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**Subject: Submittal of the Derivation and Use of Radionuclide Screening Action Levels,
Revision 4**

Dear Mr. Kieling:

Enclosed please find two hard copies with electronic files of the Derivation and Use of Radionuclide Screening Action Levels, Revision 4. Revision 4 of this report uses RESRAD, Version 7.0 (current version) to calculate the screening action levels (SALs) for each scenario. This revision also addresses the New Mexico Environment Department's comments on Revision 3 received in a letter dated February 26, 2015. The SALs calculated and presented herein will be used to assess environmental data and calculate dose to the public as well as to other receptors. The SALs will also be used to make corrective action decisions for Los Alamos National Laboratory sites and support land transfer decisions by the Laboratory and the U.S. Department of Energy.

If you have any questions, please contact Richard Mirenda at (505) 665-6953 (rmirenda@lanl.gov) or Arturo Duran at (505) 665-7772 (arturo.duran@em.doe.gov).

Sincerely,


Bruce Robinson, Program Director
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Sincerely,


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Enclosures: Two hard copies with electronic files – Derivation and Use of Radionuclide Screening Action Levels, Revision 4 (EP2015-0122)

Cy: (w/enc.)
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Derivation and Use of Radionuclide Screening Action Levels, Revision 4



Prepared by the Environmental Programs Directorate

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Appendix B	Radionuclide Screening Action Levels
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Acronyms

ALARA	as low as reasonably achievable
AOC	area of concern
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CZ	contaminated zone
DCF	dose conversion factor
DOE	Department of Energy (U.S.)
EPA	Environmental Protection Agency (U.S.)
EFH	Exposure Factors Handbook
ESH	Environment, Safety, and Health
FGR	Federal Guidance Report
ICRP	International Commission on Radiation Protection
LANL	Los Alamos National Laboratory
MDA	material disposal area
NMED	New Mexico Environment Department
NRC	Nuclear Regulatory Commission
PA/CA	performance assessment/composite analysis
RCRA	Resource Conservation and Recovery Act
RESRAD	residual radioactivity (computer code)
RME	reasonable maximum exposure
SAL	screening action level
SSL	soil screening level
SWMU	solid waste management unit

1.0 INTRODUCTION

This report documents the calculation of screening action levels (SALs) for radionuclides in soil at Los Alamos National Laboratory (LANL or the Laboratory). The SALs are used in the human health screening assessment as part of the Laboratory's corrective action process. The SAL calculations are performed for four exposure scenarios: residential, commercial/industrial, construction worker, and recreational. Among these scenarios, SALs related to residential land use correspond to the soil guidelines for unrestricted release of property described in U.S. Department of Energy (DOE) Order 458.1, "Radiation Protection of the Public and the Environment." Exposure to radionuclides in soil under these scenarios is assessed for exposure routes, including incidental ingestion of soil; inhalation of soil particulates; ingestion of homegrown produce (residential only); and external irradiation from soil. Inhalation and dermal absorption of tritiated water vapor in air are also assessed. Radionuclide SALs for each exposure scenario, with supporting information on the contribution of different exposure routes for each scenario and radionuclide, are provided in Appendix A.

The residual radioactivity (RESRAD) computer code, developed by Argonne National Laboratory for DOE, is used to calculate the radionuclide SALs presented in this guidance. The RESRAD code has been continually revised and improved since it was issued in 1989. RESRAD incorporates the dose assessment methodology described in DOE Order 458.1 and is cited in this order as an example of a dose assessment model that meets DOE quality assurance requirements for developing authorized limits to release real property. The most recent user's manual describing the use of the RESRAD code was published in July 2001 (Yu et al. 2001, 076874). The RESRAD code and associated documentation are available online at <https://web.evs.anl.gov/resrad/home2/index.cfm>. A description of the quality assurance program for verification, benchmarking, and validation of RESRAD is also described in Yu et al. (2001, 076874).

The radiation dose that is the basis of the soil guidelines calculated using RESRAD is the total effective dose, which is defined in DOE Order 458.1 as the sum of the effective dose for external irradiation and the committed effective dose for internal irradiation. The effective dose is the weighted sum of the equivalent doses to specified organs and tissues, where the weighting factors correspond to the relative likelihood of detrimental effects to a given organ or tissue following whole body irradiation (ICRP 1977, 068750). The committed effective dose for internal irradiation is the weighted sum of the equivalent doses deposited in the body in a 50-yr period (for an adult) or a 70-yr period (for a child) following the intake of a radionuclide (ICRP 1996, 223038).

The dose conversion factors (DCFs) used in the SAL calculations for ingestion, inhalation, and external irradiation are contained within the RESRAD code. The International Commission on Radiation Protection (ICRP) has developed age-dependent ingestion and inhalation committed effective dose coefficients (also known as DCFs) for members of the public of ages 3 mo, 1 yr, 5 yr, 10 yr, and 15 yr as well as adults. These dose coefficients employ the internal dosimetry methodology described in ICRP Publication 60 (ICRP 1991, 223037) and are summarized in ICRP Publication 72 (ICRP 1996, 223038) and ICRP Publication 119 (ICRP 2012, 600497). For the residential and recreational SALs, the DCFs for a child of the scenario-specific age range were calculated by linear interpolation of the ICRP 72 DCFs for the 3 mo, 1 yr, and 5 yr old. The external DCFs used in the SAL calculations originate with Federal Guidance Report (FGR) 12 (EPA 1993, 062798).

2.0 OBJECTIVES

The primary purpose of this guidance is to document the technical bases and assumptions for calculating radionuclide SALs in soil. Soil may include hillside colluvium and alluvial sediment as well as mesa-top

soil, fill, and tuff. The radionuclide SALs described in this guidance are applicable to individual sites, including solid waste management units (SWMUs), areas of concern (AOCs), and consolidated units as well as aggregate areas, watershed aggregates, and watersheds. The list of radionuclides for which SALs are calculated is based upon the radionuclides historically used and/or produced by Laboratory operations and typically detected at one or more sites.

Radionuclide SALs are used as an initial screening tool to determine whether radionuclide concentrations could be associated with dose rates that are greater than target limits under current and reasonably foreseeable future land-use conditions. The primary audience for this document consists of risk assessors and other qualified program participants who use SALs to conduct screening assessments. Sufficient information is provided in this document to enable independent review of the methodology for calculating SALs. The methodology for applying SALs in the screening assessments is provided in Laboratory guidance (LANL 2011, 111726).

The RESRAD SAL calculations are reviewed annually (at the start of each new fiscal year [October]) to determine whether the values need to be updated. Because minor revisions may be made to RESRAD one or more times within a year, radionuclide SALs are revised only if a later version of the RESRAD code results in changes in one or more SAL values. This revision to the SALs is driven by the need to implement DOE Order 458.1 requirements and to include age-specific child DCFs in the SAL calculations. The Laboratory starts using the revised radionuclide SALs (if any) at the beginning of a fiscal year; new values are not retroactive.

3.0 POTENTIALLY APPLICABLE ORDERS, REGULATIONS, AND GUIDANCE

The Organization Act of 1977 authorizes DOE to protect the public from radiation and radioactive materials that result from research, development, and production activities at DOE facilities. DOE has published health and safety orders of which DOE Order 458.1, "Radiation Protection of the Public and the Environment," is most pertinent to developing and applying cleanup guidelines. DOE Order 458.1 requires the reduction of all DOE-source radiation doses to a level as low as reasonably achievable (ALARA) below the primary dose limit of 100 mrem/yr above background.

DOE approves limits developed by its project offices, authorizing approval on a case-by-case basis and in accordance with the primary dose limit and ALARA. Where achievement of an authorized limit is impractical or inappropriate, DOE may approve a supplemental limit that also complies with the primary dose limit of 100 mrem/yr above background.

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) authorizes the U.S. Environmental Protection Agency (EPA) to regulate hazardous substances, including radionuclides, released into the environment. EPA policy under CERCLA is to assess radionuclide health effects based on potential cancer risk, as described by EPA (Luftig 1997, 058693; EPA 2014, 600496). However, because the Laboratory implements corrective actions for hazardous constituent releases under the Resource Conservation and Recovery Act (RCRA) rather than CERCLA, CERCLA guidance is not directly applicable. Unlike CERCLA, RCRA does not regulate radionuclides, and there is no equivalent EPA RCRA guidance. The Atomic Energy Act of 1954 authorizes the U.S. Nuclear Regulatory Commission (NRC) to regulate commercial, research, and medical uses of nuclear materials as well as their transport, storage, and disposal. One such NRC regulation is Title 10 of the Code of Federal Regulations, Part 20 (10 CFR 20), "Standards for Protection against Radiation." In Subpart E of 10 CFR 20, "Radiological Criteria for License Termination," NRC proposed an annual dose limit of 25 mrem/yr above background for the average member of a critical group for restricted or unrestricted use of a site.

4.0 SELECTION OF TARGET DOSE LIMIT

DOE Order 458.1 authorizes a site-specific modeled radiation dose up to 25 mrem/yr for cleanup guidelines and the release of real property. A 25-mrem/yr target dose limit is well below the basic dose limit of 100 mrem/yr above background established in DOE Order 458.1 for dose from all DOE sources. Based on this guidance, any dose equal to or less than 25 mrem/yr (with ALARA addressed) is acceptable in determining that no further action is warranted at a site and/or allowing the release of real property. The Laboratory, therefore, proposes to use the 25-mrem/yr dose limit as the ultimate basis for site decisions, including remediation and land transfer. The radionuclide SALs presented in this guidance are calculated using RESRAD Version 7.0 (printouts of RESRAD Summary Reports for SALs calculated using a 25-mrem/yr dose limit are provided in Appendix A on CD). Before DOE Order 458.1 was released in 2011, SALs were calculated using a 15-mrem/yr dose limit. Although 25 mrem/yr is proposed as the ultimate basis for site decisions, SALs related to a 15-mrem/yr threshold are also provided in Appendix B.

The Laboratory's ALARA program description states that quantitative ALARA evaluations are not necessary for Laboratory activities that have a potential for annual public exposure less than a 3-mrem total effective dose equivalent individual dose ("Los Alamos National Laboratory Environmental ALARA Program," PD410, p. 7, effective November 8, 2008). If public access is or will be available and the radiological dose is above 3 mrem/yr and equal to or below 25 mrem/yr, a quantitative ALARA analyses is conducted. If the analyses indicate the dose is ALARA, no additional removal is necessary, the investigation and remediation of the site are complete, and the property can be transferred as is, if appropriate. If the analysis determines the dose is not ALARA, additional remediation is warranted to lower the dose further or an alternative scenario may be used to restrict activity and land use for that property, if transferred.

5.0 EXPOSURE SCENARIOS AND ROUTES OF EXPOSURE

Four exposure scenarios have been identified for current and reasonably foreseeable future land use at and around the Laboratory: residential, commercial/industrial, construction worker, and recreational. These scenarios and their application are described in Laboratory guidance (LANL 2007, 099829). The residential scenario typically is most appropriate for townsite properties and is associated with both child and adult receptors. The construction worker scenario is a limited-time frame scenario that addresses the unique exposure conditions that may exist during construction activities. The commercial/industrial scenario typically is most appropriate for areas subject to continued Laboratory use and for locations where commercial businesses exist or where such development is foreseen. The recreational scenario is most appropriate for buffer areas or areas where development is constrained by topography, such as the slopes of canyons. The recreational scenario for an adult receptor is also described as a "trail user" scenario, and that for a child is described as an "extended backyard scenario," which assumes an older child playing in an undeveloped area near a residence or walking in any accessible canyon area (LANL 2007, 099829; LANL 2015, 600336). Because residential and recreational scenarios have both child and adult receptors, the four exposure scenarios equate to six exposure models.

The SALs described in this document were developed primarily for application to surface and near-surface soil. Below depths at which construction activities reasonably may be expected to occur (approximately 10 ft), and in solid environmental media (e.g., tuff), SALs are applied at the discretion of the risk assessor. In all cases, the conceptual site model should be used to compare the scenario-specific assumptions underlying the SALs and the conditions at a specific site to verify the SALs are applicable at that site.

Soil guideline values (i.e., SALs) are calculated in RESRAD as the sum of the products of several "pathway factors." A pathway factor is a model of the connections between environmental compartments

(e.g., air, plants, and soil) within and among which radionuclides can be transported. A complete exposure pathway model is the product of a group of pathway factors. For example, the inhalation pathway contains the air/soil concentration ratio; the area, cover, depth, and occupancy factors; and annual intake of air. The individual exposure pathways, such as plant ingestion and external irradiation, can be activated independently in RESRAD to create a site-specific land-use scenario. User-defined and default values for the various pathways factors, and the results of RESRAD dose and soil guideline calculations, are available as RESRAD output in several reports and graphics. Summary reports generated by RESRAD that document input values and model outputs for the SAL calculations are provided in Appendix A (on CD). The 25-mrem/yr-based SALs are presented for each scenario in Table 5.0-1. Radionuclide SALs for each scenario, with supporting information on the dominant exposure route(s) for each scenario and radionuclide, are provided in Appendix B (Tables B-1 and B-2).

Table 5.0-1
Radionuclide SALs Based on 25 mrem/yr Using RESRAD Version 7.0

Radionuclide	Residential SAL (pCi/g)	Industrial SAL (pCi/g)	Construction Worker SAL (pCi/g)	Recreational SAL (pCi/g)	Time at which SAL Applies ^a (yr)
Americium-241	83	1000	230	1500	0.0
Cesium-134	5.0	17	15	150	0.0
Cesium-137+D ^b	12	41	37	370	0.0
Cobalt-60	2.6	9.0	8.1	81	0.0
Iodine-129	96	2300	710	2000	0.0
Plutonium-238	84	1300	230	1400	0.0
Plutonium-239/240 ^c	79	1200	200	1300	0.0
Sodium-22	3.4	11	10	100	0.0
Strontium-90+D ^b	15	2400	1400	4900	0.0
Technetium-99	21	330,000	110,000	220,000	0.0
Thorium-228+D ^b	4.6	17	15	130	0.0
Thorium-230 ^d	5	5	5	5 ^e	Not applicable ^f
Thorium-232 ^d	5	5	5	5 ^e	Not applicable ^f
Tritium	1700	2,400,000	1,600,000	5,700,000	0.0
Uranium-234	290	3100	1000	3900	1000
Uranium-235+D ^b	42	160	130	1000	1000
Uranium-238+D ^b	150	710	470	2800	1000

^a Modeling period is 1000 yr. Soil criteria at other times within the modeling period are higher (less protective).

^b Includes contribution to dose of radioactive progeny (plus daughters). Cesium-137 progeny is barium-137m; strontium-90 progeny is yttrium-90; thorium-228 progeny include radium-224, radon-220, polonium-216, lead-212, bismuth-212, and thallium-208; uranium-235 progeny is thorium-231, and uranium-238 progeny include thorium-234, protactinium-234m and protactinium-234.

^c Plutonium-239 and plutonium-240 are typically unresolved in laboratory analysis. SALs for the two isotopes are identical.

^d The SAL is the generic soil guideline for release of property published in Chapter 4 ("Residual Radioactive Material") of DOE Order 458.1. For the concentration averaged over the first 15 cm of soil below the surface, 5 pCi/g applies; for subsequent 15-cm-thick layers, the generic soil guideline is 15 pCi/g. If both thorium-230 and radium-226 or both thorium-232 and radium-228 are present and not in secular equilibrium, or if other mixtures of radon-generating radionuclides occur, DOE Order 458.1 presents guidance for establishing soil criteria.

^e The value of 5 pCi/g is protective of all possible recreational activities, including situations where enclosed structures may exist on the site to capture radon gas. In topographically constrained areas where structures are not feasible, such as hillsides or drainages, dose-based SALs may be employed as follows:

- Thorium-230: 114 pCi/g
- Thorium-232: 40.4 pCi/g

^f The generic soil guideline of 5 pCi/g is not a calculated value.

The exposure pathways used to calculate radionuclide SALs across all exposure scenarios are incidental soil ingestion, inhalation of soil particulates, and external irradiation from soil. All scenarios also have a unique exposure model for tritium (as water vapor), which includes both inhalation of tritiated water vapor and absorption of tritiated water vapor through the skin. Ingestion of garden produce (i.e., fruits and vegetables) is an exposure pathway that is commonly evaluated in radionuclide dose assessments but generally is excluded in screening-level chemical risk assessment calculations (i.e., produce ingestion is not addressed in the soil screening levels [SSLs] published by New Mexico Environment Department [NMED]). In keeping with common practice and because certain radionuclides (particularly strontium-90) known to occur at some sites are particularly susceptible to plant uptake, ingestion of garden produce is included in the residential scenario. Internal exposure related to dermal absorption of radionuclides (excepting tritiated water vapor) is assumed to be negligible, consistent with EPA guidance (EPA 1989, 008021). There are no SALs calculated for radon gas (radon-220 and radon-222) because DOE guidelines per DOE Order 458.1 set forth soil standards for the radium and thorium parents of radon-220 and radon-222. A summary of exposure routes employed in each exposure scenario is provided in Table 5.0-2.

Table 5.0-2
Scenario-Specific Exposure Routes

Exposure Routes	Residential (child/adult)	Commercial/ Industrial (adult)	Construction Worker (adult)	Recreational (child/adult)
Incidental soil ingestion	X	X	X	X
Inhalation of soil particulates	X	X	X	X
External irradiation from soil	X	X	X	X
Tritium—inhilation and dermal absorption of tritiated water vapor ^a	X	X	X	X
Ingestion of garden produce	X	— ^b	—	—

^a This exposure route is not specifically identified as a distinct pathway in the RESRAD summary reports provided in Appendix A.

^b — = Not applicable.

The primary sources of exposure parameter values used in the SAL calculations are NMED's risk assessment guidance for investigations and remediation (NMED 2015, 600675) and EPA's Exposure Factors Handbook (EFH) (EPA 2011, 208374). The selected parameter values are intended to provide estimates of "reasonable maximum exposure" for each exposure scenario (EPA 2014, 600495). Selection of exposure parameter values and the scenario-specific assumptions constraining potential exposure conditions are described in section 6.0.

6.0 RESRAD INPUT PARAMETER VALUES AND ASSUMPTIONS

Only a subset of RESRAD input parameters are varied to differentiate the exposure scenarios described in section 5.0. These include variable parameters related to the nature and intensity of human exposure at the contaminated site and the age-specific DCFs. The variable exposure parameters for each scenario are also directly related to many of the exposure values employed by NMED in calculating SSLs for hazardous chemicals (NMED 2015, 600575). The RESRAD input parameters describing the physical dimensions and hydrologic setting of the site are generally held constant across the exposure scenarios because these are independent of human activities.

RESRAD input parameters that are varied across exposure scenarios are discussed in section 6.1. Parameter values that remain unchanged across all scenarios are discussed in section 6.2.

6.1 Input Values and Assumptions for Variable RESRAD Parameters

The RESRAD input parameters that are varied among the exposure scenarios are inhalation rate, ambient-air dust concentration, outdoor-time fraction at the site, indoor-time fraction at the site, and soil-ingestion rate. RESRAD is an integrated site-assessment model that incorporates many links between those components of the model describing human exposure and those governing the physical transport of radionuclides over time. To maintain consistency in exposure assumptions between the radionuclide SALs and chemical SSLs used in the screening assessments, the NMED daily soil ingestion rate parameter value was modified for application in RESRAD to assign 100% of the intake to time spent on-site.

6.1.1 Residential Scenario Variable Exposure Parameters

Residential exposure pertains to both adults and children. Therefore, separate calculations were conducted for each of these potential receptors. Residential radionuclide SALs (Table 5.0-1 and Appendix B) are defined based on the receptor with the highest potential dose: the child receptor. The residential exposure parameter values and their derivation (described in the table notes) are presented in Table 6.1-1. The input exposure parameters used in the calculations are those obtained from the EFH (EPA 2011, 208374) as well as from NMED guidance (NMED 2015, 600575). These values represent a reasonable maximum exposure (RME) for a young child or an adult. The site parameters are a combination of RESRAD default values and local values, defined to effectively create static conditions in the contaminated zone with respect to radionuclide concentrations and thereby maximize dose to a receptor exposed to site soil (Appendix A).

Table 6.1-1
Residential Scenario: Variable Exposure Parameters

Parameters	Residential, Child	Residential, Adult
Inhalation rate (m ³ /yr)	4712 ^a	7780 ^b
Mass loading (g/m ³)	1.51 × 10 ^{-7c}	1.51 × 10 ^{-7c}
Outdoor time fraction	0.0926 ^d	0.0934 ^e
Indoor-time fraction	0.8656 ^f	0.8648 ^g
Soil ingestion (g/yr)	73 ^h	36.5 ⁱ

^a Calculated as 12.9 m³/d × 365.25 d/yr, where 12.9 m³/d is the mean upper percentile daily inhalation rate of a child (EPA 2011, 208374, Table 6-1).

^b Calculated as 21.3 m³/d × 365.25 d/yr, where 21.3 m³/d is the mean upper percentile daily inhalation rate of an adult from 21 to less than 61 yr old (EPA 2011, 208374, Table 6-1).

^c Calculated as (1 / 6.61 × 10⁹ m³/kg) × 1000 g/kg, where 6.61 × 10⁹ m³/kg is the particulate emission factor (NMED 2015, 600575).

^d Calculated as (2.32 h/d × 350 d/yr) / 8766 h/yr, where 2.32 h/d (139 min) is the largest amount of time spent outdoors for child age groups between 1 to less than 3 mo and 3 to less than 6 yr (EPA 2011, 208374, Table 16-1) and is comparable with the adult time spent outdoors at a residence.

^e Calculated as (2.34 h/d × 350 d/yr) / 8766 h/yr, where 4.68 h/d is the average total time spent outdoors for adults age 18 to less than 65 yr in all environments (EPA 2011, 208374, Table 16-1); 50% of this value (2.34 h/d) was applied to time spent outdoors at a residence and is similar to mean time outdoors at a residence for this age group (EPA 2011, 208374, Table 16-22).

^f Calculated as [(24 h/d–2.32 h/d) × 350 d/yr] / 8766 h/yr.

^g Calculated as [(24 h/d–2.34 h/d) × 350 d/yr] / 8766 h/yr.

^h The soil ingestion rate compensates for the time-based occupancy factor applied by RESRAD in calculating exposure from the soil ingestion pathway. Calculated as [0.2 g/d × 350 d/yr] / [indoor + outdoor time fractions], where 0.2 g/d is the upper percentile site-related daily child soil ingestion rate (NMED 2015, 600575; EPA 2011, 208374, Table 5-1).

ⁱ The soil ingestion rate compensates for the time-based occupancy factor applied by RESRAD in calculating exposure from the soil ingestion pathway. Calculated as [0.1 g/d × 350 d/yr] / [indoor + outdoor time fractions], where 0.1 g/d is the site-related daily adult soil ingestion rate (NMED 2015, 600575).

Fruit and vegetable ingestion rate data are described in the EFH (EPA 2011, 208374) in various formats. Per capita ingestion rates of fruits and vegetables are provided for many different age groups in Chapter 9 of the handbook (EPA 2011, 208374), although the relative quantity of produce from home gardens is not specified. Alternatively, ingestion rates of home-produced fruits and vegetables are provided in Chapter 13 of the handbook (EPA 2011, 208374). Rather than speculate on the fraction of home-produced foods originating from a home garden, the ingestion rate data from Chapter 13 (EPA 2011, 208374) were used to quantify intake for both adults and children via home-grown produce.

The home-grown plant ingestion rates for a child and adult (14 kg/yr and 22.1 kg/yr, respectively) include consumption of garden vegetables and fruits. These ingestion rates are the age-weighted body-weight normalized sum of the mean per capita fruit and vegetable ingestion rates for home-produced foods (EPA 2011, 208374). The mean plant ingestion rate for the less-than-6-yr-old child receptor is biased high to include an older child/pre-adult (1 to less than 21 yr) to provide an RME estimate (EPA 2011, 208374, Tables 13-1, 8-10, and 8-13). The adult mean plant ingestion rate is based on ages 21 to 65 yr (EPA 2011, 208374, Tables 13-1 and 8-1). Inclusion of older age groups in the calculation of home-grown plant ingestion rates is protective because body-weight normalized intake rates of combined fruits and vegetables increase with each age group provided in Table 13-1 of the EFH (EPA 2011, 208374).

Because the plant-ingestion rate values applied to calculate radionuclide SALs are based on per capita statistics rather than consumer-only, they include individuals in farming and gardening households that did not consume home-raised produce during the 1-wk survey period over which the ingestion data were acquired. The per capita values may be compared with the higher produce consumption rates in EFH Tables 13-5 and 13-10, which are consumer-only, unadjusted values. As stated in section 13.3.2 of the EFH (EPA 2011, 208374), consumer-only intake values may overestimate exposure over residential scenario time periods that are much longer than a 1-wk survey. In the case of residential SALs, produce ingestion rates are derived from data representing a 20-yr time period for children and a 45-yr period for adults. This is the principal reason for applying per capita rather than consumer-only intake rates. In addition, the consumer-only data represent the unadjusted weight of food brought into the home rather than “as-consumed” weights. Consistent with section 13.2 of the EFH, preparation and cooking-loss factors were applied in deriving the produce-ingestion rate values in EFH Table 13-1 used in calculating residential SALs. The average percent decrease in weight is approximately 30% for fruits and 20% for vegetables (EFH 2011, 208374, Table 13-69).

The inputs from Tables 13-1, 8-1, 8-10, and 8-13 of the EFH (EPA 2011, 208374) used to calculate child and adult plant ingestion rates are shown in Table 6.1-2. The age groups for which per-capita home-produced fruit and vegetable rates are provided in Table 13-1 include 1 to less than 3 yr, 3 to less than 6 yr, 6 to less than 11 yr, 11 to less than 21 yr, 21 to less than 50 yr, and greater than or equal to 50 yr. The annual fruit and vegetable intake rates for each age group (kg/yr), calculated as the product of the produce-ingestion rates and mean body weights in Table 6.1-2 with adjustment for units, are shown in Table 6.1-3.

Table 6.1-2
Inputs for Calculating Plant Ingestion Rates

Age Range	Mean, Fruit (g/kg-d)	Mean, Vegetable (g/kg-d)	Mean, Body Weight (kg)	Body Weight EFH Table Reference
1-<3 yr	1.0	1.3	12.15	Table 8-10 (avg. of 1 and 2 yr)
3-<6 yr	0.78	1.1	17.2	Table 8-10 (avg. of 3, 4, and 5 yr)
6-<11 yr	0.4	0.8	28.72	Table 8-10 (avg. of 6, 7, 8, 9, and 10 yr)
11-<21 yr	0.13	0.56	60.66	Weighted 11–14 (Table 8-10) and 15–19 yr (Table 8-13)
21-<50 yr	0.15	0.56	80	Adults; 21+ yr (Table 8-1)
50+ yr	0.24	0.6	80	Adults; 21+ yr (Table 8-1)

Table 6.1-3
Annual Fruit and Vegetable Ingestion Rates

Age Range	Mean, Fruit* (g/kg-d)	Mean, Vegetable* (g/kg-d)	Mean, Sum of Fruit and Vegetable (kg/yr)
1–<3 yr	4.44	5.77	10.2
3–<6 yr	4.90	6.91	11.8
6–<11 yr	4.20	8.39	12.6
11–<21 yr	2.88	12.41	15.3
21–<50 yr	4.38	16.4	20.7
50–65 yr	7.01	17.5	24.5

* Calculated as the product of mean intake (g/kg-d) and body weight (kg) shown in Table 6.1-2, with unit adjustments of 1 kg/1000g and 365.25 d/yr.

Child and adult plant-ingestion rates were calculated by summing the age-weighted total produce ingestion rates shown in Table 6.1-3. For children, the mean value for ages up to 21 yr was used to be protective, as described above. The calculation of 14 kg/yr, protectively rounded upwards from 13.6 kg/yr, is as follows:

$$(2 \text{ yr}/20 \text{ yr} \times 10.2 \text{ kg/yr}) + (3 \text{ yr}/20 \text{ yr} \times 11.8 \text{ kg/yr}) + (5 \text{ yr}/20 \text{ yr} \times 12.6 \text{ kg/yr}) + (10 \text{ yr}/20 \text{ yr} \times 15.3 \text{ kg/yr})$$

Equation 6.1-1

For adults evaluated over an assumed exposure period from age 21 up to less than 66 yr of age, the calculation of 22.1 kg/yr is as follows:

$$(29 \text{ yr}/45 \text{ yr} \times 20.7 \text{ kg/yr}) + (16 \text{ yr}/45 \text{ yr} \times 24.5 \text{ kg/yr})$$

Equation 6.1-2

6.1.2 Commercial/Industrial Scenario Variable Exposure Parameters

The RESRAD input values for certain exposure parameters are consistent with the analogous parameter values used in the calculation of chemical SSLs for the industrial scenario (NMED 2015, 600575) as well as those obtained from the EFH (EPA 2011, 208374). These values and their derivation (described in table notes) are presented in Table 6.1-4.

6.1.3 Construction Worker Scenario Variable Exposure Parameters

The RESRAD input values for certain exposure parameters are consistent with the analogous parameter values used in the calculation of chemical SSLs for the construction worker scenario (NMED 2015, 600575) as well as those obtained from the EFH (EPA 2011, 208374). These values and their derivation (described in the table notes) are presented in Table 6.1-5.

Table 6.1-4
Commercial/Industrial Scenario: Variable Exposure Parameters

Parameters	Commercial/Industrial, Adult
Inhalation rate (m ³ /yr)	7780 ^a
Mass loading (g/m ³)	1.51×10^{-7} ^b
Outdoor time fraction	0.2053 ^c
Indoor time fraction	0 ^d
Soil ingestion (g/yr)	109.6 ^e

^a Calculated as $[21.3 \text{ m}^3/\text{d} \times 365.25 \text{ d/yr}]$, where 21.3 m³/d is the upper percentile daily inhalation rate of an adult from 21 to less than 61 yr old (EPA 2011, 208374, Table 6-1).

^b Calculated as $(1 / 6.61 \times 10^9 \text{ m}^3/\text{kg}) \times 1000 \text{ g/kg}$, where $6.61 \times 10^9 \text{ m}^3/\text{kg}$ is the particulate emission factor (NMED 2015, 600575).

^c Calculated as $(8 \text{ h/d} \times 225 \text{ d/yr}) / 8766 \text{ h/yr}$, where 8 h/d is an estimate of the average length of the work day and 225 d/yr is the exposure frequency (NMED 2015, 600575).

^d The commercial/industrial worker is defined as someone who “spends most of the work day conducting maintenance or manual labor activities outdoors” (NMED 2015, 600575).

^e The soil-ingestion rate compensates for the time-based occupancy factor applied by RESRAD in calculating exposure from the soil-ingestion pathway. Calculated as $[0.1 \text{ g/d} \times 225 \text{ d/yr}] / [\text{indoor} + \text{outdoor time fractions}]$, where 0.1 g/d is the site-related daily adult soil-ingestion rate (NMED 2015, 600575).

Table 6.1-5
Construction Worker Scenario: Variable Exposure Parameters

Parameters	Construction Worker, Adult
Inhalation rate (m ³ /yr)	7780 ^a
Mass loading (g/m ³)	4.76×10^{-4} ^b
Outdoor time fraction	0.2282 ^c
Indoor time fraction	0
Soil ingestion (g/yr)	362 ^d

^a Calculated as $[21.3 \text{ m}^3/\text{d} \times 365.25 \text{ d/yr}]$, where 21.3 m³/d is the upper percentile daily inhalation rate of an adult from 21 to less than 61 yr old (EPA 2011, 208374, Table 6-1).

^b Calculated as $(1 / 2.1 \times 10^6 \text{ m}^3/\text{kg}) \times 1000 \text{ g/kg}$, where $2.1 \times 10^6 \text{ m}^3/\text{kg}$ is the particulate emission factor (NMED 2015, 600575).

^c Calculated as $(8 \text{ h/d} \times 250 \text{ d/yr}) / 8766 \text{ h/yr}$, where 8 h/d is an estimate of the average length of the work day and 250 d/yr is the exposure frequency (NMED 2015, 600575).

^d The soil-ingestion rate compensates for the time-based occupancy factor applied by RESRAD in calculating exposure from the soil ingestion pathway. Calculated as $[0.33 \text{ g/d} \times 250 \text{ d/yr}] / [\text{indoor} + \text{outdoor time fractions}]$, where 0.33 g/d is the site-related daily soil ingestion rate for a construction worker (NMED 2015, 600575).

6.1.4 Recreational Scenario Variable Exposure Parameters

A recreational exposure scenario is defined in “Technical Approach for Calculating Recreational Soil Screening Levels for Chemicals, Revision 4” (LANL 2015, 600336) for both adults and children. The recreational scenario describes exposure for children (ages 6 to less than 12 yr) as an “extended backyard” setting, and for adults as a “trail use” (hiker) activity. Other recreational activities (e.g., camping

or hunting) are not evaluated because these activities do not occur and are not allowed on Laboratory or DOE property. Separate calculations were conducted for each of the potential recreational receptors. Radionuclide SALs (Appendix B) are defined based on the receptor with the highest exposure intensity; the child. Unlike the case for the previous exposure scenarios, NMED and EPA have not published SSLs for a recreational scenario. The recreational parameter values obtained from NMED guidance (NMED 2015, 600575) and the EFH (EPA 2011, 208374) and their derivation (described in the table notes) are presented in Table 6.1-6.

The age range of the child applied as the receptor under the extended backyard premise is appropriate given that a child in the 6- to less-than-12-yr age range could potentially walk or play in an unsupervised manner on a SWMU or AOC or in any part of a canyon that is accessible. A younger child is unlikely to do so, is more likely to be supervised by an adult, and would likely experience minimal hours of potential exposure because a younger child is more apt to be carried by an adult at least for part of the time because they don't have sufficient attention span or stamina to walk for any length of time. The 200-d/yr exposure frequency is equivalent to 4 d/wk for 50 wk/yr and is more frequent than a younger child will typically be exposed. It is therefore appropriate to conclude that the exposure frequency and the age range are representative of the reasonably maximum exposed child for this scenario.

Table 6.1-6
Recreational Scenario: Variable Exposure Parameters

Parameters	Recreational, Child	Recreational, Adult
Inhalation rate (m ³ /yr)	15,250 ^a	19,460 ^b
Mass loading (g/m ³)	1.51×10^{-7} ^c	1.51×10^{-7} ^c
Outdoor time fraction	0.0228 ^d	0.0228 ^d
Indoor time fraction	0	0
Soil ingestion (g/yr)	797 ^e	244 ^f

^a Calculated as $(0.029 \text{ m}^3/\text{min} \times 60 \text{ min/h} \times 24 \text{ h/d} \times 365.25 \text{ d/yr})$, where 0.029 m³/min is the upper percentile child inhalation rate for moderate activity for 6 to less than 11 yr old (EPA 2011, 208374, Table 6-2).

^b Calculated as $(0.037 \text{ m}^3/\text{min} \times 60 \text{ min/h} \times 24 \text{ h/d} \times 365.25 \text{ d/yr})$, where 0.037 m³/min is the age-weighted upper percentile adult inhalation rate for moderate activity (12 to 35 yr) (EPA 2011, 208374, Table 6-2).

^c Calculated as $(1 / 6.61 \times 10^9 \text{ m}^3/\text{kg}) \times 1000 \text{ g/kg}$, where $6.61 \times 10^9 \text{ m}^3/\text{kg}$ is the particulate emission factor used for residential and industrial scenarios (NMED 2015, 600575).

^d Calculated as $(1 \text{ h/d} \times 200 \text{ d/yr}) / 8766 \text{ h/yr}$, where 1 h/d is the exposure time for a recreational adult or child and 200 d/yr is the exposure frequency (LANL 2012, 221588).

^e The soil ingestion rate is defined to compensate for the time-based occupancy factor applied by RESRAD in calculating exposure from the soil ingestion pathway. 100% of daily soil ingestion is protectively assumed to occur during outdoor activity. Calculated as $[(0.2 \text{ g/d} / 2.2 \text{ h/d}) \times 1 \text{ h/d} \times 200 \text{ d/yr}] / [\text{indoor} + \text{outdoor time fractions}]$, where 2.2 h/d is the mean time spent outdoors per day for a 6 to less than 11 yr old child (EPA 2011, 208374, Table 16-1), and where 0.2 g/d is the upper bound child soil ingestion rate (EPA 2011, 208374, Table 5-1; NMED 2015, 600575).

^f Calculated as $[(0.1 \text{ g/d} / 3.6 \text{ h/d}) \times 1 \text{ h/d} \times 200 \text{ d/yr}] / [\text{indoor} + \text{outdoor time fractions}]$, where 3.6 h/d is the mean time spent outdoors per d for an adult (12 to 35 yr) (EPA 2011, 208374, Table 16-1) and where 0.1 g/d is the adult soil ingestion rate (NMED 2015, 600575).

The parameters used to define the exposure under the extended backyard scenario are protective of a younger child as well. For example, the soil ingestion rate (200 mg/d) is the upper percentile ingestion rate for a 3- to less-than-6-yr-old child according to EPA (EPA 2011, 208374, Table 5-1) and is the soil ingestion rate used by NMED (2015, 600575) and EPA (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) for calculating residential SSLs for a 0- to 6-yr-old child. The central tendency soil ingestion rate for an

older child/young adult (6 to less than 21 yr) is 100 mg/d according to EPA (EPA 2011, 208374, Table 5-1). The time spent outdoors (2.2 h/d) for a 6- to less-than-11-yr-old child is the highest outdoor time for a child less than 12 yr old and nearly twice the time spent outdoors for a 2- to 3-yr-old child (EPA 2011, 208374, Table 16-1). The 0.029 m³/min inhalation rate is the upper percentile value for moderate activity for a 6- to less-than-11-yr-old child and is equal to or greater than the rates for younger children (EPA 2011, 208374, Table 6-2). As mentioned previously, the 200 d/yr exposure frequency is conservatively high and is more frequent than a younger child will typically be exposed. Therefore, the exposure parameters provide protection to a younger child (less than 6 yr old) under the recreational scenario.

6.1.5 Dose Conversion Factors

SALs before 2012 employed dose coefficients published in FGR 11 (EPA 1988, 050123), which are based on older uptake, metabolism, and internal dosimetry models from the late 1970s. The FGR 11 dose coefficients also pertain only to adults. With the release of RESRAD Version 6.4 in December 2007, RESRAD has included ICRP 72 DCFs, which have been developed for ages infant (3 mo), 1 yr, 5 yr, 10 yr, 15 yr, and adult (ICRP 1996, 223038). The ICRP 72 DCFs are based on the internal dosimetry methodology described in ICRP Publication 60 (ICRP 1991, 223037). The age dependency of the DCFs is particularly significant for the residential and recreational scenarios, which include a child receptor. As a result, SALs for all scenarios were recalculated using the ICRP 72 DCFs in 2012 (LANL 2012, 228852). With the release of RESRAD Version 7.0 in April 2014, the latest nuclear decay data from ICRP Publication 107 have been included in RESRAD (<https://web.evs.anl.gov/resrad/home2/reshstry.cfm>). These decay data are used in conjunction with the internal dosimetry methodology described in ICRP Publication 60 (ICRP 1991, 223037), and the resulting DCFs are referred to as “DCFPAK 3.02” in RESRAD’s internal dose library.

The SALs published in this report use the DCFPAK 3.02 DCFs available in RESRAD Version 7.0. For the residential scenario, SALs that integrate radiation dose over a child exposure period (age 0 to less than 6 yr) were derived by using the DCFPAK 3.02 DCFs for ages infant (3 mo), 1 yr, and 5 yr interpolated over the 0- to less-than-6-yr age range. For the recreational scenario, the extended backyard calculations, which apply to ages 6 to less than 12 yr, were performed using the DCFPAK 3.02 DCFs for ages 5 yr, 10 yr, and 15 yr interpolated over the 6- to less-than-12-yr age range. The Excel workbook used in the calculations of the residential and recreational child DCFs is provided in Appendix C (on CD).

The adult DCFPAK 3.02 DCFs were used to calculate the SALs for the industrial and construction worker scenarios. RESRAD Version 7.0 also includes a new set of DCFs that pertain to a Reference Person, as described in DOE guidance (2011, 600493). The Reference Person uses ICRP 72 age-specific DCFs and reflects the age and gender structure and air and water intake rates of the U.S. population. In this regard, the Reference Person reflects the same population-level approach to radiation protection applied by EPA in developing radionuclide cancer risk coefficients (EPA 1999, 600494). However, evaluating children using the interpolated DCFs is more protective in the residential and recreational scenarios relative to the population-average approach more commonly applied for radiation protection of the public. The use of interpolated DCFs is also consistent with previous versions of the radionuclide SALs. For these reasons, the Reference Person DCFs available in RESRAD Version 7.0 were not applied in the SAL calculations.

The external DCFs used in the dose calculations described in this report also employ the latest nuclear decay data from ICRP Publication 107 that have been included in RESRAD Version 7.0. These external DCFs are based on the same dosimetry as those used in the previous SALs, as described in FGR 12 (EPA 1993, 062798). Both internal and external DCFs used in the SAL calculations for each exposure scenario are documented in the summary reports provided in Appendix A on CD.

The default tritium ingestion DCFs in the RESRAD DCF libraries pertain to organically bound tritium and the inhalation DCFs to tritium bound to a particulate. Previous SAL calculations had employed these default DCFs even though the relevant form of tritium related to Laboratory operations and environmental sampling is water vapor. In this report, the tritium SALs employ DCFs that are specific to tritiated water.

6.2 Input Values and Assumptions for Unchanging RESRAD Parameters

Certain RESRAD input parameters defining physical site conditions and how these conditions may change over time are critical for calculating SALs applicable to the Laboratory. These parameters generally are subject to great site-specific variability and involve such attributes as the dimensions of the contaminated zone, local meteorological conditions, and the hydrogeology of the vadose and saturated zones. The transport of radionuclides over time within and among environmental media is affected by the values of these parameters. Hence, the length of the modeling period can influence the SALs, particularly for certain radionuclides associated with the ingrowth of radioactive progeny.

To calculate SALs that are protective across a variety of sites, two types of simplifying assumptions are made. First, RESRAD input parameters related to soil erosion and water infiltration are defined to effectively create static conditions in the contaminated zone with respect to radionuclide concentrations. Minimizing soil erosion and infiltration maximizes potential doses from exposures to surface soil. Second, the dimensions of the contaminated zone are set to values that reasonably capture the maximum size of an individual site. A summary of the values for key RESRAD input parameters that are constant across all exposure scenarios is provided in Table 6.2-1. Values for all RESRAD input parameters are provided in the summary reports included in Appendix A of this report.

Table 6.2-1
Unchanging RESRAD Input Parameters

RESRAD Data Field	Parameter	Units	Values	Rationale
Soil Concentrations	Distribution coefficients	cm ³ /g	Default values	RESRAD default values
	Radiation dose limit	mrem/yr	25	DOE Order 458.1
Contaminated Zone (CZ)	Area of CZ	m ²	10,000	RESRAD default: protectively assumes an area is effectively infinite for ingestion and external irradiation exposure pathways
	Thickness of CZ	m	2	RESRAD default
Cover and CZ Hydrological Data	Cover depth	m	0	Assumes site is contaminated at ground surface
	Density of CZ	g/cm ³	1.5	RESRAD default
	CZ erosion rate	m/yr	0	Results in constant depth of contamination over time; protectively assumes contamination is not lost by erosion
	CZ Total porosity	unitless	0.48	Value for crushed tuff used in Material Disposal Area (MDA) G performance assessment/ composite analysis (PA/CA) (Hollis et al. 1997, 063131, Appendix 2e)
	CZ Field capacity	unitless	0.2	RESRAD default
	CZ Hydraulic conductivity	m/yr	10	RESRAD default
	CZ "b" parameter	unitless	5.3	RESRAD default

Table 6.2-1 (continued)

RESRAD Data Field	Parameter	Units	Values	Rationale
Cover and CZ Hydrological Data (continued)	Humidity in air	g/m ³	5.55	Range is 2.4 (January) to 8.7 g/m ³ (July–August) over the year; 5.55 g/m ³ is range midpoint (LANL 2005, 088493)
	Evapotranspiration coefficient	unitless	0.999	Maximum allowed value: results in effectively no water infiltration through CZ; assumption maximizes potential dose by soil exposure over time
	Wind speed	m/s	3	Annual average wind speed at Laboratory is 2.5 m/s (rounded to 3 to give an upper bound limit), with sustained winds over 4 m/s occurring 20% of the time between mid-March and early June (LANL 2005, 088493)
	Precipitation	m/yr	0.29	Lower 5 th percentile of annual precipitation (LANL 2005, 088493); assumption maximizes potential dose by eliminating contaminant removal from soil.
	Irrigation	m/yr	0	Consistent with evapotranspiration coefficient of 0.999; assumption maximizes potential dose via soil exposure over time
	Runoff coefficient	unitless	0.9	High value minimizes water infiltration; consistent with evapotranspiration coefficient of 0.999; assumption maximizes potential dose via soil exposure over time
	Watershed area for nearby stream or pond	m ²	1 × 10 ⁶	RESRAD default
	Accuracy for water/soil computations	unitless	0.001	RESRAD default
Saturated Zone Hydrologic Data	Values of all parameters set to RESRAD defaults: the drinking water exposure pathway is inactive and use of irrigation water is not specified.			
Uncontaminated Unsaturated Zone Data	Number of unsaturated strata below CZ	unitless	1	Simplified hydrology—effectively no water infiltration
	Thickness of unsaturated strata	m	300	Approximate thickness of vadose zone at Pajarito Plateau (Hollis et al. 1997, 063131)
	Soil density	g/cm ³	1.5	RESRAD default
	Total porosity	unitless	0.48	Value for crushed tuff used in MDA G PA/CA (Hollis et al. 1997, 063131, Appendix 2e)
	Effective porosity	unitless	0.40	Calculated as total porosity minus water content of approximately 0.08 (Hollis et al. 1997, 063131, Appendix 2e)
	Field capacity	unitless	0.2	RESRAD default
	Hydraulic conductivity	m/yr	10	RESRAD default
	Soil-specific “b” parameter	unitless	5.3	RESRAD default

Table 6.2-1 (continued)

RESRAD Data Field	Parameter	Units	Values	Rationale
Occupancy	Indoor dust filtration factor	unitless	1	Protectively assumes indoor dust radionuclide concentrations equal to ambient soil concentrations; equivalent assumption implicit in NMED SSL calculations
	External gamma shielding factor	unitless	0.7	RESRAD default (conservative for low to moderate energy gamma emitters)
	Shape factor	unitless	1	Assumes a circular CZ
Ingestion Pathway: Dietary Data	Leafy vegetable consumption	kg/yr	0	Assumes home production of leafy vegetables is negligible
	Irrigation water contaminated fraction	unitless	0	No contribution to plant contamination from irrigation water is assumed
	Plant food contaminated fraction	unitless	1	Produce ingestion rates specified as home grown exclusively
	Mass loading for foliar deposition	g/m ³	0.001	RESRAD default
Ingestion Pathway: Nondietary Data	Depth of soil mixing layer	m	0.15	RESRAD default: contaminated zone depth set at 2 m with no dilution resulting from mixing
	Depth of roots	m	0.9	RESRAD default: protectively assumes all roots are contained within the depth of contaminated soil
	Plant factors	unitless	Default values	RESRAD default
Storage Times	Fruits, nonleafy vegetables, and grain	d	1	Protectively assumes that homegrown garden produce is eaten soon after harvesting

The size of the contaminated area may affect exposure by incidental soil ingestion, inhalation of particulates, and external gamma irradiation. The RESRAD default contaminated zone area of 10,000 m² results in an effectively infinite area for the incidental soil ingestion and external gamma irradiation exposure routes. However, the area factor atmospheric mixing model used in RESRAD for inhalation exposure produces an area factor of approximately 10% to 15% with an area of 10,000 m² (2.5 acres), a Laboratory-specific wind speed of 3 m/s, and a set particle diameter of 1 µm (Chang et al. 1998, 068749). Because only 10% to 15% of the suspended dust at the theoretical site used in the SAL calculations originates on the site, inhalation exposure concentrations are only 10% to 15% of the corresponding site soil concentration. In practice, increasing the defined site area within reasonable bounds would influence the area factor only slightly. For example, a 250-acre site would still have an area factor of less than 20% with a wind speed of 3 m/sec.

The evapotranspiration coefficient for calculating SALs has been set at the RESRAD limit of 0.999, effectively eliminating leaching of radionuclides from the contaminated zone by water, thereby maximizing the retention of radionuclides in surface soil over time. Because the value used for the evapotranspiration coefficient results in no infiltration, RESRAD vadose and saturated zone hydrogeologic parameters have little influence on the calculated SAL. A value of 0.999 is unrealistic for any individual site (i.e., plant growth would be impossible) but has the utility of simplicity and conservatism for these calculations. A local precipitation rate value is used in the calculations because this parameter influences the SAL for

tritium. Additionally, the soil-erosion rate has been set at zero for the SAL calculations. The combination of no water infiltration and no erosion creates a static contaminated soil zone, which, in turn, results in maximum on-site dose over time. Under the static site conditions achieved in the calculation of SALs (i.e., the contaminated zone is not depleted by erosion or infiltration of water), radioactive progeny continue to ingrow in soil at a rate proportional to the half-life of these nuclides.

SALs are calculated within a 1000-yr time frame. One thousand years was selected as the time limit for dose calculations based on DOE requirements for performance assessment of low-level waste sites in DOE Order 435.1. For most radionuclides, maximum exposure (dose) occurs at the beginning of this 1000-yr time interval, but the uranium isotopes for which SALs are calculated (uranium-234, uranium-235, and uranium-238) contribute their maximum dose at the end of the modeling period because of the slow ingrowth of radioactive progeny. Hence, the static site conditions are most relevant in ensuring protective SALs for the uranium isotopes.

Although the contaminated zone is modeled as static with respect to loss of radionuclides through erosion and leaching, RESRAD accounts for tritium diffusing as water vapor from contaminated soil (lost to the atmosphere). As a result, the modeled tritium dose declines rapidly over time. Tritium diffusion from soil as water vapor (resulting in dose by inhalation and dermal absorption) is greatly affected by the absolute humidity of the air above the contaminated zone (a local value for absolute humidity is used in SAL calculations).

7.0 APPLICATION OF SALs

To determine whether SALs are applicable to a particular site, it is necessary to determine if the assumptions underlying their calculation are consistent with the conceptual site model. The conceptual site model includes what is known or assumed about the spatial distribution of radionuclides in soil, the potential for radionuclide migration over time, and the characteristics of the applicable receptor population. If potentially important site-specific transport or exposure pathways are not included in the derivation of the SALs, a comparison of site data to SALs may be inappropriate. If such a screening is determined to be inappropriate for a site, a site-specific dose assessment should be conducted.

Radionuclide migration from a contaminated site may occur by dissolution in surface or groundwater, erosion of soil, resuspension as airborne particulate, through biotic uptake, and/or volatilization as a vapor. Radionuclide migration to an off-site location is not incorporated in the SALs, and RESRAD does not directly support such evaluations. Although potential off-site radionuclide concentrations generally should be lower than those observed on the site, modeling remote concentrations over time may be important because of (1) public concerns, (2) different routes and/or intensities of exposure than are considered for on-site receptors, and (3) regulatory requirements to assess off-site impacts. An example of a potentially significant off-site impact is strontium-90 uptake by plants rooted in contaminated soil and the subsequent redistribution in leaf litter or in fine particulates if the plant or plant material burns. Appendix K of Yu et al. (2001, 076874) provides guidance for evaluating off-site migration using RESRAD output. The RESRAD-Offsite computer code distributed by Argonne National Laboratory may also be used for evaluating doses to remote receptors.

Radionuclide SALs are calculated for individual radionuclides such that a receptor will not receive a dose greater than 25 mrem/yr when the contaminated zone contains a uniform radionuclide concentration equal to the SAL. When two or more radionuclides have been released, however, it is necessary to determine whether their cumulative impact may result in a total annual dose greater than the target dose limit. If no SAL is exceeded, the soil concentration of each radionuclide is divided by the SAL for that radionuclide to produce a ratio. These ratios are then summed. If the sum exceeds unity, the dose for a

receptor exceeds 25 mrem/yr, although all radionuclides are present at concentrations below their individual SALs.

8.0 SUMMARY

In summary, SALs are applicable for screening contaminated media at most sites and are protectively biased within the bounds of the assumptions used in the calculations. The user must verify these bounds are appropriate for a screening assessment at a specific site. The applicability of the SALs for site screening can be established by comparing the underlying SAL assumptions, described in this document, with site-specific conditions.

9.0 REFERENCES

The following list includes all documents cited in this report. Parenthetical information following each reference provides the author(s), publication date, and ER ID or ESH ID. This information is also included in text citations. ER IDs were assigned by the Environmental Programs Directorate's Records Processing Facility (IDs through 599999), and ESH IDs are assigned by the Environment, Safety, and Health (ESH) Directorate (IDs 600000 and above). IDs are used to locate documents in the Laboratory's Electronic Document Management System and, where applicable, in the master reference set.

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Appendix A

*Scenario-Specific RESRAD
Summary Reports for Screening Action Levels
(on CD included with this document)*

The following 25-mrem/yr summary reports from residual radioactivity (RESRAD) 7.0 computer code present details on the input parameter values, results of interim calculations, and single radionuclide soil guidelines related to the screening action levels (SALs) for each scenario. SALs are linearly proportional to the user-defined annual dose threshold. SALs based on a 15-mrem/yr dose threshold were derived from the 25-mrem/yr values by multiplying the 25-mrem/yr results by (15/25).

The summary reports also include total dose values related to the soil concentrations of each radionuclide. These dose results are not meaningful; the RESRAD simulations were conducted for the purpose of calculating the single radionuclide soil guidelines and the initial soil concentrations are arbitrary and have no influence on the soil guidelines.

- Residential 25 mrem/yr, child
- Residential 25 mrem/yr, adult
- Commercial/industrial 25 mrem/yr, adult
- Construction worker 25 mrem/yr, adult
- Recreational 25 mrem/yr, child
- Recreational 25 mrem/yr, adult

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Time = 0.000E+00	24
Time = 1.000E+00	26
Time = 2.500E+01	28
Time = 3.000E+01	30
Time = 5.000E+01	32
Time = 1.000E+02	34
Time = 2.500E+02	36
Time = 5.000E+02	38
Time = 1.000E+03	40
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Dose Conversion Factor (and Related) Parameter Summary

Dose Library: DCFPAK adult HTO Plus DCFPAK3.02 (Adult)

0	3		3	Current	3	Base	3	Parameter
Menu	3	Parameter	3	Value#	3	Case*	3	Name
AA								
A-1	3	DCF's for external ground radiation, (mrem/yr)/(pCi/g)	3		3		3	
A-1	3	Ac-225 (Source: DCFPAK3.02)	3	5.286E-02	3	5.287E-02	3	DCF1(1)
A-1	3	Ac-227 (Source: DCFPAK3.02)	3	2.615E-04	3	2.615E-04	3	DCF1(2)
A-1	3	Ac-228 (Source: DCFPAK3.02)	3	5.044E+00	3	5.044E+00	3	DCF1(3)
A-1	3	Am-241 (Source: DCFPAK3.02)	3	3.717E-02	3	3.718E-02	3	DCF1(4)
A-1	3	At-217 (Source: DCFPAK3.02)	3	1.186E-03	3	1.186E-03	3	DCF1(5)
A-1	3	At-218 (Source: DCFPAK3.02)	3	5.567E-05	3	5.567E-05	3	DCF1(6)
A-1	3	At-219 (Source: DCFPAK3.02)	3	0.000E+00	3	0.000E+00	3	DCF1(7)
A-1	3	Ba-137m (Source: DCFPAK3.02)	3	3.381E+00	3	3.381E+00	3	DCF1(8)
A-1	3	Bi-210 (Source: DCFPAK3.02)	3	5.473E-03	3	5.474E-03	3	DCF1(9)
A-1	3	Bi-211 (Source: DCFPAK3.02)	3	2.410E-01	3	2.410E-01	3	DCF1(10)
A-1	3	Bi-212 (Source: DCFPAK3.02)	3	6.258E-01	3	6.259E-01	3	DCF1(11)
A-1	3	Bi-213 (Source: DCFPAK3.02)	3	6.874E-01	3	6.875E-01	3	DCF1(12)
A-1	3	Bi-214 (Source: DCFPAK3.02)	3	9.135E+00	3	9.136E+00	3	DCF1(13)
A-1	3	Bi-215 (Source: DCFPAK3.02)	3	1.369E+00	3	1.369E+00	3	DCF1(14)
A-1	3	Co-60 (Source: DCFPAK3.02)	3	1.539E+01	3	1.539E+01	3	DCF1(15)
A-1	3	Cs-134 (Source: DCFPAK3.02)	3	8.892E+00	3	8.893E+00	3	DCF1(16)
A-1	3	Cs-137 (Source: DCFPAK3.02)	3	8.686E-04	3	8.687E-04	3	DCF1(17)
A-1	3	Eu-152 (Source: DCFPAK3.02)	3	6.743E+00	3	6.744E+00	3	DCF1(18)
A-1	3	Eu-154 (Source: DCFPAK3.02)	3	7.285E+00	3	7.286E+00	3	DCF1(19)
A-1	3	Eu-155 (Source: DCFPAK3.02)	3	1.633E-01	3	1.633E-01	3	DCF1(20)
A-1	3	Fr-221 (Source: DCFPAK3.02)	3	1.332E-01	3	1.332E-01	3	DCF1(21)
A-1	3	Fr-223 (Source: DCFPAK3.02)	3	1.758E-01	3	1.758E-01	3	DCF1(22)
A-1	3	Gd-152 (Source: DCFPAK3.02)	3	0.000E+00	3	0.000E+00	3	DCF1(23)
A-1	3	H-3 (Source: DCFPAK3.02)	3	0.000E+00	3	0.000E+00	3	DCF1(24)
A-1	3	Hg-206 (Source: DCFPAK3.02)	3	6.127E-01	3	6.128E-01	3	DCF1(25)
A-1	3	I-129 (Source: DCFPAK3.02)	3	9.695E-03	3	9.696E-03	3	DCF1(26)
A-1	3	Mn-54 (Source: DCFPAK3.02)	3	4.857E+00	3	4.857E+00	3	DCF1(27)
A-1	3	Na-22 (Source: DCFPAK3.02)	3	1.289E+01	3	1.289E+01	3	DCF1(28)
A-1	3	Nd-144 (Source: DCFPAK3.02)	3	0.000E+00	3	0.000E+00	3	DCF1(29)
A-1	3	Ni-63 (Source: DCFPAK3.02)	3	0.000E+00	3	0.000E+00	3	DCF1(30)
A-1	3	Np-237 (Source: DCFPAK3.02)	3	6.706E-02	3	6.707E-02	3	DCF1(31)
A-1	3	Pa-231 (Source: DCFPAK3.02)	3	1.608E-01	3	1.609E-01	3	DCF1(32)
A-1	3	Pa-233 (Source: DCFPAK3.02)	3	1.018E+00	3	1.018E+00	3	DCF1(33)
A-1	3	Pa-234 (Source: DCFPAK3.02)	3	8.275E+00	3	8.276E+00	3	DCF1(34)
A-1	3	Pa-234m (Source: DCFPAK3.02)	3	1.257E-01	3	1.257E-01	3	DCF1(35)
A-1	3	Pb-209 (Source: DCFPAK3.02)	3	7.528E-04	3	7.529E-04	3	DCF1(36)
A-1	3	Pb-210 (Source: DCFPAK3.02)	3	2.092E-03	3	2.092E-03	3	DCF1(37)
A-1	3	Pb-211 (Source: DCFPAK3.02)	3	3.680E-01	3	3.680E-01	3	DCF1(38)
A-1	3	Pb-212 (Source: DCFPAK3.02)	3	6.314E-01	3	6.315E-01	3	DCF1(39)

A-1 ³ Pb-214 (Source: DCFPAK3.02)
 A-1 ³ Po-210 (Source: DCFPAK3.02)
 A-1 ³ Po-211 (Source: DCFPAK3.02)
 A-1 ³ Po-212 (Source: DCFPAK3.02)
 A-1 ³ Po-213 (Source: DCFPAK3.02)
 A-1 ³ Po-214 (Source: DCFPAK3.02)
 A-1 ³ Po-215 (Source: DCFPAK3.02)
 A-1 ³ Po-216 (Source: DCFPAK3.02)
 A-1 ³ Po-218 (Source: DCFPAK3.02)
 A-1 ³ Pu-238 (Source: DCFPAK3.02)

³ 1.257E+00 ³ 1.257E+00 ³ DCF1(40)
³ 5.641E-05 ³ 5.642E-05 ³ DCF1(41)
³ 4.707E-02 ³ 4.708E-02 ³ DCF1(42)
³ 0.000E+00 ³ 0.000E+00 ³ DCF1(43)
³ 2.167E-04 ³ 2.167E-04 ³ DCF1(44)
³ 4.801E-04 ³ 4.801E-04 ³ DCF1(45)
³ 9.452E-04 ³ 9.453E-04 ³ DCF1(46)
³ 8.873E-05 ³ 8.874E-05 ³ DCF1(47)
³ 9.228E-09 ³ 9.229E-09 ³ DCF1(48)
³ 1.111E-04 ³ 1.112E-04 ³ DCF1(49)

Dose Conversion Factor (and Related) Parameter Summary (continued)

Dose Library: DCFPAK adult HTO Plus DCFPAK3.02 (Adult)

0	3		3	Current	3	Base	3	Parameter
Menu	3	Parameter	3	Value#	3	Case*	3	Name
AA								
A-1	3	Pu-239 (Source: DCFPAK3.02)	3	2.765E-04	3	2.765E-04	3	DCF1(50)
A-1	3	Ra-223 (Source: DCFPAK3.02)	3	5.791E-01	3	5.791E-01	3	DCF1(51)
A-1	3	Ra-224 (Source: DCFPAK3.02)	3	4.950E-02	3	4.951E-02	3	DCF1(52)
A-1	3	Ra-225 (Source: DCFPAK3.02)	3	8.910E-03	3	8.911E-03	3	DCF1(53)
A-1	3	Ra-226 (Source: DCFPAK3.02)	3	3.176E-02	3	3.176E-02	3	DCF1(54)
A-1	3	Ra-228 (Source: DCFPAK3.02)	3	6.575E-05	3	6.576E-05	3	DCF1(55)
A-1	3	Rh-106 (Source: DCFPAK3.02)	3	1.252E+00	3	1.252E+00	3	DCF1(56)
A-1	3	Rn-218 (Source: DCFPAK3.02)	3	4.259E-03	3	4.260E-03	3	DCF1(57)
A-1	3	Rn-219 (Source: DCFPAK3.02)	3	2.970E-01	3	2.970E-01	3	DCF1(58)
A-1	3	Rn-220 (Source: DCFPAK3.02)	3	3.474E-03	3	3.475E-03	3	DCF1(59)
A-1	3	Rn-222 (Source: DCFPAK3.02)	3	2.130E-03	3	2.130E-03	3	DCF1(60)
A-1	3	Ru-106 (Source: DCFPAK3.02)	3	0.000E+00	3	0.000E+00	3	DCF1(61)
A-1	3	Sm-148 (Source: DCFPAK3.02)	3	0.000E+00	3	0.000E+00	3	DCF1(62)
A-1	3	Sr-90 (Source: DCFPAK3.02)	3	6.463E-04	3	6.464E-04	3	DCF1(63)
A-1	3	Tc-99 (Source: DCFPAK3.02)	3	1.104E-04	3	1.104E-04	3	DCF1(64)
A-1	3	Th-227 (Source: DCFPAK3.02)	3	5.641E-01	3	5.642E-01	3	DCF1(65)
A-1	3	Th-228 (Source: DCFPAK3.02)	3	7.248E-03	3	7.249E-03	3	DCF1(66)
A-1	3	Th-229 (Source: DCFPAK3.02)	3	2.877E-01	3	2.877E-01	3	DCF1(67)
A-1	3	Th-230 (Source: DCFPAK3.02)	3	1.106E-03	3	1.106E-03	3	DCF1(68)
A-1	3	Th-231 (Source: DCFPAK3.02)	3	3.250E-02	3	3.251E-02	3	DCF1(69)
A-1	3	Th-232 (Source: DCFPAK3.02)	3	4.782E-04	3	4.783E-04	3	DCF1(70)
A-1	3	Th-234 (Source: DCFPAK3.02)	3	2.316E-02	3	2.317E-02	3	DCF1(71)
A-1	3	Tl-206 (Source: DCFPAK3.02)	3	1.278E-02	3	1.278E-02	3	DCF1(72)
A-1	3	Tl-207 (Source: DCFPAK3.02)	3	2.391E-02	3	2.391E-02	3	DCF1(73)
A-1	3	Tl-208 (Source: DCFPAK3.02)	3	2.167E+01	3	2.167E+01	3	DCF1(74)
A-1	3	Tl-209 (Source: DCFPAK3.02)	3	1.287E+01	3	1.287E+01	3	DCF1(75)
A-1	3	Tl-210 (Source: DCFPAK3.02)	3	1.677E+01	3	1.678E+01	3	DCF1(76)
A-1	3	U-233 (Source: DCFPAK3.02)	3	9.191E-04	3	9.192E-04	3	DCF1(77)
A-1	3	U-234 (Source: DCFPAK3.02)	3	3.456E-04	3	3.456E-04	3	DCF1(78)
A-1	3	U-235 (Source: DCFPAK3.02)	3	7.005E-01	3	7.006E-01	3	DCF1(79)
A-1	3	U-235m (Source: DCFPAK3.02)	3	0.000E+00	3	0.000E+00	3	DCF1(80)
A-1	3	U-238 (Source: DCFPAK3.02)	3	1.713E-04	3	1.713E-04	3	DCF1(81)
A-1	3	Y-90 (Source: DCFPAK3.02)	3	4.016E-02	3	4.017E-02	3	DCF1(82)
3								
B-1	3	Dose conversion factors for inhalation, mrem/pCi:	3		3		3	
B-1	3	Ac-227+D	3	6.464E-01	3	5.760E-01	3	DCF2(1)
B-1	3	Ac-227+D1	3	6.464E-01	3	5.760E-01	3	DCF2(2)
B-1	3	Ac-227+D2	3	6.081E-01	3	5.760E-01	3	DCF2(3)
B-1	3	Ac-227+D3	3	6.081E-01	3	5.760E-01	3	DCF2(4)
B-1	3	Ac-227+D4	3	5.761E-01	3	5.760E-01	3	DCF2(5)

B-1 ³ Ac-227+D5
B-1 ³ Am-241
B-1 ³ Co-60
B-1 ³ Cs-134
B-1 ³ Cs-137+D
B-1 ³ Eu-152
B-1 ³ Eu-154
B-1 ³ Eu-155
B-1 ³ Gd-152
B-1 ³ H-3

³ 5.761E-01 ³ 5.760E-01 ³ DCF2(6)
³ 3.566E-01 ³ 3.566E-01 ³ DCF2(7)
³ 1.138E-04 ³ 1.138E-04 ³ DCF2(8)
³ 7.558E-05 ³ 7.558E-05 ³ DCF2(9)
³ 1.457E-04 ³ 1.457E-04 ³ DCF2(10)
³ 3.452E-04 ³ 3.452E-04 ³ DCF2(11)
³ 3.947E-04 ³ 3.947E-04 ³ DCF2(13)
³ 4.599E-05 ³ 4.599E-05 ³ DCF2(14)
³ 7.037E-02 ³ 7.037E-02 ³ DCF2(15)
³ 6.778E-08 ³ 9.689E-07 ³ DCF2(16)

Dose Library: DCFPAK adult HT0 Plus DCFPAK3.02 (Adult)

0		3	Current	3	Base	3	Parameter
Menu		3	Value#	3	Case*	3	Name
B-1	I-129	3	3.630E-04	3	3.630E-04	3	DCF2(17)
B-1	Mn-54	3	1.210E-05	3	1.210E-05	3	DCF2(18)
B-1	Na-22	3	1.075E-04	3	1.075E-04	3	DCF2(19)
B-1	Nd-144	3	7.037E-02	3	7.037E-02	3	DCF2(20)
B-1	Ni-63	3	7.388E-06	3	7.388E-06	3	DCF2(21)
B-1	Np-237+D	3	1.839E-01	3	1.839E-01	3	DCF2(22)
B-1	Pa-231	3	8.505E-01	3	8.505E-01	3	DCF2(23)
B-1	Pb-210+D	3	3.708E-02	3	2.077E-02	3	DCF2(29)
B-1	Pb-210+D1	3	2.126E-02	3	2.077E-02	3	DCF2(30)
B-1	Pb-210+D2	3	2.077E-02	3	2.077E-02	3	DCF2(31)
B-1	Pu-238	3	3.999E-01	3	3.999E-01	3	DCF2(32)
B-1	Pu-239	3	4.410E-01	3	4.410E-01	3	DCF2(48)
B-1	Pu-239+D	3	4.410E-01	3	4.410E-01	3	DCF2(54)
B-1	Ra-226+D	3	3.528E-02	3	3.517E-02	3	DCF2(60)
B-1	Ra-226+D1	3	3.528E-02	3	3.517E-02	3	DCF2(63)
B-1	Ra-226+D2	3	3.523E-02	3	3.517E-02	3	DCF2(66)
B-1	Ra-226+D3	3	3.523E-02	3	3.517E-02	3	DCF2(69)
B-1	Ra-226+D4	3	3.517E-02	3	3.517E-02	3	DCF2(72)
B-1	Ra-228+D	3	5.943E-02	3	5.938E-02	3	DCF2(75)
B-1	Ru-106+D	3	2.461E-04	3	2.461E-04	3	DCF2(76)
B-1	Sm-148	3	7.340E-02	3	7.340E-02	3	DCF2(77)
B-1	Sr-90+D	3	5.841E-04	3	5.786E-04	3	DCF2(78)
B-1	Tc-99	3	4.935E-05	3	4.935E-05	3	DCF2(79)
B-1	Th-228+D	3	1.600E-01	3	1.468E-01	3	DCF2(80)
B-1	Th-229+D	3	9.433E-01	3	8.831E-01	3	DCF2(81)
B-1	Th-230	3	3.759E-01	3	3.759E-01	3	DCF2(82)
B-1	Th-232	3	4.070E-01	3	4.070E-01	3	DCF2(97)
B-1	U-233	3	3.549E-02	3	3.549E-02	3	DCF2(98)
B-1	U-234	3	3.479E-02	3	3.479E-02	3	DCF2(99)
B-1	U-235+D	3	3.132E-02	3	3.132E-02	3	DCF2(114)
B-1	U-238	3	2.973E-02	3	2.973E-02	3	DCF2(120)
B-1	U-238+D	3	2.976E-02	3	2.973E-02	3	DCF2(121)
B-1	U-238+D1	3	2.976E-02	3	2.973E-02	3	DCF2(136)
D-1	Dose conversion factors for ingestion, mrem/pCi:						
D-1	Ac-227+D	3	1.607E-03	3	1.191E-03	3	DCF3(1)
D-1	Ac-227+D1	3	1.607E-03	3	1.191E-03	3	DCF3(2)
D-1	Ac-227+D2	3	1.582E-03	3	1.191E-03	3	DCF3(3)
D-1	Ac-227+D3	3	1.582E-03	3	1.191E-03	3	DCF3(4)
D-1	Ac-227+D4	3	1.201E-03	3	1.191E-03	3	DCF3(5)

D-1 ³ Ac-227+D5
D-1 ³ Am-241
D-1 ³ Co-60
D-1 ³ Cs-134
D-1 ³ Cs-137+D
D-1 ³ Eu-152
D-1 ³ Eu-154
D-1 ³ Eu-155
D-1 ³ Gd-152
D-1 ³ H-3

³ 1.201E-03 ³ 1.191E-03 ³ DCF3(6)
³ 7.548E-04 ³ 7.548E-04 ³ DCF3(7)
³ 1.265E-05 ³ 1.265E-05 ³ DCF3(8)
³ 7.141E-05 ³ 7.141E-05 ³ DCF3(9)
³ 5.032E-05 ³ 5.032E-05 ³ DCF3(10)
³ 4.958E-06 ³ 4.958E-06 ³ DCF3(11)
³ 7.289E-06 ³ 7.289E-06 ³ DCF3(13)
³ 1.228E-06 ³ 1.228E-06 ³ DCF3(14)
³ 1.517E-04 ³ 1.517E-04 ³ DCF3(15)
³ 7.067E-08 ³ 1.550E-07 ³ DCF3(16)

Dose Library: DCFPAK adult HT0 Plus DCFPAK3.02 (Adult)

Menu	Parameter	Current Value#	Base Case*	Parameter Name
D-1	I-129	3.996E-04	3.996E-04	DCF3(17)
D-1	Mn-54	2.668E-06	2.668E-06	DCF3(18)
D-1	Na-22	1.173E-05	1.173E-05	DCF3(19)
D-1	Nd-144	1.510E-04	1.510E-04	DCF3(20)
D-1	Ni-63	5.735E-07	5.735E-07	DCF3(21)
D-1	Np-237+D	3.995E-04	3.959E-04	DCF3(22)
D-1	Pa-231	1.772E-03	1.772E-03	DCF3(23)
D-1	Pb-210+D	7.057E-03	2.575E-03	DCF3(29)
D-1	Pb-210+D1	2.580E-03	2.575E-03	DCF3(30)
D-1	Pb-210+D2	2.575E-03	2.575E-03	DCF3(31)
D-1	Pu-238	8.436E-04	8.436E-04	DCF3(32)
D-1	Pu-239	9.287E-04	9.287E-04	DCF3(48)
D-1	Pu-239+D	9.287E-04	9.287E-04	DCF3(54)
D-1	Ra-226+D	1.037E-03	1.036E-03	DCF3(60)
D-1	Ra-226+D1	1.037E-03	1.036E-03	DCF3(63)
D-1	Ra-226+D2	1.036E-03	1.036E-03	DCF3(66)
D-1	Ra-226+D3	1.036E-03	1.036E-03	DCF3(69)
D-1	Ra-226+D4	1.036E-03	1.036E-03	DCF3(72)
D-1	Ra-228+D	2.577E-03	2.575E-03	DCF3(75)
D-1	Ru-106+D	2.597E-05	2.597E-05	DCF3(76)
D-1	Sm-148	1.576E-04	1.576E-04	DCF3(77)
D-1	Sr-90+D	1.120E-04	1.021E-04	DCF3(78)
D-1	Tc-99	2.375E-06	2.375E-06	DCF3(79)
D-1	Th-228+D	5.286E-04	2.664E-04	DCF3(80)
D-1	Th-229+D	2.359E-03	1.846E-03	DCF3(81)
D-1	Th-230	7.918E-04	7.918E-04	DCF3(82)
D-1	Th-232	8.547E-04	8.547E-04	DCF3(97)
D-1	U-233	1.894E-04	1.894E-04	DCF3(98)
D-1	U-234	1.831E-04	1.831E-04	DCF3(99)
D-1	U-235+D	1.740E-04	1.728E-04	DCF3(114)
D-1	U-238	1.650E-04	1.650E-04	DCF3(120)
D-1	U-238+D	1.791E-04	1.650E-04	DCF3(121)
D-1	U-238+D1	1.776E-04	1.650E-04	DCF3(136)
D-34	Food transfer factors:			
D-34	Ac-227+D , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(1,1)
D-34	Ac-227+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-05	2.000E-05	RTF(1,2)
D-34	Ac-227+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-05	2.000E-05	RTF(1,3)
D-34	Ac-227+D1 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(2,1)

D-34	³	Ac-227+D1 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	³	2.000E-05	³	2.000E-05	³	RTF(	2,2)
D-34	³	Ac-227+D1 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	³	2.000E-05	³	2.000E-05	³	RTF(	2,3)
D-34	³		³		³		³		
D-34	³	Ac-227+D2 , plant/soil concentration ratio, dimensionless	³	2.500E-03	³	2.500E-03	³	RTF(	3,1)
D-34	³	Ac-227+D2 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	³	2.000E-05	³	2.000E-05	³	RTF(	3,2)
D-34	³	Ac-227+D2 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	³	2.000E-05	³	2.000E-05	³	RTF(	3,3)
D-34	³		³		³		³		
D-34	³	Ac-227+D3 , plant/soil concentration ratio, dimensionless	³	2.500E-03	³	2.500E-03	³	RTF(	4,1)
D-34	³	Ac-227+D3 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	³	2.000E-05	³	2.000E-05	³	RTF(	4,2)
D-34	³	Ac-227+D3 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	³	2.000E-05	³	2.000E-05	³	RTF(	4,3)

Dose Conversion Factor (and Related) Parameter Summary (continued)

Dose Library: DCFPAK adult HTO Plus DCFPAK3.02 (Adult)

0	3		3	Current	3	Base	3	Parameter
Menu	3	Parameter	3	Value#	3	Case*	3	Name
AA								
D-34	3	Ac-227+D4 , plant/soil concentration ratio, dimensionless	3	2.500E-03	3	2.500E-03	3	RTF(5,1)
D-34	3	Ac-227+D4 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	2.000E-05	3	2.000E-05	3	RTF(5,2)
D-34	3	Ac-227+D4 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	2.000E-05	3	2.000E-05	3	RTF(5,3)
D-34	3		3		3		3	
D-34	3	Ac-227+D5 , plant/soil concentration ratio, dimensionless	3	2.500E-03	3	2.500E-03	3	RTF(6,1)
D-34	3	Ac-227+D5 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	2.000E-05	3	2.000E-05	3	RTF(6,2)
D-34	3	Ac-227+D5 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	2.000E-05	3	2.000E-05	3	RTF(6,3)
D-34	3		3		3		3	
D-34	3	Am-241 , plant/soil concentration ratio, dimensionless	3	1.000E-03	3	1.000E-03	3	RTF(7,1)
D-34	3	Am-241 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	5.000E-05	3	5.000E-05	3	RTF(7,2)
D-34	3	Am-241 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	2.000E-06	3	2.000E-06	3	RTF(7,3)
D-34	3		3		3		3	
D-34	3	Co-60 , plant/soil concentration ratio, dimensionless	3	8.000E-02	3	8.000E-02	3	RTF(8,1)
D-34	3	Co-60 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	2.000E-02	3	2.000E-02	3	RTF(8,2)
D-34	3	Co-60 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	2.000E-03	3	2.000E-03	3	RTF(8,3)
D-34	3		3		3		3	
D-34	3	Cs-134 , plant/soil concentration ratio, dimensionless	3	4.000E-02	3	4.000E-02	3	RTF(9,1)
D-34	3	Cs-134 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	3.000E-02	3	3.000E-02	3	RTF(9,2)
D-34	3	Cs-134 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	8.000E-03	3	8.000E-03	3	RTF(9,3)
D-34	3		3		3		3	
D-34	3	Cs-137+D , plant/soil concentration ratio, dimensionless	3	4.000E-02	3	4.000E-02	3	RTF(10,1)
D-34	3	Cs-137+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	3.000E-02	3	3.000E-02	3	RTF(10,2)
D-34	3	Cs-137+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	8.000E-03	3	8.000E-03	3	RTF(10,3)
D-34	3		3		3		3	
D-34	3	Eu-152 , plant/soil concentration ratio, dimensionless	3	2.500E-03	3	2.500E-03	3	RTF(11,1)
D-34	3	Eu-152 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	2.000E-03	3	2.000E-03	3	RTF(11,2)
D-34	3	Eu-152 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	5.000E-05	3	5.000E-05	3	RTF(11,3)
D-34	3		3		3		3	
D-34	3	Eu-154 , plant/soil concentration ratio, dimensionless	3	2.500E-03	3	2.500E-03	3	RTF(13,1)
D-34	3	Eu-154 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	2.000E-03	3	2.000E-03	3	RTF(13,2)
D-34	3	Eu-154 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	5.000E-05	3	5.000E-05	3	RTF(13,3)
D-34	3		3		3		3	
D-34	3	Eu-155 , plant/soil concentration ratio, dimensionless	3	2.500E-03	3	2.500E-03	3	RTF(14,1)
D-34	3	Eu-155 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	2.000E-03	3	2.000E-03	3	RTF(14,2)
D-34	3	Eu-155 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	5.000E-05	3	5.000E-05	3	RTF(14,3)
D-34	3		3		3		3	
D-34	3	Gd-152 , plant/soil concentration ratio, dimensionless	3	2.500E-03	3	2.500E-03	3	RTF(15,1)
D-34	3	Gd-152 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	2.000E-03	3	2.000E-03	3	RTF(15,2)
D-34	3	Gd-152 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	2.000E-05	3	2.000E-05	3	RTF(15,3)
D-34	3		3		3		3	

D-34	³	H-3	, plant/soil concentration ratio, dimensionless	³	4.800E+00	³	4.800E+00	³	RTF(16,1)
D-34	³	H-3	, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	³	1.200E-02	³	1.200E-02	³	RTF(16,2)
D-34	³	H-3	, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	³	1.000E-02	³	1.000E-02	³	RTF(16,3)
D-34	³			³		³		³	
D-34	³	I-129	, plant/soil concentration ratio, dimensionless	³	2.000E-02	³	2.000E-02	³	RTF(17,1)
D-34	³	I-129	, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	³	7.000E-03	³	7.000E-03	³	RTF(17,2)
D-34	³	I-129	, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	³	1.000E-02	³	1.000E-02	³	RTF(17,3)
D-34	³			³		³		³	

Dose Conversion Factor (and Related) Parameter Summary (continued)

Dose Library: DCFPAK adult HTO Plus DCFPAK3.02 (Adult)

0	3		3	Current	3	Base	3	Parameter
Menu	3	Parameter	3	Value#	3	Case*	3	Name
AAAAA	3	AAAAA	3	AAAAA	3	AAAAA	3	AAAAA
D-34	3	Mn-54 , plant/soil concentration ratio, dimensionless	3	3.000E-01	3	3.000E-01	3	RTF(18,1)
D-34	3	Mn-54 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	5.000E-04	3	5.000E-04	3	RTF(18,2)
D-34	3	Mn-54 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	3.000E-04	3	3.000E-04	3	RTF(18,3)
D-34	3		3		3		3	
D-34	3	Na-22 , plant/soil concentration ratio, dimensionless	3	5.000E-02	3	5.000E-02	3	RTF(19,1)
D-34	3	Na-22 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	8.000E-02	3	8.000E-02	3	RTF(19,2)
D-34	3	Na-22 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	4.000E-02	3	4.000E-02	3	RTF(19,3)
D-34	3		3		3		3	
D-34	3	Nd-144 , plant/soil concentration ratio, dimensionless	3	2.400E-03	3	2.400E-03	3	RTF(20,1)
D-34	3	Nd-144 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	2.000E-03	3	2.000E-03	3	RTF(20,2)
D-34	3	Nd-144 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	2.000E-05	3	2.000E-05	3	RTF(20,3)
D-34	3		3		3		3	
D-34	3	Ni-63 , plant/soil concentration ratio, dimensionless	3	5.000E-02	3	5.000E-02	3	RTF(21,1)
D-34	3	Ni-63 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	5.000E-03	3	5.000E-03	3	RTF(21,2)
D-34	3	Ni-63 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	2.000E-02	3	2.000E-02	3	RTF(21,3)
D-34	3		3		3		3	
D-34	3	Np-237+D , plant/soil concentration ratio, dimensionless	3	2.000E-02	3	2.000E-02	3	RTF(22,1)
D-34	3	Np-237+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	1.000E-03	3	1.000E-03	3	RTF(22,2)
D-34	3	Np-237+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	5.000E-06	3	5.000E-06	3	RTF(22,3)
D-34	3		3		3		3	
D-34	3	Pa-231 , plant/soil concentration ratio, dimensionless	3	1.000E-02	3	1.000E-02	3	RTF(23,1)
D-34	3	Pa-231 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	5.000E-03	3	5.000E-03	3	RTF(23,2)
D-34	3	Pa-231 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	5.000E-06	3	5.000E-06	3	RTF(23,3)
D-34	3		3		3		3	
D-34	3	Pb-210+D , plant/soil concentration ratio, dimensionless	3	1.000E-02	3	1.000E-02	3	RTF(29,1)
D-34	3	Pb-210+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	8.000E-04	3	8.000E-04	3	RTF(29,2)
D-34	3	Pb-210+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	3.000E-04	3	3.000E-04	3	RTF(29,3)
D-34	3		3		3		3	
D-34	3	Pb-210+D1 , plant/soil concentration ratio, dimensionless	3	1.000E-02	3	1.000E-02	3	RTF(30,1)
D-34	3	Pb-210+D1 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	8.000E-04	3	8.000E-04	3	RTF(30,2)
D-34	3	Pb-210+D1 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	3.000E-04	3	3.000E-04	3	RTF(30,3)
D-34	3		3		3		3	
D-34	3	Pb-210+D2 , plant/soil concentration ratio, dimensionless	3	1.000E-02	3	1.000E-02	3	RTF(31,1)
D-34	3	Pb-210+D2 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	8.000E-04	3	8.000E-04	3	RTF(31,2)
D-34	3	Pb-210+D2 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	3.000E-04	3	3.000E-04	3	RTF(31,3)
D-34	3		3		3		3	
D-34	3	Pu-238 , plant/soil concentration ratio, dimensionless	3	1.000E-03	3	1.000E-03	3	RTF(32,1)
D-34	3	Pu-238 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	1.000E-04	3	1.000E-04	3	RTF(32,2)
D-34	3	Pu-238 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	1.000E-06	3	1.000E-06	3	RTF(32,3)
D-34	3		3		3		3	

D-34	³	Pu-239	, plant/soil concentration ratio, dimensionless	³	1.000E-03	³	1.000E-03	³	RTF(48,1)
D-34	³	Pu-239	, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	³	1.000E-04	³	1.000E-04	³	RTF(48,2)
D-34	³	Pu-239	, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	³	1.000E-06	³	1.000E-06	³	RTF(48,3)
D-34	³			³		³		³	
D-34	³	Pu-239+D	, plant/soil concentration ratio, dimensionless	³	1.000E-03	³	1.000E-03	³	RTF(54,1)
D-34	³	Pu-239+D	, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	³	1.000E-04	³	1.000E-04	³	RTF(54,2)
D-34	³	Pu-239+D	, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	³	1.000E-06	³	1.000E-06	³	RTF(54,3)
D-34	³			³		³		³	

Dose Conversion Factor (and Related) Parameter Summary (continued)

Dose Library: DCFPAK adult HTO Plus DCFPAK3.02 (Adult)

0	3		3	Current	3	Base	3	Parameter
Menu	3	Parameter	3	Value#	3	Case*	3	Name
AA								
D-34	3	Ra-226+D , plant/soil concentration ratio, dimensionless	3	4.000E-02	3	4.000E-02	3	RTF(60,1)
D-34	3	Ra-226+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	1.000E-03	3	1.000E-03	3	RTF(60,2)
D-34	3	Ra-226+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	1.000E-03	3	1.000E-03	3	RTF(60,3)
D-34	3		3		3		3	
D-34	3	Ra-226+D1 , plant/soil concentration ratio, dimensionless	3	4.000E-02	3	4.000E-02	3	RTF(63,1)
D-34	3	Ra-226+D1 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	1.000E-03	3	1.000E-03	3	RTF(63,2)
D-34	3	Ra-226+D1 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	1.000E-03	3	1.000E-03	3	RTF(63,3)
D-34	3		3		3		3	
D-34	3	Ra-226+D2 , plant/soil concentration ratio, dimensionless	3	4.000E-02	3	4.000E-02	3	RTF(66,1)
D-34	3	Ra-226+D2 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	1.000E-03	3	1.000E-03	3	RTF(66,2)
D-34	3	Ra-226+D2 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	1.000E-03	3	1.000E-03	3	RTF(66,3)
D-34	3		3		3		3	
D-34	3	Ra-226+D3 , plant/soil concentration ratio, dimensionless	3	4.000E-02	3	4.000E-02	3	RTF(69,1)
D-34	3	Ra-226+D3 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	1.000E-03	3	1.000E-03	3	RTF(69,2)
D-34	3	Ra-226+D3 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	1.000E-03	3	1.000E-03	3	RTF(69,3)
D-34	3		3		3		3	
D-34	3	Ra-226+D4 , plant/soil concentration ratio, dimensionless	3	4.000E-02	3	4.000E-02	3	RTF(72,1)
D-34	3	Ra-226+D4 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	1.000E-03	3	1.000E-03	3	RTF(72,2)
D-34	3	Ra-226+D4 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	1.000E-03	3	1.000E-03	3	RTF(72,3)
D-34	3		3		3		3	
D-34	3	Ra-228+D , plant/soil concentration ratio, dimensionless	3	4.000E-02	3	4.000E-02	3	RTF(75,1)
D-34	3	Ra-228+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	1.000E-03	3	1.000E-03	3	RTF(75,2)
D-34	3	Ra-228+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	1.000E-03	3	1.000E-03	3	RTF(75,3)
D-34	3		3		3		3	
D-34	3	Ru-106+D , plant/soil concentration ratio, dimensionless	3	3.000E-02	3	3.000E-02	3	RTF(76,1)
D-34	3	Ru-106+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	2.000E-03	3	2.000E-03	3	RTF(76,2)
D-34	3	Ru-106+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	3.300E-06	3	3.300E-06	3	RTF(76,3)
D-34	3		3		3		3	
D-34	3	Sm-148 , plant/soil concentration ratio, dimensionless	3	2.500E-03	3	2.500E-03	3	RTF(77,1)
D-34	3	Sm-148 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	2.000E-03	3	2.000E-03	3	RTF(77,2)
D-34	3	Sm-148 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	2.000E-05	3	2.000E-05	3	RTF(77,3)
D-34	3		3		3		3	
D-34	3	Sr-90+D , plant/soil concentration ratio, dimensionless	3	3.000E-01	3	3.000E-01	3	RTF(78,1)
D-34	3	Sr-90+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	8.000E-03	3	8.000E-03	3	RTF(78,2)
D-34	3	Sr-90+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	2.000E-03	3	2.000E-03	3	RTF(78,3)
D-34	3		3		3		3	
D-34	3	Tc-99 , plant/soil concentration ratio, dimensionless	3	5.000E+00	3	5.000E+00	3	RTF(79,1)
D-34	3	Tc-99 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	1.000E-04	3	1.000E-04	3	RTF(79,2)
D-34	3	Tc-99 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	1.000E-03	3	1.000E-03	3	RTF(79,3)
D-34	3		3		3		3	

D-34	³	Th-228+D	, plant/soil concentration ratio, dimensionless	³	1.000E-03	³	1.000E-03	³	RTF(80,1)
D-34	³	Th-228+D	, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	³	1.000E-04	³	1.000E-04	³	RTF(80,2)
D-34	³	Th-228+D	, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	³	5.000E-06	³	5.000E-06	³	RTF(80,3)
D-34	³			³		³		³	
D-34	³	Th-229+D	, plant/soil concentration ratio, dimensionless	³	1.000E-03	³	1.000E-03	³	RTF(81,1)
D-34	³	Th-229+D	, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	³	1.000E-04	³	1.000E-04	³	RTF(81,2)
D-34	³	Th-229+D	, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	³	5.000E-06	³	5.000E-06	³	RTF(81,3)
D-34	³			³		³		³	

Dose Conversion Factor (and Related) Parameter Summary (continued)

Dose Library: DCFPAK adult HT0 Plus DCFPAK3.02 (Adult)

Menu	Parameter	Current Value#	Base Case*	Parameter Name
D-34	Th-230 , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(82,1)
D-34	Th-230 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-04	1.000E-04	RTF(82,2)
D-34	Th-230 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-06	5.000E-06	RTF(82,3)
D-34	Th-232 , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(97,1)
D-34	Th-232 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-04	1.000E-04	RTF(97,2)
D-34	Th-232 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-06	5.000E-06	RTF(97,3)
D-34	U-233 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(98,1)
D-34	U-233 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.400E-04	3.400E-04	RTF(98,2)
D-34	U-233 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	6.000E-04	6.000E-04	RTF(98,3)
D-34	U-234 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(99,1)
D-34	U-234 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.400E-04	3.400E-04	RTF(99,2)
D-34	U-234 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	6.000E-04	6.000E-04	RTF(99,3)
D-34	U-235+D , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(114,1)
D-34	U-235+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.400E-04	3.400E-04	RTF(114,2)
D-34	U-235+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	6.000E-04	6.000E-04	RTF(114,3)
D-34	U-238 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(120,1)
D-34	U-238 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.400E-04	3.400E-04	RTF(120,2)
D-34	U-238 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	6.000E-04	6.000E-04	RTF(120,3)
D-34	U-238+D , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(121,1)
D-34	U-238+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.400E-04	3.400E-04	RTF(121,2)
D-34	U-238+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	6.000E-04	6.000E-04	RTF(121,3)
D-34	U-238+D1 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(136,1)
D-34	U-238+D1 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.400E-04	3.400E-04	RTF(136,2)
D-34	U-238+D1 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	6.000E-04	6.000E-04	RTF(136,3)
D-5	Bioaccumulation factors, fresh water, L/kg:			
D-5	Ac-227+D , fish	1.500E+01	1.500E+01	BIOFAC(1,1)
D-5	Ac-227+D , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(1,2)
D-5	Ac-227+D1 , fish	1.500E+01	1.500E+01	BIOFAC(2,1)
D-5	Ac-227+D1 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(2,2)

D-5 ³ Ac-227+D2 , fish
 D-5 ³ Ac-227+D2 , crustacea and mollusks
 D-5 ³
 D-5 ³ Ac-227+D3 , fish
 D-5 ³ Ac-227+D3 , crustacea and mollusks
 D-5 ³
 D-5 ³ Ac-227+D4 , fish
 D-5 ³ Ac-227+D4 , crustacea and mollusks
 D-5 ³

³ 1.500E+01 ³ 1.500E+01 ³ BIOFAC(3,1)
³ 1.000E+03 ³ 1.000E+03 ³ BIOFAC(3,2)
³ ³ ³
³ 1.500E+01 ³ 1.500E+01 ³ BIOFAC(4,1)
³ 1.000E+03 ³ 1.000E+03 ³ BIOFAC(4,2)
³ ³ ³
³ 1.500E+01 ³ 1.500E+01 ³ BIOFAC(5,1)
³ 1.000E+03 ³ 1.000E+03 ³ BIOFAC(5,2)
³ ³ ³

Dose Conversion Factor (and Related) Parameter Summary (continued)

Dose Library: DCFPAK adult HTO Plus DCFPAK3.02 (Adult)

0	3		3	Current	3	Base	3	Parameter
Menu	3	Parameter	3	Value#	3	Case*	3	Name
AAAAA	3	AAAAA	3	AAAAA	3	AAAAA	3	AAAAA
D-5	3	Ac-227+D5 , fish	3	1.500E+01	3	1.500E+01	3	BIOFAC(6,1)
D-5	3	Ac-227+D5 , crustacea and mollusks	3	1.000E+03	3	1.000E+03	3	BIOFAC(6,2)
D-5	3		3		3		3	
D-5	3	Am-241 , fish	3	3.000E+01	3	3.000E+01	3	BIOFAC(7,1)
D-5	3	Am-241 , crustacea and mollusks	3	1.000E+03	3	1.000E+03	3	BIOFAC(7,2)
D-5	3		3		3		3	
D-5	3	Co-60 , fish	3	3.000E+02	3	3.000E+02	3	BIOFAC(8,1)
D-5	3	Co-60 , crustacea and mollusks	3	2.000E+02	3	2.000E+02	3	BIOFAC(8,2)
D-5	3		3		3		3	
D-5	3	Cs-134 , fish	3	2.000E+03	3	2.000E+03	3	BIOFAC(9,1)
D-5	3	Cs-134 , crustacea and mollusks	3	1.000E+02	3	1.000E+02	3	BIOFAC(9,2)
D-5	3		3		3		3	
D-5	3	Cs-137+D , fish	3	2.000E+03	3	2.000E+03	3	BIOFAC(10,1)
D-5	3	Cs-137+D , crustacea and mollusks	3	1.000E+02	3	1.000E+02	3	BIOFAC(10,2)
D-5	3		3		3		3	
D-5	3	Eu-152 , fish	3	5.000E+01	3	5.000E+01	3	BIOFAC(11,1)
D-5	3	Eu-152 , crustacea and mollusks	3	1.000E+03	3	1.000E+03	3	BIOFAC(11,2)
D-5	3		3		3		3	
D-5	3	Eu-154 , fish	3	5.000E+01	3	5.000E+01	3	BIOFAC(13,1)
D-5	3	Eu-154 , crustacea and mollusks	3	1.000E+03	3	1.000E+03	3	BIOFAC(13,2)
D-5	3		3		3		3	
D-5	3	Eu-155 , fish	3	5.000E+01	3	5.000E+01	3	BIOFAC(14,1)
D-5	3	Eu-155 , crustacea and mollusks	3	1.000E+03	3	1.000E+03	3	BIOFAC(14,2)
D-5	3		3		3		3	
D-5	3	Gd-152 , fish	3	2.500E+01	3	2.500E+01	3	BIOFAC(15,1)
D-5	3	Gd-152 , crustacea and mollusks	3	1.000E+03	3	1.000E+03	3	BIOFAC(15,2)
D-5	3		3		3		3	
D-5	3	H-3 , fish	3	1.000E+00	3	1.000E+00	3	BIOFAC(16,1)
D-5	3	H-3 , crustacea and mollusks	3	1.000E+00	3	1.000E+00	3	BIOFAC(16,2)
D-5	3		3		3		3	
D-5	3	I-129 , fish	3	4.000E+01	3	4.000E+01	3	BIOFAC(17,1)
D-5	3	I-129 , crustacea and mollusks	3	5.000E+00	3	5.000E+00	3	BIOFAC(17,2)
D-5	3		3		3		3	
D-5	3	Mn-54 , fish	3	4.000E+02	3	4.000E+02	3	BIOFAC(18,1)
D-5	3	Mn-54 , crustacea and mollusks	3	9.000E+04	3	9.000E+04	3	BIOFAC(18,2)
D-5	3		3		3		3	
D-5	3	Na-22 , fish	3	2.000E+01	3	2.000E+01	3	BIOFAC(19,1)
D-5	3	Na-22 , crustacea and mollusks	3	2.000E+02	3	2.000E+02	3	BIOFAC(19,2)
D-5	3		3		3		3	
D-5	3	Nd-144 , fish	3	1.000E+02	3	1.000E+02	3	BIOFAC(20,1)

D-5 ³ Nd-144 , crustacea and mollusks
 D-5 ³
 D-5 ³ Ni-63 , fish
 D-5 ³ Ni-63 , crustacea and mollusks
 D-5 ³
 D-5 ³ Np-237+D , fish
 D-5 ³ Np-237+D , crustacea and mollusks
 D-5 ³
 D-5 ³ Pa-231 , fish
 D-5 ³ Pa-231 , crustacea and mollusks

³ 1.000E+03 ³ 1.000E+03 ³ BIOFAC(20,2)
³
³ 1.000E+02 ³ 1.000E+02 ³ BIOFAC(21,1)
³ 1.000E+02 ³ 1.000E+02 ³ BIOFAC(21,2)
³
³ 3.000E+01 ³ 3.000E+01 ³ BIOFAC(22,1)
³ 4.000E+02 ³ 4.000E+02 ³ BIOFAC(22,2)
³
³ 1.000E+01 ³ 1.000E+01 ³ BIOFAC(23,1)
³ 1.100E+02 ³ 1.100E+02 ³ BIOFAC(23,2)

Dose Conversion Factor (and Related) Parameter Summary (continued)

Dose Library: DCFPAK adult HTO Plus DCFPAK3.02 (Adult)

0	3		3	Current	3	Base	3	Parameter
Menu	3	Parameter	3	Value#	3	Case*	3	Name
AAAAA	3	AAAAA	3	AAAAA	3	AAAAA	3	AAAAA
D-5	3	Pb-210+D , fish	3	3.000E+02	3	3.000E+02	3	BIOFAC(29,1)
D-5	3	Pb-210+D , crustacea and mollusks	3	1.000E+02	3	1.000E+02	3	BIOFAC(29,2)
D-5	3		3		3		3	
D-5	3	Pb-210+D1 , fish	3	3.000E+02	3	3.000E+02	3	BIOFAC(30,1)
D-5	3	Pb-210+D1 , crustacea and mollusks	3	1.000E+02	3	1.000E+02	3	BIOFAC(30,2)
D-5	3		3		3		3	
D-5	3	Pb-210+D2 , fish	3	3.000E+02	3	3.000E+02	3	BIOFAC(31,1)
D-5	3	Pb-210+D2 , crustacea and mollusks	3	1.000E+02	3	1.000E+02	3	BIOFAC(31,2)
D-5	3		3		3		3	
D-5	3	Pu-238 , fish	3	3.000E+01	3	3.000E+01	3	BIOFAC(32,1)
D-5	3	Pu-238 , crustacea and mollusks	3	1.000E+02	3	1.000E+02	3	BIOFAC(32,2)
D-5	3		3		3		3	
D-5	3	Pu-239 , fish	3	3.000E+01	3	3.000E+01	3	BIOFAC(48,1)
D-5	3	Pu-239 , crustacea and mollusks	3	1.000E+02	3	1.000E+02	3	BIOFAC(48,2)
D-5	3		3		3		3	
D-5	3	Pu-239+D , fish	3	3.000E+01	3	3.000E+01	3	BIOFAC(54,1)
D-5	3	Pu-239+D , crustacea and mollusks	3	1.000E+02	3	1.000E+02	3	BIOFAC(54,2)
D-5	3		3		3		3	
D-5	3	Ra-226+D , fish	3	5.000E+01	3	5.000E+01	3	BIOFAC(60,1)
D-5	3	Ra-226+D , crustacea and mollusks	3	2.500E+02	3	2.500E+02	3	BIOFAC(60,2)
D-5	3		3		3		3	
D-5	3	Ra-226+D1 , fish	3	5.000E+01	3	5.000E+01	3	BIOFAC(63,1)
D-5	3	Ra-226+D1 , crustacea and mollusks	3	2.500E+02	3	2.500E+02	3	BIOFAC(63,2)
D-5	3		3		3		3	
D-5	3	Ra-226+D2 , fish	3	5.000E+01	3	5.000E+01	3	BIOFAC(66,1)
D-5	3	Ra-226+D2 , crustacea and mollusks	3	2.500E+02	3	2.500E+02	3	BIOFAC(66,2)
D-5	3		3		3		3	
D-5	3	Ra-226+D3 , fish	3	5.000E+01	3	5.000E+01	3	BIOFAC(69,1)
D-5	3	Ra-226+D3 , crustacea and mollusks	3	2.500E+02	3	2.500E+02	3	BIOFAC(69,2)
D-5	3		3		3		3	
D-5	3	Ra-226+D4 , fish	3	5.000E+01	3	5.000E+01	3	BIOFAC(72,1)
D-5	3	Ra-226+D4 , crustacea and mollusks	3	2.500E+02	3	2.500E+02	3	BIOFAC(72,2)
D-5	3		3		3		3	
D-5	3	Ra-228+D , fish	3	5.000E+01	3	5.000E+01	3	BIOFAC(75,1)
D-5	3	Ra-228+D , crustacea and mollusks	3	2.500E+02	3	2.500E+02	3	BIOFAC(75,2)
D-5	3		3		3		3	
D-5	3	Ru-106+D , fish	3	1.000E+01	3	1.000E+01	3	BIOFAC(76,1)
D-5	3	Ru-106+D , crustacea and mollusks	3	3.000E+02	3	3.000E+02	3	BIOFAC(76,2)
D-5	3		3		3		3	
D-5	3	Sm-148 , fish	3	2.500E+01	3	2.500E+01	3	BIOFAC(77,1)

D-5 ³ Sm-148 , crustacea and mollusks
 D-5 ³
 D-5 ³ Sr-90+D , fish
 D-5 ³ Sr-90+D , crustacea and mollusks
 D-5 ³
 D-5 ³ Tc-99 , fish
 D-5 ³ Tc-99 , crustacea and mollusks
 D-5 ³
 D-5 ³ Th-228+D , fish
 D-5 ³ Th-228+D , crustacea and mollusks

³ 1.000E+03 ³ 1.000E+03 ³ BIOFAC(77,2)
³
³ 6.000E+01 ³ 6.000E+01 ³ BIOFAC(78,1)
³ 1.000E+02 ³ 1.000E+02 ³ BIOFAC(78,2)
³
³ 2.000E+01 ³ 2.000E+01 ³ BIOFAC(79,1)
³ 5.000E+00 ³ 5.000E+00 ³ BIOFAC(79,2)
³
³ 1.000E+02 ³ 1.000E+02 ³ BIOFAC(80,1)
³ 5.000E+02 ³ 5.000E+02 ³ BIOFAC(80,2)

Dose Conversion Factor (and Related) Parameter Summary (continued)

Dose Library: DCFPAK adult HTO Plus DCFPAK3.02 (Adult)

0	3		3	Current	3	Base	3	Parameter
Menu	3	Parameter	3	Value#	3	Case*	3	Name
AA								
D-5	3	Th-229+D , fish	3	1.000E+02	3	1.000E+02	3	BIOFAC(81,1)
D-5	3	Th-229+D , crustacea and mollusks	3	5.000E+02	3	5.000E+02	3	BIOFAC(81,2)
D-5	3		3		3		3	
D-5	3	Th-230 , fish	3	1.000E+02	3	1.000E+02	3	BIOFAC(82,1)
D-5	3	Th-230 , crustacea and mollusks	3	5.000E+02	3	5.000E+02	3	BIOFAC(82,2)
D-5	3		3		3		3	
D-5	3	Th-232 , fish	3	1.000E+02	3	1.000E+02	3	BIOFAC(97,1)
D-5	3	Th-232 , crustacea and mollusks	3	5.000E+02	3	5.000E+02	3	BIOFAC(97,2)
D-5	3		3		3		3	
D-5	3	U-233 , fish	3	1.000E+01	3	1.000E+01	3	BIOFAC(98,1)
D-5	3	U-233 , crustacea and mollusks	3	6.000E+01	3	6.000E+01	3	BIOFAC(98,2)
D-5	3		3		3		3	
D-5	3	U-234 , fish	3	1.000E+01	3	1.000E+01	3	BIOFAC(99,1)
D-5	3	U-234 , crustacea and mollusks	3	6.000E+01	3	6.000E+01	3	BIOFAC(99,2)
D-5	3		3		3		3	
D-5	3	U-235+D , fish	3	1.000E+01	3	1.000E+01	3	BIOFAC(114,1)
D-5	3	U-235+D , crustacea and mollusks	3	6.000E+01	3	6.000E+01	3	BIOFAC(114,2)
D-5	3		3		3		3	
D-5	3	U-238 , fish	3	1.000E+01	3	1.000E+01	3	BIOFAC(120,1)
D-5	3	U-238 , crustacea and mollusks	3	6.000E+01	3	6.000E+01	3	BIOFAC(120,2)
D-5	3		3		3		3	
D-5	3	U-238+D , fish	3	1.000E+01	3	1.000E+01	3	BIOFAC(121,1)
D-5	3	U-238+D , crustacea and mollusks	3	6.000E+01	3	6.000E+01	3	BIOFAC(121,2)
D-5	3		3		3		3	
D-5	3	U-238+D1 , fish	3	1.000E+01	3	1.000E+01	3	BIOFAC(136,1)
D-5	3	U-238+D1 , crustacea and mollusks	3	6.000E+01	3	6.000E+01	3	BIOFAC(136,2)
D-5	3		3		3		3	

 #For DCF1(XXX) only, factors are for infinite depth & area. See ETFG table in Ground Pathway of Detailed Report.
 *Base Case means Default.Lib w/o Associate Nuclide contributions.

Site-Specific Parameter Summary

0	3	3	3	3	3	3	3	3	3
Menu	Parameter	User	Default	Used by RESRAD	Parameter	Input	Default	(If different from user input)	Name
AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
R011	Area of contaminated zone (m**2)	1.000E+04	1.000E+04	---	AREA				
R011	Thickness of contaminated zone (m)	2.000E+00	2.000E+00	---	THICK0				
R011	Fraction of contamination that is submerged	0.000E+00	0.000E+00	---	SUBMFRACT				
R011	Length parallel to aquifer flow (m)	not used	1.000E+02	---	LCZPAQ				
R011	Basic radiation dose limit (mrem/yr)	2.500E+01	3.000E+01	---	BRDL				
R011	Time since placement of material (yr)	0.000E+00	0.000E+00	---	TI				
R011	Times for calculations (yr)	1.000E+00	1.000E+00	---	T(2)				
R011	Times for calculations (yr)	2.500E+01	3.000E+00	---	T(3)				
R011	Times for calculations (yr)	3.000E+01	1.000E+01	---	T(4)				
R011	Times for calculations (yr)	5.000E+01	3.000E+01	---	T(5)				
R011	Times for calculations (yr)	1.000E+02	1.000E+02	---	T(6)				
R011	Times for calculations (yr)	2.500E+02	3.000E+02	---	T(7)				
R011	Times for calculations (yr)	5.000E+02	1.000E+03	---	T(8)				
R011	Times for calculations (yr)	1.000E+03	0.000E+00	---	T(9)				
R011	Times for calculations (yr)	not used	0.000E+00	---	T(10)				
R012	Initial principal radionuclide (pCi/g): Am-241	1.000E+01	0.000E+00	---	S1(7)				
R012	Initial principal radionuclide (pCi/g): Co-60	1.000E+01	0.000E+00	---	S1(8)				
R012	Initial principal radionuclide (pCi/g): Cs-134	1.000E+01	0.000E+00	---	S1(9)				
R012	Initial principal radionuclide (pCi/g): Cs-137	1.000E+01	0.000E+00	---	S1(10)				
R012	Initial principal radionuclide (pCi/g): Eu-152	1.000E+01	0.000E+00	---	S1(11)				
R012	Initial principal radionuclide (pCi/g): Eu-154	1.000E+01	0.000E+00	---	S1(13)				
R012	Initial principal radionuclide (pCi/g): Eu-155	1.000E+01	0.000E+00	---	S1(14)				
R012	Initial principal radionuclide (pCi/g): H-3	1.000E+01	0.000E+00	---	S1(16)				
R012	Initial principal radionuclide (pCi/g): I-129	1.000E+01	0.000E+00	---	S1(17)				
R012	Initial principal radionuclide (pCi/g): Mn-54	1.000E+01	0.000E+00	---	S1(18)				
R012	Initial principal radionuclide (pCi/g): Na-22	1.000E+01	0.000E+00	---	S1(19)				
R012	Initial principal radionuclide (pCi/g): Ni-63	1.000E+01	0.000E+00	---	S1(21)				
R012	Initial principal radionuclide (pCi/g): Np-237	1.000E+01	0.000E+00	---	S1(22)				
R012	Initial principal radionuclide (pCi/g): Pu-238	1.000E+01	0.000E+00	---	S1(32)				
R012	Initial principal radionuclide (pCi/g): Pu-239	1.000E+01	0.000E+00	---	S1(48)				
R012	Initial principal radionuclide (pCi/g): Ru-106	1.000E+01	0.000E+00	---	S1(76)				
R012	Initial principal radionuclide (pCi/g): Sr-90	1.000E+01	0.000E+00	---	S1(78)				
R012	Initial principal radionuclide (pCi/g): Tc-99	1.000E+01	0.000E+00	---	S1(79)				
R012	Initial principal radionuclide (pCi/g): Th-228	1.000E+01	0.000E+00	---	S1(80)				
R012	Initial principal radionuclide (pCi/g): Th-230	1.000E+01	0.000E+00	---	S1(82)				
R012	Initial principal radionuclide (pCi/g): Th-232	1.000E+01	0.000E+00	---	S1(97)				
R012	Initial principal radionuclide (pCi/g): U-234	1.000E+01	0.000E+00	---	S1(99)				
R012	Initial principal radionuclide (pCi/g): U-235	1.000E+01	0.000E+00	---	S1(114)				
R012	Initial principal radionuclide (pCi/g): U-238	1.000E+01	0.000E+00	---	S1(120)				
R012	Concentration in groundwater (pCi/L): Am-241	not used	0.000E+00	---	W1(7)				

R012	³	Concentration in groundwater	(pCi/L):	Co-60	³	not used	³	0.000E+00	³	---	³	W1(8)
R012	³	Concentration in groundwater	(pCi/L):	Cs-134	³	not used	³	0.000E+00	³	---	³	W1(9)
R012	³	Concentration in groundwater	(pCi/L):	Cs-137	³	not used	³	0.000E+00	³	---	³	W1(10)
R012	³	Concentration in groundwater	(pCi/L):	Eu-152	³	not used	³	0.000E+00	³	---	³	W1(11)
R012	³	Concentration in groundwater	(pCi/L):	Eu-154	³	not used	³	0.000E+00	³	---	³	W1(13)
R012	³	Concentration in groundwater	(pCi/L):	Eu-155	³	not used	³	0.000E+00	³	---	³	W1(14)
R012	³	Concentration in groundwater	(pCi/L):	H-3	³	not used	³	0.000E+00	³	---	³	W1(16)
R012	³	Concentration in groundwater	(pCi/L):	I-129	³	not used	³	0.000E+00	³	---	³	W1(17)
R012	³	Concentration in groundwater	(pCi/L):	Mn-54	³	not used	³	0.000E+00	³	---	³	W1(18)

Site-Specific Parameter Summary (continued)

0	3	3	3	3	3	3	3
Menu	Parameter	User	Default	Used by RESRAD	Parameter		
		Input	(If different from user input)		Name		
AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
R012	Concentration in groundwater (pCi/L): Na-22	not used	0.000E+00	---	W1(19)		
R012	Concentration in groundwater (pCi/L): Ni-63	not used	0.000E+00	---	W1(21)		
R012	Concentration in groundwater (pCi/L): Np-237	not used	0.000E+00	---	W1(22)		
R012	Concentration in groundwater (pCi/L): Pu-238	not used	0.000E+00	---	W1(32)		
R012	Concentration in groundwater (pCi/L): Pu-239	not used	0.000E+00	---	W1(48)		
R012	Concentration in groundwater (pCi/L): Ru-106	not used	0.000E+00	---	W1(76)		
R012	Concentration in groundwater (pCi/L): Sr-90	not used	0.000E+00	---	W1(78)		
R012	Concentration in groundwater (pCi/L): Tc-99	not used	0.000E+00	---	W1(79)		
R012	Concentration in groundwater (pCi/L): Th-228	not used	0.000E+00	---	W1(80)		
R012	Concentration in groundwater (pCi/L): Th-230	not used	0.000E+00	---	W1(82)		
R012	Concentration in groundwater (pCi/L): Th-232	not used	0.000E+00	---	W1(97)		
R012	Concentration in groundwater (pCi/L): U-234	not used	0.000E+00	---	W1(99)		
R012	Concentration in groundwater (pCi/L): U-235	not used	0.000E+00	---	W1(**)		
R012	Concentration in groundwater (pCi/L): U-238	not used	0.000E+00	---	W1(**)		
R013	Cover depth (m)	0.000E+00	0.000E+00	---	COVER0		
R013	Density of cover material (g/cm**3)	not used	1.500E+00	---	DENSCV		
R013	Cover depth erosion rate (m/yr)	not used	1.000E-03	---	VCV		
R013	Density of contaminated zone (g/cm**3)	1.500E+00	1.500E+00	---	DENSCZ		
R013	Contaminated zone erosion rate (m/yr)	0.000E+00	1.000E-03	---	VCZ		
R013	Contaminated zone total porosity	4.800E-01	4.000E-01	---	TPCZ		
R013	Contaminated zone field capacity	2.000E-01	2.000E-01	---	FCCZ		
R013	Contaminated zone hydraulic conductivity (m/yr)	1.000E+01	1.000E+01	---	HCCZ		
R013	Contaminated zone b parameter	5.300E+00	5.300E+00	---	BCZ		
R013	Average annual wind speed (m/sec)	3.000E+00	2.000E+00	---	WIND		
R013	Humidity in air (g/m**3)	5.550E+00	8.000E+00	---	HUMID		
R013	Evapotranspiration coefficient	9.990E-01	5.000E-01	---	EVAPTR		
R013	Precipitation (m/yr)	2.900E-01	1.000E+00	---	PRECIP		
R013	Irrigation (m/yr)	0.000E+00	2.000E-01	---	RI		
R013	Irrigation mode	overhead	overhead	---	IDITCH		
R013	Runoff coefficient	9.000E-01	2.000E-01	---	RUNOFF		
R013	Watershed area for nearby stream or pond (m**2)	not used	1.000E+06	---	WAREA		
R013	Accuracy for water/soil computations	not used	1.000E-03	---	EPS		
R014	Density of saturated zone (g/cm**3)	not used	1.500E+00	---	DENSAQ		
R014	Saturated zone total porosity	not used	4.000E-01	---	TPSZ		
R014	Saturated zone effective porosity	not used	2.000E-01	---	EPSZ		
R014	Saturated zone field capacity	not used	2.000E-01	---	FCSZ		
R014	Saturated zone hydraulic conductivity (m/yr)	not used	1.000E+02	---	HCSZ		
R014	Saturated zone hydraulic gradient	not used	2.000E-02	---	HGWT		
R014	Saturated zone b parameter	not used	5.300E+00	---	BSZ		

R014	³ Water table drop rate (m/yr)	³ not used	³ 1.000E-03	³	---	³ VWT
R014	³ Well pump intake depth (m below water table)	³ not used	³ 1.000E+01	³	---	³ DWIBWT
R014	³ Model: Nondispersion (ND) or Mass-Balance (MB)	³ not used	³ ND	³	---	³ MODEL
R014	³ Well pumping rate (m ³ /yr)	³ not used	³ 2.500E+02	³	---	³ UW
	³	³	³	³		³
R015	³ Number of unsaturated zone strata	³ not used	³ 1	³	---	³ NS

Site-Specific Parameter Summary (continued)

0	3	3	3	3	3	3	3
Menu	Parameter	User	Default	Used by RESRAD	Parameter		
		Input	(If different from user input)		Name		
AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
R015	Unsat. zone 1, thickness (m)	not used	4.000E+00	---	H(1)		
R015	Unsat. zone 1, soil density (g/cm**3)	not used	1.500E+00	---	DENSUZ(1)		
R015	Unsat. zone 1, total porosity	not used	4.000E-01	---	TPUZ(1)		
R015	Unsat. zone 1, effective porosity	not used	2.000E-01	---	EPUZ(1)		
R015	Unsat. zone 1, field capacity	not used	2.000E-01	---	FCUZ(1)		
R015	Unsat. zone 1, soil-specific b parameter	not used	5.300E+00	---	BUZ(1)		
R015	Unsat. zone 1, hydraulic conductivity (m/yr)	not used	1.000E+01	---	HCUZ(1)		
R016	Distribution coefficients for Am-241						
R016	Contaminated zone (cm**3/g)	2.000E+01	2.000E+01	---	DCNUCC(7)		
R016	Unsaturated zone 1 (cm**3/g)	not used	2.000E+01	---	DCNUCU(7,1)		
R016	Saturated zone (cm**3/g)	not used	2.000E+01	---	DCNUCS(7)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	4.801E-07	ALEACH(7)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(7)		
R016	Distribution coefficients for Co-60						
R016	Contaminated zone (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCC(8)		
R016	Unsaturated zone 1 (cm**3/g)	not used	1.000E+03	---	DCNUCU(8,1)		
R016	Saturated zone (cm**3/g)	not used	1.000E+03	---	DCNUCS(8)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	9.665E-09	ALEACH(8)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(8)		
R016	Distribution coefficients for Cs-134						
R016	Contaminated zone (cm**3/g)	4.600E+03	4.600E+03	---	DCNUCC(9)		
R016	Unsaturated zone 1 (cm**3/g)	not used	4.600E+03	---	DCNUCU(9,1)		
R016	Saturated zone (cm**3/g)	not used	4.600E+03	---	DCNUCS(9)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	2.101E-09	ALEACH(9)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(9)		
R016	Distribution coefficients for Cs-137						
R016	Contaminated zone (cm**3/g)	4.600E+03	4.600E+03	---	DCNUCC(10)		
R016	Unsaturated zone 1 (cm**3/g)	not used	4.600E+03	---	DCNUCU(10,1)		
R016	Saturated zone (cm**3/g)	not used	4.600E+03	---	DCNUCS(10)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	2.101E-09	ALEACH(10)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(10)		
R016	Distribution coefficients for Eu-152						
R016	Contaminated zone (cm**3/g)	-1.000E+00	-1.000E+00	8.249E+02	DCNUCC(11)		
R016	Unsaturated zone 1 (cm**3/g)	not used	-1.000E+00	---	DCNUCU(11,1)		
R016	Saturated zone (cm**3/g)	not used	-1.000E+00	---	DCNUCS(11)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.172E-08	ALEACH(11)		

R016	³	Solubility constant	³	0.000E+00	³	0.000E+00	³	not used	³	SOLUBK(11)
	³		³		³		³		³	
R016	³	Distribution coefficients for Eu-154	³		³		³		³	
R016	³	Contaminated zone (cm**3/g)	³	-1.000E+00	³	-1.000E+00	³	8.249E+02	³	DCNUCC(13)
R016	³	Unsaturated zone 1 (cm**3/g)	³	not used	³	-1.000E+00	³	---	³	DCNUCU(13,1)
R016	³	Saturated zone (cm**3/g)	³	not used	³	-1.000E+00	³	---	³	DCNUCS(13)
R016	³	Leach rate (/yr)	³	0.000E+00	³	0.000E+00	³	1.172E-08	³	ALEACH(13)
R016	³	Solubility constant	³	0.000E+00	³	0.000E+00	³	not used	³	SOLUBK(13)

Site-Specific Parameter Summary (continued)

0	3	3	3	3	3	3	3
Menu	Parameter	User	Default	Used by RESRAD	Parameter		
		Input	(If different from user input)		Name		
AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
R016	Distribution coefficients for Eu-155						
R016	Contaminated zone (cm**3/g)	3 -1.000E+00	3 -1.000E+00	3 8.249E+02	3 DCNUCC(14)		
R016	Unsaturated zone 1 (cm**3/g)	3 not used	3 -1.000E+00	3 ---	3 DCNUCU(14,1)		
R016	Saturated zone (cm**3/g)	3 not used	3 -1.000E+00	3 ---	3 DCNUCS(14)		
R016	Leach rate (/yr)	3 0.000E+00	3 0.000E+00	3 1.172E-08	3 ALEACH(14)		
R016	Solubility constant	3 0.000E+00	3 0.000E+00	3 not used	3 SOLUBK(14)		
		3	3	3	3		
R016	Distribution coefficients for H-3						
R016	Contaminated zone (cm**3/g)	3 0.000E+00	3 0.000E+00	3 ---	3 DCNUCC(16)		
R016	Unsaturated zone 1 (cm**3/g)	3 not used	3 0.000E+00	3 ---	3 DCNUCU(16,1)		
R016	Saturated zone (cm**3/g)	3 not used	3 0.000E+00	3 ---	3 DCNUCS(16)		
R016	Leach rate (/yr)	3 0.000E+00	3 0.000E+00	3 7.250E-05	3 ALEACH(16)		
R016	Solubility constant	3 0.000E+00	3 0.000E+00	3 not used	3 SOLUBK(16)		
		3	3	3	3		
R016	Distribution coefficients for I-129						
R016	Contaminated zone (cm**3/g)	3 1.000E-01	3 1.000E-01	3 ---	3 DCNUCC(17)		
R016	Unsaturated zone 1 (cm**3/g)	3 not used	3 1.000E-01	3 ---	3 DCNUCU(17,1)		
R016	Saturated zone (cm**3/g)	3 not used	3 1.000E-01	3 ---	3 DCNUCS(17)		
R016	Leach rate (/yr)	3 0.000E+00	3 0.000E+00	3 4.143E-05	3 ALEACH(17)		
R016	Solubility constant	3 0.000E+00	3 0.000E+00	3 not used	3 SOLUBK(17)		
		3	3	3	3		
R016	Distribution coefficients for Mn-54						
R016	Contaminated zone (cm**3/g)	3 2.000E+02	3 2.000E+02	3 ---	3 DCNUCC(18)		
R016	Unsaturated zone 1 (cm**3/g)	3 not used	3 2.000E+02	3 ---	3 DCNUCU(18,1)		
R016	Saturated zone (cm**3/g)	3 not used	3 2.000E+02	3 ---	3 DCNUCS(18)		
R016	Leach rate (/yr)	3 0.000E+00	3 0.000E+00	3 4.830E-08	3 ALEACH(18)		
R016	Solubility constant	3 0.000E+00	3 0.000E+00	3 not used	3 SOLUBK(18)		
		3	3	3	3		
R016	Distribution coefficients for Na-22						
R016	Contaminated zone (cm**3/g)	3 1.000E+01	3 1.000E+01	3 ---	3 DCNUCC(19)		
R016	Unsaturated zone 1 (cm**3/g)	3 not used	3 1.000E+01	3 ---	3 DCNUCU(19,1)		
R016	Saturated zone (cm**3/g)	3 not used	3 1.000E+01	3 ---	3 DCNUCS(19)		
R016	Leach rate (/yr)	3 0.000E+00	3 0.000E+00	3 9.539E-07	3 ALEACH(19)		
R016	Solubility constant	3 0.000E+00	3 0.000E+00	3 not used	3 SOLUBK(19)		
		3	3	3	3		
R016	Distribution coefficients for Ni-63						
R016	Contaminated zone (cm**3/g)	3 1.000E+03	3 1.000E+03	3 ---	3 DCNUCC(21)		
R016	Unsaturated zone 1 (cm**3/g)	3 not used	3 1.000E+03	3 ---	3 DCNUCU(21,1)		
R016	Saturated zone (cm**3/g)	3 not used	3 1.000E+03	3 ---	3 DCNUCS(21)		
R016	Leach rate (/yr)	3 0.000E+00	3 0.000E+00	3 9.665E-09	3 ALEACH(21)		
R016	Solubility constant	3 0.000E+00	3 0.000E+00	3 not used	3 SOLUBK(21)		

Site-Specific Parameter Summary (continued)

0	3	3	3	3	3	3	3
Menu	Parameter	User	Default	Used by RESRAD	Parameter		
		Input	(If different from user input)		Name		
AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
R016	Distribution coefficients for Pu-238						
R016	Contaminated zone (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCC(32)		
R016	Unsaturated zone 1 (cm**3/g)	not used	2.000E+03	---	DCNUCU(32,1)		
R016	Saturated zone (cm**3/g)	not used	2.000E+03	---	DCNUCS(32)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	4.833E-09	ALEACH(32)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(32)		
R016	Distribution coefficients for Pu-239						
R016	Contaminated zone (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCC(48)		
R016	Unsaturated zone 1 (cm**3/g)	not used	2.000E+03	---	DCNUCU(48,1)		
R016	Saturated zone (cm**3/g)	not used	2.000E+03	---	DCNUCS(48)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	4.833E-09	ALEACH(48)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(48)		
R016	Distribution coefficients for Ru-106						
R016	Contaminated zone (cm**3/g)	6.000E+04	0.000E+00	---	DCNUCC(76)		
R016	Unsaturated zone 1 (cm**3/g)	not used	0.000E+00	---	DCNUCU(76,1)		
R016	Saturated zone (cm**3/g)	not used	0.000E+00	---	DCNUCS(76)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.611E-10	ALEACH(76)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(76)		
R016	Distribution coefficients for Sr-90						
R016	Contaminated zone (cm**3/g)	3.000E+01	3.000E+01	---	DCNUCC(78)		
R016	Unsaturated zone 1 (cm**3/g)	not used	3.000E+01	---	DCNUCU(78,1)		
R016	Saturated zone (cm**3/g)	not used	3.000E+01	---	DCNUCS(78)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	3.208E-07	ALEACH(78)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(78)		
R016	Distribution coefficients for Tc-99						
R016	Contaminated zone (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCC(79)		
R016	Unsaturated zone 1 (cm**3/g)	not used	0.000E+00	---	DCNUCU(79,1)		
R016	Saturated zone (cm**3/g)	not used	0.000E+00	---	DCNUCS(79)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	7.250E-05	ALEACH(79)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(79)		
R016	Distribution coefficients for Th-228						
R016	Contaminated zone (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCC(80)		
R016	Unsaturated zone 1 (cm**3/g)	not used	6.000E+04	---	DCNUCU(80,1)		
R016	Saturated zone (cm**3/g)	not used	6.000E+04	---	DCNUCS(80)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.611E-10	ALEACH(80)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(80)		

	³		³	³		³
R016	³	Distribution coefficients for Th-230	³			³
R016	³	Contaminated zone (cm**3/g)	³	6.000E+04	³	6.000E+04 ³
R016	³	Unsaturated zone 1 (cm**3/g)	³	not used	³	6.000E+04 ³
R016	³	Saturated zone (cm**3/g)	³	not used	³	6.000E+04 ³
R016	³	Leach rate (/yr)	³	0.000E+00	³	0.000E+00 ³
R016	³	Solubility constant	³	0.000E+00	³	0.000E+00 ³

					1.611E-10	
					not used	
						³ DCNUCC(82)
						³ DCNUCU(82,1)
						³ DCNUCS(82)
						³ ALEACH(82)
						³ SOLUBK(82)

Site-Specific Parameter Summary (continued)

0	3	3	User	3	3	Used by RESRAD	3	Parameter		
Menu	3	Parameter	3	Input	3	Default	3	(If different from user input)	3	Name
AA										
R016	3	Distribution coefficients for Th-232	3		3		3		3	
R016	3	Contaminated zone (cm**3/g)	3	6.000E+04	3	6.000E+04	3	---	3	DCNUCC(97)
R016	3	Unsaturated zone 1 (cm**3/g)	3	not used	3	6.000E+04	3	---	3	DCNUCU(97,1)
R016	3	Saturated zone (cm**3/g)	3	not used	3	6.000E+04	3	---	3	DCNUCS(97)
R016	3	Leach rate (/yr)	3	0.000E+00	3	0.000E+00	3	1.611E-10	3	ALEACH(97)
R016	3	Solubility constant	3	0.000E+00	3	0.000E+00	3	not used	3	SOLUBK(97)
	3		3		3		3		3	
R016	3	Distribution coefficients for U-234	3		3		3		3	
R016	3	Contaminated zone (cm**3/g)	3	5.000E+01	3	5.000E+01	3	---	3	DCNUCC(99)
R016	3	Unsaturated zone 1 (cm**3/g)	3	not used	3	5.000E+01	3	---	3	DCNUCU(99,1)
R016	3	Saturated zone (cm**3/g)	3	not used	3	5.000E+01	3	---	3	DCNUCS(99)
R016	3	Leach rate (/yr)	3	0.000E+00	3	0.000E+00	3	1.928E-07	3	ALEACH(99)
R016	3	Solubility constant	3	0.000E+00	3	0.000E+00	3	not used	3	SOLUBK(99)
	3		3		3		3		3	
R016	3	Distribution coefficients for U-235	3		3		3		3	
R016	3	Contaminated zone (cm**3/g)	3	5.000E+01	3	5.000E+01	3	---	3	DCNUCC(**)
R016	3	Unsaturated zone 1 (cm**3/g)	3	not used	3	5.000E+01	3	---	3	DCNUCU(**,1)
R016	3	Saturated zone (cm**3/g)	3	not used	3	5.000E+01	3	---	3	DCNUCS(**)
R016	3	Leach rate (/yr)	3	0.000E+00	3	0.000E+00	3	1.928E-07	3	ALEACH(**)
R016	3	Solubility constant	3	0.000E+00	3	0.000E+00	3	not used	3	SOLUBK(**)
	3		3		3		3		3	
R016	3	Distribution coefficients for U-238	3		3		3		3	
R016	3	Contaminated zone (cm**3/g)	3	5.000E+01	3	5.000E+01	3	---	3	DCNUCC(**)
R016	3	Unsaturated zone 1 (cm**3/g)	3	not used	3	5.000E+01	3	---	3	DCNUCU(**,1)
R016	3	Saturated zone (cm**3/g)	3	not used	3	5.000E+01	3	---	3	DCNUCS(**)
R016	3	Leach rate (/yr)	3	0.000E+00	3	0.000E+00	3	1.928E-07	3	ALEACH(**)
R016	3	Solubility constant	3	0.000E+00	3	0.000E+00	3	not used	3	SOLUBK(**)
	3		3		3		3		3	
R016	3	Distribution coefficients for daughter Ac-227	3		3		3		3	
R016	3	Contaminated zone (cm**3/g)	3	2.000E+01	3	2.000E+01	3	---	3	DCNUCC(1)
R016	3	Unsaturated zone 1 (cm**3/g)	3	not used	3	2.000E+01	3	---	3	DCNUCU(1,1)
R016	3	Saturated zone (cm**3/g)	3	not used	3	2.000E+01	3	---	3	DCNUCS(1)
R016	3	Leach rate (/yr)	3	0.000E+00	3	0.000E+00	3	4.801E-07	3	ALEACH(1)
R016	3	Solubility constant	3	0.000E+00	3	0.000E+00	3	not used	3	SOLUBK(1)
	3		3		3		3		3	
R016	3	Distribution coefficients for daughter Gd-152	3		3		3		3	
R016	3	Contaminated zone (cm**3/g)	3	-1.000E+00	3	-1.000E+00	3	8.249E+02	3	DCNUCC(15)
R016	3	Unsaturated zone 1 (cm**3/g)	3	not used	3	-1.000E+00	3	---	3	DCNUCU(15,1)
R016	3	Saturated zone (cm**3/g)	3	not used	3	-1.000E+00	3	---	3	DCNUCS(15)
R016	3	Leach rate (/yr)	3	0.000E+00	3	0.000E+00	3	1.172E-08	3	ALEACH(15)
R016	3	Solubility constant	3	0.000E+00	3	0.000E+00	3	not used	3	SOLUBK(15)

	³		³	³		³
R016	³	Distribution coefficients for daughter Nd-144	³	³		³
R016	³	Contaminated zone (cm**3/g)	³	1.580E+02	³	1.580E+02 ³ --- ³ DCNUCC(20)
R016	³	Unsaturated zone 1 (cm**3/g)	³	not used	³	1.580E+02 ³ --- ³ DCNUCU(20,1)
R016	³	Saturated zone (cm**3/g)	³	not used	³	1.580E+02 ³ --- ³ DCNUCS(20)
R016	³	Leach rate (/yr)	³	0.000E+00	³	0.000E+00 ³ 6.113E-08 ³ ALEACH(20)
R016	³	Solubility constant	³	0.000E+00	³	0.000E+00 ³ not used ³ SOLUBK(20)

Site-Specific Parameter Summary (continued)

0	3	3	3	3	3	3	3
Menu	Parameter	User	Default	Used by RESRAD	Parameter		
		Input	(If different from user input)		Name		
AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
R016	Distribution coefficients for daughter Pa-231						
R016	Contaminated zone (cm**3/g)	3 5.000E+01	3 5.000E+01	3 ---	3 DCNUCC(23)		
R016	Unsaturated zone 1 (cm**3/g)	3 not used	3 5.000E+01	3 ---	3 DCNUCU(23,1)		
R016	Saturated zone (cm**3/g)	3 not used	3 5.000E+01	3 ---	3 DCNUCS(23)		
R016	Leach rate (/yr)	3 0.000E+00	3 0.000E+00	3 1.928E-07	3 ALEACH(23)		
R016	Solubility constant	3 0.000E+00	3 0.000E+00	3 not used	3 SOLUBK(23)		
		3	3	3	3		
R016	Distribution coefficients for daughter Pb-210						
R016	Contaminated zone (cm**3/g)	3 1.000E+02	3 1.000E+02	3 ---	3 DCNUCC(29)		
R016	Unsaturated zone 1 (cm**3/g)	3 not used	3 1.000E+02	3 ---	3 DCNUCU(29,1)		
R016	Saturated zone (cm**3/g)	3 not used	3 1.000E+02	3 ---	3 DCNUCS(29)		
R016	Leach rate (/yr)	3 0.000E+00	3 0.000E+00	3 9.654E-08	3 ALEACH(29)		
R016	Solubility constant	3 0.000E+00	3 0.000E+00	3 not used	3 SOLUBK(29)		
		3	3	3	3		
R016	Distribution coefficients for daughter Ra-226						
R016	Contaminated zone (cm**3/g)	3 7.000E+01	3 7.000E+01	3 ---	3 DCNUCC(60)		
R016	Unsaturated zone 1 (cm**3/g)	3 not used	3 7.000E+01	3 ---	3 DCNUCU(60,1)		
R016	Saturated zone (cm**3/g)	3 not used	3 7.000E+01	3 ---	3 DCNUCS(60)		
R016	Leach rate (/yr)	3 0.000E+00	3 0.000E+00	3 1.378E-07	3 ALEACH(60)		
R016	Solubility constant	3 0.000E+00	3 0.000E+00	3 not used	3 SOLUBK(60)		
		3	3	3	3		
R016	Distribution coefficients for daughter Ra-228						
R016	Contaminated zone (cm**3/g)	3 7.000E+01	3 7.000E+01	3 ---	3 DCNUCC(75)		
R016	Unsaturated zone 1 (cm**3/g)	3 not used	3 7.000E+01	3 ---	3 DCNUCU(75,1)		
R016	Saturated zone (cm**3/g)	3 not used	3 7.000E+01	3 ---	3 DCNUCS(75)		
R016	Leach rate (/yr)	3 0.000E+00	3 0.000E+00	3 1.378E-07	3 ALEACH(75)		
R016	Solubility constant	3 0.000E+00	3 0.000E+00	3 not used	3 SOLUBK(75)		
		3	3	3	3		
R016	Distribution coefficients for daughter Sm-148						
R016	Contaminated zone (cm**3/g)	3 -1.000E+00	3 -1.000E+00	3 8.249E+02	3 DCNUCC(77)		
R016	Unsaturated zone 1 (cm**3/g)	3 not used	3 -1.000E+00	3 ---	3 DCNUCU(77,1)		
R016	Saturated zone (cm**3/g)	3 not used	3 -1.000E+00	3 ---	3 DCNUCS(77)		
R016	Leach rate (/yr)	3 0.000E+00	3 0.000E+00	3 1.172E-08	3 ALEACH(77)		
R016	Solubility constant	3 0.000E+00	3 0.000E+00	3 not used	3 SOLUBK(77)		
		3	3	3	3		
R016	Distribution coefficients for daughter Th-229						
R016	Contaminated zone (cm**3/g)	3 6.000E+04	3 6.000E+04	3 ---	3 DCNUCC(81)		
R016	Unsaturated zone 1 (cm**3/g)	3 not used	3 6.000E+04	3 ---	3 DCNUCU(81,1)		
R016	Saturated zone (cm**3/g)	3 not used	3 6.000E+04	3 ---	3 DCNUCS(81)		
R016	Leach rate (/yr)	3 0.000E+00	3 0.000E+00	3 1.611E-10	3 ALEACH(81)		
R016	Solubility constant	3 0.000E+00	3 0.000E+00	3 not used	3 SOLUBK(81)		

	³		³	³		³
R016	³	Distribution coefficients for daughter U-233	³	³		³
R016	³	Contaminated zone (cm**3/g)	³	5.000E+01	³	5.000E+01 ³ --- ³ DCNUCC(98)
R016	³	Unsaturated zone 1 (cm**3/g)	³	not used	³	5.000E+01 ³ --- ³ DCNUCU(98,1)
R016	³	Saturated zone (cm**3/g)	³	not used	³	5.000E+01 ³ --- ³ DCNUCS(98)
R016	³	Leach rate (/yr)	³	0.000E+00	³	0.000E+00 ³ 1.928E-07 ³ ALEACH(98)
R016	³	Solubility constant	³	0.000E+00	³	0.000E+00 ³ not used ³ SOLUBK(98)
	³		³	³		³
R017	³	Inhalation rate (m**3/yr)	³	7.780E+03	³	8.400E+03 ³ --- ³ INHALR

Site-Specific Parameter Summary (continued)

0	3	3	3	3	3	3	3
Menu	Parameter	User	Default	Used by RESRAD	Parameter		
	Input	Default	(If different from user input)	Name			
AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
R017	Mass loading for inhalation (g/m**3)	4.000E-04	1.000E-04	---	MLINH		
R017	Exposure duration	1.000E+00	3.000E+01	---	ED		
R017	Shielding factor, inhalation	1.000E+00	4.000E-01	---	SHF3		
R017	Shielding factor, external gamma	7.000E-01	7.000E-01	---	SHF1		
R017	Fraction of time spent indoors	0.000E+00	5.000E-01	---	FIND		
R017	Fraction of time spent outdoors (on site)	2.282E-01	2.500E-01	---	FOTD		
R017	Shape factor flag, external gamma	1.000E+00	1.000E+00	>0 shows circular AREA.	FS		
R017	Radii of shape factor array (used if FS = -1):						
R017	Outer annular radius (m), ring 1:	not used	5.000E+01	---	RAD_SHAPE(1)		
R017	Outer annular radius (m), ring 2:	not used	7.071E+01	---	RAD_SHAPE(2)		
R017	Outer annular radius (m), ring 3:	not used	0.000E+00	---	RAD_SHAPE(3)		
R017	Outer annular radius (m), ring 4:	not used	0.000E+00	---	RAD_SHAPE(4)		
R017	Outer annular radius (m), ring 5:	not used	0.000E+00	---	RAD_SHAPE(5)		
R017	Outer annular radius (m), ring 6:	not used	0.000E+00	---	RAD_SHAPE(6)		
R017	Outer annular radius (m), ring 7:	not used	0.000E+00	---	RAD_SHAPE(7)		
R017	Outer annular radius (m), ring 8:	not used	0.000E+00	---	RAD_SHAPE(8)		
R017	Outer annular radius (m), ring 9:	not used	0.000E+00	---	RAD_SHAPE(9)		
R017	Outer annular radius (m), ring 10:	not used	0.000E+00	---	RAD_SHAPE(10)		
R017	Outer annular radius (m), ring 11:	not used	0.000E+00	---	RAD_SHAPE(11)		
R017	Outer annular radius (m), ring 12:	not used	0.000E+00	---	RAD_SHAPE(12)		
R017	Fractions of annular areas within AREA:						
R017	Ring 1	not used	1.000E+00	---	FRACA(1)		
R017	Ring 2	not used	2.732E-01	---	FRACA(2)		
R017	Ring 3	not used	0.000E+00	---	FRACA(3)		
R017	Ring 4	not used	0.000E+00	---	FRACA(4)		
R017	Ring 5	not used	0.000E+00	---	FRACA(5)		
R017	Ring 6	not used	0.000E+00	---	FRACA(6)		
R017	Ring 7	not used	0.000E+00	---	FRACA(7)		
R017	Ring 8	not used	0.000E+00	---	FRACA(8)		
R017	Ring 9	not used	0.000E+00	---	FRACA(9)		
R017	Ring 10	not used	0.000E+00	---	FRACA(10)		
R017	Ring 11	not used	0.000E+00	---	FRACA(11)		
R017	Ring 12	not used	0.000E+00	---	FRACA(12)		
R018	Fruits, vegetables and grain consumption (kg/yr)	not used	1.600E+02	---	DIET(1)		
R018	Leafy vegetable consumption (kg/yr)	not used	1.400E+01	---	DIET(2)		
R018	Milk consumption (L/yr)	not used	9.200E+01	---	DIET(3)		
R018	Meat and poultry consumption (kg/yr)	not used	6.300E+01	---	DIET(4)		
R018	Fish consumption (kg/yr)	not used	5.400E+00	---	DIET(5)		
R018	Other seafood consumption (kg/yr)	not used	9.000E-01	---	DIET(6)		

R018	³	Soil ingestion rate (g/yr)	³	3.620E+02	³	3.650E+01	³	---	³	SOIL
R018	³	Drinking water intake (L/yr)	³	not used	³	5.100E+02	³	---	³	DWI
R018	³	Contamination fraction of drinking water	³	not used	³	1.000E+00	³	---	³	FDW
R018	³	Contamination fraction of household water	³	not used	³	1.000E+00	³	---	³	FHHW
R018	³	Contamination fraction of livestock water	³	not used	³	1.000E+00	³	---	³	FLW
R018	³	Contamination fraction of irrigation water	³	not used	³	1.000E+00	³	---	³	FIRW
R018	³	Contamination fraction of aquatic food	³	not used	³	5.000E-01	³	---	³	FR9
R018	³	Contamination fraction of plant food	³	not used	³	-1	³	---	³	FPLANT
R018	³	Contamination fraction of meat	³	not used	³	-1	³	---	³	FMEAT

Site-Specific Parameter Summary (continued)

0	3	3	3	3	3	3	3
Menu	Parameter	User Input	Default	(If different from user input)	Used by RESRAD	Parameter Name	
R018	Contamination fraction of milk	not used	-1	---		FMILK	
R019	Livestock fodder intake for meat (kg/day)	not used	6.800E+01	---		LFI5	
R019	Livestock fodder intake for milk (kg/day)	not used	5.500E+01	---		LFI6	
R019	Livestock water intake for meat (L/day)	not used	5.000E+01	---		LWI5	
R019	Livestock water intake for milk (L/day)	not used	1.600E+02	---		LWI6	
R019	Livestock soil intake (kg/day)	not used	5.000E-01	---		LSI	
R019	Mass loading for foliar deposition (g/m**3)	not used	1.000E-04	---		MLFD	
R019	Depth of soil mixing layer (m)	1.500E-01	1.500E-01	---		DM	
R019	Depth of roots (m)	not used	9.000E-01	---		DR00T	
R019	Drinking water fraction from ground water	not used	1.000E+00	---		FGWDW	
R019	Household water fraction from ground water	not used	1.000E+00	---		FGWHH	
R019	Livestock water fraction from ground water	not used	1.000E+00	---		FGWLW	
R019	Irrigation fraction from ground water	not used	1.000E+00	---		FGWIR	
R19B	Wet weight crop yield for Non-Leafy (kg/m**2)	not used	7.000E-01	---		YV(1)	
R19B	Wet weight crop yield for Leafy (kg/m**2)	not used	1.500E+00	---		YV(2)	
R19B	Wet weight crop yield for Fodder (kg/m**2)	not used	1.100E+00	---		YV(3)	
R19B	Growing Season for Non-Leafy (years)	not used	1.700E-01	---		TE(1)	
R19B	Growing Season for Leafy (years)	not used	2.500E-01	---		TE(2)	
R19B	Growing Season for Fodder (years)	not used	8.000E-02	---		TE(3)	
R19B	Translocation Factor for Non-Leafy	not used	1.000E-01	---		TIV(1)	
R19B	Translocation Factor for Leafy	not used	1.000E+00	---		TIV(2)	
R19B	Translocation Factor for Fodder	not used	1.000E+00	---		TIV(3)	
R19B	Dry Foliar Interception Fraction for Non-Leafy	not used	2.500E-01	---		RDRY(1)	
R19B	Dry Foliar Interception Fraction for Leafy	not used	2.500E-01	---		RDRY(2)	
R19B	Dry Foliar Interception Fraction for Fodder	not used	2.500E-01	---		RDRY(3)	
R19B	Wet Foliar Interception Fraction for Non-Leafy	not used	2.500E-01	---		RWET(1)	
R19B	Wet Foliar Interception Fraction for Leafy	not used	2.500E-01	---		RWET(2)	
R19B	Wet Foliar Interception Fraction for Fodder	not used	2.500E-01	---		RWET(3)	
R19B	Weathering Removal Constant for Vegetation	not used	2.000E+01	---		WLAM	
C14	C-12 concentration in water (g/cm**3)	not used	2.000E-05	---		C12WTR	
C14	C-12 concentration in contaminated soil (g/g)	not used	3.000E-02	---		C12CZ	
C14	Fraction of vegetation carbon from soil	not used	2.000E-02	---		CSOIL	
C14	Fraction of vegetation carbon from air	not used	9.800E-01	---		CAIR	
C14	C-14 evasion layer thickness in soil (m)	not used	3.000E-01	---		DMC	
C14	C-14 evasion flux rate from soil (1/sec)	not used	7.000E-07	---		EVSN	
C14	C-12 evasion flux rate from soil (1/sec)	not used	1.000E-10	---		REVSN	
C14	Fraction of grain in beef cattle feed	not used	8.000E-01	---		AVFG4	
C14	Fraction of grain in milk cow feed	not used	2.000E-01	---		AVFG5	

	3	3	3	3	3
STOR	Storage times of contaminated foodstuffs (days):	3	3	3	3
STOR	Fruits, non-leafy vegetables, and grain	3 1.000E+00	3 1.400E+01	3 ---	3 STOR_T(1)
STOR	Leafy vegetables	3 1.000E+00	3 1.000E+00	3 ---	3 STOR_T(2)
STOR	Milk	3 1.000E+00	3 1.000E+00	3 ---	3 STOR_T(3)
STOR	Meat and poultry	3 2.000E+01	3 2.000E+01	3 ---	3 STOR_T(4)
STOR	Fish	3 7.000E+00	3 7.000E+00	3 ---	3 STOR_T(5)
STOR	Crustacea and mollusks	3 7.000E+00	3 7.000E+00	3 ---	3 STOR_T(6)
STOR	Well water	3 1.000E+00	3 1.000E+00	3 ---	3 STOR_T(7)

Site-Specific Parameter Summary (continued)

0	3	3	3	3	3	3	3
Menu	Parameter	User	Input	Default	Used by RESRAD	(If different from user input)	Parameter Name
STOR	Surface water	3	1.000E+00	3	1.000E+00	---	3 STOR_T(8)
STOR	Livestock fodder	3	4.500E+01	3	4.500E+01	---	3 STOR_T(9)
R021	Thickness of building foundation (m)	3	not used	3	1.500E-01	---	3 FLOOR1
R021	Bulk density of building foundation (g/cm**3)	3	not used	3	2.400E+00	---	3 DENSFL
R021	Total porosity of the cover material	3	not used	3	4.000E-01	---	3 TPCV
R021	Total porosity of the building foundation	3	not used	3	1.000E-01	---	3 TPFL
R021	Volumetric water content of the cover material	3	not used	3	5.000E-02	---	3 PH20CV
R021	Volumetric water content of the foundation	3	not used	3	3.000E-02	---	3 PH20FL
R021	Diffusion coefficient for radon gas (m/sec):	3		3			3
R021	in cover material	3	not used	3	2.000E-06	---	3 DIFCV
R021	in foundation material	3	not used	3	3.000E-07	---	3 DIFFL
R021	in contaminated zone soil	3	not used	3	2.000E-06	---	3 DIFCZ
R021	Radon vertical dimension of mixing (m)	3	not used	3	2.000E+00	---	3 HMIX
R021	Average building air exchange rate (1/hr)	3	not used	3	5.000E-01	---	3 REXG
R021	Height of the building (room) (m)	3	not used	3	2.500E+00	---	3 HRM
R021	Building interior area factor	3	not used	3	0.000E+00	---	3 FAI
R021	Building depth below ground surface (m)	3	not used	3	-1.000E+00	---	3 DMFL
R021	Emanating power of Rn-222 gas	3	not used	3	2.500E-01	---	3 EMANA(1)
R021	Emanating power of Rn-220 gas	3	not used	3	1.500E-01	---	3 EMANA(2)
TITL	Number of graphical time points	3	32	3	---	---	3 NPTS
TITL	Maximum number of integration points for dose	3	17	3	---	---	3 LYMAX
TITL	Maximum number of integration points for risk	3	257	3	---	---	3 KYMAX

Summary of Pathway Selections

Pathway	3	User Selection
1 -- external gamma	3	active
2 -- inhalation (w/o radon)	3	active
3 -- plant ingestion	3	suppressed
4 -- meat ingestion	3	suppressed
5 -- milk ingestion	3	suppressed
6 -- aquatic foods	3	suppressed
7 -- drinking water	3	suppressed
8 -- soil ingestion	3	active
9 -- radon	3	suppressed

Contaminated Zone Dimensions	Initial Soil Concentrations, pCi/g
AAAAAAAAAAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAAAAAAAAAA
Area: 10000.00 square meters	Am-241 1.000E+01
Thickness: 2.00 meters	Co-60 1.000E+01
Cover Depth: 0.00 meters	Cs-134 1.000E+01
	Cs-137 1.000E+01
	Eu-152 1.000E+01
	Eu-154 1.000E+01
	Eu-155 1.000E+01
	H-3 1.000E+01
	I-129 1.000E+01
	Mn-54 1.000E+01
	Na-22 1.000E+01
	Ni-63 1.000E+01
	Np-237 1.000E+01
	Pu-238 1.000E+01
	Pu-239 1.000E+01
	Ru-106 1.000E+01
	Sr-90 1.000E+01
	Tc-99 1.000E+01
	Th-228 1.000E+01
	Th-230 1.000E+01
	Th-232 1.000E+01
	U-234 1.000E+01
	U-235 1.000E+01
	U-238 1.000E+01

0

Total Dose TDOSE(t), mrem/yr
Basic Radiation Dose Limit = 2.500E+01 mrem/yr
Total Mixture Sum M(t) = Fraction of Basic Dose Limit Received at Time (t)
AAAAAAAAAAAAAAAAAAAAAAAAAAAA

t (years):	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
TDOSE(t):	1.460E+02	1.218E+02	5.353E+01	5.188E+01	4.809E+01	4.566E+01	4.613E+01	4.847E+01	5.285E+01
M(t):	5.840E+00	4.872E+00	2.141E+00	2.075E+00	1.924E+00	1.826E+00	1.845E+00	1.939E+00	2.114E+00

0Maximum TDOSE(t): 1.460E+02 mrem/yr at t = 0.000E+00 years

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)

As mrem/yr and Fraction of Total Dose At t = 0.000E+00 years

Water Independent Pathways (Inhalation excludes radon)

0	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil		
0	Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	
	Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
	Am-241	8.414E-02	0.0006	3.726E-01	0.0026	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.230E-01	0.0043
	Co-60	3.097E+01	0.2121	1.115E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.795E-03	0.0001
	Cs-134	1.613E+01	0.1105	6.713E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.011E-02	0.0003
	Cs-137	6.741E+00	0.0462	1.506E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.109E-02	0.0003
	Eu-152	1.404E+01	0.0962	3.519E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.993E-03	0.0000
	Eu-154	1.501E+01	0.1028	3.965E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.785E-03	0.0000
	Eu-155	3.347E-01	0.0023	4.475E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.444E-04	0.0000
	H-3	0.000E+00	0.0000	9.721E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.477E-05	0.0000
	I-129	2.197E-02	0.0002	3.796E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.301E-01	0.0023
	Mn-54	7.129E+00	0.0488	8.667E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.510E-03	0.0000
	Na-22	2.425E+01	0.1661	9.868E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.506E-03	0.0001
	Ni-63	0.000E+00	0.0000	7.699E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.721E-04	0.0000
	Np-237	2.359E+00	0.0162	1.923E-01	0.0013	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.300E-01	0.0023
	Pu-238	2.521E-04	0.0000	4.165E-01	0.0029	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.941E-01	0.0048
	Pu-239	6.053E-04	0.0000	4.611E-01	0.0032	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.672E-01	0.0053
	Ru-106	1.942E+00	0.0133	1.869E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.558E-02	0.0001
	Sr-90	8.641E-02	0.0006	6.035E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.145E-02	0.0006
	Tc-99	2.411E-04	0.0000	5.160E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.962E-03	0.0000
	Th-228	1.641E+01	0.1124	1.404E-01	0.0010	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.663E-01	0.0025
	Th-230	7.284E-03	0.0000	3.931E-01	0.0027	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.543E-01	0.0045
	Th-232	7.519E-01	0.0051	4.303E-01	0.0029	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.322E-01	0.0057
	U-234	7.875E-04	0.0000	3.638E-02	0.0002	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.513E-01	0.0010
	U-235	1.596E+00	0.0109	3.276E-02	0.0002	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.438E-01	0.0010
	U-238	3.491E-01	0.0024	3.112E-02	0.0002	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.467E-01	0.0010
	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
	Total	1.382E+02	0.9467	2.509E+00	0.0172	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.270E+00	0.0361

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
 As mrem/yr and Fraction of Total Dose At t = 0.000E+00 years

0	Water Dependent Pathways													
	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
Radio-	AAAAAAAAAAAAAA		AAAAAAAAAAAAAA		AAAAAAAAAAAAAA		AAAAAAAAAAAAAA		AAAAAAAAAAAAAA		AAAAAAAAAAAAAA		AAAAAAAAAAAAAA	
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA
Am-241	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.080E+00	0.0074
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.098E+01	0.2122
Cs-134	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.618E+01	0.1108
Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.783E+00	0.0465
Eu-152	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.405E+01	0.0962
Eu-154	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.501E+01	0.1028
Eu-155	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.357E-01	0.0023
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.520E-04	0.0000
I-129	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.524E-01	0.0024
Mn-54	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.131E+00	0.0488
Na-22	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.426E+01	0.1662
Ni-63	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.798E-04	0.0000
Np-237	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.881E+00	0.0197
Pu-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.111E+00	0.0076
Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.229E+00	0.0084
Ru-106	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.958E+00	0.0134
Sr-90	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.785E-01	0.0012
Tc-99	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.255E-03	0.0000
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.692E+01	0.1159
Th-230	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.055E+00	0.0072
Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.014E+00	0.0138
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.885E-01	0.0013
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.773E+00	0.0121
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.269E-01	0.0036
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.460E+02	1.0000

0*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)

As mrem/yr and Fraction of Total Dose At t = 1.000E+00 years

Water Independent Pathways (Inhalation excludes radon)

0	Water Independent Pathways (Inhalation excludes radon)															
0	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil			
Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA
Am-241	8.401E-02	0.0007	3.720E-01	0.0031	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.220E-01	0.0051
Co-60	2.715E+01	0.2229	9.777E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.588E-03	0.0001
Cs-134	1.153E+01	0.0947	4.799E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.582E-02	0.0003
Cs-137	6.588E+00	0.0541	1.472E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.016E-02	0.0003
Eu-152	1.334E+01	0.1095	3.343E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.793E-03	0.0000
Eu-154	1.384E+01	0.1137	3.658E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.337E-03	0.0000
Eu-155	2.893E-01	0.0024	3.869E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.164E-04	0.0000
H-3	0.000E+00	0.0000	8.545E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.815E-05	0.0000
I-129	2.197E-02	0.0002	3.796E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.301E-01	0.0027
Mn-54	3.168E+00	0.0260	3.851E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.708E-04	0.0000
Na-22	1.858E+01	0.1525	7.560E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.517E-03	0.0001
Ni-63	0.000E+00	0.0000	7.646E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.689E-04	0.0000
Np-237	2.359E+00	0.0194	1.923E-01	0.0016	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.300E-01	0.0027
Pu-238	2.501E-04	0.0000	4.132E-01	0.0034	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.887E-01	0.0057
Pu-239	6.053E-04	0.0000	4.611E-01	0.0038	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.672E-01	0.0063
Ru-106	9.863E-01	0.0081	9.491E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.914E-03	0.0001
Sr-90	8.436E-02	0.0007	5.892E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.927E-02	0.0007
Tc-99	2.411E-04	0.0000	5.160E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.962E-03	0.0000
Th-228	1.142E+01	0.0938	9.768E-02	0.0008	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.549E-01	0.0021
Th-230	1.699E-02	0.0001	3.931E-01	0.0032	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.547E-01	0.0054
Th-232	2.555E+00	0.0210	4.425E-01	0.0036	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.074E+00	0.0088
U-234	7.876E-04	0.0000	3.638E-02	0.0003	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.513E-01	0.0012
U-235	1.596E+00	0.0131	3.278E-02	0.0003	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.438E-01	0.0012
U-238	3.491E-01	0.0029	3.112E-02	0.0003	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.467E-01	0.0012
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	1.140E+02	0.9356	2.475E+00	0.0203	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.365E+00	0.0440

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
 As mrem/yr and Fraction of Total Dose At t = 1.000E+00 years

Water Dependent Pathways														
0	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA
Am-241	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.078E+00	0.0089
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.716E+01	0.2230
Cs-134	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.157E+01	0.0950
Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.629E+00	0.0544
Eu-152	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.334E+01	0.1096
Eu-154	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.385E+01	0.1137
Eu-155	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.902E-01	0.0024
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.336E-04	0.0000
I-129	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.524E-01	0.0029
Mn-54	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.169E+00	0.0260
Na-22	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.859E+01	0.1526
Ni-63	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.765E-04	0.0000
Np-237	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.881E+00	0.0237
Pu-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.102E+00	0.0090
Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.229E+00	0.0101
Ru-106	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.943E-01	0.0082
Sr-90	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.742E-01	0.0014
Tc-99	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.255E-03	0.0000
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.177E+01	0.0967
Th-230	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.065E+00	0.0087
Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.072E+00	0.0334
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.885E-01	0.0015
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.773E+00	0.0146
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.269E-01	0.0043
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.218E+02	1.0000

0*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)

As mrem/yr and Fraction of Total Dose At t = 2.500E+01 years

Water Independent Pathways (Inhalation excludes radon)

0	Water Independent Pathways (Inhalation excludes radon)													
0	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA
Am-241	8.085E-02	0.0015	3.579E-01	0.0067	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.985E-01	0.0112
Co-60	1.157E+00	0.0216	4.165E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.659E-04	0.0000
Cs-134	3.656E-03	0.0001	1.521E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.135E-05	0.0000
Cs-137	3.796E+00	0.0709	8.480E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.314E-02	0.0004
Eu-152	3.904E+00	0.0729	9.783E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.110E-03	0.0000
Eu-154	1.998E+00	0.0373	5.278E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.700E-04	0.0000
Eu-155	8.789E-03	0.0002	1.175E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.480E-05	0.0000
H-3	0.000E+00	0.0000	3.876E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.184E-06	0.0000
I-129	2.195E-02	0.0004	3.792E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.298E-01	0.0062
Mn-54	1.112E-08	0.0000	1.352E-14	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.355E-12	0.0000
Na-22	3.107E-02	0.0006	1.264E-07	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.090E-05	0.0000
Ni-63	0.000E+00	0.0000	6.475E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.971E-04	0.0000
Np-237	2.359E+00	0.0441	1.923E-01	0.0036	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.300E-01	0.0062
Pu-238	2.069E-04	0.0000	3.418E-01	0.0064	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.697E-01	0.0106
Pu-239	6.049E-04	0.0000	4.608E-01	0.0086	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.666E-01	0.0143
Ru-106	8.522E-08	0.0000	8.201E-12	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.838E-10	0.0000
Sr-90	4.733E-02	0.0009	3.306E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.009E-02	0.0009
Tc-99	2.406E-04	0.0000	5.150E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.958E-03	0.0000
Th-228	1.898E-03	0.0000	1.623E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.235E-05	0.0000
Th-230	2.488E-01	0.0046	3.935E-01	0.0074	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.833E-01	0.0128
Th-232	2.849E+01	0.5323	6.406E-01	0.0120	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.142E+00	0.0587
U-234	8.169E-04	0.0000	3.647E-02	0.0007	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.514E-01	0.0028
U-235	1.597E+00	0.0298	3.335E-02	0.0006	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.448E-01	0.0027
U-238	3.491E-01	0.0065	3.112E-02	0.0006	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.467E-01	0.0027
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	4.410E+01	0.8238	2.489E+00	0.0465	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.941E+00	0.1297

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
 As mrem/yr and Fraction of Total Dose At t = 2.500E+01 years

	Water Dependent Pathways																			
0	Water				Fish				Radon				Plant				Meat			
0																				
Radio-	Water				Fish				Radon				Plant				Meat			
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA
Am-241	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.037E+00	0.0194
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.157E+00	0.0216
Cs-134	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.667E-03	0.0001
Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.819E+00	0.0713
Eu-152	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.905E+00	0.0730
Eu-154	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.998E+00	0.0373
Eu-155	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.815E-03	0.0002
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.059E-06	0.0000
I-129	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.521E-01	0.0066
Mn-54	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.113E-08	0.0000
Na-22	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.108E-02	0.0006
Ni-63	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.035E-04	0.0000
Np-237	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.881E+00	0.0538
Pu-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.117E-01	0.0170
Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.228E+00	0.0229
Ru-106	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.591E-08	0.0000
Sr-90	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.776E-02	0.0018
Tc-99	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.251E-03	0.0000
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.957E-03	0.0000
Th-230	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.326E+00	0.0248
Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.227E+01	0.6030
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.887E-01	0.0035
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.775E+00	0.0332
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.269E-01	0.0098
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.353E+01	1.0000

0*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)

As mrem/yr and Fraction of Total Dose At t = 3.000E+01 years

Water Independent Pathways (Inhalation excludes radon)

0	Ground				Inhalation				Radon				Plant				Meat				Milk				Soil				
0	Radio-	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	
	Nuclide	mrem/yr	fract.		mrem/yr	fract.		mrem/yr	fract.		mrem/yr	fract.	mrem/yr	fract.		mrem/yr	fract.	mrem/yr	fract.		mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.			
	AAAA	AAAA	AAAA		AAAA	AAAA		AAAA	AAAA		AAAA	AAAA	AAAA	AAAA		AAAA	AAAA	AAAA	AAAA		AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA		
	Am-241	8.021E-02	0.0015		3.551E-01	0.0068		0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000	5.938E-01	0.0114			
	Co-60	5.994E-01	0.0116		2.158E-06	0.0000		0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000	1.896E-04	0.0000			
	Cs-134	6.823E-04	0.0000		2.839E-09	0.0000		0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000	2.119E-06	0.0000			
	Cs-137	3.384E+00	0.0652		7.560E-05	0.0000		0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000	2.063E-02	0.0004			
	Eu-152	3.022E+00	0.0582		7.573E-05	0.0000		0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000	8.593E-04	0.0000			
	Eu-154	1.335E+00	0.0257		3.526E-05	0.0000		0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000	5.144E-04	0.0000			
	Eu-155	4.244E-03	0.0001		5.676E-07	0.0000		0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000	1.198E-05	0.0000			
	H-3	0.000E+00	0.0000		2.035E-06	0.0000		0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000	1.146E-06	0.0000			
	I-129	2.194E-02	0.0004		3.791E-04	0.0000		0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000	3.297E-01	0.0064			
	Mn-54	1.927E-10	0.0000		2.343E-16	0.0000		0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000	4.080E-14	0.0000			
	Na-22	8.201E-03	0.0002		3.337E-08	0.0000		0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000	2.876E-06	0.0000			
	Ni-63	0.000E+00	0.0000		6.255E-06	0.0000		0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000	3.836E-04	0.0000			
	Np-237	2.359E+00	0.0455		1.923E-01	0.0037		0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000	3.300E-01	0.0064			
	Pu-238	1.989E-04	0.0000		3.286E-01	0.0063		0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000	5.476E-01	0.0106			
	Pu-239	6.048E-04	0.0000		4.607E-01	0.0089		0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000	7.665E-01	0.0148			
	Ru-106	2.877E-09	0.0000		2.769E-13	0.0000		0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000	2.309E-11	0.0000			
	Sr-90	4.197E-02	0.0008		2.931E-04	0.0000		0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000	4.441E-02	0.0009			
	Tc-99	2.405E-04	0.0000		5.148E-05	0.0000		0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000	1.958E-03	0.0000			
	Th-228	3.097E-04	0.0000		2.649E-06	0.0000		0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000	6.911E-06	0.0000			
	Th-230	2.968E-01	0.0057		3.936E-01	0.0076		0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000	6.924E-01	0.0133			
	Th-232	2.933E+01	0.5653		6.472E-01	0.0125		0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000	3.201E+00	0.0617			
	U-234	8.295E-04	0.0000		3.649E-02	0.0007		0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000	1.515E-01	0.0029			
	U-235	1.597E+00	0.0308		3.348E-02	0.0006		0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000	1.450E-01	0.0028			
	U-238	3.491E-01	0.0067		3.112E-02	0.0006		0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000	1.467E-01	0.0028			
	iiiiiii	iiiiiii	iiiiiii		iiiiiii	iiiiiii		iiiiiii	iiiiiii		iiiiiii	iiiiiii	iiiiiii	iiiiiii		iiiiiii	iiiiiii	iiiiiii	iiiiiii		iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii		
	Total	4.243E+01	0.8178		2.480E+00	0.0478		0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000	6.973E+00	0.1344			

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 3.000E+01 years

Water Dependent Pathways														
0	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA
Am-241	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.029E+00	0.0198
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.995E-01	0.0116
Cs-134	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.844E-04	0.0000
Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.404E+00	0.0656
Eu-152	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.023E+00	0.0583
Eu-154	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.335E+00	0.0257
Eu-155	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.257E-03	0.0001
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.181E-06	0.0000
I-129	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.520E-01	0.0068
Mn-54	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.927E-10	0.0000
Na-22	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.204E-03	0.0002
Ni-63	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.898E-04	0.0000
Np-237	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.881E+00	0.0555
Pu-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.764E-01	0.0169
Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.228E+00	0.0237
Ru-106	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.901E-09	0.0000
Sr-90	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.667E-02	0.0017
Tc-99	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.250E-03	0.0000
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.192E-04	0.0000
Th-230	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.383E+00	0.0267
Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.318E+01	0.6395
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.888E-01	0.0036
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.776E+00	0.0342
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.269E-01	0.0102
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.188E+01	1.0000

0*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)

As mrem/yr and Fraction of Total Dose At t = 5.000E+01 years

Water Independent Pathways (Inhalation excludes radon)

Water Independent Pathways (Inhalation excludes radon)														
0	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA
Am-241	7.769E-02	0.0016	3.439E-01	0.0072	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.750E-01	0.0120
Co-60	4.321E-02	0.0009	1.556E-07	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.367E-05	0.0000
Cs-134	8.283E-07	0.0000	3.446E-12	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.573E-09	0.0000
Cs-137	2.137E+00	0.0444	4.775E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.303E-02	0.0003
Eu-152	1.085E+00	0.0226	2.720E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.086E-04	0.0000
Eu-154	2.659E-01	0.0055	7.025E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.025E-04	0.0000
Eu-155	2.308E-04	0.0000	3.087E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.513E-07	0.0000
H-3	0.000E+00	0.0000	1.545E-07	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.706E-08	0.0000
I-129	2.193E-02	0.0005	3.788E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.294E-01	0.0068
Mn-54	1.736E-17	0.0000	2.110E-23	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.675E-21	0.0000
Na-22	3.980E-05	0.0000	1.620E-10	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.396E-08	0.0000
Ni-63	0.000E+00	0.0000	5.446E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.340E-04	0.0000
Np-237	2.359E+00	0.0491	1.923E-01	0.0040	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.300E-01	0.0069
Pu-238	1.699E-04	0.0000	2.806E-01	0.0058	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.676E-01	0.0097
Pu-239	6.045E-04	0.0000	4.605E-01	0.0096	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.661E-01	0.0159
Ru-106	3.739E-15	0.0000	3.598E-19	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.000E-17	0.0000
Sr-90	2.593E-02	0.0005	1.811E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.744E-02	0.0006
Tc-99	2.402E-04	0.0000	5.141E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.955E-03	0.0000
Th-228	2.195E-07	0.0000	1.877E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.898E-09	0.0000
Th-230	4.877E-01	0.0101	3.941E-01	0.0082	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.352E-01	0.0153
Th-232	3.025E+01	0.6291	6.544E-01	0.0136	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.265E+00	0.0679
U-234	9.016E-04	0.0000	3.656E-02	0.0008	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.516E-01	0.0032
U-235	1.599E+00	0.0332	3.406E-02	0.0007	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.460E-01	0.0030
U-238	3.491E-01	0.0073	3.112E-02	0.0006	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.467E-01	0.0031
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	3.871E+01	0.8049	2.428E+00	0.0505	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.956E+00	0.1446

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 5.000E+01 years

0	Water Dependent Pathways													
	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
Radio-	AAAAAAAAAAAAAA		AAAAAAAAAAAAAA		AAAAAAAAAAAAAA		AAAAAAAAAAAAAA		AAAAAAAAAAAAAA		AAAAAAAAAAAAAA		AAAAAAAAAAAAAA	
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA
Am-241	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.966E-01	0.020
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.322E-02	0.0009
Cs-134	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.308E-07	0.0000
Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.150E+00	0.0447
Eu-152	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.086E+00	0.0226
Eu-154	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.660E-01	0.0055
Eu-155	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.315E-04	0.0000
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.416E-07	0.0000
I-129	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.517E-01	0.0073
Mn-54	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.736E-17	0.0000
Na-22	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.982E-05	0.0000
Ni-63	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.394E-04	0.0000
Np-237	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.881E+00	0.0599
Pu-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.483E-01	0.0156
Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.227E+00	0.0255
Ru-106	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.770E-15	0.0000
Sr-90	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.355E-02	0.0011
Tc-99	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.246E-03	0.0000
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.263E-07	0.0000
Th-230	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.617E+00	0.0336
Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.417E+01	0.7106
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.891E-01	0.0039
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.779E+00	0.0370
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.269E-01	0.0110
iiiiiii	iiiiiii	iiiiii	iiiiiii	iiiiii	iiiiiii	iiiiii	iiiiiii	iiiiii	iiiiiii	iiiiii	iiiiiii	iiiiii	iiiiiii	iiiiii
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.809E+01	1.0000

0*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)

As mrem/yr and Fraction of Total Dose At t = 1.000E+02 years

Water Independent Pathways (Inhalation excludes radon)

0	Water Independent Pathways (Inhalation excludes radon)														
0	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil		
Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	
AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	
Am-241	7.174E-02	0.0016	3.174E-01	0.0070	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.307E-01	0.0116	
Co-60	6.028E-05	0.0000	2.171E-10	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.907E-08	0.0000	
Cs-134	4.252E-14	0.0000	1.769E-19	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.321E-16	0.0000	
Cs-137	6.775E-01	0.0148	1.514E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.130E-03	0.0001	
Eu-152	8.388E-02	0.0018	2.102E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.385E-05	0.0000	
Eu-154	4.711E-03	0.0001	1.245E-07	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.816E-06	0.0000	
Eu-155	1.592E-07	0.0000	2.129E-11	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.492E-10	0.0000	
H-3	0.000E+00	0.0000	2.456E-10	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.384E-10	0.0000	
I-129	2.188E-02	0.0005	3.780E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.287E-01	0.0072	
Mn-54	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	
Na-22	6.533E-11	0.0000	2.658E-16	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.291E-14	0.0000	
Ni-63	0.000E+00	0.0000	3.852E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.362E-04	0.0000	
Np-237	2.359E+00	0.0517	1.923E-01	0.0042	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.301E-01	0.0072	
Pu-238	1.145E-04	0.0000	1.890E-01	0.0041	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.149E-01	0.0069	
Pu-239	6.037E-04	0.0000	4.598E-01	0.0101	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.650E-01	0.0168	
Ru-106	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	
Sr-90	7.780E-03	0.0002	5.433E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.233E-03	0.0002	
Tc-99	2.393E-04	0.0000	5.121E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.947E-03	0.0000	
Th-228	2.935E-15	0.0000	2.510E-17	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.550E-17	0.0000	
Th-230	9.578E-01	0.0210	3.954E-01	0.0087	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.633E-01	0.0189	
Th-232	3.034E+01	0.6645	6.551E-01	0.0143	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.271E+00	0.0716	
U-234	1.234E-03	0.0000	3.673E-02	0.0008	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.519E-01	0.0033	
U-235	1.603E+00	0.0351	3.564E-02	0.0008	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.488E-01	0.0033	
U-238	3.491E-01	0.0076	3.113E-02	0.0007	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.467E-01	0.0032	
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	
Total	3.648E+01	0.7990	2.313E+00	0.0507	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.866E+00	0.1504	

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
 As mrem/yr and Fraction of Total Dose At t = 1.000E+02 years

Water Dependent Pathways														
0	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA
Am-241	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.198E-01	0.0201
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.030E-05	0.0000
Cs-134	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.265E-14	0.0000
Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.816E-01	0.0149
Eu-152	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.391E-02	0.0018
Eu-154	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.713E-03	0.0001
Eu-155	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.597E-07	0.0000
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.840E-10	0.0000
I-129	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.510E-01	0.0077
Mn-54	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Na-22	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.535E-11	0.0000
Ni-63	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.401E-04	0.0000
Np-237	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.881E+00	0.0631
Pu-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.040E-01	0.0110
Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.225E+00	0.0268
Ru-106	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Sr-90	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.607E-02	0.0004
Tc-99	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.238E-03	0.0000
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.026E-15	0.0000
Th-230	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.217E+00	0.0485
Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.427E+01	0.7505
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.899E-01	0.0042
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.788E+00	0.0392
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.269E-01	0.0115
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.566E+01	1.0000

0*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)

As mrem/yr and Fraction of Total Dose At t = 2.500E+02 years

Water Independent Pathways (Inhalation excludes radon)

0	Water Independent Pathways (Inhalation excludes radon)														
0	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil		
Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	
AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	
Am-241	5.650E-02	0.0012	2.495E-01	0.0054	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.172E-01	0.0090	
Co-60	1.637E-13	0.0000	5.895E-19	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.178E-17	0.0000	
Cs-134	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	
Cs-137	2.158E-02	0.0005	4.822E-07	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.316E-04	0.0000	
Eu-152	3.873E-05	0.0000	9.705E-10	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.101E-08	0.0000	
Eu-154	2.620E-08	0.0000	6.923E-13	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.010E-11	0.0000	
Eu-155	5.222E-17	0.0000	6.984E-21	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.474E-19	0.0000	
H-3	0.000E+00	0.0000	9.863E-19	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.558E-19	0.0000	
I-129	2.175E-02	0.0005	3.757E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.267E-01	0.0071	
Mn-54	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	
Na-22	2.888E-28	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	
Ni-63	0.000E+00	0.0000	1.363E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.360E-05	0.0000	
Np-237	2.359E+00	0.0511	1.924E-01	0.0042	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.302E-01	0.0072	
Pu-238	3.561E-05	0.0000	5.776E-02	0.0013	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.628E-02	0.0021	
Pu-239	6.014E-04	0.0000	4.578E-01	0.0099	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.617E-01	0.0165	
Ru-106	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	
Sr-90	2.102E-04	0.0000	1.468E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.224E-04	0.0000	
Tc-99	2.366E-04	0.0000	5.063E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.925E-03	0.0000	
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	
Th-230	2.307E+00	0.0500	3.994E-01	0.0087	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.266E+00	0.0274	
Th-232	3.034E+01	0.6578	6.551E-01	0.0142	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.271E+00	0.0709	
U-234	3.495E-03	0.0001	3.726E-02	0.0008	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.533E-01	0.0033	
U-235	1.618E+00	0.0351	4.057E-02	0.0009	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.576E-01	0.0034	
U-238	3.491E-01	0.0076	3.114E-02	0.0007	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.468E-01	0.0032	
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	
Total	3.708E+01	0.8038	2.121E+00	0.0460	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.929E+00	0.1502	

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
 As mrem/yr and Fraction of Total Dose At t = 2.500E+02 years

Water Dependent Pathways														
Water		Fish		Radon		Plant		Meat		Milk		All Pathways*		
Radio-	AAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAA	
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
0	AAAAAAAA	AAAAAAAA	AAAAAAAA	AAAAAA	AAAAAAAA	AAAAAA	AAAAAAAA	AAAAAA	AAAAAAAA	AAAAAA	AAAAAAAA	AAAAAA	AAAAAAAA	AAAAAA
Am-241	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.232E-01	0.0157
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.638E-13	0.0000
Cs-134	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.171E-02	0.0005
Eu-152	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.874E-05	0.0000
Eu-154	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.621E-08	0.0000
Eu-155	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.238E-17	0.0000
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.542E-18	0.0000
I-129	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.488E-01	0.0076
Mn-54	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Na-22	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.888E-28	0.0000
Ni-63	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.497E-05	0.0000
Np-237	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.881E+00	0.0625
Pu-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.541E-01	0.0033
Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.220E+00	0.0264
Ru-106	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Sr-90	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.340E-04	0.0000
Tc-99	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.213E-03	0.0000
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Th-230	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.973E+00	0.0861
Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.427E+01	0.7429
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.941E-01	0.0042
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.817E+00	0.0394
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.270E-01	0.0114
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.613E+01	1.0000

0*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)

As mrem/yr and Fraction of Total Dose At t = 5.000E+02 years

Water Independent Pathways (Inhalation excludes radon)

0	Water Independent Pathways (Inhalation excludes radon)													
0	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA
Am-241	3.799E-02	0.0008	1.671E-01	0.0034	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.794E-01	0.0058
Co-60	8.654E-28	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Cs-134	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Cs-137	6.908E-05	0.0000	1.543E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.211E-07	0.0000
Eu-152	1.068E-10	0.0000	5.250E-15	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.475E-14	0.0000
Eu-154	4.574E-17	0.0000	1.209E-21	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.763E-20	0.0000
Eu-155	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
I-129	2.152E-02	0.0004	3.718E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.233E-01	0.0067
Mn-54	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Na-22	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Ni-63	0.000E+00	0.0000	2.414E-07	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.480E-05	0.0000
Np-237	2.359E+00	0.0487	1.924E-01	0.0040	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.304E-01	0.0068
Pu-238	7.451E-06	0.0000	8.019E-03	0.0002	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.340E-02	0.0003
Pu-239	5.975E-04	0.0000	4.546E-01	0.0094	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.562E-01	0.0156
Ru-106	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Sr-90	5.111E-07	0.0000	3.569E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.408E-07	0.0000
Tc-99	2.321E-04	0.0000	4.968E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.889E-03	0.0000
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Th-230	4.366E+00	0.0901	4.055E-01	0.0084	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.886E+00	0.0389
Th-232	3.034E+01	0.6260	6.551E-01	0.0135	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.271E+00	0.0675
U-234	1.120E-02	0.0002	3.816E-02	0.0008	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.569E-01	0.0032
U-235	1.644E+00	0.0339	4.879E-02	0.0010	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.723E-01	0.0036
U-238	3.491E-01	0.0072	3.117E-02	0.0006	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.469E-01	0.0030
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	3.913E+01	0.8073	2.001E+00	0.0413	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.337E+00	0.1514

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
 As mrem/yr and Fraction of Total Dose At t = 5.000E+02 years

Water Dependent Pathways														
0	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA
Am-241	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.845E-01	0.0100
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.654E-28	0.0000
Cs-134	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.951E-05	0.0000
Eu-152	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.069E-10	0.0000
Eu-154	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.576E-17	0.0000
Eu-155	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
I-129	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.452E-01	0.0071
Mn-54	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Na-22	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Ni-63	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.505E-05	0.0000
Np-237	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.881E+00	0.0594
Pu-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.142E-02	0.0004
Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.211E+00	0.0250
Ru-106	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Sr-90	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.055E-06	0.0000
Tc-99	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.171E-03	0.0000
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Th-230	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.657E+00	0.1373
Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.427E+01	0.7070
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.062E-01	0.0043
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.865E+00	0.0385
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.271E-01	0.0109
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.847E+01	1.0000

0*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)

As mrem/yr and Fraction of Total Dose At t = 1.000E+03 years

Water Independent Pathways (Inhalation excludes radon)

0	Water Independent Pathways (Inhalation excludes radon)													
0	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA
Am-241	1.730E-02	0.0003	7.494E-02	0.0014	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.253E-01	0.002
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Cs-134	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Cs-137	7.079E-10	0.0000	1.582E-14	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.316E-12	0.0000
Eu-152	8.125E-22	0.0000	2.573E-15	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.382E-15	0.0000
Eu-154	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Eu-155	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
I-129	2.108E-02	0.0004	3.642E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.167E-01	0.0060
Mn-54	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Na-22	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Ni-63	0.000E+00	0.0000	7.570E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.643E-07	0.0000
Np-237	2.359E+00	0.0446	1.926E-01	0.0036	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.309E-01	0.0063
Pu-238	1.131E-05	0.0000	1.680E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.152E-04	0.0000
Pu-239	5.897E-04	0.0000	4.481E-01	0.0085	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.454E-01	0.0141
Ru-106	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Sr-90	3.023E-12	0.0000	2.111E-14	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.199E-12	0.0000
Tc-99	2.235E-04	0.0000	4.784E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.819E-03	0.0000
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Th-230	7.855E+00	0.1486	4.156E-01	0.0079	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.936E+00	0.0555
Th-232	3.034E+01	0.5742	6.551E-01	0.0124	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.271E+00	0.0619
U-234	3.956E-02	0.0007	3.999E-02	0.0008	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.678E-01	0.0032
U-235	1.694E+00	0.0321	6.508E-02	0.0012	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.013E-01	0.0038
U-238	3.491E-01	0.0066	3.122E-02	0.0006	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.471E-01	0.0028
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	4.268E+01	0.8076	1.923E+00	0.0364	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.243E+00	0.1560

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
 As mrem/yr and Fraction of Total Dose At t = 1.000E+03 years

0 0	Water Dependent Pathways													
	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
Radio-	AAAAA		AAAAA		AAAAA		AAAAA		AAAAA		AAAAA		AAAAA	
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
Am-241	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.175E-01	0.0041
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Cs-134	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.123E-10	0.0000
Eu-152	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.956E-15	0.0000
Eu-154	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Eu-155	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
I-129	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.381E-01	0.0064
Mn-54	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Na-22	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Ni-63	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.718E-07	0.0000
Np-237	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.882E+00	0.0545
Pu-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.945E-04	0.0000
Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.194E+00	0.0226
Ru-106	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Sr-90	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.242E-12	0.0000
Tc-99	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.090E-03	0.0000
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Th-230	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.121E+01	0.2121
Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.427E+01	0.6485
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.473E-01	0.0047
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.960E+00	0.0371
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.274E-01	0.0100
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.285E+01	1.0000

0*Sum of all water independent and dependent pathways.

Dose/Source Ratios Summed Over All Pathways

Parent and Progeny Principal Radionuclide Contributions Indicated

0	Parent	Product	Thread	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)								
	(i)	(j)	Fraction	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA
	Am-241	Am-241	1.000E+00	1.080E-01	1.078E-01	1.037E-01	1.029E-01	9.965E-02	9.197E-02	7.230E-02	4.841E-02	2.171E-02
	Am-241	Np-237+D	1.000E+00	4.655E-08	1.396E-07	2.327E-06	2.773E-06	4.519E-06	8.646E-06	1.921E-05	3.205E-05	4.639E-05
	Am-241	U-233	1.000E+00	4.587E-15	3.209E-14	8.832E-12	1.260E-11	3.418E-11	1.318E-10	7.586E-10	2.682E-09	8.606E-09
	Am-241	Th-229+D	1.000E+00	3.346E-18	5.017E-17	2.197E-13	3.751E-13	1.688E-12	1.303E-11	1.897E-10	1.372E-09	9.137E-09
	Am-241	äDSR(j)		1.080E-01	1.078E-01	1.037E-01	1.029E-01	9.966E-02	9.198E-02	7.232E-02	4.845E-02	2.175E-02
	0Co-60	Co-60	1.000E+00	3.098E+00	2.716E+00	1.157E-01	5.995E-02	4.322E-03	6.030E-06	1.638E-14	8.657E-29	0.000E+00
	0Cs-134	Cs-134	1.000E+00	1.618E+00	1.157E+00	3.667E-04	6.844E-05	8.308E-08	4.265E-15	5.771E-37	0.000E+00	0.000E+00
	0Cs-137+D	Cs-137+D	1.000E+00	6.783E-01	6.629E-01	3.819E-01	3.404E-01	2.150E-01	6.816E-02	2.171E-03	6.951E-06	7.123E-11
	0Eu-152	Eu-152	7.210E-01	1.013E+00	9.622E-01	2.815E-01	2.180E-01	7.827E-02	6.050E-03	2.793E-06	7.704E-12	5.860E-23
	0Eu-152	Eu-152	2.790E-01	3.919E-01	3.723E-01	1.089E-01	8.434E-02	3.029E-02	2.341E-03	1.081E-06	2.981E-12	2.268E-23
	Eu-152	Gd-152	2.790E-01	1.751E-17	5.135E-17	5.071E-16	5.496E-16	6.432E-16	6.915E-16	6.956E-16	6.956E-16	6.956E-16
	Eu-152	Sm-148	2.790E-01	6.039E-34	4.166E-33	8.072E-31	1.080E-30	2.325E-30	5.811E-30	1.655E-29	3.447E-29	7.030E-29
	Eu-152	Nd-144	2.790E-01	0.000E+00	0.000E+00	2.803E-45	4.204E-45	1.401E-44	7.147E-44	5.591E-43	2.409E-42	1.001E-41
	Eu-152	äDSR(j)		3.919E-01	3.723E-01	1.089E-01	8.434E-02	3.029E-02	2.341E-03	1.081E-06	2.982E-12	6.956E-16
	0Eu-154	Eu-154	1.000E+00	1.501E+00	1.385E+00	1.998E-01	1.335E-01	2.660E-02	4.713E-04	2.621E-09	4.576E-18	1.395E-35
	0Eu-155	Eu-155	1.000E+00	3.357E-02	2.902E-02	8.815E-04	4.257E-04	2.315E-05	1.597E-08	5.238E-18	8.173E-34	0.000E+00
	0H-3	H-3	1.000E+00	1.520E-05	1.336E-05	6.059E-07	3.181E-07	2.416E-08	3.840E-11	1.542E-19	1.565E-33	0.000E+00
	0I-129	I-129	1.000E+00	3.524E-02	3.524E-02	3.521E-02	3.520E-02	3.517E-02	3.510E-02	3.488E-02	3.452E-02	3.381E-02
	0Mn-54	Mn-54	1.000E+00	7.131E-01	3.169E-01	1.113E-09	1.927E-11	1.736E-18	4.226E-36	0.000E+00	0.000E+00	0.000E+00
	0Na-22	Na-22	1.000E+00	2.426E+00	1.859E+00	3.108E-03	8.204E-04	3.982E-06	6.535E-12	2.889E-29	0.000E+00	0.000E+00
	0Ni-63	Ni-63	1.000E+00	4.798E-05	4.765E-05	4.035E-05	3.898E-05	3.394E-05	2.401E-05	8.497E-06	1.505E-06	4.718E-08
	0Np-237+D	Np-237+D	1.000E+00	2.881E-01	2.881E-01	2.881E-01	2.881E-01	2.881E-01	2.881E-01	2.881E-01	2.881E-01	2.880E-01
	Np-237+D	U-233	1.000E+00	4.258E-08	1.277E-07	2.172E-06	2.597E-06	4.300E-06	8.557E-06	2.132E-05	4.257E-05	8.500E-05
	Np-237+D	Th-229+D	1.000E+00	4.141E-11	2.899E-10	8.073E-08	1.155E-07	3.163E-07	1.251E-06	7.732E-06	3.061E-05	1.203E-04
	Np-237+D	äDSR(j)		2.881E-01	2.881E-01	2.881E-01	2.881E-01	2.881E-01	2.881E-01	2.881E-01	2.881E-01	2.882E-01
	0Pu-238	Pu-238	1.850E-09	2.055E-10	2.039E-10	1.687E-10	1.621E-10	1.384E-10	9.324E-11	2.849E-11	3.950E-12	7.592E-14
	0Pu-238	Pu-238	9.996E-01	1.110E-01	1.102E-01	9.114E-02	8.760E-02	7.480E-02	5.038E-02	1.539E-02	2.134E-03	4.102E-05
	Pu-238	U-234	9.996E-01	2.652E-08	7.930E-08	1.228E-06	1.441E-06	2.215E-06	3.688E-06	5.798E-06	6.593E-06	6.710E-06
	Pu-238	Th-230	9.996E-01	4.531E-13	3.164E-12	8.290E-10	1.171E-09	3.053E-09	1.073E-08	4.869E-08	1.294E-07	2.996E-07
	Pu-238	Ra-226+D	9.996E-01	1.090E-15	1.632E-14	6.874E-11	1.164E-10	5.077E-10	3.634E-09	4.337E-08	2.418E-07	1.135E-06
	Pu-238	Pb-210+D	9.996E-01	1.711E-18	5.266E-17	2.999E-12	5.917E-12	3.863E-11	4.404E-10	7.972E-09	5.254E-08	2.678E-07
	Pu-238	äDSR(j)		1.110E-01	1.102E-01	9.114E-02	8.761E-02	7.480E-02	5.038E-02	1.540E-02	2.141E-03	4.943E-05

Dose/Source Ratios Summed Over All Pathways

Parent and Progeny Principal Radionuclide Contributions Indicated

0	Parent (i)	Product (j)	Thread Fraction	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)								
	AAAAA	AAAAA	AAAAA	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
	Pu-238	Pu-238	1.319E-06	1.466E-07	1.454E-07	1.203E-07	1.156E-07	9.873E-08	6.650E-08	2.032E-08	2.817E-09	5.415E-11
	Pu-238	U-234	1.319E-06	3.501E-14	1.047E-13	1.621E-12	1.903E-12	2.923E-12	4.868E-12	7.653E-12	8.703E-12	8.857E-12
	Pu-238	Th-230	1.319E-06	5.981E-19	4.177E-18	1.094E-15	1.546E-15	4.030E-15	1.417E-14	6.427E-14	1.708E-13	3.954E-13
	Pu-238	Ra-226+D	1.319E-06	1.439E-21	2.155E-20	9.074E-17	1.537E-16	6.702E-16	4.797E-15	5.725E-14	3.191E-13	1.498E-12
	Pu-238	Pb-210+D1	1.319E-06	8.431E-25	2.596E-23	1.478E-18	2.916E-18	1.904E-17	2.171E-16	3.929E-15	2.590E-14	1.320E-13
	Pu-238	äDSR(j)		1.466E-07	1.454E-07	1.203E-07	1.156E-07	9.873E-08	6.651E-08	2.033E-08	2.826E-09	6.503E-11
0	Pu-238	Pu-238	1.899E-08	2.110E-09	2.093E-09	1.732E-09	1.664E-09	1.421E-09	9.572E-10	2.925E-10	4.055E-11	7.794E-13
	Pu-238	U-234	1.899E-08	5.040E-16	1.507E-15	2.334E-14	2.739E-14	4.208E-14	7.007E-14	1.102E-13	1.253E-13	1.275E-13
	Pu-238	Th-230	1.899E-08	8.609E-21	6.012E-20	1.575E-17	2.225E-17	5.801E-17	2.039E-16	9.251E-16	2.458E-15	5.692E-15
	Pu-238	Ra-226+D	1.899E-08	2.071E-23	3.101E-22	1.306E-18	2.212E-18	9.646E-18	6.905E-17	8.240E-16	4.594E-15	2.157E-14
	Pu-238	Pb-210+D2	1.899E-08	1.938E-26	5.967E-25	3.398E-20	6.704E-20	4.377E-19	4.990E-18	9.032E-17	5.953E-16	3.035E-15
	Pu-238	äDSR(j)		2.110E-09	2.093E-09	1.732E-09	1.665E-09	1.421E-09	9.573E-10	2.926E-10	4.068E-11	9.372E-13
0	Pu-238	Pu-238	2.100E-04	2.332E-05	2.314E-05	1.914E-05	1.840E-05	1.571E-05	1.058E-05	3.234E-06	4.483E-07	8.616E-09
	Pu-238	U-234	2.100E-04	5.571E-12	1.666E-11	2.580E-10	3.028E-10	4.652E-10	7.746E-10	1.218E-09	1.385E-09	1.409E-09
	Pu-238	Th-230	2.100E-04	9.517E-17	6.647E-16	1.741E-13	2.459E-13	6.413E-13	2.254E-12	1.023E-11	2.718E-11	6.293E-11
	Pu-238	Ra-226+D1	2.100E-04	5.819E-19	8.714E-18	3.670E-14	6.216E-14	2.710E-13	1.940E-12	2.315E-11	1.291E-10	6.059E-10
	Pu-238	Pb-210+D	2.100E-04	3.593E-22	1.106E-20	6.299E-16	1.243E-15	8.115E-15	9.250E-14	1.674E-12	1.104E-11	5.626E-11
	Pu-238	äDSR(j)		2.332E-05	2.314E-05	1.914E-05	1.840E-05	1.571E-05	1.058E-05	3.235E-06	4.498E-07	1.075E-08
0	Pu-238	Pu-238	2.771E-10	3.079E-11	3.055E-11	2.527E-11	2.429E-11	2.074E-11	1.397E-11	4.268E-12	5.917E-13	1.137E-14
	Pu-238	U-234	2.771E-10	7.354E-18	2.199E-17	3.406E-16	3.997E-16	6.140E-16	1.023E-15	1.607E-15	1.828E-15	1.860E-15
	Pu-238	Th-230	2.771E-10	1.256E-22	8.774E-22	2.298E-19	3.246E-19	8.465E-19	2.975E-18	1.350E-17	3.588E-17	8.306E-17
	Pu-238	Ra-226+D1	2.771E-10	7.682E-25	1.150E-23	4.844E-20	8.205E-20	3.578E-19	2.561E-18	3.056E-17	1.704E-16	7.999E-16
	Pu-238	Pb-210+D1	2.771E-10	1.771E-28	5.452E-27	3.105E-22	6.126E-22	3.999E-21	4.559E-20	8.253E-19	5.439E-18	2.773E-17
	Pu-238	äDSR(j)		3.079E-11	3.055E-11	2.527E-11	2.429E-11	2.074E-11	1.397E-11	4.270E-12	5.938E-13	1.414E-14
0	Pu-238	Pu-238	3.989E-12	4.432E-13	4.397E-13	3.637E-13	3.496E-13	2.985E-13	2.011E-13	6.144E-14	8.518E-15	1.637E-16
	Pu-238	U-234	3.989E-12	1.059E-19	3.165E-19	4.902E-18	5.753E-18	8.838E-18	1.472E-17	2.314E-17	2.631E-17	2.678E-17
	Pu-238	Th-230	3.989E-12	1.808E-24	1.263E-23	3.308E-21	4.673E-21	1.219E-20	4.283E-20	1.943E-19	5.164E-19	1.196E-18
	Pu-238	Ra-226+D1	3.989E-12	1.106E-26	1.656E-25	6.973E-22	1.181E-21	5.150E-21	3.686E-20	4.399E-19	2.452E-18	1.151E-17
	Pu-238	Pb-210+D2	3.989E-12	4.071E-30	1.253E-28	7.137E-24	1.408E-23	9.194E-23	1.048E-21	1.897E-20	1.250E-19	6.374E-19
	Pu-238	äDSR(j)		4.432E-13	4.397E-13	3.637E-13	3.496E-13	2.985E-13	2.011E-13	6.146E-14	8.547E-15	2.038E-16
0	Pu-238	Pu-238	1.998E-04	2.219E-05	2.202E-05	1.821E-05	1.751E-05	1.495E-05	1.007E-05	3.076E-06	4.265E-07	8.198E-09
	Pu-238	U-234	1.998E-04	5.301E-12	1.585E-11	2.455E-10	2.881E-10	4.426E-10	7.370E-10	1.159E-09	1.318E-09	1.341E-09
	Pu-238	Th-230	1.998E-04	9.054E-17	6.324E-16	1.657E-13	2.340E-13	6.102E-13	2.144E-12	9.730E-12	2.586E-11	5.987E-11
	Pu-238	Ra-226+D2	1.998E-04	1.924E-19	2.880E-18	1.213E-14	2.055E-14	8.960E-14	6.413E-13	7.654E-12	4.267E-11	2.003E-10
	Pu-238	Pb-210+D	1.998E-04	3.418E-22	1.052E-20	5.993E-16	1.183E-15	7.720E-15	8.801E-14	1.593E-12	1.050E-11	5.352E-11
	Pu-238	äDSR(j)		2.219E-05	2.202E-05	1.821E-05	1.751E-05	1.495E-05	1.007E-05	3.078E-06	4.279E-07	9.852E-09

Dose/Source Ratios Summed Over All Pathways

Parent and Progeny Principal Radionuclide Contributions Indicated

0	Parent	Product	Thread	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)								
	(i)	(j)	Fraction	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA
	Pu-238	Pu-238	2.637E-10	2.929E-11	2.906E-11	2.404E-11	2.311E-11	1.973E-11	1.329E-11	4.061E-12	5.630E-13	1.082E-14
	Pu-238	U-234	2.637E-10	6.997E-18	2.092E-17	3.240E-16	3.802E-16	5.842E-16	9.728E-16	1.529E-15	1.739E-15	1.770E-15
	Pu-238	Th-230	2.637E-10	1.195E-22	8.347E-22	2.187E-19	3.089E-19	8.054E-19	2.831E-18	1.284E-17	3.413E-17	7.903E-17
	Pu-238	Ra-226+D2	2.637E-10	2.539E-25	3.802E-24	1.601E-20	2.712E-20	1.183E-19	8.466E-19	1.010E-17	5.632E-17	2.644E-16
	Pu-238	Pb-210+D1	2.637E-10	1.685E-28	5.187E-27	2.954E-22	5.828E-22	3.805E-21	4.338E-20	7.852E-19	5.175E-18	2.638E-17
	Pu-238	äDSR(j)		2.929E-11	2.906E-11	2.404E-11	2.311E-11	1.973E-11	1.329E-11	4.063E-12	5.648E-13	1.296E-14
0	Pu-238	Pu-238	3.795E-12	4.216E-13	4.183E-13	3.460E-13	3.326E-13	2.840E-13	1.913E-13	5.845E-14	8.104E-15	1.558E-16
	Pu-238	U-234	3.795E-12	1.007E-19	3.011E-19	4.664E-18	5.473E-18	8.409E-18	1.400E-17	2.201E-17	2.503E-17	2.548E-17
	Pu-238	Th-230	3.795E-12	1.720E-24	1.202E-23	3.148E-21	4.446E-21	1.159E-20	4.075E-20	1.849E-19	4.913E-19	1.138E-18
	Pu-238	Ra-226+D2	3.795E-12	3.655E-27	5.473E-26	2.305E-22	3.904E-22	1.702E-21	1.219E-20	1.454E-19	8.107E-19	3.806E-18
	Pu-238	Pb-210+D2	3.795E-12	3.873E-30	1.192E-28	6.790E-24	1.340E-23	8.747E-23	9.971E-22	1.805E-20	1.190E-19	6.064E-19
	Pu-238	äDSR(j)		4.216E-13	4.183E-13	3.460E-13	3.326E-13	2.840E-13	1.913E-13	5.848E-14	8.130E-15	1.868E-16
0	Pu-238	Pu-238	4.196E-08	4.661E-09	4.624E-09	3.825E-09	3.677E-09	3.140E-09	2.115E-09	6.462E-10	8.959E-11	1.722E-12
	Pu-238	U-234	4.196E-08	1.113E-15	3.328E-15	5.156E-14	6.051E-14	9.296E-14	1.548E-13	2.434E-13	2.768E-13	2.816E-13
	Pu-238	Th-230	4.196E-08	1.902E-20	1.328E-19	3.480E-17	4.915E-17	1.282E-16	4.504E-16	2.044E-15	5.431E-15	1.258E-14
	Pu-238	Ra-226+D3	4.196E-08	1.109E-22	1.661E-21	6.996E-18	1.185E-17	5.167E-17	3.699E-16	4.414E-15	2.461E-14	1.155E-13
	Pu-238	Pb-210+D	4.196E-08	7.180E-26	2.211E-24	1.259E-19	2.484E-19	1.622E-18	1.849E-17	3.346E-16	2.205E-15	1.124E-14
	Pu-238	äDSR(j)		4.661E-09	4.624E-09	3.825E-09	3.677E-09	3.140E-09	2.115E-09	6.465E-10	8.990E-11	2.143E-12
0	Pu-238	Pu-238	5.538E-14	6.153E-15	6.104E-15	5.050E-15	4.854E-15	4.144E-15	2.791E-15	8.530E-16	1.183E-16	2.273E-18
	Pu-238	U-234	5.538E-14	1.470E-21	4.394E-21	6.806E-20	7.987E-20	1.227E-19	2.043E-19	3.212E-19	3.653E-19	3.718E-19
	Pu-238	Th-230	5.538E-14	2.510E-26	1.753E-25	4.593E-23	6.488E-23	1.692E-22	5.946E-22	2.698E-21	7.169E-21	1.660E-20
	Pu-238	Ra-226+D3	5.538E-14	1.464E-28	2.193E-27	9.235E-24	1.564E-23	6.821E-23	4.882E-22	5.827E-21	3.248E-20	1.525E-19
	Pu-238	Pb-210+D1	5.538E-14	3.539E-32	1.090E-30	6.205E-26	1.224E-25	7.993E-25	9.111E-24	1.649E-22	1.087E-21	5.541E-21
	Pu-238	äDSR(j)		6.153E-15	6.104E-15	5.050E-15	4.854E-15	4.144E-15	2.792E-15	8.533E-16	1.187E-16	2.819E-18
0	Pu-238	Pu-238	7.972E-16	8.856E-17	8.786E-17	7.268E-17	6.987E-17	5.965E-17	4.018E-17	1.228E-17	1.702E-18	3.271E-20
	Pu-238	U-234	7.972E-16	2.115E-23	6.324E-23	9.796E-22	1.150E-21	1.766E-21	2.941E-21	4.624E-21	5.258E-21	5.351E-21
	Pu-238	Th-230	7.972E-16	3.613E-28	2.524E-27	6.611E-25	9.338E-25	2.435E-24	8.558E-24	3.883E-23	1.032E-22	2.389E-22
	Pu-238	Ra-226+D3	7.972E-16	2.108E-30	3.156E-29	1.329E-25	2.251E-25	9.818E-25	7.028E-24	8.387E-23	4.675E-22	2.195E-21
	Pu-238	Pb-210+D2	7.972E-16	8.135E-34	2.505E-32	1.426E-27	2.814E-27	1.837E-26	2.094E-25	3.791E-24	2.499E-23	1.274E-22
	Pu-238	äDSR(j)		8.856E-17	8.786E-17	7.268E-17	6.987E-17	5.965E-17	4.018E-17	1.228E-17	1.708E-18	4.063E-20
0	Pu-238	Pu-238	2.000E-07	2.222E-08	2.204E-08	1.823E-08	1.753E-08	1.497E-08	1.008E-08	3.080E-09	4.270E-10	8.207E-12
	Pu-238	U-234	2.000E-07	5.307E-15	1.587E-14	2.458E-13	2.884E-13	4.431E-13	7.379E-13	1.160E-12	1.319E-12	1.342E-12
	Pu-238	Th-230	2.000E-07	9.065E-20	6.331E-19	1.659E-16	2.343E-16	6.109E-16	2.147E-15	9.742E-15	2.589E-14	5.994E-14
	Pu-238	Ra-226+D4	2.000E-07	9.136E-24	1.368E-22	5.761E-19	9.758E-19	4.255E-18	3.046E-17	3.635E-16	2.026E-15	9.513E-15
	Pu-238	Pb-210+D	2.000E-07	3.422E-25	1.054E-23	6.001E-19	1.184E-18	7.730E-18	8.811E-17	1.595E-15	1.051E-14	5.359E-14
	Pu-238	äDSR(j)		2.222E-08	2.204E-08	1.823E-08	1.753E-08	1.497E-08	1.008E-08	3.081E-09	4.284E-10	9.673E-12

Dose/Source Ratios Summed Over All Pathways

Parent and Progeny Principal Radionuclide Contributions Indicated

0	Parent (i)	Product (j)	Thread Fraction	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)								
	AAAAA	AAAAA	AAAAA	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
	Pu-238	Pu-238	2.640E-13	2.933E-14	2.910E-14	2.407E-14	2.314E-14	1.975E-14	1.331E-14	4.066E-15	5.637E-16	1.083E-17
	Pu-238	U-234	2.640E-13	7.005E-21	2.094E-20	3.244E-19	3.807E-19	5.849E-19	9.740E-19	1.531E-18	1.741E-18	1.772E-18
	Pu-238	Th-230	2.640E-13	1.197E-25	8.357E-25	2.189E-22	3.093E-22	8.064E-22	2.834E-21	1.286E-20	3.417E-20	7.912E-20
	Pu-238	Ra-226+D4	2.640E-13	1.206E-29	1.806E-28	7.605E-25	1.288E-24	5.617E-24	4.020E-23	4.798E-22	2.675E-21	1.256E-20
	Pu-238	Pb-210+D1	2.640E-13	1.687E-31	5.193E-30	2.958E-25	5.835E-25	3.810E-24	4.343E-23	7.861E-22	5.181E-21	2.641E-20
	Pu-238	äDSR(j)		2.933E-14	2.910E-14	2.407E-14	2.314E-14	1.975E-14	1.331E-14	4.067E-15	5.655E-16	1.272E-17
0	Pu-238	Pu-238	3.800E-15	4.221E-16	4.188E-16	3.465E-16	3.330E-16	2.843E-16	1.915E-16	5.852E-17	8.114E-18	1.559E-19
	Pu-238	U-234	3.800E-15	1.008E-22	3.014E-22	4.670E-21	5.480E-21	8.419E-21	1.402E-20	2.204E-20	2.506E-20	2.551E-20
	Pu-238	Th-230	3.800E-15	1.722E-27	1.203E-26	3.151E-24	4.451E-24	1.161E-23	4.079E-23	1.851E-22	4.919E-22	1.139E-21
	Pu-238	Ra-226+D4	3.800E-15	1.736E-31	2.599E-30	1.095E-26	1.854E-26	8.085E-26	5.787E-25	6.906E-24	3.850E-23	1.807E-22
	Pu-238	Pb-210+D2	3.800E-15	3.878E-33	1.194E-31	6.799E-27	1.341E-26	8.758E-26	9.983E-25	1.807E-23	1.191E-22	6.072E-22
	Pu-238	äDSR(j)		4.221E-16	4.188E-16	3.465E-16	3.330E-16	2.843E-16	1.915E-16	5.855E-17	8.139E-18	1.834E-19
0	Pu-239	Pu-239	5.901E-04	7.252E-05	7.251E-05	7.246E-05	7.245E-05	7.241E-05	7.231E-05	7.200E-05	7.148E-05	7.046E-05
	Pu-239	U-235+D	5.901E-04	5.149E-14	1.545E-13	2.625E-12	3.140E-12	5.197E-12	1.033E-11	2.570E-11	5.117E-11	1.016E-10
	Pu-239	Pa-231	5.901E-04	5.536E-19	3.875E-18	1.080E-15	1.544E-15	4.232E-15	1.675E-14	1.038E-13	4.126E-13	1.635E-12
	Pu-239	Ac-227+D	5.901E-04	1.052E-20	1.567E-19	5.799E-16	9.581E-16	3.811E-15	2.263E-14	1.947E-13	8.749E-13	3.690E-12
	Pu-239	äDSR(j)		7.252E-05	7.251E-05	7.246E-05	7.245E-05	7.241E-05	7.231E-05	7.200E-05	7.148E-05	7.046E-05
0	Pu-239	Pu-239	1.633E-06	2.007E-07	2.007E-07	2.006E-07	2.005E-07	2.004E-07	2.001E-07	1.993E-07	1.978E-07	1.950E-07
	Pu-239	U-235+D	1.633E-06	1.425E-16	4.275E-16	7.265E-15	8.689E-15	1.438E-14	2.860E-14	7.114E-14	1.416E-13	2.811E-13
	Pu-239	Pa-231	1.633E-06	1.532E-21	1.072E-20	2.988E-18	4.274E-18	1.171E-17	4.635E-17	2.872E-16	1.142E-15	4.525E-15
	Pu-239	Ac-227+D1	1.633E-06	2.933E-23	4.370E-22	1.617E-18	2.672E-18	1.063E-17	6.310E-17	5.430E-16	2.440E-15	1.029E-14
	Pu-239	äDSR(j)		2.007E-07	2.007E-07	2.006E-07	2.005E-07	2.004E-07	2.001E-07	1.993E-07	1.978E-07	1.950E-07
0	Pu-239	Pu-239	8.257E-06	1.015E-06	1.015E-06	1.014E-06	1.014E-06	1.013E-06	1.012E-06	1.007E-06	1.000E-06	9.859E-07
	Pu-239	U-235+D	8.257E-06	7.205E-16	2.161E-15	3.673E-14	4.393E-14	7.271E-14	1.446E-13	3.597E-13	7.160E-13	1.421E-12
	Pu-239	Pa-231	8.257E-06	7.746E-21	5.422E-20	1.511E-17	2.161E-17	5.922E-17	2.343E-16	1.452E-15	5.773E-15	2.287E-14
	Pu-239	Ac-227+D2	8.257E-06	1.267E-22	1.887E-21	6.983E-18	1.154E-17	4.589E-17	2.725E-16	2.345E-15	1.054E-14	4.444E-14
	Pu-239	äDSR(j)		1.015E-06	1.015E-06	1.014E-06	1.014E-06	1.013E-06	1.012E-06	1.007E-06	1.000E-06	9.859E-07
0	Pu-239	Pu-239	2.285E-08	2.808E-09	2.808E-09	2.806E-09	2.806E-09	2.804E-09	2.800E-09	2.788E-09	2.768E-09	2.729E-09
	Pu-239	U-235+D	2.285E-08	1.994E-18	5.982E-18	1.017E-16	1.216E-16	2.012E-16	4.002E-16	9.954E-16	1.982E-15	3.933E-15
	Pu-239	Pa-231	2.285E-08	2.144E-23	1.501E-22	4.181E-20	5.980E-20	1.639E-19	6.485E-19	4.019E-18	1.598E-17	6.331E-17
	Pu-239	Ac-227+D3	2.285E-08	3.536E-25	5.269E-24	1.950E-20	3.221E-20	1.281E-19	7.608E-19	6.546E-18	2.942E-17	1.241E-16
	Pu-239	äDSR(j)		2.808E-09	2.808E-09	2.806E-09	2.806E-09	2.804E-09	2.800E-09	2.788E-09	2.768E-09	2.729E-09
0	Pu-239	Pu-239	4.954E-10	6.088E-11	6.088E-11	6.084E-11	6.083E-11	6.080E-11	6.071E-11	6.045E-11	6.001E-11	5.916E-11
	Pu-239	U-235+D	4.954E-10	4.323E-20	1.297E-19	2.204E-18	2.636E-18	4.363E-18	8.677E-18	2.158E-17	4.296E-17	8.526E-17
	Pu-239	Pa-231	4.954E-10	4.648E-25	3.253E-24	9.064E-22	1.297E-21	3.553E-21	1.406E-20	8.713E-20	3.464E-19	1.373E-18
	Pu-239	Ac-227+D4	4.954E-10	8.555E-27	1.275E-25	4.716E-22	7.793E-22	3.099E-21	1.840E-20	1.584E-19	7.116E-19	3.001E-18
	Pu-239	äDSR(j)		6.088E-11	6.088E-11	6.084E-11	6.083E-11	6.080E-11	6.071E-11	6.045E-11	6.001E-11	5.916E-11

Dose/Source Ratios Summed Over All Pathways

Parent and Progeny Principal Radionuclide Contributions Indicated

0	Parent (i)	Product (j)	Thread Fraction	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)								
	AAAAA	AAAAA	AAAAA	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
	Pu-239	Pu-239	1.371E-12	1.685E-13	1.685E-13	1.684E-13	1.684E-13	1.683E-13	1.680E-13	1.673E-13	1.661E-13	1.637E-13
	Pu-239	U-235+D	1.371E-12	1.196E-22	3.589E-22	6.100E-21	7.295E-21	1.208E-20	2.401E-20	5.973E-20	1.189E-19	2.360E-19
	Pu-239	Pa-231	1.371E-12	1.286E-27	9.004E-27	2.509E-24	3.588E-24	9.834E-24	3.891E-23	2.411E-22	9.586E-22	3.799E-21
	Pu-239	Ac-227+D5	1.371E-12	2.386E-29	3.555E-28	1.316E-24	2.174E-24	8.645E-24	5.134E-23	4.417E-22	1.985E-21	8.372E-21
	Pu-239	äDSR(j)		1.685E-13	1.685E-13	1.684E-13	1.684E-13	1.683E-13	1.680E-13	1.673E-13	1.661E-13	1.637E-13
0Pu-239+D	Pu-239+D		9.829E-01	1.208E-01	1.208E-01	1.207E-01	1.207E-01	1.206E-01	1.204E-01	1.199E-01	1.191E-01	1.174E-01
	Pu-239+D	U-235+D	9.829E-01	8.577E-11	2.573E-10	4.372E-09	5.229E-09	8.656E-09	1.721E-08	4.281E-08	8.523E-08	1.692E-07
	Pu-239+D	Pa-231	9.829E-01	9.221E-16	6.455E-15	1.798E-12	2.572E-12	7.049E-12	2.789E-11	1.729E-10	6.872E-10	2.723E-09
	Pu-239+D	Ac-227+D	9.829E-01	1.752E-17	2.610E-16	9.659E-13	1.596E-12	6.347E-12	3.769E-11	3.243E-10	1.457E-09	6.147E-09
	Pu-239+D	äDSR(j)		1.208E-01	1.208E-01	1.207E-01	1.207E-01	1.206E-01	1.204E-01	1.199E-01	1.191E-01	1.174E-01
0Pu-239+D	Pu-239+D		2.720E-03	3.343E-04	3.343E-04	3.341E-04	3.340E-04	3.338E-04	3.333E-04	3.319E-04	3.295E-04	3.248E-04
	Pu-239+D	U-235+D	2.720E-03	2.374E-13	7.121E-13	1.210E-11	1.447E-11	2.396E-11	4.764E-11	1.185E-10	2.359E-10	4.682E-10
	Pu-239+D	Pa-231	2.720E-03	2.552E-18	1.786E-17	4.977E-15	7.119E-15	1.951E-14	7.720E-14	4.784E-13	1.902E-12	7.537E-12
	Pu-239+D	Ac-227+D1	2.720E-03	4.886E-20	7.279E-19	2.694E-15	4.450E-15	1.770E-14	1.051E-13	9.044E-13	4.064E-12	1.714E-11
	Pu-239+D	äDSR(j)		3.343E-04	3.343E-04	3.341E-04	3.340E-04	3.338E-04	3.333E-04	3.319E-04	3.295E-04	3.248E-04
0Pu-239+D	Pu-239+D		1.375E-02	1.690E-03	1.690E-03	1.689E-03	1.689E-03	1.688E-03	1.685E-03	1.678E-03	1.666E-03	1.642E-03
	Pu-239+D	U-235+D	1.375E-02	1.200E-12	3.600E-12	6.118E-11	7.317E-11	1.211E-10	2.409E-10	5.991E-10	1.193E-09	2.367E-09
	Pu-239+D	Pa-231	1.375E-02	1.290E-17	9.031E-17	2.516E-14	3.599E-14	9.863E-14	3.903E-13	2.419E-12	9.615E-12	3.810E-11
	Pu-239+D	Ac-227+D2	1.375E-02	2.110E-19	3.143E-18	1.163E-14	1.922E-14	7.643E-14	4.539E-13	3.905E-12	1.755E-11	7.402E-11
	Pu-239+D	äDSR(j)		1.690E-03	1.690E-03	1.689E-03	1.689E-03	1.688E-03	1.685E-03	1.678E-03	1.666E-03	1.642E-03
0Pu-239+D	Pu-239+D		3.806E-05	4.678E-06	4.677E-06	4.674E-06	4.674E-06	4.671E-06	4.664E-06	4.644E-06	4.611E-06	4.545E-06
	Pu-239+D	U-235+D	3.806E-05	3.321E-15	9.964E-15	1.693E-13	2.025E-13	3.352E-13	6.666E-13	1.658E-12	3.301E-12	6.551E-12
	Pu-239+D	Pa-231	3.806E-05	3.571E-20	2.500E-19	6.964E-17	9.961E-17	2.730E-16	1.080E-15	6.694E-15	2.661E-14	1.055E-13
	Pu-239+D	Ac-227+D3	3.806E-05	5.890E-22	8.776E-21	3.248E-17	5.366E-17	2.134E-16	1.267E-15	1.090E-14	4.900E-14	2.067E-13
	Pu-239+D	äDSR(j)		4.678E-06	4.677E-06	4.674E-06	4.674E-06	4.671E-06	4.664E-06	4.644E-06	4.611E-06	4.545E-06
0Pu-239+D	Pu-239+D		8.252E-07	1.014E-07	1.014E-07	1.013E-07	1.013E-07	1.013E-07	1.011E-07	1.007E-07	9.996E-08	9.854E-08
	Pu-239+D	U-235+D	8.252E-07	7.201E-17	2.160E-16	3.671E-15	4.391E-15	7.268E-15	1.445E-14	3.595E-14	7.156E-14	1.420E-13
	Pu-239+D	Pa-231	8.252E-07	7.742E-22	5.419E-21	1.510E-18	2.160E-18	5.918E-18	2.342E-17	1.451E-16	5.769E-16	2.286E-15
	Pu-239+D	Ac-227+D4	8.252E-07	1.425E-23	2.123E-22	7.856E-19	1.298E-18	5.163E-18	3.065E-17	2.638E-16	1.185E-15	4.999E-15
	Pu-239+D	äDSR(j)		1.014E-07	1.014E-07	1.013E-07	1.013E-07	1.013E-07	1.011E-07	1.007E-07	9.996E-08	9.854E-08
0Pu-239+D	Pu-239+D		2.284E-09	2.807E-10	2.807E-10	2.805E-10	2.804E-10	2.803E-10	2.799E-10	2.787E-10	2.767E-10	2.727E-10
	Pu-239+D	U-235+D	2.284E-09	1.993E-19	5.979E-19	1.016E-17	1.215E-17	2.011E-17	4.000E-17	9.948E-17	1.981E-16	3.931E-16
	Pu-239+D	Pa-231	2.284E-09	2.143E-24	1.500E-23	4.179E-21	5.977E-21	1.638E-20	6.482E-20	4.017E-19	1.597E-18	6.328E-18
	Pu-239+D	Ac-227+D5	2.284E-09	3.975E-26	5.922E-25	2.191E-21	3.621E-21	1.440E-20	8.551E-20	7.357E-19	3.306E-18	1.395E-17
	Pu-239+D	äDSR(j)		2.807E-10	2.807E-10	2.805E-10	2.804E-10	2.803E-10	2.799E-10	2.787E-10	2.767E-10	2.727E-10
0Ru-106+D	Ru-106+D		1.000E+00	1.958E-01	9.943E-02	8.591E-09	2.901E-10	3.770E-16	7.257E-31	0.000E+00	0.000E+00	0.000E+00
0Sr-90+D	Sr-90+D		1.000E+00	1.785E-02	1.742E-02	9.776E-03	8.667E-03	5.355E-03	1.607E-03	4.340E-05	1.055E-07	6.242E-13

Dose/Source Ratios Summed Over All Pathways

Parent and Progeny Principal Radionuclide Contributions Indicated

0	Parent (i)	Product (j)	Thread Fraction	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)								
	AAAAA	AAAAA	AAAAA	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
	Tc-99	Tc-99	1.000E+00	2.255E-04	2.255E-04	2.251E-04	2.250E-04	2.246E-04	2.238E-04	2.213E-04	2.171E-04	2.090E-04
0Th-228+D	Th-228+D	Th-228+D	1.000E+00	1.692E+00	1.177E+00	1.957E-04	3.192E-05	2.263E-08	3.026E-16	7.237E-40	0.000E+00	0.000E+00
0Th-230	Th-230	Th-230	9.996E-01	1.049E-01	1.049E-01	1.049E-01	1.049E-01	1.049E-01	1.048E-01	1.047E-01	1.044E-01	1.040E-01
	Th-230	Ra-226+D	9.996E-01	5.046E-04	1.514E-03	2.559E-02	3.058E-02	5.041E-02	9.922E-02	2.393E-01	4.531E-01	8.154E-01
	Th-230	Pb-210+D	9.996E-01	1.316E-06	9.128E-06	2.010E-03	2.747E-03	6.342E-03	1.749E-02	5.302E-02	1.078E-01	2.006E-01
	Th-230	äDSR(j)		1.054E-01	1.064E-01	1.325E-01	1.382E-01	1.616E-01	2.215E-01	3.970E-01	6.653E-01	1.120E+00
0Th-230	Th-230	Th-230	1.319E-06	1.385E-07	1.385E-07	1.385E-07	1.385E-07	1.384E-07	1.384E-07	1.382E-07	1.379E-07	1.372E-07
	Th-230	Ra-226+D	1.319E-06	6.661E-10	1.998E-09	3.379E-08	4.036E-08	6.654E-08	1.310E-07	3.159E-07	5.981E-07	1.076E-06
	Th-230	Pb-210+D1	1.319E-06	6.485E-13	4.499E-12	9.907E-10	1.354E-09	3.126E-09	8.621E-09	2.613E-08	5.311E-08	9.886E-08
	Th-230	äDSR(j)		1.392E-07	1.405E-07	1.732E-07	1.802E-07	2.081E-07	2.780E-07	4.802E-07	7.890E-07	1.312E-06
0Th-230	Th-230	Th-230	1.899E-08	1.993E-09	1.993E-09	1.993E-09	1.993E-09	1.992E-09	1.992E-09	1.989E-09	1.984E-09	1.975E-09
	Th-230	Ra-226+D	1.899E-08	9.588E-12	2.876E-11	4.863E-10	5.810E-10	9.578E-10	1.885E-09	4.547E-09	8.609E-09	1.549E-08
	Th-230	Pb-210+D2	1.899E-08	1.491E-14	1.034E-13	2.277E-11	3.112E-11	7.185E-11	1.982E-10	6.007E-10	1.221E-09	2.272E-09
	Th-230	äDSR(j)		2.003E-09	2.022E-09	2.502E-09	2.605E-09	3.022E-09	4.075E-09	7.137E-09	1.181E-08	1.974E-08
0Th-230	Th-230	Th-230	2.100E-04	2.204E-05	2.204E-05	2.203E-05	2.203E-05	2.203E-05	2.202E-05	2.199E-05	2.194E-05	2.184E-05
	Th-230	Ra-226+D1	2.100E-04	2.694E-07	8.080E-07	1.366E-05	1.632E-05	2.691E-05	5.297E-05	1.278E-04	2.419E-04	4.353E-04
	Th-230	Pb-210+D	2.100E-04	2.764E-10	1.917E-09	4.222E-07	5.770E-07	1.332E-06	3.674E-06	1.114E-05	2.264E-05	4.213E-05
	Th-230	äDSR(j)		2.231E-05	2.285E-05	3.612E-05	3.893E-05	5.027E-05	7.866E-05	1.609E-04	2.864E-04	4.993E-04
0Th-230	Th-230	Th-230	2.771E-10	2.909E-11	2.909E-11	2.908E-11	2.908E-11	2.908E-11	2.906E-11	2.902E-11	2.896E-11	2.882E-11
	Th-230	Ra-226+D1	2.771E-10	3.556E-13	1.067E-12	1.804E-11	2.155E-11	3.552E-11	6.992E-11	1.687E-10	3.193E-10	5.746E-10
	Th-230	Pb-210+D1	2.771E-10	1.362E-16	9.450E-16	2.081E-13	2.844E-13	6.565E-13	1.811E-12	5.489E-12	1.116E-11	2.076E-11
	Th-230	äDSR(j)		2.944E-11	3.016E-11	4.733E-11	5.091E-11	6.525E-11	1.008E-10	2.032E-10	3.594E-10	6.242E-10
0Th-230	Th-230	Th-230	3.989E-12	4.187E-13	4.187E-13	4.186E-13	4.186E-13	4.185E-13	4.183E-13	4.177E-13	4.168E-13	4.149E-13
	Th-230	Ra-226+D1	3.989E-12	5.118E-15	1.535E-14	2.596E-13	3.102E-13	5.113E-13	1.006E-12	2.428E-12	4.596E-12	8.271E-12
	Th-230	Pb-210+D2	3.989E-12	3.131E-18	2.172E-17	4.784E-15	6.537E-15	1.509E-14	4.162E-14	1.262E-13	2.565E-13	4.773E-13
	Th-230	äDSR(j)		4.238E-13	4.341E-13	6.830E-13	7.353E-13	9.449E-13	1.466E-12	2.971E-12	5.269E-12	9.163E-12
0Th-230	Th-230	Th-230	1.998E-04	2.097E-05	2.097E-05	2.096E-05	2.096E-05	2.096E-05	2.095E-05	2.092E-05	2.087E-05	2.077E-05
	Th-230	Ra-226+D2	1.998E-04	8.905E-08	2.671E-07	4.517E-06	5.396E-06	8.896E-06	1.751E-05	4.224E-05	7.996E-05	1.439E-04
	Th-230	Pb-210+D	1.998E-04	2.629E-10	1.824E-09	4.017E-07	5.489E-07	1.267E-06	3.495E-06	1.060E-05	2.154E-05	4.008E-05
	Th-230	äDSR(j)		2.106E-05	2.124E-05	2.588E-05	2.691E-05	3.112E-05	4.195E-05	7.375E-05	1.224E-04	2.048E-04
0Th-230	Th-230	Th-230	2.637E-10	2.768E-11	2.768E-11	2.767E-11	2.767E-11	2.766E-11	2.765E-11	2.761E-11	2.755E-11	2.742E-11
	Th-230	Ra-226+D2	2.637E-10	1.175E-13	3.526E-13	5.962E-12	7.123E-12	1.174E-11	2.311E-11	5.575E-11	1.055E-10	1.899E-10
	Th-230	Pb-210+D1	2.637E-10	1.296E-16	8.991E-16	1.980E-13	2.706E-13	6.246E-13	1.723E-12	5.222E-12	1.061E-11	1.976E-11
	Th-230	äDSR(j)		2.779E-11	2.803E-11	3.383E-11	3.506E-11	4.003E-11	5.249E-11	8.859E-11	1.437E-10	2.371E-10

Dose/Source Ratios Summed Over All Pathways

Parent and Progeny Principal Radionuclide Contributions Indicated

0	Parent	Product	Thread	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)								
	(i)	(j)	Fraction	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
	Th-230	Th-230	3.795E-12	3.984E-13	3.984E-13	3.983E-13	3.982E-13	3.982E-13	3.980E-13	3.974E-13	3.965E-13	3.947E-13
	Th-230	Ra-226+D2	3.795E-12	1.692E-15	5.075E-15	8.582E-14	1.025E-13	1.690E-13	3.327E-13	8.025E-13	1.519E-12	2.734E-12
	Th-230	Pb-210+D2	3.795E-12	2.979E-18	2.067E-17	4.551E-15	6.220E-15	1.436E-14	3.960E-14	1.200E-13	2.440E-13	4.541E-13
	Th-230	äDSR(j)		4.001E-13	4.035E-13	4.886E-13	5.070E-13	5.816E-13	7.703E-13	1.320E-12	2.160E-12	3.583E-12
0	Th-230	Th-230	4.196E-08	4.404E-09	4.404E-09	4.403E-09	4.403E-09	4.402E-09	4.400E-09	4.394E-09	4.384E-09	4.364E-09
	Th-230	Ra-226+D3	4.196E-08	5.136E-11	1.540E-10	2.605E-09	3.112E-09	5.130E-09	1.010E-08	2.436E-08	4.611E-08	8.299E-08
	Th-230	Pb-210+D	4.196E-08	5.523E-14	3.831E-13	8.437E-11	1.153E-10	2.662E-10	7.342E-10	2.226E-09	4.523E-09	8.419E-09
	Th-230	äDSR(j)		4.455E-09	4.558E-09	7.092E-09	7.630E-09	9.798E-09	1.523E-08	3.098E-08	5.502E-08	9.577E-08
0	Th-230	Th-230	5.538E-14	5.813E-15	5.813E-15	5.812E-15	5.811E-15	5.810E-15	5.808E-15	5.800E-15	5.786E-15	5.760E-15
	Th-230	Ra-226+D3	5.538E-14	6.779E-17	2.033E-16	3.439E-15	4.108E-15	6.772E-15	1.333E-14	3.215E-14	6.087E-14	1.095E-13
	Th-230	Pb-210+D1	5.538E-14	2.722E-20	1.888E-19	4.159E-17	5.683E-17	1.312E-16	3.619E-16	1.097E-15	2.229E-15	4.150E-15
	Th-230	äDSR(j)		5.881E-15	6.017E-15	9.292E-15	9.976E-15	1.271E-14	1.950E-14	3.905E-14	6.889E-14	1.195E-13
0	Th-230	Th-230	7.972E-16	8.367E-17	8.367E-17	8.365E-17	8.365E-17	8.363E-17	8.360E-17	8.348E-17	8.329E-17	8.291E-17
	Th-230	Ra-226+D3	7.972E-16	9.758E-19	2.927E-18	4.949E-17	5.913E-17	9.748E-17	1.919E-16	4.628E-16	8.762E-16	1.577E-15
	Th-230	Pb-210+D2	7.972E-16	6.258E-22	4.341E-21	9.560E-19	1.306E-18	3.016E-18	8.318E-18	2.521E-17	5.125E-17	9.539E-17
	Th-230	äDSR(j)		8.465E-17	8.660E-17	1.341E-16	1.441E-16	1.841E-16	2.838E-16	5.715E-16	1.011E-15	1.755E-15
0	Th-230	Th-230	2.000E-07	2.099E-08	2.099E-08	2.099E-08	2.099E-08	2.098E-08	2.097E-08	2.094E-08	2.090E-08	2.080E-08
	Th-230	Ra-226+D4	2.000E-07	4.229E-12	1.269E-11	2.145E-10	2.563E-10	4.225E-10	8.316E-10	2.006E-09	3.797E-09	6.834E-09
	Th-230	Pb-210+D	2.000E-07	2.633E-13	1.826E-12	4.022E-10	5.496E-10	1.269E-09	3.500E-09	1.061E-08	2.156E-08	4.013E-08
	Th-230	äDSR(j)		2.100E-08	2.101E-08	2.160E-08	2.179E-08	2.267E-08	2.530E-08	3.356E-08	4.625E-08	6.776E-08
0	Th-230	Th-230	2.640E-13	2.771E-14	2.771E-14	2.770E-14	2.770E-14	2.770E-14	2.768E-14	2.765E-14	2.758E-14	2.746E-14
	Th-230	Ra-226+D4	2.640E-13	5.583E-18	1.674E-17	2.832E-16	3.383E-16	5.577E-16	1.098E-15	2.648E-15	5.013E-15	9.021E-15
	Th-230	Pb-210+D1	2.640E-13	1.298E-19	9.002E-19	1.982E-16	2.709E-16	6.254E-16	1.725E-15	5.229E-15	1.063E-14	1.978E-14
	Th-230	äDSR(j)		2.771E-14	2.773E-14	2.818E-14	2.831E-14	2.888E-14	3.051E-14	3.552E-14	4.322E-14	5.626E-14
0	Th-230	Th-230	3.800E-15	3.988E-16	3.988E-16	3.988E-16	3.987E-16	3.987E-16	3.985E-16	3.979E-16	3.970E-16	3.952E-16
	Th-230	Ra-226+D4	3.800E-15	8.036E-20	2.410E-19	4.076E-18	4.870E-18	8.027E-18	1.580E-17	3.811E-17	7.215E-17	1.298E-16
	Th-230	Pb-210+D2	3.800E-15	2.983E-21	2.069E-20	4.557E-18	6.227E-18	1.438E-17	3.965E-17	1.202E-16	2.443E-16	4.547E-16
	Th-230	äDSR(j)		3.989E-16	3.991E-16	4.074E-16	4.098E-16	4.211E-16	4.539E-16	5.562E-16	7.135E-16	9.797E-16
0	Th-232	Th-232	1.000E+00	1.133E-01	1.133E-01	1.133E-01	1.133E-01	1.133E-01	1.133E-01	1.133E-01	1.133E-01	1.133E-01
	Th-232	Ra-228+D	1.000E+00	7.510E-02	2.138E-01	1.237E+00	1.264E+00	1.294E+00	1.297E+00	1.297E+00	1.297E+00	1.297E+00
	Th-232	Th-228+D	1.000E+00	1.305E-02	8.007E-02	1.877E+00	1.941E+00	2.010E+00	2.017E+00	2.017E+00	2.017E+00	2.017E+00
	Th-232	äDSR(j)		2.014E-01	4.072E-01	3.227E+00	3.318E+00	3.417E+00	3.427E+00	3.427E+00	3.427E+00	3.427E+00
0	U-234	U-234	9.996E-01	1.884E-02	1.884E-02	1.884E-02	1.884E-02	1.884E-02	1.883E-02	1.882E-02	1.881E-02	1.878E-02
	U-234	Th-230	9.996E-01	4.824E-07	1.447E-06	2.460E-05	2.942E-05	4.870E-05	9.690E-05	2.413E-04	4.814E-04	9.593E-04
	U-234	Ra-226+D	9.996E-01	1.547E-09	1.083E-08	3.007E-06	4.298E-06	1.175E-05	4.618E-05	2.807E-04	1.081E-03	4.024E-03
	U-234	Pb-210+D	9.996E-01	3.030E-12	4.514E-11	1.672E-07	2.762E-07	1.098E-06	6.510E-06	5.525E-05	2.411E-04	9.570E-04
	U-234	äDSR(j)		1.884E-02	1.884E-02	1.886E-02	1.887E-02	1.890E-02	1.898E-02	1.940E-02	2.061E-02	2.472E-02

Dose/Source Ratios Summed Over All Pathways												
Parent and Progeny Principal Radionuclide Contributions Indicated												
0	Parent	Product	Thread	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)								
	(i)	(j)	Fraction	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
	AAAAAAAA	AAAAAAAA	AAAAAAAA	AAAAAAAA	AAAAAAAA	AAAAAAAA	AAAAAAAA	AAAAAAAA	AAAAAAAA	AAAAAAAA	AAAAAAAA	AAAAAAAA
	U-234	U-234	1.319E-06	2.487E-08	2.487E-08	2.487E-08	2.486E-08	2.486E-08	2.486E-08	2.485E-08	2.483E-08	2.479E-08
	U-234	Th-230	1.319E-06	6.367E-13	1.910E-12	3.247E-11	3.883E-11	6.429E-11	1.279E-10	3.185E-10	6.354E-10	1.266E-09
	U-234	Ra-226+D	1.319E-06	2.042E-15	1.429E-14	3.969E-12	5.673E-12	1.551E-11	6.096E-11	3.705E-10	1.426E-09	5.312E-09
	U-234	Pb-210+D1	1.319E-06	1.493E-18	2.225E-17	8.239E-14	1.361E-13	5.414E-13	3.208E-12	2.723E-11	1.188E-10	4.717E-10
	U-234	àDSR(j)		2.487E-08	2.487E-08	2.490E-08	2.491E-08	2.494E-08	2.505E-08	2.556E-08	2.701E-08	3.184E-08
0U-234	U-234		1.899E-08	3.579E-10	3.579E-10	3.579E-10	3.579E-10	3.579E-10	3.578E-10	3.577E-10	3.574E-10	3.569E-10
	U-234	Th-230	1.899E-08	9.165E-15	2.749E-14	4.673E-13	5.590E-13	9.254E-13	1.841E-12	4.585E-12	9.146E-12	1.823E-11
	U-234	Ra-226+D	1.899E-08	2.939E-17	2.057E-16	5.713E-14	8.166E-14	2.232E-13	8.775E-13	5.333E-12	2.053E-11	7.646E-11
	U-234	Pb-210+D2	1.899E-08	3.432E-20	5.114E-19	1.894E-15	3.129E-15	1.245E-14	7.375E-14	6.260E-13	2.732E-12	1.084E-11
	U-234	àDSR(j)		3.579E-10	3.580E-10	3.584E-10	3.585E-10	3.590E-10	3.606E-10	3.682E-10	3.898E-10	4.624E-10
0U-234	U-234		2.100E-04	3.957E-06	3.957E-06	3.957E-06	3.957E-06	3.956E-06	3.956E-06	3.954E-06	3.951E-06	3.945E-06
	U-234	Th-230	2.100E-04	1.013E-10	3.040E-10	5.166E-09	6.179E-09	1.023E-08	2.035E-08	5.068E-08	1.011E-07	2.015E-07
	U-234	Ra-226+D1	2.100E-04	8.257E-13	5.779E-12	1.605E-09	2.294E-09	6.271E-09	2.465E-08	1.498E-07	5.769E-07	2.148E-06
	U-234	Pb-210+D	2.100E-04	6.363E-16	9.481E-15	3.511E-11	5.802E-11	2.307E-10	1.367E-09	1.161E-08	5.065E-08	2.010E-07
	U-234	àDSR(j)		3.957E-06	3.957E-06	3.963E-06	3.965E-06	3.973E-06	4.002E-06	4.166E-06	4.680E-06	6.496E-06
0U-234	U-234		2.771E-10	5.223E-12	5.223E-12	5.223E-12	5.223E-12	5.222E-12	5.222E-12	5.219E-12	5.215E-12	5.207E-12
	U-234	Th-230	2.771E-10	1.337E-16	4.012E-16	6.820E-15	8.157E-15	1.350E-14	2.687E-14	6.690E-14	1.335E-13	2.660E-13
	U-234	Ra-226+D1	2.771E-10	1.090E-18	7.629E-18	2.119E-15	3.029E-15	8.278E-15	3.254E-14	1.978E-13	7.615E-13	2.836E-12
	U-234	Pb-210+D1	2.771E-10	3.136E-22	4.673E-21	1.731E-17	2.859E-17	1.137E-16	6.739E-16	5.720E-15	2.496E-14	9.907E-14
	U-234	àDSR(j)		5.223E-12	5.224E-12	5.232E-12	5.234E-12	5.244E-12	5.282E-12	5.490E-12	6.135E-12	8.408E-12
0U-234	U-234		3.989E-12	7.518E-14	7.518E-14	7.518E-14	7.518E-14	7.517E-14	7.516E-14	7.513E-14	7.507E-14	7.496E-14
	U-234	Th-230	3.989E-12	1.925E-18	5.775E-18	9.816E-17	1.174E-16	1.944E-16	3.867E-16	9.630E-16	1.921E-15	3.829E-15
	U-234	Ra-226+D1	3.989E-12	1.569E-20	1.098E-19	3.050E-17	4.360E-17	1.192E-16	4.684E-16	2.847E-15	1.096E-14	4.082E-14
	U-234	Pb-210+D2	3.989E-12	7.210E-24	1.074E-22	3.978E-19	6.573E-19	2.614E-18	1.549E-17	1.315E-16	5.738E-16	2.277E-15
	U-234	àDSR(j)		7.518E-14	7.519E-14	7.531E-14	7.534E-14	7.549E-14	7.603E-14	7.907E-14	8.852E-14	1.219E-13
0U-234	U-234		1.998E-04	3.765E-06	3.765E-06	3.764E-06	3.764E-06	3.764E-06	3.764E-06	3.762E-06	3.759E-06	3.753E-06
	U-234	Th-230	1.998E-04	9.640E-11	2.892E-10	4.915E-09	5.879E-09	9.733E-09	1.936E-08	4.822E-08	9.620E-08	1.917E-07
	U-234	Ra-226+D2	1.998E-04	2.730E-13	1.911E-12	5.306E-10	7.585E-10	2.073E-09	8.150E-09	4.953E-08	1.907E-07	7.101E-07
	U-234	Pb-210+D	1.998E-04	6.054E-16	9.020E-15	3.341E-11	5.520E-11	2.195E-10	1.301E-09	1.104E-08	4.819E-08	1.912E-07
	U-234	àDSR(j)		3.765E-06	3.765E-06	3.770E-06	3.771E-06	3.776E-06	3.792E-06	3.871E-06	4.094E-06	4.846E-06
0U-234	U-234		2.637E-10	4.969E-12	4.969E-12	4.969E-12	4.969E-12	4.969E-12	4.968E-12	4.966E-12	4.962E-12	4.954E-12
	U-234	Th-230	2.637E-10	1.272E-16	3.817E-16	6.488E-15	7.760E-15	1.285E-14	2.556E-14	6.365E-14	1.270E-13	2.531E-13
	U-234	Ra-226+D2	2.637E-10	3.603E-19	2.522E-18	7.004E-16	1.001E-15	2.737E-15	1.076E-14	6.538E-14	2.517E-13	9.374E-13
	U-234	Pb-210+D1	2.637E-10	2.984E-22	4.446E-21	1.647E-17	2.721E-17	1.082E-16	6.412E-16	5.442E-15	2.375E-14	9.426E-14
	U-234	àDSR(j)		4.970E-12	4.970E-12	4.976E-12	4.978E-12	4.984E-12	5.005E-12	5.100E-12	5.364E-12	6.239E-12
0U-234	U-234		3.795E-12	7.153E-14	7.153E-14	7.152E-14	7.152E-14	7.152E-14	7.151E-14	7.148E-14	7.142E-14	7.131E-14
	U-234	Th-230	3.795E-12	1.832E-18	5.495E-18	9.339E-17	1.117E-16	1.849E-16	3.679E-16	9.162E-16	1.828E-15	3.643E-15
	U-234	Ra-226+D2	3.795E-12	5.186E-21	3.630E-20	1.008E-17	1.441E-17	3.939E-17	1.548E-16	9.411E-16	3.623E-15	1.349E-14
	U-234	Pb-210+D2	3.795E-12	6.859E-24	1.022E-22	3.785E-19	6.254E-19	2.487E-18	1.474E-17	1.251E-16	5.459E-16	2.167E-15
	U-234	àDSR(j)		7.153E-14	7.153E-14	7.163E-14	7.165E-14	7.175E-14	7.205E-14	7.346E-14	7.742E-14	9.062E-14

Dose/Source Ratios Summed Over All Pathways												
Parent and Progeny Principal Radionuclide Contributions Indicated												
0	Parent	Product	Thread	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)								
	(i)	(j)	Fraction	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA
	U-234	U-234	4.196E-08	7.908E-10	7.908E-10	7.907E-10	7.907E-10	7.906E-10	7.905E-10	7.902E-10	7.896E-10	7.884E-10
	U-234	Th-230	4.196E-08	2.025E-14	6.074E-14	1.032E-12	1.235E-12	2.044E-12	4.067E-12	1.013E-11	2.021E-11	4.027E-11
	U-234	Ra-226+D3	4.196E-08	1.574E-16	1.102E-15	3.060E-13	4.374E-13	1.196E-12	4.700E-12	2.857E-11	1.100E-10	4.095E-10
	U-234	Pb-210+D	4.196E-08	1.272E-19	1.895E-18	7.017E-15	1.159E-14	4.611E-14	2.732E-13	2.319E-12	1.012E-11	4.017E-11
	U-234	äDSR(j)		7.908E-10	7.908E-10	7.920E-10	7.924E-10	7.939E-10	7.996E-10	8.312E-10	9.299E-10	1.278E-09
0U-234	U-234		5.538E-14	1.044E-15	1.044E-15	1.044E-15	1.044E-15	1.044E-15	1.043E-15	1.043E-15	1.042E-15	1.041E-15
	U-234	Th-230	5.538E-14	2.673E-20	8.018E-20	1.363E-18	1.630E-18	2.699E-18	5.369E-18	1.337E-17	2.667E-17	5.315E-17
	U-234	Ra-226+D3	5.538E-14	2.078E-22	1.454E-21	4.039E-19	5.774E-19	1.578E-18	6.204E-18	3.771E-17	1.452E-16	5.406E-16
	U-234	Pb-210+D1	5.538E-14	6.268E-26	9.338E-25	3.458E-21	5.714E-21	2.273E-20	1.347E-19	1.143E-18	4.988E-18	1.980E-17
	U-234	äDSR(j)		1.044E-15	1.044E-15	1.045E-15	1.046E-15	1.048E-15	1.055E-15	1.095E-15	1.219E-15	1.654E-15
0U-234	U-234		7.972E-16	1.502E-17	1.502E-17	1.502E-17	1.502E-17	1.502E-17	1.502E-17	1.501E-17	1.500E-17	1.498E-17
	U-234	Th-230	7.972E-16	3.847E-22	1.154E-21	1.962E-20	2.346E-20	3.884E-20	7.728E-20	1.924E-19	3.839E-19	7.651E-19
	U-234	Ra-226+D3	7.972E-16	2.991E-24	2.093E-23	5.814E-21	8.311E-21	2.272E-20	8.930E-20	5.427E-19	2.090E-18	7.781E-18
	U-234	Pb-210+D2	7.972E-16	1.441E-27	2.147E-26	7.950E-23	1.314E-22	5.224E-22	3.096E-21	2.628E-20	1.147E-19	4.551E-19
	U-234	äDSR(j)		1.502E-17	1.503E-17	1.505E-17	1.505E-17	1.508E-17	1.519E-17	1.577E-17	1.759E-17	2.398E-17
0U-234	U-234		2.000E-07	3.769E-09	3.769E-09	3.769E-09	3.769E-09	3.769E-09	3.768E-09	3.766E-09	3.764E-09	3.758E-09
	U-234	Th-230	2.000E-07	9.651E-14	2.895E-13	4.921E-12	5.886E-12	9.745E-12	1.939E-11	4.828E-11	9.632E-11	1.919E-10
	U-234	Ra-226+D4	2.000E-07	1.296E-17	9.073E-17	2.520E-14	3.602E-14	9.846E-14	3.871E-13	2.352E-12	9.057E-12	3.373E-11
	U-234	Pb-210+D	2.000E-07	6.061E-19	9.031E-18	3.345E-14	5.526E-14	2.198E-13	1.302E-12	1.106E-11	4.824E-11	1.915E-10
	U-234	äDSR(j)		3.769E-09	3.770E-09	3.774E-09	3.775E-09	3.779E-09	3.789E-09	3.828E-09	3.917E-09	4.175E-09
0U-234	U-234		2.640E-13	4.975E-15	4.975E-15	4.975E-15	4.975E-15	4.975E-15	4.974E-15	4.972E-15	4.968E-15	4.960E-15
	U-234	Th-230	2.640E-13	1.274E-19	3.822E-19	6.496E-18	7.770E-18	1.286E-17	2.559E-17	6.373E-17	1.271E-16	2.534E-16
	U-234	Ra-226+D4	2.640E-13	1.711E-23	1.198E-22	3.326E-20	4.755E-20	1.300E-19	5.109E-19	3.105E-18	1.195E-17	4.452E-17
	U-234	Pb-210+D1	2.640E-13	2.988E-25	4.451E-24	1.649E-20	2.724E-20	1.083E-19	6.419E-19	5.449E-18	2.378E-17	9.438E-17
	U-234	äDSR(j)		4.976E-15	4.976E-15	4.982E-15	4.983E-15	4.988E-15	5.001E-15	5.044E-15	5.131E-15	5.353E-15
0U-234	U-234		3.800E-15	7.162E-17	7.162E-17	7.161E-17	7.161E-17	7.161E-17	7.159E-17	7.156E-17	7.151E-17	7.140E-17
	U-234	Th-230	3.800E-15	1.834E-21	5.501E-21	9.351E-20	1.118E-19	1.852E-19	3.684E-19	9.173E-19	1.830E-18	3.647E-18
	U-234	Ra-226+D4	3.800E-15	2.463E-25	1.724E-24	4.788E-22	6.844E-22	1.871E-21	7.354E-21	4.469E-20	1.721E-19	6.408E-19
	U-234	Pb-210+D2	3.800E-15	6.868E-27	1.023E-25	3.790E-22	6.261E-22	2.490E-21	1.476E-20	1.253E-19	5.466E-19	2.169E-18
	U-234	äDSR(j)		7.162E-17	7.162E-17	7.171E-17	7.172E-17	7.179E-17	7.198E-17	7.265E-17	7.406E-17	7.786E-17
0U-235+D	U-235+D		9.835E-01	1.743E-01	1.743E-01	1.743E-01	1.743E-01	1.743E-01	1.743E-01	1.743E-01	1.743E-01	1.743E-01
	U-235+D	Pa-231	9.835E-01	2.811E-06	8.434E-06	1.433E-04	1.714E-04	2.838E-04	5.645E-04	1.405E-03	2.799E-03	5.565E-03
	U-235+D	Ac-227+D	9.835E-01	7.110E-08	4.933E-07	1.085E-04	1.483E-04	3.427E-04	9.497E-04	2.952E-03	6.304E-03	1.295E-02
	U-235+D	äDSR(j)		1.743E-01	1.743E-01	1.746E-01	1.746E-01	1.749E-01	1.758E-01	1.787E-01	1.834E-01	1.928E-01
0U-235+D	U-235+D		2.722E-03	4.825E-04	4.825E-04	4.825E-04	4.825E-04	4.825E-04	4.825E-04	4.824E-04	4.824E-04	4.824E-04
	U-235+D	Pa-231	2.722E-03	7.781E-09	2.334E-08	3.967E-07	4.745E-07	7.854E-07	1.562E-06	3.888E-06	7.747E-06	1.540E-05
	U-235+D	Ac-227+D1	2.722E-03	1.983E-10	1.376E-09	3.027E-07	4.137E-07	9.557E-07	2.648E-06	8.233E-06	1.758E-05	3.612E-05
	U-235+D	äDSR(j)		4.825E-04	4.825E-04	4.832E-04	4.833E-04	4.842E-04	4.867E-04	4.946E-04	5.077E-04	5.339E-04

Dose/Source Ratios Summed Over All Pathways

Parent and Progeny Principal Radionuclide Contributions Indicated

0	Parent (i)	Product (j)	Thread Fraction	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)											
	AAAAA	AAAAA	AAAAA	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03	AAAAA	AAAAA	AAAAA
	U-235+D	U-235+D	1.376E-02	2.439E-03	2.439E-03	2.439E-03	2.439E-03	2.439E-03	2.439E-03	2.439E-03	2.439E-03	2.439E-03	2.439E-03	2.439E-03	2.439E-03
	U-235+D	Pa-231	1.376E-02	3.934E-08	1.180E-07	2.006E-06	2.399E-06	3.971E-06	7.898E-06	1.965E-05	3.916E-05	7.787E-05	3.934E-08	1.180E-07	2.006E-06
	U-235+D	Ac-227+D2	1.376E-02	8.562E-10	5.940E-09	1.307E-06	1.786E-06	4.127E-06	1.144E-05	3.555E-05	7.591E-05	1.560E-04	8.562E-10	5.940E-09	1.307E-06
	U-235+D	äDSR(j)		2.439E-03	2.439E-03	2.442E-03	2.443E-03	2.447E-03	2.458E-03	2.494E-03	2.554E-03	2.673E-03	2.439E-03	2.439E-03	2.439E-03
0U	U-235+D	U-235+D	3.809E-05	6.751E-06	6.751E-06	6.751E-06	6.751E-06	6.751E-06	6.751E-06	6.750E-06	6.750E-06	6.749E-06	6.751E-06	6.751E-06	6.751E-06
	U-235+D	Pa-231	3.809E-05	1.089E-10	3.266E-10	5.551E-09	6.639E-09	1.099E-08	2.186E-08	5.440E-08	1.084E-07	2.155E-07	1.089E-10	3.266E-10	5.551E-09
	U-235+D	Ac-227+D3	3.809E-05	2.391E-12	1.658E-11	3.650E-09	4.988E-09	1.152E-08	3.193E-08	9.926E-08	2.120E-07	4.355E-07	2.391E-12	1.658E-11	3.650E-09
	U-235+D	äDSR(j)		6.751E-06	6.751E-06	6.760E-06	6.762E-06	6.773E-06	6.804E-06	6.904E-06	7.070E-06	7.400E-06	6.751E-06	6.751E-06	6.751E-06
0U	U-235+D	U-235+D	8.257E-07	1.464E-07	1.464E-07	1.464E-07	1.464E-07	1.464E-07	1.464E-07	1.464E-07	1.464E-07	1.463E-07	1.464E-07	1.464E-07	1.464E-07
	U-235+D	Pa-231	8.257E-07	2.360E-12	7.081E-12	1.203E-10	1.439E-10	2.383E-10	4.739E-10	1.179E-09	2.350E-09	4.673E-09	2.360E-12	7.081E-12	1.203E-10
	U-235+D	Ac-227+D4	8.257E-07	5.783E-14	4.012E-13	8.829E-11	1.207E-10	2.787E-10	7.724E-10	2.401E-09	5.127E-09	1.054E-08	5.783E-14	4.012E-13	8.829E-11
	U-235+D	äDSR(j)		1.464E-07	1.464E-07	1.466E-07	1.466E-07	1.469E-07	1.476E-07	1.499E-07	1.538E-07	1.615E-07	1.464E-07	1.464E-07	1.464E-07
0U	U-235+D	U-235+D	2.285E-09	4.051E-10	4.051E-10	4.051E-10	4.051E-10	4.051E-10	4.051E-10	4.050E-10	4.050E-10	4.050E-10	4.051E-10	4.051E-10	4.051E-10
	U-235+D	Pa-231	2.285E-09	6.533E-15	1.960E-14	3.331E-13	3.984E-13	6.594E-13	1.312E-12	3.264E-12	6.504E-12	1.293E-11	6.533E-15	1.960E-14	3.331E-13
	U-235+D	Ac-227+D5	2.285E-09	1.613E-16	1.119E-15	2.463E-13	3.366E-13	7.775E-13	2.155E-12	6.698E-12	1.430E-11	2.939E-11	1.613E-16	1.119E-15	2.463E-13
	U-235+D	äDSR(j)		4.051E-10	4.051E-10	4.056E-10	4.058E-10	4.065E-10	4.085E-10	4.150E-10	4.258E-10	4.473E-10	4.051E-10	4.051E-10	4.051E-10
0U	U-238	U-238	5.450E-07	9.144E-09	9.144E-09	9.144E-09	9.144E-09	9.144E-09	9.144E-09	9.144E-09	9.144E-09	9.143E-09	9.144E-09	9.144E-09	9.144E-09
0U	U-238+D	U-238+D	1.599E-03	2.910E-03	2.910E-03	2.910E-03	2.910E-03	2.910E-03	2.910E-03	2.910E-03	2.910E-03	2.910E-03	2.910E-03	2.910E-03	2.910E-03
	U-238+D	U-234	1.599E-03	4.255E-11	1.277E-10	2.170E-09	2.596E-09	4.297E-09	8.551E-09	2.131E-08	4.256E-08	8.501E-08	4.255E-11	1.277E-10	2.170E-09
	U-238+D	Th-230	1.599E-03	7.264E-16	5.084E-15	1.417E-12	2.027E-12	5.556E-12	2.200E-11	1.366E-10	5.447E-10	2.172E-09	7.264E-16	5.084E-15	1.417E-12
	U-238+D	Ra-226+D	1.599E-03	1.747E-18	2.620E-17	1.156E-13	1.977E-13	8.950E-13	7.015E-12	1.068E-10	8.293E-10	6.282E-09	1.747E-18	2.620E-17	1.156E-13
	U-238+D	Pb-210+D	1.599E-03	2.740E-21	8.449E-20	4.998E-15	9.942E-15	6.705E-14	8.293E-13	1.898E-11	1.745E-10	1.448E-09	2.740E-21	8.449E-20	4.998E-15
	U-238+D	äDSR(j)		2.910E-03	2.910E-03	2.910E-03	2.910E-03	2.910E-03	2.910E-03	2.910E-03	2.910E-03	2.910E-03	2.910E-03	2.910E-03	2.910E-03
0U	U-238+D	U-238+D	2.111E-09	3.841E-09	3.841E-09	3.841E-09	3.841E-09	3.841E-09	3.841E-09	3.841E-09	3.841E-09	3.840E-09	3.841E-09	3.841E-09	3.841E-09
	U-238+D	U-234	2.111E-09	5.617E-17	1.685E-16	2.864E-15	3.426E-15	5.672E-15	1.129E-14	2.813E-14	5.618E-14	1.122E-13	5.617E-17	1.685E-16	2.864E-15
	U-238+D	Th-230	2.111E-09	9.588E-22	6.712E-21	1.870E-18	2.676E-18	7.334E-18	2.904E-17	1.803E-16	7.190E-16	2.867E-15	9.588E-22	6.712E-21	1.870E-18
	U-238+D	Ra-226+D	2.111E-09	2.306E-24	3.459E-23	1.526E-19	2.609E-19	1.181E-18	9.260E-18	1.410E-16	1.095E-15	8.292E-15	2.306E-24	3.459E-23	1.526E-19
	U-238+D	Pb-210+D1	2.111E-09	1.351E-27	4.164E-26	2.464E-21	4.900E-21	3.305E-20	4.088E-19	9.356E-18	8.601E-17	7.134E-16	1.351E-27	4.164E-26	2.464E-21
	U-238+D	äDSR(j)		3.841E-09	3.841E-09	3.841E-09	3.841E-09	3.841E-09	3.841E-09	3.841E-09	3.841E-09	3.840E-09	3.841E-09	3.841E-09	3.841E-09
0U	U-238+D	U-238+D	3.039E-11	5.529E-11	5.529E-11	5.529E-11	5.529E-11	5.529E-11	5.529E-11	5.528E-11	5.528E-11	5.528E-11	5.529E-11	5.529E-11	5.529E-11
	U-238+D	U-234	3.039E-11	8.085E-19	2.425E-18	4.123E-17	4.931E-17	8.165E-17	1.625E-16	4.049E-16	8.086E-16	1.615E-15	8.085E-19	2.425E-18	4.123E-17
	U-238+D	Th-230	3.039E-11	1.380E-23	9.661E-23	2.692E-20	3.851E-20	1.056E-19	4.180E-19	2.595E-18	1.035E-17	4.127E-17	1.380E-23	9.661E-23	2.692E-20
	U-238+D	Ra-226+D	3.039E-11	3.319E-26	4.978E-25	2.196E-21	3.755E-21	1.701E-20	1.333E-19	2.030E-18	1.576E-17	1.193E-16	3.319E-26	4.978E-25	2.196E-21
	U-238+D	Pb-210+D2	3.039E-11	3.105E-29	9.573E-28	5.663E-23	1.126E-22	7.597E-22	9.396E-21	2.151E-19	1.977E-18	1.640E-17	3.105E-29	9.573E-28	5.663E-23
	U-238+D	äDSR(j)		5.529E-11	5.529E-11	5.529E-11	5.529E-11	5.529E-11	5.529E-11	5.528E-11	5.528E-11	5.528E-11	5.529E-11	5.529E-11	5.529E-11

Dose/Source Ratios Summed Over All Pathways
Parent and Progeny Principal Radionuclide Contributions Indicated

0	Parent	Product	Thread	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)								
	(i)	(j)	Fraction	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA
	U-238+D	U-238+D	3.359E-07	6.112E-07	6.112E-07	6.112E-07	6.112E-07	6.112E-07	6.112E-07	6.112E-07	6.111E-07	6.111E-07
	U-238+D	U-234	3.359E-07	8.938E-15	2.681E-14	4.558E-13	5.452E-13	9.026E-13	1.796E-12	4.476E-12	8.939E-12	1.786E-11
	U-238+D	Th-230	3.359E-07	1.526E-19	1.068E-18	2.976E-16	4.258E-16	1.167E-15	4.621E-15	2.869E-14	1.144E-13	4.563E-13
	U-238+D	Ra-226+D1	3.359E-07	9.326E-22	1.399E-20	6.171E-17	1.055E-16	4.778E-16	3.745E-15	5.704E-14	4.427E-13	3.353E-12
	U-238+D	Pb-210+D	3.359E-07	5.756E-25	1.775E-23	1.050E-18	2.088E-18	1.408E-17	1.742E-16	3.987E-15	3.665E-14	3.040E-13
	U-238+D	äDSR(j)		6.112E-07	6.112E-07	6.112E-07	6.112E-07	6.112E-07	6.112E-07	6.112E-07	6.111E-07	6.111E-07
0U-238+D	U-238+D		4.434E-13	8.068E-13	8.068E-13	8.068E-13	8.068E-13	8.068E-13	8.068E-13	8.067E-13	8.067E-13	8.066E-13
	U-238+D	U-234	4.434E-13	1.180E-20	3.539E-20	6.017E-19	7.196E-19	1.191E-18	2.371E-18	5.908E-18	1.180E-17	2.357E-17
	U-238+D	Th-230	4.434E-13	2.014E-25	1.410E-24	3.929E-22	5.620E-22	1.541E-21	6.100E-21	3.787E-20	1.510E-19	6.023E-19
	U-238+D	Ra-226+D1	4.434E-13	1.231E-27	1.846E-26	8.145E-23	1.393E-22	6.307E-22	4.943E-21	7.529E-20	5.844E-19	4.426E-18
	U-238+D	Pb-210+D1	4.434E-13	2.837E-31	8.747E-30	5.174E-25	1.029E-24	6.942E-24	8.586E-23	1.965E-21	1.807E-20	1.499E-19
	U-238+D	äDSR(j)		8.068E-13	8.068E-13	8.068E-13	8.068E-13	8.068E-13	8.068E-13	8.067E-13	8.067E-13	8.066E-13
0U-238+D	U-238+D		6.383E-15	1.161E-14	1.161E-14	1.161E-14	1.161E-14	1.161E-14	1.161E-14	1.161E-14	1.161E-14	1.161E-14
	U-238+D	U-234	6.383E-15	1.698E-22	5.094E-22	8.660E-21	1.036E-20	1.715E-20	3.413E-20	8.504E-20	1.698E-19	3.393E-19
	U-238+D	Th-230	6.383E-15	2.899E-27	2.029E-26	5.655E-24	8.090E-24	2.217E-23	8.780E-23	5.451E-22	2.174E-21	8.669E-21
	U-238+D	Ra-226+D1	6.383E-15	1.772E-29	2.658E-28	1.172E-24	2.005E-24	9.079E-24	7.115E-23	1.084E-21	8.412E-21	6.371E-20
	U-238+D	Pb-210+D2	6.383E-15	6.522E-33	2.011E-31	1.189E-26	2.366E-26	1.596E-25	1.974E-24	4.517E-23	4.153E-22	3.445E-21
	U-238+D	äDSR(j)		1.161E-14	1.161E-14	1.161E-14	1.161E-14	1.161E-14	1.161E-14	1.161E-14	1.161E-14	1.161E-14
0U-238+D	U-238+D		3.196E-07	5.815E-07	5.815E-07	5.815E-07	5.815E-07	5.815E-07	5.815E-07	5.815E-07	5.814E-07	5.814E-07
	U-238+D	U-234	3.196E-07	8.503E-15	2.551E-14	4.337E-13	5.187E-13	8.588E-13	1.709E-12	4.259E-12	8.505E-12	1.699E-11
	U-238+D	Th-230	3.196E-07	1.452E-19	1.016E-18	2.832E-16	4.051E-16	1.110E-15	4.397E-15	2.730E-14	1.089E-13	4.341E-13
	U-238+D	Ra-226+D2	3.196E-07	3.083E-22	4.624E-21	2.040E-17	3.488E-17	1.580E-16	1.238E-15	1.886E-14	1.464E-13	1.109E-12
	U-238+D	Pb-210+D	3.196E-07	5.477E-25								

Dose/Source Ratios Summed Over All Pathways
Parent and Progeny Principal Radionuclide Contributions Indicated

0	Parent (i)	Product (j)	Thread Fraction	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA
	U-238+D	U-238+D	6.713E-11	1.221E-10	1.221E-10	1.221E-10	1.221E-10	1.221E-10	1.221E-10	1.221E-10	1.221E-10	1.221E-10
	U-238+D	U-234	6.713E-11	1.786E-18	5.358E-18	9.109E-17	1.089E-16	1.804E-16	3.589E-16	8.945E-16	1.786E-15	3.568E-15
	U-238+D	Th-230	6.713E-11	3.049E-23	2.134E-22	5.948E-20	8.508E-20	2.332E-19	9.235E-19	5.734E-18	2.287E-17	9.118E-17
	U-238+D	Ra-226+D3	6.713E-11	1.778E-25	2.667E-24	1.176E-20	2.012E-20	9.109E-20	7.140E-19	1.087E-17	8.441E-17	6.393E-16
	U-238+D	Pb-210+D	6.713E-11	1.150E-28	3.546E-27	2.098E-22	4.173E-22	2.815E-21	3.481E-20	7.968E-19	7.325E-18	6.076E-17
	U-238+D	ΔDSR(j)		1.221E-10	1.221E-10	1.221E-10	1.221E-10	1.221E-10	1.221E-10	1.221E-10	1.221E-10	1.221E-10
0U	U-238+D	U-238+D	8.862E-17	1.612E-16	1.612E-16	1.612E-16	1.612E-16	1.612E-16	1.612E-16	1.612E-16	1.612E-16	1.612E-16
	U-238+D	U-234	8.862E-17	2.358E-24	7.073E-24	1.202E-22	1.438E-22	2.381E-22	4.738E-22	1.181E-21	2.358E-21	4.710E-21
	U-238+D	Th-230	8.862E-17	4.025E-29	2.817E-28	7.851E-26	1.123E-25	3.079E-25	1.219E-24	7.568E-24	3.018E-23	1.204E-22
	U-238+D	Ra-226+D3	8.862E-17	2.347E-31	3.520E-30	1.553E-26	2.655E-26	1.202E-25	9.424E-25	1.435E-23	1.114E-22	8.439E-22
	U-238+D	Pb-210+D1	8.862E-17	5.670E-35	1.748E-33	1.034E-28	2.057E-28	1.387E-27	1.716E-26	3.927E-25	3.610E-24	2.995E-23
	U-238+D	ΔDSR(j)		1.612E-16	1.612E-16	1.612E-16	1.612E-16	1.612E-16	1.612E-16	1.612E-16	1.612E-16	1.612E-16
0U	U-238+D	U-238+D	1.276E-18	2.321E-18	2.321E-18	2.321E-18	2.321E-18	2.321E-18	2.321E-18	2.321E-18	2.320E-18	2.320E-18
	U-238+D	U-234	1.276E-18	3.394E-26	1.018E-25	1.731E-24	2.070E-24	3.427E-24	6.820E-24	1.700E-23	3.394E-23	6.780E-23
	U-238+D	Th-230	1.276E-18	5.793E-31	4.055E-30	1.130E-27	1.617E-27	4.431E-27	1.755E-26	1.089E-25	4.344E-25	1.732E-24
	U-238+D	Ra-226+D3	1.276E-18	3.378E-33	5.067E-32	2.235E-28	3.822E-28	1.731E-27	1.357E-26	2.066E-25	1.604E-24	1.215E-23
	U-238+D	Pb-210+D2	1.276E-18	1.303E-36	4.018E-35	2.377E-30	4.728E-30	3.189E-29	3.944E-28	9.028E-27	8.299E-26	6.884E-25
	U-238+D	ΔDSR(j)		2.321E-18	2.321E-18	2.321E-18	2.321E-18	2.321E-18	2.321E-18	2.321E-18	2.320E-18	2.320E-18
0U	U-238+D	U-238+D	3.200E-10	5.822E-10	5.822E-10	5.822E-10	5.822E-10	5.822E-10	5.822E-10	5.822E-10	5.821E-10	5.821E-10
	U-238+D	U-234	3.200E-10	8.514E-18	2.554E-17	4.342E-16	5.193E-16	8.598E-16	1.711E-15	4.264E-15	8.515E-15	1.701E-14
	U-238+D	Th-230	3.200E-10	1.453E-22	1.017E-21	2.835E-19	4.056E-19	1.112E-18	4.402E-18	2.733E-17	1.090E-16	4.346E-16
	U-238+D	Ra-226+D4	3.200E-10	1.464E-26	2.196E-25	9.688E-22	1.657E-21	7.501E-21	5.879E-20	8.955E-19	6.951E-18	5.265E-17
	U-238+D	Pb-210+D	3.200E-10	5.483E-28	1.690E-26	1.000E-21	1.989E-21	1.342E-20	1.659E-19	3.798E-18	3.492E-17	2.896E-16
	U-238+D	ΔDSR(j)		5.822E-10	5.822E-10	5.822E-10	5.822E-10	5.822E-10	5.822E-10	5.822E-10	5.822E-10	5.821E-10
0U	U-238+D	U-238+D	4.224E-16	7.685E-16	7.685E-16	7.685E-16	7.685E-16	7.685E-16	7.685E-16	7.685E-16	7.684E-16	7.684E-16
	U-238+D	U-234	4.224E-16	1.124E-23	3.371E-23	5.731E-22	6.855E-22	1.135E-21	2.259E-21	5.628E-21	1.124E-20	2.245E-20
	U-238+D	Th-230	4.224E-16	1.918E-28	1.343E-27	3.742E-25	5.354E-25	1.467E-24	5.810E-24	3.608E-23	1.439E-22	5.737E-22
	U-238+D	Ra-226+D4	4.224E-16	1.933E-32	2.899E-31	1.279E-27	2.187E-27	9.902E-27	7.761E-26	1.182E-24	9.175E-24	6.949E-23
	U-238+D	Pb-210+D1	4.224E-16	2.703E-34	8.332E-33	4.929E-28	9.804E-28	6.612E-27	8.179E-26	1.872E-24	1.721E-23	1.427E-22
	U-238+D	ΔDSR(j)		7.685E-16	7.685E-16	7.685E-16	7.685E-16	7.685E-16	7.685E-16	7.685E-16	7.684E-16	7.684E-16
0U	U-238+D	U-238+D	6.080E-18	1.106E-17	1.106E-17	1.106E-17	1.106E-17	1.106E-17	1.106E-17	1.106E-17	1.106E-17	1.106E-17
	U-238+D	U-234	6.080E-18	1.618E-25	4.853E-25	8.249E-24	9.867E-24	1.634E-23	3.251E-23	8.101E-23	1.618E-22	3.232E-22
	U-238+D	Th-230	6.080E-18	2.761E-30	1.933E-29	5.387E-27	7.706E-27	2.112E-26	8.364E-26	5.193E-25	2.071E-24	8.258E-24
	U-238+D	Ra-226+D4	6.080E-18	2.782E-34	4.172E-33	1.841E-29	3.148E-29	1.425E-28	1.117E-27	1.701E-26	1.321E-25	1.000E-24
	U-238+D	Pb-210+D2	6.080E-18	6.212E-36	1.915E-34	1.133E-29	2.254E-29	1.520E-28	1.880E-27	4.303E-26	3.956E-25	3.281E-24
	U-238+D	ΔDSR(j)		1.106E-17	1.106E-17	1.106E-17	1.106E-17	1.106E-17	1.106E-17	1.106E-17	1.106E-17	1.106E-17

Dose/Source Ratios Summed Over All Pathways
Parent and Progeny Principal Radionuclide Contributions Indicated

0	Parent	Product	Thread	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)								
	(i)	(j)	Fraction	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA
	U-238+D1	U-238+D1	9.980E-01	4.976E-02	4.976E-02	4.976E-02	4.976E-02	4.976E-02	4.976E-02	4.976E-02	4.975E-02	4.975E-02
	U-238+D1	U-234	9.980E-01	2.655E-02	7.966E-08	1.354E-06	1.620E-06	2.682E-06	5.336E-06	1.330E-05	2.656E-05	5.305E-05
	U-238+D1	Th-230	9.980E-01	4.532E-13	3.173E-12	8.842E-10	1.265E-09	3.467E-09	1.373E-08	8.524E-08	3.399E-07	1.355E-06
	U-238+D1	Ra-226+D	9.980E-01	1.090E-15	1.635E-14	7.213E-11	1.233E-10	5.585E-10	4.377E-09	6.667E-08	5.175E-07	3.920E-06
	U-238+D1	Pb-210+D	9.980E-01	1.710E-18	5.272E-17	3.119E-12	6.204E-12	4.184E-11	5.175E-10	1.185E-08	1.089E-07	9.032E-07
	U-238+D1	ΔDSR(j)		4.976E-02	4.976E-02	4.976E-02	4.976E-02	4.976E-02	4.976E-02	4.977E-02	4.978E-02	4.981E-02
0U	U-238+D1	U-238+D1	1.317E-06	6.568E-08	6.568E-08	6.568E-08	6.568E-08	6.568E-08	6.568E-08	6.568E-08	6.568E-08	6.567E-08
	U-238+D1	U-234	1.317E-06	3.505E-14	1.051E-13	1.787E-12	2.138E-12	3.540E-12	7.044E-12	1.755E-11	3.506E-11	7.002E-11
	U-238+D1	Th-230	1.317E-06	5.983E-19	4.188E-18	1.167E-15	1.670E-15	4.577E-15	1.812E-14	1.125E-13	4.487E-13	1.789E-12
	U-238+D1	Ra-226+D	1.317E-06	1.439E-21	2.158E-20	9.521E-17	1.628E-16	7.372E-16	5.778E-15	8.801E-14	6.831E-13	5.174E-12
	U-238+D1	Pb-210+D1	1.317E-06	8.428E-25	2.598E-23	1.537E-18	3.058E-18	2.062E-17	2.551E-16	5.838E-15	5.367E-14	4.452E-13
	U-238+D1	ΔDSR(j)		6.568E-08	6.568E-08	6.568E-08	6.568E-08	6.568E-08	6.569E-08	6.570E-08	6.571E-08	6.575E-08
0U	U-238+D1	U-238+D1	1.896E-08	9.454E-10	9.454E-10	9.454E-10	9.454E-10	9.454E-10	9.454E-10	9.454E-10	9.453E-10	9.452E-10
	U-238+D1	U-234	1.896E-08	5.045E-16	1.513E-15	2.573E-14	3.077E-14	5.095E-14	1.014E-13	2.526E-13	5.046E-13	1.008E-12
	U-238+D1	Th-230	1.896E-08	8.612E-21	6.028E-20	1.680E-17	2.403E-17	6.587E-17	2.608E-16	1.619E-15	6.458E-15	2.575E-14
	U-238+D1	Ra-226+D	1.896E-08	2.071E-23	3.106E-22	1.370E-18	2.343E-18	1.061E-17	8.317E-17	1.267E-15	9.833E-15	7.447E-14
	U-238+D1	Pb-210+D2	1.896E-08	1.937E-26	5.973E-25	3.534E-20	7.029E-20	4.741E-19	5.863E-18	1.342E-16	1.234E-15	1.023E-14
	U-238+D1	ΔDSR(j)		9.454E-10	9.454E-10	9.454E-10	9.454E-10	9.455E-10	9.455E-10	9.456E-10	9.459E-10	9.464E-10
0U	U-238+D1	U-238+D1	2.096E-04	1.045E-05	1.045E-05	1.045E-05	1.045E-05	1.045E-05	1.045E-05	1.045E-05	1.045E-05	1.045E-05
	U-238+D1	U-234	2.096E-04	5.577E-12	1.673E-11	2.844E-10	3.402E-10	5.632E-10	1.121E-09	2.793E-09	5.578E-09	1.114E-08
	U-238+D1	Th-230	2.096E-04	9.520E-17	6.664E-16	1.857E-13	2.657E-13	7.282E-13	2.884E-12	1.790E-11	7.140E-11	2.847E-10
	U-238+D1	Ra-226+D1	2.096E-04	5.819E-19	8.728E-18	3.851E-14	6.584E-14	2.982E-13	2.337E-12	3.559E-11	2.763E-10	2.093E-09
	U-238+D1	Pb-210+D	2.096E-04	3.592E-22	1.107E-20	6.551E-16	1.303E-15	8.788E-15	1.087E-13	2.488E-12	2.287E-11	1.897E-10
	U-238+D1	ΔDSR(j)		1.045E-05	1.045E-05	1.045E-05	1.045E-05	1.045E-05	1.045E-05	1.045E-05	1.046E-05	1.046E-05
0U	U-238+D1	U-238+D1	2.767E-10	1.380E-11	1.380E-11	1.380E-11	1.380E-11	1.380E-11	1.380E-11	1.380E-11	1.379E-11	1.379E-11
	U-238+D1	U-234	2.767E-10	7.362E-18	2.209E-17	3.754E-16	4.490E-16	7.435E-16	1.479E-15	3.687E-15	7.363E-15	1.471E-14
	U-238+D1	Th-230	2.767E-10	1.257E-22	8.797E-22	2.452E-19	3.507E-19	9.613E-19	3.806E-18	2.363E-17	9.424E-17	3.758E-16
	U-238+D1	Ra-226+D1	2.767E-10	7.682E-25	1.152E-23	5.083E-20	8.691E-20	3.936E-19	3.085E-18	4.698E-17	3.647E-16	2.762E-15
	U-238+D1	Pb-210+D1	2.767E-10	1.770E-28	5.458E-27	3.229E-22	6.422E-22	4.332E-21	5.358E-20	1.226E-18	1.127E-17	9.351E-17
	U-238+D1	ΔDSR(j)		1.380E-11	1.380E-11	1.380E-11	1.380E-11	1.380E-11	1.380E-11	1.380E-11	1.380E-11	1.381E-11
0U	U-238+D1	U-238+D1	3.983E-12	1.986E-13	1.986E-13	1.986E-13	1.986E-13	1.986E-13	1.986E-13	1.986E-13	1.986E-13	1.985E-13
	U-238+D1	U-234	3.983E-12	1.060E-19	3.179E-19	5.404E-18	6.464E-18	1.070E-17	2.130E-17	5.307E-17	1.060E-16	2.117E-16
	U-238+D1	Th-230	3.983E-12	1.809E-24	1.266E-23	3.529E-21	5.048E-21	1.384E-20	5.479E-20	3.402E-19	1.357E-18	5.410E-18
	U-238+D1	Ra-226+D1	3.983E-12	1.106E-26	1.658E-25	7.316E-22	1.251E-21	5.665E-21	4.440E-20	6.763E-19	5.249E-18	3.976E-17
	U-238+D1	Pb-210+D2	3.983E-12	4.070E-30	1.255E-28	7.422E-24	1.476E-23	9.957E-23	1.232E-21	2.819E-20	2.591E-19	2.150E-18
	U-238+D1	ΔDSR(j)		1.986E-13	1.986E-13	1.986E-13	1.986E-13	1.986E-13	1.986E-13	1.986E-13	1.987E-13	1.988E-13

Dose/Source Ratios Summed Over All Pathways												
Parent and Progeny Principal Radionuclide Contributions Indicated												
0	Parent	Product	Thread	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)								
	(i)	(j)	Fraction	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA
	U-238+D1	U-238+D1	1.997E-07	9.956E-09	9.956E-09	9.956E-09	9.956E-09	9.956E-09	9.956E-09	9.955E-09	9.955E-09	9.954E-09
	U-238+D1	U-234	1.997E-07	5.313E-15	1.594E-14	2.709E-13	3.241E-13	5.365E-13	1.068E-12	2.661E-12	5.314E-12	1.061E-11
	U-238+D1	Th-230	1.997E-07	9.069E-20	6.348E-19	1.769E-16	2.531E-16	6.937E-16	2.747E-15	1.705E-14	6.801E-14	2.712E-13
	U-238+D1	Ra-226+D4	1.997E-07	9.136E-24	1.370E-22	6.045E-19	1.034E-18	4.681E-18	3.669E-17	5.588E-16	4.337E-15	3.285E-14
	U-238+D1	Pb-210+D	1.997E-07	3.421E-25	1.055E-23	6.240E-19	1.241E-18	8.371E-18	1.035E-16	2.370E-15	2.179E-14	1.807E-13
	U-238+D1	äDSR(j)		9.956E-09	9.956E-09	9.956E-09	9.956E-09	9.956E-09	9.957E-09	9.958E-09	9.960E-09	9.965E-09
0U	238+D1	U-238+D1	2.636E-13	1.314E-14	1.314E-14	1.314E-14	1.314E-14	1.314E-14	1.314E-14	1.314E-14	1.314E-14	1.314E-14
	U-238+D1	U-234	2.636E-13	7.013E-21	2.104E-20	3.576E-19	4.277E-19	7.082E-19	1.409E-18	3.512E-18	7.014E-18	1.401E-17
	U-238+D1	Th-230	2.636E-13	1.197E-25	8.379E-25	2.335E-22	3.341E-22	9.157E-22	3.626E-21	2.251E-20	8.977E-20	3.580E-19
	U-238+D1	Ra-226+D4	2.636E-13	1.206E-29	1.809E-28	7.980E-25	1.364E-24	6.179E-24	4.843E-23	7.376E-22	5.725E-21	4.336E-20
	U-238+D1	Pb-210+D1	2.636E-13	1.686E-31	5.199E-30	3.076E-25	6.118E-25	4.126E-24	5.103E-23	1.168E-21	1.074E-20	8.907E-20
	U-238+D1	äDSR(j)		1.314E-14	1.314E-14	1.314E-14	1.314E-14	1.314E-14	1.314E-14	1.314E-14	1.315E-14	1.315E-14
0U	238+D1	U-238+D1	3.794E-15	1.892E-16	1.892E-16	1.892E-16	1.892E-16	1.892E-16	1.892E-16	1.892E-16	1.891E-16	1.891E-16
	U-238+D1	U-234	3.794E-15	1.009E-22	3.028E-22	5.148E-21	6.157E-21	1.019E-20	2.029E-20	5.055E-20	1.010E-19	2.017E-19
	U-238+D1	Th-230	3.794E-15	1.723E-27	1.206E-26	3.361E-24	4.808E-24	1.318E-23	5.219E-23	3.240E-22	1.292E-21	5.153E-21
	U-238+D1	Ra-226+D4	3.794E-15	1.736E-31	2.604E-30	1.149E-26	1.964E-26	8.894E-26	6.971E-25	1.062E-23	8.241E-23	6.242E-22
	U-238+D1	Pb-210+D2	3.794E-15	3.877E-33	1.195E-31	7.070E-27	1.406E-26	9.485E-26	1.173E-24	2.685E-23	2.469E-22	2.048E-21
	U-238+D1	äDSR(j)		1.892E-16	1.892E-16	1.892E-16	1.892E-16	1.892E-16	1.892E-16	1.892E-16	1.892E-16	1.893E-16
	iiiiiiiiii	iiiiiiiiii	iiiiiiiiii	iiiiiiiiii	iiiiiiiiii	iiiiiiiiii	iiiiiiiiii	iiiiiiiiii	iiiiiiiiii	iiiiiiiiii	iiiiiiiiii	iiiiiiiiii

The DSR includes contributions from associated (half-life ó 180 days) daughters.

Single Radionuclide Soil Guidelines G(i,t) in pCi/g
 Basic Radiation Dose Limit = 2.500E+01 mrem/yr

0Nuclide	t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
(i)	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Am-241	2.315E+02	2.319E+02	2.410E+02	2.429E+02	2.509E+02	2.718E+02	3.457E+02	5.160E+02	1.149E+03	
Co-60	8.070E+00	9.205E+00	2.161E+02	4.170E+02	5.785E+03	4.146E+06	*1.113E+15	*1.113E+15	*1.113E+15	
Cs-134	1.545E+01	2.161E+01	6.818E+04	3.653E+05	3.009E+08	*1.283E+15	*1.283E+15	*1.283E+15	*1.283E+15	
Cs-137	3.686E+01	3.772E+01	6.546E+01	7.343E+01	1.163E+02	3.668E+02	1.151E+04	3.597E+06	3.510E+11	
Eu-152	1.780E+01	1.873E+01	6.402E+01	8.270E+01	2.303E+02	2.980E+03	6.453E+06	2.340E+12	*1.727E+14	
Eu-154	1.665E+01	1.805E+01	1.251E+02	1.872E+02	9.398E+02	5.305E+04	9.538E+09	*2.685E+14	*2.685E+14	
Eu-155	7.448E+02	8.615E+02	2.836E+04	5.873E+04	1.080E+06	1.566E+09	*4.815E+14	*4.815E+14	*4.815E+14	
H-3	1.645E+06	1.871E+06	4.126E+07	7.859E+07	1.035E+09	6.511E+11	*9.621E+15	*9.621E+15	*9.621E+15	
I-129	7.093E+02	7.094E+02	7.101E+02	7.102E+02	7.108E+02	7.123E+02	7.167E+02	7.242E+02	7.394E+02	
Mn-54	3.506E+01	7.890E+01	2.247E+10	1.297E+12	*7.615E+15	*7.615E+15	*7.615E+15	*7.615E+15	*7.615E+15	
Na-22	1.030E+01	1.345E+01	8.044E+03	3.047E+04	6.279E+06	3.826E+12	*5.976E+15	*5.976E+15	*5.976E+15	
Ni-63	5.210E+05	5.246E+05	6.195E+05	6.413E+05	7.366E+05	1.041E+06	2.942E+06	1.662E+07	5.299E+08	
Np-237	8.677E+01	8.677E+01	8.677E+01	8.677E+01	8.677E+01	8.677E+01	8.677E+01	8.676E+01	8.674E+01	
Pu-238	2.250E+02	2.268E+02	2.742E+02	2.853E+02	3.341E+02	4.960E+02	1.623E+03	1.167E+04	5.055E+05	
Pu-239	2.034E+02	2.034E+02	2.036E+02	2.036E+02	2.037E+02	2.040E+02	2.049E+02	2.064E+02	2.094E+02	
Ru-106	1.277E+02	2.514E+02	2.910E+09	8.619E+10	*3.269E+15	*3.269E+15	*3.269E+15	*3.269E+15	*3.269E+15	
Sr-90	1.401E+03	1.435E+03	2.557E+03	2.885E+03	4.669E+03	1.556E+04	5.760E+05	2.369E+08	4.005E+13	
Tc-99	1.109E+05	1.109E+05	1.111E+05	1.111E+05	1.113E+05	1.117E+05	1.130E+05	1.152E+05	1.196E+05	
Th-228	1.478E+01	2.123E+01	1.278E+05	7.831E+05	1.105E+09	*8.201E+14	*8.201E+14	*8.201E+14	*8.201E+14	
Th-230	2.370E+02	2.348E+02	1.886E+02	1.808E+02	1.546E+02	1.128E+02	6.293E+01	3.755E+01	2.231E+01	
Th-232	1.241E+02	6.140E+01	7.746E+00	7.535E+00	7.316E+00	7.295E+00	7.295E+00	7.295E+00	7.295E+00	
U-234	1.326E+03	1.326E+03	1.325E+03	1.324E+03	1.322E+03	1.316E+03	1.288E+03	1.212E+03	1.011E+03	
U-235	1.410E+02	1.410E+02	1.408E+02	1.408E+02	1.405E+02	1.398E+02	1.376E+02	1.341E+02	1.275E+02	
U-238	4.745E+02	4.745E+02	4.745E+02	4.745E+02	4.745E+02	4.744E+02	4.743E+02	4.743E+02	4.740E+02	
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	

*At specific activity limit

Summed Dose/Source Ratios DSR(i,t) in (mrem/yr)/(pCi/g)
 and Single Radionuclide Soil Guidelines G(i,t) in pCi/g
 at tmin = time of minimum single radionuclide soil guideline
 and at tmax = time of maximum total dose = 0.000E+00 years

0Nuclide	Initial	tmin	DSR(i,tmin)	G(i,tmin)	DSR(i,tmax)	G(i,tmax)
(i)	(pCi/g)	(years)		(pCi/g)		(pCi/g)
AAAAAAA	AAAAAAAAA	AAAAAAAAAAAAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA
Am-241	1.000E+01	0.000E+00	1.080E-01	2.315E+02	1.080E-01	2.315E+02
Co-60	1.000E+01	0.000E+00	3.098E+00	8.070E+00	3.098E+00	8.070E+00
Cs-134	1.000E+01	0.000E+00	1.618E+00	1.545E+01	1.618E+00	1.545E+01
Cs-137	1.000E+01	0.000E+00	6.783E-01	3.686E+01	6.783E-01	3.686E+01
Eu-152	1.000E+01	0.000E+00	1.405E+00	1.780E+01	1.405E+00	1.780E+01
Eu-154	1.000E+01	0.000E+00	1.501E+00	1.665E+01	1.501E+00	1.665E+01
Eu-155	1.000E+01	0.000E+00	3.357E-02	7.448E+02	3.357E-02	7.448E+02
H-3	1.000E+01	0.000E+00	1.520E-05	1.645E+06	1.520E-05	1.645E+06
I-129	1.000E+01	0.000E+00	3.524E-02	7.093E+02	3.524E-02	7.093E+02
Mn-54	1.000E+01	0.000E+00	7.131E-01	3.506E+01	7.131E-01	3.506E+01
Na-22	1.000E+01	0.000E+00	2.426E+00	1.030E+01	2.426E+00	1.030E+01
Ni-63	1.000E+01	0.000E+00	4.798E-05	5.210E+05	4.798E-05	5.210E+05
Np-237	1.000E+01	1.000E+03	2.882E-01	8.674E+01	2.881E-01	8.677E+01
Pu-238	1.000E+01	0.000E+00	1.111E-01	2.250E+02	1.111E-01	2.250E+02
Pu-239	1.000E+01	0.000E+00	1.229E-01	2.034E+02	1.229E-01	2.034E+02
Ru-106	1.000E+01	0.000E+00	1.958E-01	1.277E+02	1.958E-01	1.277E+02
Sr-90	1.000E+01	0.000E+00	1.785E-02	1.401E+03	1.785E-02	1.401E+03
Tc-99	1.000E+01	0.000E+00	2.255E-04	1.109E+05	2.255E-04	1.109E+05
Th-228	1.000E+01	0.000E+00	1.692E+00	1.478E+01	1.692E+00	1.478E+01
Th-230	1.000E+01	1.000E+03	1.121E+00	2.231E+01	1.055E-01	2.370E+02
Th-232	1.000E+01	144.7 ñ 0.3	3.427E+00	7.295E+00	2.014E-01	1.241E+02
U-234	1.000E+01	1.000E+03	2.473E-02	1.011E+03	1.885E-02	1.326E+03
U-235	1.000E+01	1.000E+03	1.960E-01	1.275E+02	1.773E-01	1.410E+02
U-238	1.000E+01	1.000E+03	5.274E-02	4.740E+02	5.269E-02	4.745E+02
iiiiiiii	iiiiiiiiii	iiiiiiiiiiiiiiiiii	iiiiiiiiii	iiiiiiiiii	iiiiiiiiii	iiiiiiiiii

Individual Nuclide Dose Summed Over All Pathways

Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	DOSE(j,t), mrem/yr									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Am-241	Am-241	1.000E+00		1.080E+00	1.078E+00	1.037E+00	1.029E+00	9.965E-01	9.197E-01	7.230E-01	4.841E-01	2.171E-01
0Np-237	Am-241	1.000E+00		4.655E-07	1.396E-06	2.327E-05	2.773E-05	4.519E-05	8.646E-05	1.921E-04	3.205E-04	4.639E-04
Np-237	Np-237	1.000E+00		2.881E+00	2.881E+00	2.881E+00	2.881E+00	2.881E+00	2.881E+00	2.881E+00	2.881E+00	2.880E+00
Np-237	äDOSE(j)			2.881E+00	2.881E+00	2.881E+00	2.881E+00	2.881E+00	2.881E+00	2.881E+00	2.881E+00	2.881E+00
0U-233	Am-241	1.000E+00		4.587E-14	3.209E-13	8.832E-11	1.260E-10	3.418E-10	1.318E-09	7.586E-09	2.682E-08	8.606E-08
U-233	Np-237	1.000E+00		4.258E-07	1.277E-06	2.172E-05	2.597E-05	4.300E-05	8.557E-05	2.132E-04	4.257E-04	8.500E-04
U-233	äDOSE(j)			4.258E-07	1.277E-06	2.172E-05	2.597E-05	4.300E-05	8.557E-05	2.132E-04	4.258E-04	8.501E-04
0Th-229	Am-241	1.000E+00		3.346E-17	5.017E-16	2.197E-12	3.751E-12	1.688E-11	1.303E-10	1.897E-09	1.372E-08	9.137E-08
Th-229	Np-237	1.000E+00		4.141E-10	2.899E-09	8.073E-07	1.155E-06	3.163E-06	1.251E-05	7.732E-05	3.061E-04	1.203E-03
Th-229	äDOSE(j)			4.141E-10	2.899E-09	8.073E-07	1.155E-06	3.163E-06	1.251E-05	7.732E-05	3.061E-04	1.203E-03
0Co-60	Co-60	1.000E+00		3.098E+01	2.716E+01	1.157E+00	5.995E-01	4.322E-02	6.030E-05	1.638E-13	8.654E-28	0.000E+00
0Cs-134	Cs-134	1.000E+00		1.618E+01	1.157E+01	3.667E-03	6.844E-04	8.308E-07	4.265E-14	0.000E+00	0.000E+00	0.000E+00
0Cs-137	Cs-137	1.000E+00		6.783E+00	6.629E+00	3.819E+00	3.404E+00	2.150E+00	6.816E-01	2.171E-02	6.951E-05	7.123E-10
0Eu-152	Eu-152	7.210E-01		1.013E+01	9.622E+00	2.815E+00	2.180E+00	7.827E-01	6.050E-02	2.793E-05	7.704E-11	5.860E-22
Eu-152	Eu-152	2.790E-01		3.919E+00	3.723E+00	1.089E+00	8.434E-01	3.029E-01	2.341E-02	1.081E-05	2.981E-11	2.268E-22
Eu-152	äDOSE(j)			1.405E+01	1.334E+01	3.905E+00	3.023E+00	1.086E+00	8.391E-02	3.874E-05	1.068E-10	8.128E-22
0Gd-152	Eu-152	2.790E-01		1.751E-16	5.135E-16	5.071E-15	5.496E-15	6.432E-15	6.915E-15	6.956E-15	6.956E-15	6.956E-15
0Sm-148	Eu-152	2.790E-01		0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.463E-29	5.811E-29	1.655E-28	3.447E-28	7.030E-28
0Nd-144	Eu-152	2.790E-01		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
0Eu-154	Eu-154	1.000E+00		1.501E+01	1.385E+01	1.998E+00	1.335E+00	2.660E-01	4.713E-03	2.621E-08	4.576E-17	0.000E+00
0Eu-155	Eu-155	1.000E+00		3.357E-01	2.902E-01	8.815E-03	4.257E-03	2.315E-04	1.597E-07	5.238E-17	0.000E+00	0.000E+00
0H-3	H-3	1.000E+00		1.520E-04	1.336E-04	6.059E-06	3.181E-06	2.416E-07	3.840E-10	1.542E-18	0.000E+00	0.000E+00
0I-129	I-129	1.000E+00		3.524E-01	3.524E-01	3.521E-01	3.520E-01	3.517E-01	3.510E-01	3.488E-01	3.452E-01	3.381E-01
0Mn-54	Mn-54	1.000E+00		7.131E+00	3.169E+00	1.113E-08	1.927E-10	1.736E-17	0.000E+00	0.000E+00	0.000E+00	0.000E+00
0Na-22	Na-22	1.000E+00		2.426E+01	1.859E+01	3.108E-02	8.204E-03	3.982E-05	6.535E-11	2.888E-28	0.000E+00	0.000E+00
0Ni-63	Ni-63	1.000E+00		4.798E-04	4.765E-04	4.035E-04	3.898E-04	3.394E-04	2.401E-04	8.497E-05	1.505E-05	4.718E-07
0Pu-238	Pu-238	1.850E-09		2.055E-09	2.039E-09	1.687E-09	1.621E-09	1.384E-09	9.324E-10	2.849E-10	3.950E-11	7.592E-13
Pu-238	Pu-238	9.996E-01		1.110E+00	1.102E+00	9.114E-01	8.760E-01	7.480E-01	5.038E-01	1.539E-01	2.134E-02	4.102E-04
Pu-238	äDOSE(j)			1.110E+00	1.102E+00	9.114E-01	8.760E-01	7.480E-01	5.038E-01	1.539E-01	2.134E-02	4.102E-04
0U-234	Pu-238	9.996E-01		2.652E-07	7.930E-07	1.228E-05	1.441E-05	2.215E-05	3.688E-05	5.798E-05	6.593E-05	6.710E-05

Individual Nuclide Dose Summed Over All Pathways

Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	DOSE(j,t), mrem/yr									
(j)	(i)		t= 0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03	
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
U-234	Pu-238	1.899E-08	5.040E-15	1.507E-14	2.334E-13	2.739E-13	4.208E-13	7.007E-13	1.102E-12	1.253E-12	1.275E-12	
U-234	Pu-238	2.100E-04	5.571E-11	1.666E-10	2.580E-09	3.028E-09	4.652E-09	7.746E-09	1.218E-08	1.385E-08	1.409E-08	
U-234	Pu-238	2.771E-10	7.354E-17	2.199E-16	3.406E-15	3.997E-15	6.140E-15	1.023E-14	1.607E-14	1.828E-14	1.860E-14	
U-234	Pu-238	3.989E-12	1.059E-18	3.165E-18	4.902E-17	5.753E-17	8.838E-17	1.472E-16	2.314E-16	2.631E-16	2.678E-16	
U-234	Pu-238	1.998E-04	5.301E-11	1.585E-10	2.455E-09	2.881E-09	4.426E-09	7.370E-09	1.159E-08	1.318E-08	1.341E-08	
U-234	Pu-238	2.637E-10	6.997E-17	2.092E-16	3.240E-15	3.802E-15	5.842E-15	9.728E-15	1.529E-14	1.739E-14	1.770E-14	
U-234	Pu-238	3.795E-12	1.007E-18	3.011E-18	4.664E-17	5.473E-17	8.409E-17	1.400E-16	2.201E-16	2.503E-16	2.548E-16	
U-234	Pu-238	4.196E-08	1.113E-14	3.328E-14	5.156E-13	6.051E-13	9.296E-13	1.548E-12	2.434E-12	2.768E-12	2.816E-12	
U-234	Pu-238	5.538E-14	1.470E-20	4.394E-20	6.806E-19	7.987E-19	1.227E-18	2.043E-18	3.212E-18	3.653E-18	3.718E-18	
U-234	Pu-238	7.972E-16	2.115E-22	6.324E-22	9.796E-21	1.150E-20	1.766E-20	2.941E-20	4.624E-20	5.258E-20	5.351E-20	
U-234	Pu-238	2.000E-07	5.307E-14	1.587E-13	2.458E-12	2.884E-12	4.431E-12	7.379E-12	1.160E-11	1.319E-11	1.342E-11	
U-234	Pu-238	2.640E-13	7.005E-20	2.094E-19	3.244E-18	3.807E-18	5.849E-18	9.740E-18	1.531E-17	1.741E-17	1.772E-17	
U-234	Pu-238	3.800E-15	1.008E-21	3.014E-21	4.670E-20	5.480E-20	8.419E-20	1.402E-19	2.204E-19	2.506E-19	2.551E-19	
U-234	U-234	9.996E-01	1.884E-01	1.884E-01	1.884E-01	1.884E-01	1.884E-01	1.883E-01	1.882E-01	1.881E-01	1.878E-01	
U-234	U-238	1.599E-03	4.255E-10	1.277E-09	2.170E-08	2.596E-08	4.297E-08	8.551E-08	2.131E-07	4.256E-07	8.501E-07	
U-234	U-238	2.111E-09	5.617E-16	1.685E-15	2.864E-14	3.426E-14	5.672E-14	1.129E-13	2.813E-13	5.618E-13	1.122E-12	
U-234	U-238	3.039E-11	8.085E-18	2.425E-17	4.123E-16	4.931E-16	8.165E-16	1.625E-15	4.049E-15	8.086E-15	1.615E-14	
U-234	U-238	3.359E-07	8.938E-14	2.681E-13	4.558E-12	5.452E-12	9.026E-12	1.796E-11	4.476E-11	8.939E-11	1.786E-10	
U-234	U-238	4.434E-13	1.180E-19	3.539E-19	6.017E-18	7.196E-18	1.191E-17	2.371E-17	5.908E-17	1.180E-16	2.357E-16	
U-234	U-238	6.383E-15	1.698E-21	5.094E-21	8.660E-20	1.036E-19	1.715E-19	3.413E-19	8.504E-19	1.698E-18	3.393E-18	
U-234	U-238	3.196E-07	8.503E-14	2.551E-13	4.337E-12	5.187E-12	8.588E-12	1.709E-11	4.259E-11	8.505E-11	1.699E-10	
U-234	U-238	4.219E-13	1.122E-19	3.367E-19	5.724E-18	6.847E-18	1.134E-17	2.256E-17	5.621E-17	1.123E-16	2.242E-16	
U-234	U-238	6.073E-15	1.616E-21	4.847E-21	8.240E-20	9.855E-20	1.632E-19	3.247E-19	8.091E-19	1.616E-18	3.228E-18	
U-234	U-238	6.713E-11	1.786E-17	5.358E-17	9.109E-16	1.089E-15	1.804E-15	3.589E-15	8.945E-15	1.786E-14	3.568E-14	
U-234	U-238	8.862E-17	2.358E-23	7.073E-23	1.202E-21	1.438E-21	2.381E-21	4.738E-21	1.181E-20	2.358E-20	4.710E-20	
U-234	U-238	1.276E-18	3.394E-25	1.018E-24	1.731E-23	2.070E-23	3.427E-23	6.820E-23	1.700E-22	3.394E-22	6.780E-22	
U-234	U-238	3.200E-10	8.514E-17	2.554E-16	4.342E-15	5.193E-15	8.598E-15	1.711E-14	4.264E-14	8.515E-14	1.701E-13	
U-234	U-238	4.224E-16	1.124E-22	3.371E-22	5.731E-21	6.855E-21	1.135E-20	2.259E-20	5.628E-20	1.124E-19	2.245E-19	
U-234	U-238	6.080E-18	1.618E-24	4.853E-24	8.249E-23	9.867E-23	1.634E-22	3.251E-22	8.101E-22	1.618E-21	3.232E-21	
U-234	U-238	9.980E-01	2.655E-07	7.966E-07	1.354E-05	1.620E-05	2.682E-05	5.336E-05	1.330E-04	2.656E-04	5.305E-04	
U-234	U-238	1.317E-06	3.505E-13	1.051E-12	1.787E-11	2.138E-11	3.540E-11	7.044E-11	1.755E-10	3.506E-10	7.002E-10	
U-234	U-238	1.896E-08	5.045E-15	1.513E-14	2.573E-13	3.077E-13	5.095E-13	1.014E-12	2.526E-12	5.046E-12	1.008E-11	
U-234	U-238	2.096E-04	5.577E-11	1.673E-10	2.844E-09	3.402E-09	5.632E-09	1.121E-08	2.793E-08	5.578E-08	1.114E-07	
U-234	U-238	2.767E-10	7.362E-17	2.209E-16	3.754E-15	4.490E-15	7.435E-15	1.479E-14	3.687E-14	7.363E-14	1.471E-13	
U-234	U-238	3.983E-12	1.060E-18	3.179E-18	5.404E-17	6.464E-17	1.070E-16	2.130E-16	5.307E-16	1.060E-15	2.117E-15	
U-234	U-238	1.994E-04	5.306E-11	1.592E-10	2.706E-09	3.237E-09	5.359E-09	1.066E-08	2.657E-08	5.307E-08	1.060E-07	
U-234	U-238	2.633E-10	7.004E-17	2.101E-16	3.572E-15	4.272E-15	7.074E-15	1.408E-14	3.508E-14	7.006E-14	1.399E-13	
U-234	U-238	3.789E-12	1.008E-18	3.025E-18	5.141E-17	6.150E-17	1.018E-16	2.026E-16	5.049E-16	1.008E-15	2.014E-15	
U-234	U-238	4.189E-08	1.115E-14	3.344E-14	5.684E-13	6.798E-13	1.126E-12	2.240E-12	5.582E-12	1.115E-11	2.227E-11	
U-234	U-238	5.530E-14	1.471E-20	4.414E-20	7.503E-19	8.974E-19	1.486E-18	2.957E-18	7.368E-18	1.471E-17	2.939E-17	

U-234	U-238	7.959E-16	2.118E-22	6.353E-22	1.080E-20	1.292E-20	2.139E-20	4.256E-20	1.060E-19	2.118E-19	4.231E-19
U-234	U-238	1.997E-07	5.313E-14	1.594E-13	2.709E-12	3.241E-12	5.365E-12	1.068E-11	2.661E-11	5.314E-11	1.061E-10
U-234	U-238	2.636E-13	7.013E-20	2.104E-19	3.576E-18	4.277E-18	7.082E-18	1.409E-17	3.512E-17	7.014E-17	1.401E-16
U-234	U-238	3.794E-15	1.009E-21	3.028E-21	5.148E-20	6.157E-20	1.019E-19	2.029E-19	5.055E-19	1.010E-18	2.017E-18
U-234	äDOSE(j)		1.884E-01	1.884E-01	1.884E-01	1.884E-01	1.884E-01	1.884E-01	1.884E-01	1.884E-01	1.884E-01
0Th-230	Pu-238	9.996E-01	4.531E-12	3.164E-11	8.290E-09	1.171E-08	3.053E-08	1.073E-07	4.869E-07	1.294E-06	2.996E-06
Th-230	Pu-238	1.899E-08	8.609E-20	6.012E-19	1.575E-16	2.225E-16	5.801E-16	2.039E-15	9.251E-15	2.458E-14	5.692E-14
Th-230	Pu-238	2.100E-04	9.517E-16	6.647E-15	1.741E-12	2.459E-12	6.413E-12	2.254E-11	1.023E-10	2.718E-10	6.293E-10

Individual Nuclide Dose Summed Over All Pathways

Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	DOSE(j,t), mrem/yr									
(j)	(i)		t= 0.000E+00 1.000E+00 2.500E+01 3.000E+01 5.000E+01 1.000E+02 2.500E+02 5.000E+02 1.000E+03									
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Th-230	Pu-238	2.771E-10	1.256E-21	8.774E-21	2.298E-18	3.246E-18	8.465E-18	2.975E-17	1.350E-16	3.588E-16	8.306E-16	
Th-230	Pu-238	3.989E-12	1.808E-23	1.263E-22	3.308E-20	4.673E-20	1.219E-19	4.283E-19	1.943E-18	5.164E-18	1.196E-17	
Th-230	Pu-238	1.998E-04	9.054E-16	6.324E-15	1.657E-12	2.340E-12	6.102E-12	2.144E-11	9.730E-11	2.586E-10	5.987E-10	
Th-230	Pu-238	2.637E-10	1.195E-21	8.347E-21	2.187E-18	3.089E-18	8.054E-18	2.831E-17	1.284E-16	3.413E-16	7.903E-16	
Th-230	Pu-238	3.795E-12	1.720E-23	1.202E-22	3.148E-20	4.446E-20	1.159E-19	4.075E-19	1.849E-18	4.913E-18	1.138E-17	
Th-230	Pu-238	4.196E-08	1.902E-19	1.328E-18	3.480E-16	4.915E-16	1.282E-15	4.504E-15	2.044E-14	5.431E-14	1.257E-13	
Th-230	Pu-238	5.538E-14	2.510E-25	1.753E-24	4.593E-22	6.488E-22	1.692E-21	5.946E-21	2.698E-20	7.169E-20	1.660E-19	
Th-230	Pu-238	7.972E-16	3.605E-27	2.524E-26	6.611E-24	9.338E-24	2.435E-23	8.558E-23	3.883E-22	1.032E-21	2.389E-21	
Th-230	Pu-238	2.000E-07	9.065E-19	6.331E-18	1.659E-15	2.343E-15	6.109E-15	2.147E-14	9.742E-14	2.589E-13	5.994E-13	
Th-230	Pu-238	2.640E-13	1.197E-24	8.357E-24	2.189E-21	3.093E-21	8.064E-21	2.834E-20	1.286E-19	3.417E-19	7.912E-19	
Th-230	Pu-238	3.800E-15	1.722E-26	1.203E-25	3.151E-23	4.451E-23	1.161E-22	4.079E-22	1.851E-21	4.919E-21	1.139E-20	
Th-230	Th-230	9.996E-01	1.049E+00	1.049E+00	1.049E+00	1.049E+00	1.049E+00	1.049E+00	1.047E+00	1.044E+00	1.040E+00	
Th-230	U-234	9.996E-01	4.824E-06	1.447E-05	2.460E-04	2.942E-04	4.870E-04	9.690E-04	2.413E-03	4.814E-03	9.593E-03	
Th-230	U-234	1.319E-06	6.367E-12	1.910E-11	3.247E-10	3.883E-10	6.429E-10	1.279E-09	3.185E-09	6.354E-09	1.266E-08	
Th-230	U-234	1.899E-08	9.165E-14	2.749E-13	4.673E-12	5.590E-12	9.254E-12	1.841E-11	4.585E-11	9.146E-11	1.823E-10	
Th-230	U-234	2.100E-04	1.013E-09	3.040E-09	5.166E-08	6.179E-08	1.023E-07	2.035E-07	5.068E-07	1.011E-06	2.015E-06	
Th-230	U-234	2.771E-10	1.337E-15	4.012E-15	6.820E-14	8.157E-14	1.350E-13	2.687E-13	6.690E-13	1.335E-12	2.660E-12	
Th-230	U-234	3.989E-12	1.925E-17	5.775E-17	9.816E-16	1.174E-15	1.944E-15	3.867E-15	9.630E-15	1.921E-14	3.829E-14	
Th-230	U-234	1.998E-04	9.640E-10	2.892E-09	4.915E-08	5.879E-08	9.733E-08	1.936E-07	4.822E-07	9.620E-07	1.917E-06	
Th-230	U-234	2.637E-10	1.272E-15	3.817E-15	6.488E-14	7.760E-14	1.285E-13	2.556E-13	6.365E-13	1.270E-12	2.531E-12	
Th-230	U-234	3.795E-12	1.832E-17	5.495E-17	9.339E-16	1.117E-15	1.849E-15	3.679E-15	9.162E-15	1.828E-14	3.643E-14	
Th-230	U-234	4.196E-08	2.025E-13	6.074E-13	1.032E-11	1.235E-11	2.044E-11	4.067E-11	1.013E-10	2.021E-10	4.027E-10	
Th-230	U-234	5.538E-14	2.673E-19	8.018E-19	1.363E-17	1.630E-17	2.699E-17	5.369E-17	1.337E-16	2.667E-16	5.315E-16	
Th-230	U-234	7.972E-16	3.847E-21	1.154E-20	1.962E-19	2.346E-19	3.884E-19	7.728E-19	1.924E-18	3.839E-18	7.651E-18	
Th-230	U-234	2.000E-07	9.651E-13	2.895E-12	4.921E-11	5.886E-11	9.745E-11	1.939E-10	4.828E-10	9.632E-10	1.919E-09	
Th-230	U-234	2.640E-13	1.274E-18	3.822E-18	6.496E-17	7.770E-17	1.286E-16	2.559E-16	6.373E-16	1.271E-15	2.534E-15	
Th-230	U-234	3.800E-15	1.834E-20	5.501E-20	9.351E-19	1.118E-18	1.852E-18	3.684E-18	9.173E-18	1.830E-17	3.647E-17	
Th-230	U-238	1.599E-03	7.264E-15	5.084E-14	1.417E-11	2.027E-11	5.556E-11	2.200E-10	1.366E-09	5.447E-09	2.172E-08	
Th-230	U-238	2.111E-09	9.588E-21	6.712E-20	1.870E-17	2.676E-17	7.334E-17	2.904E-16	1.803E-15	7.190E-15	2.867E-14	
Th-230	U-238	3.039E-11	1.380E-22	9.661E-22	2.692E-19	3.851E-19	1.056E-18	4.180E-18	2.595E-17	1.035E-16	4.127E-16	
Th-230	U-238	3.359E-07	1.526E-18	1.068E-17	2.976E-15	4.258E-15	1.167E-14	4.621E-14	2.869E-13	1.144E-12	4.563E-12	
Th-230	U-238	4.434E-13	2.014E-24	1.410E-23	3.929E-21	5.620E-21	1.541E-20	6.100E-20	3.787E-19	1.510E-18	6.023E-18	
Th-230	U-238	6.383E-15	2.899E-26	2.029E-25	5.655E-23	8.090E-23	2.217E-22	8.780E-22	5.451E-21	2.174E-20	8.669E-20	
Th-230	U-238	3.196E-07	1.452E-18	1.016E-17	2.832E-15	4.051E-15	1.110E-14	4.397E-14	2.730E-13	1.089E-12	4.341E-12	
Th-230	U-238	4.219E-13	1.916E-24	1.341E-23	3.738E-21	5.347E-21	1.466E-20	5.803E-20	3.603E-19	1.437E-18	5.730E-18	
Th-230	U-238	6.073E-15	2.758E-26	1.931E-25	5.380E-23	7.697E-23	2.110E-22	8.353E-22	5.187E-21	2.068E-20	8.248E-20	
Th-230	U-238	6.713E-11	3.049E-22	2.134E-21	5.948E-19	8.508E-19	2.332E-18	9.235E-18	5.734E-17	2.287E-16	9.118E-16	
Th-230	U-238	8.862E-17	4.015E-28	2.811E-27	7.851E-25	1.123E-24	3.079E-24	1.219E-23	7.568E-23	3.018E-22	1.204E-21	
Th-230	U-238	1.276E-18	0.000E+00	4.046E-29	1.130E-26	1.617E-26	4.431E-26	1.755E-25	1.089E-24	4.344E-24	1.732E-23	
Th-230	U-238	3.200E-10	1.453E-21	1.017E-20	2.835E-18	4.056E-18	1.112E-17	4.402E-17	2.733E-16	1.090E-15	4.346E-15	

Th-230	U-238	4.224E-16	1.914E-27	1.343E-26	3.742E-24	5.354E-24	1.467E-23	5.810E-23	3.608E-22	1.439E-21	5.737E-21
Th-230	U-238	6.080E-18	2.755E-29	1.928E-28	5.387E-26	7.706E-26	2.112E-25	8.364E-25	5.193E-24	2.071E-23	8.258E-23
Th-230	U-238	9.980E-01	4.532E-12	3.173E-11	8.842E-09	1.265E-08	3.467E-08	1.373E-07	8.524E-07	3.399E-06	1.355E-05
Th-230	U-238	1.317E-06	5.983E-18	4.188E-17	1.167E-14	1.670E-14	4.577E-14	1.812E-13	1.125E-12	4.487E-12	1.789E-11
Th-230	U-238	1.896E-08	8.612E-20	6.028E-19	1.680E-16	2.403E-16	6.587E-16	2.608E-15	1.619E-14	6.458E-14	2.575E-13
Th-230	U-238	2.096E-04	9.520E-16	6.664E-15	1.857E-12	2.657E-12	7.282E-12	2.884E-11	1.790E-10	7.140E-10	2.847E-09
Th-230	U-238	2.767E-10	1.257E-21	8.797E-21	2.452E-18	3.507E-18	9.613E-18	3.806E-17	2.363E-16	9.424E-16	3.758E-15
Th-230	U-238	3.983E-12	1.809E-23	1.266E-22	3.529E-20	5.048E-20	1.384E-19	5.479E-19	3.402E-18	1.357E-17	5.410E-17
Th-230	U-238	1.994E-04	9.058E-16	6.340E-15	1.767E-12	2.528E-12	6.929E-12	2.743E-11	1.703E-10	6.793E-10	2.709E-09

Individual Nuclide Dose Summed Over All Pathways

Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	DOSE(j,t), mrem/yr									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Th-230	U-238	2.633E-10	1.196E-21	8.369E-21	2.332E-18	3.337E-18	9.146E-18	3.621E-17	2.248E-16	8.967E-16	3.576E-15	
Th-230	U-238	3.789E-12	1.721E-23	1.205E-22	3.357E-20	4.803E-20	1.316E-19	5.213E-19	3.236E-18	1.291E-17	5.147E-17	
Th-230	U-238	4.189E-08	1.903E-19	1.332E-18	3.711E-16	5.309E-16	1.455E-15	5.762E-15	3.578E-14	1.427E-13	5.690E-13	
Th-230	U-238	5.530E-14	2.511E-25	1.758E-24	4.899E-22	7.008E-22	1.921E-21	7.606E-21	4.723E-20	1.883E-19	7.510E-19	
Th-230	U-238	7.959E-16	3.606E-27	2.530E-26	7.052E-24	1.009E-23	2.765E-23	1.095E-22	6.798E-22	2.711E-21	1.081E-20	
Th-230	U-238	1.997E-07	9.069E-19	6.348E-18	1.769E-15	2.531E-15	6.937E-15	2.747E-14	1.705E-13	6.801E-13	2.712E-12	
Th-230	U-238	2.636E-13	1.197E-24	8.379E-24	2.335E-21	3.341E-21	9.157E-21	3.626E-20	2.251E-19	8.977E-19	3.580E-18	
Th-230	U-238	3.794E-15	1.723E-26	1.206E-25	3.361E-23	4.808E-23	1.318E-22	5.219E-22	3.240E-21	1.292E-20	5.153E-20	
Th-230	äDOSE(j)		1.049E+00	1.049E+00	1.049E+00	1.049E+00	1.049E+00	1.049E+00	1.049E+00	1.049E+00	1.049E+00	1.049E+00
0Ra-226	Pu-238	9.996E-01	1.090E-14	1.632E-13	6.874E-10	1.164E-09	5.077E-09	3.634E-08	4.337E-07	2.418E-06	1.135E-05	
Ra-226	Pu-238	1.899E-08	2.071E-22	3.101E-21	1.306E-17	2.212E-17	9.646E-17	6.905E-16	8.240E-15	4.594E-14	2.157E-13	
Ra-226	Th-230	9.996E-01	5.046E-03	1.514E-02	2.559E-01	3.058E-01	5.041E-01	9.922E-01	2.393E+00	4.531E+00	8.154E+00	
Ra-226	Th-230	1.319E-06	6.661E-09	1.998E-08	3.379E-07	4.036E-07	6.654E-07	1.310E-06	3.159E-06	5.981E-06	1.076E-05	
Ra-226	Th-230	1.899E-08	9.588E-11	2.876E-10	4.863E-09	5.810E-09	9.578E-09	1.885E-08	4.547E-08	8.609E-08	1.549E-07	
Ra-226	U-234	9.996E-01	1.547E-08	1.083E-07	3.007E-05	4.298E-05	1.175E-04	4.618E-04	2.807E-03	1.081E-02	4.024E-02	
Ra-226	U-234	1.319E-06	2.042E-14	1.429E-13	3.969E-11	5.673E-11	1.551E-10	6.096E-10	3.705E-09	1.426E-08	5.312E-08	
Ra-226	U-234	1.899E-08	2.939E-16	2.057E-15	5.713E-13	8.166E-13	2.232E-12	8.775E-12	5.333E-11	2.053E-10	7.646E-10	
Ra-226	U-238	1.599E-03	1.747E-17	2.620E-16	1.156E-12	1.977E-12	8.950E-12	7.015E-11	1.068E-09	8.293E-09	6.282E-08	
Ra-226	U-238	2.111E-09	2.306E-23	3.459E-22	1.526E-18	2.609E-18	1.181E-17	9.260E-17	1.410E-15	1.095E-14	8.292E-14	
Ra-226	U-238	3.039E-11	3.319E-25	4.978E-24	2.196E-20	3.755E-20	1.701E-19	1.333E-18	2.030E-17	1.576E-16	1.193E-15	
Ra-226	U-238	9.980E-01	1.090E-14	1.635E-13	7.213E-10	1.233E-09	5.585E-09	4.377E-08	6.667E-07	5.175E-06	3.920E-05	
Ra-226	U-238	1.317E-06	1.439E-20	2.158E-19	9.521E-16	1.628E-15	7.372E-15	5.778E-14	8.801E-13	6.831E-12	5.174E-11	
Ra-226	U-238	1.896E-08	2.071E-22	3.106E-21	1.370E-17	2.343E-17	1.061E-16	8.317E-16	1.267E-14	9.833E-14	7.447E-13	
Ra-226	äDOSE(j)		5.046E-03	1.514E-02	2.560E-01	3.058E-01	5.042E-01	9.927E-01	2.396E+00	4.542E+00	8.195E+00	
0Pb-210	Pu-238	9.996E-01	1.711E-17	5.266E-16	2.999E-11	5.917E-11	3.863E-10	4.404E-09	7.972E-08	5.254E-07	2.678E-06	
Pb-210	Pu-238	1.319E-06	8.431E-24	2.596E-22	1.478E-17	2.916E-17	1.904E-16	2.171E-15	3.929E-14	2.590E-13	1.320E-12	
Pb-210	Pu-238	2.100E-04	3.593E-21	1.106E-19	6.299E-15	1.243E-14	8.115E-14	9.250E-13	1.674E-11	1.104E-10	5.626E-10	
Pb-210	Pu-238	1.998E-04	3.418E-21	1.052E-19	5.993E-15	1.183E-14	7.720E-14	8.801E-13	1.593E-11	1.050E-10	5.352E-10	
Pb-210	Pu-238	4.196E-08	7.180E-25	2.211E-23	1.259E-18	2.484E-18	1.622E-17	1.849E-16	3.346E-15	2.205E-14	1.124E-13	
Pb-210	Pu-238	2.000E-07	3.422E-24	1.054E-22	6.001E-18	1.184E-17	7.730E-17	8.811E-16	1.595E-14	1.051E-13	5.359E-13	
Pb-210	Th-230	9.996E-01	1.316E-05	9.128E-05	2.010E-02	2.747E-02	6.342E-02	1.749E-01	5.302E-01	1.078E+00	2.006E+00	
Pb-210	Th-230	2.100E-04	2.764E-09	1.917E-08	4.222E-06	5.770E-06	1.332E-05	3.674E-05	1.114E-04	2.264E-04	4.213E-04	
Pb-210	Th-230	1.998E-04	2.629E-09	1.824E-08	4.017E-06	5.489E-06	1.267E-05	3.495E-05	1.060E-04	2.154E-04	4.008E-04	
Pb-210	Th-230	4.196E-08	5.523E-13	3.831E-12	8.437E-10	1.153E-09	2.662E-09	7.342E-09	2.226E-08	4.523E-08	8.419E-08	
Pb-210	Th-230	2.000E-07	2.633E-12	1.826E-11	4.022E-09	5.496E-09	1.269E-08	3.500E-08	1.061E-07	2.156E-07	4.013E-07	
Pb-210	U-234	9.996E-01	3.030E-11	4.514E-10	1.672E-06	2.762E-06	1.098E-05	6.510E-05	5.525E-04	2.411E-03	9.570E-03	
Pb-210	U-234	2.100E-04	6.363E-15	9.481E-14	3.511E-10	5.802E-10	2.307E-09	1.367E-08	1.161E-07	5.065E-07	2.010E-06	
Pb-210	U-234	1.998E-04	6.054E-15	9.020E-14	3.341E-10	5.520E-10	2.195E-09	1.301E-08	1.104E-07	4.819E-07	1.912E-06	
Pb-210	U-234	4.196E-08	1.272E-18	1.895E-17	7.017E-14	1.159E-13	4.611E-13	2.732E-12	2.319E-11	1.012E-10	4.017E-10	
Pb-210	U-234	2.000E-07	6.062E-18	9.031E-17	3.345E-13	5.526E-13	2.198E-12	1.302E-11	1.106E-10	4.824E-10	1.915E-09	

Pb-210	U-238	1.599E-03	2.740E-20	8.449E-19	4.998E-14	9.942E-14	6.705E-13	8.293E-12	1.898E-10	1.745E-09	1.448E-08
Pb-210	U-238	3.359E-07	5.756E-24	1.775E-22	1.050E-17	2.088E-17	1.408E-16	1.742E-15	3.987E-14	3.665E-13	3.040E-12
Pb-210	U-238	3.196E-07	5.477E-24	1.688E-22	9.988E-18	1.987E-17	1.340E-16	1.657E-15	3.793E-14	3.487E-13	2.893E-12
Pb-210	U-238	6.713E-11	1.139E-27	3.546E-26	2.098E-21	4.173E-21	2.815E-20	3.481E-19	7.968E-18	7.325E-17	6.076E-16
Pb-210	U-238	3.200E-10	5.483E-27	1.690E-25	1.000E-20	1.989E-20	1.342E-19	1.659E-18	3.798E-17	3.492E-16	2.896E-15
Pb-210	U-238	9.980E-01	1.710E-17	5.272E-16	3.119E-11	6.204E-11	4.184E-10	5.175E-09	1.185E-07	1.089E-06	9.032E-06
Pb-210	U-238	2.096E-04	3.592E-21	1.107E-19	6.551E-15	1.303E-14	8.788E-14	1.087E-12	2.488E-11	2.287E-10	1.897E-09

Individual Nuclide Dose Summed Over All Pathways

Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	DOSE(j,t), mrem/yr									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Pb-210	U-238	1.994E-04	3.417E-21	1.054E-19	6.233E-15	1.240E-14	8.361E-14	1.034E-12	2.367E-11	2.176E-10	1.805E-09	
Pb-210	U-238	4.189E-08	7.178E-25	2.213E-23	1.309E-18	2.604E-18	1.756E-17	2.172E-16	4.972E-15	4.571E-14	3.791E-13	
Pb-210	U-238	1.997E-07	3.421E-24	1.055E-22	6.240E-18	1.241E-17	8.371E-17	1.035E-15	2.370E-14	2.179E-13	1.807E-12	
Pb-210	äDOSE(j)		1.316E-05	9.132E-05	2.011E-02	2.748E-02	6.345E-02	1.750E-01	5.310E-01	1.080E+00	2.016E+00	
0Pu-238	Pu-238	1.319E-06	1.466E-06	1.454E-06	1.203E-06	1.156E-06	9.873E-07	6.650E-07	2.032E-07	2.817E-08	5.415E-10	
Pu-238	Pu-238	1.899E-08	2.110E-08	2.093E-08	1.732E-08	1.664E-08	1.421E-08	9.572E-09	2.925E-09	4.055E-10	7.794E-12	
Pu-238	äDOSE(j)		1.487E-06	1.475E-06	1.220E-06	1.173E-06	1.002E-06	6.746E-07	2.061E-07	2.858E-08	5.493E-10	
0U-234	Pu-238	1.319E-06	3.501E-13	1.047E-12	1.621E-11	1.903E-11	2.923E-11	4.868E-11	7.653E-11	8.703E-11	8.857E-11	
0Th-230	Pu-238	1.319E-06	5.981E-18	4.177E-17	1.094E-14	1.546E-14	4.030E-14	1.417E-13	6.427E-13	1.708E-12	3.954E-12	
0Ra-226	Pu-238	1.319E-06	1.439E-20	2.155E-19	9.074E-16	1.537E-15	6.702E-15	4.797E-14	5.725E-13	3.191E-12	1.498E-11	
0Pb-210	Pu-238	1.899E-08	1.938E-25	5.967E-24	3.398E-19	6.704E-19	4.377E-18	4.990E-17	9.032E-16	5.953E-15	3.035E-14	
Pb-210	Pu-238	3.989E-12	4.046E-29	1.246E-27	7.137E-23	1.408E-22	9.194E-22	1.048E-20	1.897E-19	1.250E-18	6.374E-18	
Pb-210	Pu-238	3.795E-12	3.849E-29	1.185E-27	6.790E-23	1.340E-22	8.747E-22	9.971E-21	1.805E-19	1.190E-18	6.064E-18	
Pb-210	Pu-238	7.972E-16	0.000E+00	0.000E+00	1.426E-26	2.814E-26	1.837E-25	2.094E-24	3.791E-23	2.499E-22	1.274E-21	
Pb-210	Pu-238	3.800E-15	0.000E+00	0.000E+00	6.799E-26	1.341E-25	8.758E-25	9.983E-24	1.807E-22	1.191E-21	6.072E-21	
Pb-210	Th-230	1.899E-08	1.491E-13	1.034E-12	2.277E-10	3.112E-10	7.185E-10	1.982E-09	6.007E-09	1.221E-08	2.272E-08	
Pb-210	Th-230	3.989E-12	3.131E-17	2.172E-16	4.784E-14	6.537E-14	1.509E-13	4.162E-13	1.262E-12	2.565E-12	4.773E-12	
Pb-210	Th-230	3.795E-12	2.979E-17	2.067E-16	4.551E-14	6.220E-14	1.436E-13	3.960E-13	1.200E-12	2.440E-12	4.541E-12	
Pb-210	Th-230	7.972E-16	6.258E-21	4.341E-20	9.560E-18	1.306E-17	3.016E-17	8.318E-17	2.521E-16	5.125E-16	9.539E-16	
Pb-210	Th-230	3.800E-15	2.983E-20	2.069E-19	4.557E-17	6.227E-17	1.438E-16	3.965E-16	1.202E-15	2.443E-15	4.547E-15	
Pb-210	U-234	1.899E-08	3.432E-19	5.114E-18	1.894E-14	3.129E-14	1.245E-13	7.375E-13	6.260E-12	2.732E-11	1.084E-10	
Pb-210	U-234	3.989E-12	7.210E-23	1.074E-21	3.978E-18	6.573E-18	2.614E-17	1.549E-16	1.315E-15	5.738E-15	2.277E-14	
Pb-210	U-234	3.795E-12	6.859E-23	1.022E-21	3.785E-18	6.254E-18	2.487E-17	1.474E-16	1.251E-15	5.459E-15	2.167E-14	
Pb-210	U-234	7.972E-16	1.441E-26	2.147E-25	7.950E-22	1.314E-21	5.224E-21	3.096E-20	2.628E-19	1.147E-18	4.551E-18	
Pb-210	U-234	3.800E-15	6.868E-26	1.023E-24	3.790E-21	6.261E-21	2.490E-20	1.476E-19	1.253E-18	5.466E-18	2.169E-17	
Pb-210	U-238	3.039E-11	3.086E-28	9.573E-27	5.663E-22	1.126E-21	7.597E-21	9.396E-20	2.151E-18	1.977E-17	1.640E-16	
Pb-210	U-238	6.383E-15	0.000E+00	0.000E+00	1.189E-25	2.366E-25	1.596E-24	1.974E-23	4.517E-22	4.153E-21	3.445E-20	
Pb-210	U-238	6.073E-15	0.000E+00	0.000E+00	1.132E-25	2.251E-25	1.518E-24	1.878E-23	4.298E-22	3.951E-21	3.277E-20	
Pb-210	U-238	1.276E-18	0.000E+00	0.000E+00	1.441E-29	4.699E-29	3.169E-28	3.944E-27	9.028E-26	8.299E-25	6.884E-24	
Pb-210	U-238	6.080E-18	0.000E+00	0.000E+00	1.126E-28	2.240E-28	1.511E-27	1.880E-26	4.303E-25	3.956E-24	3.281E-23	
Pb-210	U-238	1.896E-08	1.937E-25	5.973E-24	3.534E-19	7.029E-19	4.741E-18	5.863E-17	1.342E-15	1.234E-14	1.023E-13	
Pb-210	U-238	3.983E-12	4.044E-29	1.247E-27	7.422E-23	1.476E-22	9.957E-22	1.232E-20	2.819E-19	2.591E-18	2.150E-17	
Pb-210	U-238	3.789E-12	3.848E-29	1.186E-27	7.062E-23	1.405E-22	9.473E-22	1.172E-20	2.682E-19	2.466E-18	2.045E-17	
Pb-210	U-238	7.959E-16	0.000E+00	0.000E+00	1.483E-26	2.950E-26	1.990E-25	2.461E-24	5.633E-23	5.179E-22	4.296E-21	
Pb-210	U-238	3.794E-15	0.000E+00	0.000E+00	7.070E-26	1.406E-25	9.485E-25	1.173E-23	2.685E-22	2.469E-21	2.048E-20	
Pb-210	äDOSE(j)		1.491E-13	1.035E-12	2.279E-10	3.114E-10	7.189E-10	1.983E-09	6.016E-09	1.224E-08	2.284E-08	
0Pu-238	Pu-238	2.100E-04	2.332E-04	2.314E-04	1.914E-04	1.840E-04	1.571E-04	1.058E-04	3.234E-05	4.483E-06	8.616E-08	
Pu-238	Pu-238	2.771E-10	3.079E-10	3.055E-10	2.527E-10	2.429E-10	2.074E-10	1.397E-10	4.268E-11	5.917E-12	1.137E-13	
Pu-238	äDOSE(j)		2.332E-04	2.314E-04	1.914E-04	1.840E-04	1.571E-04	1.058E-04	3.234E-05	4.483E-06	8.616E-08	
0Ra-226	Pu-238	2.100E-04	5.819E-18	8.714E-17	3.670E-13	6.216E-13	2.710E-12	1.940E-11	2.315E-10	1.291E-09	6.059E-09	

Ra-226	Pu-238	2.771E-10	7.682E-24	1.150E-22	4.844E-19	8.205E-19	3.578E-18	2.561E-17	3.056E-16	1.704E-15	7.999E-15
Ra-226	Pu-238	3.989E-12	1.106E-25	1.656E-24	6.973E-21	1.181E-20	5.150E-20	3.686E-19	4.399E-18	2.452E-17	1.151E-16

Individual Nuclide Dose Summed Over All Pathways

Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	DOSE(j,t), mrem/yr									
(j)	(i)		t= 0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03	
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Ra-226	Th-230	2.100E-04	2.694E-06	8.080E-06	1.366E-04	1.632E-04	2.691E-04	5.297E-04	1.278E-03	2.419E-03	4.353E-03	
Ra-226	Th-230	2.771E-10	3.556E-12	1.067E-11	1.804E-10	2.155E-10	3.552E-10	6.992E-10	1.687E-09	3.193E-09	5.746E-09	
Ra-226	Th-230	3.989E-12	5.118E-14	1.535E-13	2.596E-12	3.102E-12	5.113E-12	1.006E-11	2.428E-11	4.596E-11	8.271E-11	
Ra-226	U-234	2.100E-04	8.257E-12	5.779E-11	1.605E-08	2.294E-08	6.271E-08	2.465E-07	1.498E-06	5.769E-06	2.148E-05	
Ra-226	U-234	2.771E-10	1.090E-17	7.629E-17	2.119E-14	3.029E-14	8.278E-14	3.254E-13	1.978E-12	7.615E-12	2.836E-11	
Ra-226	U-234	3.989E-12	1.569E-19	1.098E-18	3.050E-16	4.360E-16	1.192E-15	4.684E-15	2.847E-14	1.096E-13	4.082E-13	
Ra-226	U-238	3.359E-07	9.326E-21	1.399E-19	6.171E-16	1.055E-15	4.778E-15	3.745E-14	5.704E-13	4.427E-12	3.353E-11	
Ra-226	U-238	4.434E-13	1.230E-26	1.846E-25	8.145E-22	1.393E-21	6.307E-21	4.943E-20	7.529E-19	5.844E-18	4.426E-17	
Ra-226	U-238	6.383E-15	1.745E-28	2.656E-27	1.172E-23	2.005E-23	9.079E-23	7.115E-22	1.084E-20	8.412E-20	6.371E-19	
Ra-226	U-238	2.096E-04	5.819E-18	8.728E-17	3.851E-13	6.584E-13	2.982E-12	2.337E-11	3.559E-10	2.763E-09	2.093E-08	
Ra-226	U-238	2.767E-10	7.682E-24	1.152E-22	5.083E-19	8.691E-19	3.936E-18	3.085E-17	4.698E-16	3.647E-15	2.762E-14	
Ra-226	U-238	3.983E-12	1.106E-25	1.658E-24	7.316E-21	1.251E-20	5.665E-20	4.440E-19	6.763E-18	5.249E-17	3.976E-16	
Ra-226	äDOSE(j)		2.694E-06	8.080E-06	1.367E-04	1.633E-04	2.692E-04	5.299E-04	1.279E-03	2.425E-03	4.375E-03	
0Pb-210	Pu-238	2.771E-10	1.771E-27	5.452E-26	3.105E-21	6.126E-21	3.999E-20	4.559E-19	8.253E-18	5.439E-17	2.773E-16	
Pb-210	Pu-238	2.637E-10	1.685E-27	5.187E-26	2.954E-21	5.828E-21	3.805E-20	4.338E-19	7.852E-18	5.175E-17	2.638E-16	
Pb-210	Pu-238	5.538E-14	0.000E+00	1.057E-29	6.205E-25	1.224E-24	7.993E-24	9.111E-23	1.649E-21	1.087E-20	5.541E-20	
Pb-210	Pu-238	2.640E-13	0.000E+00	5.037E-29	2.958E-24	5.835E-24	3.810E-23	4.343E-22	7.861E-21	5.181E-20	2.641E-19	
Pb-210	Th-230	1.319E-06	6.485E-12	4.499E-11	9.907E-09	1.354E-08	3.126E-08	8.621E-08	2.613E-07	5.311E-07	9.886E-07	
Pb-210	Th-230	2.771E-10	1.362E-15	9.450E-15	2.081E-12	2.844E-12	6.565E-12	1.811E-11	5.489E-11	1.116E-10	2.076E-10	
Pb-210	Th-230	2.637E-10	1.296E-15	8.991E-15	1.980E-12	2.706E-12	6.246E-12	1.723E-11	5.222E-11	1.061E-10	1.976E-10	
Pb-210	Th-230	5.538E-14	2.722E-19	1.888E-18	4.159E-16	5.683E-16	1.312E-15	3.619E-15	1.097E-14	2.229E-14	4.150E-14	
Pb-210	Th-230	2.640E-13	1.298E-18	9.002E-18	1.982E-15	2.709E-15	6.254E-15	1.725E-14	5.229E-14	1.063E-13	1.978E-13	
Pb-210	U-234	1.319E-06	1.493E-17	2.225E-16	8.239E-13	1.361E-12	5.414E-12	3.208E-11	2.723E-10	1.188E-09	4.717E-09	
Pb-210	U-234	2.771E-10	3.136E-21	4.673E-20	1.731E-16	2.859E-16	1.137E-15	6.739E-15	5.720E-14	2.496E-13	9.907E-13	
Pb-210	U-234	2.637E-10	2.984E-21	4.446E-20	1.647E-16	2.721E-16	1.082E-15	6.412E-15	5.442E-14	2.375E-13	9.426E-13	
Pb-210	U-234	5.538E-14	6.268E-25	9.338E-24	3.458E-20	5.714E-20	2.273E-19	1.347E-18	1.143E-17	4.988E-17	1.980E-16	
Pb-210	U-234	2.640E-13	2.988E-24	4.451E-23	1.649E-19	2.724E-19	1.083E-18	6.419E-18	5.449E-17	2.378E-16	9.438E-16	
Pb-210	U-238	2.111E-09	1.351E-26	4.164E-25	2.464E-20	4.900E-20	3.305E-19	4.088E-18	9.356E-17	8.601E-16	7.134E-15	
Pb-210	U-238	4.434E-13	0.000E+00	8.483E-29	5.174E-24	1.029E-23	6.942E-23	8.586E-22	1.965E-20	1.807E-19	1.499E-18	
Pb-210	U-238	4.219E-13	0.000E+00	8.071E-29	4.923E-24	9.792E-24	6.604E-23	8.169E-22	1.870E-20	1.719E-19	1.426E-18	
Pb-210	U-238	8.862E-17	0.000E+00	0.000E+00	1.034E-27	2.057E-27	1.387E-26	1.716E-25	3.927E-24	3.610E-23	2.995E-22	
Pb-210	U-238	4.224E-16	0.000E+00	0.000E+00	4.929E-27	9.804E-27	6.612E-26	8.179E-25	1.872E-23	1.721E-22	1.427E-21	
Pb-210	U-238	1.317E-06	8.428E-24	2.598E-22	1.537E-17	3.058E-17	2.062E-16	2.551E-15	5.838E-14	5.367E-13	4.452E-12	
Pb-210	U-238	2.767E-10	1.770E-27	5.458E-26	3.229E-21	6.422E-21	4.332E-20	5.358E-19	1.226E-17	1.127E-16	9.351E-16	
Pb-210	U-238	2.633E-10	1.684E-27	5.193E-26	3.072E-21	6.110E-21	4.121E-20	5.097E-19	1.167E-17	1.073E-16	8.897E-16	
Pb-210	U-238	5.530E-14	0.000E+00	1.058E-29	6.453E-25	1.283E-24	8.656E-24	1.071E-22	2.451E-21	2.253E-20	1.869E-19	
Pb-210	U-238	2.636E-13	0.000E+00	5.043E-29	3.076E-24	6.118E-24	4.126E-23	5.103E-22	1.168E-20	1.074E-19	8.907E-19	
Pb-210	äDOSE(j)		6.488E-12	4.501E-11	9.912E-09	1.355E-08	3.127E-08	8.628E-08	2.617E-07	5.325E-07	9.937E-07	
0Pu-238	Pu-238	3.989E-12	4.432E-12	4.397E-12	3.637E-12	3.496E-12	2.985E-12	2.011E-12	6.144E-13	8.518E-14	1.637E-15	
Pu-238	Pu-238	1.998E-04	2.219E-04	2.202E-04	1.821E-04	1.751E-04	1.495E-04	1.007E-04	3.076E-05	4.265E-06	8.198E-08	

Pu-238	äDOSE(j)		2.219E-04	2.202E-04	1.821E-04	1.751E-04	1.495E-04	1.007E-04	3.076E-05	4.265E-06	8.198E-08
0Ra-226	Pu-238	1.998E-04	1.924E-18	2.880E-17	1.213E-13	2.055E-13	8.960E-13	6.413E-12	7.654E-11	4.267E-10	2.003E-09
Ra-226	Pu-238	3.795E-12	3.655E-26	5.473E-25	2.305E-21	3.904E-21	1.702E-20	1.219E-19	1.454E-18	8.107E-18	3.806E-17
Ra-226	Th-230	1.998E-04	8.905E-07	2.671E-06	4.517E-05	5.396E-05	8.896E-05	1.751E-04	4.224E-04	7.996E-04	1.439E-03
Ra-226	Th-230	2.637E-10	1.175E-12	3.526E-12	5.962E-11	7.123E-11	1.174E-10	2.311E-10	5.575E-10	1.055E-09	1.899E-09
Ra-226	Th-230	3.795E-12	1.692E-14	5.075E-14	8.582E-13	1.025E-12	1.690E-12	3.327E-12	8.025E-12	1.519E-11	2.734E-11

Individual Nuclide Dose Summed Over All Pathways

Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	DOSE(j,t), mrem/yr									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Ra-226	U-234	1.998E-04	2.730E-12	1.911E-11	5.306E-09	7.585E-09	2.073E-08	8.150E-08	4.953E-07	1.907E-06	7.101E-06	
Ra-226	U-234	2.637E-10	3.603E-18	2.522E-17	7.004E-15	1.001E-14	2.737E-14	1.076E-13	6.538E-13	2.517E-12	9.374E-12	
Ra-226	U-234	3.795E-12	5.186E-20	3.630E-19	1.008E-16	1.441E-16	3.939E-16	1.548E-15	9.411E-15	3.623E-14	1.349E-13	
Ra-226	U-238	3.196E-07	3.083E-21	4.624E-20	2.040E-16	3.488E-16	1.580E-15	1.238E-14	1.886E-13	1.464E-12	1.109E-11	
Ra-226	U-238	4.219E-13	4.062E-27	6.103E-26	2.693E-22	4.604E-22	2.085E-21	1.634E-20	2.489E-19	1.932E-18	1.463E-17	
Ra-226	U-238	6.073E-15	5.603E-29	8.770E-28	3.876E-24	6.627E-24	3.001E-23	2.352E-22	3.583E-21	2.781E-20	2.106E-19	
Ra-226	U-238	1.994E-04	1.924E-18	2.885E-17	1.273E-13	2.177E-13	9.856E-13	7.725E-12	1.177E-10	9.133E-10	6.917E-09	
Ra-226	U-238	2.633E-10	2.539E-24	3.809E-23	1.680E-19	2.873E-19	1.301E-18	1.020E-17	1.553E-16	1.206E-15	9.131E-15	
Ra-226	U-238	3.789E-12	3.655E-26	5.482E-25	2.418E-21	4.136E-21	1.873E-20	1.468E-19	2.236E-18	1.735E-17	1.314E-16	
Ra-226	äDOSE(j)		8.905E-07	2.671E-06	4.517E-05	5.397E-05	8.898E-05	1.752E-04	4.229E-04	8.015E-04	1.446E-03	
0Pu-238	Pu-238	2.637E-10	2.929E-10	2.906E-10	2.404E-10	2.311E-10	1.973E-10	1.329E-10	4.061E-11	5.630E-12	1.082E-13	
Pu-238	Pu-238	3.795E-12	4.216E-12	4.183E-12	3.460E-12	3.326E-12	2.840E-12	1.913E-12	5.845E-13	8.104E-14	1.558E-15	
Pu-238	äDOSE(j)		2.971E-10	2.948E-10	2.439E-10	2.344E-10	2.001E-10	1.348E-10	4.119E-11	5.711E-12	1.098E-13	
0Ra-226	Pu-238	2.637E-10	2.539E-24	3.802E-23	1.601E-19	2.712E-19	1.183E-18	8.466E-18	1.010E-16	5.632E-16	2.644E-15	
0Pu-238	Pu-238	4.196E-08	4.661E-08	4.624E-08	3.825E-08	3.677E-08	3.140E-08	2.115E-08	6.462E-09	8.959E-10	1.722E-11	
Pu-238	Pu-238	5.538E-14	6.153E-14	6.104E-14	5.050E-14	4.854E-14	4.144E-14	2.791E-14	8.530E-15	1.183E-15	2.273E-17	
Pu-238	äDOSE(j)		4.661E-08	4.624E-08	3.825E-08	3.677E-08	3.140E-08	2.115E-08	6.462E-09	8.959E-10	1.722E-11	
0Ra-226	Pu-238	4.196E-08	1.109E-21	1.661E-20	6.996E-17	1.185E-16	5.167E-16	3.699E-15	4.414E-14	2.461E-13	1.155E-12	
Ra-226	Pu-238	5.538E-14	1.464E-27	2.193E-26	9.235E-23	1.564E-22	6.821E-22	4.882E-21	5.827E-20	3.248E-19	1.525E-18	
Ra-226	Pu-238	7.972E-16	2.075E-29	3.106E-28	1.329E-24	2.251E-24	9.818E-24	7.028E-23	8.387E-22	4.675E-21	2.195E-20	
Ra-226	Th-230	4.196E-08	5.136E-10	1.540E-09	2.605E-08	3.112E-08	5.130E-08	1.010E-07	2.436E-07	4.611E-07	8.299E-07	
Ra-226	Th-230	5.538E-14	6.779E-16	2.033E-15	3.439E-14	4.108E-14	6.772E-14	1.333E-13	3.215E-13	6.087E-13	1.095E-12	
Ra-226	Th-230	7.972E-16	9.758E-18	2.927E-17	4.949E-16	5.913E-16	9.748E-16	1.919E-15	4.628E-15	8.762E-15	1.577E-14	
Ra-226	U-234	4.196E-08	1.574E-15	1.102E-14	3.060E-12	4.374E-12	1.196E-11	4.700E-11	2.857E-10	1.100E-09	4.095E-09	
Ra-226	U-234	5.538E-14	2.078E-21	1.454E-20	4.039E-18	5.774E-18	1.578E-17	6.204E-17	3.771E-16	1.452E-15	5.406E-15	
Ra-226	U-234	7.972E-16	2.991E-23	2.093E-22	5.814E-20	8.311E-20	2.272E-19	8.930E-19	5.427E-18	2.090E-17	7.781E-17	
Ra-226	U-238	6.713E-11	1.778E-24	2.667E-23	1.176E-19	2.012E-19	9.109E-19	7.140E-18	1.087E-16	8.441E-16	6.393E-15	
Ra-226	U-238	8.862E-17	0.000E+00	3.464E-29	1.553E-25	2.655E-25	1.202E-24	9.424E-24	1.435E-22	1.114E-21	8.439E-21	
Ra-226	U-238	1.276E-18	0.000E+00	0.000E+00	2.234E-27	3.820E-27	1.731E-26	1.357E-25	2.066E-24	1.604E-23	1.215E-22	
Ra-226	U-238	4.189E-08	1.109E-21	1.664E-20	7.341E-17	1.255E-16	5.684E-16	4.455E-15	6.786E-14	5.267E-13	3.989E-12	
Ra-226	U-238	5.530E-14	1.464E-27	2.196E-26	9.690E-23	1.657E-22	7.503E-22	5.881E-21	8.957E-20	6.952E-19	5.266E-18	
Ra-226	U-238	7.959E-16	2.075E-29	3.112E-28	1.395E-24	2.385E-24	1.080E-23	8.465E-23	1.289E-21	1.001E-20	7.580E-20	
Ra-226	äDOSE(j)		5.136E-10	1.540E-09	2.605E-08	3.113E-08	5.132E-08	1.010E-07	2.439E-07	4.622E-07	8.340E-07	
0Pu-238	Pu-238	7.972E-16	8.856E-16	8.786E-16	7.268E-16	6.987E-16	5.965E-16	4.018E-16	1.228E-16	1.702E-17	3.271E-19	
Pu-238	Pu-238	2.000E-07	2.222E-07	2.204E-07	1.823E-07	1.753E-07	1.497E-07	1.008E-07	3.080E-08	4.270E-09	8.207E-11	
Pu-238	äDOSE(j)		2.222E-07	2.204E-07	1.823E-07	1.753E-07	1.497E-07	1.008E-07	3.080E-08	4.270E-09	8.207E-11	
0Ra-226	Pu-238	2.000E-07	9.136E-23	1.368E-21	5.761E-18	9.758E-18	4.255E-17	3.046E-16	3.635E-15	2.026E-14	9.513E-14	
Ra-226	Pu-238	3.800E-15	0.000E+00	2.278E-29	1.095E-25	1.854E-25	8.085E-25	5.787E-24	6.906E-23	3.850E-22	1.807E-21	
Ra-226	Th-230	2.000E-07	4.229E-11	1.269E-10	2.145E-09	2.563E-09	4.225E-09	8.316E-09	2.006E-08	3.797E-08	6.834E-08	
Ra-226	Th-230	2.640E-13	5.583E-17	1.674E-16	2.832E-15	3.383E-15	5.577E-15	1.098E-14	2.648E-14	5.013E-14	9.021E-14	

Ra-226	Th-230	3.800E-15	8.036E-19	2.410E-18	4.076E-17	4.870E-17	8.027E-17	1.580E-16	3.811E-16	7.215E-16	1.298E-15
Ra-226	U-234	2.000E-07	1.296E-16	9.073E-16	2.520E-13	3.602E-13	9.846E-13	3.871E-12	2.352E-11	9.057E-11	3.373E-10
Ra-226	U-234	2.640E-13	1.711E-22	1.198E-21	3.326E-19	4.755E-19	1.300E-18	5.109E-18	3.105E-17	1.195E-16	4.452E-16

Individual Nuclide Dose Summed Over All Pathways

Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	DOSE(j,t), mrem/yr									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Ra-226	U-234	3.800E-15	2.463E-24	1.724E-23	4.788E-21	6.844E-21	1.871E-20	7.354E-20	4.469E-19	1.721E-18	6.408E-18	
Ra-226	U-238	3.200E-10	1.464E-25	2.196E-24	9.688E-21	1.657E-20	7.501E-20	5.879E-19	8.955E-18	6.951E-17	5.265E-16	
Ra-226	U-238	4.224E-16	0.000E+00	0.000E+00	1.279E-26	2.187E-26	9.902E-26	7.761E-25	1.182E-23	9.175E-23	6.949E-22	
Ra-226	U-238	6.080E-18	0.000E+00	0.000E+00	1.771E-28	3.148E-28	1.425E-27	1.117E-26	1.701E-25	1.321E-24	1.000E-23	
Ra-226	U-238	1.997E-07	9.136E-23	1.370E-21	6.045E-18	1.034E-17	4.681E-17	3.669E-16	5.588E-15	4.337E-14	3.285E-13	
Ra-226	U-238	2.636E-13	1.161E-28	1.809E-27	7.980E-24	1.364E-23	6.179E-23	4.843E-22	7.376E-21	5.725E-20	4.336E-19	
Ra-226	U-238	3.794E-15	0.000E+00	2.282E-29	1.149E-25	1.964E-25	8.894E-25	6.971E-24	1.062E-22	8.241E-22	6.242E-21	
Ra-226	äDOSE(j)		4.229E-11	1.269E-10	2.145E-09	2.563E-09	4.226E-09	8.320E-09	2.008E-08	3.806E-08	6.868E-08	
0Pu-238	Pu-238	2.640E-13	2.933E-13	2.910E-13	2.407E-13	2.314E-13	1.975E-13	1.331E-13	4.066E-14	5.637E-15	1.083E-16	
Pu-238	Pu-238	3.800E-15	4.221E-15	4.188E-15	3.465E-15	3.330E-15	2.843E-15	1.915E-15	5.852E-16	8.114E-17	1.559E-18	
Pu-238	äDOSE(j)		2.975E-13	2.952E-13	2.442E-13	2.347E-13	2.004E-13	1.350E-13	4.124E-14	5.718E-15	1.099E-16	
0Ra-226	Pu-238	2.640E-13	1.161E-28	1.806E-27	7.605E-24	1.288E-23	5.617E-23	4.020E-22	4.798E-21	2.675E-20	1.256E-19	
0Pu-239	Pu-239	5.901E-04	7.252E-04	7.251E-04	7.246E-04	7.245E-04	7.241E-04	7.231E-04	7.200E-04	7.148E-04	7.046E-04	
Pu-239	Pu-239	1.633E-06	2.007E-06	2.007E-06	2.006E-06	2.005E-06	2.004E-06	2.001E-06	1.993E-06	1.978E-06	1.950E-06	
Pu-239	äDOSE(j)		7.272E-04	7.272E-04	7.267E-04	7.265E-04	7.261E-04	7.251E-04	7.220E-04	7.168E-04	7.066E-04	
0U-235	Pu-239	5.901E-04	5.149E-13	1.545E-12	2.625E-11	3.140E-11	5.197E-11	1.033E-10	2.570E-10	5.117E-10	1.016E-09	
U-235	Pu-239	1.633E-06	1.425E-15	4.275E-15	7.265E-14	8.689E-14	1.438E-13	2.860E-13	7.114E-13	1.416E-12	2.811E-12	
U-235	Pu-239	8.257E-06	7.205E-15	2.161E-14	3.673E-13	4.393E-13	7.271E-13	1.446E-12	3.597E-12	7.160E-12	1.421E-11	
U-235	Pu-239	2.285E-08	1.994E-17	5.982E-17	1.017E-15	1.216E-15	2.012E-15	4.002E-15	9.954E-15	1.982E-14	3.933E-14	
U-235	Pu-239	4.954E-10	4.323E-19	1.297E-18	2.204E-17	2.636E-17	4.363E-17	8.677E-17	2.158E-16	4.296E-16	8.526E-16	
U-235	Pu-239	1.371E-12	1.196E-21	3.589E-21	6.100E-20	7.295E-20	1.208E-19	2.401E-19	5.973E-19	1.189E-18	2.360E-18	
U-235	Pu-239	9.829E-01	8.577E-10	2.573E-09	4.372E-08	5.229E-08	8.656E-08	1.721E-07	4.281E-07	8.523E-07	1.692E-06	
U-235	Pu-239	2.720E-03	2.374E-12	7.121E-12	1.210E-10	1.447E-10	2.396E-10	4.764E-10	1.185E-09	2.359E-09	4.682E-09	
U-235	Pu-239	1.375E-02	1.200E-11	3.600E-11	6.118E-10	7.317E-10	1.211E-09	2.409E-09	5.991E-09	1.193E-08	2.367E-08	
U-235	Pu-239	3.806E-05	3.321E-14	9.964E-14	1.693E-12	2.025E-12	3.352E-12	6.666E-12	1.658E-11	3.301E-11	6.551E-11	
U-235	Pu-239	8.252E-07	7.201E-16	2.160E-15	3.671E-14	4.391E-14	7.268E-14	1.445E-13	3.595E-13	7.156E-13	1.420E-12	
U-235	Pu-239	2.284E-09	1.993E-18	5.979E-18	1.016E-16	1.215E-16	2.011E-16	4.000E-16	9.948E-16	1.981E-15	3.931E-15	
U-235	U-235	9.835E-01	1.743E+00	1.743E+00	1.743E+00	1.743E+00	1.743E+00	1.743E+00	1.743E+00	1.743E+00	1.743E+00	
U-235	äDOSE(j)		1.743E+00	1.743E+00	1.743E+00	1.743E+00	1.743E+00	1.743E+00	1.743E+00	1.743E+00	1.743E+00	
0Pa-231	Pu-239	5.901E-04	5.536E-18	3.875E-17	1.080E-14	1.544E-14	4.232E-14	1.675E-13	1.038E-12	4.126E-12	1.635E-11	
Pa-231	Pu-239	1.633E-06	1.532E-20	1.072E-19	2.988E-17	4.274E-17	1.171E-16	4.635E-16	2.872E-15	1.142E-14	4.525E-14	
Pa-231	Pu-239	8.257E-06	7.746E-20	5.422E-19	1.511E-16	2.161E-16	5.922E-16	2.343E-15	1.452E-14	5.773E-14	2.287E-13	
Pa-231	Pu-239	2.285E-08	2.144E-22	1.501E-21	4.181E-19	5.980E-19	1.639E-18	6.485E-18	4.019E-17	1.598E-16	6.331E-16	
Pa-231	Pu-239	4.954E-10	4.648E-24	3.253E-23	9.064E-21	1.297E-20	3.553E-20	1.406E-19	8.713E-19	3.464E-18	1.373E-17	
Pa-231	Pu-239	1.371E-12	1.286E-26	9.004E-26	2.509E-23	3.588E-23	9.834E-23	3.891E-22	2.411E-21	9.586E-21	3.799E-20	
Pa-231	Pu-239	9.829E-01	9.221E-15	6.455E-14	1.798E-11	2.572E-11	7.049E-11	2.789E-10	1.729E-09	6.872E-09	2.723E-08	
Pa-231	Pu-239	2.720E-03	2.552E-17	1.786E-16	4.977E-14	7.119E-14	1.951E-13	7.720E-13	4.784E-12	1.902E-11	7.537E-11	
Pa-231	Pu-239	1.375E-02	1.290E-16	9.031E-16	2.516E-13	3.599E-13	9.863E-13	3.903E-12	2.419E-11	9.615E-11	3.810E-10	
Pa-231	Pu-239	3.806E-05	3.571E-19	2.500E-18	6.964E-16	9.961E-16	2.730E-15	1.080E-14	6.694E-14	2.661E-13	1.055E-12	
Pa-231	Pu-239	8.252E-07	7.742E-21	5.419E-20	1.510E-17	2.160E-17	5.918E-17	2.342E-16	1.451E-15	5.769E-15	2.286E-14	

Pa-231	Pu-239	2.284E-09	2.143E-23	1.500E-22	4.179E-20	5.977E-20	1.638E-19	6.482E-19	4.017E-18	1.597E-17	6.328E-17
Pa-231	U-235	9.835E-01	2.811E-05	8.434E-05	1.433E-03	1.714E-03	2.838E-03	5.645E-03	1.405E-02	2.799E-02	5.565E-02
Pa-231	U-235	2.722E-03	7.781E-08	2.334E-07	3.967E-06	4.745E-06	7.854E-06	1.562E-05	3.888E-05	7.747E-05	1.540E-04
Pa-231	U-235	1.376E-02	3.934E-07	1.180E-06	2.006E-05	2.399E-05	3.971E-05	7.898E-05	1.965E-04	3.916E-04	7.787E-04

Individual Nuclide Dose Summed Over All Pathways

Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	DOSE(j,t), mrem/yr									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Pa-231	U-235	3.809E-05		1.089E-09	3.266E-09	5.551E-08	6.639E-08	1.099E-07	2.186E-07	5.440E-07	1.084E-06	2.155E-06
Pa-231	U-235	8.257E-07		2.360E-11	7.081E-11	1.203E-09	1.439E-09	2.383E-09	4.739E-09	1.179E-08	2.350E-08	4.673E-08
Pa-231	U-235	2.285E-09		6.533E-14	1.960E-13	3.331E-12	3.984E-12	6.594E-12	1.312E-11	3.264E-11	6.504E-11	1.293E-10
Pa-231	äDOSE(j)			2.859E-05	8.576E-05	1.457E-03	1.743E-03	2.886E-03	5.739E-03	1.428E-02	2.846E-02	5.659E-02
0Ac-227	Pu-239	5.901E-04		1.052E-19	1.567E-18	5.799E-15	9.581E-15	3.811E-14	2.263E-13	1.947E-12	8.749E-12	3.690E-11
Ac-227	Pu-239	9.829E-01		1.752E-16	2.610E-15	9.659E-12	1.596E-11	6.347E-11	3.769E-10	3.243E-09	1.457E-08	6.147E-08
Ac-227	U-235	9.835E-01		7.110E-07	4.933E-06	1.085E-03	1.483E-03	3.427E-03	9.497E-03	2.952E-02	6.304E-02	1.295E-01
Ac-227	äDOSE(j)			7.110E-07	4.933E-06	1.085E-03	1.483E-03	3.427E-03	9.497E-03	2.952E-02	6.304E-02	1.295E-01
0Ac-227	Pu-239	1.633E-06		2.933E-22	4.370E-21	1.617E-17	2.672E-17	1.063E-16	6.310E-16	5.430E-15	2.440E-14	1.029E-13
Ac-227	Pu-239	8.257E-06		1.267E-21	1.887E-20	6.983E-17	1.154E-16	4.589E-16	2.725E-15	2.345E-14	1.054E-13	4.444E-13
Ac-227	Pu-239	2.720E-03		4.886E-19	7.279E-18	2.694E-14	4.450E-14	1.770E-13	1.051E-12	9.044E-12	4.064E-11	1.714E-10
Ac-227	U-235	2.722E-03		1.983E-09	1.376E-08	3.027E-06	4.137E-06	9.557E-06	2.648E-05	8.233E-05	1.758E-04	3.612E-04
Ac-227	äDOSE(j)			1.983E-09	1.376E-08	3.027E-06	4.137E-06	9.557E-06	2.648E-05	8.233E-05	1.758E-04	3.612E-04
0Pu-239	Pu-239	8.257E-06		1.015E-05	1.015E-05	1.014E-05	1.014E-05	1.013E-05	1.012E-05	1.007E-05	1.000E-05	9.859E-06
Pu-239	Pu-239	2.285E-08		2.808E-08	2.808E-08	2.806E-08	2.806E-08	2.804E-08	2.800E-08	2.788E-08	2.768E-08	2.729E-08
Pu-239	äDOSE(j)			1.017E-05	1.017E-05	1.017E-05	1.017E-05	1.016E-05	1.015E-05	1.010E-05	1.003E-05	9.886E-06
0Ac-227	Pu-239	2.285E-08		3.536E-24	5.269E-23	1.950E-19	3.221E-19	1.281E-18	7.608E-18	6.546E-17	2.942E-16	1.241E-15
Ac-227	Pu-239	4.954E-10		8.555E-26	1.275E-24	4.716E-21	7.793E-21	3.099E-20	1.840E-19	1.584E-18	7.116E-18	3.001E-17
Ac-227	Pu-239	3.806E-05		5.890E-21	8.776E-20	3.248E-16	5.366E-16	2.134E-15	1.267E-14	1.090E-13	4.900E-13	2.067E-12
Ac-227	U-235	3.809E-05		2.391E-11	1.658E-10	3.650E-08	4.988E-08	1.152E-07	3.193E-07	9.926E-07	2.120E-06	4.355E-06
Ac-227	äDOSE(j)			2.391E-11	1.658E-10	3.650E-08	4.988E-08	1.152E-07	3.193E-07	9.926E-07	2.120E-06	4.355E-06
0Pu-239	Pu-239	4.954E-10		6.088E-10	6.088E-10	6.084E-10	6.083E-10	6.080E-10	6.071E-10	6.045E-10	6.001E-10	5.916E-10
Pu-239	Pu-239	1.371E-12		1.685E-12	1.685E-12	1.684E-12	1.684E-12	1.683E-12	1.680E-12	1.673E-12	1.661E-12	1.637E-12
Pu-239	äDOSE(j)			6.105E-10	6.105E-10	6.101E-10	6.100E-10	6.096E-10	6.088E-10	6.062E-10	6.018E-10	5.932E-10
0Ac-227	Pu-239	1.371E-12		2.386E-28	3.555E-27	1.316E-23	2.174E-23	8.645E-23	5.134E-22	4.417E-21	1.985E-20	8.372E-20
Ac-227	Pu-239	2.284E-09		3.975E-25	5.922E-24	2.191E-20	3.621E-20	1.440E-19	8.551E-19	7.357E-18	3.306E-17	1.395E-16
Ac-227	U-235	2.285E-09		1.613E-15	1.119E-14	2.463E-12	3.366E-12	7.775E-12	2.155E-11	6.698E-11	1.430E-10	2.939E-10
Ac-227	äDOSE(j)			1.613E-15	1.119E-14	2.463E-12	3.366E-12	7.775E-12	2.155E-11	6.698E-11	1.430E-10	2.939E-10
0Pu-239	Pu-239	9.829E-01		1.208E+00	1.208E+00	1.207E+00	1.207E+00	1.206E+00	1.204E+00	1.199E+00	1.191E+00	1.174E+00
Pu-239	Pu-239	2.720E-03		3.343E-03	3.343E-03	3.341E-03	3.340E-03	3.338E-03	3.333E-03	3.319E-03	3.295E-03	3.248E-03
Pu-239	äDOSE(j)			1.211E+00	1.211E+00	1.210E+00	1.210E+00	1.209E+00	1.208E+00	1.203E+00	1.194E+00	1.177E+00
0Pu-239	Pu-239	1.375E-02		1.690E-02	1.690E-02	1.689E-02	1.689E-02	1.688E-02	1.685E-02	1.678E-02	1.666E-02	1.642E-02
Pu-239	Pu-239	3.806E-05		4.678E-05	4.677E-05	4.674E-05	4.674E-05	4.671E-05	4.664E-05	4.644E-05	4.611E-05	4.545E-05
Pu-239	äDOSE(j)			1.695E-02	1.695E-02	1.694E-02	1.693E-02	1.692E-02	1.690E-02	1.683E-02	1.671E-02	1.647E-02
0Ac-227	Pu-239	1.375E-02		2.110E-18	3.143E-17	1.163E-13	1.922E-13	7.643E-13	4.539E-12	3.905E-11	1.755E-10	7.402E-10
Ac-227	U-235	1.376E-02		8.562E-09	5.940E-08	1.307E-05	1.786E-05	4.127E-05	1.144E-04	3.555E-04	7.591E-04	1.560E-03
Ac-227	äDOSE(j)			8.562E-09	5.940E-08	1.307E-05	1.786E-05	4.127E-05	1.144E-04	3.555E-04	7.591E-04	1.560E-03
0Pu-239	Pu-239	8.252E-07		1.014E-06	1.014E-06	1.013E-06	1.013E-06	1.013E-06	1.011E-06	1.007E-06	9.996E-07	9.854E-07
Pu-239	Pu-239	2.284E-09		2.807E-09	2.807E-09	2.805E-09	2.804E-09	2.803E-09	2.799E-09	2.787E-09	2.767E-09	2.727E-09
Pu-239	äDOSE(j)			1.017E-06	1.017E-06	1.016E-06	1.016E-06	1.015E-06	1.014E-06	1.010E-06	1.002E-06	9.881E-07

Individual Nuclide Dose Summed Over All Pathways

Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	DOSE(j,t), mrem/yr									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Ac-227	Pu-239	8.252E-07		1.425E-22	2.123E-21	7.856E-18	1.298E-17	5.163E-17	3.065E-16	2.638E-15	1.185E-14	4.999E-14
Ac-227	U-235	8.257E-07		5.783E-13	4.012E-12	8.829E-10	1.207E-09	2.787E-09	7.724E-09	2.401E-08	5.127E-08	1.054E-07
Ac-227	äDOSE(j)			5.783E-13	4.012E-12	8.829E-10	1.207E-09	2.787E-09	7.724E-09	2.401E-08	5.127E-08	1.054E-07
ORu-106	Ru-106	1.000E+00		1.958E+00	9.943E-01	8.591E-08	2.901E-09	3.770E-15	0.000E+00	0.000E+00	0.000E+00	0.000E+00
OSr-90	Sr-90	1.000E+00		1.785E-01	1.742E-01	9.776E-02	8.667E-02	5.355E-02	1.607E-02	4.340E-04	1.055E-06	6.242E-12
OTc-99	Tc-99	1.000E+00		2.255E-03	2.255E-03	2.251E-03	2.250E-03	2.246E-03	2.238E-03	2.213E-03	2.171E-03	2.090E-03
0Th-228	Th-228	1.000E+00		1.692E+01	1.177E+01	1.957E-03	3.192E-04	2.263E-07	3.026E-15	0.000E+00	0.000E+00	0.000E+00
Th-228	Th-232	1.000E+00		1.305E-01	8.007E-01	1.877E+01	1.941E+01	2.010E+01	2.017E+01	2.017E+01	2.017E+01	2.017E+01
Th-228	äDOSE(j)			1.705E+01	1.257E+01	1.878E+01	1.941E+01	2.010E+01	2.017E+01	2.017E+01	2.017E+01	2.017E+01
0Th-230	Th-230	1.319E-06		1.385E-06	1.385E-06	1.385E-06	1.385E-06	1.384E-06	1.384E-06	1.382E-06	1.379E-06	1.372E-06
Th-230	Th-230	1.899E-08		1.993E-08	1.993E-08	1.993E-08	1.993E-08	1.992E-08	1.992E-08	1.989E-08	1.984E-08	1.975E-08
Th-230	äDOSE(j)			1.405E-06	1.405E-06	1.404E-06	1.404E-06	1.404E-06	1.404E-06	1.402E-06	1.398E-06	1.392E-06
0Th-230	Th-230	2.100E-04		2.204E-04	2.204E-04	2.203E-04	2.203E-04	2.203E-04	2.202E-04	2.199E-04	2.194E-04	2.184E-04
Th-230	Th-230	2.771E-10		2.909E-10	2.909E-10	2.908E-10	2.908E-10	2.908E-10	2.906E-10	2.902E-10	2.896E-10	2.882E-10
Th-230	äDOSE(j)			2.204E-04	2.204E-04	2.203E-04	2.203E-04	2.203E-04	2.202E-04	2.199E-04	2.194E-04	2.184E-04
0Th-230	Th-230	3.989E-12		4.187E-12	4.187E-12	4.186E-12	4.186E-12	4.185E-12	4.183E-12	4.177E-12	4.168E-12	4.149E-12
Th-230	Th-230	1.998E-04		2.097E-04	2.097E-04	2.096E-04	2.096E-04	2.096E-04	2.095E-04	2.092E-04	2.087E-04	2.077E-04
Th-230	äDOSE(j)			2.097E-04	2.097E-04	2.096E-04	2.096E-04	2.096E-04	2.095E-04	2.092E-04	2.087E-04	2.077E-04
0Th-230	Th-230	2.637E-10		2.768E-10	2.768E-10	2.767E-10	2.767E-10	2.766E-10	2.765E-10	2.761E-10	2.755E-10	2.742E-10
Th-230	Th-230	3.795E-12		3.984E-12	3.984E-12	3.983E-12	3.982E-12	3.982E-12	3.980E-12	3.974E-12	3.965E-12	3.947E-12
Th-230	äDOSE(j)			2.807E-10	2.807E-10	2.807E-10	2.807E-10	2.806E-10	2.805E-10	2.801E-10	2.795E-10	2.782E-10
0Th-230	Th-230	4.196E-08		4.404E-08	4.404E-08	4.403E-08	4.403E-08	4.402E-08	4.400E-08	4.394E-08	4.384E-08	4.364E-08
Th-230	Th-230	5.538E-14		5.813E-14	5.813E-14	5.812E-14	5.811E-14	5.810E-14	5.808E-14	5.800E-14	5.786E-14	5.760E-14
Th-230	äDOSE(j)			4.404E-08	4.404E-08	4.403E-08	4.403E-08	4.402E-08	4.400E-08	4.394E-08	4.384E-08	4.364E-08
0Th-230	Th-230	7.972E-16		8.367E-16	8.367E-16	8.365E-16	8.365E-16	8.363E-16	8.360E-16	8.348E-16	8.329E-16	8.291E-16
Th-230	Th-230	2.000E-07		2.099E-07	2.099E-07	2.099E-07	2.099E-07	2.098E-07	2.097E-07	2.094E-07	2.090E-07	2.080E-07
Th-230	äDOSE(j)			2.099E-07	2.099E-07	2.099E-07	2.099E-07	2.098E-07	2.097E-07	2.094E-07	2.090E-07	2.080E-07
0Th-230	Th-230	2.640E-13		2.771E-13	2.771E-13	2.770E-13	2.770E-13	2.770E-13	2.768E-13	2.765E-13	2.758E-13	2.746E-13
Th-230	Th-230	3.800E-15		3.988E-15	3.988E-15	3.988E-15	3.987E-15	3.987E-15	3.985E-15	3.979E-15	3.970E-15	3.952E-15
Th-230	äDOSE(j)			2.811E-13	2.811E-13	2.810E-13	2.810E-13	2.809E-13	2.808E-13	2.804E-13	2.798E-13	2.785E-13
0Th-232	Th-232	1.000E+00		1.133E+00	1.133E+00	1.133E+00	1.133E+00	1.133E+00	1.133E+00	1.133E+00	1.133E+00	1.133E+00
ORa-228	Th-232	1.000E+00		7.510E-01	2.138E+00	1.237E+01	1.264E+01	1.294E+01	1.297E+01	1.297E+01	1.297E+01	1.297E+01
OU-234	U-234	1.319E-06		2.487E-07	2.487E-07	2.487E-07	2.486E-07	2.486E-07	2.486E-07	2.485E-07	2.483E-07	2.479E-07
U-234	U-234	1.899E-08		3.579E-09	3.579E-09	3.579E-09	3.579E-09	3.579E-09	3.578E-09	3.577E-09	3.574E-09	3.569E-09
U-234	äDOSE(j)			2.522E-07	2.522E-07	2.522E-07	2.522E-07	2.522E-07	2.522E-07	2.521E-07	2.519E-07	2.515E-07

Individual Nuclide Dose Summed Over All Pathways

Parent Nuclide and Branch Fraction Indicated

DOSE(j,t), mrem/yr

ONuclide	Parent	THF(i)	t=	DOSE(j,t), mrem/yr								
(j)	(i)			0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAAAA		AAAAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA
U-234	U-234	2.100E-04		3.957E-05	3.957E-05	3.957E-05	3.957E-05	3.956E-05	3.956E-05	3.954E-05	3.951E-05	3.945E-05
U-234	U-234	2.771E-10		5.223E-11	5.223E-11	5.223E-11	5.223E-11	5.222E-11	5.222E-11	5.219E-11	5.215E-11	5.207E-11
U-234	äDOSE(j)			3.957E-05	3.957E-05	3.957E-05	3.957E-05	3.956E-05	3.956E-05	3.954E-05	3.951E-05	3.945E-05
OU-234	U-234	3.989E-12		7.518E-13	7.518E-13	7.518E-13	7.518E-13	7.517E-13	7.516E-13	7.513E-13	7.507E-13	7.496E-13
U-234	U-234	1.998E-04		3.765E-05	3.765E-05	3.764E-05	3.764E-05	3.764E-05	3.764E-05	3.762E-05	3.759E-05	3.753E-05
U-234	äDOSE(j)			3.765E-05	3.765E-05	3.764E-05	3.764E-05	3.764E-05	3.764E-05	3.762E-05	3.759E-05	3.753E-05
OU-234	U-234	2.637E-10		4.969E-11	4.969E-11	4.969E-11	4.969E-11	4.969E-11	4.968E-11	4.966E-11	4.962E-11	4.954E-11
U-234	U-234	3.795E-12		7.153E-13	7.153E-13	7.152E-13	7.152E-13	7.152E-13	7.151E-13	7.148E-13	7.142E-13	7.131E-13
U-234	äDOSE(j)			5.041E-11	5.041E-11	5.041E-11	5.040E-11	5.040E-11	5.039E-11	5.037E-11	5.033E-11	5.026E-11
OU-234	U-234	4.196E-08		7.908E-09	7.908E-09	7.907E-09	7.907E-09	7.906E-09	7.905E-09	7.902E-09	7.896E-09	7.884E-09
U-234	U-234	5.538E-14		1.044E-14	1.044E-14	1.044E-14	1.044E-14	1.044E-14	1.043E-14	1.043E-14	1.042E-14	1.041E-14
U-234	äDOSE(j)			7.908E-09	7.908E-09	7.907E-09	7.907E-09	7.906E-09	7.905E-09	7.902E-09	7.896E-09	7.884E-09
OU-234	U-234	7.972E-16		1.502E-16	1.502E-16	1.502E-16	1.502E-16	1.502E-16	1.502E-16	1.501E-16	1.500E-16	1.498E-16
U-234	U-234	2.000E-07		3.769E-08	3.769E-08	3.769E-08	3.769E-08	3.769E-08	3.768E-08	3.766E-08	3.764E-08	3.758E-08
U-234	äDOSE(j)			3.769E-08	3.769E-08	3.769E-08	3.769E-08	3.769E-08	3.768E-08	3.766E-08	3.764E-08	3.758E-08
OU-234	U-234	2.640E-13		4.975E-14	4.975E-14	4.975E-14	4.975E-14	4.975E-14	4.974E-14	4.972E-14	4.968E-14	4.960E-14
U-234	U-234	3.800E-15		7.162E-16	7.162E-16	7.161E-16	7.161E-16	7.161E-16	7.159E-16	7.156E-16	7.151E-16	7.140E-16
U-234	äDOSE(j)			5.047E-14	5.047E-14	5.047E-14	5.047E-14	5.046E-14	5.046E-14	5.043E-14	5.039E-14	5.032E-14
OU-235	U-235	2.722E-03		4.825E-03	4.825E-03	4.825E-03	4.825E-03	4.825E-03	4.825E-03	4.824E-03	4.824E-03	4.824E-03
U-235	U-235	1.376E-02		2.439E-02	2.439E-02	2.439E-02	2.439E-02	2.439E-02	2.439E-02	2.439E-02	2.439E-02	2.439E-02
U-235	äDOSE(j)			2.922E-02	2.922E-02	2.922E-02	2.922E-02	2.922E-02	2.922E-02	2.921E-02	2.921E-02	2.921E-02
OU-235	U-235	3.809E-05		6.751E-05	6.751E-05	6.751E-05	6.751E-05	6.751E-05	6.751E-05	6.750E-05	6.750E-05	6.749E-05
U-235	U-235	8.257E-07		1.464E-06	1.464E-06	1.464E-06	1.464E-06	1.464E-06	1.464E-06	1.464E-06	1.463E-06	1.463E-06
U-235	äDO											

Individual Nuclide Dose Summed Over All Pathways

Parent Nuclide and Branch Fraction Indicated

0Nuclide Parent	THF(i)		DOSE(j,t), mrem/yr									
(j)	(i)		t= 0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03	
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
U-238	U-238	4.219E-13	7.676E-12	7.676E-12	7.676E-12	7.676E-12	7.676E-12	7.676E-12	7.675E-12	7.675E-12	7.674E-12	
U-238	U-238	6.073E-15	1.105E-13	1.105E-13	1.105E-13	1.105E-13	1.105E-13	1.105E-13	1.105E-13	1.105E-13	1.105E-13	
U-238	äDOSE(j)		7.786E-12	7.786E-12	7.786E-12	7.786E-12	7.786E-12	7.786E-12	7.786E-12	7.786E-12	7.785E-12	
0U-238	U-238	6.713E-11	1.221E-09	1.221E-09	1.221E-09	1.221E-09	1.221E-09	1.221E-09	1.221E-09	1.221E-09	1.221E-09	
U-238	U-238	8.862E-17	1.612E-15	1.612E-15	1.612E-15	1.612E-15	1.612E-15	1.612E-15	1.612E-15	1.612E-15	1.612E-15	
U-238	äDOSE(j)		1.221E-09	1.221E-09	1.221E-09	1.221E-09	1.221E-09	1.221E-09	1.221E-09	1.221E-09	1.221E-09	
0U-238	U-238	1.276E-18	2.321E-17	2.321E-17	2.321E-17	2.321E-17	2.321E-17	2.321E-17	2.321E-17	2.320E-17	2.320E-17	
U-238	U-238	3.200E-10	5.822E-09	5.822E-09	5.822E-09	5.822E-09	5.822E-09	5.822E-09	5.822E-09	5.821E-09	5.821E-09	
U-238	äDOSE(j)		5.822E-09	5.822E-09	5.822E-09	5.822E-09	5.822E-09	5.822E-09	5.822E-09	5.821E-09	5.821E-09	
0U-238	U-238	4.224E-16	7.685E-15	7.685E-15	7.685E-15	7.685E-15	7.685E-15	7.685E-15	7.685E-15	7.684E-15	7.684E-15	
U-238	U-238	6.080E-18	1.106E-16	1.106E-16	1.106E-16	1.106E-16	1.106E-16	1.106E-16	1.106E-16	1.106E-16	1.106E-16	
U-238	äDOSE(j)		7.796E-15	7.796E-15	7.796E-15	7.796E-15	7.796E-15	7.796E-15	7.795E-15	7.795E-15	7.794E-15	
0U-238	U-238	9.980E-01	4.976E-01	4.976E-01	4.976E-01	4.976E-01	4.976E-01	4.976E-01	4.976E-01	4.975E-01	4.975E-01	
U-238	U-238	1.317E-06	6.568E-07	6.568E-07	6.568E-07	6.568E-07	6.568E-07	6.568E-07	6.568E-07	6.568E-07	6.567E-07	
U-238	äDOSE(j)		4.976E-01	4.976E-01	4.976E-01	4.976E-01	4.976E-01	4.976E-01	4.976E-01	4.975E-01	4.975E-01	
0U-238	U-238	1.896E-08	9.454E-09	9.454E-09	9.454E-09	9.454E-09	9.454E-09	9.454E-09	9.454E-09	9.453E-09	9.452E-09	
U-238	U-238	2.096E-04	1.045E-04	1.045E-04	1.045E-04	1.045E-04	1.045E-04	1.045E-04	1.045E-04	1.045E-04	1.045E-04	
U-238	äDOSE(j)		1.045E-04	1.045E-04	1.045E-04	1.045E-04	1.045E-04	1.045E-04	1.045E-04	1.045E-04	1.045E-04	
0U-238	U-238	2.767E-10	1.380E-10	1.380E-10	1.380E-10	1.380E-10	1.380E-10	1.380E-10	1.380E-10	1.379E-10	1.379E-10	
U-238	U-238	3.983E-12	1.986E-12	1.986E-12	1.986E-12	1.986E-12	1.986E-12	1.986E-12	1.986E-12	1.986E-12	1.985E-12	
U-238	äDOSE(j)		1.399E-10	1.399E-10	1.399E-10	1.399E-10	1.399E-10	1.399E-10	1.399E-10	1.399E-10	1.399E-10	
0U-238	U-238	1.994E-04	9.944E-05	9.944E-05	9.944E-05	9.944E-05	9.944E-05	9.944E-05	9.944E-05	9.943E-05	9.942E-05	
U-238	U-238	2.633E-10	1.313E-10	1.313E-10	1.313E-10	1.313E-10	1.313E-10	1.313E-10	1.313E-10	1.312E-10	1.312E-10	
U-238	äDOSE(j)		9.944E-05	9.944E-05	9.944E-05	9.944E-05	9.944E-05	9.944E-05	9.943E-05	9.943E-05	9.942E-05	
0U-238	U-238	3.789E-12	1.889E-12	1.889E-12	1.889E-12	1.889E-12	1.889E-12	1.889E-12	1.889E-12	1.889E-12	1.889E-12	
U-238	U-238	4.189E-08	2.089E-08	2.089E-08	2.089E-08	2.089E-08	2.089E-08	2.089E-08	2.089E-08	2.088E-08	2.088E-08	
U-238	äDOSE(j)		2.089E-08	2.089E-08	2.089E-08	2.089E-08	2.089E-08	2.089E-08	2.089E-08	2.089E-08	2.088E-08	
0U-238	U-238	5.530E-14	2.757E-14	2.757E-14	2.757E-14	2.757E-14	2.757E-14	2.757E-14	2.757E-14	2.757E-14	2.756E-14	
U-238	U-238	7.959E-16	3.968E-16	3.968E-16	3.968E-16	3.968E-16	3.968E-16	3.968E-16	3.968E-16	3.968E-16	3.968E-16	
U-238	äDOSE(j)		2.797E-14	2.797E-14	2.797E-14	2.797E-14	2.797E-14	2.797E-14	2.797E-14	2.796E-14	2.796E-14	
0U-238	U-238	1.997E-07	9.956E-08	9.956E-08	9.956E-08	9.956E-08	9.956E-08	9.956E-08	9.955E-08	9.955E-08	9.954E-08	
U-238	U-238	2.636E-13	1.314E-13	1.314E-13	1.314E-13	1.314E-13	1.314E-13	1.314E-13	1.314E-13	1.314E-13	1.314E-13	
U-238	äDOSE(j)		9.956E-08	9.956E-08	9.956E-08	9.956E-08	9.956E-08	9.956E-08	9.955E-08	9.955E-08	9.954E-08	
0U-238	U-238	3.794E-15	1.892E-15	1.892E-15	1.892E-15	1.892E-15	1.892E-15	1.892E-15	1.892E-15	1.891E-15	1.891E-15	
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii

THF(i) is the thread fraction of the parent nuclide.

Individual Nuclide Soil Concentration
Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	S(j,t), pCi/g									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA		AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Am-241	Am-241	1.000E+00		1.000E+01	9.984E+00	9.607E+00	9.530E+00	9.229E+00	8.518E+00	6.696E+00	4.484E+00	2.010E+00
0Np-237	Am-241	1.000E+00		0.000E+00	3.230E-06	7.922E-05	9.469E-05	1.553E-04	2.987E-04	6.658E-04	1.112E-03	1.610E-03
Np-237	Np-237	1.000E+00		1.000E+01	1.000E+01	1.000E+01	1.000E+01	1.000E+01	1.000E+01	9.999E+00	9.998E+00	9.996E+00
Np-237	äS(j):			1.000E+01	1.000E+01	1.000E+01	1.000E+01	1.000E+01	1.000E+01	1.000E+01	9.999E+00	9.998E+00
0U-233	Am-241	1.000E+00		0.000E+00	7.034E-12	4.340E-09	6.234E-09	1.713E-08	6.675E-08	3.864E-07	1.369E-06	4.396E-06
U-233	Np-237	1.000E+00		0.000E+00	4.354E-05	1.088E-03	1.306E-03	2.177E-03	4.353E-03	1.088E-02	2.174E-02	4.343E-02
U-233	äS(j):			0.000E+00	4.354E-05	1.088E-03	1.306E-03	2.177E-03	4.353E-03	1.088E-02	2.174E-02	4.344E-02
0Th-229	Am-241	1.000E+00		0.000E+00	2.215E-16	3.425E-12	5.906E-12	2.711E-11	2.124E-10	3.121E-09	2.263E-08	1.510E-07
Th-229	Np-237	1.000E+00		0.000E+00	2.056E-09	1.284E-06	1.848E-06	5.131E-06	2.049E-05	1.274E-04	5.055E-04	1.989E-03
Th-229	äS(j):			0.000E+00	2.056E-09	1.284E-06	1.848E-06	5.131E-06	2.049E-05	1.274E-04	5.056E-04	1.989E-03
0Co-60	Co-60	1.000E+00		1.000E+01	8.768E+00	3.735E-01	1.935E-01	1.395E-02	1.947E-05	5.286E-14	2.795E-28	0.000E+00
0Cs-134	Cs-134	1.000E+00		1.000E+01	7.148E+00	2.266E-03	4.229E-04	5.134E-07	2.636E-14	3.566E-36	0.000E+00	0.000E+00
0Cs-137	Cs-137	1.000E+00		1.000E+01	9.773E+00	5.630E+00	5.019E+00	3.170E+00	1.005E+00	3.201E-02	1.025E-04	1.050E-09
0Eu-152	Eu-152	7.210E-01		7.210E+00	6.850E+00	2.004E+00	1.552E+00	5.573E-01	4.307E-02	1.989E-05	5.485E-11	4.172E-22
Eu-152	Eu-152	2.790E-01		2.790E+00	2.651E+00	7.756E-01	6.005E-01	2.156E-01	1.667E-02	7.695E-06	2.122E-11	1.614E-22
Eu-152	äS(j):			1.000E+01	9.501E+00	2.780E+00	2.152E+00	7.729E-01	5.974E-02	2.758E-05	7.607E-11	5.787E-22
0Gd-152	Eu-152	2.790E-01		0.000E+00	1.746E-14	2.525E-13	2.744E-13	3.227E-13	3.476E-13	3.497E-13	3.497E-13	3.497E-13
0Sm-148	Eu-152	2.790E-01		0.000E+00	8.716E-31	3.774E-28	5.081E-28	1.107E-27	2.791E-27	7.981E-27	1.664E-26	3.395E-26
0Nd-144	Eu-152	2.790E-01		0.000E+00	0.000E+00	1.037E-42	1.710E-42	6.558E-42	3.592E-41	2.804E-40	1.212E-39	5.040E-39
0Eu-154	Eu-154	1.000E+00		1.000E+01	9.225E+00	1.331E+00	8.893E-01	1.772E-01	3.139E-03	1.746E-08	3.048E-17	9.290E-35
0Eu-155	Eu-155	1.000E+00		1.000E+01	8.645E+00	2.626E-01	1.268E-01	6.897E-03	4.757E-06	1.560E-15	2.435E-31	0.000E+00
0H-3	H-3	1.000E+00		1.000E+01	8.791E+00	3.987E-01	2.093E-01	1.590E-02	2.527E-05	1.015E-13	1.030E-27	0.000E+00
0I-129	I-129	1.000E+00		1.000E+01	1.000E+01	9.990E+00	9.988E+00	9.979E+00	9.959E+00	9.897E+00	9.795E+00	9.594E+00
0Mn-54	Mn-54	1.000E+00		1.000E+01	4.444E+00	1.560E-08	2.703E-10	2.434E-17	5.926E-35	0.000E+00	0.000E+00	0.000E+00
0Na-22	Na-22	1.000E+00		1.000E+01	7.661E+00	1.281E-02	3.381E-03	1.641E-05	2.694E-11	1.191E-28	0.000E+00	0.000E+00
0Ni-63	Ni-63	1.000E+00		1.000E+01	9.931E+00	8.410E+00	8.124E+00	7.074E+00	5.003E+00	1.771E+00	3.136E-01	9.833E-03
0Pu-238	Pu-238	1.850E-09		1.850E-08	1.835E-08	1.518E-08	1.459E-08	1.246E-08	8.393E-09	2.565E-09	3.556E-10	6.834E-12
Pu-238	Pu-238	9.996E-01		9.996E+00	9.917E+00	8.204E+00	7.886E+00	6.733E+00	4.535E+00	1.386E+00	1.921E-01	3.693E-03
Pu-238	äS(j):			9.996E+00	9.917E+00	8.204E+00	7.886E+00	6.733E+00	4.535E+00	1.386E+00	1.921E-01	3.693E-03
0U-234	Pu-238	9.996E-01		0.000E+00	2.811E-05	6.402E-04	7.537E-04	1.166E-03	1.950E-03	3.074E-03	3.498E-03	3.560E-03

Individual Nuclide Soil Concentration
Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	S(j,t), pCi/g									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
U-234	Pu-238	1.899E-08	0.000E+00	5.341E-13	1.216E-11	1.432E-11	2.215E-11	3.706E-11	5.841E-11	6.646E-11	6.764E-11	
U-234	Pu-238	2.100E-04	0.000E+00	5.905E-09	1.345E-07	1.583E-07	2.448E-07	4.097E-07	6.457E-07	7.348E-07	7.478E-07	
U-234	Pu-238	2.771E-10	0.000E+00	7.794E-15	1.775E-13	2.090E-13	3.232E-13	5.408E-13	8.524E-13	9.699E-13	9.871E-13	
U-234	Pu-238	3.989E-12	0.000E+00	1.122E-16	2.555E-15	3.008E-15	4.652E-15	7.784E-15	1.227E-14	1.396E-14	1.421E-14	
U-234	Pu-238	1.998E-04	0.000E+00	5.618E-09	1.279E-07	1.506E-07	2.329E-07	3.898E-07	6.144E-07	6.991E-07	7.115E-07	
U-234	Pu-238	2.637E-10	0.000E+00	7.415E-15	1.689E-13	1.988E-13	3.075E-13	5.145E-13	8.110E-13	9.228E-13	9.391E-13	
U-234	Pu-238	3.795E-12	0.000E+00	1.067E-16	2.431E-15	2.862E-15	4.426E-15	7.406E-15	1.167E-14	1.328E-14	1.352E-14	
U-234	Pu-238	4.196E-08	0.000E+00	1.180E-12	2.687E-11	3.164E-11	4.893E-11	8.187E-11	1.290E-10	1.468E-10	1.494E-10	
U-234	Pu-238	5.538E-14	0.000E+00	1.558E-18	3.547E-17	4.176E-17	6.458E-17	1.081E-16	1.703E-16	1.938E-16	1.973E-16	
U-234	Pu-238	7.972E-16	0.000E+00	2.242E-20	5.106E-19	6.011E-19	9.296E-19	1.556E-18	2.452E-18	2.790E-18	2.839E-18	
U-234	Pu-238	2.000E-07	0.000E+00	5.625E-12	1.281E-10	1.508E-10	2.332E-10	3.903E-10	6.151E-10	6.999E-10	7.123E-10	
U-234	Pu-238	2.640E-13	0.000E+00	7.424E-18	1.691E-16	1.991E-16	3.078E-16	5.151E-16	8.119E-16	9.239E-16	9.403E-16	
U-234	Pu-238	3.800E-15	0.000E+00	1.069E-19	2.434E-18	2.865E-18	4.431E-18	7.415E-18	1.169E-17	1.330E-17	1.353E-17	
U-234	U-234	9.996E-01	9.996E+00	9.996E+00	9.995E+00	9.995E+00	9.994E+00	9.993E+00	9.988E+00	9.981E+00	9.966E+00	
U-234	U-238	1.599E-03	0.000E+00	4.516E-08	1.129E-06	1.355E-06	2.258E-06	4.515E-06	1.128E-05	2.256E-05	4.508E-05	
U-234	U-238	2.111E-09	0.000E+00	5.961E-14	1.490E-12	1.788E-12	2.980E-12	5.960E-12	1.490E-11	2.978E-11	5.951E-11	
U-234	U-238	3.039E-11	0.000E+00	8.580E-16	2.145E-14	2.574E-14	4.289E-14	8.578E-14	2.144E-13	4.286E-13	8.566E-13	
U-234	U-238	3.359E-07	0.000E+00	9.485E-12	2.371E-10	2.845E-10	4.742E-10	9.483E-10	2.370E-09	4.739E-09	9.470E-09	
U-234	U-238	4.434E-13	0.000E+00	1.252E-17	3.130E-16	3.756E-16	6.259E-16	1.252E-15	3.129E-15	6.255E-15	1.250E-14	
U-234	U-238	6.383E-15	0.000E+00	1.802E-19	4.505E-18	5.406E-18	9.010E-18	1.802E-17	4.503E-17	9.003E-17	1.799E-16	
U-234	U-238	3.196E-07	0.000E+00	9.024E-12	2.256E-10	2.707E-10	4.512E-10	9.023E-10	2.255E-09	4.508E-09	9.010E-09	
U-234	U-238	4.219E-13	0.000E+00	1.191E-17	2.978E-16	3.573E-16	5.955E-16	1.191E-15	2.977E-15	5.951E-15	1.189E-14	
U-234	U-238	6.073E-15	0.000E+00	1.715E-19	4.286E-18	5.143E-18	8.572E-18	1.714E-17	4.285E-17	8.566E-17	1.712E-16	
U-234	U-238	6.713E-11	0.000E+00	1.895E-15	4.738E-14	5.686E-14	9.476E-14	1.895E-13	4.737E-13	9.470E-13	1.892E-12	
U-234	U-238	8.862E-17	0.000E+00	2.502E-21	6.255E-20	7.506E-20	1.251E-19	2.502E-19	6.252E-19	1.250E-18	2.498E-18	
U-234	U-238	1.276E-18	0.000E+00	3.601E-23	9.003E-22	1.080E-21	1.801E-21	3.601E-21	9.000E-21	1.799E-20	3.596E-20	
U-234	U-238	3.200E-10	0.000E+00	9.035E-15	2.259E-13	2.710E-13	4.517E-13	9.033E-13	2.258E-12	4.514E-12	9.020E-12	
U-234	U-238	4.224E-16	0.000E+00	1.193E-20	2.981E-19	3.578E-19	5.963E-19	1.192E-18	2.980E-18	5.958E-18	1.191E-17	
U-234	U-238	6.080E-18	0.000E+00	1.717E-22	4.291E-21	5.150E-21	8.582E-21	1.716E-20	4.290E-20	8.576E-20	1.714E-19	
U-234	U-238	9.980E-01	0.000E+00	2.818E-05	7.044E-04	8.453E-04	1.409E-03	2.817E-03	7.042E-03	1.408E-02	2.813E-02	
U-234	U-238	1.317E-06	0.000E+00	3.719E-11	9.298E-10	1.116E-09	1.860E-09	3.719E-09	9.295E-09	1.858E-08	3.713E-08	
U-234	U-238	1.896E-08	0.000E+00	5.354E-13	1.338E-11	1.606E-11	2.677E-11	5.353E-11	1.338E-10	2.675E-10	5.345E-10	
U-234	U-238	2.096E-04	0.000E+00	5.918E-09	1.480E-07	1.775E-07	2.959E-07	5.918E-07	1.479E-06	2.957E-06	5.909E-06	
U-234	U-238	2.767E-10	0.000E+00	7.812E-15	1.953E-13	2.344E-13	3.906E-13	7.811E-13	1.952E-12	3.903E-12	7.800E-12	
U-234	U-238	3.983E-12	0.000E+00	1.125E-16	2.811E-15	3.373E-15	5.622E-15	1.124E-14	2.810E-14	5.618E-14	1.123E-13	
U-234	U-238	1.994E-04	0.000E+00	5.631E-09	1.408E-07	1.689E-07	2.815E-07	5.630E-07	1.407E-06	2.813E-06	5.622E-06	
U-234	U-238	2.633E-10	0.000E+00	7.433E-15	1.858E-13	2.230E-13	3.716E-13	7.432E-13	1.857E-12	3.713E-12	7.421E-12	
U-234	U-238	3.789E-12	0.000E+00	1.070E-16	2.675E-15	3.209E-15	5.349E-15	1.070E-14	2.674E-14	5.345E-14	1.068E-13	
U-234	U-238	4.189E-08	0.000E+00	1.183E-12	2.957E-11	3.548E-11	5.913E-11	1.183E-10	2.956E-10	5.909E-10	1.181E-09	
U-234	U-238	5.530E-14	0.000E+00	1.561E-18	3.903E-17	4.683E-17	7.806E-17	1.561E-16	3.902E-16	7.800E-16	1.559E-15	

U-234	U-238	7.959E-16	0.000E+00	2.247E-20	5.618E-19	6.741E-19	1.124E-18	2.247E-18	5.616E-18	1.123E-17	2.244E-17
U-234	U-238	1.997E-07	0.000E+00	5.638E-12	1.409E-10	1.691E-10	2.819E-10	5.637E-10	1.409E-09	2.817E-09	5.629E-09
U-234	U-238	2.636E-13	0.000E+00	7.442E-18	1.860E-16	2.232E-16	3.721E-16	7.441E-16	1.860E-15	3.718E-15	7.430E-15
U-234	U-238	3.794E-15	0.000E+00	1.071E-19	2.678E-18	3.213E-18	5.355E-18	1.071E-17	2.677E-17	5.352E-17	1.069E-16
U-234	äS(j):		9.996E+00	9.996E+00	9.996E+00	9.997E+00	9.997E+00	9.998E+00	9.998E+00	9.998E+00	9.998E+00
0Th-230	Pu-238	9.996E-01	0.000E+00	1.294E-10	7.600E-08	1.081E-07	2.855E-07	1.013E-06	4.625E-06	1.231E-05	2.853E-05
Th-230	Pu-238	1.899E-08	0.000E+00	2.459E-18	1.444E-15	2.053E-15	5.425E-15	1.926E-14	8.787E-14	2.339E-13	5.420E-13
Th-230	Pu-238	2.100E-04	0.000E+00	2.718E-14	1.596E-11	2.270E-11	5.997E-11	2.129E-10	9.714E-10	2.586E-09	5.992E-09

Individual Nuclide Soil Concentration
Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	S(j,t), pCi/g									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Th-230	Pu-238	2.771E-10	0.000E+00	3.588E-20	2.107E-17	2.996E-17	7.916E-17	2.810E-16	1.282E-15	3.414E-15	7.909E-15	
Th-230	Pu-238	3.989E-12	0.000E+00	5.165E-22	3.033E-19	4.313E-19	1.139E-18	4.044E-18	1.846E-17	4.914E-17	1.138E-16	
Th-230	Pu-238	1.998E-04	0.000E+00	2.586E-14	1.519E-11	2.159E-11	5.706E-11	2.025E-10	9.242E-10	2.460E-09	5.701E-09	
Th-230	Pu-238	2.637E-10	0.000E+00	3.414E-20	2.005E-17	2.851E-17	7.532E-17	2.673E-16	1.220E-15	3.248E-15	7.525E-15	
Th-230	Pu-238	3.795E-12	0.000E+00	4.914E-22	2.886E-19	4.103E-19	1.084E-18	3.848E-18	1.756E-17	4.675E-17	1.083E-16	
Th-230	Pu-238	4.196E-08	0.000E+00	5.432E-18	3.190E-15	4.536E-15	1.198E-14	4.254E-14	1.941E-13	5.168E-13	1.197E-12	
Th-230	Pu-238	5.538E-14	0.000E+00	7.171E-24	4.211E-21	5.987E-21	1.582E-20	5.615E-20	2.563E-19	6.822E-19	1.581E-18	
Th-230	Pu-238	7.972E-16	0.000E+00	1.032E-25	6.061E-23	8.618E-23	2.277E-22	8.082E-22	3.689E-21	9.819E-21	2.275E-20	
Th-230	Pu-238	2.000E-07	0.000E+00	2.589E-17	1.521E-14	2.162E-14	5.713E-14	2.028E-13	9.254E-13	2.463E-12	5.708E-12	
Th-230	Pu-238	2.640E-13	0.000E+00	3.418E-23	2.007E-20	2.854E-20	7.541E-20	2.677E-19	1.221E-18	3.252E-18	7.534E-18	
Th-230	Pu-238	3.800E-15	0.000E+00	4.920E-25	2.889E-22	4.108E-22	1.085E-21	3.853E-21	1.758E-20	4.680E-20	1.084E-19	
Th-230	Th-230	9.996E-01	9.996E+00	9.996E+00	9.994E+00	9.993E+00	9.991E+00	9.987E+00	9.973E+00	9.950E+00	9.904E+00	
Th-230	U-234	9.996E-01	0.000E+00	9.192E-05	2.298E-03	2.757E-03	4.594E-03	9.186E-03	2.294E-02	4.582E-02	9.136E-02	
Th-230	U-234	1.319E-06	0.000E+00	1.213E-10	3.033E-09	3.639E-09	6.065E-09	1.213E-08	3.029E-08	6.048E-08	1.206E-07	
Th-230	U-234	1.899E-08	0.000E+00	1.746E-12	4.365E-11	5.238E-11	8.729E-11	1.745E-10	4.359E-10	8.705E-10	1.736E-09	
Th-230	U-234	2.100E-04	0.000E+00	1.931E-08	4.826E-07	5.791E-07	9.650E-07	1.929E-06	4.819E-06	9.624E-06	1.919E-05	
Th-230	U-234	2.771E-10	0.000E+00	2.548E-14	6.370E-13	7.644E-13	1.274E-12	2.547E-12	6.361E-12	1.270E-11	2.533E-11	
Th-230	U-234	3.989E-12	0.000E+00	3.668E-16	9.169E-15	1.100E-14	1.834E-14	3.666E-14	9.157E-14	1.829E-13	3.646E-13	
Th-230	U-234	1.998E-04	0.000E+00	1.837E-08	4.591E-07	5.510E-07	9.181E-07	1.836E-06	4.585E-06	9.156E-06	1.826E-05	
Th-230	U-234	2.637E-10	0.000E+00	2.425E-14	6.061E-13	7.273E-13	1.212E-12	2.423E-12	6.052E-12	1.209E-11	2.410E-11	
Th-230	U-234	3.795E-12	0.000E+00	3.490E-16	8.724E-15	1.047E-14	1.744E-14	3.488E-14	8.712E-14	1.740E-13	3.469E-13	
Th-230	U-234	4.196E-08	0.000E+00	3.858E-12	9.644E-11	1.157E-10	1.929E-10	3.856E-10	9.631E-10	1.923E-09	3.835E-09	
Th-230	U-234	5.538E-14	0.000E+00	5.093E-18	1.273E-16	1.528E-16	2.546E-16	5.090E-16	1.271E-15	2.539E-15	5.062E-15	
Th-230	U-234	7.972E-16	0.000E+00	7.331E-20	1.832E-18	2.199E-18	3.664E-18	7.326E-18	1.830E-17	3.654E-17	7.286E-17	
Th-230	U-234	2.000E-07	0.000E+00	1.839E-11	4.597E-10	5.516E-10	9.193E-10	1.838E-09	4.591E-09	9.167E-09	1.828E-08	
Th-230	U-234	2.640E-13	0.000E+00	2.428E-17	6.068E-16	7.281E-16	1.213E-15	2.426E-15	6.060E-15	1.210E-14	2.413E-14	
Th-230	U-234	3.800E-15	0.000E+00	3.494E-19	8.734E-18	1.048E-17	1.747E-17	3.492E-17	8.722E-17	1.742E-16	3.473E-16	
Th-230	U-238	1.599E-03	0.000E+00	2.076E-13	1.297E-10	1.868E-10	5.189E-10	2.075E-09	1.296E-08	5.180E-08	2.068E-07	
Th-230	U-238	2.111E-09	0.000E+00	2.740E-19	1.713E-16	2.466E-16	6.850E-16	2.739E-15	1.711E-14	6.837E-14	2.729E-13	
Th-230	U-238	3.039E-11	0.000E+00	3.945E-21	2.465E-18	3.550E-18	9.860E-18	3.943E-17	2.463E-16	9.841E-16	3.928E-15	
Th-230	U-238	3.359E-07	0.000E+00	4.361E-17	2.725E-14	3.924E-14	1.090E-13	4.359E-13	2.723E-12	1.088E-11	4.343E-11	
Th-230	U-238	4.434E-13	0.000E+00	5.756E-23	3.597E-20	5.180E-20	1.439E-19	5.754E-19	3.594E-18	1.436E-17	5.733E-17	
Th-230	U-238	6.383E-15	0.000E+00	8.285E-25	5.178E-22	7.456E-22	2.071E-21	8.282E-21	5.173E-20	2.067E-19	8.251E-19	
Th-230	U-238	3.196E-07	0.000E+00	4.149E-17	2.593E-14	3.734E-14	1.037E-13	4.147E-13	2.590E-12	1.035E-11	4.132E-11	
Th-230	U-238	4.219E-13	0.000E+00	5.477E-23	3.423E-20	4.928E-20	1.369E-19	5.474E-19	3.419E-18	1.366E-17	5.454E-17	
Th-230	U-238	6.073E-15	0.000E+00	7.883E-25	4.926E-22	7.094E-22	1.970E-21	7.880E-21	4.922E-20	1.967E-19	7.850E-19	
Th-230	U-238	6.713E-11	0.000E+00	8.715E-21	5.446E-18	7.842E-18	2.178E-17	8.711E-17	5.441E-16	2.174E-15	8.679E-15	
Th-230	U-238	8.862E-17	0.000E+00	1.150E-26	7.189E-24	1.035E-23	2.875E-23	1.150E-22	7.182E-22	2.870E-21	1.146E-20	
Th-230	U-238	1.276E-18	0.000E+00	1.656E-28	1.035E-25	1.490E-25	4.139E-25	1.655E-24	1.034E-23	4.131E-23	1.649E-22	
Th-230	U-238	3.200E-10	0.000E+00	4.154E-20	2.596E-17	3.738E-17	1.038E-16	4.152E-16	2.594E-15	1.036E-14	4.137E-14	

Th-230	U-238	4.224E-16	0.000E+00	5.483E-26	3.427E-23	4.934E-23	1.371E-22	5.481E-22	3.423E-21	1.368E-20	5.461E-20
Th-230	U-238	6.080E-18	0.000E+00	7.893E-28	4.932E-25	7.102E-25	1.973E-24	7.889E-24	4.928E-23	1.969E-22	7.860E-22
Th-230	U-238	9.980E-01	0.000E+00	1.295E-10	8.096E-08	1.166E-07	3.238E-07	1.295E-06	8.089E-06	3.232E-05	1.290E-04
Th-230	U-238	1.317E-06	0.000E+00	1.710E-16	1.069E-13	1.539E-13	4.274E-13	1.709E-12	1.068E-11	4.266E-11	1.703E-10
Th-230	U-238	1.896E-08	0.000E+00	2.461E-18	1.538E-15	2.215E-15	6.152E-15	2.460E-14	1.537E-13	6.141E-13	2.451E-12
Th-230	U-238	2.096E-04	0.000E+00	2.721E-14	1.701E-11	2.449E-11	6.801E-11	2.720E-10	1.699E-09	6.789E-09	2.710E-08
Th-230	U-238	2.767E-10	0.000E+00	3.592E-20	2.245E-17	3.232E-17	8.978E-17	3.590E-16	2.243E-15	8.961E-15	3.577E-14
Th-230	U-238	3.983E-12	0.000E+00	5.170E-22	3.231E-19	4.653E-19	1.292E-18	5.168E-18	3.228E-17	1.290E-16	5.149E-16
Th-230	U-238	1.994E-04	0.000E+00	2.589E-14	1.618E-11	2.330E-11	6.471E-11	2.588E-10	1.616E-09	6.459E-09	2.578E-08

Individual Nuclide Soil Concentration
Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	S(j,t), pCi/g									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Th-230	U-238	2.633E-10	0.000E+00	3.417E-20	2.136E-17	3.075E-17	8.542E-17	3.416E-16	2.134E-15	8.526E-15	3.403E-14	
Th-230	U-238	3.789E-12	0.000E+00	4.919E-22	3.074E-19	4.427E-19	1.229E-18	4.917E-18	3.071E-17	1.227E-16	4.899E-16	
Th-230	U-238	4.189E-08	0.000E+00	5.438E-18	3.398E-15	4.894E-15	1.359E-14	5.436E-14	3.395E-13	1.357E-12	5.415E-12	
Th-230	U-238	5.530E-14	0.000E+00	7.178E-24	4.486E-21	6.459E-21	1.794E-20	7.175E-20	4.482E-19	1.791E-18	7.148E-18	
Th-230	U-238	7.959E-16	0.000E+00	1.033E-25	6.457E-23	9.298E-23	2.582E-22	1.033E-21	6.451E-21	2.578E-20	1.029E-19	
Th-230	U-238	1.997E-07	0.000E+00	2.592E-17	1.620E-14	2.333E-14	6.479E-14	2.591E-13	1.618E-12	6.467E-12	2.581E-11	
Th-230	U-238	2.636E-13	0.000E+00	3.422E-23	2.138E-20	3.079E-20	8.552E-20	3.420E-19	2.136E-18	8.536E-18	3.407E-17	
Th-230	U-238	3.794E-15	0.000E+00	4.925E-25	3.078E-22	4.432E-22	1.231E-21	4.923E-21	3.075E-20	1.229E-19	4.905E-19	
Th-230	äS(j):		9.996E+00	9.996E+00	9.996E+00	9.996E+00	9.996E+00	9.996E+00	9.996E+00	9.996E+00	9.996E+00	
0Ra-226	Pu-238	9.996E-01	0.000E+00	1.870E-14	2.781E-10	4.757E-10	2.116E-09	1.537E-08	1.851E-07	1.035E-06	4.864E-06	
Ra-226	Pu-238	1.899E-08	0.000E+00	3.553E-22	5.284E-18	9.038E-18	4.020E-17	2.921E-16	3.517E-15	1.966E-14	9.242E-14	
Ra-226	Th-230	9.996E-01	0.000E+00	4.329E-03	1.077E-01	1.291E-01	2.141E-01	4.236E-01	1.025E+00	1.942E+00	3.497E+00	
Ra-226	Th-230	1.319E-06	0.000E+00	5.715E-09	1.421E-07	1.704E-07	2.827E-07	5.591E-07	1.353E-06	2.564E-06	4.616E-06	
Ra-226	Th-230	1.899E-08	0.000E+00	8.226E-11	2.046E-09	2.452E-09	4.069E-09	8.048E-09	1.947E-08	3.690E-08	6.644E-08	
Ra-226	U-234	9.996E-01	0.000E+00	1.991E-08	1.240E-05	1.784E-05	4.941E-05	1.962E-04	1.199E-03	4.627E-03	1.725E-02	
Ra-226	U-234	1.319E-06	0.000E+00	2.628E-14	1.636E-11	2.355E-11	6.522E-11	2.589E-10	1.583E-09	6.108E-09	2.277E-08	
Ra-226	U-234	1.899E-08	0.000E+00	3.782E-16	2.356E-13	3.389E-13	9.387E-13	3.727E-12	2.279E-11	8.791E-11	3.277E-10	
Ra-226	U-238	1.599E-03	0.000E+00	2.998E-17	4.671E-13	8.068E-13	3.727E-12	2.965E-11	4.557E-10	3.547E-09	2.691E-08	
Ra-226	U-238	2.111E-09	0.000E+00	3.957E-23	6.166E-19	1.065E-18	4.919E-18	3.914E-17	6.015E-16	4.683E-15	3.552E-14	
Ra-226	U-238	3.039E-11	0.000E+00	5.696E-25	8.876E-21	1.533E-20	7.081E-20	5.633E-19	8.658E-18	6.740E-17	5.113E-16	
Ra-226	U-238	9.980E-01	0.000E+00	1.871E-14	2.915E-10	5.034E-10	2.326E-09	1.850E-08	2.843E-07	2.214E-06	1.679E-05	
Ra-226	U-238	1.317E-06	0.000E+00	2.469E-20	3.848E-16	6.645E-16	3.070E-15	2.442E-14	3.753E-13	2.922E-12	2.216E-11	
Ra-226	U-238	1.896E-08	0.000E+00	3.554E-22	5.538E-18	9.565E-18	4.418E-17	3.515E-16	5.402E-15	4.206E-14	3.190E-13	
Ra-226	äS(j):		0.000E+00	4.329E-03	1.077E-01	1.291E-01	2.142E-01	4.238E-01	1.026E+00	1.947E+00	3.514E+00	
0Pb-210	Pu-238	9.996E-01	0.000E+00	1.451E-16	4.722E-11	9.441E-11	6.329E-10	7.357E-09	1.347E-07	8.905E-07	4.546E-06	
Pb-210	Pu-238	1.319E-06	0.000E+00	1.915E-22	6.233E-17	1.246E-16	8.354E-16	9.711E-15	1.778E-13	1.175E-12	6.001E-12	
Pb-210	Pu-238	2.100E-04	0.000E+00	3.048E-20	9.918E-15	1.983E-14	1.329E-13	1.545E-12	2.829E-11	1.870E-10	9.549E-10	
Pb-210	Pu-238	1.998E-04	0.000E+00	2.900E-20	9.436E-15	1.887E-14	1.265E-13	1.470E-12	2.691E-11	1.780E-10	9.085E-10	
Pb-210	Pu-238	4.196E-08	0.000E+00	6.091E-24	1.982E-18	3.963E-18	2.657E-17	3.088E-16	5.653E-15	3.738E-14	1.908E-13	
Pb-210	Pu-238	2.000E-07	0.000E+00	2.903E-23	9.448E-18	1.889E-17	1.266E-16	1.472E-15	2.694E-14	1.782E-13	9.096E-13	
Pb-210	Th-230	9.996E-01	0.000E+00	6.690E-05	3.298E-02	4.536E-02	1.061E-01	2.952E-01	8.989E-01	1.829E+00	3.407E+00	
Pb-210	Th-230	2.100E-04	0.000E+00	1.405E-08	6.927E-06	9.528E-06	2.228E-05	6.200E-05	1.888E-04	3.842E-04	7.156E-04	
Pb-210	Th-230	1.998E-04	0.000E+00	1.337E-08	6.590E-06	9.065E-06	2.120E-05	5.899E-05	1.796E-04	3.656E-04	6.808E-04	
Pb-210	Th-230	4.196E-08	0.000E+00	2.808E-12	1.384E-09	1.904E-09	4.452E-09	1.239E-08	3.773E-08	7.679E-08	1.430E-07	
Pb-210	Th-230	2.000E-07	0.000E+00	1.338E-11	6.598E-09	9.076E-09	2.122E-08	5.906E-08	1.799E-07	3.660E-07	6.816E-07	
Pb-210	U-234	9.996E-01	0.000E+00	2.056E-10	2.685E-06	4.481E-06	1.817E-05	1.092E-04	9.347E-04	4.089E-03	1.625E-02	
Pb-210	U-234	2.100E-04	0.000E+00	4.318E-14	5.640E-10	9.411E-10	3.817E-09	2.295E-08	1.963E-07	8.588E-07	3.412E-06	
Pb-210	U-234	1.998E-04	0.000E+00	4.108E-14	5.366E-10	8.954E-10	3.632E-09	2.183E-08	1.868E-07	8.171E-07	3.247E-06	
Pb-210	U-234	4.196E-08	0.000E+00	8.629E-18	1.127E-13	1.881E-13	7.628E-13	4.586E-12	3.924E-11	1.716E-10	6.819E-10	
Pb-210	U-234	2.000E-07	0.000E+00	4.113E-17	5.373E-13	8.965E-13	3.636E-12	2.186E-11	1.870E-10	8.181E-10	3.250E-09	

Pb-210	U-238	1.599E-03	0.000E+00	2.325E-19	7.863E-14	1.585E-13	1.098E-12	1.384E-11	3.204E-10	2.956E-09	2.456E-08
Pb-210	U-238	3.359E-07	0.000E+00	4.884E-23	1.652E-17	3.329E-17	2.305E-16	2.908E-15	6.731E-14	6.209E-13	5.158E-12
Pb-210	U-238	3.196E-07	0.000E+00	4.647E-23	1.571E-17	3.167E-17	2.193E-16	2.766E-15	6.404E-14	5.907E-13	4.908E-12
Pb-210	U-238	6.713E-11	0.000E+00	9.761E-27	3.301E-21	6.653E-21	4.607E-20	5.811E-19	1.345E-17	1.241E-16	1.031E-15
Pb-210	U-238	3.200E-10	0.000E+00	4.653E-26	1.573E-20	3.171E-20	2.196E-19	2.770E-18	6.411E-17	5.914E-16	4.914E-15
Pb-210	U-238	9.980E-01	0.000E+00	1.451E-16	4.907E-11	9.890E-11	6.849E-10	8.638E-09	2.000E-07	1.845E-06	1.532E-05
Pb-210	U-238	2.096E-04	0.000E+00	3.048E-20	1.031E-14	2.077E-14	1.439E-13	1.814E-12	4.200E-11	3.874E-10	3.219E-09

Individual Nuclide Soil Concentration
 Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	S(j,t), pCi/g									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Pb-210	U-238	1.994E-04	0.000E+00	2.900E-20	9.805E-15	1.976E-14	1.369E-13	1.726E-12	3.996E-11	3.686E-10	3.063E-09	
Pb-210	U-238	4.189E-08	0.000E+00	6.091E-24	2.060E-18	4.151E-18	2.875E-17	3.626E-16	8.393E-15	7.742E-14	6.433E-13	
Pb-210	U-238	1.997E-07	0.000E+00	2.903E-23	9.817E-18	1.979E-17	1.370E-16	1.728E-15	4.001E-14	3.691E-13	3.066E-12	
Pb-210	äS(j):		0.000E+00	6.692E-05	3.300E-02	4.538E-02	1.061E-01	2.954E-01	9.002E-01	1.834E+00	3.424E+00	
0Pu-238	Pu-238	1.319E-06	1.319E-05	1.309E-05	1.083E-05	1.041E-05	8.887E-06	5.986E-06	1.829E-06	2.536E-07	4.874E-09	
Pu-238	Pu-238	1.899E-08	1.899E-07	1.884E-07	1.559E-07	1.498E-07	1.279E-07	8.616E-08	2.633E-08	3.650E-09	7.016E-11	
Pu-238	äS(j):		1.338E-05	1.328E-05	1.098E-05	1.056E-05	9.015E-06	6.072E-06	1.856E-06	2.572E-07	4.944E-09	
0U-234	Pu-238	1.319E-06	0.000E+00	3.711E-11	8.451E-10	9.949E-10	1.539E-09	2.575E-09	4.058E-09	4.618E-09	4.699E-09	
0Th-230	Pu-238	1.319E-06	0.000E+00	1.708E-16	1.003E-13	1.426E-13	3.769E-13	1.338E-12	6.105E-12	1.625E-11	3.766E-11	
0Ra-226	Pu-238	1.319E-06	0.000E+00	2.468E-20	3.671E-16	6.279E-16	2.793E-15	2.029E-14	2.443E-13	1.366E-12	6.421E-12	
0Pb-210	Pu-238	1.899E-08	0.000E+00	2.757E-24	8.972E-19	1.794E-18	1.202E-17	1.398E-16	2.559E-15	1.692E-14	8.638E-14	
Pb-210	Pu-238	3.989E-12	0.000E+00	5.791E-28	1.884E-22	3.768E-22	2.526E-21	2.936E-20	5.374E-19	3.554E-18	1.814E-17	
Pb-210	Pu-238	3.795E-12	0.000E+00	5.510E-28	1.793E-22	3.585E-22	2.403E-21	2.793E-20	5.113E-19	3.381E-18	1.726E-17	
Pb-210	Pu-238	7.972E-16	0.000E+00	1.157E-31	3.766E-26	7.529E-26	5.047E-25	5.867E-24	1.074E-22	7.102E-22	3.626E-21	
Pb-210	Pu-238	3.800E-15	0.000E+00	5.516E-31	1.795E-25	3.589E-25	2.406E-24	2.797E-23	5.119E-22	3.385E-21	1.728E-20	
Pb-210	Th-230	1.899E-08	0.000E+00	1.271E-12	6.266E-10	8.618E-10	2.015E-09	5.609E-09	1.708E-08	3.476E-08	6.473E-08	
Pb-210	Th-230	3.989E-12	0.000E+00	2.670E-16	1.316E-13	1.810E-13	4.233E-13	1.178E-12	3.587E-12	7.301E-12	1.360E-11	
Pb-210	Th-230	3.795E-12	0.000E+00	2.540E-16	1.252E-13	1.722E-13	4.027E-13	1.121E-12	3.413E-12	6.946E-12	1.294E-11	
Pb-210	Th-230	7.972E-16	0.000E+00	5.335E-20	2.630E-17	3.618E-17	8.459E-17	2.354E-16	7.169E-16	1.459E-15	2.717E-15	
Pb-210	Th-230	3.800E-15	0.000E+00	2.543E-19	1.254E-16	1.724E-16	4.032E-16	1.122E-15	3.417E-15	6.954E-15	1.295E-14	
Pb-210	U-234	1.899E-08	0.000E+00	3.906E-18	5.102E-14	8.513E-14	3.453E-13	2.076E-12	1.776E-11	7.768E-11	3.087E-10	
Pb-210	U-234	3.989E-12	0.000E+00	8.204E-22	1.072E-17	1.788E-17	7.252E-17	4.360E-16	3.730E-15	1.632E-14	6.483E-14	
Pb-210	U-234	3.795E-12	0.000E+00	7.806E-22	1.020E-17	1.701E-17	6.900E-17	4.148E-16	3.549E-15	1.552E-14	6.168E-14	
Pb-210	U-234	7.972E-16	0.000E+00	1.640E-25	2.142E-21	3.573E-21	1.449E-20	8.713E-20	7.455E-19	3.261E-18	1.296E-17	
Pb-210	U-234	3.800E-15	0.000E+00	7.815E-25	1.021E-20	1.703E-20	6.908E-20	4.153E-19	3.553E-18	1.554E-17	6.176E-17	
Pb-210	U-238	3.039E-11	0.000E+00	4.418E-27	1.494E-21	3.011E-21	2.085E-20	2.630E-19	6.088E-18	5.616E-17	4.666E-16	
Pb-210	U-238	6.383E-15	0.000E+00	9.280E-31	3.138E-25	6.325E-25	4.380E-24	5.525E-23	1.279E-21	1.180E-20	9.801E-20	
Pb-210	U-238	6.073E-15	0.000E+00	8.830E-31	2.986E-25	6.018E-25	4.167E-24	5.256E-23	1.217E-21	1.122E-20	9.325E-20	
Pb-210	U-238	1.276E-18	0.000E+00	1.855E-34	6.271E-29	1.264E-28	8.753E-28	1.104E-26	2.556E-25	2.357E-24	1.959E-23	
Pb-210	U-238	6.080E-18	0.000E+00	8.840E-34	2.989E-28	6.025E-28	4.172E-27	5.263E-26	1.218E-24	1.124E-23	9.336E-23	
Pb-210	U-238	1.896E-08	0.000E+00	2.757E-24	9.323E-19	1.879E-18	1.301E-17	1.641E-16	3.799E-15	3.505E-14	2.912E-13	
Pb-210	U-238	3.983E-12	0.000E+00	5.791E-28	1.958E-22	3.947E-22	2.733E-21	3.447E-20	7.980E-19	7.361E-18	6.116E-17	
Pb-210	U-238	3.789E-12	0.000E+00	5.510E-28	1.863E-22	3.755E-22	2.600E-21	3.280E-20	7.592E-19	7.004E-18	5.819E-17	
Pb-210	U-238	7.959E-16	0.000E+00	1.157E-31	3.913E-26	7.887E-26	5.462E-25	6.889E-24	1.595E-22	1.471E-21	1.222E-20	
Pb-210	U-238	3.794E-15	0.000E+00	5.516E-31	1.865E-25	3.760E-25	2.604E-24	3.284E-23	7.601E-22	7.012E-21	5.826E-20	
Pb-210	äS(j):		0.000E+00	1.272E-12	6.269E-10	8.623E-10	2.016E-09	5.613E-09	1.710E-08	3.485E-08	6.506E-08	
0Pu-238	Pu-238	2.100E-04	2.100E-03	2.083E-03	1.723E-03	1.656E-03	1.414E-03	9.525E-04	2.911E-04	4.035E-05	7.756E-07	
Pu-238	Pu-238	2.771E-10	2.771E-09	2.750E-09	2.275E-09	2.186E-09	1.867E-09	1.257E-09	3.842E-10	5.327E-11	1.024E-12	
Pu-238	äS(j):		2.100E-03	2.083E-03	1.723E-03	1.656E-03	1.414E-03	9.525E-04	2.911E-04	4.035E-05	7.756E-07	
0Ra-226	Pu-238	2.100E-04	0.000E+00	3.928E-18	5.841E-14	9.992E-14	4.444E-13	3.229E-12	3.888E-11	2.174E-10	1.022E-09	

Ra-226	Pu-238	2.771E-10	0.000E+00	5.184E-24	7.710E-20	1.319E-19	5.867E-19	4.262E-18	5.132E-17	2.869E-16	1.349E-15
Ra-226	Pu-238	3.989E-12	0.000E+00	7.462E-26	1.110E-21	1.898E-21	8.444E-21	6.135E-20	7.387E-19	4.130E-18	1.941E-17

Individual Nuclide Soil Concentration
Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	S(j,t), pCi/g									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Ra-226	Th-230	2.100E-04	0.000E+00	9.094E-07	2.261E-05	2.711E-05	4.498E-05	8.897E-05	2.153E-04	4.079E-04	7.345E-04	
Ra-226	Th-230	2.771E-10	0.000E+00	1.200E-12	2.985E-11	3.578E-11	5.937E-11	1.174E-10	2.841E-10	5.385E-10	9.695E-10	
Ra-226	Th-230	3.989E-12	0.000E+00	1.728E-14	4.297E-13	5.150E-13	8.546E-13	1.690E-12	4.090E-12	7.750E-12	1.396E-11	
Ra-226	U-234	2.100E-04	0.000E+00	4.181E-12	2.604E-09	3.747E-09	1.038E-08	4.120E-08	2.519E-07	9.719E-07	3.623E-06	
Ra-226	U-234	2.771E-10	0.000E+00	5.519E-18	3.437E-15	4.946E-15	1.370E-14	5.439E-14	3.325E-13	1.283E-12	4.782E-12	
Ra-226	U-234	3.989E-12	0.000E+00	7.944E-20	4.948E-17	7.119E-17	1.972E-16	7.829E-16	4.787E-15	1.847E-14	6.883E-14	
Ra-226	U-238	3.359E-07	0.000E+00	6.297E-21	9.812E-17	1.695E-16	7.828E-16	6.228E-15	9.571E-14	7.451E-13	5.652E-12	
Ra-226	U-238	4.434E-13	0.000E+00	8.311E-27	1.295E-22	2.237E-22	1.033E-21	8.221E-21	1.263E-19	9.836E-19	7.461E-18	
Ra-226	U-238	6.383E-15	0.000E+00	1.196E-28	1.864E-24	3.220E-24	1.487E-23	1.183E-22	1.819E-21	1.416E-20	1.074E-19	
Ra-226	U-238	2.096E-04	0.000E+00	3.929E-18	6.123E-14	1.057E-13	4.885E-13	3.886E-12	5.972E-11	4.650E-10	3.527E-09	
Ra-226	U-238	2.767E-10	0.000E+00	5.186E-24	8.082E-20	1.396E-19	6.448E-19	5.130E-18	7.884E-17	6.137E-16	4.656E-15	
Ra-226	U-238	3.983E-12	0.000E+00	7.465E-26	1.163E-21	2.009E-21	9.281E-21	7.384E-20	1.135E-18	8.834E-18	6.701E-17	
Ra-226	äS(j):		0.000E+00	9.094E-07	2.262E-05	2.711E-05	4.499E-05	8.901E-05	2.155E-04	4.089E-04	7.381E-04	
0Pb-210	Pu-238	2.771E-10	0.000E+00	4.023E-26	1.309E-20	2.618E-20	1.755E-19	2.040E-18	3.734E-17	2.469E-16	1.260E-15	
Pb-210	Pu-238	2.637E-10	0.000E+00	3.828E-26	1.246E-20	2.490E-20	1.669E-19	1.941E-18	3.552E-17	2.349E-16	1.199E-15	
Pb-210	Pu-238	5.538E-14	0.000E+00	8.040E-30	2.616E-24	5.231E-24	3.507E-23	4.076E-22	7.461E-21	4.934E-20	2.519E-19	
Pb-210	Pu-238	2.640E-13	0.000E+00	3.832E-29	1.247E-23	2.493E-23	1.672E-22	1.943E-21	3.557E-20	2.352E-19	1.201E-18	
Pb-210	Th-230	1.319E-06	0.000E+00	8.830E-11	4.353E-08	5.988E-08	1.400E-07	3.897E-07	1.187E-06	2.415E-06	4.497E-06	
Pb-210	Th-230	2.771E-10	0.000E+00	1.855E-14	9.144E-12	1.258E-11	2.941E-11	8.185E-11	2.492E-10	5.072E-10	9.445E-10	
Pb-210	Th-230	2.637E-10	0.000E+00	1.765E-14	8.699E-12	1.197E-11	2.798E-11	7.787E-11	2.371E-10	4.826E-10	8.986E-10	
Pb-210	Th-230	5.538E-14	0.000E+00	3.707E-18	1.827E-15	2.513E-15	5.877E-15	1.636E-14	4.981E-14	1.014E-13	1.888E-13	
Pb-210	Th-230	2.640E-13	0.000E+00	1.767E-17	8.710E-15	1.198E-14	2.801E-14	7.796E-14	2.374E-13	4.831E-13	8.997E-13	
Pb-210	U-234	1.319E-06	0.000E+00	2.714E-16	3.545E-12	5.915E-12	2.399E-11	1.442E-10	1.234E-09	5.397E-09	2.144E-08	
Pb-210	U-234	2.771E-10	0.000E+00	5.700E-20	7.445E-16	1.242E-15	5.038E-15	3.029E-14	2.592E-13	1.134E-12	4.504E-12	
Pb-210	U-234	2.637E-10	0.000E+00	5.423E-20	7.083E-16	1.182E-15	4.794E-15	2.882E-14	2.466E-13	1.079E-12	4.285E-12	
Pb-210	U-234	5.538E-14	0.000E+00	1.139E-23	1.488E-19	2.483E-19	1.007E-18	6.053E-18	5.179E-17	2.265E-16	9.001E-16	
Pb-210	U-234	2.640E-13	0.000E+00	5.430E-23	7.092E-19	1.183E-18	4.799E-18	2.885E-17	2.469E-16	1.080E-15	4.291E-15	
Pb-210	U-238	2.111E-09	0.000E+00	3.070E-25	1.038E-19	2.092E-19	1.449E-18	1.827E-17	4.230E-16	3.902E-15	3.242E-14	
Pb-210	U-238	4.434E-13	0.000E+00	6.447E-29	2.180E-23	4.394E-23	3.043E-22	3.838E-21	8.884E-20	8.196E-19	6.809E-18	
Pb-210	U-238	4.219E-13	0.000E+00	6.134E-29	2.074E-23	4.181E-23	2.895E-22	3.652E-21	8.453E-20	7.797E-19	6.478E-18	
Pb-210	U-238	8.862E-17	0.000E+00	1.288E-32	4.357E-27	8.781E-27	6.081E-26	7.670E-25	1.775E-23	1.638E-22	1.361E-21	
Pb-210	U-238	4.224E-16	0.000E+00	6.142E-32	2.077E-26	4.186E-26	2.899E-25	3.656E-24	8.463E-23	7.807E-22	6.486E-21	
Pb-210	U-238	1.317E-06	0.000E+00	1.915E-22	6.477E-17	1.305E-16	9.040E-16	1.140E-14	2.639E-13	2.435E-12	2.023E-11	
Pb-210	U-238	2.767E-10	0.000E+00	4.023E-26	1.360E-20	2.742E-20	1.899E-19	2.395E-18	5.544E-17	5.114E-16	4.249E-15	
Pb-210	U-238	2.633E-10	0.000E+00	3.828E-26	1.294E-20	2.609E-20	1.807E-19	2.279E-18	5.274E-17	4.866E-16	4.043E-15	
Pb-210	U-238	5.530E-14	0.000E+00	8.040E-30	2.719E-24	5.480E-24	3.795E-23	4.786E-22	1.108E-20	1.022E-19	8.491E-19	
Pb-210	U-238	2.636E-13	0.000E+00	3.832E-29	1.296E-23	2.612E-23	1.809E-22	2.281E-21	5.281E-20	4.871E-19	4.047E-18	
Pb-210	äS(j):		0.000E+00	8.834E-11	4.355E-08	5.991E-08	1.401E-07	3.900E-07	1.188E-06	2.421E-06	4.520E-06	
0Pu-238	Pu-238	3.989E-12	3.989E-11	3.958E-11	3.274E-11	3.147E-11	2.687E-11	1.810E-11	5.530E-12	7.667E-13	1.474E-14	
Pu-238	Pu-238	1.998E-04	1.998E-03	1.982E-03	1.639E-03	1.576E-03	1.345E-03	9.063E-04	2.769E-04	3.839E-05	7.379E-07	

Pu-238	äS(j):		1.998E-03	1.982E-03	1.639E-03	1.576E-03	1.345E-03	9.063E-04	2.769E-04	3.839E-05	7.379E-07
0Ra-226	Pu-238	1.998E-04	0.000E+00	3.737E-18	5.557E-14	9.506E-14	4.229E-13	3.072E-12	3.699E-11	2.068E-10	9.721E-10
Ra-226	Pu-238	3.795E-12	0.000E+00	7.100E-26	1.056E-21	1.806E-21	8.034E-21	5.837E-20	7.028E-19	3.929E-18	1.847E-17
Ra-226	Th-230	1.998E-04	0.000E+00	8.652E-07	2.152E-05	2.579E-05	4.279E-05	8.465E-05	2.048E-04	3.881E-04	6.988E-04
Ra-226	Th-230	2.637E-10	0.000E+00	1.142E-12	2.840E-11	3.404E-11	5.649E-11	1.117E-10	2.703E-10	5.123E-10	9.224E-10
Ra-226	Th-230	3.795E-12	0.000E+00	1.644E-14	4.088E-13	4.900E-13	8.131E-13	1.608E-12	3.891E-12	7.374E-12	1.328E-11

Individual Nuclide Soil Concentration
Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	S(j,t), pCi/g									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Ra-226	U-234	1.998E-04	0.000E+00	3.978E-12	2.478E-09	3.565E-09	9.873E-09	3.920E-08	2.397E-07	9.247E-07	3.447E-06	
Ra-226	U-234	2.637E-10	0.000E+00	5.251E-18	3.270E-15	4.706E-15	1.303E-14	5.175E-14	3.164E-13	1.221E-12	4.550E-12	
Ra-226	U-234	3.795E-12	0.000E+00	7.559E-20	4.707E-17	6.773E-17	1.876E-16	7.449E-16	4.554E-15	1.757E-14	6.549E-14	
Ra-226	U-238	3.196E-07	0.000E+00	5.991E-21	9.335E-17	1.612E-16	7.448E-16	5.925E-15	9.106E-14	7.089E-13	5.378E-12	
Ra-226	U-238	4.219E-13	0.000E+00	7.908E-27	1.232E-22	2.128E-22	9.831E-22	7.821E-21	1.202E-19	9.358E-19	7.098E-18	
Ra-226	U-238	6.073E-15	0.000E+00	1.138E-28	1.774E-24	3.063E-24	1.415E-23	1.126E-22	1.730E-21	1.347E-20	1.022E-19	
Ra-226	U-238	1.994E-04	0.000E+00	3.738E-18	5.825E-14	1.006E-13	4.647E-13	3.697E-12	5.682E-11	4.424E-10	3.356E-09	
Ra-226	U-238	2.633E-10	0.000E+00	4.934E-24	7.689E-20	1.328E-19	6.134E-19	4.880E-18	7.501E-17	5.839E-16	4.429E-15	
Ra-226	U-238	3.789E-12	0.000E+00	7.103E-26	1.107E-21	1.911E-21	8.830E-21	7.025E-20	1.080E-18	8.405E-18	6.376E-17	
Ra-226	äS(j):		0.000E+00	8.652E-07	2.152E-05	2.579E-05	4.280E-05	8.469E-05	2.050E-04	3.890E-04	7.023E-04	
0Pu-238	Pu-238	2.637E-10	2.637E-09	2.616E-09	2.164E-09	2.080E-09	1.776E-09	1.196E-09	3.656E-10	5.068E-11	9.740E-13	
Pu-238	Pu-238	3.795E-12	3.795E-11	3.766E-11	3.115E-11	2.994E-11	2.556E-11	1.722E-11	5.262E-12	7.295E-13	1.402E-14	
Pu-238	äS(j):		2.675E-09	2.654E-09	2.195E-09	2.110E-09	1.802E-09	1.213E-09	3.708E-10	5.141E-11	9.881E-13	
0Ra-226	Pu-238	2.637E-10	0.000E+00	4.933E-24	7.336E-20	1.255E-19	5.582E-19	4.055E-18	4.883E-17	2.730E-16	1.283E-15	
0Pu-238	Pu-238	4.196E-08	4.196E-07	4.163E-07	3.444E-07	3.310E-07	2.826E-07	1.904E-07	5.817E-08	8.064E-09	1.550E-10	
Pu-238	Pu-238	5.538E-14	5.538E-13	5.495E-13	4.545E-13	4.369E-13	3.730E-13	2.513E-13	7.678E-14	1.064E-14	2.046E-16	
Pu-238	äS(j):		4.196E-07	4.163E-07	3.444E-07	3.310E-07	2.826E-07	1.904E-07	5.817E-08	8.064E-09	1.550E-10	
0Ra-226	Pu-238	4.196E-08	0.000E+00	7.849E-22	1.167E-17	1.997E-17	8.882E-17	6.453E-16	7.770E-15	4.344E-14	2.042E-13	
Ra-226	Pu-238	5.538E-14	0.000E+00	1.036E-27	1.541E-23	2.636E-23	1.172E-22	8.518E-22	1.026E-20	5.734E-20	2.695E-19	
Ra-226	Pu-238	7.972E-16	0.000E+00	1.491E-29	2.218E-25	3.794E-25	1.688E-24	1.226E-23	1.476E-22	8.253E-22	3.879E-21	
Ra-226	Th-230	4.196E-08	0.000E+00	1.817E-10	4.519E-09	5.417E-09	8.989E-09	1.778E-08	4.302E-08	8.152E-08	1.468E-07	
Ra-226	Th-230	5.538E-14	0.000E+00	2.399E-16	5.965E-15	7.150E-15	1.186E-14	2.347E-14	5.678E-14	1.076E-13	1.938E-13	
Ra-226	Th-230	7.972E-16	0.000E+00	3.453E-18	8.586E-17	1.029E-16	1.708E-16	3.378E-16	8.173E-16	1.549E-15	2.789E-15	
Ra-226	U-234	4.196E-08	0.000E+00	8.356E-16	5.204E-13	7.488E-13	2.074E-12	8.234E-12	5.034E-11	1.942E-10	7.240E-10	
Ra-226	U-234	5.538E-14	0.000E+00	1.103E-21	6.869E-19	9.884E-19	2.737E-18	1.087E-17	6.645E-17	2.564E-16	9.556E-16	
Ra-226	U-234	7.972E-16	0.000E+00	1.588E-23	9.887E-21	1.423E-20	3.940E-20	1.565E-19	9.565E-19	3.690E-18	1.376E-17	
Ra-226	U-238	6.713E-11	0.000E+00	1.258E-24	1.961E-20	3.386E-20	1.564E-19	1.245E-18	1.913E-17	1.489E-16	1.130E-15	
Ra-226	U-238	8.862E-17	0.000E+00	1.661E-30	2.588E-26	4.470E-26	2.065E-25	1.643E-24	2.525E-23	1.966E-22	1.491E-21	
Ra-226	U-238	1.276E-18	0.000E+00	2.391E-32	3.726E-28	6.434E-28	2.972E-27	2.365E-26	3.634E-25	2.829E-24	2.146E-23	
Ra-226	U-238	4.189E-08	0.000E+00	7.852E-22	1.224E-17	2.113E-17	9.761E-17	7.766E-16	1.194E-14	9.292E-14	7.048E-13	
Ra-226	U-238	5.530E-14	0.000E+00	1.036E-27	1.615E-23	2.789E-23	1.288E-22	1.025E-21	1.575E-20	1.227E-19	9.304E-19	
Ra-226	U-238	7.959E-16	0.000E+00	1.492E-29	2.325E-25	4.015E-25	1.855E-24	1.476E-23	2.268E-22	1.765E-21	1.339E-20	
Ra-226	äS(j):		0.000E+00	1.817E-10	4.520E-09	5.418E-09	8.991E-09	1.779E-08	4.307E-08	8.171E-08	1.475E-07	
0Pu-238	Pu-238	7.972E-16	7.972E-15	7.909E-15	6.543E-15	6.289E-15	5.370E-15	3.617E-15	1.105E-15	1.532E-16	2.945E-18	
Pu-238	Pu-238	2.000E-07	2.000E-06	1.984E-06	1.641E-06	1.578E-06	1.347E-06	9.074E-07	2.773E-07	3.844E-08	7.388E-10	
Pu-238	äS(j):		2.000E-06	1.984E-06	1.641E-06	1.578E-06	1.347E-06	9.074E-07	2.773E-07	3.844E-08	7.388E-10	
0Ra-226	Pu-238	2.000E-07	0.000E+00	3.741E-21	5.564E-17	9.518E-17	4.234E-16	3.076E-15	3.704E-14	2.070E-13	9.733E-13	
Ra-226	Pu-238	3.800E-15	0.000E+00	7.108E-29	1.057E-24	1.808E-24	8.044E-24	5.844E-23	7.037E-22	3.934E-21	1.849E-20	
Ra-226	Th-230	2.000E-07	0.000E+00	8.662E-10	2.154E-08	2.582E-08	4.285E-08	8.475E-08	2.050E-07	3.886E-07	6.997E-07	
Ra-226	Th-230	2.640E-13	0.000E+00	1.143E-15	2.843E-14	3.408E-14	5.656E-14	1.119E-13	2.707E-13	5.129E-13	9.236E-13	

Ra-226	Th-230	3.800E-15	0.000E+00	1.646E-17	4.093E-16	4.906E-16	8.141E-16	1.610E-15	3.896E-15	7.383E-15	1.329E-14
Ra-226	U-234	2.000E-07	0.000E+00	3.983E-15	2.481E-12	3.569E-12	9.885E-12	3.925E-11	2.400E-10	9.258E-10	3.451E-09
Ra-226	U-234	2.640E-13	0.000E+00	5.258E-21	3.274E-18	4.711E-18	1.305E-17	5.181E-17	3.168E-16	1.222E-15	4.555E-15

Individual Nuclide Soil Concentration
Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	S(j,t), pCi/g									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Ra-226	U-234	3.800E-15	0.000E+00	7.568E-23	4.713E-20	6.782E-20	1.878E-19	7.458E-19	4.560E-18	1.759E-17	6.557E-17	
Ra-226	U-238	3.200E-10	0.000E+00	5.998E-24	9.347E-20	1.614E-19	7.457E-19	5.932E-18	9.117E-17	7.098E-16	5.384E-15	
Ra-226	U-238	4.224E-16	0.000E+00	7.917E-30	1.234E-25	2.131E-25	9.843E-25	7.831E-24	1.203E-22	9.369E-22	7.107E-21	
Ra-226	U-238	6.080E-18	0.000E+00	1.140E-31	1.776E-27	3.067E-27	1.417E-26	1.127E-25	1.732E-24	1.349E-23	1.023E-22	
Ra-226	U-238	1.997E-07	0.000E+00	3.743E-21	5.832E-17	1.007E-16	4.653E-16	3.702E-15	5.689E-14	4.429E-13	3.360E-12	
Ra-226	U-238	2.636E-13	0.000E+00	4.940E-27	7.699E-23	1.330E-22	6.142E-22	4.886E-21	7.510E-20	5.846E-19	4.435E-18	
Ra-226	U-238	3.794E-15	0.000E+00	7.111E-29	1.108E-24	1.914E-24	8.841E-24	7.033E-23	1.081E-21	8.415E-21	6.383E-20	
Ra-226	äS(j):		0.000E+00	8.662E-10	2.154E-08	2.582E-08	4.286E-08	8.479E-08	2.053E-07	3.895E-07	7.031E-07	
0Pu-238	Pu-238	2.640E-13	2.640E-12	2.619E-12	2.167E-12	2.083E-12	1.778E-12	1.198E-12	3.660E-13	5.074E-14	9.752E-16	
Pu-238	Pu-238	3.800E-15	3.800E-14	3.770E-14	3.119E-14	2.998E-14	2.560E-14	1.724E-14	5.268E-15	7.304E-16	1.404E-17	
Pu-238	äS(j):		2.678E-12	2.657E-12	2.198E-12	2.113E-12	1.804E-12	1.215E-12	3.713E-13	5.147E-14	9.893E-16	
0Ra-226	Pu-238	2.640E-13	0.000E+00	4.939E-27	7.345E-23	1.256E-22	5.588E-22	4.060E-21	4.889E-20	2.733E-19	1.285E-18	
0Pu-239	Pu-239	5.901E-04	5.901E-03	5.901E-03	5.897E-03	5.896E-03	5.892E-03	5.884E-03	5.859E-03	5.817E-03	5.734E-03	
Pu-239	Pu-239	1.633E-06	1.633E-05	1.633E-05	1.632E-05	1.632E-05	1.631E-05	1.628E-05	1.621E-05	1.610E-05	1.587E-05	
Pu-239	äS(j):		5.917E-03	5.917E-03	5.913E-03	5.912E-03	5.909E-03	5.900E-03	5.875E-03	5.833E-03	5.749E-03	
0U-235	Pu-239	5.901E-04	0.000E+00	5.810E-12	1.452E-10	1.742E-10	2.903E-10	5.802E-10	1.447E-09	2.884E-09	5.727E-09	
U-235	Pu-239	1.633E-06	0.000E+00	1.608E-14	4.018E-13	4.822E-13	8.034E-13	1.606E-12	4.005E-12	7.982E-12	1.585E-11	
U-235	Pu-239	8.257E-06	0.000E+00	8.129E-14	2.032E-12	2.438E-12	4.062E-12	8.118E-12	2.025E-11	4.035E-11	8.013E-11	
U-235	Pu-239	2.285E-08	0.000E+00	2.250E-16	5.623E-15	6.747E-15	1.124E-14	2.247E-14	5.604E-14	1.117E-13	2.218E-13	
U-235	Pu-239	4.954E-10	0.000E+00	4.878E-18	1.219E-16	1.463E-16	2.437E-16	4.871E-16	1.215E-15	2.421E-15	4.808E-15	
U-235	Pu-239	1.371E-12	0.000E+00	1.350E-20	3.374E-19	4.048E-19	6.745E-19	1.348E-18	3.363E-18	6.702E-18	1.331E-17	
U-235	Pu-239	9.829E-01	0.000E+00	9.677E-09	2.418E-07	2.902E-07	4.835E-07	9.663E-07	2.411E-06	4.804E-06	9.539E-06	
U-235	Pu-239	2.720E-03	0.000E+00	2.678E-11	6.693E-10	8.032E-10	1.338E-09	2.674E-09	6.672E-09	1.330E-08	2.640E-08	
U-235	Pu-239	1.375E-02	0.000E+00	1.354E-10	3.384E-09	4.060E-09	6.766E-09	1.352E-08	3.373E-08	6.722E-08	1.335E-07	
U-235	Pu-239	3.806E-05	0.000E+00	3.748E-13	9.366E-12	1.124E-11	1.872E-11	3.742E-11	9.335E-11	1.860E-10	3.694E-10	
U-235	Pu-239	8.252E-07	0.000E+00	8.125E-15	2.031E-13	2.436E-13	4.060E-13	8.113E-13	2.024E-12	4.033E-12	8.008E-12	
U-235	Pu-239	2.284E-09	0.000E+00	2.249E-17	5.620E-16	6.743E-16	1.124E-15	2.245E-15	5.601E-15	1.116E-14	2.216E-14	
U-235	U-235	9.835E-01	9.835E+00	9.835E+00	9.835E+00	9.835E+00	9.835E+00	9.835E+00	9.834E+00	9.834E+00	9.833E+00	
U-235	äS(j):		9.835E+00	9.835E+00	9.835E+00	9.835E+00	9.835E+00	9.835E+00	9.834E+00	9.834E+00	9.833E+00	
0Pa-231	Pu-239	5.901E-04	0.000E+00	6.146E-17	3.840E-14	5.529E-14	1.535E-13	6.136E-13	3.825E-12	1.524E-11	6.044E-11	
Pa-231	Pu-239	1.633E-06	0.000E+00	1.701E-19	1.063E-16	1.530E-16	4.249E-16	1.698E-15	1.059E-14	4.217E-14	1.673E-13	
Pa-231	Pu-239	8.257E-06	0.000E+00	8.600E-19	5.373E-16	7.736E-16	2.148E-15	8.586E-15	5.353E-14	2.132E-13	8.457E-13	
Pa-231	Pu-239	2.285E-08	0.000E+00	2.380E-21	1.487E-18	2.141E-18	5.946E-18	2.376E-17	1.481E-16	5.901E-16	2.341E-15	
Pa-231	Pu-239	4.954E-10	0.000E+00	5.160E-23	3.224E-20	4.642E-20	1.289E-19	5.152E-19	3.212E-18	1.279E-17	5.075E-17	
Pa-231	Pu-239	1.371E-12	0.000E+00	1.428E-25	8.923E-23	1.285E-22	3.568E-22	1.426E-21	8.889E-21	3.541E-20	1.404E-19	
Pa-231	Pu-239	9.829E-01	0.000E+00	1.024E-13	6.396E-11	9.209E-11	2.557E-10	1.022E-09	6.372E-09	2.538E-08	1.007E-07	
Pa-231	Pu-239	2.720E-03	0.000E+00	2.833E-16	1.770E-13	2.549E-13	7.078E-13	2.829E-12	1.764E-11	7.025E-11	2.786E-10	
Pa-231	Pu-239	1.375E-02	0.000E+00	1.432E-15	8.949E-13	1.289E-12	3.578E-12	1.430E-11	8.916E-11	3.551E-10	1.409E-09	
Pa-231	Pu-239	3.806E-05	0.000E+00	3.965E-18	2.477E-15	3.566E-15	9.903E-15	3.958E-14	2.468E-13	9.829E-13	3.899E-12	
Pa-231	Pu-239	8.252E-07	0.000E+00	8.595E-20	5.370E-17	7.732E-17	2.147E-16	8.581E-16	5.350E-15	2.131E-14	8.453E-14	

Pa-231	Pu-239	2.284E-09	0.000E+00	2.379E-22	1.486E-19	2.140E-19	5.942E-19	2.375E-18	1.481E-17	5.898E-17	2.339E-16
Pa-231	U-235	9.835E-01	0.000E+00	2.081E-04	5.201E-03	6.241E-03	1.040E-02	2.079E-02	5.188E-02	1.035E-01	2.059E-01
Pa-231	U-235	2.722E-03	0.000E+00	5.759E-07	1.439E-05	1.727E-05	2.878E-05	5.753E-05	1.436E-04	2.864E-04	5.698E-04
Pa-231	U-235	1.376E-02	0.000E+00	2.912E-06	7.277E-05	8.732E-05	1.455E-04	2.908E-04	7.259E-04	1.448E-03	2.880E-03

Individual Nuclide Soil Concentration
 Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	S(j,t), pCi/g									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Pa-231	U-235	3.809E-05	0.000E+00	8.058E-09	2.014E-07	2.417E-07	4.027E-07	8.050E-07	2.009E-06	4.008E-06	7.972E-06	
Pa-231	U-235	8.257E-07	0.000E+00	1.747E-10	4.367E-09	5.240E-09	8.731E-09	1.745E-08	4.356E-08	8.688E-08	1.728E-07	
Pa-231	U-235	2.285E-09	0.000E+00	4.835E-13	1.208E-11	1.450E-11	2.416E-11	4.830E-11	1.206E-10	2.405E-10	4.784E-10	
Pa-231	äS(j):		0.000E+00	2.116E-04	5.288E-03	6.345E-03	1.057E-02	2.114E-02	5.275E-02	1.052E-01	2.093E-01	
0Ac-227	Pu-239	5.901E-04	0.000E+00	6.471E-19	8.445E-15	1.409E-14	5.716E-14	3.443E-13	2.986E-12	1.345E-11	5.679E-11	
Ac-227	Pu-239	9.829E-01	0.000E+00	1.078E-15	1.407E-11	2.347E-11	9.520E-11	5.735E-10	4.974E-09	2.240E-08	9.460E-08	
Ac-227	U-235	9.835E-01	0.000E+00	3.278E-06	1.615E-03	2.221E-03	5.197E-03	1.453E-02	4.538E-02	9.701E-02	1.995E-01	
Ac-227	äS(j):		0.000E+00	3.278E-06	1.615E-03	2.221E-03	5.197E-03	1.453E-02	4.538E-02	9.701E-02	1.995E-01	
0Ac-227	Pu-239	1.633E-06	0.000E+00	1.791E-21	2.337E-17	3.900E-17	1.582E-16	9.529E-16	8.264E-15	3.722E-14	1.572E-13	
Ac-227	Pu-239	8.257E-06	0.000E+00	9.054E-21	1.182E-16	1.972E-16	7.997E-16	4.817E-15	4.178E-14	1.882E-13	7.947E-13	
Ac-227	Pu-239	2.720E-03	0.000E+00	2.983E-18	3.893E-14	6.496E-14	2.635E-13	1.587E-12	1.377E-11	6.200E-11	2.618E-10	
Ac-227	U-235	2.722E-03	0.000E+00	9.071E-09	4.469E-06	6.147E-06	1.438E-05	4.022E-05	1.256E-04	2.685E-04	5.520E-04	
Ac-227	äS(j):		0.000E+00	9.071E-09	4.469E-06	6.147E-06	1.438E-05	4.022E-05	1.256E-04	2.685E-04	5.520E-04	
0Pu-239	Pu-239	8.257E-06	8.257E-05	8.256E-05	8.251E-05	8.250E-05	8.245E-05	8.233E-05	8.198E-05	8.139E-05	8.023E-05	
Pu-239	Pu-239	2.285E-08	2.285E-07	2.285E-07	2.284E-07	2.283E-07	2.282E-07	2.279E-07	2.269E-07	2.253E-07	2.220E-07	
Pu-239	äS(j):		8.280E-05	8.279E-05	8.274E-05	8.272E-05	8.268E-05	8.256E-05	8.220E-05	8.161E-05	8.045E-05	
0Ac-227	Pu-239	2.285E-08	0.000E+00	2.506E-23	3.271E-19	5.457E-19	2.213E-18	1.333E-17	1.156E-16	5.208E-16	2.199E-15	
Ac-227	Pu-239	4.954E-10	0.000E+00	5.433E-25	7.091E-21	1.183E-20	4.799E-20	2.891E-19	2.507E-18	1.129E-17	4.768E-17	
Ac-227	Pu-239	3.806E-05	0.000E+00	4.174E-20	5.448E-16	9.090E-16	3.687E-15	2.221E-14	1.926E-13	8.675E-13	3.663E-12	
Ac-227	U-235	3.809E-05	0.000E+00	1.269E-10	6.253E-08	8.601E-08	2.012E-07	5.627E-07	1.757E-06	3.757E-06	7.724E-06	
Ac-227	äS(j):		0.000E+00	1.269E-10	6.253E-08	8.601E-08	2.012E-07	5.627E-07	1.757E-06	3.757E-06	7.724E-06	
0Pu-239	Pu-239	4.954E-10	4.954E-09	4.954E-09	4.951E-09	4.950E-09	4.947E-09	4.940E-09	4.919E-09	4.884E-09	4.814E-09	
Pu-239	Pu-239	1.371E-12	1.371E-11	1.371E-11	1.370E-11	1.370E-11	1.369E-11	1.367E-11	1.361E-11	1.352E-11	1.332E-11	
Pu-239	äS(j):		4.968E-09	4.968E-09	4.964E-09	4.964E-09	4.961E-09	4.954E-09	4.932E-09	4.897E-09	4.827E-09	
0Ac-227	Pu-239	1.371E-12	0.000E+00	1.504E-27	1.962E-23	3.274E-23	1.328E-22	8.000E-22	6.939E-21	3.125E-20	1.320E-19	
Ac-227	Pu-239	2.284E-09	0.000E+00	2.505E-24	3.269E-20	5.454E-20	2.212E-19	1.333E-18	1.156E-17	5.206E-17	2.198E-16	
Ac-227	U-235	2.285E-09	0.000E+00	7.616E-15	3.752E-12	5.161E-12	1.208E-11	3.376E-11	1.054E-10	2.254E-10	4.635E-10	
Ac-227	äS(j):		0.000E+00	7.616E-15	3.752E-12	5.161E-12	1.208E-11	3.376E-11	1.054E-10	2.254E-10	4.635E-10	
0Pu-239	Pu-239	9.829E-01	9.829E+00	9.829E+00	9.822E+00	9.820E+00	9.815E+00	9.801E+00	9.758E+00	9.689E+00	9.550E+00	
Pu-239	Pu-239	2.720E-03	2.720E-02	2.720E-02	2.718E-02	2.718E-02	2.716E-02	2.712E-02	2.701E-02	2.681E-02	2.643E-02	
Pu-239	äS(j):		9.856E+00	9.856E+00	9.849E+00	9.848E+00	9.842E+00	9.828E+00	9.785E+00	9.715E+00	9.577E+00	
0Pu-239	Pu-239	1.375E-02	1.375E-01	1.375E-01	1.374E-01	1.374E-01	1.373E-01	1.371E-01	1.365E-01	1.356E-01	1.336E-01	
Pu-239	Pu-239	3.806E-05	3.806E-04	3.806E-04	3.804E-04	3.803E-04	3.801E-04	3.795E-04	3.779E-04	3.752E-04	3.698E-04	
Pu-239	äS(j):		1.379E-01	1.379E-01	1.378E-01	1.378E-01	1.377E-01	1.375E-01	1.369E-01	1.359E-01	1.340E-01	
0Ac-227	Pu-239	1.375E-02	0.000E+00	1.508E-17	1.968E-13	3.284E-13	1.332E-12	8.024E-12	6.959E-11	3.135E-10	1.324E-09	
Ac-227	U-235	1.376E-02	0.000E+00	4.586E-08	2.259E-05	3.108E-05	7.271E-05	2.033E-04	6.349E-04	1.357E-03	2.791E-03	
Ac-227	äS(j):		0.000E+00	4.586E-08	2.259E-05	3.108E-05	7.271E-05	2.033E-04	6.349E-04	1.357E-03	2.791E-03	
0Pu-239	Pu-239	8.252E-07	8.252E-06	8.252E-06	8.246E-06	8.245E-06	8.240E-06	8.228E-06	8.193E-06	8.134E-06	8.018E-06	
Pu-239	Pu-239	2.284E-09	2.284E-08	2.284E-08	2.282E-08	2.282E-08	2.281E-08	2.277E-08	2.268E-08	2.251E-08	2.219E-08	
Pu-239	äS(j):		8.275E-06	8.275E-06	8.269E-06	8.268E-06	8.263E-06	8.251E-06	8.216E-06	8.157E-06	8.040E-06	

Individual Nuclide Soil Concentration
 Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	S(j,t), pCi/g									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Ac-227	Pu-239	8.252E-07	0.000E+00	9.050E-22	1.181E-17	1.971E-17	7.993E-17	4.815E-16	4.176E-15	1.881E-14	7.942E-14	
Ac-227	U-235	8.257E-07	0.000E+00	2.752E-12	1.356E-09	1.865E-09	4.363E-09	1.220E-08	3.810E-08	8.145E-08	1.675E-07	
Ac-227	äS(j):		0.000E+00	2.752E-12	1.356E-09	1.865E-09	4.363E-09	1.220E-08	3.810E-08	8.145E-08	1.675E-07	
ORu-106	Ru-106	1.000E+00	1.000E+01	5.078E+00	4.388E-07	1.481E-08	1.925E-14	3.706E-29	0.000E+00	0.000E+00	0.000E+00	
OSr-90	Sr-90	1.000E+00	1.000E+01	9.762E+00	5.478E+00	4.856E+00	3.000E+00	9.003E-01	2.432E-02	5.914E-05	3.498E-10	
OTc-99	Tc-99	1.000E+00	1.000E+01	9.999E+00	9.981E+00	9.977E+00	9.962E+00	9.925E+00	9.812E+00	9.628E+00	9.270E+00	
0Th-228	Th-228	1.000E+00	1.000E+01	6.959E+00	1.156E-03	1.887E-04	1.337E-07	1.788E-15	4.277E-39	0.000E+00	0.000E+00	
Th-228	Th-232	1.000E+00	0.000E+00	1.866E-01	9.265E+00	9.597E+00	9.964E+00	1.000E+01	1.000E+01	1.000E+01	1.000E+01	
Th-228	äS(j):		1.000E+01	7.145E+00	9.266E+00	9.598E+00	9.964E+00	1.000E+01	1.000E+01	1.000E+01	1.000E+01	
0Th-230	Th-230	1.319E-06	1.319E-05	1.319E-05	1.319E-05	1.319E-05	1.319E-05	1.318E-05	1.316E-05	1.313E-05	1.307E-05	
Th-230	Th-230	1.899E-08	1.899E-07	1.899E-07	1.899E-07	1.899E-07	1.898E-07	1.897E-07	1.895E-07	1.891E-07	1.882E-07	
Th-230	äS(j):		1.338E-05	1.338E-05	1.338E-05	1.338E-05	1.338E-05	1.337E-05	1.335E-05	1.332E-05	1.326E-05	
0Th-230	Th-230	2.100E-04	2.100E-03	2.100E-03	2.099E-03	2.099E-03	2.099E-03	2.098E-03	2.095E-03	2.090E-03	2.080E-03	
Th-230	Th-230	2.771E-10	2.771E-09	2.771E-09	2.771E-09	2.771E-09	2.770E-09	2.769E-09	2.765E-09	2.759E-09	2.746E-09	
Th-230	äS(j):		2.100E-03	2.100E-03	2.099E-03	2.099E-03	2.099E-03	2.098E-03	2.095E-03	2.090E-03	2.080E-03	
0Th-230	Th-230	3.989E-12	3.989E-11	3.989E-11	3.988E-11	3.988E-11	3.987E-11	3.986E-11	3.980E-11	3.971E-11	3.953E-11	
Th-230	Th-230	1.998E-04	1.998E-03	1.998E-03	1.997E-03	1.997E-03	1.997E-03	1.996E-03	1.993E-03	1.988E-03	1.979E-03	
Th-230	äS(j):		1.998E-03	1.998E-03	1.997E-03	1.997E-03	1.997E-03	1.996E-03	1.993E-03	1.988E-03	1.979E-03	
0Th-230	Th-230	2.637E-10	2.637E-09	2.637E-09	2.636E-09	2.636E-09	2.636E-09	2.634E-09	2.631E-09	2.625E-09	2.613E-09	
Th-230	Th-230	3.795E-12	3.795E-11	3.795E-11	3.795E-11	3.794E-11	3.794E-11	3.792E-11	3.787E-11	3.778E-11	3.761E-11	
Th-230	äS(j):		2.675E-09	2.675E-09	2.674E-09	2.674E-09	2.674E-09	2.672E-09	2.669E-09	2.662E-09	2.650E-09	
0Th-230	Th-230	4.196E-08	4.196E-07	4.196E-07	4.195E-07	4.195E-07	4.194E-07	4.192E-07	4.186E-07	4.177E-07	4.157E-07	
Th-230	Th-230	5.538E-14	5.538E-13	5.538E-13	5.537E-13	5.537E-13	5.536E-13	5.533E-13	5.526E-13	5.513E-13	5.488E-13	
Th-230	äS(j):		4.196E-07	4.196E-07	4.195E-07	4.195E-07	4.194E-07	4.192E-07	4.186E-07	4.177E-07	4.157E-07	
0Th-230	Th-230	7.972E-16	7.972E-15	7.972E-15	7.970E-15	7.970E-15	7.968E-15	7.965E-15	7.954E-15	7.935E-15	7.899E-15	
Th-230	Th-230	2.000E-07	2.000E-06	2.000E-06	2.000E-06	1.999E-06	1.999E-06	1.998E-06	1.995E-06	1.991E-06	1.982E-06	
Th-230	äS(j):		2.000E-06	2.000E-06	2.000E-06	1.999E-06	1.999E-06	1.998E-06	1.995E-06	1.991E-06	1.982E-06	
0Th-230	Th-230	2.640E-13	2.640E-12	2.640E-12	2.639E-12	2.639E-12	2.639E-12	2.638E-12	2.634E-12	2.628E-12	2.616E-12	
Th-230	Th-230	3.800E-15	3.800E-14	3.800E-14	3.799E-14	3.799E-14	3.798E-14	3.797E-14	3.791E-14	3.783E-14	3.765E-14	
Th-230	äS(j):		2.678E-12	2.678E-12	2.677E-12	2.677E-12	2.677E-12	2.676E-12	2.672E-12	2.666E-12	2.653E-12	
0Th-232	Th-232	1.000E+00	1.000E+01	1.000E+01	1.000E+01	1.000E+01	1.000E+01	1.000E+01	1.000E+01	1.000E+01	1.000E+01	
ORa-228	Th-232	1.000E+00	0.000E+00	1.136E+00	9.509E+00	9.731E+00	9.976E+00	1.000E+01	1.000E+01	1.000E+01	1.000E+01	
OU-234	U-234	1.319E-06	1.319E-05	1.319E-05	1.319E-05	1.319E-05	1.319E-05	1.319E-05	1.318E-05	1.317E-05	1.315E-05	
U-234	U-234	1.899E-08	1.899E-07	1.899E-07	1.899E-07	1.899E-07	1.899E-07	1.899E-07	1.898E-07	1.896E-07	1.894E-07	
U-234	äS(j):		1.338E-05	1.338E-05	1.338E-05	1.338E-05	1.338E-05	1.338E-05	1.337E-05	1.336E-05	1.334E-05	

Individual Nuclide Soil Concentration
Parent Nuclide and Branch Fraction Indicated

[illegible]

Individual Nuclide Soil Concentration
Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	S(j,t), pCi/g									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
U-238	U-238	4.219E-13	4.219E-12	4.219E-12	4.219E-12	4.219E-12	4.219E-12	4.219E-12	4.219E-12	4.219E-12	4.218E-12	4.218E-12
U-238	U-238	6.073E-15	6.073E-14	6.073E-14	6.073E-14	6.073E-14	6.073E-14	6.073E-14	6.073E-14	6.072E-14	6.072E-14	6.071E-14
U-238	äS(j):		4.280E-12	4.280E-12	4.280E-12	4.280E-12	4.280E-12	4.280E-12	4.280E-12	4.279E-12	4.279E-12	4.279E-12
0U-238	U-238	6.713E-11	6.713E-10	6.713E-10	6.713E-10	6.713E-10	6.713E-10	6.713E-10	6.713E-10	6.713E-10	6.713E-10	6.712E-10
U-238	U-238	8.862E-17	8.862E-16	8.862E-16	8.861E-16	8.861E-16	8.861E-16	8.861E-16	8.861E-16	8.861E-16	8.861E-16	8.860E-16
U-238	äS(j):		6.713E-10	6.713E-10	6.713E-10	6.713E-10	6.713E-10	6.713E-10	6.713E-10	6.713E-10	6.713E-10	6.712E-10
0U-238	U-238	1.276E-18	1.276E-17	1.276E-17	1.276E-17	1.276E-17	1.276E-17	1.276E-17	1.275E-17	1.275E-17	1.275E-17	1.275E-17
U-238	U-238	3.200E-10	3.200E-09	3.200E-09	3.200E-09	3.200E-09	3.200E-09	3.200E-09	3.200E-09	3.200E-09	3.200E-09	3.199E-09
U-238	äS(j):		3.200E-09	3.200E-09	3.200E-09	3.200E-09	3.200E-09	3.200E-09	3.200E-09	3.200E-09	3.200E-09	3.199E-09
0U-238	U-238	4.224E-16	4.224E-15	4.224E-15	4.224E-15	4.224E-15	4.224E-15	4.224E-15	4.224E-15	4.224E-15	4.224E-15	4.223E-15
U-238	U-238	6.080E-18	6.080E-17	6.080E-17	6.080E-17	6.080E-17	6.080E-17	6.080E-17	6.080E-17	6.080E-17	6.079E-17	6.079E-17
U-238	äS(j):		4.285E-15	4.285E-15	4.285E-15	4.285E-15	4.285E-15	4.285E-15	4.285E-15	4.285E-15	4.284E-15	4.284E-15
0U-238	U-238	9.980E-01	9.980E+00	9.980E+00	9.980E+00	9.980E+00	9.980E+00	9.980E+00	9.980E+00	9.979E+00	9.979E+00	9.978E+00
U-238	U-238	1.317E-06	1.317E-05	1.317E-05	1.317E-05	1.317E-05	1.317E-05	1.317E-05	1.317E-05	1.317E-05	1.317E-05	1.317E-05
U-238	äS(j):		9.980E+00	9.980E+00	9.980E+00	9.980E+00	9.980E+00	9.980E+00	9.980E+00	9.979E+00	9.979E+00	9.978E+00
0U-238	U-238	1.896E-08	1.896E-07	1.896E-07	1.896E-07	1.896E-07	1.896E-07	1.896E-07	1.896E-07	1.896E-07	1.896E-07	1.896E-07
U-238	U-238	2.096E-04	2.096E-03	2.096E-03	2.096E-03	2.096E-03	2.096E-03	2.096E-03	2.096E-03	2.096E-03	2.096E-03	2.096E-03
U-238	äS(j):		2.096E-03	2.096E-03	2.096E-03	2.096E-03	2.096E-03	2.096E-03	2.096E-03	2.096E-03	2.096E-03	2.096E-03
0U-238	U-238	2.767E-10	2.767E-09	2.767E-09	2.767E-09	2.767E-09	2.767E-09	2.767E-09	2.767E-09	2.767E-09	2.767E-09	2.766E-09
U-238	U-238	3.983E-12	3.983E-11	3.983E-11	3.983E-11	3.983E-11	3.983E-11	3.983E-11	3.983E-11	3.983E-11	3.982E-11	3.982E-11
U-238	äS(j):		2.807E-09	2.807E-09	2.807E-09	2.807E-09	2.807E-09	2.807E-09	2.807E-09	2.807E-09	2.807E-09	2.806E-09
0U-238	U-238	1.994E-04	1.994E-03	1.994E-03	1.994E-03	1.994E-03	1.994E-03	1.994E-03	1.994E-03	1.994E-03	1.994E-03	1.994E-03
U-238	U-238	2.633E-10	2.633E-09	2.633E-09	2.633E-09	2.633E-09	2.633E-09	2.633E-09	2.633E-09	2.632E-09	2.632E-09	2.632E-09
U-238	äS(j):		1.994E-03	1.994E-03	1.994E-03	1.994E-03	1.994E-03	1.994E-03	1.994E-03	1.994E-03	1.994E-03	1.994E-03
0U-238	U-238	3.789E-12	3.789E-11	3.789E-11	3.789E-11	3.789E-11	3.789E-11	3.789E-11	3.789E-11	3.789E-11	3.789E-11	3.789E-11
U-238	U-238	4.189E-08	4.189E-07	4.189E-07	4.189E-07	4.189E-07	4.189E-07	4.189E-07	4.189E-07	4.189E-07	4.189E-07	4.188E-07
U-238	äS(j):		4.189E-07	4.189E-07	4.189E-07	4.189E-07	4.189E-07	4.189E-07	4.189E-07	4.189E-07	4.189E-07	4.189E-07
0U-238	U-238	5.530E-14	5.530E-13	5.530E-13	5.530E-13	5.530E-13	5.530E-13	5.530E-13	5.529E-13	5.529E-13	5.529E-13	5.529E-13
U-238	U-238	7.959E-16	7.959E-15	7.959E-15	7.959E-15	7.959E-15	7.959E-15	7.959E-15	7.959E-15	7.959E-15	7.958E-15	7.958E-15
U-238	äS(j):		5.609E-13	5.609E-13	5.609E-13	5.609E-13	5.609E-13	5.609E-13	5.609E-13	5.609E-13	5.609E-13	5.608E-13
0U-238	U-238	1.997E-07	1.997E-06	1.997E-06	1.997E-06	1.997E-06	1.997E-06	1.997E-06	1.997E-06	1.997E-06	1.997E-06	1.996E-06
U-238	U-238	2.636E-13	2.636E-12	2.636E-12	2.636E-12	2.636E-12	2.636E-12	2.636E-12	2.636E-12	2.636E-12	2.636E-12	2.635E-12
U-238	äS(j):		1.997E-06	1.997E-06	1.997E-06	1.997E-06	1.997E-06	1.997E-06	1.997E-06	1.997E-06	1.997E-06	1.996E-06
0U-238	U-238	3.794E-15	3.794E-14	3.794E-14	3.794E-14	3.794E-14	3.794E-14	3.794E-14	3.794E-14	3.794E-14	3.794E-14	3.793E-14
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii

THF(i) is the thread fraction of the parent nuclide.
0RESCALC.EXE execution time = 82.69 seconds

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[illegible]

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Time = 0.000E+00	24
Time = 1.000E+00	26
Time = 2.500E+01	28
Time = 3.000E+01	30
Time = 5.000E+01	32
Time = 1.000E+02	34
Time = 2.500E+02	36
Time = 5.000E+02	38
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Dose Conversion Factor (and Related) Parameter Summary

Dose Library: DCFPAK adult HTO Plus DCFPAK3.02 (Adult)

0	3		3	Current	3	Base	3	Parameter
Menu	3	Parameter	3	Value#	3	Case*	3	Name
AAAAA	3	AAAAA	3	AAAAA	3	AAAAA	3	AAAAA
A-1	3	DCF's for external ground radiation, (mrem/yr)/(pCi/g)	3		3		3	
A-1	3	Ac-225 (Source: DCFPAK3.02)	3	5.286E-02	3	5.287E-02	3	DCF1(1)
A-1	3	Ac-227 (Source: DCFPAK3.02)	3	2.615E-04	3	2.615E-04	3	DCF1(2)
A-1	3	Ac-228 (Source: DCFPAK3.02)	3	5.044E+00	3	5.044E+00	3	DCF1(3)
A-1	3	Am-241 (Source: DCFPAK3.02)	3	3.717E-02	3	3.718E-02	3	DCF1(4)
A-1	3	At-217 (Source: DCFPAK3.02)	3	1.186E-03	3	1.186E-03	3	DCF1(5)
A-1	3	At-218 (Source: DCFPAK3.02)	3	5.567E-05	3	5.567E-05	3	DCF1(6)
A-1	3	At-219 (Source: DCFPAK3.02)	3	0.000E+00	3	0.000E+00	3	DCF1(7)
A-1	3	Ba-137m (Source: DCFPAK3.02)	3	3.381E+00	3	3.381E+00	3	DCF1(8)
A-1	3	Bi-210 (Source: DCFPAK3.02)	3	5.473E-03	3	5.474E-03	3	DCF1(9)
A-1	3	Bi-211 (Source: DCFPAK3.02)	3	2.410E-01	3	2.410E-01	3	DCF1(10)
A-1	3	Bi-212 (Source: DCFPAK3.02)	3	6.258E-01	3	6.259E-01	3	DCF1(11)
A-1	3	Bi-213 (Source: DCFPAK3.02)	3	6.874E-01	3	6.875E-01	3	DCF1(12)
A-1	3	Bi-214 (Source: DCFPAK3.02)	3	9.135E+00	3	9.136E+00	3	DCF1(13)
A-1	3	Bi-215 (Source: DCFPAK3.02)	3	1.369E+00	3	1.369E+00	3	DCF1(14)
A-1	3	Co-60 (Source: DCFPAK3.02)	3	1.539E+01	3	1.539E+01	3	DCF1(15)
A-1	3	Cs-134 (Source: DCFPAK3.02)	3	8.892E+00	3	8.893E+00	3	DCF1(16)
A-1	3	Cs-137 (Source: DCFPAK3.02)	3	8.686E-04	3	8.687E-04	3	DCF1(17)
A-1	3	Eu-152 (Source: DCFPAK3.02)	3	6.743E+00	3	6.744E+00	3	DCF1(18)
A-1	3	Eu-154 (Source: DCFPAK3.02)	3	7.285E+00	3	7.286E+00	3	DCF1(19)
A-1	3	Eu-155 (Source: DCFPAK3.02)	3	1.633E-01	3	1.633E-01	3	DCF1(20)
A-1	3	Fr-221 (Source: DCFPAK3.02)	3	1.332E-01	3	1.332E-01	3	DCF1(21)
A-1	3	Fr-223 (Source: DCFPAK3.02)	3	1.758E-01	3	1.758E-01	3	DCF1(22)
A-1	3	Gd-152 (Source: DCFPAK3.02)	3	0.000E+00	3	0.000E+00	3	DCF1(23)
A-1	3	H-3 (Source: DCFPAK3.02)	3	0.000E+00	3	0.000E+00	3	DCF1(24)
A-1	3	Hg-206 (Source: DCFPAK3.02)	3	6.127E-01	3	6.128E-01	3	DCF1(25)
A-1	3	I-129 (Source: DCFPAK3.02)	3	9.695E-03	3	9.696E-03	3	DCF1(26)
A-1	3	Mn-54 (Source: DCFPAK3.02)	3	4.857E+00	3	4.857E+00	3	DCF1(27)
A-1	3	Na-22 (Source: DCFPAK3.02)	3	1.289E+01	3	1.289E+01	3	DCF1(28)
A-1	3	Nd-144 (Source: DCFPAK3.02)	3	0.000E+00	3	0.000E+00	3	DCF1(29)
A-1	3	Ni-63 (Source: DCFPAK3.02)	3	0.000E+00	3	0.000E+00	3	DCF1(30)
A-1	3	Np-237 (Source: DCFPAK3.02)	3	6.706E-02	3	6.707E-02	3	DCF1(31)
A-1	3	Pa-231 (Source: DCFPAK3.02)	3	1.608E-01	3	1.609E-01	3	DCF1(32)
A-1	3	Pa-233 (Source: DCFPAK3.02)	3	1.018E+00	3	1.018E+00	3	DCF1(33)
A-1	3	Pa-234 (Source: DCFPAK3.02)	3	8.275E+00	3	8.276E+00	3	DCF1(34)
A-1	3	Pa-234m (Source: DCFPAK3.02)	3	1.257E-01	3	1.257E-01	3	DCF1(35)
A-1	3	Pb-209 (Source: DCFPAK3.02)	3	7.528E-04	3	7.529E-04	3	DCF1(36)
A-1	3	Pb-210 (Source: DCFPAK3.02)	3	2.092E-03	3	2.092E-03	3	DCF1(37)
A-1	3	Pb-211 (Source: DCFPAK3.02)	3	3.680E-01	3	3.680E-01	3	DCF1(38)
A-1	3	Pb-212 (Source: DCFPAK3.02)	3	6.314E-01	3	6.315E-01	3	DCF1(39)

A-1 ³ Pb-214 (Source: DCFPAK3.02)
 A-1 ³ Po-210 (Source: DCFPAK3.02)
 A-1 ³ Po-211 (Source: DCFPAK3.02)
 A-1 ³ Po-212 (Source: DCFPAK3.02)
 A-1 ³ Po-213 (Source: DCFPAK3.02)
 A-1 ³ Po-214 (Source: DCFPAK3.02)
 A-1 ³ Po-215 (Source: DCFPAK3.02)
 A-1 ³ Po-216 (Source: DCFPAK3.02)
 A-1 ³ Po-218 (Source: DCFPAK3.02)
 A-1 ³ Pu-238 (Source: DCFPAK3.02)

³ 1.257E+00 ³ 1.257E+00 ³ DCF1(40)
³ 5.641E-05 ³ 5.642E-05 ³ DCF1(41)
³ 4.707E-02 ³ 4.708E-02 ³ DCF1(42)
³ 0.000E+00 ³ 0.000E+00 ³ DCF1(43)
³ 2.167E-04 ³ 2.167E-04 ³ DCF1(44)
³ 4.801E-04 ³ 4.801E-04 ³ DCF1(45)
³ 9.452E-04 ³ 9.453E-04 ³ DCF1(46)
³ 8.873E-05 ³ 8.874E-05 ³ DCF1(47)
³ 9.228E-09 ³ 9.229E-09 ³ DCF1(48)
³ 1.111E-04 ³ 1.112E-04 ³ DCF1(49)

Dose Conversion Factor (and Related) Parameter Summary (continued)

Dose Library: DCFPAK adult HTO Plus DCFPAK3.02 (Adult)

0	3		3	Current	3	Base	3	Parameter
Menu	3	Parameter	3	Value#	3	Case*	3	Name
AA								
A-1	3	Pu-239 (Source: DCFPAK3.02)	3	2.765E-04	3	2.765E-04	3	DCF1(50)
A-1	3	Ra-223 (Source: DCFPAK3.02)	3	5.791E-01	3	5.791E-01	3	DCF1(51)
A-1	3	Ra-224 (Source: DCFPAK3.02)	3	4.950E-02	3	4.951E-02	3	DCF1(52)
A-1	3	Ra-225 (Source: DCFPAK3.02)	3	8.910E-03	3	8.911E-03	3	DCF1(53)
A-1	3	Ra-226 (Source: DCFPAK3.02)	3	3.176E-02	3	3.176E-02	3	DCF1(54)
A-1	3	Ra-228 (Source: DCFPAK3.02)	3	6.575E-05	3	6.576E-05	3	DCF1(55)
A-1	3	Rh-106 (Source: DCFPAK3.02)	3	1.252E+00	3	1.252E+00	3	DCF1(56)
A-1	3	Rn-218 (Source: DCFPAK3.02)	3	4.259E-03	3	4.260E-03	3	DCF1(57)
A-1	3	Rn-219 (Source: DCFPAK3.02)	3	2.970E-01	3	2.970E-01	3	DCF1(58)
A-1	3	Rn-220 (Source: DCFPAK3.02)	3	3.474E-03	3	3.475E-03	3	DCF1(59)
A-1	3	Rn-222 (Source: DCFPAK3.02)	3	2.130E-03	3	2.130E-03	3	DCF1(60)
A-1	3	Ru-106 (Source: DCFPAK3.02)	3	0.000E+00	3	0.000E+00	3	DCF1(61)
A-1	3	Sm-148 (Source: DCFPAK3.02)	3	0.000E+00	3	0.000E+00	3	DCF1(62)
A-1	3	Sr-90 (Source: DCFPAK3.02)	3	6.463E-04	3	6.464E-04	3	DCF1(63)
A-1	3	Tc-99 (Source: DCFPAK3.02)	3	1.104E-04	3	1.104E-04	3	DCF1(64)
A-1	3	Th-227 (Source: DCFPAK3.02)	3	5.641E-01	3	5.642E-01	3	DCF1(65)
A-1	3	Th-228 (Source: DCFPAK3.02)	3	7.248E-03	3	7.249E-03	3	DCF1(66)
A-1	3	Th-229 (Source: DCFPAK3.02)	3	2.877E-01	3	2.877E-01	3	DCF1(67)
A-1	3	Th-230 (Source: DCFPAK3.02)	3	1.106E-03	3	1.106E-03	3	DCF1(68)
A-1	3	Th-231 (Source: DCFPAK3.02)	3	3.250E-02	3	3.251E-02	3	DCF1(69)
A-1	3	Th-232 (Source: DCFPAK3.02)	3	4.782E-04	3	4.783E-04	3	DCF1(70)
A-1	3	Th-234 (Source: DCFPAK3.02)	3	2.316E-02	3	2.317E-02	3	DCF1(71)
A-1	3	Tl-206 (Source: DCFPAK3.02)	3	1.278E-02	3	1.278E-02	3	DCF1(72)
A-1	3	Tl-207 (Source: DCFPAK3.02)	3	2.391E-02	3	2.391E-02	3	DCF1(73)
A-1	3	Tl-208 (Source: DCFPAK3.02)	3	2.167E+01	3	2.167E+01	3	DCF1(74)
A-1	3	Tl-209 (Source: DCFPAK3.02)	3	1.287E+01	3	1.287E+01	3	DCF1(75)
A-1	3	Tl-210 (Source: DCFPAK3.02)	3	1.677E+01	3	1.678E+01	3	DCF1(76)
A-1	3	U-233 (Source: DCFPAK3.02)	3	9.191E-04	3	9.192E-04	3	DCF1(77)
A-1	3	U-234 (Source: DCFPAK3.02)	3	3.456E-04	3	3.456E-04	3	DCF1(78)
A-1	3	U-235 (Source: DCFPAK3.02)	3	7.005E-01	3	7.006E-01	3	DCF1(79)
A-1	3	U-235m (Source: DCFPAK3.02)	3	0.000E+00	3	0.000E+00	3	DCF1(80)
A-1	3	U-238 (Source: DCFPAK3.02)	3	1.713E-04	3	1.713E-04	3	DCF1(81)
A-1	3	Y-90 (Source: DCFPAK3.02)	3	4.016E-02	3	4.017E-02	3	DCF1(82)
3								
B-1	3	Dose conversion factors for inhalation, mrem/pCi:	3		3		3	
B-1	3	Ac-227+D	3	6.464E-01	3	5.760E-01	3	DCF2(1)
B-1	3	Ac-227+D1	3	6.464E-01	3	5.760E-01	3	DCF2(2)
B-1	3	Ac-227+D2	3	6.081E-01	3	5.760E-01	3	DCF2(3)
B-1	3	Ac-227+D3	3	6.081E-01	3	5.760E-01	3	DCF2(4)
B-1	3	Ac-227+D4	3	5.761E-01	3	5.760E-01	3	DCF2(5)

B-1 ³ Ac-227+D5
B-1 ³ Am-241
B-1 ³ Co-60
B-1 ³ Cs-134
B-1 ³ Cs-137+D
B-1 ³ Eu-152
B-1 ³ Eu-154
B-1 ³ Eu-155
B-1 ³ Gd-152
B-1 ³ H-3

³ 5.761E-01 ³ 5.760E-01 ³ DCF2(6)
³ 3.566E-01 ³ 3.566E-01 ³ DCF2(7)
³ 1.138E-04 ³ 1.138E-04 ³ DCF2(8)
³ 7.558E-05 ³ 7.558E-05 ³ DCF2(9)
³ 1.457E-04 ³ 1.457E-04 ³ DCF2(10)
³ 3.452E-04 ³ 3.452E-04 ³ DCF2(11)
³ 3.947E-04 ³ 3.947E-04 ³ DCF2(13)
³ 4.599E-05 ³ 4.599E-05 ³ DCF2(14)
³ 7.037E-02 ³ 7.037E-02 ³ DCF2(15)
³ 6.778E-08 ³ 9.689E-07 ³ DCF2(16)

Dose Conversion Factor (and Related) Parameter Summary (continued)

Dose Library: DCFPAK adult HTO Plus DCFPAK3.02 (Adult)

0	3		3	Current	3	Base	3	Parameter
Menu	3	Parameter	3	Value#	3	Case*	3	Name
AA								
B-1	3	I-129	3	3.630E-04	3	3.630E-04	3	DCF2(17)
B-1	3	Mn-54	3	1.210E-05	3	1.210E-05	3	DCF2(18)
B-1	3	Na-22	3	1.075E-04	3	1.075E-04	3	DCF2(19)
B-1	3	Nd-144	3	7.037E-02	3	7.037E-02	3	DCF2(20)
B-1	3	Ni-63	3	7.388E-06	3	7.388E-06	3	DCF2(21)
B-1	3	Np-237+D	3	1.839E-01	3	1.839E-01	3	DCF2(22)
B-1	3	Pa-231	3	8.505E-01	3	8.505E-01	3	DCF2(23)
B-1	3	Pb-210+D	3	3.708E-02	3	2.077E-02	3	DCF2(29)
B-1	3	Pb-210+D1	3	2.126E-02	3	2.077E-02	3	DCF2(30)
B-1	3	Pb-210+D2	3	2.077E-02	3	2.077E-02	3	DCF2(31)
B-1	3	Pu-238	3	3.999E-01	3	3.999E-01	3	DCF2(32)
B-1	3	Pu-239	3	4.410E-01	3	4.410E-01	3	DCF2(48)
B-1	3	Pu-239+D	3	4.410E-01	3	4.410E-01	3	DCF2(54)
B-1	3	Ra-226+D	3	3.528E-02	3	3.517E-02	3	DCF2(60)
B-1	3	Ra-226+D1	3	3.528E-02	3	3.517E-02	3	DCF2(63)
B-1	3	Ra-226+D2	3	3.523E-02	3	3.517E-02	3	DCF2(66)
B-1	3	Ra-226+D3	3	3.523E-02	3	3.517E-02	3	DCF2(69)
B-1	3	Ra-226+D4	3	3.517E-02	3	3.517E-02	3	DCF2(72)
B-1	3	Ra-228+D	3	5.943E-02	3	5.938E-02	3	DCF2(75)
B-1	3	Ru-106+D	3	2.461E-04	3	2.461E-04	3	DCF2(76)
B-1	3	Sm-148	3	7.340E-02	3	7.340E-02	3	DCF2(77)
B-1	3	Sr-90+D	3	5.841E-04	3	5.786E-04	3	DCF2(78)
B-1	3	Tc-99	3	4.935E-05	3	4.935E-05	3	DCF2(79)
B-1	3	Th-228+D	3	1.600E-01	3	1.468E-01	3	DCF2(80)
B-1	3	Th-229+D	3	9.433E-01	3	8.831E-01	3	DCF2(81)
B-1	3	Th-230	3	3.759E-01	3	3.759E-01	3	DCF2(82)
B-1	3	Th-232	3	4.070E-01	3	4.070E-01	3	DCF2(97)
B-1	3	U-233	3	3.549E-02	3	3.549E-02	3	DCF2(98)
B-1	3	U-234	3	3.479E-02	3	3.479E-02	3	DCF2(99)
B-1	3	U-235+D	3	3.132E-02	3	3.132E-02	3	DCF2(114)
B-1	3	U-238	3	2.973E-02	3	2.973E-02	3	DCF2(120)
B-1	3	U-238+D	3	2.976E-02	3	2.973E-02	3	DCF2(121)
B-1	3	U-238+D1	3	2.976E-02	3	2.973E-02	3	DCF2(136)
3								
D-1	3	Dose conversion factors for ingestion, mrem/pCi:						
D-1	3	Ac-227+D	3	1.607E-03	3	1.191E-03	3	DCF3(1)
D-1	3	Ac-227+D1	3	1.607E-03	3	1.191E-03	3	DCF3(2)
D-1	3	Ac-227+D2	3	1.582E-03	3	1.191E-03	3	DCF3(3)
D-1	3	Ac-227+D3	3	1.582E-03	3	1.191E-03	3	DCF3(4)
D-1	3	Ac-227+D4	3	1.201E-03	3	1.191E-03	3	DCF3(5)

D-1 ³ Ac-227+D5
D-1 ³ Am-241
D-1 ³ Co-60
D-1 ³ Cs-134
D-1 ³ Cs-137+D
D-1 ³ Eu-152
D-1 ³ Eu-154
D-1 ³ Eu-155
D-1 ³ Gd-152
D-1 ³ H-3

³ 1.201E-03 ³ 1.191E-03 ³ DCF3(6)
³ 7.548E-04 ³ 7.548E-04 ³ DCF3(7)
³ 1.265E-05 ³ 1.265E-05 ³ DCF3(8)
³ 7.141E-05 ³ 7.141E-05 ³ DCF3(9)
³ 5.032E-05 ³ 5.032E-05 ³ DCF3(10)
³ 4.958E-06 ³ 4.958E-06 ³ DCF3(11)
³ 7.289E-06 ³ 7.289E-06 ³ DCF3(13)
³ 1.228E-06 ³ 1.228E-06 ³ DCF3(14)
³ 1.517E-04 ³ 1.517E-04 ³ DCF3(15)
³ 7.067E-08 ³ 1.550E-07 ³ DCF3(16)

Dose Conversion Factor (and Related) Parameter Summary (continued)

Dose Library: DCFPAK adult HTO Plus DCFPAK3.02 (Adult)

0	3		3	Current	3	Base	3	Parameter
Menu	3	Parameter	3	Value#	3	Case*	3	Name
AA								
D-1	3	I-129	3	3.996E-04	3	3.996E-04	3	DCF3(17)
D-1	3	Mn-54	3	2.668E-06	3	2.668E-06	3	DCF3(18)
D-1	3	Na-22	3	1.173E-05	3	1.173E-05	3	DCF3(19)
D-1	3	Nd-144	3	1.510E-04	3	1.510E-04	3	DCF3(20)
D-1	3	Ni-63	3	5.735E-07	3	5.735E-07	3	DCF3(21)
D-1	3	Np-237+D	3	3.995E-04	3	3.959E-04	3	DCF3(22)
D-1	3	Pa-231	3	1.772E-03	3	1.772E-03	3	DCF3(23)
D-1	3	Pb-210+D	3	7.057E-03	3	2.575E-03	3	DCF3(29)
D-1	3	Pb-210+D1	3	2.580E-03	3	2.575E-03	3	DCF3(30)
D-1	3	Pb-210+D2	3	2.575E-03	3	2.575E-03	3	DCF3(31)
D-1	3	Pu-238	3	8.436E-04	3	8.436E-04	3	DCF3(32)
D-1	3	Pu-239	3	9.287E-04	3	9.287E-04	3	DCF3(48)
D-1	3	Pu-239+D	3	9.287E-04	3	9.287E-04	3	DCF3(54)
D-1	3	Ra-226+D	3	1.037E-03	3	1.036E-03	3	DCF3(60)
D-1	3	Ra-226+D1	3	1.037E-03	3	1.036E-03	3	DCF3(63)
D-1	3	Ra-226+D2	3	1.036E-03	3	1.036E-03	3	DCF3(66)
D-1	3	Ra-226+D3	3	1.036E-03	3	1.036E-03	3	DCF3(69)
D-1	3	Ra-226+D4	3	1.036E-03	3	1.036E-03	3	DCF3(72)
D-1	3	Ra-228+D	3	2.577E-03	3	2.575E-03	3	DCF3(75)
D-1	3	Ru-106+D	3	2.597E-05	3	2.597E-05	3	DCF3(76)
D-1	3	Sm-148	3	1.576E-04	3	1.576E-04	3	DCF3(77)
D-1	3	Sr-90+D	3	1.120E-04	3	1.021E-04	3	DCF3(78)
D-1	3	Tc-99	3	2.375E-06	3	2.375E-06	3	DCF3(79)
D-1	3	Th-228+D	3	5.286E-04	3	2.664E-04	3	DCF3(80)
D-1	3	Th-229+D	3	2.359E-03	3	1.846E-03	3	DCF3(81)
D-1	3	Th-230	3	7.918E-04	3	7.918E-04	3	DCF3(82)
D-1	3	Th-232	3	8.547E-04	3	8.547E-04	3	DCF3(97)
D-1	3	U-233	3	1.894E-04	3	1.894E-04	3	DCF3(98)
D-1	3	U-234	3	1.831E-04	3	1.831E-04	3	DCF3(99)
D-1	3	U-235+D	3	1.740E-04	3	1.728E-04	3	DCF3(114)
D-1	3	U-238	3	1.650E-04	3	1.650E-04	3	DCF3(120)
D-1	3	U-238+D	3	1.791E-04	3	1.650E-04	3	DCF3(121)
D-1	3	U-238+D1	3	1.776E-04	3	1.650E-04	3	DCF3(136)
3								
D-34	3	Food transfer factors:						
D-34	3	Ac-227+D , plant/soil concentration ratio, dimensionless	3	2.500E-03	3	2.500E-03	3	RTF(1,1)
D-34	3	Ac-227+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	2.000E-05	3	2.000E-05	3	RTF(1,2)
D-34	3	Ac-227+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	2.000E-05	3	2.000E-05	3	RTF(1,3)
D-34	3							
D-34	3	Ac-227+D1 , plant/soil concentration ratio, dimensionless	3	2.500E-03	3	2.500E-03	3	RTF(2,1)

D-34	³	Ac-227+D1 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	³	2.000E-05	³	2.000E-05	³	RTF(	2,2)
D-34	³	Ac-227+D1 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	³	2.000E-05	³	2.000E-05	³	RTF(	2,3)
D-34	³		³		³		³		
D-34	³	Ac-227+D2 , plant/soil concentration ratio, dimensionless	³	2.500E-03	³	2.500E-03	³	RTF(	3,1)
D-34	³	Ac-227+D2 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	³	2.000E-05	³	2.000E-05	³	RTF(	3,2)
D-34	³	Ac-227+D2 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	³	2.000E-05	³	2.000E-05	³	RTF(	3,3)
D-34	³		³		³		³		
D-34	³	Ac-227+D3 , plant/soil concentration ratio, dimensionless	³	2.500E-03	³	2.500E-03	³	RTF(	4,1)
D-34	³	Ac-227+D3 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	³	2.000E-05	³	2.000E-05	³	RTF(	4,2)
D-34	³	Ac-227+D3 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	³	2.000E-05	³	2.000E-05	³	RTF(	4,3)

Dose Conversion Factor (and Related) Parameter Summary (continued)

Dose Library: DCFPAK adult HTO Plus DCFPAK3.02 (Adult)

0	3		3	Current	3	Base	3	Parameter
Menu	3	Parameter	3	Value#	3	Case*	3	Name
AA								
D-34	3	Ac-227+D4 , plant/soil concentration ratio, dimensionless	3	2.500E-03	3	2.500E-03	3	RTF(5,1)
D-34	3	Ac-227+D4 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	2.000E-05	3	2.000E-05	3	RTF(5,2)
D-34	3	Ac-227+D4 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	2.000E-05	3	2.000E-05	3	RTF(5,3)
D-34	3		3		3		3	
D-34	3	Ac-227+D5 , plant/soil concentration ratio, dimensionless	3	2.500E-03	3	2.500E-03	3	RTF(6,1)
D-34	3	Ac-227+D5 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	2.000E-05	3	2.000E-05	3	RTF(6,2)
D-34	3	Ac-227+D5 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	2.000E-05	3	2.000E-05	3	RTF(6,3)
D-34	3		3		3		3	
D-34	3	Am-241 , plant/soil concentration ratio, dimensionless	3	1.000E-03	3	1.000E-03	3	RTF(7,1)
D-34	3	Am-241 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	5.000E-05	3	5.000E-05	3	RTF(7,2)
D-34	3	Am-241 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	2.000E-06	3	2.000E-06	3	RTF(7,3)
D-34	3		3		3		3	
D-34	3	Co-60 , plant/soil concentration ratio, dimensionless	3	8.000E-02	3	8.000E-02	3	RTF(8,1)
D-34	3	Co-60 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	2.000E-02	3	2.000E-02	3	RTF(8,2)
D-34	3	Co-60 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	2.000E-03	3	2.000E-03	3	RTF(8,3)
D-34	3		3		3		3	
D-34	3	Cs-134 , plant/soil concentration ratio, dimensionless	3	4.000E-02	3	4.000E-02	3	RTF(9,1)
D-34	3	Cs-134 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	3.000E-02	3	3.000E-02	3	RTF(9,2)
D-34	3	Cs-134 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	8.000E-03	3	8.000E-03	3	RTF(9,3)
D-34	3		3		3		3	
D-34	3	Cs-137+D , plant/soil concentration ratio, dimensionless	3	4.000E-02	3	4.000E-02	3	RTF(10,1)
D-34	3	Cs-137+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	3.000E-02	3	3.000E-02	3	RTF(10,2)
D-34	3	Cs-137+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	8.000E-03	3	8.000E-03	3	RTF(10,3)
D-34	3		3		3		3	
D-34	3	Eu-152 , plant/soil concentration ratio, dimensionless	3	2.500E-03	3	2.500E-03	3	RTF(11,1)
D-34	3	Eu-152 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	2.000E-03	3	2.000E-03	3	RTF(11,2)
D-34	3	Eu-152 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	5.000E-05	3	5.000E-05	3	RTF(11,3)
D-34	3		3		3		3	
D-34	3	Eu-154 , plant/soil concentration ratio, dimensionless	3	2.500E-03	3	2.500E-03	3	RTF(13,1)
D-34	3	Eu-154 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	2.000E-03	3	2.000E-03	3	RTF(13,2)
D-34	3	Eu-154 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	5.000E-05	3	5.000E-05	3	RTF(13,3)
D-34	3		3		3		3	
D-34	3	Eu-155 , plant/soil concentration ratio, dimensionless	3	2.500E-03	3	2.500E-03	3	RTF(14,1)
D-34	3	Eu-155 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	2.000E-03	3	2.000E-03	3	RTF(14,2)
D-34	3	Eu-155 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	5.000E-05	3	5.000E-05	3	RTF(14,3)
D-34	3		3		3		3	
D-34	3	Gd-152 , plant/soil concentration ratio, dimensionless	3	2.500E-03	3	2.500E-03	3	RTF(15,1)
D-34	3	Gd-152 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	2.000E-03	3	2.000E-03	3	RTF(15,2)
D-34	3	Gd-152 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	2.000E-05	3	2.000E-05	3	RTF(15,3)
D-34	3		3		3		3	

D-34	³	H-3	, plant/soil concentration ratio, dimensionless	³	4.800E+00	³	4.800E+00	³	RTF(16,1)
D-34	³	H-3	, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	³	1.200E-02	³	1.200E-02	³	RTF(16,2)
D-34	³	H-3	, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	³	1.000E-02	³	1.000E-02	³	RTF(16,3)
D-34	³			³		³		³	
D-34	³	I-129	, plant/soil concentration ratio, dimensionless	³	2.000E-02	³	2.000E-02	³	RTF(17,1)
D-34	³	I-129	, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	³	7.000E-03	³	7.000E-03	³	RTF(17,2)
D-34	³	I-129	, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	³	1.000E-02	³	1.000E-02	³	RTF(17,3)
D-34	³			³		³		³	

Dose Conversion Factor (and Related) Parameter Summary (continued)

Dose Library: DCFPAK adult HTO Plus DCFPAK3.02 (Adult)

0	3		3	Current	3	Base	3	Parameter
Menu	3	Parameter	3	Value#	3	Case*	3	Name
AAAAA	3	AAAAA	3	AAAAA	3	AAAAA	3	AAAAA
D-34	3	Mn-54 , plant/soil concentration ratio, dimensionless	3	3.000E-01	3	3.000E-01	3	RTF(18,1)
D-34	3	Mn-54 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	5.000E-04	3	5.000E-04	3	RTF(18,2)
D-34	3	Mn-54 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	3.000E-04	3	3.000E-04	3	RTF(18,3)
D-34	3		3		3		3	
D-34	3	Na-22 , plant/soil concentration ratio, dimensionless	3	5.000E-02	3	5.000E-02	3	RTF(19,1)
D-34	3	Na-22 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	8.000E-02	3	8.000E-02	3	RTF(19,2)
D-34	3	Na-22 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	4.000E-02	3	4.000E-02	3	RTF(19,3)
D-34	3		3		3		3	
D-34	3	Nd-144 , plant/soil concentration ratio, dimensionless	3	2.400E-03	3	2.400E-03	3	RTF(20,1)
D-34	3	Nd-144 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	2.000E-03	3	2.000E-03	3	RTF(20,2)
D-34	3	Nd-144 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	2.000E-05	3	2.000E-05	3	RTF(20,3)
D-34	3		3		3		3	
D-34	3	Ni-63 , plant/soil concentration ratio, dimensionless	3	5.000E-02	3	5.000E-02	3	RTF(21,1)
D-34	3	Ni-63 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	5.000E-03	3	5.000E-03	3	RTF(21,2)
D-34	3	Ni-63 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	2.000E-02	3	2.000E-02	3	RTF(21,3)
D-34	3		3		3		3	
D-34	3	Np-237+D , plant/soil concentration ratio, dimensionless	3	2.000E-02	3	2.000E-02	3	RTF(22,1)
D-34	3	Np-237+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	1.000E-03	3	1.000E-03	3	RTF(22,2)
D-34	3	Np-237+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	5.000E-06	3	5.000E-06	3	RTF(22,3)
D-34	3		3		3		3	
D-34	3	Pa-231 , plant/soil concentration ratio, dimensionless	3	1.000E-02	3	1.000E-02	3	RTF(23,1)
D-34	3	Pa-231 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	5.000E-03	3	5.000E-03	3	RTF(23,2)
D-34	3	Pa-231 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	5.000E-06	3	5.000E-06	3	RTF(23,3)
D-34	3		3		3		3	
D-34	3	Pb-210+D , plant/soil concentration ratio, dimensionless	3	1.000E-02	3	1.000E-02	3	RTF(29,1)
D-34	3	Pb-210+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	8.000E-04	3	8.000E-04	3	RTF(29,2)
D-34	3	Pb-210+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	3.000E-04	3	3.000E-04	3	RTF(29,3)
D-34	3		3		3		3	
D-34	3	Pb-210+D1 , plant/soil concentration ratio, dimensionless	3	1.000E-02	3	1.000E-02	3	RTF(30,1)
D-34	3	Pb-210+D1 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	8.000E-04	3	8.000E-04	3	RTF(30,2)
D-34	3	Pb-210+D1 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	3.000E-04	3	3.000E-04	3	RTF(30,3)
D-34	3		3		3		3	
D-34	3	Pb-210+D2 , plant/soil concentration ratio, dimensionless	3	1.000E-02	3	1.000E-02	3	RTF(31,1)
D-34	3	Pb-210+D2 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	8.000E-04	3	8.000E-04	3	RTF(31,2)
D-34	3	Pb-210+D2 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	3.000E-04	3	3.000E-04	3	RTF(31,3)
D-34	3		3		3		3	
D-34	3	Pu-238 , plant/soil concentration ratio, dimensionless	3	1.000E-03	3	1.000E-03	3	RTF(32,1)
D-34	3	Pu-238 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	1.000E-04	3	1.000E-04	3	RTF(32,2)
D-34	3	Pu-238 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	1.000E-06	3	1.000E-06	3	RTF(32,3)
D-34	3		3		3		3	

D-34	³	Pu-239	, plant/soil concentration ratio, dimensionless	³	1.000E-03	³	1.000E-03	³	RTF(48,1)
D-34	³	Pu-239	, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	³	1.000E-04	³	1.000E-04	³	RTF(48,2)
D-34	³	Pu-239	, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	³	1.000E-06	³	1.000E-06	³	RTF(48,3)
D-34	³			³		³		³	
D-34	³	Pu-239+D	, plant/soil concentration ratio, dimensionless	³	1.000E-03	³	1.000E-03	³	RTF(54,1)
D-34	³	Pu-239+D	, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	³	1.000E-04	³	1.000E-04	³	RTF(54,2)
D-34	³	Pu-239+D	, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	³	1.000E-06	³	1.000E-06	³	RTF(54,3)
D-34	³			³		³		³	

Dose Conversion Factor (and Related) Parameter Summary (continued)

Dose Library: DCFPAK adult HTO Plus DCFPAK3.02 (Adult)

0	3		3	Current	3	Base	3	Parameter
Menu	3	Parameter	3	Value#	3	Case*	3	Name
AAAAA	3	AAAAA	3	AAAAA	3	AAAAA	3	AAAAA
D-34	3	Ra-226+D , plant/soil concentration ratio, dimensionless	3	4.000E-02	3	4.000E-02	3	RTF(60,1)
D-34	3	Ra-226+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	1.000E-03	3	1.000E-03	3	RTF(60,2)
D-34	3	Ra-226+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	1.000E-03	3	1.000E-03	3	RTF(60,3)
D-34	3		3		3		3	
D-34	3	Ra-226+D1 , plant/soil concentration ratio, dimensionless	3	4.000E-02	3	4.000E-02	3	RTF(63,1)
D-34	3	Ra-226+D1 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	1.000E-03	3	1.000E-03	3	RTF(63,2)
D-34	3	Ra-226+D1 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	1.000E-03	3	1.000E-03	3	RTF(63,3)
D-34	3		3		3		3	
D-34	3	Ra-226+D2 , plant/soil concentration ratio, dimensionless	3	4.000E-02	3	4.000E-02	3	RTF(66,1)
D-34	3	Ra-226+D2 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	1.000E-03	3	1.000E-03	3	RTF(66,2)
D-34	3	Ra-226+D2 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	1.000E-03	3	1.000E-03	3	RTF(66,3)
D-34	3		3		3		3	
D-34	3	Ra-226+D3 , plant/soil concentration ratio, dimensionless	3	4.000E-02	3	4.000E-02	3	RTF(69,1)
D-34	3	Ra-226+D3 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	1.000E-03	3	1.000E-03	3	RTF(69,2)
D-34	3	Ra-226+D3 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	1.000E-03	3	1.000E-03	3	RTF(69,3)
D-34	3		3		3		3	
D-34	3	Ra-226+D4 , plant/soil concentration ratio, dimensionless	3	4.000E-02	3	4.000E-02	3	RTF(72,1)
D-34	3	Ra-226+D4 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	1.000E-03	3	1.000E-03	3	RTF(72,2)
D-34	3	Ra-226+D4 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	1.000E-03	3	1.000E-03	3	RTF(72,3)
D-34	3		3		3		3	
D-34	3	Ra-228+D , plant/soil concentration ratio, dimensionless	3	4.000E-02	3	4.000E-02	3	RTF(75,1)
D-34	3	Ra-228+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	1.000E-03	3	1.000E-03	3	RTF(75,2)
D-34	3	Ra-228+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	1.000E-03	3	1.000E-03	3	RTF(75,3)
D-34	3		3		3		3	
D-34	3	Ru-106+D , plant/soil concentration ratio, dimensionless	3	3.000E-02	3	3.000E-02	3	RTF(76,1)
D-34	3	Ru-106+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	2.000E-03	3	2.000E-03	3	RTF(76,2)
D-34	3	Ru-106+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	3.300E-06	3	3.300E-06	3	RTF(76,3)
D-34	3		3		3		3	
D-34	3	Sm-148 , plant/soil concentration ratio, dimensionless	3	2.500E-03	3	2.500E-03	3	RTF(77,1)
D-34	3	Sm-148 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	2.000E-03	3	2.000E-03	3	RTF(77,2)
D-34	3	Sm-148 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	2.000E-05	3	2.000E-05	3	RTF(77,3)
D-34	3		3		3		3	
D-34	3	Sr-90+D , plant/soil concentration ratio, dimensionless	3	3.000E-01	3	3.000E-01	3	RTF(78,1)
D-34	3	Sr-90+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	8.000E-03	3	8.000E-03	3	RTF(78,2)
D-34	3	Sr-90+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	2.000E-03	3	2.000E-03	3	RTF(78,3)
D-34	3		3		3		3	
D-34	3	Tc-99 , plant/soil concentration ratio, dimensionless	3	5.000E+00	3	5.000E+00	3	RTF(79,1)
D-34	3	Tc-99 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	1.000E-04	3	1.000E-04	3	RTF(79,2)
D-34	3	Tc-99 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	1.000E-03	3	1.000E-03	3	RTF(79,3)
D-34	3		3		3		3	

D-34	³	Th-228+D	, plant/soil concentration ratio, dimensionless	³	1.000E-03	³	1.000E-03	³	RTF(80,1)
D-34	³	Th-228+D	, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	³	1.000E-04	³	1.000E-04	³	RTF(80,2)
D-34	³	Th-228+D	, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	³	5.000E-06	³	5.000E-06	³	RTF(80,3)
D-34	³			³		³		³	
D-34	³	Th-229+D	, plant/soil concentration ratio, dimensionless	³	1.000E-03	³	1.000E-03	³	RTF(81,1)
D-34	³	Th-229+D	, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	³	1.000E-04	³	1.000E-04	³	RTF(81,2)
D-34	³	Th-229+D	, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	³	5.000E-06	³	5.000E-06	³	RTF(81,3)
D-34	³			³		³		³	

D-5 ³ Ac-227+D2 , fish
 D-5 ³ Ac-227+D2 , crustacea and mollusks
 D-5 ³
 D-5 ³ Ac-227+D3 , fish
 D-5 ³ Ac-227+D3 , crustacea and mollusks
 D-5 ³
 D-5 ³ Ac-227+D4 , fish
 D-5 ³ Ac-227+D4 , crustacea and mollusks
 D-5 ³

³ 1.500E+01 ³ 1.500E+01 ³ BIOFAC(3,1)
³ 1.000E+03 ³ 1.000E+03 ³ BIOFAC(3,2)
³ ³ ³
³ 1.500E+01 ³ 1.500E+01 ³ BIOFAC(4,1)
³ 1.000E+03 ³ 1.000E+03 ³ BIOFAC(4,2)
³ ³ ³
³ 1.500E+01 ³ 1.500E+01 ³ BIOFAC(5,1)
³ 1.000E+03 ³ 1.000E+03 ³ BIOFAC(5,2)
³ ³ ³

Dose Conversion Factor (and Related) Parameter Summary (continued)

Dose Library: DCFPAK adult HTO Plus DCFPAK3.02 (Adult)

0	3		3	Current	3	Base	3	Parameter
Menu	3	Parameter	3	Value#	3	Case*	3	Name
AAAAA	3	AAAAA	3	AAAAA	3	AAAAA	3	AAAAA
D-5	3	Ac-227+D5 , fish	3	1.500E+01	3	1.500E+01	3	BIOFAC(6,1)
D-5	3	Ac-227+D5 , crustacea and mollusks	3	1.000E+03	3	1.000E+03	3	BIOFAC(6,2)
D-5	3		3		3		3	
D-5	3	Am-241 , fish	3	3.000E+01	3	3.000E+01	3	BIOFAC(7,1)
D-5	3	Am-241 , crustacea and mollusks	3	1.000E+03	3	1.000E+03	3	BIOFAC(7,2)
D-5	3		3		3		3	
D-5	3	Co-60 , fish	3	3.000E+02	3	3.000E+02	3	BIOFAC(8,1)
D-5	3	Co-60 , crustacea and mollusks	3	2.000E+02	3	2.000E+02	3	BIOFAC(8,2)
D-5	3		3		3		3	
D-5	3	Cs-134 , fish	3	2.000E+03	3	2.000E+03	3	BIOFAC(9,1)
D-5	3	Cs-134 , crustacea and mollusks	3	1.000E+02	3	1.000E+02	3	BIOFAC(9,2)
D-5	3		3		3		3	
D-5	3	Cs-137+D , fish	3	2.000E+03	3	2.000E+03	3	BIOFAC(10,1)
D-5	3	Cs-137+D , crustacea and mollusks	3	1.000E+02	3	1.000E+02	3	BIOFAC(10,2)
D-5	3		3		3		3	
D-5	3	Eu-152 , fish	3	5.000E+01	3	5.000E+01	3	BIOFAC(11,1)
D-5	3	Eu-152 , crustacea and mollusks	3	1.000E+03	3	1.000E+03	3	BIOFAC(11,2)
D-5	3		3		3		3	
D-5	3	Eu-154 , fish	3	5.000E+01	3	5.000E+01	3	BIOFAC(13,1)
D-5	3	Eu-154 , crustacea and mollusks	3	1.000E+03	3	1.000E+03	3	BIOFAC(13,2)
D-5	3		3		3		3	
D-5	3	Eu-155 , fish	3	5.000E+01	3	5.000E+01	3	BIOFAC(14,1)
D-5	3	Eu-155 , crustacea and mollusks	3	1.000E+03	3	1.000E+03	3	BIOFAC(14,2)
D-5	3		3		3		3	
D-5	3	Gd-152 , fish	3	2.500E+01	3	2.500E+01	3	BIOFAC(15,1)
D-5	3	Gd-152 , crustacea and mollusks	3	1.000E+03	3	1.000E+03	3	BIOFAC(15,2)
D-5	3		3		3		3	
D-5	3	H-3 , fish	3	1.000E+00	3	1.000E+00	3	BIOFAC(16,1)
D-5	3	H-3 , crustacea and mollusks	3	1.000E+00	3	1.000E+00	3	BIOFAC(16,2)
D-5	3		3		3		3	
D-5	3	I-129 , fish	3	4.000E+01	3	4.000E+01	3	BIOFAC(17,1)
D-5	3	I-129 , crustacea and mollusks	3	5.000E+00	3	5.000E+00	3	BIOFAC(17,2)
D-5	3		3		3		3	
D-5	3	Mn-54 , fish	3	4.000E+02	3	4.000E+02	3	BIOFAC(18,1)
D-5	3	Mn-54 , crustacea and mollusks	3	9.000E+04	3	9.000E+04	3	BIOFAC(18,2)
D-5	3		3		3		3	
D-5	3	Na-22 , fish	3	2.000E+01	3	2.000E+01	3	BIOFAC(19,1)
D-5	3	Na-22 , crustacea and mollusks	3	2.000E+02	3	2.000E+02	3	BIOFAC(19,2)
D-5	3		3		3		3	
D-5	3	Nd-144 , fish	3	1.000E+02	3	1.000E+02	3	BIOFAC(20,1)

D-5 ³ Nd-144 , crustacea and mollusks
 D-5 ³
 D-5 ³ Ni-63 , fish
 D-5 ³ Ni-63 , crustacea and mollusks
 D-5 ³
 D-5 ³ Np-237+D , fish
 D-5 ³ Np-237+D , crustacea and mollusks
 D-5 ³
 D-5 ³ Pa-231 , fish
 D-5 ³ Pa-231 , crustacea and mollusks

³ 1.000E+03 ³ 1.000E+03 ³ BIOFAC(20,2)
³
³ 1.000E+02 ³ 1.000E+02 ³ BIOFAC(21,1)
³ 1.000E+02 ³ 1.000E+02 ³ BIOFAC(21,2)
³
³ 3.000E+01 ³ 3.000E+01 ³ BIOFAC(22,1)
³ 4.000E+02 ³ 4.000E+02 ³ BIOFAC(22,2)
³
³ 1.000E+01 ³ 1.000E+01 ³ BIOFAC(23,1)
³ 1.100E+02 ³ 1.100E+02 ³ BIOFAC(23,2)

Dose Conversion Factor (and Related) Parameter Summary (continued)

Dose Library: DCFPAK adult HT0 Plus DCFPAK3.02 (Adult)

Menu	Parameter	Current Value#	Base Case*	Parameter Name
D-5	Pb-210+D , fish	3.000E+02	3.000E+02	BIOFAC(29,1)
D-5	Pb-210+D , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(29,2)
D-5	Pb-210+D1 , fish	3.000E+02	3.000E+02	BIOFAC(30,1)
D-5	Pb-210+D1 , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(30,2)
D-5	Pb-210+D2 , fish	3.000E+02	3.000E+02	BIOFAC(31,1)
D-5	Pb-210+D2 , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(31,2)
D-5	Pu-238 , fish	3.000E+01	3.000E+01	BIOFAC(32,1)
D-5	Pu-238 , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(32,2)
D-5	Pu-239 , fish	3.000E+01	3.000E+01	BIOFAC(48,1)
D-5	Pu-239 , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(48,2)
D-5	Pu-239+D , fish	3.000E+01	3.000E+01	BIOFAC(54,1)
D-5	Pu-239+D , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(54,2)
D-5	Ra-226+D , fish	5.000E+01	5.000E+01	BIOFAC(60,1)
D-5	Ra-226+D , crustacea and mollusks	2.500E+02	2.500E+02	BIOFAC(60,2)
D-5	Ra-226+D1 , fish	5.000E+01	5.000E+01	BIOFAC(63,1)
D-5	Ra-226+D1 , crustacea and mollusks	2.500E+02	2.500E+02	BIOFAC(63,2)
D-5	Ra-226+D2 , fish	5.000E+01	5.000E+01	BIOFAC(66,1)
D-5	Ra-226+D2 , crustacea and mollusks	2.500E+02	2.500E+02	BIOFAC(66,2)
D-5	Ra-226+D3 , fish	5.000E+01	5.000E+01	BIOFAC(69,1)
D-5	Ra-226+D3 , crustacea and mollusks	2.500E+02	2.500E+02	BIOFAC(69,2)
D-5	Ra-226+D4 , fish	5.000E+01	5.000E+01	BIOFAC(72,1)
D-5	Ra-226+D4 , crustacea and mollusks	2.500E+02	2.500E+02	BIOFAC(72,2)
D-5	Ra-228+D , fish	5.000E+01	5.000E+01	BIOFAC(75,1)
D-5	Ra-228+D , crustacea and mollusks	2.500E+02	2.500E+02	BIOFAC(75,2)
D-5	Ru-106+D , fish	1.000E+01	1.000E+01	BIOFAC(76,1)
D-5	Ru-106+D , crustacea and mollusks	3.000E+02	3.000E+02	BIOFAC(76,2)
D-5	Sm-148 , fish	2.500E+01	2.500E+01	BIOFAC(77,1)

D-5 ³ Sm-148 , crustacea and mollusks
 D-5 ³
 D-5 ³ Sr-90+D , fish
 D-5 ³ Sr-90+D , crustacea and mollusks
 D-5 ³
 D-5 ³ Tc-99 , fish
 D-5 ³ Tc-99 , crustacea and mollusks
 D-5 ³
 D-5 ³ Th-228+D , fish
 D-5 ³ Th-228+D , crustacea and mollusks

³ 1.000E+03 ³ 1.000E+03 ³ BIOFAC(77,2)
³
³ 6.000E+01 ³ 6.000E+01 ³ BIOFAC(78,1)
³ 1.000E+02 ³ 1.000E+02 ³ BIOFAC(78,2)
³
³ 2.000E+01 ³ 2.000E+01 ³ BIOFAC(79,1)
³ 5.000E+00 ³ 5.000E+00 ³ BIOFAC(79,2)
³
³ 1.000E+02 ³ 1.000E+02 ³ BIOFAC(80,1)
³ 5.000E+02 ³ 5.000E+02 ³ BIOFAC(80,2)

Dose Conversion Factor (and Related) Parameter Summary (continued)

Dose Library: DCFPAK adult HTO Plus DCFPAK3.02 (Adult)

0	3		3	Current	3	Base	3	Parameter
Menu	3	Parameter	3	Value#	3	Case*	3	Name
AA								
D-5	3	Th-229+D , fish	3	1.000E+02	3	1.000E+02	3	BIOFAC(81,1)
D-5	3	Th-229+D , crustacea and mollusks	3	5.000E+02	3	5.000E+02	3	BIOFAC(81,2)
D-5	3		3		3		3	
D-5	3	Th-230 , fish	3	1.000E+02	3	1.000E+02	3	BIOFAC(82,1)
D-5	3	Th-230 , crustacea and mollusks	3	5.000E+02	3	5.000E+02	3	BIOFAC(82,2)
D-5	3		3		3		3	
D-5	3	Th-232 , fish	3	1.000E+02	3	1.000E+02	3	BIOFAC(97,1)
D-5	3	Th-232 , crustacea and mollusks	3	5.000E+02	3	5.000E+02	3	BIOFAC(97,2)
D-5	3		3		3		3	
D-5	3	U-233 , fish	3	1.000E+01	3	1.000E+01	3	BIOFAC(98,1)
D-5	3	U-233 , crustacea and mollusks	3	6.000E+01	3	6.000E+01	3	BIOFAC(98,2)
D-5	3		3		3		3	
D-5	3	U-234 , fish	3	1.000E+01	3	1.000E+01	3	BIOFAC(99,1)
D-5	3	U-234 , crustacea and mollusks	3	6.000E+01	3	6.000E+01	3	BIOFAC(99,2)
D-5	3		3		3		3	
D-5	3	U-235+D , fish	3	1.000E+01	3	1.000E+01	3	BIOFAC(114,1)
D-5	3	U-235+D , crustacea and mollusks	3	6.000E+01	3	6.000E+01	3	BIOFAC(114,2)
D-5	3		3		3		3	
D-5	3	U-238 , fish	3	1.000E+01	3	1.000E+01	3	BIOFAC(120,1)
D-5	3	U-238 , crustacea and mollusks	3	6.000E+01	3	6.000E+01	3	BIOFAC(120,2)
D-5	3		3		3		3	
D-5	3	U-238+D , fish	3	1.000E+01	3	1.000E+01	3	BIOFAC(121,1)
D-5	3	U-238+D , crustacea and mollusks	3	6.000E+01	3	6.000E+01	3	BIOFAC(121,2)
D-5	3		3		3		3	
D-5	3	U-238+D1 , fish	3	1.000E+01	3	1.000E+01	3	BIOFAC(136,1)
D-5	3	U-238+D1 , crustacea and mollusks	3	6.000E+01	3	6.000E+01	3	BIOFAC(136,2)
D-5	3		3		3		3	

 #For DCF1(xxx) only, factors are for infinite depth & area. See ETFG table in Ground Pathway of Detailed Report.
 *Base Case means Default.Lib w/o Associate Nuclide contributions.

Site-Specific Parameter Summary

Menu	Parameter	User Input	Default	Used by RESRAD	Parameter Name
R011	Area of contaminated zone (m**2)	1.000E+04	1.000E+04	---	AREA
R011	Thickness of contaminated zone (m)	2.000E+00	2.000E+00	---	THICK0
R011	Fraction of contamination that is submerged	0.000E+00	0.000E+00	---	SUBMFRACT
R011	Length parallel to aquifer flow (m)	not used	1.000E+02	---	LCZPAQ
R011	Basic radiation dose limit (mrem/yr)	2.500E+01	3.000E+01	---	BRDL
R011	Time since placement of material (yr)	0.000E+00	0.000E+00	---	TI
R011	Times for calculations (yr)	1.000E+00	1.000E+00	---	T(2)
R011	Times for calculations (yr)	2.500E+01	3.000E+00	---	T(3)
R011	Times for calculations (yr)	3.000E+01	1.000E+01	---	T(4)
R011	Times for calculations (yr)	5.000E+01	3.000E+01	---	T(5)
R011	Times for calculations (yr)	1.000E+02	1.000E+02	---	T(6)
R011	Times for calculations (yr)	2.500E+02	3.000E+02	---	T(7)
R011	Times for calculations (yr)	5.000E+02	1.000E+03	---	T(8)
R011	Times for calculations (yr)	1.000E+03	0.000E+00	---	T(9)
R011	Times for calculations (yr)	not used	0.000E+00	---	T(10)
R012	Initial principal radionuclide (pCi/g): Am-241	1.000E+01	0.000E+00	---	S1(7)
R012	Initial principal radionuclide (pCi/g): Co-60	1.000E+01	0.000E+00	---	S1(8)
R012	Initial principal radionuclide (pCi/g): Cs-134	1.000E+01	0.000E+00	---	S1(9)
R012	Initial principal radionuclide (pCi/g): Cs-137	1.000E+01	0.000E+00	---	S1(10)
R012	Initial principal radionuclide (pCi/g): Eu-152	1.000E+01	0.000E+00	---	S1(11)
R012	Initial principal radionuclide (pCi/g): Eu-154	1.000E+01	0.000E+00	---	S1(13)
R012	Initial principal radionuclide (pCi/g): Eu-155	1.000E+01	0.000E+00	---	S1(14)
R012	Initial principal radionuclide (pCi/g): H-3	1.000E+01	0.000E+00	---	S1(16)
R012	Initial principal radionuclide (pCi/g): I-129	1.000E+01	0.000E+00	---	S1(17)
R012	Initial principal radionuclide (pCi/g): Mn-54	1.000E+01	0.000E+00	---	S1(18)
R012	Initial principal radionuclide (pCi/g): Na-22	1.000E+01	0.000E+00	---	S1(19)
R012	Initial principal radionuclide (pCi/g): Ni-63	1.000E+01	0.000E+00	---	S1(21)
R012	Initial principal radionuclide (pCi/g): Np-237	1.000E+01	0.000E+00	---	S1(22)
R012	Initial principal radionuclide (pCi/g): Pu-238	1.000E+01	0.000E+00	---	S1(32)
R012	Initial principal radionuclide (pCi/g): Pu-239	1.000E+01	0.000E+00	---	S1(48)
R012	Initial principal radionuclide (pCi/g): Ru-106	1.000E+01	0.000E+00	---	S1(76)
R012	Initial principal radionuclide (pCi/g): Sr-90	1.000E+01	0.000E+00	---	S1(78)
R012	Initial principal radionuclide (pCi/g): Tc-99	1.000E+01	0.000E+00	---	S1(79)
R012	Initial principal radionuclide (pCi/g): Th-228	1.000E+01	0.000E+00	---	S1(80)
R012	Initial principal radionuclide (pCi/g): Th-230	1.000E+01	0.000E+00	---	S1(82)
R012	Initial principal radionuclide (pCi/g): Th-232	1.000E+01	0.000E+00	---	S1(97)
R012	Initial principal radionuclide (pCi/g): U-234	1.000E+01	0.000E+00	---	S1(99)
R012	Initial principal radionuclide (pCi/g): U-235	1.000E+01	0.000E+00	---	S1(114)
R012	Initial principal radionuclide (pCi/g): U-238	1.000E+01	0.000E+00	---	S1(120)
R012	Concentration in groundwater (pCi/L): Am-241	not used	0.000E+00	---	W1(7)

R012	³	Concentration in groundwater	(pCi/L):	Co-60	³	not used	³	0.000E+00	³	---	³	W1(8)
R012	³	Concentration in groundwater	(pCi/L):	Cs-134	³	not used	³	0.000E+00	³	---	³	W1(9)
R012	³	Concentration in groundwater	(pCi/L):	Cs-137	³	not used	³	0.000E+00	³	---	³	W1(10)
R012	³	Concentration in groundwater	(pCi/L):	Eu-152	³	not used	³	0.000E+00	³	---	³	W1(11)
R012	³	Concentration in groundwater	(pCi/L):	Eu-154	³	not used	³	0.000E+00	³	---	³	W1(13)
R012	³	Concentration in groundwater	(pCi/L):	Eu-155	³	not used	³	0.000E+00	³	---	³	W1(14)
R012	³	Concentration in groundwater	(pCi/L):	H-3	³	not used	³	0.000E+00	³	---	³	W1(16)
R012	³	Concentration in groundwater	(pCi/L):	I-129	³	not used	³	0.000E+00	³	---	³	W1(17)
R012	³	Concentration in groundwater	(pCi/L):	Mn-54	³	not used	³	0.000E+00	³	---	³	W1(18)

Site-Specific Parameter Summary (continued)

0	3	3	3	3	3	3	3
Menu	Parameter	User	Default	Used by RESRAD	Parameter		
		Input	(If different from user input)		Name		
AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
R012	Concentration in groundwater (pCi/L): Na-22	not used	0.000E+00	---	W1(19)		
R012	Concentration in groundwater (pCi/L): Ni-63	not used	0.000E+00	---	W1(21)		
R012	Concentration in groundwater (pCi/L): Np-237	not used	0.000E+00	---	W1(22)		
R012	Concentration in groundwater (pCi/L): Pu-238	not used	0.000E+00	---	W1(32)		
R012	Concentration in groundwater (pCi/L): Pu-239	not used	0.000E+00	---	W1(48)		
R012	Concentration in groundwater (pCi/L): Ru-106	not used	0.000E+00	---	W1(76)		
R012	Concentration in groundwater (pCi/L): Sr-90	not used	0.000E+00	---	W1(78)		
R012	Concentration in groundwater (pCi/L): Tc-99	not used	0.000E+00	---	W1(79)		
R012	Concentration in groundwater (pCi/L): Th-228	not used	0.000E+00	---	W1(80)		
R012	Concentration in groundwater (pCi/L): Th-230	not used	0.000E+00	---	W1(82)		
R012	Concentration in groundwater (pCi/L): Th-232	not used	0.000E+00	---	W1(97)		
R012	Concentration in groundwater (pCi/L): U-234	not used	0.000E+00	---	W1(99)		
R012	Concentration in groundwater (pCi/L): U-235	not used	0.000E+00	---	W1(**)		
R012	Concentration in groundwater (pCi/L): U-238	not used	0.000E+00	---	W1(**)		
R013	Cover depth (m)	0.000E+00	0.000E+00	---	COVER0		
R013	Density of cover material (g/cm**3)	not used	1.500E+00	---	DENSCV		
R013	Cover depth erosion rate (m/yr)	not used	1.000E-03	---	VCV		
R013	Density of contaminated zone (g/cm**3)	1.500E+00	1.500E+00	---	DENSCZ		
R013	Contaminated zone erosion rate (m/yr)	0.000E+00	1.000E-03	---	VCZ		
R013	Contaminated zone total porosity	4.800E-01	4.000E-01	---	TPCZ		
R013	Contaminated zone field capacity	2.000E-01	2.000E-01	---	FCCZ		
R013	Contaminated zone hydraulic conductivity (m/yr)	1.000E+01	1.000E+01	---	HCCZ		
R013	Contaminated zone b parameter	5.300E+00	5.300E+00	---	BCZ		
R013	Average annual wind speed (m/sec)	3.000E+00	2.000E+00	---	WIND		
R013	Humidity in air (g/m**3)	5.550E+00	8.000E+00	---	HUMID		
R013	Evapotranspiration coefficient	9.990E-01	5.000E-01	---	EVAPTR		
R013	Precipitation (m/yr)	2.900E-01	1.000E+00	---	PRECIP		
R013	Irrigation (m/yr)	0.000E+00	2.000E-01	---	RI		
R013	Irrigation mode	overhead	overhead	---	IDITCH		
R013	Runoff coefficient	9.000E-01	2.000E-01	---	RUNOFF		
R013	Watershed area for nearby stream or pond (m**2)	not used	1.000E+06	---	WAREA		
R013	Accuracy for water/soil computations	not used	1.000E-03	---	EPS		
R014	Density of saturated zone (g/cm**3)	not used	1.500E+00	---	DENSAQ		
R014	Saturated zone total porosity	not used	4.000E-01	---	TPSZ		
R014	Saturated zone effective porosity	not used	2.000E-01	---	EPSZ		
R014	Saturated zone field capacity	not used	2.000E-01	---	FCSZ		
R014	Saturated zone hydraulic conductivity (m/yr)	not used	1.000E+02	---	HCSZ		
R014	Saturated zone hydraulic gradient	not used	2.000E-02	---	HGWT		
R014	Saturated zone b parameter	not used	5.300E+00	---	BSZ		

R014	³ Water table drop rate (m/yr)	³ not used	³ 1.000E-03	³	---	³ VWT
R014	³ Well pump intake depth (m below water table)	³ not used	³ 1.000E+01	³	---	³ DWIBWT
R014	³ Model: Nondispersion (ND) or Mass-Balance (MB)	³ not used	³ ND	³	---	³ MODEL
R014	³ Well pumping rate (m ³ /yr)	³ not used	³ 2.500E+02	³	---	³ UW
	³	³	³	³		³
R015	³ Number of unsaturated zone strata	³ not used	³ 1	³	---	³ NS

Site-Specific Parameter Summary (continued)

0	3	3	3	3	3	3	3
Menu	Parameter	User	Default	Used by RESRAD	Parameter		
		Input	(If different from user input)		Name		
AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
R015	Unsat. zone 1, thickness (m)	not used	4.000E+00	---	H(1)		
R015	Unsat. zone 1, soil density (g/cm**3)	not used	1.500E+00	---	DENSUZ(1)		
R015	Unsat. zone 1, total porosity	not used	4.000E-01	---	TPUZ(1)		
R015	Unsat. zone 1, effective porosity	not used	2.000E-01	---	EPUZ(1)		
R015	Unsat. zone 1, field capacity	not used	2.000E-01	---	FCUZ(1)		
R015	Unsat. zone 1, soil-specific b parameter	not used	5.300E+00	---	BUZ(1)		
R015	Unsat. zone 1, hydraulic conductivity (m/yr)	not used	1.000E+01	---	HCUZ(1)		
R016	Distribution coefficients for Am-241						
R016	Contaminated zone (cm**3/g)	2.000E+01	2.000E+01	---	DCNUCC(7)		
R016	Unsaturated zone 1 (cm**3/g)	not used	2.000E+01	---	DCNUCU(7,1)		
R016	Saturated zone (cm**3/g)	not used	2.000E+01	---	DCNUCS(7)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	4.801E-07	ALEACH(7)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(7)		
R016	Distribution coefficients for Co-60						
R016	Contaminated zone (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCC(8)		
R016	Unsaturated zone 1 (cm**3/g)	not used	1.000E+03	---	DCNUCU(8,1)		
R016	Saturated zone (cm**3/g)	not used	1.000E+03	---	DCNUCS(8)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	9.665E-09	ALEACH(8)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(8)		
R016	Distribution coefficients for Cs-134						
R016	Contaminated zone (cm**3/g)	4.600E+03	4.600E+03	---	DCNUCC(9)		
R016	Unsaturated zone 1 (cm**3/g)	not used	4.600E+03	---	DCNUCU(9,1)		
R016	Saturated zone (cm**3/g)	not used	4.600E+03	---	DCNUCS(9)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	2.101E-09	ALEACH(9)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(9)		
R016	Distribution coefficients for Cs-137						
R016	Contaminated zone (cm**3/g)	4.600E+03	4.600E+03	---	DCNUCC(10)		
R016	Unsaturated zone 1 (cm**3/g)	not used	4.600E+03	---	DCNUCU(10,1)		
R016	Saturated zone (cm**3/g)	not used	4.600E+03	---	DCNUCS(10)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	2.101E-09	ALEACH(10)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(10)		
R016	Distribution coefficients for Eu-152						
R016	Contaminated zone (cm**3/g)	-1.000E+00	-1.000E+00	8.249E+02	DCNUCC(11)		
R016	Unsaturated zone 1 (cm**3/g)	not used	-1.000E+00	---	DCNUCU(11,1)		
R016	Saturated zone (cm**3/g)	not used	-1.000E+00	---	DCNUCS(11)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.172E-08	ALEACH(11)		

R016	³	Solubility constant	³	0.000E+00	³	0.000E+00	³	not used	³	SOLUBK(11)
	³		³		³		³		³	
R016	³	Distribution coefficients for Eu-154	³		³		³		³	
R016	³	Contaminated zone (cm**3/g)	³	-1.000E+00	³	-1.000E+00	³	8.249E+02	³	DCNUCC(13)
R016	³	Unsaturated zone 1 (cm**3/g)	³	not used	³	-1.000E+00	³	---	³	DCNUCU(13,1)
R016	³	Saturated zone (cm**3/g)	³	not used	³	-1.000E+00	³	---	³	DCNUCS(13)
R016	³	Leach rate (/yr)	³	0.000E+00	³	0.000E+00	³	1.172E-08	³	ALEACH(13)
R016	³	Solubility constant	³	0.000E+00	³	0.000E+00	³	not used	³	SOLUBK(13)

Site-Specific Parameter Summary (continued)

0	3	3	3	3	3	3	3
Menu	Parameter	User	Default	Used by RESRAD	Parameter		
		Input	(If different from user input)		Name		
AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
R016	Distribution coefficients for Eu-155						
R016	Contaminated zone (cm**3/g)	3 -1.000E+00	3 -1.000E+00	3 8.249E+02	3 DCNUCC(14)		
R016	Unsaturated zone 1 (cm**3/g)	3 not used	3 -1.000E+00	3 ---	3 DCNUCU(14,1)		
R016	Saturated zone (cm**3/g)	3 not used	3 -1.000E+00	3 ---	3 DCNUCS(14)		
R016	Leach rate (/yr)	3 0.000E+00	3 0.000E+00	3 1.172E-08	3 ALEACH(14)		
R016	Solubility constant	3 0.000E+00	3 0.000E+00	3 not used	3 SOLUBK(14)		
		3	3	3	3		
R016	Distribution coefficients for H-3						
R016	Contaminated zone (cm**3/g)	3 0.000E+00	3 0.000E+00	3 ---	3 DCNUCC(16)		
R016	Unsaturated zone 1 (cm**3/g)	3 not used	3 0.000E+00	3 ---	3 DCNUCU(16,1)		
R016	Saturated zone (cm**3/g)	3 not used	3 0.000E+00	3 ---	3 DCNUCS(16)		
R016	Leach rate (/yr)	3 0.000E+00	3 0.000E+00	3 7.250E-05	3 ALEACH(16)		
R016	Solubility constant	3 0.000E+00	3 0.000E+00	3 not used	3 SOLUBK(16)		
		3	3	3	3		
R016	Distribution coefficients for I-129						
R016	Contaminated zone (cm**3/g)	3 1.000E-01	3 1.000E-01	3 ---	3 DCNUCC(17)		
R016	Unsaturated zone 1 (cm**3/g)	3 not used	3 1.000E-01	3 ---	3 DCNUCU(17,1)		
R016	Saturated zone (cm**3/g)	3 not used	3 1.000E-01	3 ---	3 DCNUCS(17)		
R016	Leach rate (/yr)	3 0.000E+00	3 0.000E+00	3 4.143E-05	3 ALEACH(17)		
R016	Solubility constant	3 0.000E+00	3 0.000E+00	3 not used	3 SOLUBK(17)		
		3	3	3	3		
R016	Distribution coefficients for Mn-54						
R016	Contaminated zone (cm**3/g)	3 2.000E+02	3 2.000E+02	3 ---	3 DCNUCC(18)		
R016	Unsaturated zone 1 (cm**3/g)	3 not used	3 2.000E+02	3 ---	3 DCNUCU(18,1)		
R016	Saturated zone (cm**3/g)	3 not used	3 2.000E+02	3 ---	3 DCNUCS(18)		
R016	Leach rate (/yr)	3 0.000E+00	3 0.000E+00	3 4.830E-08	3 ALEACH(18)		
R016	Solubility constant	3 0.000E+00	3 0.000E+00	3 not used	3 SOLUBK(18)		
		3	3	3	3		
R016	Distribution coefficients for Na-22						
R016	Contaminated zone (cm**3/g)	3 1.000E+01	3 1.000E+01	3 ---	3 DCNUCC(19)		
R016	Unsaturated zone 1 (cm**3/g)	3 not used	3 1.000E+01	3 ---	3 DCNUCU(19,1)		
R016	Saturated zone (cm**3/g)	3 not used	3 1.000E+01	3 ---	3 DCNUCS(19)		
R016	Leach rate (/yr)	3 0.000E+00	3 0.000E+00	3 9.539E-07	3 ALEACH(19)		
R016	Solubility constant	3 0.000E+00	3 0.000E+00	3 not used	3 SOLUBK(19)		
		3	3	3	3		
R016	Distribution coefficients for Ni-63						
R016	Contaminated zone (cm**3/g)	3 1.000E+03	3 1.000E+03	3 ---	3 DCNUCC(21)		
R016	Unsaturated zone 1 (cm**3/g)	3 not used	3 1.000E+03	3 ---	3 DCNUCU(21,1)		
R016	Saturated zone (cm**3/g)	3 not used	3 1.000E+03	3 ---	3 DCNUCS(21)		
R016	Leach rate (/yr)	3 0.000E+00	3 0.000E+00	3 9.665E-09	3 ALEACH(21)		
R016	Solubility constant	3 0.000E+00	3 0.000E+00	3 not used	3 SOLUBK(21)		

	³		³	³		³
R016	³	Distribution coefficients for Np-237	³	³		³
R016	³	Contaminated zone (cm**3/g)	³	-1.000E+00	³	-1.000E+00
R016	³	Unsaturated zone 1 (cm**3/g)	³	not used	³	-1.000E+00
R016	³	Saturated zone (cm**3/g)	³	not used	³	-1.000E+00
R016	³	Leach rate (/yr)	³	0.000E+00	³	0.000E+00
R016	³	Solubility constant	³	0.000E+00	³	0.000E+00
					2.574E+02	DCNUCC(22)
					---	DCNUCU(22,1)
					---	DCNUCS(22)
					3.753E-08	ALEACH(22)
					not used	SOLUBK(22)

Site-Specific Parameter Summary (continued)

0	3	3	3	3	3	3	3
Menu	Parameter	User	Default	Used by RESRAD	Parameter		
	Input		(If different from user input)		Name		
AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
R016	Distribution coefficients for Pu-238						
R016	Contaminated zone (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCC(32)		
R016	Unsaturated zone 1 (cm**3/g)	not used	2.000E+03	---	DCNUCU(32,1)		
R016	Saturated zone (cm**3/g)	not used	2.000E+03	---	DCNUCS(32)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	4.833E-09	ALEACH(32)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(32)		
R016	Distribution coefficients for Pu-239						
R016	Contaminated zone (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCC(48)		
R016	Unsaturated zone 1 (cm**3/g)	not used	2.000E+03	---	DCNUCU(48,1)		
R016	Saturated zone (cm**3/g)	not used	2.000E+03	---	DCNUCS(48)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	4.833E-09	ALEACH(48)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(48)		
R016	Distribution coefficients for Ru-106						
R016	Contaminated zone (cm**3/g)	6.000E+04	0.000E+00	---	DCNUCC(76)		
R016	Unsaturated zone 1 (cm**3/g)	not used	0.000E+00	---	DCNUCU(76,1)		
R016	Saturated zone (cm**3/g)	not used	0.000E+00	---	DCNUCS(76)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.611E-10	ALEACH(76)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(76)		
R016	Distribution coefficients for Sr-90						
R016	Contaminated zone (cm**3/g)	3.000E+01	3.000E+01	---	DCNUCC(78)		
R016	Unsaturated zone 1 (cm**3/g)	not used	3.000E+01	---	DCNUCU(78,1)		
R016	Saturated zone (cm**3/g)	not used	3.000E+01	---	DCNUCS(78)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	3.208E-07	ALEACH(78)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(78)		
R016	Distribution coefficients for Tc-99						
R016	Contaminated zone (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCC(79)		
R016	Unsaturated zone 1 (cm**3/g)	not used	0.000E+00	---	DCNUCU(79,1)		
R016	Saturated zone (cm**3/g)	not used	0.000E+00	---	DCNUCS(79)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	7.250E-05	ALEACH(79)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(79)		
R016	Distribution coefficients for Th-228						
R016	Contaminated zone (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCC(80)		
R016	Unsaturated zone 1 (cm**3/g)	not used	6.000E+04	---	DCNUCU(80,1)		
R016	Saturated zone (cm**3/g)	not used	6.000E+04	---	DCNUCS(80)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.611E-10	ALEACH(80)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(80)		

Site-Specific Parameter Summary (continued)

0	3	3	3	3	3	3	3
Menu	Parameter	User	Default	Used by RESRAD	Parameter		
	Input		(If different from user input)		Name		
AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
R016	Distribution coefficients for Th-232						
R016	Contaminated zone (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCC(97)		
R016	Unsaturated zone 1 (cm**3/g)	not used	6.000E+04	---	DCNUCU(97,1)		
R016	Saturated zone (cm**3/g)	not used	6.000E+04	---	DCNUCS(97)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.611E-10	ALEACH(97)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(97)		
R016	Distribution coefficients for U-234						
R016	Contaminated zone (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCC(99)		
R016	Unsaturated zone 1 (cm**3/g)	not used	5.000E+01	---	DCNUCU(99,1)		
R016	Saturated zone (cm**3/g)	not used	5.000E+01	---	DCNUCS(99)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.928E-07	ALEACH(99)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(99)		
R016	Distribution coefficients for U-235						
R016	Contaminated zone (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCC(**)		
R016	Unsaturated zone 1 (cm**3/g)	not used	5.000E+01	---	DCNUCU(**,1)		
R016	Saturated zone (cm**3/g)	not used	5.000E+01	---	DCNUCS(**)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.928E-07	ALEACH(**)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(**)		
R016	Distribution coefficients for U-238						
R016	Contaminated zone (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCC(**)		
R016	Unsaturated zone 1 (cm**3/g)	not used	5.000E+01	---	DCNUCU(**,1)		
R016	Saturated zone (cm**3/g)	not used	5.000E+01	---	DCNUCS(**)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.928E-07	ALEACH(**)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(**)		
R016	Distribution coefficients for daughter Ac-227						
R016	Contaminated zone (cm**3/g)	2.000E+01	2.000E+01	---	DCNUCC(1)		
R016	Unsaturated zone 1 (cm**3/g)	not used	2.000E+01	---	DCNUCU(1,1)		
R016	Saturated zone (cm**3/g)	not used	2.000E+01	---	DCNUCS(1)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	4.801E-07	ALEACH(1)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(1)		
R016	Distribution coefficients for daughter Gd-152						
R016	Contaminated zone (cm**3/g)	-1.000E+00	-1.000E+00	8.249E+02	DCNUCC(15)		
R016	Unsaturated zone 1 (cm**3/g)	not used	-1.000E+00	---	DCNUCU(15,1)		
R016	Saturated zone (cm**3/g)	not used	-1.000E+00	---	DCNUCS(15)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.172E-08	ALEACH(15)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(15)		

R016	3	Distribution coefficients for daughter Nd-144	3	3	3	3				
R016	3	Contaminated zone (cm**3/g)	3	1.580E+02	3	1.580E+02	3	---	3	DCNUCC(20)
R016	3	Unsaturated zone 1 (cm**3/g)	3	not used	3	1.580E+02	3	---	3	DCNUCU(20,1)
R016	3	Saturated zone (cm**3/g)	3	not used	3	1.580E+02	3	---	3	DCNUCS(20)
R016	3	Leach rate (/yr)	3	0.000E+00	3	0.000E+00	3	6.113E-08	3	ALEACH(20)
R016	3	Solubility constant	3	0.000E+00	3	0.000E+00	3	not used	3	SOLUBK(20)

Site-Specific Parameter Summary (continued)

0	3	3	3	3	3	3	3
Menu	Parameter	User	Default	Used by RESRAD	Parameter		
	Input		(If different from user input)		Name		
AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
R016	Distribution coefficients for daughter Pa-231						
R016	Contaminated zone (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCC(23)		
R016	Unsaturated zone 1 (cm**3/g)	not used	5.000E+01	---	DCNUCU(23,1)		
R016	Saturated zone (cm**3/g)	not used	5.000E+01	---	DCNUCS(23)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.928E-07	ALEACH(23)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(23)		
R016	Distribution coefficients for daughter Pb-210						
R016	Contaminated zone (cm**3/g)	1.000E+02	1.000E+02	---	DCNUCC(29)		
R016	Unsaturated zone 1 (cm**3/g)	not used	1.000E+02	---	DCNUCU(29,1)		
R016	Saturated zone (cm**3/g)	not used	1.000E+02	---	DCNUCS(29)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	9.654E-08	ALEACH(29)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(29)		
R016	Distribution coefficients for daughter Ra-226						
R016	Contaminated zone (cm**3/g)	7.000E+01	7.000E+01	---	DCNUCC(60)		
R016	Unsaturated zone 1 (cm**3/g)	not used	7.000E+01	---	DCNUCU(60,1)		
R016	Saturated zone (cm**3/g)	not used	7.000E+01	---	DCNUCS(60)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.378E-07	ALEACH(60)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(60)		
R016	Distribution coefficients for daughter Ra-228						
R016	Contaminated zone (cm**3/g)	7.000E+01	7.000E+01	---	DCNUCC(75)		
R016	Unsaturated zone 1 (cm**3/g)	not used	7.000E+01	---	DCNUCU(75,1)		
R016	Saturated zone (cm**3/g)	not used	7.000E+01	---	DCNUCS(75)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.378E-07	ALEACH(75)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(75)		
R016	Distribution coefficients for daughter Sm-148						
R016	Contaminated zone (cm**3/g)	-1.000E+00	-1.000E+00	8.249E+02	DCNUCC(77)		
R016	Unsaturated zone 1 (cm**3/g)	not used	-1.000E+00	---	DCNUCU(77,1)		
R016	Saturated zone (cm**3/g)	not used	-1.000E+00	---	DCNUCS(77)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.172E-08	ALEACH(77)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(77)		
R016	Distribution coefficients for daughter Th-229						
R016	Contaminated zone (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCC(81)		
R016	Unsaturated zone 1 (cm**3/g)	not used	6.000E+04	---	DCNUCU(81,1)		
R016	Saturated zone (cm**3/g)	not used	6.000E+04	---	DCNUCS(81)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.611E-10	ALEACH(81)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(81)		

	³		³	³		³
R016	³	Distribution coefficients for daughter U-233	³	³		³
R016	³	Contaminated zone (cm**3/g)	³	5.000E+01	³	5.000E+01 ³ --- ³ DCNUCC(98)
R016	³	Unsaturated zone 1 (cm**3/g)	³	not used	³	5.000E+01 ³ --- ³ DCNUCU(98,1)
R016	³	Saturated zone (cm**3/g)	³	not used	³	5.000E+01 ³ --- ³ DCNUCS(98)
R016	³	Leach rate (/yr)	³	0.000E+00	³	0.000E+00 ³ 1.928E-07 ³ ALEACH(98)
R016	³	Solubility constant	³	0.000E+00	³	0.000E+00 ³ not used ³ SOLUBK(98)
	³		³	³		³
R017	³	Inhalation rate (m**3/yr)	³	7.780E+03	³	8.400E+03 ³ --- ³ INHALR

Site-Specific Parameter Summary (continued)

0	3	3	3	3	3	3	3
Menu	Parameter	User	Default	Used by RESRAD	Parameter		
	Input	Default	(If different from user input)	Name			
AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
R017	Mass loading for inhalation (g/m**3)	1.510E-07	1.000E-04	---	MLINH		
R017	Exposure duration	2.500E+01	3.000E+01	---	ED		
R017	Shielding factor, inhalation	1.000E+00	4.000E-01	---	SHF3		
R017	Shielding factor, external gamma	7.000E-01	7.000E-01	---	SHF1		
R017	Fraction of time spent indoors	0.000E+00	5.000E-01	---	FIND		
R017	Fraction of time spent outdoors (on site)	2.053E-01	2.500E-01	---	FOTD		
R017	Shape factor flag, external gamma	1.000E+00	1.000E+00	>0 shows circular AREA.	FS		
R017	Radii of shape factor array (used if FS = -1):						
R017	Outer annular radius (m), ring 1:	not used	5.000E+01	---	RAD_SHAPE(1)		
R017	Outer annular radius (m), ring 2:	not used	7.071E+01	---	RAD_SHAPE(2)		
R017	Outer annular radius (m), ring 3:	not used	0.000E+00	---	RAD_SHAPE(3)		
R017	Outer annular radius (m), ring 4:	not used	0.000E+00	---	RAD_SHAPE(4)		
R017	Outer annular radius (m), ring 5:	not used	0.000E+00	---	RAD_SHAPE(5)		
R017	Outer annular radius (m), ring 6:	not used	0.000E+00	---	RAD_SHAPE(6)		
R017	Outer annular radius (m), ring 7:	not used	0.000E+00	---	RAD_SHAPE(7)		
R017	Outer annular radius (m), ring 8:	not used	0.000E+00	---	RAD_SHAPE(8)		
R017	Outer annular radius (m), ring 9:	not used	0.000E+00	---	RAD_SHAPE(9)		
R017	Outer annular radius (m), ring 10:	not used	0.000E+00	---	RAD_SHAPE(10)		
R017	Outer annular radius (m), ring 11:	not used	0.000E+00	---	RAD_SHAPE(11)		
R017	Outer annular radius (m), ring 12:	not used	0.000E+00	---	RAD_SHAPE(12)		
R017	Fractions of annular areas within AREA:						
R017	Ring 1	not used	1.000E+00	---	FRACA(1)		
R017	Ring 2	not used	2.732E-01	---	FRACA(2)		
R017	Ring 3	not used	0.000E+00	---	FRACA(3)		
R017	Ring 4	not used	0.000E+00	---	FRACA(4)		
R017	Ring 5	not used	0.000E+00	---	FRACA(5)		
R017	Ring 6	not used	0.000E+00	---	FRACA(6)		
R017	Ring 7	not used	0.000E+00	---	FRACA(7)		
R017	Ring 8	not used	0.000E+00	---	FRACA(8)		
R017	Ring 9	not used	0.000E+00	---	FRACA(9)		
R017	Ring 10	not used	0.000E+00	---	FRACA(10)		
R017	Ring 11	not used	0.000E+00	---	FRACA(11)		
R017	Ring 12	not used	0.000E+00	---	FRACA(12)		
R018	Fruits, vegetables and grain consumption (kg/yr)	not used	1.600E+02	---	DIET(1)		
R018	Leafy vegetable consumption (kg/yr)	not used	1.400E+01	---	DIET(2)		
R018	Milk consumption (L/yr)	not used	9.200E+01	---	DIET(3)		
R018	Meat and poultry consumption (kg/yr)	not used	6.300E+01	---	DIET(4)		
R018	Fish consumption (kg/yr)	not used	5.400E+00	---	DIET(5)		
R018	Other seafood consumption (kg/yr)	not used	9.000E-01	---	DIET(6)		

R018	³	Soil ingestion rate (g/yr)	³	1.096E+02	³	3.650E+01	³	---	³	SOIL
R018	³	Drinking water intake (L/yr)	³	not used	³	5.100E+02	³	---	³	DWI
R018	³	Contamination fraction of drinking water	³	not used	³	1.000E+00	³	---	³	FDW
R018	³	Contamination fraction of household water	³	not used	³	1.000E+00	³	---	³	FHHW
R018	³	Contamination fraction of livestock water	³	not used	³	1.000E+00	³	---	³	FLW
R018	³	Contamination fraction of irrigation water	³	not used	³	1.000E+00	³	---	³	FIRW
R018	³	Contamination fraction of aquatic food	³	not used	³	5.000E-01	³	---	³	FR9
R018	³	Contamination fraction of plant food	³	not used	³	-1	³	---	³	FPLANT
R018	³	Contamination fraction of meat	³	not used	³	-1	³	---	³	FMEAT

Site-Specific Parameter Summary (continued)

0	3	3	3	3	3	3	3
Menu	Parameter	User	Input	Default	Used by RESRAD	(If different from user input)	Parameter Name
AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
R018	Contamination fraction of milk	3	not used	3-1	3	---	3 FMILK
		3		3	3		3
R019	Livestock fodder intake for meat (kg/day)	3	not used	3 6.800E+01	3	---	3 LFI5
R019	Livestock fodder intake for milk (kg/day)	3	not used	3 5.500E+01	3	---	3 LFI6
R019	Livestock water intake for meat (L/day)	3	not used	3 5.000E+01	3	---	3 LWI5
R019	Livestock water intake for milk (L/day)	3	not used	3 1.600E+02	3	---	3 LWI6
R019	Livestock soil intake (kg/day)	3	not used	3 5.000E-01	3	---	3 LSI
R019	Mass loading for foliar deposition (g/m**3)	3	not used	3 1.000E-04	3	---	3 MLFD
R019	Depth of soil mixing layer (m)	3	1.500E-01	3 1.500E-01	3	---	3 DM
R019	Depth of roots (m)	3	not used	3 9.000E-01	3	---	3 DROOT
R019	Drinking water fraction from ground water	3	not used	3 1.000E+00	3	---	3 FGWDW
R019	Household water fraction from ground water	3	not used	3 1.000E+00	3	---	3 FGWHH
R019	Livestock water fraction from ground water	3	not used	3 1.000E+00	3	---	3 FGWLW
R019	Irrigation fraction from ground water	3	not used	3 1.000E+00	3	---	3 FGWIR
		3		3	3		3
R19B	Wet weight crop yield for Non-Leafy (kg/m**2)	3	not used	3 7.000E-01	3	---	3 YV(1)
R19B	Wet weight crop yield for Leafy (kg/m**2)	3	not used	3 1.500E+00	3	---	3 YV(2)
R19B	Wet weight crop yield for Fodder (kg/m**2)	3	not used	3 1.100E+00	3	---	3 YV(3)
R19B	Growing Season for Non-Leafy (years)	3	not used	3 1.700E-01	3	---	3 TE(1)
R19B	Growing Season for Leafy (years)	3	not used	3 2.500E-01	3	---	3 TE(2)
R19B	Growing Season for Fodder (years)	3	not used	3 8.000E-02	3	---	3 TE(3)
R19B	Translocation Factor for Non-Leafy	3	not used	3 1.000E-01	3	---	3 TIV(1)
R19B	Translocation Factor for Leafy	3	not used	3 1.000E+00	3	---	3 TIV(2)
R19B	Translocation Factor for Fodder	3	not used	3 1.000E+00	3	---	3 TIV(3)
R19B	Dry Foliar Interception Fraction for Non-Leafy	3	not used	3 2.500E-01	3	---	3 RDRY(1)
R19B	Dry Foliar Interception Fraction for Leafy	3	not used	3 2.500E-01	3	---	3 RDRY(2)
R19B	Dry Foliar Interception Fraction for Fodder	3	not used	3 2.500E-01	3	---	3 RDRY(3)
R19B	Wet Foliar Interception Fraction for Non-Leafy	3	not used	3 2.500E-01	3	---	3 RWET(1)
R19B	Wet Foliar Interception Fraction for Leafy	3	not used	3 2.500E-01	3	---	3 RWET(2)
R19B	Wet Foliar Interception Fraction for Fodder	3	not used	3 2.500E-01	3	---	3 RWET(3)
R19B	Weathering Removal Constant for Vegetation	3	not used	3 2.000E+01	3	---	3 WLAM
		3		3	3		3
C14	C-12 concentration in water (g/cm**3)	3	not used	3 2.000E-05	3	---	3 C12WTR
C14	C-12 concentration in contaminated soil (g/g)	3	not used	3 3.000E-02	3	---	3 C12CZ
C14	Fraction of vegetation carbon from soil	3	not used	3 2.000E-02	3	---	3 CSOIL
C14	Fraction of vegetation carbon from air	3	not used	3 9.800E-01	3	---	3 CAIR
C14	C-14 evasion layer thickness in soil (m)	3	not used	3 3.000E-01	3	---	3 DMC
C14	C-14 evasion flux rate from soil (1/sec)	3	not used	3 7.000E-07	3	---	3 EVSN
C14	C-12 evasion flux rate from soil (1/sec)	3	not used	3 1.000E-10	3	---	3 REVSN
C14	Fraction of grain in beef cattle feed	3	not used	3 8.000E-01	3	---	3 AVFG4
C14	Fraction of grain in milk cow feed	3	not used	3 2.000E-01	3	---	3 AVFG5

	³		³	³	³		³
STOR	³	Storage times of contaminated foodstuffs (days):	³	³	³		³
STOR	³	Fruits, non-leafy vegetables, and grain	³	1.000E+00	³	1.400E+01	³ --- ³ STOR_T(1)
STOR	³	Leafy vegetables	³	1.000E+00	³	1.000E+00	³ --- ³ STOR_T(2)
STOR	³	Milk	³	1.000E+00	³	1.000E+00	³ --- ³ STOR_T(3)
STOR	³	Meat and poultry	³	2.000E+01	³	2.000E+01	³ --- ³ STOR_T(4)
STOR	³	Fish	³	7.000E+00	³	7.000E+00	³ --- ³ STOR_T(5)
STOR	³	Crustacea and mollusks	³	7.000E+00	³	7.000E+00	³ --- ³ STOR_T(6)
STOR	³	Well water	³	1.000E+00	³	1.000E+00	³ --- ³ STOR_T(7)

Site-Specific Parameter Summary (continued)

0	3	3	3	3	3	3	3
Menu	Parameter	User	Input	Default	Used by RESRAD	(If different from user input)	Parameter Name
STOR	Surface water	3	1.000E+00	3	1.000E+00	---	3 STOR_T(8)
STOR	Livestock fodder	3	4.500E+01	3	4.500E+01	---	3 STOR_T(9)
R021	Thickness of building foundation (m)	3	not used	3	1.500E-01	---	3 FLOOR1
R021	Bulk density of building foundation (g/cm**3)	3	not used	3	2.400E+00	---	3 DENSFL
R021	Total porosity of the cover material	3	not used	3	4.000E-01	---	3 TPCV
R021	Total porosity of the building foundation	3	not used	3	1.000E-01	---	3 TPFL
R021	Volumetric water content of the cover material	3	not used	3	5.000E-02	---	3 PH20CV
R021	Volumetric water content of the foundation	3	not used	3	3.000E-02	---	3 PH20FL
R021	Diffusion coefficient for radon gas (m/sec):	3		3			3
R021	in cover material	3	not used	3	2.000E-06	---	3 DIFCV
R021	in foundation material	3	not used	3	3.000E-07	---	3 DIFFL
R021	in contaminated zone soil	3	not used	3	2.000E-06	---	3 DIFCZ
R021	Radon vertical dimension of mixing (m)	3	not used	3	2.000E+00	---	3 HMIX
R021	Average building air exchange rate (1/hr)	3	not used	3	5.000E-01	---	3 REXG
R021	Height of the building (room) (m)	3	not used	3	2.500E+00	---	3 HRM
R021	Building interior area factor	3	not used	3	0.000E+00	---	3 FAI
R021	Building depth below ground surface (m)	3	not used	3	-1.000E+00	---	3 DMFL
R021	Emanating power of Rn-222 gas	3	not used	3	2.500E-01	---	3 EMANA(1)
R021	Emanating power of Rn-220 gas	3	not used	3	1.500E-01	---	3 EMANA(2)
TITL	Number of graphical time points	3	32	3	---	---	3 NPTS
TITL	Maximum number of integration points for dose	3	17	3	---	---	3 LYMAX
TITL	Maximum number of integration points for risk	3	257	3	---	---	3 KYMAX

Summary of Pathway Selections

Pathway	3	User Selection
1 -- external gamma	3	active
2 -- inhalation (w/o radon)	3	active
3 -- plant ingestion	3	suppressed
4 -- meat ingestion	3	suppressed
5 -- milk ingestion	3	suppressed
6 -- aquatic foods	3	suppressed
7 -- drinking water	3	suppressed
8 -- soil ingestion	3	active
9 -- radon	3	suppressed

Contaminated Zone Dimensions	Initial Soil Concentrations, pCi/g
AAAAAAAAAAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAAAAAAAAAA
Area: 10000.00 square meters	Am-241 1.000E+01
Thickness: 2.00 meters	Co-60 1.000E+01
Cover Depth: 0.00 meters	Cs-134 1.000E+01
	Cs-137 1.000E+01
	Eu-152 1.000E+01
	Eu-154 1.000E+01
	Eu-155 1.000E+01
	H-3 1.000E+01
	I-129 1.000E+01
	Mn-54 1.000E+01
	Na-22 1.000E+01
	Ni-63 1.000E+01
	Np-237 1.000E+01
	Pu-238 1.000E+01
	Pu-239 1.000E+01
	Ru-106 1.000E+01
	Sr-90 1.000E+01
	Tc-99 1.000E+01
	Th-228 1.000E+01
	Th-230 1.000E+01
	Th-232 1.000E+01
	U-234 1.000E+01
	U-235 1.000E+01
	U-238 1.000E+01

0

Total Dose TDOSE(t), mrem/yr
Basic Radiation Dose Limit = 2.500E+01 mrem/yr
Total Mixture Sum M(t) = Fraction of Basic Dose Limit Received at Time (t)
AA

t (years):	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
TDOSE(t):	1.258E+02	1.040E+02	4.156E+01	4.007E+01	3.672E+01	3.469E+01	3.525E+01	3.721E+01	4.064E+01
M(t):	5.031E+00	4.160E+00	1.662E+00	1.603E+00	1.469E+00	1.388E+00	1.410E+00	1.488E+00	1.626E+00

0Maximum TDOSE(t): 1.258E+02 mrem/yr at t = 0.000E+00 years

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)

As mrem/yr and Fraction of Total Dose At t = 0.000E+00 years

Water Independent Pathways (Inhalation excludes radon)

0	Water Independent Pathways (Inhalation excludes radon)													
0	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA
Am-241	7.570E-02	0.0006	1.265E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.697E-01	0.0013
Co-60	2.786E+01	0.2215	3.787E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.668E-03	0.0000
Cs-134	1.451E+01	0.1154	2.280E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.365E-02	0.0001
Cs-137	6.065E+00	0.0482	5.115E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.119E-02	0.0001
Eu-152	1.263E+01	0.1004	1.195E-07	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.088E-03	0.0000
Eu-154	1.350E+01	0.1073	1.347E-07	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.576E-03	0.0000
Eu-155	3.011E-01	0.0024	1.520E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.572E-04	0.0000
H-3	0.000E+00	0.0000	8.745E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.492E-05	0.0000
I-129	1.977E-02	0.0002	1.289E-07	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.991E-02	0.0007
Mn-54	6.414E+00	0.0510	2.944E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.112E-04	0.0000
Na-22	2.182E+01	0.1735	3.351E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.317E-03	0.0000
Ni-63	0.000E+00	0.0000	2.615E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.286E-04	0.0000
Np-237	2.122E+00	0.0169	6.531E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.989E-02	0.0007
Pu-238	2.268E-04	0.0000	1.415E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.891E-01	0.0015
Pu-239	5.446E-04	0.0000	1.566E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.090E-01	0.0017
Ru-106	1.747E+00	0.0139	6.348E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.245E-03	0.0000
Sr-90	7.774E-02	0.0006	2.050E-07	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.491E-02	0.0002
Tc-99	2.169E-04	0.0000	1.752E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.345E-04	0.0000
Th-228	1.477E+01	0.1174	4.767E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.976E-02	0.0008
Th-230	6.553E-03	0.0001	1.335E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.782E-01	0.0014
Th-232	6.764E-01	0.0054	1.461E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.267E-01	0.0018
U-234	7.085E-04	0.0000	1.236E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.121E-02	0.0003
U-235	1.436E+00	0.0114	1.113E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.916E-02	0.0003
U-238	3.141E-01	0.0025	1.057E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.995E-02	0.0003
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	1.243E+02	0.9886	9.396E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.435E+00	0.0114

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 0.000E+00 years

Water Dependent Pathways														
0	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA
Am-241	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.455E-01	0.0020
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.786E+01	0.2215
Cs-134	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.453E+01	0.1155
Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.076E+00	0.0483
Eu-152	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.263E+01	0.1004
Eu-154	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.350E+01	0.1073
Eu-155	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.013E-01	0.0024
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.024E-04	0.0000
I-129	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.097E-01	0.0009
Mn-54	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.414E+00	0.0510
Na-22	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.182E+01	0.1735
Ni-63	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.286E-04	0.0000
Np-237	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.212E+00	0.0176
Pu-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.894E-01	0.0015
Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.097E-01	0.0017
Ru-106	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.752E+00	0.0139
Sr-90	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.027E-01	0.0008
Tc-99	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.514E-04	0.0000
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.487E+01	0.1182
Th-230	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.849E-01	0.0015
Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.032E-01	0.0072
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.193E-02	0.0003
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.475E+00	0.0117
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.540E-01	0.0028
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.258E+02	1.0000

0*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)

As mrem/yr and Fraction of Total Dose At t = 1.000E+00 years

Water Independent Pathways (Inhalation excludes radon)

Water Independent Pathways (Inhalation excludes radon)														
0	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA
Am-241	7.558E-02	0.0007	1.263E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.694E-01	0.0016
Co-60	2.443E+01	0.2349	3.320E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.339E-03	0.0000
Cs-134	1.038E+01	0.0998	1.630E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.757E-03	0.0001
Cs-137	5.927E+00	0.0570	4.999E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.094E-02	0.0001
Eu-152	1.200E+01	0.1154	1.135E-07	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.033E-03	0.0000
Eu-154	1.246E+01	0.1198	1.242E-07	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.454E-03	0.0000
Eu-155	2.603E-01	0.0025	1.314E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.224E-04	0.0000
H-3	0.000E+00	0.0000	7.688E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.312E-05	0.0000
I-129	1.977E-02	0.0002	1.289E-07	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.991E-02	0.0009
Mn-54	2.850E+00	0.0274	1.308E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.827E-04	0.0000
Na-22	1.672E+01	0.1607	2.568E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.775E-03	0.0000
Ni-63	0.000E+00	0.0000	2.597E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.277E-04	0.0000
Np-237	2.122E+00	0.0204	6.531E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.989E-02	0.0009
Pu-238	2.250E-04	0.0000	1.403E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.876E-01	0.0018
Pu-239	5.445E-04	0.0000	1.566E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.090E-01	0.0020
Ru-106	8.873E-01	0.0085	3.223E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.156E-03	0.0000
Sr-90	7.589E-02	0.0007	2.001E-07	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.432E-02	0.0002
Tc-99	2.169E-04	0.0000	1.752E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.344E-04	0.0000
Th-228	1.027E+01	0.0988	3.317E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.942E-02	0.0007
Th-230	1.529E-02	0.0001	1.335E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.783E-01	0.0017
Th-232	2.298E+00	0.0221	1.503E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.926E-01	0.0028
U-234	7.086E-04	0.0000	1.236E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.121E-02	0.0004
U-235	1.436E+00	0.0138	1.113E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.917E-02	0.0004
U-238	3.141E-01	0.0030	1.057E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.995E-02	0.0004
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	1.025E+02	0.9859	9.172E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.461E+00	0.0141

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
 As mrem/yr and Fraction of Total Dose At t = 1.000E+00 years

	Water Dependent Pathways																				
0	Water				Fish				Radon				Plant				Meat				
0																					
Radio-	Water				Fish				Radon				Plant				Meat				
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	
0	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	
0	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	
Am-241	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.451E-01	0.0024	
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.443E+01	0.2349	
Cs-134	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.039E+01	0.0999	
Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.938E+00	0.0571	
Eu-152	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.200E+01	0.1154	
Eu-154	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.246E+01	0.1198	
Eu-155	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.605E-01	0.0025	
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.999E-05	0.0000	
I-129	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.097E-01	0.0011	
Mn-54	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.850E+00	0.0274	
Na-22	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.672E+01	0.1608	
Ni-63	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.277E-04	0.0000	
Np-237	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.212E+00	0.0213	
Pu-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.879E-01	0.0018	
Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.097E-01	0.0020	
Ru-106	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.895E-01	0.0086	
Sr-90	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.002E-01	0.0010	
Tc-99	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.513E-04	0.0000	
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.034E+01	0.0995	
Th-230	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.938E-01	0.0019	
Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.591E+00	0.0249	
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.193E-02	0.0004	
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.475E+00	0.0142	
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.540E-01	0.0034	
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.040E+02	1.0000	

0*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)

As mrem/yr and Fraction of Total Dose At t = 2.500E+01 years

Water Independent Pathways (Inhalation excludes radon)

0	Water Independent Pathways (Inhalation excludes radon)													
0	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA
Am-241	7.274E-02	0.0018	1.216E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.630E-01	0.0039
Co-60	1.041E+00	0.0250	1.415E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.966E-05	0.0000
Cs-134	3.289E-03	0.0001	5.166E-12	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.093E-06	0.0000
Cs-137	3.415E+00	0.0822	2.880E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.302E-03	0.0002
Eu-152	3.512E+00	0.0845	3.322E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.023E-04	0.0000
Eu-154	1.797E+00	0.0432	1.792E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.097E-04	0.0000
Eu-155	7.907E-03	0.0002	3.992E-10	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.755E-06	0.0000
H-3	0.000E+00	0.0000	3.487E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.948E-07	0.0000
I-129	1.975E-02	0.0005	1.288E-07	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.982E-02	0.0022
Mn-54	1.001E-08	0.0000	4.593E-18	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.416E-13	0.0000
Na-22	2.795E-02	0.0007	4.294E-11	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.968E-06	0.0000
Ni-63	0.000E+00	0.0000	2.199E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.082E-04	0.0000
Np-237	2.122E+00	0.0511	6.531E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.989E-02	0.0022
Pu-238	1.862E-04	0.0000	1.161E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.552E-01	0.0037
Pu-239	5.442E-04	0.0000	1.565E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.088E-01	0.0050
Ru-106	7.667E-08	0.0000	2.785E-15	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.862E-10	0.0000
Sr-90	4.258E-02	0.0010	1.123E-07	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.364E-02	0.0003
Tc-99	2.165E-04	0.0000	1.749E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.335E-04	0.0000
Th-228	1.708E-03	0.0000	5.513E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.154E-05	0.0000
Th-230	2.238E-01	0.0054	1.336E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.861E-01	0.0045
Th-232	2.563E+01	0.6167	2.176E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.559E-01	0.0206
U-234	7.350E-04	0.0000	1.239E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.125E-02	0.0010
U-235	1.437E+00	0.0346	1.132E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.943E-02	0.0009
U-238	3.141E-01	0.0076	1.057E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.996E-02	0.0010
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	3.967E+01	0.9545	8.488E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.891E+00	0.0455

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 2.500E+01 years

Water Dependent Pathways														
0	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
Radio-	AAAAAAAAAAAAAAAA		AAAAAAAAAAAAAAAA		AAAAAAAAAAAAAAAA		AAAAAAAAAAAAAAAA		AAAAAAAAAAAAAAAA		AAAAAAAAAAAAAAAA		AAAAAAAAAAAAAAAA	
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA
Am-241	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.359E-01	0.005
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.041E+00	0.0250
Cs-134	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.292E-03	0.0001
Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.421E+00	0.0823
Eu-152	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.512E+00	0.0845
Eu-154	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.797E+00	0.0432
Eu-155	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.914E-03	0.0002
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.081E-06	0.0000
I-129	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.096E-01	0.0026
Mn-54	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.001E-08	0.0000
Na-22	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.795E-02	0.0007
Ni-63	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.082E-04	0.0000
Np-237	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.212E+00	0.0532
Pu-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.555E-01	0.0037
Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.095E-01	0.0050
Ru-106	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.686E-08	0.0000
Sr-90	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.623E-02	0.0014
Tc-99	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.500E-04	0.0000
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.719E-03	0.0000
Th-230	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.101E-01	0.0099
Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.649E+01	0.6373
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.200E-02	0.0010
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.476E+00	0.0355
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.540E-01	0.0085
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.156E+01	1.0000

0*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)

As mrem/yr and Fraction of Total Dose At t = 3.000E+01 years

Water Independent Pathways (Inhalation excludes radon)

Water Independent Pathways (Inhalation excludes radon)														
0	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA
Am-241	7.216E-02	0.0018	1.206E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.617E-01	0.0040
Co-60	5.392E-01	0.0135	7.329E-10	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.164E-05	0.0000
Cs-134	6.139E-04	0.0000	9.643E-13	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.772E-07	0.0000
Cs-137	3.044E+00	0.0760	2.567E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.618E-03	0.0001
Eu-152	2.719E+00	0.0678	2.572E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.340E-04	0.0000
Eu-154	1.201E+00	0.0300	1.198E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.401E-04	0.0000
Eu-155	3.818E-03	0.0001	1.928E-10	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.262E-06	0.0000
H-3	0.000E+00	0.0000	1.830E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.123E-07	0.0000
I-129	1.974E-02	0.0005	1.287E-07	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.980E-02	0.0022
Mn-54	1.734E-10	0.0000	7.956E-20	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.111E-14	0.0000
Na-22	7.378E-03	0.0002	1.133E-11	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.834E-07	0.0000
Ni-63	0.000E+00	0.0000	2.124E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.045E-04	0.0000
Np-237	2.122E+00	0.0530	6.531E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.989E-02	0.0022
Pu-238	1.790E-04	0.0000	1.116E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.492E-01	0.0037
Pu-239	5.441E-04	0.0000	1.565E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.088E-01	0.0052
Ru-106	2.589E-09	0.0000	9.404E-17	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.288E-12	0.0000
Sr-90	3.775E-02	0.0009	9.954E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.210E-02	0.0003
Tc-99	2.164E-04	0.0000	1.749E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.333E-04	0.0000
Th-228	2.786E-04	0.0000	8.995E-10	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.882E-06	0.0000
Th-230	2.670E-01	0.0067	1.337E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.886E-01	0.0047
Th-232	2.639E+01	0.6585	2.198E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.718E-01	0.0218
U-234	7.462E-04	0.0000	1.239E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.126E-02	0.0010
U-235	1.437E+00	0.0359	1.137E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.950E-02	0.0010
U-238	3.141E-01	0.0078	1.057E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.996E-02	0.0010
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	3.817E+01	0.9526	8.439E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.899E+00	0.0474

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
 As mrem/yr and Fraction of Total Dose At t = 3.000E+01 years

		Water Dependent Pathways														
0		Water		Fish		Radon		Plant		Meat		Milk		All Pathways*		
Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAA	AAAAAA	AAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA
Am-241	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.340E-01	0.0058
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.393E-01	0.0135
Cs-134	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.144E-04	0.0000
Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.050E+00	0.0761
Eu-152	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.719E+00	0.0679
Eu-154	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.201E+00	0.0300
Eu-155	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.822E-03	0.0001
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.143E-06	0.0000
I-129	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.095E-01	0.0027
Mn-54	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.734E-10	0.0000
Na-22	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.379E-03	0.0002
Ni-63	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.045E-04	0.0000
Np-237	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.212E+00	0.0552
Pu-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.495E-01	0.0037
Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.095E-01	0.0052
Ru-106	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.595E-09	0.0000
Sr-90	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.985E-02	0.0012
Tc-99	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.497E-04	0.0000
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.805E-04	0.0000
Th-230	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.557E-01	0.0114
Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.726E+01	0.6802
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.202E-02	0.0010
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.476E+00	0.0368
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.540E-01	0.0088
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.007E+01	1.0000

0*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)

As mrem/yr and Fraction of Total Dose At t = 5.000E+01 years

Water Independent Pathways (Inhalation excludes radon)

0	Water Independent Pathways (Inhalation excludes radon)													
0	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA
Am-241	6.990E-02	0.0019	1.168E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.566E-01	0.0043
Co-60	3.887E-02	0.0011	5.283E-11	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.722E-06	0.0000
Cs-134	7.451E-07	0.0000	1.170E-15	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.007E-10	0.0000
Cs-137	1.923E+00	0.0524	1.622E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.548E-03	0.0001
Eu-152	9.764E-01	0.0266	9.236E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.405E-05	0.0000
Eu-154	2.392E-01	0.0065	2.386E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.792E-05	0.0000
Eu-155	2.076E-04	0.0000	1.048E-11	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.774E-07	0.0000
H-3	0.000E+00	0.0000	1.390E-07	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.371E-08	0.0000
I-129	1.973E-02	0.0005	1.286E-07	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.973E-02	0.0024
Mn-54	1.561E-17	0.0000	7.166E-27	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.001E-21	0.0000
Na-22	3.581E-05	0.0000	5.500E-14	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.802E-09	0.0000
Ni-63	0.000E+00	0.0000	1.849E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.096E-05	0.0000
Np-237	2.122E+00	0.0578	6.532E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.989E-02	0.0024
Pu-238	1.528E-04	0.0000	9.528E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.274E-01	0.0035
Pu-239	5.439E-04	0.0000	1.564E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.087E-01	0.0057
Ru-106	3.364E-15	0.0000	1.222E-22	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.172E-18	0.0000
Sr-90	2.333E-02	0.0006	6.150E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.474E-03	0.0002
Tc-99	2.161E-04	0.0000	1.746E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.324E-04	0.0000
Th-228	1.975E-07	0.0000	6.375E-13	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.334E-09	0.0000
Th-230	4.388E-01	0.0119	1.338E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.002E-01	0.0055
Th-232	2.722E+01	0.7413	2.222E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.893E-01	0.0242
U-234	8.111E-04	0.0000	1.242E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.129E-02	0.0011
U-235	1.438E+00	0.0392	1.157E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.978E-02	0.0011
U-238	3.141E-01	0.0086	1.057E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.996E-02	0.0011
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	3.482E+01	0.9484	8.248E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.895E+00	0.0516

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
 As mrem/yr and Fraction of Total Dose At t = 5.000E+01 years

Water Dependent Pathways														
0	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
Radio-	AAAAAAAAAAAAAAAA		AAAAAAAAAAAAAAAA		AAAAAAAAAAAAAAAA		AAAAAAAAAAAAAAAA		AAAAAAAAAAAAAAAA		AAAAAAAAAAAAAAAA		AAAAAAAAAAAAAAAA	
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA
Am-241	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.266E-01	0.0062
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.887E-02	0.0011
Cs-134	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.458E-07	0.0000
Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.926E+00	0.0525
Eu-152	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.764E-01	0.0266
Eu-154	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.392E-01	0.0065
Eu-155	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.078E-04	0.0000
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.627E-07	0.0000
I-129	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.095E-01	0.0030
Mn-54	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.562E-17	0.0000
Na-22	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.581E-05	0.0000
Ni-63	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.096E-05	0.0000
Np-237	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.212E+00	0.0602
Pu-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.276E-01	0.0035
Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.094E-01	0.0057
Ru-106	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.372E-15	0.0000
Sr-90	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.080E-02	0.0008
Tc-99	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.485E-04	0.0000
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.988E-07	0.0000
Th-230	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.392E-01	0.0174
Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.811E+01	0.7655
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.211E-02	0.0011
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.478E+00	0.0403
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.540E-01	0.0096
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.672E+01	1.0000

0*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)

As mrem/yr and Fraction of Total Dose At t = 1.000E+02 years

Water Independent Pathways (Inhalation excludes radon)

0	Water Independent Pathways (Inhalation excludes radon)													
0	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA
Am-241	6.454E-02	0.0019	1.078E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.446E-01	0.0042
Co-60	5.423E-05	0.0000	7.371E-14	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.193E-09	0.0000
Cs-134	3.825E-14	0.0000	6.009E-23	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.597E-17	0.0000
Cs-137	6.095E-01	0.0176	5.140E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.125E-03	0.0000
Eu-152	7.546E-02	0.0022	7.139E-10	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.496E-06	0.0000
Eu-154	4.238E-03	0.0001	4.227E-11	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.946E-07	0.0000
Eu-155	1.432E-07	0.0000	7.230E-15	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.224E-10	0.0000
H-3	0.000E+00	0.0000	2.210E-10	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.769E-11	0.0000
I-129	1.969E-02	0.0006	1.284E-07	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.954E-02	0.0026
Mn-54	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Na-22	5.877E-11	0.0000	9.027E-20	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.241E-15	0.0000
Ni-63	0.000E+00	0.0000	1.308E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.434E-05	0.0000
Np-237	2.122E+00	0.0612	6.532E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.990E-02	0.0026
Pu-238	1.031E-04	0.0000	6.418E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.579E-02	0.0025
Pu-239	5.431E-04	0.0000	1.562E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.084E-01	0.0060
Ru-106	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Sr-90	6.999E-03	0.0002	1.845E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.242E-03	0.0001
Tc-99	2.153E-04	0.0000	1.739E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.304E-04	0.0000
Th-228	2.641E-15	0.0000	8.526E-21	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.784E-17	0.0000
Th-230	8.617E-01	0.0248	1.343E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.351E-01	0.0068
Th-232	2.730E+01	0.7869	2.225E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.910E-01	0.0257
U-234	1.110E-03	0.0000	1.247E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.138E-02	0.0012
U-235	1.442E+00	0.0416	1.211E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.054E-02	0.0012
U-238	3.141E-01	0.0091	1.057E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.996E-02	0.0012
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	3.282E+01	0.9461	7.855E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.870E+00	0.0539

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
 As mrem/yr and Fraction of Total Dose At t = 1.000E+02 years

0 0	Water Dependent Pathways															
	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*			
Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
Am-241	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.092E-01	0.0060		
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.424E-05	0.0000		
Cs-134	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.829E-14	0.0000		
Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.106E-01	0.0176		
Eu-152	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.547E-02	0.0022		
Eu-154	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.239E-03	0.0001		
Eu-155	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.433E-07	0.0000		
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.587E-10	0.0000		
I-129	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.092E-01	0.0031		
Mn-54	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000		
Na-22	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.878E-11	0.0000		
Ni-63	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.434E-05	0.0000		
Np-237	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.212E+00	0.0638		
Pu-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.595E-02	0.0025		
Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.091E-01	0.0060		
Ru-106	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000		
Sr-90	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.242E-03	0.0003		
Tc-99	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.457E-04	0.0000		
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.659E-15	0.0000		
Th-230	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.097E+00	0.0316		
Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.819E+01	0.8126		
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.251E-02	0.0012		
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.483E+00	0.0427		
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.540E-01	0.0102		
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.469E+01	1.0000		

0*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)

As mrem/yr and Fraction of Total Dose At t = 2.500E+02 years

Water Independent Pathways (Inhalation excludes radon)

0	Water Independent Pathways (Inhalation excludes radon)													
0	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA
Am-241	5.083E-02	0.0014	8.474E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.136E-01	0.0032
Co-60	1.473E-13	0.0000	2.002E-22	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.410E-17	0.0000
Cs-134	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Cs-137	1.942E-02	0.0006	1.637E-10	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.583E-05	0.0000
Eu-152	3.484E-05	0.0000	3.296E-13	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.999E-09	0.0000
Eu-154	2.357E-08	0.0000	2.351E-16	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.751E-12	0.0000
Eu-155	4.698E-17	0.0000	2.372E-24	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.014E-20	0.0000
H-3	0.000E+00	0.0000	8.874E-19	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.514E-19	0.0000
I-129	1.956E-02	0.0006	1.276E-07	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.898E-02	0.0025
Mn-54	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Na-22	2.598E-28	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Ni-63	0.000E+00	0.0000	4.630E-10	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.277E-05	0.0000
Np-237	2.122E+00	0.0602	6.533E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.993E-02	0.0026
Pu-238	3.203E-05	0.0000	1.961E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.622E-02	0.0007
Pu-239	5.410E-04	0.0000	1.555E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.075E-01	0.0059
Ru-106	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Sr-90	1.891E-04	0.0000	4.985E-10	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.057E-05	0.0000
Tc-99	2.128E-04	0.0000	1.720E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.244E-04	0.0000
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Th-230	2.076E+00	0.0589	1.357E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.448E-01	0.0098
Th-232	2.730E+01	0.7745	2.225E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.910E-01	0.0253
U-234	3.144E-03	0.0001	1.266E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.177E-02	0.0012
U-235	1.456E+00	0.0413	1.378E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.294E-02	0.0012
U-238	3.141E-01	0.0089	1.058E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.998E-02	0.0011
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	3.336E+01	0.9464	7.205E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.887E+00	0.0535

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
 As mrem/yr and Fraction of Total Dose At t = 2.500E+02 years

Water Dependent Pathways														
0	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA
Am-241	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.646E-01	0.0047
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.473E-13	0.0000
Cs-134	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.945E-02	0.0006
Eu-152	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.484E-05	0.0000
Eu-154	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.357E-08	0.0000
Eu-155	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.702E-17	0.0000
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.039E-18	0.0000
I-129	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.085E-01	0.0031
Mn-54	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Na-22	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.598E-28	0.0000
Ni-63	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.277E-05	0.0000
Np-237	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.212E+00	0.0628
Pu-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.628E-02	0.0007
Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.082E-01	0.0059
Ru-106	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Sr-90	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.496E-04	0.0000
Tc-99	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.373E-04	0.0000
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Th-230	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.421E+00	0.0687
Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.819E+01	0.7998
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.492E-02	0.0013
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.499E+00	0.0425
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.540E-01	0.0100
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.525E+01	1.0000

0*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)

As mrem/yr and Fraction of Total Dose At t = 5.000E+02 years

Water Independent Pathways (Inhalation excludes radon)

0	Water Independent Pathways (Inhalation excludes radon)														
0	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil		
Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	
AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	
Am-241	3.418E-02	0.0009	5.674E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.610E-02	0.0020	
Co-60	7.786E-28	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	
Cs-134	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	
Cs-137	6.215E-05	0.0000	5.242E-13	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.147E-07	0.0000	
Eu-152	9.610E-11	0.0000	1.783E-18	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.466E-15	0.0000	
Eu-154	4.115E-17	0.0000	4.104E-25	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.802E-21	0.0000	
Eu-155	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	
I-129	1.936E-02	0.0005	1.263E-07	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.807E-02	0.0024	
Mn-54	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	
Na-22	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	
Ni-63	0.000E+00	0.0000	8.199E-11	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.033E-06	0.0000	
Np-237	2.122E+00	0.0570	6.535E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.999E-02	0.0024	
Pu-238	6.704E-06	0.0000	2.723E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.649E-03	0.0001	
Pu-239	5.375E-04	0.0000	1.544E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.060E-01	0.0055	
Ru-106	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	
Sr-90	4.598E-07	0.0000	1.212E-12	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.473E-07	0.0000	
Tc-99	2.088E-04	0.0000	1.687E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.146E-04	0.0000	
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	
Th-230	3.928E+00	0.1056	1.377E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.136E-01	0.0138	
Th-232	2.730E+01	0.7337	2.225E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.910E-01	0.0239	
U-234	1.008E-02	0.0003	1.296E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.272E-02	0.0011	
U-235	1.479E+00	0.0397	1.657E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.692E-02	0.0013	
U-238	3.140E-01	0.0084	1.058E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.001E-02	0.0011	
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	
Total	3.521E+01	0.9463	6.797E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.999E+00	0.0537	

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
 As mrem/yr and Fraction of Total Dose At t = 5.000E+02 years

Water Dependent Pathways														
0	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
Radio-	AAAAA		AAAAA		AAAAA		AAAAA		AAAAA		AAAAA		AAAAA	
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA
Am-241	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.103E-01	0.0030
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.786E-28	0.0000
Cs-134	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.227E-05	0.0000
Eu-152	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.610E-11	0.0000
Eu-154	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.116E-17	0.0000
Eu-155	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
I-129	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.074E-01	0.0029
Mn-54	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Na-22	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Ni-63	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.033E-06	0.0000
Np-237	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.212E+00	0.0595
Pu-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.658E-03	0.0001
Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.067E-01	0.0056
Ru-106	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Sr-90	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.071E-07	0.0000
Tc-99	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.234E-04	0.0000
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Th-230	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.441E+00	0.1194
Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.819E+01	0.7577
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.282E-02	0.0014
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.526E+00	0.0410
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.541E-01	0.0095
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.721E+01	1.0000

0*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)

As mrem/yr and Fraction of Total Dose At t = 1.000E+03 years

Water Independent Pathways (Inhalation excludes radon)

0	Water Independent Pathways (Inhalation excludes radon)													
0	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA
Am-241	1.556E-02	0.0004	2.545E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.413E-02	0.0008
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Cs-134	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Cs-137	6.369E-10	0.0000	5.372E-18	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.175E-12	0.0000
Eu-152	7.310E-22	0.0000	8.739E-19	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.194E-15	0.0000
Eu-154	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Eu-155	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
I-129	1.896E-02	0.0005	1.237E-07	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.626E-02	0.0021
Mn-54	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Na-22	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Ni-63	0.000E+00	0.0000	2.571E-12	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.265E-07	0.0000
Np-237	2.122E+00	0.0522	6.541E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.014E-02	0.0022
Pu-238	1.018E-05	0.0000	5.705E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.587E-05	0.0000
Pu-239	5.306E-04	0.0000	1.522E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.030E-01	0.0050
Ru-106	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Sr-90	2.719E-12	0.0000	7.169E-18	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.712E-13	0.0000
Tc-99	2.011E-04	0.0000	1.625E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.955E-04	0.0000
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Th-230	7.067E+00	0.1739	1.411E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.996E-01	0.0197
Th-232	2.730E+01	0.6717	2.225E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.910E-01	0.0219
U-234	3.559E-02	0.0009	1.358E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.570E-02	0.0011
U-235	1.524E+00	0.0375	2.210E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.484E-02	0.0013
U-238	3.140E-01	0.0077	1.060E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.007E-02	0.0010
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	3.840E+01	0.9447	6.531E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.245E+00	0.0552

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
 As mrem/yr and Fraction of Total Dose At t = 1.000E+03 years

Water Dependent Pathways														
0	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA
Am-241	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.972E-02	0.0012
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Cs-134	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.381E-10	0.0000
Eu-152	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.195E-15	0.0000
Eu-154	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Eu-155	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
I-129	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.052E-01	0.0026
Mn-54	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Na-22	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Ni-63	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.265E-07	0.0000
Np-237	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.212E+00	0.0544
Pu-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.610E-05	0.0000
Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.037E-01	0.0050
Ru-106	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Sr-90	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.591E-12	0.0000
Tc-99	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.965E-04	0.0000
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Th-230	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.867E+00	0.1936
Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.819E+01	0.6936
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.131E-02	0.0020
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.579E+00	0.0388
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.541E-01	0.0087
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.064E+01	1.0000

0*Sum of all water independent and dependent pathways.

Dose/Source Ratios Summed Over All Pathways												
Parent and Progeny Principal Radionuclide Contributions Indicated												
0	Parent	Product	Thread	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)								
	(i)	(j)	Fraction	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
	Am-241	Am-241	1.000E+00	2.455E-02	2.451E-02	2.359E-02	2.340E-02	2.266E-02	2.091E-02	1.644E-02	1.101E-02	4.936E-03
	Am-241	Np-237+D	1.000E+00	3.574E-08	1.071E-07	1.787E-06	2.129E-06	3.469E-06	6.638E-06	1.475E-05	2.461E-05	3.562E-05
	Am-241	U-233	1.000E+00	1.042E-15	7.291E-15	2.006E-12	2.863E-12	7.765E-12	2.995E-11	1.723E-10	6.094E-10	1.955E-09
	Am-241	Th-229+D	1.000E+00	1.842E-18	2.763E-17	1.210E-13	2.065E-13	9.295E-13	7.174E-12	1.045E-10	7.552E-10	5.031E-09
	Am-241	àDSR(j)		2.455E-02	2.451E-02	2.359E-02	2.340E-02	2.266E-02	2.092E-02	1.646E-02	1.103E-02	4.972E-03
	0Co-60	Co-60	1.000E+00	2.786E+00	2.443E+00	1.041E-01	5.393E-02	3.887E-03	5.424E-06	1.473E-14	7.786E-29	0.000E+00
	0Cs-134	Cs-134	1.000E+00	1.453E+00	1.039E+00	3.292E-04	6.144E-05	7.458E-08	3.829E-15	5.181E-37	0.000E+00	0.000E+00
	0Cs-137+D	Cs-137+D	1.000E+00	6.076E-01	5.938E-01	3.421E-01	3.050E-01	1.926E-01	6.106E-02	1.945E-03	6.227E-06	6.381E-11
	0Eu-152	Eu-152	7.210E-01	9.109E-01	8.654E-01	2.532E-01	1.960E-01	7.040E-02	5.441E-03	2.512E-06	6.929E-12	5.271E-23
	0Eu-152	Eu-152	2.790E-01	3.525E-01	3.349E-01	9.799E-02	7.586E-02	2.724E-02	2.106E-03	9.722E-07	2.681E-12	2.040E-23
	Eu-152	Gd-152	2.790E-01	3.007E-18	8.819E-18	8.708E-17	9.439E-17	1.105E-16	1.188E-16	1.195E-16	1.195E-16	1.195E-16
	Eu-152	Sm-148	2.790E-01	1.036E-34	7.145E-34	1.384E-31	1.852E-31	3.987E-31	9.965E-31	2.839E-30	5.911E-30	1.206E-29
	Eu-152	Nd-144	2.790E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.803E-45	1.261E-44	9.529E-44	4.120E-43	1.715E-42
	Eu-152	àDSR(j)		3.525E-01	3.349E-01	9.799E-02	7.586E-02	2.724E-02	2.106E-03	9.722E-07	2.681E-12	1.195E-16
	0Eu-154	Eu-154	1.000E+00	1.350E+00	1.246E+00	1.797E-01	1.201E-01	2.392E-02	4.239E-04	2.357E-09	4.116E-18	1.254E-35
	0Eu-155	Eu-155	1.000E+00	3.013E-02	2.605E-02	7.914E-04	3.822E-04	2.078E-05	1.433E-08	4.702E-18	7.338E-34	0.000E+00
	0H-3	H-3	1.000E+00	1.024E-05	8.999E-06	4.081E-07	2.143E-07	1.627E-08	2.587E-11	1.039E-19	1.054E-33	0.000E+00
	0I-129	I-129	1.000E+00	1.097E-02	1.097E-02	1.096E-02	1.095E-02	1.095E-02	1.092E-02	1.085E-02	1.074E-02	1.052E-02
	0Mn-54	Mn-54	1.000E+00	6.414E-01	2.850E-01	1.001E-09	1.734E-11	1.562E-18	3.801E-36	0.000E+00	0.000E+00	0.000E+00
	0Na-22	Na-22	1.000E+00	2.182E+00	1.672E+00	2.795E-03	7.379E-04	3.581E-06	5.878E-12	2.598E-29	0.000E+00	0.000E+00
	0Ni-63	Ni-63	1.000E+00	1.286E-05	1.277E-05	1.082E-05	1.045E-05	9.096E-06	6.434E-06	2.277E-06	4.033E-07	1.265E-08
	0Np-237+D	Np-237+D	1.000E+00	2.212E-01	2.212E-01	2.212E-01	2.212E-01	2.212E-01	2.212E-01	2.212E-01	2.212E-01	2.211E-01
	Np-237+D	U-233	1.000E+00	9.674E-09	2.902E-08	4.933E-07	5.901E-07	9.770E-07	1.944E-06	4.844E-06	9.672E-06	1.931E-05
	Np-237+D	Th-229+D	1.000E+00	2.280E-11	1.596E-10	4.445E-08	6.358E-08	1.742E-07	6.887E-07	4.257E-06	1.686E-05	6.626E-05
	Np-237+D	àDSR(j)		2.212E-01	2.212E-01	2.212E-01	2.212E-01	2.212E-01	2.212E-01	2.212E-01	2.212E-01	2.212E-01
	0Pu-238	Pu-238	1.850E-09	3.505E-11	3.477E-11	2.876E-11	2.765E-11	2.361E-11	1.590E-11	4.859E-12	6.736E-13	1.295E-14
	0Pu-238	Pu-238	9.996E-01	1.894E-02	1.879E-02	1.554E-02	1.494E-02	1.275E-02	8.591E-03	2.625E-03	3.639E-04	6.995E-06
	Pu-238	U-234	9.996E-01	5.901E-09	1.764E-08	2.733E-07	3.207E-07	4.927E-07	8.205E-07	1.290E-06	1.467E-06	1.493E-06
	Pu-238	Th-230	9.996E-01	7.791E-14	5.441E-13	1.425E-10	2.013E-10	5.250E-10	1.845E-09	8.373E-09	2.225E-08	5.151E-08
	Pu-238	Ra-226+D	9.996E-01	9.540E-16	1.428E-14	6.016E-11	1.019E-10	4.443E-10	3.181E-09	3.796E-08	2.116E-07	9.934E-07
	Pu-238	Pb-210+D	9.996E-01	4.659E-19	1.434E-17	8.168E-13	1.612E-12	1.052E-11	1.199E-10	2.171E-09	1.431E-08	7.295E-08
	Pu-238	àDSR(j)		1.894E-02	1.879E-02	1.554E-02	1.494E-02	1.275E-02	8.592E-03	2.627E-03	3.657E-04	9.606E-06

Dose/Source Ratios Summed Over All Pathways

Parent and Progeny Principal Radionuclide Contributions Indicated

0	Parent (i)	Product (j)	Thread Fraction	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)								
	AAAAA	AAAAA	AAAAA	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
	Pu-238	Pu-238	1.319E-06	2.500E-08	2.480E-08	2.051E-08	1.972E-08	1.684E-08	1.134E-08	3.465E-09	4.804E-10	9.233E-12
	Pu-238	U-234	1.319E-06	7.790E-15	2.329E-14	3.607E-13	4.233E-13	6.504E-13	1.083E-12	1.703E-12	1.936E-12	1.970E-12
	Pu-238	Th-230	1.319E-06	1.028E-19	7.182E-19	1.882E-16	2.658E-16	6.930E-16	2.436E-15	1.105E-14	2.937E-14	6.800E-14
	Pu-238	Ra-226+D	1.319E-06	1.259E-21	1.886E-20	7.941E-17	1.345E-16	5.865E-16	4.198E-15	5.010E-14	2.793E-13	1.311E-12
	Pu-238	Pb-210+D1	1.319E-06	2.379E-25	7.324E-24	4.171E-19	8.229E-19	5.373E-18	6.124E-17	1.109E-15	7.307E-15	3.725E-14
	Pu-238	äDSR(j)		2.500E-08	2.480E-08	2.051E-08	1.972E-08	1.684E-08	1.134E-08	3.467E-09	4.827E-10	1.262E-11
0	Pu-238	Pu-238	1.899E-08	3.598E-10	3.570E-10	2.953E-10	2.838E-10	2.423E-10	1.632E-10	4.988E-11	6.915E-12	1.329E-13
	Pu-238	U-234	1.899E-08	1.121E-16	3.352E-16	5.192E-15	6.094E-15	9.362E-15	1.559E-14	2.451E-14	2.787E-14	2.836E-14
	Pu-238	Th-230	1.899E-08	1.480E-21	1.034E-20	2.708E-18	3.826E-18	9.975E-18	3.506E-17	1.591E-16	4.227E-16	9.788E-16
	Pu-238	Ra-226+D	1.899E-08	1.813E-23	2.714E-22	1.143E-18	1.936E-18	8.442E-18	6.043E-17	7.212E-16	4.020E-15	1.887E-14
	Pu-238	Pb-210+D2	1.899E-08	9.959E-27	3.066E-25	1.746E-20	3.445E-20	2.249E-19	2.564E-18	4.641E-17	3.059E-16	1.559E-15
	Pu-238	äDSR(j)		3.598E-10	3.570E-10	2.953E-10	2.838E-10	2.423E-10	1.632E-10	4.990E-11	6.948E-12	1.827E-13
0	Pu-238	Pu-238	2.100E-04	3.977E-06	3.946E-06	3.264E-06	3.138E-06	2.679E-06	1.804E-06	5.514E-07	7.644E-08	1.469E-09
	Pu-238	U-234	2.100E-04	1.240E-12	3.706E-12	5.740E-11	6.736E-11	1.035E-10	1.723E-10	2.709E-10	3.081E-10	3.136E-10
	Pu-238	Th-230	2.100E-04	1.636E-17	1.143E-16	2.994E-14	4.229E-14	1.103E-13	3.876E-13	1.759E-12	4.673E-12	1.082E-11
	Pu-238	Ra-226+D1	2.100E-04	5.179E-19	7.755E-18	3.266E-14	5.532E-14	2.412E-13	1.727E-12	2.061E-11	1.149E-10	5.393E-10
	Pu-238	Pb-210+D	2.100E-04	9.786E-23	3.013E-21	1.716E-16	3.385E-16	2.210E-15	2.519E-14	4.561E-13	3.006E-12	1.532E-11
	Pu-238	äDSR(j)		3.977E-06	3.946E-06	3.264E-06	3.138E-06	2.679E-06	1.805E-06	5.517E-07	7.688E-08	2.348E-09
0	Pu-238	Pu-238	2.771E-10	5.250E-12	5.209E-12	4.309E-12	4.142E-12	3.536E-12	2.382E-12	7.279E-13	1.009E-13	1.939E-15
	Pu-238	U-234	2.771E-10	1.636E-18	4.891E-18	7.577E-17	8.892E-17	1.366E-16	2.275E-16	3.576E-16	4.067E-16	4.139E-16
	Pu-238	Th-230	2.771E-10	2.160E-23	1.509E-22	3.952E-20	5.582E-20	1.456E-19	5.116E-19	2.321E-18	6.169E-18	1.428E-17
	Pu-238	Ra-226+D1	2.771E-10	6.837E-25	1.024E-23	4.311E-20	7.302E-20	3.184E-19	2.279E-18	2.720E-17	1.516E-16	7.119E-16
	Pu-238	Pb-210+D1	2.771E-10	4.997E-29	1.538E-27	8.760E-23	1.728E-22	1.128E-21	1.286E-20	2.329E-19	1.535E-18	7.824E-18
	Pu-238	äDSR(j)		5.250E-12	5.209E-12	4.309E-12	4.142E-12	3.536E-12	2.382E-12	7.282E-13	1.015E-13	3.087E-15
0	Pu-238	Pu-238	3.989E-12	7.557E-14	7.498E-14	6.202E-14	5.962E-14	5.090E-14	3.428E-14	1.048E-14	1.452E-15	2.792E-17
	Pu-238	U-234	3.989E-12	2.355E-20	7.041E-20	1.091E-18	1.280E-18	1.966E-18	3.275E-18	5.148E-18	5.854E-18	5.958E-18
	Pu-238	Th-230	3.989E-12	3.109E-25	2.172E-24	5.689E-22	8.035E-22	2.095E-21	7.364E-21	3.341E-20	8.879E-20	2.056E-19
	Pu-238	Ra-226+D1	3.989E-12	9.841E-27	1.474E-25	6.206E-22	1.051E-21	4.583E-21	3.281E-20	3.915E-19	2.183E-18	1.025E-17
	Pu-238	Pb-210+D2	3.989E-12	2.092E-30	6.440E-29	3.667E-24	7.236E-24	4.724E-23	5.385E-22	9.748E-21	6.425E-20	3.275E-19
	Pu-238	äDSR(j)		7.557E-14	7.498E-14	6.202E-14	5.962E-14	5.090E-14	3.429E-14	1.048E-14	1.461E-15	4.465E-17
0	Pu-238	Pu-238	1.998E-04	3.784E-06	3.754E-06	3.106E-06	2.985E-06	2.549E-06	1.717E-06	5.246E-07	7.273E-08	1.398E-09
	Pu-238	U-234	1.998E-04	1.179E-12	3.526E-12	5.461E-11	6.409E-11	9.846E-11	1.640E-10	2.578E-10	2.932E-10	2.983E-10
	Pu-238	Th-230	1.998E-04	1.557E-17	1.087E-16	2.849E-14	4.024E-14	1.049E-13	3.688E-13	1.673E-12	4.446E-12	1.029E-11
	Pu-238	Ra-226+D2	1.998E-04	1.677E-19	2.512E-18	1.058E-14	1.792E-14	7.812E-14	5.592E-13	6.674E-12	3.720E-11	1.747E-10
	Pu-238	Pb-210+D	1.998E-04	9.310E-23	2.866E-21	1.632E-16	3.221E-16	2.103E-15	2.397E-14	4.339E-13	2.860E-12	1.458E-11
	Pu-238	äDSR(j)		3.784E-06	3.754E-06	3.106E-06	2.985E-06	2.549E-06	1.717E-06	5.249E-07	7.307E-08	1.896E-09

Dose/Source Ratios Summed Over All Pathways

Parent and Progeny Principal Radionuclide Contributions Indicated

0	Parent	Product	Thread	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)								
	(i)	(j)	Fraction	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA
	Pu-238	Pu-238	2.637E-10	4.995E-12	4.956E-12	4.100E-12	3.941E-12	3.364E-12	2.266E-12	6.925E-13	9.601E-14	1.845E-15
	Pu-238	U-234	2.637E-10	1.557E-18	4.654E-18	7.209E-17	8.460E-17	1.300E-16	2.164E-16	3.403E-16	3.870E-16	3.938E-16
	Pu-238	Th-230	2.637E-10	2.055E-23	1.435E-22	3.760E-20	5.311E-20	1.385E-19	4.868E-19	2.209E-18	5.869E-18	1.359E-17
	Pu-238	Ra-226+D2	2.637E-10	2.214E-25	3.315E-24	1.396E-20	2.365E-20	1.031E-19	7.382E-19	8.809E-18	4.911E-17	2.305E-16
	Pu-238	Pb-210+D1	2.637E-10	4.754E-29	1.464E-27	8.335E-23	1.645E-22	1.074E-21	1.224E-20	2.215E-19	1.460E-18	7.444E-18
	Pu-238	äDSR(j)		4.995E-12	4.956E-12	4.100E-12	3.941E-12	3.365E-12	2.266E-12	6.929E-13	9.645E-14	2.491E-15
0	Pu-238	Pu-238	3.795E-12	7.190E-14	7.133E-14	5.901E-14	5.672E-14	4.843E-14	3.262E-14	9.968E-15	1.382E-15	2.656E-17
	Pu-238	U-234	3.795E-12	2.241E-20	6.699E-20	1.038E-18	1.218E-18	1.871E-18	3.116E-18	4.898E-18	5.570E-18	5.668E-18
	Pu-238	Th-230	3.795E-12	2.958E-25	2.066E-24	5.412E-22	7.645E-22	1.993E-21	7.006E-21	3.179E-20	8.448E-20	1.956E-19
	Pu-238	Ra-226+D2	3.795E-12	3.187E-27	4.772E-26	2.010E-22	3.404E-22	1.484E-21	1.062E-20	1.268E-19	7.069E-19	3.319E-18
	Pu-238	Pb-210+D2	3.795E-12	1.990E-30	6.127E-29	3.489E-24	6.884E-24	4.495E-23	5.124E-22	9.275E-21	6.113E-20	3.116E-19
	Pu-238	äDSR(j)		7.190E-14	7.133E-14	5.901E-14	5.672E-14	4.843E-14	3.262E-14	9.973E-15	1.388E-15	3.605E-17
0	Pu-238	Pu-238	4.196E-08	7.948E-10	7.886E-10	6.523E-10	6.271E-10	5.354E-10	3.606E-10	1.102E-10	1.528E-11	2.936E-13
	Pu-238	U-234	4.196E-08	2.477E-16	7.405E-16	1.147E-14	1.346E-14	2.068E-14	3.444E-14	5.414E-14	6.157E-14	6.266E-14
	Pu-238	Th-230	4.196E-08	3.270E-21	2.284E-20	5.983E-18	8.451E-18	2.204E-17	7.745E-17	3.514E-16	9.339E-16	2.162E-15
	Pu-238	Ra-226+D3	4.196E-08	9.869E-23	1.478E-21	6.224E-18	1.054E-17	4.597E-17	3.290E-16	3.927E-15	2.189E-14	1.028E-13
	Pu-238	Pb-210+D	4.196E-08	1.956E-26	6.021E-25	3.429E-20	6.765E-20	4.417E-19	5.035E-18	9.114E-17	6.007E-16	3.062E-15
	Pu-238	äDSR(j)		7.948E-10	7.886E-10	6.523E-10	6.271E-10	5.354E-10	3.606E-10	1.103E-10	1.536E-11	4.643E-13
0	Pu-238	Pu-238	5.538E-14	1.049E-15	1.041E-15	8.611E-16	8.277E-16	7.067E-16	4.760E-16	1.455E-16	2.017E-17	3.876E-19
	Pu-238	U-234	5.538E-14	3.270E-22	9.775E-22	1.514E-20	1.777E-20	2.730E-20	4.546E-20	7.147E-20	8.128E-20	8.271E-20
	Pu-238	Th-230	5.538E-14	4.317E-27	3.015E-26	7.898E-24	1.116E-23	2.909E-23	1.022E-22	4.639E-22	1.233E-21	2.854E-21
	Pu-238	Ra-226+D3	5.538E-14	1.303E-28	1.951E-27	8.215E-24	1.391E-23	6.067E-23	4.343E-22	5.183E-21	2.889E-20	1.356E-19
	Pu-238	Pb-210+D1	5.538E-14	9.985E-33	3.074E-31	1.751E-26	3.454E-26	2.255E-25	2.571E-24	4.653E-23	3.067E-22	1.564E-21
	Pu-238	äDSR(j)		1.049E-15	1.041E-15	8.611E-16	8.277E-16	7.067E-16	4.760E-16	1.455E-16	2.028E-17	6.104E-19
0	Pu-238	Pu-238	7.972E-16	1.510E-17	1.498E-17	1.239E-17	1.191E-17	1.017E-17	6.851E-18	2.094E-18	2.903E-19	5.579E-21
	Pu-238	U-234	7.972E-16	4.707E-24	1.407E-23	2.180E-22	2.558E-22	3.930E-22	6.544E-22	1.029E-21	1.170E-21	1.191E-21
	Pu-238	Th-230	7.972E-16	6.213E-29	4.340E-28	1.137E-25	1.606E-25	4.187E-25	1.472E-24	6.677E-24	1.774E-23	4.108E-23
	Pu-238	Ra-226+D3	7.972E-16	1.875E-30	2.808E-29	1.183E-25	2.003E-25	8.733E-25	6.251E-24	7.461E-23	4.159E-22	1.953E-21
	Pu-238	Pb-210+D2	7.972E-16	4.180E-34	1.287E-32	7.329E-28	1.446E-27	9.441E-27	1.076E-25	1.948E-24	1.284E-23	6.545E-23
	Pu-238	äDSR(j)		1.510E-17	1.498E-17	1.239E-17	1.191E-17	1.017E-17	6.852E-18	2.095E-18	2.919E-19	8.828E-21
0	Pu-238	Pu-238	2.000E-07	3.789E-09	3.759E-09	3.109E-09	2.989E-09	2.552E-09	1.719E-09	5.253E-10	7.282E-11	1.400E-12
	Pu-238	U-234	2.000E-07	1.181E-15	3.530E-15	5.468E-14	6.417E-14	9.858E-14	1.642E-13	2.581E-13	2.935E-13	2.987E-13
	Pu-238	Th-230	2.000E-07	1.559E-20	1.089E-19	2.852E-17	4.029E-17	1.050E-16	3.692E-16	1.675E-15	4.452E-15	1.031E-14
	Pu-238	Ra-226+D4	2.000E-07	2.887E-24	4.322E-23	1.820E-19	3.083E-19	1.344E-18	9.624E-18	1.149E-16	6.403E-16	3.006E-15
	Pu-238	Pb-210+D	2.000E-07	9.322E-26	2.870E-24	1.634E-19	3.225E-19	2.105E-18	2.400E-17	4.344E-16	2.863E-15	1.460E-14
	Pu-238	äDSR(j)		3.789E-09	3.759E-09	3.109E-09	2.989E-09	2.552E-09	1.719E-09	5.255E-10	7.312E-11	1.726E-12

Dose/Source Ratios Summed Over All Pathways												
Parent and Progeny Principal Radionuclide Contributions Indicated												
0	Parent	Product	Thread	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)								
	(i)	(j)	Fraction	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA
	Pu-238	Pu-238	2.640E-13	5.001E-15	4.962E-15	4.104E-15	3.945E-15	3.369E-15	2.269E-15	6.933E-16	9.612E-17	1.847E-18
	Pu-238	U-234	2.640E-13	1.559E-21	4.659E-21	7.218E-20	8.470E-20	1.301E-19	2.167E-19	3.407E-19	3.874E-19	3.943E-19
	Pu-238	Th-230	2.640E-13	2.058E-26	1.437E-25	3.765E-23	5.318E-23	1.387E-22	4.873E-22	2.211E-21	5.876E-21	1.361E-20
	Pu-238	Ra-226+D4	2.640E-13	3.810E-30	5.706E-29	2.403E-25	4.070E-25	1.775E-24	1.270E-23	1.516E-22	8.451E-22	3.968E-21
	Pu-238	Pb-210+D1	2.640E-13	4.760E-32	1.465E-30	8.345E-26	1.646E-25	1.075E-24	1.225E-23	2.218E-22	1.462E-21	7.453E-21
	Pu-238	äDSR(j)		5.001E-15	4.962E-15	4.105E-15	3.946E-15	3.369E-15	2.269E-15	6.937E-16	9.652E-17	2.267E-18
0	Pu-238	Pu-238	3.800E-15	7.199E-17	7.142E-17	5.908E-17	5.679E-17	4.849E-17	3.266E-17	9.980E-18	1.384E-18	2.659E-20
	Pu-238	U-234	3.800E-15	2.243E-23	6.707E-23	1.039E-21	1.219E-21	1.873E-21	3.119E-21	4.904E-21	5.577E-21	5.675E-21
	Pu-238	Th-230	3.800E-15	2.962E-28	2.069E-27	5.419E-25	7.654E-25	1.996E-24	7.015E-24	3.183E-23	8.458E-23	1.958E-22
	Pu-238	Ra-226+D4	3.800E-15	5.485E-32	8.213E-31	3.459E-27	5.858E-27	2.555E-26	1.829E-25	2.182E-24	1.216E-23	5.711E-23
	Pu-238	Pb-210+D2	3.800E-15	1.993E-33	6.135E-32	3.493E-27	6.893E-27	4.500E-26	5.130E-25	9.286E-24	6.120E-23	3.120E-22
	Pu-238	äDSR(j)		7.199E-17	7.142E-17	5.908E-17	5.679E-17	4.849E-17	3.266E-17	9.985E-18	1.389E-18	3.283E-20
0	Pu-239	Pu-239	5.901E-04	1.237E-05	1.237E-05	1.236E-05	1.236E-05	1.235E-05	1.234E-05	1.228E-05	1.220E-05	1.202E-05
	Pu-239	U-235+D	5.901E-04	4.285E-14	1.285E-13	2.184E-12	2.613E-12	4.325E-12	8.600E-12	2.139E-11	4.258E-11	8.451E-11
	Pu-239	Pa-231	5.901E-04	1.460E-19	1.022E-18	2.848E-16	4.074E-16	1.116E-15	4.417E-15	2.737E-14	1.088E-13	4.312E-13
	Pu-239	Ac-227+D	5.901E-04	7.128E-21	1.062E-19	3.930E-16	6.493E-16	2.583E-15	1.534E-14	1.320E-13	5.929E-13	2.501E-12
	Pu-239	äDSR(j)		1.237E-05	1.237E-05	1.236E-05	1.236E-05	1.235E-05	1.234E-05	1.228E-05	1.220E-05	1.202E-05
0	Pu-239	Pu-239	1.633E-06	3.424E-08	3.424E-08	3.422E-08	3.421E-08	3.419E-08	3.414E-08	3.400E-08	3.375E-08	3.327E-08
	Pu-239	U-235+D	1.633E-06	1.186E-16	3.558E-16	6.046E-15	7.231E-15	1.197E-14	2.380E-14	5.920E-14	1.179E-13	2.339E-13
	Pu-239	Pa-231	1.633E-06	4.041E-22	2.829E-21	7.882E-19	1.127E-18	3.090E-18	1.223E-17	7.576E-17	3.012E-16	1.193E-15
	Pu-239	Ac-227+D1	1.633E-06	1.993E-23	2.969E-22	1.099E-18	1.815E-18	7.220E-18	4.287E-17	3.689E-16	1.658E-15	6.992E-15
	Pu-239	äDSR(j)		3.424E-08	3.424E-08	3.422E-08	3.421E-08	3.419E-08	3.414E-08	3.400E-08	3.375E-08	3.327E-08
0	Pu-239	Pu-239	8.257E-06	1.731E-07	1.731E-07	1.730E-07	1.730E-07	1.729E-07	1.726E-07	1.719E-07	1.706E-07	1.682E-07
	Pu-239	U-235+D	8.257E-06	5.995E-16	1.799E-15	3.057E-14	3.656E-14	6.051E-14	1.203E-13	2.993E-13	5.958E-13	1.182E-12
	Pu-239	Pa-231	8.257E-06	2.043E-21	1.430E-20	3.985E-18	5.700E-18	1.562E-17	6.181E-17	3.830E-16	1.523E-15	6.034E-15
	Pu-239	Ac-227+D2	8.257E-06	8.239E-23	1.228E-21	4.543E-18	7.505E-18	2.985E-17	1.773E-16	1.525E-15	6.853E-15	2.891E-14
	Pu-239	äDSR(j)		1.731E-07	1.731E-07	1.730E-07	1.730E-07	1.729E-07	1.726E-07	1.719E-07	1.706E-07	1.682E-07
0	Pu-239	Pu-239	2.285E-08	4.791E-10	4.791E-10	4.788E-10	4.787E-10	4.784E-10	4.777E-10	4.757E-10	4.723E-10	4.655E-10
	Pu-239	U-235+D	2.285E-08	1.659E-18	4.978E-18	8.459E-17	1.012E-16	1.675E-16	3.330E-16	8.283E-16	1.649E-15	3.273E-15
	Pu-239	Pa-231	2.285E-08	5.655E-24	3.958E-23	1.103E-20	1.578E-20	4.323E-20	1.711E-19	1.060E-18	4.214E-18	1.670E-17
	Pu-239	Ac-227+D3	2.285E-08	2.308E-25	3.439E-24	1.273E-20	2.103E-20	8.363E-20	4.966E-19	4.273E-18	1.920E-17	8.099E-17
	Pu-239	äDSR(j)		4.791E-10	4.791E-10	4.788E-10	4.787E-10	4.784E-10	4.777E-10	4.757E-10	4.723E-10	4.655E-10
0	Pu-239	Pu-239	4.954E-10	1.039E-11	1.039E-11	1.038E-11	1.038E-11	1.037E-11	1.036E-11	1.031E-11	1.024E-11	1.009E-11
	Pu-239	U-235+D	4.954E-10	3.597E-20	1.079E-19	1.834E-18	2.193E-18	3.631E-18	7.220E-18	1.796E-17	3.575E-17	7.095E-17
	Pu-239	Pa-231	4.954E-10	1.226E-25	8.582E-25	2.391E-22	3.420E-22	9.372E-22	3.709E-21	2.298E-20	9.137E-20	3.621E-19
	Pu-239	Ac-227+D4	4.954E-10	6.113E-27	9.107E-26	3.370E-22	5.568E-22	2.215E-21	1.315E-20	1.132E-19	5.084E-19	2.145E-18
	Pu-239	äDSR(j)		1.039E-11	1.039E-11	1.038E-11	1.038E-11	1.037E-11	1.036E-11	1.031E-11	1.024E-11	1.009E-11

Dose/Source Ratios Summed Over All Pathways

Parent and Progeny Principal Radionuclide Contributions Indicated

0	Parent	Product	Thread	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)								
	(i)	(j)	Fraction	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA
	Pu-239	Pu-239	1.371E-12	2.875E-14	2.875E-14	2.873E-14	2.872E-14	2.871E-14	2.867E-14	2.854E-14	2.834E-14	2.793E-14
	Pu-239	U-235+D	1.371E-12	9.956E-23	2.987E-22	5.076E-21	6.071E-21	1.005E-20	1.998E-20	4.970E-20	9.895E-20	1.964E-19
	Pu-239	Pa-231	1.371E-12	3.393E-28	2.375E-27	6.617E-25	9.466E-25	2.594E-24	1.026E-23	6.361E-23	2.529E-22	1.002E-21
	Pu-239	Ac-227+D5	1.371E-12	1.708E-29	2.545E-28	9.419E-25	1.556E-24	6.190E-24	3.676E-23	3.163E-22	1.421E-21	5.994E-21
	Pu-239	äDSR(j)		2.875E-14	2.875E-14	2.873E-14	2.872E-14	2.871E-14	2.867E-14	2.854E-14	2.834E-14	2.793E-14
0	Pu-239+D	Pu-239+D	9.829E-01	2.061E-02	2.061E-02	2.059E-02	2.059E-02	2.058E-02	2.055E-02	2.046E-02	2.031E-02	2.002E-02
	Pu-239+D	U-235+D	9.829E-01	7.137E-11	2.141E-10	3.639E-09	4.352E-09	7.203E-09	1.432E-08	3.563E-08	7.093E-08	1.408E-07
	Pu-239+D	Pa-231	9.829E-01	2.432E-16	1.703E-15	4.743E-13	6.785E-13	1.859E-12	7.358E-12	4.560E-11	1.813E-10	7.183E-10
	Pu-239+D	Ac-227+D	9.829E-01	1.187E-17	1.769E-16	6.546E-13	1.082E-12	4.302E-12	2.554E-11	2.198E-10	9.876E-10	4.166E-09
	Pu-239+D	äDSR(j)		2.061E-02	2.061E-02	2.059E-02	2.059E-02	2.058E-02	2.055E-02	2.046E-02	2.031E-02	2.002E-02
0	Pu-239+D	Pu-239+D	2.720E-03	5.703E-05	5.703E-05	5.699E-05	5.699E-05	5.695E-05	5.687E-05	5.663E-05	5.622E-05	5.542E-05
	Pu-239+D	U-235+D	2.720E-03	1.975E-13	5.926E-13	1.007E-11	1.204E-11	1.994E-11	3.965E-11	9.860E-11	1.963E-10	3.896E-10
	Pu-239+D	Pa-231	2.720E-03	6.732E-19	4.712E-18	1.313E-15	1.878E-15	5.146E-15	2.036E-14	1.262E-13	5.017E-13	1.988E-12
	Pu-239+D	Ac-227+D1	2.720E-03	3.319E-20	4.945E-19	1.830E-15	3.024E-15	1.203E-14	7.141E-14	6.145E-13	2.761E-12	1.165E-11
	Pu-239+D	äDSR(j)		5.703E-05	5.703E-05	5.699E-05	5.699E-05	5.695E-05	5.687E-05	5.663E-05	5.622E-05	5.542E-05
0	Pu-239+D	Pu-239+D	1.375E-02	2.883E-04	2.883E-04	2.881E-04	2.881E-04	2.879E-04	2.875E-04	2.863E-04	2.842E-04	2.802E-04
	Pu-239+D	U-235+D	1.375E-02	9.986E-13	2.996E-12	5.091E-11	6.089E-11	1.008E-10	2.004E-10	4.985E-10	9.924E-10	1.970E-09
	Pu-239+D	Pa-231	1.375E-02	3.403E-18	2.382E-17	6.637E-15	9.494E-15	2.602E-14	1.030E-13	6.380E-13	2.536E-12	1.005E-11
	Pu-239+D	Ac-227+D2	1.375E-02	1.372E-19	2.045E-18	7.566E-15	1.250E-14	4.972E-14	2.952E-13	2.540E-12	1.142E-11	4.815E-11
	Pu-239+D	äDSR(j)		2.883E-04	2.883E-04	2.881E-04	2.881E-04	2.879E-04	2.875E-04	2.863E-04	2.842E-04	2.802E-04
0	Pu-239+D	Pu-239+D	3.806E-05	7.980E-07	7.980E-07	7.975E-07	7.974E-07	7.969E-07	7.957E-07	7.923E-07	7.866E-07	7.754E-07
	Pu-239+D	U-235+D	3.806E-05	2.764E-15	8.291E-15	1.409E-13	1.685E-13	2.789E-13	5.547E-13	1.380E-12	2.747E-12	5.451E-12
	Pu-239+D	Pa-231	3.806E-05	9.419E-21	6.593E-20	1.837E-17	2.628E-17	7.201E-17	2.849E-16	1.766E-15	7.020E-15	2.782E-14
	Pu-239+D	Ac-227+D3	3.806E-05	3.845E-22	5.728E-21	2.120E-17	3.502E-17	1.393E-16	8.271E-16	7.117E-15	3.198E-14	1.349E-13
	Pu-239+D	äDSR(j)		7.980E-07	7.980E-07	7.975E-07	7.974E-07	7.969E-07	7.957E-07	7.923E-07	7.867E-07	7.754E-07
0	Pu-239+D	Pu-239+D	8.252E-07	1.730E-08	1.730E-08	1.729E-08	1.729E-08	1.728E-08	1.725E-08	1.718E-08	1.705E-08	1.681E-08
	Pu-239+D	U-235+D	8.252E-07	5.992E-17	1.798E-16	3.055E-15	3.654E-15	6.048E-15	1.203E-14	2.991E-14	5.955E-14	1.182E-13
	Pu-239+D	Pa-231	8.252E-07	2.042E-22	1.429E-21	3.983E-19	5.697E-19	1.561E-18	6.178E-18	3.828E-17	1.522E-16	6.031E-16
	Pu-239+D	Ac-227+D4	8.252E-07	1.018E-23	1.517E-22	5.613E-19	9.275E-19	3.689E-18	2.190E-17	1.885E-16	8.469E-16	3.572E-15
	Pu-239+D	äDSR(j)		1.730E-08	1.730E-08	1.729E-08	1.729E-08	1.728E-08	1.725E-08	1.718E-08	1.705E-08	1.681E-08
0	Pu-239+D	Pu-239+D	2.284E-09	4.789E-11	4.788E-11	4.785E-11	4.784E-11	4.782E-11	4.775E-11	4.754E-11	4.720E-11	4.653E-11
	Pu-239+D	U-235+D	2.284E-09	1.658E-19	4.975E-19	8.455E-18	1.011E-17	1.674E-17	3.329E-17	8.279E-17	1.648E-16	3.271E-16
	Pu-239+D	Pa-231	2.284E-09	5.652E-25	3.956E-24	1.102E-21	1.577E-21	4.321E-21	1.710E-20	1.060E-19	4.212E-19	1.669E-18
	Pu-239+D	Ac-227+D5	2.284E-09	2.846E-26	4.240E-25	1.569E-21	2.592E-21	1.031E-20	6.122E-20	5.268E-19	2.367E-18	9.985E-18
	Pu-239+D	äDSR(j)		4.789E-11	4.788E-11	4.785E-11	4.784E-11	4.782E-11	4.775E-11	4.754E-11	4.720E-11	4.653E-11
0	Ru-106+D	Ru-106+D	1.000E+00	1.752E-01	8.895E-02	7.686E-09	2.595E-10	3.372E-16	6.492E-31	0.000E+00	0.000E+00	0.000E+00
0	Sr-90+D	Sr-90+D	1.000E+00	1.027E-02	1.002E-02	5.623E-03	4.985E-03	3.080E-03	9.242E-04	2.496E-05	6.071E-08	3.591E-13

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 Summary : Industrial SALS 2015
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Dose/Source Ratios Summed Over All Pathways												
Parent and Progeny Principal Radionuclide Contributions Indicated												
0	Parent	Product	Thread	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)								
	(i)	(j)	Fraction	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA
	Tc-99	Tc-99	1.000E+00	7.514E-05	7.513E-05	7.500E-05	7.497E-05	7.485E-05	7.457E-05	7.373E-05	7.234E-05	6.965E-05
0	Th-228+D	Th-228+D	1.000E+00	1.487E+00	1.034E+00	1.719E-04	2.805E-05	1.988E-08	2.659E-16	6.358E-40	0.000E+00	0.000E+00
0	Th-230	Th-230	9.996E-01	1.804E-02	1.804E-02	1.804E-02	1.804E-02	1.803E-02	1.802E-02	1.800E-02	1.796E-02	1.788E-02
	Th-230	Ra-226+D	9.996E-01	4.416E-04	1.325E-03	2.240E-02	2.676E-02	4.412E-02	8.683E-02	2.095E-01	3.965E-01	7.136E-01
	Th-230	Pb-210+D	9.996E-01	3.584E-07	2.486E-06	5.475E-04	7.482E-04	1.727E-03	4.764E-03	1.444E-02	2.935E-02	5.463E-02
	Th-230	äDSR(j)		1.848E-02	1.937E-02	4.098E-02	4.555E-02	6.388E-02	1.096E-01	2.419E-01	4.438E-01	7.861E-01
0	Th-230	Th-230	1.319E-06	2.381E-08	2.381E-08	2.381E-08	2.381E-08	2.380E-08	2.379E-08	2.376E-08	2.370E-08	2.360E-08
	Th-230	Ra-226+D	1.319E-06	5.830E-10	1.749E-09	2.957E-08	3.533E-08	5.823E-08	1.146E-07	2.765E-07	5.234E-07	9.420E-07
	Th-230	Pb-210+D1	1.319E-06	1.830E-13	1.269E-12	2.795E-10	3.820E-10	8.819E-10	2.432E-09	7.373E-09	1.499E-08	2.789E-08
	Th-230	äDSR(j)		2.440E-08	2.556E-08	5.366E-08	5.952E-08	8.292E-08	1.408E-07	3.076E-07	5.621E-07	9.935E-07
0	Th-230	Th-230	1.899E-08	3.428E-10	3.428E-10	3.427E-10	3.427E-10	3.426E-10	3.425E-10	3.420E-10	3.412E-10	3.396E-10
	Th-230	Ra-226+D	1.899E-08	8.391E-12	2.517E-11	4.256E-10	5.085E-10	8.382E-10	1.650E-09	3.980E-09	7.534E-09	1.356E-08
	Th-230	Pb-210+D2	1.899E-08	7.660E-15	5.314E-14	1.170E-11	1.599E-11	3.692E-11	1.018E-10	3.087E-10	6.274E-10	1.168E-09
	Th-230	äDSR(j)		3.512E-10	3.680E-10	7.800E-10	8.672E-10	1.218E-09	2.094E-09	4.630E-09	8.503E-09	1.507E-08
0	Th-230	Th-230	2.100E-04	3.789E-06	3.789E-06	3.788E-06	3.788E-06	3.788E-06	3.786E-06	3.781E-06	3.772E-06	3.755E-06
	Th-230	Ra-226+D1	2.100E-04	2.398E-07	7.191E-07	1.216E-05	1.453E-05	2.395E-05	4.714E-05	1.137E-04	2.153E-04	3.874E-04
	Th-230	Pb-210+D	2.100E-04	7.527E-11	5.222E-10	1.150E-07	1.571E-07	3.628E-07	1.001E-06	3.033E-06	6.165E-06	1.147E-05
	Th-230	äDSR(j)		4.029E-06	4.509E-06	1.606E-05	1.847E-05	2.810E-05	5.193E-05	1.205E-04	2.252E-04	4.027E-04
0	Th-230	Th-230	2.771E-10	5.002E-12	5.002E-12	5.001E-12	5.000E-12	5.000E-12	4.997E-12	4.990E-12	4.979E-12	4.956E-12
	Th-230	Ra-226+D1	2.771E-10	3.165E-13	9.493E-13	1.605E-11	1.918E-11	3.162E-11	6.223E-11	1.501E-10	2.842E-10	5.114E-10
	Th-230	Pb-210+D1	2.771E-10	3.843E-17	2.666E-16	5.872E-14	8.024E-14	1.852E-13	5.109E-13	1.549E-12	3.148E-12	5.859E-12
	Th-230	äDSR(j)		5.318E-12	5.951E-12	2.111E-11	2.426E-11	3.680E-11	6.774E-11	1.566E-10	2.923E-10	5.222E-10
0	Th-230	Th-230	3.989E-12	7.200E-14	7.200E-14	7.198E-14	7.198E-14	7.196E-14	7.193E-14	7.183E-14	7.167E-14	7.134E-14
	Th-230	Ra-226+D1	3.989E-12	4.555E-15	1.366E-14	2.311E-13	2.761E-13	4.551E-13	8.957E-13	2.161E-12	4.090E-12	7.361E-12
	Th-230	Pb-210+D2	3.989E-12	1.609E-18	1.116E-17	2.458E-15	3.359E-15	7.755E-15	2.139E-14	6.484E-14	1.318E-13	2.453E-13
	Th-230	äDSR(j)		7.655E-14	8.567E-14	3.055E-13	3.514E-13	5.348E-13	9.890E-13	2.297E-12	4.294E-12	7.678E-12
0	Th-230	Th-230	1.998E-04	3.605E-06	3.605E-06	3.604E-06	3.604E-06	3.604E-06	3.602E-06	3.597E-06	3.589E-06	3.572E-06
	Th-230	Ra-226+D2	1.998E-04	7.765E-08	2.329E-07	3.938E-06	4.705E-06	7.757E-06	1.527E-05	3.683E-05	6.972E-05	1.255E-04
	Th-230	Pb-210+D	1.998E-04	7.162E-11	4.968E-10	1.094E-07	1.495E-07	3.452E-07	9.520E-07	2.886E-06	5.866E-06	1.092E-05
	Th-230	äDSR(j)		3.683E-06	3.839E-06	7.652E-06	8.459E-06	1.171E-05	1.982E-05	4.331E-05	7.917E-05	1.400E-04
0	Th-230	Th-230	2.637E-10	4.759E-12	4.759E-12	4.758E-12	4.758E-12	4.757E-12	4.754E-12	4.748E-12	4.737E-12	4.715E-12
	Th-230	Ra-226+D2	2.637E-10	1.025E-13	3.074E-13	5.199E-12	6.211E-12	1.024E-11	2.015E-11	4.861E-11	9.203E-11	1.656E-10
	Th-230	Pb-210+D1	2.637E-10	3.657E-17	2.537E-16	5.586E-14	7.634E-14	1.762E-13	4.861E-13	1.473E-12	2.995E-12	5.574E-12
	Th-230	äDSR(j)		4.861E-12	5.067E-12	1.001E-11	1.105E-11	1.517E-11	2.539E-11	5.483E-11	9.976E-11	1.759E-10

Dose/Source Ratios Summed Over All Pathways

Parent and Progeny Principal Radionuclide Contributions Indicated

0	Parent	Product	Thread	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)								
	(i)	(j)	Fraction	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
	Th-230	Th-230	3.795E-12	6.850E-14	6.850E-14	6.848E-14	6.848E-14	6.847E-14	6.844E-14	6.834E-14	6.818E-14	6.787E-14
	Th-230	Ra-226+D2	3.795E-12	1.475E-15	4.425E-15	7.483E-14	8.940E-14	1.474E-13	2.901E-13	6.997E-13	1.325E-12	2.384E-12
	Th-230	Pb-210+D2	3.795E-12	1.531E-18	1.062E-17	2.339E-15	3.196E-15	7.378E-15	2.035E-14	6.169E-14	1.254E-13	2.334E-13
	Th-230	äDSR(j)		6.998E-14	7.293E-14	1.457E-13	1.611E-13	2.232E-13	3.789E-13	8.297E-13	1.518E-12	2.685E-12
0	Th-230	Th-230	4.196E-08	7.573E-10	7.572E-10	7.571E-10	7.570E-10	7.569E-10	7.566E-10	7.555E-10	7.538E-10	7.503E-10
	Th-230	Ra-226+D3	4.196E-08	4.569E-11	1.370E-10	2.317E-09	2.769E-09	4.564E-09	8.983E-09	2.167E-08	4.102E-08	7.383E-08
	Th-230	Pb-210+D	4.196E-08	1.504E-14	1.044E-13	2.298E-11	3.140E-11	7.250E-11	2.000E-10	6.062E-10	1.232E-09	2.293E-09
	Th-230	äDSR(j)		8.030E-10	8.944E-10	3.097E-09	3.557E-09	5.393E-09	9.940E-09	2.303E-08	4.301E-08	7.687E-08
0	Th-230	Th-230	5.538E-14	9.996E-16	9.996E-16	9.993E-16	9.993E-16	9.991E-16	9.987E-16	9.973E-16	9.950E-16	9.904E-16
	Th-230	Ra-226+D3	5.538E-14	6.031E-17	1.809E-16	3.059E-15	3.654E-15	6.024E-15	1.186E-14	2.860E-14	5.415E-14	9.745E-14
	Th-230	Pb-210+D1	5.538E-14	7.681E-21	5.328E-20	1.173E-17	1.604E-17	3.702E-17	1.021E-16	3.095E-16	6.291E-16	1.171E-15
	Th-230	äDSR(j)		1.060E-15	1.180E-15	4.070E-15	4.670E-15	7.060E-15	1.296E-14	2.991E-14	5.577E-14	9.961E-14
0	Th-230	Th-230	7.972E-16	1.439E-17	1.439E-17	1.438E-17	1.438E-17	1.438E-17	1.437E-17	1.435E-17	1.432E-17	1.426E-17
	Th-230	Ra-226+D3	7.972E-16	8.680E-19	2.604E-18	4.403E-17	5.260E-17	8.671E-17	1.707E-16	4.117E-16	7.794E-16	1.403E-15
	Th-230	Pb-210+D2	7.972E-16	3.215E-22	2.231E-21	4.912E-19	6.713E-19	1.550E-18	4.274E-18	1.296E-17	2.633E-17	4.901E-17
	Th-230	äDSR(j)		1.526E-17	1.699E-17	5.890E-17	6.766E-17	1.026E-16	1.893E-16	4.390E-16	8.200E-16	1.466E-15
0	Th-230	Th-230	2.000E-07	3.610E-09	3.610E-09	3.609E-09	3.609E-09	3.608E-09	3.606E-09	3.601E-09	3.593E-09	3.577E-09
	Th-230	Ra-226+D4	2.000E-07	1.336E-12	4.008E-12	6.778E-11	8.098E-11	1.335E-10	2.627E-10	6.338E-10	1.200E-09	2.159E-09
	Th-230	Pb-210+D	2.000E-07	7.170E-14	4.974E-13	1.095E-10	1.497E-10	3.456E-10	9.532E-10	2.889E-09	5.873E-09	1.093E-08
	Th-230	äDSR(j)		3.611E-09	3.614E-09	3.786E-09	3.839E-09	4.087E-09	4.822E-09	7.124E-09	1.067E-08	1.667E-08
0	Th-230	Th-230	2.640E-13	4.765E-15	4.765E-15	4.764E-15	4.763E-15	4.762E-15	4.760E-15	4.754E-15	4.743E-15	4.721E-15
	Th-230	Ra-226+D4	2.640E-13	1.764E-18	5.291E-18	8.947E-17	1.069E-16	1.762E-16	3.468E-16	8.366E-16	1.584E-15	2.850E-15
	Th-230	Pb-210+D1	2.640E-13	3.661E-20	2.540E-19	5.593E-17	7.643E-17	1.765E-16	4.867E-16	1.475E-15	2.999E-15	5.581E-15
	Th-230	äDSR(j)		4.766E-15	4.770E-15	4.909E-15	4.947E-15	5.115E-15	5.594E-15	7.066E-15	9.325E-15	1.315E-14
0	Th-230	Th-230	3.800E-15	6.858E-17	6.858E-17	6.857E-17	6.856E-17	6.855E-17	6.852E-17	6.842E-17	6.827E-17	6.795E-17
	Th-230	Ra-226+D4	3.800E-15	2.539E-20	7.615E-20	1.288E-18	1.539E-18	2.536E-18	4.992E-18	1.204E-17	2.280E-17	4.103E-17
	Th-230	Pb-210+D2	3.800E-15	1.533E-21	1.063E-20	2.341E-18	3.200E-18	7.387E-18	2.037E-17	6.176E-17	1.255E-16	2.336E-16
	Th-230	äDSR(j)		6.861E-17	6.867E-17	7.220E-17	7.330E-17	7.847E-17	9.389E-17	1.422E-16	2.166E-16	3.426E-16
0	Th-232	Th-232	1.000E+00	1.934E-02	1.934E-02	1.934E-02	1.934E-02	1.934E-02	1.934E-02	1.934E-02	1.934E-02	1.934E-02
	Th-232	Ra-228+D	1.000E+00	5.951E-02	1.694E-01	9.799E-01	1.001E+00	1.025E+00	1.027E+00	1.027E+00	1.027E+00	1.027E+00
	Th-232	Th-228+D	1.000E+00	1.147E-02	7.035E-02	1.650E+00	1.705E+00	1.766E+00	1.772E+00	1.772E+00	1.772E+00	1.772E+00
	Th-232	äDSR(j)		9.032E-02	2.591E-01	2.649E+00	2.726E+00	2.811E+00	2.819E+00	2.819E+00	2.819E+00	2.819E+00
0	U-234	U-234	9.996E-01	4.191E-03	4.191E-03	4.191E-03	4.191E-03	4.191E-03	4.190E-03	4.188E-03	4.185E-03	4.179E-03
	U-234	Th-230	9.996E-01	8.294E-08	2.488E-07	4.230E-06	5.059E-06	8.375E-06	1.666E-05	4.149E-05	8.277E-05	1.650E-04
	U-234	Ra-226+D	9.996E-01	1.354E-09	9.475E-09	2.631E-06	3.762E-06	1.028E-05	4.042E-05	2.456E-04	9.457E-04	3.522E-03
	U-234	Pb-210+D	9.996E-01	8.251E-13	1.229E-11	4.553E-08	7.523E-08	2.992E-07	1.773E-06	1.505E-05	6.567E-05	2.607E-04
	U-234	äDSR(j)		4.191E-03	4.192E-03	4.198E-03	4.200E-03	4.210E-03	4.249E-03	4.490E-03	5.279E-03	8.126E-03

Dose/Source Ratios Summed Over All Pathways												
Parent and Progeny Principal Radionuclide Contributions Indicated												
0	Parent	Product	Thread	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)								
	(i)	(j)	Fraction	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA
	U-234	U-234	1.319E-06	5.533E-09	5.533E-09	5.532E-09	5.532E-09	5.532E-09	5.531E-09	5.528E-09	5.524E-09	5.516E-09
	U-234	Th-230	1.319E-06	1.095E-13	3.285E-13	5.583E-12	6.677E-12	1.105E-11	2.199E-11	5.477E-11	1.093E-10	2.177E-10
	U-234	Ra-226+D	1.319E-06	1.787E-15	1.251E-14	3.473E-12	4.965E-12	1.357E-11	5.335E-11	3.242E-10	1.248E-09	4.649E-09
	U-234	Pb-210+D1	1.319E-06	4.213E-19	6.277E-18	2.325E-14	3.841E-14	1.528E-13	9.053E-13	7.684E-12	3.353E-11	1.331E-10
	U-234	àDSR(j)		5.533E-09	5.533E-09	5.541E-09	5.544E-09	5.557E-09	5.607E-09	5.915E-09	6.915E-09	1.052E-08
0U-234	U-234		1.899E-08	7.964E-11	7.964E-11	7.963E-11	7.963E-11	7.962E-11	7.961E-11	7.958E-11	7.952E-11	7.940E-11
	U-234	Th-230	1.899E-08	1.576E-15	4.728E-15	8.036E-14	9.611E-14	1.591E-13	3.166E-13	7.883E-13	1.573E-12	3.134E-12
	U-234	Ra-226+D	1.899E-08	2.572E-17	1.800E-16	5.000E-14	7.147E-14	1.953E-13	7.679E-13	4.667E-12	1.797E-11	6.691E-11
	U-234	Pb-210+D2	1.899E-08	1.764E-20	2.628E-19	9.732E-16	1.608E-15	6.395E-15	3.790E-14	3.217E-13	1.404E-12	5.572E-12
	U-234	àDSR(j)		7.964E-11	7.964E-11	7.976E-11	7.980E-11	7.999E-11	8.073E-11	8.535E-11	1.005E-10	1.550E-10
0U-234	U-234		2.100E-04	8.804E-07	8.804E-07	8.803E-07	8.803E-07	8.802E-07	8.801E-07	8.797E-07	8.790E-07	8.777E-07
	U-234	Th-230	2.100E-04	1.742E-11	5.227E-11	8.884E-10	1.063E-09	1.759E-09	3.500E-09	8.715E-09	1.739E-08	3.465E-08
	U-234	Ra-226+D1	2.100E-04	7.349E-13	5.144E-12	1.429E-09	2.042E-09	5.582E-09	2.194E-08	1.334E-07	5.134E-07	1.912E-06
	U-234	Pb-210+D	2.100E-04	1.733E-16	2.582E-15	9.563E-12	1.580E-11	6.284E-11	3.724E-10	3.161E-09	1.379E-08	5.475E-08
	U-234	àDSR(j)		8.804E-07	8.804E-07	8.826E-07	8.834E-07	8.876E-07	9.059E-07	1.025E-06	1.424E-06	2.879E-06
0U-234	U-234		2.771E-10	1.162E-12	1.162E-12	1.162E-12	1.162E-12	1.162E-12	1.162E-12	1.161E-12	1.160E-12	1.159E-12
	U-234	Th-230	2.771E-10	2.300E-17	6.899E-17	1.173E-15	1.403E-15	2.322E-15	4.620E-15	1.150E-14	2.295E-14	4.574E-14
	U-234	Ra-226+D1	2.771E-10	9.701E-19	6.790E-18	1.886E-15	2.696E-15	7.368E-15	2.896E-14	1.760E-13	6.777E-13	2.524E-12
	U-234	Pb-210+D1	2.771E-10	8.849E-23	1.319E-21	4.883E-18	8.068E-18	3.209E-17	1.901E-16	1.614E-15	7.043E-15	2.795E-14
	U-234	àDSR(j)		1.162E-12	1.162E-12	1.165E-12	1.166E-12	1.172E-12	1.196E-12	1.350E-12	1.868E-12	3.756E-12
0U-234	U-234		3.989E-12	1.673E-14	1.673E-14	1.673E-14	1.673E-14	1.672E-14	1.672E-14	1.671E-14	1.670E-14	1.668E-14
	U-234	Th-230	3.989E-12	3.310E-19	9.930E-19	1.688E-17	2.019E-17	3.342E-17	6.649E-17	1.656E-16	3.303E-16	6.583E-16
	U-234	Ra-226+D1	3.989E-12	1.396E-20	9.773E-20	2.714E-17	3.880E-17	1.061E-16	4.169E-16	2.534E-15	9.755E-15	3.633E-14
	U-234	Pb-210+D2	3.989E-12	3.705E-24	5.520E-23	2.044E-19	3.378E-19	1.343E-18	7.960E-18	6.757E-17	2.949E-16	1.170E-15
	U-234	àDSR(j)		1.673E-14	1.673E-14	1.677E-14	1.678E-14	1.687E-14	1.721E-14	1.948E-14	2.708E-14	5.483E-14
0U-234	U-234		1.998E-04	8.376E-07	8.376E-07	8.375E-07	8.375E-07	8.375E-07	8.374E-07	8.370E-07	8.363E-07	8.351E-07
	U-234	Th-230	1.998E-04	1.658E-11	4.973E-11	8.452E-10	1.011E-09	1.674E-09	3.330E-09	8.292E-09	1.654E-08	3.297E-08
	U-234	Ra-226+D2	1.998E-04	2.380E-13	1.666E-12	4.627E-10	6.614E-10	1.808E-09	7.106E-09	4.319E-08	1.663E-07	6.192E-07
	U-234	Pb-210+D	1.998E-04	1.649E-16	2.457E-15	9.099E-12	1.503E-11	5.979E-11	3.543E-10	3.007E-09	1.312E-08	5.209E-08
	U-234	àDSR(j)		8.376E-07	8.377E-07	8.389E-07	8.392E-07	8.410E-07	8.481E-07	8.915E-07	1.032E-06	1.539E-06
0U-234	U-234		2.637E-10	1.106E-12	1.106E-12	1.106E-12	1.106E-12	1.105E-12	1.105E-12	1.105E-12	1.104E-12	1.102E-12
	U-234	Th-230	2.637E-10	2.188E-17	6.564E-17	1.116E-15	1.334E-15	2.209E-15	4.395E-15	1.095E-14	2.183E-14	4.352E-14
	U-234	Ra-226+D2	2.637E-10	3.142E-19	2.199E-18	6.107E-16	8.730E-16	2.386E-15	9.380E-15	5.701E-14	2.195E-13	8.173E-13
	U-234	Pb-210+D1	2.637E-10	8.420E-23	1.254E-21	4.646E-18	7.676E-18	3.053E-17	1.809E-16	1.536E-15	6.701E-15	2.660E-14
	U-234	àDSR(j)		1.106E-12	1.106E-12	1.107E-12	1.108E-12	1.110E-12	1.119E-12	1.174E-12	1.352E-12	1.990E-12
0U-234	U-234		3.795E-12	1.591E-14	1.591E-14	1.591E-14	1.591E-14	1.591E-14	1.591E-14	1.590E-14	1.589E-14	1.587E-14
	U-234	Th-230	3.795E-12	3.149E-19	9.448E-19	1.606E-17	1.921E-17	3.180E-17	6.326E-17	1.575E-16	3.143E-16	6.264E-16
	U-234	Ra-226+D2	3.795E-12	4.522E-21	3.165E-20	8.791E-18	1.257E-17	3.435E-17	1.350E-16	8.206E-16	3.159E-15	1.176E-14
	U-234	Pb-210+D2	3.795E-12	3.525E-24	5.252E-23	1.945E-19	3.214E-19	1.278E-18	7.573E-18	6.429E-17	2.805E-16	1.113E-15
	U-234	àDSR(j)		1.591E-14	1.592E-14	1.594E-14	1.595E-14	1.598E-14	1.612E-14	1.694E-14	1.964E-14	2.937E-14

Dose/Source Ratios Summed Over All Pathways

Parent and Progeny Principal Radionuclide Contributions Indicated

0	Parent (i)	Product (j)	Thread Fraction	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)								
	AAAAA	AAAAA	AAAAA	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
	U-234	U-234	4.196E-08	1.759E-10	1.759E-10	1.759E-10	1.759E-10	1.759E-10	1.759E-10	1.758E-10	1.757E-10	1.754E-10
	U-234	Th-230	4.196E-08	3.482E-15	1.044E-14	1.775E-13	2.123E-13	3.515E-13	6.994E-13	1.742E-12	3.474E-12	6.924E-12
	U-234	Ra-226+D3	4.196E-08	1.400E-16	9.801E-16	2.722E-13	3.891E-13	1.064E-12	4.181E-12	2.541E-11	9.783E-11	3.643E-10
	U-234	Pb-210+D	4.196E-08	3.464E-20	5.161E-19	1.911E-15	3.158E-15	1.256E-14	7.442E-14	6.317E-13	2.757E-12	1.094E-11
	U-234	äDSR(j)		1.759E-10	1.759E-10	1.764E-10	1.765E-10	1.773E-10	1.808E-10	2.036E-10	2.797E-10	5.576E-10
0U-234	U-234		5.538E-14	2.322E-16	2.322E-16	2.322E-16	2.322E-16	2.322E-16	2.322E-16	2.321E-16	2.319E-16	2.315E-16
	U-234	Th-230	5.538E-14	4.596E-21	1.379E-20	2.343E-19	2.803E-19	4.640E-19	9.232E-19	2.299E-18	4.586E-18	9.140E-18
	U-234	Ra-226+D3	5.538E-14	1.849E-22	1.294E-21	3.593E-19	5.136E-19	1.404E-18	5.519E-18	3.354E-17	1.291E-16	4.809E-16
	U-234	Pb-210+D1	5.538E-14	1.768E-26	2.635E-25	9.758E-22	1.612E-21	6.412E-21	3.800E-20	3.225E-19	1.408E-18	5.587E-18
	U-234	äDSR(j)		2.322E-16	2.322E-16	2.328E-16	2.330E-16	2.341E-16	2.386E-16	2.682E-16	3.670E-16	7.272E-16
0U-234	U-234		7.972E-16	3.343E-18	3.343E-18	3.343E-18	3.342E-18	3.342E-18	3.342E-18	3.340E-18	3.338E-18	3.333E-18
	U-234	Th-230	7.972E-16	6.615E-23	1.985E-22	3.373E-21	4.034E-21	6.679E-21	1.329E-20	3.309E-20	6.601E-20	1.316E-19
	U-234	Ra-226+D3	7.972E-16	2.661E-24	1.862E-23	5.172E-21	7.393E-21	2.021E-20	7.944E-20	4.828E-19	1.859E-18	6.922E-18
	U-234	Pb-210+D2	7.972E-16	7.403E-28	1.103E-26	4.085E-23	6.750E-23	2.684E-22	1.591E-21	1.350E-20	5.892E-20	2.339E-19
	U-234	äDSR(j)		3.343E-18	3.343E-18	3.351E-18	3.354E-18	3.369E-18	3.436E-18	3.870E-18	5.322E-18	1.062E-17
0U-234	U-234		2.000E-07	8.386E-10	8.386E-10	8.386E-10	8.385E-10	8.385E-10	8.384E-10	8.380E-10	8.374E-10	8.361E-10
	U-234	Th-230	2.000E-07	1.660E-14	4.979E-14	8.462E-13	1.012E-12	1.676E-12	3.334E-12	8.302E-12	1.656E-11	3.301E-11
	U-234	Ra-226+D4	2.000E-07	4.096E-18	2.867E-17	7.962E-15	1.138E-14	3.111E-14	1.223E-13	7.433E-13	2.862E-12	1.066E-11
	U-234	Pb-210+D	2.000E-07	1.651E-19	2.460E-18	9.110E-15	1.505E-14	5.986E-14	3.547E-13	3.011E-12	1.314E-11	5.215E-11
	U-234	äDSR(j)		8.386E-10	8.387E-10	8.394E-10	8.396E-10	8.403E-10	8.422E-10	8.500E-10	8.699E-10	9.319E-10
0U-234	U-234		2.640E-13	1.107E-15	1.107E-15	1.107E-15	1.107E-15	1.107E-15	1.107E-15	1.106E-15	1.105E-15	1.104E-15
	U-234	Th-230	2.640E-13	2.191E-20	6.572E-20	1.117E-18	1.336E-18	2.212E-18	4.400E-18	1.096E-17	2.186E-17	4.357E-17
	U-234	Ra-226+D4	2.640E-13	5.407E-24	3.784E-23	1.051E-20	1.502E-20	4.106E-20	1.614E-19	9.811E-19	3.777E-18	1.407E-17
	U-234	Pb-210+D1	2.640E-13	8.430E-26	1.256E-24	4.651E-21	7.686E-21	3.057E-20	1.811E-19	1.537E-18	6.709E-18	2.663E-17
	U-234	äDSR(j)		1.107E-15	1.107E-15	1.108E-15	1.108E-15	1.109E-15	1.111E-15	1.120E-15	1.138E-15	1.188E-15
0U-234	U-234		3.800E-15	1.593E-17	1.593E-17	1.593E-17	1.593E-17	1.593E-17	1.593E-17	1.592E-17	1.591E-17	1.589E-17
	U-234	Th-230	3.800E-15	3.153E-22	9.459E-22	1.608E-20	1.923E-20	3.184E-20	6.334E-20	1.577E-19	3.147E-19	6.271E-19
	U-234	Ra-226+D4	3.800E-15	7.783E-26	5.447E-25	1.513E-22	2.163E-22	5.911E-22	2.324E-21	1.412E-20	5.437E-20	2.025E-19
	U-234	Pb-210+D2	3.800E-15	3.529E-27	5.258E-26	1.947E-22	3.217E-22	1.280E-21	7.583E-21	6.436E-20	2.809E-19	1.115E-18
	U-234	äDSR(j)		1.593E-17	1.593E-17	1.595E-17	1.595E-17	1.597E-17	1.600E-17	1.616E-17	1.656E-17	1.783E-17
0U-235+D	U-235+D		9.835E-01	1.451E-01	1.451E-01	1.451E-01	1.451E-01	1.451E-01	1.451E-01	1.451E-01	1.450E-01	1.450E-01
	U-235+D	Pa-231	9.835E-01	7.416E-07	2.225E-06	3.781E-05	4.522E-05	7.486E-05	1.489E-04	3.705E-04	7.383E-04	1.468E-03
	U-235+D	Ac-227+D	9.835E-01	4.819E-08	3.343E-07	7.357E-05	1.005E-04	2.323E-04	6.436E-04	2.001E-03	4.272E-03	8.779E-03
	U-235+D	äDSR(j)		1.451E-01	1.451E-01	1.452E-01	1.452E-01	1.454E-01	1.459E-01	1.474E-01	1.501E-01	1.553E-01
0U-235+D	U-235+D		2.722E-03	4.015E-04	4.015E-04	4.015E-04	4.015E-04	4.015E-04	4.015E-04	4.015E-04	4.014E-04	4.014E-04
	U-235+D	Pa-231	2.722E-03	2.052E-09	6.157E-09	1.046E-07	1.252E-07	2.072E-07	4.121E-07	1.025E-06	2.043E-06	4.063E-06
	U-235+D	Ac-227+D1	2.722E-03	1.347E-10	9.345E-10	2.057E-07	2.811E-07	6.493E-07	1.799E-06	5.594E-06	1.194E-05	2.454E-05
	U-235+D	äDSR(j)		4.015E-04	4.015E-04	4.018E-04	4.019E-04	4.023E-04	4.037E-04	4.081E-04	4.154E-04	4.300E-04

Dose/Source Ratios Summed Over All Pathways
Parent and Progeny Principal Radionuclide Contributions Indicated

0	Parent	Product	Thread	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)								
	(i)	(j)	Fraction	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA
	U-235+D	U-235+D	1.376E-02	2.030E-03	2.030E-03	2.030E-03	2.030E-03	2.030E-03	2.030E-03	2.030E-03	2.030E-03	2.029E-03
	U-235+D	Pa-231	1.376E-02	1.038E-08	3.113E-08	5.290E-07	6.327E-07	1.047E-06	2.083E-06	5.184E-06	1.033E-05	2.054E-05
	U-235+D	Ac-227+D2	1.376E-02	5.570E-10	3.864E-09	8.503E-07	1.162E-06	2.685E-06	7.439E-06	2.313E-05	4.938E-05	1.015E-04
	U-235+D	äDSR(j)		2.030E-03	2.030E-03	2.031E-03	2.032E-03	2.033E-03	2.039E-03	2.058E-03	2.089E-03	2.151E-03
0U-235+D	U-235+D		3.809E-05	5.618E-06	5.618E-06	5.618E-06	5.618E-06	5.618E-06	5.618E-06	5.617E-06	5.617E-06	5.617E-06
	U-235+D	Pa-231	3.809E-05	2.872E-11	8.615E-11	1.464E-09	1.751E-09	2.899E-09	5.766E-09	1.435E-08	2.859E-08	5.685E-08
	U-235+D	Ac-227+D3	3.809E-05	1.560E-12	1.082E-11	2.382E-09	3.256E-09	7.521E-09	2.084E-08	6.479E-08	1.383E-07	2.843E-07
	U-235+D	äDSR(j)		5.618E-06	5.618E-06	5.621E-06	5.623E-06	5.628E-06	5.644E-06	5.697E-06	5.784E-06	5.958E-06
0U-235+D	U-235+D		8.257E-07	1.218E-07	1.218E-07	1.218E-07	1.218E-07	1.218E-07	1.218E-07	1.218E-07	1.218E-07	1.218E-07
	U-235+D	Pa-231	8.257E-07	6.226E-13	1.868E-12	3.174E-11	3.797E-11	6.285E-11	1.250E-10	3.111E-10	6.199E-10	1.233E-09
	U-235+D	Ac-227+D4	8.257E-07	4.132E-14	2.867E-13	6.308E-11	8.621E-11	1.992E-10	5.519E-10	1.716E-09	3.664E-09	7.528E-09
	U-235+D	äDSR(j)		1.218E-07	1.218E-07	1.219E-07	1.219E-07	1.221E-07	1.225E-07	1.238E-07	1.261E-07	1.305E-07
0U-235+D	U-235+D		2.285E-09	3.371E-10	3.371E-10	3.371E-10	3.371E-10	3.371E-10	3.371E-10	3.371E-10	3.370E-10	3.370E-10
	U-235+D	Pa-231	2.285E-09	1.723E-15	5.169E-15	8.786E-14	1.051E-13	1.739E-13	3.460E-13	8.610E-13	1.716E-12	3.411E-12
	U-235+D	Ac-227+D5	2.285E-09	1.155E-16	8.012E-16	1.763E-13	2.410E-13	5.567E-13	1.543E-12	4.796E-12	1.024E-11	2.104E-11
	U-235+D	äDSR(j)		3.371E-10	3.371E-10	3.373E-10	3.374E-10	3.378E-10	3.390E-10	3.427E-10	3.490E-10	3.615E-10
0U-238	U-238		5.450E-07	2.043E-09	2.043E-09	2.043E-09	2.043E-09	2.043E-09	2.043E-09	2.043E-09	2.043E-09	2.042E-09
0U-238+D	U-238+D		1.599E-03	2.598E-03	2.598E-03	2.598E-03	2.598E-03	2.598E-03	2.598E-03	2.598E-03	2.598E-03	2.598E-03
	U-238+D	U-234	1.599E-03	9.467E-12	2.840E-11	4.828E-10	5.775E-10	9.561E-10	1.903E-09	4.741E-09	9.469E-09	1.891E-08
	U-238+D	Th-230	1.599E-03	1.249E-16	8.743E-16	2.437E-13	3.486E-13	9.554E-13	3.783E-12	2.349E-11	9.367E-11	3.735E-10
	U-238+D	Ra-226+D	1.599E-03	1.529E-18	2.293E-17	1.012E-13	1.730E-13	7.833E-13	6.139E-12	9.351E-11	7.258E-10	5.497E-09
	U-238+D	Pb-210+D	1.599E-03	7.464E-22	2.301E-20	1.361E-15	2.708E-15	1.826E-14	2.259E-13	5.170E-12	4.753E-11	3.943E-10

Dose/Source Ratios Summed Over All Pathways
Parent and Progeny Principal Radionuclide Contributions Indicated

0	Parent (i)	Product (j)	Thread Fraction	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)											
	AAAAA	AAAAA	AAAAA	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03	AAAAA	AAAAA	AAAAA
	U-238+D	U-238+D	3.359E-07	5.458E-07	5.458E-07	5.458E-07	5.458E-07	5.458E-07	5.458E-07	5.458E-07	5.457E-07	5.457E-07			
	U-238+D	U-234	3.359E-07	1.989E-15	5.966E-15	1.014E-13	1.213E-13	2.008E-13	3.996E-13	9.959E-13	1.989E-12	3.973E-12			
	U-238+D	Th-230	3.359E-07	2.623E-20	1.836E-19	5.118E-17	7.321E-17	2.007E-16	7.946E-16	4.934E-15	1.967E-14	7.846E-14			
	U-238+D	Ra-226+D1	3.359E-07	8.300E-22	1.245E-20	5.492E-17	9.391E-17	4.253E-16	3.333E-15	5.077E-14	3.940E-13	2.985E-12			
	U-238+D	Pb-210+D	3.359E-07	1.568E-25	4.834E-24	2.859E-19	5.688E-19	3.836E-18	4.745E-17	1.086E-15	9.983E-15	8.281E-14			
	U-238+D	äDSR(j)		5.458E-07	5.458E-07	5.458E-07	5.458E-07	5.458E-07	5.458E-07	5.458E-07	5.457E-07	5.457E-07			
0U-	238+D	U-238+D	4.434E-13	7.205E-13	7.205E-13	7.205E-13	7.205E-13	7.204E-13	7.204E-13	7.204E-13	7.204E-13	7.203E-13			
	U-238+D	U-234	4.434E-13	2.625E-21	7.875E-21	1.339E-19	1.601E-19	2.651E-19	5.275E-19	1.315E-18	2.625E-18	5.244E-18			
	U-238+D	Th-230	4.434E-13	3.463E-26	2.424E-25	6.755E-23	9.664E-23	2.649E-22	1.049E-21	6.512E-21	2.597E-20	1.036E-19			
	U-238+D	Ra-226+D1	4.434E-13	1.096E-27	1.643E-26	7.250E-23	1.240E-22	5.614E-22	4.400E-21	6.701E-20	5.201E-19	3.940E-18			
	U-238+D	Pb-210+D1	4.434E-13	8.005E-32	2.468E-30	1.460E-25	2.904E-25	1.959E-24	2.423E-23	5.545E-22	5.097E-21	4.228E-20			
	U-238+D	äDSR(j)		7.205E-13	7.205E-13	7.205E-13	7.205E-13	7.204E-13	7.204E-13	7.204E-13	7.204E-13	7.203E-13			
0U-	238+D	U-238+D	6.383E-15	1.037E-14	1.037E-14	1.037E-14	1.037E-14	1.037E-14	1.037E-14	1.037E-14	1.037E-14	1.037E-14			
	U-238+D	U-234	6.383E-15	3.778E-23	1.133E-22	1.927E-21	2.305E-21	3.816E-21	7.593E-21	1.892E-20	3.779E-20	7.548E-20			
	U-238+D	Th-230	6.383E-15	4.985E-28	3.489E-27	9.724E-25	1.391E-24	3.813E-24	1.510E-23	9.374E-23	3.738E-22	1.491E-21			
	U-238+D	Ra-226+D1	6.383E-15	1.577E-29	2.365E-28	1.044E-24	1.784E-24	8.080E-24	6.333E-23	9.646E-22	7.487E-21	5.671E-20			
	U-238+D	Pb-210+D2	6.383E-15	3.351E-33	1.033E-31	6.112E-27	1.216E-26	8.199E-26	1.014E-24	2.321E-23	2.134E-22	1.770E-21			
	U-238+D	äDSR(j)		1.037E-14	1.037E-14	1.037E-14	1.037E-14	1.037E-14	1.037E-14	1.037E-14	1.037E-14	1.037E-14			
0U-	238+D	U-238+D	3.196E-07	5.193E-07	5.193E-07	5.193E-07	5.193E-07	5.193E-07	5.193E-07	5.193E-07	5.192E-07	5.192E-07			
	U-238+D	U-234	3.196E-07	1.892E-15	5.676E-15	9.648E-14	1.154E-13	1.911E-13	3.802E-13	9.475E-13	1.892E-12	3.780E-12			
	U-238+D	Th-230	3.196E-07	2.496E-20	1.747E-19	4.869E-17	6.965E-17	1.909E-16	7.560E-16	4.694E-15	1.872E-14	7.465E-14			
	U-238+D	Ra-226+D2	3.196E-07	2.688E-22	4.032E-21	1.779E-17	3.041E-17	1.377E-16	1.079E-15	1.644E-14	1.276E-13	9.666E-13			
	U-238+D	Pb-210+D	3.196E-07	1.492E-25	4.599E-24	2.721E-19	5.411E-19	3.650E-18	4.514E-17	1.033E-15	9.498E-15	7.879E-14			
	U-238+D	äDSR(j)		5.193E-07	5.193E-07	5.193E-07	5.193E-07	5.193E-07	5.193E-07	5.193E-07	5.192E-07	5.192E-07			
0U-	238+D	U-238+D	4.219E-13	6.855E-13	6.855E-13	6.855E-13	6.854E-13	6.854E-13	6.854E-13	6.854E-13	6.854E-13	6.853E-13			
	U-238+D	U-234	4.219E-13	2.497E-21	7.492E-21	1.274E-19	1.523E-19	2.522E-19	5.019E-19	1.251E-18	2.498E-18	4.989E-18			
	U-238+D	Th-230	4.219E-13	3.295E-26	2.306E-25	6.427E-23	9.194E-23	2.520E-22	9.979E-22	6.196E-21	2.471E-20	9.853E-20			
	U-238+D	Ra-226+D2	4.219E-13	3.548E-28	5.322E-27	2.348E-23	4.015E-23	1.818E-22	1.425E-21	2.170E-20	1.685E-19	1.276E-18			
	U-238+D	Pb-210+D1	4.219E-13	7.616E-32	2.348E-30	1.389E-25	2.763E-25	1.863E-24	2.305E-23	5.276E-22	4.850E-21	4.023E-20			
	U-238+D	äDSR(j)		6.855E-13	6.855E-13	6.855E-13	6.855E-13	6.854E-13	6.854E-13	6.854E-13	6.854E-13	6.853E-13			
0U-	238+D	U-238+D	6.073E-15	9.866E-15	9.866E-15	9.866E-15	9.866E-15	9.866E-15	9.866E-15	9.866E-15	9.865E-15	9.864E-15			
	U-238+D	U-234	6.073E-15	3.595E-23	1.078E-22	1.833E-21	2.193E-21	3.630E-21	7.224E-21	1.800E-20	3.595E-20	7.181E-20			
	U-238+D	Th-230	6.073E-15	4.742E-28	3.320E-27	9.251E-25	1.323E-24	3.628E-24	1.436E-23	8.918E-23	3.557E-22	1.418E-21			
	U-238+D	Ra-226+D2	6.073E-15	5.107E-30	7.660E-29	3.379E-25	5.779E-25	2.617E-24	2.051E-23	3.124E-22	2.425E-21	1.837E-20			
	U-238+D	Pb-210+D2	6.073E-15	3.188E-33	9.830E-32	5.815E-27	1.157E-26	7.801E-26	9.649E-25	2.209E-23	2.030E-22	1.684E-21			
	U-238+D	äDSR(j)		9.866E-15	9.866E-15	9.866E-15	9.866E-15	9.866E-15	9.866E-15	9.866E-15	9.865E-15	9.865E-15			

Dose/Source Ratios Summed Over All Pathways
Parent and Progeny Principal Radionuclide Contributions Indicated

0	Parent	Product	Thread	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)								
	(i)	(j)	Fraction	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA
	U-238+D1	U-238+D1	9.980E-01	3.279E-02	3.279E-02	3.279E-02	3.279E-02	3.279E-02	3.279E-02	3.279E-02	3.279E-02	3.278E-02
	U-238+D1	U-234	9.980E-01	5.908E-09	1.772E-08	3.013E-07	3.603E-07	5.966E-07	1.187E-06	2.958E-06	5.909E-06	1.180E-05
	U-238+D1	Th-230	9.980E-01	7.794E-14	5.456E-13	1.520E-10	2.175E-10	5.962E-10	2.361E-09	1.466E-08	5.845E-08	2.331E-07
	U-238+D1	Ra-226+D	9.980E-01	9.540E-16	1.431E-14	6.313E-11	1.079E-10	4.888E-10	3.831E-09	5.835E-08	4.529E-07	3.430E-06
	U-238+D1	Pb-210+D	9.980E-01	4.658E-19	1.436E-17	8.495E-13	1.690E-12	1.140E-11	1.410E-10	3.226E-09	2.966E-08	2.460E-07
	U-238+D1	ΔDSR(j)		3.279E-02	3.279E-02	3.279E-02	3.279E-02	3.279E-02	3.279E-02	3.279E-02	3.279E-02	3.280E-02
0U	U-238+D1	U-238+D1	1.317E-06	4.328E-08	4.328E-08	4.328E-08	4.328E-08	4.328E-08	4.328E-08	4.328E-08	4.328E-08	4.327E-08
	U-238+D1	U-234	1.317E-06	7.798E-15	2.339E-14	3.977E-13	4.757E-13	7.875E-13	1.567E-12	3.905E-12	7.799E-12	1.558E-11
	U-238+D1	Th-230	1.317E-06	1.029E-19	7.201E-19	2.007E-16	2.871E-16	7.869E-16	3.116E-15	1.935E-14	7.715E-14	3.077E-13
	U-238+D1	Ra-226+D	1.317E-06	1.259E-21	1.889E-20	8.333E-17	1.425E-16	6.452E-16	5.057E-15	7.702E-14	5.978E-13	4.528E-12
	U-238+D1	Pb-210+D1	1.317E-06	2.378E-25	7.332E-24	4.337E-19	8.627E-19	5.819E-18	7.197E-17	1.647E-15	1.514E-14	1.256E-13
	U-238+D1	ΔDSR(j)		4.328E-08	4.328E-08	4.328E-08	4.328E-08	4.328E-08	4.328E-08	4.329E-08	4.329E-08	4.330E-08
0U	U-238+D1	U-238+D1	1.896E-08	6.230E-10	6.230E-10	6.230E-10	6.230E-10	6.230E-10	6.230E-10	6.230E-10	6.230E-10	6.229E-10
	U-238+D1	U-234	1.896E-08	1.122E-16	3.367E-16	5.724E-15	6.847E-15	1.134E-14	2.256E-14	5.621E-14	1.123E-13	2.242E-13
	U-238+D1	Th-230	1.896E-08	1.481E-21	1.037E-20	2.889E-18	4.132E-18	1.133E-17	4.485E-17	2.785E-16	1.111E-15	4.429E-15
	U-238+D1	Ra-226+D	1.896E-08	1.813E-23	2.719E-22	1.199E-18	2.051E-18	9.287E-18	7.279E-17	1.109E-15	8.605E-15	6.518E-14
	U-238+D1	Pb-210+D2	1.896E-08	9.956E-27	3.069E-25	1.816E-20	3.612E-20	2.436E-19	3.013E-18	6.896E-17	6.340E-16	5.259E-15
	U-238+D1	ΔDSR(j)		6.230E-10	6.230E-10	6.230E-10	6.230E-10	6.230E-10	6.230E-10	6.230E-10	6.231E-10	6.232E-10
0U	U-238+D1	U-238+D1	2.096E-04	6.887E-06	6.887E-06	6.887E-06	6.887E-06	6.887E-06	6.887E-06	6.887E-06	6.887E-06	6.886E-06
	U-238+D1	U-234	2.096E-04	1.241E-12	3.723E-12	6.328E-11	7.569E-11	1.253E-10	2.494E-10	6.214E-10	1.241E-09	2.479E-09
	U-238+D1	Th-230	2.096E-04	1.637E-17	1.146E-16	3.194E-14	4.568E-14	1.252E-13	4.958E-13	3.079E-12	1.228E-11	4.896E-11
	U-238+D1	Ra-226+D1	2.096E-04	5.179E-19	7.768E-18	3.427E-14	5.860E-14	2.654E-13	2.080E-12	3.168E-11	2.459E-10	1.862E-09
	U-238+D1	Pb-210+D	2.096E-04	9.783E-23	3.016E-21	1.784E-16	3.549E-16	2.394E-15	2.961E-14	6.777E-13	6.230E-12	5.167E-11
	U-238+D1	ΔDSR(j)		6.887E-06	6.887E-06	6.887E-06	6.887E-06	6.887E-06	6.888E-06	6.888E-06	6.888E-06	6.891E-06
0U	U-238+D1	U-238+D1	2.767E-10	9.091E-12	9.091E-12	9.091E-12	9.091E-12	9.091E-12	9.091E-12	9.091E-12	9.091E-12	9.090E-12
	U-238+D1	U-234	2.767E-10	1.638E-18	4.914E-18	8.353E-17	9.991E-17	1.654E-16	3.292E-16	8.203E-16	1.638E-15	3.272E-15
	U-238+D1	Th-230	2.767E-10	2.161E-23	1.513E-22	4.215E-20	6.030E-20	1.653E-19	6.545E-19	4.064E-18	1.621E-17	6.462E-17
	U-238+D1	Ra-226+D1	2.767E-10	6.837E-25	1.025E-23	4.524E-20	7.735E-20	3.503E-20	2.745E-19	4.182E-17	3.246E-16	2.458E-15
	U-238+D1	Pb-210+D1	2.767E-10	4.995E-29	1.540E-27	9.111E-23	1.812E-22	1.222E-21	1.512E-20	3.460E-19	3.181E-18	2.638E-17
	U-238+D1	ΔDSR(j)		9.091E-12	9.091E-12	9.091E-12	9.091E-12	9.091E-12	9.092E-12	9.092E-12	9.092E-12	9.095E-12
0U	U-238+D1	U-238+D1	3.983E-12	1.309E-13	1.309E-13	1.309E-13	1.309E-13	1.309E-13	1.309E-13	1.309E-13	1.308E-13	1.308E-13
	U-238+D1	U-234	3.983E-12	2.358E-20	7.073E-20	1.202E-18	1.438E-18	2.381E-18	4.738E-18	1.181E-17	2.358E-17	4.710E-17
	U-238+D1	Th-230	3.983E-12	3.110E-25	2.177E-24	6.068E-22	8.680E-22	2.379E-21	9.421E-21	5.849E-20	2.333E-19	9.302E-19
	U-238+D1	Ra-226+D1	3.983E-12	9.841E-27	1.476E-25	6.511E-22	1.113E-21	5.042E-21	3.952E-20	6.019E-19	4.672E-18	3.539E-17
	U-238+D1	Pb-210+D2	3.983E-12	2.091E-30	6.447E-29	3.814E-24	7.586E-24	5.116E-23	6.328E-22	1.448E-20	1.332E-19	1.105E-18
	U-238+D1	ΔDSR(j)		1.309E-13	1.309E-13	1.309E-13	1.309E-13	1.309E-13	1.309E-13	1.309E-13	1.309E-13	1.309E-13

Dose/Source Ratios Summed Over All Pathways
Parent and Progeny Principal Radionuclide Contributions Indicated

0	Parent	Product	Thread	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)								
	(i)	(j)	Fraction	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA
	U-238+D1	U-238+D1	1.994E-04	6.553E-06	6.553E-06	6.553E-06	6.553E-06	6.553E-06	6.553E-06	6.552E-06	6.552E-06	6.552E-06
	U-238+D1	U-234	1.994E-04	1.181E-12	3.542E-12	6.021E-11	7.201E-11	1.192E-10	2.373E-10	5.912E-10	1.181E-09	2.359E-09
	U-238+D1	Th-230	1.994E-04	1.557E-17	1.090E-16	3.038E-14	4.346E-14	1.191E-13	4.717E-13	2.929E-12	1.168E-11	4.658E-11
	U-238+D1	Ra-226+D2	1.994E-04	1.677E-19	2.516E-18	1.110E-14	1.898E-14	8.594E-14	6.736E-13	1.026E-11	7.963E-11	6.031E-10
	U-238+D1	Pb-210+D	1.994E-04	9.308E-23	2.870E-21	1.698E-16	3.377E-16	2.277E-15	2.817E-14	6.447E-13	5.927E-12	4.916E-11
	U-238+D1	ΔDSR(j)		6.553E-06	6.553E-06	6.553E-06	6.553E-06	6.553E-06	6.553E-06	6.553E-06	6.553E-06	6.555E-06
0U	U-238+D1	U-238+D1	2.633E-10	8.650E-12	8.650E-12	8.650E-12	8.650E-12	8.650E-12	8.650E-12	8.649E-12	8.649E-12	8.648E-12
	U-238+D1	U-234	2.633E-10	1.558E-18	4.675E-18	7.947E-17	9.505E-17	1.574E-16	3.132E-16	7.804E-16	1.559E-15	3.113E-15
	U-238+D1	Th-230	2.633E-10	2.056E-23	1.439E-22	4.011E-20	5.737E-20	1.573E-19	6.227E-19	3.866E-18	1.542E-17	6.148E-17
	U-238+D1	Ra-226+D2	2.633E-10	2.214E-25	3.321E-24	1.465E-20	2.505E-20	1.134E-19	8.891E-19	1.354E-17	1.051E-16	7.962E-16
	U-238+D1	Pb-210+D1	2.633E-10	4.753E-29	1.465E-27	8.668E-23	1.724E-22	1.163E-21	1.438E-20	3.292E-19	3.026E-18	2.510E-17
	U-238+D1	ΔDSR(j)		8.650E-12	8.650E-12	8.650E-12	8.650E-12	8.650E-12	8.650E-12	8.650E-12	8.651E-12	8.652E-12
0U	U-238+D1	U-238+D1	3.789E-12	1.245E-13	1.245E-13	1.245E-13	1.245E-13	1.245E-13	1.245E-13	1.245E-13	1.245E-13	1.245E-13
	U-238+D1	U-234	3.789E-12	2.243E-20	6.729E-20	1.144E-18	1.368E-18	2.265E-18	4.508E-18	1.123E-17	2.244E-17	4.481E-17
	U-238+D1	Th-230	3.789E-12	2.959E-25	2.071E-24	5.773E-22	8.258E-22	2.264E-21	8.963E-21	5.565E-20	2.219E-19	8.850E-19
	U-238+D1	Ra-226+D2	3.789E-12	3.187E-27	4.780E-26	2.109E-22	3.606E-22	1.633E-21	1.280E-20	1.949E-19	1.513E-18	1.146E-17
	U-238+D1	Pb-210+D2	3.789E-12	1.990E-30	6.134E-29	3.629E-24	7.218E-24	4.868E-23	6.021E-22	1.378E-20	1.267E-19	1.051E-18
	U-238+D1	ΔDSR(j)		1.245E-13	1.245E-13	1.245E-13	1.245E-13	1.245E-13	1.245E-13	1.245E-13	1.245E-13	1.245E-13
0U	U-238+D1	U-238+D1	4.189E-08	1.376E-09	1.376E-09	1.376E-09	1.376E-09	1.376E-09	1.376E-09	1.376E-09	1.376E-09	1.376E-09
	U-238+D1	U-234	4.189E-08	2.480E-16	7.439E-16	1.265E-14	1.513E-14	2.504E-14	4.983E-14	1.242E-13	2.480E-13	4.954E-13
	U-238+D1	Th-230	4.189E-08	3.271E-21	2.290E-20	6.382E-18	9.129E-18	2.502E-17	9.909E-17	6.152E-16	2.453E-15	9.784E-15
	U-238+D1	Ra-226+D3	4.189E-08	9.869E-23	1.480E-21	6.530E-18	1.117E-17	5.057E-17	3.963E-16	6.036E-15	4.685E-14	3.549E-13
	U-238+D1	Pb-210+D	4.189E-08	1.955E-26	6.027E-25	3.566E-20	7.092E-20	4.783E-19	5.917E-18	1.354E-16	1.245E-15	1.033E-14
	U-238+D1	ΔDSR(j)		1.376E-09	1.376E-09	1.376E-09	1.376E-09	1.376E-09	1.376E-09	1.376E-09	1.377E-09	1.377E-09
0U	U-238+D1	U-238+D1	5.530E-14	1.817E-15	1.817E-15	1.817E-15	1.817E-15	1.817E-15	1.817E-15	1.817E-15	1.817E-15	1.816E-15
	U-238+D1	U-234	5.530E-14	3.273E-22	9.820E-22	1.669E-20	1.997E-20	3.306E-20	6.578E-20	1.639E-19	3.274E-19	6.539E-19
	U-238+D1	Th-230	5.530E-14	4.318E-27	3.023E-26	8.424E-24	1.205E-23	3.303E-23	1.308E-22	8.121E-22	3.238E-21	1.291E-20
	U-238+D1	Ra-226+D3	5.530E-14	1.303E-28	1.954E-27	8.620E-24	1.474E-23	6.675E-23	5.231E-22	7.968E-21	6.185E-20	4.684E-19
	U-238+D1	Pb-210+D1	5.530E-14	9.982E-33	3.078E-31	1.821E-26	3.621E-26	2.442E-25	3.021E-24	6.915E-23	6.357E-22	5.273E-21
	U-238+D1	ΔDSR(j)		1.817E-15	1.817E-15	1.817E-15	1.817E-15	1.817E-15	1.817E-15	1.817E-15	1.817E-15	1.818E-15
0U	U-238+D1	U-238+D1	7.959E-16	2.615E-17	2.615E-17	2.615E-17	2.615E-17	2.615E-17	2.615E-17	2.615E-17	2.615E-17	2.615E-17
	U-238+D1	U-234	7.959E-16	4.711E-24	1.413E-23	2.403E-22	2.874E-22	4.758E-22	9.468E-22	2.359E-21	4.712E-21	9.412E-21
	U-238+D1	Th-230	7.959E-16	6.216E-29	4.351E-28	1.213E-25	1.735E-25	4.755E-25	1.883E-24	1.169E-23	4.661E-23	1.859E-22
	U-238+D1	Ra-226+D3	7.959E-16	1.875E-30	2.812E-29	1.241E-25	2.122E-25	9.607E-25	7.530E-24	1.147E-22	8.902E-22	6.743E-21
	U-238+D1	Pb-210+D2	7.959E-16	4.179E-34	1.288E-32	7.622E-28	1.516E-27	1.022E-26	1.265E-25	2.895E-24	2.661E-23	2.207E-22
	U-238+D1	ΔDSR(j)		2.615E-17	2.615E-17	2.615E-17	2.615E-17	2.615E-17	2.615E-17	2.615E-17	2.615E-17	2.616E-17

Dose/Source Ratios Summed Over All Pathways												
Parent and Progeny Principal Radionuclide Contributions Indicated												
0	Parent	Product	Thread	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)								
	(i)	(j)	Fraction	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA
	U-238+D1	U-238+D1	1.997E-07	6.561E-09	6.561E-09	6.561E-09	6.561E-09	6.561E-09	6.561E-09	6.560E-09	6.560E-09	6.559E-09
	U-238+D1	U-234	1.997E-07	1.182E-15	3.546E-15	6.028E-14	7.210E-14	1.194E-13	2.375E-13	5.919E-13	1.182E-12	2.361E-12
	U-238+D1	Th-230	1.997E-07	1.559E-20	1.092E-19	3.042E-17	4.352E-17	1.193E-16	4.723E-16	2.933E-15	1.169E-14	4.664E-14
	U-238+D1	Ra-226+D4	1.997E-07	2.887E-24	4.330E-23	1.910E-19	3.266E-19	1.479E-18	1.159E-17	1.766E-16	1.370E-15	1.038E-14
	U-238+D1	Pb-210+D	1.997E-07	9.319E-26	2.873E-24	1.700E-19	3.381E-19	2.280E-18	2.820E-17	6.455E-16	5.934E-15	4.922E-14
	U-238+D1	äDSR(j)		6.561E-09	6.561E-09	6.561E-09	6.561E-09	6.561E-09	6.561E-09	6.561E-09	6.561E-09	6.562E-09
0U	U-238+D1	U-238+D1	2.636E-13	8.660E-15	8.660E-15	8.660E-15	8.660E-15	8.660E-15	8.660E-15	8.660E-15	8.659E-15	8.659E-15
	U-238+D1	U-234	2.636E-13	1.560E-21	4.681E-21	7.957E-20	9.517E-20	1.576E-19	3.136E-19	7.814E-19	1.561E-18	3.117E-18
	U-238+D1	Th-230	2.636E-13	2.058E-26	1.441E-25	4.015E-23	5.744E-23	1.575E-22	6.235E-22	3.871E-21	1.544E-20	6.156E-20
	U-238+D1	Ra-226+D4	2.636E-13	3.810E-30	5.715E-29	2.521E-25	4.311E-25	1.952E-24	1.530E-23	2.331E-22	1.809E-21	1.370E-20
	U-238+D1	Pb-210+D1	2.636E-13	4.758E-32	1.467E-30	8.678E-26	1.726E-25	1.164E-24	1.440E-23	3.296E-22	3.030E-21	2.513E-20
	U-238+D1	äDSR(j)		8.660E-15	8.660E-15	8.660E-15	8.660E-15	8.660E-15	8.660E-15	8.661E-15	8.661E-15	8.662E-15
0U	U-238+D1	U-238+D1	3.794E-15	1.247E-16	1.247E-16	1.247E-16	1.247E-16	1.247E-16	1.247E-16	1.246E-16	1.246E-16	1.246E-16
	U-238+D1	U-234	3.794E-15	2.246E-23	6.737E-23	1.145E-21	1.370E-21	2.268E-21	4.513E-21	1.125E-20	2.246E-20	4.487E-20
	U-238+D1	Th-230	3.794E-15	2.963E-28	2.074E-27	5.780E-25	8.268E-25	2.266E-24	8.974E-24	5.572E-23	2.222E-22	8.861E-22
	U-238+D1	Ra-226+D4	3.794E-15	5.485E-32	8.226E-31	3.629E-27	6.206E-27	2.810E-26	2.202E-25	3.355E-24	2.604E-23	1.972E-22
	U-238+D1	Pb-210+D2	3.794E-15	1.992E-33	6.141E-32	3.633E-27	7.226E-27	4.874E-26	6.028E-25	1.380E-23	1.268E-22	1.052E-21
	U-238+D1	äDSR(j)		1.247E-16	1.247E-16	1.247E-16	1.247E-16	1.247E-16	1.247E-16	1.247E-16	1.247E-16	1.247E-16
	iiiiiiiiii	iiiiiiiiii	iiiiiiiiii	iiiiiiiiii	iiiiiiiiii	iiiiiiiiii	iiiiiiiiii	iiiiiiiiii	iiiiiiiiii	iiiiiiiiii	iiiiiiiiii	iiiiiiiiii

The DSR includes contributions from associated (half-life ó 180 days) daughters.

Single Radionuclide Soil Guidelines G(i,t) in pCi/g
Basic Radiation Dose Limit = 2.500E+01 mrem/yr

0Nuclide	t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
(i)	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03	
AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA
Am-241	1.018E+03	1.020E+03	1.060E+03	1.068E+03	1.103E+03	1.195E+03	1.519E+03	2.266E+03	5.028E+03	
Co-60	8.973E+00	1.023E+01	2.402E+02	4.636E+02	6.431E+03	4.610E+06	*1.113E+15	*1.113E+15	*1.113E+15	
Cs-134	1.721E+01	2.407E+01	7.595E+04	4.069E+05	3.352E+08	*1.283E+15	*1.283E+15	*1.283E+15	*1.283E+15	
Cs-137	4.114E+01	4.210E+01	7.308E+01	8.197E+01	1.298E+02	4.094E+02	1.285E+04	4.015E+06	3.918E+11	
Eu-152	1.979E+01	2.083E+01	7.118E+01	9.195E+01	2.560E+02	3.313E+03	7.175E+06	2.601E+12	*1.727E+14	
Eu-154	1.851E+01	2.007E+01	1.391E+02	2.082E+02	1.045E+03	5.898E+04	1.061E+10	*2.685E+14	*2.685E+14	
Eu-155	8.296E+02	9.597E+02	3.159E+04	6.542E+04	1.203E+06	1.744E+09	*4.815E+14	*4.815E+14	*4.815E+14	
H-3	2.442E+06	2.778E+06	6.125E+07	1.167E+08	1.536E+09	9.666E+11	*9.621E+15	*9.621E+15	*9.621E+15	
I-129	2.279E+03	2.279E+03	2.282E+03	2.282E+03	2.284E+03	2.289E+03	2.303E+03	2.327E+03	2.376E+03	
Mn-54	3.897E+01	8.771E+01	2.498E+10	1.442E+12	*7.615E+15	*7.615E+15	*7.615E+15	*7.615E+15	*7.615E+15	
Na-22	1.146E+01	1.495E+01	8.943E+03	3.388E+04	6.981E+06	4.253E+12	*5.976E+15	*5.976E+15	*5.976E+15	
Ni-63	1.944E+06	1.958E+06	2.311E+06	2.393E+06	2.748E+06	3.885E+06	1.098E+07	6.199E+07	1.977E+09	
Np-237	1.130E+02	1.130E+02	1.130E+02	1.130E+02	1.130E+02	1.130E+02	1.130E+02	1.130E+02	1.130E+02	
Pu-238	1.320E+03	1.330E+03	1.608E+03	1.673E+03	1.959E+03	2.909E+03	9.514E+03	6.834E+04	2.601E+06	
Pu-239	1.192E+03	1.192E+03	1.193E+03	1.193E+03	1.194E+03	1.196E+03	1.201E+03	1.210E+03	1.227E+03	
Ru-106	1.427E+02	2.811E+02	3.253E+09	9.634E+10	*3.269E+15	*3.269E+15	*3.269E+15	*3.269E+15	*3.269E+15	
Sr-90	2.435E+03	2.495E+03	4.446E+03	5.015E+03	8.117E+03	2.705E+04	1.001E+06	4.118E+08	6.963E+13	
Tc-99	3.327E+05	3.327E+05	3.334E+05	3.335E+05	3.340E+05	3.353E+05	3.391E+05	3.456E+05	3.589E+05	
Th-228	1.682E+01	2.417E+01	1.454E+05	8.913E+05	1.258E+09	*8.201E+14	*8.201E+14	*8.201E+14	*8.201E+14	
Th-230	1.352E+03	1.290E+03	6.096E+02	5.486E+02	3.911E+02	2.279E+02	1.033E+02	5.629E+01	3.178E+01	
Th-232	2.768E+02	9.648E+01	9.438E+00	9.171E+00	8.895E+00	8.868E+00	8.868E+00	8.868E+00	8.868E+00	
U-234	5.962E+03	5.962E+03	5.953E+03	5.950E+03	5.936E+03	5.881E+03	5.565E+03	4.733E+03	3.075E+03	
U-235	1.695E+02	1.695E+02	1.694E+02	1.693E+02	1.691E+02	1.686E+02	1.668E+02	1.639E+02	1.584E+02	
U-238	7.061E+02	7.061E+02	7.061E+02	7.061E+02	7.061E+02	7.061E+02	7.061E+02	7.061E+02	7.060E+02	
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	

*At specific activity limit

Summed Dose/Source Ratios DSR(i,t) in (mrem/yr)/(pCi/g)
 and Single Radionuclide Soil Guidelines G(i,t) in pCi/g
 at tmin = time of minimum single radionuclide soil guideline
 and at tmax = time of maximum total dose = 0.000E+00 years

0Nuclide	Initial	tmin	DSR(i,tmin)	G(i,tmin)	DSR(i,tmax)	G(i,tmax)
(i)	(pCi/g)	(years)		(pCi/g)		(pCi/g)
AAAAAAA	AAAAAAAAA	AAAAAAAAAAAAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA
Am-241	1.000E+01	0.000E+00	2.455E-02	1.018E+03	2.455E-02	1.018E+03
Co-60	1.000E+01	0.000E+00	2.786E+00	8.973E+00	2.786E+00	8.973E+00
Cs-134	1.000E+01	0.000E+00	1.453E+00	1.721E+01	1.453E+00	1.721E+01
Cs-137	1.000E+01	0.000E+00	6.076E-01	4.114E+01	6.076E-01	4.114E+01
Eu-152	1.000E+01	0.000E+00	1.263E+00	1.979E+01	1.263E+00	1.979E+01
Eu-154	1.000E+01	0.000E+00	1.350E+00	1.851E+01	1.350E+00	1.851E+01
Eu-155	1.000E+01	0.000E+00	3.013E-02	8.296E+02	3.013E-02	8.296E+02
H-3	1.000E+01	0.000E+00	1.024E-05	2.442E+06	1.024E-05	2.442E+06
I-129	1.000E+01	0.000E+00	1.097E-02	2.279E+03	1.097E-02	2.279E+03
Mn-54	1.000E+01	0.000E+00	6.414E-01	3.897E+01	6.414E-01	3.897E+01
Na-22	1.000E+01	0.000E+00	2.182E+00	1.146E+01	2.182E+00	1.146E+01
Ni-63	1.000E+01	0.000E+00	1.286E-05	1.944E+06	1.286E-05	1.944E+06
Np-237	1.000E+01	1.000E+03	2.212E-01	1.130E+02	2.212E-01	1.130E+02
Pu-238	1.000E+01	0.000E+00	1.894E-02	1.320E+03	1.894E-02	1.320E+03
Pu-239	1.000E+01	0.000E+00	2.097E-02	1.192E+03	2.097E-02	1.192E+03
Ru-106	1.000E+01	0.000E+00	1.752E-01	1.427E+02	1.752E-01	1.427E+02
Sr-90	1.000E+01	0.000E+00	1.027E-02	2.435E+03	1.027E-02	2.435E+03
Tc-99	1.000E+01	0.000E+00	7.514E-05	3.327E+05	7.514E-05	3.327E+05
Th-228	1.000E+01	0.000E+00	1.487E+00	1.682E+01	1.487E+00	1.682E+01
Th-230	1.000E+01	1.000E+03	7.867E-01	3.178E+01	1.849E-02	1.352E+03
Th-232	1.000E+01	144.8 ñ 0.3	2.819E+00	8.868E+00	9.032E-02	2.768E+02
U-234	1.000E+01	1.000E+03	8.131E-03	3.075E+03	4.193E-03	5.962E+03
U-235	1.000E+01	1.000E+03	1.579E-01	1.584E+02	1.475E-01	1.695E+02
U-238	1.000E+01	1.000E+03	3.541E-02	7.060E+02	3.540E-02	7.061E+02
iiiiiiii	iiiiiiiiii	iiiiiiiiiiiiiiiiii	iiiiiiiiii	iiiiiiiiii	iiiiiiiiii	iiiiiiiiii

Individual Nuclide Dose Summed Over All Pathways

Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	DOSE(j,t), mrem/yr									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Am-241	Am-241	1.000E+00		2.455E-01	2.451E-01	2.359E-01	2.340E-01	2.266E-01	2.091E-01	1.644E-01	1.101E-01	4.936E-02
0Np-237	Am-241	1.000E+00		3.574E-07	1.071E-06	1.787E-05	2.129E-05	3.469E-05	6.638E-05	1.475E-04	2.461E-04	3.562E-04
Np-237	Np-237	1.000E+00		2.212E+00	2.212E+00	2.212E+00	2.212E+00	2.212E+00	2.212E+00	2.212E+00	2.212E+00	2.211E+00
Np-237	äDOSE(j)			2.212E+00	2.212E+00	2.212E+00	2.212E+00	2.212E+00	2.212E+00	2.212E+00	2.212E+00	2.212E+00
0U-233	Am-241	1.000E+00		1.042E-14	7.291E-14	2.006E-11	2.863E-11	7.765E-11	2.995E-10	1.723E-09	6.094E-09	1.955E-08
U-233	Np-237	1.000E+00		9.674E-08	2.902E-07	4.933E-06	5.901E-06	9.770E-06	1.944E-05	4.844E-05	9.672E-05	1.931E-04
U-233	äDOSE(j)			9.674E-08	2.902E-07	4.934E-06	5.901E-06	9.770E-06	1.944E-05	4.844E-05	9.672E-05	1.931E-04
0Th-229	Am-241	1.000E+00		1.842E-17	2.763E-16	1.210E-12	2.065E-12	9.295E-12	7.174E-11	1.045E-09	7.552E-09	5.031E-08
Th-229	Np-237	1.000E+00		2.280E-10	1.596E-09	4.445E-07	6.358E-07	1.742E-06	6.887E-06	4.257E-05	1.686E-04	6.626E-04
Th-229	äDOSE(j)			2.280E-10	1.596E-09	4.445E-07	6.358E-07	1.742E-06	6.887E-06	4.258E-05	1.686E-04	6.627E-04
0Co-60	Co-60	1.000E+00		2.786E+01	2.443E+01	1.041E+00	5.393E-01	3.887E-02	5.424E-05	1.473E-13	7.786E-28	0.000E+00
0Cs-134	Cs-134	1.000E+00		1.453E+01	1.039E+01	3.292E-03	6.144E-04	7.458E-07	3.829E-14	0.000E+00	0.000E+00	0.000E+00
0Cs-137	Cs-137	1.000E+00		6.076E+00	5.938E+00	3.421E+00	3.050E+00	1.926E+00	6.106E-01	1.945E-02	6.227E-05	6.381E-10
0Eu-152	Eu-152	7.210E-01		9.109E+00	8.654E+00	2.532E+00	1.960E+00	7.040E-01	5.441E-02	2.512E-05	6.929E-11	5.271E-22
Eu-152	Eu-152	2.790E-01		3.525E+00	3.349E+00	9.799E-01	7.586E-01	2.724E-01	2.106E-02	9.722E-06	2.681E-11	2.040E-22
Eu-152	äDOSE(j)			1.263E+01	1.200E+01	3.512E+00	2.719E+00	9.764E-01	7.547E-02	3.484E-05	9.610E-11	7.311E-22
0Gd-152	Eu-152	2.790E-01		3.007E-17	8.819E-17	8.708E-16	9.439E-16	1.105E-15	1.188E-15	1.195E-15	1.195E-15	1.195E-15
0Sm-148	Eu-152	2.790E-01		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.837E-29	5.907E-29	1.205E-28
0Nd-144	Eu-152	2.790E-01		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
0Eu-154	Eu-154	1.000E+00		1.350E+01	1.246E+01	1.797E+00	1.201E+00	2.392E-01	4.239E-03	2.357E-08	4.116E-17	0.000E+00
0Eu-155	Eu-155	1.000E+00		3.013E-01	2.605E-01	7.914E-03	3.822E-03	2.078E-04	1.433E-07	4.702E-17	0.000E+00	0.000E+00
0H-3	H-3	1.000E+00		1.024E-04	8.999E-05	4.081E-06	2.143E-06	1.627E-07	2.587E-10	1.039E-18	0.000E+00	0.000E+00
0I-129	I-129	1.000E+00		1.097E-01	1.097E-01	1.096E-01	1.095E-01	1.095E-01	1.092E-01	1.085E-01	1.074E-01	1.052E-01
0Mn-54	Mn-54	1.000E+00		6.414E+00	2.850E+00	1.001E-08	1.734E-10	1.562E-17	0.000E+00	0.000E+00	0.000E+00	0.000E+00
0Na-22	Na-22	1.000E+00		2.182E+01	1.672E+01	2.795E-02	7.379E-03	3.581E-05	5.878E-11	2.598E-28	0.000E+00	0.000E+00
0Ni-63	Ni-63	1.000E+00		1.286E-04	1.277E-04	1.082E-04	1.045E-04	9.096E-05	6.434E-05	2.277E-05	4.033E-06	1.265E-07
0Pu-238	Pu-238	1.850E-09		3.505E-10	3.477E-10	2.876E-10	2.765E-10	2.361E-10	1.590E-10	4.859E-11	6.736E-12	1.295E-13
Pu-238	Pu-238	9.996E-01		1.894E-01	1.879E-01	1.554E-01	1.494E-01	1.275E-01	8.591E-02	2.625E-02	3.639E-03	6.995E-05
Pu-238	äDOSE(j)			1.894E-01	1.879E-01	1.554E-01	1.494E-01	1.275E-01	8.591E-02	2.625E-02	3.639E-03	6.995E-05
0U-234	Pu-238	9.996E-01		5.901E-08	1.764E-07	2.733E-06	3.207E-06	4.927E-06	8.205E-06	1.290E-05	1.467E-05	1.493E-05

Individual Nuclide Dose Summed Over All Pathways

Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	DOSE(j,t), mrem/yr									
(j)	(i)		t= 0.000E+00 1.000E+00 2.500E+01 3.000E+01 5.000E+01 1.000E+02 2.500E+02 5.000E+02 1.000E+03									
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
U-234	Pu-238	1.899E-08	1.121E-15	3.352E-15	5.192E-14	6.094E-14	9.362E-14	1.559E-13	2.451E-13	2.787E-13	2.836E-13	
U-234	Pu-238	2.100E-04	1.240E-11	3.706E-11	5.740E-10	6.736E-10	1.035E-09	1.723E-09	2.709E-09	3.081E-09	3.136E-09	
U-234	Pu-238	2.771E-10	1.636E-17	4.891E-17	7.577E-16	8.892E-16	1.366E-15	2.275E-15	3.576E-15	4.067E-15	4.139E-15	
U-234	Pu-238	3.989E-12	2.355E-19	7.041E-19	1.091E-17	1.280E-17	1.966E-17	3.275E-17	5.148E-17	5.854E-17	5.958E-17	
U-234	Pu-238	1.998E-04	1.179E-11	3.526E-11	5.461E-10	6.409E-10	9.846E-10	1.640E-09	2.578E-09	2.932E-09	2.983E-09	
U-234	Pu-238	2.637E-10	1.557E-17	4.654E-17	7.209E-16	8.460E-16	1.300E-15	2.164E-15	3.403E-15	3.870E-15	3.938E-15	
U-234	Pu-238	3.795E-12	2.241E-19	6.699E-19	1.038E-17	1.218E-17	1.871E-17	3.116E-17	4.898E-17	5.570E-17	5.668E-17	
U-234	Pu-238	4.196E-08	2.477E-15	7.405E-15	1.147E-13	1.346E-13	2.068E-13	3.444E-13	5.414E-13	6.157E-13	6.266E-13	
U-234	Pu-238	5.538E-14	3.270E-21	9.775E-21	1.514E-19	1.777E-19	2.730E-19	4.546E-19	7.147E-19	8.128E-19	8.271E-19	
U-234	Pu-238	7.972E-16	4.707E-23	1.407E-22	2.180E-21	2.558E-21	3.930E-21	6.544E-21	1.029E-20	1.170E-20	1.191E-20	
U-234	Pu-238	2.000E-07	1.181E-14	3.530E-14	5.468E-13	6.417E-13	9.858E-13	1.642E-12	2.581E-12	2.935E-12	2.987E-12	
U-234	Pu-238	2.640E-13	1.559E-20	4.659E-20	7.218E-19	8.470E-19	1.301E-18	2.167E-18	3.407E-18	3.874E-18	3.943E-18	
U-234	Pu-238	3.800E-15	2.243E-22	6.707E-22	1.039E-20	1.219E-20	1.873E-20	3.119E-20	4.904E-20	5.577E-20	5.675E-20	
U-234	U-234	9.996E-01	4.191E-02	4.191E-02	4.191E-02	4.191E-02	4.191E-02	4.190E-02	4.188E-02	4.185E-02	4.179E-02	
U-234	U-238	1.599E-03	9.467E-11	2.840E-10	4.828E-09	5.775E-09	9.561E-09	1.903E-08	4.741E-08	9.469E-08	1.891E-07	
U-234	U-238	2.111E-09	1.250E-16	3.749E-16	6.373E-15	7.623E-15	1.262E-14	2.511E-14	6.258E-14	1.250E-13	2.497E-13	
U-234	U-238	3.039E-11	1.799E-18	5.396E-18	9.173E-17	1.097E-16	1.817E-16	3.615E-16	9.008E-16	1.799E-15	3.594E-15	
U-234	U-238	3.359E-07	1.989E-14	5.966E-14	1.014E-12	1.213E-12	2.008E-12	3.996E-12	9.959E-12	1.989E-11	3.973E-11	
U-234	U-238	4.434E-13	2.625E-20	7.875E-20	1.339E-18	1.601E-18	2.651E-18	5.275E-18	1.315E-17	2.625E-17	5.244E-17	
U-234	U-238	6.383E-15	3.778E-22	1.133E-21	1.927E-20	2.305E-20	3.816E-20	7.593E-20	1.892E-19	3.779E-19	7.548E-19	
U-234	U-238	3.196E-07	1.892E-14	5.676E-14	9.648E-13	1.154E-12	1.911E-12	3.802E-12	9.475E-12	1.892E-11	3.780E-11	
U-234	U-238	4.219E-13	2.497E-20	7.492E-20	1.274E-18	1.523E-18	2.522E-18	5.019E-18	1.251E-17	2.498E-17	4.989E-17	
U-234	U-238	6.073E-15	3.595E-22	1.078E-21	1.833E-20	2.193E-20	3.630E-20	7.224E-20	1.800E-19	3.595E-19	7.181E-19	
U-234	U-238	6.713E-11	3.974E-18	1.192E-17	2.027E-16	2.424E-16	4.013E-16	7.986E-16	1.990E-15	3.975E-15	7.939E-15	
U-234	U-238	8.862E-17	5.246E-24	1.574E-23	2.675E-22	3.200E-22	5.298E-22	1.054E-21	2.627E-21	5.247E-21	1.048E-20	
U-234	U-238	1.276E-18	7.550E-26	2.265E-25	3.851E-24	4.606E-24	7.625E-24	1.517E-23	3.781E-23	7.552E-23	1.508E-22	
U-234	U-238	3.200E-10	1.894E-17	5.683E-17	9.660E-16	1.155E-15	1.913E-15	3.807E-15	9.486E-15	1.895E-14	3.784E-14	
U-234	U-238	4.224E-16	2.500E-23	7.501E-23	1.275E-21	1.525E-21	2.525E-21	5.025E-21	1.252E-20	2.501E-20	4.995E-20	
U-234	U-238	6.080E-18	3.599E-25	1.080E-24	1.835E-23	2.195E-23	3.635E-23	7.233E-23	1.802E-22	3.600E-22	7.190E-22	
U-234	U-238	9.980E-01	5.908E-08	1.772E-07	3.013E-06	3.603E-06	5.966E-06	1.187E-05	2.958E-05	5.909E-05	1.180E-04	
U-234	U-238	1.317E-06	7.798E-14	2.339E-13	3.977E-12	4.757E-12	7.875E-12	1.567E-11	3.905E-11	7.799E-11	1.558E-10	
U-234	U-238	1.896E-08	1.122E-15	3.367E-15	5.724E-14	6.847E-14	1.134E-13	2.256E-13	5.621E-13	1.123E-12	2.242E-12	
U-234	U-238	2.096E-04	1.241E-11	3.723E-11	6.328E-10	7.569E-10	1.253E-09	2.494E-09	6.214E-09	1.241E-08	2.479E-08	
U-234	U-238	2.767E-10	1.638E-17	4.914E-17	8.353E-16	9.991E-16	1.654E-15	3.292E-15	8.203E-15	1.638E-14	3.272E-14	
U-234	U-238	3.983E-12	2.358E-19	7.073E-19	1.202E-17	1.438E-17	2.381E-17	4.738E-17	1.181E-16	2.358E-16	4.710E-16	
U-234	U-238	1.994E-04	1.181E-11	3.542E-11	6.021E-10	7.201E-10	1.192E-09	2.373E-09	5.912E-09	1.181E-08	2.359E-08	
U-234	U-238	2.633E-10	1.558E-17	4.675E-17	7.947E-16	9.505E-16	1.574E-15	3.132E-15	7.804E-15	1.559E-14	3.113E-14	
U-234	U-238	3.789E-12	2.243E-19	6.729E-19	1.144E-17	1.368E-17	2.265E-17	4.508E-17	1.123E-16	2.244E-16	4.481E-16	
U-234	U-238	4.189E-08	2.480E-15	7.439E-15	1.265E-13	1.513E-13	2.504E-13	4.983E-13	1.242E-12	2.480E-12	4.954E-12	
U-234	U-238	5.530E-14	3.273E-21	9.820E-21	1.669E-19	1.997E-19	3.306E-19	6.578E-19	1.639E-18	3.274E-18	6.539E-18	

U-234	U-238	7.959E-16	4.711E-23	1.413E-22	2.403E-21	2.874E-21	4.758E-21	9.468E-21	2.359E-20	4.712E-20	9.412E-20
U-234	U-238	1.997E-07	1.182E-14	3.546E-14	6.028E-13	7.210E-13	1.194E-12	2.375E-12	5.919E-12	1.182E-11	2.361E-11
U-234	U-238	2.636E-13	1.560E-20	4.681E-20	7.957E-19	9.517E-19	1.576E-18	3.136E-18	7.814E-18	1.561E-17	3.117E-17
U-234	U-238	3.794E-15	2.246E-22	6.737E-22	1.145E-20	1.370E-20	2.268E-20	4.513E-20	1.125E-19	2.246E-19	4.487E-19
U-234	äDOSE(j)		4.191E-02	4.191E-02	4.192E-02	4.192E-02	4.192E-02	4.192E-02	4.192E-02	4.192E-02	4.192E-02
0Th-230	Pu-238	9.996E-01	7.791E-13	5.441E-12	1.425E-09	2.013E-09	5.250E-09	1.845E-08	8.373E-08	2.225E-07	5.151E-07
Th-230	Pu-238	1.899E-08	1.480E-20	1.034E-19	2.708E-17	3.826E-17	9.975E-17	3.506E-16	1.591E-15	4.227E-15	9.788E-15
Th-230	Pu-238	2.100E-04	1.636E-16	1.143E-15	2.994E-13	4.229E-13	1.103E-12	3.876E-12	1.759E-11	4.673E-11	1.082E-10

Individual Nuclide Dose Summed Over All Pathways

Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	DOSE(j,t), mrem/yr									
(j)	(i)		t= 0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03	
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Th-230	Pu-238	2.771E-10	2.160E-22	1.509E-21	3.952E-19	5.582E-19	1.456E-18	5.116E-18	2.321E-17	6.169E-17	1.428E-16	
Th-230	Pu-238	3.989E-12	3.109E-24	2.172E-23	5.689E-21	8.035E-21	2.095E-20	7.364E-20	3.341E-19	8.879E-19	2.056E-18	
Th-230	Pu-238	1.998E-04	1.557E-16	1.087E-15	2.849E-13	4.024E-13	1.049E-12	3.688E-12	1.673E-11	4.446E-11	1.029E-10	
Th-230	Pu-238	2.637E-10	2.055E-22	1.435E-21	3.760E-19	5.311E-19	1.385E-18	4.868E-18	2.209E-17	5.869E-17	1.359E-16	
Th-230	Pu-238	3.795E-12	2.958E-24	2.066E-23	5.412E-21	7.645E-21	1.993E-20	7.006E-20	3.179E-19	8.448E-19	1.956E-18	
Th-230	Pu-238	4.196E-08	3.270E-20	2.284E-19	5.983E-17	8.451E-17	2.204E-16	7.745E-16	3.514E-15	9.339E-15	2.162E-14	
Th-230	Pu-238	5.538E-14	4.317E-26	3.015E-25	7.898E-23	1.116E-22	2.909E-22	1.022E-21	4.639E-21	1.233E-20	2.854E-20	
Th-230	Pu-238	7.972E-16	6.134E-28	4.336E-27	1.137E-24	1.606E-24	4.187E-24	1.472E-23	6.677E-23	1.774E-22	4.108E-22	
Th-230	Pu-238	2.000E-07	1.559E-19	1.089E-18	2.852E-16	4.029E-16	1.050E-15	3.692E-15	1.675E-14	4.452E-14	1.031E-13	
Th-230	Pu-238	2.640E-13	2.058E-25	1.437E-24	3.765E-22	5.318E-22	1.387E-21	4.873E-21	2.211E-20	5.876E-20	1.361E-19	
Th-230	Pu-238	3.800E-15	2.960E-27	2.069E-26	5.419E-24	7.654E-24	1.996E-23	7.015E-23	3.183E-22	8.458E-22	1.958E-21	
Th-230	Th-230	9.996E-01	1.804E-01	1.804E-01	1.804E-01	1.804E-01	1.803E-01	1.802E-01	1.800E-01	1.796E-01	1.788E-01	
Th-230	U-234	9.996E-01	8.294E-07	2.488E-06	4.230E-05	5.059E-05	8.375E-05	1.666E-04	4.149E-04	8.277E-04	1.650E-03	
Th-230	U-234	1.319E-06	1.095E-12	3.285E-12	5.583E-11	6.677E-11	1.105E-10	2.199E-10	5.477E-10	1.093E-09	2.177E-09	
Th-230	U-234	1.899E-08	1.576E-14	4.728E-14	8.036E-13	9.611E-13	1.591E-12	3.166E-12	7.883E-12	1.573E-11	3.134E-11	
Th-230	U-234	2.100E-04	1.742E-10	5.227E-10	8.884E-09	1.063E-08	1.759E-08	3.500E-08	8.715E-08	1.739E-07	3.465E-07	
Th-230	U-234	2.771E-10	2.300E-16	6.899E-16	1.173E-14	1.403E-14	2.322E-14	4.620E-14	1.150E-13	2.295E-13	4.574E-13	
Th-230	U-234	3.989E-12	3.310E-18	9.930E-18	1.688E-16	2.019E-16	3.342E-16	6.649E-16	1.656E-15	3.303E-15	6.583E-15	
Th-230	U-234	1.998E-04	1.658E-10	4.973E-10	8.452E-09	1.011E-08	1.674E-08	3.330E-08	8.292E-08	1.654E-07	3.297E-07	
Th-230	U-234	2.637E-10	2.188E-16	6.564E-16	1.116E-14	1.334E-14	2.209E-14	4.395E-14	1.095E-13	2.183E-13	4.352E-13	
Th-230	U-234	3.795E-12	3.149E-18	9.448E-18	1.606E-16	1.921E-16	3.180E-16	6.326E-16	1.575E-15	3.143E-15	6.264E-15	
Th-230	U-234	4.196E-08	3.482E-14	1.044E-13	1.775E-12	2.123E-12	3.515E-12	6.994E-12	1.742E-11	3.474E-11	6.924E-11	
Th-230	U-234	5.538E-14	4.596E-20	1.379E-19	2.343E-18	2.803E-18	4.640E-18	9.232E-18	2.299E-17	4.586E-17	9.140E-17	
Th-230	U-234	7.972E-16	6.615E-22	1.985E-21	3.373E-20	4.034E-20	6.679E-20	1.329E-19	3.309E-19	6.601E-19	1.316E-18	
Th-230	U-234	2.000E-07	1.660E-13	4.979E-13	8.462E-12	1.012E-11	1.676E-11	3.334E-11	8.302E-11	1.656E-10	3.301E-10	
Th-230	U-234	2.640E-13	2.191E-19	6.572E-19	1.117E-17	1.336E-17	2.212E-17	4.400E-17	1.096E-16	2.186E-16	4.357E-16	
Th-230	U-234	3.800E-15	3.153E-21	9.459E-21	1.608E-19	1.923E-19	3.184E-19	6.334E-19	1.577E-18	3.147E-18	6.271E-18	
Th-230	U-238	1.599E-03	1.249E-15	8.743E-15	2.437E-12	3.486E-12	9.554E-12	3.783E-11	2.349E-10	9.367E-10	3.735E-09	
Th-230	U-238	2.111E-09	1.649E-21	1.154E-20	3.216E-18	4.601E-18	1.261E-17	4.994E-17	3.100E-16	1.236E-15	4.931E-15	
Th-230	U-238	3.039E-11	2.373E-23	1.661E-22	4.629E-20	6.622E-20	1.815E-19	7.188E-19	4.463E-18	1.780E-17	7.097E-17	
Th-230	U-238	3.359E-07	2.623E-19	1.836E-18	5.118E-16	7.321E-16	2.007E-15	7.946E-15	4.934E-14	1.967E-13	7.846E-13	
Th-230	U-238	4.434E-13	3.463E-25	2.424E-24	6.755E-22	9.664E-22	2.649E-21	1.049E-20	6.512E-20	2.597E-19	1.036E-18	
Th-230	U-238	6.383E-15	4.981E-27	3.489E-26	9.724E-24	1.391E-23	3.813E-23	1.510E-22	9.374E-22	3.738E-21	1.491E-20	
Th-230	U-238	3.196E-07	2.496E-19	1.747E-18	4.869E-16	6.965E-16	1.909E-15	7.560E-15	4.694E-14	1.872E-13	7.465E-13	
Th-230	U-238	4.219E-13	3.295E-25	2.306E-24	6.427E-22	9.194E-22	2.520E-21	9.979E-21	6.196E-20	2.471E-19	9.853E-19	
Th-230	U-238	6.073E-15	4.739E-27	3.320E-26	9.251E-24	1.323E-23	3.628E-23	1.436E-22	8.918E-22	3.557E-21	1.418E-20	
Th-230	U-238	6.713E-11	5.243E-23	3.670E-22	1.023E-19	1.463E-19	4.010E-19	1.588E-18	9.859E-18	3.932E-17	1.568E-16	
Th-230	U-238	8.862E-17	6.831E-29	4.782E-28	1.350E-25	1.931E-25	5.294E-25	2.096E-24	1.301E-23	5.190E-23	2.070E-22	
Th-230	U-238	1.276E-18	0.000E+00	0.000E+00	1.942E-27	2.778E-27	7.614E-27	3.017E-26	1.873E-25	7.470E-25	2.979E-24	
Th-230	U-238	3.200E-10	2.499E-22	1.749E-21	4.875E-19	6.974E-19	1.912E-18	7.569E-18	4.700E-17	1.874E-16	7.474E-16	

Th-230	U-238	4.224E-16	3.256E-28	2.307E-27	6.435E-25	9.206E-25	2.523E-24	9.991E-24	6.203E-23	2.474E-22	9.865E-22
Th-230	U-238	6.080E-18	0.000E+00	3.281E-29	9.256E-27	1.324E-26	3.632E-26	1.438E-25	8.929E-25	3.561E-24	1.420E-23
Th-230	U-238	9.980E-01	7.794E-13	5.456E-12	1.520E-09	2.175E-09	5.962E-09	2.361E-08	1.466E-07	5.845E-07	2.331E-06
Th-230	U-238	1.317E-06	1.029E-18	7.201E-18	2.007E-15	2.871E-15	7.869E-15	3.116E-14	1.935E-13	7.715E-13	3.077E-12
Th-230	U-238	1.896E-08	1.481E-20	1.037E-19	2.889E-17	4.132E-17	1.133E-16	4.485E-16	2.785E-15	1.111E-14	4.429E-14
Th-230	U-238	2.096E-04	1.637E-16	1.146E-15	3.194E-13	4.568E-13	1.252E-12	4.958E-12	3.079E-11	1.228E-10	4.896E-10
Th-230	U-238	2.767E-10	2.161E-22	1.513E-21	4.215E-19	6.030E-19	1.653E-18	6.545E-18	4.064E-17	1.621E-16	6.462E-16
Th-230	U-238	3.983E-12	3.110E-24	2.177E-23	6.068E-21	8.680E-21	2.379E-20	9.421E-20	5.849E-19	2.333E-18	9.302E-18
Th-230	U-238	1.994E-04	1.557E-16	1.090E-15	3.038E-13	4.346E-13	1.191E-12	4.717E-12	2.929E-11	1.168E-10	4.658E-10

Individual Nuclide Dose Summed Over All Pathways

Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	DOSE(j,t), mrem/yr									
(j)	(i)		t= 0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03	
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Th-230	U-238	2.633E-10	2.056E-22	1.439E-21	4.011E-19	5.737E-19	1.573E-18	6.227E-18	3.866E-17	1.542E-16	6.148E-16	
Th-230	U-238	3.789E-12	2.959E-24	2.071E-23	5.773E-21	8.258E-21	2.264E-20	8.963E-20	5.565E-19	2.219E-18	8.850E-18	
Th-230	U-238	4.189E-08	3.271E-20	2.290E-19	6.382E-17	9.129E-17	2.502E-16	9.909E-16	6.152E-15	2.453E-14	9.784E-14	
Th-230	U-238	5.530E-14	4.318E-26	3.023E-25	8.424E-23	1.205E-22	3.303E-22	1.308E-21	8.121E-21	3.238E-20	1.291E-19	
Th-230	U-238	7.959E-16	6.136E-28	4.348E-27	1.213E-24	1.735E-24	4.755E-24	1.883E-23	1.169E-22	4.661E-22	1.859E-21	
Th-230	U-238	1.997E-07	1.559E-19	1.092E-18	3.042E-16	4.352E-16	1.193E-15	4.723E-15	2.933E-14	1.169E-13	4.664E-13	
Th-230	U-238	2.636E-13	2.058E-25	1.441E-24	4.015E-22	5.744E-22	1.575E-21	6.235E-21	3.871E-20	1.544E-19	6.156E-19	
Th-230	U-238	3.794E-15	2.961E-27	2.074E-26	5.780E-24	8.268E-24	2.266E-23	8.974E-23	5.572E-22	2.222E-21	8.861E-21	
Th-230	äDOSE(j)		1.804E-01	1.804E-01	1.804E-01	1.804E-01	1.804E-01	1.804E-01	1.804E-01	1.804E-01	1.804E-01	
0Ra-226	Pu-238	9.996E-01	9.540E-15	1.428E-13	6.016E-10	1.019E-09	4.443E-09	3.181E-08	3.796E-07	2.116E-06	9.934E-06	
Ra-226	Pu-238	1.899E-08	1.813E-22	2.714E-21	1.143E-17	1.936E-17	8.442E-17	6.043E-16	7.212E-15	4.020E-14	1.887E-13	
Ra-226	Th-230	9.996E-01	4.416E-03	1.325E-02	2.240E-01	2.676E-01	4.412E-01	8.683E-01	2.095E+00	3.965E+00	7.136E+00	
Ra-226	Th-230	1.319E-06	5.830E-09	1.749E-08	2.957E-07	3.533E-07	5.823E-07	1.146E-06	2.765E-06	5.234E-06	9.420E-06	
Ra-226	Th-230	1.899E-08	8.391E-11	2.517E-10	4.256E-09	5.085E-09	8.382E-09	1.650E-08	3.980E-08	7.534E-08	1.356E-07	
Ra-226	U-234	9.996E-01	1.354E-08	9.475E-08	2.631E-05	3.762E-05	1.028E-04	4.042E-04	2.456E-03	9.457E-03	3.522E-02	
Ra-226	U-234	1.319E-06	1.787E-14	1.251E-13	3.473E-11	4.965E-11	1.357E-10	5.335E-10	3.242E-09	1.248E-08	4.649E-08	
Ra-226	U-234	1.899E-08	2.572E-16	1.800E-15	5.000E-13	7.147E-13	1.953E-12	7.679E-12	4.667E-11	1.797E-10	6.691E-10	
Ra-226	U-238	1.599E-03	1.529E-17	2.293E-16	1.012E-12	1.730E-12	7.833E-12	6.139E-11	9.351E-10	7.258E-09	5.497E-08	
Ra-226	U-238	2.111E-09	2.018E-23	3.027E-22	1.335E-18	2.283E-18	1.034E-17	8.104E-17	1.234E-15	9.581E-15	7.257E-14	
Ra-226	U-238	3.039E-11	2.905E-25	4.357E-24	1.922E-20	3.287E-20	1.488E-19	1.166E-18	1.777E-17	1.379E-16	1.045E-15	
Ra-226	U-238	9.980E-01	9.540E-15	1.431E-13	6.313E-10	1.079E-09	4.888E-09	3.831E-08	5.835E-07	4.529E-06	3.430E-05	
Ra-226	U-238	1.317E-06	1.259E-20	1.889E-19	8.333E-16	1.425E-15	6.452E-15	5.057E-14	7.702E-13	5.978E-12	4.528E-11	
Ra-226	U-238	1.896E-08	1.813E-22	2.719E-21	1.199E-17	2.051E-17	9.287E-17	7.279E-16	1.109E-14	8.605E-14	6.518E-13	
Ra-226	äDOSE(j)		4.416E-03	1.325E-02	2.240E-01	2.677E-01	4.413E-01	8.688E-01	2.097E+00	3.975E+00	7.172E+00	
0Pb-210	Pu-238	9.996E-01	4.659E-18	1.434E-16	8.168E-12	1.612E-11	1.052E-10	1.199E-09	2.171E-08	1.431E-07	7.295E-07	
Pb-210	Pu-238	1.319E-06	2.379E-24	7.324E-23	4.171E-18	8.229E-18	5.373E-17	6.124E-16	1.109E-14	7.307E-14	3.725E-13	
Pb-210	Pu-238	2.100E-04	9.786E-22	3.013E-20	1.716E-15	3.385E-15	2.210E-14	2.519E-13	4.561E-12	3.006E-11	1.532E-10	
Pb-210	Pu-238	1.998E-04	9.310E-22	2.866E-20	1.632E-15	3.221E-15	2.103E-14	2.397E-13	4.339E-12	2.860E-11	1.458E-10	
Pb-210	Pu-238	4.196E-08	1.956E-25	6.021E-24	3.429E-19	6.765E-19	4.417E-18	5.035E-17	9.114E-16	6.007E-15	3.062E-14	
Pb-210	Pu-238	2.000E-07	9.322E-25	2.870E-23	1.634E-18	3.225E-18	2.105E-17	2.400E-16	4.344E-15	2.863E-14	1.460E-13	
Pb-210	Th-230	9.996E-01	3.584E-06	2.486E-05	5.475E-03	7.482E-03	1.727E-02	4.764E-02	1.444E-01	2.935E-01	5.463E-01	
Pb-210	Th-230	2.100E-04	7.527E-10	5.222E-09	1.150E-06	1.571E-06	3.628E-06	1.001E-05	3.033E-05	6.165E-05	1.147E-04	
Pb-210	Th-230	1.998E-04	7.162E-10	4.968E-09	1.094E-06	1.495E-06	3.452E-06	9.520E-06	2.886E-05	5.866E-05	1.092E-04	
Pb-210	Th-230	4.196E-08	1.504E-13	1.044E-12	2.298E-10	3.140E-10	7.250E-10	2.000E-09	6.062E-09	1.232E-08	2.293E-08	
Pb-210	Th-230	2.000E-07	7.170E-13	4.974E-12	1.095E-09	1.497E-09	3.456E-09	9.532E-09	2.889E-08	5.873E-08	1.093E-07	
Pb-210	U-234	9.996E-01	8.251E-12	1.229E-10	4.553E-07	7.523E-07	2.992E-06	1.773E-05	1.505E-04	6.567E-04	2.607E-03	
Pb-210	U-234	2.100E-04	1.733E-15	2.582E-14	9.563E-11	1.580E-10	6.284E-10	3.724E-09	3.161E-08	1.379E-07	5.475E-07	
Pb-210	U-234	1.998E-04	1.649E-15	2.457E-14	9.099E-11	1.503E-10	5.979E-10	3.543E-09	3.007E-08	1.312E-07	5.209E-07	
Pb-210	U-234	4.196E-08	3.464E-19	5.161E-18	1.911E-14	3.158E-14	1.256E-13	7.442E-13	6.317E-12	2.757E-11	1.094E-10	
Pb-210	U-234	2.000E-07	1.651E-18	2.460E-17	9.110E-14	1.505E-13	5.986E-13	3.547E-12	3.011E-11	1.314E-10	5.215E-10	

Pb-210	U-238	1.599E-03	7.464E-21	2.301E-19	1.361E-14	2.708E-14	1.826E-13	2.259E-12	5.170E-11	4.753E-10	3.943E-09
Pb-210	U-238	3.359E-07	1.568E-24	4.834E-23	2.859E-18	5.688E-18	3.836E-17	4.745E-16	1.086E-14	9.983E-14	8.281E-13
Pb-210	U-238	3.196E-07	1.492E-24	4.599E-23	2.721E-18	5.411E-18	3.650E-17	4.514E-16	1.033E-14	9.498E-14	7.879E-13
Pb-210	U-238	6.713E-11	3.104E-28	9.659E-27	5.714E-22	1.137E-21	7.666E-21	9.482E-20	2.170E-18	1.995E-17	1.655E-16
Pb-210	U-238	3.200E-10	1.493E-27	4.604E-26	2.724E-21	5.418E-21	3.654E-20	4.520E-19	1.034E-17	9.510E-17	7.888E-16
Pb-210	U-238	9.980E-01	4.658E-18	1.436E-16	8.495E-12	1.690E-11	1.140E-10	1.410E-09	3.226E-08	2.966E-07	2.460E-06
Pb-210	U-238	2.096E-04	9.783E-22	3.016E-20	1.784E-15	3.549E-15	2.394E-14	2.961E-13	6.777E-12	6.230E-11	5.167E-10

Individual Nuclide Dose Summed Over All Pathways

Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	DOSE(j,t), mrem/yr									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Pb-210	U-238	1.994E-04	9.308E-22	2.870E-20	1.698E-15	3.377E-15	2.277E-14	2.817E-13	6.447E-12	5.927E-11	4.916E-10	
Pb-210	U-238	4.189E-08	1.955E-25	6.027E-24	3.566E-19	7.092E-19	4.783E-18	5.917E-17	1.354E-15	1.245E-14	1.033E-13	
Pb-210	U-238	1.997E-07	9.319E-25	2.873E-23	1.700E-18	3.381E-18	2.280E-17	2.820E-16	6.455E-15	5.934E-14	4.922E-13	
Pb-210	äDOSE(j)		3.585E-06	2.487E-05	5.477E-03	7.486E-03	1.728E-02	4.768E-02	1.446E-01	2.943E-01	5.491E-01	
0Pu-238	Pu-238	1.319E-06	2.500E-07	2.480E-07	2.051E-07	1.972E-07	1.684E-07	1.134E-07	3.465E-08	4.804E-09	9.233E-11	
Pu-238	Pu-238	1.899E-08	3.598E-09	3.570E-09	2.953E-09	2.838E-09	2.423E-09	1.632E-09	4.988E-10	6.915E-11	1.329E-12	
Pu-238	äDOSE(j)		2.536E-07	2.516E-07	2.081E-07	2.000E-07	1.708E-07	1.150E-07	3.515E-08	4.873E-09	9.366E-11	
0U-234	Pu-238	1.319E-06	7.790E-14	2.329E-13	3.607E-12	4.233E-12	6.504E-12	1.083E-11	1.703E-11	1.936E-11	1.970E-11	
0Th-230	Pu-238	1.319E-06	1.028E-18	7.182E-18	1.882E-15	2.658E-15	6.930E-15	2.436E-14	1.105E-13	2.937E-13	6.800E-13	
0Ra-226	Pu-238	1.319E-06	1.259E-20	1.886E-19	7.941E-16	1.345E-15	5.865E-15	4.198E-14	5.010E-13	2.793E-12	1.311E-11	
0Pb-210	Pu-238	1.899E-08	9.958E-26	3.066E-24	1.746E-19	3.445E-19	2.249E-18	2.564E-17	4.641E-16	3.059E-15	1.559E-14	
Pb-210	Pu-238	3.989E-12	1.420E-29	6.440E-28	3.667E-23	7.236E-23	4.724E-22	5.385E-21	9.748E-20	6.425E-19	3.275E-18	
Pb-210	Pu-238	3.795E-12	1.351E-29	6.127E-28	3.489E-23	6.884E-23	4.495E-22	5.124E-21	9.275E-20	6.113E-19	3.116E-18	
Pb-210	Pu-238	7.972E-16	0.000E+00	0.000E+00	7.329E-27	1.446E-26	9.441E-26	1.076E-24	1.948E-23	1.284E-22	6.545E-22	
Pb-210	Pu-238	3.800E-15	0.000E+00	0.000E+00	3.493E-26	6.893E-26	4.500E-25	5.130E-24	9.286E-23	6.120E-22	3.120E-21	
Pb-210	Th-230	1.899E-08	7.660E-14	5.314E-13	1.170E-10	1.599E-10	3.692E-10	1.018E-09	3.087E-09	6.274E-09	1.168E-08	
Pb-210	Th-230	3.989E-12	1.609E-17	1.116E-16	2.458E-14	3.359E-14	7.755E-14	2.139E-13	6.484E-13	1.318E-12	2.453E-12	
Pb-210	Th-230	3.795E-12	1.531E-17	1.062E-16	2.339E-14	3.196E-14	7.378E-14	2.035E-13	6.169E-13	1.254E-12	2.334E-12	
Pb-210	Th-230	7.972E-16	3.215E-21	2.231E-20	4.912E-18	6.713E-18	1.550E-17	4.274E-17	1.296E-16	2.633E-16	4.901E-16	
Pb-210	Th-230	3.800E-15	1.533E-20	1.063E-19	2.341E-17	3.200E-17	7.387E-17	2.037E-16	6.176E-16	1.255E-15	2.336E-15	
Pb-210	U-234	1.899E-08	1.764E-19	2.628E-18	9.732E-15	1.608E-14	6.395E-14	3.790E-13	3.217E-12	1.404E-11	5.572E-11	
Pb-210	U-234	3.989E-12	3.705E-23	5.520E-22	2.044E-18	3.378E-18	1.343E-17	7.960E-17	6.757E-16	2.949E-15	1.170E-14	
Pb-210	U-234	3.795E-12	3.525E-23	5.252E-22	1.945E-18	3.214E-18	1.278E-17	7.573E-17	6.429E-16	2.805E-15	1.113E-14	
Pb-210	U-234	7.972E-16	7.403E-27	1.103E-25	4.085E-22	6.750E-22	2.684E-21	1.591E-20	1.350E-19	5.892E-19	2.339E-18	
Pb-210	U-234	3.800E-15	3.529E-26	5.258E-25	1.947E-21	3.217E-21	1.280E-20	7.583E-20	6.436E-19	2.809E-18	1.115E-17	
Pb-210	U-238	3.039E-11	1.595E-28	4.919E-27	2.910E-22	5.788E-22	3.904E-21	4.828E-20	1.105E-18	1.016E-17	8.427E-17	
Pb-210	U-238	6.383E-15	0.000E+00	0.000E+00	6.112E-26	1.216E-25	8.199E-25	1.014E-23	2.321E-22	2.134E-21	1.770E-20	
Pb-210	U-238	6.073E-15	0.000E+00	0.000E+00	5.815E-26	1.157E-25	7.801E-25	9.649E-24	2.209E-22	2.030E-21	1.684E-20	
Pb-210	U-238	1.276E-18	0.000E+00	0.000E+00	0.000E+00	1.649E-29	1.639E-28	2.027E-27	4.639E-26	4.264E-25	3.537E-24	
Pb-210	U-238	6.080E-18	0.000E+00	0.000E+00	5.822E-29	1.158E-28	7.811E-28	9.661E-27	2.211E-25	2.033E-24	1.686E-23	
Pb-210	U-238	1.896E-08	9.956E-26	3.069E-24	1.816E-19	3.612E-19	2.436E-18	3.013E-17	6.896E-16	6.340E-15	5.259E-14	
Pb-210	U-238	3.983E-12	1.419E-29	6.447E-28	3.814E-23	7.586E-23	5.116E-22	6.328E-21	1.448E-19	1.332E-18	1.105E-17	
Pb-210	U-238	3.789E-12	1.350E-29	6.134E-28	3.629E-23	7.218E-23	4.868E-22	6.021E-21	1.378E-19	1.267E-18	1.051E-17	
Pb-210	U-238	7.959E-16	0.000E+00	0.000E+00	7.622E-27	1.516E-26	1.022E-25	1.265E-24	2.895E-23	2.661E-22	2.207E-21	
Pb-210	U-238	3.794E-15	0.000E+00	0.000E+00	3.633E-26	7.226E-26	4.874E-25	6.028E-24	1.380E-22	1.268E-21	1.052E-20	
Pb-210	äDOSE(j)		7.663E-14	5.316E-13	1.171E-10	1.600E-10	3.694E-10	1.019E-09	3.091E-09	6.291E-09	1.174E-08	
0Pu-238	Pu-238	2.100E-04	3.977E-05	3.946E-05	3.264E-05	3.138E-05	2.679E-05	1.804E-05	5.514E-06	7.644E-07	1.469E-08	
Pu-238	Pu-238	2.771E-10	5.250E-11	5.209E-11	4.309E-11	4.142E-11	3.536E-11	2.382E-11	7.279E-12	1.009E-12	1.939E-14	
Pu-238	äDOSE(j)		3.977E-05	3.946E-05	3.264E-05	3.138E-05	2.679E-05	1.804E-05	5.514E-06	7.644E-07	1.469E-08	
0Ra-226	Pu-238	2.100E-04	5.179E-18	7.755E-17	3.266E-13	5.532E-13	2.412E-12	1.727E-11	2.061E-10	1.149E-09	5.393E-09	

Ra-226	Pu-238	2.771E-10	6.837E-24	1.024E-22	4.311E-19	7.302E-19	3.184E-18	2.279E-17	2.720E-16	1.516E-15	7.119E-15
Ra-226	Pu-238	3.989E-12	9.841E-26	1.474E-24	6.206E-21	1.051E-20	4.583E-20	3.281E-19	3.915E-18	2.183E-17	1.025E-16

Pu-238	äDOSE(j)		3.784E-05	3.754E-05	3.106E-05	2.985E-05	2.549E-05	1.717E-05	5.246E-06	7.273E-07	1.398E-08
0Ra-226	Pu-238	1.998E-04	1.677E-18	2.512E-17	1.058E-13	1.792E-13	7.812E-13	5.592E-12	6.674E-11	3.720E-10	1.747E-09
Ra-226	Pu-238	3.795E-12	3.187E-26	4.772E-25	2.010E-21	3.404E-21	1.484E-20	1.062E-19	1.268E-18	7.069E-18	3.319E-17
Ra-226	Th-230	1.998E-04	7.765E-07	2.329E-06	3.938E-05	4.705E-05	7.757E-05	1.527E-04	3.683E-04	6.972E-04	1.255E-03
Ra-226	Th-230	2.637E-10	1.025E-12	3.074E-12	5.199E-11	6.211E-11	1.024E-10	2.015E-10	4.861E-10	9.203E-10	1.656E-09
Ra-226	Th-230	3.795E-12	1.475E-14	4.425E-14	7.483E-13	8.940E-13	1.474E-12	2.901E-12	6.997E-12	1.325E-11	2.384E-11

Ra-226	Th-230	3.800E-15	2.539E-19	7.615E-19	1.288E-17	1.539E-17	2.536E-17	4.992E-17	1.204E-16	2.280E-16	4.103E-16
Ra-226	U-234	2.000E-07	4.096E-17	2.867E-16	7.962E-14	1.138E-13	3.111E-13	1.223E-12	7.433E-12	2.862E-11	1.066E-10
Ra-226	U-234	2.640E-13	5.407E-23	3.784E-22	1.051E-19	1.502E-19	4.106E-19	1.614E-18	9.811E-18	3.777E-17	1.407E-16

Pa-231	Pu-239	2.284E-09	5.652E-24	3.956E-23	1.102E-20	1.577E-20	4.321E-20	1.710E-19	1.060E-18	4.212E-18	1.669E-17
Pa-231	U-235	9.835E-01	7.416E-06	2.225E-05	3.781E-04	4.522E-04	7.486E-04	1.489E-03	3.705E-03	7.383E-03	1.468E-02
Pa-231	U-235	2.722E-03	2.052E-08	6.157E-08	1.046E-06	1.252E-06	2.072E-06	4.121E-06	1.025E-05	2.043E-05	4.063E-05
Pa-231	U-235	1.376E-02	1.038E-07	3.113E-07	5.290E-06	6.327E-06	1.047E-05	2.083E-05	5.184E-05	1.033E-04	2.054E-04

Individual Nuclide Dose Summed Over All Pathways

Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	DOSE(j,t), mrem/yr									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Pa-231	U-235	3.809E-05		2.872E-10	8.615E-10	1.464E-08	1.751E-08	2.899E-08	5.766E-08	1.435E-07	2.859E-07	5.685E-07
Pa-231	U-235	8.257E-07		6.226E-12	1.868E-11	3.174E-10	3.797E-10	6.285E-10	1.250E-09	3.111E-09	6.199E-09	1.233E-08
Pa-231	U-235	2.285E-09		1.723E-14	5.169E-14	8.786E-13	1.051E-12	1.739E-12	3.460E-12	8.610E-12	1.716E-11	3.411E-11
Pa-231	äDOSE(j)			7.540E-06	2.262E-05	3.844E-04	4.598E-04	7.612E-04	1.514E-03	3.768E-03	7.507E-03	1.493E-02
0Ac-227	Pu-239	5.901E-04		7.128E-20	1.062E-18	3.930E-15	6.493E-15	2.583E-14	1.534E-13	1.320E-12	5.929E-12	2.501E-11
Ac-227	Pu-239	9.829E-01		1.187E-16	1.769E-15	6.546E-12	1.082E-11	4.302E-11	2.554E-10	2.198E-09	9.876E-09	4.166E-08
Ac-227	U-235	9.835E-01		4.819E-07	3.343E-06	7.357E-04	1.005E-03	2.323E-03	6.436E-03	2.001E-02	4.272E-02	8.779E-02
Ac-227	äDOSE(j)			4.819E-07	3.343E-06	7.357E-04	1.005E-03	2.323E-03	6.436E-03	2.001E-02	4.272E-02	8.779E-02
0Ac-227	Pu-239	1.633E-06		1.993E-22	2.969E-21	1.099E-17	1.815E-17	7.220E-17	4.287E-16	3.689E-15	1.658E-14	6.992E-14
Ac-227	Pu-239	8.257E-06		8.239E-22	1.228E-20	4.543E-17	7.505E-17	2.985E-16	1.773E-15	1.525E-14	6.853E-14	2.891E-13
Ac-227	Pu-239	2.720E-03		3.319E-19	4.945E-18	1.830E-14	3.024E-14	1.203E-13	7.141E-13	6.145E-12	2.761E-11	1.165E-10
Ac-227	U-235	2.722E-03		1.347E-09	9.345E-09	2.057E-06	2.811E-06	6.493E-06	1.799E-05	5.594E-05	1.194E-04	2.454E-04
Ac-227	äDOSE(j)			1.347E-09	9.345E-09	2.057E-06	2.811E-06	6.493E-06	1.799E-05	5.594E-05	1.194E-04	2.454E-04
0Pu-239	Pu-239	8.257E-06		1.731E-06	1.731E-06	1.730E-06	1.730E-06	1.729E-06	1.726E-06	1.719E-06	1.706E-06	1.682E-06
Pu-239	Pu-239	2.285E-08		4.791E-09	4.791E-09	4.788E-09	4.787E-09	4.784E-09	4.777E-09	4.757E-09	4.723E-09	4.655E-09
Pu-239	äDOSE(j)			1.736E-06	1.736E-06	1.735E-06	1.734E-06	1.733E-06	1.731E-06	1.723E-06	1.711E-06	1.687E-06
0Ac-227	Pu-239	2.285E-08		2.308E-24	3.439E-23	1.273E-19	2.103E-19	8.363E-19	4.966E-18	4.273E-17	1.920E-16	8.099E-16
Ac-227	Pu-239	4.954E-10		6.112E-26	9.107E-25	3.370E-21	5.568E-21	2.215E-20	1.315E-19	1.132E-18	5.084E-18	2.145E-17
Ac-227	Pu-239	3.806E-05		3.845E-21	5.728E-20	2.120E-16	3.502E-16	1.393E-15	8.271E-15	7.117E-14	3.198E-13	1.349E-12
Ac-227	U-235	3.809E-05		1.560E-11	1.082E-10	2.382E-08	3.256E-08	7.521E-08	2.084E-07	6.479E-07	1.383E-06	2.843E-06
Ac-227	äDOSE(j)			1.560E-11	1.082E-10	2.382E-08	3.256E-08	7.521E-08	2.084E-07	6.479E-07	1.383E-06	2.843E-06
0Pu-239	Pu-239	4.954E-10		1.039E-10	1.039E-10	1.038E-10	1.038E-10	1.037E-10	1.036E-10	1.031E-10	1.024E-10	1.009E-10
Pu-239	Pu-239	1.371E-12		2.875E-13	2.875E-13	2.873E-13	2.872E-13	2.871E-13	2.867E-13	2.854E-13	2.834E-13	2.793E-13
Pu-239	äDOSE(j)			1.042E-10	1.042E-10	1.041E-10	1.041E-10	1.040E-10	1.039E-10	1.034E-10	1.027E-10	1.012E-10
0Ac-227	Pu-239	1.371E-12		1.708E-28	2.545E-27	9.419E-24	1.556E-23	6.190E-23	3.676E-22	3.163E-21	1.421E-20	5.994E-20
Ac-227	Pu-239	2.284E-09		2.846E-25	4.240E-24	1.569E-20	2.592E-20	1.031E-19	6.122E-19	5.268E-18	2.367E-17	9.985E-17
Ac-227	U-235	2.285E-09		1.155E-15	8.012E-15	1.763E-12	2.410E-12	5.567E-12	1.543E-11	4.796E-11	1.024E-10	2.104E-10
Ac-227	äDOSE(j)			1.155E-15	8.012E-15	1.763E-12	2.410E-12	5.567E-12	1.543E-11	4.796E-11	1.024E-10	2.104E-10
0Pu-239	Pu-239	9.829E-01		2.061E-01	2.061E-01	2.059E-01	2.059E-01	2.058E-01	2.055E-01	2.046E-01	2.031E-01	2.002E-01
Pu-239	Pu-239	2.720E-03		5.703E-04	5.703E-04	5.699E-04	5.699E-04	5.695E-04	5.687E-04	5.663E-04	5.622E-04	5.542E-04
Pu-239	äDOSE(j)			2.066E-01	2.066E-01	2.065E-01	2.065E-01	2.063E-01	2.061E-01	2.052E-01	2.037E-01	2.008E-01
0Pu-239	Pu-239	1.375E-02		2.883E-03	2.883E-03	2.881E-03	2.881E-03	2.879E-03	2.875E-03	2.863E-03	2.842E-03	2.802E-03
Pu-239	Pu-239	3.806E-05		7.980E-06	7.980E-06	7.975E-06	7.974E-06	7.969E-06	7.957E-06	7.923E-06	7.866E-06	7.754E-06
Pu-239	äDOSE(j)			2.891E-03	2.891E-03	2.889E-03	2.889E-03	2.887E-03	2.883E-03	2.871E-03	2.850E-03	2.809E-03
0Ac-227	Pu-239	1.375E-02		1.372E-18	2.045E-17	7.566E-14	1.250E-13	4.972E-13	2.952E-12	2.540E-11	1.142E-10	4.815E-10
Ac-227	U-235	1.376E-02		5.570E-09	3.864E-08	8.503E-06	1.162E-05	2.685E-05	7.439E-05	2.313E-04	4.938E-04	1.015E-03
Ac-227	äDOSE(j)			5.570E-09	3.864E-08	8.503E-06	1.162E-05	2.685E-05	7.439E-05	2.313E-04	4.938E-04	1.015E-03
0Pu-239	Pu-239	8.252E-07		1.730E-07	1.730E-07	1.729E-07	1.729E-07	1.728E-07	1.725E-07	1.718E-07	1.705E-07	1.681E-07
Pu-239	Pu-239	2.284E-09		4.789E-10	4.788E-10	4.785E-10	4.784E-10	4.782E-10	4.775E-10	4.754E-10	4.720E-10	4.653E-10
Pu-239	äDOSE(j)			1.735E-07	1.735E-07	1.734E-07	1.733E-07	1.732E-07	1.730E-07	1.723E-07	1.710E-07	1.686E-07

Individual Nuclide Dose Summed Over All Pathways

Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	DOSE(j,t), mrem/yr									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Ac-227	Pu-239	8.252E-07	1.018E-22	1.517E-21	5.613E-18	9.275E-18	3.689E-17	2.190E-16	1.885E-15	8.469E-15	3.572E-14	
Ac-227	U-235	8.257E-07	4.132E-13	2.867E-12	6.308E-10	8.621E-10	1.992E-09	5.519E-09	1.716E-08	3.664E-08	7.528E-08	
Ac-227	äDOSE(j)		4.132E-13	2.867E-12	6.308E-10	8.621E-10	1.992E-09	5.519E-09	1.716E-08	3.664E-08	7.528E-08	
ORu-106	Ru-106	1.000E+00	1.752E+00	8.895E-01	7.686E-08	2.595E-09	3.372E-15	0.000E+00	0.000E+00	0.000E+00	0.000E+00	
OSr-90	Sr-90	1.000E+00	1.027E-01	1.002E-01	5.623E-02	4.985E-02	3.080E-02	9.242E-03	2.496E-04	6.071E-07	3.591E-12	
OTc-99	Tc-99	1.000E+00	7.514E-04	7.513E-04	7.500E-04	7.497E-04	7.485E-04	7.457E-04	7.373E-04	7.234E-04	6.965E-04	
0Th-228	Th-228	1.000E+00	1.487E+01	1.034E+01	1.719E-03	2.805E-04	1.988E-07	2.659E-15	0.000E+00	0.000E+00	0.000E+00	
Th-228	Th-232	1.000E+00	1.147E-01	7.035E-01	1.650E+01	1.705E+01	1.766E+01	1.772E+01	1.772E+01	1.772E+01	1.772E+01	
Th-228	äDOSE(j)		1.498E+01	1.105E+01	1.650E+01	1.705E+01	1.766E+01	1.772E+01	1.772E+01	1.772E+01	1.772E+01	
0Th-230	Th-230	1.319E-06	2.381E-07	2.381E-07	2.381E-07	2.381E-07	2.380E-07	2.379E-07	2.376E-07	2.370E-07	2.360E-07	
Th-230	Th-230	1.899E-08	3.428E-09	3.428E-09	3.427E-09	3.427E-09	3.426E-09	3.425E-09	3.420E-09	3.412E-09	3.396E-09	
Th-230	äDOSE(j)		2.416E-07	2.416E-07	2.415E-07	2.415E-07	2.415E-07	2.413E-07	2.410E-07	2.405E-07	2.394E-07	
0Th-230	Th-230	2.100E-04	3.789E-05	3.789E-05	3.788E-05	3.788E-05	3.788E-05	3.786E-05	3.781E-05	3.772E-05	3.755E-05	
Th-230	Th-230	2.771E-10	5.002E-11	5.002E-11	5.001E-11	5.000E-11	5.000E-11	4.997E-11	4.990E-11	4.979E-11	4.956E-11	
Th-230	äDOSE(j)		3.789E-05	3.789E-05	3.788E-05	3.788E-05	3.788E-05	3.786E-05	3.781E-05	3.772E-05	3.755E-05	
0Th-230	Th-230	3.989E-12	7.200E-13	7.200E-13	7.198E-13	7.198E-13	7.196E-13	7.193E-13	7.183E-13	7.167E-13	7.134E-13	
Th-230	Th-230	1.998E-04	3.605E-05	3.605E-05	3.604E-05	3.604E-05	3.604E-05	3.602E-05	3.597E-05	3.589E-05	3.572E-05	
Th-230	äDOSE(j)		3.605E-05	3.605E-05	3.604E-05	3.604E-05	3.604E-05	3.602E-05	3.597E-05	3.589E-05	3.572E-05	
0Th-230	Th-230	2.637E-10	4.759E-11	4.759E-11	4.758E-11	4.758E-11	4.757E-11	4.754E-11	4.748E-11	4.737E-11	4.715E-11	
Th-230	Th-230	3.795E-12	6.850E-13	6.850E-13	6.848E-13	6.848E-13	6.847E-13	6.844E-13	6.834E-13	6.818E-13	6.787E-13	
Th-230	äDOSE(j)		4.827E-11	4.827E-11	4.826E-11	4.826E-11	4.825E-11	4.823E-11	4.816E-11	4.805E-11	4.783E-11	
0Th-230	Th-230	4.196E-08	7.573E-09	7.572E-09	7.571E-09	7.570E-09	7.569E-09	7.566E-09	7.555E-09	7.538E-09	7.503E-09	
Th-230	Th-230	5.538E-14	9.996E-15	9.996E-15	9.993E-15	9.993E-15	9.991E-15	9.987E-15	9.973E-15	9.950E-15	9.904E-15	
Th-230	äDOSE(j)		7.573E-09	7.572E-09	7.571E-09	7.570E-09	7.569E-09	7.566E-09	7.555E-09	7.538E-09	7.503E-09	
0Th-230	Th-230	7.972E-16	1.439E-16	1.439E-16	1.438E-16	1.438E-16	1.438E-16	1.437E-16	1.435E-16	1.432E-16	1.426E-16	
Th-230	Th-230	2.000E-07	3.610E-08	3.610E-08	3.609E-08	3.609E-08	3.608E-08	3.606E-08	3.601E-08	3.593E-08	3.577E-08	
Th-230	äDOSE(j)		3.610E-08	3.610E-08	3.609E-08	3.609E-08	3.608E-08	3.606E-08	3.601E-08	3.593E-08	3.577E-08	
0Th-230	Th-230	2.640E-13	4.765E-14	4.765E-14	4.764E-14	4.763E-14	4.762E-14	4.760E-14	4.754E-14	4.743E-14	4.721E-14	
Th-230	Th-230	3.800E-15	6.858E-16	6.858E-16	6.857E-16	6.856E-16	6.855E-16	6.852E-16	6.842E-16	6.827E-16	6.795E-16	
Th-230	äDOSE(j)		4.833E-14	4.833E-14	4.832E-14	4.832E-14	4.831E-14	4.829E-14	4.822E-14	4.811E-14	4.789E-14	
0Th-232	Th-232	1.000E+00	1.934E-01	1.934E-01	1.934E-01	1.934E-01	1.934E-01	1.934E-01	1.934E-01	1.934E-01	1.934E-01	
ORa-228	Th-232	1.000E+00	5.951E-01	1.694E+00	9.799E+00	1.001E+01	1.025E+01	1.027E+01	1.027E+01	1.027E+01	1.027E+01	
OU-234	U-234	1.319E-06	5.533E-08	5.533E-08	5.532E-08	5.532E-08	5.532E-08	5.531E-08	5.528E-08	5.524E-08	5.516E-08	
U-234	U-234	1.899E-08	7.964E-10	7.964E-10	7.963E-10	7.963E-10	7.962E-10	7.961E-10	7.958E-10	7.952E-10	7.940E-10	
U-234	äDOSE(j)		5.612E-08	5.612E-08	5.612E-08	5.612E-08	5.611E-08	5.611E-08	5.608E-08	5.604E-08	5.595E-08	

Individual Nuclide Dose Summed Over All Pathways

Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	DOSE(j,t), mrem/yr									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
U-234	U-234	2.100E-04	8.804E-06	8.804E-06	8.803E-06	8.803E-06	8.802E-06	8.801E-06	8.797E-06	8.790E-06	8.777E-06	
U-234	U-234	2.771E-10	1.162E-11	1.162E-11	1.162E-11	1.162E-11	1.162E-11	1.162E-11	1.161E-11	1.160E-11	1.159E-11	
U-234	äDOSE(j)		8.804E-06	8.804E-06	8.803E-06	8.803E-06	8.802E-06	8.801E-06	8.797E-06	8.791E-06	8.777E-06	
0U-234	U-234	3.989E-12	1.673E-13	1.673E-13	1.673E-13	1.673E-13	1.672E-13	1.672E-13	1.671E-13	1.670E-13	1.668E-13	
U-234	U-234	1.998E-04	8.376E-06	8.376E-06	8.375E-06	8.375E-06	8.375E-06	8.374E-06	8.370E-06	8.363E-06	8.351E-06	
U-234	äDOSE(j)		8.376E-06	8.376E-06	8.375E-06	8.375E-06	8.375E-06	8.374E-06	8.370E-06	8.363E-06	8.351E-06	
0U-234	U-234	2.637E-10	1.106E-11	1.106E-11	1.106E-11	1.106E-11	1.105E-11	1.105E-11	1.105E-11	1.104E-11	1.102E-11	
U-234	U-234	3.795E-12	1.591E-13	1.591E-13	1.591E-13	1.591E-13	1.591E-13	1.591E-13	1.590E-13	1.589E-13	1.587E-13	
U-234	äDOSE(j)		1.122E-11	1.122E-11	1.121E-11	1.121E-11	1.121E-11	1.121E-11	1.121E-11	1.120E-11	1.118E-11	
0U-234	U-234	4.196E-08	1.759E-09	1.759E-09	1.759E-09	1.759E-09	1.759E-09	1.759E-09	1.758E-09	1.757E-09	1.754E-09	
U-234	U-234	5.538E-14	2.322E-15	2.322E-15	2.322E-15	2.322E-15	2.322E-15	2.322E-15	2.321E-15	2.319E-15	2.315E-15	
U-234	äDOSE(j)		1.759E-09	1.759E-09	1.759E-09	1.759E-09	1.759E-09	1.759E-09	1.758E-09	1.757E-09	1.754E-09	
0U-234	U-234	7.972E-16	3.343E-17	3.343E-17	3.343E-17	3.342E-17	3.342E-17	3.342E-17	3.340E-17	3.338E-17	3.333E-17	
U-234	U-234	2.000E-07	8.386E-09	8.386E-09	8.386E-09	8.385E-09	8.385E-09	8.384E-09	8.380E-09	8.374E-09	8.361E-09	
U-234	äDOSE(j)		8.386E-09	8.386E-09	8.386E-09	8.385E-09	8.385E-09	8.384E-09	8.380E-09	8.374E-09	8.361E-09	
0U-234	U-234	2.640E-13	1.107E-14	1.107E-14	1.107E-14	1.107E-14	1.107E-14	1.107E-14	1.106E-14	1.105E-14	1.104E-14	
U-234	U-234	3.800E-15	1.593E-16	1.593E-16	1.593E-16	1.593E-16	1.593E-16	1.593E-16	1.592E-16	1.591E-16	1.589E-16	
U-234	äDOSE(j)		1.123E-14	1.123E-14	1.123E-14	1.123E-14	1.123E-14	1.123E-14	1.122E-14	1.121E-14	1.120E-14	
0U-235	U-235	2.722E-03	4.015E-03	4.015E-03	4.015E-03	4.015E-03	4.015E-03	4.015E-03	4.015E-03	4.014E-03	4.014E-03	
U-235	U-235	1.376E-02	2.030E-02	2.030E-02	2.030E-02	2.030E-02	2.030E-02	2.030E-02	2.030E-02	2.030E-02	2.029E-02	
U-235	äDOSE(j)		2.431E-02	2.431E-02	2.431E-02	2.431E-02	2.431E-02	2.431E-02	2.431E-02	2.431E-02	2.431E-02	
0U-235	U-235	3.809E-05	5.618E-05	5.618E-05	5.618E-05	5.618E-05	5.618E-05	5.618E-05	5.617E-05	5.617E-05	5.617E-05	
U-235	U-235	8.257E-07	1.218E-06	1.218E-06	1.218E-06	1.218E-06	1.218E-06	1.218E-06	1.218E-06	1.218E-06	1.218E-06	
U-235	äDOSE(j)		5.739E-05	5.739E-05	5.739E-05	5.739E-05	5.739E-05	5.739E-05	5.739E-05	5.739E-05	5.738E-05	
0U-235	U-235	2.285E-09	3.371E-09	3.371E-09	3.371E-09	3.371E-09	3.371E-09	3.371E-09	3.371E-09	3.370E-09	3.370E-09	
0U-238	U-238	5.450E-07	2.043E-08	2.043E-08	2.043E-08	2.043E-08	2.043E-08	2.043E-08	2.043E-08	2.043E-08	2.042E-08	
U-238	U-238	1.599E-03	2.598E-02	2.598E-02	2.598E-02	2.598E-02	2.598E-02	2.598E-02	2.598E-02	2.598E-02	2.598E-02	
U-238	äDOSE(j)		2.598E-02	2.598E-02	2.598E-02	2.598E-02	2.598E-02	2.598E-02	2.598E-02	2.598E-02	2.598E-02	
0U-238	U-238	2.111E-09	3.430E-08	3.430E-08	3.430E-08	3.430E-08	3.430E-08	3.430E-08	3.430E-08	3.430E-08	3.429E-08	
U-238	U-238	3.039E-11	4.937E-10	4.937E-10	4.937E-10	4.937E-10	4.937E-10	4.937E-10	4.937E-10	4.937E-10	4.936E-10	
U-238	äDOSE(j)		3.479E-08	3.479E-08	3.479E-08	3.479E-08	3.479E-08	3.479E-08	3.479E-08	3.479E-08	3.479E-08	
0U-238	U-238	3.359E-07	5.458E-06	5.458E-06	5.458E-06	5.458E-06	5.458E-06	5.458E-06	5.458E-06	5.457E-06	5.457E-06	
U-238	U-238	4.434E-13	7.205E-12	7.205E-12	7.205E-12	7.205E-12	7.204E-12	7.204E-12	7.204E-12	7.204E-12	7.203E-12	
U-238	äDOSE(j)		5.458E-06	5.458E-06	5.458E-06	5.458E-06	5.458E-06	5.458E-06	5.458E-06	5.457E-06	5.457E-06	
0U-238	U-238	6.383E-15	1.037E-13	1.037E-13	1.037E-13	1.037E-13	1.037E-13	1.037E-13	1.037E-13	1.037E-13	1.037E-13	
U-238	U-238	3.196E-07	5.193E-06	5.193E-06	5.193E-06	5.193E-06	5.193E-06	5.193E-06	5.193E-06	5.192E-06	5.192E-06	
U-238	äDOSE(j)		5.193E-06	5.193E-06	5.193E-06	5.193E-06	5.193E-06	5.193E-06	5.193E-06	5.192E-06	5.192E-06	

Individual Nuclide Dose Summed Over All Pathways

Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	DOSE(j,t), mrem/yr									
(j)	(i)		t= 0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03	
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
U-238	U-238	4.219E-13	6.855E-12	6.855E-12	6.855E-12	6.854E-12	6.854E-12	6.854E-12	6.854E-12	6.854E-12	6.853E-12	
U-238	U-238	6.073E-15	9.866E-14	9.866E-14	9.866E-14	9.866E-14	9.866E-14	9.866E-14	9.866E-14	9.866E-14	9.865E-14	9.864E-14
U-238	äDOSE(j)		6.953E-12	6.953E-12	6.953E-12	6.953E-12	6.953E-12	6.953E-12	6.953E-12	6.953E-12	6.952E-12	
0U-238	U-238	6.713E-11	1.091E-09	1.091E-09	1.091E-09	1.091E-09	1.091E-09	1.091E-09	1.091E-09	1.091E-09	1.091E-09	1.091E-09
U-238	U-238	8.862E-17	1.440E-15	1.440E-15	1.440E-15	1.440E-15	1.440E-15	1.440E-15	1.440E-15	1.440E-15	1.440E-15	1.439E-15
U-238	äDOSE(j)		1.091E-09	1.091E-09	1.091E-09	1.091E-09	1.091E-09	1.091E-09	1.091E-09	1.091E-09	1.091E-09	1.091E-09
0U-238	U-238	1.276E-18	2.072E-17	2.072E-17	2.072E-17	2.072E-17	2.072E-17	2.072E-17	2.072E-17	2.072E-17	2.072E-17	2.072E-17
U-238	U-238	3.200E-10	5.199E-09	5.199E-09	5.199E-09	5.199E-09	5.199E-09	5.199E-09	5.199E-09	5.199E-09	5.198E-09	
U-238	äDOSE(j)		5.199E-09	5.199E-09	5.199E-09	5.199E-09	5.199E-09	5.199E-09	5.199E-09	5.199E-09	5.198E-09	
0U-238	U-238	4.224E-16	6.863E-15	6.863E-15	6.863E-15	6.863E-15	6.863E-15	6.863E-15	6.863E-15	6.863E-15	6.862E-15	6.862E-15
U-238	U-238	6.080E-18	9.878E-17	9.878E-17	9.878E-17	9.878E-17	9.878E-17	9.878E-17	9.878E-17	9.878E-17	9.877E-17	9.876E-17
U-238	äDOSE(j)		6.962E-15	6.962E-15	6.962E-15	6.962E-15	6.962E-15	6.962E-15	6.962E-15	6.962E-15	6.961E-15	6.960E-15
0U-238	U-238	9.980E-01	3.279E-01	3.279E-01	3.279E-01	3.279E-01	3.279E-01	3.279E-01	3.279E-01	3.279E-01	3.278E-01	
U-238	U-238	1.317E-06	4.328E-07	4.328E-07	4.328E-07	4.328E-07	4.328E-07	4.328E-07	4.328E-07	4.328E-07	4.327E-07	
U-238	äDOSE(j)		3.279E-01	3.279E-01	3.279E-01	3.279E-01	3.279E-01	3.279E-01	3.279E-01	3.279E-01	3.278E-01	
0U-238	U-238	1.896E-08	6.230E-09	6.230E-09	6.230E-09	6.230E-09	6.230E-09	6.230E-09	6.230E-09	6.230E-09	6.229E-09	
U-238	U-238	2.096E-04	6.887E-05	6.887E-05	6.887E-05	6.887E-05	6.887E-05	6.887E-05	6.887E-05	6.887E-05	6.887E-05	6.886E-05
U-238	äDOSE(j)		6.888E-05	6.888E-05	6.888E-05	6.888E-05	6.888E-05	6.888E-05	6.888E-05	6.888E-05	6.887E-05	6.887E-05
0U-238	U-238	2.767E-10	9.091E-11	9.091E-11	9.091E-11	9.091E-11	9.091E-11	9.091E-11	9.091E-11	9.091E-11	9.090E-11	
U-238	U-238	3.983E-12	1.309E-12	1.309E-12	1.309E-12	1.309E-12	1.309E-12	1.309E-12	1.309E-12	1.309E-12	1.308E-12	1.308E-12
U-238	äDOSE(j)		9.222E-11	9.222E-11	9.222E-11	9.222E-11	9.222E-11	9.222E-11	9.222E-11	9.222E-11	9.221E-11	9.220E-11
0U-238	U-238	1.994E-04	6.553E-05	6.553E-05	6.553E-05	6.553E-05	6.553E-05	6.553E-05	6.553E-05	6.552E-05	6.552E-05	6.552E-05
U-238	U-238	2.633E-10	8.650E-11	8.650E-11	8.650E-11	8.650E-11	8.650E-11	8.650E-11	8.650E-11	8.649E-11	8.648E-11	
U-238	äDOSE(j)		6.553E-05	6.553E-05	6.553E-05	6.553E-05	6.553E-05	6.553E-05	6.553E-05	6.553E-05	6.552E-05	6.552E-05
0U-238	U-238	3.789E-12	1.245E-12	1.245E-12	1.245E-12	1.245E-12	1.245E-12	1.245E-12	1.245E-12	1.245E-12	1.245E-12	1.245E-12
U-238	U-238	4.189E-08	1.376E-08	1.376E-08	1.376E-08	1.376E-08	1.376E-08	1.376E-08	1.376E-08	1.376E-08	1.376E-08	1.376E-08
U-238	äDOSE(j)		1.377E-08	1.377E-08	1.376E-08	1.376E-08	1.376E-08	1.376E-08	1.376E-08	1.376E-08	1.376E-08	1.376E-08
0U-238	U-238	5.530E-14	1.817E-14	1.817E-14	1.817E-14	1.817E-14	1.817E-14	1.817E-14	1.817E-14	1.817E-14	1.816E-14	
U-238	U-238	7.959E-16	2.615E-16	2.615E-16	2.615E-16	2.615E-16	2.615E-16	2.615E-16	2.615E-16	2.615E-16	2.615E-16	2.615E-16
U-238	äDOSE(j)		1.843E-14	1.843E-14	1.843E-14	1.843E-14	1.843E-14	1.843E-14	1.843E-14	1.843E-14	1.843E-14	1.843E-14
0U-238	U-238	1.997E-07	6.561E-08	6.561E-08	6.561E-08	6.561E-08	6.561E-08	6.561E-08	6.561E-08	6.560E-08	6.559E-08	
U-238	U-238	2.636E-13	8.660E-14	8.660E-14	8.660E-14	8.660E-14	8.660E-14	8.660E-14	8.660E-14	8.660E-14	8.659E-14	8.659E-14
U-238	äDOSE(j)		6.561E-08	6.561E-08	6.561E-08	6.561E-08	6.561E-08	6.561E-08	6.561E-08	6.560E-08	6.559E-08	
0U-238	U-238	3.794E-15	1.247E-15	1.247E-15	1.247E-15	1.247E-15	1.247E-15	1.247E-15	1.247E-15	1.246E-15	1.246E-15	1.246E-15
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii

THF(i) is the thread fraction of the parent nuclide.

Individual Nuclide Soil Concentration
Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	S(j,t), pCi/g									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Am-241	Am-241	1.000E+00		1.000E+01	9.984E+00	9.607E+00	9.530E+00	9.229E+00	8.518E+00	6.696E+00	4.484E+00	2.010E+00
0Np-237	Am-241	1.000E+00		0.000E+00	3.230E-06	7.922E-05	9.469E-05	1.553E-04	2.987E-04	6.658E-04	1.112E-03	1.610E-03
Np-237	Np-237	1.000E+00		1.000E+01	1.000E+01	1.000E+01	1.000E+01	1.000E+01	1.000E+01	9.999E+00	9.998E+00	9.996E+00
Np-237	äS(j):			1.000E+01	1.000E+01	1.000E+01	1.000E+01	1.000E+01	1.000E+01	1.000E+01	9.999E+00	9.998E+00
0U-233	Am-241	1.000E+00		0.000E+00	7.034E-12	4.340E-09	6.234E-09	1.713E-08	6.675E-08	3.864E-07	1.369E-06	4.396E-06
U-233	Np-237	1.000E+00		0.000E+00	4.354E-05	1.088E-03	1.306E-03	2.177E-03	4.353E-03	1.088E-02	2.174E-02	4.343E-02
U-233	äS(j):			0.000E+00	4.354E-05	1.088E-03	1.306E-03	2.177E-03	4.353E-03	1.088E-02	2.174E-02	4.344E-02
0Th-229	Am-241	1.000E+00		0.000E+00	2.215E-16	3.425E-12	5.906E-12	2.711E-11	2.124E-10	3.121E-09	2.263E-08	1.510E-07
Th-229	Np-237	1.000E+00		0.000E+00	2.056E-09	1.284E-06	1.848E-06	5.131E-06	2.049E-05	1.274E-04	5.055E-04	1.989E-03
Th-229	äS(j):			0.000E+00	2.056E-09	1.284E-06	1.848E-06	5.131E-06	2.049E-05	1.274E-04	5.056E-04	1.989E-03
0Co-60	Co-60	1.000E+00		1.000E+01	8.768E+00	3.735E-01	1.935E-01	1.395E-02	1.947E-05	5.286E-14	2.795E-28	0.000E+00
0Cs-134	Cs-134	1.000E+00		1.000E+01	7.148E+00	2.266E-03	4.229E-04	5.134E-07	2.636E-14	3.566E-36	0.000E+00	0.000E+00
0Cs-137	Cs-137	1.000E+00		1.000E+01	9.773E+00	5.630E+00	5.019E+00	3.170E+00	1.005E+00	3.201E-02	1.025E-04	1.050E-09
0Eu-152	Eu-152	7.210E-01		7.210E+00	6.850E+00	2.004E+00	1.552E+00	5.573E-01	4.307E-02	1.989E-05	5.485E-11	4.172E-22
Eu-152	Eu-152	2.790E-01		2.790E+00	2.651E+00	7.756E-01	6.005E-01	2.156E-01	1.667E-02	7.695E-06	2.122E-11	1.614E-22
Eu-152	äS(j):			1.000E+01	9.501E+00	2.780E+00	2.152E+00	7.729E-01	5.974E-02	2.758E-05	7.607E-11	5.787E-22
0Gd-152	Eu-152	2.790E-01		0.000E+00	1.746E-14	2.525E-13	2.744E-13	3.227E-13	3.476E-13	3.497E-13	3.497E-13	3.497E-13
0Sm-148	Eu-152	2.790E-01		0.000E+00	8.716E-31	3.774E-28	5.081E-28	1.107E-27	2.791E-27	7.981E-27	1.664E-26	3.395E-26
0Nd-144	Eu-152	2.790E-01		0.000E+00	0.000E+00	1.037E-42	1.710E-42	6.558E-42	3.592E-41	2.804E-40	1.212E-39	5.040E-39
0Eu-154	Eu-154	1.000E+00		1.000E+01	9.225E+00	1.331E+00	8.893E-01	1.772E-01	3.139E-03	1.746E-08	3.048E-17	9.290E-35
0Eu-155	Eu-155	1.000E+00		1.000E+01	8.645E+00	2.626E-01	1.268E-01	6.897E-03	4.757E-06	1.560E-15	2.435E-31	0.000E+00
0H-3	H-3	1.000E+00		1.000E+01	8.791E+00	3.987E-01	2.093E-01	1.590E-02	2.527E-05	1.015E-13	1.030E-27	0.000E+00
0I-129	I-129	1.000E+00		1.000E+01	1.000E+01	9.990E+00	9.988E+00	9.979E+00	9.959E+00	9.897E+00	9.795E+00	9.594E+00
0Mn-54	Mn-54	1.000E+00		1.000E+01	4.444E+00	1.560E-08	2.703E-10	2.434E-17	5.926E-35	0.000E+00	0.000E+00	0.000E+00
0Na-22	Na-22	1.000E+00		1.000E+01	7.661E+00	1.281E-02	3.381E-03	1.641E-05	2.694E-11	1.191E-28	0.000E+00	0.000E+00
0Ni-63	Ni-63	1.000E+00		1.000E+01	9.931E+00	8.410E+00	8.124E+00	7.074E+00	5.003E+00	1.771E+00	3.136E-01	9.833E-03
0Pu-238	Pu-238	1.850E-09		1.850E-08	1.835E-08	1.518E-08	1.459E-08	1.246E-08	8.393E-09	2.565E-09	3.556E-10	6.834E-12
Pu-238	Pu-238	9.996E-01		9.996E+00	9.917E+00	8.204E+00	7.886E+00	6.733E+00	4.535E+00	1.386E+00	1.921E-01	3.693E-03
Pu-238	äS(j):			9.996E+00	9.917E+00	8.204E+00	7.886E+00	6.733E+00	4.535E+00	1.386E+00	1.921E-01	3.693E-03
0U-234	Pu-238	9.996E-01		0.000E+00	2.811E-05	6.402E-04	7.537E-04	1.166E-03	1.950E-03	3.074E-03	3.498E-03	3.560E-03

Individual Nuclide Soil Concentration
Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	S(j,t), pCi/g									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
U-234	Pu-238	1.899E-08	0.000E+00	5.341E-13	1.216E-11	1.432E-11	2.215E-11	3.706E-11	5.841E-11	6.646E-11	6.764E-11	
U-234	Pu-238	2.100E-04	0.000E+00	5.905E-09	1.345E-07	1.583E-07	2.448E-07	4.097E-07	6.457E-07	7.348E-07	7.478E-07	
U-234	Pu-238	2.771E-10	0.000E+00	7.794E-15	1.775E-13	2.090E-13	3.232E-13	5.408E-13	8.524E-13	9.699E-13	9.871E-13	
U-234	Pu-238	3.989E-12	0.000E+00	1.122E-16	2.555E-15	3.008E-15	4.652E-15	7.784E-15	1.227E-14	1.396E-14	1.421E-14	
U-234	Pu-238	1.998E-04	0.000E+00	5.618E-09	1.279E-07	1.506E-07	2.329E-07	3.898E-07	6.144E-07	6.991E-07	7.115E-07	
U-234	Pu-238	2.637E-10	0.000E+00	7.415E-15	1.689E-13	1.988E-13	3.075E-13	5.145E-13	8.110E-13	9.228E-13	9.391E-13	
U-234	Pu-238	3.795E-12	0.000E+00	1.067E-16	2.431E-15	2.862E-15	4.426E-15	7.406E-15	1.167E-14	1.328E-14	1.352E-14	
U-234	Pu-238	4.196E-08	0.000E+00	1.180E-12	2.687E-11	3.164E-11	4.893E-11	8.187E-11	1.290E-10	1.468E-10	1.494E-10	
U-234	Pu-238	5.538E-14	0.000E+00	1.558E-18	3.547E-17	4.176E-17	6.458E-17	1.081E-16	1.703E-16	1.938E-16	1.973E-16	
U-234	Pu-238	7.972E-16	0.000E+00	2.242E-20	5.106E-19	6.011E-19	9.296E-19	1.556E-18	2.452E-18	2.790E-18	2.839E-18	
U-234	Pu-238	2.000E-07	0.000E+00	5.625E-12	1.281E-10	1.508E-10	2.332E-10	3.903E-10	6.151E-10	6.999E-10	7.123E-10	
U-234	Pu-238	2.640E-13	0.000E+00	7.424E-18	1.691E-16	1.991E-16	3.078E-16	5.151E-16	8.119E-16	9.239E-16	9.403E-16	
U-234	Pu-238	3.800E-15	0.000E+00	1.069E-19	2.434E-18	2.865E-18	4.431E-18	7.415E-18	1.169E-17	1.330E-17	1.353E-17	
U-234	U-234	9.996E-01	9.996E+00	9.996E+00	9.995E+00	9.995E+00	9.994E+00	9.993E+00	9.988E+00	9.981E+00	9.966E+00	
U-234	U-238	1.599E-03	0.000E+00	4.516E-08	1.129E-06	1.355E-06	2.258E-06	4.515E-06	1.128E-05	2.256E-05	4.508E-05	
U-234	U-238	2.111E-09	0.000E+00	5.961E-14	1.490E-12	1.788E-12	2.980E-12	5.960E-12	1.490E-11	2.978E-11	5.951E-11	
U-234	U-238	3.039E-11	0.000E+00	8.580E-16	2.145E-14	2.574E-14	4.289E-14	8.578E-14	2.144E-13	4.286E-13	8.566E-13	
U-234	U-238	3.359E-07	0.000E+00	9.485E-12	2.371E-10	2.845E-10	4.742E-10	9.483E-10	2.370E-09	4.739E-09	9.470E-09	
U-234	U-238	4.434E-13	0.000E+00	1.252E-17	3.130E-16	3.756E-16	6.259E-16	1.252E-15	3.129E-15	6.255E-15	1.250E-14	
U-234	U-238	6.383E-15	0.000E+00	1.802E-19	4.505E-18	5.406E-18	9.010E-18	1.802E-17	4.503E-17	9.003E-17	1.799E-16	
U-234	U-238	3.196E-07	0.000E+00	9.024E-12	2.256E-10	2.707E-10	4.512E-10	9.023E-10	2.255E-09	4.508E-09	9.010E-09	
U-234	U-238	4.219E-13	0.000E+00	1.191E-17	2.978E-16	3.573E-16	5.955E-16	1.191E-15	2.977E-15	5.951E-15	1.189E-14	
U-234	U-238	6.073E-15	0.000E+00	1.715E-19	4.286E-18	5.143E-18	8.572E-18	1.714E-17	4.285E-17	8.566E-17	1.712E-16	
U-234	U-238	6.713E-11	0.000E+00	1.895E-15	4.738E-14	5.686E-14	9.476E-14	1.895E-13	4.737E-13	9.470E-13	1.892E-12	
U-234	U-238	8.862E-17	0.000E+00	2.502E-21	6.255E-20	7.506E-20	1.251E-19	2.502E-19	6.252E-19	1.250E-18	2.498E-18	
U-234	U-238	1.276E-18	0.000E+00	3.601E-23	9.003E-22	1.080E-21	1.801E-21	3.601E-21	9.000E-21	1.799E-20	3.596E-20	
U-234	U-238	3.200E-10	0.000E+00	9.035E-15	2.259E-13	2.710E-13	4.517E-13	9.033E-13	2.258E-12	4.514E-12	9.020E-12	
U-234	U-238	4.224E-16	0.000E+00	1.193E-20	2.981E-19	3.578E-19	5.963E-19	1.192E-18	2.980E-18	5.958E-18	1.191E-17	
U-234	U-238	6.080E-18	0.000E+00	1.717E-22	4.291E-21	5.150E-21	8.582E-21	1.716E-20	4.290E-20	8.576E-20	1.714E-19	
U-234	U-238	9.980E-01	0.000E+00	2.818E-05	7.044E-04	8.453E-04	1.409E-03	2.817E-03	7.042E-03	1.408E-02	2.813E-02	
U-234	U-238	1.317E-06	0.000E+00	3.719E-11	9.298E-10	1.116E-09	1.860E-09	3.719E-09	9.295E-09	1.858E-08	3.713E-08	
U-234	U-238	1.896E-08	0.000E+00	5.354E-13	1.338E-11	1.606E-11	2.677E-11	5.353E-11	1.338E-10	2.675E-10	5.345E-10	
U-234	U-238	2.096E-04	0.000E+00	5.918E-09	1.480E-07	1.775E-07	2.959E-07	5.918E-07	1.479E-06	2.957E-06	5.909E-06	
U-234	U-238	2.767E-10	0.000E+00	7.812E-15	1.953E-13	2.344E-13	3.906E-13	7.811E-13	1.952E-12	3.903E-12	7.800E-12	
U-234	U-238	3.983E-12	0.000E+00	1.125E-16	2.811E-15	3.373E-15	5.622E-15	1.124E-14	2.810E-14	5.618E-14	1.123E-13	
U-234	U-238	1.994E-04	0.000E+00	5.631E-09	1.408E-07	1.689E-07	2.815E-07	5.630E-07	1.407E-06	2.813E-06	5.622E-06	
U-234	U-238	2.633E-10	0.000E+00	7.433E-15	1.858E-13	2.230E-13	3.716E-13	7.432E-13	1.857E-12	3.713E-12	7.421E-12	
U-234	U-238	3.789E-12	0.000E+00	1.070E-16	2.675E-15	3.209E-15	5.349E-15	1.070E-14	2.674E-14	5.345E-14	1.068E-13	
U-234	U-238	4.189E-08	0.000E+00	1.183E-12	2.957E-11	3.548E-11	5.913E-11	1.183E-10	2.956E-10	5.909E-10	1.181E-09	
U-234	U-238	5.530E-14	0.000E+00	1.561E-18	3.903E-17	4.683E-17	7.806E-17	1.561E-16	3.902E-16	7.800E-16	1.559E-15	

U-234	U-238	7.959E-16	0.000E+00	2.247E-20	5.618E-19	6.741E-19	1.124E-18	2.247E-18	5.616E-18	1.123E-17	2.244E-17
U-234	U-238	1.997E-07	0.000E+00	5.638E-12	1.409E-10	1.691E-10	2.819E-10	5.637E-10	1.409E-09	2.817E-09	5.629E-09
U-234	U-238	2.636E-13	0.000E+00	7.442E-18	1.860E-16	2.232E-16	3.721E-16	7.441E-16	1.860E-15	3.718E-15	7.430E-15
U-234	U-238	3.794E-15	0.000E+00	1.071E-19	2.678E-18	3.213E-18	5.355E-18	1.071E-17	2.677E-17	5.352E-17	1.069E-16
U-234	äS(j):		9.996E+00	9.996E+00	9.996E+00	9.997E+00	9.997E+00	9.998E+00	9.998E+00	9.998E+00	9.998E+00
0Th-230	Pu-238	9.996E-01	0.000E+00	1.294E-10	7.600E-08	1.081E-07	2.855E-07	1.013E-06	4.625E-06	1.231E-05	2.853E-05
Th-230	Pu-238	1.899E-08	0.000E+00	2.459E-18	1.444E-15	2.053E-15	5.425E-15	1.926E-14	8.787E-14	2.339E-13	5.420E-13
Th-230	Pu-238	2.100E-04	0.000E+00	2.718E-14	1.596E-11	2.270E-11	5.997E-11	2.129E-10	9.714E-10	2.586E-09	5.992E-09

Individual Nuclide Soil Concentration
 Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	S(j,t), pCi/g									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Th-230	Pu-238	2.771E-10	0.000E+00	3.588E-20	2.107E-17	2.996E-17	7.916E-17	2.810E-16	1.282E-15	3.414E-15	7.909E-15	
Th-230	Pu-238	3.989E-12	0.000E+00	5.165E-22	3.033E-19	4.313E-19	1.139E-18	4.044E-18	1.846E-17	4.914E-17	1.138E-16	
Th-230	Pu-238	1.998E-04	0.000E+00	2.586E-14	1.519E-11	2.159E-11	5.706E-11	2.025E-10	9.242E-10	2.460E-09	5.701E-09	
Th-230	Pu-238	2.637E-10	0.000E+00	3.414E-20	2.005E-17	2.851E-17	7.532E-17	2.673E-16	1.220E-15	3.248E-15	7.525E-15	
Th-230	Pu-238	3.795E-12	0.000E+00	4.914E-22	2.886E-19	4.103E-19	1.084E-18	3.848E-18	1.756E-17	4.675E-17	1.083E-16	
Th-230	Pu-238	4.196E-08	0.000E+00	5.432E-18	3.190E-15	4.536E-15	1.198E-14	4.254E-14	1.941E-13	5.168E-13	1.197E-12	
Th-230	Pu-238	5.538E-14	0.000E+00	7.171E-24	4.211E-21	5.987E-21	1.582E-20	5.615E-20	2.563E-19	6.822E-19	1.581E-18	
Th-230	Pu-238	7.972E-16	0.000E+00	1.032E-25	6.061E-23	8.618E-23	2.277E-22	8.082E-22	3.689E-21	9.819E-21	2.275E-20	
Th-230	Pu-238	2.000E-07	0.000E+00	2.589E-17	1.521E-14	2.162E-14	5.713E-14	2.028E-13	9.254E-13	2.463E-12	5.708E-12	
Th-230	Pu-238	2.640E-13	0.000E+00	3.418E-23	2.007E-20	2.854E-20	7.541E-20	2.677E-19	1.221E-18	3.252E-18	7.534E-18	
Th-230	Pu-238	3.800E-15	0.000E+00	4.920E-25	2.889E-22	4.108E-22	1.085E-21	3.853E-21	1.758E-20	4.680E-20	1.084E-19	
Th-230	Th-230	9.996E-01	9.996E+00	9.996E+00	9.994E+00	9.993E+00	9.991E+00	9.987E+00	9.973E+00	9.950E+00	9.904E+00	
Th-230	U-234	9.996E-01	0.000E+00	9.192E-05	2.298E-03	2.757E-03	4.594E-03	9.186E-03	2.294E-02	4.582E-02	9.136E-02	
Th-230	U-234	1.319E-06	0.000E+00	1.213E-10	3.033E-09	3.639E-09	6.065E-09	1.213E-08	3.029E-08	6.048E-08	1.206E-07	
Th-230	U-234	1.899E-08	0.000E+00	1.746E-12	4.365E-11	5.238E-11	8.729E-11	1.745E-10	4.359E-10	8.705E-10	1.736E-09	
Th-230	U-234	2.100E-04	0.000E+00	1.931E-08	4.826E-07	5.791E-07	9.650E-07	1.929E-06	4.819E-06	9.624E-06	1.919E-05	
Th-230	U-234	2.771E-10	0.000E+00	2.548E-14	6.370E-13	7.644E-13	1.274E-12	2.547E-12	6.361E-12	1.270E-11	2.533E-11	
Th-230	U-234	3.989E-12	0.000E+00	3.668E-16	9.169E-15	1.100E-14	1.834E-14	3.666E-14	9.157E-14	1.829E-13	3.646E-13	
Th-230	U-234	1.998E-04	0.000E+00	1.837E-08	4.591E-07	5.510E-07	9.181E-07	1.836E-06	4.585E-06	9.156E-06	1.826E-05	
Th-230	U-234	2.637E-10	0.000E+00	2.425E-14	6.061E-13	7.273E-13	1.212E-12	2.423E-12	6.052E-12	1.209E-11	2.410E-11	
Th-230	U-234	3.795E-12	0.000E+00	3.490E-16	8.724E-15	1.047E-14	1.744E-14	3.488E-14	8.712E-14	1.740E-13	3.469E-13	
Th-230	U-234	4.196E-08	0.000E+00	3.858E-12	9.644E-11	1.157E-10	1.929E-10	3.856E-10	9.631E-10	1.923E-09	3.835E-09	
Th-230	U-234	5.538E-14	0.000E+00	5.093E-18	1.273E-16	1.528E-16	2.546E-16	5.090E-16	1.271E-15	2.539E-15	5.062E-15	
Th-230	U-234	7.972E-16	0.000E+00	7.331E-20	1.832E-18	2.199E-18	3.664E-18	7.326E-18	1.830E-17	3.654E-17	7.286E-17	
Th-230	U-234	2.000E-07	0.000E+00	1.839E-11	4.597E-10	5.516E-10	9.193E-10	1.838E-09	4.591E-09	9.167E-09	1.828E-08	
Th-230	U-234	2.640E-13	0.000E+00	2.428E-17	6.068E-16	7.281E-16	1.213E-15	2.426E-15	6.060E-15	1.210E-14	2.413E-14	
Th-230	U-234	3.800E-15	0.000E+00	3.494E-19	8.734E-18	1.048E-17	1.747E-17	3.492E-17	8.722E-17	1.742E-16	3.473E-16	
Th-230	U-238	1.599E-03	0.000E+00	2.076E-13	1.297E-10	1.868E-10	5.189E-10	2.075E-09	1.296E-08	5.180E-08	2.068E-07	
Th-230	U-238	2.111E-09	0.000E+00	2.740E-19	1.713E-16	2.466E-16	6.850E-16	2.739E-15	1.711E-14	6.837E-14	2.729E-13	
Th-230	U-238	3.039E-11	0.000E+00	3.945E-21	2.465E-18	3.550E-18	9.860E-18	3.943E-17	2.463E-16	9.841E-16	3.928E-15	
Th-230	U-238	3.359E-07	0.000E+00	4.361E-17	2.725E-14	3.924E-14	1.090E-13	4.359E-13	2.723E-12	1.088E-11	4.343E-11	
Th-230	U-238	4.434E-13	0.000E+00	5.756E-23	3.597E-20	5.180E-20	1.439E-19	5.754E-19	3.594E-18	1.436E-17	5.733E-17	
Th-230	U-238	6.383E-15	0.000E+00	8.285E-25	5.178E-22	7.456E-22	2.071E-21	8.282E-21	5.173E-20	2.067E-19	8.251E-19	
Th-230	U-238	3.196E-07	0.000E+00	4.149E-17	2.593E-14	3.734E-14	1.037E-13	4.147E-13	2.590E-12	1.035E-11	4.132E-11	
Th-230	U-238	4.219E-13	0.000E+00	5.477E-23	3.423E-20	4.928E-20	1.369E-19	5.474E-19	3.419E-18	1.366E-17	5.454E-17	
Th-230	U-238	6.073E-15	0.000E+00	7.883E-25	4.926E-22	7.094E-22	1.970E-21	7.880E-21	4.922E-20	1.967E-19	7.850E-19	
Th-230	U-238	6.713E-11	0.000E+00	8.715E-21	5.446E-18	7.842E-18	2.178E-17	8.711E-17	5.441E-16	2.174E-15	8.679E-15	
Th-230	U-238	8.862E-17	0.000E+00	1.150E-26	7.189E-24	1.035E-23	2.875E-23	1.150E-22	7.182E-22	2.870E-21	1.146E-20	
Th-230	U-238	1.276E-18	0.000E+00	1.656E-28	1.035E-25	1.490E-25	4.139E-25	1.655E-24	1.034E-23	4.131E-23	1.649E-22	
Th-230	U-238	3.200E-10	0.000E+00	4.154E-20	2.596E-17	3.738E-17	1.038E-16	4.152E-16	2.594E-15	1.036E-14	4.137E-14	

Th-230	U-238	4.224E-16	0.000E+00	5.483E-26	3.427E-23	4.934E-23	1.371E-22	5.481E-22	3.423E-21	1.368E-20	5.461E-20
Th-230	U-238	6.080E-18	0.000E+00	7.893E-28	4.932E-25	7.102E-25	1.973E-24	7.889E-24	4.928E-23	1.969E-22	7.860E-22
Th-230	U-238	9.980E-01	0.000E+00	1.295E-10	8.096E-08	1.166E-07	3.238E-07	1.295E-06	8.089E-06	3.232E-05	1.290E-04
Th-230	U-238	1.317E-06	0.000E+00	1.710E-16	1.069E-13	1.539E-13	4.274E-13	1.709E-12	1.068E-11	4.266E-11	1.703E-10
Th-230	U-238	1.896E-08	0.000E+00	2.461E-18	1.538E-15	2.215E-15	6.152E-15	2.460E-14	1.537E-13	6.141E-13	2.451E-12
Th-230	U-238	2.096E-04	0.000E+00	2.721E-14	1.701E-11	2.449E-11	6.801E-11	2.720E-10	1.699E-09	6.789E-09	2.710E-08
Th-230	U-238	2.767E-10	0.000E+00	3.592E-20	2.245E-17	3.232E-17	8.978E-17	3.590E-16	2.243E-15	8.961E-15	3.577E-14
Th-230	U-238	3.983E-12	0.000E+00	5.170E-22	3.231E-19	4.653E-19	1.292E-18	5.168E-18	3.228E-17	1.290E-16	5.149E-16
Th-230	U-238	1.994E-04	0.000E+00	2.589E-14	1.618E-11	2.330E-11	6.471E-11	2.588E-10	1.616E-09	6.459E-09	2.578E-08

Individual Nuclide Soil Concentration
Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	S(j,t), pCi/g									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Th-230	U-238	2.633E-10	0.000E+00	3.417E-20	2.136E-17	3.075E-17	8.542E-17	3.416E-16	2.134E-15	8.526E-15	3.403E-14	
Th-230	U-238	3.789E-12	0.000E+00	4.919E-22	3.074E-19	4.427E-19	1.229E-18	4.917E-18	3.071E-17	1.227E-16	4.899E-16	
Th-230	U-238	4.189E-08	0.000E+00	5.438E-18	3.398E-15	4.894E-15	1.359E-14	5.436E-14	3.395E-13	1.357E-12	5.415E-12	
Th-230	U-238	5.530E-14	0.000E+00	7.178E-24	4.486E-21	6.459E-21	1.794E-20	7.175E-20	4.482E-19	1.791E-18	7.148E-18	
Th-230	U-238	7.959E-16	0.000E+00	1.033E-25	6.457E-23	9.298E-23	2.582E-22	1.033E-21	6.451E-21	2.578E-20	1.029E-19	
Th-230	U-238	1.997E-07	0.000E+00	2.592E-17	1.620E-14	2.333E-14	6.479E-14	2.591E-13	1.618E-12	6.467E-12	2.581E-11	
Th-230	U-238	2.636E-13	0.000E+00	3.422E-23	2.138E-20	3.079E-20	8.552E-20	3.420E-19	2.136E-18	8.536E-18	3.407E-17	
Th-230	U-238	3.794E-15	0.000E+00	4.925E-25	3.078E-22	4.432E-22	1.231E-21	4.923E-21	3.075E-20	1.229E-19	4.905E-19	
Th-230	äS(j):		9.996E+00	9.996E+00	9.996E+00	9.996E+00	9.996E+00	9.996E+00	9.996E+00	9.996E+00	9.996E+00	9.996E+00
0Ra-226	Pu-238	9.996E-01	0.000E+00	1.870E-14	2.781E-10	4.757E-10	2.116E-09	1.537E-08	1.851E-07	1.035E-06	4.864E-06	
Ra-226	Pu-238	1.899E-08	0.000E+00	3.553E-22	5.284E-18	9.038E-18	4.020E-17	2.921E-16	3.517E-15	1.966E-14	9.242E-14	
Ra-226	Th-230	9.996E-01	0.000E+00	4.329E-03	1.077E-01	1.291E-01	2.141E-01	4.236E-01	1.025E+00	1.942E+00	3.497E+00	
Ra-226	Th-230	1.319E-06	0.000E+00	5.715E-09	1.421E-07	1.704E-07	2.827E-07	5.591E-07	1.353E-06	2.564E-06	4.616E-06	
Ra-226	Th-230	1.899E-08	0.000E+00	8.226E-11	2.046E-09	2.452E-09	4.069E-09	8.048E-09	1.947E-08	3.690E-08	6.644E-08	
Ra-226	U-234	9.996E-01	0.000E+00	1.991E-08	1.240E-05	1.784E-05	4.941E-05	1.962E-04	1.199E-03	4.627E-03	1.725E-02	
Ra-226	U-234	1.319E-06	0.000E+00	2.628E-14	1.636E-11	2.355E-11	6.522E-11	2.589E-10	1.583E-09	6.108E-09	2.277E-08	
Ra-226	U-234	1.899E-08	0.000E+00	3.782E-16	2.356E-13	3.389E-13	9.387E-13	3.727E-12	2.279E-11	8.791E-11	3.277E-10	
Ra-226	U-238	1.599E-03	0.000E+00	2.998E-17	4.671E-13	8.068E-13	3.727E-12	2.965E-11	4.557E-10	3.547E-09	2.691E-08	
Ra-226	U-238	2.111E-09	0.000E+00	3.957E-23	6.166E-19	1.065E-18	4.919E-18	3.914E-17	6.015E-16	4.683E-15	3.552E-14	
Ra-226	U-238	3.039E-11	0.000E+00	5.696E-25	8.876E-21	1.533E-20	7.081E-20	5.633E-19	8.658E-18	6.740E-17	5.113E-16	
Ra-226	U-238	9.980E-01	0.000E+00	1.871E-14	2.915E-10	5.034E-10	2.326E-09	1.850E-08	2.843E-07	2.214E-06	1.679E-05	
Ra-226	U-238	1.317E-06	0.000E+00	2.469E-20	3.848E-16	6.645E-16	3.070E-15	2.442E-14	3.753E-13	2.922E-12	2.216E-11	
Ra-226	U-238	1.896E-08	0.000E+00	3.554E-22	5.538E-18	9.565E-18	4.418E-17	3.515E-16	5.402E-15	4.206E-14	3.190E-13	
Ra-226	äS(j):		0.000E+00	4.329E-03	1.077E-01	1.291E-01	2.142E-01	4.238E-01	1.026E+00	1.947E+00	3.514E+00	
0Pb-210	Pu-238	9.996E-01	0.000E+00	1.451E-16	4.722E-11	9.441E-11	6.329E-10	7.357E-09	1.347E-07	8.905E-07	4.546E-06	
Pb-210	Pu-238	1.319E-06	0.000E+00	1.915E-22	6.233E-17	1.246E-16	8.354E-16	9.711E-15	1.778E-13	1.175E-12	6.001E-12	
Pb-210	Pu-238	2.100E-04	0.000E+00	3.048E-20	9.918E-15	1.983E-14	1.329E-13	1.545E-12	2.829E-11	1.870E-10	9.549E-10	
Pb-210	Pu-238	1.998E-04	0.000E+00	2.900E-20	9.436E-15	1.887E-14	1.265E-13	1.470E-12	2.691E-11	1.780E-10	9.085E-10	
Pb-210	Pu-238	4.196E-08	0.000E+00	6.091E-24	1.982E-18	3.963E-18	2.657E-17	3.088E-16	5.653E-15	3.738E-14	1.908E-13	
Pb-210	Pu-238	2.000E-07	0.000E+00	2.903E-23	9.448E-18	1.889E-17	1.266E-16	1.472E-15	2.694E-14	1.782E-13	9.096E-13	
Pb-210	Th-230	9.996E-01	0.000E+00	6.690E-05	3.298E-02	4.536E-02	1.061E-01	2.952E-01	8.989E-01	1.829E+00	3.407E+00	
Pb-210	Th-230	2.100E-04	0.000E+00	1.405E-08	6.927E-06	9.528E-06	2.228E-05	6.200E-05	1.888E-04	3.842E-04	7.156E-04	
Pb-210	Th-230	1.998E-04	0.000E+00	1.337E-08	6.590E-06	9.065E-06	2.120E-05	5.899E-05	1.796E-04	3.656E-04	6.808E-04	
Pb-210	Th-230	4.196E-08	0.000E+00	2.808E-12	1.384E-09	1.904E-09	4.452E-09	1.239E-08	3.773E-08	7.679E-08	1.430E-07	
Pb-210	Th-230	2.000E-07	0.000E+00	1.338E-11	6.598E-09	9.076E-09	2.122E-08	5.906E-08	1.799E-07	3.660E-07	6.816E-07	
Pb-210	U-234	9.996E-01	0.000E+00	2.056E-10	2.685E-06	4.481E-06	1.817E-05	1.092E-04	9.347E-04	4.089E-03	1.625E-02	
Pb-210	U-234	2.100E-04	0.000E+00	4.318E-14	5.640E-10	9.411E-10	3.817E-09	2.295E-08	1.963E-07	8.588E-07	3.412E-06	
Pb-210	U-234	1.998E-04	0.000E+00	4.108E-14	5.366E-10	8.954E-10	3.632E-09	2.183E-08	1.868E-07	8.171E-07	3.247E-06	
Pb-210	U-234	4.196E-08	0.000E+00	8.629E-18	1.127E-13	1.881E-13	7.628E-13	4.586E-12	3.924E-11	1.716E-10	6.819E-10	
Pb-210	U-234	2.000E-07	0.000E+00	4.113E-17	5.373E-13	8.965E-13	3.636E-12	2.186E-11	1.870E-10	8.181E-10	3.250E-09	

Pb-210	U-238	1.599E-03	0.000E+00	2.325E-19	7.863E-14	1.585E-13	1.098E-12	1.384E-11	3.204E-10	2.956E-09	2.456E-08
Pb-210	U-238	3.359E-07	0.000E+00	4.884E-23	1.652E-17	3.329E-17	2.305E-16	2.908E-15	6.731E-14	6.209E-13	5.158E-12
Pb-210	U-238	3.196E-07	0.000E+00	4.647E-23	1.571E-17	3.167E-17	2.193E-16	2.766E-15	6.404E-14	5.907E-13	4.908E-12
Pb-210	U-238	6.713E-11	0.000E+00	9.761E-27	3.301E-21	6.653E-21	4.607E-20	5.811E-19	1.345E-17	1.241E-16	1.031E-15
Pb-210	U-238	3.200E-10	0.000E+00	4.653E-26	1.573E-20	3.171E-20	2.196E-19	2.770E-18	6.411E-17	5.914E-16	4.914E-15
Pb-210	U-238	9.980E-01	0.000E+00	1.451E-16	4.907E-11	9.890E-11	6.849E-10	8.638E-09	2.000E-07	1.845E-06	1.532E-05
Pb-210	U-238	2.096E-04	0.000E+00	3.048E-20	1.031E-14	2.077E-14	1.439E-13	1.814E-12	4.200E-11	3.874E-10	3.219E-09

Individual Nuclide Soil Concentration
 Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	S(j,t), pCi/g									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Pb-210	U-238	1.994E-04	0.000E+00	2.900E-20	9.805E-15	1.976E-14	1.369E-13	1.726E-12	3.996E-11	3.686E-10	3.063E-09	
Pb-210	U-238	4.189E-08	0.000E+00	6.091E-24	2.060E-18	4.151E-18	2.875E-17	3.626E-16	8.393E-15	7.742E-14	6.433E-13	
Pb-210	U-238	1.997E-07	0.000E+00	2.903E-23	9.817E-18	1.979E-17	1.370E-16	1.728E-15	4.001E-14	3.691E-13	3.066E-12	
Pb-210	äS(j):		0.000E+00	6.692E-05	3.300E-02	4.538E-02	1.061E-01	2.954E-01	9.002E-01	1.834E+00	3.424E+00	
0Pu-238	Pu-238	1.319E-06	1.319E-05	1.309E-05	1.083E-05	1.041E-05	8.887E-06	5.986E-06	1.829E-06	2.536E-07	4.874E-09	
Pu-238	Pu-238	1.899E-08	1.899E-07	1.884E-07	1.559E-07	1.498E-07	1.279E-07	8.616E-08	2.633E-08	3.650E-09	7.016E-11	
Pu-238	äS(j):		1.338E-05	1.328E-05	1.098E-05	1.056E-05	9.015E-06	6.072E-06	1.856E-06	2.572E-07	4.944E-09	
0U-234	Pu-238	1.319E-06	0.000E+00	3.711E-11	8.451E-10	9.949E-10	1.539E-09	2.575E-09	4.058E-09	4.618E-09	4.699E-09	
0Th-230	Pu-238	1.319E-06	0.000E+00	1.708E-16	1.003E-13	1.426E-13	3.769E-13	1.338E-12	6.105E-12	1.625E-11	3.766E-11	
0Ra-226	Pu-238	1.319E-06	0.000E+00	2.468E-20	3.671E-16	6.279E-16	2.793E-15	2.029E-14	2.443E-13	1.366E-12	6.421E-12	
0Pb-210	Pu-238	1.899E-08	0.000E+00	2.757E-24	8.972E-19	1.794E-18	1.202E-17	1.398E-16	2.559E-15	1.692E-14	8.638E-14	
Pb-210	Pu-238	3.989E-12	0.000E+00	5.791E-28	1.884E-22	3.768E-22	2.526E-21	2.936E-20	5.374E-19	3.554E-18	1.814E-17	
Pb-210	Pu-238	3.795E-12	0.000E+00	5.510E-28	1.793E-22	3.585E-22	2.403E-21	2.793E-20	5.113E-19	3.381E-18	1.726E-17	
Pb-210	Pu-238	7.972E-16	0.000E+00	1.157E-31	3.766E-26	7.529E-26	5.047E-25	5.867E-24	1.074E-22	7.102E-22	3.626E-21	
Pb-210	Pu-238	3.800E-15	0.000E+00	5.516E-31	1.795E-25	3.589E-25	2.406E-24	2.797E-23	5.119E-22	3.385E-21	1.728E-20	
Pb-210	Th-230	1.899E-08	0.000E+00	1.271E-12	6.266E-10	8.618E-10	2.015E-09	5.609E-09	1.708E-08	3.476E-08	6.473E-08	
Pb-210	Th-230	3.989E-12	0.000E+00	2.670E-16	1.316E-13	1.810E-13	4.233E-13	1.178E-12	3.587E-12	7.301E-12	1.360E-11	
Pb-210	Th-230	3.795E-12	0.000E+00	2.540E-16	1.252E-13	1.722E-13	4.027E-13	1.121E-12	3.413E-12	6.946E-12	1.294E-11	
Pb-210	Th-230	7.972E-16	0.000E+00	5.335E-20	2.630E-17	3.618E-17	8.459E-17	2.354E-16	7.169E-16	1.459E-15	2.717E-15	
Pb-210	Th-230	3.800E-15	0.000E+00	2.543E-19	1.254E-16	1.724E-16	4.032E-16	1.122E-15	3.417E-15	6.954E-15	1.295E-14	
Pb-210	U-234	1.899E-08	0.000E+00	3.906E-18	5.102E-14	8.513E-14	3.453E-13	2.076E-12	1.776E-11	7.768E-11	3.087E-10	
Pb-210	U-234	3.989E-12	0.000E+00	8.204E-22	1.072E-17	1.788E-17	7.252E-17	4.360E-16	3.730E-15	1.632E-14	6.483E-14	
Pb-210	U-234	3.795E-12	0.000E+00	7.806E-22	1.020E-17	1.701E-17	6.900E-17	4.148E-16	3.549E-15	1.552E-14	6.168E-14	
Pb-210	U-234	7.972E-16	0.000E+00	1.640E-25	2.142E-21	3.573E-21	1.449E-20	8.713E-20	7.455E-19	3.261E-18	1.296E-17	
Pb-210	U-234	3.800E-15	0.000E+00	7.815E-25	1.021E-20	1.703E-20	6.908E-20	4.153E-19	3.553E-18	1.554E-17	6.176E-17	
Pb-210	U-238	3.039E-11	0.000E+00	4.418E-27	1.494E-21	3.011E-21	2.085E-20	2.630E-19	6.088E-18	5.616E-17	4.666E-16	
Pb-210	U-238	6.383E-15	0.000E+00	9.280E-31	3.138E-25	6.325E-25	4.380E-24	5.525E-23	1.279E-21	1.180E-20	9.801E-20	
Pb-210	U-238	6.073E-15	0.000E+00	8.830E-31	2.986E-25	6.018E-25	4.167E-24	5.256E-23	1.217E-21	1.122E-20	9.325E-20	
Pb-210	U-238	1.276E-18	0.000E+00	1.855E-34	6.271E-29	1.264E-28	8.753E-28	1.104E-26	2.556E-25	2.357E-24	1.959E-23	
Pb-210	U-238	6.080E-18	0.000E+00	8.840E-34	2.989E-28	6.025E-28	4.172E-27	5.263E-26	1.218E-24	1.124E-23	9.336E-23	
Pb-210	U-238	1.896E-08	0.000E+00	2.757E-24	9.323E-19	1.879E-18	1.301E-17	1.641E-16	3.799E-15	3.505E-14	2.912E-13	
Pb-210	U-238	3.983E-12	0.000E+00	5.791E-28	1.958E-22	3.947E-22	2.733E-21	3.447E-20	7.980E-19	7.361E-18	6.116E-17	
Pb-210	U-238	3.789E-12	0.000E+00	5.510E-28	1.863E-22	3.755E-22	2.600E-21	3.280E-20	7.592E-19	7.004E-18	5.819E-17	
Pb-210	U-238	7.959E-16	0.000E+00	1.157E-31	3.913E-26	7.887E-26	5.462E-25	6.889E-24	1.595E-22	1.471E-21	1.222E-20	
Pb-210	U-238	3.794E-15	0.000E+00	5.516E-31	1.865E-25	3.760E-25	2.604E-24	3.284E-23	7.601E-22	7.012E-21	5.826E-20	
Pb-210	äS(j):		0.000E+00	1.272E-12	6.269E-10	8.623E-10	2.016E-09	5.613E-09	1.710E-08	3.485E-08	6.506E-08	
0Pu-238	Pu-238	2.100E-04	2.100E-03	2.083E-03	1.723E-03	1.656E-03	1.414E-03	9.525E-04	2.911E-04	4.035E-05	7.756E-07	
Pu-238	Pu-238	2.771E-10	2.771E-09	2.750E-09	2.275E-09	2.186E-09	1.867E-09	1.257E-09	3.842E-10	5.327E-11	1.024E-12	
Pu-238	äS(j):		2.100E-03	2.083E-03	1.723E-03	1.656E-03	1.414E-03	9.525E-04	2.911E-04	4.035E-05	7.756E-07	
0Ra-226	Pu-238	2.100E-04	0.000E+00	3.928E-18	5.841E-14	9.992E-14	4.444E-13	3.229E-12	3.888E-11	2.174E-10	1.022E-09	

Ra-226	Pu-238	2.771E-10	0.000E+00	5.184E-24	7.710E-20	1.319E-19	5.867E-19	4.262E-18	5.132E-17	2.869E-16	1.349E-15
Ra-226	Pu-238	3.989E-12	0.000E+00	7.462E-26	1.110E-21	1.898E-21	8.444E-21	6.135E-20	7.387E-19	4.130E-18	1.941E-17

Individual Nuclide Soil Concentration
 Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	S(j,t), pCi/g									
(j)	(i)		t= 0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03	
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	
Ra-226	Th-230	2.100E-04	0.000E+00	9.094E-07	2.261E-05	2.711E-05	4.498E-05	8.897E-05	2.153E-04	4.079E-04	7.345E-04	
Ra-226	Th-230	2.771E-10	0.000E+00	1.200E-12	2.985E-11	3.578E-11	5.937E-11	1.174E-10	2.841E-10	5.385E-10	9.695E-10	
Ra-226	Th-230	3.989E-12	0.000E+00	1.728E-14	4.297E-13	5.150E-13	8.546E-13	1.690E-12	4.090E-12	7.750E-12	1.396E-11	
Ra-226	U-234	2.100E-04	0.000E+00	4.181E-12	2.604E-09	3.747E-09	1.038E-08	4.120E-08	2.519E-07	9.719E-07	3.623E-06	
Ra-226	U-234	2.771E-10	0.000E+00	5.519E-18	3.437E-15	4.946E-15	1.370E-14	5.439E-14	3.325E-13	1.283E-12	4.782E-12	
Ra-226	U-234	3.989E-12	0.000E+00	7.944E-20	4.948E-17	7.119E-17	1.972E-16	7.829E-16	4.787E-15	1.847E-14	6.883E-14	
Ra-226	U-238	3.359E-07	0.000E+00	6.297E-21	9.812E-17	1.695E-16	7.828E-16	6.228E-15	9.571E-14	7.451E-13	5.652E-12	
Ra-226	U-238	4.434E-13	0.000E+00	8.311E-27	1.295E-22	2.237E-22	1.033E-21	8.221E-21	1.263E-19	9.836E-19	7.461E-18	
Ra-226	U-238	6.383E-15	0.000E+00	1.196E-28	1.864E-24	3.220E-24	1.487E-23	1.183E-22	1.819E-21	1.416E-20	1.074E-19	
Ra-226	U-238	2.096E-04	0.000E+00	3.929E-18	6.123E-14	1.057E-13	4.885E-13	3.886E-12	5.972E-11	4.650E-10	3.527E-09	
Ra-226	U-238	2.767E-10	0.000E+00	5.186E-24	8.082E-20	1.396E-19	6.448E-19	5.130E-18	7.884E-17	6.137E-16	4.656E-15	
Ra-226	U-238	3.983E-12	0.000E+00	7.465E-26	1.163E-21	2.009E-21	9.281E-21	7.384E-20	1.135E-18	8.834E-18	6.701E-17	
Ra-226	äS(j):		0.000E+00	9.094E-07	2.262E-05	2.711E-05	4.499E-05	8.901E-05	2.155E-04	4.089E-04	7.381E-04	
0Pb-210	Pu-238	2.771E-10	0.000E+00	4.023E-26	1.309E-20	2.618E-20	1.755E-19	2.040E-18	3.734E-17	2.469E-16	1.260E-15	
Pb-210	Pu-238	2.637E-10	0.000E+00	3.828E-26	1.246E-20	2.490E-20	1.669E-19	1.941E-18	3.552E-17	2.349E-16	1.199E-15	
Pb-210	Pu-238	5.538E-14	0.000E+00	8.040E-30	2.616E-24	5.231E-24	3.507E-23	4.076E-22	7.461E-21	4.934E-20	2.519E-19	
Pb-210	Pu-238	2.640E-13	0.000E+00	3.832E-29	1.247E-23	2.493E-23	1.672E-22	1.943E-21	3.557E-20	2.352E-19	1.201E-18	
Pb-210	Th-230	1.319E-06	0.000E+00	8.830E-11	4.353E-08	5.988E-08	1.400E-07	3.897E-07	1.187E-06	2.415E-06	4.497E-06	
Pb-210	Th-230	2.771E-10	0.000E+00	1.855E-14	9.144E-12	1.258E-11	2.941E-11	8.185E-11	2.492E-10	5.072E-10	9.445E-10	
Pb-210	Th-230	2.637E-10	0.000E+00	1.765E-14	8.699E-12	1.197E-11	2.798E-11	7.787E-11	2.371E-10	4.826E-10	8.986E-10	
Pb-210	Th-230	5.538E-14	0.000E+00	3.707E-18	1.827E-15	2.513E-15	5.877E-15	1.636E-14	4.981E-14	1.014E-13	1.888E-13	
Pb-210	Th-230	2.640E-13	0.000E+00	1.767E-17	8.710E-15	1.198E-14	2.801E-14	7.796E-14	2.374E-13	4.831E-13	8.997E-13	
Pb-210	U-234	1.319E-06	0.000E+00	2.714E-16	3.545E-12	5.915E-12	2.399E-11	1.442E-10	1.234E-09	5.397E-09	2.144E-08	
Pb-210	U-234	2.771E-10	0.000E+00	5.700E-20	7.445E-16	1.242E-15	5.038E-15	3.029E-14	2.592E-13	1.134E-12	4.504E-12	
Pb-210	U-234	2.637E-10	0.000E+00	5.423E-20	7.083E-16	1.182E-15	4.794E-15	2.882E-14	2.466E-13	1.079E-12	4.285E-12	
Pb-210	U-234	5.538E-14	0.000E+00	1.139E-23	1.488E-19	2.483E-19	1.007E-18	6.053E-18	5.179E-17	2.265E-16	9.001E-16	
Pb-210	U-234	2.640E-13	0.000E+00	5.430E-23	7.092E-19	1.183E-18	4.799E-18	2.885E-17	2.469E-16	1.080E-15	4.291E-15	
Pb-210	U-238	2.111E-09	0.000E+00	3.070E-25	1.038E-19	2.092E-19	1.449E-18	1.827E-17	4.230E-16	3.902E-15	3.242E-14	
Pb-210	U-238	4.434E-13	0.000E+00	6.447E-29	2.180E-23	4.394E-23	3.043E-22	3.838E-21	8.884E-20	8.196E-19	6.809E-18	
Pb-210	U-238	4.219E-13	0.000E+00	6.134E-29	2.074E-23	4.181E-23	2.895E-22	3.652E-21	8.453E-20	7.797E-19	6.478E-18	
Pb-210	U-238	8.862E-17	0.000E+00	1.288E-32	4.357E-27	8.781E-27	6.081E-26	7.670E-25	1.775E-23	1.638E-22	1.361E-21	
Pb-210	U-238	4.224E-16	0.000E+00	6.142E-32	2.077E-26	4.186E-26	2.899E-25	3.656E-24	8.463E-23	7.807E-22	6.486E-21	
Pb-210	U-238	1.317E-06	0.000E+00	1.915E-22	6.477E-17	1.305E-16	9.040E-16	1.140E-14	2.639E-13	2.435E-12	2.023E-11	
Pb-210	U-238	2.767E-10	0.000E+00	4.023E-26	1.360E-20	2.742E-20	1.899E-19	2.395E-18	5.544E-17	5.114E-16	4.249E-15	
Pb-210	U-238	2.633E-10	0.000E+00	3.828E-26	1.294E-20	2.609E-20	1.807E-19	2.279E-18	5.274E-17	4.866E-16	4.043E-15	
Pb-210	U-238	5.530E-14	0.000E+00	8.040E-30	2.719E-24	5.480E-24	3.795E-23	4.786E-22	1.108E-20	1.022E-19	8.491E-19	
Pb-210	U-238	2.636E-13	0.000E+00	3.832E-29	1.296E-23	2.612E-23	1.809E-22	2.281E-21	5.281E-20	4.871E-19	4.047E-18	
Pb-210	äS(j):		0.000E+00	8.834E-11	4.355E-08	5.991E-08	1.401E-07	3.900E-07	1.188E-06	2.421E-06	4.520E-06	
0Pu-238	Pu-238	3.989E-12	3.989E-11	3.958E-11	3.274E-11	3.147E-11	2.687E-11	1.810E-11	5.530E-12	7.667E-13	1.474E-14	
Pu-238	Pu-238	1.998E-04	1.998E-03	1.982E-03	1.639E-03	1.576E-03	1.345E-03	9.063E-04	2.769E-04	3.839E-05	7.379E-07	

Pu-238	äS(j):		1.998E-03	1.982E-03	1.639E-03	1.576E-03	1.345E-03	9.063E-04	2.769E-04	3.839E-05	7.379E-07
0Ra-226	Pu-238	1.998E-04	0.000E+00	3.737E-18	5.557E-14	9.506E-14	4.229E-13	3.072E-12	3.699E-11	2.068E-10	9.721E-10
Ra-226	Pu-238	3.795E-12	0.000E+00	7.100E-26	1.056E-21	1.806E-21	8.034E-21	5.837E-20	7.028E-19	3.929E-18	1.847E-17
Ra-226	Th-230	1.998E-04	0.000E+00	8.652E-07	2.152E-05	2.579E-05	4.279E-05	8.465E-05	2.048E-04	3.881E-04	6.988E-04
Ra-226	Th-230	2.637E-10	0.000E+00	1.142E-12	2.840E-11	3.404E-11	5.649E-11	1.117E-10	2.703E-10	5.123E-10	9.224E-10
Ra-226	Th-230	3.795E-12	0.000E+00	1.644E-14	4.088E-13	4.900E-13	8.131E-13	1.608E-12	3.891E-12	7.374E-12	1.328E-11

Individual Nuclide Soil Concentration
Parent Nuclide and Branch Fraction Indicated

0Nuclide Parent	THF(i)	S(j,t), pCi/g									
(j)	(i)	t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Ra-226	U-234	1.998E-04	0.000E+00	3.978E-12	2.478E-09	3.565E-09	9.873E-09	3.920E-08	2.397E-07	9.247E-07	3.447E-06
Ra-226	U-234	2.637E-10	0.000E+00	5.251E-18	3.270E-15	4.706E-15	1.303E-14	5.175E-14	3.164E-13	1.221E-12	4.550E-12
Ra-226	U-234	3.795E-12	0.000E+00	7.559E-20	4.707E-17	6.773E-17	1.876E-16	7.449E-16	4.554E-15	1.757E-14	6.549E-14
Ra-226	U-238	3.196E-07	0.000E+00	5.991E-21	9.335E-17	1.612E-16	7.448E-16	5.925E-15	9.106E-14	7.089E-13	5.378E-12
Ra-226	U-238	4.219E-13	0.000E+00	7.908E-27	1.232E-22	2.128E-22	9.831E-22	7.821E-21	1.202E-19	9.358E-19	7.098E-18
Ra-226	U-238	6.073E-15	0.000E+00	1.138E-28	1.774E-24	3.063E-24	1.415E-23	1.126E-22	1.730E-21	1.347E-20	1.022E-19
Ra-226	U-238	1.994E-04	0.000E+00	3.738E-18	5.825E-14	1.006E-13	4.647E-13	3.697E-12	5.682E-11	4.424E-10	3.356E-09
Ra-226	U-238	2.633E-10	0.000E+00	4.934E-24	7.689E-20	1.328E-19	6.134E-19	4.880E-18	7.501E-17	5.839E-16	4.429E-15
Ra-226	U-238	3.789E-12	0.000E+00	7.103E-26	1.107E-21	1.911E-21	8.830E-21	7.025E-20	1.080E-18	8.405E-18	6.376E-17
Ra-226	äS(j):		0.000E+00	8.652E-07	2.152E-05	2.579E-05	4.280E-05	8.469E-05	2.050E-04	3.890E-04	7.023E-04
0Pu-238	Pu-238	2.637E-10	2.637E-09	2.616E-09	2.164E-09	2.080E-09	1.776E-09	1.196E-09	3.656E-10	5.068E-11	9.740E-13
Pu-238	Pu-238	3.795E-12	3.795E-11	3.766E-11	3.115E-11	2.994E-11	2.556E-11	1.722E-11	5.262E-12	7.295E-13	1.402E-14
Pu-238	äS(j):		2.675E-09	2.654E-09	2.195E-09	2.110E-09	1.802E-09	1.213E-09	3.708E-10	5.141E-11	9.881E-13
0Ra-226	Pu-238	2.637E-10	0.000E+00	4.933E-24	7.336E-20	1.255E-19	5.582E-19	4.055E-18	4.883E-17	2.730E-16	1.283E-15
0Pu-238	Pu-238	4.196E-08	4.196E-07	4.163E-07	3.444E-07	3.310E-07	2.826E-07	1.904E-07	5.817E-08	8.064E-09	1.550E-10
Pu-238	Pu-238	5.538E-14	5.538E-13	5.495E-13	4.545E-13	4.369E-13	3.730E-13	2.513E-13	7.678E-14	1.064E-14	2.046E-16
Pu-238	äS(j):		4.196E-07	4.163E-07	3.444E-07	3.310E-07	2.826E-07	1.904E-07	5.817E-08	8.064E-09	1.550E-10
0Ra-226	Pu-238	4.196E-08	0.000E+00	7.849E-22	1.167E-17	1.997E-17	8.882E-17	6.453E-16	7.770E-15	4.344E-14	2.042E-13
Ra-226	Pu-238	5.538E-14	0.000E+00	1.036E-27	1.541E-23	2.636E-23	1.172E-22	8.518E-22	1.026E-20	5.734E-20	2.695E-19
Ra-226	Pu-238	7.972E-16	0.000E+00	1.491E-29	2.218E-25	3.794E-25	1.688E-24	1.226E-23	1.476E-22	8.253E-22	3.879E-21
Ra-226	Th-230	4.196E-08	0.000E+00	1.817E-10	4.519E-09	5.417E-09	8.989E-09	1.778E-08	4.302E-08	8.152E-08	1.468E-07
Ra-226	Th-230	5.538E-14	0.000E+00	2.399E-16	5.965E-15	7.150E-15	1.186E-14	2.347E-14	5.678E-14	1.076E-13	1.938E-13
Ra-226	Th-230	7.972E-16	0.000E+00	3.453E-18	8.586E-17	1.029E-16	1.708E-16	3.378E-16	8.173E-16	1.549E-15	2.789E-15
Ra-226	U-234	4.196E-08	0.000E+00	8.356E-16	5.204E-13	7.488E-13	2.074E-12	8.234E-12	5.034E-11	1.942E-10	7.240E-10
Ra-226	U-234	5.538E-14	0.000E+00	1.103E-21	6.869E-19	9.884E-19	2.737E-18	1.087E-17	6.645E-17	2.564E-16	9.556E-16
Ra-226	U-234	7.972E-16	0.000E+00	1.588E-23	9.887E-21	1.423E-20	3.940E-20	1.565E-19	9.565E-19	3.690E-18	1.376E-17
Ra-226	U-238	6.713E-11	0.000E+00	1.258E-24	1.961E-20	3.386E-20	1.564E-19	1.245E-18	1.913E-17	1.489E-16	1.130E-15
Ra-226	U-238	8.862E-17	0.000E+00	1.661E-30	2.588E-26	4.470E-26	2.065E-25	1.643E-24	2.525E-23	1.966E-22	1.491E-21
Ra-226	U-238	1.276E-18	0.000E+00	2.391E-32	3.726E-28	6.434E-28	2.972E-27	2.365E-26	3.634E-25	2.829E-24	2.146E-23
Ra-226	U-238	4.189E-08	0.000E+00	7.852E-22	1.224E-17	2.113E-17	9.761E-17	7.766E-16	1.194E-14	9.292E-14	7.048E-13
Ra-226	U-238	5.530E-14	0.000E+00	1.036E-27	1.615E-23	2.789E-23	1.288E-22	1.025E-21	1.575E-20	1.227E-19	9.304E-19
Ra-226	U-238	7.959E-16	0.000E+00	1.492E-29	2.325E-25	4.015E-25	1.855E-24	1.476E-23	2.268E-22	1.765E-21	1.339E-20
Ra-226	äS(j):		0.000E+00	1.817E-10	4.520E-09	5.418E-09	8.991E-09	1.779E-08	4.307E-08	8.171E-08	1.475E-07
0Pu-238	Pu-238	7.972E-16	7.972E-15	7.909E-15	6.543E-15	6.289E-15	5.370E-15	3.617E-15	1.105E-15	1.532E-16	2.945E-18
Pu-238	Pu-238	2.000E-07	2.000E-06	1.984E-06	1.641E-06	1.578E-06	1.347E-06	9.074E-07	2.773E-07	3.844E-08	7.388E-10
Pu-238	äS(j):		2.000E-06	1.984E-06	1.641E-06	1.578E-06	1.347E-06	9.074E-07	2.773E-07	3.844E-08	7.388E-10
0Ra-226	Pu-238	2.000E-07	0.000E+00	3.741E-21	5.564E-17	9.518E-17	4.234E-16	3.076E-15	3.704E-14	2.070E-13	9.733E-13
Ra-226	Pu-238	3.800E-15	0.000E+00	7.108E-29	1.057E-24	1.808E-24	8.044E-24	5.844E-23	7.037E-22	3.934E-21	1.849E-20
Ra-226	Th-230	2.000E-07	0.000E+00	8.662E-10	2.154E-08	2.582E-08	4.285E-08	8.475E-08	2.050E-07	3.886E-07	6.997E-07
Ra-226	Th-230	2.640E-13	0.000E+00	1.143E-15	2.843E-14	3.408E-14	5.656E-14	1.119E-13	2.707E-13	5.129E-13	9.236E-13

Ra-226	Th-230	3.800E-15	0.000E+00	1.646E-17	4.093E-16	4.906E-16	8.141E-16	1.610E-15	3.896E-15	7.383E-15	1.329E-14
Ra-226	U-234	2.000E-07	0.000E+00	3.983E-15	2.481E-12	3.569E-12	9.885E-12	3.925E-11	2.400E-10	9.258E-10	3.451E-09
Ra-226	U-234	2.640E-13	0.000E+00	5.258E-21	3.274E-18	4.711E-18	1.305E-17	5.181E-17	3.168E-16	1.222E-15	4.555E-15

Individual Nuclide Soil Concentration
Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	S(j,t), pCi/g									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Ra-226	U-234	3.800E-15	0.000E+00	7.568E-23	4.713E-20	6.782E-20	1.878E-19	7.458E-19	4.560E-18	1.759E-17	6.557E-17	
Ra-226	U-238	3.200E-10	0.000E+00	5.998E-24	9.347E-20	1.614E-19	7.457E-19	5.932E-18	9.117E-17	7.098E-16	5.384E-15	
Ra-226	U-238	4.224E-16	0.000E+00	7.917E-30	1.234E-25	2.131E-25	9.843E-25	7.831E-24	1.203E-22	9.369E-22	7.107E-21	
Ra-226	U-238	6.080E-18	0.000E+00	1.140E-31	1.776E-27	3.067E-27	1.417E-26	1.127E-25	1.732E-24	1.349E-23	1.023E-22	
Ra-226	U-238	1.997E-07	0.000E+00	3.743E-21	5.832E-17	1.007E-16	4.653E-16	3.702E-15	5.689E-14	4.429E-13	3.360E-12	
Ra-226	U-238	2.636E-13	0.000E+00	4.940E-27	7.699E-23	1.330E-22	6.142E-22	4.886E-21	7.510E-20	5.846E-19	4.435E-18	
Ra-226	U-238	3.794E-15	0.000E+00	7.111E-29	1.108E-24	1.914E-24	8.841E-24	7.033E-23	1.081E-21	8.415E-21	6.383E-20	
Ra-226	äS(j):		0.000E+00	8.662E-10	2.154E-08	2.582E-08	4.286E-08	8.479E-08	2.053E-07	3.895E-07	7.031E-07	
0Pu-238	Pu-238	2.640E-13	2.640E-12	2.619E-12	2.167E-12	2.083E-12	1.778E-12	1.198E-12	3.660E-13	5.074E-14	9.752E-16	
Pu-238	Pu-238	3.800E-15	3.800E-14	3.770E-14	3.119E-14	2.998E-14	2.560E-14	1.724E-14	5.268E-15	7.304E-16	1.404E-17	
Pu-238	äS(j):		2.678E-12	2.657E-12	2.198E-12	2.113E-12	1.804E-12	1.215E-12	3.713E-13	5.147E-14	9.893E-16	
0Ra-226	Pu-238	2.640E-13	0.000E+00	4.939E-27	7.345E-23	1.256E-22	5.588E-22	4.060E-21	4.889E-20	2.733E-19	1.285E-18	
0Pu-239	Pu-239	5.901E-04	5.901E-03	5.901E-03	5.897E-03	5.896E-03	5.892E-03	5.884E-03	5.859E-03	5.817E-03	5.734E-03	
Pu-239	Pu-239	1.633E-06	1.633E-05	1.633E-05	1.632E-05	1.632E-05	1.631E-05	1.628E-05	1.621E-05	1.610E-05	1.587E-05	
Pu-239	äS(j):		5.917E-03	5.917E-03	5.913E-03	5.912E-03	5.909E-03	5.900E-03	5.875E-03	5.833E-03	5.749E-03	
0U-235	Pu-239	5.901E-04	0.000E+00	5.810E-12	1.452E-10	1.742E-10	2.903E-10	5.802E-10	1.447E-09	2.884E-09	5.727E-09	
U-235	Pu-239	1.633E-06	0.000E+00	1.608E-14	4.018E-13	4.822E-13	8.034E-13	1.606E-12	4.005E-12	7.982E-12	1.585E-11	
U-235	Pu-239	8.257E-06	0.000E+00	8.129E-14	2.032E-12	2.438E-12	4.062E-12	8.118E-12	2.025E-11	4.035E-11	8.013E-11	
U-235	Pu-239	2.285E-08	0.000E+00	2.250E-16	5.623E-15	6.747E-15	1.124E-14	2.247E-14	5.604E-14	1.117E-13	2.218E-13	
U-235	Pu-239	4.954E-10	0.000E+00	4.878E-18	1.219E-16	1.463E-16	2.437E-16	4.871E-16	1.215E-15	2.421E-15	4.808E-15	
U-235	Pu-239	1.371E-12	0.000E+00	1.350E-20	3.374E-19	4.048E-19	6.745E-19	1.348E-18	3.363E-18	6.702E-18	1.331E-17	
U-235	Pu-239	9.829E-01	0.000E+00	9.677E-09	2.418E-07	2.902E-07	4.835E-07	9.663E-07	2.411E-06	4.804E-06	9.539E-06	
U-235	Pu-239	2.720E-03	0.000E+00	2.678E-11	6.693E-10	8.032E-10	1.338E-09	2.674E-09	6.672E-09	1.330E-08	2.640E-08	
U-235	Pu-239	1.375E-02	0.000E+00	1.354E-10	3.384E-09	4.060E-09	6.766E-09	1.352E-08	3.373E-08	6.722E-08	1.335E-07	
U-235	Pu-239	3.806E-05	0.000E+00	3.748E-13	9.366E-12	1.124E-11	1.872E-11	3.742E-11	9.335E-11	1.860E-10	3.694E-10	
U-235	Pu-239	8.252E-07	0.000E+00	8.125E-15	2.031E-13	2.436E-13	4.060E-13	8.113E-13	2.024E-12	4.033E-12	8.008E-12	
U-235	Pu-239	2.284E-09	0.000E+00	2.249E-17	5.620E-16	6.743E-16	1.124E-15	2.245E-15	5.601E-15	1.116E-14	2.216E-14	
U-235	U-235	9.835E-01	9.835E+00	9.835E+00	9.835E+00	9.835E+00	9.835E+00	9.835E+00	9.834E+00	9.834E+00	9.833E+00	
U-235	äS(j):		9.835E+00	9.835E+00	9.835E+00	9.835E+00	9.835E+00	9.835E+00	9.834E+00	9.834E+00	9.833E+00	
0Pa-231	Pu-239	5.901E-04	0.000E+00	6.146E-17	3.840E-14	5.529E-14	1.535E-13	6.136E-13	3.825E-12	1.524E-11	6.044E-11	
Pa-231	Pu-239	1.633E-06	0.000E+00	1.701E-19	1.063E-16	1.530E-16	4.249E-16	1.698E-15	1.059E-14	4.217E-14	1.673E-13	
Pa-231	Pu-239	8.257E-06	0.000E+00	8.600E-19	5.373E-16	7.736E-16	2.148E-15	8.586E-15	5.353E-14	2.132E-13	8.457E-13	
Pa-231	Pu-239	2.285E-08	0.000E+00	2.380E-21	1.487E-18	2.141E-18	5.946E-18	2.376E-17	1.481E-16	5.901E-16	2.341E-15	
Pa-231	Pu-239	4.954E-10	0.000E+00	5.160E-23	3.224E-20	4.642E-20	1.289E-19	5.152E-19	3.212E-18	1.279E-17	5.075E-17	
Pa-231	Pu-239	1.371E-12	0.000E+00	1.428E-25	8.923E-23	1.285E-22	3.568E-22	1.426E-21	8.889E-21	3.541E-20	1.404E-19	
Pa-231	Pu-239	9.829E-01	0.000E+00	1.024E-13	6.396E-11	9.209E-11	2.557E-10	1.022E-09	6.372E-09	2.538E-08	1.007E-07	
Pa-231	Pu-239	2.720E-03	0.000E+00	2.833E-16	1.770E-13	2.549E-13	7.078E-13	2.829E-12	1.764E-11	7.025E-11	2.786E-10	
Pa-231	Pu-239	1.375E-02	0.000E+00	1.432E-15	8.949E-13	1.289E-12	3.578E-12	1.430E-11	8.916E-11	3.551E-10	1.409E-09	
Pa-231	Pu-239	3.806E-05	0.000E+00	3.965E-18	2.477E-15	3.566E-15	9.903E-15	3.958E-14	2.468E-13	9.829E-13	3.899E-12	
Pa-231	Pu-239	8.252E-07	0.000E+00	8.595E-20	5.370E-17	7.732E-17	2.147E-16	8.581E-16	5.350E-15	2.131E-14	8.453E-14	

Pa-231	Pu-239	2.284E-09	0.000E+00	2.379E-22	1.486E-19	2.140E-19	5.942E-19	2.375E-18	1.481E-17	5.898E-17	2.339E-16
Pa-231	U-235	9.835E-01	0.000E+00	2.081E-04	5.201E-03	6.241E-03	1.040E-02	2.079E-02	5.188E-02	1.035E-01	2.059E-01
Pa-231	U-235	2.722E-03	0.000E+00	5.759E-07	1.439E-05	1.727E-05	2.878E-05	5.753E-05	1.436E-04	2.864E-04	5.698E-04
Pa-231	U-235	1.376E-02	0.000E+00	2.912E-06	7.277E-05	8.732E-05	1.455E-04	2.908E-04	7.259E-04	1.448E-03	2.880E-03

Individual Nuclide Soil Concentration
 Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	S(j,t), pCi/g									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Pa-231	U-235	3.809E-05	0.000E+00	8.058E-09	2.014E-07	2.417E-07	4.027E-07	8.050E-07	2.009E-06	4.008E-06	7.972E-06	
Pa-231	U-235	8.257E-07	0.000E+00	1.747E-10	4.367E-09	5.240E-09	8.731E-09	1.745E-08	4.356E-08	8.688E-08	1.728E-07	
Pa-231	U-235	2.285E-09	0.000E+00	4.835E-13	1.208E-11	1.450E-11	2.416E-11	4.830E-11	1.206E-10	2.405E-10	4.784E-10	
Pa-231	äS(j):		0.000E+00	2.116E-04	5.288E-03	6.345E-03	1.057E-02	2.114E-02	5.275E-02	1.052E-01	2.093E-01	
0Ac-227	Pu-239	5.901E-04	0.000E+00	6.471E-19	8.445E-15	1.409E-14	5.716E-14	3.443E-13	2.986E-12	1.345E-11	5.679E-11	
Ac-227	Pu-239	9.829E-01	0.000E+00	1.078E-15	1.407E-11	2.347E-11	9.520E-11	5.735E-10	4.974E-09	2.240E-08	9.460E-08	
Ac-227	U-235	9.835E-01	0.000E+00	3.278E-06	1.615E-03	2.221E-03	5.197E-03	1.453E-02	4.538E-02	9.701E-02	1.995E-01	
Ac-227	äS(j):		0.000E+00	3.278E-06	1.615E-03	2.221E-03	5.197E-03	1.453E-02	4.538E-02	9.701E-02	1.995E-01	
0Ac-227	Pu-239	1.633E-06	0.000E+00	1.791E-21	2.337E-17	3.900E-17	1.582E-16	9.529E-16	8.264E-15	3.722E-14	1.572E-13	
Ac-227	Pu-239	8.257E-06	0.000E+00	9.054E-21	1.182E-16	1.972E-16	7.997E-16	4.817E-15	4.178E-14	1.882E-13	7.947E-13	
Ac-227	Pu-239	2.720E-03	0.000E+00	2.983E-18	3.893E-14	6.496E-14	2.635E-13	1.587E-12	1.377E-11	6.200E-11	2.618E-10	
Ac-227	U-235	2.722E-03	0.000E+00	9.071E-09	4.469E-06	6.147E-06	1.438E-05	4.022E-05	1.256E-04	2.685E-04	5.520E-04	
Ac-227	äS(j):		0.000E+00	9.071E-09	4.469E-06	6.147E-06	1.438E-05	4.022E-05	1.256E-04	2.685E-04	5.520E-04	
0Pu-239	Pu-239	8.257E-06	8.257E-05	8.256E-05	8.251E-05	8.250E-05	8.245E-05	8.233E-05	8.198E-05	8.139E-05	8.023E-05	
Pu-239	Pu-239	2.285E-08	2.285E-07	2.285E-07	2.284E-07	2.283E-07	2.282E-07	2.279E-07	2.269E-07	2.253E-07	2.220E-07	
Pu-239	äS(j):		8.280E-05	8.279E-05	8.274E-05	8.272E-05	8.268E-05	8.256E-05	8.220E-05	8.161E-05	8.045E-05	
0Ac-227	Pu-239	2.285E-08	0.000E+00	2.506E-23	3.271E-19	5.457E-19	2.213E-18	1.333E-17	1.156E-16	5.208E-16	2.199E-15	
Ac-227	Pu-239	4.954E-10	0.000E+00	5.433E-25	7.091E-21	1.183E-20	4.799E-20	2.891E-19	2.507E-18	1.129E-17	4.768E-17	
Ac-227	Pu-239	3.806E-05	0.000E+00	4.174E-20	5.448E-16	9.090E-16	3.687E-15	2.221E-14	1.926E-13	8.675E-13	3.663E-12	
Ac-227	U-235	3.809E-05	0.000E+00	1.269E-10	6.253E-08	8.601E-08	2.012E-07	5.627E-07	1.757E-06	3.757E-06	7.724E-06	
Ac-227	äS(j):		0.000E+00	1.269E-10	6.253E-08	8.601E-08	2.012E-07	5.627E-07	1.757E-06	3.757E-06	7.724E-06	
0Pu-239	Pu-239	4.954E-10	4.954E-09	4.954E-09	4.951E-09	4.950E-09	4.947E-09	4.940E-09	4.919E-09	4.884E-09	4.814E-09	
Pu-239	Pu-239	1.371E-12	1.371E-11	1.371E-11	1.370E-11	1.370E-11	1.369E-11	1.367E-11	1.361E-11	1.352E-11	1.332E-11	
Pu-239	äS(j):		4.968E-09	4.968E-09	4.964E-09	4.964E-09	4.961E-09	4.954E-09	4.932E-09	4.897E-09	4.827E-09	
0Ac-227	Pu-239	1.371E-12	0.000E+00	1.504E-27	1.962E-23	3.274E-23	1.328E-22	8.000E-22	6.939E-21	3.125E-20	1.320E-19	
Ac-227	Pu-239	2.284E-09	0.000E+00	2.505E-24	3.269E-20	5.454E-20	2.212E-19	1.333E-18	1.156E-17	5.206E-17	2.198E-16	
Ac-227	U-235	2.285E-09	0.000E+00	7.616E-15	3.752E-12	5.161E-12	1.208E-11	3.376E-11	1.054E-10	2.254E-10	4.635E-10	
Ac-227	äS(j):		0.000E+00	7.616E-15	3.752E-12	5.161E-12	1.208E-11	3.376E-11	1.054E-10	2.254E-10	4.635E-10	
0Pu-239	Pu-239	9.829E-01	9.829E+00	9.829E+00	9.822E+00	9.820E+00	9.815E+00	9.801E+00	9.758E+00	9.689E+00	9.550E+00	
Pu-239	Pu-239	2.720E-03	2.720E-02	2.720E-02	2.718E-02	2.718E-02	2.716E-02	2.712E-02	2.701E-02	2.681E-02	2.643E-02	
Pu-239	äS(j):		9.856E+00	9.856E+00	9.849E+00	9.848E+00	9.842E+00	9.828E+00	9.785E+00	9.715E+00	9.577E+00	
0Pu-239	Pu-239	1.375E-02	1.375E-01	1.375E-01	1.374E-01	1.374E-01	1.373E-01	1.371E-01	1.365E-01	1.356E-01	1.336E-01	
Pu-239	Pu-239	3.806E-05	3.806E-04	3.806E-04	3.804E-04	3.803E-04	3.801E-04	3.795E-04	3.779E-04	3.752E-04	3.698E-04	
Pu-239	äS(j):		1.379E-01	1.379E-01	1.378E-01	1.378E-01	1.377E-01	1.375E-01	1.369E-01	1.359E-01	1.340E-01	
0Ac-227	Pu-239	1.375E-02	0.000E+00	1.508E-17	1.968E-13	3.284E-13	1.332E-12	8.024E-12	6.959E-11	3.135E-10	1.324E-09	
Ac-227	U-235	1.376E-02	0.000E+00	4.586E-08	2.259E-05	3.108E-05	7.271E-05	2.033E-04	6.349E-04	1.357E-03	2.791E-03	
Ac-227	äS(j):		0.000E+00	4.586E-08	2.259E-05	3.108E-05	7.271E-05	2.033E-04	6.349E-04	1.357E-03	2.791E-03	
0Pu-239	Pu-239	8.252E-07	8.252E-06	8.252E-06	8.246E-06	8.245E-06	8.240E-06	8.228E-06	8.193E-06	8.134E-06	8.018E-06	
Pu-239	Pu-239	2.284E-09	2.284E-08	2.284E-08	2.282E-08	2.282E-08	2.281E-08	2.277E-08	2.268E-08	2.251E-08	2.219E-08	
Pu-239	äS(j):		8.275E-06	8.275E-06	8.269E-06	8.268E-06	8.263E-06	8.251E-06	8.216E-06	8.157E-06	8.040E-06	

Individual Nuclide Soil Concentration
Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	S(j,t), pCi/g									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Ac-227	Pu-239	8.252E-07	0.000E+00	9.050E-22	1.181E-17	1.971E-17	7.993E-17	4.815E-16	4.176E-15	1.881E-14	7.942E-14	
Ac-227	U-235	8.257E-07	0.000E+00	2.752E-12	1.356E-09	1.865E-09	4.363E-09	1.220E-08	3.810E-08	8.145E-08	1.675E-07	
Ac-227	äS(j):		0.000E+00	2.752E-12	1.356E-09	1.865E-09	4.363E-09	1.220E-08	3.810E-08	8.145E-08	1.675E-07	
ORu-106	Ru-106	1.000E+00	1.000E+01	5.078E+00	4.388E-07	1.481E-08	1.925E-14	3.706E-29	0.000E+00	0.000E+00	0.000E+00	
OSr-90	Sr-90	1.000E+00	1.000E+01	9.762E+00	5.478E+00	4.856E+00	3.000E+00	9.003E-01	2.432E-02	5.914E-05	3.498E-10	
OTc-99	Tc-99	1.000E+00	1.000E+01	9.999E+00	9.981E+00	9.977E+00	9.962E+00	9.925E+00	9.812E+00	9.628E+00	9.270E+00	
0Th-228	Th-228	1.000E+00	1.000E+01	6.959E+00	1.156E-03	1.887E-04	1.337E-07	1.788E-15	4.277E-39	0.000E+00	0.000E+00	
Th-228	Th-232	1.000E+00	0.000E+00	1.866E-01	9.265E+00	9.597E+00	9.964E+00	1.000E+01	1.000E+01	1.000E+01	1.000E+01	
Th-228	äS(j):		1.000E+01	7.145E+00	9.266E+00	9.598E+00	9.964E+00	1.000E+01	1.000E+01	1.000E+01	1.000E+01	
0Th-230	Th-230	1.319E-06	1.319E-05	1.319E-05	1.319E-05	1.319E-05	1.319E-05	1.318E-05	1.316E-05	1.313E-05	1.307E-05	
Th-230	Th-230	1.899E-08	1.899E-07	1.899E-07	1.899E-07	1.899E-07	1.898E-07	1.897E-07	1.895E-07	1.891E-07	1.882E-07	
Th-230	äS(j):		1.338E-05	1.338E-05	1.338E-05	1.338E-05	1.338E-05	1.337E-05	1.335E-05	1.332E-05	1.326E-05	
0Th-230	Th-230	2.100E-04	2.100E-03	2.100E-03	2.099E-03	2.099E-03	2.099E-03	2.098E-03	2.095E-03	2.090E-03	2.080E-03	
Th-230	Th-230	2.771E-10	2.771E-09	2.771E-09	2.771E-09	2.771E-09	2.770E-09	2.769E-09	2.765E-09	2.759E-09	2.746E-09	
Th-230	äS(j):		2.100E-03	2.100E-03	2.099E-03	2.099E-03	2.099E-03	2.098E-03	2.095E-03	2.090E-03	2.080E-03	
0Th-230	Th-230	3.989E-12	3.989E-11	3.989E-11	3.988E-11	3.988E-11	3.987E-11	3.986E-11	3.980E-11	3.971E-11	3.953E-11	
Th-230	Th-230	1.998E-04	1.998E-03	1.998E-03	1.997E-03	1.997E-03	1.997E-03	1.996E-03	1.993E-03	1.988E-03	1.979E-03	
Th-230	äS(j):		1.998E-03	1.998E-03	1.997E-03	1.997E-03	1.997E-03	1.996E-03	1.993E-03	1.988E-03	1.979E-03	
0Th-230	Th-230	2.637E-10	2.637E-09	2.637E-09	2.636E-09	2.636E-09	2.636E-09	2.634E-09	2.631E-09	2.625E-09	2.613E-09	
Th-230	Th-230	3.795E-12	3.795E-11	3.795E-11	3.795E-11	3.794E-11	3.794E-11	3.792E-11	3.787E-11	3.778E-11	3.761E-11	
Th-230	äS(j):		2.675E-09	2.675E-09	2.674E-09	2.674E-09	2.674E-09	2.672E-09	2.669E-09	2.662E-09	2.650E-09	
0Th-230	Th-230	4.196E-08	4.196E-07	4.196E-07	4.195E-07	4.195E-07	4.194E-07	4.192E-07	4.186E-07	4.177E-07	4.157E-07	
Th-230	Th-230	5.538E-14	5.538E-13	5.538E-13	5.537E-13	5.537E-13	5.536E-13	5.533E-13	5.526E-13	5.513E-13	5.488E-13	
Th-230	äS(j):		4.196E-07	4.196E-07	4.195E-07	4.195E-07	4.194E-07	4.192E-07	4.186E-07	4.177E-07	4.157E-07	
0Th-230	Th-230	7.972E-16	7.972E-15	7.972E-15	7.970E-15	7.970E-15	7.968E-15	7.965E-15	7.954E-15	7.935E-15	7.899E-15	
Th-230	Th-230	2.000E-07	2.000E-06	2.000E-06	2.000E-06	1.999E-06	1.999E-06	1.998E-06	1.995E-06	1.991E-06	1.982E-06	
Th-230	äS(j):		2.000E-06	2.000E-06	2.000E-06	1.999E-06	1.999E-06	1.998E-06	1.995E-06	1.991E-06	1.982E-06	
0Th-230	Th-230	2.640E-13	2.640E-12	2.640E-12	2.639E-12	2.639E-12	2.639E-12	2.638E-12	2.634E-12	2.628E-12	2.616E-12	
Th-230	Th-230	3.800E-15	3.800E-14	3.800E-14	3.799E-14	3.799E-14	3.798E-14	3.797E-14	3.791E-14	3.783E-14	3.765E-14	
Th-230	äS(j):		2.678E-12	2.678E-12	2.677E-12	2.677E-12	2.677E-12	2.676E-12	2.672E-12	2.666E-12	2.653E-12	
0Th-232	Th-232	1.000E+00	1.000E+01	1.000E+01	1.000E+01	1.000E+01	1.000E+01	1.000E+01	1.000E+01	1.000E+01	1.000E+01	
ORa-228	Th-232	1.000E+00	0.000E+00	1.136E+00	9.509E+00	9.731E+00	9.976E+00	1.000E+01	1.000E+01	1.000E+01	1.000E+01	
OU-234	U-234	1.319E-06	1.319E-05	1.319E-05	1.319E-05	1.319E-05	1.319E-05	1.319E-05	1.318E-05	1.317E-05	1.315E-05	
U-234	U-234	1.899E-08	1.899E-07	1.899E-07	1.899E-07	1.899E-07	1.899E-07	1.899E-07	1.898E-07	1.896E-07	1.894E-07	
U-234	äS(j):		1.338E-05	1.338E-05	1.338E-05	1.338E-05	1.338E-05	1.338E-05	1.337E-05	1.336E-05	1.334E-05	

Individual Nuclide Soil Concentration
Parent Nuclide and Branch Fraction Indicated

ONuclide	Parent	THF(i)	S(j,t), pCi/g									
(j)	(i)	t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03	
AAAAAAA	AAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA	
U-234	U-234	2.100E-04	2.100E-03	2.100E-03	2.099E-03	2.099E-03	2.099E-03	2.099E-03	2.098E-03	2.096E-03	2.093E-03	
U-234	U-234	2.771E-10	2.771E-09	2.771E-09	2.771E-09	2.771E-09	2.771E-09	2.771E-09	2.769E-09	2.767E-09	2.763E-09	
U-234	äS(j):		2.100E-03	2.100E-03	2.099E-03	2.099E-03	2.099E-03	2.099E-03	2.098E-03	2.096E-03	2.093E-03	
OU-234	U-234	3.989E-12	3.989E-11	3.989E-11	3.989E-11	3.989E-11	3.989E-11	3.988E-11	3.986E-11	3.983E-11	3.977E-11	
U-234	U-234	1.998E-04	1.998E-03	1.998E-03	1.997E-03	1.997E-03	1.997E-03	1.997E-03	1.996E-03	1.995E-03	1.992E-03	
U-234	äS(j):		1.998E-03	1.998E-03	1.997E-03	1.997E-03	1.997E-03	1.997E-03	1.996E-03	1.995E-03	1.992E-03	
OU-234	U-234	2.637E-10	2.637E-09	2.637E-09	2.637E-09	2.637E-09	2.636E-09	2.636E-09	2.635E-09	2.633E-09	2.629E-09	
U-234	U-234	3.795E-12	3.795E-11	3.795E-11	3.795E-11	3.795E-11	3.795E-11	3.794E-11	3.793E-11	3.790E-11	3.784E-11	
U-234	äS(j):		2.675E-09	2.675E-09	2.675E-09	2.675E-09	2.674E-09	2.674E-09	2.673E-09	2.671E-09	2.667E-09	
OU-234	U-234	4.196E-08	4.196E-07	4.196E-07	4.195E-07	4.195E-07	4.195E-07	4.195E-07	4.193E-07	4.189E-07	4.183E-07	
U-234	U-234	5.538E-14	5.538E-13	5.538E-13	5.538E-13	5.538E-13	5.538E-13	5.537E-13	5.534E-13	5.530E-13	5.522E-13	
U-234	äS(j):		4.196E-07	4.196E-07	4.195E-07	4.195E-07	4.195E-07	4.195E-07	4.193E-07	4.189E-07	4.183E-07	
OU-234	U-234	7.972E-16	7.972E-15	7.972E-15	7.971E-15	7.971E-15	7.971E-15	7.970E-15	7.966E-15	7.960E-15	7.948E-15	
U-234	U-234	2.000E-07	2.000E-06	2.000E-06	2.000E-06	2.000E-06	2.000E-06	1.999E-06	1.998E-06	1.997E-06	1.994E-06	
U-234	äS(j):		2.000E-06	2.000E-06	2.000E-06	2.000E-06	2.000E-06	1.999E-06	1.998E-06	1.997E-06	1.994E-06	
OU-234	U-234	2.640E-13	2.640E-12	2.640E-12	2.640E-12	2.640E-12	2.640E-12	2.639E-12	2.638E-12	2.636E-12	2.632E-12	
U-234	U-234	3.800E-15	3.800E-14	3.800E-14	3.800E-14	3.800E-14	3.799E-14	3.799E-14	3.797E-14	3.794E-14	3.789E-14	
U-234	äS(j):		2.678E-12	2.678E-12	2.678E-12	2.678E-12	2.678E-12	2.677E-12	2.676E-12	2.674E-12	2.670E-12	
OU-235	U-235	2.722E-03	2.722E-02	2.722E-02	2.722E-02	2.722E-02	2.722E-02	2.722E-02	2.722E-02	2.722E-02	2.721E-02	
U-235	U-235	1.376E-02	1.376E-01	1.376E-01	1.376E-01	1.376E-01	1.376E-01	1.376E-01	1.376E-01	1.376E-01	1.376E-01	
U-235	äS(j):		1.648E-01	1.648E-01	1.648E-01	1.648E-01	1.648E-01	1.648E-01	1.648E-01	1.648E-01	1.648E-01	
OU-235	U-235	3.809E-05	3.809E-04	3.809E-04	3.809E-04	3.809E-04	3.809E-04	3.808E-04	3.808E-04	3.808E-04	3.808E-04	
U-235	U-235	8.257E-07	8.257E-06	8.257E-06	8.257E-06	8.257E-06	8.257E-06	8.257E-06	8.257E-06	8.256E-06	8.256E-06	
U-235	äS(j):		3.891E-04	3.891E-04	3.891E-04	3.891E-04	3.891E-04	3.891E-04	3.891E-04	3.891E-04	3.890E-04	
OU-235	U-235	2.285E-09	2.285E-08	2.285E-08	2.285E-08	2.285E-08	2.285E-08	2.285E-08	2.285E-08	2.285E-08	2.285E-08	
OU-238	U-238	5.450E-07	5.450E-06	5.450E-06	5.450E-06	5.450E-06	5.450E-06	5.450E-06	5.450E-06	5.449E-06	5.449E-06	
U-238	U-238	1.599E-03	1.599E-02	1.599E-02	1.599E-02	1.599E-02	1.599E-02	1.599E-02	1.599E-02	1.599E-02	1.599E-02	
U-238	äS(j):		1.600E-02	1.600E-02	1.600E-02	1.600E-02	1.600E-02	1.600E-02	1.600E-02	1.600E-02	1.600E-02	
OU-238	U-238	2.111E-09	2.111E-08	2.111E-08	2.111E-08	2.111E-08	2.111E-08	2.111E-08	2.111E-08	2.111E-08	2.111E-08	
U-238	U-238	3.039E-11	3.039E-10	3.039E-10	3.039E-10	3.039E-10	3.039E-10	3.039E-10	3.039E-10	3.038E-10	3.038E-10	
U-238	äS(j):		2.142E-08	2.142E-08	2.142E-08	2.142E-08	2.141E-08	2.141E-08	2.141E-08	2.141E-08	2.141E-08	
OU-238	U-238	3.359E-07	3.359E-06	3.359E-06	3.359E-06	3.359E-06	3.359E-06	3.359E-06	3.359E-06	3.359E-06	3.359E-06	
U-238	U-238	4.434E-13	4.434E-12	4.434E-12	4.434E-12	4.434E-12	4.434E-12	4.434E-12	4.434E-12	4.434E-12	4.433E-12	
U-238	äS(j):		3.359E-06	3.359E-06	3.359E-06	3.359E-06	3.359E-06	3.359E-06	3.359E-06	3.359E-06	3.359E-06	
OU-238	U-238	6.383E-15	6.383E-14	6.383E-14	6.383E-14	6.383E-14	6.383E-14	6.383E-14	6.382E-14	6.382E-14	6.381E-14	
U-238	U-238	3.196E-07	3.196E-06	3.196E-06	3.196E-06	3.196E-06	3.196E-06	3.196E-06	3.196E-06	3.196E-06	3.196E-06	
U-238	äS(j):		3.196E-06	3.196E-06	3.196E-06	3.196E-06	3.196E-06	3.196E-06	3.196E-06	3.196E-06	3.196E-06	

Individual Nuclide Soil Concentration
Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	S(j,t), pCi/g									
(j)	(i)		t= 0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03	
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
U-238	U-238	4.219E-13	4.219E-12	4.219E-12	4.219E-12	4.219E-12	4.219E-12	4.219E-12	4.219E-12	4.218E-12	4.218E-12	
U-238	U-238	6.073E-15	6.073E-14	6.073E-14	6.073E-14	6.073E-14	6.073E-14	6.073E-14	6.072E-14	6.072E-14	6.071E-14	
U-238	äS(j):		4.280E-12	4.280E-12	4.280E-12	4.280E-12	4.280E-12	4.280E-12	4.279E-12	4.279E-12	4.279E-12	
0U-238	U-238	6.713E-11	6.713E-10	6.713E-10	6.713E-10	6.713E-10	6.713E-10	6.713E-10	6.713E-10	6.713E-10	6.712E-10	
U-238	U-238	8.862E-17	8.862E-16	8.862E-16	8.861E-16	8.861E-16	8.861E-16	8.861E-16	8.861E-16	8.861E-16	8.860E-16	
U-238	äS(j):		6.713E-10	6.713E-10	6.713E-10	6.713E-10	6.713E-10	6.713E-10	6.713E-10	6.713E-10	6.712E-10	
0U-238	U-238	1.276E-18	1.276E-17	1.276E-17	1.276E-17	1.276E-17	1.276E-17	1.275E-17	1.275E-17	1.275E-17	1.275E-17	
U-238	U-238	3.200E-10	3.200E-09	3.200E-09	3.200E-09	3.200E-09	3.200E-09	3.200E-09	3.200E-09	3.200E-09	3.199E-09	
U-238	äS(j):		3.200E-09	3.200E-09	3.200E-09	3.200E-09	3.200E-09	3.200E-09	3.200E-09	3.200E-09	3.199E-09	
0U-238	U-238	4.224E-16	4.224E-15	4.224E-15	4.224E-15	4.224E-15	4.224E-15	4.224E-15	4.224E-15	4.224E-15	4.223E-15	
U-238	U-238	6.080E-18	6.080E-17	6.080E-17	6.080E-17	6.080E-17	6.080E-17	6.080E-17	6.080E-17	6.079E-17	6.079E-17	
U-238	äS(j):		4.285E-15	4.285E-15	4.285E-15	4.285E-15	4.285E-15	4.285E-15	4.285E-15	4.284E-15	4.284E-15	
0U-238	U-238	9.980E-01	9.980E+00	9.980E+00	9.980E+00	9.980E+00	9.980E+00	9.980E+00	9.979E+00	9.979E+00	9.978E+00	
U-238	U-238	1.317E-06	1.317E-05	1.317E-05	1.317E-05	1.317E-05	1.317E-05	1.317E-05	1.317E-05	1.317E-05	1.317E-05	
U-238	äS(j):		9.980E+00	9.980E+00	9.980E+00	9.980E+00	9.980E+00	9.980E+00	9.979E+00	9.979E+00	9.978E+00	
0U-238	U-238	1.896E-08	1.896E-07	1.896E-07	1.896E-07	1.896E-07	1.896E-07	1.896E-07	1.896E-07	1.896E-07	1.896E-07	
U-238	U-238	2.096E-04	2.096E-03	2.096E-03	2.096E-03	2.096E-03	2.096E-03	2.096E-03	2.096E-03	2.096E-03	2.096E-03	
U-238	äS(j):		2.096E-03	2.096E-03	2.096E-03	2.096E-03	2.096E-03	2.096E-03	2.096E-03	2.096E-03	2.096E-03	
0U-238	U-238	2.767E-10	2.767E-09	2.767E-09	2.767E-09	2.767E-09	2.767E-09	2.767E-09	2.767E-09	2.767E-09	2.766E-09	
U-238	U-238	3.983E-12	3.983E-11	3.983E-11	3.983E-11	3.983E-11	3.983E-11	3.983E-11	3.983E-11	3.982E-11	3.982E-11	
U-238	äS(j):		2.807E-09	2.807E-09	2.807E-09	2.807E-09	2.807E-09	2.807E-09	2.807E-09	2.807E-09	2.806E-09	
0U-238	U-238	1.994E-04	1.994E-03	1.994E-03	1.994E-03	1.994E-03	1.994E-03	1.994E-03	1.994E-03	1.994E-03	1.994E-03	
U-238	U-238	2.633E-10	2.633E-09	2.633E-09	2.633E-09	2.633E-09	2.633E-09	2.633E-09	2.632E-09	2.632E-09	2.632E-09	
U-238	äS(j):		1.994E-03	1.994E-03	1.994E-03	1.994E-03	1.994E-03	1.994E-03	1.994E-03	1.994E-03	1.994E-03	
0U-238	U-238	3.789E-12	3.789E-11	3.789E-11	3.789E-11	3.789E-11	3.789E-11	3.789E-11	3.789E-11	3.789E-11	3.789E-11	
U-238	U-238	4.189E-08	4.189E-07	4.189E-07	4.189E-07	4.189E-07	4.189E-07	4.189E-07	4.189E-07	4.189E-07	4.188E-07	
U-238	äS(j):		4.189E-07	4.189E-07	4.189E-07	4.189E-07	4.189E-07	4.189E-07	4.189E-07	4.189E-07	4.189E-07	
0U-238	U-238	5.530E-14	5.530E-13	5.530E-13	5.530E-13	5.530E-13	5.530E-13	5.529E-13	5.529E-13	5.529E-13	5.529E-13	
U-238	U-238	7.959E-16	7.959E-15	7.959E-15	7.959E-15	7.959E-15	7.959E-15	7.959E-15	7.959E-15	7.958E-15	7.958E-15	
U-238	äS(j):		5.609E-13	5.609E-13	5.609E-13	5.609E-13	5.609E-13	5.609E-13	5.609E-13	5.609E-13	5.608E-13	
0U-238	U-238	1.997E-07	1.997E-06	1.997E-06	1.997E-06	1.997E-06	1.997E-06	1.997E-06	1.997E-06	1.997E-06	1.996E-06	
U-238	U-238	2.636E-13	2.636E-12	2.636E-12	2.636E-12	2.636E-12	2.636E-12	2.636E-12	2.636E-12	2.636E-12	2.635E-12	
U-238	äS(j):		1.997E-06	1.997E-06	1.997E-06	1.997E-06	1.997E-06	1.997E-06	1.997E-06	1.997E-06	1.996E-06	
0U-238	U-238	3.794E-15	3.794E-14	3.794E-14	3.794E-14	3.794E-14	3.794E-14	3.794E-14	3.794E-14	3.794E-14	3.793E-14	
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii

THF(i) is the thread fraction of the parent nuclide.
0RESCALC.EXE execution time = 167.95 seconds

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[illegible]

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Total Dose Components	
Time = 0.000E+00	24
Time = 1.000E+00	26
Time = 2.500E+01	28
Time = 3.000E+01	30
Time = 5.000E+01	32
Time = 1.000E+02	34
Time = 2.500E+02	36
Time = 5.000E+02	38
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Dose Conversion Factor (and Related) Parameter Summary

Dose Library: DCFPAK adult HTO Plus DCFPAK3.02 (Adult)

0	3		3	Current	3	Base	3	Parameter
Menu	3	Parameter	3	Value#	3	Case*	3	Name
AA								
A-1	3	DCF's for external ground radiation, (mrem/yr)/(pCi/g)	3		3		3	
A-1	3	Ac-225 (Source: DCFPAK3.02)	3	5.286E-02	3	5.287E-02	3	DCF1(1)
A-1	3	Ac-227 (Source: DCFPAK3.02)	3	2.615E-04	3	2.615E-04	3	DCF1(2)
A-1	3	Ac-228 (Source: DCFPAK3.02)	3	5.044E+00	3	5.044E+00	3	DCF1(3)
A-1	3	Am-241 (Source: DCFPAK3.02)	3	3.717E-02	3	3.718E-02	3	DCF1(4)
A-1	3	At-217 (Source: DCFPAK3.02)	3	1.186E-03	3	1.186E-03	3	DCF1(5)
A-1	3	At-218 (Source: DCFPAK3.02)	3	5.567E-05	3	5.567E-05	3	DCF1(6)
A-1	3	At-219 (Source: DCFPAK3.02)	3	0.000E+00	3	0.000E+00	3	DCF1(7)
A-1	3	Ba-137m (Source: DCFPAK3.02)	3	3.381E+00	3	3.381E+00	3	DCF1(8)
A-1	3	Bi-210 (Source: DCFPAK3.02)	3	5.473E-03	3	5.474E-03	3	DCF1(9)
A-1	3	Bi-211 (Source: DCFPAK3.02)	3	2.410E-01	3	2.410E-01	3	DCF1(10)
A-1	3	Bi-212 (Source: DCFPAK3.02)	3	6.258E-01	3	6.259E-01	3	DCF1(11)
A-1	3	Bi-213 (Source: DCFPAK3.02)	3	6.874E-01	3	6.875E-01	3	DCF1(12)
A-1	3	Bi-214 (Source: DCFPAK3.02)	3	9.135E+00	3	9.136E+00	3	DCF1(13)
A-1	3	Bi-215 (Source: DCFPAK3.02)	3	1.369E+00	3	1.369E+00	3	DCF1(14)
A-1	3	Co-60 (Source: DCFPAK3.02)	3	1.539E+01	3	1.539E+01	3	DCF1(15)
A-1	3	Cs-134 (Source: DCFPAK3.02)	3	8.892E+00	3	8.893E+00	3	DCF1(16)
A-1	3	Cs-137 (Source: DCFPAK3.02)	3	8.686E-04	3	8.687E-04	3	DCF1(17)
A-1	3	Eu-152 (Source: DCFPAK3.02)	3	6.743E+00	3	6.744E+00	3	DCF1(18)
A-1	3	Eu-154 (Source: DCFPAK3.02)	3	7.285E+00	3	7.286E+00	3	DCF1(19)
A-1	3	Eu-155 (Source: DCFPAK3.02)	3	1.633E-01	3	1.633E-01	3	DCF1(20)
A-1	3	Fr-221 (Source: DCFPAK3.02)	3	1.332E-01	3	1.332E-01	3	DCF1(21)
A-1	3	Fr-223 (Source: DCFPAK3.02)	3	1.758E-01	3	1.758E-01	3	DCF1(22)
A-1	3	Gd-152 (Source: DCFPAK3.02)	3	0.000E+00	3	0.000E+00	3	DCF1(23)
A-1	3	H-3 (Source: DCFPAK3.02)	3	0.000E+00	3	0.000E+00	3	DCF1(24)
A-1	3	Hg-206 (Source: DCFPAK3.02)	3	6.127E-01	3	6.128E-01	3	DCF1(25)
A-1	3	I-129 (Source: DCFPAK3.02)	3	9.695E-03	3	9.696E-03	3	DCF1(26)
A-1	3	Mn-54 (Source: DCFPAK3.02)	3	4.857E+00	3	4.857E+00	3	DCF1(27)
A-1	3	Na-22 (Source: DCFPAK3.02)	3	1.289E+01	3	1.289E+01	3	DCF1(28)
A-1	3	Nd-144 (Source: DCFPAK3.02)	3	0.000E+00	3	0.000E+00	3	DCF1(29)
A-1	3	Ni-63 (Source: DCFPAK3.02)	3	0.000E+00	3	0.000E+00	3	DCF1(30)
A-1	3	Np-237 (Source: DCFPAK3.02)	3	6.706E-02	3	6.707E-02	3	DCF1(31)
A-1	3	Pa-231 (Source: DCFPAK3.02)	3	1.608E-01	3	1.609E-01	3	DCF1(32)
A-1	3	Pa-233 (Source: DCFPAK3.02)	3	1.018E+00	3	1.018E+00	3	DCF1(33)
A-1	3	Pa-234 (Source: DCFPAK3.02)	3	8.275E+00	3	8.276E+00	3	DCF1(34)
A-1	3	Pa-234m (Source: DCFPAK3.02)	3	1.257E-01	3	1.257E-01	3	DCF1(35)
A-1	3	Pb-209 (Source: DCFPAK3.02)	3	7.528E-04	3	7.529E-04	3	DCF1(36)
A-1	3	Pb-210 (Source: DCFPAK3.02)	3	2.092E-03	3	2.092E-03	3	DCF1(37)
A-1	3	Pb-211 (Source: DCFPAK3.02)	3	3.680E-01	3	3.680E-01	3	DCF1(38)
A-1	3	Pb-212 (Source: DCFPAK3.02)	3	6.314E-01	3	6.315E-01	3	DCF1(39)

A-1 ³ Pb-214 (Source: DCFPAK3.02)
 A-1 ³ Po-210 (Source: DCFPAK3.02)
 A-1 ³ Po-211 (Source: DCFPAK3.02)
 A-1 ³ Po-212 (Source: DCFPAK3.02)
 A-1 ³ Po-213 (Source: DCFPAK3.02)
 A-1 ³ Po-214 (Source: DCFPAK3.02)
 A-1 ³ Po-215 (Source: DCFPAK3.02)
 A-1 ³ Po-216 (Source: DCFPAK3.02)
 A-1 ³ Po-218 (Source: DCFPAK3.02)
 A-1 ³ Pu-238 (Source: DCFPAK3.02)

³ 1.257E+00 ³ 1.257E+00 ³ DCF1(40)
³ 5.641E-05 ³ 5.642E-05 ³ DCF1(41)
³ 4.707E-02 ³ 4.708E-02 ³ DCF1(42)
³ 0.000E+00 ³ 0.000E+00 ³ DCF1(43)
³ 2.167E-04 ³ 2.167E-04 ³ DCF1(44)
³ 4.801E-04 ³ 4.801E-04 ³ DCF1(45)
³ 9.452E-04 ³ 9.453E-04 ³ DCF1(46)
³ 8.873E-05 ³ 8.874E-05 ³ DCF1(47)
³ 9.228E-09 ³ 9.229E-09 ³ DCF1(48)
³ 1.111E-04 ³ 1.112E-04 ³ DCF1(49)

Dose Conversion Factor (and Related) Parameter Summary (continued)

Dose Library: DCFPAK adult HTO Plus DCFPAK3.02 (Adult)

0	3		3	Current	3	Base	3	Parameter
Menu	3	Parameter	3	Value#	3	Case*	3	Name
AA								
A-1	3	Pu-239 (Source: DCFPAK3.02)	3	2.765E-04	3	2.765E-04	3	DCF1(50)
A-1	3	Ra-223 (Source: DCFPAK3.02)	3	5.791E-01	3	5.791E-01	3	DCF1(51)
A-1	3	Ra-224 (Source: DCFPAK3.02)	3	4.950E-02	3	4.951E-02	3	DCF1(52)
A-1	3	Ra-225 (Source: DCFPAK3.02)	3	8.910E-03	3	8.911E-03	3	DCF1(53)
A-1	3	Ra-226 (Source: DCFPAK3.02)	3	3.176E-02	3	3.176E-02	3	DCF1(54)
A-1	3	Ra-228 (Source: DCFPAK3.02)	3	6.575E-05	3	6.576E-05	3	DCF1(55)
A-1	3	Rh-106 (Source: DCFPAK3.02)	3	1.252E+00	3	1.252E+00	3	DCF1(56)
A-1	3	Rn-218 (Source: DCFPAK3.02)	3	4.259E-03	3	4.260E-03	3	DCF1(57)
A-1	3	Rn-219 (Source: DCFPAK3.02)	3	2.970E-01	3	2.970E-01	3	DCF1(58)
A-1	3	Rn-220 (Source: DCFPAK3.02)	3	3.474E-03	3	3.475E-03	3	DCF1(59)
A-1	3	Rn-222 (Source: DCFPAK3.02)	3	2.130E-03	3	2.130E-03	3	DCF1(60)
A-1	3	Ru-106 (Source: DCFPAK3.02)	3	0.000E+00	3	0.000E+00	3	DCF1(61)
A-1	3	Sm-148 (Source: DCFPAK3.02)	3	0.000E+00	3	0.000E+00	3	DCF1(62)
A-1	3	Sr-90 (Source: DCFPAK3.02)	3	6.463E-04	3	6.464E-04	3	DCF1(63)
A-1	3	Tc-99 (Source: DCFPAK3.02)	3	1.104E-04	3	1.104E-04	3	DCF1(64)
A-1	3	Th-227 (Source: DCFPAK3.02)	3	5.641E-01	3	5.642E-01	3	DCF1(65)
A-1	3	Th-228 (Source: DCFPAK3.02)	3	7.248E-03	3	7.249E-03	3	DCF1(66)
A-1	3	Th-229 (Source: DCFPAK3.02)	3	2.877E-01	3	2.877E-01	3	DCF1(67)
A-1	3	Th-230 (Source: DCFPAK3.02)	3	1.106E-03	3	1.106E-03	3	DCF1(68)
A-1	3	Th-231 (Source: DCFPAK3.02)	3	3.250E-02	3	3.251E-02	3	DCF1(69)
A-1	3	Th-232 (Source: DCFPAK3.02)	3	4.782E-04	3	4.783E-04	3	DCF1(70)
A-1	3	Th-234 (Source: DCFPAK3.02)	3	2.316E-02	3	2.317E-02	3	DCF1(71)
A-1	3	Tl-206 (Source: DCFPAK3.02)	3	1.278E-02	3	1.278E-02	3	DCF1(72)
A-1	3	Tl-207 (Source: DCFPAK3.02)	3	2.391E-02	3	2.391E-02	3	DCF1(73)
A-1	3	Tl-208 (Source: DCFPAK3.02)	3	2.167E+01	3	2.167E+01	3	DCF1(74)
A-1	3	Tl-209 (Source: DCFPAK3.02)	3	1.287E+01	3	1.287E+01	3	DCF1(75)
A-1	3	Tl-210 (Source: DCFPAK3.02)	3	1.677E+01	3	1.678E+01	3	DCF1(76)
A-1	3	U-233 (Source: DCFPAK3.02)	3	9.191E-04	3	9.192E-04	3	DCF1(77)
A-1	3	U-234 (Source: DCFPAK3.02)	3	3.456E-04	3	3.456E-04	3	DCF1(78)
A-1	3	U-235 (Source: DCFPAK3.02)	3	7.005E-01	3	7.006E-01	3	DCF1(79)
A-1	3	U-235m (Source: DCFPAK3.02)	3	0.000E+00	3	0.000E+00	3	DCF1(80)
A-1	3	U-238 (Source: DCFPAK3.02)	3	1.713E-04	3	1.713E-04	3	DCF1(81)
A-1	3	Y-90 (Source: DCFPAK3.02)	3	4.016E-02	3	4.017E-02	3	DCF1(82)
3								
B-1	3	Dose conversion factors for inhalation, mrem/pCi:	3		3		3	
B-1	3	Ac-227+D	3	6.464E-01	3	5.760E-01	3	DCF2(1)
B-1	3	Ac-227+D1	3	6.464E-01	3	5.760E-01	3	DCF2(2)
B-1	3	Ac-227+D2	3	6.081E-01	3	5.760E-01	3	DCF2(3)
B-1	3	Ac-227+D3	3	6.081E-01	3	5.760E-01	3	DCF2(4)
B-1	3	Ac-227+D4	3	5.761E-01	3	5.760E-01	3	DCF2(5)

B-1 ³ Ac-227+D5
B-1 ³ Am-241
B-1 ³ Co-60
B-1 ³ Cs-134
B-1 ³ Cs-137+D
B-1 ³ Eu-152
B-1 ³ Eu-154
B-1 ³ Eu-155
B-1 ³ Gd-152
B-1 ³ H-3

³ 5.761E-01 ³ 5.760E-01 ³ DCF2(6)
³ 3.566E-01 ³ 3.566E-01 ³ DCF2(7)
³ 1.138E-04 ³ 1.138E-04 ³ DCF2(8)
³ 7.558E-05 ³ 7.558E-05 ³ DCF2(9)
³ 1.457E-04 ³ 1.457E-04 ³ DCF2(10)
³ 3.452E-04 ³ 3.452E-04 ³ DCF2(11)
³ 3.947E-04 ³ 3.947E-04 ³ DCF2(13)
³ 4.599E-05 ³ 4.599E-05 ³ DCF2(14)
³ 7.037E-02 ³ 7.037E-02 ³ DCF2(15)
³ 6.778E-08 ³ 9.689E-07 ³ DCF2(16)

Dose Library: DCFPAK adult HT0 Plus DCFPAK3.02 (Adult)

Menu	Parameter	Current Value#	Base Case*	Parameter Name
B-1	I-129	3.630E-04	3.630E-04	DCF2(17)
B-1	Mn-54	1.210E-05	1.210E-05	DCF2(18)
B-1	Na-22	1.075E-04	1.075E-04	DCF2(19)
B-1	Nd-144	7.037E-02	7.037E-02	DCF2(20)
B-1	Ni-63	7.388E-06	7.388E-06	DCF2(21)
B-1	Np-237+D	1.839E-01	1.839E-01	DCF2(22)
B-1	Pa-231	8.505E-01	8.505E-01	DCF2(23)
B-1	Pb-210+D	3.708E-02	2.077E-02	DCF2(29)
B-1	Pb-210+D1	2.126E-02	2.077E-02	DCF2(30)
B-1	Pb-210+D2	2.077E-02	2.077E-02	DCF2(31)
B-1	Pu-238	3.999E-01	3.999E-01	DCF2(32)
B-1	Pu-239	4.410E-01	4.410E-01	DCF2(48)
B-1	Pu-239+D	4.410E-01	4.410E-01	DCF2(54)
B-1	Ra-226+D	3.528E-02	3.517E-02	DCF2(60)
B-1	Ra-226+D1	3.528E-02	3.517E-02	DCF2(63)
B-1	Ra-226+D2	3.523E-02	3.517E-02	DCF2(66)
B-1	Ra-226+D3	3.523E-02	3.517E-02	DCF2(69)
B-1	Ra-226+D4	3.517E-02	3.517E-02	DCF2(72)
B-1	Ra-228+D	5.943E-02	5.938E-02	DCF2(75)
B-1	Ru-106+D	2.461E-04	2.461E-04	DCF2(76)
B-1	Sm-148	7.340E-02	7.340E-02	DCF2(77)
B-1	Sr-90+D	5.841E-04	5.786E-04	DCF2(78)
B-1	Tc-99	4.935E-05	4.935E-05	DCF2(79)
B-1	Th-228+D	1.600E-01	1.468E-01	DCF2(80)
B-1	Th-229+D	9.433E-01	8.831E-01	DCF2(81)
B-1	Th-230	3.759E-01	3.759E-01	DCF2(82)
B-1	Th-232	4.070E-01	4.070E-01	DCF2(97)
B-1	U-233	3.549E-02	3.549E-02	DCF2(98)
B-1	U-234	3.479E-02	3.479E-02	DCF2(99)
B-1	U-235+D	3.132E-02	3.132E-02	DCF2(114)
B-1	U-238	2.973E-02	2.973E-02	DCF2(120)
B-1	U-238+D	2.976E-02	2.973E-02	DCF2(121)
B-1	U-238+D1	2.976E-02	2.973E-02	DCF2(136)
D-1	Dose conversion factors for ingestion, mrem/pCi:			
D-1	Ac-227+D	1.607E-03	1.191E-03	DCF3(1)
D-1	Ac-227+D1	1.607E-03	1.191E-03	DCF3(2)
D-1	Ac-227+D2	1.582E-03	1.191E-03	DCF3(3)
D-1	Ac-227+D3	1.582E-03	1.191E-03	DCF3(4)
D-1	Ac-227+D4	1.201E-03	1.191E-03	DCF3(5)

D-1 ³ Ac-227+D5
D-1 ³ Am-241
D-1 ³ Co-60
D-1 ³ Cs-134
D-1 ³ Cs-137+D
D-1 ³ Eu-152
D-1 ³ Eu-154
D-1 ³ Eu-155
D-1 ³ Gd-152
D-1 ³ H-3

³ 1.201E-03 ³ 1.191E-03 ³ DCF3(6)
³ 7.548E-04 ³ 7.548E-04 ³ DCF3(7)
³ 1.265E-05 ³ 1.265E-05 ³ DCF3(8)
³ 7.141E-05 ³ 7.141E-05 ³ DCF3(9)
³ 5.032E-05 ³ 5.032E-05 ³ DCF3(10)
³ 4.958E-06 ³ 4.958E-06 ³ DCF3(11)
³ 7.289E-06 ³ 7.289E-06 ³ DCF3(13)
³ 1.228E-06 ³ 1.228E-06 ³ DCF3(14)
³ 1.517E-04 ³ 1.517E-04 ³ DCF3(15)
³ 7.067E-08 ³ 1.550E-07 ³ DCF3(16)

Dose Library: DCFPAK adult HT0 Plus DCFPAK3.02 (Adult)

Menu	Parameter	Current Value#	Base Case*	Parameter Name
D-1	I-129	3.996E-04	3.996E-04	DCF3(17)
D-1	Mn-54	2.668E-06	2.668E-06	DCF3(18)
D-1	Na-22	1.173E-05	1.173E-05	DCF3(19)
D-1	Nd-144	1.510E-04	1.510E-04	DCF3(20)
D-1	Ni-63	5.735E-07	5.735E-07	DCF3(21)
D-1	Np-237+D	3.995E-04	3.959E-04	DCF3(22)
D-1	Pa-231	1.772E-03	1.772E-03	DCF3(23)
D-1	Pb-210+D	7.057E-03	2.575E-03	DCF3(29)
D-1	Pb-210+D1	2.580E-03	2.575E-03	DCF3(30)
D-1	Pb-210+D2	2.575E-03	2.575E-03	DCF3(31)
D-1	Pu-238	8.436E-04	8.436E-04	DCF3(32)
D-1	Pu-239	9.287E-04	9.287E-04	DCF3(48)
D-1	Pu-239+D	9.287E-04	9.287E-04	DCF3(54)
D-1	Ra-226+D	1.037E-03	1.036E-03	DCF3(60)
D-1	Ra-226+D1	1.037E-03	1.036E-03	DCF3(63)
D-1	Ra-226+D2	1.036E-03	1.036E-03	DCF3(66)
D-1	Ra-226+D3	1.036E-03	1.036E-03	DCF3(69)
D-1	Ra-226+D4	1.036E-03	1.036E-03	DCF3(72)
D-1	Ra-228+D	2.577E-03	2.575E-03	DCF3(75)
D-1	Ru-106+D	2.597E-05	2.597E-05	DCF3(76)
D-1	Sm-148	1.576E-04	1.576E-04	DCF3(77)
D-1	Sr-90+D	1.120E-04	1.021E-04	DCF3(78)
D-1	Tc-99	2.375E-06	2.375E-06	DCF3(79)
D-1	Th-228+D	5.286E-04	2.664E-04	DCF3(80)
D-1	Th-229+D	2.359E-03	1.846E-03	DCF3(81)
D-1	Th-230	7.918E-04	7.918E-04	DCF3(82)
D-1	Th-232	8.547E-04	8.547E-04	DCF3(97)
D-1	U-233	1.894E-04	1.894E-04	DCF3(98)
D-1	U-234	1.831E-04	1.831E-04	DCF3(99)
D-1	U-235+D	1.740E-04	1.728E-04	DCF3(114)
D-1	U-238	1.650E-04	1.650E-04	DCF3(120)
D-1	U-238+D	1.791E-04	1.650E-04	DCF3(121)
D-1	U-238+D1	1.776E-04	1.650E-04	DCF3(136)
D-34	Food transfer factors:			
D-34	Ac-227+D , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(1,1)
D-34	Ac-227+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-05	2.000E-05	RTF(1,2)
D-34	Ac-227+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-05	2.000E-05	RTF(1,3)
D-34	Ac-227+D1 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(2,1)

D-34	³	Ac-227+D1 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	³	2.000E-05	³	2.000E-05	³	RTF(	2,2)
D-34	³	Ac-227+D1 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	³	2.000E-05	³	2.000E-05	³	RTF(	2,3)
D-34	³		³		³		³		
D-34	³	Ac-227+D2 , plant/soil concentration ratio, dimensionless	³	2.500E-03	³	2.500E-03	³	RTF(	3,1)
D-34	³	Ac-227+D2 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	³	2.000E-05	³	2.000E-05	³	RTF(	3,2)
D-34	³	Ac-227+D2 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	³	2.000E-05	³	2.000E-05	³	RTF(	3,3)
D-34	³		³		³		³		
D-34	³	Ac-227+D3 , plant/soil concentration ratio, dimensionless	³	2.500E-03	³	2.500E-03	³	RTF(	4,1)
D-34	³	Ac-227+D3 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	³	2.000E-05	³	2.000E-05	³	RTF(	4,2)
D-34	³	Ac-227+D3 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	³	2.000E-05	³	2.000E-05	³	RTF(	4,3)

Dose Conversion Factor (and Related) Parameter Summary (continued)

Dose Library: DCFPAK adult HTO Plus DCFPAK3.02 (Adult)

0	3		3	Current	3	Base	3	Parameter
Menu	3	Parameter	3	Value#	3	Case*	3	Name
AA								
D-34	3	Ac-227+D4 , plant/soil concentration ratio, dimensionless	3	2.500E-03	3	2.500E-03	3	RTF(5,1)
D-34	3	Ac-227+D4 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	2.000E-05	3	2.000E-05	3	RTF(5,2)
D-34	3	Ac-227+D4 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	2.000E-05	3	2.000E-05	3	RTF(5,3)
D-34	3		3		3		3	
D-34	3	Ac-227+D5 , plant/soil concentration ratio, dimensionless	3	2.500E-03	3	2.500E-03	3	RTF(6,1)
D-34	3	Ac-227+D5 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	2.000E-05	3	2.000E-05	3	RTF(6,2)
D-34	3	Ac-227+D5 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	2.000E-05	3	2.000E-05	3	RTF(6,3)
D-34	3		3		3		3	
D-34	3	Am-241 , plant/soil concentration ratio, dimensionless	3	1.000E-03	3	1.000E-03	3	RTF(7,1)
D-34	3	Am-241 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	5.000E-05	3	5.000E-05	3	RTF(7,2)
D-34	3	Am-241 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	2.000E-06	3	2.000E-06	3	RTF(7,3)
D-34	3		3		3		3	
D-34	3	Co-60 , plant/soil concentration ratio, dimensionless	3	8.000E-02	3	8.000E-02	3	RTF(8,1)
D-34	3	Co-60 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	2.000E-02	3	2.000E-02	3	RTF(8,2)
D-34	3	Co-60 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	2.000E-03	3	2.000E-03	3	RTF(8,3)
D-34	3		3		3		3	
D-34	3	Cs-134 , plant/soil concentration ratio, dimensionless	3	4.000E-02	3	4.000E-02	3	RTF(9,1)
D-34	3	Cs-134 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	3.000E-02	3	3.000E-02	3	RTF(9,2)
D-34	3	Cs-134 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	8.000E-03	3	8.000E-03	3	RTF(9,3)
D-34	3		3		3		3	
D-34	3	Cs-137+D , plant/soil concentration ratio, dimensionless	3	4.000E-02	3	4.000E-02	3	RTF(10,1)
D-34	3	Cs-137+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	3.000E-02	3	3.000E-02	3	RTF(10,2)
D-34	3	Cs-137+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	8.000E-03	3	8.000E-03	3	RTF(10,3)
D-34	3		3		3		3	
D-34	3	Eu-152 , plant/soil concentration ratio, dimensionless	3	2.500E-03	3	2.500E-03	3	RTF(11,1)
D-34	3	Eu-152 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	2.000E-03	3	2.000E-03	3	RTF(11,2)
D-34	3	Eu-152 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	5.000E-05	3	5.000E-05	3	RTF(11,3)
D-34	3		3		3		3	
D-34	3	Eu-154 , plant/soil concentration ratio, dimensionless	3	2.500E-03	3	2.500E-03	3	RTF(13,1)
D-34	3	Eu-154 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	2.000E-03	3	2.000E-03	3	RTF(13,2)
D-34	3	Eu-154 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	5.000E-05	3	5.000E-05	3	RTF(13,3)
D-34	3		3		3		3	
D-34	3	Eu-155 , plant/soil concentration ratio, dimensionless	3	2.500E-03	3	2.500E-03	3	RTF(14,1)
D-34	3	Eu-155 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	2.000E-03	3	2.000E-03	3	RTF(14,2)
D-34	3	Eu-155 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	5.000E-05	3	5.000E-05	3	RTF(14,3)
D-34	3		3		3		3	
D-34	3	Gd-152 , plant/soil concentration ratio, dimensionless	3	2.500E-03	3	2.500E-03	3	RTF(15,1)
D-34	3	Gd-152 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	2.000E-03	3	2.000E-03	3	RTF(15,2)
D-34	3	Gd-152 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	2.000E-05	3	2.000E-05	3	RTF(15,3)
D-34	3		3		3		3	

D-34	³	H-3	, plant/soil concentration ratio, dimensionless	³	4.800E+00	³	4.800E+00	³	RTF(16,1)
D-34	³	H-3	, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	³	1.200E-02	³	1.200E-02	³	RTF(16,2)
D-34	³	H-3	, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	³	1.000E-02	³	1.000E-02	³	RTF(16,3)
D-34	³			³		³		³	
D-34	³	I-129	, plant/soil concentration ratio, dimensionless	³	2.000E-02	³	2.000E-02	³	RTF(17,1)
D-34	³	I-129	, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	³	7.000E-03	³	7.000E-03	³	RTF(17,2)
D-34	³	I-129	, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	³	1.000E-02	³	1.000E-02	³	RTF(17,3)
D-34	³			³		³		³	

Dose Conversion Factor (and Related) Parameter Summary (continued)

Dose Library: DCFPAK adult HTO Plus DCFPAK3.02 (Adult)

0	3		3	Current	3	Base	3	Parameter
Menu	3	Parameter	3	Value#	3	Case*	3	Name
AAAAA	3	AAAAA	3	AAAAA	3	AAAAA	3	AAAAA
D-34	3	Mn-54 , plant/soil concentration ratio, dimensionless	3	3.000E-01	3	3.000E-01	3	RTF(18,1)
D-34	3	Mn-54 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	5.000E-04	3	5.000E-04	3	RTF(18,2)
D-34	3	Mn-54 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	3.000E-04	3	3.000E-04	3	RTF(18,3)
D-34	3		3		3		3	
D-34	3	Na-22 , plant/soil concentration ratio, dimensionless	3	5.000E-02	3	5.000E-02	3	RTF(19,1)
D-34	3	Na-22 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	8.000E-02	3	8.000E-02	3	RTF(19,2)
D-34	3	Na-22 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	4.000E-02	3	4.000E-02	3	RTF(19,3)
D-34	3		3		3		3	
D-34	3	Nd-144 , plant/soil concentration ratio, dimensionless	3	2.400E-03	3	2.400E-03	3	RTF(20,1)
D-34	3	Nd-144 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	2.000E-03	3	2.000E-03	3	RTF(20,2)
D-34	3	Nd-144 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	2.000E-05	3	2.000E-05	3	RTF(20,3)
D-34	3		3		3		3	
D-34	3	Ni-63 , plant/soil concentration ratio, dimensionless	3	5.000E-02	3	5.000E-02	3	RTF(21,1)
D-34	3	Ni-63 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	5.000E-03	3	5.000E-03	3	RTF(21,2)
D-34	3	Ni-63 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	2.000E-02	3	2.000E-02	3	RTF(21,3)
D-34	3		3		3		3	
D-34	3	Np-237+D , plant/soil concentration ratio, dimensionless	3	2.000E-02	3	2.000E-02	3	RTF(22,1)
D-34	3	Np-237+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	1.000E-03	3	1.000E-03	3	RTF(22,2)
D-34	3	Np-237+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	5.000E-06	3	5.000E-06	3	RTF(22,3)
D-34	3		3		3		3	
D-34	3	Pa-231 , plant/soil concentration ratio, dimensionless	3	1.000E-02	3	1.000E-02	3	RTF(23,1)
D-34	3	Pa-231 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	5.000E-03	3	5.000E-03	3	RTF(23,2)
D-34	3	Pa-231 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	5.000E-06	3	5.000E-06	3	RTF(23,3)
D-34	3		3		3		3	
D-34	3	Pb-210+D , plant/soil concentration ratio, dimensionless	3	1.000E-02	3	1.000E-02	3	RTF(29,1)
D-34	3	Pb-210+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	8.000E-04	3	8.000E-04	3	RTF(29,2)
D-34	3	Pb-210+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	3.000E-04	3	3.000E-04	3	RTF(29,3)
D-34	3		3		3		3	
D-34	3	Pb-210+D1 , plant/soil concentration ratio, dimensionless	3	1.000E-02	3	1.000E-02	3	RTF(30,1)
D-34	3	Pb-210+D1 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	8.000E-04	3	8.000E-04	3	RTF(30,2)
D-34	3	Pb-210+D1 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	3.000E-04	3	3.000E-04	3	RTF(30,3)
D-34	3		3		3		3	
D-34	3	Pb-210+D2 , plant/soil concentration ratio, dimensionless	3	1.000E-02	3	1.000E-02	3	RTF(31,1)
D-34	3	Pb-210+D2 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	8.000E-04	3	8.000E-04	3	RTF(31,2)
D-34	3	Pb-210+D2 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	3.000E-04	3	3.000E-04	3	RTF(31,3)
D-34	3		3		3		3	
D-34	3	Pu-238 , plant/soil concentration ratio, dimensionless	3	1.000E-03	3	1.000E-03	3	RTF(32,1)
D-34	3	Pu-238 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	1.000E-04	3	1.000E-04	3	RTF(32,2)
D-34	3	Pu-238 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	1.000E-06	3	1.000E-06	3	RTF(32,3)
D-34	3		3		3		3	

D-34	³	Pu-239	, plant/soil concentration ratio, dimensionless	³	1.000E-03	³	1.000E-03	³	RTF(48,1)
D-34	³	Pu-239	, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	³	1.000E-04	³	1.000E-04	³	RTF(48,2)
D-34	³	Pu-239	, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	³	1.000E-06	³	1.000E-06	³	RTF(48,3)
D-34	³			³		³		³	
D-34	³	Pu-239+D	, plant/soil concentration ratio, dimensionless	³	1.000E-03	³	1.000E-03	³	RTF(54,1)
D-34	³	Pu-239+D	, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	³	1.000E-04	³	1.000E-04	³	RTF(54,2)
D-34	³	Pu-239+D	, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	³	1.000E-06	³	1.000E-06	³	RTF(54,3)
D-34	³			³		³		³	

Dose Conversion Factor (and Related) Parameter Summary (continued)

Dose Library: DCFPAK adult HTO Plus DCFPAK3.02 (Adult)

0	3		3	Current	3	Base	3	Parameter
Menu	3	Parameter	3	Value#	3	Case*	3	Name
AA								
D-34	3	Ra-226+D , plant/soil concentration ratio, dimensionless	3	4.000E-02	3	4.000E-02	3	RTF(60,1)
D-34	3	Ra-226+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	1.000E-03	3	1.000E-03	3	RTF(60,2)
D-34	3	Ra-226+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	1.000E-03	3	1.000E-03	3	RTF(60,3)
D-34	3		3		3		3	
D-34	3	Ra-226+D1 , plant/soil concentration ratio, dimensionless	3	4.000E-02	3	4.000E-02	3	RTF(63,1)
D-34	3	Ra-226+D1 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	1.000E-03	3	1.000E-03	3	RTF(63,2)
D-34	3	Ra-226+D1 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	1.000E-03	3	1.000E-03	3	RTF(63,3)
D-34	3		3		3		3	
D-34	3	Ra-226+D2 , plant/soil concentration ratio, dimensionless	3	4.000E-02	3	4.000E-02	3	RTF(66,1)
D-34	3	Ra-226+D2 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	1.000E-03	3	1.000E-03	3	RTF(66,2)
D-34	3	Ra-226+D2 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	1.000E-03	3	1.000E-03	3	RTF(66,3)
D-34	3		3		3		3	
D-34	3	Ra-226+D3 , plant/soil concentration ratio, dimensionless	3	4.000E-02	3	4.000E-02	3	RTF(69,1)
D-34	3	Ra-226+D3 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	1.000E-03	3	1.000E-03	3	RTF(69,2)
D-34	3	Ra-226+D3 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	1.000E-03	3	1.000E-03	3	RTF(69,3)
D-34	3		3		3		3	
D-34	3	Ra-226+D4 , plant/soil concentration ratio, dimensionless	3	4.000E-02	3	4.000E-02	3	RTF(72,1)
D-34	3	Ra-226+D4 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	1.000E-03	3	1.000E-03	3	RTF(72,2)
D-34	3	Ra-226+D4 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	1.000E-03	3	1.000E-03	3	RTF(72,3)
D-34	3		3		3		3	
D-34	3	Ra-228+D , plant/soil concentration ratio, dimensionless	3	4.000E-02	3	4.000E-02	3	RTF(75,1)
D-34	3	Ra-228+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	1.000E-03	3	1.000E-03	3	RTF(75,2)
D-34	3	Ra-228+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	1.000E-03	3	1.000E-03	3	RTF(75,3)
D-34	3		3		3		3	
D-34	3	Ru-106+D , plant/soil concentration ratio, dimensionless	3	3.000E-02	3	3.000E-02	3	RTF(76,1)
D-34	3	Ru-106+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	2.000E-03	3	2.000E-03	3	RTF(76,2)
D-34	3	Ru-106+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	3.300E-06	3	3.300E-06	3	RTF(76,3)
D-34	3		3		3		3	
D-34	3	Sm-148 , plant/soil concentration ratio, dimensionless	3	2.500E-03	3	2.500E-03	3	RTF(77,1)
D-34	3	Sm-148 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	2.000E-03	3	2.000E-03	3	RTF(77,2)
D-34	3	Sm-148 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	2.000E-05	3	2.000E-05	3	RTF(77,3)
D-34	3		3		3		3	
D-34	3	Sr-90+D , plant/soil concentration ratio, dimensionless	3	3.000E-01	3	3.000E-01	3	RTF(78,1)
D-34	3	Sr-90+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	8.000E-03	3	8.000E-03	3	RTF(78,2)
D-34	3	Sr-90+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	2.000E-03	3	2.000E-03	3	RTF(78,3)
D-34	3		3		3		3	
D-34	3	Tc-99 , plant/soil concentration ratio, dimensionless	3	5.000E+00	3	5.000E+00	3	RTF(79,1)
D-34	3	Tc-99 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	1.000E-04	3	1.000E-04	3	RTF(79,2)
D-34	3	Tc-99 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	1.000E-03	3	1.000E-03	3	RTF(79,3)
D-34	3		3		3		3	

D-34	³	Th-228+D	, plant/soil concentration ratio, dimensionless	³	1.000E-03	³	1.000E-03	³	RTF(80,1)
D-34	³	Th-228+D	, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	³	1.000E-04	³	1.000E-04	³	RTF(80,2)
D-34	³	Th-228+D	, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	³	5.000E-06	³	5.000E-06	³	RTF(80,3)
D-34	³			³		³		³	
D-34	³	Th-229+D	, plant/soil concentration ratio, dimensionless	³	1.000E-03	³	1.000E-03	³	RTF(81,1)
D-34	³	Th-229+D	, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	³	1.000E-04	³	1.000E-04	³	RTF(81,2)
D-34	³	Th-229+D	, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	³	5.000E-06	³	5.000E-06	³	RTF(81,3)
D-34	³			³		³		³	

Dose Library: DCFPAK adult HT0 Plus DCFPAK3.02 (Adult)

Menu	Parameter	Current Value#	Base Case*	Parameter Name
D-34	Th-230 , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(82,1)
D-34	Th-230 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-04	1.000E-04	RTF(82,2)
D-34	Th-230 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-06	5.000E-06	RTF(82,3)
D-34	Th-232 , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(97,1)
D-34	Th-232 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-04	1.000E-04	RTF(97,2)
D-34	Th-232 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-06	5.000E-06	RTF(97,3)
D-34	U-233 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(98,1)
D-34	U-233 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.400E-04	3.400E-04	RTF(98,2)
D-34	U-233 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	6.000E-04	6.000E-04	RTF(98,3)
D-34	U-234 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(99,1)
D-34	U-234 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.400E-04	3.400E-04	RTF(99,2)
D-34	U-234 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	6.000E-04	6.000E-04	RTF(99,3)
D-34	U-235+D , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(114,1)
D-34	U-235+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.400E-04	3.400E-04	RTF(114,2)
D-34	U-235+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	6.000E-04	6.000E-04	RTF(114,3)
D-34	U-238 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(120,1)
D-34	U-238 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.400E-04	3.400E-04	RTF(120,2)
D-34	U-238 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	6.000E-04	6.000E-04	RTF(120,3)
D-34	U-238+D , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(121,1)
D-34	U-238+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.400E-04	3.400E-04	RTF(121,2)
D-34	U-238+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	6.000E-04	6.000E-04	RTF(121,3)
D-34	U-238+D1 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(136,1)
D-34	U-238+D1 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.400E-04	3.400E-04	RTF(136,2)
D-34	U-238+D1 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	6.000E-04	6.000E-04	RTF(136,3)
D-5	Bioaccumulation factors, fresh water, L/kg:			
D-5	Ac-227+D , fish	1.500E+01	1.500E+01	BIOFAC(1,1)
D-5	Ac-227+D , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(1,2)
D-5	Ac-227+D1 , fish	1.500E+01	1.500E+01	BIOFAC(2,1)
D-5	Ac-227+D1 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(2,2)

D-5 ³ Ac-227+D2 , fish
 D-5 ³ Ac-227+D2 , crustacea and mollusks
 D-5 ³
 D-5 ³ Ac-227+D3 , fish
 D-5 ³ Ac-227+D3 , crustacea and mollusks
 D-5 ³
 D-5 ³ Ac-227+D4 , fish
 D-5 ³ Ac-227+D4 , crustacea and mollusks
 D-5 ³

³ 1.500E+01 ³ 1.500E+01 ³ BIOFAC(3,1)
³ 1.000E+03 ³ 1.000E+03 ³ BIOFAC(3,2)
³ ³ ³
³ 1.500E+01 ³ 1.500E+01 ³ BIOFAC(4,1)
³ 1.000E+03 ³ 1.000E+03 ³ BIOFAC(4,2)
³ ³ ³
³ 1.500E+01 ³ 1.500E+01 ³ BIOFAC(5,1)
³ 1.000E+03 ³ 1.000E+03 ³ BIOFAC(5,2)
³ ³ ³

Dose Conversion Factor (and Related) Parameter Summary (continued)

Dose Library: DCFPAK adult HTO Plus DCFPAK3.02 (Adult)

0	3		3	Current	3	Base	3	Parameter
Menu	3	Parameter	3	Value#	3	Case*	3	Name
AAAAA	3	AAAAA	3	AAAAA	3	AAAAA	3	AAAAA
D-5	3	Ac-227+D5 , fish	3	1.500E+01	3	1.500E+01	3	BIOFAC(6,1)
D-5	3	Ac-227+D5 , crustacea and mollusks	3	1.000E+03	3	1.000E+03	3	BIOFAC(6,2)
D-5	3		3		3		3	
D-5	3	Am-241 , fish	3	3.000E+01	3	3.000E+01	3	BIOFAC(7,1)
D-5	3	Am-241 , crustacea and mollusks	3	1.000E+03	3	1.000E+03	3	BIOFAC(7,2)
D-5	3		3		3		3	
D-5	3	Co-60 , fish	3	3.000E+02	3	3.000E+02	3	BIOFAC(8,1)
D-5	3	Co-60 , crustacea and mollusks	3	2.000E+02	3	2.000E+02	3	BIOFAC(8,2)
D-5	3		3		3		3	
D-5	3	Cs-134 , fish	3	2.000E+03	3	2.000E+03	3	BIOFAC(9,1)
D-5	3	Cs-134 , crustacea and mollusks	3	1.000E+02	3	1.000E+02	3	BIOFAC(9,2)
D-5	3		3		3		3	
D-5	3	Cs-137+D , fish	3	2.000E+03	3	2.000E+03	3	BIOFAC(10,1)
D-5	3	Cs-137+D , crustacea and mollusks	3	1.000E+02	3	1.000E+02	3	BIOFAC(10,2)
D-5	3		3		3		3	
D-5	3	Eu-152 , fish	3	5.000E+01	3	5.000E+01	3	BIOFAC(11,1)
D-5	3	Eu-152 , crustacea and mollusks	3	1.000E+03	3	1.000E+03	3	BIOFAC(11,2)
D-5	3		3		3		3	
D-5	3	Eu-154 , fish	3	5.000E+01	3	5.000E+01	3	BIOFAC(13,1)
D-5	3	Eu-154 , crustacea and mollusks	3	1.000E+03	3	1.000E+03	3	BIOFAC(13,2)
D-5	3		3		3		3	
D-5	3	Eu-155 , fish	3	5.000E+01	3	5.000E+01	3	BIOFAC(14,1)
D-5	3	Eu-155 , crustacea and mollusks	3	1.000E+03	3	1.000E+03	3	BIOFAC(14,2)
D-5	3		3		3		3	
D-5	3	Gd-152 , fish	3	2.500E+01	3	2.500E+01	3	BIOFAC(15,1)
D-5	3	Gd-152 , crustacea and mollusks	3	1.000E+03	3	1.000E+03	3	BIOFAC(15,2)
D-5	3		3		3		3	
D-5	3	H-3 , fish	3	1.000E+00	3	1.000E+00	3	BIOFAC(16,1)
D-5	3	H-3 , crustacea and mollusks	3	1.000E+00	3	1.000E+00	3	BIOFAC(16,2)
D-5	3		3		3		3	
D-5	3	I-129 , fish	3	4.000E+01	3	4.000E+01	3	BIOFAC(17,1)
D-5	3	I-129 , crustacea and mollusks	3	5.000E+00	3	5.000E+00	3	BIOFAC(17,2)
D-5	3		3		3		3	
D-5	3	Mn-54 , fish	3	4.000E+02	3	4.000E+02	3	BIOFAC(18,1)
D-5	3	Mn-54 , crustacea and mollusks	3	9.000E+04	3	9.000E+04	3	BIOFAC(18,2)
D-5	3		3		3		3	
D-5	3	Na-22 , fish	3	2.000E+01	3	2.000E+01	3	BIOFAC(19,1)
D-5	3	Na-22 , crustacea and mollusks	3	2.000E+02	3	2.000E+02	3	BIOFAC(19,2)
D-5	3		3		3		3	
D-5	3	Nd-144 , fish	3	1.000E+02	3	1.000E+02	3	BIOFAC(20,1)

D-5 ³ Nd-144 , crustacea and mollusks
 D-5 ³
 D-5 ³ Ni-63 , fish
 D-5 ³ Ni-63 , crustacea and mollusks
 D-5 ³
 D-5 ³ Np-237+D , fish
 D-5 ³ Np-237+D , crustacea and mollusks
 D-5 ³
 D-5 ³ Pa-231 , fish
 D-5 ³ Pa-231 , crustacea and mollusks

³ 1.000E+03 ³ 1.000E+03 ³ BIOFAC(20,2)
³
³ 1.000E+02 ³ 1.000E+02 ³ BIOFAC(21,1)
³ 1.000E+02 ³ 1.000E+02 ³ BIOFAC(21,2)
³
³ 3.000E+01 ³ 3.000E+01 ³ BIOFAC(22,1)
³ 4.000E+02 ³ 4.000E+02 ³ BIOFAC(22,2)
³
³ 1.000E+01 ³ 1.000E+01 ³ BIOFAC(23,1)
³ 1.100E+02 ³ 1.100E+02 ³ BIOFAC(23,2)

Dose Conversion Factor (and Related) Parameter Summary (continued)

Dose Library: DCFPAK adult HTO Plus DCFPAK3.02 (Adult)

0	3		3	Current	3	Base	3	Parameter
Menu	3	Parameter	3	Value#	3	Case*	3	Name
AAAAA	3	AAAAA	3	AAAAA	3	AAAAA	3	AAAAA
D-5	3	Pb-210+D , fish	3	3.000E+02	3	3.000E+02	3	BIOFAC(29,1)
D-5	3	Pb-210+D , crustacea and mollusks	3	1.000E+02	3	1.000E+02	3	BIOFAC(29,2)
D-5	3		3		3		3	
D-5	3	Pb-210+D1 , fish	3	3.000E+02	3	3.000E+02	3	BIOFAC(30,1)
D-5	3	Pb-210+D1 , crustacea and mollusks	3	1.000E+02	3	1.000E+02	3	BIOFAC(30,2)
D-5	3		3		3		3	
D-5	3	Pb-210+D2 , fish	3	3.000E+02	3	3.000E+02	3	BIOFAC(31,1)
D-5	3	Pb-210+D2 , crustacea and mollusks	3	1.000E+02	3	1.000E+02	3	BIOFAC(31,2)
D-5	3		3		3		3	
D-5	3	Pu-238 , fish	3	3.000E+01	3	3.000E+01	3	BIOFAC(32,1)
D-5	3	Pu-238 , crustacea and mollusks	3	1.000E+02	3	1.000E+02	3	BIOFAC(32,2)
D-5	3		3		3		3	
D-5	3	Pu-239 , fish	3	3.000E+01	3	3.000E+01	3	BIOFAC(48,1)
D-5	3	Pu-239 , crustacea and mollusks	3	1.000E+02	3	1.000E+02	3	BIOFAC(48,2)
D-5	3		3		3		3	
D-5	3	Pu-239+D , fish	3	3.000E+01	3	3.000E+01	3	BIOFAC(54,1)
D-5	3	Pu-239+D , crustacea and mollusks	3	1.000E+02	3	1.000E+02	3	BIOFAC(54,2)
D-5	3		3		3		3	
D-5	3	Ra-226+D , fish	3	5.000E+01	3	5.000E+01	3	BIOFAC(60,1)
D-5	3	Ra-226+D , crustacea and mollusks	3	2.500E+02	3	2.500E+02	3	BIOFAC(60,2)
D-5	3		3		3		3	
D-5	3	Ra-226+D1 , fish	3	5.000E+01	3	5.000E+01	3	BIOFAC(63,1)
D-5	3	Ra-226+D1 , crustacea and mollusks	3	2.500E+02	3	2.500E+02	3	BIOFAC(63,2)
D-5	3		3		3		3	
D-5	3	Ra-226+D2 , fish	3	5.000E+01	3	5.000E+01	3	BIOFAC(66,1)
D-5	3	Ra-226+D2 , crustacea and mollusks	3	2.500E+02	3	2.500E+02	3	BIOFAC(66,2)
D-5	3		3		3		3	
D-5	3	Ra-226+D3 , fish	3	5.000E+01	3	5.000E+01	3	BIOFAC(69,1)
D-5	3	Ra-226+D3 , crustacea and mollusks	3	2.500E+02	3	2.500E+02	3	BIOFAC(69,2)
D-5	3		3		3		3	
D-5	3	Ra-226+D4 , fish	3	5.000E+01	3	5.000E+01	3	BIOFAC(72,1)
D-5	3	Ra-226+D4 , crustacea and mollusks	3	2.500E+02	3	2.500E+02	3	BIOFAC(72,2)
D-5	3		3		3		3	
D-5	3	Ra-228+D , fish	3	5.000E+01	3	5.000E+01	3	BIOFAC(75,1)
D-5	3	Ra-228+D , crustacea and mollusks	3	2.500E+02	3	2.500E+02	3	BIOFAC(75,2)
D-5	3		3		3		3	
D-5	3	Ru-106+D , fish	3	1.000E+01	3	1.000E+01	3	BIOFAC(76,1)
D-5	3	Ru-106+D , crustacea and mollusks	3	3.000E+02	3	3.000E+02	3	BIOFAC(76,2)
D-5	3		3		3		3	
D-5	3	Sm-148 , fish	3	2.500E+01	3	2.500E+01	3	BIOFAC(77,1)

D-5 ³ Sm-148 , crustacea and mollusks
 D-5 ³
 D-5 ³ Sr-90+D , fish
 D-5 ³ Sr-90+D , crustacea and mollusks
 D-5 ³
 D-5 ³ Tc-99 , fish
 D-5 ³ Tc-99 , crustacea and mollusks
 D-5 ³
 D-5 ³ Th-228+D , fish
 D-5 ³ Th-228+D , crustacea and mollusks

³ 1.000E+03 ³ 1.000E+03 ³ BIOFAC(77,2)
³
³ 6.000E+01 ³ 6.000E+01 ³ BIOFAC(78,1)
³ 1.000E+02 ³ 1.000E+02 ³ BIOFAC(78,2)
³
³ 2.000E+01 ³ 2.000E+01 ³ BIOFAC(79,1)
³ 5.000E+00 ³ 5.000E+00 ³ BIOFAC(79,2)
³
³ 1.000E+02 ³ 1.000E+02 ³ BIOFAC(80,1)
³ 5.000E+02 ³ 5.000E+02 ³ BIOFAC(80,2)

Dose Conversion Factor (and Related) Parameter Summary (continued)

Dose Library: DCFPAK adult HTO Plus DCFPAK3.02 (Adult)

0	3		3	Current	3	Base	3	Parameter
Menu	3	Parameter	3	Value#	3	Case*	3	Name
AAAAA	3	AAAAA	3	AAAAA	3	AAAAA	3	AAAAA
D-5	3	Th-229+D , fish	3	1.000E+02	3	1.000E+02	3	BIOFAC(81,1)
D-5	3	Th-229+D , crustacea and mollusks	3	5.000E+02	3	5.000E+02	3	BIOFAC(81,2)
D-5	3		3		3		3	
D-5	3	Th-230 , fish	3	1.000E+02	3	1.000E+02	3	BIOFAC(82,1)
D-5	3	Th-230 , crustacea and mollusks	3	5.000E+02	3	5.000E+02	3	BIOFAC(82,2)
D-5	3		3		3		3	
D-5	3	Th-232 , fish	3	1.000E+02	3	1.000E+02	3	BIOFAC(97,1)
D-5	3	Th-232 , crustacea and mollusks	3	5.000E+02	3	5.000E+02	3	BIOFAC(97,2)
D-5	3		3		3		3	
D-5	3	U-233 , fish	3	1.000E+01	3	1.000E+01	3	BIOFAC(98,1)
D-5	3	U-233 , crustacea and mollusks	3	6.000E+01	3	6.000E+01	3	BIOFAC(98,2)
D-5	3		3		3		3	
D-5	3	U-234 , fish	3	1.000E+01	3	1.000E+01	3	BIOFAC(99,1)
D-5	3	U-234 , crustacea and mollusks	3	6.000E+01	3	6.000E+01	3	BIOFAC(99,2)
D-5	3		3		3		3	
D-5	3	U-235+D , fish	3	1.000E+01	3	1.000E+01	3	BIOFAC(114,1)
D-5	3	U-235+D , crustacea and mollusks	3	6.000E+01	3	6.000E+01	3	BIOFAC(114,2)
D-5	3		3		3		3	
D-5	3	U-238 , fish	3	1.000E+01	3	1.000E+01	3	BIOFAC(120,1)
D-5	3	U-238 , crustacea and mollusks	3	6.000E+01	3	6.000E+01	3	BIOFAC(120,2)
D-5	3		3		3		3	
D-5	3	U-238+D , fish	3	1.000E+01	3	1.000E+01	3	BIOFAC(121,1)
D-5	3	U-238+D , crustacea and mollusks	3	6.000E+01	3	6.000E+01	3	BIOFAC(121,2)
D-5	3		3		3		3	
D-5	3	U-238+D1 , fish	3	1.000E+01	3	1.000E+01	3	BIOFAC(136,1)
D-5	3	U-238+D1 , crustacea and mollusks	3	6.000E+01	3	6.000E+01	3	BIOFAC(136,2)
D-5	3		3		3		3	

#####

#For DCF1(XXX) only, factors are for infinite depth & area. See ETFG table in Ground Pathway of Detailed Report.

*Base Case means Default.Lib w/o Associate Nuclide contributions.

Site-Specific Parameter Summary

Menu	Parameter	User Input	Default	Used by RESRAD	Parameter Name
R011	Area of contaminated zone (m**2)	1.000E+04	1.000E+04	---	AREA
R011	Thickness of contaminated zone (m)	2.000E+00	2.000E+00	---	THICK0
R011	Fraction of contamination that is submerged	0.000E+00	0.000E+00	---	SUBMFRACT
R011	Length parallel to aquifer flow (m)	not used	1.000E+02	---	LCZPAQ
R011	Basic radiation dose limit (mrem/yr)	2.500E+01	3.000E+01	---	BRDL
R011	Time since placement of material (yr)	0.000E+00	0.000E+00	---	TI
R011	Times for calculations (yr)	1.000E+00	1.000E+00	---	T(2)
R011	Times for calculations (yr)	2.500E+01	3.000E+00	---	T(3)
R011	Times for calculations (yr)	3.000E+01	1.000E+01	---	T(4)
R011	Times for calculations (yr)	5.000E+01	3.000E+01	---	T(5)
R011	Times for calculations (yr)	1.000E+02	1.000E+02	---	T(6)
R011	Times for calculations (yr)	2.500E+02	3.000E+02	---	T(7)
R011	Times for calculations (yr)	5.000E+02	1.000E+03	---	T(8)
R011	Times for calculations (yr)	1.000E+03	0.000E+00	---	T(9)
R011	Times for calculations (yr)	not used	0.000E+00	---	T(10)
R012	Initial principal radionuclide (pCi/g): Am-241	1.000E+01	0.000E+00	---	S1(7)
R012	Initial principal radionuclide (pCi/g): Co-60	1.000E+01	0.000E+00	---	S1(8)
R012	Initial principal radionuclide (pCi/g): Cs-134	1.000E+01	0.000E+00	---	S1(9)
R012	Initial principal radionuclide (pCi/g): Cs-137	1.000E+01	0.000E+00	---	S1(10)
R012	Initial principal radionuclide (pCi/g): Eu-152	1.000E+01	0.000E+00	---	S1(11)
R012	Initial principal radionuclide (pCi/g): Eu-154	1.000E+01	0.000E+00	---	S1(13)
R012	Initial principal radionuclide (pCi/g): Eu-155	1.000E+01	0.000E+00	---	S1(14)
R012	Initial principal radionuclide (pCi/g): H-3	1.000E+01	0.000E+00	---	S1(16)
R012	Initial principal radionuclide (pCi/g): I-129	1.000E+01	0.000E+00	---	S1(17)
R012	Initial principal radionuclide (pCi/g): Mn-54	1.000E+01	0.000E+00	---	S1(18)
R012	Initial principal radionuclide (pCi/g): Na-22	1.000E+01	0.000E+00	---	S1(19)
R012	Initial principal radionuclide (pCi/g): Ni-63	1.000E+01	0.000E+00	---	S1(21)
R012	Initial principal radionuclide (pCi/g): Np-237	1.000E+01	0.000E+00	---	S1(22)
R012	Initial principal radionuclide (pCi/g): Pu-238	1.000E+01	0.000E+00	---	S1(32)
R012	Initial principal radionuclide (pCi/g): Pu-239	1.000E+01	0.000E+00	---	S1(48)
R012	Initial principal radionuclide (pCi/g): Ru-106	1.000E+01	0.000E+00	---	S1(76)
R012	Initial principal radionuclide (pCi/g): Sr-90	1.000E+01	0.000E+00	---	S1(78)
R012	Initial principal radionuclide (pCi/g): Tc-99	1.000E+01	0.000E+00	---	S1(79)
R012	Initial principal radionuclide (pCi/g): Th-228	1.000E+01	0.000E+00	---	S1(80)
R012	Initial principal radionuclide (pCi/g): Th-230	1.000E+01	0.000E+00	---	S1(82)
R012	Initial principal radionuclide (pCi/g): Th-232	1.000E+01	0.000E+00	---	S1(97)
R012	Initial principal radionuclide (pCi/g): U-234	1.000E+01	0.000E+00	---	S1(99)
R012	Initial principal radionuclide (pCi/g): U-235	1.000E+01	0.000E+00	---	S1(114)
R012	Initial principal radionuclide (pCi/g): U-238	1.000E+01	0.000E+00	---	S1(120)
R012	Concentration in groundwater (pCi/L): Am-241	not used	0.000E+00	---	W1(7)

R012	³	Concentration in groundwater	(pCi/L):	Co-60	³	not used	³	0.000E+00	³	---	³	W1(8)
R012	³	Concentration in groundwater	(pCi/L):	Cs-134	³	not used	³	0.000E+00	³	---	³	W1(9)
R012	³	Concentration in groundwater	(pCi/L):	Cs-137	³	not used	³	0.000E+00	³	---	³	W1(10)
R012	³	Concentration in groundwater	(pCi/L):	Eu-152	³	not used	³	0.000E+00	³	---	³	W1(11)
R012	³	Concentration in groundwater	(pCi/L):	Eu-154	³	not used	³	0.000E+00	³	---	³	W1(13)
R012	³	Concentration in groundwater	(pCi/L):	Eu-155	³	not used	³	0.000E+00	³	---	³	W1(14)
R012	³	Concentration in groundwater	(pCi/L):	H-3	³	not used	³	0.000E+00	³	---	³	W1(16)
R012	³	Concentration in groundwater	(pCi/L):	I-129	³	not used	³	0.000E+00	³	---	³	W1(17)
R012	³	Concentration in groundwater	(pCi/L):	Mn-54	³	not used	³	0.000E+00	³	---	³	W1(18)

Site-Specific Parameter Summary (continued)

0	3	3	3	3	3	3	3
Menu	Parameter	User	Default	Used by RESRAD	Parameter		
		Input	(If different from user input)		Name		
AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
R012	Concentration in groundwater (pCi/L): Na-22	not used	0.000E+00	---	W1(19)		
R012	Concentration in groundwater (pCi/L): Ni-63	not used	0.000E+00	---	W1(21)		
R012	Concentration in groundwater (pCi/L): Np-237	not used	0.000E+00	---	W1(22)		
R012	Concentration in groundwater (pCi/L): Pu-238	not used	0.000E+00	---	W1(32)		
R012	Concentration in groundwater (pCi/L): Pu-239	not used	0.000E+00	---	W1(48)		
R012	Concentration in groundwater (pCi/L): Ru-106	not used	0.000E+00	---	W1(76)		
R012	Concentration in groundwater (pCi/L): Sr-90	not used	0.000E+00	---	W1(78)		
R012	Concentration in groundwater (pCi/L): Tc-99	not used	0.000E+00	---	W1(79)		
R012	Concentration in groundwater (pCi/L): Th-228	not used	0.000E+00	---	W1(80)		
R012	Concentration in groundwater (pCi/L): Th-230	not used	0.000E+00	---	W1(82)		
R012	Concentration in groundwater (pCi/L): Th-232	not used	0.000E+00	---	W1(97)		
R012	Concentration in groundwater (pCi/L): U-234	not used	0.000E+00	---	W1(99)		
R012	Concentration in groundwater (pCi/L): U-235	not used	0.000E+00	---	W1(**)		
R012	Concentration in groundwater (pCi/L): U-238	not used	0.000E+00	---	W1(**)		
R013	Cover depth (m)	0.000E+00	0.000E+00	---	COVER0		
R013	Density of cover material (g/cm**3)	not used	1.500E+00	---	DENSCV		
R013	Cover depth erosion rate (m/yr)	not used	1.000E-03	---	VCV		
R013	Density of contaminated zone (g/cm**3)	1.500E+00	1.500E+00	---	DENSCZ		
R013	Contaminated zone erosion rate (m/yr)	0.000E+00	1.000E-03	---	VCZ		
R013	Contaminated zone total porosity	4.800E-01	4.000E-01	---	TPCZ		
R013	Contaminated zone field capacity	2.000E-01	2.000E-01	---	FCCZ		
R013	Contaminated zone hydraulic conductivity (m/yr)	1.000E+01	1.000E+01	---	HCCZ		
R013	Contaminated zone b parameter	5.300E+00	5.300E+00	---	BCZ		
R013	Average annual wind speed (m/sec)	3.000E+00	2.000E+00	---	WIND		
R013	Humidity in air (g/m**3)	5.550E+00	8.000E+00	---	HUMID		
R013	Evapotranspiration coefficient	9.990E-01	5.000E-01	---	EVAPTR		
R013	Precipitation (m/yr)	2.900E-01	1.000E+00	---	PRECIP		
R013	Irrigation (m/yr)	0.000E+00	2.000E-01	---	RI		
R013	Irrigation mode	overhead	overhead	---	IDITCH		
R013	Runoff coefficient	9.000E-01	2.000E-01	---	RUNOFF		
R013	Watershed area for nearby stream or pond (m**2)	not used	1.000E+06	---	WAREA		
R013	Accuracy for water/soil computations	not used	1.000E-03	---	EPS		
R014	Density of saturated zone (g/cm**3)	not used	1.500E+00	---	DENSAQ		
R014	Saturated zone total porosity	not used	4.000E-01	---	TPSZ		
R014	Saturated zone effective porosity	not used	2.000E-01	---	EPSZ		
R014	Saturated zone field capacity	not used	2.000E-01	---	FCSZ		
R014	Saturated zone hydraulic conductivity (m/yr)	not used	1.000E+02	---	HCSZ		
R014	Saturated zone hydraulic gradient	not used	2.000E-02	---	HGWT		
R014	Saturated zone b parameter	not used	5.300E+00	---	BSZ		

R014	³ Water table drop rate (m/yr)	³ not used	³ 1.000E-03	³	---	³ VWT
R014	³ Well pump intake depth (m below water table)	³ not used	³ 1.000E+01	³	---	³ DWIBWT
R014	³ Model: Nondispersion (ND) or Mass-Balance (MB)	³ not used	³ ND	³	---	³ MODEL
R014	³ Well pumping rate (m ³ /yr)	³ not used	³ 2.500E+02	³	---	³ UW
	³	³	³	³		³
R015	³ Number of unsaturated zone strata	³ not used	³ 1	³	---	³ NS

Site-Specific Parameter Summary (continued)

0	3	3	3	3	3	3	3
Menu	Parameter	User	Default	Used by RESRAD	Parameter		
	Input		(If different from user input)		Name		
AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
R015	Unsat. zone 1, thickness (m)	not used	4.000E+00	---	H(1)		
R015	Unsat. zone 1, soil density (g/cm**3)	not used	1.500E+00	---	DENSUZ(1)		
R015	Unsat. zone 1, total porosity	not used	4.000E-01	---	TPUZ(1)		
R015	Unsat. zone 1, effective porosity	not used	2.000E-01	---	EPUZ(1)		
R015	Unsat. zone 1, field capacity	not used	2.000E-01	---	FCUZ(1)		
R015	Unsat. zone 1, soil-specific b parameter	not used	5.300E+00	---	BUZ(1)		
R015	Unsat. zone 1, hydraulic conductivity (m/yr)	not used	1.000E+01	---	HCUZ(1)		
R016	Distribution coefficients for Am-241						
R016	Contaminated zone (cm**3/g)	2.000E+01	2.000E+01	---	DCNUCC(7)		
R016	Unsaturated zone 1 (cm**3/g)	not used	2.000E+01	---	DCNUCU(7,1)		
R016	Saturated zone (cm**3/g)	not used	2.000E+01	---	DCNUCS(7)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	4.801E-07	ALEACH(7)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(7)		
R016	Distribution coefficients for Co-60						
R016	Contaminated zone (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCC(8)		
R016	Unsaturated zone 1 (cm**3/g)	not used	1.000E+03	---	DCNUCU(8,1)		
R016	Saturated zone (cm**3/g)	not used	1.000E+03	---	DCNUCS(8)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	9.665E-09	ALEACH(8)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(8)		
R016	Distribution coefficients for Cs-134						
R016	Contaminated zone (cm**3/g)	4.600E+03	4.600E+03	---	DCNUCC(9)		
R016	Unsaturated zone 1 (cm**3/g)	not used	4.600E+03	---	DCNUCU(9,1)		
R016	Saturated zone (cm**3/g)	not used	4.600E+03	---	DCNUCS(9)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	2.101E-09	ALEACH(9)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(9)		
R016	Distribution coefficients for Cs-137						
R016	Contaminated zone (cm**3/g)	4.600E+03	4.600E+03	---	DCNUCC(10)		
R016	Unsaturated zone 1 (cm**3/g)	not used	4.600E+03	---	DCNUCU(10,1)		
R016	Saturated zone (cm**3/g)	not used	4.600E+03	---	DCNUCS(10)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	2.101E-09	ALEACH(10)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(10)		
R016	Distribution coefficients for Eu-152						
R016	Contaminated zone (cm**3/g)	-1.000E+00	-1.000E+00	8.249E+02	DCNUCC(11)		
R016	Unsaturated zone 1 (cm**3/g)	not used	-1.000E+00	---	DCNUCU(11,1)		
R016	Saturated zone (cm**3/g)	not used	-1.000E+00	---	DCNUCS(11)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.172E-08	ALEACH(11)		

R016	³	Solubility constant	³	0.000E+00	³	0.000E+00	³	not used	³	SOLUBK(11)
	³		³		³		³		³	
R016	³	Distribution coefficients for Eu-154	³		³		³		³	
R016	³	Contaminated zone (cm**3/g)	³	-1.000E+00	³	-1.000E+00	³	8.249E+02	³	DCNUCC(13)
R016	³	Unsaturated zone 1 (cm**3/g)	³	not used	³	-1.000E+00	³	---	³	DCNUCU(13,1)
R016	³	Saturated zone (cm**3/g)	³	not used	³	-1.000E+00	³	---	³	DCNUCS(13)
R016	³	Leach rate (/yr)	³	0.000E+00	³	0.000E+00	³	1.172E-08	³	ALEACH(13)
R016	³	Solubility constant	³	0.000E+00	³	0.000E+00	³	not used	³	SOLUBK(13)

Site-Specific Parameter Summary (continued)

0	3	3	3	3	3	3	3
Menu	Parameter	User	Default	Used by RESRAD	Parameter		
		Input	(If different from user input)		Name		
AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
R016	Distribution coefficients for Eu-155						
R016	Contaminated zone (cm**3/g)	3 -1.000E+00	3 -1.000E+00	3 8.249E+02	3 DCNUCC(14)		
R016	Unsaturated zone 1 (cm**3/g)	3 not used	3 -1.000E+00	3 ---	3 DCNUCU(14,1)		
R016	Saturated zone (cm**3/g)	3 not used	3 -1.000E+00	3 ---	3 DCNUCS(14)		
R016	Leach rate (/yr)	3 0.000E+00	3 0.000E+00	3 1.172E-08	3 ALEACH(14)		
R016	Solubility constant	3 0.000E+00	3 0.000E+00	3 not used	3 SOLUBK(14)		
		3	3	3	3		
R016	Distribution coefficients for H-3						
R016	Contaminated zone (cm**3/g)	3 0.000E+00	3 0.000E+00	3 ---	3 DCNUCC(16)		
R016	Unsaturated zone 1 (cm**3/g)	3 not used	3 0.000E+00	3 ---	3 DCNUCU(16,1)		
R016	Saturated zone (cm**3/g)	3 not used	3 0.000E+00	3 ---	3 DCNUCS(16)		
R016	Leach rate (/yr)	3 0.000E+00	3 0.000E+00	3 7.250E-05	3 ALEACH(16)		
R016	Solubility constant	3 0.000E+00	3 0.000E+00	3 not used	3 SOLUBK(16)		
		3	3	3	3		
R016	Distribution coefficients for I-129						
R016	Contaminated zone (cm**3/g)	3 1.000E-01	3 1.000E-01	3 ---	3 DCNUCC(17)		
R016	Unsaturated zone 1 (cm**3/g)	3 not used	3 1.000E-01	3 ---	3 DCNUCU(17,1)		
R016	Saturated zone (cm**3/g)	3 not used	3 1.000E-01	3 ---	3 DCNUCS(17)		
R016	Leach rate (/yr)	3 0.000E+00	3 0.000E+00	3 4.143E-05	3 ALEACH(17)		
R016	Solubility constant	3 0.000E+00	3 0.000E+00	3 not used	3 SOLUBK(17)		
		3	3	3	3		
R016	Distribution coefficients for Mn-54						
R016	Contaminated zone (cm**3/g)	3 2.000E+02	3 2.000E+02	3 ---	3 DCNUCC(18)		
R016	Unsaturated zone 1 (cm**3/g)	3 not used	3 2.000E+02	3 ---	3 DCNUCU(18,1)		
R016	Saturated zone (cm**3/g)	3 not used	3 2.000E+02	3 ---	3 DCNUCS(18)		
R016	Leach rate (/yr)	3 0.000E+00	3 0.000E+00	3 4.830E-08	3 ALEACH(18)		
R016	Solubility constant	3 0.000E+00	3 0.000E+00	3 not used	3 SOLUBK(18)		
		3	3	3	3		
R016	Distribution coefficients for Na-22						
R016	Contaminated zone (cm**3/g)	3 1.000E+01	3 1.000E+01	3 ---	3 DCNUCC(19)		
R016	Unsaturated zone 1 (cm**3/g)	3 not used	3 1.000E+01	3 ---	3 DCNUCU(19,1)		
R016	Saturated zone (cm**3/g)	3 not used	3 1.000E+01	3 ---	3 DCNUCS(19)		
R016	Leach rate (/yr)	3 0.000E+00	3 0.000E+00	3 9.539E-07	3 ALEACH(19)		
R016	Solubility constant	3 0.000E+00	3 0.000E+00	3 not used	3 SOLUBK(19)		
		3	3	3	3		
R016	Distribution coefficients for Ni-63						
R016	Contaminated zone (cm**3/g)	3 1.000E+03	3 1.000E+03	3 ---	3 DCNUCC(21)		
R016	Unsaturated zone 1 (cm**3/g)	3 not used	3 1.000E+03	3 ---	3 DCNUCU(21,1)		
R016	Saturated zone (cm**3/g)	3 not used	3 1.000E+03	3 ---	3 DCNUCS(21)		
R016	Leach rate (/yr)	3 0.000E+00	3 0.000E+00	3 9.665E-09	3 ALEACH(21)		
R016	Solubility constant	3 0.000E+00	3 0.000E+00	3 not used	3 SOLUBK(21)		

	³		³	³		³
R016	³	Distribution coefficients for Np-237	³	³		³
R016	³	Contaminated zone (cm**3/g)	³	-1.000E+00	³	-1.000E+00
R016	³	Unsaturated zone 1 (cm**3/g)	³	not used	³	-1.000E+00
R016	³	Saturated zone (cm**3/g)	³	not used	³	-1.000E+00
R016	³	Leach rate (/yr)	³	0.000E+00	³	0.000E+00
R016	³	Solubility constant	³	0.000E+00	³	0.000E+00
					2.574E+02	

					3.753E-08	
					not used	
						³ DCNUCC(22)
						³ DCNUCU(22,1)
						³ DCNUCS(22)
						³ ALEACH(22)
						³ SOLUBK(22)

Site-Specific Parameter Summary (continued)

0	3	3	3	3	3	3	3
Menu	Parameter	User	Default	Used by RESRAD	Parameter		
		Input	(If different from user input)		Name		
AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
R016	Distribution coefficients for Pu-238						
R016	Contaminated zone (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCC(32)		
R016	Unsaturated zone 1 (cm**3/g)	not used	2.000E+03	---	DCNUCU(32,1)		
R016	Saturated zone (cm**3/g)	not used	2.000E+03	---	DCNUCS(32)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	4.833E-09	ALEACH(32)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(32)		
R016	Distribution coefficients for Pu-239						
R016	Contaminated zone (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCC(48)		
R016	Unsaturated zone 1 (cm**3/g)	not used	2.000E+03	---	DCNUCU(48,1)		
R016	Saturated zone (cm**3/g)	not used	2.000E+03	---	DCNUCS(48)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	4.833E-09	ALEACH(48)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(48)		
R016	Distribution coefficients for Ru-106						
R016	Contaminated zone (cm**3/g)	6.000E+04	0.000E+00	---	DCNUCC(76)		
R016	Unsaturated zone 1 (cm**3/g)	not used	0.000E+00	---	DCNUCU(76,1)		
R016	Saturated zone (cm**3/g)	not used	0.000E+00	---	DCNUCS(76)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.611E-10	ALEACH(76)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(76)		
R016	Distribution coefficients for Sr-90						
R016	Contaminated zone (cm**3/g)	3.000E+01	3.000E+01	---	DCNUCC(78)		
R016	Unsaturated zone 1 (cm**3/g)	not used	3.000E+01	---	DCNUCU(78,1)		
R016	Saturated zone (cm**3/g)	not used	3.000E+01	---	DCNUCS(78)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	3.208E-07	ALEACH(78)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(78)		
R016	Distribution coefficients for Tc-99						
R016	Contaminated zone (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCC(79)		
R016	Unsaturated zone 1 (cm**3/g)	not used	0.000E+00	---	DCNUCU(79,1)		
R016	Saturated zone (cm**3/g)	not used	0.000E+00	---	DCNUCS(79)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	7.250E-05	ALEACH(79)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(79)		
R016	Distribution coefficients for Th-228						
R016	Contaminated zone (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCC(80)		
R016	Unsaturated zone 1 (cm**3/g)	not used	6.000E+04	---	DCNUCU(80,1)		
R016	Saturated zone (cm**3/g)	not used	6.000E+04	---	DCNUCS(80)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.611E-10	ALEACH(80)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(80)		

R016	Distribution coefficients for daughter Nd-144	3	3	3	3
R016	Contaminated zone (cm**3/g)	3	1.580E+02	3	1.580E+02
R016	Unsaturated zone 1 (cm**3/g)	3	not used	3	1.580E+02
R016	Saturated zone (cm**3/g)	3	not used	3	1.580E+02
R016	Leach rate (/yr)	3	0.000E+00	3	0.000E+00
R016	Solubility constant	3	0.000E+00	3	0.000E+00

Site-Specific Parameter Summary (continued)

0	3	3	3	3	3	3
Menu	Parameter	User	Default	Used by RESRAD	Parameter	
		Input	(If different from user input)		Name	
AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
R016	Distribution coefficients for daughter Pa-231					
R016	Contaminated zone (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCC(23)	
R016	Unsaturated zone 1 (cm**3/g)	not used	5.000E+01	---	DCNUCU(23,1)	
R016	Saturated zone (cm**3/g)	not used	5.000E+01	---	DCNUCS(23)	
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.928E-07	ALEACH(23)	
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(23)	
R016	Distribution coefficients for daughter Pb-210					
R016	Contaminated zone (cm**3/g)	1.000E+02	1.000E+02	---	DCNUCC(29)	
R016	Unsaturated zone 1 (cm**3/g)	not used	1.000E+02	---	DCNUCU(29,1)	
R016	Saturated zone (cm**3/g)	not used	1.000E+02	---	DCNUCS(29)	
R016	Leach rate (/yr)	0.000E+00	0.000E+00	9.654E-08	ALEACH(29)	
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(29)	
R016	Distribution coefficients for daughter Ra-226					
R016	Contaminated zone (cm**3/g)	7.000E+01	7.000E+01	---	DCNUCC(60)	
R016	Unsaturated zone 1 (cm**3/g)	not used	7.000E+01	---	DCNUCU(60,1)	
R016	Saturated zone (cm**3/g)	not used	7.000E+01	---	DCNUCS(60)	
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.378E-07	ALEACH(60)	
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(60)	
R016	Distribution coefficients for daughter Ra-228					
R016	Contaminated zone (cm**3/g)	7.000E+01	7.000E+01	---	DCNUCC(75)	
R016	Unsaturated zone 1 (cm**3/g)	not used	7.000E+01	---	DCNUCU(75,1)	
R016	Saturated zone (cm**3/g)	not used	7.000E+01	---	DCNUCS(75)	
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.378E-07	ALEACH(75)	
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(75)	
R016	Distribution coefficients for daughter Sm-148					
R016	Contaminated zone (cm**3/g)	-1.000E+00	-1.000E+00	8.249E+02	DCNUCC(77)	
R016	Unsaturated zone 1 (cm**3/g)	not used	-1.000E+00	---	DCNUCU(77,1)	
R016	Saturated zone (cm**3/g)	not used	-1.000E+00	---	DCNUCS(77)	
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.172E-08	ALEACH(77)	
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(77)	
R016	Distribution coefficients for daughter Th-229					
R016	Contaminated zone (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCC(81)	
R016	Unsaturated zone 1 (cm**3/g)	not used	6.000E+04	---	DCNUCU(81,1)	
R016	Saturated zone (cm**3/g)	not used	6.000E+04	---	DCNUCS(81)	
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.611E-10	ALEACH(81)	
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(81)	

R016	3	Distribution coefficients for daughter U-233	3	3	3	3				
R016	3	Contaminated zone (cm**3/g)	3	5.000E+01	3	5.000E+01	3	---	3	DCNUCC(98)
R016	3	Unsaturated zone 1 (cm**3/g)	3	not used	3	5.000E+01	3	---	3	DCNUCU(98,1)
R016	3	Saturated zone (cm**3/g)	3	not used	3	5.000E+01	3	---	3	DCNUCS(98)
R016	3	Leach rate (/yr)	3	0.000E+00	3	0.000E+00	3	1.928E-07	3	ALEACH(98)
R016	3	Solubility constant	3	0.000E+00	3	0.000E+00	3	not used	3	SOLUBK(98)
R017	3	Inhalation rate (m**3/yr)	3	1.946E+04	3	8.400E+03	3	---	3	INHALR

Site-Specific Parameter Summary (continued)

0	3	3	3	3	3	3	3
Menu	Parameter	User	Default	Used by RESRAD	Parameter		
	Input	Default	(If different from user input)	Name			
AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
R017	Mass loading for inhalation (g/m**3)	1.510E-07	1.000E-04	---	MLINH		
R017	Exposure duration	2.000E+01	3.000E+01	---	ED		
R017	Shielding factor, inhalation	1.000E+00	4.000E-01	---	SHF3		
R017	Shielding factor, external gamma	7.000E-01	7.000E-01	---	SHF1		
R017	Fraction of time spent indoors	0.000E+00	5.000E-01	---	FIND		
R017	Fraction of time spent outdoors (on site)	2.280E-02	2.500E-01	---	FOTD		
R017	Shape factor flag, external gamma	1.000E+00	1.000E+00	>0 shows circular AREA.	FS		
R017	Radii of shape factor array (used if FS = -1):						
R017	Outer annular radius (m), ring 1:	not used	5.000E+01	---	RAD_SHAPE(1)		
R017	Outer annular radius (m), ring 2:	not used	7.071E+01	---	RAD_SHAPE(2)		
R017	Outer annular radius (m), ring 3:	not used	0.000E+00	---	RAD_SHAPE(3)		
R017	Outer annular radius (m), ring 4:	not used	0.000E+00	---	RAD_SHAPE(4)		
R017	Outer annular radius (m), ring 5:	not used	0.000E+00	---	RAD_SHAPE(5)		
R017	Outer annular radius (m), ring 6:	not used	0.000E+00	---	RAD_SHAPE(6)		
R017	Outer annular radius (m), ring 7:	not used	0.000E+00	---	RAD_SHAPE(7)		
R017	Outer annular radius (m), ring 8:	not used	0.000E+00	---	RAD_SHAPE(8)		
R017	Outer annular radius (m), ring 9:	not used	0.000E+00	---	RAD_SHAPE(9)		
R017	Outer annular radius (m), ring 10:	not used	0.000E+00	---	RAD_SHAPE(10)		
R017	Outer annular radius (m), ring 11:	not used	0.000E+00	---	RAD_SHAPE(11)		
R017	Outer annular radius (m), ring 12:	not used	0.000E+00	---	RAD_SHAPE(12)		
R017	Fractions of annular areas within AREA:						
R017	Ring 1	not used	1.000E+00	---	FRACA(1)		
R017	Ring 2	not used	2.732E-01	---	FRACA(2)		
R017	Ring 3	not used	0.000E+00	---	FRACA(3)		
R017	Ring 4	not used	0.000E+00	---	FRACA(4)		
R017	Ring 5	not used	0.000E+00	---	FRACA(5)		
R017	Ring 6	not used	0.000E+00	---	FRACA(6)		
R017	Ring 7	not used	0.000E+00	---	FRACA(7)		
R017	Ring 8	not used	0.000E+00	---	FRACA(8)		
R017	Ring 9	not used	0.000E+00	---	FRACA(9)		
R017	Ring 10	not used	0.000E+00	---	FRACA(10)		
R017	Ring 11	not used	0.000E+00	---	FRACA(11)		
R017	Ring 12	not used	0.000E+00	---	FRACA(12)		
R018	Fruits, vegetables and grain consumption (kg/yr)	not used	1.600E+02	---	DIET(1)		
R018	Leafy vegetable consumption (kg/yr)	not used	1.400E+01	---	DIET(2)		
R018	Milk consumption (L/yr)	not used	9.200E+01	---	DIET(3)		
R018	Meat and poultry consumption (kg/yr)	not used	6.300E+01	---	DIET(4)		
R018	Fish consumption (kg/yr)	not used	5.400E+00	---	DIET(5)		
R018	Other seafood consumption (kg/yr)	not used	9.000E-01	---	DIET(6)		

R018	³	Soil ingestion rate (g/yr)	³	2.440E+02	³	3.650E+01	³	---	³	SOIL
R018	³	Drinking water intake (L/yr)	³	not used	³	5.100E+02	³	---	³	DWI
R018	³	Contamination fraction of drinking water	³	not used	³	1.000E+00	³	---	³	FDW
R018	³	Contamination fraction of household water	³	not used	³	1.000E+00	³	---	³	FHHW
R018	³	Contamination fraction of livestock water	³	not used	³	1.000E+00	³	---	³	FLW
R018	³	Contamination fraction of irrigation water	³	not used	³	1.000E+00	³	---	³	FIRW
R018	³	Contamination fraction of aquatic food	³	not used	³	5.000E-01	³	---	³	FR9
R018	³	Contamination fraction of plant food	³	not used	³	-1	³	---	³	FPLANT
R018	³	Contamination fraction of meat	³	not used	³	-1	³	---	³	FMEAT

Site-Specific Parameter Summary (continued)

0	3	3	3	3	3	3
Menu	Parameter	User	Input	Default	Used by RESRAD	Parameter
					(If different from user input)	Name
AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
R018	Contamination fraction of milk	not used	3	-1	---	FMILK
R019	Livestock fodder intake for meat (kg/day)	not used	3	6.800E+01	---	LFI5
R019	Livestock fodder intake for milk (kg/day)	not used	3	5.500E+01	---	LFI6
R019	Livestock water intake for meat (L/day)	not used	3	5.000E+01	---	LWI5
R019	Livestock water intake for milk (L/day)	not used	3	1.600E+02	---	LWI6
R019	Livestock soil intake (kg/day)	not used	3	5.000E-01	---	LSI
R019	Mass loading for foliar deposition (g/m**3)	not used	3	1.000E-04	---	MLFD
R019	Depth of soil mixing layer (m)	1.500E-01	3	1.500E-01	---	DM
R019	Depth of roots (m)	not used	3	9.000E-01	---	DR00T
R019	Drinking water fraction from ground water	not used	3	1.000E+00	---	FGWDW
R019	Household water fraction from ground water	not used	3	1.000E+00	---	FGWHH
R019	Livestock water fraction from ground water	not used	3	1.000E+00	---	FGWLW
R019	Irrigation fraction from ground water	not used	3	1.000E+00	---	FGWIR
R19B	Wet weight crop yield for Non-Leafy (kg/m**2)	not used	3	7.000E-01	---	YV(1)
R19B	Wet weight crop yield for Leafy (kg/m**2)	not used	3	1.500E+00	---	YV(2)
R19B	Wet weight crop yield for Fodder (kg/m**2)	not used	3	1.100E+00	---	YV(3)
R19B	Growing Season for Non-Leafy (years)	not used	3	1.700E-01	---	TE(1)
R19B	Growing Season for Leafy (years)	not used	3	2.500E-01	---	TE(2)
R19B	Growing Season for Fodder (years)	not used	3	8.000E-02	---	TE(3)
R19B	Translocation Factor for Non-Leafy	not used	3	1.000E-01	---	TIV(1)
R19B	Translocation Factor for Leafy	not used	3	1.000E+00	---	TIV(2)
R19B	Translocation Factor for Fodder	not used	3	1.000E+00	---	TIV(3)
R19B	Dry Foliar Interception Fraction for Non-Leafy	not used	3	2.500E-01	---	RDRY(1)
R19B	Dry Foliar Interception Fraction for Leafy	not used	3	2.500E-01	---	RDRY(2)
R19B	Dry Foliar Interception Fraction for Fodder	not used	3	2.500E-01	---	RDRY(3)
R19B	Wet Foliar Interception Fraction for Non-Leafy	not used	3	2.500E-01	---	RWET(1)
R19B	Wet Foliar Interception Fraction for Leafy	not used	3	2.500E-01	---	RWET(2)
R19B	Wet Foliar Interception Fraction for Fodder	not used	3	2.500E-01	---	RWET(3)
R19B	Weathering Removal Constant for Vegetation	not used	3	2.000E+01	---	WLAM
C14	C-12 concentration in water (g/cm**3)	not used	3	2.000E-05	---	C12WTR
C14	C-12 concentration in contaminated soil (g/g)	not used	3	3.000E-02	---	C12CZ
C14	Fraction of vegetation carbon from soil	not used	3	2.000E-02	---	CSOIL
C14	Fraction of vegetation carbon from air	not used	3	9.800E-01	---	CAIR
C14	C-14 evasion layer thickness in soil (m)	not used	3	3.000E-01	---	DMC
C14	C-14 evasion flux rate from soil (1/sec)	not used	3	7.000E-07	---	EVSN
C14	C-12 evasion flux rate from soil (1/sec)	not used	3	1.000E-10	---	REVSN
C14	Fraction of grain in beef cattle feed	not used	3	8.000E-01	---	AVFG4
C14	Fraction of grain in milk cow feed	not used	3	2.000E-01	---	AVFG5

	³		³		³		³
STOR	³	Storage times of contaminated foodstuffs (days):	³		³		³
STOR	³	Fruits, non-leafy vegetables, and grain	³	1.000E+00	³	1.400E+01	³
STOR	³	Leafy vegetables	³	1.000E+00	³	1.000E+00	³
STOR	³	Milk	³	1.000E+00	³	1.000E+00	³
STOR	³	Meat and poultry	³	2.000E+01	³	2.000E+01	³
STOR	³	Fish	³	7.000E+00	³	7.000E+00	³
STOR	³	Crustacea and mollusks	³	7.000E+00	³	7.000E+00	³
STOR	³	Well water	³	1.000E+00	³	1.000E+00	³

---	³	STOR_T(1)
---	³	STOR_T(2)
---	³	STOR_T(3)
---	³	STOR_T(4)
---	³	STOR_T(5)
---	³	STOR_T(6)
---	³	STOR_T(7)

Site-Specific Parameter Summary (continued)

0	3	3	3	3	3	3	3
Menu	Parameter	User	Input	Default	Used by RESRAD	(If different from user input)	Parameter Name
STOR	Surface water	3	1.000E+00	3	1.000E+00	---	3 STOR_T(8)
STOR	Livestock fodder	3	4.500E+01	3	4.500E+01	---	3 STOR_T(9)
R021	Thickness of building foundation (m)	3	not used	3	1.500E-01	---	3 FLOOR1
R021	Bulk density of building foundation (g/cm**3)	3	not used	3	2.400E+00	---	3 DENSFL
R021	Total porosity of the cover material	3	not used	3	4.000E-01	---	3 TPCV
R021	Total porosity of the building foundation	3	not used	3	1.000E-01	---	3 TPFL
R021	Volumetric water content of the cover material	3	not used	3	5.000E-02	---	3 PH20CV
R021	Volumetric water content of the foundation	3	not used	3	3.000E-02	---	3 PH20FL
R021	Diffusion coefficient for radon gas (m/sec):	3		3			3
R021	in cover material	3	not used	3	2.000E-06	---	3 DIFCV
R021	in foundation material	3	not used	3	3.000E-07	---	3 DIFFL
R021	in contaminated zone soil	3	not used	3	2.000E-06	---	3 DIFCZ
R021	Radon vertical dimension of mixing (m)	3	not used	3	2.000E+00	---	3 HMIX
R021	Average building air exchange rate (1/hr)	3	not used	3	5.000E-01	---	3 REXG
R021	Height of the building (room) (m)	3	not used	3	2.500E+00	---	3 HRM
R021	Building interior area factor	3	not used	3	0.000E+00	---	3 FAI
R021	Building depth below ground surface (m)	3	not used	3	-1.000E+00	---	3 DMFL
R021	Emanating power of Rn-222 gas	3	not used	3	2.500E-01	---	3 EMANA(1)
R021	Emanating power of Rn-220 gas	3	not used	3	1.500E-01	---	3 EMANA(2)
TITL	Number of graphical time points	3	32	3	---	---	3 NPTS
TITL	Maximum number of integration points for dose	3	17	3	---	---	3 LYMAX
TITL	Maximum number of integration points for risk	3	257	3	---	---	3 KYMAX

Summary of Pathway Selections

Pathway	3	User Selection
1 -- external gamma	3	active
2 -- inhalation (w/o radon)	3	active
3 -- plant ingestion	3	suppressed
4 -- meat ingestion	3	suppressed
5 -- milk ingestion	3	suppressed
6 -- aquatic foods	3	suppressed
7 -- drinking water	3	suppressed
8 -- soil ingestion	3	active
9 -- radon	3	suppressed

Contaminated Zone Dimensions	Initial Soil Concentrations, pCi/g
AAAAAAAAAAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAAAAAAAAAA
Area: 10000.00 square meters	Am-241 1.000E+01
Thickness: 2.00 meters	Co-60 1.000E+01
Cover Depth: 0.00 meters	Cs-134 1.000E+01
	Cs-137 1.000E+01
	Eu-152 1.000E+01
	Eu-154 1.000E+01
	Eu-155 1.000E+01
	H-3 1.000E+01
	I-129 1.000E+01
	Mn-54 1.000E+01
	Na-22 1.000E+01
	Ni-63 1.000E+01
	Np-237 1.000E+01
	Pu-238 1.000E+01
	Pu-239 1.000E+01
	Ru-106 1.000E+01
	Sr-90 1.000E+01
	Tc-99 1.000E+01
	Th-228 1.000E+01
	Th-230 1.000E+01
	Th-232 1.000E+01
	U-234 1.000E+01
	U-235 1.000E+01
	U-238 1.000E+01

0

Total Dose TDOSE(t), mrem/yr
 Basic Radiation Dose Limit = 2.500E+01 mrem/yr
 Total Mixture Sum M(t) = Fraction of Basic Dose Limit Received at Time (t)
 AA

t (years):	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
TDOSE(t):	1.417E+01	1.175E+01	4.873E+00	4.709E+00	4.336E+00	4.108E+00	4.172E+00	4.404E+00	4.820E+00
M(t):	5.666E-01	4.699E-01	1.949E-01	1.884E-01	1.734E-01	1.643E-01	1.669E-01	1.762E-01	1.928E-01

0Maximum TDOSE(t): 1.417E+01 mrem/yr at t = 0.000E+00 years

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)

As mrem/yr and Fraction of Total Dose At t = 0.000E+00 years

Water Independent Pathways (Inhalation excludes radon)

0	Water Independent Pathways (Inhalation excludes radon)													
0	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA
Am-241	8.407E-03	0.0006	3.515E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.196E-02	0.0030
Co-60	3.094E+00	0.2184	1.052E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.596E-04	0.0000
Cs-134	1.612E+00	0.1138	6.334E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.375E-03	0.0002
Cs-137	6.736E-01	0.0476	1.421E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.767E-03	0.0002
Eu-152	1.403E+00	0.0990	3.320E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.689E-04	0.0000
Eu-154	1.499E+00	0.1059	3.741E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.896E-04	0.0000
Eu-155	3.344E-02	0.0024	4.222E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.360E-05	0.0000
H-3	0.000E+00	0.0000	2.429E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.689E-06	0.0000
I-129	2.195E-03	0.0002	3.581E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.223E-02	0.0016
Mn-54	7.123E-01	0.0503	8.177E-10	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.017E-04	0.0000
Na-22	2.423E+00	0.1711	9.310E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.728E-04	0.0000
Ni-63	0.000E+00	0.0000	7.263E-10	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.179E-05	0.0000
Np-237	2.357E-01	0.0166	1.814E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.222E-02	0.0016
Pu-238	2.518E-05	0.0000	3.929E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.675E-02	0.0033
Pu-239	6.048E-05	0.0000	4.350E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.166E-02	0.0036
Ru-106	1.941E-01	0.0137	1.763E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.050E-03	0.0001
Sr-90	8.634E-03	0.0006	5.694E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.158E-03	0.0004
Tc-99	2.409E-05	0.0000	4.868E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.321E-04	0.0000
Th-228	1.640E+00	0.1158	1.324E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.466E-02	0.0017
Th-230	7.277E-04	0.0001	3.708E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.406E-02	0.0031
Th-232	7.512E-02	0.0053	4.059E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.604E-02	0.0040
U-234	7.868E-05	0.0000	3.432E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.019E-02	0.0007
U-235	1.595E-01	0.0113	3.091E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.682E-03	0.0007
U-238	3.488E-02	0.0025	2.936E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.878E-03	0.0007
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	1.381E+01	0.9749	2.610E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.549E-01	0.0251

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 0.000E+00 years

		Water Dependent Pathways													
0		Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr
AAAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA
Am-241	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.040E-02 0.003
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.095E+00 0.2185
Cs-134	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.615E+00 0.1140
Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.763E-01 0.0477
Eu-152	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.403E+00 0.0991
Eu-154	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.500E+00 0.1059
Eu-155	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.350E-02 0.0024
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.798E-05 0.0000
I-129	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.443E-02 0.0017
Mn-54	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.124E-01 0.0503
Na-22	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.424E+00 0.1711
Ni-63	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.180E-05 0.0000
Np-237	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.579E-01 0.0182
Pu-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.681E-02 0.0033
Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.177E-02 0.0037
Ru-106	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.951E-01 0.0138
Sr-90	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.479E-02 0.0010
Tc-99	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.562E-04 0.0000
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.665E+00 0.1175
Th-230	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.483E-02 0.0032
Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.312E-01 0.0093
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.027E-02 0.0007
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.691E-01 0.0119
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.476E-02 0.0032
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.417E+01 1.0000

0*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)

As mrem/yr and Fraction of Total Dose At t = 1.000E+00 years

Water Independent Pathways (Inhalation excludes radon)

0	Water Independent Pathways (Inhalation excludes radon)													
0	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA
Am-241	8.394E-03	0.0007	3.509E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.189E-02	0.003
Co-60	2.713E+00	0.2309	9.223E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.784E-04	0.0000
Cs-134	1.152E+00	0.0981	4.527E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.412E-03	0.0002
Cs-137	6.583E-01	0.0560	1.389E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.705E-03	0.0002
Eu-152	1.333E+00	0.1135	3.154E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.555E-04	0.0000
Eu-154	1.383E+00	0.1177	3.451E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.594E-04	0.0000
Eu-155	2.891E-02	0.0025	3.650E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.498E-05	0.0000
H-3	0.000E+00	0.0000	2.136E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.243E-06	0.0000
I-129	2.195E-03	0.0002	3.581E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.223E-02	0.0019
Mn-54	3.165E-01	0.0269	3.633E-10	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.518E-05	0.0000
Na-22	1.856E+00	0.1580	7.133E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.389E-04	0.0000
Ni-63	0.000E+00	0.0000	7.213E-10	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.158E-05	0.0000
Np-237	2.357E-01	0.0201	1.814E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.222E-02	0.0019
Pu-238	2.499E-05	0.0000	3.899E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.638E-02	0.0039
Pu-239	6.048E-05	0.0000	4.350E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.166E-02	0.0044
Ru-106	9.854E-02	0.0084	8.954E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.329E-04	0.0000
Sr-90	8.428E-03	0.0007	5.558E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.012E-03	0.0005
Tc-99	2.409E-05	0.0000	4.868E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.321E-04	0.0000
Th-228	1.141E+00	0.0971	9.215E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.716E-02	0.0015
Th-230	1.698E-03	0.0001	3.708E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.409E-02	0.0038
Th-232	2.553E-01	0.0217	4.174E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.235E-02	0.0062
U-234	7.869E-05	0.0000	3.433E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.019E-02	0.0009
U-235	1.595E-01	0.0136	3.093E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.685E-03	0.0008
U-238	3.488E-02	0.0030	2.936E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.878E-03	0.0008
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	1.139E+01	0.9692	2.548E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.613E-01	0.0308

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 1.000E+00 years

	Water Dependent Pathways																			
	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*							
Radio-	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA
Am-241	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.032E-02	0.0043						
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.713E+00	0.2310						
Cs-134	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.155E+00	0.0983						
Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.610E-01	0.0563						
Eu-152	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.333E+00	0.1135						
Eu-154	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.384E+00	0.1178						
Eu-155	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.896E-02	0.0025						
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.460E-05	0.0000						
I-129	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.442E-02	0.0021						
Mn-54	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.166E-01	0.0269						
Na-22	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.857E+00	0.1580						
Ni-63	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.158E-05	0.0000						
Np-237	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.579E-01	0.0220						
Pu-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.644E-02	0.0040						
Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.177E-02	0.0044						
Ru-106	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.908E-02	0.0084						
Sr-90	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.444E-02	0.0012						
Tc-99	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.562E-04	0.0000						
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.158E+00	0.0986						
Th-230	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.583E-02	0.0039						
Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.277E-01	0.0279						
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.027E-02	0.0009						
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.691E-01	0.0144						
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.476E-02	0.0038						
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.175E+01	1.0000						

0*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)

As mrem/yr and Fraction of Total Dose At t = 2.500E+01 years

Water Independent Pathways (Inhalation excludes radon)

0	Water Independent Pathways (Inhalation excludes radon)													
0	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA
Am-241	8.078E-03	0.0017	3.377E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.031E-02	0.0083
Co-60	1.156E-01	0.0237	3.929E-10	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.464E-05	0.0000
Cs-134	3.652E-04	0.0001	1.435E-12	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.646E-07	0.0000
Cs-137	3.792E-01	0.0778	8.000E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.558E-03	0.0003
Eu-152	3.900E-01	0.0800	9.229E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.475E-05	0.0000
Eu-154	1.996E-01	0.0410	4.979E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.186E-05	0.0000
Eu-155	8.781E-04	0.0002	1.109E-10	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.670E-06	0.0000
H-3	0.000E+00	0.0000	9.685E-07	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.471E-07	0.0000
I-129	2.193E-03	0.0005	3.577E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.221E-02	0.0046
Mn-54	1.111E-09	0.0000	1.276E-18	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.586E-13	0.0000
Na-22	3.104E-03	0.0006	1.193E-11	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.338E-07	0.0000
Ni-63	0.000E+00	0.0000	6.109E-10	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.674E-05	0.0000
Np-237	2.357E-01	0.0484	1.814E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.222E-02	0.0046
Pu-238	2.067E-05	0.0000	3.225E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.837E-02	0.0079
Pu-239	6.044E-05	0.0000	4.347E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.163E-02	0.0106
Ru-106	8.515E-09	0.0000	7.737E-16	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.605E-11	0.0000
Sr-90	4.729E-03	0.0010	3.119E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.373E-03	0.0007
Tc-99	2.404E-05	0.0000	4.859E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.319E-04	0.0000
Th-228	1.896E-04	0.0000	1.531E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.852E-06	0.0000
Th-230	2.486E-02	0.0051	3.712E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.601E-02	0.0094
Th-232	2.847E+00	0.5841	6.044E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.116E-01	0.0434
U-234	8.162E-05	0.0000	3.440E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.020E-02	0.0021
U-235	1.596E-01	0.0327	3.146E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.750E-03	0.0020
U-238	3.488E-02	0.0072	2.936E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.879E-03	0.0020
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	4.406E+00	0.9040	2.358E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.674E-01	0.0959

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
 As mrem/yr and Fraction of Total Dose At t = 2.500E+01 years

	Water Dependent Pathways																			
0	Water				Fish				Radon				Plant				Meat			
0																				
Radio-	Water				Fish				Radon				Plant				Meat			
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
0	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
0	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Am-241	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.842E-02	0.0099
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.156E-01	0.0237
Cs-134	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.660E-04	0.0001
Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.808E-01	0.0781
Eu-152	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.901E-01	0.0800
Eu-154	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.996E-01	0.0410
Eu-155	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.798E-04	0.0002
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.116E-06	0.0000
I-129	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.440E-02	0.0050
Mn-54	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.112E-09	0.0000
Na-22	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.105E-03	0.0006
Ni-63	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.674E-05	0.0000
Np-237	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.579E-01	0.0529
Pu-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.842E-02	0.0079
Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.173E-02	0.0106
Ru-106	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.561E-09	0.0000
Sr-90	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.103E-03	0.0017
Tc-99	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.559E-04	0.0000
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.925E-04	0.0000
Th-230	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.091E-02	0.0146
Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.058E+00	0.6275
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.028E-02	0.0021
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.693E-01	0.0347
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.476E-02	0.0092
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.873E+00	1.0000

0*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)

As mrem/yr and Fraction of Total Dose At t = 3.000E+01 years

Water Independent Pathways (Inhalation excludes radon)

Water Independent Pathways (Inhalation excludes radon)														
0	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA
Am-241	8.014E-03	0.0017	3.350E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.999E-02	0.0085
Co-60	5.988E-02	0.0127	2.036E-10	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.277E-05	0.0000
Cs-134	6.817E-05	0.0000	2.679E-13	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.427E-07	0.0000
Cs-137	3.381E-01	0.0718	7.132E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.389E-03	0.0003
Eu-152	3.019E-01	0.0641	7.144E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.787E-05	0.0000
Eu-154	1.333E-01	0.0283	3.327E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.464E-05	0.0000
Eu-155	4.240E-04	0.0001	5.355E-11	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.065E-07	0.0000
H-3	0.000E+00	0.0000	5.084E-07	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.720E-08	0.0000
I-129	2.193E-03	0.0005	3.576E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.220E-02	0.0047
Mn-54	1.925E-11	0.0000	2.210E-20	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.748E-15	0.0000
Na-22	8.194E-04	0.0002	3.148E-12	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.937E-07	0.0000
Ni-63	0.000E+00	0.0000	5.901E-10	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.583E-05	0.0000
Np-237	2.357E-01	0.0500	1.814E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.222E-02	0.0047
Pu-238	1.987E-05	0.0000	3.100E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.688E-02	0.0078
Pu-239	6.043E-05	0.0000	4.347E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.162E-02	0.0110
Ru-106	2.875E-10	0.0000	2.612E-17	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.555E-12	0.0000
Sr-90	4.193E-03	0.0009	2.765E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.991E-03	0.0006
Tc-99	2.403E-05	0.0000	4.857E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.318E-04	0.0000
Th-228	3.094E-05	0.0000	2.499E-10	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.654E-07	0.0000
Th-230	2.965E-02	0.0063	3.713E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.663E-02	0.0099
Th-232	2.930E+00	0.6223	6.105E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.156E-01	0.0458
U-234	8.287E-05	0.0000	3.442E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.020E-02	0.0022
U-235	1.596E-01	0.0339	3.159E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.766E-03	0.0021
U-238	3.488E-02	0.0074	2.936E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.879E-03	0.0021
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	4.239E+00	0.9002	2.344E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.696E-01	0.0997

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
 As mrem/yr and Fraction of Total Dose At t = 3.000E+01 years

		Water Dependent Pathways													
0		Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
Radio-	AAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAA		AAAAAAAAAAAAAAAA		AAAAAAAAAAAAAAAA		AAAAAAAAAAAAAAAA		AAAAAAAAAAAAAAAA		AAAAAAAAAAAAAAAA		AAAAAAAAAAAAAAAA	
Nuclide	mrem/yr fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAAA	AAAAAAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA
Am-241	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.803E-02 0.0102
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.990E-02 0.0127
Cs-134	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.832E-05 0.0000
Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.395E-01 0.0721
Eu-152	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.020E-01 0.0641
Eu-154	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.334E-01 0.0283
Eu-155	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.249E-04 0.0001
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.856E-07 0.0000
I-129	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.440E-02 0.0052
Mn-54	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.926E-11 0.0000
Na-22	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.196E-04 0.0002
Ni-63	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.583E-05 0.0000
Np-237	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.579E-01 0.0548
Pu-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.693E-02 0.0078
Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.172E-02 0.0110
Ru-106	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.890E-10 0.0000
Sr-90	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.184E-03 0.0015
Tc-99	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.559E-04 0.0000
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.141E-05 0.0000
Th-230	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.632E-02 0.0162
Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.146E+00 0.6681
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.029E-02 0.0022
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.694E-01 0.0360
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.476E-02 0.0095
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.709E+00 1.0000

0*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)

As mrem/yr and Fraction of Total Dose At t = 5.000E+01 years

Water Independent Pathways (Inhalation excludes radon)

0	Water Independent Pathways (Inhalation excludes radon)														
0	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil		
Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	
AAAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	
Am-241	7.763E-03	0.0018	3.244E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.872E-02	0.0089	
Co-60	4.317E-03	0.0010	1.468E-11	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.203E-07	0.0000	
Cs-134	8.275E-08	0.0000	3.251E-16	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.732E-10	0.0000	
Cs-137	2.135E-01	0.0492	4.504E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.773E-04	0.0002	
Eu-152	1.084E-01	0.0250	2.566E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.078E-05	0.0000	
Eu-154	2.657E-02	0.0061	6.628E-10	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.902E-06	0.0000	
Eu-155	2.306E-05	0.0000	2.912E-12	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.386E-08	0.0000	
H-3	0.000E+00	0.0000	3.861E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.863E-09	0.0000	
I-129	2.191E-03	0.0005	3.573E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.218E-02	0.0051	
Mn-54	1.734E-18	0.0000	1.991E-27	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.475E-22	0.0000	
Na-22	3.977E-06	0.0000	1.528E-14	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.401E-10	0.0000	
Ni-63	0.000E+00	0.0000	5.138E-10	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.249E-05	0.0000	
Np-237	2.357E-01	0.0544	1.814E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.223E-02	0.0051	
Pu-238	1.697E-05	0.0000	2.647E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.149E-02	0.0073	
Pu-239	6.040E-05	0.0000	4.344E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.159E-02	0.0119	
Ru-106	3.736E-16	0.0000	3.395E-23	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.020E-18	0.0000	
Sr-90	2.591E-03	0.0006	1.708E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.848E-03	0.0004	
Tc-99	2.400E-05	0.0000	4.850E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.316E-04	0.0000	
Th-228	2.193E-08	0.0000	1.771E-13	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.298E-10	0.0000	
Th-230	4.873E-02	0.0112	3.718E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.951E-02	0.0114	
Th-232	3.023E+00	0.6971	6.174E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.199E-01	0.0507	
U-234	9.008E-05	0.0000	3.449E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.021E-02	0.0024	
U-235	1.597E-01	0.0368	3.214E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.835E-03	0.0023	
U-238	3.488E-02	0.0080	2.936E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.880E-03	0.0023	
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	
Total	3.867E+00	0.8919	2.291E-04	0.0001	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.684E-01	0.1080	

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
 As mrem/yr and Fraction of Total Dose At t = 5.000E+01 years

		Water Dependent Pathways												
	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
Radio-	AAAAAAAAAAAAAA		AAAAAAAAAAAAAA		AAAAAAAAAAAAAA		AAAAAAAAAAAAAA		AAAAAAAAAAAAAA		AAAAAAAAAAAAAA		AAAAAAAAAAAAAA	
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA
Am-241	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.652E-02	0.010
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.318E-03	0.0010
Cs-134	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.293E-08	0.0000
Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.144E-01	0.0494
Eu-152	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.085E-01	0.0250
Eu-154	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.657E-02	0.0061
Eu-155	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.310E-05	0.0000
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.448E-08	0.0000
I-129	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.437E-02	0.0056
Mn-54	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.734E-18	0.0000
Na-22	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.978E-06	0.0000
Ni-63	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.249E-05	0.0000
Np-237	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.579E-01	0.0595
Pu-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.153E-02	0.0073
Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.169E-02	0.0119
Ru-106	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.756E-16	0.0000
Sr-90	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.438E-03	0.0010
Tc-99	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.556E-04	0.0000
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.226E-08	0.0000
Th-230	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.828E-02	0.0227
Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.243E+00	0.7478
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.030E-02	0.0024
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.696E-01	0.0391
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.476E-02	0.0103
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.336E+00	1.0000

0*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)

As mrem/yr and Fraction of Total Dose At t = 1.000E+02 years

Water Independent Pathways (Inhalation excludes radon)

0	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil		
0	Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	
	Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
	Am-241	7.168E-03	0.0017	2.994E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.574E-02	0.0087
	Co-60	6.023E-06	0.0000	2.048E-14	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.284E-09	0.0000
	Cs-134	4.248E-15	0.0000	1.669E-23	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.894E-18	0.0000
	Cs-137	6.769E-02	0.0165	1.428E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.781E-04	0.0001
	Eu-152	8.381E-03	0.0020	1.983E-10	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.606E-06	0.0000
	Eu-154	4.707E-04	0.0001	1.174E-11	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.223E-07	0.0000
	Eu-155	1.590E-08	0.0000	2.008E-15	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.025E-11	0.0000
	H-3	0.000E+00	0.0000	6.138E-11	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.320E-12	0.0000
	I-129	2.186E-03	0.0005	3.566E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.214E-02	0.0054
	Mn-54	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
	Na-22	6.527E-12	0.0000	2.508E-20	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.543E-15	0.0000
	Ni-63	0.000E+00	0.0000	3.634E-10	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.591E-05	0.0000
	Np-237	2.357E-01	0.0574	1.814E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.223E-02	0.0054
	Pu-238	1.144E-05	0.0000	1.783E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.121E-02	0.0052
	Pu-239	6.032E-05	0.0000	4.338E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.152E-02	0.0125
	Ru-106	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
	Sr-90	7.773E-04	0.0002	5.126E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.544E-04	0.0001
	Tc-99	2.391E-05	0.0000	4.831E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.311E-04	0.0000
	Th-228	2.933E-16	0.0000	2.368E-21	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.411E-18	0.0000
	Th-230	9.569E-02	0.0233	3.731E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.814E-02	0.0142
	Th-232	3.032E+00	0.7381	6.180E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.203E-01	0.0536
	U-234	1.233E-04	0.0000	3.465E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.023E-02	0.0025
	U-235	1.602E-01	0.0390	3.363E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.002E-02	0.0024
	U-238	3.488E-02	0.0085	2.937E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.881E-03	0.0024
	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
	Total	3.645E+00	0.8874	2.182E-04	0.0001	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.624E-01	0.1126

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
 As mrem/yr and Fraction of Total Dose At t = 1.000E+02 years

	Water Dependent Pathways											
	Water		Fish		Radon		Plant		Meat		Milk	All Pathways*
Radio-	AAAAA		AAAAA		AAAAA		AAAAA		AAAAA		AAAAA	AAAAA
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA
Am-241	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Cs-134	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Eu-152	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Eu-154	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Eu-155	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
I-129	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Mn-54	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Na-22	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Ni-63	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Np-237	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Pu-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Ru-106	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Sr-90	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Tc-99	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Th-230	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
iiiiiii	iiiiiii	iiiiii	iiiiiii	iiiiii	iiiiiii	iiiiii	iiiiiii	iiiiii	iiiiiii	iiiiii	iiiiiii	iiiiii
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000

0*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)

As mrem/yr and Fraction of Total Dose At t = 2.500E+02 years

Water Independent Pathways (Inhalation excludes radon)

0	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil		
0	Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	
	Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
	Am-241	5.645E-03	0.0014	2.354E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.810E-02	0.0067
	Co-60	1.636E-14	0.0000	5.561E-23	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.487E-18	0.0000
	Cs-134	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
	Cs-137	2.156E-03	0.0005	4.549E-11	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.859E-06	0.0000
	Eu-152	3.869E-06	0.0000	9.156E-14	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.416E-10	0.0000
	Eu-154	2.618E-09	0.0000	6.531E-17	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.801E-13	0.0000
	Eu-155	5.218E-18	0.0000	6.588E-25	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.924E-21	0.0000
	H-3	0.000E+00	0.0000	2.465E-19	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.743E-20	0.0000
	I-129	2.173E-03	0.0005	3.544E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.200E-02	0.0053
	Mn-54	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
	Na-22	2.885E-29	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
	Ni-63	0.000E+00	0.0000	1.286E-10	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.630E-06	0.0000
	Np-237	2.357E-01	0.0565	1.815E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.223E-02	0.0053
	Pu-238	3.557E-06	0.0000	5.449E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.484E-03	0.0016
	Pu-239	6.008E-05	0.0000	4.319E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.129E-02	0.0123
	Ru-106	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
	Sr-90	2.100E-05	0.0000	1.385E-10	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.498E-05	0.0000
	Tc-99	2.364E-05	0.0000	4.777E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.297E-04	0.0000
	Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
	Th-230	2.305E-01	0.0553	3.768E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.526E-02	0.0204
	Th-232	3.032E+00	0.7267	6.180E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.203E-01	0.0528
	U-234	3.492E-04	0.0001	3.515E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.033E-02	0.0025
	U-235	1.617E-01	0.0388	3.828E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.062E-02	0.0025
	U-238	3.488E-02	0.0084	2.938E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.885E-03	0.0024
	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
	Total	3.705E+00	0.8881	2.001E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.666E-01	0.1119

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
 As mrem/yr and Fraction of Total Dose At t = 2.500E+02 years

	Water Dependent Pathways													
	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
Radio-	AAAAA		AAAAA		AAAAA		AAAAA		AAAAA		AAAAA		AAAAA	
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
Am-241	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.377E-02	0.0081
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.636E-14	0.0000
Cs-134	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.165E-03	0.0005
Eu-152	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.870E-06	0.0000
Eu-154	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.618E-09	0.0000
Eu-155	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.228E-18	0.0000
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.839E-19	0.0000
I-129	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.417E-02	0.0058
Mn-54	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Na-22	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.885E-29	0.0000
Ni-63	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.630E-06	0.0000
Np-237	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.579E-01	0.0618
Pu-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.493E-03	0.0016
Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.140E-02	0.0123
Ru-106	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Sr-90	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.597E-05	0.0000
Tc-99	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.533E-04	0.0000
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Th-230	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.158E-01	0.0757
Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.252E+00	0.7795
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.068E-02	0.0026
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.723E-01	0.0413
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.477E-02	0.0107
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.172E+00	1.0000

0*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)

As mrem/yr and Fraction of Total Dose At t = 5.000E+02 years

Water Independent Pathways (Inhalation excludes radon)

0	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil		
0	Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	
	Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
	Am-241	3.796E-03	0.0009	1.576E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.882E-02	0.0043
	Co-60	8.647E-29	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
	Cs-134	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
	Cs-137	6.902E-06	0.0000	1.456E-13	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.836E-08	0.0000
	Eu-152	1.067E-11	0.0000	4.953E-19	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.340E-15	0.0000
	Eu-154	4.570E-18	0.0000	1.140E-25	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.187E-21	0.0000
	Eu-155	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
	H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
	I-129	2.150E-03	0.0005	3.507E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.177E-02	0.0049
	Mn-54	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
	Na-22	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
	Ni-63	0.000E+00	0.0000	2.278E-11	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.970E-07	0.0000
	Np-237	2.357E-01	0.0535	1.815E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.225E-02	0.0051
	Pu-238	7.445E-07	0.0000	7.565E-07	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.021E-04	0.0002
	Pu-239	5.969E-05	0.0000	4.288E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.093E-02	0.0116
	Ru-106	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
	Sr-90	5.106E-08	0.0000	3.367E-13	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.642E-08	0.0000
	Tc-99	2.319E-05	0.0000	4.687E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.272E-04	0.0000
	Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
	Th-230	4.362E-01	0.0990	3.826E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.270E-01	0.0288
	Th-232	3.032E+00	0.6884	6.180E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.203E-01	0.0500
	U-234	1.119E-03	0.0003	3.600E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.056E-02	0.0024
	U-235	1.642E-01	0.0373	4.602E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.160E-02	0.0026
	U-238	3.488E-02	0.0079	2.940E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.892E-03	0.0022
	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
	Total	3.910E+00	0.8878	1.888E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.941E-01	0.1122

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
 As mrem/yr and Fraction of Total Dose At t = 5.000E+02 years

	Water Dependent Pathways													
0	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
0	Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	
	Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	
	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	
	Am-241	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.263E-02 0.0051
	Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.647E-29 0.0000
	Cs-134	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00 0.0000
	Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.931E-06 0.0000
	Eu-152	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.067E-11 0.0000
	Eu-154	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.571E-18 0.0000
	Eu-155	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00 0.0000
	H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00 0.0000
	I-129	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.392E-02 0.0054
	Mn-54	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00 0.0000
	Na-22	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00 0.0000
	Ni-63	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.970E-07 0.0000
	Np-237	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.579E-01 0.0586
	Pu-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.036E-04 0.0002
	Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.103E-02 0.0116
	Ru-106	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00 0.0000
	Sr-90	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.749E-08 0.0000
	Tc-99	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.504E-04 0.0000
	Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00 0.0000
	Th-230	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.632E-01 0.1279
	Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.252E+00 0.7384
	U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.169E-02 0.0027
	U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.758E-01 0.0399
	U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.477E-02 0.0102
	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
	Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.404E+00 1.0000

0*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)

As mrem/yr and Fraction of Total Dose At t = 1.000E+03 years

Water Independent Pathways (Inhalation excludes radon)

0	Ground				Inhalation				Radon				Plant				Meat				Milk				Soil			
0	Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
	Nuclide	mrem/yr	fract.		mrem/yr	fract.		mrem/yr	fract.		mrem/yr	fract.		mrem/yr	fract.		mrem/yr	fract.		mrem/yr	fract.		mrem/yr	fract.		mrem/yr	fract.	
	AAAAAA	AAAAAA	AAAAA		AAAAAA	AAAAA		AAAAAA	AAAAA		AAAAAA	AAAAA		AAAAAA	AAAAA		AAAAAA	AAAAA		AAAAAA	AAAAA		AAAAAA	AAAAA		AAAAAA	AAAAA	
	Am-241	1.728E-03	0.0004		7.070E-06	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		8.439E-03	0.0018	
	Co-60	0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000	
	Cs-134	0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000	
	Cs-137	7.073E-11	0.0000		1.492E-18	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		2.906E-13	0.0000	
	Eu-152	8.118E-23	0.0000		2.428E-19	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		2.951E-16	0.0000	
	Eu-154	0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000	
	Eu-155	0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000	
	H-3	0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000	
	I-129	2.106E-03	0.0004		3.435E-08	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		2.133E-02	0.0044	
	Mn-54	0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000	
	Na-22	0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000	
	Ni-63	0.000E+00	0.0000		7.142E-13	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		3.127E-08	0.0000	
	Np-237	2.357E-01	0.0489		1.817E-05	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		2.229E-02	0.0046	
	Pu-238	1.130E-06	0.0000		1.585E-08	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		2.123E-05	0.0000	
	Pu-239	5.892E-05	0.0000		4.227E-05	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		5.020E-02	0.0104	
	Ru-106	0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000	
	Sr-90	3.020E-13	0.0000		1.992E-18	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		2.154E-13	0.0000	
	Tc-99	2.233E-05	0.0000		4.513E-09	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		1.225E-04	0.0000	
	Th-228	0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000	
	Th-230	7.849E-01	0.1628		3.921E-05	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		1.977E-01	0.0410	
	Th-232	3.032E+00	0.6291		6.180E-05	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		2.203E-01	0.0457	
	U-234	3.953E-03	0.0008		3.773E-06	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		1.130E-02	0.0023	
	U-235	1.692E-01	0.0351		6.139E-06	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		1.356E-02	0.0028	
	U-238	3.488E-02	0.0072		2.945E-06	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		9.906E-03	0.0021	
	iiiiiii	iiiiiii	iiiiiii		iiiiiii	iiiiiii		iiiiiii	iiiiiii		iiiiiii	iiiiiii		iiiiiii	iiiiiii		iiiiiii	iiiiiii		iiiiiii	iiiiiii		iiiiiii	iiiiiii		iiiiiii	iiiiiii	
	Total	4.264E+00	0.8848		1.814E-04	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		5.551E-01	0.1152	

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
 As mrem/yr and Fraction of Total Dose At t = 1.000E+03 years

	Water Dependent Pathways														
0	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*		
0	Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	
	Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
	Am-241	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.017E-02	0.0021
	Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
	Cs-134	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
	Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.102E-11	0.0000
	Eu-152	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.954E-16	0.0000
	Eu-154	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
	Eu-155	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
	H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
	I-129	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.343E-02	0.0049
	Mn-54	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
	Na-22	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
	Ni-63	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.127E-08	0.0000
	Np-237	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.580E-01	0.0535
	Pu-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.238E-05	0.0000
	Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.030E-02	0.0104
	Ru-106	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
	Sr-90	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.174E-13	0.0000
	Tc-99	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.448E-04	0.0000
	Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
	Th-230	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.826E-01	0.2039
	Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.252E+00	0.6748
	U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.526E-02	0.0032
	U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.828E-01	0.0379
	U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.479E-02	0.0093
	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
	Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.820E+00	1.0000

0*Sum of all water independent and dependent pathways.

Dose/Source Ratios Summed Over All Pathways

Parent and Progeny Principal Radionuclide Contributions Indicated

0	Parent	Product	Thread	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)								
	(i)	(j)	Fraction	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
	Am-241	Am-241	1.000E+00	5.040E-03	5.032E-03	4.842E-03	4.803E-03	4.651E-03	4.293E-03	3.375E-03	2.260E-03	1.013E-03
	Am-241	Np-237+D	1.000E+00	4.167E-09	1.249E-08	2.083E-07	2.482E-07	4.045E-07	7.740E-07	1.720E-06	2.869E-06	4.153E-06
	Am-241	U-233	1.000E+00	2.519E-16	1.763E-15	4.850E-13	6.920E-13	1.877E-12	7.241E-12	4.166E-11	1.473E-10	4.727E-10
	Am-241	Th-229+D	1.000E+00	2.447E-19	3.669E-18	1.606E-14	2.743E-14	1.234E-13	9.526E-13	1.387E-11	1.003E-10	6.681E-10
	Am-241	àDSR(j)		5.040E-03	5.032E-03	4.842E-03	4.803E-03	4.652E-03	4.294E-03	3.377E-03	2.263E-03	1.017E-03
	0Co-60	Co-60	1.000E+00	3.095E-01	2.713E-01	1.156E-02	5.990E-03	4.318E-04	6.024E-07	1.636E-15	8.648E-30	0.000E+00
	0Cs-134	Cs-134	1.000E+00	1.615E-01	1.155E-01	3.660E-05	6.832E-06	8.293E-09	4.257E-16	5.760E-38	0.000E+00	0.000E+00
	0Cs-137+D	Cs-137+D	1.000E+00	6.763E-02	6.610E-02	3.808E-02	3.395E-02	2.144E-02	6.796E-03	2.165E-04	6.931E-07	7.102E-12
	0Eu-152	Eu-152	7.210E-01	1.012E-01	9.612E-02	2.813E-02	2.177E-02	7.819E-03	6.044E-04	2.790E-07	7.696E-13	5.854E-24
	0Eu-152	Eu-152	2.790E-01	3.915E-02	3.720E-02	1.088E-02	8.426E-03	3.026E-03	2.339E-04	1.080E-07	2.978E-13	2.265E-24
	Eu-152	Gd-152	2.790E-01	7.435E-19	2.181E-18	2.153E-17	2.334E-17	2.731E-17	2.937E-17	2.954E-17	2.954E-17	2.954E-17
	Eu-152	Sm-148	2.790E-01	2.561E-35	1.767E-34	3.423E-32	4.579E-32	9.859E-32	2.464E-31	7.019E-31	1.462E-30	2.981E-30
	Eu-152	Nd-144	2.790E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.803E-45	2.382E-44	1.023E-43	4.232E-43
	Eu-152	àDSR(j)		3.915E-02	3.720E-02	1.088E-02	8.426E-03	3.026E-03	2.339E-04	1.080E-07	2.978E-13	2.954E-17
	0Eu-154	Eu-154	1.000E+00	1.500E-01	1.384E-01	1.996E-02	1.334E-02	2.657E-03	4.708E-05	2.618E-10	4.571E-19	1.393E-36
	0Eu-155	Eu-155	1.000E+00	3.350E-03	2.896E-03	8.798E-05	4.249E-05	2.310E-06	1.593E-09	5.228E-19	8.157E-35	0.000E+00
	0H-3	H-3	1.000E+00	2.798E-06	2.460E-06	1.116E-07	5.856E-08	4.448E-09	7.070E-12	2.839E-20	2.881E-34	0.000E+00
	0I-129	I-129	1.000E+00	2.443E-03	2.442E-03	2.440E-03	2.440E-03	2.437E-03	2.432E-03	2.417E-03	2.392E-03	2.343E-03
	0Mn-54	Mn-54	1.000E+00	7.124E-02	3.166E-02	1.112E-10	1.926E-12	1.734E-19	4.222E-37	0.000E+00	0.000E+00	0.000E+00
	0Na-22	Na-22	1.000E+00	2.424E-01	1.857E-01	3.105E-04	8.196E-05	3.978E-07	6.528E-13	2.886E-30	0.000E+00	0.000E+00
	0Ni-63	Ni-63	1.000E+00	3.180E-06	3.158E-06	2.674E-06	2.583E-06	2.249E-06	1.591E-06	5.630E-07	9.970E-08	3.127E-09
	0Np-237+D	Np-237+D	1.000E+00	2.579E-02	2.579E-02	2.579E-02	2.579E-02	2.579E-02	2.579E-02	2.579E-02	2.579E-02	2.578E-02
	Np-237+D	U-233	1.000E+00	2.339E-09	7.016E-09	1.193E-07	1.426E-07	2.362E-07	4.699E-07	1.171E-06	2.338E-06	4.668E-06
	Np-237+D	Th-229+D	1.000E+00	3.028E-12	2.120E-11	5.903E-09	8.443E-09	2.313E-08	9.145E-08	5.654E-07	2.238E-06	8.799E-06
	Np-237+D	àDSR(j)		2.579E-02	2.579E-02	2.579E-02	2.579E-02	2.579E-02	2.579E-02	2.579E-02	2.579E-02	2.580E-02
	0Pu-238	Pu-238	1.850E-09	8.660E-12	8.592E-12	7.107E-12	6.832E-12	5.833E-12	3.929E-12	1.201E-12	1.664E-13	3.199E-15
	0Pu-238	Pu-238	9.996E-01	4.679E-03	4.642E-03	3.840E-03	3.691E-03	3.152E-03	2.123E-03	6.487E-04	8.993E-05	1.728E-06
	Pu-238	U-234	9.996E-01	1.446E-09	4.322E-09	6.694E-08	7.856E-08	1.207E-07	2.010E-07	3.160E-07	3.593E-07	3.657E-07
	Pu-238	Th-230	9.996E-01	1.914E-14	1.336E-13	3.501E-11	4.945E-11	1.290E-10	4.532E-10	2.056E-09	5.465E-09	1.265E-08
	Pu-238	Ra-226+D	9.996E-01	1.074E-16	1.609E-15	6.775E-12	1.147E-11	5.004E-11	3.582E-10	4.274E-09	2.383E-08	1.119E-07
	Pu-238	Pb-210+D	9.996E-01	1.146E-19	3.528E-18	2.009E-13	3.964E-13	2.588E-12	2.950E-11	5.340E-10	3.520E-09	1.794E-08
	Pu-238	àDSR(j)		4.679E-03	4.642E-03	3.840E-03	3.691E-03	3.152E-03	2.123E-03	6.490E-04	9.032E-05	2.237E-06

Dose/Source Ratios Summed Over All Pathways

Parent and Progeny Principal Radionuclide Contributions Indicated

0	Parent (i)	Product (j)	Thread Fraction	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)								
	AAAAA	AAAAA	AAAAA	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
	Pu-238	Pu-238	1.319E-06	6.176E-09	6.128E-09	5.069E-09	4.873E-09	4.160E-09	2.802E-09	8.563E-10	1.187E-10	2.282E-12
	Pu-238	U-234	1.319E-06	1.908E-15	5.704E-15	8.836E-14	1.037E-13	1.593E-13	2.653E-13	4.171E-13	4.743E-13	4.827E-13
	Pu-238	Th-230	1.319E-06	2.526E-20	1.764E-19	4.622E-17	6.528E-17	1.702E-16	5.983E-16	2.715E-15	7.214E-15	1.670E-14
	Pu-238	Ra-226+D	1.319E-06	1.418E-22	2.123E-21	8.943E-18	1.515E-17	6.605E-17	4.728E-16	5.642E-15	3.145E-14	1.477E-13
	Pu-238	Pb-210+D1	1.319E-06	5.675E-26	1.747E-24	9.950E-20	1.963E-19	1.282E-18	1.461E-17	2.645E-16	1.743E-15	8.886E-15
	Pu-238	äDSR(j)		6.176E-09	6.128E-09	5.069E-09	4.873E-09	4.160E-09	2.802E-09	8.567E-10	1.192E-10	2.938E-12
0	Pu-238	Pu-238	1.899E-08	8.890E-11	8.820E-11	7.296E-11	7.014E-11	5.988E-11	4.033E-11	1.233E-11	1.709E-12	3.284E-14
	Pu-238	U-234	1.899E-08	2.747E-17	8.211E-17	1.272E-15	1.493E-15	2.293E-15	3.819E-15	6.003E-15	6.827E-15	6.948E-15
	Pu-238	Th-230	1.899E-08	3.636E-22	2.539E-21	6.652E-19	9.396E-19	2.450E-18	8.611E-18	3.907E-17	1.038E-16	2.404E-16
	Pu-238	Ra-226+D	1.899E-08	2.041E-24	3.057E-23	1.287E-19	2.180E-19	9.507E-19	6.805E-18	8.122E-17	4.527E-16	2.126E-15
	Pu-238	Pb-210+D2	1.899E-08	1.542E-27	4.747E-26	2.703E-21	5.333E-21	3.482E-20	3.969E-19	7.185E-18	4.736E-17	2.414E-16
	Pu-238	äDSR(j)		8.890E-11	8.820E-11	7.297E-11	7.014E-11	5.988E-11	4.034E-11	1.233E-11	1.716E-12	4.240E-14
0	Pu-238	Pu-238	2.100E-04	9.828E-07	9.751E-07	8.066E-07	7.754E-07	6.620E-07	4.459E-07	1.363E-07	1.889E-08	3.631E-10
	Pu-238	U-234	2.100E-04	3.036E-13	9.077E-13	1.406E-11	1.650E-11	2.535E-11	4.222E-11	6.637E-11	7.547E-11	7.681E-11
	Pu-238	Th-230	2.100E-04	4.019E-18	2.807E-17	7.354E-15	1.039E-14	2.709E-14	9.520E-14	4.319E-13	1.148E-12	2.658E-12
	Pu-238	Ra-226+D1	2.100E-04	5.783E-20	8.660E-19	3.647E-15	6.177E-15	2.694E-14	1.928E-13	2.301E-12	1.283E-11	6.022E-11
	Pu-238	Pb-210+D	2.100E-04	2.407E-23	7.411E-22	4.220E-17	8.326E-17	5.436E-16	6.197E-15	1.122E-13	7.393E-13	3.769E-12
	Pu-238	äDSR(j)		9.828E-07	9.751E-07	8.066E-07	7.754E-07	6.620E-07	4.459E-07	1.363E-07	1.898E-08	5.065E-10
0	Pu-238	Pu-238	2.771E-10	1.297E-12	1.287E-12	1.065E-12	1.023E-12	8.738E-13	5.886E-13	1.799E-13	2.493E-14	4.792E-16
	Pu-238	U-234	2.771E-10	4.008E-19	1.198E-18	1.856E-17	2.178E-17	3.346E-17	5.573E-17	8.760E-17	9.963E-17	1.014E-16
	Pu-238	Th-230	2.771E-10	5.306E-24	3.705E-23	9.707E-21	1.371E-20	3.575E-20	1.257E-19	5.702E-19	1.515E-18	3.508E-18
	Pu-238	Ra-226+D1	2.771E-10	7.634E-26	1.143E-24	4.814E-21	8.154E-21	3.555E-20	2.545E-19	3.037E-18	1.693E-17	7.949E-17
	Pu-238	Pb-210+D1	2.771E-10	1.192E-29	3.670E-28	2.090E-23	4.124E-23	2.692E-22	3.069E-21	5.555E-20	3.661E-19	1.867E-18
	Pu-238	äDSR(j)		1.297E-12	1.287E-12	1.065E-12	1.023E-12	8.739E-13	5.886E-13	1.799E-13	2.505E-14	6.655E-16
0	Pu-238	Pu-238	3.989E-12	1.867E-14	1.853E-14	1.533E-14	1.473E-14	1.258E-14	8.472E-15	2.589E-15	3.589E-16	6.898E-18
	Pu-238	U-234	3.989E-12	5.769E-21	1.725E-20	2.672E-19	3.135E-19	4.817E-19	8.021E-19	1.261E-18	1.434E-18	1.459E-18
	Pu-238	Th-230	3.989E-12	7.637E-26	5.334E-25	1.397E-22	1.974E-22	5.146E-22	1.809E-21	8.207E-21	2.181E-20	5.050E-20
	Pu-238	Ra-226+D1	3.989E-12	1.099E-27	1.645E-26	6.929E-23	1.174E-22	5.118E-22	3.663E-21	4.372E-20	2.437E-19	1.144E-18
	Pu-238	Pb-210+D2	3.989E-12	3.238E-31	9.970E-30	5.678E-25	1.120E-24	7.314E-24	8.337E-23	1.509E-21	9.947E-21	5.071E-20
	Pu-238	äDSR(j)		1.867E-14	1.853E-14	1.533E-14	1.473E-14	1.258E-14	8.473E-15	2.590E-15	3.606E-16	9.603E-18
0	Pu-238	Pu-238	1.998E-04	9.351E-07	9.277E-07	7.674E-07	7.377E-07	6.298E-07	4.242E-07	1.296E-07	1.797E-08	3.454E-10
	Pu-238	U-234	1.998E-04	2.889E-13	8.636E-13	1.338E-11	1.570E-11	2.412E-11	4.017E-11	6.314E-11	7.181E-11	7.307E-11
	Pu-238	Th-230	1.998E-04	3.824E-18	2.671E-17	6.997E-15	9.883E-15	2.577E-14	9.057E-14	4.110E-13	1.092E-12	2.529E-12
	Pu-238	Ra-226+D2	1.998E-04	1.893E-20	2.834E-19	1.193E-15	2.021E-15	8.814E-15	6.309E-14	7.530E-13	4.198E-12	1.971E-11
	Pu-238	Pb-210+D	1.998E-04	2.290E-23	7.051E-22	4.015E-17	7.922E-17	5.172E-16	5.896E-15	1.067E-13	7.034E-13	3.586E-12
	Pu-238	äDSR(j)		9.351E-07	9.277E-07	7.674E-07	7.377E-07	6.299E-07	4.243E-07	1.297E-07	1.805E-08	4.443E-10

Dose/Source Ratios Summed Over All Pathways

Parent and Progeny Principal Radionuclide Contributions Indicated

0	Parent (i)	Product (j)	Thread Fraction	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)								
	AAAAA	AAAAA	AAAAA	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
	Pu-238	Pu-238	2.637E-10	1.234E-12	1.225E-12	1.013E-12	9.738E-13	8.314E-13	5.600E-13	1.711E-13	2.372E-14	4.560E-16
	Pu-238	U-234	2.637E-10	3.813E-19	1.140E-18	1.766E-17	2.072E-17	3.184E-17	5.302E-17	8.335E-17	9.479E-17	9.646E-17
	Pu-238	Th-230	2.637E-10	5.048E-24	3.525E-23	9.236E-21	1.305E-20	3.402E-20	1.196E-19	5.425E-19	1.442E-18	3.338E-18
	Pu-238	Ra-226+D2	2.637E-10	2.498E-26	3.741E-25	1.575E-21	2.668E-21	1.164E-20	8.328E-20	9.939E-19	5.541E-18	2.601E-17
	Pu-238	Pb-210+D1	2.637E-10	1.134E-29	3.492E-28	1.988E-23	3.923E-23	2.561E-22	2.920E-21	5.285E-20	3.483E-19	1.776E-18
	Pu-238	äDSR(j)		1.234E-12	1.225E-12	1.013E-12	9.738E-13	8.314E-13	5.600E-13	1.712E-13	2.383E-14	5.835E-16
0	Pu-238	Pu-238	3.795E-12	1.777E-14	1.763E-14	1.458E-14	1.402E-14	1.197E-14	8.060E-15	2.463E-15	3.415E-16	6.563E-18
	Pu-238	U-234	3.795E-12	5.489E-21	1.641E-20	2.542E-19	2.983E-19	4.583E-19	7.632E-19	1.200E-18	1.364E-18	1.388E-18
	Pu-238	Th-230	3.795E-12	7.266E-26	5.075E-25	1.329E-22	1.878E-22	4.896E-22	1.721E-21	7.808E-21	2.075E-20	4.804E-20
	Pu-238	Ra-226+D2	3.795E-12	3.596E-28	5.384E-27	2.268E-23	3.841E-23	1.675E-22	1.199E-21	1.431E-20	7.975E-20	3.744E-19
	Pu-238	Pb-210+D2	3.795E-12	3.081E-31	9.486E-30	5.402E-25	1.066E-24	6.959E-24	7.932E-23	1.436E-21	9.463E-21	4.824E-20
	Pu-238	äDSR(j)		1.777E-14	1.763E-14	1.458E-14	1.402E-14	1.197E-14	8.061E-15	2.464E-15	3.429E-16	8.422E-18
0	Pu-238	Pu-238	4.196E-08	1.964E-10	1.949E-10	1.612E-10	1.549E-10	1.323E-10	8.911E-11	2.723E-11	3.775E-12	7.255E-14
	Pu-238	U-234	4.196E-08	6.068E-17	1.814E-16	2.810E-15	3.298E-15	5.066E-15	8.437E-15	1.326E-14	1.508E-14	1.535E-14
	Pu-238	Th-230	4.196E-08	8.032E-22	5.610E-21	1.470E-18	2.076E-18	5.413E-18	1.902E-17	8.632E-17	2.294E-16	5.311E-16
	Pu-238	Ra-226+D3	4.196E-08	1.102E-23	1.650E-22	6.951E-19	1.177E-18	5.134E-18	3.675E-17	4.386E-16	2.445E-15	1.148E-14
	Pu-238	Pb-210+D	4.196E-08	4.810E-27	1.481E-25	8.433E-21	1.664E-20	1.086E-19	1.238E-18	2.242E-17	1.477E-16	7.532E-16
	Pu-238	äDSR(j)		1.964E-10	1.949E-10	1.612E-10	1.550E-10	1.323E-10	8.911E-11	2.724E-11	3.793E-12	1.007E-13
0	Pu-238	Pu-238	5.538E-14	2.593E-16	2.572E-16	2.128E-16	2.045E-16	1.746E-16	1.176E-16	3.594E-17	4.983E-18	9.577E-20
	Pu-238	U-234	5.538E-14	8.010E-23	2.394E-22	3.709E-21	4.353E-21	6.687E-21	1.114E-20	1.751E-20	1.991E-20	2.026E-20
	Pu-238	Th-230	5.538E-14	1.060E-27	7.405E-27	1.940E-24	2.740E-24	7.145E-24	2.511E-23	1.139E-22	3.028E-22	7.011E-22
	Pu-238	Ra-226+D3	5.538E-14	1.455E-29	2.179E-28	9.176E-25	1.554E-24	6.777E-24	4.851E-23	5.789E-22	3.227E-21	1.515E-20
	Pu-238	Pb-210+D1	5.538E-14	2.382E-33	7.334E-32	4.177E-27	8.241E-27	5.380E-26	6.133E-25	1.110E-23	7.317E-23	3.730E-22
	Pu-238	äDSR(j)		2.593E-16	2.572E-16	2.128E-16	2.045E-16	1.746E-16	1.176E-16	3.596E-17	5.006E-18	1.323E-19
0	Pu-238	Pu-238	7.972E-16	3.732E-18	3.702E-18	3.063E-18	2.944E-18	2.514E-18	1.693E-18	5.174E-19	7.172E-20	1.379E-21
	Pu-238	U-234	7.972E-16	1.153E-24	3.447E-24	5.339E-23	6.265E-23	9.625E-23	1.603E-22	2.520E-22	2.866E-22	2.916E-22
	Pu-238	Th-230	7.972E-16	1.526E-29	1.066E-28	2.792E-26	3.944E-26	1.028E-25	3.615E-25	1.640E-24	4.358E-24	1.009E-23
	Pu-238	Ra-226+D3	7.972E-16	2.094E-31	3.136E-30	1.321E-26	2.237E-26	9.754E-26	6.982E-25	8.333E-24	4.645E-23	2.181E-22
	Pu-238	Pb-210+D2	7.972E-16	6.472E-35	1.992E-33	1.135E-28	2.239E-28	1.462E-27	1.666E-26	3.016E-25	1.988E-24	1.013E-23
	Pu-238	äDSR(j)		3.732E-18	3.702E-18	3.063E-18	2.944E-18	2.514E-18	1.693E-18	5.176E-19	7.206E-20	1.908E-21
0	Pu-238	Pu-238	2.000E-07	9.362E-10	9.288E-10	7.684E-10	7.386E-10	6.306E-10	4.247E-10	1.298E-10	1.799E-11	3.458E-13
	Pu-238	U-234	2.000E-07	2.892E-16	8.647E-16	1.339E-14	1.572E-14	2.415E-14	4.021E-14	6.322E-14	7.189E-14	7.316E-14
	Pu-238	Th-230	2.000E-07	3.829E-21	2.674E-20	7.005E-18	9.895E-18	2.580E-17	9.068E-17	4.115E-16	1.093E-15	2.532E-15
	Pu-238	Ra-226+D4	2.000E-07	6.177E-25	9.249E-24	3.895E-20	6.597E-20	2.877E-19	2.059E-18	2.457E-17	1.370E-16	6.431E-16
	Pu-238	Pb-210+D	2.000E-07	2.293E-26	7.059E-25	4.020E-20	7.932E-20	5.178E-19	5.903E-18	1.069E-16	7.042E-16	3.590E-15
	Pu-238	äDSR(j)		9.362E-10	9.288E-10	7.684E-10	7.386E-10	6.306E-10	4.248E-10	1.299E-10	1.807E-11	4.258E-13

Dose/Source Ratios Summed Over All Pathways

Parent and Progeny Principal Radionuclide Contributions Indicated

0	Parent (i)	Product (j)	Thread Fraction	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)								
	AAAAA	AAAAA	AAAAA	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
	Pu-238	Pu-238	2.640E-13	1.236E-15	1.226E-15	1.014E-15	9.749E-16	8.324E-16	5.607E-16	1.713E-16	2.375E-17	4.565E-19
	Pu-238	U-234	2.640E-13	3.818E-22	1.141E-21	1.768E-20	2.075E-20	3.188E-20	5.308E-20	8.345E-20	9.490E-20	9.657E-20
	Pu-238	Th-230	2.640E-13	5.054E-27	3.530E-26	9.247E-24	1.306E-23	3.406E-23	1.197E-22	5.431E-22	1.443E-21	3.342E-21
	Pu-238	Ra-226+D4	2.640E-13	8.153E-31	1.221E-29	5.142E-26	8.708E-26	3.797E-25	2.718E-24	3.244E-23	1.808E-22	8.489E-22
	Pu-238	Pb-210+D1	2.640E-13	1.135E-32	3.496E-31	1.991E-26	3.928E-26	2.565E-25	2.923E-24	5.292E-23	3.488E-22	1.778E-21
	Pu-238	äDSR(j)		1.236E-15	1.226E-15	1.014E-15	9.750E-16	8.324E-16	5.607E-16	1.714E-16	2.385E-17	5.591E-19
0	Pu-238	Pu-238	3.800E-15	1.779E-17	1.765E-17	1.460E-17	1.403E-17	1.198E-17	8.070E-18	2.466E-18	3.419E-19	6.571E-21
	Pu-238	U-234	3.800E-15	5.495E-24	1.643E-23	2.545E-22	2.986E-22	4.588E-22	7.641E-22	1.201E-21	1.366E-21	1.390E-21
	Pu-238	Th-230	3.800E-15	7.275E-29	5.081E-28	1.331E-25	1.880E-25	4.902E-25	1.723E-24	7.818E-24	2.078E-23	4.810E-23
	Pu-238	Ra-226+D4	3.800E-15	1.174E-32	1.757E-31	7.401E-28	1.253E-27	5.466E-27	3.912E-26	4.669E-25	2.603E-24	1.222E-23
	Pu-238	Pb-210+D2	3.800E-15	3.085E-34	9.497E-33	5.408E-28	1.067E-27	6.967E-27	7.942E-26	1.438E-24	9.475E-24	4.830E-23
	Pu-238	äDSR(j)		1.779E-17	1.765E-17	1.460E-17	1.403E-17	1.198E-17	8.071E-18	2.467E-18	3.433E-19	8.070E-21
0	Pu-239	Pu-239	5.901E-04	3.055E-06	3.055E-06	3.053E-06	3.052E-06	3.050E-06	3.046E-06	3.033E-06	3.011E-06	2.968E-06
	Pu-239	U-235+D	5.901E-04	4.914E-15	1.474E-14	2.505E-13	2.996E-13	4.959E-13	9.862E-13	2.453E-12	4.883E-12	9.691E-12
	Pu-239	Pa-231	5.901E-04	2.735E-20	1.915E-19	5.335E-17	7.631E-17	2.091E-16	8.275E-16	5.128E-15	2.039E-14	8.078E-14
	Pu-239	Ac-227+D	5.901E-04	8.715E-22	1.298E-20	4.805E-17	7.939E-17	3.157E-16	1.875E-15	1.613E-14	7.249E-14	3.058E-13
	Pu-239	äDSR(j)		3.055E-06	3.055E-06	3.053E-06	3.052E-06	3.050E-06	3.046E-06	3.033E-06	3.011E-06	2.968E-06
0	Pu-239	Pu-239	1.633E-06	8.455E-09	8.454E-09	8.449E-09	8.447E-09	8.442E-09	8.430E-09	8.394E-09	8.334E-09	8.215E-09
	Pu-239	U-235+D	1.633E-06	1.360E-17	4.080E-17	6.933E-16	8.292E-16	1.372E-15	2.729E-15	6.788E-15	1.351E-14	2.682E-14
	Pu-239	Pa-231	1.633E-06	7.571E-23	5.299E-22	1.476E-19	2.112E-19	5.787E-19	2.290E-18	1.419E-17	5.642E-17	2.236E-16
	Pu-239	Ac-227+D1	1.633E-06	2.434E-24	3.627E-23	1.342E-19	2.217E-19	8.819E-19	5.237E-18	4.506E-17	2.025E-16	8.540E-16
	Pu-239	äDSR(j)		8.455E-09	8.454E-09	8.449E-09	8.447E-09	8.442E-09	8.430E-09	8.394E-09	8.334E-09	8.215E-09
0	Pu-239	Pu-239	8.257E-06	4.274E-08	4.274E-08	4.271E-08	4.271E-08	4.268E-08	4.262E-08	4.244E-08	4.213E-08	4.153E-08
	Pu-239	U-235+D	8.257E-06	6.875E-17	2.063E-16	3.505E-15	4.192E-15	6.939E-15	1.380E-14	3.432E-14	6.832E-14	1.356E-13
	Pu-239	Pa-231	8.257E-06	3.827E-22	2.679E-21	7.464E-19	1.068E-18	2.926E-18	1.158E-17	7.175E-17	2.852E-16	1.130E-15
	Pu-239	Ac-227+D2	8.257E-06	1.025E-23	1.527E-22	5.651E-19	9.337E-19	3.714E-18	2.205E-17	1.897E-16	8.526E-16	3.596E-15
	Pu-239	äDSR(j)		4.274E-08	4.274E-08	4.271E-08	4.271E-08	4.268E-08	4.262E-08	4.244E-08	4.213E-08	4.153E-08
0	Pu-239	Pu-239	2.285E-08	1.183E-10	1.183E-10	1.182E-10	1.182E-10	1.181E-10	1.180E-10	1.175E-10	1.166E-10	1.149E-10
	Pu-239	U-235+D	2.285E-08	1.903E-19	5.708E-19	9.701E-18	1.160E-17	1.920E-17	3.819E-17	9.499E-17	1.891E-16	3.753E-16
	Pu-239	Pa-231	2.285E-08	1.059E-24	7.415E-24	2.066E-21	2.955E-21	8.098E-21	3.204E-20	1.986E-19	7.894E-19	3.128E-18
	Pu-239	Ac-227+D3	2.285E-08	2.868E-26	4.273E-25	1.581E-21	2.612E-21	1.039E-20	6.170E-20	5.309E-19	2.385E-18	1.006E-17
	Pu-239	äDSR(j)		1.183E-10	1.183E-10	1.182E-10	1.182E-10	1.181E-10	1.180E-10	1.175E-10	1.166E-10	1.149E-10
0	Pu-239	Pu-239	4.954E-10	2.565E-12	2.565E-12	2.563E-12	2.563E-12	2.561E-12	2.557E-12	2.546E-12	2.528E-12	2.492E-12
	Pu-239	U-235+D	4.954E-10	4.125E-21	1.238E-20	2.103E-19	2.515E-19	4.164E-19	8.280E-19	2.059E-18	4.100E-18	8.136E-18
	Pu-239	Pa-231	4.954E-10	2.297E-26	1.608E-25	4.479E-23	6.407E-23	1.756E-22	6.947E-22	4.305E-21	1.712E-20	6.782E-20
	Pu-239	Ac-227+D4	4.954E-10	7.289E-28	1.086E-26	4.019E-23	6.640E-23	2.641E-22	1.568E-21	1.349E-20	6.063E-20	2.558E-19
	Pu-239	äDSR(j)		2.565E-12	2.565E-12	2.563E-12	2.563E-12	2.561E-12	2.557E-12	2.546E-12	2.528E-12	2.492E-12

Dose/Source Ratios Summed Over All Pathways
 Parent and Progeny Principal Radionuclide Contributions Indicated

0	Parent (i)	Product (j)	Thread Fraction	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)								
	AAAAA	AAAAA	AAAAA	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
	Pu-239	Pu-239	1.371E-12	7.098E-15	7.098E-15	7.093E-15	7.092E-15	7.088E-15	7.078E-15	7.048E-15	6.997E-15	6.897E-15
	Pu-239	U-235+D	1.371E-12	1.142E-23	3.425E-23	5.821E-22	6.962E-22	1.152E-21	2.292E-21	5.699E-21	1.135E-20	2.252E-20
	Pu-239	Pa-231	1.371E-12	6.356E-29	4.449E-28	1.240E-25	1.773E-25	4.859E-25	1.923E-24	1.192E-23	4.737E-23	1.877E-22
	Pu-239	Ac-227+D5	1.371E-12	2.036E-30	3.033E-29	1.123E-25	1.855E-25	7.377E-25	4.380E-24	3.769E-23	1.694E-22	7.144E-22
	Pu-239	äDSR(j)		7.098E-15	7.098E-15	7.093E-15	7.092E-15	7.088E-15	7.078E-15	7.048E-15	6.997E-15	6.897E-15
0	Pu-239+D	Pu-239+D	9.829E-01	5.088E-03	5.088E-03	5.085E-03	5.084E-03	5.081E-03	5.074E-03	5.052E-03	5.016E-03	4.944E-03
	Pu-239+D	U-235+D	9.829E-01	8.184E-12	2.455E-11	4.172E-10	4.990E-10	8.260E-10	1.643E-09	4.086E-09	8.133E-09	1.614E-08
	Pu-239+D	Pa-231	9.829E-01	4.556E-17	3.189E-16	8.886E-14	1.271E-13	3.483E-13	1.378E-12	8.541E-12	3.396E-11	1.346E-10
	Pu-239+D	Ac-227+D	9.829E-01	1.452E-18	2.163E-17	8.003E-14	1.322E-13	5.259E-13	3.123E-12	2.687E-11	1.207E-10	5.093E-10
	Pu-239+D	äDSR(j)		5.088E-03	5.088E-03	5.085E-03	5.084E-03	5.081E-03	5.074E-03	5.052E-03	5.016E-03	4.944E-03
0	Pu-239+D	Pu-239+D	2.720E-03	1.408E-05	1.408E-05	1.407E-05	1.407E-05	1.406E-05	1.404E-05	1.398E-05	1.388E-05	1.368E-05
	Pu-239+D	U-235+D	2.720E-03	2.265E-14	6.795E-14	1.155E-12	1.381E-12	2.286E-12	4.546E-12	1.131E-11	2.251E-11	4.468E-11
	Pu-239+D	Pa-231	2.720E-03	1.261E-19	8.827E-19	2.459E-16	3.518E-16	9.640E-16	3.815E-15	2.364E-14	9.398E-14	3.724E-13
	Pu-239+D	Ac-227+D1	2.720E-03	4.054E-21	6.041E-20	2.235E-16	3.693E-16	1.469E-15	8.723E-15	7.505E-14	3.373E-13	1.423E-12
	Pu-239+D	äDSR(j)		1.408E-05	1.408E-05	1.407E-05	1.407E-05	1.406E-05	1.404E-05	1.398E-05	1.388E-05	1.368E-05
0	Pu-239+D	Pu-239+D	1.375E-02	7.120E-05	7.119E-05	7.115E-05	7.114E-05	7.109E-05	7.099E-05	7.069E-05	7.018E-05	6.918E-05
	Pu-239+D	U-235+D	1.375E-02	1.145E-13	3.435E-13	5.838E-12	6.983E-12	1.156E-11	2.298E-11	5.717E-11	1.138E-10	2.259E-10
	Pu-239+D	Pa-231	1.375E-02	6.375E-19	4.463E-18	1.243E-15	1.778E-15	4.874E-15	1.929E-14	1.195E-13	4.751E-13	1.883E-12
	Pu-239+D	Ac-227+D2	1.375E-02	1.707E-20	2.544E-19	9.413E-16	1.555E-15	6.186E-15	3.673E-14	3.160E-13	1.420E-12	5.990E-12
	Pu-239+D	äDSR(j)		7.120E-05	7.119E-05	7.115E-05	7.114E-05	7.109E-05	7.099E-05	7.069E-05	7.018E-05	6.918E-05
0	Pu-239+D	Pu-239+D	3.806E-05	1.970E-07	1.970E-07	1.969E-07	1.969E-07	1.968E-07	1.965E-07	1.956E-07	1.942E-07	1.915E-07
	Pu-239+D	U-235+D	3.806E-05	3.169E-16	9.508E-16	1.616E-14	1.933E-14	3.199E-14	6.361E-14	1.582E-13	3.150E-13	6.251E-13
	Pu-239+D	Pa-231	3.806E-05	1.764E-21	1.235E-20	3.441E-18	4.922E-18	1.349E-17	5.338E-17	3.308E-16	1.315E-15	5.211E-15
	Pu-239+D	Ac-227+D3	3.806E-05	4.777E-23	7.117E-22	2.634E-18	4.351E-18	1.731E-17	1.028E-16	8.843E-16	3.973E-15	1.676E-14
	Pu-239+D	äDSR(j)		1.970E-07	1.970E-07	1.969E-07	1.969E-07	1.968E-07	1.965E-07	1.956E-07	1.942E-07	1.915E-07
0	Pu-239+D	Pu-239+D	8.252E-07	4.272E-09	4.272E-09	4.269E-09	4.268E-09	4.266E-09	4.260E-09	4.241E-09	4.211E-09	4.151E-09
	Pu-239+D	U-235+D	8.252E-07	6.871E-18	2.061E-17	3.503E-16	4.190E-16	6.935E-16	1.379E-15	3.430E-15	6.829E-15	1.355E-14
	Pu-239+D	Pa-231	8.252E-07	3.825E-23	2.678E-22	7.460E-20	1.067E-19	2.924E-19	1.157E-18	7.171E-18	2.851E-17	1.130E-16
	Pu-239+D	Ac-227+D4	8.252E-07	1.214E-24	1.809E-23	6.694E-20	1.106E-19	4.399E-19	2.612E-18	2.248E-17	1.010E-16	4.260E-16
	Pu-239+D	äDSR(j)		4.272E-09	4.272E-09	4.269E-09	4.268E-09	4.266E-09	4.260E-09	4.241E-09	4.211E-09	4.151E-09
0	Pu-239+D	Pu-239+D	2.284E-09	1.182E-11	1.182E-11	1.181E-11	1.181E-11	1.181E-11	1.179E-11	1.174E-11	1.165E-11	1.149E-11
	Pu-239+D	U-235+D	2.284E-09	1.902E-20	5.705E-20	9.695E-19	1.160E-18	1.919E-18	3.817E-18	9.493E-18	1.890E-17	3.751E-17
	Pu-239+D	Pa-231	2.284E-09	1.059E-25	7.411E-25	2.065E-22	2.953E-22	8.094E-22	3.203E-21	1.985E-20	7.890E-20	3.127E-19
	Pu-239+D	Ac-227+D5	2.284E-09	3.391E-27	5.053E-26	1.870E-22	3.089E-22	1.229E-21	7.296E-21	6.278E-20	2.821E-19	1.190E-18
	Pu-239+D	äDSR(j)		1.182E-11	1.182E-11	1.181E-11	1.181E-11	1.181E-11	1.179E-11	1.174E-11	1.165E-11	1.149E-11
0	Ru-106+D	Ru-106+D	1.000E+00	1.951E-02	9.908E-03	8.561E-10	2.890E-11	3.756E-17	7.231E-32	0.000E+00	0.000E+00	0.000E+00
0	Sr-90+D	Sr-90+D	1.000E+00	1.479E-03	1.444E-03	8.103E-04	7.184E-04	4.438E-04	1.332E-04	3.597E-06	8.749E-09	5.174E-14

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 Summary : Adult recreational SALS 2015
 File : D:\ACTIVE PROJECTS\ADELANTE\MT0A4_CONTRACT\T01\RISK\2015 RAD SALS\DOSE-BASED SALS\RESRAD CALCS\ADULTREC2015.RAD

Dose/Source Ratios Summed Over All Pathways

Parent and Progeny Principal Radionuclide Contributions Indicated

0	Parent (i)	Product (j)	Thread Fraction	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)								
	AAAAA	AAAAA	AAAAA	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
	Tc-99	Tc-99	1.000E+00	1.562E-05	1.562E-05	1.559E-05	1.559E-05	1.556E-05	1.551E-05	1.533E-05	1.504E-05	1.448E-05
0	Th-228+D	Th-228+D	1.000E+00	1.665E-01	1.158E-01	1.925E-05	3.141E-06	2.226E-09	2.977E-17	7.119E-41	0.000E+00	0.000E+00
0	Th-230	Th-230	9.996E-01	4.431E-03	4.431E-03	4.430E-03	4.430E-03	4.429E-03	4.427E-03	4.421E-03	4.411E-03	4.391E-03
	Th-230	Ra-226+D	9.996E-01	4.973E-05	1.492E-04	2.523E-03	3.014E-03	4.968E-03	9.779E-03	2.359E-02	4.465E-02	8.037E-02
	Th-230	Pb-210+D	9.996E-01	8.815E-08	6.115E-07	1.347E-04	1.840E-04	4.248E-04	1.172E-03	3.552E-03	7.219E-03	1.344E-02
	Th-230	äDSR(j)		4.481E-03	4.581E-03	7.087E-03	7.628E-03	9.822E-03	1.538E-02	3.156E-02	5.629E-02	9.819E-02
0	Th-230	Th-230	1.319E-06	5.849E-09	5.849E-09	5.848E-09	5.847E-09	5.846E-09	5.844E-09	5.836E-09	5.822E-09	5.795E-09
	Th-230	Ra-226+D	1.319E-06	6.565E-11	1.969E-10	3.330E-09	3.978E-09	6.558E-09	1.291E-08	3.114E-08	5.894E-08	1.061E-07
	Th-230	Pb-210+D1	1.319E-06	4.365E-14	3.028E-13	6.669E-11	9.114E-11	2.104E-10	5.803E-10	1.759E-09	3.575E-09	6.655E-09
	Th-230	äDSR(j)		5.915E-09	6.046E-09	9.244E-09	9.917E-09	1.261E-08	1.933E-08	3.873E-08	6.834E-08	1.185E-07
0	Th-230	Th-230	1.899E-08	8.419E-11	8.419E-11	8.417E-11	8.417E-11	8.415E-11	8.411E-11	8.400E-11	8.380E-11	8.342E-11
	Th-230	Ra-226+D	1.899E-08	9.449E-13	2.834E-12	4.793E-11	5.726E-11	9.439E-11	1.858E-10	4.482E-10	8.484E-10	1.527E-09
	Th-230	Pb-210+D2	1.899E-08	1.186E-15	8.227E-15	1.812E-12	2.476E-12	5.716E-12	1.577E-11	4.779E-11	9.713E-11	1.808E-10
	Th-230	äDSR(j)		8.514E-11	8.703E-11	1.339E-10	1.439E-10	1.843E-10	2.857E-10	5.800E-10	1.029E-09	1.791E-09
0	Th-230	Th-230	2.100E-04	9.307E-07	9.307E-07	9.305E-07	9.305E-07	9.303E-07	9.299E-07	9.286E-07	9.264E-07	9.222E-07
	Th-230	Ra-226+D1	2.100E-04	2.677E-08	8.030E-08	1.358E-06	1.622E-06	2.674E-06	5.264E-06	1.270E-05	2.404E-05	4.326E-05
	Th-230	Pb-210+D	2.100E-04	1.851E-11	1.284E-10	2.829E-08	3.865E-08	8.924E-08	2.461E-07	7.461E-07	1.516E-06	2.822E-06
	Th-230	äDSR(j)		9.575E-07	1.011E-06	2.317E-06	2.591E-06	3.694E-06	6.440E-06	1.437E-05	2.648E-05	4.701E-05
0	Th-230	Th-230	2.771E-10	1.229E-12	1.229E-12	1.228E-12	1.228E-12	1.228E-12	1.227E-12	1.226E-12	1.223E-12	1.217E-12
	Th-230	Ra-226+D1	2.771E-10	3.534E-14	1.060E-13	1.792E-12	2.141E-12	3.530E-12	6.948E-12	1.676E-11	3.173E-11	5.710E-11
	Th-230	Pb-210+D1	2.771E-10	9.169E-18	6.361E-17	1.401E-14	1.914E-14	4.419E-14	1.219E-13	3.695E-13	7.510E-13	1.398E-12
	Th-230	äDSR(j)		1.264E-12	1.335E-12	3.035E-12	3.389E-12	4.802E-12	8.298E-12	1.836E-11	3.370E-11	5.972E-11
0	Th-230	Th-230	3.989E-12	1.768E-14	1.768E-14	1.768E-14	1.768E-14	1.768E-14	1.767E-14	1.764E-14	1.760E-14	1.752E-14
	Th-230	Ra-226+D1	3.989E-12	5.087E-16	1.526E-15	2.580E-14	3.082E-14	5.081E-14	1.000E-13	2.412E-13	4.567E-13	8.220E-13
	Th-230	Pb-210+D2	3.989E-12	2.491E-19	1.728E-18	3.805E-16	5.200E-16	1.201E-15	3.311E-15	1.004E-14	2.040E-14	3.797E-14
	Th-230	äDSR(j)		1.819E-14	1.921E-14	4.386E-14	4.902E-14	6.969E-14	1.210E-13	2.689E-13	4.947E-13	8.775E-13
0	Th-230	Th-230	1.998E-04	8.855E-07	8.855E-07	8.853E-07	8.853E-07	8.851E-07	8.847E-07	8.835E-07	8.814E-07	8.774E-07
	Th-230	Ra-226+D2	1.998E-04	8.761E-09	2.628E-08	4.444E-07	5.309E-07	8.752E-07	1.723E-06	4.155E-06	7.866E-06	1.416E-05
	Th-230	Pb-210+D	1.998E-04	1.762E-11	1.222E-10	2.691E-08	3.678E-08	8.490E-08	2.342E-07	7.098E-07	1.443E-06	2.685E-06
	Th-230	äDSR(j)		8.943E-07	9.119E-07	1.357E-06	1.453E-06	1.845E-06	2.841E-06	5.748E-06	1.019E-05	1.772E-05
0	Th-230	Th-230	2.637E-10	1.169E-12	1.169E-12	1.169E-12	1.169E-12	1.168E-12	1.168E-12	1.166E-12	1.164E-12	1.158E-12
	Th-230	Ra-226+D2	2.637E-10	1.156E-14	3.469E-14	5.866E-13	7.008E-13	1.155E-12	2.274E-12	5.485E-12	1.038E-11	1.869E-11
	Th-230	Pb-210+D1	2.637E-10	8.724E-18	6.052E-17	1.333E-14	1.821E-14	4.205E-14	1.160E-13	3.515E-13	7.145E-13	1.330E-12
	Th-230	äDSR(j)		1.180E-12	1.204E-12	1.768E-12	1.888E-12	2.366E-12	3.558E-12	7.002E-12	1.226E-11	2.118E-11

Dose/Source Ratios Summed Over All Pathways

Parent and Progeny Principal Radionuclide Contributions Indicated

0	Parent (i)	Product (j)	Thread Fraction	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)								
	AAAAA	AAAAA	AAAAA	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
	Th-230	Th-230	3.795E-12	1.682E-14	1.682E-14	1.682E-14	1.682E-14	1.682E-14	1.681E-14	1.679E-14	1.675E-14	1.667E-14
	Th-230	Ra-226+D2	3.795E-12	1.665E-16	4.993E-16	8.443E-15	1.009E-14	1.663E-14	3.273E-14	7.895E-14	1.495E-13	2.690E-13
	Th-230	Pb-210+D2	3.795E-12	2.370E-19	1.644E-18	3.621E-16	4.948E-16	1.142E-15	3.150E-15	9.550E-15	1.941E-14	3.613E-14
	Th-230	äDSR(j)		1.699E-14	1.733E-14	2.563E-14	2.740E-14	3.459E-14	5.269E-14	1.053E-13	1.856E-13	3.218E-13
0	Th-230	Th-230	4.196E-08	1.860E-10	1.860E-10	1.860E-10	1.859E-10	1.859E-10	1.858E-10	1.856E-10	1.851E-10	1.843E-10
	Th-230	Ra-226+D3	4.196E-08	5.103E-12	1.530E-11	2.588E-10	3.092E-10	5.097E-10	1.003E-09	2.420E-09	4.582E-09	8.245E-09
	Th-230	Pb-210+D	4.196E-08	3.700E-15	2.567E-14	5.652E-12	7.725E-12	1.783E-11	4.919E-11	1.491E-10	3.030E-10	5.640E-10
	Th-230	äDSR(j)		1.911E-10	2.013E-10	4.504E-10	5.029E-10	7.135E-10	1.238E-09	2.755E-09	5.070E-09	8.994E-09
0	Th-230	Th-230	5.538E-14	2.455E-16	2.455E-16	2.455E-16	2.454E-16	2.454E-16	2.453E-16	2.449E-16	2.444E-16	2.433E-16
	Th-230	Ra-226+D3	5.538E-14	6.735E-18	2.020E-17	3.416E-16	4.082E-16	6.728E-16	1.324E-15	3.195E-15	6.048E-15	1.088E-14
	Th-230	Pb-210+D1	5.538E-14	1.832E-21	1.271E-20	2.799E-18	3.825E-18	8.831E-18	2.436E-17	7.384E-17	1.501E-16	2.793E-16
	Th-230	äDSR(j)		2.523E-16	2.657E-16	5.899E-16	6.574E-16	9.271E-16	1.594E-15	3.513E-15	6.442E-15	1.141E-14
0	Th-230	Th-230	7.972E-16	3.534E-18	3.534E-18	3.533E-18	3.533E-18	3.532E-18	3.531E-18	3.526E-18	3.518E-18	3.502E-18
	Th-230	Ra-226+D3	7.972E-16	9.695E-20	2.908E-19	4.917E-18	5.875E-18	9.685E-18	1.906E-17	4.598E-17	8.705E-17	1.567E-16
	Th-230	Pb-210+D2	7.972E-16	4.978E-23	3.453E-22	7.605E-20	1.039E-19	2.399E-19	6.617E-19	2.006E-18	4.077E-18	7.588E-18
	Th-230	äDSR(j)		3.631E-18	3.825E-18	8.527E-18	9.512E-18	1.346E-17	2.326E-17	5.151E-17	9.464E-17	1.678E-16
0	Th-230	Th-230	2.000E-07	8.866E-10	8.866E-10	8.864E-10	8.863E-10	8.862E-10	8.858E-10	8.845E-10	8.825E-10	8.785E-10
	Th-230	Ra-226+D4	2.000E-07	2.859E-13	8.576E-13	1.450E-11	1.733E-11	2.856E-11	5.622E-11	1.356E-10	2.567E-10	4.620E-10
	Th-230	Pb-210+D	2.000E-07	1.764E-14	1.224E-13	2.694E-11	3.682E-11	8.500E-11	2.345E-10	7.107E-10	1.444E-09	2.689E-09
	Th-230	äDSR(j)		8.869E-10	8.875E-10	9.278E-10	9.405E-10	9.997E-10	1.176E-09	1.731E-09	2.584E-09	4.029E-09
0	Th-230	Th-230	2.640E-13	1.170E-15	1.170E-15	1.170E-15	1.170E-15	1.170E-15	1.169E-15	1.168E-15	1.165E-15	1.160E-15
	Th-230	Ra-226+D4	2.640E-13	3.774E-19	1.132E-18	1.914E-17	2.287E-17	3.770E-17	7.421E-17	1.790E-16	3.389E-16	6.099E-16
	Th-230	Pb-210+D1	2.640E-13	8.734E-21	6.059E-20	1.334E-17	1.823E-17	4.210E-17	1.161E-16	3.520E-16	7.154E-16	1.331E-15
	Th-230	äDSR(j)		1.171E-15	1.171E-15	1.202E-15	1.211E-15	1.250E-15	1.360E-15	1.699E-15	2.219E-15	3.101E-15
0	Th-230	Th-230	3.800E-15	1.684E-17	1.684E-17	1.684E-17	1.684E-17	1.684E-17	1.683E-17	1.681E-17	1.677E-17	1.669E-17
	Th-230	Ra-226+D4	3.800E-15	5.433E-21	1.629E-20	2.755E-19	3.292E-19	5.427E-19	1.068E-18	2.577E-18	4.878E-18	8.779E-18
	Th-230	Pb-210+D2	3.800E-15	2.373E-22	1.646E-21	3.625E-19	4.954E-19	1.144E-18	3.154E-18	9.562E-18	1.943E-17	3.617E-17
	Th-230	äDSR(j)		1.685E-17	1.686E-17	1.748E-17	1.766E-17	1.852E-17	2.105E-17	2.894E-17	4.108E-17	6.164E-17
0	Th-232	Th-232	1.000E+00	4.770E-03	4.770E-03	4.770E-03	4.770E-03	4.770E-03	4.770E-03	4.770E-03	4.770E-03	4.770E-03
	Th-232	Ra-228+D	1.000E+00	7.066E-03	2.012E-02	1.164E-01	1.189E-01	1.217E-01	1.220E-01	1.220E-01	1.220E-01	1.220E-01
	Th-232	Th-228+D	1.000E+00	1.284E-03	7.877E-03	1.847E-01	1.909E-01	1.978E-01	1.984E-01	1.984E-01	1.984E-01	1.984E-01
	Th-232	äDSR(j)		1.312E-02	3.277E-02	3.058E-01	3.146E-01	3.243E-01	3.252E-01	3.252E-01	3.252E-01	3.252E-01
0	U-234	U-234	9.996E-01	1.027E-03	1.027E-03	1.027E-03	1.027E-03	1.027E-03	1.026E-03	1.026E-03	1.025E-03	1.024E-03
	U-234	Th-230	9.996E-01	2.037E-08	6.112E-08	1.039E-06	1.243E-06	2.057E-06	4.092E-06	1.019E-05	2.033E-05	4.052E-05
	U-234	Ra-226+D	9.996E-01	1.524E-10	1.067E-09	2.963E-07	4.236E-07	1.158E-06	4.552E-06	2.766E-05	1.065E-04	3.966E-04
	U-234	Pb-210+D	9.996E-01	2.030E-13	3.024E-12	1.120E-08	1.850E-08	7.359E-08	4.361E-07	3.702E-06	1.615E-05	6.411E-05
	U-234	äDSR(j)		1.027E-03	1.027E-03	1.028E-03	1.028E-03	1.030E-03	1.035E-03	1.067E-03	1.168E-03	1.525E-03

Dose/Source Ratios Summed Over All Pathways

Parent and Progeny Principal Radionuclide Contributions Indicated

0	Parent (i)	Product (j)	Thread Fraction	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)								
	AAAAA	AAAAA	AAAAA	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
	U-234	U-234	1.319E-06	1.355E-09	1.355E-09	1.355E-09	1.355E-09	1.355E-09	1.355E-09	1.354E-09	1.353E-09	1.351E-09
	U-234	Th-230	1.319E-06	2.689E-14	8.068E-14	1.371E-12	1.640E-12	2.715E-12	5.402E-12	1.345E-11	2.684E-11	5.348E-11
	U-234	Ra-226+D	1.319E-06	2.012E-16	1.408E-15	3.912E-13	5.592E-13	1.528E-12	6.008E-12	3.651E-11	1.406E-10	5.235E-10
	U-234	Pb-210+D1	1.319E-06	1.005E-19	1.498E-18	5.546E-15	9.164E-15	3.644E-14	2.160E-13	1.833E-12	8.000E-12	3.175E-11
	U-234	äDSR(j)		1.355E-09	1.355E-09	1.357E-09	1.357E-09	1.359E-09	1.366E-09	1.406E-09	1.529E-09	1.960E-09
0U-234	U-234		1.899E-08	1.951E-11	1.951E-11	1.951E-11	1.951E-11	1.950E-11	1.950E-11	1.949E-11	1.948E-11	1.945E-11
	U-234	Th-230	1.899E-08	3.871E-16	1.161E-15	1.974E-14	2.361E-14	3.908E-14	7.776E-14	1.936E-13	3.863E-13	7.698E-13
	U-234	Ra-226+D	1.899E-08	2.896E-18	2.027E-17	5.630E-15	8.048E-15	2.200E-14	8.648E-14	5.256E-13	2.024E-12	7.535E-12
	U-234	Pb-210+D2	1.899E-08	2.731E-21	4.068E-20	1.507E-16	2.490E-16	9.901E-16	5.867E-15	4.980E-14	2.173E-13	8.626E-13
	U-234	äDSR(j)		1.951E-11	1.951E-11	1.953E-11	1.954E-11	1.957E-11	1.967E-11	2.026E-11	2.210E-11	2.862E-11
0U-234	U-234		2.100E-04	2.156E-07	2.156E-07	2.156E-07	2.156E-07	2.156E-07	2.156E-07	2.155E-07	2.153E-07	2.150E-07
	U-234	Th-230	2.100E-04	4.279E-12	1.284E-11	2.182E-10	2.610E-10	4.321E-10	8.596E-10	2.141E-09	4.270E-09	8.510E-09
	U-234	Ra-226+D1	2.100E-04	8.206E-14	5.744E-13	1.595E-10	2.280E-10	6.232E-10	2.450E-09	1.489E-08	5.733E-08	2.135E-07
	U-234	Pb-210+D	2.100E-04	4.263E-17	6.352E-16	2.352E-12	3.887E-12	1.546E-11	9.160E-11	7.775E-10	3.393E-09	1.347E-08
	U-234	äDSR(j)		2.157E-07	2.157E-07	2.160E-07	2.161E-07	2.167E-07	2.190E-07	2.333E-07	2.803E-07	4.505E-07
0U-234	U-234		2.771E-10	2.847E-13	2.847E-13	2.846E-13	2.846E-13	2.846E-13	2.846E-13	2.844E-13	2.842E-13	2.838E-13
	U-234	Th-230	2.771E-10	5.648E-18	1.695E-17	2.880E-16	3.445E-16	5.703E-16	1.135E-15	2.826E-15	5.637E-15	1.123E-14
	U-234	Ra-226+D1	2.771E-10	1.083E-19	7.582E-19	2.106E-16	3.010E-16	8.227E-16	3.234E-15	1.966E-14	7.568E-14	2.818E-13
	U-234	Pb-210+D1	2.771E-10	2.111E-23	3.146E-22	1.165E-18	1.925E-18	7.655E-18	4.536E-17	3.851E-16	1.680E-15	6.669E-15
	U-234	äDSR(j)		2.847E-13	2.847E-13	2.851E-13	2.853E-13	2.860E-13	2.890E-13	3.073E-13	3.672E-13	5.835E-13
0U-234	U-234		3.989E-12	4.097E-15	4.097E-15	4.097E-15	4.097E-15	4.097E-15	4.096E-15	4.094E-15	4.091E-15	4.085E-15
	U-234	Th-230	3.989E-12	8.130E-20	2.439E-19	4.146E-18	4.959E-18	8.209E-18	1.633E-17	4.067E-17	8.114E-17	1.617E-16
	U-234	Ra-226+D1	3.989E-12	1.559E-21	1.091E-20	3.031E-18	4.332E-18	1.184E-17	4.655E-17	2.829E-16	1.089E-15	4.056E-15
	U-234	Pb-210+D2	3.989E-12	5.735E-25	8.546E-24	3.165E-20	5.229E-20	2.080E-19	1.232E-18	1.046E-17	4.565E-17	1.812E-16
	U-234	äDSR(j)		4.097E-15	4.098E-15	4.104E-15	4.106E-15	4.117E-15	4.160E-15	4.428E-15	5.307E-15	8.484E-15
0U-234	U-234		1.998E-04	2.052E-07	2.052E-07	2.052E-07	2.052E-07	2.051E-07	2.051E-07	2.050E-07	2.049E-07	2.046E-07
	U-234	Th-230	1.998E-04	4.071E-12	1.221E-11	2.076E-10	2.483E-10	4.111E-10	8.178E-10	2.037E-09	4.063E-09	8.097E-09
	U-234	Ra-226+D2	1.998E-04	2.685E-14	1.880E-13	5.220E-11	7.462E-11	2.040E-10	8.018E-10	4.873E-09	1.876E-08	6.986E-08
	U-234	Pb-210+D	1.998E-04	4.056E-17	6.043E-16	2.238E-12	3.698E-12	1.471E-11	8.715E-11	7.397E-10	3.228E-09	1.281E-08
	U-234	äDSR(j)		2.052E-07	2.052E-07	2.054E-07	2.055E-07	2.058E-07	2.068E-07	2.127E-07	2.309E-07	2.953E-07
0U-234	U-234		2.637E-10	2.708E-13	2.708E-13	2.708E-13	2.708E-13	2.708E-13	2.707E-13	2.706E-13	2.704E-13	2.700E-13
	U-234	Th-230	2.637E-10	5.374E-18	1.612E-17	2.740E-16	3.278E-16	5.426E-16	1.080E-15	2.688E-15	5.363E-15	1.069E-14
	U-234	Ra-226+D2	2.637E-10	3.545E-20	2.481E-19	6.890E-17	9.850E-17	2.692E-16	1.058E-15	6.432E-15	2.476E-14	9.222E-14
	U-234	Pb-210+D1	2.637E-10	2.009E-23	2.993E-22	1.108E-18	1.831E-18	7.283E-18	4.316E-17	3.663E-16	1.599E-15	6.345E-15
	U-234	äDSR(j)		2.708E-13	2.708E-13	2.712E-13	2.712E-13	2.716E-13	2.729E-13	2.801E-13	3.021E-13	3.793E-13
0U-234	U-234		3.795E-12	3.898E-15	3.898E-15	3.898E-15	3.898E-15	3.898E-15	3.897E-15	3.895E-15	3.892E-15	3.887E-15
	U-234	Th-230	3.795E-12	7.735E-20	2.321E-19	3.944E-18	4.718E-18	7.810E-18	1.554E-17	3.870E-17	7.720E-17	1.538E-16
	U-234	Ra-226+D2	3.795E-12	5.102E-22	3.571E-21	9.918E-19	1.418E-18	3.875E-18	1.523E-17	9.258E-17	3.565E-16	1.327E-15
	U-234	Pb-210+D2	3.795E-12	5.457E-25	8.130E-24	3.011E-20	4.975E-20	1.979E-19	1.173E-18	9.952E-18	4.343E-17	1.724E-16
	U-234	äDSR(j)		3.898E-15	3.899E-15	3.903E-15	3.904E-15	3.910E-15	3.929E-15	4.037E-15	4.370E-15	5.540E-15

Dose/Source Ratios Summed Over All Pathways												
Parent and Progeny Principal Radionuclide Contributions Indicated												
0	Parent	Product	Thread	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)								
	(i)	(j)	Fraction	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA
	U-234	U-234	4.196E-08	4.310E-11	4.310E-11	4.309E-11	4.309E-11	4.309E-11	4.308E-11	4.306E-11	4.303E-11	4.297E-11
	U-234	Th-230	4.196E-08	8.551E-16	2.565E-15	4.361E-14	5.215E-14	8.634E-14	1.718E-13	4.278E-13	8.534E-13	1.701E-12
	U-234	Ra-226+D3	4.196E-08	1.564E-17	1.095E-16	3.040E-14	4.346E-14	1.188E-13	4.670E-13	2.838E-12	1.093E-11	4.069E-11
	U-234	Pb-210+D	4.196E-08	8.519E-21	1.269E-19	4.701E-16	7.767E-16	3.089E-15	1.831E-14	1.554E-13	6.780E-13	2.691E-12
	U-234	äDSR(j)		4.310E-11	4.310E-11	4.317E-11	4.319E-11	4.330E-11	4.374E-11	4.648E-11	5.549E-11	8.805E-11
0U-234	U-234		5.538E-14	5.689E-17	5.689E-17	5.688E-17	5.688E-17	5.688E-17	5.687E-17	5.684E-17	5.680E-17	5.671E-17
	U-234	Th-230	5.538E-14	1.129E-21	3.386E-21	5.756E-20	6.884E-20	1.140E-19	2.267E-19	5.647E-19	1.126E-18	2.245E-18
	U-234	Ra-226+D3	5.538E-14	2.065E-23	1.445E-22	4.013E-20	5.737E-20	1.568E-19	6.164E-19	3.746E-18	1.442E-17	5.371E-17
	U-234	Pb-210+D1	5.538E-14	4.219E-27	6.286E-26	2.328E-22	3.847E-22	1.530E-21	9.065E-21	7.695E-20	3.358E-19	1.333E-18
	U-234	äDSR(j)		5.689E-17	5.689E-17	5.698E-17	5.701E-17	5.715E-17	5.772E-17	6.123E-17	7.269E-17	1.140E-16
0U-234	U-234		7.972E-16	8.188E-19	8.188E-19	8.188E-19	8.187E-19	8.187E-19	8.186E-19	8.182E-19	8.176E-19	8.163E-19
	U-234	Th-230	7.972E-16	1.625E-23	4.874E-23	8.285E-22	9.909E-22	1.641E-21	3.264E-21	8.128E-21	1.621E-20	3.231E-20
	U-234	Ra-226+D3	7.972E-16	2.972E-25	2.080E-24	5.777E-22	8.258E-22	2.257E-21	8.873E-21	5.392E-20	2.076E-19	7.731E-19
	U-234	Pb-210+D2	7.972E-16	1.146E-28	1.708E-27	6.324E-24	1.045E-23	4.156E-23	2.463E-22	2.090E-21	9.122E-21	3.621E-20
	U-234	äDSR(j)		8.188E-19	8.189E-19	8.202E-19	8.206E-19	8.226E-19	8.309E-19	8.823E-19	1.051E-18	1.658E-18
0U-234	U-234		2.000E-07	2.054E-10	2.054E-10	2.054E-10	2.054E-10	2.054E-10	2.054E-10	2.053E-10	2.051E-10	2.048E-10
	U-234	Th-230	2.000E-07	4.076E-15	1.223E-14	2.079E-13	2.486E-13	4.116E-13	8.188E-13	2.039E-12	4.068E-12	8.107E-12
	U-234	Ra-226+D4	2.000E-07	8.764E-19	6.134E-18	1.704E-15	2.435E-15	6.656E-15	2.617E-14	1.590E-13	6.123E-13	2.280E-12
	U-234	Pb-210+D	2.000E-07	4.061E-20	6.050E-19	2.241E-15	3.702E-15	1.472E-14	8.725E-14	7.406E-13	3.232E-12	1.283E-11
	U-234	äDSR(j)		2.054E-10	2.054E-10	2.056E-10	2.057E-10	2.058E-10	2.063E-10	2.082E-10	2.130E-10	2.280E-10
0U-234	U-234		2.640E-13	2.712E-16	2.712E-16	2.711E-16	2.711E-16	2.711E-16	2.711E-16	2.710E-16	2.707E-16	2.703E-16
	U-234	Th-230	2.640E-13	5.381E-21	1.614E-20	2.744E-19	3.282E-19	5.433E-19	1.081E-18	2.692E-18	5.370E-18	1.070E-17
	U-234	Ra-226+D4	2.640E-13	1.157E-24	8.097E-24	2.249E-21	3.215E-21	8.786E-21	3.454E-20	2.099E-19	8.082E-19	3.010E-18
	U-234	Pb-210+D1	2.640E-13	2.011E-26	2.996E-25	1.110E-21	1.834E-21	7.292E-21	4.321E-20	3.668E-19	1.601E-18	6.353E-18
	U-234	äDSR(j)		2.712E-16	2.712E-16	2.714E-16	2.715E-16	2.717E-16	2.722E-16	2.742E-16	2.785E-16	2.904E-16
0U-234	U-234		3.800E-15	3.903E-18	3.903E-18	3.903E-18	3.903E-18	3.902E-18	3.902E-18	3.900E-18	3.897E-18	3.891E-18
	U-234	Th-230	3.800E-15	7.745E-23	3.323E-22	3.949E-21	4.723E-21	7.820E-21	1.556E-20	3.874E-20	7.729E-20	1.540E-19
	U-234	Ra-226+D4	3.800E-15	1.665E-26	1.166E-25	3.237E-23	4.627E-23	1.265E-22	4.972E-22	3.022E-21	1.163E-20	4.332E-20
	U-234	Pb-210+D2	3.800E-15	5.463E-28	8.140E-27	3.015E-23	4.981E-23	1.981E-22	1.174E-21	9.965E-21	4.348E-20	1.726E-19
	U-234	äDSR(j)		3.903E-18	3.903E-18	3.907E-18	3.907E-18	3.911E-18	3.919E-18	3.952E-18	4.030E-18	4.261E-18
0U-235+D	U-235+D		9.835E-01	1.664E-02	1.664E-02	1.663E-02	1.663E-02	1.663E-02	1.663E-02	1.663E-02	1.663E-02	1.663E-02
	U-235+D	Pa-231	9.835E-01	1.389E-07	4.167E-07	7.083E-06	8.471E-06	1.402E-05	2.789E-05	6.941E-05	1.383E-04	2.750E-04
	U-235+D	Ac-227+D	9.835E-01	5.892E-09	4.087E-08	8.994E-06	1.229E-05	2.840E-05	7.869E-05	2.446E-04	5.223E-04	1.073E-03
	U-235+D	äDSR(j)		1.664E-02	1.664E-02	1.665E-02	1.666E-02	1.668E-02	1.674E-02	1.695E-02	1.729E-02	1.798E-02
0U-235+D	U-235+D		2.722E-03	4.604E-05	4.604E-05	4.604E-05	4.604E-05	4.604E-05	4.604E-05	4.604E-05	4.604E-05	4.603E-05
	U-235+D	Pa-231	2.722E-03	3.845E-10	1.153E-09	1.960E-08	2.344E-08	3.881E-08	7.719E-08	1.921E-07	3.828E-07	7.611E-07
	U-235+D	Ac-227+D1	2.722E-03	1.646E-11	1.142E-10	2.512E-08	3.433E-08	7.931E-08	2.198E-07	6.832E-07	1.459E-06	2.998E-06
	U-235+D	äDSR(j)		4.604E-05	4.604E-05	4.608E-05	4.610E-05	4.616E-05	4.634E-05	4.691E-05	4.788E-05	4.979E-05

Dose/Source Ratios Summed Over All Pathways

Parent and Progeny Principal Radionuclide Contributions Indicated

0	Parent (i)	Product (j)	Thread Fraction	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)									
	AAAAA	AAAAA	AAAAA	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03	AAAAA
	U-235+D	U-235+D	1.376E-02	2.328E-04	2.328E-04	2.328E-04	2.328E-04	2.328E-04	2.328E-04	2.328E-04	2.327E-04	2.327E-04	AAAAA
	U-235+D	Pa-231	1.376E-02	1.944E-09	5.831E-09	9.910E-08	1.185E-07	1.962E-07	3.903E-07	9.712E-07	1.935E-06	3.848E-06	AAAAA
	U-235+D	Ac-227+D2	1.376E-02	6.929E-11	4.807E-10	1.058E-07	1.446E-07	3.340E-07	9.255E-07	2.877E-06	6.144E-06	1.262E-05	AAAAA
	U-235+D	äDSR(j)		2.328E-04	2.328E-04	2.330E-04	2.330E-04	2.333E-04	2.341E-04	2.366E-04	2.408E-04	2.492E-04	AAAAA
0U-	U-235+D	U-235+D	3.809E-05	6.442E-07	6.442E-07	6.442E-07	6.442E-07	6.442E-07	6.442E-07	6.442E-07	6.441E-07	6.441E-07	AAAAA
	U-235+D	Pa-231	3.809E-05	5.379E-12	1.614E-11	2.743E-10	3.280E-10	5.430E-10	1.080E-09	2.688E-09	5.356E-09	1.065E-08	AAAAA
	U-235+D	Ac-227+D3	3.809E-05	1.939E-13	1.345E-12	2.960E-10	4.045E-10	9.344E-10	2.589E-09	8.050E-09	1.719E-08	3.532E-08	AAAAA
	U-235+D	äDSR(j)		6.442E-07	6.442E-07	6.448E-07	6.449E-07	6.457E-07	6.479E-07	6.549E-07	6.667E-07	6.900E-07	AAAAA
0U-	U-235+D	U-235+D	8.257E-07	1.397E-08	1.397E-08	1.397E-08	1.397E-08	1.397E-08	1.397E-08	1.397E-08	1.397E-08	1.396E-08	AAAAA
	U-235+D	Pa-231	8.257E-07	1.166E-13	3.499E-13	5.947E-12	7.112E-12	1.177E-11	2.342E-11	5.827E-11	1.161E-10	2.309E-10	AAAAA
	U-235+D	Ac-227+D4	8.257E-07	4.928E-15	3.419E-14	7.523E-12	1.028E-11	2.375E-11	6.582E-11	2.046E-10	4.369E-10	8.978E-10	AAAAA
	U-235+D	äDSR(j)		1.397E-08	1.397E-08	1.398E-08	1.398E-08	1.400E-08	1.406E-08	1.423E-08	1.452E-08	1.509E-08	AAAAA
0U-	U-235+D	U-235+D	2.285E-09	3.865E-11	3.865E-11	3.865E-11	3.865E-11	3.865E-11	3.865E-11	3.865E-11	3.865E-11	3.865E-11	AAAAA
	U-235+D	Pa-231	2.285E-09	3.228E-16	9.684E-16	1.646E-14	1.968E-14	3.258E-14	6.481E-14	1.613E-13	3.214E-13	6.390E-13	AAAAA
	U-235+D	Ac-227+D5	2.285E-09	1.376E-17	9.548E-17	2.101E-14	2.872E-14	6.634E-14	1.838E-13	5.715E-13	1.220E-12	2.508E-12	AAAAA
	U-235+D	äDSR(j)		3.865E-11	3.866E-11	3.869E-11	3.870E-11	3.875E-11	3.890E-11	3.939E-11	4.019E-11	4.179E-11	AAAAA
0U-	U-238	U-238	5.450E-07	5.026E-10	5.026E-10	5.026E-10	5.026E-10	5.025E-10	5.025E-10	5.025E-10	5.025E-10	5.025E-10	AAAAA
0U-	U-238+D	U-238+D	1.599E-03	2.895E-04	2.895E-04	2.895E-04	2.895E-04	2.895E-04	2.895E-04	2.895E-04	2.894E-04	2.894E-04	AAAAA
	U-238+D	U-234	1.599E-03	2.319E-12	6.957E-12	1.183E-10	1.415E-10	2.342E-10	4.660E-10	1.161E-09	2.319E-09	4.633E-09	AAAAA
	U-238+D	Th-230	1.599E-03	3.068E-17	2.147E-16	5.985E-14	8.561E-14	2.347E-13	9.292E-13	5.769E-12	2.301E-11	9.174E-11	AAAAA
	U-238+D	Ra-226+D	1.599E-03	1.722E-19	2.582E-18	1.139E-14	1.948E-14	8.821E-14	6.914E-13	1.053E-11	8.174E-11	6.191E-10	AAAAA
	U-238+D	Pb-210+D	1.599E-03	1.836E-22	5.660E-21	3.348E-16	6.660E-16	4.492E-15	5.556E-14	1.272E-12	1.169E-11	9.697E-11	AAAAA
	U-238+D	äDSR(j)		2.895E-04	2.895E-04	2.895E-04	2.895E-04	2.895E-04	2.895E-04	2.895E-04	2.894E-04	2.894E-04	AAAAA
0U-	U-238+D	U-238+D	2.111E-09	3.821E-10	3.821E-10	3.821E-10	3.821E-10	3.821E-10	3.821E-10	3.821E-10	3.820E-10	3.820E-10	AAAAA
	U-238+D	U-234	2.111E-09	3.061E-18	9.183E-18	1.561E-16	1.867E-16	3.091E-16	6.152E-16	1.533E-15	3.062E-15	6.115E-15	AAAAA
	U-238+D	Th-230	2.111E-09	4.049E-23	2.835E-22	7.900E-20	1.130E-19	3.098E-19	1.227E-18	7.615E-18	3.037E-17	1.211E-16	AAAAA
	U-238+D	Ra-226+D	2.111E-09	2.273E-25	3.409E-24	1.504E-20	2.571E-20	1.164E-19	9.126E-19	1.390E-17	1.079E-16	8.172E-16	AAAAA
	U-238+D	Pb-210+D1	2.111E-09	9.092E-29	2.803E-27	1.658E-22	3.298E-22	2.225E-21	2.752E-20	6.298E-19	5.790E-18	4.803E-17	AAAAA
	U-238+D	äDSR(j)		3.821E-10	3.821E-10	3.821E-10	3.821E-10	3.821E-10	3.821E-10	3.821E-10	3.821E-10	3.820E-10	AAAAA
0U-	U-238+D	U-238+D	3.039E-11	5.500E-12	5.500E-12	5.500E-12	5.500E-12	5.500E-12	5.500E-12	5.499E-12	5.499E-12	5.499E-12	AAAAA
	U-238+D	U-234	3.039E-11	4.406E-20	1.322E-19	2.247E-18	2.688E-18	4.450E-18	8.855E-18	2.207E-17	4.407E-17	8.803E-17	AAAAA
	U-238+D	Th-230	3.039E-11	5.829E-25	4.080E-24	1.137E-21	1.627E-21	4.459E-21	1.765E-20	1.096E-19	4.371E-19	1.743E-18	AAAAA
	U-238+D	Ra-226+D	3.039E-11	3.271E-27	4.906E-26	2.165E-22	3.701E-22	1.676E-21	1.314E-20	2.001E-19	1.553E-18	1.176E-17	AAAAA
	U-238+D	Pb-210+D2	3.039E-11	2.470E-30	7.615E-29	4.505E-24	8.961E-24	6.044E-23	7.475E-22	1.711E-20	1.573E-19	1.305E-18	AAAAA
	U-238+D	äDSR(j)		5.500E-12	5.500E-12	5.500E-12	5.500E-12	5.500E-12	5.500E-12	5.499E-12	5.499E-12	5.499E-12	AAAAA

Dose/Source Ratios Summed Over All Pathways

Parent and Progeny Principal Radionuclide Contributions Indicated

0	Parent (i)	Product (j)	Thread Fraction	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)									
	AAAAA	AAAAA	AAAAA	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03	
	U-238+D1	U-238+D1	9.980E-01	4.185E-03	4.185E-03	4.185E-03	4.185E-03	4.185E-03	4.185E-03	4.185E-03	4.184E-03	4.184E-03	
	U-238+D1	U-234	9.980E-01	1.447E-09	4.341E-09	7.380E-08	8.827E-08	1.461E-07	2.908E-07	7.247E-07	1.447E-06	2.891E-06	
	U-238+D1	Th-230	9.980E-01	1.914E-14	1.340E-13	3.734E-11	5.342E-11	1.464E-10	5.798E-10	3.600E-09	1.436E-08	5.725E-08	
	U-238+D1	Ra-226+D	9.980E-01	1.074E-16	1.611E-15	7.109E-12	1.216E-11	5.505E-11	4.314E-10	6.571E-09	5.100E-08	3.863E-07	
	U-238+D1	Pb-210+D	9.980E-01	1.146E-19	3.532E-18	2.089E-13	4.156E-13	2.803E-12	3.467E-11	7.936E-10	7.295E-09	6.051E-08	
	U-238+D1	äDSR(j)		4.185E-03	4.185E-03	4.185E-03	4.185E-03	4.185E-03	4.185E-03	4.185E-03	4.186E-03	4.187E-03	
0U-	238+D1	U-238+D1	1.317E-06	5.524E-09	5.524E-09	5.524E-09	5.524E-09	5.524E-09	5.524E-09	5.524E-09	5.523E-09	5.523E-09	
	U-238+D1	U-234	1.317E-06	1.910E-15	5.730E-15	9.741E-14	1.165E-13	1.929E-13	3.839E-13	9.566E-13	1.910E-12	3.816E-12	
	U-238+D1	Th-230	1.317E-06	2.527E-20	1.769E-19	4.929E-17	7.052E-17	1.933E-16	7.653E-16	4.752E-15	1.895E-14	7.557E-14	
	U-238+D1	Ra-226+D	1.317E-06	1.418E-22	2.127E-21	9.384E-18	1.605E-17	7.266E-17	5.695E-16	8.674E-15	6.733E-14	5.099E-13	
	U-238+D1	Pb-210+D1	1.317E-06	5.674E-26	1.749E-24	1.035E-19	2.058E-19	1.388E-18	1.717E-17	3.930E-16	3.613E-15	2.997E-14	
	U-238+D1	äDSR(j)		5.524E-09	5.524E-09	5.524E-09	5.524E-09	5.524E-09	5.524E-09	5.525E-09	5.525E-09	5.527E-09	
0U-	238+D1	U-238+D1	1.896E-08	7.951E-11	7.951E-11	7.951E-11	7.951E-11	7.951E-11	7.951E-11	7.951E-11	7.950E-11	7.950E-11	
	U-238+D1	U-234	1.896E-08	2.749E-17	8.248E-17	1.402E-15	1.677E-15	2.777E-15	5.525E-15	1.377E-14	2.750E-14	5.493E-14	
	U-238+D1	Th-230	1.896E-08	3.637E-22	2.546E-21	7.095E-19	1.015E-18	2.782E-18	1.102E-17	6.840E-17	2.728E-16	1.088E-15	
	U-238+D1	Ra-226+D	1.896E-08	2.041E-24	3.062E-23	1.351E-19	2.310E-19	1.046E-18	8.197E-18	1.249E-16	9.691E-16	7.340E-15	
	U-238+D1	Pb-210+D2	1.896E-08	1.541E-27	4.752E-26	2.811E-21	5.592E-21	3.771E-20	4.664E-19	1.068E-17	9.815E-17	8.141E-16	
	U-238+D1	äDSR(j)		7.951E-11	7.951E-11	7.951E-11	7.951E-11	7.951E-11	7.951E-11	7.952E-11	7.953E-11	7.956E-11	
0U-	238+D1	U-238+D1	2.096E-04	8.790E-07	8.790E-07	8.790E-07	8.790E-07	8.790E-07	8.790E-07	8.790E-07	8.789E-07	8.788E-07	
	U-238+D1	U-234	2.096E-04	3.039E-13	9.118E-13	1.550E-11	1.854E-11	3.070E-11	6.108E-11	1.522E-10	3.040E-10	6.072E-10	
	U-238+D1	Th-230	2.096E-04	4.021E-18	2.815E-17	7.844E-15	1.122E-14	3.076E-14	1.218E-13	7.561E-13	3.015E-12	1.202E-11	
	U-238+D1	Ra-226+D1	2.096E-04	5.783E-20	8.674E-19	3.827E-15	6.543E-15	2.963E-14	2.322E-13	3.537E-12	2.746E-11	2.080E-10	
	U-238+D1	Pb-210+D	2.096E-04	2.406E-23	7.419E-22	4.389E-17	8.730E-17	5.888E-16	7.282E-15	1.667E-13	1.532E-12	1.271E-11	
	U-238+D1	äDSR(j)		8.790E-07	8.790E-07	8.790E-07	8.790E-07	8.790E-07	8.790E-07	8.791E-07	8.792E-07	8.797E-07	
0U-	238+D1	U-238+D1	2.767E-10	1.160E-12	1.160E-12	1.160E-12	1.160E-12	1.160E-12	1.160E-12	1.160E-12	1.160E-12	1.160E-12	
	U-238+D1	U-234	2.767E-10	4.012E-19	1.204E-18	2.046E-17	2.447E-17	4.052E-17	8.063E-17	2.009E-16	4.013E-16	8.015E-16	
	U-238+D1	Th-230	2.767E-10	5.307E-24	3.715E-23	1.035E-20	1.481E-20	4.060E-20	1.608E-19	9.981E-19	3.980E-18	1.587E-17	
	U-238+D1	Ra-226+D1	2.767E-10	7.634E-26	1.145E-24	5.051E-21	8.637E-21	3.911E-20	3.066E-19	4.669E-18	3.624E-17	2.745E-16	
	U-238+D1	Pb-210+D1	2.767E-10	1.192E-29	3.674E-28	2.173E-23	4.323E-23	2.916E-22	3.606E-21	8.255E-20	7.588E-19	6.295E-18	
	U-238+D1	äDSR(j)		1.160E-12	1.160E-12	1.160E-12	1.160E-12	1.160E-12	1.160E-12	1.160E-12	1.161E-12	1.161E-12	
0U-	238+D1	U-238+D1	3.983E-12	1.670E-14	1.670E-14	1.670E-14	1.670E-14	1.670E-14	1.670E-14	1.670E-14	1.670E-14	1.670E-14	
	U-238+D1	U-234	3.983E-12	5.775E-21	1.732E-20	2.945E-19	3.523E-19	5.832E-19	1.161E-18	2.892E-18	5.776E-18	1.154E-17	
	U-238+D1	Th-230	3.983E-12	7.640E-26	5.348E-25	1.490E-22	2.132E-22	5.844E-22	2.314E-21	1.437E-20	5.729E-20	2.285E-19	
	U-238+D1	Ra-226+D1	3.983E-12	1.099E-27	1.648E-26	7.271E-23	1.243E-22	5.630E-22	4.412E-21	6.721E-20	5.217E-19	3.951E-18	
	U-238+D1	Pb-210+D2	3.983E-12	3.237E-31	9.981E-30	5.905E-25	1.174E-24	7.921E-24	9.797E-23	2.243E-21	2.062E-20	1.710E-19	
	U-238+D1	äDSR(j)		1.670E-14	1.670E-14	1.670E-14	1.670E-14	1.670E-14	1.670E-14	1.670E-14	1.671E-14	1.671E-14	

Dose/Source Ratios Summed Over All Pathways												
Parent and Progeny Principal Radionuclide Contributions Indicated												
0	Parent	Product	Thread	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)								
	(i)	(j)	Fraction	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
	AAAAAAAA	AAAAAAAA	AAAAAAAA	AAAAAAAA	AAAAAAAA	AAAAAAAA	AAAAAAAA	AAAAAAAA	AAAAAAAA	AAAAAAAA	AAAAAAAA	AAAAAAAA
	U-238+D1	U-238+D1	1.997E-07	8.373E-10	8.373E-10	8.373E-10	8.373E-10	8.373E-10	8.373E-10	8.373E-10	8.372E-10	8.371E-10
	U-238+D1	U-234	1.997E-07	2.895E-16	8.686E-16	1.477E-14	1.766E-14	2.924E-14	5.819E-14	1.450E-13	2.896E-13	5.784E-13
	U-238+D1	Th-230	1.997E-07	3.830E-21	2.681E-20	7.472E-18	1.069E-17	2.930E-17	1.160E-16	7.203E-16	2.872E-15	1.145E-14
	U-238+D1	Ra-226+D4	1.997E-07	6.177E-25	9.264E-24	4.087E-20	6.989E-20	3.165E-19	2.480E-18	3.778E-17	2.932E-16	2.221E-15
	U-238+D1	Pb-210+D	1.997E-07	2.292E-26	7.067E-25	4.181E-20	8.315E-20	5.608E-19	6.937E-18	1.588E-16	1.460E-15	1.211E-14
	U-238+D1	äDSR(j)		8.373E-10	8.373E-10	8.373E-10	8.373E-10	8.373E-10	8.373E-10	8.374E-10	8.375E-10	8.377E-10
0U-	238+D1	U-238+D1	2.636E-13	1.105E-15	1.105E-15	1.105E-15	1.105E-15	1.105E-15	1.105E-15	1.105E-15	1.105E-15	1.105E-15
	U-238+D1	U-234	2.636E-13	3.822E-22	1.147E-21	1.949E-20	2.331E-20	3.860E-20	7.681E-20	1.914E-19	3.823E-19	7.635E-19
	U-238+D1	Th-230	2.636E-13	5.056E-27	3.539E-26	9.863E-24	1.411E-23	3.867E-23	1.531E-22	9.508E-22	3.792E-21	1.512E-20
	U-238+D1	Ra-226+D4	2.636E-13	8.153E-31	1.223E-29	5.395E-26	9.225E-26	4.177E-25	3.274E-24	4.987E-23	3.871E-22	2.932E-21
	U-238+D1	Pb-210+D1	2.636E-13	1.135E-32	3.500E-31	2.070E-26	4.118E-26	2.777E-25	3.435E-24	7.863E-23	7.229E-22	5.996E-21
	U-238+D1	äDSR(j)		1.105E-15	1.105E-15	1.105E-15	1.105E-15	1.105E-15	1.105E-15	1.105E-15	1.106E-15	1.106E-15
0U-	238+D1	U-238+D1	3.794E-15	1.591E-17	1.591E-17	1.591E-17	1.591E-17	1.591E-17	1.591E-17	1.591E-17	1.591E-17	1.591E-17
	U-238+D1	U-234	3.794E-15	5.501E-24	1.650E-23	2.805E-22	3.356E-22	5.556E-22	1.106E-21	2.755E-21	5.502E-21	1.099E-20
	U-238+D1	Th-230	3.794E-15	7.277E-29	5.094E-28	1.420E-25	2.031E-25	5.567E-25	2.204E-24	1.369E-23	5.458E-23	2.176E-22
	U-238+D1	Ra-226+D4	3.794E-15	1.174E-32	1.760E-31	7.765E-28	1.328E-27	6.013E-27	4.713E-26	7.178E-25	5.571E-24	4.220E-23
	U-238+D1	Pb-210+D2	3.794E-15	3.084E-34	9.508E-33	5.625E-28	1.119E-27	7.545E-27	9.333E-26	2.136E-24	1.964E-23	1.629E-22
	U-238+D1	äDSR(j)		1.591E-17	1.591E-17	1.591E-17	1.591E-17	1.591E-17	1.591E-17	1.591E-17	1.591E-17	1.592E-17
	iiiiiiiiii	iiiiiiiiii	iiiiiiiiii	iiiiiiiiii	iiiiiiiiii	iiiiiiiiii	iiiiiiiiii	iiiiiiiiii	iiiiiiiiii	iiiiiiiiii	iiiiiiiiii	iiiiiiiiii

The DSR includes contributions from associated (half-life ó 180 days) daughters.

Single Radionuclide Soil Guidelines G(i,t) in pCi/g
 Basic Radiation Dose Limit = 2.500E+01 mrem/yr

0Nuclide	t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
(i)	t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA
Am-241	4.960E+03	4.968E+03	5.163E+03	5.205E+03	5.374E+03	5.822E+03	7.404E+03	1.105E+04	2.457E+04	
Co-60	8.078E+01	9.214E+01	2.163E+03	4.174E+03	5.790E+04	4.150E+07	*1.113E+15	*1.113E+15	*1.113E+15	
Cs-134	1.548E+02	2.165E+02	6.831E+05	3.659E+06	3.015E+09	*1.283E+15	*1.283E+15	*1.283E+15	*1.283E+15	
Cs-137	3.696E+02	3.782E+02	6.565E+02	7.365E+02	1.166E+03	3.678E+03	1.155E+05	3.607E+07	3.520E+12	
Eu-152	1.782E+02	1.875E+02	6.409E+02	8.278E+02	2.305E+03	2.982E+04	6.460E+07	2.342E+13	*1.727E+14	
Eu-154	1.667E+02	1.807E+02	1.252E+03	1.874E+03	9.408E+03	5.310E+05	9.548E+10	*2.685E+14	*2.685E+14	
Eu-155	7.463E+03	8.632E+03	2.842E+05	5.884E+05	1.082E+07	1.569E+10	*4.815E+14	*4.815E+14	*4.815E+14	
H-3	8.934E+06	1.016E+07	2.241E+08	4.269E+08	5.621E+09	3.536E+12	*9.621E+15	*9.621E+15	*9.621E+15	
I-129	1.024E+04	1.024E+04	1.025E+04	1.025E+04	1.026E+04	1.028E+04	1.034E+04	1.045E+04	1.067E+04	
Mn-54	3.509E+02	7.897E+02	2.249E+11	1.298E+13	*7.615E+15	*7.615E+15	*7.615E+15	*7.615E+15	*7.615E+15	
Na-22	1.031E+02	1.346E+02	8.052E+04	3.050E+05	6.285E+07	3.829E+13	*5.976E+15	*5.976E+15	*5.976E+15	
Ni-63	7.863E+06	7.917E+06	9.349E+06	9.678E+06	1.112E+07	1.571E+07	4.440E+07	2.507E+08	7.996E+09	
Np-237	9.693E+02	9.693E+02	9.693E+02	9.693E+02	9.693E+02	9.693E+02	9.693E+02	9.693E+02	9.691E+02	
Pu-238	5.341E+03	5.383E+03	6.507E+03	6.770E+03	7.929E+03	1.177E+04	3.850E+04	2.767E+05	1.117E+07	
Pu-239	4.829E+03	4.829E+03	4.833E+03	4.833E+03	4.836E+03	4.843E+03	4.864E+03	4.899E+03	4.970E+03	
Ru-106	1.281E+03	2.523E+03	2.920E+10	8.649E+11	*3.269E+15	*3.269E+15	*3.269E+15	*3.269E+15	*3.269E+15	
Sr-90	1.690E+04	1.731E+04	3.085E+04	3.480E+04	5.633E+04	1.877E+05	6.950E+06	2.858E+09	*1.366E+14	
Tc-99	1.600E+06	1.600E+06	1.603E+06	1.604E+06	1.606E+06	1.612E+06	1.631E+06	1.662E+06	1.726E+06	
Th-228	1.502E+02	2.158E+02	1.299E+06	7.960E+06	1.123E+10	*8.201E+14	*8.201E+14	*8.201E+14	*8.201E+14	
Th-230	5.577E+03	5.455E+03	3.526E+03	3.276E+03	2.544E+03	1.625E+03	7.916E+02	4.439E+02	2.544E+02	
Th-232	1.905E+03	7.630E+02	8.175E+01	7.947E+01	7.710E+01	7.687E+01	7.687E+01	7.687E+01	7.687E+01	
U-234	2.434E+04	2.434E+04	2.431E+04	2.430E+04	2.427E+04	2.413E+04	2.341E+04	2.139E+04	1.639E+04	
U-235	1.478E+03	1.478E+03	1.477E+03	1.476E+03	1.474E+03	1.469E+03	1.451E+03	1.422E+03	1.368E+03	
U-238	5.585E+03	5.585E+03	5.585E+03	5.585E+03	5.585E+03	5.585E+03	5.585E+03	5.584E+03	5.582E+03	
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	

*At specific activity limit

[illegible]

Individual Nuclide Dose Summed Over All Pathways

Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	DOSE(j,t), mrem/yr									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Am-241	Am-241	1.000E+00		5.040E-02	5.032E-02	4.842E-02	4.803E-02	4.651E-02	4.293E-02	3.375E-02	2.260E-02	1.013E-02
0Np-237	Am-241	1.000E+00		4.167E-08	1.249E-07	2.083E-06	2.482E-06	4.045E-06	7.740E-06	1.720E-05	2.869E-05	4.153E-05
Np-237	Np-237	1.000E+00		2.579E-01	2.579E-01	2.579E-01	2.579E-01	2.579E-01	2.579E-01	2.579E-01	2.579E-01	2.578E-01
Np-237	äDOSE(j)			2.579E-01	2.579E-01	2.579E-01	2.579E-01	2.579E-01	2.579E-01	2.579E-01	2.579E-01	2.579E-01
0U-233	Am-241	1.000E+00		2.519E-15	1.763E-14	4.850E-12	6.920E-12	1.877E-11	7.241E-11	4.166E-10	1.473E-09	4.727E-09
U-233	Np-237	1.000E+00		2.339E-08	7.016E-08	1.193E-06	1.426E-06	2.362E-06	4.699E-06	1.171E-05	2.338E-05	4.668E-05
U-233	äDOSE(j)			2.339E-08	7.016E-08	1.193E-06	1.426E-06	2.362E-06	4.699E-06	1.171E-05	2.338E-05	4.668E-05
0Th-229	Am-241	1.000E+00		2.447E-18	3.669E-17	1.606E-13	2.743E-13	1.234E-12	9.526E-12	1.387E-10	1.003E-09	6.681E-09
Th-229	Np-237	1.000E+00		3.028E-11	2.120E-10	5.903E-08	8.443E-08	2.313E-07	9.145E-07	5.654E-06	2.238E-05	8.799E-05
Th-229	äDOSE(j)			3.028E-11	2.120E-10	5.903E-08	8.443E-08	2.313E-07	9.145E-07	5.654E-06	2.239E-05	8.800E-05
0Co-60	Co-60	1.000E+00		3.095E+00	2.713E+00	1.156E-01	5.990E-02	4.318E-03	6.024E-06	1.636E-14	8.647E-29	0.000E+00
0Cs-134	Cs-134	1.000E+00		1.615E+00	1.155E+00	3.660E-04	6.832E-05	8.293E-08	4.257E-15	0.000E+00	0.000E+00	0.000E+00
0Cs-137	Cs-137	1.000E+00		6.763E-01	6.610E-01	3.808E-01	3.395E-01	2.144E-01	6.796E-02	2.165E-03	6.931E-06	7.102E-11
0Eu-152	Eu-152	7.210E-01		1.012E+00	9.612E-01	2.813E-01	2.177E-01	7.819E-02	6.044E-03	2.790E-06	7.696E-12	5.854E-23
Eu-152	Eu-152	2.790E-01		3.915E-01	3.720E-01	1.088E-01	8.426E-02	3.026E-02	2.339E-03	1.080E-06	2.978E-12	2.265E-23
Eu-152	äDOSE(j)			1.403E+00	1.333E+00	3.901E-01	3.020E-01	1.085E-01	8.382E-03	3.870E-06	1.067E-11	8.120E-23
0Gd-152	Eu-152	2.790E-01		7.435E-18	2.181E-17	2.153E-16	2.334E-16	2.731E-16	2.937E-16	2.954E-16	2.954E-16	2.954E-16
0Sm-148	Eu-152	2.790E-01		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.460E-29	2.979E-29
0Nd-144	Eu-152	2.790E-01		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
0Eu-154	Eu-154	1.000E+00		1.500E+00	1.384E+00	1.996E-01	1.334E-01	2.657E-02	4.708E-04	2.618E-09	4.571E-18	0.000E+00
0Eu-155	Eu-155	1.000E+00		3.350E-02	2.896E-02	8.798E-04	4.249E-04	2.310E-05	1.593E-08	5.228E-18	0.000E+00	0.000E+00
0H-3	H-3	1.000E+00		2.798E-05	2.460E-05	1.116E-06	5.856E-07	4.448E-08	7.070E-11	2.839E-19	0.000E+00	0.000E+00
0I-129	I-129	1.000E+00		2.443E-02	2.442E-02	2.440E-02	2.440E-02	2.437E-02	2.432E-02	2.417E-02	2.392E-02	2.343E-02
0Mn-54	Mn-54	1.000E+00		7.124E-01	3.166E-01	1.112E-09	1.926E-11	1.734E-18	0.000E+00	0.000E+00	0.000E+00	0.000E+00
0Na-22	Na-22	1.000E+00		2.424E+00	1.857E+00	3.105E-03	8.196E-04	3.978E-06	6.528E-12	2.885E-29	0.000E+00	0.000E+00
0Ni-63	Ni-63	1.000E+00		3.180E-05	3.158E-05	2.674E-05	2.583E-05	2.249E-05	1.591E-05	5.630E-06	9.970E-07	3.127E-08
0Pu-238	Pu-238	1.850E-09		8.660E-11	8.592E-11	7.107E-11	6.832E-11	5.833E-11	3.929E-11	1.201E-11	1.664E-12	3.199E-14
Pu-238	Pu-238	9.996E-01		4.679E-02	4.642E-02	3.840E-02	3.691E-02	3.152E-02	2.123E-02	6.487E-03	8.993E-04	1.728E-05
Pu-238	äDOSE(j)			4.679E-02	4.642E-02	3.840E-02	3.691E-02	3.152E-02	2.123E-02	6.487E-03	8.993E-04	1.728E-05
0U-234	Pu-238	9.996E-01		1.446E-08	4.322E-08	6.694E-07	7.856E-07	1.207E-06	2.010E-06	3.160E-06	3.593E-06	3.657E-06

Individual Nuclide Dose Summed Over All Pathways

Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	DOSE(j,t), mrem/yr									
(j)	(i)		t= 0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03	
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
U-234	Pu-238	1.899E-08	2.747E-16	8.211E-16	1.272E-14	1.493E-14	2.293E-14	3.819E-14	6.003E-14	6.827E-14	6.948E-14	
U-234	Pu-238	2.100E-04	3.036E-12	9.077E-12	1.406E-10	1.650E-10	2.535E-10	4.222E-10	6.637E-10	7.547E-10	7.681E-10	
U-234	Pu-238	2.771E-10	4.008E-18	1.198E-17	1.856E-16	2.178E-16	3.346E-16	5.573E-16	8.760E-16	9.963E-16	1.014E-15	
U-234	Pu-238	3.989E-12	5.769E-20	1.725E-19	2.672E-18	3.135E-18	4.817E-18	8.021E-18	1.261E-17	1.434E-17	1.459E-17	
U-234	Pu-238	1.998E-04	2.889E-12	8.636E-12	1.338E-10	1.570E-10	2.412E-10	4.017E-10	6.314E-10	7.181E-10	7.307E-10	
U-234	Pu-238	2.637E-10	3.813E-18	1.140E-17	1.766E-16	2.072E-16	3.184E-16	5.302E-16	8.335E-16	9.479E-16	9.646E-16	
U-234	Pu-238	3.795E-12	5.489E-20	1.641E-19	2.542E-18	2.983E-18	4.583E-18	7.632E-18	1.200E-17	1.364E-17	1.388E-17	
U-234	Pu-238	4.196E-08	6.068E-16	1.814E-15	2.810E-14	3.298E-14	5.066E-14	8.437E-14	1.326E-13	1.508E-13	1.535E-13	
U-234	Pu-238	5.538E-14	8.010E-22	2.394E-21	3.709E-20	4.353E-20	6.687E-20	1.114E-19	1.751E-19	1.991E-19	2.026E-19	
U-234	Pu-238	7.972E-16	1.153E-23	3.447E-23	5.339E-22	6.265E-22	9.625E-22	1.603E-21	2.520E-21	2.866E-21	2.916E-21	
U-234	Pu-238	2.000E-07	2.892E-15	8.647E-15	1.339E-13	1.572E-13	2.415E-13	4.021E-13	6.322E-13	7.189E-13	7.316E-13	
U-234	Pu-238	2.640E-13	3.818E-21	1.141E-20	1.768E-19	2.075E-19	3.188E-19	5.308E-19	8.345E-19	9.490E-19	9.657E-19	
U-234	Pu-238	3.800E-15	5.495E-23	1.643E-22	2.545E-21	2.986E-21	4.588E-21	7.641E-21	1.201E-20	1.366E-20	1.390E-20	
U-234	U-234	9.996E-01	1.027E-02	1.027E-02	1.027E-02	1.027E-02	1.027E-02	1.026E-02	1.026E-02	1.025E-02	1.024E-02	
U-234	U-238	1.599E-03	2.319E-11	6.957E-11	1.183E-09	1.415E-09	2.342E-09	4.660E-09	1.161E-08	2.319E-08	4.633E-08	
U-234	U-238	2.111E-09	3.061E-17	9.183E-17	1.561E-15	1.867E-15	3.091E-15	6.152E-15	1.533E-14	3.062E-14	6.115E-14	
U-234	U-238	3.039E-11	4.406E-19	1.322E-18	2.247E-17	2.688E-17	4.450E-17	8.855E-17	2.207E-16	4.407E-16	8.803E-16	
U-234	U-238	3.359E-07	4.871E-15	1.461E-14	2.484E-13	2.971E-13	4.919E-13	9.789E-13	2.439E-12	4.872E-12	9.731E-12	
U-234	U-238	4.434E-13	6.430E-21	1.929E-20	3.279E-19	3.922E-19	6.493E-19	1.292E-18	3.220E-18	6.431E-18	1.285E-17	
U-234	U-238	6.383E-15	9.255E-23	2.776E-22	4.720E-21	5.645E-21	9.347E-21	1.860E-20	4.635E-20	9.257E-20	1.849E-19	
U-234	U-238	3.196E-07	4.634E-15	1.390E-14	2.363E-13	2.827E-13	4.680E-13	9.313E-13	2.321E-12	4.635E-12	9.258E-12	
U-234	U-238	4.219E-13	6.117E-21	1.835E-20	3.120E-19	3.731E-19	6.178E-19	1.229E-18	3.064E-18	6.118E-18	1.222E-17	
U-234	U-238	6.073E-15	8.805E-23	2.642E-22	4.490E-21	5.371E-21	8.893E-21	1.770E-20	4.410E-20	8.807E-20	1.759E-19	
U-234	U-238	6.713E-11	9.734E-19	2.920E-18	4.964E-17	5.938E-17	9.831E-17	1.956E-16	4.875E-16	9.736E-16	1.945E-15	
U-234	U-238	8.862E-17	1.285E-24	3.855E-24	6.553E-23	7.838E-23	1.298E-22	2.582E-22	6.435E-22	1.285E-21	2.567E-21	
U-234	U-238	1.276E-18	1.849E-26	5.548E-26	9.432E-25	1.128E-24	1.868E-24	3.717E-24	9.262E-24	1.850E-23	3.695E-23	
U-234	U-238	3.200E-10	4.640E-18	1.392E-17	2.366E-16	2.830E-16	4.686E-16	9.325E-16	2.324E-15	4.641E-15	9.270E-15	
U-234	U-238	4.224E-16	6.125E-24	1.837E-23	3.123E-22	3.736E-22	6.185E-22	1.231E-21	3.067E-21	6.126E-21	1.224E-20	
U-234	U-238	6.080E-18	8.816E-26	2.645E-25	4.496E-24	5.377E-24	8.903E-24	1.772E-23	4.415E-23	8.818E-23	1.761E-22	
U-234	U-238	9.980E-01	1.447E-08	4.341E-08	7.380E-07	8.827E-07	1.461E-06	2.908E-06	7.247E-06	1.447E-05	2.891E-05	
U-234	U-238	1.317E-06	1.910E-14	5.730E-14	9.741E-13	1.165E-12	1.929E-12	3.839E-12	9.566E-12	1.910E-11	3.816E-11	
U-234	U-238	1.896E-08	2.749E-16	8.248E-16	1.402E-14	1.677E-14	2.777E-14	5.525E-14	1.377E-13	2.750E-13	5.493E-13	
U-234	U-238	2.096E-04	3.039E-12	9.118E-12	1.550E-10	1.854E-10	3.070E-10	6.108E-10	1.522E-09	3.040E-09	6.072E-09	
U-234	U-238	2.767E-10	4.012E-18	1.204E-17	2.046E-16	2.447E-16	4.052E-16	8.063E-16	2.009E-15	4.013E-15	8.015E-15	
U-234	U-238	3.983E-12	5.775E-20	1.732E-19	2.945E-18	3.523E-18	5.832E-18	1.161E-17	2.892E-17	5.776E-17	1.154E-16	
U-234	U-238	1.994E-04	2.892E-12	8.675E-12	1.475E-10	1.764E-10	2.920E-10	5.812E-10	1.448E-09	2.892E-09	5.777E-09	
U-234	U-238	2.633E-10	3.817E-18	1.145E-17	1.947E-16	2.328E-16	3.855E-16	7.671E-16	1.912E-15	3.818E-15	7.626E-15	
U-234	U-238	3.789E-12	5.494E-20	1.648E-19	2.802E-18	3.351E-18	5.549E-18	1.104E-17	2.752E-17	5.496E-17	1.098E-16	
U-234	U-238	4.189E-08	6.074E-16	1.822E-15	3.098E-14	3.705E-14	6.134E-14	1.221E-13	3.042E-13	6.075E-13	1.213E-12	
U-234	U-238	5.530E-14	8.018E-22	2.405E-21	4.089E-20	4.891E-20	8.097E-20	1.611E-19	4.015E-19	8.019E-19	1.602E-18	

U-234	U-238	7.959E-16	1.154E-23	3.462E-23	5.886E-22	7.040E-22	1.166E-21	2.319E-21	5.780E-21	1.154E-20	2.306E-20
U-234	U-238	1.997E-07	2.895E-15	8.686E-15	1.477E-13	1.766E-13	2.924E-13	5.819E-13	1.450E-12	2.896E-12	5.784E-12
U-234	U-238	2.636E-13	3.822E-21	1.147E-20	1.949E-19	2.331E-19	3.860E-19	7.681E-19	1.914E-18	3.823E-18	7.635E-18
U-234	U-238	3.794E-15	5.501E-23	1.650E-22	2.805E-21	3.356E-21	5.556E-21	1.106E-20	2.755E-20	5.502E-20	1.099E-19
U-234	äDOSE(j)		1.027E-02	1.027E-02	1.027E-02	1.027E-02	1.027E-02	1.027E-02	1.027E-02	1.027E-02	1.027E-02
0Th-230	Pu-238	9.996E-01	1.914E-13	1.336E-12	3.501E-10	4.945E-10	1.290E-09	4.532E-09	2.056E-08	5.465E-08	1.265E-07
Th-230	Pu-238	1.899E-08	3.636E-21	2.539E-20	6.652E-18	9.396E-18	2.450E-17	8.611E-17	3.907E-16	1.038E-15	2.404E-15
Th-230	Pu-238	2.100E-04	4.019E-17	2.807E-16	7.354E-14	1.039E-13	2.709E-13	9.520E-13	4.319E-12	1.148E-11	2.658E-11

Individual Nuclide Dose Summed Over All Pathways

Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	DOSE(j,t), mrem/yr									
(j)	(i)		t= 0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03	
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Th-230	Pu-238	2.771E-10	5.306E-23	3.705E-22	9.707E-20	1.371E-19	3.575E-19	1.257E-18	5.702E-18	1.515E-17	3.508E-17	
Th-230	Pu-238	3.989E-12	7.637E-25	5.334E-24	1.397E-21	1.974E-21	5.146E-21	1.809E-20	8.207E-20	2.181E-19	5.050E-19	
Th-230	Pu-238	1.998E-04	3.824E-17	2.671E-16	6.997E-14	9.883E-14	2.577E-13	9.057E-13	4.110E-12	1.092E-11	2.529E-11	
Th-230	Pu-238	2.637E-10	5.048E-23	3.525E-22	9.236E-20	1.305E-19	3.402E-19	1.196E-18	5.425E-18	1.442E-17	3.338E-17	
Th-230	Pu-238	3.795E-12	7.266E-25	5.075E-24	1.329E-21	1.878E-21	4.896E-21	1.721E-20	7.808E-20	2.075E-19	4.804E-19	
Th-230	Pu-238	4.196E-08	8.032E-21	5.610E-20	1.470E-17	2.076E-17	5.413E-17	1.902E-16	8.632E-16	2.294E-15	5.311E-15	
Th-230	Pu-238	5.538E-14	1.059E-26	7.405E-26	1.940E-23	2.740E-23	7.145E-23	2.511E-22	1.139E-21	3.028E-21	7.011E-21	
Th-230	Pu-238	7.972E-16	1.516E-28	1.059E-27	2.792E-25	3.944E-25	1.028E-24	3.615E-24	1.640E-23	4.358E-23	1.009E-22	
Th-230	Pu-238	2.000E-07	3.829E-20	2.674E-19	7.005E-17	9.895E-17	2.580E-16	9.068E-16	4.115E-15	1.093E-14	2.532E-14	
Th-230	Pu-238	2.640E-13	5.054E-26	3.530E-25	9.247E-23	1.306E-22	3.406E-22	1.197E-21	5.431E-21	1.443E-20	3.342E-20	
Th-230	Pu-238	3.800E-15	7.229E-28	5.076E-27	1.331E-24	1.880E-24	4.902E-24	1.723E-23	7.818E-23	2.078E-22	4.810E-22	
Th-230	Th-230	9.996E-01	4.431E-02	4.431E-02	4.430E-02	4.430E-02	4.429E-02	4.427E-02	4.421E-02	4.411E-02	4.391E-02	
Th-230	U-234	9.996E-01	2.037E-07	6.112E-07	1.039E-05	1.243E-05	2.057E-05	4.092E-05	1.019E-04	2.033E-04	4.052E-04	
Th-230	U-234	1.319E-06	2.689E-13	8.068E-13	1.371E-11	1.640E-11	2.715E-11	5.402E-11	1.345E-10	2.684E-10	5.348E-10	
Th-230	U-234	1.899E-08	3.871E-15	1.161E-14	1.974E-13	2.361E-13	3.908E-13	7.776E-13	1.936E-12	3.863E-12	7.698E-12	
Th-230	U-234	2.100E-04	4.279E-11	1.284E-10	2.182E-09	2.610E-09	4.321E-09	8.596E-09	2.141E-08	4.270E-08	8.510E-08	
Th-230	U-234	2.771E-10	5.648E-17	1.695E-16	2.880E-15	3.445E-15	5.703E-15	1.135E-14	2.826E-14	5.637E-14	1.123E-13	
Th-230	U-234	3.989E-12	8.130E-19	2.439E-18	4.146E-17	4.959E-17	8.209E-17	1.633E-16	4.067E-16	8.114E-16	1.617E-15	
Th-230	U-234	1.998E-04	4.071E-11	1.221E-10	2.076E-09	2.483E-09	4.111E-09	8.178E-09	2.037E-08	4.063E-08	8.097E-08	
Th-230	U-234	2.637E-10	5.374E-17	1.612E-16	2.740E-15	3.278E-15	5.426E-15	1.080E-14	2.688E-14	5.363E-14	1.069E-13	
Th-230	U-234	3.795E-12	7.735E-19	2.321E-18	3.944E-17	4.718E-17	7.810E-17	1.554E-16	3.870E-16	7.720E-16	1.538E-15	
Th-230	U-234	4.196E-08	8.551E-15	2.565E-14	4.361E-13	5.215E-13	8.634E-13	1.718E-12	4.278E-12	8.534E-12	1.701E-11	
Th-230	U-234	5.538E-14	1.129E-20	3.386E-20	5.756E-19	6.884E-19	1.140E-18	2.267E-18	5.647E-18	1.126E-17	2.245E-17	
Th-230	U-234	7.972E-16	1.625E-22	4.874E-22	8.285E-21	9.909E-21	1.641E-20	3.264E-20	8.128E-20	1.621E-19	3.231E-19	
Th-230	U-234	2.000E-07	4.076E-14	1.223E-13	2.079E-12	2.486E-12	4.116E-12	8.188E-12	2.039E-11	4.068E-11	8.107E-11	
Th-230	U-234	2.640E-13	5.381E-20	1.614E-19	2.744E-18	3.282E-18	5.433E-18	1.081E-17	2.692E-17	5.370E-17	1.070E-16	
Th-230	U-234	3.800E-15	7.745E-22	2.323E-21	3.949E-20	4.723E-20	7.820E-20	1.556E-19	3.874E-19	7.729E-19	1.540E-18	
Th-230	U-238	1.599E-03	3.068E-16	2.147E-15	5.985E-13	8.561E-13	2.347E-12	9.292E-12	5.769E-11	2.301E-10	9.174E-10	
Th-230	U-238	2.111E-09	4.049E-22	2.835E-21	7.900E-19	1.130E-18	3.098E-18	1.227E-17	7.615E-17	3.037E-16	1.211E-15	
Th-230	U-238	3.039E-11	5.829E-24	4.080E-23	1.137E-20	1.627E-20	4.459E-20	1.765E-19	1.096E-18	4.371E-18	1.743E-17	
Th-230	U-238	3.359E-07	6.444E-20	4.511E-19	1.257E-16	1.798E-16	4.929E-16	1.952E-15	1.212E-14	4.832E-14	1.927E-13	
Th-230	U-238	4.434E-13	8.506E-26	5.954E-25	1.659E-22	2.374E-22	6.506E-22	2.576E-21	1.600E-20	6.379E-20	2.544E-19	
Th-230	U-238	6.383E-15	1.217E-27	8.563E-27	2.388E-24	3.417E-24	9.365E-24	3.708E-23	2.302E-22	9.182E-22	3.661E-21	
Th-230	U-238	3.196E-07	6.131E-20	4.291E-19	1.196E-16	1.711E-16	4.690E-16	1.857E-15	1.153E-14	4.598E-14	1.833E-13	
Th-230	U-238	4.219E-13	8.092E-26	5.665E-25	1.579E-22	2.258E-22	6.190E-22	2.451E-21	1.522E-20	6.069E-20	2.420E-19	
Th-230	U-238	6.073E-15	1.157E-27	8.147E-27	2.272E-24	3.251E-24	8.910E-24	3.528E-23	2.191E-22	8.736E-22	3.484E-21	
Th-230	U-238	6.713E-11	1.288E-23	9.014E-23	2.512E-20	3.594E-20	9.850E-20	3.900E-19	2.422E-18	9.657E-18	3.851E-17	
Th-230	U-238	8.862E-17	1.689E-29	1.182E-28	3.316E-26	4.743E-26	1.300E-25	5.148E-25	3.197E-24	1.275E-23	5.083E-23	
Th-230	U-238	1.276E-18	0.000E+00	0.000E+00	4.743E-28	6.785E-28	1.870E-27	7.404E-27	4.601E-26	1.835E-25	7.317E-25	
Th-230	U-238	3.200E-10	6.138E-23	4.297E-22	1.197E-19	1.713E-19	4.695E-19	1.859E-18	1.154E-17	4.603E-17	1.836E-16	

Th-230	U-238	4.224E-16	8.051E-29	5.636E-28	1.581E-25	2.261E-25	6.198E-25	2.454E-24	1.524E-23	6.076E-23	2.423E-22
Th-230	U-238	6.080E-18	0.000E+00	0.000E+00	2.273E-27	3.252E-27	8.913E-27	3.532E-26	2.193E-25	8.746E-25	3.488E-24
Th-230	U-238	9.980E-01	1.914E-13	1.340E-12	3.734E-10	5.342E-10	1.464E-09	5.798E-09	3.600E-08	1.436E-07	5.725E-07
Th-230	U-238	1.317E-06	2.527E-19	1.769E-18	4.929E-16	7.052E-16	1.933E-15	7.653E-15	4.752E-14	1.895E-13	7.557E-13
Th-230	U-238	1.896E-08	3.637E-21	2.546E-20	7.095E-18	1.015E-17	2.782E-17	1.102E-16	6.840E-16	2.728E-15	1.088E-14
Th-230	U-238	2.096E-04	4.021E-17	2.815E-16	7.844E-14	1.122E-13	3.076E-13	1.218E-12	7.561E-12	3.015E-11	1.202E-10
Th-230	U-238	2.767E-10	5.307E-23	3.715E-22	1.035E-19	1.481E-19	4.060E-19	1.608E-18	9.981E-18	3.980E-17	1.587E-16
Th-230	U-238	3.983E-12	7.640E-25	5.348E-24	1.490E-21	2.132E-21	5.844E-21	2.314E-20	1.437E-19	5.729E-19	2.285E-18
Th-230	U-238	1.994E-04	3.825E-17	2.678E-16	7.463E-14	1.068E-13	2.926E-13	1.159E-12	7.194E-12	2.869E-11	1.144E-10

Individual Nuclide Dose Summed Over All Pathways

Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	DOSE(j,t), mrem/yr									
(j)	(i)		t= 0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03	
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Th-230	U-238	2.633E-10	5.050E-23	3.535E-22	9.851E-20	1.409E-19	3.863E-19	1.529E-18	9.496E-18	3.787E-17	1.510E-16	
Th-230	U-238	3.789E-12	7.268E-25	5.088E-24	1.418E-21	2.028E-21	5.560E-21	2.202E-20	1.367E-19	5.451E-19	2.174E-18	
Th-230	U-238	4.189E-08	8.035E-21	5.625E-20	1.568E-17	2.242E-17	6.146E-17	2.434E-16	1.511E-15	6.026E-15	2.403E-14	
Th-230	U-238	5.530E-14	1.060E-26	7.425E-26	2.069E-23	2.960E-23	8.113E-23	3.213E-22	1.995E-21	7.954E-21	3.172E-20	
Th-230	U-238	7.959E-16	1.517E-28	1.062E-27	2.978E-25	4.260E-25	1.168E-24	4.624E-24	2.871E-23	1.145E-22	4.566E-22	
Th-230	U-238	1.997E-07	3.830E-20	2.681E-19	7.472E-17	1.069E-16	2.930E-16	1.160E-15	7.203E-15	2.872E-14	1.145E-13	
Th-230	U-238	2.636E-13	5.056E-26	3.539E-25	9.863E-23	1.411E-22	3.867E-22	1.531E-21	9.508E-21	3.792E-20	1.512E-19	
Th-230	U-238	3.794E-15	7.231E-28	5.090E-27	1.420E-24	2.031E-24	5.567E-24	2.204E-23	1.369E-22	5.458E-22	2.176E-21	
Th-230	äDOSE(j)		4.431E-02	4.431E-02	4.431E-02	4.431E-02	4.431E-02	4.431E-02	4.431E-02	4.431E-02	4.431E-02	
0Ra-226	Pu-238	9.996E-01	1.074E-15	1.609E-14	6.775E-11	1.147E-10	5.004E-10	3.582E-09	4.274E-08	2.383E-07	1.119E-06	
Ra-226	Pu-238	1.899E-08	2.041E-23	3.057E-22	1.287E-18	2.180E-18	9.507E-18	6.805E-17	8.122E-16	4.527E-15	2.126E-14	
Ra-226	Th-230	9.996E-01	4.973E-04	1.492E-03	2.523E-02	3.014E-02	4.968E-02	9.779E-02	2.359E-01	4.465E-01	8.037E-01	
Ra-226	Th-230	1.319E-06	6.565E-10	1.969E-09	3.330E-08	3.978E-08	6.558E-08	1.291E-07	3.114E-07	5.894E-07	1.061E-06	
Ra-226	Th-230	1.899E-08	9.449E-12	2.834E-11	4.793E-10	5.726E-10	9.439E-10	1.858E-09	4.482E-09	8.484E-09	1.527E-08	
Ra-226	U-234	9.996E-01	1.524E-09	1.067E-08	2.963E-06	4.236E-06	1.158E-05	4.552E-05	2.766E-04	1.065E-03	3.966E-03	
Ra-226	U-234	1.319E-06	2.012E-15	1.408E-14	3.912E-12	5.592E-12	1.528E-11	6.008E-11	3.651E-10	1.406E-09	5.235E-09	
Ra-226	U-234	1.899E-08	2.896E-17	2.027E-16	5.630E-14	8.048E-14	2.200E-13	8.648E-13	5.256E-12	2.024E-11	7.535E-11	
Ra-226	U-238	1.599E-03	1.722E-18	2.582E-17	1.139E-13	1.948E-13	8.821E-13	6.914E-12	1.053E-10	8.174E-10	6.191E-09	
Ra-226	U-238	2.111E-09	2.273E-24	3.409E-23	1.504E-19	2.571E-19	1.164E-18	9.126E-18	1.390E-16	1.079E-15	8.172E-15	
Ra-226	U-238	3.039E-11	3.271E-26	4.906E-25	2.165E-21	3.701E-21	1.676E-20	1.314E-19	2.001E-18	1.553E-17	1.176E-16	
Ra-226	U-238	9.980E-01	1.074E-15	1.611E-14	7.109E-11	1.216E-10	5.505E-10	4.314E-09	6.571E-08	5.100E-07	3.863E-06	
Ra-226	U-238	1.317E-06	1.418E-21	2.127E-20	9.384E-17	1.605E-16	7.266E-16	5.695E-15	8.674E-14	6.733E-13	5.099E-12	
Ra-226	U-238	1.896E-08	2.041E-23	3.062E-22	1.351E-18	2.310E-18	1.046E-17	8.197E-17	1.249E-15	9.691E-15	7.340E-14	
Ra-226	äDOSE(j)		4.973E-04	1.492E-03	2.523E-02	3.014E-02	4.969E-02	9.783E-02	2.362E-01	4.476E-01	8.076E-01	
0Pb-210	Pu-238	9.996E-01	1.146E-18	3.528E-17	2.009E-12	3.964E-12	2.588E-11	2.950E-10	5.340E-09	3.520E-08	1.794E-07	
Pb-210	Pu-238	1.319E-06	5.675E-25	1.747E-23	9.950E-19	1.963E-18	1.282E-17	1.461E-16	2.645E-15	1.743E-14	8.886E-14	
Pb-210	Pu-238	2.100E-04	2.407E-22	7.411E-21	4.220E-16	8.326E-16	5.436E-15	6.197E-14	1.122E-12	7.393E-12	3.769E-11	
Pb-210	Pu-238	1.998E-04	2.290E-22	7.051E-21	4.015E-16	7.922E-16	5.172E-15	5.896E-14	1.067E-12	7.034E-12	3.586E-11	
Pb-210	Pu-238	4.196E-08	4.810E-26	1.481E-24	8.433E-20	1.664E-19	1.086E-18	1.238E-17	2.242E-16	1.477E-15	7.532E-15	
Pb-210	Pu-238	2.000E-07	2.293E-25	7.059E-24	4.020E-19	7.932E-19	5.178E-18	5.903E-17	1.069E-15	7.042E-15	3.590E-14	
Pb-210	Th-230	9.996E-01	8.815E-07	6.115E-06	1.347E-03	1.840E-03	4.248E-03	1.172E-02	3.552E-02	7.219E-02	1.344E-01	
Pb-210	Th-230	2.100E-04	1.851E-10	1.284E-09	2.829E-07	3.865E-07	8.924E-07	2.461E-06	7.461E-06	1.516E-05	2.822E-05	
Pb-210	Th-230	1.998E-04	1.762E-10	1.222E-09	2.691E-07	3.678E-07	8.490E-07	2.342E-06	7.098E-06	1.443E-05	2.685E-05	
Pb-210	Th-230	4.196E-08	3.700E-14	2.567E-13	5.652E-11	7.725E-11	1.783E-10	4.919E-10	1.491E-09	3.030E-09	5.640E-09	
Pb-210	Th-230	2.000E-07	1.764E-13	1.224E-12	2.694E-10	3.682E-10	8.500E-10	2.345E-09	7.107E-09	1.444E-08	2.689E-08	
Pb-210	U-234	9.996E-01	2.030E-12	3.024E-11	1.120E-07	1.850E-07	7.359E-07	4.361E-06	3.702E-05	1.615E-04	6.411E-04	
Pb-210	U-234	2.100E-04	4.263E-16	6.352E-15	2.352E-11	3.887E-11	1.546E-10	9.160E-10	7.775E-09	3.393E-08	1.347E-07	
Pb-210	U-234	1.998E-04	4.056E-16	6.043E-15	2.238E-11	3.698E-11	1.471E-10	8.715E-10	7.397E-09	3.228E-08	1.281E-07	
Pb-210	U-234	4.196E-08	8.519E-20	1.269E-18	4.701E-15	7.767E-15	3.089E-14	1.831E-13	1.554E-12	6.780E-12	2.691E-11	
Pb-210	U-234	2.000E-07	4.061E-19	6.050E-18	2.241E-14	3.702E-14	1.472E-13	8.725E-13	7.406E-12	3.232E-11	1.283E-10	

Pb-210	U-238	1.599E-03	1.836E-21	5.660E-20	3.348E-15	6.660E-15	4.492E-14	5.556E-13	1.272E-11	1.169E-10	9.697E-10
Pb-210	U-238	3.359E-07	3.856E-25	1.189E-23	7.033E-19	1.399E-18	9.435E-18	1.167E-16	2.671E-15	2.456E-14	2.037E-13
Pb-210	U-238	3.196E-07	3.669E-25	1.131E-23	6.692E-19	1.331E-18	8.977E-18	1.110E-16	2.541E-15	2.336E-14	1.938E-13
Pb-210	U-238	6.713E-11	7.674E-29	2.376E-27	1.406E-22	2.796E-22	1.886E-21	2.332E-20	5.338E-19	4.907E-18	4.070E-17
Pb-210	U-238	3.200E-10	3.658E-28	1.132E-26	6.700E-22	1.333E-21	8.988E-21	1.112E-19	2.544E-18	2.339E-17	1.940E-16
Pb-210	U-238	9.980E-01	1.146E-18	3.532E-17	2.089E-12	4.156E-12	2.803E-11	3.467E-10	7.936E-09	7.295E-08	6.051E-07
Pb-210	U-238	2.096E-04	2.406E-22	7.419E-21	4.389E-16	8.730E-16	5.888E-15	7.282E-14	1.667E-12	1.532E-11	1.271E-10

Individual Nuclide Dose Summed Over All Pathways

Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	DOSE(j,t), mrem/yr									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Pb-210	U-238	1.994E-04		2.289E-22	7.058E-21	4.176E-16	8.305E-16	5.602E-15	6.928E-14	1.586E-12	1.458E-11	1.209E-10
Pb-210	U-238	4.189E-08		4.809E-26	1.483E-24	8.771E-20	1.745E-19	1.177E-18	1.455E-17	3.331E-16	3.062E-15	2.540E-14
Pb-210	U-238	1.997E-07		2.292E-25	7.067E-24	4.181E-19	8.315E-19	5.608E-18	6.937E-17	1.588E-15	1.460E-14	1.211E-13
Pb-210	äDOSE(j)			8.818E-07	6.118E-06	1.347E-03	1.841E-03	4.251E-03	1.173E-02	3.557E-02	7.239E-02	1.351E-01
0Pu-238	Pu-238	1.319E-06		6.176E-08	6.128E-08	5.069E-08	4.873E-08	4.160E-08	2.802E-08	8.563E-09	1.187E-09	2.282E-11
Pu-238	Pu-238	1.899E-08		8.890E-10	8.820E-10	7.296E-10	7.014E-10	5.988E-10	4.033E-10	1.233E-10	1.709E-11	3.284E-13
Pu-238	äDOSE(j)			6.265E-08	6.216E-08	5.142E-08	4.943E-08	4.220E-08	2.842E-08	8.686E-09	1.204E-09	2.314E-11
0U-234	Pu-238	1.319E-06		1.908E-14	5.704E-14	8.836E-13	1.037E-12	1.593E-12	2.653E-12	4.171E-12	4.743E-12	4.827E-12
0Th-230	Pu-238	1.319E-06		2.526E-19	1.764E-18	4.622E-16	6.528E-16	1.702E-15	5.983E-15	2.715E-14	7.214E-14	1.670E-13
0Ra-226	Pu-238	1.319E-06		1.418E-21	2.123E-20	8.943E-17	1.515E-16	6.605E-16	4.728E-15	5.642E-14	3.145E-13	1.477E-12
0Pb-210	Pu-238	1.899E-08		1.542E-26	4.747E-25	2.703E-20	5.333E-20	3.482E-19	3.969E-18	7.185E-17	4.736E-16	2.414E-15
Pb-210	Pu-238	3.989E-12		0.000E+00	9.970E-29	5.678E-24	1.120E-23	7.314E-23	8.337E-22	1.509E-20	9.947E-20	5.071E-19
Pb-210	Pu-238	3.795E-12		0.000E+00	9.486E-29	5.402E-24	1.066E-23	6.959E-23	7.932E-22	1.436E-20	9.463E-20	4.824E-19
Pb-210	Pu-238	7.972E-16		0.000E+00	0.000E+00	1.135E-27	2.239E-27	1.462E-26	1.666E-25	3.016E-24	1.988E-23	1.013E-22
Pb-210	Pu-238	3.800E-15		0.000E+00	0.000E+00	5.408E-27	1.067E-26	6.967E-26	7.942E-25	1.438E-23	9.475E-23	4.830E-22
Pb-210	Th-230	1.899E-08		1.186E-14	8.227E-14	1.812E-11	2.476E-11	5.716E-11	1.577E-10	4.779E-10	9.713E-10	1.808E-09
Pb-210	Th-230	3.989E-12		2.491E-18	1.728E-17	3.805E-15	5.200E-15	1.201E-14	3.311E-14	1.004E-13	2.040E-13	3.797E-13
Pb-210	Th-230	3.795E-12		2.370E-18	1.644E-17	3.621E-15	4.948E-15	1.142E-14	3.150E-14	9.550E-14	1.941E-13	3.613E-13
Pb-210	Th-230	7.972E-16		4.978E-22	3.453E-21	7.605E-19	1.039E-18	2.399E-18	6.617E-18	2.006E-17	4.077E-17	7.588E-17
Pb-210	Th-230	3.800E-15		2.373E-21	1.646E-20	3.625E-18	4.954E-18	1.144E-17	3.154E-17	9.562E-17	1.943E-16	3.617E-16
Pb-210	U-234	1.899E-08		2.731E-20	4.068E-19	1.507E-15	2.490E-15	9.901E-15	5.867E-14	4.980E-13	2.173E-12	8.626E-12
Pb-210	U-234	3.989E-12		5.735E-24	8.546E-23	3.165E-19	5.229E-19	2.080E-18	1.232E-17	1.046E-16	4.565E-16	1.812E-15
Pb-210	U-234	3.795E-12		5.457E-24	8.130E-23	3.011E-19	4.975E-19	1.979E-18	1.173E-17	9.952E-17	4.343E-16	1.724E-15
Pb-210	U-234	7.972E-16		1.146E-27	1.708E-26	6.324E-23	1.045E-22	4.156E-22	2.463E-21	2.090E-20	9.122E-20	3.621E-19
Pb-210	U-234	3.800E-15		5.463E-27	8.140E-26	3.015E-22	4.981E-22	1.981E-21	1.174E-20	9.965E-20	4.348E-19	1.726E-18
Pb-210	U-238	3.039E-11		2.470E-29	7.615E-28	4.505E-23	8.961E-23	6.044E-22	7.475E-21	1.711E-19	1.573E-18	1.305E-17
Pb-210	U-238	6.383E-15		0.000E+00	0.000E+00	9.463E-27	1.882E-26	1.269E-25	1.570E-24	3.594E-23	3.304E-22	2.740E-21
Pb-210	U-238	6.073E-15		0.000E+00	0.000E+00	9.003E-27	1.791E-26	1.208E-25	1.494E-24	3.419E-23	3.143E-22	2.607E-21
Pb-210	U-238	1.276E-18		0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.537E-29	3.138E-28	7.182E-27	6.602E-26	5.476E-25
Pb-210	U-238	6.080E-18		0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.209E-28	1.496E-27	3.423E-26	3.147E-25	2.610E-24
Pb-210	U-238	1.896E-08		1.541E-26	4.752E-25	2.811E-20	5.592E-20	3.771E-19	4.664E-18	1.068E-16	9.815E-16	8.141E-15
Pb-210	U-238	3.983E-12		0.000E+00	9.981E-29	5.905E-24	1.174E-23	7.921E-23	9.797E-22	2.243E-20	2.062E-19	1.710E-18
Pb-210	U-238	3.789E-12		0.000E+00	9.496E-29	5.618E-24	1.117E-23	7.536E-23	9.322E-22	2.134E-20	1.961E-19	1.627E-18
Pb-210	U-238	7.959E-16		0.000E+00	0.000E+00	1.180E-27	2.347E-27	1.583E-26	1.958E-25	4.481E-24	4.120E-23	3.417E-22
Pb-210	U-238	3.794E-15		0.000E+00	0.000E+00	5.625E-27	1.119E-26	7.545E-26	9.333E-25	2.136E-23	1.964E-22	1.629E-21
Pb-210	äDOSE(j)			1.186E-14	8.231E-14	1.813E-11	2.477E-11	5.719E-11	1.578E-10	4.786E-10	9.739E-10	1.817E-09
0Pu-238	Pu-238	2.100E-04		9.828E-06	9.751E-06	8.066E-06	7.754E-06	6.620E-06	4.459E-06	1.363E-06	1.889E-07	3.631E-09
Pu-238	Pu-238	2.771E-10		1.297E-11	1.287E-11	1.065E-11	1.023E-11	8.738E-12	5.886E-12	1.799E-12	2.493E-13	4.792E-15
Pu-238	äDOSE(j)			9.828E-06	9.751E-06	8.066E-06	7.754E-06	6.620E-06	4.459E-06	1.363E-06	1.889E-07	3.631E-09
0Ra-226	Pu-238	2.100E-04		5.783E-19	8.660E-18	3.647E-14	6.177E-14	2.694E-13	1.928E-12	2.301E-11	1.283E-10	6.022E-10

Ra-226	Pu-238	2.771E-10	7.634E-25	1.143E-23	4.814E-20	8.154E-20	3.555E-19	2.545E-18	3.037E-17	1.693E-16	7.949E-16
Ra-226	Pu-238	3.989E-12	1.099E-26	1.645E-25	6.929E-22	1.174E-21	5.118E-21	3.663E-20	4.372E-19	2.437E-18	1.144E-17

Individual Nuclide Dose Summed Over All Pathways

Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	DOSE(j,t), mrem/yr									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Ra-226	Th-230	2.100E-04	2.677E-07	8.030E-07	1.358E-05	1.622E-05	2.674E-05	5.264E-05	1.270E-04	2.404E-04	4.326E-04	
Ra-226	Th-230	2.771E-10	3.534E-13	1.060E-12	1.792E-11	2.141E-11	3.530E-11	6.948E-11	1.676E-10	3.173E-10	5.710E-10	
Ra-226	Th-230	3.989E-12	5.087E-15	1.526E-14	2.580E-13	3.082E-13	5.081E-13	1.000E-12	2.412E-12	4.567E-12	8.220E-12	
Ra-226	U-234	2.100E-04	8.206E-13	5.744E-12	1.595E-09	2.280E-09	6.232E-09	2.450E-08	1.489E-07	5.733E-07	2.135E-06	
Ra-226	U-234	2.771E-10	1.083E-18	7.582E-18	2.106E-15	3.010E-15	8.227E-15	3.234E-14	1.966E-13	7.568E-13	2.818E-12	
Ra-226	U-234	3.989E-12	1.559E-20	1.091E-19	3.031E-17	4.332E-17	1.184E-16	4.655E-16	2.829E-15	1.089E-14	4.056E-14	
Ra-226	U-238	3.359E-07	9.268E-22	1.390E-20	6.132E-17	1.049E-16	4.749E-16	3.722E-15	5.669E-14	4.400E-13	3.333E-12	
Ra-226	U-238	4.434E-13	1.223E-27	1.835E-26	8.095E-23	1.384E-22	6.268E-22	4.913E-21	7.483E-20	5.808E-19	4.399E-18	
Ra-226	U-238	6.383E-15	1.744E-29	2.615E-28	1.165E-24	1.992E-24	9.022E-24	7.071E-23	1.077E-21	8.360E-21	6.332E-20	
Ra-226	U-238	2.096E-04	5.783E-19	8.674E-18	3.827E-14	6.543E-14	2.963E-13	2.322E-12	3.537E-11	2.746E-10	2.080E-09	
Ra-226	U-238	2.767E-10	7.634E-25	1.145E-23	5.051E-20	8.637E-20	3.911E-19	3.066E-18	4.669E-17	3.624E-16	2.745E-15	
Ra-226	U-238	3.983E-12	1.099E-26	1.648E-25	7.271E-22	1.243E-21	5.630E-21	4.412E-20	6.721E-19	5.217E-18	3.951E-17	
Ra-226	äDOSE(j)		2.677E-07	8.030E-07	1.358E-05	1.623E-05	2.675E-05	5.266E-05	1.271E-04	2.410E-04	4.347E-04	
0Pb-210	Pu-238	2.771E-10	1.157E-28	3.670E-27	2.090E-22	4.124E-22	2.692E-21	3.069E-20	5.555E-19	3.661E-18	1.867E-17	
Pb-210	Pu-238	2.637E-10	1.100E-28	3.492E-27	1.988E-22	3.923E-22	2.561E-21	2.920E-20	5.285E-19	3.483E-18	1.776E-17	
Pb-210	Pu-238	5.538E-14	0.000E+00	0.000E+00	4.177E-26	8.240E-26	5.380E-25	6.133E-24	1.110E-22	7.317E-22	3.730E-21	
Pb-210	Pu-238	2.640E-13	0.000E+00	0.000E+00	1.991E-25	3.928E-25	2.565E-24	2.923E-23	5.292E-22	3.488E-21	1.778E-20	
Pb-210	Th-230	1.319E-06	4.365E-13	3.028E-12	6.669E-10	9.114E-10	2.104E-09	5.803E-09	1.759E-08	3.575E-08	6.655E-08	
Pb-210	Th-230	2.771E-10	9.169E-17	6.361E-16	1.401E-13	1.914E-13	4.419E-13	1.219E-12	3.695E-12	7.510E-12	1.398E-11	
Pb-210	Th-230	2.637E-10	8.724E-17	6.052E-16	1.333E-13	1.821E-13	4.205E-13	1.160E-12	3.515E-12	7.145E-12	1.330E-11	
Pb-210	Th-230	5.538E-14	1.832E-20	1.271E-19	2.799E-17	3.825E-17	8.831E-17	2.436E-16	7.384E-16	1.501E-15	2.793E-15	
Pb-210	Th-230	2.640E-13	8.734E-20	6.059E-19	1.334E-16	1.823E-16	4.210E-16	1.161E-15	3.520E-15	7.154E-15	1.331E-14	
Pb-210	U-234	1.319E-06	1.005E-18	1.498E-17	5.546E-14	9.164E-14	3.644E-13	2.160E-12	1.833E-11	8.000E-11	3.175E-10	
Pb-210	U-234	2.771E-10	2.111E-22	3.146E-21	1.165E-17	1.925E-17	7.655E-17	4.536E-16	3.851E-15	1.680E-14	6.669E-14	
Pb-210	U-234	2.637E-10	2.009E-22	2.993E-21	1.108E-17	1.831E-17	7.283E-17	4.316E-16	3.663E-15	1.599E-14	6.345E-14	
Pb-210	U-234	5.538E-14	4.219E-26	6.286E-25	2.328E-21	3.847E-21	1.530E-20	9.065E-20	7.695E-19	3.358E-18	1.333E-17	
Pb-210	U-234	2.640E-13	2.011E-25	2.996E-24	1.110E-20	1.834E-20	7.292E-20	4.321E-19	3.668E-18	1.601E-17	6.353E-17	
Pb-210	U-238	2.111E-09	9.092E-28	2.803E-26	1.658E-21	3.298E-21	2.225E-20	2.752E-19	6.298E-18	5.790E-17	4.803E-16	
Pb-210	U-238	4.434E-13	0.000E+00	0.000E+00	3.483E-25	6.928E-25	4.673E-24	5.780E-23	1.323E-21	1.216E-20	1.009E-19	
Pb-210	U-238	4.219E-13	0.000E+00	0.000E+00	3.314E-25	6.591E-25	4.446E-24	5.499E-23	1.259E-21	1.157E-20	9.597E-20	
Pb-210	U-238	8.862E-17	0.000E+00	0.000E+00	6.754E-29	1.343E-28	9.338E-28	1.155E-26	2.644E-25	2.430E-24	2.016E-23	
Pb-210	U-238	4.224E-16	0.000E+00	0.000E+00	3.220E-28	6.599E-28	4.451E-27	5.505E-26	1.260E-24	1.158E-23	9.609E-23	
Pb-210	U-238	1.317E-06	5.673E-25	1.749E-23	1.035E-18	2.058E-18	1.388E-17	1.717E-16	3.930E-15	3.613E-14	2.997E-13	
Pb-210	U-238	2.767E-10	1.156E-28	3.674E-27	2.173E-22	4.323E-22	2.916E-21	3.606E-20	8.255E-19	7.588E-18	6.295E-17	
Pb-210	U-238	2.633E-10	1.100E-28	3.495E-27	2.068E-22	4.113E-22	2.774E-21	3.431E-20	7.854E-19	7.220E-18	5.989E-17	
Pb-210	U-238	5.530E-14	0.000E+00	0.000E+00	4.343E-26	8.639E-26	5.827E-25	7.207E-24	1.650E-22	1.516E-21	1.258E-20	
Pb-210	U-238	2.636E-13	0.000E+00	0.000E+00	2.070E-25	4.118E-25	2.777E-24	3.435E-23	7.863E-22	7.229E-21	5.996E-20	
Pb-210	äDOSE(j)		4.367E-13	3.030E-12	6.672E-10	9.118E-10	2.105E-09	5.808E-09	1.762E-08	3.585E-08	6.689E-08	
0Pu-238	Pu-238	3.989E-12	1.867E-13	1.853E-13	1.533E-13	1.473E-13	1.258E-13	8.472E-14	2.589E-14	3.589E-15	6.898E-17	
Pu-238	Pu-238	1.998E-04	9.351E-06	9.277E-06	7.674E-06	7.377E-06	6.298E-06	4.242E-06	1.296E-06	1.797E-07	3.454E-09	

Pu-238	äDOSE(j)		9.351E-06	9.277E-06	7.674E-06	7.377E-06	6.298E-06	4.242E-06	1.296E-06	1.797E-07	3.454E-09
0Ra-226	Pu-238	1.998E-04	1.893E-19	2.834E-18	1.193E-14	2.021E-14	8.814E-14	6.309E-13	7.530E-12	4.198E-11	1.971E-10
Ra-226	Pu-238	3.795E-12	3.596E-27	5.384E-26	2.268E-22	3.841E-22	1.675E-21	1.199E-20	1.431E-19	7.975E-19	3.744E-18
Ra-226	Th-230	1.998E-04	8.761E-08	2.628E-07	4.444E-06	5.309E-06	8.752E-06	1.723E-05	4.155E-05	7.866E-05	1.416E-04
Ra-226	Th-230	2.637E-10	1.156E-13	3.469E-13	5.866E-12	7.008E-12	1.155E-11	2.274E-11	5.485E-11	1.038E-10	1.869E-10
Ra-226	Th-230	3.795E-12	1.665E-15	4.993E-15	8.443E-14	1.009E-13	1.663E-13	3.273E-13	7.895E-13	1.495E-12	2.690E-12

Individual Nuclide Dose Summed Over All Pathways

Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	DOSE(j,t), mrem/yr									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Ra-226	U-234	1.998E-04		2.685E-13	1.880E-12	5.220E-10	7.462E-10	2.040E-09	8.018E-09	4.873E-08	1.876E-07	6.986E-07
Ra-226	U-234	2.637E-10		3.545E-19	2.481E-18	6.890E-16	9.850E-16	2.692E-15	1.058E-14	6.432E-14	2.476E-13	9.222E-13
Ra-226	U-234	3.795E-12		5.102E-21	3.571E-20	9.918E-18	1.418E-17	3.875E-17	1.523E-16	9.258E-16	3.565E-15	1.327E-14
Ra-226	U-238	3.196E-07		3.033E-22	4.549E-21	2.007E-17	3.432E-17	1.554E-16	1.218E-15	1.855E-14	1.440E-13	1.091E-12
Ra-226	U-238	4.219E-13		4.003E-28	6.005E-27	2.649E-23	4.530E-23	2.051E-22	1.608E-21	2.449E-20	1.901E-19	1.440E-18
Ra-226	U-238	6.073E-15		0.000E+00	8.397E-29	3.813E-25	6.520E-25	2.952E-24	2.314E-23	3.525E-22	2.736E-21	2.072E-20
Ra-226	U-238	1.994E-04		1.893E-19	2.839E-18	1.252E-14	2.141E-14	9.696E-14	7.600E-13	1.158E-11	8.985E-11	6.805E-10
Ra-226	U-238	2.633E-10		2.498E-25	3.747E-24	1.653E-20	2.827E-20	1.280E-19	1.003E-18	1.528E-17	1.186E-16	8.983E-16
Ra-226	U-238	3.789E-12		3.596E-27	5.393E-26	2.379E-22	4.068E-22	1.842E-21	1.444E-20	2.199E-19	1.707E-18	1.293E-17
Ra-226	äDOSE(j)			8.761E-08	2.628E-07	4.444E-06	5.310E-06	8.754E-06	1.723E-05	4.160E-05	7.885E-05	1.423E-04
0Pu-238	Pu-238	2.637E-10		1.234E-11	1.225E-11	1.013E-11	9.738E-12	8.314E-12	5.600E-12	1.711E-12	2.372E-13	4.560E-15
Pu-238	Pu-238	3.795E-12		1.777E-13	1.763E-13	1.458E-13	1.402E-13	1.197E-13	8.060E-14	2.463E-14	3.415E-15	6.563E-17
Pu-238	äDOSE(j)			1.252E-11	1.242E-11	1.028E-11	9.878E-12	8.433E-12	5.680E-12	1.736E-12	2.406E-13	4.625E-15
0Ra-226	Pu-238	2.637E-10		2.498E-25	3.741E-24	1.575E-20	2.668E-20	1.164E-19	8.328E-19	9.939E-18	5.541E-17	2.601E-16
0Pu-238	Pu-238	4.196E-08		1.964E-09	1.949E-09	1.612E-09	1.549E-09	1.323E-09	8.911E-10	2.723E-10	3.775E-11	7.255E-13
Pu-238	Pu-238	5.538E-14		2.593E-15	2.572E-15	2.128E-15	2.045E-15	1.746E-15	1.176E-15	3.594E-16	4.983E-17	9.577E-19
Pu-238	äDOSE(j)			1.964E-09	1.949E-09	1.612E-09	1.549E-09	1.323E-09	8.911E-10	2.723E-10	3.775E-11	7.255E-13
0Ra-226	Pu-238	4.196E-08		1.102E-22	1.650E-21	6.951E-18	1.177E-17	5.134E-17	3.675E-16	4.386E-15	2.445E-14	1.148E-13
Ra-226	Pu-238	5.538E-14		1.440E-28	2.179E-27	9.176E-24	1.554E-23	6.777E-23	4.851E-22	5.789E-21	3.227E-20	1.515E-19
Ra-226	Pu-238	7.972E-16		0.000E+00	3.104E-29	1.321E-25	2.237E-25	9.754E-25	6.982E-24	8.333E-23	4.645E-22	2.181E-21
Ra-226	Th-230	4.196E-08		5.103E-11	1.530E-10	2.588E-09	3.092E-09	5.097E-09	1.003E-08	2.420E-08	4.582E-08	8.245E-08
Ra-226	Th-230	5.538E-14		6.735E-17	2.020E-16	3.416E-15	4.082E-15	6.728E-15	1.324E-14	3.195E-14	6.048E-14	1.088E-13
Ra-226	Th-230	7.972E-16		9.695E-19	2.908E-18	4.917E-17	5.875E-17	9.685E-17	1.906E-16	4.598E-16	8.705E-16	1.567E-15
Ra-226	U-234	4.196E-08		1.564E-16	1.095E-15	3.040E-13	4.346E-13	1.188E-12	4.670E-12	2.838E-11	1.093E-10	4.069E-10
Ra-226	U-234	5.538E-14		2.065E-22	1.445E-21	4.013E-19	5.737E-19	1.568E-18	6.164E-18	3.746E-17	1.442E-16	5.371E-16
Ra-226	U-234	7.972E-16		2.972E-24	2.080E-23	5.777E-21	8.258E-21	2.257E-20	8.873E-20	5.392E-19	2.076E-18	7.731E-18
Ra-226	U-238	6.713E-11		1.766E-25	2.649E-24	1.169E-20	1.999E-20	9.051E-20	7.094E-19	1.080E-17	8.386E-17	6.352E-16
Ra-226	U-238	8.862E-17		0.000E+00	0.000E+00	1.543E-26	2.638E-26	1.195E-25	9.363E-25	1.426E-23	1.107E-22	8.384E-22
Ra-226	U-238	1.276E-18		0.000E+00	0.000E+00	2.198E-28	3.758E-28	1.720E-27	1.348E-26	2.053E-25	1.593E-24	1.207E-23
Ra-226	U-238	4.189E-08		1.102E-22	1.653E-21	7.294E-18	1.247E-17	5.648E-17	4.426E-16	6.742E-15	5.233E-14	3.964E-13
Ra-226	U-238	5.530E-14		1.440E-28	2.182E-27	9.628E-24	1.646E-23	7.455E-23	5.843E-22	8.899E-21	6.908E-20	5.232E-19
Ra-226	U-238	7.959E-16		0.000E+00	3.109E-29	1.386E-25	2.370E-25	1.073E-24	8.410E-24	1.281E-22	9.943E-22	7.531E-21
Ra-226	äDOSE(j)			5.103E-11	1.531E-10	2.588E-09	3.093E-09	5.098E-09	1.004E-08	2.423E-08	4.592E-08	8.286E-08
0Pu-238	Pu-238	7.972E-16		3.732E-17	3.702E-17	3.063E-17	2.944E-17	2.514E-17	1.693E-17	5.174E-18	7.172E-19	1.379E-20
Pu-238	Pu-238	2.000E-07		9.362E-09	9.288E-09	7.684E-09	7.386E-09	6.306E-09	4.247E-09	1.298E-09	1.799E-10	3.458E-12
Pu-238	äDOSE(j)			9.362E-09	9.288E-09	7.684E-09	7.386E-09	6.306E-09	4.247E-09	1.298E-09	1.799E-10	3.458E-12
0Ra-226	Pu-238	2.000E-07		6.177E-24	9.249E-23	3.895E-19	6.597E-19	2.877E-18	2.059E-17	2.457E-16	1.370E-15	6.431E-15
Ra-226	Pu-238	3.800E-15		0.000E+00	0.000E+00	7.400E-27	1.253E-26	5.465E-26	3.912E-25	4.669E-24	2.603E-23	1.222E-22
Ra-226	Th-230	2.000E-07		2.859E-12	8.576E-12	1.450E-10	1.733E-10	2.856E-10	5.622E-10	1.356E-09	2.567E-09	4.620E-09
Ra-226	Th-230	2.640E-13		3.774E-18	1.132E-17	1.914E-16	2.287E-16	3.770E-16	7.421E-16	1.790E-15	3.389E-15	6.099E-15

Ra-226	Th-230	3.800E-15	5.433E-20	1.629E-19	2.755E-18	3.292E-18	5.427E-18	1.068E-17	2.577E-17	4.878E-17	8.779E-17
Ra-226	U-234	2.000E-07	8.764E-18	6.134E-17	1.704E-14	2.435E-14	6.656E-14	2.617E-13	1.590E-12	6.123E-12	2.280E-11
Ra-226	U-234	2.640E-13	1.157E-23	8.097E-23	2.249E-20	3.215E-20	8.786E-20	3.454E-19	2.099E-18	8.082E-18	3.010E-17

Individual Nuclide Dose Summed Over All Pathways

Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	DOSE(j,t), mrem/yr									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Ra-226	U-234	3.800E-15	1.665E-25	1.166E-24	3.237E-22	4.627E-22	1.265E-21	4.972E-21	3.022E-20	1.163E-19	4.332E-19	
Ra-226	U-238	3.200E-10	9.898E-27	1.485E-25	6.550E-22	1.120E-21	5.071E-21	3.975E-20	6.054E-19	4.699E-18	3.559E-17	
Ra-226	U-238	4.224E-16	0.000E+00	0.000E+00	8.645E-28	1.478E-27	6.694E-27	5.247E-26	7.991E-25	6.203E-24	4.698E-23	
Ra-226	U-238	6.080E-18	0.000E+00	0.000E+00	1.087E-29	1.858E-29	9.635E-29	7.552E-28	1.150E-26	8.928E-26	6.763E-25	
Ra-226	U-238	1.997E-07	6.177E-24	9.264E-23	4.087E-19	6.989E-19	3.165E-18	2.480E-17	3.778E-16	2.932E-15	2.221E-14	
Ra-226	U-238	2.636E-13	0.000E+00	1.223E-28	5.395E-25	9.225E-25	4.177E-24	3.274E-23	4.987E-22	3.871E-21	2.932E-20	
Ra-226	U-238	3.794E-15	0.000E+00	0.000E+00	7.765E-27	1.328E-26	6.012E-26	4.713E-25	7.178E-24	5.571E-23	4.220E-22	
Ra-226	äDOSE(j)		2.859E-12	8.576E-12	1.450E-10	1.733E-10	2.857E-10	5.625E-10	1.358E-09	2.573E-09	4.643E-09	
0Pu-238	Pu-238	2.640E-13	1.236E-14	1.226E-14	1.014E-14	9.749E-15	8.324E-15	5.607E-15	1.713E-15	2.375E-16	4.565E-18	
Pu-238	Pu-238	3.800E-15	1.779E-16	1.765E-16	1.460E-16	1.403E-16	1.198E-16	8.070E-17	2.466E-17	3.419E-18	6.571E-20	
Pu-238	äDOSE(j)		1.254E-14	1.244E-14	1.029E-14	9.890E-15	8.444E-15	5.687E-15	1.738E-15	2.409E-16	4.631E-18	
0Ra-226	Pu-238	2.640E-13	0.000E+00	1.221E-28	5.142E-25	8.708E-25	3.797E-24	2.718E-23	3.244E-22	1.808E-21	8.489E-21	
0Pu-239	Pu-239	5.901E-04	3.055E-05	3.055E-05	3.053E-05	3.052E-05	3.050E-05	3.046E-05	3.033E-05	3.011E-05	2.968E-05	
Pu-239	Pu-239	1.633E-06	8.455E-08	8.454E-08	8.449E-08	8.447E-08	8.442E-08	8.430E-08	8.394E-08	8.334E-08	8.215E-08	
Pu-239	äDOSE(j)		3.063E-05	3.063E-05	3.061E-05	3.061E-05	3.059E-05	3.054E-05	3.041E-05	3.020E-05	2.976E-05	
0U-235	Pu-239	5.901E-04	4.914E-14	1.474E-13	2.505E-12	2.996E-12	4.959E-12	9.862E-12	2.453E-11	4.883E-11	9.691E-11	
U-235	Pu-239	1.633E-06	1.360E-16	4.080E-16	6.933E-15	8.292E-15	1.372E-14	2.729E-14	6.788E-14	1.351E-13	2.682E-13	
U-235	Pu-239	8.257E-06	6.875E-16	2.063E-15	3.505E-14	4.192E-14	6.939E-14	1.380E-13	3.432E-13	6.832E-13	1.356E-12	
U-235	Pu-239	2.285E-08	1.903E-18	5.708E-18	9.701E-17	1.160E-16	1.920E-16	3.819E-16	9.499E-16	1.891E-15	3.753E-15	
U-235	Pu-239	4.954E-10	4.125E-20	1.238E-19	2.103E-18	2.515E-18	4.164E-18	8.280E-18	2.059E-17	4.100E-17	8.136E-17	
U-235	Pu-239	1.371E-12	1.142E-22	3.425E-22	5.821E-21	6.962E-21	1.152E-20	2.292E-20	5.699E-20	1.135E-19	2.252E-19	
U-235	Pu-239	9.829E-01	8.184E-11	2.455E-10	4.172E-09	4.990E-09	8.260E-09	1.643E-08	4.086E-08	8.133E-08	1.614E-07	
U-235	Pu-239	2.720E-03	2.265E-13	6.795E-13	1.155E-11	1.381E-11	2.286E-11	4.546E-11	1.131E-10	2.251E-10	4.468E-10	
U-235	Pu-239	1.375E-02	1.145E-12	3.435E-12	5.838E-11	6.983E-11	1.156E-10	2.298E-10	5.717E-10	1.138E-09	2.259E-09	
U-235	Pu-239	3.806E-05	3.169E-15	9.508E-15	1.616E-13	1.933E-13	3.199E-13	6.361E-13	1.582E-12	3.150E-12	6.251E-12	
U-235	Pu-239	8.252E-07	6.871E-17	2.061E-16	3.503E-15	4.190E-15	6.935E-15	1.379E-14	3.430E-14	6.829E-14	1.355E-13	
U-235	Pu-239	2.284E-09	1.902E-19	5.705E-19	9.695E-18	1.160E-17	1.919E-17	3.817E-17	9.493E-17	1.890E-16	3.751E-16	
U-235	U-235	9.835E-01	1.664E-01	1.664E-01	1.663E-01	1.663E-01	1.663E-01	1.663E-01	1.663E-01	1.663E-01	1.663E-01	
U-235	äDOSE(j)		1.664E-01	1.664E-01	1.663E-01	1.663E-01	1.663E-01	1.663E-01	1.663E-01	1.663E-01	1.663E-01	
0Pa-231	Pu-239	5.901E-04	2.735E-19	1.915E-18	5.335E-16	7.631E-16	2.091E-15	8.275E-15	5.128E-14	2.039E-13	8.078E-13	
Pa-231	Pu-239	1.633E-06	7.571E-22	5.299E-21	1.476E-18	2.112E-18	5.787E-18	2.290E-17	1.419E-16	5.642E-16	2.236E-15	
Pa-231	Pu-239	8.257E-06	3.827E-21	2.679E-20	7.464E-18	1.068E-17	2.926E-17	1.158E-16	7.175E-16	2.852E-15	1.130E-14	
Pa-231	Pu-239	2.285E-08	1.059E-23	7.415E-23	2.066E-20	2.955E-20	8.098E-20	3.204E-19	1.986E-18	7.894E-18	3.128E-17	
Pa-231	Pu-239	4.954E-10	2.297E-25	1.608E-24	4.479E-22	6.407E-22	1.756E-21	6.947E-21	4.305E-20	1.712E-19	6.782E-19	
Pa-231	Pu-239	1.371E-12	6.352E-28	4.446E-27	1.240E-24	1.773E-24	4.859E-24	1.923E-23	1.192E-22	4.737E-22	1.877E-21	
Pa-231	Pu-239	9.829E-01	4.556E-16	3.189E-15	8.886E-13	1.271E-12	3.483E-12	1.378E-11	8.541E-11	3.396E-10	1.346E-09	
Pa-231	Pu-239	2.720E-03	1.261E-18	8.827E-18	2.459E-15	3.518E-15	9.640E-15	3.815E-14	2.364E-13	9.398E-13	3.724E-12	
Pa-231	Pu-239	1.375E-02	6.375E-18	4.463E-17	1.243E-14	1.778E-14	4.874E-14	1.929E-13	1.195E-12	4.751E-12	1.883E-11	
Pa-231	Pu-239	3.806E-05	1.764E-20	1.235E-19	3.441E-17	4.922E-17	1.349E-16	5.338E-16	3.308E-15	1.315E-14	5.211E-14	
Pa-231	Pu-239	8.252E-07	3.825E-22	2.678E-21	7.460E-19	1.067E-18	2.924E-18	1.157E-17	7.171E-17	2.851E-16	1.130E-15	

Pa-231	Pu-239	2.284E-09	1.059E-24	7.411E-24	2.065E-21	2.953E-21	8.094E-21	3.203E-20	1.985E-19	7.890E-19	3.127E-18
Pa-231	U-235	9.835E-01	1.389E-06	4.167E-06	7.083E-05	8.471E-05	1.402E-04	2.789E-04	6.941E-04	1.383E-03	2.750E-03
Pa-231	U-235	2.722E-03	3.845E-09	1.153E-08	1.960E-07	2.344E-07	3.881E-07	7.719E-07	1.921E-06	3.828E-06	7.611E-06
Pa-231	U-235	1.376E-02	1.944E-08	5.831E-08	9.910E-07	1.185E-06	1.962E-06	3.903E-06	9.712E-06	1.935E-05	3.848E-05

Individual Nuclide Dose Summed Over All Pathways

Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	DOSE(j,t), mrem/yr									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Pa-231	U-235	3.809E-05	5.379E-11	1.614E-10	2.743E-09	3.280E-09	5.430E-09	1.080E-08	2.688E-08	5.356E-08	1.065E-07	
Pa-231	U-235	8.257E-07	1.166E-12	3.499E-12	5.947E-11	7.112E-11	1.177E-10	2.342E-10	5.827E-10	1.161E-09	2.309E-09	
Pa-231	U-235	2.285E-09	3.228E-15	9.684E-15	1.646E-13	1.968E-13	3.258E-13	6.481E-13	1.613E-12	3.214E-12	6.390E-12	
Pa-231	äDOSE(j)		1.412E-06	4.237E-06	7.202E-05	8.613E-05	1.426E-04	2.836E-04	7.057E-04	1.406E-03	2.796E-03	
0Ac-227	Pu-239	5.901E-04	8.715E-21	1.298E-19	4.805E-16	7.939E-16	3.157E-15	1.875E-14	1.613E-13	7.249E-13	3.058E-12	
Ac-227	Pu-239	9.829E-01	1.452E-17	2.163E-16	8.003E-13	1.322E-12	5.259E-12	3.123E-11	2.687E-10	1.207E-09	5.093E-09	
Ac-227	U-235	9.835E-01	5.892E-08	4.087E-07	8.994E-05	1.229E-04	2.840E-04	7.869E-04	2.446E-03	5.223E-03	1.073E-02	
Ac-227	äDOSE(j)		5.892E-08	4.087E-07	8.994E-05	1.229E-04	2.840E-04	7.869E-04	2.446E-03	5.223E-03	1.073E-02	
0Ac-227	Pu-239	1.633E-06	2.434E-23	3.627E-22	1.342E-18	2.217E-18	8.819E-18	5.237E-17	4.506E-16	2.025E-15	8.540E-15	
Ac-227	Pu-239	8.257E-06	1.025E-22	1.527E-21	5.651E-18	9.337E-18	3.714E-17	2.205E-16	1.897E-15	8.526E-15	3.596E-14	
Ac-227	Pu-239	2.720E-03	4.054E-20	6.041E-19	2.235E-15	3.693E-15	1.469E-14	8.723E-14	7.505E-13	3.373E-12	1.423E-11	
Ac-227	U-235	2.722E-03	1.646E-10	1.142E-09	2.512E-07	3.433E-07	7.931E-07	2.198E-06	6.832E-06	1.459E-05	2.998E-05	
Ac-227	äDOSE(j)		1.646E-10	1.142E-09	2.512E-07	3.433E-07	7.931E-07	2.198E-06	6.832E-06	1.459E-05	2.998E-05	
0Pu-239	Pu-239	8.257E-06	4.274E-07	4.274E-07	4.271E-07	4.271E-07	4.268E-07	4.262E-07	4.244E-07	4.213E-07	4.153E-07	
Pu-239	Pu-239	2.285E-08	1.183E-09	1.183E-09	1.182E-09	1.182E-09	1.181E-09	1.180E-09	1.175E-09	1.166E-09	1.149E-09	
Pu-239	äDOSE(j)		4.286E-07	4.286E-07	4.283E-07	4.282E-07	4.280E-07	4.274E-07	4.255E-07	4.225E-07	4.165E-07	
0Ac-227	Pu-239	2.285E-08	2.868E-25	4.273E-24	1.581E-20	2.612E-20	1.039E-19	6.170E-19	5.309E-18	2.385E-17	1.006E-16	
Ac-227	Pu-239	4.954E-10	7.289E-27	1.086E-25	4.019E-22	6.640E-22	2.641E-21	1.568E-20	1.349E-19	6.063E-19	2.558E-18	
Ac-227	Pu-239	3.806E-05	4.777E-22	7.117E-21	2.634E-17	4.351E-17	1.731E-16	1.028E-15	8.843E-15	3.973E-14	1.676E-13	
Ac-227	U-235	3.809E-05	1.939E-12	1.345E-11	2.960E-09	4.045E-09	9.344E-09	2.589E-08	8.050E-08	1.719E-07	3.532E-07	
Ac-227	äDOSE(j)		1.939E-12	1.345E-11	2.960E-09	4.045E-09	9.344E-09	2.589E-08	8.050E-08	1.719E-07	3.532E-07	
0Pu-239	Pu-239	4.954E-10	2.565E-11	2.565E-11	2.563E-11	2.563E-11	2.561E-11	2.557E-11	2.546E-11	2.528E-11	2.492E-11	
Pu-239	Pu-239	1.371E-12	7.098E-14	7.098E-14	7.093E-14	7.092E-14	7.088E-14	7.078E-14	7.048E-14	6.997E-14	6.897E-14	
Pu-239	äDOSE(j)		2.572E-11	2.572E-11	2.570E-11	2.570E-11	2.568E-11	2.564E-11	2.553E-11	2.535E-11	2.499E-11	
0Ac-227	Pu-239	1.371E-12	1.784E-29	3.033E-28	1.123E-24	1.855E-24	7.377E-24	4.380E-23	3.769E-22	1.694E-21	7.144E-21	
Ac-227	Pu-239	2.284E-09	3.391E-26	5.053E-25	1.870E-21	3.089E-21	1.229E-20	7.296E-20	6.278E-19	2.821E-18	1.190E-17	
Ac-227	U-235	2.285E-09	1.376E-16	9.548E-16	2.101E-13	2.872E-13	6.634E-13	1.838E-12	5.715E-12	1.220E-11	2.508E-11	
Ac-227	äDOSE(j)		1.376E-16	9.548E-16	2.101E-13	2.872E-13	6.634E-13	1.838E-12	5.715E-12	1.220E-11	2.508E-11	
0Pu-239	Pu-239	9.829E-01	5.088E-02	5.088E-02	5.085E-02	5.084E-02	5.081E-02	5.074E-02	5.052E-02	5.016E-02	4.944E-02	
Pu-239	Pu-239	2.720E-03	1.408E-04	1.408E-04	1.407E-04	1.407E-04	1.406E-04	1.404E-04	1.398E-04	1.388E-04	1.368E-04	
Pu-239	äDOSE(j)		5.102E-02	5.102E-02	5.099E-02	5.098E-02	5.095E-02	5.088E-02	5.066E-02	5.030E-02	4.958E-02	
0Pu-239	Pu-239	1.375E-02	7.120E-04	7.119E-04	7.115E-04	7.114E-04	7.109E-04	7.099E-04	7.069E-04	7.018E-04	6.918E-04	
Pu-239	Pu-239	3.806E-05	1.970E-06	1.970E-06	1.969E-06	1.969E-06	1.968E-06	1.965E-06	1.956E-06	1.942E-06	1.915E-06	
Pu-239	äDOSE(j)		7.139E-04	7.139E-04	7.134E-04	7.133E-04	7.129E-04	7.119E-04	7.088E-04	7.037E-04	6.937E-04	
0Ac-227	Pu-239	1.375E-02	1.707E-19	2.544E-18	9.413E-15	1.555E-14	6.186E-14	3.673E-13	3.160E-12	1.420E-11	5.990E-11	
Ac-227	U-235	1.376E-02	6.929E-10	4.807E-09	1.058E-06	1.446E-06	3.340E-06	9.255E-06	2.877E-05	6.144E-05	1.262E-04	
Ac-227	äDOSE(j)		6.929E-10	4.807E-09	1.058E-06	1.446E-06	3.340E-06	9.255E-06	2.877E-05	6.144E-05	1.262E-04	
0Pu-239	Pu-239	8.252E-07	4.272E-08	4.272E-08	4.269E-08	4.268E-08	4.266E-08	4.260E-08	4.241E-08	4.211E-08	4.151E-08	
Pu-239	Pu-239	2.284E-09	1.182E-10	1.182E-10	1.181E-10	1.181E-10	1.181E-10	1.179E-10	1.174E-10	1.165E-10	1.149E-10	
Pu-239	äDOSE(j)		4.284E-08	4.284E-08	4.281E-08	4.280E-08	4.278E-08	4.272E-08	4.253E-08	4.223E-08	4.162E-08	

Individual Nuclide Dose Summed Over All Pathways

Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	DOSE(j,t), mrem/yr									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Ac-227	Pu-239	8.252E-07	1.214E-23	1.809E-22	6.694E-19	1.106E-18	4.399E-18	2.612E-17	2.248E-16	1.010E-15	4.260E-15	
Ac-227	U-235	8.257E-07	4.928E-14	3.419E-13	7.523E-11	1.028E-10	2.375E-10	6.582E-10	2.046E-09	4.369E-09	8.978E-09	
Ac-227	äDOSE(j)		4.928E-14	3.419E-13	7.523E-11	1.028E-10	2.375E-10	6.582E-10	2.046E-09	4.369E-09	8.978E-09	
ORu-106	Ru-106	1.000E+00	1.951E-01	9.908E-02	8.561E-09	2.890E-10	3.756E-16	0.000E+00	0.000E+00	0.000E+00	0.000E+00	
OSr-90	Sr-90	1.000E+00	1.479E-02	1.444E-02	8.103E-03	7.184E-03	4.438E-03	1.332E-03	3.597E-05	8.749E-08	5.174E-13	
OTc-99	Tc-99	1.000E+00	1.562E-04	1.562E-04	1.559E-04	1.559E-04	1.556E-04	1.551E-04	1.533E-04	1.504E-04	1.448E-04	
0Th-228	Th-228	1.000E+00	1.665E+00	1.158E+00	1.925E-04	3.141E-05	2.226E-08	2.977E-16	0.000E+00	0.000E+00	0.000E+00	
Th-228	Th-232	1.000E+00	1.284E-02	7.877E-02	1.847E+00	1.909E+00	1.978E+00	1.984E+00	1.984E+00	1.984E+00	1.984E+00	
Th-228	äDOSE(j)		1.677E+00	1.237E+00	1.847E+00	1.909E+00	1.978E+00	1.984E+00	1.984E+00	1.984E+00	1.984E+00	
0Th-230	Th-230	1.319E-06	5.849E-08	5.849E-08	5.848E-08	5.847E-08	5.846E-08	5.844E-08	5.836E-08	5.822E-08	5.795E-08	
Th-230	Th-230	1.899E-08	8.419E-10	8.419E-10	8.417E-10	8.417E-10	8.415E-10	8.411E-10	8.400E-10	8.380E-10	8.342E-10	
Th-230	äDOSE(j)		5.933E-08	5.933E-08	5.932E-08	5.932E-08	5.930E-08	5.928E-08	5.920E-08	5.906E-08	5.879E-08	
0Th-230	Th-230	2.100E-04	9.307E-06	9.307E-06	9.305E-06	9.305E-06	9.303E-06	9.299E-06	9.286E-06	9.264E-06	9.222E-06	
Th-230	Th-230	2.771E-10	1.229E-11	1.229E-11	1.228E-11	1.228E-11	1.228E-11	1.227E-11	1.226E-11	1.223E-11	1.217E-11	
Th-230	äDOSE(j)		9.307E-06	9.307E-06	9.305E-06	9.305E-06	9.303E-06	9.299E-06	9.286E-06	9.264E-06	9.222E-06	
0Th-230	Th-230	3.989E-12	1.768E-13	1.768E-13	1.768E-13	1.768E-13	1.768E-13	1.767E-13	1.764E-13	1.760E-13	1.752E-13	
Th-230	Th-230	1.998E-04	8.855E-06	8.855E-06	8.853E-06	8.853E-06	8.851E-06	8.847E-06	8.835E-06	8.814E-06	8.774E-06	
Th-230	äDOSE(j)		8.855E-06	8.855E-06	8.853E-06	8.853E-06	8.851E-06	8.847E-06	8.835E-06	8.814E-06	8.774E-06	
0Th-230	Th-230	2.637E-10	1.169E-11	1.169E-11	1.169E-11	1.169E-11	1.168E-11	1.168E-11	1.166E-11	1.164E-11	1.158E-11	
Th-230	Th-230	3.795E-12	1.682E-13	1.682E-13	1.682E-13	1.682E-13	1.682E-13	1.681E-13	1.679E-13	1.675E-13	1.667E-13	
Th-230	äDOSE(j)		1.186E-11	1.186E-11	1.185E-11	1.185E-11	1.185E-11	1.185E-11	1.183E-11	1.180E-11	1.175E-11	
0Th-230	Th-230	4.196E-08	1.860E-09	1.860E-09	1.860E-09	1.859E-09	1.859E-09	1.859E-09	1.858E-09	1.856E-09	1.851E-09	
Th-230	Th-230	5.538E-14	2.455E-15	2.455E-15	2.455E-15	2.454E-15	2.454E-15	2.453E-15	2.449E-15	2.444E-15	2.433E-15	
Th-230	äDOSE(j)		1.860E-09	1.860E-09	1.860E-09	1.859E-09	1.859E-09	1.858E-09	1.856E-09	1.851E-09	1.843E-09	
0Th-230	Th-230	7.972E-16	3.534E-17	3.534E-17	3.533E-17	3.533E-17	3.532E-17	3.531E-17	3.526E-17	3.518E-17	3.502E-17	
Th-230	Th-230	2.000E-07	8.866E-09	8.866E-09	8.864E-09	8.863E-09	8.862E-09	8.858E-09	8.845E-09	8.825E-09	8.785E-09	
Th-230	äDOSE(j)		8.866E-09	8.866E-09	8.864E-09	8.863E-09	8.862E-09	8.858E-09	8.845E-09	8.825E-09	8.785E-09	
0Th-230	Th-230	2.640E-13	1.170E-14	1.170E-14	1.170E-14	1.170E-14	1.170E-14	1.169E-14	1.168E-14	1.165E-14	1.160E-14	
Th-230	Th-230	3.800E-15	1.684E-16	1.684E-16	1.684E-16	1.684E-16	1.684E-16	1.683E-16	1.681E-16	1.677E-16	1.669E-16	
Th-230	äDOSE(j)		1.187E-14	1.187E-14	1.187E-14	1.187E-14	1.187E-14	1.186E-14	1.184E-14	1.182E-14	1.176E-14	
0Th-232	Th-232	1.000E+00	4.770E-02	4.770E-02	4.770E-02	4.770E-02	4.770E-02	4.770E-02	4.770E-02	4.770E-02	4.770E-02	
ORa-228	Th-232	1.000E+00	7.066E-02	2.012E-01	1.164E+00	1.189E+00	1.217E+00	1.220E+00	1.220E+00	1.220E+00	1.220E+00	
OU-234	U-234	1.319E-06	1.355E-08	1.355E-08	1.355E-08	1.355E-08	1.355E-08	1.355E-08	1.354E-08	1.353E-08	1.351E-08	
U-234	U-234	1.899E-08	1.951E-10	1.951E-10	1.951E-10	1.951E-10	1.950E-10	1.950E-10	1.949E-10	1.948E-10	1.945E-10	
U-234	äDOSE(j)		1.375E-08	1.375E-08	1.375E-08	1.375E-08	1.375E-08	1.374E-08	1.374E-08	1.373E-08	1.371E-08	

Individual Nuclide Dose Summed Over All Pathways

Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	DOSE(j,t), mrem/yr									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
U-234	U-234	2.100E-04		2.156E-06	2.156E-06	2.156E-06	2.156E-06	2.156E-06	2.156E-06	2.155E-06	2.153E-06	2.150E-06
U-234	U-234	2.771E-10		2.847E-12	2.847E-12	2.846E-12	2.846E-12	2.846E-12	2.846E-12	2.844E-12	2.842E-12	2.838E-12
U-234	äDOSE(j)			2.156E-06	2.156E-06	2.156E-06	2.156E-06	2.156E-06	2.156E-06	2.155E-06	2.153E-06	2.150E-06
0U-234	U-234	3.989E-12		4.097E-14	4.097E-14	4.097E-14	4.097E-14	4.097E-14	4.096E-14	4.094E-14	4.091E-14	4.085E-14
U-234	U-234	1.998E-04		2.052E-06	2.052E-06	2.052E-06	2.052E-06	2.051E-06	2.051E-06	2.050E-06	2.049E-06	2.046E-06
U-234	äDOSE(j)			2.052E-06	2.052E-06	2.052E-06	2.052E-06	2.051E-06	2.051E-06	2.050E-06	2.049E-06	2.046E-06
0U-234	U-234	2.637E-10		2.708E-12	2.708E-12	2.708E-12	2.708E-12	2.708E-12	2.707E-12	2.706E-12	2.704E-12	2.700E-12
U-234	U-234	3.795E-12		3.898E-14	3.898E-14	3.898E-14	3.898E-14	3.898E-14	3.897E-14	3.895E-14	3.892E-14	3.887E-14
U-234	äDOSE(j)			2.747E-12	2.747E-12	2.747E-12	2.747E-12	2.747E-12	2.746E-12	2.745E-12	2.743E-12	2.739E-12
0U-234	U-234	4.196E-08		4.310E-10	4.310E-10	4.309E-10	4.309E-10	4.309E-10	4.308E-10	4.306E-10	4.303E-10	4.297E-10
U-234	U-234	5.538E-14		5.689E-16	5.689E-16	5.688E-16	5.688E-16	5.688E-16	5.687E-16	5.684E-16	5.680E-16	5.671E-16
U-234	äDOSE(j)			4.310E-10	4.310E-10	4.309E-10	4.309E-10	4.309E-10	4.308E-10	4.306E-10	4.303E-10	4.297E-10
0U-234	U-234	7.972E-16		8.188E-18	8.188E-18	8.188E-18	8.187E-18	8.187E-18	8.186E-18	8.182E-18	8.176E-18	8.163E-18
U-234	U-234	2.000E-07		2.054E-09	2.054E-09	2.054E-09	2.054E-09	2.054E-09	2.054E-09	2.053E-09	2.051E-09	2.048E-09
U-234	äDOSE(j)			2.054E-09	2.054E-09	2.054E-09	2.054E-09	2.054E-09	2.054E-09	2.053E-09	2.051E-09	2.048E-09
0U-234	U-234	2.640E-13		2.712E-15	2.712E-15	2.711E-15	2.711E-15	2.711E-15	2.711E-15	2.710E-15	2.707E-15	2.703E-15
U-234	U-234	3.800E-15		3.903E-17	3.903E-17	3.903E-17	3.903E-17	3.902E-17	3.902E-17	3.900E-17	3.897E-17	3.891E-17
U-234	äDOSE(j)			2.751E-15	2.751E-15	2.750E-15	2.750E-15	2.750E-15	2.750E-15	2.749E-15	2.746E-15	2.742E-15
0U-235	U-235	2.722E-03		4.604E-04	4.604E-04	4.604E-04	4.604E-04	4.604E-04	4.604E-04	4.604E-04	4.604E-04	4.603E-04
U-235	U-235	1.376E-02		2.328E-03	2.328E-03	2.328E-03	2.328E-03	2.328E-03	2.328E-03	2.328E-03	2.327E-03	2.327E-03
U-235	äDOSE(j)			2.788E-03	2.788E-03	2.788E-03	2.788E-03	2.788E-03	2.788E-03	2.788E-03	2.788E-03	2.787E-03
0U-235	U-235	3.809E-05		6.442E-06	6.442E-06	6.442E-06	6.442E-06	6.442E-06	6.442E-06	6.442E-06	6.441E-06	6.441E-06
U-235	U-235	8.257E-07		1.397E-07	1.397E-07	1.397E-07	1.397E-07	1.397E-07	1.397E-07	1.397E-07	1.397E-07	1.396E-07
U-235	äDOSE(j)			6.582E-06	6.582E-06	6.582E-06	6.582E-06	6.582E-06	6.582E-06	6.581E-06	6.581E-06	6.580E-06
0U-235	U-235	2.285E-09		3.865E-10	3.865E-10	3.865E-10	3.865E-10	3.865E-10	3.865E-10	3.865E-10	3.865E-10	3.865E-10
0U-238	U-238	5.450E-07		5.026E-09	5.026E-09	5.026E-09	5.026E-09	5.025E-09	5.025E-09	5.025E-09	5.025E-09	5.025E-09
U-238	U-238	1.599E-03		2.895E-03	2.895E-03	2.895E-03	2.895E-03	2.895E-03	2.895E-03	2.894E-03	2.894E-03	2.894E-03
U-238	äDOSE(j)			2.895E-03	2.895E-03	2.895E-03	2.895E-03	2.895E-03	2.895E-03	2.894E-03	2.894E-03	2.894E-03
0U-238	U-238	2.111E-09		3.821E-09	3.821E-09	3.821E-09	3.821E-09	3.821E-09	3.821E-09	3.821E-09	3.820E-09	3.820E-09
U-238	U-238	3.039E-11		5.500E-11	5.500E-11	5.500E-11	5.500E-11	5.500E-11	5.500E-11	5.499E-11	5.499E-11	5.499E-11
U-238	äDOSE(j)			3.876E-09	3.876E-09	3.876E-09	3.876E-09	3.876E-09	3.876E-09	3.876E-09	3.875E-09	3.875E-09
0U-238	U-238	3.359E-07		6.080E-07	6.080E-07	6.080E-07	6.080E-07	6.080E-07	6.080E-07	6.080E-07	6.079E-07	6.079E-07
U-238	U-238	4.434E-13		8.025E-13	8.025E-13	8.025E-13	8.025E-13	8.025E-13	8.025E-13	8.025E-13	8.025E-13	8.024E-13
U-238	äDOSE(j)			6.080E-07	6.080E-07	6.080E-07	6.080E-07	6.080E-07	6.080E-07	6.080E-07	6.079E-07	6.079E-07
0U-238	U-238	6.383E-15		1.155E-14	1.155E-14	1.155E-14	1.155E-14	1.155E-14	1.155E-14	1.155E-14	1.155E-14	1.155E-14
U-238	U-238	3.196E-07		5.785E-07	5.785E-07	5.785E-07	5.785E-07	5.784E-07	5.784E-07	5.784E-07	5.784E-07	5.783E-07
U-238	äDOSE(j)			5.785E-07	5.785E-07	5.785E-07	5.785E-07	5.784E-07	5.784E-07	5.784E-07	5.784E-07	5.783E-07

Individual Nuclide Dose Summed Over All Pathways

Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	DOSE(j,t), mrem/yr									
(j)	(i)		t= 0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03	
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
U-238	U-238	4.219E-13	7.636E-13	7.636E-13	7.636E-13	7.636E-13	7.636E-13	7.635E-13	7.635E-13	7.635E-13	7.634E-13	
U-238	U-238	6.073E-15	1.099E-14	1.099E-14	1.099E-14	1.099E-14	1.099E-14	1.099E-14	1.099E-14	1.099E-14	1.099E-14	
U-238	äDOSE(j)		7.746E-13	7.746E-13	7.745E-13	7.745E-13	7.745E-13	7.745E-13	7.745E-13	7.745E-13	7.744E-13	
0U-238	U-238	6.713E-11	1.215E-10	1.215E-10	1.215E-10	1.215E-10	1.215E-10	1.215E-10	1.215E-10	1.215E-10	1.215E-10	
U-238	U-238	8.862E-17	1.604E-16	1.604E-16	1.604E-16	1.604E-16	1.604E-16	1.604E-16	1.604E-16	1.604E-16	1.604E-16	
U-238	äDOSE(j)		1.215E-10	1.215E-10	1.215E-10	1.215E-10	1.215E-10	1.215E-10	1.215E-10	1.215E-10	1.215E-10	
0U-238	U-238	1.276E-18	2.309E-18	2.309E-18	2.309E-18	2.309E-18	2.308E-18	2.308E-18	2.308E-18	2.308E-18	2.308E-18	
U-238	U-238	3.200E-10	5.792E-10	5.792E-10	5.792E-10	5.792E-10	5.791E-10	5.791E-10	5.791E-10	5.791E-10	5.790E-10	
U-238	äDOSE(j)		5.792E-10	5.792E-10	5.792E-10	5.792E-10	5.791E-10	5.791E-10	5.791E-10	5.791E-10	5.790E-10	
0U-238	U-238	4.224E-16	7.645E-16	7.645E-16	7.645E-16	7.645E-16	7.645E-16	7.645E-16	7.644E-16	7.644E-16	7.643E-16	
U-238	U-238	6.080E-18	1.100E-17	1.100E-17	1.100E-17	1.100E-17	1.100E-17	1.100E-17	1.100E-17	1.100E-17	1.100E-17	
U-238	äDOSE(j)		7.755E-16	7.755E-16	7.755E-16	7.755E-16	7.755E-16	7.755E-16	7.755E-16	7.755E-16	7.753E-16	
0U-238	U-238	9.980E-01	4.185E-02	4.185E-02	4.185E-02	4.185E-02	4.185E-02	4.185E-02	4.185E-02	4.184E-02	4.184E-02	
U-238	U-238	1.317E-06	5.524E-08	5.524E-08	5.524E-08	5.524E-08	5.524E-08	5.524E-08	5.524E-08	5.523E-08	5.523E-08	
U-238	äDOSE(j)		4.185E-02	4.185E-02	4.185E-02	4.185E-02	4.185E-02	4.185E-02	4.185E-02	4.184E-02	4.184E-02	
0U-238	U-238	1.896E-08	7.951E-10	7.951E-10	7.951E-10	7.951E-10	7.951E-10	7.951E-10	7.951E-10	7.950E-10	7.950E-10	
U-238	U-238	2.096E-04	8.790E-06	8.790E-06	8.790E-06	8.790E-06	8.790E-06	8.790E-06	8.789E-06	8.789E-06	8.788E-06	
U-238	äDOSE(j)		8.791E-06	8.791E-06	8.791E-06	8.791E-06	8.791E-06	8.791E-06	8.790E-06	8.790E-06	8.789E-06	
0U-238	U-238	2.767E-10	1.160E-11	1.160E-11	1.160E-11	1.160E-11	1.160E-11	1.160E-11	1.160E-11	1.160E-11	1.160E-11	
U-238	U-238	3.983E-12	1.670E-13	1.670E-13	1.670E-13	1.670E-13	1.670E-13	1.670E-13	1.670E-13	1.670E-13	1.670E-13	
U-238	äDOSE(j)		1.177E-11	1.177E-11	1.177E-11	1.177E-11	1.177E-11	1.177E-11	1.177E-11	1.177E-11	1.177E-11	
0U-238	U-238	1.994E-04	8.363E-06	8.363E-06	8.363E-06	8.363E-06	8.363E-06	8.363E-06	8.362E-06	8.362E-06	8.361E-06	
U-238	U-238	2.633E-10	1.104E-11	1.104E-11	1.104E-11	1.104E-11	1.104E-11	1.104E-11	1.104E-11	1.104E-11	1.104E-11	
U-238	äDOSE(j)		8.363E-06	8.363E-06	8.363E-06	8.363E-06	8.363E-06	8.363E-06	8.362E-06	8.362E-06	8.361E-06	
0U-238	U-238	3.789E-12	1.589E-13	1.589E-13	1.589E-13	1.589E-13	1.589E-13	1.589E-13	1.589E-13	1.589E-13	1.589E-13	
U-238	U-238	4.189E-08	1.757E-09	1.757E-09	1.757E-09	1.757E-09	1.757E-09	1.757E-09	1.756E-09	1.756E-09	1.756E-09	
U-238	äDOSE(j)		1.757E-09	1.757E-09	1.757E-09	1.757E-09	1.757E-09	1.757E-09	1.757E-09	1.757E-09	1.756E-09	
0U-238	U-238	5.530E-14	2.319E-15	2.319E-15	2.319E-15	2.319E-15	2.319E-15	2.319E-15	2.319E-15	2.318E-15	2.318E-15	
U-238	U-238	7.959E-16	3.337E-17	3.337E-17	3.337E-17	3.337E-17	3.337E-17	3.337E-17	3.337E-17	3.337E-17	3.337E-17	
U-238	äDOSE(j)		2.352E-15	2.352E-15	2.352E-15	2.352E-15	2.352E-15	2.352E-15	2.352E-15	2.352E-15	2.352E-15	
0U-238	U-238	1.997E-07	8.373E-09	8.373E-09	8.373E-09	8.373E-09	8.373E-09	8.373E-09	8.373E-09	8.372E-09	8.371E-09	
U-238	U-238	2.636E-13	1.105E-14	1.105E-14	1.105E-14	1.105E-14	1.105E-14	1.105E-14	1.105E-14	1.105E-14	1.105E-14	
U-238	äDOSE(j)		8.373E-09	8.373E-09	8.373E-09	8.373E-09	8.373E-09	8.373E-09	8.373E-09	8.372E-09	8.371E-09	
0U-238	U-238	3.794E-15	1.591E-16	1.591E-16	1.591E-16	1.591E-16	1.591E-16	1.591E-16	1.591E-16	1.591E-16	1.591E-16	
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii

THF(i) is the thread fraction of the parent nuclide.

Individual Nuclide Soil Concentration
 Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	S(j,t), pCi/g									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Am-241	Am-241	1.000E+00		1.000E+01	9.984E+00	9.607E+00	9.530E+00	9.229E+00	8.518E+00	6.696E+00	4.484E+00	2.010E+00
0Np-237	Am-241	1.000E+00		0.000E+00	3.230E-06	7.922E-05	9.469E-05	1.553E-04	2.987E-04	6.658E-04	1.112E-03	1.610E-03
Np-237	Np-237	1.000E+00		1.000E+01	1.000E+01	1.000E+01	1.000E+01	1.000E+01	1.000E+01	9.999E+00	9.998E+00	9.996E+00
Np-237	äS(j):			1.000E+01	1.000E+01	1.000E+01	1.000E+01	1.000E+01	1.000E+01	1.000E+01	9.999E+00	9.998E+00
0U-233	Am-241	1.000E+00		0.000E+00	7.034E-12	4.340E-09	6.234E-09	1.713E-08	6.675E-08	3.864E-07	1.369E-06	4.396E-06
U-233	Np-237	1.000E+00		0.000E+00	4.354E-05	1.088E-03	1.306E-03	2.177E-03	4.353E-03	1.088E-02	2.174E-02	4.343E-02
U-233	äS(j):			0.000E+00	4.354E-05	1.088E-03	1.306E-03	2.177E-03	4.353E-03	1.088E-02	2.174E-02	4.344E-02
0Th-229	Am-241	1.000E+00		0.000E+00	2.215E-16	3.425E-12	5.906E-12	2.711E-11	2.124E-10	3.121E-09	2.263E-08	1.510E-07
Th-229	Np-237	1.000E+00		0.000E+00	2.056E-09	1.284E-06	1.848E-06	5.131E-06	2.049E-05	1.274E-04	5.055E-04	1.989E-03
Th-229	äS(j):			0.000E+00	2.056E-09	1.284E-06	1.848E-06	5.131E-06	2.049E-05	1.274E-04	5.056E-04	1.989E-03
0Co-60	Co-60	1.000E+00		1.000E+01	8.768E+00	3.735E-01	1.935E-01	1.395E-02	1.947E-05	5.286E-14	2.795E-28	0.000E+00
0Cs-134	Cs-134	1.000E+00		1.000E+01	7.148E+00	2.266E-03	4.229E-04	5.134E-07	2.636E-14	3.566E-36	0.000E+00	0.000E+00
0Cs-137	Cs-137	1.000E+00		1.000E+01	9.773E+00	5.630E+00	5.019E+00	3.170E+00	1.005E+00	3.201E-02	1.025E-04	1.050E-09
0Eu-152	Eu-152	7.210E-01		7.210E+00	6.850E+00	2.004E+00	1.552E+00	5.573E-01	4.307E-02	1.989E-05	5.485E-11	4.172E-22
Eu-152	Eu-152	2.790E-01		2.790E+00	2.651E+00	7.756E-01	6.005E-01	2.156E-01	1.667E-02	7.695E-06	2.122E-11	1.614E-22
Eu-152	äS(j):			1.000E+01	9.501E+00	2.780E+00	2.152E+00	7.729E-01	5.974E-02	2.758E-05	7.607E-11	5.787E-22
0Gd-152	Eu-152	2.790E-01		0.000E+00	1.746E-14	2.525E-13	2.744E-13	3.227E-13	3.476E-13	3.497E-13	3.497E-13	3.497E-13
0Sm-148	Eu-152	2.790E-01		0.000E+00	8.716E-31	3.774E-28	5.081E-28	1.107E-27	2.791E-27	7.981E-27	1.664E-26	3.395E-26
0Nd-144	Eu-152	2.790E-01		0.000E+00	0.000E+00	1.037E-42	1.710E-42	6.558E-42	3.592E-41	2.804E-40	1.212E-39	5.040E-39
0Eu-154	Eu-154	1.000E+00		1.000E+01	9.225E+00	1.331E+00	8.893E-01	1.772E-01	3.139E-03	1.746E-08	3.048E-17	9.290E-35
0Eu-155	Eu-155	1.000E+00		1.000E+01	8.645E+00	2.626E-01	1.268E-01	6.897E-03	4.757E-06	1.560E-15	2.435E-31	0.000E+00
0H-3	H-3	1.000E+00		1.000E+01	8.791E+00	3.987E-01	2.093E-01	1.590E-02	2.527E-05	1.015E-13	1.030E-27	0.000E+00
0I-129	I-129	1.000E+00		1.000E+01	1.000E+01	9.990E+00	9.988E+00	9.979E+00	9.959E+00	9.897E+00	9.795E+00	9.594E+00
0Mn-54	Mn-54	1.000E+00		1.000E+01	4.444E+00	1.560E-08	2.703E-10	2.434E-17	5.926E-35	0.000E+00	0.000E+00	0.000E+00
0Na-22	Na-22	1.000E+00		1.000E+01	7.661E+00	1.281E-02	3.381E-03	1.641E-05	2.694E-11	1.191E-28	0.000E+00	0.000E+00
0Ni-63	Ni-63	1.000E+00		1.000E+01	9.931E+00	8.410E+00	8.124E+00	7.074E+00	5.003E+00	1.771E+00	3.136E-01	9.833E-03
0Pu-238	Pu-238	1.850E-09		1.850E-08	1.835E-08	1.518E-08	1.459E-08	1.246E-08	8.393E-09	2.565E-09	3.556E-10	6.834E-12
Pu-238	Pu-238	9.996E-01		9.996E+00	9.917E+00	8.204E+00	7.886E+00	6.733E+00	4.535E+00	1.386E+00	1.921E-01	3.693E-03
Pu-238	äS(j):			9.996E+00	9.917E+00	8.204E+00	7.886E+00	6.733E+00	4.535E+00	1.386E+00	1.921E-01	3.693E-03
0U-234	Pu-238	9.996E-01		0.000E+00	2.811E-05	6.402E-04	7.537E-04	1.166E-03	1.950E-03	3.074E-03	3.498E-03	3.560E-03

Individual Nuclide Soil Concentration
Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	S(j,t), pCi/g									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
U-234	Pu-238	1.899E-08	0.000E+00	5.341E-13	1.216E-11	1.432E-11	2.215E-11	3.706E-11	5.841E-11	6.646E-11	6.764E-11	
U-234	Pu-238	2.100E-04	0.000E+00	5.905E-09	1.345E-07	1.583E-07	2.448E-07	4.097E-07	6.457E-07	7.348E-07	7.478E-07	
U-234	Pu-238	2.771E-10	0.000E+00	7.794E-15	1.775E-13	2.090E-13	3.232E-13	5.408E-13	8.524E-13	9.699E-13	9.871E-13	
U-234	Pu-238	3.989E-12	0.000E+00	1.122E-16	2.555E-15	3.008E-15	4.652E-15	7.784E-15	1.227E-14	1.396E-14	1.421E-14	
U-234	Pu-238	1.998E-04	0.000E+00	5.618E-09	1.279E-07	1.506E-07	2.329E-07	3.898E-07	6.144E-07	6.991E-07	7.115E-07	
U-234	Pu-238	2.637E-10	0.000E+00	7.415E-15	1.689E-13	1.988E-13	3.075E-13	5.145E-13	8.110E-13	9.228E-13	9.391E-13	
U-234	Pu-238	3.795E-12	0.000E+00	1.067E-16	2.431E-15	2.862E-15	4.426E-15	7.406E-15	1.167E-14	1.328E-14	1.352E-14	
U-234	Pu-238	4.196E-08	0.000E+00	1.180E-12	2.687E-11	3.164E-11	4.893E-11	8.187E-11	1.290E-10	1.468E-10	1.494E-10	
U-234	Pu-238	5.538E-14	0.000E+00	1.558E-18	3.547E-17	4.176E-17	6.458E-17	1.081E-16	1.703E-16	1.938E-16	1.973E-16	
U-234	Pu-238	7.972E-16	0.000E+00	2.242E-20	5.106E-19	6.011E-19	9.296E-19	1.556E-18	2.452E-18	2.790E-18	2.839E-18	
U-234	Pu-238	2.000E-07	0.000E+00	5.625E-12	1.281E-10	1.508E-10	2.332E-10	3.903E-10	6.151E-10	6.999E-10	7.123E-10	
U-234	Pu-238	2.640E-13	0.000E+00	7.424E-18	1.691E-16	1.991E-16	3.078E-16	5.151E-16	8.119E-16	9.239E-16	9.403E-16	
U-234	Pu-238	3.800E-15	0.000E+00	1.069E-19	2.434E-18	2.865E-18	4.431E-18	7.415E-18	1.169E-17	1.330E-17	1.353E-17	
U-234	U-234	9.996E-01	9.996E+00	9.996E+00	9.995E+00	9.995E+00	9.994E+00	9.993E+00	9.988E+00	9.981E+00	9.966E+00	
U-234	U-238	1.599E-03	0.000E+00	4.516E-08	1.129E-06	1.355E-06	2.258E-06	4.515E-06	1.128E-05	2.256E-05	4.508E-05	
U-234	U-238	2.111E-09	0.000E+00	5.961E-14	1.490E-12	1.788E-12	2.980E-12	5.960E-12	1.490E-11	2.978E-11	5.951E-11	
U-234	U-238	3.039E-11	0.000E+00	8.580E-16	2.145E-14	2.574E-14	4.289E-14	8.578E-14	2.144E-13	4.286E-13	8.566E-13	
U-234	U-238	3.359E-07	0.000E+00	9.485E-12	2.371E-10	2.845E-10	4.742E-10	9.483E-10	2.370E-09	4.739E-09	9.470E-09	
U-234	U-238	4.434E-13	0.000E+00	1.252E-17	3.130E-16	3.756E-16	6.259E-16	1.252E-15	3.129E-15	6.255E-15	1.250E-14	
U-234	U-238	6.383E-15	0.000E+00	1.802E-19	4.505E-18	5.406E-18	9.010E-18	1.802E-17	4.503E-17	9.003E-17	1.799E-16	
U-234	U-238	3.196E-07	0.000E+00	9.024E-12	2.256E-10	2.707E-10	4.512E-10	9.023E-10	2.255E-09	4.508E-09	9.010E-09	
U-234	U-238	4.219E-13	0.000E+00	1.191E-17	2.978E-16	3.573E-16	5.955E-16	1.191E-15	2.977E-15	5.951E-15	1.189E-14	
U-234	U-238	6.073E-15	0.000E+00	1.715E-19	4.286E-18	5.143E-18	8.572E-18	1.714E-17	4.285E-17	8.566E-17	1.712E-16	
U-234	U-238	6.713E-11	0.000E+00	1.895E-15	4.738E-14	5.686E-14	9.476E-14	1.895E-13	4.737E-13	9.470E-13	1.892E-12	
U-234	U-238	8.862E-17	0.000E+00	2.502E-21	6.255E-20	7.506E-20	1.251E-19	2.502E-19	6.252E-19	1.250E-18	2.498E-18	
U-234	U-238	1.276E-18	0.000E+00	3.601E-23	9.003E-22	1.080E-21	1.801E-21	3.601E-21	9.000E-21	1.799E-20	3.596E-20	
U-234	U-238	3.200E-10	0.000E+00	9.035E-15	2.259E-13	2.710E-13	4.517E-13	9.033E-13	2.258E-12	4.514E-12	9.020E-12	
U-234	U-238	4.224E-16	0.000E+00	1.193E-20	2.981E-19	3.578E-19	5.963E-19	1.192E-18	2.980E-18	5.958E-18	1.191E-17	
U-234	U-238	6.080E-18	0.000E+00	1.717E-22	4.291E-21	5.150E-21	8.582E-21	1.716E-20	4.290E-20	8.576E-20	1.714E-19	
U-234	U-238	9.980E-01	0.000E+00	2.818E-05	7.044E-04	8.453E-04	1.409E-03	2.817E-03	7.042E-03	1.408E-02	2.813E-02	
U-234	U-238	1.317E-06	0.000E+00	3.719E-11	9.298E-10	1.116E-09	1.860E-09	3.719E-09	9.295E-09	1.858E-08	3.713E-08	
U-234	U-238	1.896E-08	0.000E+00	5.354E-13	1.338E-11	1.606E-11	2.677E-11	5.353E-11	1.338E-10	2.675E-10	5.345E-10	
U-234	U-238	2.096E-04	0.000E+00	5.918E-09	1.480E-07	1.775E-07	2.959E-07	5.918E-07	1.479E-06	2.957E-06	5.909E-06	
U-234	U-238	2.767E-10	0.000E+00	7.812E-15	1.953E-13	2.344E-13	3.906E-13	7.811E-13	1.952E-12	3.903E-12	7.800E-12	
U-234	U-238	3.983E-12	0.000E+00	1.125E-16	2.811E-15	3.373E-15	5.622E-15	1.124E-14	2.810E-14	5.618E-14	1.123E-13	
U-234	U-238	1.994E-04	0.000E+00	5.631E-09	1.408E-07	1.689E-07	2.815E-07	5.630E-07	1.407E-06	2.813E-06	5.622E-06	
U-234	U-238	2.633E-10	0.000E+00	7.433E-15	1.858E-13	2.230E-13	3.716E-13	7.432E-13	1.857E-12	3.713E-12	7.421E-12	
U-234	U-238	3.789E-12	0.000E+00	1.070E-16	2.675E-15	3.209E-15	5.349E-15	1.070E-14	2.674E-14	5.345E-14	1.068E-13	
U-234	U-238	4.189E-08	0.000E+00	1.183E-12	2.957E-11	3.548E-11	5.913E-11	1.183E-10	2.956E-10	5.909E-10	1.181E-09	
U-234	U-238	5.530E-14	0.000E+00	1.561E-18	3.903E-17	4.683E-17	7.806E-17	1.561E-16	3.902E-16	7.800E-16	1.559E-15	

U-234	U-238	7.959E-16	0.000E+00	2.247E-20	5.618E-19	6.741E-19	1.124E-18	2.247E-18	5.616E-18	1.123E-17	2.244E-17
U-234	U-238	1.997E-07	0.000E+00	5.638E-12	1.409E-10	1.691E-10	2.819E-10	5.637E-10	1.409E-09	2.817E-09	5.629E-09
U-234	U-238	2.636E-13	0.000E+00	7.442E-18	1.860E-16	2.232E-16	3.721E-16	7.441E-16	1.860E-15	3.718E-15	7.430E-15
U-234	U-238	3.794E-15	0.000E+00	1.071E-19	2.678E-18	3.213E-18	5.355E-18	1.071E-17	2.677E-17	5.352E-17	1.069E-16
U-234	äS(j):		9.996E+00	9.996E+00	9.996E+00	9.997E+00	9.997E+00	9.998E+00	9.998E+00	9.998E+00	9.998E+00
0Th-230	Pu-238	9.996E-01	0.000E+00	1.294E-10	7.600E-08	1.081E-07	2.855E-07	1.013E-06	4.625E-06	1.231E-05	2.853E-05
Th-230	Pu-238	1.899E-08	0.000E+00	2.459E-18	1.444E-15	2.053E-15	5.425E-15	1.926E-14	8.787E-14	2.339E-13	5.420E-13
Th-230	Pu-238	2.100E-04	0.000E+00	2.718E-14	1.596E-11	2.270E-11	5.997E-11	2.129E-10	9.714E-10	2.586E-09	5.992E-09

Individual Nuclide Soil Concentration
Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	S(j,t), pCi/g									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA		AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Th-230	Pu-238	2.771E-10		0.000E+00	3.588E-20	2.107E-17	2.996E-17	7.916E-17	2.810E-16	1.282E-15	3.414E-15	7.909E-15
Th-230	Pu-238	3.989E-12		0.000E+00	5.165E-22	3.033E-19	4.313E-19	1.139E-18	4.044E-18	1.846E-17	4.914E-17	1.138E-16
Th-230	Pu-238	1.998E-04		0.000E+00	2.586E-14	1.519E-11	2.159E-11	5.706E-11	2.025E-10	9.242E-10	2.460E-09	5.701E-09
Th-230	Pu-238	2.637E-10		0.000E+00	3.414E-20	2.005E-17	2.851E-17	7.532E-17	2.673E-16	1.220E-15	3.248E-15	7.525E-15
Th-230	Pu-238	3.795E-12		0.000E+00	4.914E-22	2.886E-19	4.103E-19	1.084E-18	3.848E-18	1.756E-17	4.675E-17	1.083E-16
Th-230	Pu-238	4.196E-08		0.000E+00	5.432E-18	3.190E-15	4.536E-15	1.198E-14	4.254E-14	1.941E-13	5.168E-13	1.197E-12
Th-230	Pu-238	5.538E-14		0.000E+00	7.171E-24	4.211E-21	5.987E-21	1.582E-20	5.615E-20	2.563E-19	6.822E-19	1.581E-18
Th-230	Pu-238	7.972E-16		0.000E+00	1.032E-25	6.061E-23	8.618E-23	2.277E-22	8.082E-22	3.689E-21	9.819E-21	2.275E-20
Th-230	Pu-238	2.000E-07		0.000E+00	2.589E-17	1.521E-14	2.162E-14	5.713E-14	2.028E-13	9.254E-13	2.463E-12	5.708E-12
Th-230	Pu-238	2.640E-13		0.000E+00	3.418E-23	2.007E-20	2.854E-20	7.541E-20	2.677E-19	1.221E-18	3.252E-18	7.534E-18
Th-230	Pu-238	3.800E-15		0.000E+00	4.920E-25	2.889E-22	4.108E-22	1.085E-21	3.853E-21	1.758E-20	4.680E-20	1.084E-19
Th-230	Th-230	9.996E-01		9.996E+00	9.996E+00	9.994E+00	9.993E+00	9.991E+00	9.987E+00	9.973E+00	9.950E+00	9.904E+00
Th-230	U-234	9.996E-01		0.000E+00	9.192E-05	2.298E-03	2.757E-03	4.594E-03	9.186E-03	2.294E-02	4.582E-02	9.136E-02
Th-230	U-234	1.319E-06		0.000E+00	1.213E-10	3.033E-09	3.639E-09	6.065E-09	1.213E-08	3.029E-08	6.048E-08	1.206E-07
Th-230	U-234	1.899E-08		0.000E+00	1.746E-12	4.365E-11	5.238E-11	8.729E-11	1.745E-10	4.359E-10	8.705E-10	1.736E-09
Th-230	U-234	2.100E-04		0.000E+00	1.931E-08	4.826E-07	5.791E-07	9.650E-07	1.929E-06	4.819E-06	9.624E-06	1.919E-05
Th-230	U-234	2.771E-10		0.000E+00	2.548E-14	6.370E-13	7.644E-13	1.274E-12	2.547E-12	6.361E-12	1.270E-11	2.533E-11
Th-230	U-234	3.989E-12		0.000E+00	3.668E-16	9.169E-15	1.100E-14	1.834E-14	3.666E-14	9.157E-14	1.829E-13	3.646E-13
Th-230	U-234	1.998E-04		0.000E+00	1.837E-08	4.591E-07	5.510E-07	9.181E-07	1.836E-06	4.585E-06	9.156E-06	1.826E-05
Th-230	U-234	2.637E-10		0.000E+00	2.425E-14	6.061E-13	7.273E-13	1.212E-12	2.423E-12	6.052E-12	1.209E-11	2.410E-11
Th-230	U-234	3.795E-12		0.000E+00	3.490E-16	8.724E-15	1.047E-14	1.744E-14	3.488E-14	8.712E-14	1.740E-13	3.469E-13
Th-230	U-234	4.196E-08		0.000E+00	3.858E-12	9.644E-11	1.157E-10	1.929E-10	3.856E-10	9.631E-10	1.923E-09	3.835E-09
Th-230	U-234	5.538E-14		0.000E+00	5.093E-18	1.273E-16	1.528E-16	2.546E-16	5.090E-16	1.271E-15	2.539E-15	5.062E-15
Th-230	U-234	7.972E-16		0.000E+00	7.331E-20	1.832E-18	2.199E-18	3.664E-18	7.326E-18	1.830E-17	3.654E-17	7.286E-17
Th-230	U-234	2.000E-07		0.000E+00	1.839E-11	4.597E-10	5.516E-10	9.193E-10	1.838E-09	4.591E-09	9.167E-09	1.828E-08
Th-230	U-234	2.640E-13		0.000E+00	2.428E-17	6.068E-16	7.281E-16	1.213E-15	2.426E-15	6.060E-15	1.210E-14	2.413E-14
Th-230	U-234	3.800E-15		0.000E+00	3.494E-19	8.734E-18	1.048E-17	1.747E-17	3.492E-17	8.722E-17	1.742E-16	3.473E-16
Th-230	U-238	1.599E-03		0.000E+00	2.076E-13	1.297E-10	1.868E-10	5.189E-10	2.075E-09	1.296E-08	5.180E-08	2.068E-07
Th-230	U-238	2.111E-09		0.000E+00	2.740E-19	1.713E-16	2.466E-16	6.850E-16	2.739E-15	1.711E-14	6.837E-14	2.729E-13
Th-230	U-238	3.039E-11		0.000E+00	3.945E-21	2.465E-18	3.550E-18	9.860E-18	3.943E-17	2.463E-16	9.841E-16	3.928E-15
Th-230	U-238	3.359E-07		0.000E+00	4.361E-17	2.725E-14	3.924E-14	1.090E-13	4.359E-13	2.723E-12	1.088E-11	4.343E-11
Th-230	U-238	4.434E-13		0.000E+00	5.756E-23	3.597E-20	5.180E-20	1.439E-19	5.754E-19	3.594E-18	1.436E-17	5.733E-17
Th-230	U-238	6.383E-15		0.000E+00	8.285E-25	5.178E-22	7.456E-22	2.071E-21	8.282E-21	5.173E-20	2.067E-19	8.251E-19
Th-230	U-238	3.196E-07		0.000E+00	4.149E-17	2.593E-14	3.734E-14	1.037E-13	4.147E-13	2.590E-12	1.035E-11	4.132E-11
Th-230	U-238	4.219E-13		0.000E+00	5.477E-23	3.423E-20	4.928E-20	1.369E-19	5.474E-19	3.419E-18	1.366E-17	5.454E-17
Th-230	U-238	6.073E-15		0.000E+00	7.883E-25	4.926E-22	7.094E-22	1.970E-21	7.880E-21	4.922E-20	1.967E-19	7.850E-19
Th-230	U-238	6.713E-11		0.000E+00	8.715E-21	5.446E-18	7.842E-18	2.178E-17	8.711E-17	5.441E-16	2.174E-15	8.679E-15
Th-230	U-238	8.862E-17		0.000E+00	1.150E-26	7.189E-24	1.035E-23	2.875E-23	1.150E-22	7.182E-22	2.870E-21	1.146E-20
Th-230	U-238	1.276E-18		0.000E+00	1.656E-28	1.035E-25	1.490E-25	4.139E-25	1.655E-24	1.034E-23	4.131E-23	1.649E-22
Th-230	U-238	3.200E-10		0.000E+00	4.154E-20	2.596E-17	3.738E-17	1.038E-16	4.152E-16	2.594E-15	1.036E-14	4.137E-14

Th-230	U-238	4.224E-16	0.000E+00	5.483E-26	3.427E-23	4.934E-23	1.371E-22	5.481E-22	3.423E-21	1.368E-20	5.461E-20
Th-230	U-238	6.080E-18	0.000E+00	7.893E-28	4.932E-25	7.102E-25	1.973E-24	7.889E-24	4.928E-23	1.969E-22	7.860E-22
Th-230	U-238	9.980E-01	0.000E+00	1.295E-10	8.096E-08	1.166E-07	3.238E-07	1.295E-06	8.089E-06	3.232E-05	1.290E-04
Th-230	U-238	1.317E-06	0.000E+00	1.710E-16	1.069E-13	1.539E-13	4.274E-13	1.709E-12	1.068E-11	4.266E-11	1.703E-10
Th-230	U-238	1.896E-08	0.000E+00	2.461E-18	1.538E-15	2.215E-15	6.152E-15	2.460E-14	1.537E-13	6.141E-13	2.451E-12
Th-230	U-238	2.096E-04	0.000E+00	2.721E-14	1.701E-11	2.449E-11	6.801E-11	2.720E-10	1.699E-09	6.789E-09	2.710E-08
Th-230	U-238	2.767E-10	0.000E+00	3.592E-20	2.245E-17	3.232E-17	8.978E-17	3.590E-16	2.243E-15	8.961E-15	3.577E-14
Th-230	U-238	3.983E-12	0.000E+00	5.170E-22	3.231E-19	4.653E-19	1.292E-18	5.168E-18	3.228E-17	1.290E-16	5.149E-16
Th-230	U-238	1.994E-04	0.000E+00	2.589E-14	1.618E-11	2.330E-11	6.471E-11	2.588E-10	1.616E-09	6.459E-09	2.578E-08

Individual Nuclide Soil Concentration
 Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	S(j,t), pCi/g									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Th-230	U-238	2.633E-10	0.000E+00	3.417E-20	2.136E-17	3.075E-17	8.542E-17	3.416E-16	2.134E-15	8.526E-15	3.403E-14	
Th-230	U-238	3.789E-12	0.000E+00	4.919E-22	3.074E-19	4.427E-19	1.229E-18	4.917E-18	3.071E-17	1.227E-16	4.899E-16	
Th-230	U-238	4.189E-08	0.000E+00	5.438E-18	3.398E-15	4.894E-15	1.359E-14	5.436E-14	3.395E-13	1.357E-12	5.415E-12	
Th-230	U-238	5.530E-14	0.000E+00	7.178E-24	4.486E-21	6.459E-21	1.794E-20	7.175E-20	4.482E-19	1.791E-18	7.148E-18	
Th-230	U-238	7.959E-16	0.000E+00	1.033E-25	6.457E-23	9.298E-23	2.582E-22	1.033E-21	6.451E-21	2.578E-20	1.029E-19	
Th-230	U-238	1.997E-07	0.000E+00	2.592E-17	1.620E-14	2.333E-14	6.479E-14	2.591E-13	1.618E-12	6.467E-12	2.581E-11	
Th-230	U-238	2.636E-13	0.000E+00	3.422E-23	2.138E-20	3.079E-20	8.552E-20	3.420E-19	2.136E-18	8.536E-18	3.407E-17	
Th-230	U-238	3.794E-15	0.000E+00	4.925E-25	3.078E-22	4.432E-22	1.231E-21	4.923E-21	3.075E-20	1.229E-19	4.905E-19	
Th-230	äS(j):		9.996E+00	9.996E+00	9.996E+00	9.996E+00	9.996E+00	9.996E+00	9.996E+00	9.996E+00	9.996E+00	9.996E+00
0Ra-226	Pu-238	9.996E-01	0.000E+00	1.870E-14	2.781E-10	4.757E-10	2.116E-09	1.537E-08	1.851E-07	1.035E-06	4.864E-06	
Ra-226	Pu-238	1.899E-08	0.000E+00	3.553E-22	5.284E-18	9.038E-18	4.020E-17	2.921E-16	3.517E-15	1.966E-14	9.242E-14	
Ra-226	Th-230	9.996E-01	0.000E+00	4.329E-03	1.077E-01	1.291E-01	2.141E-01	4.236E-01	1.025E+00	1.942E+00	3.497E+00	
Ra-226	Th-230	1.319E-06	0.000E+00	5.715E-09	1.421E-07	1.704E-07	2.827E-07	5.591E-07	1.353E-06	2.564E-06	4.616E-06	
Ra-226	Th-230	1.899E-08	0.000E+00	8.226E-11	2.046E-09	2.452E-09	4.069E-09	8.048E-09	1.947E-08	3.690E-08	6.644E-08	
Ra-226	U-234	9.996E-01	0.000E+00	1.991E-08	1.240E-05	1.784E-05	4.941E-05	1.962E-04	1.199E-03	4.627E-03	1.725E-02	
Ra-226	U-234	1.319E-06	0.000E+00	2.628E-14	1.636E-11	2.355E-11	6.522E-11	2.589E-10	1.583E-09	6.108E-09	2.277E-08	
Ra-226	U-234	1.899E-08	0.000E+00	3.782E-16	2.356E-13	3.389E-13	9.387E-13	3.727E-12	2.279E-11	8.791E-11	3.277E-10	
Ra-226	U-238	1.599E-03	0.000E+00	2.998E-17	4.671E-13	8.068E-13	3.727E-12	2.965E-11	4.557E-10	3.547E-09	2.691E-08	
Ra-226	U-238	2.111E-09	0.000E+00	3.957E-23	6.166E-19	1.065E-18	4.919E-18	3.914E-17	6.015E-16	4.683E-15	3.552E-14	
Ra-226	U-238	3.039E-11	0.000E+00	5.696E-25	8.876E-21	1.533E-20	7.081E-20	5.633E-19	8.658E-18	6.740E-17	5.113E-16	
Ra-226	U-238	9.980E-01	0.000E+00	1.871E-14	2.915E-10	5.034E-10	2.326E-09	1.850E-08	2.843E-07	2.214E-06	1.679E-05	
Ra-226	U-238	1.317E-06	0.000E+00	2.469E-20	3.848E-16	6.645E-16	3.070E-15	2.442E-14	3.753E-13	2.922E-12	2.216E-11	
Ra-226	U-238	1.896E-08	0.000E+00	3.554E-22	5.538E-18	9.565E-18	4.418E-17	3.515E-16	5.402E-15	4.206E-14	3.190E-13	
Ra-226	äS(j):		0.000E+00	4.329E-03	1.077E-01	1.291E-01	2.142E-01	4.238E-01	1.026E+00	1.947E+00	3.514E+00	
0Pb-210	Pu-238	9.996E-01	0.000E+00	1.451E-16	4.722E-11	9.441E-11	6.329E-10	7.357E-09	1.347E-07	8.905E-07	4.546E-06	
Pb-210	Pu-238	1.319E-06	0.000E+00	1.915E-22	6.233E-17	1.246E-16	8.354E-16	9.711E-15	1.778E-13	1.175E-12	6.001E-12	
Pb-210	Pu-238	2.100E-04	0.000E+00	3.048E-20	9.918E-15	1.983E-14	1.329E-13	1.545E-12	2.829E-11	1.870E-10	9.549E-10	
Pb-210	Pu-238	1.998E-04	0.000E+00	2.900E-20	9.436E-15	1.887E-14	1.265E-13	1.470E-12	2.691E-11	1.780E-10	9.085E-10	
Pb-210	Pu-238	4.196E-08	0.000E+00	6.091E-24	1.982E-18	3.963E-18	2.657E-17	3.088E-16	5.653E-15	3.738E-14	1.908E-13	
Pb-210	Pu-238	2.000E-07	0.000E+00	2.903E-23	9.448E-18	1.889E-17	1.266E-16	1.472E-15	2.694E-14	1.782E-13	9.096E-13	
Pb-210	Th-230	9.996E-01	0.000E+00	6.690E-05	3.298E-02	4.536E-02	1.061E-01	2.952E-01	8.989E-01	1.829E+00	3.407E+00	
Pb-210	Th-230	2.100E-04	0.000E+00	1.405E-08	6.927E-06	9.528E-06	2.228E-05	6.200E-05	1.888E-04	3.842E-04	7.156E-04	
Pb-210	Th-230	1.998E-04	0.000E+00	1.337E-08	6.590E-06	9.065E-06	2.120E-05	5.899E-05	1.796E-04	3.656E-04	6.808E-04	
Pb-210	Th-230	4.196E-08	0.000E+00	2.808E-12	1.384E-09	1.904E-09	4.452E-09	1.239E-08	3.773E-08	7.679E-08	1.430E-07	
Pb-210	Th-230	2.000E-07	0.000E+00	1.338E-11	6.598E-09	9.076E-09	2.122E-08	5.906E-08	1.799E-07	3.660E-07	6.816E-07	
Pb-210	U-234	9.996E-01	0.000E+00	2.056E-10	2.685E-06	4.481E-06	1.817E-05	1.092E-04	9.347E-04	4.089E-03	1.625E-02	
Pb-210	U-234	2.100E-04	0.000E+00	4.318E-14	5.640E-10	9.411E-10	3.817E-09	2.295E-08	1.963E-07	8.588E-07	3.412E-06	
Pb-210	U-234	1.998E-04	0.000E+00	4.108E-14	5.366E-10	8.954E-10	3.632E-09	2.183E-08	1.868E-07	8.171E-07	3.247E-06	
Pb-210	U-234	4.196E-08	0.000E+00	8.629E-18	1.127E-13	1.881E-13	7.628E-13	4.586E-12	3.924E-11	1.716E-10	6.819E-10	
Pb-210	U-234	2.000E-07	0.000E+00	4.113E-17	5.373E-13	8.965E-13	3.636E-12	2.186E-11	1.870E-10	8.181E-10	3.250E-09	

Pb-210	U-238	1.599E-03	0.000E+00	2.325E-19	7.863E-14	1.585E-13	1.098E-12	1.384E-11	3.204E-10	2.956E-09	2.456E-08
Pb-210	U-238	3.359E-07	0.000E+00	4.884E-23	1.652E-17	3.329E-17	2.305E-16	2.908E-15	6.731E-14	6.209E-13	5.158E-12
Pb-210	U-238	3.196E-07	0.000E+00	4.647E-23	1.571E-17	3.167E-17	2.193E-16	2.766E-15	6.404E-14	5.907E-13	4.908E-12
Pb-210	U-238	6.713E-11	0.000E+00	9.761E-27	3.301E-21	6.653E-21	4.607E-20	5.811E-19	1.345E-17	1.241E-16	1.031E-15
Pb-210	U-238	3.200E-10	0.000E+00	4.653E-26	1.573E-20	3.171E-20	2.196E-19	2.770E-18	6.411E-17	5.914E-16	4.914E-15
Pb-210	U-238	9.980E-01	0.000E+00	1.451E-16	4.907E-11	9.890E-11	6.849E-10	8.638E-09	2.000E-07	1.845E-06	1.532E-05
Pb-210	U-238	2.096E-04	0.000E+00	3.048E-20	1.031E-14	2.077E-14	1.439E-13	1.814E-12	4.200E-11	3.874E-10	3.219E-09

Individual Nuclide Soil Concentration
Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	S(j,t), pCi/g									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Pb-210	U-238	1.994E-04	0.000E+00	2.900E-20	9.805E-15	1.976E-14	1.369E-13	1.726E-12	3.996E-11	3.686E-10	3.063E-09	
Pb-210	U-238	4.189E-08	0.000E+00	6.091E-24	2.060E-18	4.151E-18	2.875E-17	3.626E-16	8.393E-15	7.742E-14	6.433E-13	
Pb-210	U-238	1.997E-07	0.000E+00	2.903E-23	9.817E-18	1.979E-17	1.370E-16	1.728E-15	4.001E-14	3.691E-13	3.066E-12	
Pb-210	äS(j):		0.000E+00	6.692E-05	3.300E-02	4.538E-02	1.061E-01	2.954E-01	9.002E-01	1.834E+00	3.424E+00	
0Pu-238	Pu-238	1.319E-06	1.319E-05	1.309E-05	1.083E-05	1.041E-05	8.887E-06	5.986E-06	1.829E-06	2.536E-07	4.874E-09	
Pu-238	Pu-238	1.899E-08	1.899E-07	1.884E-07	1.559E-07	1.498E-07	1.279E-07	8.616E-08	2.633E-08	3.650E-09	7.016E-11	
Pu-238	äS(j):		1.338E-05	1.328E-05	1.098E-05	1.056E-05	9.015E-06	6.072E-06	1.856E-06	2.572E-07	4.944E-09	
0U-234	Pu-238	1.319E-06	0.000E+00	3.711E-11	8.451E-10	9.949E-10	1.539E-09	2.575E-09	4.058E-09	4.618E-09	4.699E-09	
0Th-230	Pu-238	1.319E-06	0.000E+00	1.708E-16	1.003E-13	1.426E-13	3.769E-13	1.338E-12	6.105E-12	1.625E-11	3.766E-11	
0Ra-226	Pu-238	1.319E-06	0.000E+00	2.468E-20	3.671E-16	6.279E-16	2.793E-15	2.029E-14	2.443E-13	1.366E-12	6.421E-12	
0Pb-210	Pu-238	1.899E-08	0.000E+00	2.757E-24	8.972E-19	1.794E-18	1.202E-17	1.398E-16	2.559E-15	1.692E-14	8.638E-14	
Pb-210	Pu-238	3.989E-12	0.000E+00	5.791E-28	1.884E-22	3.768E-22	2.526E-21	2.936E-20	5.374E-19	3.554E-18	1.814E-17	
Pb-210	Pu-238	3.795E-12	0.000E+00	5.510E-28	1.793E-22	3.585E-22	2.403E-21	2.793E-20	5.113E-19	3.381E-18	1.726E-17	
Pb-210	Pu-238	7.972E-16	0.000E+00	1.157E-31	3.766E-26	7.529E-26	5.047E-25	5.867E-24	1.074E-22	7.102E-22	3.626E-21	
Pb-210	Pu-238	3.800E-15	0.000E+00	5.516E-31	1.795E-25	3.589E-25	2.406E-24	2.797E-23	5.119E-22	3.385E-21	1.728E-20	
Pb-210	Th-230	1.899E-08	0.000E+00	1.271E-12	6.266E-10	8.618E-10	2.015E-09	5.609E-09	1.708E-08	3.476E-08	6.473E-08	
Pb-210	Th-230	3.989E-12	0.000E+00	2.670E-16	1.316E-13	1.810E-13	4.233E-13	1.178E-12	3.587E-12	7.301E-12	1.360E-11	
Pb-210	Th-230	3.795E-12	0.000E+00	2.540E-16	1.252E-13	1.722E-13	4.027E-13	1.121E-12	3.413E-12	6.946E-12	1.294E-11	
Pb-210	Th-230	7.972E-16	0.000E+00	5.335E-20	2.630E-17	3.618E-17	8.459E-17	2.354E-16	7.169E-16	1.459E-15	2.717E-15	
Pb-210	Th-230	3.800E-15	0.000E+00	2.543E-19	1.254E-16	1.724E-16	4.032E-16	1.122E-15	3.417E-15	6.954E-15	1.295E-14	
Pb-210	U-234	1.899E-08	0.000E+00	3.906E-18	5.102E-14	8.513E-14	3.453E-13	2.076E-12	1.776E-11	7.768E-11	3.087E-10	
Pb-210	U-234	3.989E-12	0.000E+00	8.204E-22	1.072E-17	1.788E-17	7.252E-17	4.360E-16	3.730E-15	1.632E-14	6.483E-14	
Pb-210	U-234	3.795E-12	0.000E+00	7.806E-22	1.020E-17	1.701E-17	6.900E-17	4.148E-16	3.549E-15	1.552E-14	6.168E-14	
Pb-210	U-234	7.972E-16	0.000E+00	1.640E-25	2.142E-21	3.573E-21	1.449E-20	8.713E-20	7.455E-19	3.261E-18	1.296E-17	
Pb-210	U-234	3.800E-15	0.000E+00	7.815E-25	1.021E-20	1.703E-20	6.908E-20	4.153E-19	3.553E-18	1.554E-17	6.176E-17	
Pb-210	U-238	3.039E-11	0.000E+00	4.418E-27	1.494E-21	3.011E-21	2.085E-20	2.630E-19	6.088E-18	5.616E-17	4.666E-16	
Pb-210	U-238	6.383E-15	0.000E+00	9.280E-31	3.138E-25	6.325E-25	4.380E-24	5.525E-23	1.279E-21	1.180E-20	9.801E-20	
Pb-210	U-238	6.073E-15	0.000E+00	8.830E-31	2.986E-25	6.018E-25	4.167E-24	5.256E-23	1.217E-21	1.122E-20	9.325E-20	
Pb-210	U-238	1.276E-18	0.000E+00	1.855E-34	6.271E-29	1.264E-28	8.753E-28	1.104E-26	2.556E-25	2.357E-24	1.959E-23	
Pb-210	U-238	6.080E-18	0.000E+00	8.840E-34	2.989E-28	6.025E-28	4.172E-27	5.263E-26	1.218E-24	1.124E-23	9.336E-23	
Pb-210	U-238	1.896E-08	0.000E+00	2.757E-24	9.323E-19	1.879E-18	1.301E-17	1.641E-16	3.799E-15	3.505E-14	2.912E-13	
Pb-210	U-238	3.983E-12	0.000E+00	5.791E-28	1.958E-22	3.947E-22	2.733E-21	3.447E-20	7.980E-19	7.361E-18	6.116E-17	
Pb-210	U-238	3.789E-12	0.000E+00	5.510E-28	1.863E-22	3.755E-22	2.600E-21	3.280E-20	7.592E-19	7.004E-18	5.819E-17	
Pb-210	U-238	7.959E-16	0.000E+00	1.157E-31	3.913E-26	7.887E-26	5.462E-25	6.889E-24	1.595E-22	1.471E-21	1.222E-20	
Pb-210	U-238	3.794E-15	0.000E+00	5.516E-31	1.865E-25	3.760E-25	2.604E-24	3.284E-23	7.601E-22	7.012E-21	5.826E-20	
Pb-210	äS(j):		0.000E+00	1.272E-12	6.269E-10	8.623E-10	2.016E-09	5.613E-09	1.710E-08	3.485E-08	6.506E-08	
0Pu-238	Pu-238	2.100E-04	2.100E-03	2.083E-03	1.723E-03	1.656E-03	1.414E-03	9.525E-04	2.911E-04	4.035E-05	7.756E-07	
Pu-238	Pu-238	2.771E-10	2.771E-09	2.750E-09	2.275E-09	2.186E-09	1.867E-09	1.257E-09	3.842E-10	5.327E-11	1.024E-12	
Pu-238	äS(j):		2.100E-03	2.083E-03	1.723E-03	1.656E-03	1.414E-03	9.525E-04	2.911E-04	4.035E-05	7.756E-07	
0Ra-226	Pu-238	2.100E-04	0.000E+00	3.928E-18	5.841E-14	9.992E-14	4.444E-13	3.229E-12	3.888E-11	2.174E-10	1.022E-09	

Ra-226	Pu-238	2.771E-10	0.000E+00	5.184E-24	7.710E-20	1.319E-19	5.867E-19	4.262E-18	5.132E-17	2.869E-16	1.349E-15
Ra-226	Pu-238	3.989E-12	0.000E+00	7.462E-26	1.110E-21	1.898E-21	8.444E-21	6.135E-20	7.387E-19	4.130E-18	1.941E-17

Individual Nuclide Soil Concentration
Parent Nuclide and Branch Fraction Indicated

ONuclide	Parent	THF(i)	S(j,t), pCi/g									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA		AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Ra-226	Th-230	2.100E-04		0.000E+00	9.094E-07	2.261E-05	2.711E-05	4.498E-05	8.897E-05	2.153E-04	4.079E-04	7.345E-04
Ra-226	Th-230	2.771E-10		0.000E+00	1.200E-12	2.985E-11	3.578E-11	5.937E-11	1.174E-10	2.841E-10	5.385E-10	9.695E-10
Ra-226	Th-230	3.989E-12		0.000E+00	1.728E-14	4.297E-13	5.150E-13	8.546E-13	1.690E-12	4.090E-12	7.750E-12	1.396E-11
Ra-226	U-234	2.100E-04		0.000E+00	4.181E-12	2.604E-09	3.747E-09	1.038E-08	4.120E-08	2.519E-07	9.719E-07	3.623E-06
Ra-226	U-234	2.771E-10		0.000E+00	5.519E-18	3.437E-15	4.946E-15	1.370E-14	5.439E-14	3.325E-13	1.283E-12	4.782E-12
Ra-226	U-234	3.989E-12		0.000E+00	7.944E-20	4.948E-17	7.119E-17	1.972E-16	7.829E-16	4.787E-15	1.847E-14	6.883E-14
Ra-226	U-238	3.359E-07		0.000E+00	6.297E-21	9.812E-17	1.695E-16	7.828E-16	6.228E-15	9.571E-14	7.451E-13	5.652E-12
Ra-226	U-238	4.434E-13		0.000E+00	8.311E-27	1.295E-22	2.237E-22	1.033E-21	8.221E-21	1.263E-19	9.836E-19	7.461E-18
Ra-226	U-238	6.383E-15		0.000E+00	1.196E-28	1.864E-24	3.220E-24	1.487E-23	1.183E-22	1.819E-21	1.416E-20	1.074E-19
Ra-226	U-238	2.096E-04		0.000E+00	3.929E-18	6.123E-14	1.057E-13	4.885E-13	3.886E-12	5.972E-11	4.650E-10	3.527E-09
Ra-226	U-238	2.767E-10		0.000E+00	5.186E-24	8.082E-20	1.396E-19	6.448E-19	5.130E-18	7.884E-17	6.137E-16	4.656E-15
Ra-226	U-238	3.983E-12		0.000E+00	7.465E-26	1.163E-21	2.009E-21	9.281E-21	7.384E-20	1.135E-18	8.834E-18	6.701E-17
Ra-226	äS(j):			0.000E+00	9.094E-07	2.262E-05	2.711E-05	4.499E-05	8.901E-05	2.155E-04	4.089E-04	7.381E-04
0Pb-210	Pu-238	2.771E-10		0.000E+00	4.023E-26	1.309E-20	2.618E-20	1.755E-19	2.040E-18	3.734E-17	2.469E-16	1.260E-15
Pb-210	Pu-238	2.637E-10		0.000E+00	3.828E-26	1.246E-20	2.490E-20	1.669E-19	1.941E-18	3.552E-17	2.349E-16	1.199E-15
Pb-210	Pu-238	5.538E-14		0.000E+00	8.040E-30	2.616E-24	5.231E-24	3.507E-23	4.076E-22	7.461E-21	4.934E-20	2.519E-19
Pb-210	Pu-238	2.640E-13		0.000E+00	3.832E-29	1.247E-23	2.493E-23	1.672E-22	1.943E-21	3.557E-20	2.352E-19	1.201E-18
Pb-210	Th-230	1.319E-06		0.000E+00	8.830E-11	4.353E-08	5.988E-08	1.400E-07	3.897E-07	1.187E-06	2.415E-06	4.497E-06
Pb-210	Th-230	2.771E-10		0.000E+00	1.855E-14	9.144E-12	1.258E-11	2.941E-11	8.185E-11	2.492E-10	5.072E-10	9.445E-10
Pb-210	Th-230	2.637E-10		0.000E+00	1.765E-14	8.699E-12	1.197E-11	2.798E-11	7.787E-11	2.371E-10	4.826E-10	8.986E-10
Pb-210	Th-230	5.538E-14		0.000E+00	3.707E-18	1.827E-15	2.513E-15	5.877E-15	1.636E-14	4.981E-14	1.014E-13	1.888E-13
Pb-210	Th-230	2.640E-13		0.000E+00	1.767E-17	8.710E-15	1.198E-14	2.801E-14	7.796E-14	2.374E-13	4.831E-13	8.997E-13
Pb-210	U-234	1.319E-06		0.000E+00	2.714E-16	3.545E-12	5.915E-12	2.399E-11	1.442E-10	1.234E-09	5.397E-09	2.144E-08
Pb-210	U-234	2.771E-10		0.000E+00	5.700E-20	7.445E-16	1.242E-15	5.038E-15	3.029E-14	2.592E-13	1.134E-12	4.504E-12
Pb-210	U-234	2.637E-10		0.000E+00	5.423E-20	7.083E-16	1.182E-15	4.794E-15	2.882E-14	2.466E-13	1.079E-12	4.285E-12
Pb-210	U-234	5.538E-14		0.000E+00	1.139E-23	1.488E-19	2.483E-19	1.007E-18	6.053E-18	5.179E-17	2.265E-16	9.001E-16
Pb-210	U-234	2.640E-13		0.000E+00	5.430E-23	7.092E-19	1.183E-18	4.799E-18	2.885E-17	2.469E-16	1.080E-15	4.291E-15
Pb-210	U-238	2.111E-09		0.000E+00	3.070E-25	1.038E-19	2.092E-19	1.449E-18	1.827E-17	4.230E-16	3.902E-15	3.242E-14
Pb-210	U-238	4.434E-13		0.000E+00	6.447E-29	2.180E-23	4.394E-23	3.043E-22	3.838E-21	8.884E-20	8.196E-19	6.809E-18
Pb-210	U-238	4.219E-13		0.000E+00	6.134E-29	2.074E-23	4.181E-23	2.895E-22	3.652E-21	8.453E-20	7.797E-19	6.478E-18
Pb-210	U-238	8.862E-17		0.000E+00	1.288E-32	4.357E-27	8.781E-27	6.081E-26	7.670E-25	1.775E-23	1.638E-22	1.361E-21
Pb-210	U-238	4.224E-16		0.000E+00	6.142E-32	2.077E-26	4.186E-26	2.899E-25	3.656E-24	8.463E-23	7.807E-22	6.486E-21
Pb-210	U-238	1.317E-06		0.000E+00	1.915E-22	6.477E-17	1.305E-16	9.040E-16	1.140E-14	2.639E-13	2.435E-12	2.023E-11
Pb-210	U-238	2.767E-10		0.000E+00	4.023E-26	1.360E-20	2.742E-20	1.899E-19	2.395E-18	5.544E-17	5.114E-16	4.249E-15
Pb-210	U-238	2.633E-10		0.000E+00	3.828E-26	1.294E-20	2.609E-20	1.807E-19	2.279E-18	5.274E-17	4.866E-16	4.043E-15
Pb-210	U-238	5.530E-14		0.000E+00	8.040E-30	2.719E-24	5.480E-24	3.795E-23	4.786E-22	1.108E-20	1.022E-19	8.491E-19
Pb-210	U-238	2.636E-13		0.000E+00	3.832E-29	1.296E-23	2.612E-23	1.809E-22	2.281E-21	5.281E-20	4.871E-19	4.047E-18
Pb-210	äS(j):			0.000E+00	8.834E-11	4.355E-08	5.991E-08	1.401E-07	3.900E-07	1.188E-06	2.421E-06	4.520E-06
0Pu-238	Pu-238	3.989E-12		3.989E-11	3.958E-11	3.274E-11	3.147E-11	2.687E-11	1.810E-11	5.530E-12	7.667E-13	1.474E-14
Pu-238	Pu-238	1.998E-04		1.998E-03	1.982E-03	1.639E-03	1.576E-03	1.345E-03	9.063E-04	2.769E-04	3.839E-05	7.379E-07

Pu-238	äS(j):		1.998E-03	1.982E-03	1.639E-03	1.576E-03	1.345E-03	9.063E-04	2.769E-04	3.839E-05	7.379E-07
0Ra-226	Pu-238	1.998E-04	0.000E+00	3.737E-18	5.557E-14	9.506E-14	4.229E-13	3.072E-12	3.699E-11	2.068E-10	9.721E-10
Ra-226	Pu-238	3.795E-12	0.000E+00	7.100E-26	1.056E-21	1.806E-21	8.034E-21	5.837E-20	7.028E-19	3.929E-18	1.847E-17
Ra-226	Th-230	1.998E-04	0.000E+00	8.652E-07	2.152E-05	2.579E-05	4.279E-05	8.465E-05	2.048E-04	3.881E-04	6.988E-04
Ra-226	Th-230	2.637E-10	0.000E+00	1.142E-12	2.840E-11	3.404E-11	5.649E-11	1.117E-10	2.703E-10	5.123E-10	9.224E-10
Ra-226	Th-230	3.795E-12	0.000E+00	1.644E-14	4.088E-13	4.900E-13	8.131E-13	1.608E-12	3.891E-12	7.374E-12	1.328E-11

Individual Nuclide Soil Concentration
 Parent Nuclide and Branch Fraction Indicated

0Nuclide Parent	THF(i)	S(j,t), pCi/g									
(j)	(i)	t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Ra-226	U-234	1.998E-04	0.000E+00	3.978E-12	2.478E-09	3.565E-09	9.873E-09	3.920E-08	2.397E-07	9.247E-07	3.447E-06
Ra-226	U-234	2.637E-10	0.000E+00	5.251E-18	3.270E-15	4.706E-15	1.303E-14	5.175E-14	3.164E-13	1.221E-12	4.550E-12
Ra-226	U-234	3.795E-12	0.000E+00	7.559E-20	4.707E-17	6.773E-17	1.876E-16	7.449E-16	4.554E-15	1.757E-14	6.549E-14
Ra-226	U-238	3.196E-07	0.000E+00	5.991E-21	9.335E-17	1.612E-16	7.448E-16	5.925E-15	9.106E-14	7.089E-13	5.378E-12
Ra-226	U-238	4.219E-13	0.000E+00	7.908E-27	1.232E-22	2.128E-22	9.831E-22	7.821E-21	1.202E-19	9.358E-19	7.098E-18
Ra-226	U-238	6.073E-15	0.000E+00	1.138E-28	1.774E-24	3.063E-24	1.415E-23	1.126E-22	1.730E-21	1.347E-20	1.022E-19
Ra-226	U-238	1.994E-04	0.000E+00	3.738E-18	5.825E-14	1.006E-13	4.647E-13	3.697E-12	5.682E-11	4.424E-10	3.356E-09
Ra-226	U-238	2.633E-10	0.000E+00	4.934E-24	7.689E-20	1.328E-19	6.134E-19	4.880E-18	7.501E-17	5.839E-16	4.429E-15
Ra-226	U-238	3.789E-12	0.000E+00	7.103E-26	1.107E-21	1.911E-21	8.830E-21	7.025E-20	1.080E-18	8.405E-18	6.376E-17
Ra-226	äS(j):		0.000E+00	8.652E-07	2.152E-05	2.579E-05	4.280E-05	8.469E-05	2.050E-04	3.890E-04	7.023E-04
0Pu-238	Pu-238	2.637E-10	2.637E-09	2.616E-09	2.164E-09	2.080E-09	1.776E-09	1.196E-09	3.656E-10	5.068E-11	9.740E-13
Pu-238	Pu-238	3.795E-12	3.795E-11	3.766E-11	3.115E-11	2.994E-11	2.556E-11	1.722E-11	5.262E-12	7.295E-13	1.402E-14
Pu-238	äS(j):		2.675E-09	2.654E-09	2.195E-09	2.110E-09	1.802E-09	1.213E-09	3.708E-10	5.141E-11	9.881E-13
0Ra-226	Pu-238	2.637E-10	0.000E+00	4.933E-24	7.336E-20	1.255E-19	5.582E-19	4.055E-18	4.883E-17	2.730E-16	1.283E-15
0Pu-238	Pu-238	4.196E-08	4.196E-07	4.163E-07	3.444E-07	3.310E-07	2.826E-07	1.904E-07	5.817E-08	8.064E-09	1.550E-10
Pu-238	Pu-238	5.538E-14	5.538E-13	5.495E-13	4.545E-13	4.369E-13	3.730E-13	2.513E-13	7.678E-14	1.064E-14	2.046E-16
Pu-238	äS(j):		4.196E-07	4.163E-07	3.444E-07	3.310E-07	2.826E-07	1.904E-07	5.817E-08	8.064E-09	1.550E-10
0Ra-226	Pu-238	4.196E-08	0.000E+00	7.849E-22	1.167E-17	1.997E-17	8.882E-17	6.453E-16	7.770E-15	4.344E-14	2.042E-13
Ra-226	Pu-238	5.538E-14	0.000E+00	1.036E-27	1.541E-23	2.636E-23	1.172E-22	8.518E-22	1.026E-20	5.734E-20	2.695E-19
Ra-226	Pu-238	7.972E-16	0.000E+00	1.491E-29	2.218E-25	3.794E-25	1.688E-24	1.226E-23	1.476E-22	8.253E-22	3.879E-21
Ra-226	Th-230	4.196E-08	0.000E+00	1.817E-10	4.519E-09	5.417E-09	8.989E-09	1.778E-08	4.302E-08	8.152E-08	1.468E-07
Ra-226	Th-230	5.538E-14	0.000E+00	2.399E-16	5.965E-15	7.150E-15	1.186E-14	2.347E-14	5.678E-14	1.076E-13	1.938E-13
Ra-226	Th-230	7.972E-16	0.000E+00	3.453E-18	8.586E-17	1.029E-16	1.708E-16	3.378E-16	8.173E-16	1.549E-15	2.789E-15
Ra-226	U-234	4.196E-08	0.000E+00	8.356E-16	5.204E-13	7.488E-13	2.074E-12	8.234E-12	5.034E-11	1.942E-10	7.240E-10
Ra-226	U-234	5.538E-14	0.000E+00	1.103E-21	6.869E-19	9.884E-19	2.737E-18	1.087E-17	6.645E-17	2.564E-16	9.556E-16
Ra-226	U-234	7.972E-16	0.000E+00	1.588E-23	9.887E-21	1.423E-20	3.940E-20	1.565E-19	9.565E-19	3.690E-18	1.376E-17
Ra-226	U-238	6.713E-11	0.000E+00	1.258E-24	1.961E-20	3.386E-20	1.564E-19	1.245E-18	1.913E-17	1.489E-16	1.130E-15
Ra-226	U-238	8.862E-17	0.000E+00	1.661E-30	2.588E-26	4.470E-26	2.065E-25	1.643E-24	2.525E-23	1.966E-22	1.491E-21
Ra-226	U-238	1.276E-18	0.000E+00	2.391E-32	3.726E-28	6.434E-28	2.972E-27	2.365E-26	3.634E-25	2.829E-24	2.146E-23
Ra-226	U-238	4.189E-08	0.000E+00	7.852E-22	1.224E-17	2.113E-17	9.761E-17	7.766E-16	1.194E-14	9.292E-14	7.048E-13
Ra-226	U-238	5.530E-14	0.000E+00	1.036E-27	1.615E-23	2.789E-23	1.288E-22	1.025E-21	1.575E-20	1.227E-19	9.304E-19
Ra-226	U-238	7.959E-16	0.000E+00	1.492E-29	2.325E-25	4.015E-25	1.855E-24	1.476E-23	2.268E-22	1.765E-21	1.339E-20
Ra-226	äS(j):		0.000E+00	1.817E-10	4.520E-09	5.418E-09	8.991E-09	1.779E-08	4.307E-08	8.171E-08	1.475E-07
0Pu-238	Pu-238	7.972E-16	7.972E-15	7.909E-15	6.543E-15	6.289E-15	5.370E-15	3.617E-15	1.105E-15	1.532E-16	2.945E-18
Pu-238	Pu-238	2.000E-07	2.000E-06	1.984E-06	1.641E-06	1.578E-06	1.347E-06	9.074E-07	2.773E-07	3.844E-08	7.388E-10
Pu-238	äS(j):		2.000E-06	1.984E-06	1.641E-06	1.578E-06	1.347E-06	9.074E-07	2.773E-07	3.844E-08	7.388E-10
0Ra-226	Pu-238	2.000E-07	0.000E+00	3.741E-21	5.564E-17	9.518E-17	4.234E-16	3.076E-15	3.704E-14	2.070E-13	9.733E-13
Ra-226	Pu-238	3.800E-15	0.000E+00	7.108E-29	1.057E-24	1.808E-24	8.044E-24	5.844E-23	7.037E-22	3.934E-21	1.849E-20
Ra-226	Th-230	2.000E-07	0.000E+00	8.662E-10	2.154E-08	2.582E-08	4.285E-08	8.475E-08	2.050E-07	3.886E-07	6.997E-07
Ra-226	Th-230	2.640E-13	0.000E+00	1.143E-15	2.843E-14	3.408E-14	5.656E-14	1.119E-13	2.707E-13	5.129E-13	9.236E-13

Ra-226	Th-230	3.800E-15	0.000E+00	1.646E-17	4.093E-16	4.906E-16	8.141E-16	1.610E-15	3.896E-15	7.383E-15	1.329E-14
Ra-226	U-234	2.000E-07	0.000E+00	3.983E-15	2.481E-12	3.569E-12	9.885E-12	3.925E-11	2.400E-10	9.258E-10	3.451E-09
Ra-226	U-234	2.640E-13	0.000E+00	5.258E-21	3.274E-18	4.711E-18	1.305E-17	5.181E-17	3.168E-16	1.222E-15	4.555E-15

Individual Nuclide Soil Concentration
Parent Nuclide and Branch Fraction Indicated

ONuclide	Parent	THF(i)	S(j,t), pCi/g									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA		AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Ra-226	U-234	3.800E-15		0.000E+00	7.568E-23	4.713E-20	6.782E-20	1.878E-19	7.458E-19	4.560E-18	1.759E-17	6.557E-17
Ra-226	U-238	3.200E-10		0.000E+00	5.998E-24	9.347E-20	1.614E-19	7.457E-19	5.932E-18	9.117E-17	7.098E-16	5.384E-15
Ra-226	U-238	4.224E-16		0.000E+00	7.917E-30	1.234E-25	2.131E-25	9.843E-25	7.831E-24	1.203E-22	9.369E-22	7.107E-21
Ra-226	U-238	6.080E-18		0.000E+00	1.140E-31	1.776E-27	3.067E-27	1.417E-26	1.127E-25	1.732E-24	1.349E-23	1.023E-22
Ra-226	U-238	1.997E-07		0.000E+00	3.743E-21	5.832E-17	1.007E-16	4.653E-16	3.702E-15	5.689E-14	4.429E-13	3.360E-12
Ra-226	U-238	2.636E-13		0.000E+00	4.940E-27	7.699E-23	1.330E-22	6.142E-22	4.886E-21	7.510E-20	5.846E-19	4.435E-18
Ra-226	U-238	3.794E-15		0.000E+00	7.111E-29	1.108E-24	1.914E-24	8.841E-24	7.033E-23	1.081E-21	8.415E-21	6.383E-20
Ra-226	äS(j):			0.000E+00	8.662E-10	2.154E-08	2.582E-08	4.286E-08	8.479E-08	2.053E-07	3.895E-07	7.031E-07
0Pu-238	Pu-238	2.640E-13		2.640E-12	2.619E-12	2.167E-12	2.083E-12	1.778E-12	1.198E-12	3.660E-13	5.074E-14	9.752E-16
Pu-238	Pu-238	3.800E-15		3.800E-14	3.770E-14	3.119E-14	2.998E-14	2.560E-14	1.724E-14	5.268E-15	7.304E-16	1.404E-17
Pu-238	äS(j):			2.678E-12	2.657E-12	2.198E-12	2.113E-12	1.804E-12	1.215E-12	3.713E-13	5.147E-14	9.893E-16
0Ra-226	Pu-238	2.640E-13		0.000E+00	4.939E-27	7.345E-23	1.256E-22	5.588E-22	4.060E-21	4.889E-20	2.733E-19	1.285E-18
0Pu-239	Pu-239	5.901E-04		5.901E-03	5.901E-03	5.897E-03	5.896E-03	5.892E-03	5.884E-03	5.859E-03	5.817E-03	5.734E-03
Pu-239	Pu-239	1.633E-06		1.633E-05	1.633E-05	1.632E-05	1.632E-05	1.631E-05	1.628E-05	1.621E-05	1.610E-05	1.587E-05
Pu-239	äS(j):			5.917E-03	5.917E-03	5.913E-03	5.912E-03	5.909E-03	5.900E-03	5.875E-03	5.833E-03	5.749E-03
0U-235	Pu-239	5.901E-04		0.000E+00	5.810E-12	1.452E-10	1.742E-10	2.903E-10	5.802E-10	1.447E-09	2.884E-09	5.727E-09
U-235	Pu-239	1.633E-06		0.000E+00	1.608E-14	4.018E-13	4.822E-13	8.034E-13	1.606E-12	4.005E-12	7.982E-12	1.585E-11
U-235	Pu-239	8.257E-06		0.000E+00	8.129E-14	2.032E-12	2.438E-12	4.062E-12	8.118E-12	2.025E-11	4.035E-11	8.013E-11
U-235	Pu-239	2.285E-08		0.000E+00	2.250E-16	5.623E-15	6.747E-15	1.124E-14	2.247E-14	5.604E-14	1.117E-13	2.218E-13
U-235	Pu-239	4.954E-10		0.000E+00	4.878E-18	1.219E-16	1.463E-16	2.437E-16	4.871E-16	1.215E-15	2.421E-15	4.808E-15
U-235	Pu-239	1.371E-12		0.000E+00	1.350E-20	3.374E-19	4.048E-19	6.745E-19	1.348E-18	3.363E-18	6.702E-18	1.331E-17
U-235	Pu-239	9.829E-01		0.000E+00	9.677E-09	2.418E-07	2.902E-07	4.835E-07	9.663E-07	2.411E-06	4.804E-06	9.539E-06
U-235	Pu-239	2.720E-03		0.000E+00	2.678E-11	6.693E-10	8.032E-10	1.338E-09	2.674E-09	6.672E-09	1.330E-08	2.640E-08
U-235	Pu-239	1.375E-02		0.000E+00	1.354E-10	3.384E-09	4.060E-09	6.766E-09	1.352E-08	3.373E-08	6.722E-08	1.335E-07
U-235	Pu-239	3.806E-05		0.000E+00	3.748E-13	9.366E-12	1.124E-11	1.872E-11	3.742E-11	9.335E-11	1.860E-10	3.694E-10
U-235	Pu-239	8.252E-07		0.000E+00	8.125E-15	2.031E-13	2.436E-13	4.060E-13	8.113E-13	2.024E-12	4.033E-12	8.008E-12
U-235	Pu-239	2.284E-09		0.000E+00	2.249E-17	5.620E-16	6.743E-16	1.124E-15	2.245E-15	5.601E-15	1.116E-14	2.216E-14
U-235	U-235	9.835E-01		9.835E+00	9.835E+00	9.835E+00	9.835E+00	9.835E+00	9.835E+00	9.834E+00	9.834E+00	9.833E+00
U-235	äS(j):			9.835E+00	9.835E+00	9.835E+00	9.835E+00	9.835E+00	9.835E+00	9.834E+00	9.834E+00	9.833E+00
0Pa-231	Pu-239	5.901E-04		0.000E+00	6.146E-17	3.840E-14	5.529E-14	1.535E-13	6.136E-13	3.825E-12	1.524E-11	6.044E-11
Pa-231	Pu-239	1.633E-06		0.000E+00	1.701E-19	1.063E-16	1.530E-16	4.249E-16	1.698E-15	1.059E-14	4.217E-14	1.673E-13
Pa-231	Pu-239	8.257E-06		0.000E+00	8.600E-19	5.373E-16	7.736E-16	2.148E-15	8.586E-15	5.353E-14	2.132E-13	8.457E-13
Pa-231	Pu-239	2.285E-08		0.000E+00	2.380E-21	1.487E-18	2.141E-18	5.946E-18	2.376E-17	1.481E-16	5.901E-16	2.341E-15
Pa-231	Pu-239	4.954E-10		0.000E+00	5.160E-23	3.224E-20	4.642E-20	1.289E-19	5.152E-19	3.212E-18	1.279E-17	5.075E-17
Pa-231	Pu-239	1.371E-12		0.000E+00	1.428E-25	8.923E-23	1.285E-22	3.568E-22	1.426E-21	8.889E-21	3.541E-20	1.404E-19
Pa-231	Pu-239	9.829E-01		0.000E+00	1.024E-13	6.396E-11	9.209E-11	2.557E-10	1.022E-09	6.372E-09	2.538E-08	1.007E-07
Pa-231	Pu-239	2.720E-03		0.000E+00	2.833E-16	1.770E-13	2.549E-13	7.078E-13	2.829E-12	1.764E-11	7.025E-11	2.786E-10
Pa-231	Pu-239	1.375E-02		0.000E+00	1.432E-15	8.949E-13	1.289E-12	3.578E-12	1.430E-11	8.916E-11	3.551E-10	1.409E-09
Pa-231	Pu-239	3.806E-05		0.000E+00	3.965E-18	2.477E-15	3.566E-15	9.903E-15	3.958E-14	2.468E-13	9.829E-13	3.899E-12
Pa-231	Pu-239	8.252E-07		0.000E+00	8.595E-20	5.370E-17	7.732E-17	2.147E-16	8.581E-16	5.350E-15	2.131E-14	8.453E-14

Pa-231	Pu-239	2.284E-09	0.000E+00	2.379E-22	1.486E-19	2.140E-19	5.942E-19	2.375E-18	1.481E-17	5.898E-17	2.339E-16
Pa-231	U-235	9.835E-01	0.000E+00	2.081E-04	5.201E-03	6.241E-03	1.040E-02	2.079E-02	5.188E-02	1.035E-01	2.059E-01
Pa-231	U-235	2.722E-03	0.000E+00	5.759E-07	1.439E-05	1.727E-05	2.878E-05	5.753E-05	1.436E-04	2.864E-04	5.698E-04
Pa-231	U-235	1.376E-02	0.000E+00	2.912E-06	7.277E-05	8.732E-05	1.455E-04	2.908E-04	7.259E-04	1.448E-03	2.880E-03

Individual Nuclide Soil Concentration
Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	S(j,t), pCi/g									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Pa-231	U-235	3.809E-05	0.000E+00	8.058E-09	2.014E-07	2.417E-07	4.027E-07	8.050E-07	2.009E-06	4.008E-06	7.972E-06	
Pa-231	U-235	8.257E-07	0.000E+00	1.747E-10	4.367E-09	5.240E-09	8.731E-09	1.745E-08	4.356E-08	8.688E-08	1.728E-07	
Pa-231	U-235	2.285E-09	0.000E+00	4.835E-13	1.208E-11	1.450E-11	2.416E-11	4.830E-11	1.206E-10	2.405E-10	4.784E-10	
Pa-231	äS(j):		0.000E+00	2.116E-04	5.288E-03	6.345E-03	1.057E-02	2.114E-02	5.275E-02	1.052E-01	2.093E-01	
0Ac-227	Pu-239	5.901E-04	0.000E+00	6.471E-19	8.445E-15	1.409E-14	5.716E-14	3.443E-13	2.986E-12	1.345E-11	5.679E-11	
Ac-227	Pu-239	9.829E-01	0.000E+00	1.078E-15	1.407E-11	2.347E-11	9.520E-11	5.735E-10	4.974E-09	2.240E-08	9.460E-08	
Ac-227	U-235	9.835E-01	0.000E+00	3.278E-06	1.615E-03	2.221E-03	5.197E-03	1.453E-02	4.538E-02	9.701E-02	1.995E-01	
Ac-227	äS(j):		0.000E+00	3.278E-06	1.615E-03	2.221E-03	5.197E-03	1.453E-02	4.538E-02	9.701E-02	1.995E-01	
0Ac-227	Pu-239	1.633E-06	0.000E+00	1.791E-21	2.337E-17	3.900E-17	1.582E-16	9.529E-16	8.264E-15	3.722E-14	1.572E-13	
Ac-227	Pu-239	8.257E-06	0.000E+00	9.054E-21	1.182E-16	1.972E-16	7.997E-16	4.817E-15	4.178E-14	1.882E-13	7.947E-13	
Ac-227	Pu-239	2.720E-03	0.000E+00	2.983E-18	3.893E-14	6.496E-14	2.635E-13	1.587E-12	1.377E-11	6.200E-11	2.618E-10	
Ac-227	U-235	2.722E-03	0.000E+00	9.071E-09	4.469E-06	6.147E-06	1.438E-05	4.022E-05	1.256E-04	2.685E-04	5.520E-04	
Ac-227	äS(j):		0.000E+00	9.071E-09	4.469E-06	6.147E-06	1.438E-05	4.022E-05	1.256E-04	2.685E-04	5.520E-04	
0Pu-239	Pu-239	8.257E-06	8.257E-05	8.256E-05	8.251E-05	8.250E-05	8.245E-05	8.233E-05	8.198E-05	8.139E-05	8.023E-05	
Pu-239	Pu-239	2.285E-08	2.285E-07	2.285E-07	2.284E-07	2.283E-07	2.282E-07	2.279E-07	2.269E-07	2.253E-07	2.220E-07	
Pu-239	äS(j):		8.280E-05	8.279E-05	8.274E-05	8.272E-05	8.268E-05	8.256E-05	8.220E-05	8.161E-05	8.045E-05	
0Ac-227	Pu-239	2.285E-08	0.000E+00	2.506E-23	3.271E-19	5.457E-19	2.213E-18	1.333E-17	1.156E-16	5.208E-16	2.199E-15	
Ac-227	Pu-239	4.954E-10	0.000E+00	5.433E-25	7.091E-21	1.183E-20	4.799E-20	2.891E-19	2.507E-18	1.129E-17	4.768E-17	
Ac-227	Pu-239	3.806E-05	0.000E+00	4.174E-20	5.448E-16	9.090E-16	3.687E-15	2.221E-14	1.926E-13	8.675E-13	3.663E-12	
Ac-227	U-235	3.809E-05	0.000E+00	1.269E-10	6.253E-08	8.601E-08	2.012E-07	5.627E-07	1.757E-06	3.757E-06	7.724E-06	
Ac-227	äS(j):		0.000E+00	1.269E-10	6.253E-08	8.601E-08	2.012E-07	5.627E-07	1.757E-06	3.757E-06	7.724E-06	
0Pu-239	Pu-239	4.954E-10	4.954E-09	4.954E-09	4.951E-09	4.950E-09	4.947E-09	4.940E-09	4.919E-09	4.884E-09	4.814E-09	
Pu-239	Pu-239	1.371E-12	1.371E-11	1.371E-11	1.370E-11	1.370E-11	1.369E-11	1.367E-11	1.361E-11	1.352E-11	1.332E-11	
Pu-239	äS(j):		4.968E-09	4.968E-09	4.964E-09	4.964E-09	4.961E-09	4.954E-09	4.932E-09	4.897E-09	4.827E-09	
0Ac-227	Pu-239	1.371E-12	0.000E+00	1.504E-27	1.962E-23	3.274E-23	1.328E-22	8.000E-22	6.939E-21	3.125E-20	1.320E-19	
Ac-227	Pu-239	2.284E-09	0.000E+00	2.505E-24	3.269E-20	5.454E-20	2.212E-19	1.333E-18	1.156E-17	5.206E-17	2.198E-16	
Ac-227	U-235	2.285E-09	0.000E+00	7.616E-15	3.752E-12	5.161E-12	1.208E-11	3.376E-11	1.054E-10	2.254E-10	4.635E-10	
Ac-227	äS(j):		0.000E+00	7.616E-15	3.752E-12	5.161E-12	1.208E-11	3.376E-11	1.054E-10	2.254E-10	4.635E-10	
0Pu-239	Pu-239	9.829E-01	9.829E+00	9.829E+00	9.822E+00	9.820E+00	9.815E+00	9.801E+00	9.758E+00	9.689E+00	9.550E+00	
Pu-239	Pu-239	2.720E-03	2.720E-02	2.720E-02	2.718E-02	2.718E-02	2.716E-02	2.712E-02	2.701E-02	2.681E-02	2.643E-02	
Pu-239	äS(j):		9.856E+00	9.856E+00	9.849E+00	9.848E+00	9.842E+00	9.828E+00	9.785E+00	9.715E+00	9.577E+00	
0Pu-239	Pu-239	1.375E-02	1.375E-01	1.375E-01	1.374E-01	1.374E-01	1.373E-01	1.371E-01	1.365E-01	1.356E-01	1.336E-01	
Pu-239	Pu-239	3.806E-05	3.806E-04	3.806E-04	3.804E-04	3.803E-04	3.801E-04	3.795E-04	3.779E-04	3.752E-04	3.698E-04	
Pu-239	äS(j):		1.379E-01	1.379E-01	1.378E-01	1.378E-01	1.377E-01	1.375E-01	1.369E-01	1.359E-01	1.340E-01	
0Ac-227	Pu-239	1.375E-02	0.000E+00	1.508E-17	1.968E-13	3.284E-13	1.332E-12	8.024E-12	6.959E-11	3.135E-10	1.324E-09	
Ac-227	U-235	1.376E-02	0.000E+00	4.586E-08	2.259E-05	3.108E-05	7.271E-05	2.033E-04	6.349E-04	1.357E-03	2.791E-03	
Ac-227	äS(j):		0.000E+00	4.586E-08	2.259E-05	3.108E-05	7.271E-05	2.033E-04	6.349E-04	1.357E-03	2.791E-03	
0Pu-239	Pu-239	8.252E-07	8.252E-06	8.252E-06	8.246E-06	8.245E-06	8.240E-06	8.228E-06	8.193E-06	8.134E-06	8.018E-06	
Pu-239	Pu-239	2.284E-09	2.284E-08	2.284E-08	2.282E-08	2.282E-08	2.281E-08	2.277E-08	2.268E-08	2.251E-08	2.219E-08	
Pu-239	äS(j):		8.275E-06	8.275E-06	8.269E-06	8.268E-06	8.263E-06	8.251E-06	8.216E-06	8.157E-06	8.040E-06	

Individual Nuclide Soil Concentration
Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	S(j,t), pCi/g									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Ac-227	Pu-239	8.252E-07	0.000E+00	9.050E-22	1.181E-17	1.971E-17	7.993E-17	4.815E-16	4.176E-15	1.881E-14	7.942E-14	
Ac-227	U-235	8.257E-07	0.000E+00	2.752E-12	1.356E-09	1.865E-09	4.363E-09	1.220E-08	3.810E-08	8.145E-08	1.675E-07	
Ac-227	äS(j):		0.000E+00	2.752E-12	1.356E-09	1.865E-09	4.363E-09	1.220E-08	3.810E-08	8.145E-08	1.675E-07	
ORu-106	Ru-106	1.000E+00	1.000E+01	5.078E+00	4.388E-07	1.481E-08	1.925E-14	3.706E-29	0.000E+00	0.000E+00	0.000E+00	
OSr-90	Sr-90	1.000E+00	1.000E+01	9.762E+00	5.478E+00	4.856E+00	3.000E+00	9.003E-01	2.432E-02	5.914E-05	3.498E-10	
OTc-99	Tc-99	1.000E+00	1.000E+01	9.999E+00	9.981E+00	9.977E+00	9.962E+00	9.925E+00	9.812E+00	9.628E+00	9.270E+00	
0Th-228	Th-228	1.000E+00	1.000E+01	6.959E+00	1.156E-03	1.887E-04	1.337E-07	1.788E-15	4.277E-39	0.000E+00	0.000E+00	
Th-228	Th-232	1.000E+00	0.000E+00	1.866E-01	9.265E+00	9.597E+00	9.964E+00	1.000E+01	1.000E+01	1.000E+01	1.000E+01	
Th-228	äS(j):		1.000E+01	7.145E+00	9.266E+00	9.598E+00	9.964E+00	1.000E+01	1.000E+01	1.000E+01	1.000E+01	
0Th-230	Th-230	1.319E-06	1.319E-05	1.319E-05	1.319E-05	1.319E-05	1.319E-05	1.318E-05	1.316E-05	1.313E-05	1.307E-05	
Th-230	Th-230	1.899E-08	1.899E-07	1.899E-07	1.899E-07	1.899E-07	1.898E-07	1.897E-07	1.895E-07	1.891E-07	1.882E-07	
Th-230	äS(j):		1.338E-05	1.338E-05	1.338E-05	1.338E-05	1.338E-05	1.337E-05	1.335E-05	1.332E-05	1.326E-05	
0Th-230	Th-230	2.100E-04	2.100E-03	2.100E-03	2.099E-03	2.099E-03	2.099E-03	2.098E-03	2.095E-03	2.090E-03	2.080E-03	
Th-230	Th-230	2.771E-10	2.771E-09	2.771E-09	2.771E-09	2.771E-09	2.770E-09	2.769E-09	2.765E-09	2.759E-09	2.746E-09	
Th-230	äS(j):		2.100E-03	2.100E-03	2.099E-03	2.099E-03	2.099E-03	2.098E-03	2.095E-03	2.090E-03	2.080E-03	
0Th-230	Th-230	3.989E-12	3.989E-11	3.989E-11	3.988E-11	3.988E-11	3.987E-11	3.986E-11	3.980E-11	3.971E-11	3.953E-11	
Th-230	Th-230	1.998E-04	1.998E-03	1.998E-03	1.997E-03	1.997E-03	1.997E-03	1.996E-03	1.993E-03	1.988E-03	1.979E-03	
Th-230	äS(j):		1.998E-03	1.998E-03	1.997E-03	1.997E-03	1.997E-03	1.996E-03	1.993E-03	1.988E-03	1.979E-03	
0Th-230	Th-230	2.637E-10	2.637E-09	2.637E-09	2.636E-09	2.636E-09	2.636E-09	2.634E-09	2.631E-09	2.625E-09	2.613E-09	
Th-230	Th-230	3.795E-12	3.795E-11	3.795E-11	3.795E-11	3.794E-11	3.794E-11	3.792E-11	3.787E-11	3.778E-11	3.761E-11	
Th-230	äS(j):		2.675E-09	2.675E-09	2.674E-09	2.674E-09	2.674E-09	2.672E-09	2.669E-09	2.662E-09	2.650E-09	
0Th-230	Th-230	4.196E-08	4.196E-07	4.196E-07	4.195E-07	4.195E-07	4.194E-07	4.192E-07	4.186E-07	4.177E-07	4.157E-07	
Th-230	Th-230	5.538E-14	5.538E-13	5.538E-13	5.537E-13	5.537E-13	5.536E-13	5.533E-13	5.526E-13	5.513E-13	5.488E-13	
Th-230	äS(j):		4.196E-07	4.196E-07	4.195E-07	4.195E-07	4.194E-07	4.192E-07	4.186E-07	4.177E-07	4.157E-07	
0Th-230	Th-230	7.972E-16	7.972E-15	7.972E-15	7.970E-15	7.970E-15	7.968E-15	7.965E-15	7.954E-15	7.935E-15	7.899E-15	
Th-230	Th-230	2.000E-07	2.000E-06	2.000E-06	2.000E-06	1.999E-06	1.999E-06	1.998E-06	1.995E-06	1.991E-06	1.982E-06	
Th-230	äS(j):		2.000E-06	2.000E-06	2.000E-06	1.999E-06	1.999E-06	1.998E-06	1.995E-06	1.991E-06	1.982E-06	
0Th-230	Th-230	2.640E-13	2.640E-12	2.640E-12	2.639E-12	2.639E-12	2.639E-12	2.638E-12	2.634E-12	2.628E-12	2.616E-12	
Th-230	Th-230	3.800E-15	3.800E-14	3.800E-14	3.799E-14	3.799E-14	3.798E-14	3.797E-14	3.791E-14	3.783E-14	3.765E-14	
Th-230	äS(j):		2.678E-12	2.678E-12	2.677E-12	2.677E-12	2.677E-12	2.676E-12	2.672E-12	2.666E-12	2.653E-12	
0Th-232	Th-232	1.000E+00	1.000E+01	1.000E+01	1.000E+01	1.000E+01	1.000E+01	1.000E+01	1.000E+01	1.000E+01	1.000E+01	
ORa-228	Th-232	1.000E+00	0.000E+00	1.136E+00	9.509E+00	9.731E+00	9.976E+00	1.000E+01	1.000E+01	1.000E+01	1.000E+01	
OU-234	U-234	1.319E-06	1.319E-05	1.319E-05	1.319E-05	1.319E-05	1.319E-05	1.319E-05	1.318E-05	1.317E-05	1.315E-05	
U-234	U-234	1.899E-08	1.899E-07	1.899E-07	1.899E-07	1.899E-07	1.899E-07	1.899E-07	1.898E-07	1.896E-07	1.894E-07	
U-234	äS(j):		1.338E-05	1.338E-05	1.338E-05	1.338E-05	1.338E-05	1.338E-05	1.337E-05	1.336E-05	1.334E-05	

Individual Nuclide Soil Concentration
Parent Nuclide and Branch Fraction Indicated

[illegible]

Individual Nuclide Soil Concentration
Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	S(j,t), pCi/g									
(j)	(i)		t= 0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03	
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
U-238	U-238	4.219E-13	4.219E-12	4.219E-12	4.219E-12	4.219E-12	4.219E-12	4.219E-12	4.219E-12	4.218E-12	4.218E-12	
U-238	U-238	6.073E-15	6.073E-14	6.073E-14	6.073E-14	6.073E-14	6.073E-14	6.073E-14	6.072E-14	6.072E-14	6.071E-14	
U-238	äS(j):		4.280E-12	4.280E-12	4.280E-12	4.280E-12	4.280E-12	4.280E-12	4.279E-12	4.279E-12	4.279E-12	
0U-238	U-238	6.713E-11	6.713E-10	6.713E-10	6.713E-10	6.713E-10	6.713E-10	6.713E-10	6.713E-10	6.713E-10	6.712E-10	
U-238	U-238	8.862E-17	8.862E-16	8.862E-16	8.861E-16	8.861E-16	8.861E-16	8.861E-16	8.861E-16	8.861E-16	8.860E-16	
U-238	äS(j):		6.713E-10	6.713E-10	6.713E-10	6.713E-10	6.713E-10	6.713E-10	6.713E-10	6.713E-10	6.712E-10	
0U-238	U-238	1.276E-18	1.276E-17	1.276E-17	1.276E-17	1.276E-17	1.276E-17	1.275E-17	1.275E-17	1.275E-17	1.275E-17	
U-238	U-238	3.200E-10	3.200E-09	3.200E-09	3.200E-09	3.200E-09	3.200E-09	3.200E-09	3.200E-09	3.200E-09	3.199E-09	
U-238	äS(j):		3.200E-09	3.200E-09	3.200E-09	3.200E-09	3.200E-09	3.200E-09	3.200E-09	3.200E-09	3.199E-09	
0U-238	U-238	4.224E-16	4.224E-15	4.224E-15	4.224E-15	4.224E-15	4.224E-15	4.224E-15	4.224E-15	4.224E-15	4.223E-15	
U-238	U-238	6.080E-18	6.080E-17	6.080E-17	6.080E-17	6.080E-17	6.080E-17	6.080E-17	6.080E-17	6.079E-17	6.079E-17	
U-238	äS(j):		4.285E-15	4.285E-15	4.285E-15	4.285E-15	4.285E-15	4.285E-15	4.285E-15	4.284E-15	4.284E-15	
0U-238	U-238	9.980E-01	9.980E+00	9.980E+00	9.980E+00	9.980E+00	9.980E+00	9.980E+00	9.979E+00	9.979E+00	9.978E+00	
U-238	U-238	1.317E-06	1.317E-05	1.317E-05	1.317E-05	1.317E-05	1.317E-05	1.317E-05	1.317E-05	1.317E-05	1.317E-05	
U-238	äS(j):		9.980E+00	9.980E+00	9.980E+00	9.980E+00	9.980E+00	9.980E+00	9.979E+00	9.979E+00	9.978E+00	
0U-238	U-238	1.896E-08	1.896E-07	1.896E-07	1.896E-07	1.896E-07	1.896E-07	1.896E-07	1.896E-07	1.896E-07	1.896E-07	
U-238	U-238	2.096E-04	2.096E-03	2.096E-03	2.096E-03	2.096E-03	2.096E-03	2.096E-03	2.096E-03	2.096E-03	2.096E-03	
U-238	äS(j):		2.096E-03	2.096E-03	2.096E-03	2.096E-03	2.096E-03	2.096E-03	2.096E-03	2.096E-03	2.096E-03	
0U-238	U-238	2.767E-10	2.767E-09	2.767E-09	2.767E-09	2.767E-09	2.767E-09	2.767E-09	2.767E-09	2.767E-09	2.766E-09	
U-238	U-238	3.983E-12	3.983E-11	3.983E-11	3.983E-11	3.983E-11	3.983E-11	3.983E-11	3.983E-11	3.982E-11	3.982E-11	
U-238	äS(j):		2.807E-09	2.807E-09	2.807E-09	2.807E-09	2.807E-09	2.807E-09	2.807E-09	2.807E-09	2.806E-09	
0U-238	U-238	1.994E-04	1.994E-03	1.994E-03	1.994E-03	1.994E-03	1.994E-03	1.994E-03	1.994E-03	1.994E-03	1.994E-03	
U-238	U-238	2.633E-10	2.633E-09	2.633E-09	2.633E-09	2.633E-09	2.633E-09	2.633E-09	2.632E-09	2.632E-09	2.632E-09	
U-238	äS(j):		1.994E-03	1.994E-03	1.994E-03	1.994E-03	1.994E-03	1.994E-03	1.994E-03	1.994E-03	1.994E-03	
0U-238	U-238	3.789E-12	3.789E-11	3.789E-11	3.789E-11	3.789E-11	3.789E-11	3.789E-11	3.789E-11	3.789E-11	3.789E-11	
U-238	U-238	4.189E-08	4.189E-07	4.189E-07	4.189E-07	4.189E-07	4.189E-07	4.189E-07	4.189E-07	4.189E-07	4.188E-07	
U-238	äS(j):		4.189E-07	4.189E-07	4.189E-07	4.189E-07	4.189E-07	4.189E-07	4.189E-07	4.189E-07	4.189E-07	
0U-238	U-238	5.530E-14	5.530E-13	5.530E-13	5.530E-13	5.530E-13	5.530E-13	5.529E-13	5.529E-13	5.529E-13	5.529E-13	
U-238	U-238	7.959E-16	7.959E-15	7.959E-15	7.959E-15	7.959E-15	7.959E-15	7.959E-15	7.959E-15	7.958E-15	7.958E-15	
U-238	äS(j):		5.609E-13	5.609E-13	5.609E-13	5.609E-13	5.609E-13	5.609E-13	5.609E-13	5.609E-13	5.608E-13	
0U-238	U-238	1.997E-07	1.997E-06	1.997E-06	1.997E-06	1.997E-06	1.997E-06	1.997E-06	1.997E-06	1.997E-06	1.996E-06	
U-238	U-238	2.636E-13	2.636E-12	2.636E-12	2.636E-12	2.636E-12	2.636E-12	2.636E-12	2.636E-12	2.636E-12	2.635E-12	
U-238	äS(j):		1.997E-06	1.997E-06	1.997E-06	1.997E-06	1.997E-06	1.997E-06	1.997E-06	1.997E-06	1.996E-06	
0U-238	U-238	3.794E-15	3.794E-14	3.794E-14	3.794E-14	3.794E-14	3.794E-14	3.794E-14	3.794E-14	3.794E-14	3.793E-14	
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii

THF(i) is the thread fraction of the parent nuclide.
0RESCALC.EXE execution time = 167.65 seconds

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Time = 0.000E+00	24
Time = 1.000E+00	26
Time = 2.500E+01	28
Time = 3.000E+01	30
Time = 5.000E+01	32
Time = 1.000E+02	34
Time = 2.500E+02	36
Time = 5.000E+02	38
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Dose Conversion Factor (and Related) Parameter Summary
 Dose Library: Age 6-11 interpolate Plus DCFPAK3.02 (Age 10)

0	3		3	Current	3	Base	3	Parameter
Menu	3	Parameter	3	Value#	3	Case*	3	Name
AA								
A-1	3	DCF's for external ground radiation, (mrem/yr)/(pCi/g)	3		3		3	
A-1	3	Ac-225 (Source: DCFPAK3.02)	3	5.286E-02	3	5.287E-02	3	DCF1(1)
A-1	3	Ac-227 (Source: DCFPAK3.02)	3	2.615E-04	3	2.615E-04	3	DCF1(2)
A-1	3	Ac-228 (Source: DCFPAK3.02)	3	5.044E+00	3	5.044E+00	3	DCF1(3)
A-1	3	Am-241 (Source: DCFPAK3.02)	3	3.717E-02	3	3.718E-02	3	DCF1(4)
A-1	3	At-217 (Source: DCFPAK3.02)	3	1.186E-03	3	1.186E-03	3	DCF1(5)
A-1	3	At-218 (Source: DCFPAK3.02)	3	5.567E-05	3	5.567E-05	3	DCF1(6)
A-1	3	At-219 (Source: DCFPAK3.02)	3	0.000E+00	3	0.000E+00	3	DCF1(7)
A-1	3	Ba-137m (Source: DCFPAK3.02)	3	3.381E+00	3	3.381E+00	3	DCF1(8)
A-1	3	Bi-210 (Source: DCFPAK3.02)	3	5.473E-03	3	5.474E-03	3	DCF1(9)
A-1	3	Bi-211 (Source: DCFPAK3.02)	3	2.410E-01	3	2.410E-01	3	DCF1(10)
A-1	3	Bi-212 (Source: DCFPAK3.02)	3	6.258E-01	3	6.259E-01	3	DCF1(11)
A-1	3	Bi-213 (Source: DCFPAK3.02)	3	6.874E-01	3	6.875E-01	3	DCF1(12)
A-1	3	Bi-214 (Source: DCFPAK3.02)	3	9.135E+00	3	9.136E+00	3	DCF1(13)
A-1	3	Bi-215 (Source: DCFPAK3.02)	3	1.369E+00	3	1.369E+00	3	DCF1(14)
A-1	3	Co-60 (Source: DCFPAK3.02)	3	1.539E+01	3	1.539E+01	3	DCF1(15)
A-1	3	Cs-134 (Source: DCFPAK3.02)	3	8.892E+00	3	8.893E+00	3	DCF1(16)
A-1	3	Cs-137 (Source: DCFPAK3.02)	3	8.686E-04	3	8.687E-04	3	DCF1(17)
A-1	3	Eu-152 (Source: DCFPAK3.02)	3	6.743E+00	3	6.744E+00	3	DCF1(18)
A-1	3	Eu-154 (Source: DCFPAK3.02)	3	7.285E+00	3	7.286E+00	3	DCF1(19)
A-1	3	Eu-155 (Source: DCFPAK3.02)	3	1.633E-01	3	1.633E-01	3	DCF1(20)
A-1	3	Fr-221 (Source: DCFPAK3.02)	3	1.332E-01	3	1.332E-01	3	DCF1(21)
A-1	3	Fr-223 (Source: DCFPAK3.02)	3	1.758E-01	3	1.758E-01	3	DCF1(22)
A-1	3	Gd-152 (Source: DCFPAK3.02)	3	0.000E+00	3	0.000E+00	3	DCF1(23)
A-1	3	H-3 (Source: DCFPAK3.02)	3	0.000E+00	3	0.000E+00	3	DCF1(24)
A-1	3	Hg-206 (Source: DCFPAK3.02)	3	6.127E-01	3	6.128E-01	3	DCF1(25)
A-1	3	I-129 (Source: DCFPAK3.02)	3	9.695E-03	3	9.696E-03	3	DCF1(26)
A-1	3	Mn-54 (Source: DCFPAK3.02)	3	4.857E+00	3	4.857E+00	3	DCF1(27)
A-1	3	Na-22 (Source: DCFPAK3.02)	3	1.289E+01	3	1.289E+01	3	DCF1(28)
A-1	3	Nd-144 (Source: DCFPAK3.02)	3	0.000E+00	3	0.000E+00	3	DCF1(29)
A-1	3	Ni-63 (Source: DCFPAK3.02)	3	0.000E+00	3	0.000E+00	3	DCF1(30)
A-1	3	Np-237 (Source: DCFPAK3.02)	3	6.706E-02	3	6.707E-02	3	DCF1(31)
A-1	3	Pa-231 (Source: DCFPAK3.02)	3	1.608E-01	3	1.609E-01	3	DCF1(32)
A-1	3	Pa-233 (Source: DCFPAK3.02)	3	1.018E+00	3	1.018E+00	3	DCF1(33)
A-1	3	Pa-234 (Source: DCFPAK3.02)	3	8.275E+00	3	8.276E+00	3	DCF1(34)
A-1	3	Pa-234m (Source: DCFPAK3.02)	3	1.257E-01	3	1.257E-01	3	DCF1(35)
A-1	3	Pb-209 (Source: DCFPAK3.02)	3	7.528E-04	3	7.529E-04	3	DCF1(36)
A-1	3	Pb-210 (Source: DCFPAK3.02)	3	2.092E-03	3	2.092E-03	3	DCF1(37)
A-1	3	Pb-211 (Source: DCFPAK3.02)	3	3.680E-01	3	3.680E-01	3	DCF1(38)
A-1	3	Pb-212 (Source: DCFPAK3.02)	3	6.314E-01	3	6.315E-01	3	DCF1(39)

A-1 ³ Pb-214 (Source: DCFPAK3.02)
 A-1 ³ Po-210 (Source: DCFPAK3.02)
 A-1 ³ Po-211 (Source: DCFPAK3.02)
 A-1 ³ Po-212 (Source: DCFPAK3.02)
 A-1 ³ Po-213 (Source: DCFPAK3.02)
 A-1 ³ Po-214 (Source: DCFPAK3.02)
 A-1 ³ Po-215 (Source: DCFPAK3.02)
 A-1 ³ Po-216 (Source: DCFPAK3.02)
 A-1 ³ Po-218 (Source: DCFPAK3.02)
 A-1 ³ Pu-238 (Source: DCFPAK3.02)

³ 1.257E+00 ³ 1.257E+00 ³ DCF1(40)
³ 5.641E-05 ³ 5.642E-05 ³ DCF1(41)
³ 4.707E-02 ³ 4.708E-02 ³ DCF1(42)
³ 0.000E+00 ³ 0.000E+00 ³ DCF1(43)
³ 2.167E-04 ³ 2.167E-04 ³ DCF1(44)
³ 4.801E-04 ³ 4.801E-04 ³ DCF1(45)
³ 9.452E-04 ³ 9.453E-04 ³ DCF1(46)
³ 8.873E-05 ³ 8.874E-05 ³ DCF1(47)
³ 9.228E-09 ³ 9.229E-09 ³ DCF1(48)
³ 1.111E-04 ³ 1.112E-04 ³ DCF1(49)

Dose Conversion Factor (and Related) Parameter Summary (continued)

Dose Library: Age 6-11 interpolate Plus DCFPAK3.02 (Age 10)

0	3		3	Current	3	Base	3	Parameter
Menu	3	Parameter	3	Value#	3	Case*	3	Name
AA								
A-1	3	Pu-239 (Source: DCFPAK3.02)	3	2.765E-04	3	2.765E-04	3	DCF1(50)
A-1	3	Ra-223 (Source: DCFPAK3.02)	3	5.791E-01	3	5.791E-01	3	DCF1(51)
A-1	3	Ra-224 (Source: DCFPAK3.02)	3	4.950E-02	3	4.951E-02	3	DCF1(52)
A-1	3	Ra-225 (Source: DCFPAK3.02)	3	8.910E-03	3	8.911E-03	3	DCF1(53)
A-1	3	Ra-226 (Source: DCFPAK3.02)	3	3.176E-02	3	3.176E-02	3	DCF1(54)
A-1	3	Ra-228 (Source: DCFPAK3.02)	3	6.575E-05	3	6.576E-05	3	DCF1(55)
A-1	3	Rh-106 (Source: DCFPAK3.02)	3	1.252E+00	3	1.252E+00	3	DCF1(56)
A-1	3	Rn-218 (Source: DCFPAK3.02)	3	4.259E-03	3	4.260E-03	3	DCF1(57)
A-1	3	Rn-219 (Source: DCFPAK3.02)	3	2.970E-01	3	2.970E-01	3	DCF1(58)
A-1	3	Rn-220 (Source: DCFPAK3.02)	3	3.474E-03	3	3.475E-03	3	DCF1(59)
A-1	3	Rn-222 (Source: DCFPAK3.02)	3	2.130E-03	3	2.130E-03	3	DCF1(60)
A-1	3	Ru-106 (Source: DCFPAK3.02)	3	0.000E+00	3	0.000E+00	3	DCF1(61)
A-1	3	Sm-148 (Source: DCFPAK3.02)	3	0.000E+00	3	0.000E+00	3	DCF1(62)
A-1	3	Sr-90 (Source: DCFPAK3.02)	3	6.463E-04	3	6.464E-04	3	DCF1(63)
A-1	3	Tc-99 (Source: DCFPAK3.02)	3	1.104E-04	3	1.104E-04	3	DCF1(64)
A-1	3	Th-227 (Source: DCFPAK3.02)	3	5.641E-01	3	5.642E-01	3	DCF1(65)
A-1	3	Th-228 (Source: DCFPAK3.02)	3	7.248E-03	3	7.249E-03	3	DCF1(66)
A-1	3	Th-229 (Source: DCFPAK3.02)	3	2.877E-01	3	2.877E-01	3	DCF1(67)
A-1	3	Th-230 (Source: DCFPAK3.02)	3	1.106E-03	3	1.106E-03	3	DCF1(68)
A-1	3	Th-231 (Source: DCFPAK3.02)	3	3.250E-02	3	3.251E-02	3	DCF1(69)
A-1	3	Th-232 (Source: DCFPAK3.02)	3	4.782E-04	3	4.783E-04	3	DCF1(70)
A-1	3	Th-234 (Source: DCFPAK3.02)	3	2.316E-02	3	2.317E-02	3	DCF1(71)
A-1	3	Tl-206 (Source: DCFPAK3.02)	3	1.278E-02	3	1.278E-02	3	DCF1(72)
A-1	3	Tl-207 (Source: DCFPAK3.02)	3	2.391E-02	3	2.391E-02	3	DCF1(73)
A-1	3	Tl-208 (Source: DCFPAK3.02)	3	2.167E+01	3	2.167E+01	3	DCF1(74)
A-1	3	Tl-209 (Source: DCFPAK3.02)	3	1.287E+01	3	1.287E+01	3	DCF1(75)
A-1	3	Tl-210 (Source: DCFPAK3.02)	3	1.677E+01	3	1.678E+01	3	DCF1(76)
A-1	3	U-233 (Source: DCFPAK3.02)	3	9.191E-04	3	9.192E-04	3	DCF1(77)
A-1	3	U-234 (Source: DCFPAK3.02)	3	3.456E-04	3	3.456E-04	3	DCF1(78)
A-1	3	U-235 (Source: DCFPAK3.02)	3	7.005E-01	3	7.006E-01	3	DCF1(79)
A-1	3	U-235m (Source: DCFPAK3.02)	3	0.000E+00	3	0.000E+00	3	DCF1(80)
A-1	3	U-238 (Source: DCFPAK3.02)	3	1.713E-04	3	1.713E-04	3	DCF1(81)
A-1	3	Y-90 (Source: DCFPAK3.02)	3	4.016E-02	3	4.017E-02	3	DCF1(82)
3								
B-1	3	Dose conversion factors for inhalation, mrem/pCi:	3		3		3	
B-1	3	Ac-227+D	3	7.503E-01	3	6.567E-01	3	DCF2(1)
B-1	3	Ac-227+D1	3	7.503E-01	3	6.567E-01	3	DCF2(2)
B-1	3	Ac-227+D2	3	6.992E-01	3	6.567E-01	3	DCF2(3)
B-1	3	Ac-227+D3	3	6.992E-01	3	6.567E-01	3	DCF2(4)
B-1	3	Ac-227+D4	3	6.568E-01	3	6.567E-01	3	DCF2(5)

B-1 ³ Ac-227+D5
B-1 ³ Am-241
B-1 ³ Co-60
B-1 ³ Cs-134
B-1 ³ Cs-137+D
B-1 ³ Eu-152
B-1 ³ Eu-154
B-1 ³ Eu-155
B-1 ³ Gd-152
B-1 ³ H-3

³ 6.568E-01 ³ 6.567E-01 ³ DCF2(6)
³ 3.996E-01 ³ 3.737E-01 ³ DCF2(7)
³ 1.713E-04 ³ 1.491E-04 ³ DCF2(8)
³ 1.196E-04 ³ 1.036E-04 ³ DCF2(9)
³ 2.028E-04 ³ 1.762E-04 ³ DCF2(10)
³ 4.998E-04 ³ 4.428E-04 ³ DCF2(11)
³ 6.129E-04 ³ 5.324E-04 ³ DCF2(13)
³ 8.092E-05 ³ 6.789E-05 ³ DCF2(14)
³ 8.683E-02 ³ 8.683E-02 ³ DCF2(15)
³ 9.340E-08 ³ 1.380E-06 ³ DCF2(16)

Dose Library: Age 6-11 interpolate Plus DCFPAK3.02 (Age 10)

Menu	Parameter	Current Value#	Base Case*	Parameter Name
B-1	I-129	6.219E-04	6.452E-04	DCF2(17)
B-1	Mn-54	2.034E-05	1.765E-05	DCF2(18)
B-1	Na-22	1.686E-04	1.461E-04	DCF2(19)
B-1	Nd-144	8.690E-02	8.690E-02	DCF2(20)
B-1	Ni-63	1.340E-05	1.127E-05	DCF2(21)
B-1	Np-237+D	1.987E-01	1.858E-01	DCF2(22)
B-1	Pa-231	9.778E-01	9.778E-01	DCF2(23)
B-1	Pb-210+D	4.899E-02	2.641E-02	DCF2(29)
B-1	Pb-210+D1	2.710E-02	2.641E-02	DCF2(30)
B-1	Pb-210+D2	2.641E-02	2.641E-02	DCF2(31)
B-1	Pu-238	4.448E-01	4.132E-01	DCF2(32)
B-1	Pu-239	4.930E-01	4.613E-01	DCF2(48)
B-1	Pu-239+D	4.930E-01	4.613E-01	DCF2(54)
B-1	Ra-226+D	4.570E-02	4.554E-02	DCF2(60)
B-1	Ra-226+D1	4.570E-02	4.554E-02	DCF2(63)
B-1	Ra-226+D2	4.563E-02	4.554E-02	DCF2(66)
B-1	Ra-226+D3	4.563E-02	4.554E-02	DCF2(69)
B-1	Ra-226+D4	4.554E-02	4.554E-02	DCF2(72)
B-1	Ra-228+D	7.292E-02	7.284E-02	DCF2(75)
B-1	Ru-106+D	3.925E-04	3.352E-04	DCF2(76)
B-1	Sm-148	9.064E-02	9.064E-02	DCF2(77)
B-1	Sr-90+D	7.890E-04	6.741E-04	DCF2(78)
B-1	Tc-99	6.997E-05	6.082E-05	DCF2(79)
B-1	Th-228+D	2.571E-01	2.042E-01	DCF2(80)
B-1	Th-229+D	1.155E+00	1.075E+00	DCF2(81)
B-1	Th-230	4.508E-01	4.177E-01	DCF2(82)
B-1	Th-232	5.320E-01	4.961E-01	DCF2(97)
B-1	U-233	4.584E-02	4.584E-02	DCF2(98)
B-1	U-234	5.284E-02	4.499E-02	DCF2(99)
B-1	U-235+D	4.776E-02	4.058E-02	DCF2(114)
B-1	U-238	4.533E-02	3.848E-02	DCF2(120)
B-1	U-238+D	4.538E-02	3.848E-02	DCF2(121)
B-1	U-238+D1	4.538E-02	3.848E-02	DCF2(136)
D-1	Dose conversion factors for ingestion, mrem/pCi:			
D-1	Ac-227+D	3.151E-03	1.384E-03	DCF3(1)
D-1	Ac-227+D1	3.151E-03	1.384E-03	DCF3(2)
D-1	Ac-227+D2	3.084E-03	1.384E-03	DCF3(3)
D-1	Ac-227+D3	3.084E-03	1.384E-03	DCF3(4)
D-1	Ac-227+D4	1.404E-03	1.384E-03	DCF3(5)

D-1 ³ Ac-227+D5
D-1 ³ Am-241
D-1 ³ Co-60
D-1 ³ Cs-134
D-1 ³ Cs-137+D
D-1 ³ Eu-152
D-1 ³ Eu-154
D-1 ³ Eu-155
D-1 ³ Gd-152
D-1 ³ H-3

³ 1.404E-03 ³ 1.384E-03 ³ DCF3(6)
³ 8.833E-04 ³ 8.214E-04 ³ DCF3(7)
³ 4.807E-05 ³ 4.144E-05 ³ DCF3(8)
³ 5.166E-05 ³ 5.217E-05 ³ DCF3(9)
³ 3.753E-05 ³ 3.774E-05 ³ DCF3(10)
³ 1.115E-05 ³ 9.509E-06 ³ DCF3(11)
³ 1.721E-05 ³ 1.450E-05 ³ DCF3(13)
³ 3.100E-06 ³ 2.575E-06 ³ DCF3(14)
³ 1.965E-04 ³ 1.965E-04 ³ DCF3(15)
³ 1.015E-07 ³ 2.105E-07 ³ DCF3(16)

Dose Conversion Factor (and Related) Parameter Summary (continued)

Dose Library: Age 6-11 interpolate Plus DCFPAK3.02 (Age 10)

0	3		3	Current	3	Base	3	Parameter
Menu	3	Parameter	3	Value#	3	Case*	3	Name
AA								
D-1	3	I-129	3	6.846E-04	3	7.104E-04	3	DCF3(17)
D-1	3	Mn-54	3	5.511E-06	3	4.810E-06	3	DCF3(18)
D-1	3	Na-22	3	2.380E-05	3	2.039E-05	3	DCF3(19)
D-1	3	Nd-144	3	1.946E-04	3	1.946E-04	3	DCF3(20)
D-1	3	Ni-63	3	1.253E-06	3	1.040E-06	3	DCF3(21)
D-1	3	Np-237+D	3	4.685E-04	3	4.255E-04	3	DCF3(22)
D-1	3	Pa-231	3	2.090E-03	3	2.090E-03	3	DCF3(23)
D-1	3	Pb-210+D	3	1.681E-02	3	7.215E-03	3	DCF3(29)
D-1	3	Pb-210+D1	3	7.226E-03	3	7.215E-03	3	DCF3(30)
D-1	3	Pb-210+D2	3	7.215E-03	3	7.215E-03	3	DCF3(31)
D-1	3	Pu-238	3	9.763E-04	3	9.028E-04	3	DCF3(32)
D-1	3	Pu-239	3	1.076E-03	3	1.003E-03	3	DCF3(48)
D-1	3	Pu-239+D	3	1.076E-03	3	1.003E-03	3	DCF3(54)
D-1	3	Ra-226+D	3	2.969E-03	3	2.967E-03	3	DCF3(60)
D-1	3	Ra-226+D1	3	2.969E-03	3	2.967E-03	3	DCF3(63)
D-1	3	Ra-226+D2	3	2.968E-03	3	2.967E-03	3	DCF3(66)
D-1	3	Ra-226+D3	3	2.968E-03	3	2.967E-03	3	DCF3(69)
D-1	3	Ra-226+D4	3	2.967E-03	3	2.967E-03	3	DCF3(72)
D-1	3	Ra-228+D	3	1.451E-02	3	1.450E-02	3	DCF3(75)
D-1	3	Ru-106+D	3	6.730E-05	3	5.550E-05	3	DCF3(76)
D-1	3	Sm-148	3	2.031E-04	3	2.031E-04	3	DCF3(77)
D-1	3	Sr-90+D	3	2.335E-04	3	2.205E-04	3	DCF3(78)
D-1	3	Tc-99	3	6.008E-06	3	4.847E-06	3	DCF3(79)
D-1	3	Th-228+D	3	1.744E-03	3	5.069E-04	3	DCF3(80)
D-1	3	Th-229+D	3	4.478E-03	3	2.313E-03	3	DCF3(81)
D-1	3	Th-230	3	9.846E-04	3	9.102E-04	3	DCF3(82)
D-1	3	Th-232	3	1.150E-03	3	1.069E-03	3	DCF3(97)
D-1	3	U-233	3	2.886E-04	3	2.886E-04	3	DCF3(98)
D-1	3	U-234	3	2.928E-04	3	2.757E-04	3	DCF3(99)
D-1	3	U-235+D	3	2.839E-04	3	2.638E-04	3	DCF3(114)
D-1	3	U-238	3	2.658E-04	3	2.505E-04	3	DCF3(120)
D-1	3	U-238+D	3	3.031E-04	3	2.505E-04	3	DCF3(121)
D-1	3	U-238+D1	3	2.993E-04	3	2.505E-04	3	DCF3(136)
	3		3		3		3	
D-34	3	Food transfer factors:	3		3		3	
D-34	3	Ac-227+D , plant/soil concentration ratio, dimensionless	3	2.500E-03	3	2.500E-03	3	RTF(1,1)
D-34	3	Ac-227+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	2.000E-05	3	2.000E-05	3	RTF(1,2)
D-34	3	Ac-227+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	2.000E-05	3	2.000E-05	3	RTF(1,3)
D-34	3		3		3		3	
D-34	3	Ac-227+D1 , plant/soil concentration ratio, dimensionless	3	2.500E-03	3	2.500E-03	3	RTF(2,1)

D-34	³	Ac-227+D1 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	³	2.000E-05	³	2.000E-05	³	RTF(	2,2)
D-34	³	Ac-227+D1 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	³	2.000E-05	³	2.000E-05	³	RTF(	2,3)
D-34	³		³		³		³		
D-34	³	Ac-227+D2 , plant/soil concentration ratio, dimensionless	³	2.500E-03	³	2.500E-03	³	RTF(	3,1)
D-34	³	Ac-227+D2 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	³	2.000E-05	³	2.000E-05	³	RTF(	3,2)
D-34	³	Ac-227+D2 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	³	2.000E-05	³	2.000E-05	³	RTF(	3,3)
D-34	³		³		³		³		
D-34	³	Ac-227+D3 , plant/soil concentration ratio, dimensionless	³	2.500E-03	³	2.500E-03	³	RTF(	4,1)
D-34	³	Ac-227+D3 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	³	2.000E-05	³	2.000E-05	³	RTF(	4,2)
D-34	³	Ac-227+D3 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	³	2.000E-05	³	2.000E-05	³	RTF(	4,3)

Dose Conversion Factor (and Related) Parameter Summary (continued)

Dose Library: Age 6-11 interpolate Plus DCFPAK3.02 (Age 10)

0	3		3	Current	3	Base	3	Parameter
Menu	3	Parameter	3	Value#	3	Case*	3	Name
AA								
D-34	3	Ac-227+D4 , plant/soil concentration ratio, dimensionless	3	2.500E-03	3	2.500E-03	3	RTF(5,1)
D-34	3	Ac-227+D4 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	2.000E-05	3	2.000E-05	3	RTF(5,2)
D-34	3	Ac-227+D4 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	2.000E-05	3	2.000E-05	3	RTF(5,3)
D-34	3		3		3		3	
D-34	3	Ac-227+D5 , plant/soil concentration ratio, dimensionless	3	2.500E-03	3	2.500E-03	3	RTF(6,1)
D-34	3	Ac-227+D5 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	2.000E-05	3	2.000E-05	3	RTF(6,2)
D-34	3	Ac-227+D5 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	2.000E-05	3	2.000E-05	3	RTF(6,3)
D-34	3		3		3		3	
D-34	3	Am-241 , plant/soil concentration ratio, dimensionless	3	1.000E-03	3	1.000E-03	3	RTF(7,1)
D-34	3	Am-241 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	5.000E-05	3	5.000E-05	3	RTF(7,2)
D-34	3	Am-241 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	2.000E-06	3	2.000E-06	3	RTF(7,3)
D-34	3		3		3		3	
D-34	3	Co-60 , plant/soil concentration ratio, dimensionless	3	8.000E-02	3	8.000E-02	3	RTF(8,1)
D-34	3	Co-60 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	2.000E-02	3	2.000E-02	3	RTF(8,2)
D-34	3	Co-60 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	2.000E-03	3	2.000E-03	3	RTF(8,3)
D-34	3		3		3		3	
D-34	3	Cs-134 , plant/soil concentration ratio, dimensionless	3	4.000E-02	3	4.000E-02	3	RTF(9,1)
D-34	3	Cs-134 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	3.000E-02	3	3.000E-02	3	RTF(9,2)
D-34	3	Cs-134 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	8.000E-03	3	8.000E-03	3	RTF(9,3)
D-34	3		3		3		3	
D-34	3	Cs-137+D , plant/soil concentration ratio, dimensionless	3	4.000E-02	3	4.000E-02	3	RTF(10,1)
D-34	3	Cs-137+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	3.000E-02	3	3.000E-02	3	RTF(10,2)
D-34	3	Cs-137+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	8.000E-03	3	8.000E-03	3	RTF(10,3)
D-34	3		3		3		3	
D-34	3	Eu-152 , plant/soil concentration ratio, dimensionless	3	2.500E-03	3	2.500E-03	3	RTF(11,1)
D-34	3	Eu-152 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	2.000E-03	3	2.000E-03	3	RTF(11,2)
D-34	3	Eu-152 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	5.000E-05	3	5.000E-05	3	RTF(11,3)
D-34	3		3		3		3	
D-34	3	Eu-154 , plant/soil concentration ratio, dimensionless	3	2.500E-03	3	2.500E-03	3	RTF(13,1)
D-34	3	Eu-154 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	2.000E-03	3	2.000E-03	3	RTF(13,2)
D-34	3	Eu-154 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	5.000E-05	3	5.000E-05	3	RTF(13,3)
D-34	3		3		3		3	
D-34	3	Eu-155 , plant/soil concentration ratio, dimensionless	3	2.500E-03	3	2.500E-03	3	RTF(14,1)
D-34	3	Eu-155 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	2.000E-03	3	2.000E-03	3	RTF(14,2)
D-34	3	Eu-155 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	5.000E-05	3	5.000E-05	3	RTF(14,3)
D-34	3		3		3		3	
D-34	3	Gd-152 , plant/soil concentration ratio, dimensionless	3	2.500E-03	3	2.500E-03	3	RTF(15,1)
D-34	3	Gd-152 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	2.000E-03	3	2.000E-03	3	RTF(15,2)
D-34	3	Gd-152 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	2.000E-05	3	2.000E-05	3	RTF(15,3)
D-34	3		3		3		3	

D-34	³	H-3	, plant/soil concentration ratio, dimensionless	³	4.800E+00	³	4.800E+00	³	RTF(16,1)
D-34	³	H-3	, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	³	1.200E-02	³	1.200E-02	³	RTF(16,2)
D-34	³	H-3	, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	³	1.000E-02	³	1.000E-02	³	RTF(16,3)
D-34	³			³		³		³	
D-34	³	I-129	, plant/soil concentration ratio, dimensionless	³	2.000E-02	³	2.000E-02	³	RTF(17,1)
D-34	³	I-129	, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	³	7.000E-03	³	7.000E-03	³	RTF(17,2)
D-34	³	I-129	, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	³	1.000E-02	³	1.000E-02	³	RTF(17,3)
D-34	³			³		³		³	

Dose Conversion Factor (and Related) Parameter Summary (continued)

Dose Library: Age 6-11 interpolate Plus DCFPAK3.02 (Age 10)

0	3		3	Current	3	Base	3	Parameter
Menu	3	Parameter	3	Value#	3	Case*	3	Name
AAAAA	3	AAAAA	3	AAAAA	3	AAAAA	3	AAAAA
D-34	3	Mn-54 , plant/soil concentration ratio, dimensionless	3	3.000E-01	3	3.000E-01	3	RTF(18,1)
D-34	3	Mn-54 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	5.000E-04	3	5.000E-04	3	RTF(18,2)
D-34	3	Mn-54 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	3.000E-04	3	3.000E-04	3	RTF(18,3)
D-34	3		3		3		3	
D-34	3	Na-22 , plant/soil concentration ratio, dimensionless	3	5.000E-02	3	5.000E-02	3	RTF(19,1)
D-34	3	Na-22 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	8.000E-02	3	8.000E-02	3	RTF(19,2)
D-34	3	Na-22 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	4.000E-02	3	4.000E-02	3	RTF(19,3)
D-34	3		3		3		3	
D-34	3	Nd-144 , plant/soil concentration ratio, dimensionless	3	2.400E-03	3	2.400E-03	3	RTF(20,1)
D-34	3	Nd-144 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	2.000E-03	3	2.000E-03	3	RTF(20,2)
D-34	3	Nd-144 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	2.000E-05	3	2.000E-05	3	RTF(20,3)
D-34	3		3		3		3	
D-34	3	Ni-63 , plant/soil concentration ratio, dimensionless	3	5.000E-02	3	5.000E-02	3	RTF(21,1)
D-34	3	Ni-63 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	5.000E-03	3	5.000E-03	3	RTF(21,2)
D-34	3	Ni-63 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	2.000E-02	3	2.000E-02	3	RTF(21,3)
D-34	3		3		3		3	
D-34	3	Np-237+D , plant/soil concentration ratio, dimensionless	3	2.000E-02	3	2.000E-02	3	RTF(22,1)
D-34	3	Np-237+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	1.000E-03	3	1.000E-03	3	RTF(22,2)
D-34	3	Np-237+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	5.000E-06	3	5.000E-06	3	RTF(22,3)
D-34	3		3		3		3	
D-34	3	Pa-231 , plant/soil concentration ratio, dimensionless	3	1.000E-02	3	1.000E-02	3	RTF(23,1)
D-34	3	Pa-231 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	5.000E-03	3	5.000E-03	3	RTF(23,2)
D-34	3	Pa-231 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	5.000E-06	3	5.000E-06	3	RTF(23,3)
D-34	3		3		3		3	
D-34	3	Pb-210+D , plant/soil concentration ratio, dimensionless	3	1.000E-02	3	1.000E-02	3	RTF(29,1)
D-34	3	Pb-210+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	8.000E-04	3	8.000E-04	3	RTF(29,2)
D-34	3	Pb-210+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	3.000E-04	3	3.000E-04	3	RTF(29,3)
D-34	3		3		3		3	
D-34	3	Pb-210+D1 , plant/soil concentration ratio, dimensionless	3	1.000E-02	3	1.000E-02	3	RTF(30,1)
D-34	3	Pb-210+D1 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	8.000E-04	3	8.000E-04	3	RTF(30,2)
D-34	3	Pb-210+D1 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	3.000E-04	3	3.000E-04	3	RTF(30,3)
D-34	3		3		3		3	
D-34	3	Pb-210+D2 , plant/soil concentration ratio, dimensionless	3	1.000E-02	3	1.000E-02	3	RTF(31,1)
D-34	3	Pb-210+D2 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	8.000E-04	3	8.000E-04	3	RTF(31,2)
D-34	3	Pb-210+D2 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	3.000E-04	3	3.000E-04	3	RTF(31,3)
D-34	3		3		3		3	
D-34	3	Pu-238 , plant/soil concentration ratio, dimensionless	3	1.000E-03	3	1.000E-03	3	RTF(32,1)
D-34	3	Pu-238 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	1.000E-04	3	1.000E-04	3	RTF(32,2)
D-34	3	Pu-238 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	1.000E-06	3	1.000E-06	3	RTF(32,3)
D-34	3		3		3		3	

D-34	³	Pu-239	, plant/soil concentration ratio, dimensionless	³	1.000E-03	³	1.000E-03	³	RTF(48,1)
D-34	³	Pu-239	, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	³	1.000E-04	³	1.000E-04	³	RTF(48,2)
D-34	³	Pu-239	, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	³	1.000E-06	³	1.000E-06	³	RTF(48,3)
D-34	³			³		³		³	
D-34	³	Pu-239+D	, plant/soil concentration ratio, dimensionless	³	1.000E-03	³	1.000E-03	³	RTF(54,1)
D-34	³	Pu-239+D	, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	³	1.000E-04	³	1.000E-04	³	RTF(54,2)
D-34	³	Pu-239+D	, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	³	1.000E-06	³	1.000E-06	³	RTF(54,3)
D-34	³			³		³		³	

Dose Conversion Factor (and Related) Parameter Summary (continued)

Dose Library: Age 6-11 interpolate Plus DCFPAK3.02 (Age 10)

0	3		3	Current	3	Base	3	Parameter
Menu	3	Parameter	3	Value#	3	Case*	3	Name
AA								
D-34	3	Ra-226+D , plant/soil concentration ratio, dimensionless	3	4.000E-02	3	4.000E-02	3	RTF(60,1)
D-34	3	Ra-226+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	1.000E-03	3	1.000E-03	3	RTF(60,2)
D-34	3	Ra-226+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	1.000E-03	3	1.000E-03	3	RTF(60,3)
D-34	3		3		3		3	
D-34	3	Ra-226+D1 , plant/soil concentration ratio, dimensionless	3	4.000E-02	3	4.000E-02	3	RTF(63,1)
D-34	3	Ra-226+D1 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	1.000E-03	3	1.000E-03	3	RTF(63,2)
D-34	3	Ra-226+D1 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	1.000E-03	3	1.000E-03	3	RTF(63,3)
D-34	3		3		3		3	
D-34	3	Ra-226+D2 , plant/soil concentration ratio, dimensionless	3	4.000E-02	3	4.000E-02	3	RTF(66,1)
D-34	3	Ra-226+D2 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	1.000E-03	3	1.000E-03	3	RTF(66,2)
D-34	3	Ra-226+D2 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	1.000E-03	3	1.000E-03	3	RTF(66,3)
D-34	3		3		3		3	
D-34	3	Ra-226+D3 , plant/soil concentration ratio, dimensionless	3	4.000E-02	3	4.000E-02	3	RTF(69,1)
D-34	3	Ra-226+D3 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	1.000E-03	3	1.000E-03	3	RTF(69,2)
D-34	3	Ra-226+D3 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	1.000E-03	3	1.000E-03	3	RTF(69,3)
D-34	3		3		3		3	
D-34	3	Ra-226+D4 , plant/soil concentration ratio, dimensionless	3	4.000E-02	3	4.000E-02	3	RTF(72,1)
D-34	3	Ra-226+D4 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	1.000E-03	3	1.000E-03	3	RTF(72,2)
D-34	3	Ra-226+D4 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	1.000E-03	3	1.000E-03	3	RTF(72,3)
D-34	3		3		3		3	
D-34	3	Ra-228+D , plant/soil concentration ratio, dimensionless	3	4.000E-02	3	4.000E-02	3	RTF(75,1)
D-34	3	Ra-228+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	1.000E-03	3	1.000E-03	3	RTF(75,2)
D-34	3	Ra-228+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	1.000E-03	3	1.000E-03	3	RTF(75,3)
D-34	3		3		3		3	
D-34	3	Ru-106+D , plant/soil concentration ratio, dimensionless	3	3.000E-02	3	3.000E-02	3	RTF(76,1)
D-34	3	Ru-106+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	2.000E-03	3	2.000E-03	3	RTF(76,2)
D-34	3	Ru-106+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	3.300E-06	3	3.300E-06	3	RTF(76,3)
D-34	3		3		3		3	
D-34	3	Sm-148 , plant/soil concentration ratio, dimensionless	3	2.500E-03	3	2.500E-03	3	RTF(77,1)
D-34	3	Sm-148 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	2.000E-03	3	2.000E-03	3	RTF(77,2)
D-34	3	Sm-148 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	2.000E-05	3	2.000E-05	3	RTF(77,3)
D-34	3		3		3		3	
D-34	3	Sr-90+D , plant/soil concentration ratio, dimensionless	3	3.000E-01	3	3.000E-01	3	RTF(78,1)
D-34	3	Sr-90+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	8.000E-03	3	8.000E-03	3	RTF(78,2)
D-34	3	Sr-90+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	2.000E-03	3	2.000E-03	3	RTF(78,3)
D-34	3		3		3		3	
D-34	3	Tc-99 , plant/soil concentration ratio, dimensionless	3	5.000E+00	3	5.000E+00	3	RTF(79,1)
D-34	3	Tc-99 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	1.000E-04	3	1.000E-04	3	RTF(79,2)
D-34	3	Tc-99 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	1.000E-03	3	1.000E-03	3	RTF(79,3)
D-34	3		3		3		3	

D-34	³	Th-228+D	, plant/soil concentration ratio, dimensionless	³	1.000E-03	³	1.000E-03	³	RTF(80,1)
D-34	³	Th-228+D	, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	³	1.000E-04	³	1.000E-04	³	RTF(80,2)
D-34	³	Th-228+D	, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	³	5.000E-06	³	5.000E-06	³	RTF(80,3)
D-34	³			³		³		³	
D-34	³	Th-229+D	, plant/soil concentration ratio, dimensionless	³	1.000E-03	³	1.000E-03	³	RTF(81,1)
D-34	³	Th-229+D	, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	³	1.000E-04	³	1.000E-04	³	RTF(81,2)
D-34	³	Th-229+D	, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	³	5.000E-06	³	5.000E-06	³	RTF(81,3)
D-34	³			³		³		³	

Dose Conversion Factor (and Related) Parameter Summary (continued)

Dose Library: Age 6-11 interpolate Plus DCFPAK3.02 (Age 10)

0	3		3	Current	3	Base	3	Parameter
Menu	3	Parameter	3	Value#	3	Case*	3	Name
AA								
D-34	3	Th-230 , plant/soil concentration ratio, dimensionless	3	1.000E-03	3	1.000E-03	3	RTF(82,1)
D-34	3	Th-230 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	1.000E-04	3	1.000E-04	3	RTF(82,2)
D-34	3	Th-230 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	5.000E-06	3	5.000E-06	3	RTF(82,3)
D-34	3		3		3		3	
D-34	3	Th-232 , plant/soil concentration ratio, dimensionless	3	1.000E-03	3	1.000E-03	3	RTF(97,1)
D-34	3	Th-232 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	1.000E-04	3	1.000E-04	3	RTF(97,2)
D-34	3	Th-232 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	5.000E-06	3	5.000E-06	3	RTF(97,3)
D-34	3		3		3		3	
D-34	3	U-233 , plant/soil concentration ratio, dimensionless	3	2.500E-03	3	2.500E-03	3	RTF(98,1)
D-34	3	U-233 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	3.400E-04	3	3.400E-04	3	RTF(98,2)
D-34	3	U-233 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	6.000E-04	3	6.000E-04	3	RTF(98,3)
D-34	3		3		3		3	
D-34	3	U-234 , plant/soil concentration ratio, dimensionless	3	2.500E-03	3	2.500E-03	3	RTF(99,1)
D-34	3	U-234 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	3.400E-04	3	3.400E-04	3	RTF(99,2)
D-34	3	U-234 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	6.000E-04	3	6.000E-04	3	RTF(99,3)
D-34	3		3		3		3	
D-34	3	U-235+D , plant/soil concentration ratio, dimensionless	3	2.500E-03	3	2.500E-03	3	RTF(114,1)
D-34	3	U-235+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	3.400E-04	3	3.400E-04	3	RTF(114,2)
D-34	3	U-235+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	6.000E-04	3	6.000E-04	3	RTF(114,3)
D-34	3		3		3		3	
D-34	3	U-238 , plant/soil concentration ratio, dimensionless	3	2.500E-03	3	2.500E-03	3	RTF(120,1)
D-34	3	U-238 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	3.400E-04	3	3.400E-04	3	RTF(120,2)
D-34	3	U-238 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	6.000E-04	3	6.000E-04	3	RTF(120,3)
D-34	3		3		3		3	
D-34	3	U-238+D , plant/soil concentration ratio, dimensionless	3	2.500E-03	3	2.500E-03	3	RTF(121,1)
D-34	3	U-238+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	3.400E-04	3	3.400E-04	3	RTF(121,2)
D-34	3	U-238+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	6.000E-04	3	6.000E-04	3	RTF(121,3)
D-34	3		3		3		3	
D-34	3	U-238+D1 , plant/soil concentration ratio, dimensionless	3	2.500E-03	3	2.500E-03	3	RTF(136,1)
D-34	3	U-238+D1 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	3.400E-04	3	3.400E-04	3	RTF(136,2)
D-34	3	U-238+D1 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	6.000E-04	3	6.000E-04	3	RTF(136,3)
D-34	3		3		3		3	
D-5	3	Bioaccumulation factors, fresh water, L/kg:	3		3		3	
D-5	3	Ac-227+D , fish	3	1.500E+01	3	1.500E+01	3	BIOFAC(1,1)
D-5	3	Ac-227+D , crustacea and mollusks	3	1.000E+03	3	1.000E+03	3	BIOFAC(1,2)
D-5	3		3		3		3	
D-5	3	Ac-227+D1 , fish	3	1.500E+01	3	1.500E+01	3	BIOFAC(2,1)
D-5	3	Ac-227+D1 , crustacea and mollusks	3	1.000E+03	3	1.000E+03	3	BIOFAC(2,2)
D-5	3		3		3		3	

D-5 ³ Ac-227+D2 , fish
 D-5 ³ Ac-227+D2 , crustacea and mollusks
 D-5 ³
 D-5 ³ Ac-227+D3 , fish
 D-5 ³ Ac-227+D3 , crustacea and mollusks
 D-5 ³
 D-5 ³ Ac-227+D4 , fish
 D-5 ³ Ac-227+D4 , crustacea and mollusks
 D-5 ³

³ 1.500E+01 ³ 1.500E+01 ³ BIOFAC(3,1)
³ 1.000E+03 ³ 1.000E+03 ³ BIOFAC(3,2)
³ ³ ³
³ 1.500E+01 ³ 1.500E+01 ³ BIOFAC(4,1)
³ 1.000E+03 ³ 1.000E+03 ³ BIOFAC(4,2)
³ ³ ³
³ 1.500E+01 ³ 1.500E+01 ³ BIOFAC(5,1)
³ 1.000E+03 ³ 1.000E+03 ³ BIOFAC(5,2)
³ ³ ³

Summary : Child recreational SALS 2015

File : D:\ACTIVE PROJECTS\ADELANTE\MT0A4_CONTRACT\T01\RISK\2015 RADSALS\DOSE-BASED SALS\RESRAD CALCS\CHILDREC2015.RAD

Dose Conversion Factor (and Related) Parameter Summary (continued)

Dose Library: Age 6-11 interpolate Plus DCFPAK3.02 (Age 10)

0	3		3	Current	3	Base	3	Parameter
Menu	3	Parameter	3	Value#	3	Case*	3	Name
AAAAA	3	AAAAA	3	AAAAA	3	AAAAA	3	AAAAA
D-5	3	Ac-227+D5 , fish	3	1.500E+01	3	1.500E+01	3	BIOFAC(6,1)
D-5	3	Ac-227+D5 , crustacea and mollusks	3	1.000E+03	3	1.000E+03	3	BIOFAC(6,2)
D-5	3		3		3		3	
D-5	3	Am-241 , fish	3	3.000E+01	3	3.000E+01	3	BIOFAC(7,1)
D-5	3	Am-241 , crustacea and mollusks	3	1.000E+03	3	1.000E+03	3	BIOFAC(7,2)
D-5	3		3		3		3	
D-5	3	Co-60 , fish	3	3.000E+02	3	3.000E+02	3	BIOFAC(8,1)
D-5	3	Co-60 , crustacea and mollusks	3	2.000E+02	3	2.000E+02	3	BIOFAC(8,2)
D-5	3		3		3		3	
D-5	3	Cs-134 , fish	3	2.000E+03	3	2.000E+03	3	BIOFAC(9,1)
D-5	3	Cs-134 , crustacea and mollusks	3	1.000E+02	3	1.000E+02	3	BIOFAC(9,2)
D-5	3		3		3		3	
D-5	3	Cs-137+D , fish	3	2.000E+03	3	2.000E+03	3	BIOFAC(10,1)
D-5	3	Cs-137+D , crustacea and mollusks	3	1.000E+02	3	1.000E+02	3	BIOFAC(10,2)
D-5	3		3		3		3	
D-5	3	Eu-152 , fish	3	5.000E+01	3	5.000E+01	3	BIOFAC(11,1)
D-5	3	Eu-152 , crustacea and mollusks	3	1.000E+03	3	1.000E+03	3	BIOFAC(11,2)
D-5	3		3		3		3	
D-5	3	Eu-154 , fish	3	5.000E+01	3	5.000E+01	3	BIOFAC(13,1)
D-5	3	Eu-154 , crustacea and mollusks	3	1.000E+03	3	1.000E+03	3	BIOFAC(13,2)
D-5	3		3		3		3	
D-5	3	Eu-155 , fish	3	5.000E+01	3	5.000E+01	3	BIOFAC(14,1)
D-5	3	Eu-155 , crustacea and mollusks	3	1.000E+03	3	1.000E+03	3	BIOFAC(14,2)
D-5	3		3		3		3	
D-5	3	Gd-152 , fish	3	2.500E+01	3	2.500E+01	3	BIOFAC(15,1)
D-5	3	Gd-152 , crustacea and mollusks	3	1.000E+03	3	1.000E+03	3	BIOFAC(15,2)
D-5	3		3		3		3	
D-5	3	H-3 , fish	3	1.000E+00	3	1.000E+00	3	BIOFAC(16,1)
D-5	3	H-3 , crustacea and mollusks	3	1.000E+00	3	1.000E+00	3	BIOFAC(16,2)
D-5	3		3		3		3	
D-5	3	I-129 , fish	3	4.000E+01	3	4.000E+01	3	BIOFAC(17,1)
D-5	3	I-129 , crustacea and mollusks	3	5.000E+00	3	5.000E+00	3	BIOFAC(17,2)
D-5	3		3		3		3	
D-5	3	Mn-54 , fish	3	4.000E+02	3	4.000E+02	3	BIOFAC(18,1)
D-5	3	Mn-54 , crustacea and mollusks	3	9.000E+04	3	9.000E+04	3	BIOFAC(18,2)
D-5	3		3		3		3	
D-5	3	Na-22 , fish	3	2.000E+01	3	2.000E+01	3	BIOFAC(19,1)
D-5	3	Na-22 , crustacea and mollusks	3	2.000E+02	3	2.000E+02	3	BIOFAC(19,2)
D-5	3		3		3		3	
D-5	3	Nd-144 , fish	3	1.000E+02	3	1.000E+02	3	BIOFAC(20,1)

D-5 ³ Nd-144 , crustacea and mollusks
 D-5 ³
 D-5 ³ Ni-63 , fish
 D-5 ³ Ni-63 , crustacea and mollusks
 D-5 ³
 D-5 ³ Np-237+D , fish
 D-5 ³ Np-237+D , crustacea and mollusks
 D-5 ³
 D-5 ³ Pa-231 , fish
 D-5 ³ Pa-231 , crustacea and mollusks

³ 1.000E+03 ³ 1.000E+03 ³ BIOFAC(20,2)
³
³ 1.000E+02 ³ 1.000E+02 ³ BIOFAC(21,1)
³ 1.000E+02 ³ 1.000E+02 ³ BIOFAC(21,2)
³
³ 3.000E+01 ³ 3.000E+01 ³ BIOFAC(22,1)
³ 4.000E+02 ³ 4.000E+02 ³ BIOFAC(22,2)
³
³ 1.000E+01 ³ 1.000E+01 ³ BIOFAC(23,1)
³ 1.100E+02 ³ 1.100E+02 ³ BIOFAC(23,2)

Summary : Child recreational SALS 2015

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Dose Conversion Factor (and Related) Parameter Summary (continued)

Dose Library: Age 6-11 interpolate Plus DCFPAK3.02 (Age 10)

0	3		3	Current	3	Base	3	Parameter
Menu	3	Parameter	3	Value#	3	Case*	3	Name
AAAAA	3	AAAAA	3	AAAAA	3	AAAAA	3	AAAAA
D-5	3	Pb-210+D , fish	3	3.000E+02	3	3.000E+02	3	BIOFAC(29,1)
D-5	3	Pb-210+D , crustacea and mollusks	3	1.000E+02	3	1.000E+02	3	BIOFAC(29,2)
D-5	3		3		3		3	
D-5	3	Pb-210+D1 , fish	3	3.000E+02	3	3.000E+02	3	BIOFAC(30,1)
D-5	3	Pb-210+D1 , crustacea and mollusks	3	1.000E+02	3	1.000E+02	3	BIOFAC(30,2)
D-5	3		3		3		3	
D-5	3	Pb-210+D2 , fish	3	3.000E+02	3	3.000E+02	3	BIOFAC(31,1)
D-5	3	Pb-210+D2 , crustacea and mollusks	3	1.000E+02	3	1.000E+02	3	BIOFAC(31,2)
D-5	3		3		3		3	
D-5	3	Pu-238 , fish	3	3.000E+01	3	3.000E+01	3	BIOFAC(32,1)
D-5	3	Pu-238 , crustacea and mollusks	3	1.000E+02	3	1.000E+02	3	BIOFAC(32,2)
D-5	3		3		3		3	
D-5	3	Pu-239 , fish	3	3.000E+01	3	3.000E+01	3	BIOFAC(48,1)
D-5	3	Pu-239 , crustacea and mollusks	3	1.000E+02	3	1.000E+02	3	BIOFAC(48,2)
D-5	3		3		3		3	
D-5	3	Pu-239+D , fish	3	3.000E+01	3	3.000E+01	3	BIOFAC(54,1)
D-5	3	Pu-239+D , crustacea and mollusks	3	1.000E+02	3	1.000E+02	3	BIOFAC(54,2)
D-5	3		3		3		3	
D-5	3	Ra-226+D , fish	3	5.000E+01	3	5.000E+01	3	BIOFAC(60,1)
D-5	3	Ra-226+D , crustacea and mollusks	3	2.500E+02	3	2.500E+02	3	BIOFAC(60,2)
D-5	3		3		3		3	
D-5	3	Ra-226+D1 , fish	3	5.000E+01	3	5.000E+01	3	BIOFAC(63,1)
D-5	3	Ra-226+D1 , crustacea and mollusks	3	2.500E+02	3	2.500E+02	3	BIOFAC(63,2)
D-5	3		3		3		3	
D-5	3	Ra-226+D2 , fish	3	5.000E+01	3	5.000E+01	3	BIOFAC(66,1)
D-5	3	Ra-226+D2 , crustacea and mollusks	3	2.500E+02	3	2.500E+02	3	BIOFAC(66,2)
D-5	3		3		3		3	
D-5	3	Ra-226+D3 , fish	3	5.000E+01	3	5.000E+01	3	BIOFAC(69,1)
D-5	3	Ra-226+D3 , crustacea and mollusks	3	2.500E+02	3	2.500E+02	3	BIOFAC(69,2)
D-5	3		3		3		3	
D-5	3	Ra-226+D4 , fish	3	5.000E+01	3	5.000E+01	3	BIOFAC(72,1)
D-5	3	Ra-226+D4 , crustacea and mollusks	3	2.500E+02	3	2.500E+02	3	BIOFAC(72,2)
D-5	3		3		3		3	
D-5	3	Ra-228+D , fish	3	5.000E+01	3	5.000E+01	3	BIOFAC(75,1)
D-5	3	Ra-228+D , crustacea and mollusks	3	2.500E+02	3	2.500E+02	3	BIOFAC(75,2)
D-5	3		3		3		3	
D-5	3	Ru-106+D , fish	3	1.000E+01	3	1.000E+01	3	BIOFAC(76,1)
D-5	3	Ru-106+D , crustacea and mollusks	3	3.000E+02	3	3.000E+02	3	BIOFAC(76,2)
D-5	3		3		3		3	
D-5	3	Sm-148 , fish	3	2.500E+01	3	2.500E+01	3	BIOFAC(77,1)

D-5 ³ Sm-148 , crustacea and mollusks
 D-5 ³
 D-5 ³ Sr-90+D , fish
 D-5 ³ Sr-90+D , crustacea and mollusks
 D-5 ³
 D-5 ³ Tc-99 , fish
 D-5 ³ Tc-99 , crustacea and mollusks
 D-5 ³
 D-5 ³ Th-228+D , fish
 D-5 ³ Th-228+D , crustacea and mollusks

³ 1.000E+03 ³ 1.000E+03 ³ BIOFAC(77,2)
³
³ 6.000E+01 ³ 6.000E+01 ³ BIOFAC(78,1)
³ 1.000E+02 ³ 1.000E+02 ³ BIOFAC(78,2)
³
³ 2.000E+01 ³ 2.000E+01 ³ BIOFAC(79,1)
³ 5.000E+00 ³ 5.000E+00 ³ BIOFAC(79,2)
³
³ 1.000E+02 ³ 1.000E+02 ³ BIOFAC(80,1)
³ 5.000E+02 ³ 5.000E+02 ³ BIOFAC(80,2)

Dose Conversion Factor (and Related) Parameter Summary (continued)

Dose Library: Age 6-11 interpolate Plus DCFPAK3.02 (Age 10)

0	3		3	Current	3	Base	3	Parameter
Menu	3	Parameter	3	Value#	3	Case*	3	Name
AAAAA	3	AAAAA	3	AAAAA	3	AAAAA	3	AAAAA
D-5	3	Th-229+D , fish	3	1.000E+02	3	1.000E+02	3	BIOFAC(81,1)
D-5	3	Th-229+D , crustacea and mollusks	3	5.000E+02	3	5.000E+02	3	BIOFAC(81,2)
D-5	3		3		3		3	
D-5	3	Th-230 , fish	3	1.000E+02	3	1.000E+02	3	BIOFAC(82,1)
D-5	3	Th-230 , crustacea and mollusks	3	5.000E+02	3	5.000E+02	3	BIOFAC(82,2)
D-5	3		3		3		3	
D-5	3	Th-232 , fish	3	1.000E+02	3	1.000E+02	3	BIOFAC(97,1)
D-5	3	Th-232 , crustacea and mollusks	3	5.000E+02	3	5.000E+02	3	BIOFAC(97,2)
D-5	3		3		3		3	
D-5	3	U-233 , fish	3	1.000E+01	3	1.000E+01	3	BIOFAC(98,1)
D-5	3	U-233 , crustacea and mollusks	3	6.000E+01	3	6.000E+01	3	BIOFAC(98,2)
D-5	3		3		3		3	
D-5	3	U-234 , fish	3	1.000E+01	3	1.000E+01	3	BIOFAC(99,1)
D-5	3	U-234 , crustacea and mollusks	3	6.000E+01	3	6.000E+01	3	BIOFAC(99,2)
D-5	3		3		3		3	
D-5	3	U-235+D , fish	3	1.000E+01	3	1.000E+01	3	BIOFAC(114,1)
D-5	3	U-235+D , crustacea and mollusks	3	6.000E+01	3	6.000E+01	3	BIOFAC(114,2)
D-5	3		3		3		3	
D-5	3	U-238 , fish	3	1.000E+01	3	1.000E+01	3	BIOFAC(120,1)
D-5	3	U-238 , crustacea and mollusks	3	6.000E+01	3	6.000E+01	3	BIOFAC(120,2)
D-5	3		3		3		3	
D-5	3	U-238+D , fish	3	1.000E+01	3	1.000E+01	3	BIOFAC(121,1)
D-5	3	U-238+D , crustacea and mollusks	3	6.000E+01	3	6.000E+01	3	BIOFAC(121,2)
D-5	3		3		3		3	
D-5	3	U-238+D1 , fish	3	1.000E+01	3	1.000E+01	3	BIOFAC(136,1)
D-5	3	U-238+D1 , crustacea and mollusks	3	6.000E+01	3	6.000E+01	3	BIOFAC(136,2)
D-5	3		3		3		3	

 #For DCF1(XXX) only, factors are for infinite depth & area. See ETFG table in Ground Pathway of Detailed Report.
 *Base Case means Default.Lib w/o Associate Nuclide contributions.

Site-Specific Parameter Summary

Menu	Parameter	User Input	Default	Used by RESRAD	Parameter Name
R011	Area of contaminated zone (m**2)	1.000E+04	1.000E+04	---	AREA
R011	Thickness of contaminated zone (m)	2.000E+00	2.000E+00	---	THICK0
R011	Fraction of contamination that is submerged	0.000E+00	0.000E+00	---	SUBMFRACT
R011	Length parallel to aquifer flow (m)	not used	1.000E+02	---	LCZPAQ
R011	Basic radiation dose limit (mrem/yr)	2.500E+01	3.000E+01	---	BRDL
R011	Time since placement of material (yr)	0.000E+00	0.000E+00	---	TI
R011	Times for calculations (yr)	1.000E+00	1.000E+00	---	T(2)
R011	Times for calculations (yr)	2.500E+01	3.000E+00	---	T(3)
R011	Times for calculations (yr)	3.000E+01	1.000E+01	---	T(4)
R011	Times for calculations (yr)	5.000E+01	3.000E+01	---	T(5)
R011	Times for calculations (yr)	1.000E+02	1.000E+02	---	T(6)
R011	Times for calculations (yr)	2.500E+02	3.000E+02	---	T(7)
R011	Times for calculations (yr)	5.000E+02	1.000E+03	---	T(8)
R011	Times for calculations (yr)	1.000E+03	0.000E+00	---	T(9)
R011	Times for calculations (yr)	not used	0.000E+00	---	T(10)
R012	Initial principal radionuclide (pCi/g): Am-241	1.000E+01	0.000E+00	---	S1(7)
R012	Initial principal radionuclide (pCi/g): Co-60	1.000E+01	0.000E+00	---	S1(8)
R012	Initial principal radionuclide (pCi/g): Cs-134	1.000E+01	0.000E+00	---	S1(9)
R012	Initial principal radionuclide (pCi/g): Cs-137	1.000E+01	0.000E+00	---	S1(10)
R012	Initial principal radionuclide (pCi/g): Eu-152	1.000E+01	0.000E+00	---	S1(11)
R012	Initial principal radionuclide (pCi/g): Eu-154	1.000E+01	0.000E+00	---	S1(13)
R012	Initial principal radionuclide (pCi/g): Eu-155	1.000E+01	0.000E+00	---	S1(14)
R012	Initial principal radionuclide (pCi/g): H-3	1.000E+01	0.000E+00	---	S1(16)
R012	Initial principal radionuclide (pCi/g): I-129	1.000E+01	0.000E+00	---	S1(17)
R012	Initial principal radionuclide (pCi/g): Mn-54	1.000E+01	0.000E+00	---	S1(18)
R012	Initial principal radionuclide (pCi/g): Na-22	1.000E+01	0.000E+00	---	S1(19)
R012	Initial principal radionuclide (pCi/g): Ni-63	1.000E+01	0.000E+00	---	S1(21)
R012	Initial principal radionuclide (pCi/g): Np-237	1.000E+01	0.000E+00	---	S1(22)
R012	Initial principal radionuclide (pCi/g): Pu-238	1.000E+01	0.000E+00	---	S1(32)
R012	Initial principal radionuclide (pCi/g): Pu-239	1.000E+01	0.000E+00	---	S1(48)
R012	Initial principal radionuclide (pCi/g): Ru-106	1.000E+01	0.000E+00	---	S1(76)
R012	Initial principal radionuclide (pCi/g): Sr-90	1.000E+01	0.000E+00	---	S1(78)
R012	Initial principal radionuclide (pCi/g): Tc-99	1.000E+01	0.000E+00	---	S1(79)
R012	Initial principal radionuclide (pCi/g): Th-228	1.000E+01	0.000E+00	---	S1(80)
R012	Initial principal radionuclide (pCi/g): Th-230	1.000E+01	0.000E+00	---	S1(82)
R012	Initial principal radionuclide (pCi/g): Th-232	1.000E+01	0.000E+00	---	S1(97)
R012	Initial principal radionuclide (pCi/g): U-234	1.000E+01	0.000E+00	---	S1(99)
R012	Initial principal radionuclide (pCi/g): U-235	1.000E+01	0.000E+00	---	S1(114)
R012	Initial principal radionuclide (pCi/g): U-238	1.000E+01	0.000E+00	---	S1(120)
R012	Concentration in groundwater (pCi/L): Am-241	not used	0.000E+00	---	W1(7)

R012	³	Concentration in groundwater	(pCi/L):	Co-60	³	not used	³	0.000E+00	³	---	³	W1(8)
R012	³	Concentration in groundwater	(pCi/L):	Cs-134	³	not used	³	0.000E+00	³	---	³	W1(9)
R012	³	Concentration in groundwater	(pCi/L):	Cs-137	³	not used	³	0.000E+00	³	---	³	W1(10)
R012	³	Concentration in groundwater	(pCi/L):	Eu-152	³	not used	³	0.000E+00	³	---	³	W1(11)
R012	³	Concentration in groundwater	(pCi/L):	Eu-154	³	not used	³	0.000E+00	³	---	³	W1(13)
R012	³	Concentration in groundwater	(pCi/L):	Eu-155	³	not used	³	0.000E+00	³	---	³	W1(14)
R012	³	Concentration in groundwater	(pCi/L):	H-3	³	not used	³	0.000E+00	³	---	³	W1(16)
R012	³	Concentration in groundwater	(pCi/L):	I-129	³	not used	³	0.000E+00	³	---	³	W1(17)
R012	³	Concentration in groundwater	(pCi/L):	Mn-54	³	not used	³	0.000E+00	³	---	³	W1(18)

Site-Specific Parameter Summary (continued)

0	3	3	3	3	3	3	3
Menu	Parameter	User	Default	Used by RESRAD	Parameter		
		Input	(If different from user input)		Name		
AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
R012	Concentration in groundwater (pCi/L): Na-22	not used	0.000E+00	---	W1(19)		
R012	Concentration in groundwater (pCi/L): Ni-63	not used	0.000E+00	---	W1(21)		
R012	Concentration in groundwater (pCi/L): Np-237	not used	0.000E+00	---	W1(22)		
R012	Concentration in groundwater (pCi/L): Pu-238	not used	0.000E+00	---	W1(32)		
R012	Concentration in groundwater (pCi/L): Pu-239	not used	0.000E+00	---	W1(48)		
R012	Concentration in groundwater (pCi/L): Ru-106	not used	0.000E+00	---	W1(76)		
R012	Concentration in groundwater (pCi/L): Sr-90	not used	0.000E+00	---	W1(78)		
R012	Concentration in groundwater (pCi/L): Tc-99	not used	0.000E+00	---	W1(79)		
R012	Concentration in groundwater (pCi/L): Th-228	not used	0.000E+00	---	W1(80)		
R012	Concentration in groundwater (pCi/L): Th-230	not used	0.000E+00	---	W1(82)		
R012	Concentration in groundwater (pCi/L): Th-232	not used	0.000E+00	---	W1(97)		
R012	Concentration in groundwater (pCi/L): U-234	not used	0.000E+00	---	W1(99)		
R012	Concentration in groundwater (pCi/L): U-235	not used	0.000E+00	---	W1(**)		
R012	Concentration in groundwater (pCi/L): U-238	not used	0.000E+00	---	W1(**)		
R013	Cover depth (m)	0.000E+00	0.000E+00	---	COVER0		
R013	Density of cover material (g/cm**3)	not used	1.500E+00	---	DENSCV		
R013	Cover depth erosion rate (m/yr)	not used	1.000E-03	---	VCV		
R013	Density of contaminated zone (g/cm**3)	1.500E+00	1.500E+00	---	DENSCZ		
R013	Contaminated zone erosion rate (m/yr)	0.000E+00	1.000E-03	---	VCZ		
R013	Contaminated zone total porosity	4.800E-01	4.000E-01	---	TPCZ		
R013	Contaminated zone field capacity	2.000E-01	2.000E-01	---	FCCZ		
R013	Contaminated zone hydraulic conductivity (m/yr)	1.000E+01	1.000E+01	---	HCCZ		
R013	Contaminated zone b parameter	5.300E+00	5.300E+00	---	BCZ		
R013	Average annual wind speed (m/sec)	3.000E+00	2.000E+00	---	WIND		
R013	Humidity in air (g/m**3)	5.550E+00	8.000E+00	---	HUMID		
R013	Evapotranspiration coefficient	9.990E-01	5.000E-01	---	EVAPTR		
R013	Precipitation (m/yr)	2.900E-01	1.000E+00	---	PRECIP		
R013	Irrigation (m/yr)	0.000E+00	2.000E-01	---	RI		
R013	Irrigation mode	overhead	overhead	---	IDITCH		
R013	Runoff coefficient	9.000E-01	2.000E-01	---	RUNOFF		
R013	Watershed area for nearby stream or pond (m**2)	not used	1.000E+06	---	WAREA		
R013	Accuracy for water/soil computations	not used	1.000E-03	---	EPS		
R014	Density of saturated zone (g/cm**3)	not used	1.500E+00	---	DENSAQ		
R014	Saturated zone total porosity	not used	4.000E-01	---	TPSZ		
R014	Saturated zone effective porosity	not used	2.000E-01	---	EPSZ		
R014	Saturated zone field capacity	not used	2.000E-01	---	FCSZ		
R014	Saturated zone hydraulic conductivity (m/yr)	not used	1.000E+02	---	HCSZ		
R014	Saturated zone hydraulic gradient	not used	2.000E-02	---	HGWT		
R014	Saturated zone b parameter	not used	5.300E+00	---	BSZ		

R014	³ Water table drop rate (m/yr)	³ not used	³ 1.000E-03	³	---	³ VWT
R014	³ Well pump intake depth (m below water table)	³ not used	³ 1.000E+01	³	---	³ DWIBWT
R014	³ Model: Nondispersion (ND) or Mass-Balance (MB)	³ not used	³ ND	³	---	³ MODEL
R014	³ Well pumping rate (m ³ /yr)	³ not used	³ 2.500E+02	³	---	³ UW
	³	³	³	³		³
R015	³ Number of unsaturated zone strata	³ not used	³ 1	³	---	³ NS

Site-Specific Parameter Summary (continued)

0	3	3	3	3	3	3	3
Menu	Parameter	User	Default	Used by RESRAD	Parameter		
	Input		(If different from user input)		Name		
AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
R015	Unsat. zone 1, thickness (m)	not used	4.000E+00	---	H(1)		
R015	Unsat. zone 1, soil density (g/cm**3)	not used	1.500E+00	---	DENSUZ(1)		
R015	Unsat. zone 1, total porosity	not used	4.000E-01	---	TPUZ(1)		
R015	Unsat. zone 1, effective porosity	not used	2.000E-01	---	EPUZ(1)		
R015	Unsat. zone 1, field capacity	not used	2.000E-01	---	FCUZ(1)		
R015	Unsat. zone 1, soil-specific b parameter	not used	5.300E+00	---	BUZ(1)		
R015	Unsat. zone 1, hydraulic conductivity (m/yr)	not used	1.000E+01	---	HCUZ(1)		
R016	Distribution coefficients for Am-241						
R016	Contaminated zone (cm**3/g)	2.000E+01	2.000E+01	---	DCNUCC(7)		
R016	Unsaturated zone 1 (cm**3/g)	not used	2.000E+01	---	DCNUCU(7,1)		
R016	Saturated zone (cm**3/g)	not used	2.000E+01	---	DCNUCS(7)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	4.801E-07	ALEACH(7)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(7)		
R016	Distribution coefficients for Co-60						
R016	Contaminated zone (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCC(8)		
R016	Unsaturated zone 1 (cm**3/g)	not used	1.000E+03	---	DCNUCU(8,1)		
R016	Saturated zone (cm**3/g)	not used	1.000E+03	---	DCNUCS(8)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	9.665E-09	ALEACH(8)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(8)		
R016	Distribution coefficients for Cs-134						
R016	Contaminated zone (cm**3/g)	4.600E+03	4.600E+03	---	DCNUCC(9)		
R016	Unsaturated zone 1 (cm**3/g)	not used	4.600E+03	---	DCNUCU(9,1)		
R016	Saturated zone (cm**3/g)	not used	4.600E+03	---	DCNUCS(9)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	2.101E-09	ALEACH(9)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(9)		
R016	Distribution coefficients for Cs-137						
R016	Contaminated zone (cm**3/g)	4.600E+03	4.600E+03	---	DCNUCC(10)		
R016	Unsaturated zone 1 (cm**3/g)	not used	4.600E+03	---	DCNUCU(10,1)		
R016	Saturated zone (cm**3/g)	not used	4.600E+03	---	DCNUCS(10)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	2.101E-09	ALEACH(10)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(10)		
R016	Distribution coefficients for Eu-152						
R016	Contaminated zone (cm**3/g)	-1.000E+00	-1.000E+00	8.249E+02	DCNUCC(11)		
R016	Unsaturated zone 1 (cm**3/g)	not used	-1.000E+00	---	DCNUCU(11,1)		
R016	Saturated zone (cm**3/g)	not used	-1.000E+00	---	DCNUCS(11)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.172E-08	ALEACH(11)		

R016	³	Solubility constant	³	0.000E+00	³	0.000E+00	³	not used	³	SOLUBK(11)
	³		³		³		³		³	
R016	³	Distribution coefficients for Eu-154	³		³		³		³	
R016	³	Contaminated zone (cm**3/g)	³	-1.000E+00	³	-1.000E+00	³	8.249E+02	³	DCNUCC(13)
R016	³	Unsaturated zone 1 (cm**3/g)	³	not used	³	-1.000E+00	³	---	³	DCNUCU(13,1)
R016	³	Saturated zone (cm**3/g)	³	not used	³	-1.000E+00	³	---	³	DCNUCS(13)
R016	³	Leach rate (/yr)	³	0.000E+00	³	0.000E+00	³	1.172E-08	³	ALEACH(13)
R016	³	Solubility constant	³	0.000E+00	³	0.000E+00	³	not used	³	SOLUBK(13)

Site-Specific Parameter Summary (continued)

0	3	3	3	3	3	3
Menu	Parameter	User	Default	Used by RESRAD	Parameter	
		Input	(If different from user input)		Name	
AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
R016	Distribution coefficients for Eu-155					
R016	Contaminated zone (cm**3/g)	3 -1.000E+00	3 -1.000E+00	3 8.249E+02	3 DCNUCC(14)	
R016	Unsaturated zone 1 (cm**3/g)	3 not used	3 -1.000E+00	3 ---	3 DCNUCU(14,1)	
R016	Saturated zone (cm**3/g)	3 not used	3 -1.000E+00	3 ---	3 DCNUCS(14)	
R016	Leach rate (/yr)	3 0.000E+00	3 0.000E+00	3 1.172E-08	3 ALEACH(14)	
R016	Solubility constant	3 0.000E+00	3 0.000E+00	3 not used	3 SOLUBK(14)	
		3	3	3	3	
R016	Distribution coefficients for H-3					
R016	Contaminated zone (cm**3/g)	3 0.000E+00	3 0.000E+00	3 ---	3 DCNUCC(16)	
R016	Unsaturated zone 1 (cm**3/g)	3 not used	3 0.000E+00	3 ---	3 DCNUCU(16,1)	
R016	Saturated zone (cm**3/g)	3 not used	3 0.000E+00	3 ---	3 DCNUCS(16)	
R016	Leach rate (/yr)	3 0.000E+00	3 0.000E+00	3 7.250E-05	3 ALEACH(16)	
R016	Solubility constant	3 0.000E+00	3 0.000E+00	3 not used	3 SOLUBK(16)	
		3	3	3	3	
R016	Distribution coefficients for I-129					
R016	Contaminated zone (cm**3/g)	3 1.000E-01	3 1.000E-01	3 ---	3 DCNUCC(17)	
R016	Unsaturated zone 1 (cm**3/g)	3 not used	3 1.000E-01	3 ---	3 DCNUCU(17,1)	
R016	Saturated zone (cm**3/g)	3 not used	3 1.000E-01	3 ---	3 DCNUCS(17)	
R016	Leach rate (/yr)	3 0.000E+00	3 0.000E+00	3 4.143E-05	3 ALEACH(17)	
R016	Solubility constant	3 0.000E+00	3 0.000E+00	3 not used	3 SOLUBK(17)	
		3	3	3	3	
R016	Distribution coefficients for Mn-54					
R016	Contaminated zone (cm**3/g)	3 2.000E+02	3 2.000E+02	3 ---	3 DCNUCC(18)	
R016	Unsaturated zone 1 (cm**3/g)	3 not used	3 2.000E+02	3 ---	3 DCNUCU(18,1)	
R016	Saturated zone (cm**3/g)	3 not used	3 2.000E+02	3 ---	3 DCNUCS(18)	
R016	Leach rate (/yr)	3 0.000E+00	3 0.000E+00	3 4.830E-08	3 ALEACH(18)	
R016	Solubility constant	3 0.000E+00	3 0.000E+00	3 not used	3 SOLUBK(18)	
		3	3	3	3	
R016	Distribution coefficients for Na-22					
R016	Contaminated zone (cm**3/g)	3 1.000E+01	3 1.000E+01	3 ---	3 DCNUCC(19)	
R016	Unsaturated zone 1 (cm**3/g)	3 not used	3 1.000E+01	3 ---	3 DCNUCU(19,1)	
R016	Saturated zone (cm**3/g)	3 not used	3 1.000E+01	3 ---	3 DCNUCS(19)	
R016	Leach rate (/yr)	3 0.000E+00	3 0.000E+00	3 9.539E-07	3 ALEACH(19)	
R016	Solubility constant	3 0.000E+00	3 0.000E+00	3 not used	3 SOLUBK(19)	
		3	3	3	3	
R016	Distribution coefficients for Ni-63					
R016	Contaminated zone (cm**3/g)	3 1.000E+03	3 1.000E+03	3 ---	3 DCNUCC(21)	
R016	Unsaturated zone 1 (cm**3/g)	3 not used	3 1.000E+03	3 ---	3 DCNUCU(21,1)	
R016	Saturated zone (cm**3/g)	3 not used	3 1.000E+03	3 ---	3 DCNUCS(21)	
R016	Leach rate (/yr)	3 0.000E+00	3 0.000E+00	3 9.665E-09	3 ALEACH(21)	
R016	Solubility constant	3 0.000E+00	3 0.000E+00	3 not used	3 SOLUBK(21)	

Site-Specific Parameter Summary (continued)

0	3	3	3	3	3	3	3
Menu	Parameter	User	Default	Used by RESRAD	Parameter		
		Input	(If different from user input)		Name		
AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
R016	Distribution coefficients for Pu-238						
R016	Contaminated zone (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCC(32)		
R016	Unsaturated zone 1 (cm**3/g)	not used	2.000E+03	---	DCNUCU(32,1)		
R016	Saturated zone (cm**3/g)	not used	2.000E+03	---	DCNUCS(32)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	4.833E-09	ALEACH(32)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(32)		
R016	Distribution coefficients for Pu-239						
R016	Contaminated zone (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCC(48)		
R016	Unsaturated zone 1 (cm**3/g)	not used	2.000E+03	---	DCNUCU(48,1)		
R016	Saturated zone (cm**3/g)	not used	2.000E+03	---	DCNUCS(48)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	4.833E-09	ALEACH(48)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(48)		
R016	Distribution coefficients for Ru-106						
R016	Contaminated zone (cm**3/g)	6.000E+04	0.000E+00	---	DCNUCC(76)		
R016	Unsaturated zone 1 (cm**3/g)	not used	0.000E+00	---	DCNUCU(76,1)		
R016	Saturated zone (cm**3/g)	not used	0.000E+00	---	DCNUCS(76)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.611E-10	ALEACH(76)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(76)		
R016	Distribution coefficients for Sr-90						
R016	Contaminated zone (cm**3/g)	3.000E+01	3.000E+01	---	DCNUCC(78)		
R016	Unsaturated zone 1 (cm**3/g)	not used	3.000E+01	---	DCNUCU(78,1)		
R016	Saturated zone (cm**3/g)	not used	3.000E+01	---	DCNUCS(78)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	3.208E-07	ALEACH(78)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(78)		
R016	Distribution coefficients for Tc-99						
R016	Contaminated zone (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCC(79)		
R016	Unsaturated zone 1 (cm**3/g)	not used	0.000E+00	---	DCNUCU(79,1)		
R016	Saturated zone (cm**3/g)	not used	0.000E+00	---	DCNUCS(79)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	7.250E-05	ALEACH(79)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(79)		
R016	Distribution coefficients for Th-228						
R016	Contaminated zone (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCC(80)		
R016	Unsaturated zone 1 (cm**3/g)	not used	6.000E+04	---	DCNUCU(80,1)		
R016	Saturated zone (cm**3/g)	not used	6.000E+04	---	DCNUCS(80)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.611E-10	ALEACH(80)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(80)		

Site-Specific Parameter Summary (continued)

0	3	3	3	3	3	3	3
Menu	Parameter	User	Default	Used by RESRAD	Parameter		
		Input	(If different from user input)		Name		
AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
R016	Distribution coefficients for Th-232						
R016	Contaminated zone (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCC(97)		
R016	Unsaturated zone 1 (cm**3/g)	not used	6.000E+04	---	DCNUCU(97,1)		
R016	Saturated zone (cm**3/g)	not used	6.000E+04	---	DCNUCS(97)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.611E-10	ALEACH(97)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(97)		
R016	Distribution coefficients for U-234						
R016	Contaminated zone (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCC(99)		
R016	Unsaturated zone 1 (cm**3/g)	not used	5.000E+01	---	DCNUCU(99,1)		
R016	Saturated zone (cm**3/g)	not used	5.000E+01	---	DCNUCS(99)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.928E-07	ALEACH(99)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(99)		
R016	Distribution coefficients for U-235						
R016	Contaminated zone (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCC(**)		
R016	Unsaturated zone 1 (cm**3/g)	not used	5.000E+01	---	DCNUCU(**,1)		
R016	Saturated zone (cm**3/g)	not used	5.000E+01	---	DCNUCS(**)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.928E-07	ALEACH(**)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(**)		
R016	Distribution coefficients for U-238						
R016	Contaminated zone (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCC(**)		
R016	Unsaturated zone 1 (cm**3/g)	not used	5.000E+01	---	DCNUCU(**,1)		
R016	Saturated zone (cm**3/g)	not used	5.000E+01	---	DCNUCS(**)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.928E-07	ALEACH(**)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(**)		
R016	Distribution coefficients for daughter Ac-227						
R016	Contaminated zone (cm**3/g)	2.000E+01	2.000E+01	---	DCNUCC(1)		
R016	Unsaturated zone 1 (cm**3/g)	not used	2.000E+01	---	DCNUCU(1,1)		
R016	Saturated zone (cm**3/g)	not used	2.000E+01	---	DCNUCS(1)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	4.801E-07	ALEACH(1)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(1)		
R016	Distribution coefficients for daughter Gd-152						
R016	Contaminated zone (cm**3/g)	-1.000E+00	-1.000E+00	8.249E+02	DCNUCC(15)		
R016	Unsaturated zone 1 (cm**3/g)	not used	-1.000E+00	---	DCNUCU(15,1)		
R016	Saturated zone (cm**3/g)	not used	-1.000E+00	---	DCNUCS(15)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.172E-08	ALEACH(15)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(15)		

	³		³	³		³
R016	³	Distribution coefficients for daughter Nd-144	³	³		³
R016	³	Contaminated zone (cm**3/g)	³	1.580E+02	³	1.580E+02 ³ --- ³ DCNUCC(20)
R016	³	Unsaturated zone 1 (cm**3/g)	³	not used	³	1.580E+02 ³ --- ³ DCNUCU(20,1)
R016	³	Saturated zone (cm**3/g)	³	not used	³	1.580E+02 ³ --- ³ DCNUCS(20)
R016	³	Leach rate (/yr)	³	0.000E+00	³	0.000E+00 ³ 6.113E-08 ³ ALEACH(20)
R016	³	Solubility constant	³	0.000E+00	³	0.000E+00 ³ not used ³ SOLUBK(20)

Site-Specific Parameter Summary (continued)

0	3	3	3	3	3	3	3
Menu	Parameter	User	Default	Used by RESRAD	Parameter		
	Input		(If different from user input)		Name		
AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
R016	Distribution coefficients for daughter Pa-231						
R016	Contaminated zone (cm**3/g)	3 5.000E+01	3 5.000E+01	3 ---	3 DCNUCC(23)		
R016	Unsaturated zone 1 (cm**3/g)	3 not used	3 5.000E+01	3 ---	3 DCNUCU(23,1)		
R016	Saturated zone (cm**3/g)	3 not used	3 5.000E+01	3 ---	3 DCNUCS(23)		
R016	Leach rate (/yr)	3 0.000E+00	3 0.000E+00	3 1.928E-07	3 ALEACH(23)		
R016	Solubility constant	3 0.000E+00	3 0.000E+00	3 not used	3 SOLUBK(23)		
		3	3	3	3		
R016	Distribution coefficients for daughter Pb-210						
R016	Contaminated zone (cm**3/g)	3 1.000E+02	3 1.000E+02	3 ---	3 DCNUCC(29)		
R016	Unsaturated zone 1 (cm**3/g)	3 not used	3 1.000E+02	3 ---	3 DCNUCU(29,1)		
R016	Saturated zone (cm**3/g)	3 not used	3 1.000E+02	3 ---	3 DCNUCS(29)		
R016	Leach rate (/yr)	3 0.000E+00	3 0.000E+00	3 9.654E-08	3 ALEACH(29)		
R016	Solubility constant	3 0.000E+00	3 0.000E+00	3 not used	3 SOLUBK(29)		
		3	3	3	3		
R016	Distribution coefficients for daughter Ra-226						
R016	Contaminated zone (cm**3/g)	3 7.000E+01	3 7.000E+01	3 ---	3 DCNUCC(60)		
R016	Unsaturated zone 1 (cm**3/g)	3 not used	3 7.000E+01	3 ---	3 DCNUCU(60,1)		
R016	Saturated zone (cm**3/g)	3 not used	3 7.000E+01	3 ---	3 DCNUCS(60)		
R016	Leach rate (/yr)	3 0.000E+00	3 0.000E+00	3 1.378E-07	3 ALEACH(60)		
R016	Solubility constant	3 0.000E+00	3 0.000E+00	3 not used	3 SOLUBK(60)		
		3	3	3	3		
R016	Distribution coefficients for daughter Ra-228						
R016	Contaminated zone (cm**3/g)	3 7.000E+01	3 7.000E+01	3 ---	3 DCNUCC(75)		
R016	Unsaturated zone 1 (cm**3/g)	3 not used	3 7.000E+01	3 ---	3 DCNUCU(75,1)		
R016	Saturated zone (cm**3/g)	3 not used	3 7.000E+01	3 ---	3 DCNUCS(75)		
R016	Leach rate (/yr)	3 0.000E+00	3 0.000E+00	3 1.378E-07	3 ALEACH(75)		
R016	Solubility constant	3 0.000E+00	3 0.000E+00	3 not used	3 SOLUBK(75)		
		3	3	3	3		
R016	Distribution coefficients for daughter Sm-148						
R016	Contaminated zone (cm**3/g)	3 -1.000E+00	3 -1.000E+00	3 8.249E+02	3 DCNUCC(77)		
R016	Unsaturated zone 1 (cm**3/g)	3 not used	3 -1.000E+00	3 ---	3 DCNUCU(77,1)		
R016	Saturated zone (cm**3/g)	3 not used	3 -1.000E+00	3 ---	3 DCNUCS(77)		
R016	Leach rate (/yr)	3 0.000E+00	3 0.000E+00	3 1.172E-08	3 ALEACH(77)		
R016	Solubility constant	3 0.000E+00	3 0.000E+00	3 not used	3 SOLUBK(77)		
		3	3	3	3		
R016	Distribution coefficients for daughter Th-229						
R016	Contaminated zone (cm**3/g)	3 6.000E+04	3 6.000E+04	3 ---	3 DCNUCC(81)		
R016	Unsaturated zone 1 (cm**3/g)	3 not used	3 6.000E+04	3 ---	3 DCNUCU(81,1)		
R016	Saturated zone (cm**3/g)	3 not used	3 6.000E+04	3 ---	3 DCNUCS(81)		
R016	Leach rate (/yr)	3 0.000E+00	3 0.000E+00	3 1.611E-10	3 ALEACH(81)		
R016	Solubility constant	3 0.000E+00	3 0.000E+00	3 not used	3 SOLUBK(81)		

R016	3	Distribution coefficients for daughter U-233	3	3	3	3				
R016	3	Contaminated zone (cm**3/g)	3	5.000E+01	3	5.000E+01	3	---	3	DCNUCC(98)
R016	3	Unsaturated zone 1 (cm**3/g)	3	not used	3	5.000E+01	3	---	3	DCNUCU(98,1)
R016	3	Saturated zone (cm**3/g)	3	not used	3	5.000E+01	3	---	3	DCNUCS(98)
R016	3	Leach rate (/yr)	3	0.000E+00	3	0.000E+00	3	1.928E-07	3	ALEACH(98)
R016	3	Solubility constant	3	0.000E+00	3	0.000E+00	3	not used	3	SOLUBK(98)
R017	3	Inhalation rate (m**3/yr)	3	1.525E+04	3	8.400E+03	3	---	3	INHALR

Site-Specific Parameter Summary (continued)

0	3	3	3	3	3	3	3
Menu	Parameter	User	Default	Used by RESRAD	Parameter		
	Input	Default	(If different from user input)	Name			
AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
R017	Mass loading for inhalation (g/m**3)	1.510E-07	1.000E-04	---	MLINH		
R017	Exposure duration	6.000E+00	3.000E+01	---	ED		
R017	Shielding factor, inhalation	1.000E+00	4.000E-01	---	SHF3		
R017	Shielding factor, external gamma	7.000E-01	7.000E-01	---	SHF1		
R017	Fraction of time spent indoors	0.000E+00	5.000E-01	---	FIND		
R017	Fraction of time spent outdoors (on site)	2.280E-02	2.500E-01	---	FOTD		
R017	Shape factor flag, external gamma	1.000E+00	1.000E+00	>0 shows circular AREA.	FS		
R017	Radii of shape factor array (used if FS = -1):						
R017	Outer annular radius (m), ring 1:	not used	5.000E+01	---	RAD_SHAPE(1)		
R017	Outer annular radius (m), ring 2:	not used	7.071E+01	---	RAD_SHAPE(2)		
R017	Outer annular radius (m), ring 3:	not used	0.000E+00	---	RAD_SHAPE(3)		
R017	Outer annular radius (m), ring 4:	not used	0.000E+00	---	RAD_SHAPE(4)		
R017	Outer annular radius (m), ring 5:	not used	0.000E+00	---	RAD_SHAPE(5)		
R017	Outer annular radius (m), ring 6:	not used	0.000E+00	---	RAD_SHAPE(6)		
R017	Outer annular radius (m), ring 7:	not used	0.000E+00	---	RAD_SHAPE(7)		
R017	Outer annular radius (m), ring 8:	not used	0.000E+00	---	RAD_SHAPE(8)		
R017	Outer annular radius (m), ring 9:	not used	0.000E+00	---	RAD_SHAPE(9)		
R017	Outer annular radius (m), ring 10:	not used	0.000E+00	---	RAD_SHAPE(10)		
R017	Outer annular radius (m), ring 11:	not used	0.000E+00	---	RAD_SHAPE(11)		
R017	Outer annular radius (m), ring 12:	not used	0.000E+00	---	RAD_SHAPE(12)		
R017	Fractions of annular areas within AREA:						
R017	Ring 1	not used	1.000E+00	---	FRACA(1)		
R017	Ring 2	not used	2.732E-01	---	FRACA(2)		
R017	Ring 3	not used	0.000E+00	---	FRACA(3)		
R017	Ring 4	not used	0.000E+00	---	FRACA(4)		
R017	Ring 5	not used	0.000E+00	---	FRACA(5)		
R017	Ring 6	not used	0.000E+00	---	FRACA(6)		
R017	Ring 7	not used	0.000E+00	---	FRACA(7)		
R017	Ring 8	not used	0.000E+00	---	FRACA(8)		
R017	Ring 9	not used	0.000E+00	---	FRACA(9)		
R017	Ring 10	not used	0.000E+00	---	FRACA(10)		
R017	Ring 11	not used	0.000E+00	---	FRACA(11)		
R017	Ring 12	not used	0.000E+00	---	FRACA(12)		
R018	Fruits, vegetables and grain consumption (kg/yr)	not used	1.600E+02	---	DIET(1)		
R018	Leafy vegetable consumption (kg/yr)	not used	1.400E+01	---	DIET(2)		
R018	Milk consumption (L/yr)	not used	9.200E+01	---	DIET(3)		
R018	Meat and poultry consumption (kg/yr)	not used	6.300E+01	---	DIET(4)		
R018	Fish consumption (kg/yr)	not used	5.400E+00	---	DIET(5)		
R018	Other seafood consumption (kg/yr)	not used	9.000E-01	---	DIET(6)		

R018	³	Soil ingestion rate (g/yr)	³	7.970E+02	³	3.650E+01	³	---	³	SOIL
R018	³	Drinking water intake (L/yr)	³	not used	³	5.100E+02	³	---	³	DWI
R018	³	Contamination fraction of drinking water	³	not used	³	1.000E+00	³	---	³	FDW
R018	³	Contamination fraction of household water	³	not used	³	1.000E+00	³	---	³	FHHW
R018	³	Contamination fraction of livestock water	³	not used	³	1.000E+00	³	---	³	FLW
R018	³	Contamination fraction of irrigation water	³	not used	³	1.000E+00	³	---	³	FIRW
R018	³	Contamination fraction of aquatic food	³	not used	³	5.000E-01	³	---	³	FR9
R018	³	Contamination fraction of plant food	³	not used	³	-1	³	---	³	FPLANT
R018	³	Contamination fraction of meat	³	not used	³	-1	³	---	³	FMEAT

Site-Specific Parameter Summary (continued)

0	3	3	3	3	3	3	3
Menu	Parameter	User	Input	Default	Used by RESRAD	Parameter	Name
					(If different from user input)		
AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
R018	Contamination fraction of milk	3	not used	3-1	---	3	FMILK
		3		3		3	
R019	Livestock fodder intake for meat (kg/day)	3	not used	3 6.800E+01	---	3	LFI5
R019	Livestock fodder intake for milk (kg/day)	3	not used	3 5.500E+01	---	3	LFI6
R019	Livestock water intake for meat (L/day)	3	not used	3 5.000E+01	---	3	LWI5
R019	Livestock water intake for milk (L/day)	3	not used	3 1.600E+02	---	3	LWI6
R019	Livestock soil intake (kg/day)	3	not used	3 5.000E-01	---	3	LSI
R019	Mass loading for foliar deposition (g/m**3)	3	not used	3 1.000E-04	---	3	MLFD
R019	Depth of soil mixing layer (m)	3	1.500E-01	3 1.500E-01	---	3	DM
R019	Depth of roots (m)	3	not used	3 9.000E-01	---	3	DR00T
R019	Drinking water fraction from ground water	3	not used	3 1.000E+00	---	3	FGWDW
R019	Household water fraction from ground water	3	not used	3 1.000E+00	---	3	FGWHH
R019	Livestock water fraction from ground water	3	not used	3 1.000E+00	---	3	FGWLW
R019	Irrigation fraction from ground water	3	not used	3 1.000E+00	---	3	FGWIR
		3		3		3	
R19B	Wet weight crop yield for Non-Leafy (kg/m**2)	3	not used	3 7.000E-01	---	3	YV(1)
R19B	Wet weight crop yield for Leafy (kg/m**2)	3	not used	3 1.500E+00	---	3	YV(2)
R19B	Wet weight crop yield for Fodder (kg/m**2)	3	not used	3 1.100E+00	---	3	YV(3)
R19B	Growing Season for Non-Leafy (years)	3	not used	3 1.700E-01	---	3	TE(1)
R19B	Growing Season for Leafy (years)	3	not used	3 2.500E-01	---	3	TE(2)
R19B	Growing Season for Fodder (years)	3	not used	3 8.000E-02	---	3	TE(3)
R19B	Translocation Factor for Non-Leafy	3	not used	3 1.000E-01	---	3	TIV(1)
R19B	Translocation Factor for Leafy	3	not used	3 1.000E+00	---	3	TIV(2)
R19B	Translocation Factor for Fodder	3	not used	3 1.000E+00	---	3	TIV(3)
R19B	Dry Foliar Interception Fraction for Non-Leafy	3	not used	3 2.500E-01	---	3	RDRY(1)
R19B	Dry Foliar Interception Fraction for Leafy	3	not used	3 2.500E-01	---	3	RDRY(2)
R19B	Dry Foliar Interception Fraction for Fodder	3	not used	3 2.500E-01	---	3	RDRY(3)
R19B	Wet Foliar Interception Fraction for Non-Leafy	3	not used	3 2.500E-01	---	3	RWET(1)
R19B	Wet Foliar Interception Fraction for Leafy	3	not used	3 2.500E-01	---	3	RWET(2)
R19B	Wet Foliar Interception Fraction for Fodder	3	not used	3 2.500E-01	---	3	RWET(3)
R19B	Weathering Removal Constant for Vegetation	3	not used	3 2.000E+01	---	3	WLAM
		3		3		3	
C14	C-12 concentration in water (g/cm**3)	3	not used	3 2.000E-05	---	3	C12WTR
C14	C-12 concentration in contaminated soil (g/g)	3	not used	3 3.000E-02	---	3	C12CZ
C14	Fraction of vegetation carbon from soil	3	not used	3 2.000E-02	---	3	CSOIL
C14	Fraction of vegetation carbon from air	3	not used	3 9.800E-01	---	3	CAIR
C14	C-14 evasion layer thickness in soil (m)	3	not used	3 3.000E-01	---	3	DMC
C14	C-14 evasion flux rate from soil (1/sec)	3	not used	3 7.000E-07	---	3	EVSN
C14	C-12 evasion flux rate from soil (1/sec)	3	not used	3 1.000E-10	---	3	REVSN
C14	Fraction of grain in beef cattle feed	3	not used	3 8.000E-01	---	3	AVFG4
C14	Fraction of grain in milk cow feed	3	not used	3 2.000E-01	---	3	AVFG5

	³		³		³		³		³
STOR	³	Storage times of contaminated foodstuffs (days):	³		³		³		³
STOR	³	Fruits, non-leafy vegetables, and grain	³	1.000E+00	³	1.400E+01	³	---	³ STOR_T(1)
STOR	³	Leafy vegetables	³	1.000E+00	³	1.000E+00	³	---	³ STOR_T(2)
STOR	³	Milk	³	1.000E+00	³	1.000E+00	³	---	³ STOR_T(3)
STOR	³	Meat and poultry	³	2.000E+01	³	2.000E+01	³	---	³ STOR_T(4)
STOR	³	Fish	³	7.000E+00	³	7.000E+00	³	---	³ STOR_T(5)
STOR	³	Crustacea and mollusks	³	7.000E+00	³	7.000E+00	³	---	³ STOR_T(6)
STOR	³	Well water	³	1.000E+00	³	1.000E+00	³	---	³ STOR_T(7)

Site-Specific Parameter Summary (continued)

0	3	3	3	3	3	3	3
Menu	Parameter	User	Input	Default	Used by RESRAD	(If different from user input)	Parameter Name
STOR	Surface water	3	1.000E+00	3	1.000E+00	---	3 STOR_T(8)
STOR	Livestock fodder	3	4.500E+01	3	4.500E+01	---	3 STOR_T(9)
R021	Thickness of building foundation (m)	3	not used	3	1.500E-01	---	3 FLOOR1
R021	Bulk density of building foundation (g/cm**3)	3	not used	3	2.400E+00	---	3 DENSFL
R021	Total porosity of the cover material	3	not used	3	4.000E-01	---	3 TPCV
R021	Total porosity of the building foundation	3	not used	3	1.000E-01	---	3 TPFL
R021	Volumetric water content of the cover material	3	not used	3	5.000E-02	---	3 PH20CV
R021	Volumetric water content of the foundation	3	not used	3	3.000E-02	---	3 PH20FL
R021	Diffusion coefficient for radon gas (m/sec):	3		3			3
R021	in cover material	3	not used	3	2.000E-06	---	3 DIFCV
R021	in foundation material	3	not used	3	3.000E-07	---	3 DIFFL
R021	in contaminated zone soil	3	not used	3	2.000E-06	---	3 DIFCZ
R021	Radon vertical dimension of mixing (m)	3	not used	3	2.000E+00	---	3 HMIX
R021	Average building air exchange rate (1/hr)	3	not used	3	5.000E-01	---	3 REXG
R021	Height of the building (room) (m)	3	not used	3	2.500E+00	---	3 HRM
R021	Building interior area factor	3	not used	3	0.000E+00	---	3 FAI
R021	Building depth below ground surface (m)	3	not used	3	-1.000E+00	---	3 DMFL
R021	Emanating power of Rn-222 gas	3	not used	3	2.500E-01	---	3 EMANA(1)
R021	Emanating power of Rn-220 gas	3	not used	3	1.500E-01	---	3 EMANA(2)
TITL	Number of graphical time points	3	32	3	---	---	3 NPTS
TITL	Maximum number of integration points for dose	3	17	3	---	---	3 LYMAX
TITL	Maximum number of integration points for risk	3	257	3	---	---	3 KYMAX

Summary of Pathway Selections

Pathway	3	User Selection
1 -- external gamma	3	active
2 -- inhalation (w/o radon)	3	active
3 -- plant ingestion	3	suppressed
4 -- meat ingestion	3	suppressed
5 -- milk ingestion	3	suppressed
6 -- aquatic foods	3	suppressed
7 -- drinking water	3	suppressed
8 -- soil ingestion	3	active
9 -- radon	3	suppressed

Contaminated Zone Dimensions	Initial Soil Concentrations, pCi/g
AAAAAAAAAAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAAAAAAAAAA
Area: 10000.00 square meters	Am-241 1.000E+01
Thickness: 2.00 meters	Co-60 1.000E+01
Cover Depth: 0.00 meters	Cs-134 1.000E+01
	Cs-137 1.000E+01
	Eu-152 1.000E+01
	Eu-154 1.000E+01
	Eu-155 1.000E+01
	H-3 1.000E+01
	I-129 1.000E+01
	Mn-54 1.000E+01
	Na-22 1.000E+01
	Ni-63 1.000E+01
	Np-237 1.000E+01
	Pu-238 1.000E+01
	Pu-239 1.000E+01
	Ru-106 1.000E+01
	Sr-90 1.000E+01
	Tc-99 1.000E+01
	Th-228 1.000E+01
	Th-230 1.000E+01
	Th-232 1.000E+01
	U-234 1.000E+01
	U-235 1.000E+01
	U-238 1.000E+01

0

Total Dose TDOSE(t), mrem/yr
 Basic Radiation Dose Limit = 2.500E+01 mrem/yr
 Total Mixture Sum M(t) = Fraction of Basic Dose Limit Received at Time (t)
 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

t (years):	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
TDOSE(t):	1.561E+01	1.338E+01	8.512E+00	8.406E+00	8.094E+00	7.887E+00	8.077E+00	8.562E+00	9.448E+00
M(t):	6.242E-01	5.353E-01	3.405E-01	3.362E-01	3.237E-01	3.155E-01	3.231E-01	3.425E-01	3.779E-01

0Maximum TDOSE(t): 1.561E+01 mrem/yr at t = 0.000E+00 years

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)

As mrem/yr and Fraction of Total Dose At t = 0.000E+00 years

Water Independent Pathways (Inhalation excludes radon)

0	Water Independent Pathways (Inhalation excludes radon)													
0	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA
Am-241	8.407E-03	0.0005	3.087E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.604E-01	0.0103
Co-60	3.094E+00	0.1983	1.241E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.185E-03	0.0005
Cs-134	1.612E+00	0.1033	7.854E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.974E-03	0.0005
Cs-137	6.736E-01	0.0432	1.550E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.742E-03	0.0004
Eu-152	1.403E+00	0.0899	3.767E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.975E-03	0.0001
Eu-154	1.499E+00	0.0961	4.552E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.005E-03	0.0002
Eu-155	3.344E-02	0.0021	5.822E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.242E-04	0.0000
H-3	0.000E+00	0.0000	2.623E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.731E-05	0.0000
I-129	2.195E-03	0.0001	4.808E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.244E-01	0.0080
Mn-54	7.123E-01	0.0456	1.077E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.860E-04	0.0000
Na-22	2.423E+00	0.1553	1.144E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.797E-03	0.0002
Ni-63	0.000E+00	0.0000	1.032E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.269E-04	0.0000
Np-237	2.357E-01	0.0151	1.536E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.514E-02	0.0055
Pu-238	2.518E-05	0.0000	3.425E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.767E-01	0.0113
Pu-239	6.048E-05	0.0000	3.811E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.955E-01	0.0125
Ru-106	1.941E-01	0.0124	2.204E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.882E-03	0.0006
Sr-90	8.634E-03	0.0006	6.027E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.192E-02	0.0027
Tc-99	2.409E-05	0.0000	5.409E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.092E-03	0.0001
Th-228	1.640E+00	0.1051	1.667E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.658E-01	0.0170
Th-230	7.277E-04	0.0000	3.485E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.790E-01	0.0115
Th-232	7.512E-02	0.0048	4.158E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.637E-01	0.0233
U-234	7.868E-05	0.0000	4.085E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.321E-02	0.0034
U-235	1.595E-01	0.0102	3.693E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.159E-02	0.0033
U-238	3.488E-02	0.0022	3.508E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.440E-02	0.0035
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	1.381E+01	0.8850	2.495E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.795E+00	0.1150

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 0.000E+00 years

Water Dependent Pathways														
0	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA
Am-241	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.688E-01	0.0108
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.102E+00	0.1988
Cs-134	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.620E+00	0.1038
Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.803E-01	0.0436
Eu-152	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.405E+00	0.0900
Eu-154	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.502E+00	0.0963
Eu-155	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.396E-02	0.0022
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.354E-05	0.0000
I-129	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.266E-01	0.0081
Mn-54	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.130E-01	0.0457
Na-22	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.427E+00	0.1555
Ni-63	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.269E-04	0.0000
Np-237	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.208E-01	0.0206
Pu-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.768E-01	0.0113
Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.956E-01	0.0125
Ru-106	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.029E-01	0.0130
Sr-90	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.056E-02	0.0032
Tc-99	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.116E-03	0.0001
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.906E+00	0.1221
Th-230	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.798E-01	0.0115
Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.389E-01	0.0281
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.329E-02	0.0034
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.111E-01	0.0135
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.928E-02	0.0057
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.561E+01	1.0000

0*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)

As mrem/yr and Fraction of Total Dose At t = 1.000E+00 years

Water Independent Pathways (Inhalation excludes radon)

0	Water Independent Pathways (Inhalation excludes radon)													
0	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA
Am-241	8.394E-03	0.0006	3.082E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.601E-01	0.0120
Co-60	2.713E+00	0.2027	1.088E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.177E-03	0.0005
Cs-134	1.152E+00	0.0861	5.614E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.700E-03	0.0004
Cs-137	6.583E-01	0.0492	1.515E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.589E-03	0.0005
Eu-152	1.333E+00	0.0996	3.579E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.877E-03	0.0001
Eu-154	1.383E+00	0.1034	4.199E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.772E-03	0.0002
Eu-155	2.891E-02	0.0022	5.033E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.532E-04	0.0000
H-3	0.000E+00	0.0000	2.306E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.521E-05	0.0000
I-129	2.195E-03	0.0002	4.807E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.244E-01	0.0093
Mn-54	3.165E-01	0.0237	4.786E-10	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.048E-04	0.0000
Na-22	1.856E+00	0.1387	8.766E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.909E-03	0.0002
Ni-63	0.000E+00	0.0000	1.025E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.253E-04	0.0000
Np-237	2.357E-01	0.0176	1.536E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.514E-02	0.0064
Pu-238	2.499E-05	0.0000	3.398E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.753E-01	0.0131
Pu-239	6.048E-05	0.0000	3.811E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.955E-01	0.0146
Ru-106	9.854E-02	0.0074	1.119E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.510E-03	0.0003
Sr-90	8.428E-03	0.0006	5.884E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.093E-02	0.0031
Tc-99	2.409E-05	0.0000	5.409E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.092E-03	0.0001
Th-228	1.141E+00	0.0853	1.160E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.850E-01	0.0138
Th-230	1.698E-03	0.0001	3.485E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.793E-01	0.0134
Th-232	2.553E-01	0.0191	4.285E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.563E-01	0.0490
U-234	7.869E-05	0.0000	4.085E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.321E-02	0.0040
U-235	1.595E-01	0.0119	3.695E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.160E-02	0.0039
U-238	3.488E-02	0.0026	3.508E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.440E-02	0.0041
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	1.139E+01	0.8509	2.422E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.995E+00	0.1491

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 1.000E+00 years

Water Dependent Pathways														
0	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA
Am-241	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.685E-01	0.0126
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.720E+00	0.2033
Cs-134	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.158E+00	0.0865
Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.648E-01	0.0497
Eu-152	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.335E+00	0.0997
Eu-154	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.386E+00	0.1036
Eu-155	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.936E-02	0.0022
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.827E-05	0.0000
I-129	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.266E-01	0.0095
Mn-54	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.168E-01	0.0237
Na-22	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.859E+00	0.1389
Ni-63	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.253E-04	0.0000
Np-237	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.208E-01	0.0240
Pu-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.754E-01	0.0131
Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.956E-01	0.0146
Ru-106	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.031E-01	0.0077
Sr-90	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.936E-02	0.0037
Tc-99	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.116E-03	0.0001
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.326E+00	0.0991
Th-230	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.810E-01	0.0135
Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.116E-01	0.0681
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.329E-02	0.0040
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.111E-01	0.0158
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.928E-02	0.0067
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.338E+01	1.0000

0*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)

As mrem/yr and Fraction of Total Dose At t = 2.500E+01 years

Water Independent Pathways (Inhalation excludes radon)

0	Water Independent Pathways (Inhalation excludes radon)													
0	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA
Am-241	8.078E-03	0.0009	2.965E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.541E-01	0.0181
Co-60	1.156E-01	0.0136	4.635E-10	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.057E-04	0.0000
Cs-134	3.652E-04	0.0000	1.780E-12	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.807E-06	0.0000
Cs-137	3.792E-01	0.0446	8.727E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.796E-03	0.0004
Eu-152	3.900E-01	0.0458	1.047E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.491E-04	0.0001
Eu-154	1.996E-01	0.0234	6.059E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.999E-04	0.0000
Eu-155	8.781E-04	0.0001	1.529E-10	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.377E-05	0.0000
H-3	0.000E+00	0.0000	1.046E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.899E-07	0.0000
I-129	2.193E-03	0.0003	4.803E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.243E-01	0.0146
Mn-54	1.111E-09	0.0000	1.681E-18	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.070E-12	0.0000
Na-22	3.104E-03	0.0004	1.466E-11	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.864E-06	0.0000
Ni-63	0.000E+00	0.0000	8.682E-10	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.908E-04	0.0000
Np-237	2.357E-01	0.0277	1.536E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.515E-02	0.0100
Pu-238	2.067E-05	0.0000	2.811E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.450E-01	0.0170
Pu-239	6.044E-05	0.0000	3.808E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.954E-01	0.0230
Ru-106	8.515E-09	0.0000	9.670E-16	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.897E-10	0.0000
Sr-90	4.729E-03	0.0006	3.301E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.296E-02	0.0027
Tc-99	2.404E-05	0.0000	5.399E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.090E-03	0.0001
Th-228	1.896E-04	0.0000	1.928E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.074E-05	0.0000
Th-230	2.486E-02	0.0029	3.489E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.952E-01	0.0229
Th-232	2.847E+00	0.3344	6.500E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.018E+00	0.3546
U-234	8.162E-05	0.0000	4.093E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.325E-02	0.0063
U-235	1.596E-01	0.0187	3.743E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.189E-02	0.0061
U-238	3.488E-02	0.0041	3.508E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.440E-02	0.0064
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	4.406E+00	0.5176	2.236E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.106E+00	0.4824

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 2.500E+01 years

	Water Dependent Pathways																			
0	Water				Fish				Radon				Plant				Meat			
0																				
Radio-	Water				Fish				Radon				Plant				Meat			
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA
Am-241	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.622E-01	0.0191
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.159E-01	0.0136
Cs-134	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.670E-04	0.0000
Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.830E-01	0.0450
Eu-152	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.906E-01	0.0459
Eu-154	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.000E-01	0.0235
Eu-155	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.919E-04	0.0001
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.736E-06	0.0000
I-129	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.265E-01	0.0149
Mn-54	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.112E-09	0.0000
Na-22	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.109E-03	0.0004
Ni-63	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.908E-04	0.0000
Np-237	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.208E-01	0.0377
Pu-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.451E-01	0.0170
Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.955E-01	0.0230
Ru-106	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.904E-09	0.0000
Sr-90	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.769E-02	0.0033
Tc-99	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.114E-03	0.0001
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.204E-04	0.0000
Th-230	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.201E-01	0.0259
Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.865E+00	0.6890
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.333E-02	0.0063
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.114E-01	0.0248
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.928E-02	0.0105
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.512E+00	1.0000

0*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)

As mrem/yr and Fraction of Total Dose At t = 3.000E+01 years

Water Independent Pathways (Inhalation excludes radon)

Water Independent Pathways (Inhalation excludes radon)														
0	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA
Am-241	8.014E-03	0.0010	2.942E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.528E-01	0.0182
Co-60	5.988E-02	0.0071	2.402E-10	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.584E-04	0.0000
Cs-134	6.817E-05	0.0000	3.322E-13	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.372E-07	0.0000
Cs-137	3.381E-01	0.0402	7.779E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.384E-03	0.0004
Eu-152	3.019E-01	0.0359	8.106E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.251E-04	0.0001
Eu-154	1.333E-01	0.0159	4.048E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.672E-04	0.0000
Eu-155	4.240E-04	0.0001	7.383E-11	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.648E-06	0.0000
H-3	0.000E+00	0.0000	5.491E-07	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.622E-07	0.0000
I-129	2.193E-03	0.0003	4.802E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.242E-01	0.0148
Mn-54	1.925E-11	0.0000	2.911E-20	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.854E-14	0.0000
Na-22	8.194E-04	0.0001	3.869E-12	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.284E-06	0.0000
Ni-63	0.000E+00	0.0000	8.387E-10	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.843E-04	0.0000
Np-237	2.357E-01	0.0280	1.536E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.515E-02	0.0101
Pu-238	1.987E-05	0.0000	2.702E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.394E-01	0.0166
Pu-239	6.043E-05	0.0000	3.808E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.954E-01	0.0232
Ru-106	2.875E-10	0.0000	3.265E-17	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.316E-11	0.0000
Sr-90	4.193E-03	0.0005	2.927E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.036E-02	0.0024
Tc-99	2.403E-05	0.0000	5.397E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.089E-03	0.0001
Th-228	3.094E-05	0.0000	3.145E-10	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.016E-06	0.0000
Th-230	2.965E-02	0.0035	3.490E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.002E-01	0.0238
Th-232	2.930E+00	0.3486	6.574E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.083E+00	0.3668
U-234	8.287E-05	0.0000	4.094E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.325E-02	0.0063
U-235	1.596E-01	0.0190	3.755E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.197E-02	0.0062
U-238	3.488E-02	0.0041	3.508E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.440E-02	0.0065
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	4.239E+00	0.5044	2.225E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.166E+00	0.4956

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
 As mrem/yr and Fraction of Total Dose At t = 3.000E+01 years

		Water Dependent Pathways														
0		Water		Fish		Radon		Plant		Meat		Milk		All Pathways*		
Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAAA	AAAAA
Am-241	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.609E-01	0.0191
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.004E-02	0.0071
Cs-134	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.851E-05	0.0000
Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.415E-01	0.0406
Eu-152	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.024E-01	0.0360
Eu-154	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.336E-01	0.0159
Eu-155	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.307E-04	0.0001
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.112E-07	0.0000
I-129	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.264E-01	0.0150
Mn-54	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.927E-11	0.0000
Na-22	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.206E-04	0.0001
Ni-63	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.843E-04	0.0000
Np-237	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.208E-01	0.0382
Pu-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.395E-01	0.0166
Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.955E-01	0.0233
Ru-106	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.006E-10	0.0000
Sr-90	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.455E-02	0.0029
Tc-99	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.113E-03	0.0001
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.596E-05	0.0000
Th-230	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.299E-01	0.0274
Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.014E+00	0.7154
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.334E-02	0.0063
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.116E-01	0.0252
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.928E-02	0.0106
iiiiiii	iiiiiii	iiiiii	iiiiiii	iiiiii	iiiiiii	iiiiii	iiiiiii	iiiiii	iiiiiii	iiiiii	iiiiiii	iiiiii	iiiiiii	iiiiii	iiiiiii	iiiiii
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.406E+00	1.0000

0*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)

As mrem/yr and Fraction of Total Dose At t = 5.000E+01 years

Water Independent Pathways (Inhalation excludes radon)

0	Water Independent Pathways (Inhalation excludes radon)													
0	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA
Am-241	7.763E-03	0.0010	2.849E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.480E-01	0.0183
Co-60	4.317E-03	0.0005	1.731E-11	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.142E-05	0.0000
Cs-134	8.275E-08	0.0000	4.032E-16	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.094E-10	0.0000
Cs-137	2.135E-01	0.0264	4.913E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.137E-03	0.0003
Eu-152	1.084E-01	0.0134	2.911E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.527E-04	0.0000
Eu-154	2.657E-02	0.0033	8.065E-10	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.323E-05	0.0000
Eu-155	2.306E-05	0.0000	4.015E-12	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.616E-07	0.0000
H-3	0.000E+00	0.0000	4.170E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.751E-08	0.0000
I-129	2.191E-03	0.0003	4.798E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.241E-01	0.0153
Mn-54	1.734E-18	0.0000	2.622E-27	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.670E-21	0.0000
Na-22	3.977E-06	0.0000	1.878E-14	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.231E-09	0.0000
Ni-63	0.000E+00	0.0000	7.302E-10	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.605E-04	0.0000
Np-237	2.357E-01	0.0291	1.536E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.515E-02	0.0105
Pu-238	1.697E-05	0.0000	2.307E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.190E-01	0.0147
Pu-239	6.040E-05	0.0000	3.806E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.952E-01	0.0241
Ru-106	3.736E-16	0.0000	4.243E-23	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.710E-17	0.0000
Sr-90	2.591E-03	0.0003	1.808E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.258E-02	0.0016
Tc-99	2.400E-05	0.0000	5.389E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.088E-03	0.0001
Th-228	2.193E-08	0.0000	2.229E-13	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.555E-09	0.0000
Th-230	4.873E-02	0.0060	3.495E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.234E-01	0.0276
Th-232	3.023E+00	0.3735	6.656E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.155E+00	0.3898
U-234	9.008E-05	0.0000	4.101E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.329E-02	0.0066
U-235	1.597E-01	0.0197	3.804E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.230E-02	0.0065
U-238	3.488E-02	0.0043	3.509E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.440E-02	0.0067
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	3.867E+00	0.4778	2.180E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.226E+00	0.5222

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 5.000E+01 years

	Water Dependent Pathways																			
	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*							
Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA
Am-241	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.558E-01	0.0193						
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.328E-03	0.0005						
Cs-134	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.316E-08	0.0000						
Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.157E-01	0.0266						
Eu-152	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.086E-01	0.0134						
Eu-154	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.662E-02	0.0033						
Eu-155	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.342E-05	0.0000						
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.921E-08	0.0000						
I-129	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.263E-01	0.0156						
Mn-54	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.736E-18	0.0000						
Na-22	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.983E-06	0.0000						
Ni-63	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.605E-04	0.0000						
Np-237	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.208E-01	0.0396						
Pu-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.191E-01	0.0147						
Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.953E-01	0.0241						
Ru-106	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.907E-16	0.0000						
Sr-90	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.517E-02	0.0019						
Tc-99	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.112E-03	0.0001						
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.548E-08	0.0000						
Th-230	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.722E-01	0.0336						
Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.178E+00	0.7633						
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.338E-02	0.0066						
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.120E-01	0.0262						
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.929E-02	0.0110						
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.094E+00	1.0000						

0*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)

As mrem/yr and Fraction of Total Dose At t = 1.000E+02 years

Water Independent Pathways (Inhalation excludes radon)

0	Water Independent Pathways (Inhalation excludes radon)													
0	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA
Am-241	7.168E-03	0.0009	2.629E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.366E-01	0.0173
Co-60	6.023E-06	0.0000	2.415E-14	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.593E-08	0.0000
Cs-134	4.248E-15	0.0000	2.070E-23	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.102E-17	0.0000
Cs-137	6.769E-02	0.0086	1.558E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.775E-04	0.0001
Eu-152	8.381E-03	0.0011	2.250E-10	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.180E-05	0.0000
Eu-154	4.707E-04	0.0001	1.429E-11	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.431E-07	0.0000
Eu-155	1.590E-08	0.0000	2.769E-15	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.494E-10	0.0000
H-3	0.000E+00	0.0000	6.628E-11	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.372E-11	0.0000
I-129	2.186E-03	0.0003	4.788E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.239E-01	0.0157
Mn-54	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Na-22	6.527E-12	0.0000	3.082E-20	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.023E-14	0.0000
Ni-63	0.000E+00	0.0000	5.165E-10	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.135E-04	0.0000
Np-237	2.357E-01	0.0299	1.536E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.516E-02	0.0108
Pu-238	1.144E-05	0.0000	1.554E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.018E-02	0.0102
Pu-239	6.032E-05	0.0000	3.800E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.950E-01	0.0247
Ru-106	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Sr-90	7.773E-04	0.0001	5.426E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.774E-03	0.0005
Tc-99	2.391E-05	0.0000	5.368E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.083E-03	0.0001
Th-228	2.933E-16	0.0000	2.981E-21	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.754E-17	0.0000
Th-230	9.569E-02	0.0121	3.508E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.925E-01	0.0371
Th-232	3.032E+00	0.3844	6.664E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.162E+00	0.4009
U-234	1.233E-04	0.0000	4.116E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.340E-02	0.0068
U-235	1.602E-01	0.0203	3.939E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.325E-02	0.0068
U-238	3.488E-02	0.0044	3.509E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.441E-02	0.0069
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	3.645E+00	0.4621	2.085E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.242E+00	0.5378

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
 As mrem/yr and Fraction of Total Dose At t = 1.000E+02 years

		Water Dependent Pathways													
0		Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr
AAAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA
Am-241	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.438E-01
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.039E-06
Cs-134	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.269E-15
Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.836E-02
Eu-152	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.392E-03
Eu-154	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.716E-04
Eu-155	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.615E-08
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.100E-10
I-129	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.261E-01
Mn-54	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00
Na-22	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.537E-12
Ni-63	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.135E-04
Np-237	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.209E-01
Pu-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.021E-02
Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.951E-01
Ru-106	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00
Sr-90	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.552E-03
Tc-99	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.107E-03
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.408E-16
Th-230	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.883E-01
Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.194E+00
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.353E-02
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.134E-01
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.929E-02
iiiiiii	iiiiiii	iiiiii	iiiiiii	iiiiii	iiiiiii	iiiiii	iiiiiii	iiiiii	iiiiiii	iiiiii	iiiiiii	iiiiii	iiiiiii	iiiiii	iiiiiii
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.887E+00

0*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)

As mrem/yr and Fraction of Total Dose At t = 2.500E+02 years

Water Independent Pathways (Inhalation excludes radon)

0	Ground				Inhalation				Radon				Plant				Meat				Milk				Soil				
0	Radio-	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	
	Nuclide	mrem/yr	fract.		mrem/yr	fract.		mrem/yr	fract.		mrem/yr	fract.	mrem/yr	fract.		mrem/yr	fract.	mrem/yr	fract.		mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.			
	Am-241	5.645E-03	0.0007		2.067E-05	0.0000		0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000	1.074E-01	0.0133			
	Co-60	1.636E-14	0.0000		6.560E-23	0.0000		0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000	4.327E-17	0.0000			
	Cs-134	0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000			
	Cs-137	2.156E-03	0.0003		4.962E-11	0.0000		0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000	2.158E-05	0.0000			
	Eu-152	3.869E-06	0.0000		1.039E-13	0.0000		0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000	5.448E-09	0.0000			
	Eu-154	2.618E-09	0.0000		7.947E-17	0.0000		0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000	5.245E-12	0.0000			
	Eu-155	5.218E-18	0.0000		9.084E-25	0.0000		0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000	8.180E-20	0.0000			
	H-3	0.000E+00	0.0000		2.662E-19	0.0000		0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000	1.756E-19	0.0000			
	I-129	2.173E-03	0.0003		4.758E-08	0.0000		0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000	1.231E-01	0.0152			
	Mn-54	0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000			
	Na-22	2.885E-29	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000			
	Ni-63	0.000E+00	0.0000		1.828E-10	0.0000		0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000	4.018E-05	0.0000			
	Np-237	2.357E-01	0.0292		1.537E-05	0.0000		0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000	8.520E-02	0.0105			
	Pu-238	3.557E-06	0.0000		4.750E-06	0.0000		0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000	2.451E-02	0.0030			
	Pu-239	6.008E-05	0.0000		3.784E-05	0.0000		0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000	1.941E-01	0.0240			
	Ru-106	0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000			
	Sr-90	2.100E-05	0.0000		1.466E-10	0.0000		0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000	1.020E-04	0.0000			
	Tc-99	2.364E-05	0.0000		5.308E-09	0.0000		0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000	1.071E-03	0.0001			
	Th-228	0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000			
	Th-230	2.305E-01	0.0285		3.547E-05	0.0000		0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000	5.092E-01	0.0630			
	Th-232	3.032E+00	0.3754		6.664E-05	0.0000		0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000	3.162E+00	0.3915			
	U-234	3.492E-04	0.0000		4.163E-06	0.0000		0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000	5.393E-02	0.0067			
	U-235	1.617E-01	0.0200		4.360E-06	0.0000		0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000	5.624E-02	0.0070			
	U-238	3.488E-02	0.0043		3.511E-06	0.0000		0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000	5.443E-02	0.0067			
	iiiiiii	iiiiiii	iiiiiii		iiiiiii	iiiiiii		iiiiiii	iiiiiii		iiiiiii	iiiiiii	iiiiiii	iiiiiii		iiiiiii	iiiiiii	iiiiiii	iiiiiii		iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii		
	Total	3.705E+00	0.4587		1.928E-04	0.0000		0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000		0.000E+00	0.0000	0.000E+00	0.0000	4.371E+00	0.5412			

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
 As mrem/yr and Fraction of Total Dose At t = 2.500E+02 years

		Water Dependent Pathways														
0		Water		Fish		Radon		Plant		Meat		Milk		All Pathways*		
Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAAA	AAAAA
Am-241	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.131E-01	0.0140
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.640E-14	0.0000
Cs-134	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.178E-03	0.0003
Eu-152	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.875E-06	0.0000
Eu-154	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.623E-09	0.0000
Eu-155	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.299E-18	0.0000
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.418E-19	0.0000
I-129	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.253E-01	0.0155
Mn-54	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Na-22	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.885E-29	0.0000
Ni-63	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.018E-05	0.0000
Np-237	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.209E-01	0.0397
Pu-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.452E-02	0.0030
Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.942E-01	0.0240
Ru-106	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Sr-90	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.230E-04	0.0000
Tc-99	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.095E-03	0.0001
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Th-230	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.398E-01	0.0916
Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.194E+00	0.7669
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.428E-02	0.0067
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.180E-01	0.0270
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.931E-02	0.0111
iiiiiii	iiiiiii	iiiiii	iiiiiii	iiiiii	iiiiiii	iiiiii	iiiiiii	iiiiii	iiiiiii	iiiiii	iiiiiii	iiiiii	iiiiiii	iiiiii	iiiiiii	iiiiii
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.077E+00	1.0000

0*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)

As mrem/yr and Fraction of Total Dose At t = 5.000E+02 years

Water Independent Pathways (Inhalation excludes radon)

		Water Independent Pathways (Inhalation excludes radon)														
0		Ground		Inhalation		Radon		Plant		Meat		Milk		Soil		
Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA
Am-241	3.796E-03	0.0004	1.384E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.192E-02	0.008
Co-60	8.647E-29	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Cs-134	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Cs-137	6.902E-06	0.0000	1.588E-13	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.909E-08	0.0000
Eu-152	1.067E-11	0.0000	5.213E-19	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.627E-14	0.0000
Eu-154	4.570E-18	0.0000	1.387E-25	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.157E-21	0.0000
Eu-155	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
I-129	2.150E-03	0.0003	4.709E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.218E-01	0.0142
Mn-54	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Na-22	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Ni-63	0.000E+00	0.0000	3.237E-11	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.115E-06	0.0000
Np-237	2.357E-01	0.0275	1.537E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.528E-02	0.0100
Pu-238	7.445E-07	0.0000	6.598E-07	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.416E-03	0.0004
Pu-239	5.969E-05	0.0000	3.757E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.927E-01	0.0225
Ru-106	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Sr-90	5.106E-08	0.0000	3.564E-13	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.479E-07	0.0000
Tc-99	2.319E-05	0.0000	5.208E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.051E-03	0.0001
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Th-230	4.362E-01	0.0509	3.607E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.425E-01	0.0984
Th-232	3.032E+00	0.3541	6.664E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.162E+00	0.3693
U-234	1.119E-03	0.0001	4.242E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.545E-02	0.0065
U-235	1.642E-01	0.0192	5.060E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.124E-02	0.0072
U-238	3.488E-02	0.0041	3.514E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.447E-02	0.0064
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	3.910E+00	0.4567	1.830E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.652E+00	0.5433

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
 As mrem/yr and Fraction of Total Dose At t = 5.000E+02 years

Water Dependent Pathways														
0	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
Radio-	AAAAA		AAAAA		AAAAA		AAAAA		AAAAA		AAAAA		AAAAA	
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA
Am-241	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.573E-02	0.0088
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.647E-29	0.0000
Cs-134	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.971E-06	0.0000
Eu-152	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.069E-11	0.0000
Eu-154	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.579E-18	0.0000
Eu-155	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
I-129	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.240E-01	0.0145
Mn-54	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Na-22	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Ni-63	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.115E-06	0.0000
Np-237	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.210E-01	0.0375
Pu-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.417E-03	0.0004
Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.928E-01	0.0225
Ru-106	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Sr-90	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.990E-07	0.0000
Tc-99	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.074E-03	0.0001
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Th-230	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.279E+00	0.1494
Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.194E+00	0.7234
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.657E-02	0.0066
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.255E-01	0.0263
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.935E-02	0.0104
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.562E+00	1.0000

0*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)

As mrem/yr and Fraction of Total Dose At t = 1.000E+03 years

Water Independent Pathways (Inhalation excludes radon)

0	Water Independent Pathways (Inhalation excludes radon)													
0	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA
Am-241	1.728E-03	0.0002	6.208E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.226E-02	0.0034
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Cs-134	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Cs-137	7.073E-11	0.0000	1.628E-18	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.080E-13	0.0000
Eu-152	8.118E-23	0.0000	2.347E-19	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.248E-15	0.0000
Eu-154	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Eu-155	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
I-129	2.106E-03	0.0002	4.612E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.193E-01	0.0126
Mn-54	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Na-22	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Ni-63	0.000E+00	0.0000	1.015E-12	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.231E-07	0.0000
Np-237	2.357E-01	0.0249	1.539E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.550E-02	0.0090
Pu-238	1.130E-06	0.0000	1.421E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.639E-05	0.0000
Pu-239	5.892E-05	0.0000	3.703E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.900E-01	0.0201
Ru-106	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Sr-90	3.020E-13	0.0000	2.108E-18	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.466E-12	0.0000
Tc-99	2.233E-05	0.0000	5.014E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.012E-03	0.0001
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Th-230	7.849E-01	0.0831	3.706E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.408E+00	0.1490
Th-232	3.032E+00	0.3209	6.664E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.162E+00	0.3347
U-234	3.953E-03	0.0004	4.404E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.058E-02	0.0064
U-235	1.692E-01	0.0179	6.451E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.115E-02	0.0075
U-238	3.488E-02	0.0037	3.519E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.454E-02	0.0058
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	4.264E+00	0.4513	1.768E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.184E+00	0.5487

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 1.000E+03 years

		Water Dependent Pathways														
0		Water		Fish		Radon		Plant		Meat		Milk		All Pathways*		
Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAAA	AAAAA
Am-241	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.399E-02	0.003
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Cs-134	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.144E-11	0.0000
Eu-152	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.249E-15	0.0000
Eu-154	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Eu-155	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
I-129	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.215E-01	0.0129
Mn-54	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Na-22	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Ni-63	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.231E-07	0.0000
Np-237	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.212E-01	0.0340
Pu-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.754E-05	0.0000
Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.901E-01	0.0201
Ru-106	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Sr-90	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.768E-12	0.0000
Tc-99	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.034E-03	0.0001
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Th-230	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.192E+00	0.2320
Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.194E+00	0.6555
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.454E-02	0.0068
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.404E-01	0.0254
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.942E-02	0.0095
iiiiiii	iiiiiii	iiiiii	iiiiiii	iiiiii	iiiiiii	iiiiii	iiiiiii	iiiiii	iiiiiii	iiiiii	iiiiiii	iiiiii	iiiiiii	iiiiii	iiiiiii	iiiiii
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.448E+00	1.0000

0*Sum of all water independent and dependent pathways.

Dose/Source Ratios Summed Over All Pathways

Parent and Progeny Principal Radionuclide Contributions Indicated

0	Parent	Product	Thread	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)								
	(i)	(j)	Fraction	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA
	Am-241	Am-241	1.000E+00	1.688E-02	1.685E-02	1.622E-02	1.609E-02	1.558E-02	1.438E-02	1.130E-02	7.569E-03	3.394E-03
	Am-241	Np-237+D	1.000E+00	5.184E-09	1.554E-08	2.592E-07	3.088E-07	5.032E-07	9.627E-07	2.140E-06	3.569E-06	5.166E-06
	Am-241	U-233	1.000E+00	1.235E-15	8.638E-15	2.377E-12	3.391E-12	9.199E-12	3.549E-11	2.042E-10	7.220E-10	2.316E-09
	Am-241	Th-229+D	1.000E+00	6.225E-19	9.334E-18	4.087E-14	6.978E-14	3.140E-13	2.424E-12	3.529E-11	2.552E-10	1.700E-09
	Am-241	àDSR(j)		1.688E-02	1.685E-02	1.622E-02	1.609E-02	1.558E-02	1.438E-02	1.131E-02	7.573E-03	3.399E-03
	0Co-60	Co-60	1.000E+00	3.102E-01	2.720E-01	1.159E-02	6.004E-03	4.328E-04	6.039E-07	1.640E-15	8.669E-30	0.000E+00
	0Cs-134	Cs-134	1.000E+00	1.620E-01	1.158E-01	3.670E-05	6.851E-06	8.316E-09	4.269E-16	5.776E-38	0.000E+00	0.000E+00
	0Cs-137+D	Cs-137+D	1.000E+00	6.803E-02	6.648E-02	3.830E-02	3.415E-02	2.157E-02	6.836E-03	2.178E-04	6.971E-07	7.144E-12
	0Eu-152	Eu-152	7.210E-01	1.013E-01	9.624E-02	2.816E-02	2.180E-02	7.829E-03	6.051E-04	2.794E-07	7.705E-13	5.861E-24
	0Eu-152	Eu-152	2.790E-01	3.920E-02	3.724E-02	1.090E-02	8.436E-03	3.030E-03	2.341E-04	1.081E-07	2.982E-13	2.268E-24
	Eu-152	Gd-152	2.790E-01	3.143E-18	9.219E-18	9.103E-17	9.868E-17	1.155E-16	1.241E-16	1.249E-16	1.249E-16	1.249E-16
	Eu-152	Sm-148	2.790E-01	1.077E-34	7.432E-34	1.440E-31	1.926E-31	4.147E-31	1.037E-30	2.953E-30	6.149E-30	1.254E-29
	Eu-152	Nd-144	2.790E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.803E-45	1.261E-44	9.949E-44	4.288E-43	1.785E-42
	Eu-152	àDSR(j)		3.920E-02	3.724E-02	1.090E-02	8.436E-03	3.030E-03	2.341E-04	1.081E-07	2.983E-13	1.249E-16
	0Eu-154	Eu-154	1.000E+00	1.502E-01	1.386E-01	2.000E-02	1.336E-02	2.662E-03	4.716E-05	2.623E-10	4.579E-19	1.396E-36
	0Eu-155	Eu-155	1.000E+00	3.396E-03	2.936E-03	8.919E-05	4.307E-05	2.342E-06	1.615E-09	5.299E-19	8.270E-35	0.000E+00
	0H-3	H-3	1.000E+00	4.354E-06	3.827E-06	1.736E-07	9.112E-08	6.921E-09	1.100E-11	4.418E-20	4.482E-34	0.000E+00
	0I-129	I-129	1.000E+00	1.266E-02	1.266E-02	1.265E-02	1.264E-02	1.263E-02	1.261E-02	1.253E-02	1.240E-02	1.215E-02
	0Mn-54	Mn-54	1.000E+00	7.130E-02	3.168E-02	1.112E-10	1.927E-12	1.736E-19	4.225E-37	0.000E+00	0.000E+00	0.000E+00
	0Na-22	Na-22	1.000E+00	2.427E-01	1.859E-01	3.109E-04	8.206E-05	3.983E-07	6.537E-13	2.890E-30	0.000E+00	0.000E+00
	0Ni-63	Ni-63	1.000E+00	2.269E-05	2.253E-05	1.908E-05	1.843E-05	1.605E-05	1.135E-05	4.018E-06	7.115E-07	2.231E-08
	0Np-237+D	Np-237+D	1.000E+00	3.208E-02	3.208E-02	3.208E-02	3.208E-02	3.208E-02	3.208E-02	3.208E-02	3.208E-02	3.207E-02
	Np-237+D	U-233	1.000E+00	1.146E-08	3.438E-08	5.845E-07	6.991E-07	1.157E-06	2.303E-06	5.738E-06	1.146E-05	2.288E-05
	Np-237+D	Th-229+D	1.000E+00	7.705E-12	5.393E-11	1.502E-08	2.148E-08	5.885E-08	2.327E-07	1.438E-06	5.695E-06	2.239E-05
	Np-237+D	àDSR(j)		3.208E-02	3.208E-02	3.208E-02	3.208E-02	3.208E-02	3.209E-02	3.209E-02	3.210E-02	3.212E-02
	0Pu-238	Pu-238	1.850E-09	3.270E-11	3.244E-11	2.684E-11	2.580E-11	2.203E-11	1.484E-11	4.534E-12	6.285E-13	1.208E-14
	0Pu-238	Pu-238	9.996E-01	1.767E-02	1.753E-02	1.450E-02	1.394E-02	1.190E-02	8.016E-03	2.450E-03	3.396E-04	6.527E-06
	Pu-238	U-234	9.996E-01	7.500E-09	2.242E-08	3.473E-07	4.076E-07	6.262E-07	1.043E-06	1.639E-06	1.864E-06	1.897E-06
	Pu-238	Th-230	9.996E-01	7.735E-14	5.403E-13	1.415E-10	1.999E-10	5.213E-10	1.832E-09	8.313E-09	2.209E-08	5.115E-08
	Pu-238	Ra-226+D	9.996E-01	1.300E-16	1.946E-15	8.196E-12	1.388E-11	6.053E-11	4.333E-10	5.171E-09	2.883E-08	1.353E-07
	Pu-238	Pb-210+D	9.996E-01	8.882E-19	2.735E-17	1.557E-12	3.073E-12	2.006E-11	2.287E-10	4.140E-09	2.728E-08	1.391E-07
	Pu-238	àDSR(j)		1.767E-02	1.753E-02	1.450E-02	1.394E-02	1.190E-02	8.017E-03	2.451E-03	3.416E-04	8.750E-06

Dose/Source Ratios Summed Over All Pathways

Parent and Progeny Principal Radionuclide Contributions Indicated

0	Parent (i)	Product (j)	Thread Fraction	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)								
	AAAAA	AAAAA	AAAAA	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
	Pu-238	Pu-238	1.319E-06	2.332E-08	2.314E-08	1.914E-08	1.840E-08	1.571E-08	1.058E-08	3.234E-09	4.483E-10	8.616E-12
	Pu-238	U-234	1.319E-06	9.900E-15	2.960E-14	4.585E-13	5.380E-13	8.266E-13	1.376E-12	2.164E-12	2.461E-12	2.504E-12
	Pu-238	Th-230	1.319E-06	1.021E-19	7.131E-19	1.868E-16	2.639E-16	6.881E-16	2.418E-15	1.097E-14	2.916E-14	6.751E-14
	Pu-238	Ra-226+D	1.319E-06	1.716E-22	2.569E-21	1.082E-17	1.832E-17	7.990E-17	5.720E-16	6.826E-15	3.805E-14	1.786E-13
	Pu-238	Pb-210+D1	1.319E-06	5.054E-25	1.556E-23	8.862E-19	1.748E-18	1.142E-17	1.301E-16	2.355E-15	1.552E-14	7.914E-14
	Pu-238	äDSR(j)		2.332E-08	2.314E-08	1.914E-08	1.840E-08	1.571E-08	1.058E-08	3.236E-09	4.508E-10	1.145E-11
0	Pu-238	Pu-238	1.899E-08	3.357E-10	3.331E-10	2.755E-10	2.649E-10	2.261E-10	1.523E-10	4.654E-11	6.453E-12	1.240E-13
	Pu-238	U-234	1.899E-08	1.425E-16	4.260E-16	6.599E-15	7.744E-15	1.190E-14	1.981E-14	3.115E-14	3.542E-14	3.605E-14
	Pu-238	Th-230	1.899E-08	1.470E-21	1.026E-20	2.689E-18	3.798E-18	9.904E-18	3.481E-17	1.579E-16	4.197E-16	9.718E-16
	Pu-238	Ra-226+D	1.899E-08	2.469E-24	3.698E-23	1.557E-19	2.638E-19	1.150E-18	8.233E-18	9.825E-17	5.477E-16	2.571E-15
	Pu-238	Pb-210+D2	1.899E-08	7.991E-27	2.460E-25	1.401E-20	2.764E-20	1.805E-19	2.057E-18	3.724E-17	2.454E-16	1.251E-15
	Pu-238	äDSR(j)		3.357E-10	3.331E-10	2.755E-10	2.649E-10	2.261E-10	1.523E-10	4.657E-11	6.489E-12	1.649E-13
0	Pu-238	Pu-238	2.100E-04	3.711E-06	3.682E-06	3.046E-06	2.928E-06	2.500E-06	1.684E-06	5.145E-07	7.133E-08	1.371E-09
	Pu-238	U-234	2.100E-04	1.575E-12	4.709E-12	7.295E-11	8.561E-11	1.315E-10	2.190E-10	3.443E-10	3.916E-10	3.985E-10
	Pu-238	Th-230	2.100E-04	1.625E-17	1.135E-16	2.973E-14	4.199E-14	1.095E-13	3.848E-13	1.746E-12	4.640E-12	1.074E-11
	Pu-238	Ra-226+D1	2.100E-04	6.257E-20	9.368E-19	3.946E-15	6.683E-15	2.914E-14	2.086E-13	2.489E-12	1.388E-11	6.515E-11
	Pu-238	Pb-210+D	2.100E-04	1.866E-22	5.744E-21	3.271E-16	6.454E-16	4.214E-15	4.803E-14	8.695E-13	5.731E-12	2.921E-11
	Pu-238	äDSR(j)		3.711E-06	3.682E-06	3.046E-06	2.928E-06	2.500E-06	1.684E-06	5.149E-07	7.175E-08	1.875E-09
0	Pu-238	Pu-238	2.771E-10	4.899E-12	4.861E-12	4.021E-12	3.865E-12	3.300E-12	2.223E-12	6.792E-13	9.416E-14	1.810E-15
	Pu-238	U-234	2.771E-10	2.079E-18	6.216E-18	9.630E-17	1.130E-16	1.736E-16	2.891E-16	4.545E-16	5.169E-16	5.260E-16
	Pu-238	Th-230	2.771E-10	2.145E-23	1.498E-22	3.924E-20	5.543E-20	1.445E-19	5.080E-19	2.305E-18	6.125E-18	1.418E-17
	Pu-238	Ra-226+D1	2.771E-10	8.259E-26	1.237E-24	5.208E-21	8.821E-21	3.846E-20	2.753E-19	3.286E-18	1.832E-17	8.599E-17
	Pu-238	Pb-210+D1	2.771E-10	1.062E-28	3.269E-27	1.861E-22	3.672E-22	2.398E-21	2.733E-20	4.948E-19	3.261E-18	1.662E-17
	Pu-238	äDSR(j)		4.899E-12	4.861E-12	4.021E-12	3.865E-12	3.300E-12	2.223E-12	6.796E-13	9.470E-14	2.453E-15
0	Pu-238	Pu-238	3.989E-12	7.052E-14	6.996E-14	5.787E-14	5.563E-14	4.750E-14	3.199E-14	9.776E-15	1.355E-15	2.605E-17
	Pu-238	U-234	3.989E-12	2.993E-20	8.948E-20	1.386E-18	1.627E-18	2.499E-18	4.162E-18	6.542E-18	7.440E-18	7.571E-18
	Pu-238	Th-230	3.989E-12	3.087E-25	2.156E-24	5.648E-22	7.978E-22	2.080E-21	7.312E-21	3.318E-20	8.816E-20	2.041E-19
	Pu-238	Ra-226+D1	3.989E-12	1.189E-27	1.780E-26	7.497E-23	1.270E-22	5.537E-22	3.963E-21	4.730E-20	2.637E-19	1.238E-18
	Pu-238	Pb-210+D2	3.989E-12	1.678E-30	5.168E-29	2.943E-24	5.806E-24	3.791E-23	4.321E-22	7.822E-21	5.155E-20	2.628E-19
	Pu-238	äDSR(j)		7.052E-14	6.996E-14	5.788E-14	5.563E-14	4.750E-14	3.200E-14	9.783E-15	1.363E-15	3.533E-17
0	Pu-238	Pu-238	1.998E-04	3.531E-06	3.503E-06	2.898E-06	2.786E-06	2.378E-06	1.602E-06	4.895E-07	6.787E-08	1.304E-09
	Pu-238	U-234	1.998E-04	1.499E-12	4.481E-12	6.941E-11	8.145E-11	1.251E-10	2.084E-10	3.276E-10	3.726E-10	3.791E-10
	Pu-238	Th-230	1.998E-04	1.546E-17	1.080E-16	2.828E-14	3.995E-14	1.042E-13	3.661E-13	1.661E-12	4.415E-12	1.022E-11
	Pu-238	Ra-226+D2	1.998E-04	2.343E-20	3.508E-19	1.477E-15	2.502E-15	1.091E-14	7.810E-14	9.321E-13	5.196E-12	2.439E-11
	Pu-238	Pb-210+D	1.998E-04	1.775E-22	5.465E-21	3.112E-16	6.141E-16	4.009E-15	4.570E-14	8.272E-13	5.452E-12	2.779E-11
	Pu-238	äDSR(j)		3.531E-06	3.503E-06	2.898E-06	2.786E-06	2.379E-06	1.602E-06	4.899E-07	6.826E-08	1.746E-09

Dose/Source Ratios Summed Over All Pathways

Parent and Progeny Principal Radionuclide Contributions Indicated

0	Parent (i)	Product (j)	Thread Fraction	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)								
	AAAAA	AAAAA	AAAAA	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
	Pu-238	Pu-238	2.637E-10	4.661E-12	4.624E-12	3.825E-12	3.677E-12	3.140E-12	2.115E-12	6.462E-13	8.959E-14	1.722E-15
	Pu-238	U-234	2.637E-10	1.978E-18	5.914E-18	9.162E-17	1.075E-16	1.652E-16	2.751E-16	4.324E-16	4.918E-16	5.004E-16
	Pu-238	Th-230	2.637E-10	2.041E-23	1.425E-22	3.733E-20	5.273E-20	1.375E-19	4.833E-19	2.193E-18	5.827E-18	1.349E-17
	Pu-238	Ra-226+D2	2.637E-10	3.092E-26	4.630E-25	1.950E-21	3.303E-21	1.440E-20	1.031E-19	1.230E-18	6.859E-18	3.220E-17
	Pu-238	Pb-210+D1	2.637E-10	1.010E-28	3.110E-27	1.771E-22	3.494E-22	2.281E-21	2.600E-20	4.707E-19	3.102E-18	1.582E-17
	Pu-238	äDSR(j)		4.661E-12	4.624E-12	3.825E-12	3.677E-12	3.140E-12	2.115E-12	6.466E-13	9.009E-14	2.284E-15
0	Pu-238	Pu-238	3.795E-12	6.709E-14	6.656E-14	5.506E-14	5.293E-14	4.519E-14	3.044E-14	9.301E-15	1.289E-15	2.478E-17
	Pu-238	U-234	3.795E-12	2.848E-20	8.513E-20	1.319E-18	1.548E-18	2.378E-18	3.959E-18	6.224E-18	7.079E-18	7.203E-18
	Pu-238	Th-230	3.795E-12	2.937E-25	2.051E-24	5.374E-22	7.591E-22	1.979E-21	6.956E-21	3.156E-20	8.388E-20	1.942E-19
	Pu-238	Ra-226+D2	3.795E-12	4.451E-28	6.665E-27	2.807E-23	4.754E-23	2.073E-22	1.484E-21	1.771E-20	9.872E-20	4.635E-19
	Pu-238	Pb-210+D2	3.795E-12	1.597E-30	4.917E-29	2.800E-24	5.524E-24	3.607E-23	4.111E-22	7.442E-21	4.905E-20	2.500E-19
	Pu-238	äDSR(j)		6.709E-14	6.656E-14	5.506E-14	5.293E-14	4.519E-14	3.044E-14	9.308E-15	1.297E-15	3.289E-17
0	Pu-238	Pu-238	4.196E-08	7.417E-10	7.358E-10	6.087E-10	5.851E-10	4.996E-10	3.365E-10	1.028E-10	1.426E-11	2.740E-13
	Pu-238	U-234	4.196E-08	3.148E-16	9.411E-16	1.458E-14	1.711E-14	2.628E-14	4.377E-14	6.881E-14	7.825E-14	7.963E-14
	Pu-238	Th-230	4.196E-08	3.247E-21	2.268E-20	5.941E-18	8.391E-18	2.188E-17	7.690E-17	3.489E-16	9.273E-16	2.147E-15
	Pu-238	Ra-226+D3	4.196E-08	1.197E-23	1.792E-22	7.548E-19	1.278E-18	5.574E-18	3.990E-17	4.762E-16	2.655E-15	1.246E-14
	Pu-238	Pb-210+D	4.196E-08	3.728E-26	1.148E-24	6.537E-20	1.290E-19	8.421E-19	9.599E-18	1.738E-16	1.145E-15	5.838E-15
	Pu-238	äDSR(j)		7.417E-10	7.359E-10	6.087E-10	5.851E-10	4.996E-10	3.365E-10	1.029E-10	1.434E-11	3.741E-13
0	Pu-238	Pu-238	5.538E-14	9.790E-16	9.713E-16	8.035E-16	7.724E-16	6.594E-16	4.442E-16	1.357E-16	1.882E-17	3.617E-19
	Pu-238	U-234	5.538E-14	4.156E-22	1.242E-21	1.924E-20	2.258E-20	3.469E-20	5.778E-20	9.083E-20	1.033E-19	1.051E-19
	Pu-238	Th-230	5.538E-14	4.286E-27	2.993E-26	7.842E-24	1.108E-23	2.888E-23	1.015E-22	4.606E-22	1.224E-21	2.834E-21
	Pu-238	Ra-226+D3	5.538E-14	1.580E-29	2.366E-28	9.963E-25	1.687E-24	7.358E-24	5.267E-23	6.286E-22	3.504E-21	1.645E-20
	Pu-238	Pb-210+D1	5.538E-14	2.122E-32	6.532E-31	3.720E-26	7.339E-26	4.792E-25	5.462E-24	9.887E-23	6.516E-22	3.322E-21
	Pu-238	äDSR(j)		9.790E-16	9.713E-16	8.035E-16	7.724E-16	6.595E-16	4.442E-16	1.358E-16	1.893E-17	4.894E-19
0	Pu-238	Pu-238	7.972E-16	1.409E-17	1.398E-17	1.157E-17	1.112E-17	9.492E-18	6.393E-18	1.954E-18	2.708E-19	5.206E-21
	Pu-238	U-234	7.972E-16	5.981E-24	1.788E-23	2.770E-22	3.251E-22	4.994E-22	8.317E-22	1.307E-21	1.487E-21	1.513E-21
	Pu-238	Th-230	7.972E-16	6.169E-29	4.309E-28	1.129E-25	1.594E-25	4.157E-25	1.461E-24	6.630E-24	1.762E-23	4.079E-23
	Pu-238	Ra-226+D3	7.972E-16	2.274E-31	3.405E-30	1.434E-26	2.429E-26	1.059E-25	7.581E-25	9.047E-24	5.044E-23	2.368E-22
	Pu-238	Pb-210+D2	7.972E-16	3.354E-34	1.033E-32	5.881E-28	1.160E-27	7.575E-27	8.636E-26	1.563E-24	1.030E-23	5.252E-23
	Pu-238	äDSR(j)		1.409E-17	1.398E-17	1.157E-17	1.112E-17	9.492E-18	6.394E-18	1.955E-18	2.724E-19	7.049E-21
0	Pu-238	Pu-238	2.000E-07	3.535E-09	3.508E-09	2.902E-09	2.789E-09	2.381E-09	1.604E-09	4.901E-10	6.795E-11	1.306E-12
	Pu-238	U-234	2.000E-07	1.501E-15	4.486E-15	6.949E-14	8.155E-14	1.253E-13	2.086E-13	3.280E-13	3.730E-13	3.796E-13
	Pu-238	Th-230	2.000E-07	1.548E-20	1.081E-19	2.832E-17	4.000E-17	1.043E-16	3.666E-16	1.663E-15	4.420E-15	1.023E-14
	Pu-238	Ra-226+D4	2.000E-07	5.124E-24	7.672E-23	3.231E-19	5.473E-19	2.386E-18	1.708E-17	2.039E-16	1.136E-15	5.335E-15
	Pu-238	Pb-210+D	2.000E-07	1.777E-25	5.472E-24	3.116E-19	6.148E-19	4.014E-18	4.576E-17	8.282E-16	5.459E-15	2.783E-14
	Pu-238	äDSR(j)		3.535E-09	3.508E-09	2.902E-09	2.789E-09	2.381E-09	1.604E-09	4.905E-10	6.833E-11	1.729E-12

Dose/Source Ratios Summed Over All Pathways

Parent and Progeny Principal Radionuclide Contributions Indicated

0	Parent (i)	Product (j)	Thread Fraction	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)								
				0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
	Pu-238	Pu-238	2.640E-13	4.667E-15	4.630E-15	3.830E-15	3.682E-15	3.143E-15	2.117E-15	6.470E-16	8.969E-17	1.724E-18
	Pu-238	U-234	2.640E-13	1.981E-21	5.922E-21	9.173E-20	1.076E-19	1.654E-19	2.754E-19	4.330E-19	4.924E-19	5.011E-19
	Pu-238	Th-230	2.640E-13	2.043E-26	1.427E-25	3.738E-23	5.280E-23	1.377E-22	4.839E-22	2.196E-21	5.834E-21	1.351E-20
	Pu-238	Ra-226+D4	2.640E-13	6.764E-30	1.013E-28	4.265E-25	7.224E-25	3.150E-24	2.255E-23	2.691E-22	1.500E-21	7.043E-21
	Pu-238	Pb-210+D1	2.640E-13	1.011E-31	3.114E-30	1.773E-25	3.498E-25	2.284E-24	2.604E-23	4.713E-22	3.106E-21	1.583E-20
	Pu-238	äDSR(j)		4.667E-15	4.630E-15	3.830E-15	3.682E-15	3.143E-15	2.117E-15	6.474E-16	9.020E-17	2.261E-18
0	Pu-238	Pu-238	3.800E-15	6.717E-17	6.664E-17	5.513E-17	5.299E-17	4.524E-17	3.047E-17	9.312E-18	1.291E-18	2.481E-20
	Pu-238	U-234	3.800E-15	2.851E-23	8.524E-23	1.320E-21	1.549E-21	2.380E-21	3.964E-21	6.232E-21	7.087E-21	7.212E-21
	Pu-238	Th-230	3.800E-15	2.941E-28	2.054E-27	5.380E-25	7.600E-25	1.982E-24	6.965E-24	3.160E-23	8.398E-23	1.944E-22
	Pu-238	Ra-226+D4	3.800E-15	9.736E-32	1.458E-30	6.139E-27	1.040E-26	4.534E-26	3.246E-25	3.873E-24	2.159E-23	1.014E-22
	Pu-238	Pb-210+D2	3.800E-15	1.599E-33	4.922E-32	2.803E-27	5.531E-27	3.611E-26	4.116E-25	7.451E-24	4.911E-23	2.503E-22
	Pu-238	äDSR(j)		6.717E-17	6.664E-17	5.513E-17	5.299E-17	4.525E-17	3.048E-17	9.319E-18	1.298E-18	3.257E-20
0	Pu-239	Pu-239	5.901E-04	1.154E-05	1.154E-05	1.154E-05	1.153E-05	1.153E-05	1.151E-05	1.146E-05	1.138E-05	1.122E-05
	Pu-239	U-235+D	5.901E-04	6.131E-15	1.839E-14	3.126E-13	3.738E-13	6.188E-13	1.231E-12	3.061E-12	6.093E-12	1.209E-11
	Pu-239	Pa-231	5.901E-04	8.498E-20	5.949E-19	1.657E-16	2.371E-16	6.496E-16	2.571E-15	1.593E-14	6.333E-14	2.510E-13
	Pu-239	Ac-227+D	5.901E-04	1.654E-21	2.465E-20	9.121E-17	1.507E-16	5.994E-16	3.559E-15	3.062E-14	1.376E-13	5.804E-13
	Pu-239	äDSR(j)		1.154E-05	1.154E-05	1.154E-05	1.153E-05	1.153E-05	1.151E-05	1.146E-05	1.138E-05	1.122E-05
0	Pu-239	Pu-239	1.633E-06	3.195E-08	3.195E-08	3.193E-08	3.192E-08	3.190E-08	3.186E-08	3.172E-08	3.149E-08	3.104E-08
	Pu-239	U-235+D	1.633E-06	1.697E-17	5.090E-17	8.651E-16	1.035E-15	1.713E-15	3.406E-15	8.470E-15	1.686E-14	3.347E-14
	Pu-239	Pa-231	1.633E-06	2.352E-22	1.646E-21	4.587E-19	6.561E-19	1.798E-18	7.115E-18	4.409E-17	1.753E-16	6.946E-16
	Pu-239	Ac-227+D1	1.633E-06	4.601E-24	6.854E-23	2.537E-19	4.191E-19	1.667E-18	9.898E-18	8.516E-17	3.827E-16	1.614E-15
	Pu-239	äDSR(j)		3.195E-08	3.195E-08	3.193E-08	3.192E-08	3.190E-08	3.186E-08	3.172E-08	3.149E-08	3.104E-08
0	Pu-239	Pu-239	8.257E-06	1.615E-07	1.615E-07	1.614E-07	1.614E-07	1.613E-07	1.611E-07	1.604E-07	1.592E-07	1.569E-07
	Pu-239	U-235+D	8.257E-06	8.579E-17	2.574E-16	4.373E-15	5.231E-15	8.658E-15	1.722E-14	4.282E-14	8.525E-14	1.692E-13
	Pu-239	Pa-231	8.257E-06	1.189E-21	8.323E-21	2.319E-18	3.317E-18	9.090E-18	3.597E-17	2.229E-16	8.861E-16	3.511E-15
	Pu-239	Ac-227+D2	8.257E-06	2.096E-23	3.123E-22	1.156E-18	1.909E-18	7.594E-18	4.509E-17	3.880E-16	1.743E-15	7.354E-15
	Pu-239	äDSR(j)		1.615E-07	1.615E-07	1.614E-07	1.614E-07	1.613E-07	1.611E-07	1.604E-07	1.592E-07	1.569E-07
0	Pu-239	Pu-239	2.285E-08	4.470E-10	4.470E-10	4.467E-10	4.466E-10	4.464E-10	4.457E-10	4.438E-10	4.406E-10	4.344E-10
	Pu-239	U-235+D	2.285E-08	2.374E-19	7.123E-19	1.210E-17	1.448E-17	2.396E-17	4.765E-17	1.185E-16	2.359E-16	4.683E-16
	Pu-239	Pa-231	2.285E-08	3.291E-24	2.304E-23	6.418E-21	9.180E-21	2.516E-20	9.955E-20	6.169E-19	2.453E-18	9.719E-18
	Pu-239	Ac-227+D3	2.285E-08	5.832E-26	8.688E-25	3.215E-21	5.312E-21	2.113E-20	1.255E-19	1.080E-18	4.851E-18	2.046E-17
	Pu-239	äDSR(j)		4.470E-10	4.470E-10	4.467E-10	4.466E-10	4.464E-10	4.457E-10	4.438E-10	4.406E-10	4.344E-10
0	Pu-239	Pu-239	4.954E-10	9.692E-12	9.691E-12	9.685E-12	9.683E-12	9.678E-12	9.664E-12	9.622E-12	9.553E-12	9.417E-12
	Pu-239	U-235+D	4.954E-10	5.147E-21	1.544E-20	2.624E-19	3.139E-19	5.195E-19	1.033E-18	2.570E-18	5.115E-18	1.015E-17
	Pu-239	Pa-231	4.954E-10	7.135E-26	4.994E-25	1.391E-22	1.990E-22	5.454E-22	2.158E-21	1.338E-20	5.317E-20	2.107E-19
	Pu-239	Ac-227+D4	4.954E-10	9.851E-28	1.468E-26	5.431E-23	8.973E-23	3.569E-22	2.119E-21	1.824E-20	8.194E-20	3.456E-19
	Pu-239	äDSR(j)		9.692E-12	9.691E-12	9.685E-12	9.683E-12	9.678E-12	9.664E-12	9.622E-12	9.553E-12	9.417E-12

Dose/Source Ratios Summed Over All Pathways												
Parent and Progeny Principal Radionuclide Contributions Indicated												
0	Parent	Product	Thread	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)								
	(i)	(j)	Fraction	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA
	Pu-239	Pu-239	1.371E-12	2.682E-14	2.682E-14	2.680E-14	2.680E-14	2.678E-14	2.675E-14	2.663E-14	2.644E-14	2.606E-14
	Pu-239	U-235+D	1.371E-12	1.425E-23	4.274E-23	7.263E-22	8.686E-22	1.438E-21	2.859E-21	7.112E-21	1.416E-20	2.810E-20
	Pu-239	Pa-231	1.371E-12	1.975E-28	1.382E-27	3.851E-25	5.509E-25	1.510E-24	5.973E-24	3.702E-23	1.472E-22	5.831E-22
	Pu-239	Ac-227+D5	1.371E-12	2.745E-30	4.090E-29	1.513E-25	2.500E-25	9.945E-25	5.905E-24	5.081E-23	2.283E-22	9.631E-22
	Pu-239	äDSR(j)		2.682E-14	2.682E-14	2.680E-14	2.680E-14	2.678E-14	2.675E-14	2.663E-14	2.644E-14	2.606E-14
0	Pu-239+D	Pu-239+D	9.829E-01	1.923E-02	1.923E-02	1.921E-02	1.921E-02	1.920E-02	1.917E-02	1.909E-02	1.895E-02	1.868E-02
	Pu-239+D	U-235+D	9.829E-01	1.021E-11	3.064E-11	5.206E-10	6.227E-10	1.031E-09	2.050E-09	5.098E-09	1.015E-08	2.014E-08
	Pu-239+D	Pa-231	9.829E-01	1.415E-16	9.908E-16	2.760E-13	3.949E-13	1.082E-12	4.282E-12	2.654E-11	1.055E-10	4.180E-10
	Pu-239+D	Ac-227+D	9.829E-01	2.756E-18	4.105E-17	1.519E-13	2.510E-13	9.983E-13	5.928E-12	5.101E-11	2.292E-10	9.668E-10
	Pu-239+D	äDSR(j)		1.923E-02	1.923E-02	1.921E-02	1.921E-02	1.920E-02	1.917E-02	1.909E-02	1.895E-02	1.868E-02
0	Pu-239+D	Pu-239+D	2.720E-03	5.321E-05	5.321E-05	5.318E-05	5.317E-05	5.314E-05	5.306E-05	5.283E-05	5.246E-05	5.171E-05
	Pu-239+D	U-235+D	2.720E-03	2.826E-14	8.479E-14	1.441E-12	1.723E-12	2.853E-12	5.673E-12	1.411E-11	2.809E-11	5.574E-11
	Pu-239+D	Pa-231	2.720E-03	3.918E-19	2.742E-18	7.640E-16	1.093E-15	2.995E-15	1.185E-14	7.344E-14	2.920E-13	1.157E-12
	Pu-239+D	Ac-227+D1	2.720E-03	7.663E-21	1.142E-19	4.225E-16	6.981E-16	2.776E-15	1.649E-14	1.419E-13	6.374E-13	2.689E-12
	Pu-239+D	äDSR(j)		5.321E-05	5.321E-05	5.318E-05	5.317E-05	5.314E-05	5.306E-05	5.283E-05	5.246E-05	5.171E-05
0	Pu-239+D	Pu-239+D	1.375E-02	2.690E-04	2.690E-04	2.688E-04	2.688E-04	2.686E-04	2.683E-04	2.671E-04	2.652E-04	2.614E-04
	Pu-239+D	U-235+D	1.375E-02	1.429E-13	4.287E-13	7.285E-12	8.713E-12	1.442E-11	2.868E-11	7.133E-11	1.420E-10	2.818E-10
	Pu-239+D	Pa-231	1.375E-02	1.981E-18	1.386E-17	3.863E-15	5.525E-15	1.514E-14	5.991E-14	3.713E-13	1.476E-12	5.849E-12
	Pu-239+D	Ac-227+D2	1.375E-02	3.491E-20	5.201E-19	1.925E-15	3.180E-15	1.265E-14	7.511E-14	6.462E-13	2.904E-12	1.225E-11
	Pu-239+D	äDSR(j)		2.690E-04	2.690E-04	2.688E-04	2.688E-04	2.686E-04	2.683E-04	2.671E-04	2.652E-04	2.614E-04
0	Pu-239+D	Pu-239+D	3.806E-05	7.446E-07	7.446E-07	7.441E-07	7.440E-07	7.435E-07	7.425E-07	7.393E-07	7.340E-07	7.235E-07
	Pu-239+D	U-235+D	3.806E-05	3.955E-16	1.186E-15	2.016E-14	2.411E-14	3.991E-14	7.937E-14	1.974E-13	3.930E-13	7.800E-13
	Pu-239+D	Pa-231	3.806E-05	5.482E-21	3.837E-20	1.069E-17	1.529E-17	4.190E-17	1.658E-16	1.028E-15	4.085E-15	1.619E-14
	Pu-239+D	Ac-227+D3	3.806E-05	9.714E-23	1.447E-21	5.355E-18	8.848E-18	3.519E-17	2.090E-16	1.798E-15	8.080E-15	3.408E-14
	Pu-239+D	äDSR(j)		7.446E-07	7.446E-07	7.441E-07	7.440E-07	7.435E-07	7.425E-07	7.393E-07	7.340E-07	7.235E-07
0	Pu-239+D	Pu-239+D	8.252E-07	1.614E-08	1.614E-08	1.613E-08	1.613E-08	1.612E-08	1.610E-08	1.603E-08	1.591E-08	1.569E-08
	Pu-239+D	U-235+D	8.252E-07	8.574E-18	2.572E-17	4.371E-16	5.228E-16	8.653E-16	1.721E-15	4.280E-15	8.521E-15	1.691E-14
	Pu-239+D	Pa-231	8.252E-07	1.188E-22	8.319E-22	2.318E-19	3.315E-19	9.085E-19	3.595E-18	2.228E-17	8.857E-17	3.510E-16
	Pu-239+D	Ac-227+D4	8.252E-07	1.641E-24	2.445E-23	9.047E-20	1.495E-19	5.945E-19	3.530E-18	3.037E-17	1.365E-16	5.757E-16
	Pu-239+D	äDSR(j)		1.614E-08	1.614E-08	1.613E-08	1.613E-08	1.612E-08	1.610E-08	1.603E-08	1.591E-08	1.569E-08
0	Pu-239+D	Pu-239+D	2.284E-09	4.468E-11	4.468E-11	4.465E-11	4.464E-11	4.461E-11	4.455E-11	4.436E-11	4.404E-11	4.341E-11
	Pu-239+D	U-235+D	2.284E-09	2.373E-20	7.119E-20	1.210E-18	1.447E-18	2.395E-18	4.763E-18	1.185E-17	2.358E-17	4.680E-17
	Pu-239+D	Pa-231	2.284E-09	3.289E-25	2.302E-24	6.414E-22	9.175E-22	2.514E-21	9.950E-21	6.166E-20	2.451E-19	9.713E-19
	Pu-239+D	Ac-227+D5	2.284E-09	4.572E-27	6.812E-26	2.521E-22	4.165E-22	1.657E-21	9.837E-21	8.464E-20	3.803E-19	1.604E-18
	Pu-239+D	äDSR(j)		4.468E-11	4.468E-11	4.465E-11	4.464E-11	4.461E-11	4.455E-11	4.436E-11	4.404E-11	4.341E-11
0	Ru-106+D	Ru-106+D	1.000E+00	2.029E-02	1.031E-02	8.904E-10	3.006E-11	3.907E-17	7.521E-32	0.000E+00	0.000E+00	0.000E+00
0	Sr-90+D	Sr-90+D	1.000E+00	5.056E-03	4.936E-03	2.769E-03	2.455E-03	1.517E-03	4.552E-04	1.230E-05	2.990E-08	1.768E-13

Dose/Source Ratios Summed Over All Pathways

Parent and Progeny Principal Radionuclide Contributions Indicated

0	Parent (i)	Product (j)	Thread Fraction	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)								
	AAAAA	AAAAA	AAAAA	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
	Tc-99	Tc-99	1.000E+00	1.116E-04	1.116E-04	1.114E-04	1.113E-04	1.112E-04	1.107E-04	1.095E-04	1.074E-04	1.034E-04
0Th-228+D	Th-228+D	Th-228+D	1.000E+00	1.906E-01	1.326E-01	2.204E-05	3.596E-06	2.548E-09	3.408E-17	8.151E-41	0.000E+00	0.000E+00
0Th-230	Th-230	Th-230	9.996E-01	1.791E-02	1.791E-02	1.791E-02	1.791E-02	1.790E-02	1.790E-02	1.787E-02	1.783E-02	1.775E-02
Th-230	Ra-226+D	Th-230	9.996E-01	6.017E-05	1.805E-04	3.052E-03	3.646E-03	6.010E-03	1.183E-02	2.854E-02	5.402E-02	9.722E-02
Th-230	Pb-210+D	Th-230	9.996E-01	6.833E-07	4.740E-06	1.044E-03	1.426E-03	3.293E-03	9.083E-03	2.753E-02	5.596E-02	1.042E-01
Th-230	äDSR(j)	Th-230		1.797E-02	1.810E-02	2.200E-02	2.298E-02	2.721E-02	3.881E-02	7.394E-02	1.278E-01	2.191E-01
0Th-230	Th-230	Th-230	1.319E-06	2.364E-08	2.364E-08	2.364E-08	2.364E-08	2.363E-08	2.362E-08	2.359E-08	2.354E-08	2.343E-08
Th-230	Ra-226+D	Th-230	1.319E-06	7.942E-11	2.382E-10	4.028E-09	4.813E-09	7.934E-09	1.562E-08	3.767E-08	7.131E-08	1.283E-07
Th-230	Pb-210+D1	Th-230	1.319E-06	3.888E-13	2.697E-12	5.939E-10	8.117E-10	1.874E-09	5.168E-09	1.567E-08	3.184E-08	5.927E-08
Th-230	äDSR(j)	Th-230		2.372E-08	2.388E-08	2.826E-08	2.926E-08	3.344E-08	4.441E-08	7.692E-08	1.267E-07	2.110E-07
0Th-230	Th-230	Th-230	1.899E-08	3.403E-10	3.403E-10	3.403E-10	3.402E-10	3.402E-10	3.400E-10	3.395E-10	3.388E-10	3.372E-10
Th-230	Ra-226+D	Th-230	1.899E-08	1.143E-12	3.429E-12	5.798E-11	6.927E-11	1.142E-10	2.248E-10	5.422E-10	1.026E-09	1.847E-09
Th-230	Pb-210+D2	Th-230	1.899E-08	6.147E-15	4.264E-14	9.390E-12	1.283E-11	2.962E-11	8.171E-11	2.477E-10	5.034E-10	9.370E-10
Th-230	äDSR(j)	Th-230		3.415E-10	3.438E-10	4.076E-10	4.223E-10	4.840E-10	6.465E-10	1.129E-09	1.869E-09	3.121E-09
0Th-230	Th-230	Th-230	2.100E-04	3.762E-06	3.762E-06	3.761E-06	3.761E-06	3.761E-06	3.759E-06	3.754E-06	3.745E-06	3.728E-06
Th-230	Ra-226+D1	Th-230	2.100E-04	2.896E-08	8.687E-08	1.469E-06	1.755E-06	2.893E-06	5.695E-06	1.374E-05	2.601E-05	4.680E-05
Th-230	Pb-210+D	Th-230	2.100E-04	1.435E-10	9.956E-10	2.192E-07	2.996E-07	6.917E-07	1.908E-06	5.783E-06	1.175E-05	2.188E-05
Th-230	äDSR(j)	Th-230		3.791E-06	3.850E-06	5.450E-06	5.816E-06	7.346E-06	1.136E-05	2.327E-05	4.150E-05	7.241E-05
0Th-230	Th-230	Th-230	2.771E-10	4.966E-12	4.966E-12	4.965E-12	4.965E-12	4.964E-12	4.962E-12	4.955E-12	4.943E-12	4.921E-12
Th-230	Ra-226+D1	Th-230	2.771E-10	3.823E-14	1.147E-13	1.939E-12	2.317E-12	3.819E-12	7.517E-12	1.813E-11	3.433E-11	6.178E-11
Th-230	Pb-210+D1	Th-230	2.771E-10	8.166E-17	5.665E-16	1.248E-13	1.705E-13	3.936E-13	1.086E-12	3.291E-12	6.688E-12	1.245E-11
Th-230	äDSR(j)	Th-230		5.005E-12	5.081E-12	7.029E-12	7.452E-12	9.177E-12	1.356E-11	2.638E-11	4.596E-11	7.915E-11
0Th-230	Th-230	Th-230	3.989E-12	7.148E-14	7.148E-14	7.147E-14	7.146E-14	7.145E-14	7.142E-14	7.132E-14	7.116E-14	7.083E-14
Th-230	Ra-226+D1	Th-230	3.989E-12	5.503E-16	1.651E-15	2.791E-14	3.335E-14	5.497E-14	1.082E-13	2.610E-13	4.941E-13	8.892E-13
Th-230	Pb-210+D2	Th-230	3.989E-12	1.291E-18	8.957E-18	1.972E-15	2.695E-15	6.223E-15	1.716E-14	5.202E-14	1.057E-13	1.968E-13
Th-230	äDSR(j)	Th-230		7.204E-14	7.314E-14	1.014E-13	1.075E-13	1.326E-13	1.968E-13	3.843E-13	6.710E-13	1.157E-12
0Th-230	Th-230	Th-230	1.998E-04	3.580E-06	3.580E-06	3.579E-06	3.579E-06	3.578E-06	3.576E-06	3.571E-06	3.563E-06	3.547E-06
Th-230	Ra-226+D2	Th-230	1.998E-04	1.084E-08	3.253E-08	5.501E-07	6.572E-07	1.083E-06	2.132E-06	5.143E-06	9.737E-06	1.752E-05
Th-230	Pb-210+D	Th-230	1.998E-04	1.365E-10	9.472E-10	2.086E-07	2.851E-07	6.581E-07	1.815E-06	5.502E-06	1.118E-05	2.081E-05
Th-230	äDSR(j)	Th-230		3.591E-06	3.613E-06	4.337E-06	4.521E-06	5.319E-06	7.524E-06	1.422E-05	2.448E-05	4.189E-05
0Th-230	Th-230	Th-230	2.637E-10	4.725E-12	4.725E-12	4.724E-12	4.724E-12	4.723E-12	4.721E-12	4.714E-12	4.703E-12	4.682E-12
Th-230	Ra-226+D2	Th-230	2.637E-10	1.432E-14	4.294E-14	7.261E-13	8.675E-13	1.430E-12	2.815E-12	6.789E-12	1.285E-11	2.313E-11
Th-230	Pb-210+D1	Th-230	2.637E-10	7.769E-17	5.390E-16	1.187E-13	1.622E-13	3.745E-13	1.033E-12	3.131E-12	6.363E-12	1.184E-11
Th-230	äDSR(j)	Th-230		4.739E-12	4.768E-12	5.569E-12	5.753E-12	6.527E-12	8.568E-12	1.463E-11	2.392E-11	3.966E-11

Dose/Source Ratios Summed Over All Pathways

Parent and Progeny Principal Radionuclide Contributions Indicated

0	Parent (i)	Product (j)	Thread Fraction	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)								
	AAAAAAA	AAAAAAA	AAAAAAA	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
	Th-230	Th-230	3.795E-12	6.801E-14	6.801E-14	6.800E-14	6.799E-14	6.798E-14	6.795E-14	6.786E-14	6.770E-14	6.739E-14
	Th-230	Ra-226+D2	3.795E-12	2.061E-16	6.180E-16	1.045E-14	1.249E-14	2.058E-14	4.051E-14	9.773E-14	1.850E-13	3.330E-13
	Th-230	Pb-210+D2	3.795E-12	1.228E-18	8.522E-18	1.877E-15	2.564E-15	5.920E-15	1.633E-14	4.950E-14	1.006E-13	1.872E-13
	Th-230	äDSR(j)		6.822E-14	6.864E-14	8.032E-14	8.304E-14	9.448E-14	1.248E-13	2.151E-13	3.533E-13	5.876E-13
0	Th-230	Th-230	4.196E-08	7.519E-10	7.519E-10	7.517E-10	7.517E-10	7.515E-10	7.512E-10	7.501E-10	7.484E-10	7.450E-10
	Th-230	Ra-226+D3	4.196E-08	5.540E-12	1.662E-11	2.810E-10	3.357E-10	5.535E-10	1.089E-09	2.628E-09	4.975E-09	8.953E-09
	Th-230	Pb-210+D	4.196E-08	2.868E-14	1.990E-13	4.381E-11	5.987E-11	1.382E-10	3.812E-10	1.156E-09	2.349E-09	4.372E-09
	Th-230	äDSR(j)		7.574E-10	7.687E-10	1.077E-09	1.147E-09	1.443E-09	2.222E-09	4.533E-09	8.072E-09	1.407E-08
0	Th-230	Th-230	5.538E-14	9.925E-16	9.924E-16	9.922E-16	9.922E-16	9.920E-16	9.915E-16	9.902E-16	9.879E-16	9.834E-16
	Th-230	Ra-226+D3	5.538E-14	7.313E-18	2.194E-17	3.709E-16	4.432E-16	7.306E-16	1.438E-15	3.469E-15	6.566E-15	1.182E-14
	Th-230	Pb-210+D1	5.538E-14	1.632E-20	1.132E-19	2.493E-17	3.407E-17	7.865E-17	2.169E-16	6.576E-16	1.337E-15	2.488E-15
	Th-230	äDSR(j)		9.998E-16	1.014E-15	1.388E-15	1.469E-15	1.801E-15	2.646E-15	5.116E-15	8.891E-15	1.529E-14
0	Th-230	Th-230	7.972E-16	1.429E-17	1.429E-17	1.428E-17	1.428E-17	1.428E-17	1.427E-17	1.425E-17	1.422E-17	1.415E-17
	Th-230	Ra-226+D3	7.972E-16	1.053E-19	3.157E-19	5.339E-18	6.379E-18	1.052E-17	2.070E-17	4.993E-17	9.452E-17	1.701E-16
	Th-230	Pb-210+D2	7.972E-16	2.580E-22	1.790E-21	3.942E-19	5.386E-19	1.244E-18	3.430E-18	1.040E-17	2.113E-17	3.933E-17
	Th-230	äDSR(j)		1.439E-17	1.460E-17	2.002E-17	2.120E-17	2.604E-17	3.840E-17	7.458E-17	1.299E-16	2.236E-16
0	Th-230	Th-230	2.000E-07	3.584E-09	3.584E-09	3.583E-09	3.583E-09	3.582E-09	3.581E-09	3.576E-09	3.567E-09	3.551E-09
	Th-230	Ra-226+D4	2.000E-07	2.372E-12	7.114E-12	1.203E-10	1.437E-10	2.369E-10	4.664E-10	1.125E-09	2.130E-09	3.833E-09
	Th-230	Pb-210+D	2.000E-07	1.367E-13	9.484E-13	2.088E-10	2.854E-10	6.589E-10	1.817E-09	5.509E-09	1.120E-08	2.084E-08
	Th-230	äDSR(j)		3.586E-09	3.592E-09	3.912E-09	4.012E-09	4.478E-09	5.864E-09	1.021E-08	1.689E-08	2.822E-08
0	Th-230	Th-230	2.640E-13	4.731E-15	4.731E-15	4.730E-15	4.729E-15	4.729E-15	4.726E-15	4.720E-15	4.709E-15	4.687E-15
	Th-230	Ra-226+D4	2.640E-13	3.131E-18	9.391E-18	1.588E-16	1.897E-16	3.128E-16	6.156E-16	1.485E-15	2.811E-15	5.059E-15
	Th-230	Pb-210+D1	2.640E-13	7.779E-20	5.396E-19	1.188E-16	1.624E-16	3.749E-16	1.034E-15	3.135E-15	6.371E-15	1.186E-14
	Th-230	äDSR(j)		4.734E-15	4.741E-15	5.007E-15	5.082E-15	5.416E-15	6.376E-15	9.339E-15	1.389E-14	2.160E-14
0	Th-230	Th-230	3.800E-15	6.809E-17	6.809E-17	6.808E-17	6.807E-17	6.806E-17	6.803E-17	6.794E-17	6.778E-17	6.747E-17
	Th-230	Ra-226+D4	3.800E-15	4.507E-20	1.352E-19	2.286E-18	2.731E-18	4.502E-18	8.861E-18	2.137E-17	4.046E-17	7.282E-17
	Th-230	Pb-210+D2	3.800E-15	1.230E-21	8.532E-21	1.879E-18	2.568E-18	5.927E-18	1.635E-17	4.956E-17	1.007E-16	1.875E-16
	Th-230	äDSR(j)		6.814E-17	6.824E-17	7.224E-17	7.337E-17	7.849E-17	9.324E-17	1.389E-16	2.090E-16	3.278E-16
0	Th-232	Th-232	1.000E+00	2.091E-02	2.091E-02	2.091E-02	2.091E-02	2.091E-02	2.091E-02	2.091E-02	2.091E-02	2.091E-02
	Th-232	Ra-228+D	1.000E+00	2.151E-02	6.123E-02	3.541E-01	3.619E-01	3.704E-01	3.713E-01	3.713E-01	3.713E-01	3.713E-01
	Th-232	Th-228+D	1.000E+00	1.470E-03	9.019E-03	2.115E-01	2.186E-01	2.264E-01	2.272E-01	2.272E-01	2.272E-01	2.272E-01
	Th-232	äDSR(j)		4.389E-02	9.116E-02	5.865E-01	6.014E-01	6.178E-01	6.194E-01	6.194E-01	6.194E-01	6.194E-01
0	U-234	U-234	9.996E-01	5.327E-03	5.327E-03	5.326E-03	5.326E-03	5.326E-03	5.325E-03	5.323E-03	5.319E-03	5.311E-03
	U-234	Th-230	9.996E-01	8.235E-08	2.471E-07	4.199E-06	5.023E-06	8.315E-06	1.654E-05	4.120E-05	8.219E-05	1.638E-04
	U-234	Ra-226+D	9.996E-01	1.844E-10	1.291E-09	3.585E-07	5.125E-07	1.401E-06	5.506E-06	3.346E-05	1.288E-04	4.798E-04
	U-234	Pb-210+D	9.996E-01	1.573E-12	2.344E-11	8.681E-08	1.434E-07	5.704E-07	3.380E-06	2.869E-05	1.252E-04	4.970E-04
	U-234	äDSR(j)		5.327E-03	5.327E-03	5.331E-03	5.332E-03	5.336E-03	5.351E-03	5.426E-03	5.655E-03	6.451E-03

Dose/Source Ratios Summed Over All Pathways

Parent and Progeny Principal Radionuclide Contributions Indicated

0	Parent (i)	Product (j)	Thread Fraction	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)								
	AAAAA	AAAAA	AAAAA	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
	U-234	U-234	1.319E-06	7.031E-09	7.031E-09	7.031E-09	7.031E-09	7.030E-09	7.029E-09	7.026E-09	7.021E-09	7.010E-09
	U-234	Th-230	1.319E-06	1.087E-13	3.261E-13	5.543E-12	6.630E-12	1.098E-11	2.184E-11	5.438E-11	1.085E-10	2.162E-10
	U-234	Ra-226+D	1.319E-06	2.434E-16	1.704E-15	4.732E-13	6.764E-13	1.849E-12	7.268E-12	4.417E-11	1.701E-10	6.333E-10
	U-234	Pb-210+D1	1.319E-06	8.952E-19	1.334E-17	4.939E-14	8.161E-14	3.246E-13	1.923E-12	1.633E-11	7.125E-11	2.828E-10
	U-234	àDSR(j)		7.031E-09	7.032E-09	7.037E-09	7.038E-09	7.043E-09	7.060E-09	7.141E-09	7.370E-09	8.142E-09
0U-234	U-234		1.899E-08	1.012E-10	1.012E-10	1.012E-10	1.012E-10	1.012E-10	1.012E-10	1.011E-10	1.011E-10	1.009E-10
	U-234	Th-230	1.899E-08	1.565E-15	4.694E-15	7.979E-14	9.543E-14	1.580E-13	3.143E-13	7.827E-13	1.562E-12	3.112E-12
	U-234	Ra-226+D	1.899E-08	3.504E-18	2.453E-17	6.811E-15	9.737E-15	2.661E-14	1.046E-13	6.358E-13	2.448E-12	9.116E-12
	U-234	Pb-210+D2	1.899E-08	1.415E-20	2.109E-19	7.809E-16	1.290E-15	5.132E-15	3.041E-14	2.581E-13	1.126E-12	4.471E-12
	U-234	àDSR(j)		1.012E-10	1.012E-10	1.013E-10	1.013E-10	1.014E-10	1.016E-10	1.028E-10	1.062E-10	1.176E-10
0U-234	U-234		2.100E-04	1.119E-06	1.119E-06	1.119E-06	1.119E-06	1.119E-06	1.119E-06	1.118E-06	1.117E-06	1.115E-06
	U-234	Th-230	2.100E-04	1.730E-11	5.189E-11	8.821E-10	1.055E-09	1.747E-09	3.475E-09	8.653E-09	1.726E-08	3.440E-08
	U-234	Ra-226+D1	2.100E-04	8.878E-14	6.214E-13	1.726E-10	2.467E-10	6.743E-10	2.651E-09	1.611E-08	6.202E-08	2.310E-07
	U-234	Pb-210+D	2.100E-04	3.304E-16	4.923E-15	1.823E-11	3.013E-11	1.198E-10	7.100E-10	6.027E-09	2.630E-08	1.044E-07
	U-234	àDSR(j)		1.119E-06	1.119E-06	1.120E-06	1.120E-06	1.121E-06	1.125E-06	1.149E-06	1.223E-06	1.485E-06
0U-234	U-234		2.771E-10	1.477E-12	1.477E-12	1.477E-12	1.477E-12	1.477E-12	1.476E-12	1.476E-12	1.475E-12	1.472E-12
	U-234	Th-230	2.771E-10	2.283E-17	6.850E-17	1.164E-15	1.393E-15	2.305E-15	4.587E-15	1.142E-14	2.279E-14	4.541E-14
	U-234	Ra-226+D1	2.771E-10	1.172E-19	8.202E-19	2.278E-16	3.256E-16	8.900E-16	3.499E-15	2.126E-14	8.187E-14	3.049E-13
	U-234	Pb-210+D1	2.771E-10	1.880E-22	2.801E-21	1.038E-17	1.714E-17	6.818E-17	4.040E-16	3.429E-15	1.496E-14	5.940E-14
	U-234	àDSR(j)		1.477E-12	1.477E-12	1.478E-12	1.478E-12	1.480E-12	1.485E-12	1.512E-12	1.594E-12	1.882E-12
0U-234	U-234		3.989E-12	2.126E-14	2.126E-14	2.126E-14	2.126E-14	2.125E-14	2.125E-14	2.124E-14	2.123E-14	2.119E-14
	U-234	Th-230	3.989E-12	3.287E-19	9.860E-19	1.676E-17	2.004E-17	3.318E-17	6.602E-17	1.644E-16	3.280E-16	6.537E-16
	U-234	Ra-226+D1	3.989E-12	1.687E-21	1.181E-20	3.279E-18	4.687E-18	1.281E-17	5.036E-17	3.061E-16	1.178E-15	4.388E-15
	U-234	Pb-210+D2	3.989E-12	2.973E-24	4.429E-23	1.640E-19	2.710E-19	1.078E-18	6.387E-18	5.422E-17	2.366E-16	9.390E-16
	U-234	àDSR(j)		2.126E-14	2.126E-14	2.128E-14	2.128E-14	2.130E-14	2.137E-14	2.177E-14	2.297E-14	2.718E-14
0U-234	U-234		1.998E-04	1.064E-06	1.064E-06	1.064E-06	1.064E-06	1.064E-06	1.064E-06	1.064E-06	1.063E-06	1.061E-06
	U-234	Th-230	1.998E-04	1.646E-11	4.937E-11	8.392E-10	1.004E-09	1.662E-09	3.306E-09	8.233E-09	1.642E-08	3.273E-08
	U-234	Ra-226+D2	1.998E-04	3.324E-14	2.327E-13	6.462E-11	9.237E-11	2.525E-10	9.925E-10	6.032E-09	2.322E-08	8.648E-08
	U-234	Pb-210+D	1.998E-04	3.144E-16	4.684E-15	1.735E-11	2.866E-11	1.140E-10	6.755E-10	5.734E-09	2.502E-08	9.931E-08
	U-234	àDSR(j)		1.065E-06	1.065E-06	1.065E-06	1.066E-06	1.066E-06	1.069E-06	1.084E-06	1.128E-06	1.280E-06
0U-234	U-234		2.637E-10	1.405E-12	1.405E-12	1.405E-12	1.405E-12	1.405E-12	1.405E-12	1.404E-12	1.403E-12	1.401E-12
	U-234	Th-230	2.637E-10	2.172E-17	6.517E-17	1.108E-15	1.325E-15	2.193E-15	4.364E-15	1.087E-14	2.168E-14	4.321E-14
	U-234	Ra-226+D2	2.637E-10	4.388E-20	3.071E-19	8.530E-17	1.219E-16	3.333E-16	1.310E-15	7.962E-15	3.066E-14	1.142E-13
	U-234	Pb-210+D1	2.637E-10	1.789E-22	2.665E-21	9.871E-18	1.631E-17	6.486E-17	3.844E-16	3.263E-15	1.424E-14	5.651E-14
	U-234	àDSR(j)		1.405E-12	1.405E-12	1.406E-12	1.406E-12	1.408E-12	1.411E-12	1.426E-12	1.470E-12	1.615E-12
0U-234	U-234		3.795E-12	2.023E-14	2.023E-14	2.022E-14	2.022E-14	2.022E-14	2.022E-14	2.021E-14	2.019E-14	2.016E-14
	U-234	Th-230	3.795E-12	3.127E-19	9.381E-19	1.595E-17	1.907E-17	3.157E-17	6.281E-17	1.564E-16	3.121E-16	6.219E-16
	U-234	Ra-226+D2	3.795E-12	6.316E-22	4.421E-21	1.228E-18	1.755E-18	4.797E-18	1.886E-17	1.146E-16	4.412E-16	1.643E-15
	U-234	Pb-210+D2	3.795E-12	2.828E-24	4.214E-23	1.561E-19	2.579E-19	1.025E-18	6.077E-18	5.158E-17	2.251E-16	8.934E-16
	U-234	àDSR(j)		2.023E-14	2.023E-14	2.024E-14	2.024E-14	2.026E-14	2.031E-14	2.053E-14	2.117E-14	2.332E-14

Dose/Source Ratios Summed Over All Pathways

Parent and Progeny Principal Radionuclide Contributions Indicated

0	Parent (i)	Product (j)	Thread Fraction	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)								
	AAAAA	AAAAA	AAAAA	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
	U-234	U-234	4.196E-08	2.236E-10	2.236E-10	2.236E-10	2.236E-10	2.236E-10	2.235E-10	2.234E-10	2.233E-10	2.229E-10
	U-234	Th-230	4.196E-08	3.457E-15	1.037E-14	1.763E-13	2.108E-13	3.490E-13	6.944E-13	1.729E-12	3.450E-12	6.875E-12
	U-234	Ra-226+D3	4.196E-08	1.698E-17	1.189E-16	3.301E-14	4.719E-14	1.290E-13	5.070E-13	3.082E-12	1.186E-11	4.418E-11
	U-234	Pb-210+D	4.196E-08	6.603E-20	9.839E-19	3.644E-15	6.020E-15	2.394E-14	1.419E-13	1.204E-12	5.256E-12	2.086E-11
	U-234	äDSR(j)		2.236E-10	2.236E-10	2.238E-10	2.238E-10	2.241E-10	2.249E-10	2.294E-10	2.438E-10	2.948E-10
0U-234	U-234		5.538E-14	2.951E-16	2.951E-16	2.951E-16	2.951E-16	2.951E-16	2.951E-16	2.949E-16	2.947E-16	2.943E-16
	U-234	Th-230	5.538E-14	4.563E-21	1.369E-20	2.327E-19	2.783E-19	4.607E-19	9.166E-19	2.283E-18	4.554E-18	9.075E-18
	U-234	Ra-226+D3	5.538E-14	2.242E-23	1.569E-22	4.358E-20	6.229E-20	1.703E-19	6.693E-19	4.068E-18	1.566E-17	5.832E-17
	U-234	Pb-210+D1	5.538E-14	3.757E-26	5.598E-25	2.073E-21	3.426E-21	1.362E-20	8.074E-20	6.853E-19	2.991E-18	1.187E-17
	U-234	äDSR(j)		2.951E-16	2.952E-16	2.954E-16	2.955E-16	2.957E-16	2.967E-16	3.020E-16	3.179E-16	3.735E-16
0U-234	U-234		7.972E-16	4.248E-18	4.248E-18	4.248E-18	4.248E-18	4.248E-18	4.247E-18	4.245E-18	4.242E-18	4.235E-18
	U-234	Th-230	7.972E-16	6.568E-23	1.970E-22	3.349E-21	4.006E-21	6.632E-21	1.319E-20	3.286E-20	6.555E-20	1.306E-19
	U-234	Ra-226+D3	7.972E-16	3.227E-25	2.258E-24	6.272E-22	8.966E-22	2.451E-21	9.634E-21	5.855E-20	2.254E-19	8.394E-19
	U-234	Pb-210+D2	7.972E-16	5.941E-28	8.851E-27	3.278E-23	5.416E-23	2.154E-22	1.276E-21	1.083E-20	4.728E-20	1.877E-19
	U-234	äDSR(j)		4.248E-18	4.248E-18	4.252E-18	4.253E-18	4.257E-18	4.271E-18	4.347E-18	4.580E-18	5.393E-18
0U-234	U-234		2.000E-07	1.066E-09	1.066E-09	1.066E-09	1.066E-09	1.066E-09	1.065E-09	1.065E-09	1.064E-09	1.063E-09
	U-234	Th-230	2.000E-07	1.648E-14	4.943E-14	8.402E-13	1.005E-12	1.664E-12	3.310E-12	8.243E-12	1.644E-11	3.277E-11
	U-234	Ra-226+D4	2.000E-07	7.271E-18	5.089E-17	1.413E-14	2.020E-14	5.522E-14	2.171E-13	1.319E-12	5.079E-12	1.891E-11
	U-234	Pb-210+D	2.000E-07	3.148E-19	4.690E-18	1.737E-14	2.870E-14	1.141E-13	6.763E-13	5.741E-12	2.505E-11	9.943E-11
	U-234	äDSR(j)		1.066E-09	1.066E-09	1.067E-09	1.067E-09	1.067E-09	1.070E-09	1.080E-09	1.111E-09	1.214E-09
0U-234	U-234		2.640E-13	1.407E-15	1.407E-15	1.407E-15	1.407E-15	1.407E-15	1.406E-15	1.406E-15	1.405E-15	1.403E-15
	U-234	Th-230	2.640E-13	2.175E-20	6.525E-20	1.109E-18	1.327E-18	2.196E-18	4.369E-18	1.088E-17	2.171E-17	4.326E-17
	U-234	Ra-226+D4	2.640E-13	9.597E-24	6.717E-23	1.866E-20	2.667E-20	7.289E-20	2.865E-19	1.741E-18	6.705E-18	2.497E-17
	U-234	Pb-210+D1	2.640E-13	1.791E-25	2.669E-24	9.883E-21	1.633E-20	6.494E-20	3.848E-19	3.267E-18	1.426E-17	5.658E-17
	U-234	äDSR(j)		1.407E-15	1.407E-15	1.408E-15	1.408E-15	1.409E-15	1.411E-15	1.422E-15	1.447E-15	1.527E-15
0U-234	U-234		3.800E-15	2.025E-17	2.025E-17	2.025E-17	2.025E-17	2.025E-17	2.024E-17	2.023E-17	2.022E-17	2.019E-17
	U-234	Th-230	3.800E-15	3.131E-22	9.392E-22	1.596E-20	1.909E-20	3.161E-20	6.289E-20	1.566E-19	3.124E-19	6.226E-19
	U-234	Ra-226+D4	3.800E-15	1.381E-25	9.669E-25	2.685E-22	3.839E-22	1.049E-21	4.124E-21	2.507E-20	9.651E-20	3.594E-19
	U-234	Pb-210+D2	3.800E-15	2.832E-27	4.219E-26	1.562E-22	2.582E-22	1.027E-21	6.084E-21	5.165E-20	2.254E-19	8.945E-19
	U-234	äDSR(j)		2.025E-17	2.025E-17	2.026E-17	2.027E-17	2.028E-17	2.032E-17	2.047E-17	2.085E-17	2.207E-17
0U-235+D	U-235+D		9.835E-01	2.076E-02	2.076E-02	2.076E-02	2.076E-02	2.076E-02	2.076E-02	2.076E-02	2.075E-02	2.075E-02
	U-235+D	Pa-231	9.835E-01	4.316E-07	1.295E-06	2.200E-05	2.632E-05	4.356E-05	8.665E-05	2.156E-04	4.297E-04	8.543E-04
	U-235+D	Ac-227+D	9.835E-01	1.118E-08	7.758E-08	1.707E-05	2.333E-05	5.390E-05	1.494E-04	4.644E-04	9.915E-04	2.037E-03
	U-235+D	äDSR(j)		2.076E-02	2.076E-02	2.080E-02	2.081E-02	2.085E-02	2.099E-02	2.144E-02	2.218E-02	2.364E-02
0U-235+D	U-235+D		2.722E-03	5.745E-05	5.745E-05	5.745E-05	5.745E-05	5.745E-05	5.745E-05	5.744E-05	5.744E-05	5.744E-05
	U-235+D	Pa-231	2.722E-03	1.194E-09	3.583E-09	6.090E-08	7.283E-08	1.206E-07	2.398E-07	5.968E-07	1.189E-06	2.364E-06
	U-235+D	Ac-227+D1	2.722E-03	3.110E-11	2.158E-10	4.748E-08	6.489E-08	1.499E-07	4.154E-07	1.291E-06	2.757E-06	5.666E-06
	U-235+D	äDSR(j)		5.745E-05	5.745E-05	5.755E-05	5.758E-05	5.772E-05	5.810E-05	5.933E-05	6.139E-05	6.547E-05

Dose/Source Ratios Summed Over All Pathways

Parent and Progeny Principal Radionuclide Contributions Indicated

0	Parent (i)	Product (j)	Thread Fraction	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)									
	AAAAA	AAAAA	AAAAA	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03	AAAAA
	U-238+D1	U-238+D1	9.980E-01	8.628E-03	8.628E-03	8.628E-03	8.628E-03	8.627E-03	8.627E-03	8.627E-03	8.627E-03	8.627E-03	8.626E-03
	U-238+D1	U-234	9.980E-01	7.508E-09	2.252E-08	3.829E-07	4.579E-07	7.582E-07	1.509E-06	3.760E-06	7.509E-06	1.500E-05	
	U-238+D1	Th-230	9.980E-01	7.738E-14	5.417E-13	1.510E-10	2.159E-10	5.919E-10	2.344E-09	1.455E-08	5.803E-08	2.314E-07	
	U-238+D1	Ra-226+D	9.980E-01	1.300E-16	1.949E-15	8.600E-12	1.471E-11	6.659E-11	5.219E-10	7.949E-09	6.170E-08	4.673E-07	
	U-238+D1	Pb-210+D	9.980E-01	8.880E-19	2.738E-17	1.620E-12	3.221E-12	2.173E-11	2.687E-10	6.151E-09	5.655E-08	4.690E-07	
	U-238+D1	äDSR(j)		8.628E-03	8.628E-03	8.628E-03	8.628E-03	8.628E-03	8.629E-03	8.631E-03	8.634E-03	8.642E-03	
0U-	238+D1	U-238+D1	1.317E-06	1.139E-08	1.139E-08	1.139E-08	1.139E-08	1.139E-08	1.139E-08	1.139E-08	1.139E-08	1.139E-08	1.139E-08
	U-238+D1	U-234	1.317E-06	9.910E-15	2.973E-14	5.054E-13	6.045E-13	1.001E-12	1.992E-12	4.963E-12	9.912E-12	1.980E-11	
	U-238+D1	Th-230	1.317E-06	1.021E-19	7.150E-19	1.993E-16	2.851E-16	7.813E-16	3.094E-15	1.921E-14	7.660E-14	3.055E-13	
	U-238+D1	Ra-226+D	1.317E-06	1.716E-22	2.573E-21	1.135E-17	1.941E-17	8.790E-17	6.889E-16	1.049E-14	8.145E-14	6.169E-13	
	U-238+D1	Pb-210+D1	1.317E-06	5.053E-25	1.558E-23	9.216E-19	1.833E-18	1.236E-17	1.529E-16	3.500E-15	3.218E-14	2.669E-13	
	U-238+D1	äDSR(j)		1.139E-08	1.139E-08	1.139E-08	1.139E-08	1.139E-08	1.139E-08	1.139E-08	1.140E-08	1.141E-08	
0U-	238+D1	U-238+D1	1.896E-08	1.639E-10	1.639E-10	1.639E-10	1.639E-10	1.639E-10	1.639E-10	1.639E-10	1.639E-10	1.639E-10	1.639E-10
	U-238+D1	U-234	1.896E-08	1.426E-16	4.279E-16	7.275E-15	8.701E-15	1.441E-14	2.867E-14	7.144E-14	1.427E-13	2.850E-13	
	U-238+D1	Th-230	1.896E-08	1.470E-21	1.029E-20	2.868E-18	4.103E-18	1.125E-17	4.453E-17	2.765E-16	1.103E-15	4.397E-15	
	U-238+D1	Ra-226+D	1.896E-08	2.469E-24	3.704E-23	1.634E-19	2.794E-19	1.265E-18	9.916E-18	1.510E-16	1.172E-15	8.880E-15	
	U-238+D1	Pb-210+D2	1.896E-08	7.989E-27	2.463E-25	1.457E-20	2.898E-20	1.955E-19	2.418E-18	5.534E-17	5.087E-16	4.220E-15	
	U-238+D1	äDSR(j)		1.639E-10	1.639E-10	1.639E-10	1.639E-10	1.639E-10	1.639E-10	1.640E-10	1.641E-10	1.642E-10	
0U-	238+D1	U-238+D1	2.096E-04	1.812E-06	1.812E-06	1.812E-06	1.812E-06	1.812E-06	1.812E-06	1.812E-06	1.812E-06	1.812E-06	1.812E-06
	U-238+D1	U-234	2.096E-04	1.577E-12	4.731E-12	8.042E-11	9.619E-11	1.593E-10	3.169E-10	7.897E-10	1.577E-09	3.150E-09	
	U-238+D1	Th-230	2.096E-04	1.625E-17	1.138E-16	3.171E-14	4.536E-14	1.243E-13	4.923E-13	3.057E-12	1.219E-11	4.861E-11	
	U-238+D1	Ra-226+D1	2.096E-04	6.257E-20	9.384E-19	4.140E-15	7.079E-15	3.206E-14	2.512E-13	3.827E-12	2.970E-11	2.250E-10	
	U-238+D1	Pb-210+D	2.096E-04	1.865E-22	5.750E-21	3.402E-16	6.766E-16	4.564E-15	5.645E-14	1.292E-12	1.188E-11	9.852E-11	
	U-238+D1	äDSR(j)		1.812E-06	1.812E-06	1.812E-06	1.812E-06	1.812E-06	1.812E-06	1.813E-06	1.814E-06	1.815E-06	
0U-	238+D1	U-238+D1	2.767E-10	2.392E-12	2.392E-12	2.392E-12	2.392E-12	2.392E-12	2.392E-12	2.392E-12	2.392E-12	2.392E-12	2.392E-12
	U-238+D1	U-234	2.767E-10	2.082E-18	6.245E-18	1.062E-16	1.270E-16	2.102E-16	4.183E-16	1.042E-15	2.082E-15	4.159E-15	
	U-238+D1	Th-230	2.767E-10	2.145E-23	1.502E-22	4.185E-20	5.987E-20	1.641E-19	6.498E-19	4.035E-18	1.609E-17	6.416E-17	
	U-238+D1	Ra-226+D1	2.767E-10	8.259E-26	1.239E-24	5.465E-21	9.344E-21	4.231E-20	3.316E-19	5.051E-18	3.921E-17	2.970E-16	
	U-238+D1	Pb-210+D1	2.767E-10	1.061E-28	3.272E-27	1.936E-22	3.850E-22	2.597E-21	3.212E-20	7.352E-19	6.758E-18	5.606E-17	
	U-238+D1	äDSR(j)		2.392E-12	2.392E-12	2.392E-12	2.392E-12	2.392E-12	2.392E-12	2.393E-12	2.394E-12	2.396E-12	
0U-	238+D1	U-238+D1	3.983E-12	3.443E-14	3.443E-14	3.443E-14	3.443E-14	3.443E-14	3.443E-14	3.443E-14	3.443E-14	3.442E-14	3.442E-14
	U-238+D1	U-234	3.983E-12	2.996E-20	8.989E-20	1.528E-18	1.828E-18	3.026E-18	6.021E-18	1.501E-17	2.997E-17	5.986E-17	
	U-238+D1	Th-230	3.983E-12	3.088E-25	2.162E-24	6.024E-22	8.618E-22	2.362E-21	9.354E-21	5.808E-20	2.316E-19	9.236E-19	
	U-238+D1	Ra-226+D1	3.983E-12	1.189E-27	1.783E-26	7.866E-23	1.345E-22	6.091E-22	4.774E-21	7.271E-20	5.644E-19	4.274E-18	
	U-238+D1	Pb-210+D2	3.983E-12	1.678E-30	5.173E-29	3.060E-24	6.087E-24	4.106E-23	5.078E-22	1.162E-20	1.068E-19	8.863E-19	
	U-238+D1	äDSR(j)		3.443E-14	3.443E-14	3.443E-14	3.443E-14	3.443E-14	3.444E-14	3.444E-14	3.446E-14	3.449E-14	

Dose/Source Ratios Summed Over All Pathways

Parent and Progeny Principal Radionuclide Contributions Indicated

0	Parent (i)	Product (j)	Thread Fraction	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)											
	AAAAA	AAAAA	AAAAA	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03	AAAAA	AAAAA	AAAAA
	U-238+D1	U-238+D1	1.994E-04	1.724E-06	1.724E-06	1.724E-06	1.724E-06	1.724E-06	1.724E-06	1.724E-06	1.724E-06	1.724E-06	1.724E-06	1.724E-06	1.724E-06
	U-238+D1	U-234	1.994E-04	1.500E-12	4.501E-12	7.651E-11	9.152E-11	1.515E-10	3.015E-10	7.514E-10	1.501E-09	2.997E-09	1.501E-09	2.997E-09	2.997E-09
	U-238+D1	Th-230	1.994E-04	1.546E-17	1.082E-16	3.017E-14	4.315E-14	1.183E-13	4.684E-13	2.908E-12	1.160E-11	4.625E-11	1.160E-11	4.625E-11	4.625E-11
	U-238+D1	Ra-226+D2	1.994E-04	2.343E-20	3.514E-19	1.550E-15	2.651E-15	1.200E-14	9.408E-14	1.433E-12	1.112E-11	8.424E-11	1.112E-11	8.424E-11	8.424E-11
	U-238+D1	Pb-210+D	1.994E-04	1.775E-22	5.471E-21	3.237E-16	6.438E-16	4.342E-15	5.370E-14	1.229E-12	1.130E-11	9.373E-11	1.130E-11	9.373E-11	9.373E-11
	U-238+D1	äDSR(j)		1.724E-06	1.724E-06	1.724E-06	1.724E-06	1.724E-06	1.724E-06	1.724E-06	1.725E-06	1.725E-06	1.725E-06	1.727E-06	1.727E-06
0U-	238+D1	U-238+D1	2.633E-10	2.276E-12	2.276E-12	2.276E-12	2.276E-12	2.276E-12	2.276E-12	2.276E-12	2.276E-12	2.276E-12	2.276E-12	2.275E-12	2.275E-12
	U-238+D1	U-234	2.633E-10	1.980E-18	5.941E-18	1.010E-16	1.208E-16	2.000E-16	3.980E-16	9.918E-16	1.981E-15	3.957E-15	1.981E-15	3.957E-15	3.957E-15
	U-238+D1	Th-230	2.633E-10	2.041E-23	1.429E-22	3.982E-20	5.696E-20	1.561E-19	6.183E-19	3.839E-18	1.531E-17	6.105E-17	1.531E-17	6.105E-17	6.105E-17
	U-238+D1	Ra-226+D2	2.633E-10	3.092E-26	4.638E-25	2.046E-21	3.499E-21	1.584E-20	1.242E-19	1.891E-18	1.468E-17	1.112E-16	1.468E-17	1.112E-16	1.112E-16
	U-238+D1	Pb-210+D1	2.633E-10	1.010E-28	3.113E-27	1.842E-22	3.663E-22	2.471E-21	3.056E-20	6.994E-19	6.430E-18	5.334E-17	6.430E-18	5.334E-17	5.334E-17
	U-238+D1	äDSR(j)		2.276E-12	2.276E-12	2.276E-12	2.276E-12	2.276E-12	2.276E-12	2.276E-12	2.277E-12	2.278E-12	2.278E-12	2.280E-12	2.280E-12
0U-	238+D1	U-238+D1	3.789E-12	3.276E-14	3.276E-14	3.276E-14	3.276E-14	3.276E-14	3.276E-14	3.276E-14	3.276E-14	3.276E-14	3.276E-14	3.275E-14	3.275E-14
	U-238+D1	U-234	3.789E-12	2.851E-20	8.552E-20	1.454E-18	1.739E-18	2.879E-18	5.729E-18	1.428E-17	2.851E-17	5.695E-17	2.851E-17	5.695E-17	5.695E-17
	U-238+D1	Th-230	3.789E-12	2.938E-25	2.057E-24	5.732E-22	8.199E-22	2.248E-21	8.899E-21	5.525E-20	2.203E-19	8.787E-19	2.203E-19	8.787E-19	8.787E-19
	U-238+D1	Ra-226+D2	3.789E-12	4.451E-28	6.676E-27	2.945E-23	5.036E-23	2.281E-22	1.787E-21	2.722E-20	2.113E-19	1.601E-18	2.113E-19	1.601E-18	1.601E-18
	U-238+D1	Pb-210+D2	3.789E-12	1.596E-30	4.922E-29	2.912E-24	5.792E-24	3.906E-23	4.831E-22	1.106E-20	1.017E-19	8.432E-19	1.017E-19	8.432E-19	8.432E-19
	U-238+D1	äDSR(j)		3.276E-14	3.276E-14	3.276E-14	3.276E-14	3.276E-14	3.276E-14	3.276E-14	3.277E-14	3.278E-14	3.278E-14	3.281E-14	3.281E-14
0U-	238+D1	U-238+D1	4.189E-08	3.621E-10	3.621E-10	3.621E-10	3.621E-10	3.621E-10	3.621E-10	3.621E-10	3.621E-10	3.621E-10	3.621E-10	3.621E-10	3.621E-10
	U-238+D1	U-234	4.189E-08	3.151E-16	9.454E-16	1.607E-14	1.922E-14	3.183E-14	6.333E-14	1.578E-13	3.152E-13	6.296E-13	3.152E-13	6.296E-13	6.296E-13
	U-238+D1	Th-230	4.189E-08	3.248E-21	2.274E-20	6.336E-18	9.064E-18	2.485E-17	9.838E-17	6.108E-16	2.436E-15	9.714E-15	6.108E-16	2.436E-15	9.714E-15
	U-238+D1	Ra-226+D3	4.189E-08	1.197E-23	1.795E-22	7.919E-19	1.354E-18	6.132E-18	4.806E-17	7.320E-16	5.682E-15	4.304E-14	5.682E-15	4.304E-14	4.304E-14
	U-238+D1	Pb-210+D	4.189E-08	3.727E-26	1.149E-24	6.798E-20	1.352E-19	9.120E-19	1.128E-17	2.582E-16	2.374E-15	1.969E-14	2.374E-15	1.969E-14	1.969E-14
	U-238+D1	äDSR(j)		3.621E-10	3.621E-10	3.622E-10	3.622E-10	3.622E-10	3.622E-10	3.622E-10	3.623E-10	3.624E-10	3.623E-10	3.628E-10	3.628E-10
0U-	238+D1	U-238+D1	5.530E-14	4.780E-16	4.780E-16	4.780E-16	4.780E-16	4.780E-16	4.780E-16	4.780E-16	4.780E-16	4.780E-16	4.780E-16	4.779E-16	4.779E-16
	U-238+D1	U-234	5.530E-14	4.160E-22	1.248E-21	2.121E-20	2.537E-20	4.201E-20	8.360E-20	2.083E-19	4.161E-19	8.310E-19	4.161E-19	8.310E-19	8.310E-19
	U-238+D1	Th-230	5.530E-14	4.288E-27	3.001E-26	8.364E-24	1.197E-23	3.280E-23	1.299E-22	8.063E-22	3.215E-21	1.282E-20	8.063E-22	3.215E-21	1.282E-20
	U-238+D1	Ra-226+D3	5.530E-14	1.580E-29	2.369E-28	1.045E-24	1.787E-24	8.094E-24	6.344E-23	9.663E-22	7.500E-21	5.681E-20	9.663E-22	7.500E-21	5.681E-20
	U-238+D1	Pb-210+D1	5.530E-14	2.121E-32	6.539E-31	3.868E-26	7.694E-26	5.189E-25	6.419E-24	1.469E-22	1.351E-21	1.120E-20	1.469E-22	1.351E-21	1.120E-20
	U-238+D1	äDSR(j)		4.780E-16	4.780E-16	4.780E-16	4.781E-16	4.781E-16	4.781E-16	4.781E-16	4.782E-16	4.784E-16	4.781E-16	4.788E-16	4.788E-16
0U-	238+D1	U-238+D1	7.959E-16	6.881E-18	6.881E-18	6.881E-18	6.881E-18	6.881E-18	6.881E-18	6.881E-18	6.880E-18	6.880E-18	6.880E-18	6.879E-18	6.879E-18
	U-238+D1	U-234	7.959E-16	5.988E-24	1.796E-23	3.054E-22	3.652E-22	6.047E-22	1.203E-21	2.999E-21	5.989E-21	1.196E-20	2.999E-21	5.989E-21	1.196E-20
	U-238+D1	Th-230	7.959E-16	6.171E-29	4.320E-28	1.204E-25	1.722E-25	4.721E-25	1.869E-24	1.161E-23	4.628E-23	1.846E-22	1.161E-23	4.628E-23	1.846E-22
	U-238+D1	Ra-226+D3	7.959E-16	2.274E-31	3.411E-30	1.505E-26	2.573E-26	1.165E-25	9.132E-25	1.391E-23	1.080E-22	8.177E-22	1.391E-23	1.080E-22	8.177E-22
	U-238+D1	Pb-210+D2	7.959E-16	3.353E-34	1.034E-32	6.116E-28	1.216E-27	8.204E-27	1.015E-25	2.323E-24	2.135E-23	1.771E-22	2.323E-24	2.135E-23	1.771E-22
	U-238+D1	äDSR(j)		6.881E-18	6.881E-18	6.881E-18	6.881E-18	6.881E-18	6.881E-18	6.882E-18	6.883E-18	6.886E-18	6.882E-18	6.893E-18	6.893E-18

Dose/Source Ratios Summed Over All Pathways												
Parent and Progeny Principal Radionuclide Contributions Indicated												
0	Parent	Product	Thread	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)								
	(i)	(j)	Fraction	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA
	U-238+D1	U-238+D1	1.997E-07	1.726E-09	1.726E-09	1.726E-09	1.726E-09	1.726E-09	1.726E-09	1.726E-09	1.726E-09	1.726E-09
	U-238+D1	U-234	1.997E-07	1.502E-15	4.506E-15	7.661E-14	9.163E-14	1.517E-13	3.019E-13	7.523E-13	1.502E-12	3.001E-12
	U-238+D1	Th-230	1.997E-07	1.548E-20	1.084E-19	3.020E-17	4.321E-17	1.184E-16	4.690E-16	2.912E-15	1.161E-14	4.630E-14
	U-238+D1	Ra-226+D4	1.997E-07	5.124E-24	7.685E-23	3.390E-19	5.797E-19	2.625E-18	2.058E-17	3.134E-16	2.433E-15	1.842E-14
	U-238+D1	Pb-210+D	1.997E-07	1.777E-25	5.478E-24	3.240E-19	6.446E-19	4.347E-18	5.377E-17	1.231E-15	1.131E-14	9.385E-14
	U-238+D1	äDSR(j)		1.726E-09	1.726E-09	1.726E-09	1.726E-09	1.726E-09	1.726E-09	1.727E-09	1.728E-09	1.729E-09
0U	238+D1	U-238+D1	2.636E-13	2.279E-15	2.279E-15	2.279E-15	2.279E-15	2.279E-15	2.279E-15	2.279E-15	2.278E-15	2.278E-15
	U-238+D1	U-234	2.636E-13	1.983E-21	5.949E-21	1.011E-19	1.209E-19	2.003E-19	3.985E-19	9.930E-19	1.983E-18	3.961E-18
	U-238+D1	Th-230	2.636E-13	2.044E-26	1.431E-25	3.987E-23	5.703E-23	1.563E-22	6.190E-22	3.843E-21	1.533E-20	6.112E-20
	U-238+D1	Ra-226+D4	2.636E-13	6.763E-30	1.014E-28	4.475E-25	7.653E-25	3.465E-24	2.716E-23	4.137E-22	3.211E-21	2.432E-20
	U-238+D1	Pb-210+D1	2.636E-13	1.011E-31	3.117E-30	1.844E-25	3.668E-25	2.474E-24	3.060E-23	7.003E-22	6.438E-21	5.340E-20
	U-238+D1	äDSR(j)		2.279E-15	2.279E-15	2.279E-15	2.279E-15	2.279E-15	2.279E-15	2.279E-15	2.280E-15	2.282E-15
0U	238+D1	U-238+D1	3.794E-15	3.280E-17	3.280E-17	3.280E-17	3.280E-17	3.280E-17	3.280E-17	3.280E-17	3.280E-17	3.279E-17
	U-238+D1	U-234	3.794E-15	2.854E-23	8.562E-23	1.456E-21	1.741E-21	2.882E-21	5.736E-21	1.429E-20	2.855E-20	5.702E-20
	U-238+D1	Th-230	3.794E-15	2.942E-28	2.059E-27	5.739E-25	8.209E-25	2.250E-24	8.910E-24	5.532E-23	2.206E-22	8.798E-22
	U-238+D1	Ra-226+D4	3.794E-15	9.735E-32	1.460E-30	6.442E-27	1.102E-26	4.988E-26	3.909E-25	5.954E-24	4.622E-23	3.501E-22
	U-238+D1	Pb-210+D2	3.794E-15	1.598E-33	4.928E-32	2.915E-27	5.799E-27	3.911E-26	4.837E-25	1.107E-23	1.018E-22	8.443E-22
	U-238+D1	äDSR(j)		3.280E-17	3.280E-17	3.280E-17	3.280E-17	3.280E-17	3.280E-17	3.281E-17	3.282E-17	3.285E-17
	iiiiiiiiii	iiiiiiiiii	iiiiiiiiii	iiiiiiiiii	iiiiiiiiii	iiiiiiiiii	iiiiiiiiii	iiiiiiiiii	iiiiiiiiii	iiiiiiiiii	iiiiiiiiii	iiiiiiiiii

The DSR includes contributions from associated (half-life ó 180 days) daughters.

Single Radionuclide Soil Guidelines G(i,t) in pCi/g
 Basic Radiation Dose Limit = 2.500E+01 mrem/yr

0Nuclide	t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
(i)	t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA
Am-241		1.481E+03	1.483E+03	1.541E+03	1.554E+03	1.605E+03	1.738E+03	2.211E+03	3.301E+03	7.355E+03
Co-60		8.059E+01	9.191E+01	2.158E+03	4.164E+03	5.776E+04	4.140E+07	*1.113E+15	*1.113E+15	*1.113E+15
Cs-134		1.543E+02	2.159E+02	6.811E+05	3.649E+06	3.006E+09	*1.283E+15	*1.283E+15	*1.283E+15	*1.283E+15
Cs-137		3.675E+02	3.760E+02	6.527E+02	7.322E+02	1.159E+03	3.657E+03	1.148E+05	3.586E+07	3.499E+12
Eu-152		1.779E+02	1.873E+02	6.401E+02	8.268E+02	2.302E+03	2.979E+04	6.452E+07	2.339E+13	*1.727E+14
Eu-154		1.664E+02	1.804E+02	1.250E+03	1.871E+03	9.392E+03	5.301E+05	9.531E+10	*2.685E+14	*2.685E+14
Eu-155		7.361E+03	8.515E+03	2.803E+05	5.805E+05	1.067E+07	1.548E+10	*4.815E+14	*4.815E+14	*4.815E+14
H-3		5.742E+06	6.532E+06	1.440E+08	2.744E+08	3.612E+09	2.273E+12	*9.621E+15	*9.621E+15	*9.621E+15
I-129		1.975E+03	1.975E+03	1.977E+03	1.977E+03	1.979E+03	1.983E+03	1.995E+03	2.016E+03	2.058E+03
Mn-54		3.506E+02	7.891E+02	2.247E+11	1.297E+13	*7.615E+15	*7.615E+15	*7.615E+15	*7.615E+15	*7.615E+15
Na-22		1.030E+02	1.345E+02	8.041E+04	3.046E+05	6.277E+07	3.824E+13	*5.976E+15	*5.976E+15	*5.976E+15
Ni-63		1.102E+06	1.109E+06	1.310E+06	1.356E+06	1.558E+06	2.202E+06	6.222E+06	3.514E+07	1.120E+09
Np-237		7.792E+02	7.792E+02	7.792E+02	7.792E+02	7.792E+02	7.792E+02	7.791E+02	7.789E+02	7.784E+02
Pu-238		1.414E+03	1.425E+03	1.723E+03	1.793E+03	2.100E+03	3.117E+03	1.019E+04	7.317E+04	2.856E+06
Pu-239		1.278E+03	1.278E+03	1.279E+03	1.279E+03	1.280E+03	1.282E+03	1.287E+03	1.296E+03	1.315E+03
Ru-106		1.232E+03	2.426E+03	2.808E+10	8.316E+11	*3.269E+15	*3.269E+15	*3.269E+15	*3.269E+15	*3.269E+15
Sr-90		4.945E+03	5.065E+03	9.027E+03	1.018E+04	1.648E+04	5.493E+04	2.033E+06	8.361E+08	*1.366E+14
Tc-99		2.241E+05	2.241E+05	2.245E+05	2.246E+05	2.249E+05	2.258E+05	2.283E+05	2.327E+05	2.417E+05
Th-228		1.312E+02	1.885E+02	1.134E+06	6.953E+06	9.810E+09	*8.201E+14	*8.201E+14	*8.201E+14	*8.201E+14
Th-230		1.390E+03	1.381E+03	1.136E+03	1.087E+03	9.184E+02	6.439E+02	3.379E+02	1.955E+02	1.140E+02
Th-232		5.696E+02	2.742E+02	4.263E+01	4.157E+01	4.047E+01	4.036E+01	4.036E+01	4.036E+01	4.036E+01
U-234		4.691E+03	4.691E+03	4.688E+03	4.687E+03	4.683E+03	4.670E+03	4.605E+03	4.419E+03	3.874E+03
U-235		1.185E+03	1.184E+03	1.182E+03	1.182E+03	1.179E+03	1.171E+03	1.147E+03	1.109E+03	1.040E+03
U-238		2.800E+03	2.800E+03	2.800E+03	2.800E+03	2.800E+03	2.800E+03	2.799E+03	2.798E+03	2.796E+03
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii

*At specific activity limit

Summed Dose/Source Ratios DSR(i,t) in (mrem/yr)/(pCi/g)
 and Single Radionuclide Soil Guidelines G(i,t) in pCi/g
 at tmin = time of minimum single radionuclide soil guideline
 and at tmax = time of maximum total dose = 0.000E+00 years

0Nuclide	Initial	tmin	DSR(i,tmin)	G(i,tmin)	DSR(i,tmax)	G(i,tmax)
(i)	(pCi/g)	(years)		(pCi/g)		(pCi/g)
AAAAAAA	AAAAAAAAA	AAAAAAAAAAAAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA
Am-241	1.000E+01	0.000E+00	1.688E-02	1.481E+03	1.688E-02	1.481E+03
Co-60	1.000E+01	0.000E+00	3.102E-01	8.059E+01	3.102E-01	8.059E+01
Cs-134	1.000E+01	0.000E+00	1.620E-01	1.543E+02	1.620E-01	1.543E+02
Cs-137	1.000E+01	0.000E+00	6.803E-02	3.675E+02	6.803E-02	3.675E+02
Eu-152	1.000E+01	0.000E+00	1.405E-01	1.779E+02	1.405E-01	1.779E+02
Eu-154	1.000E+01	0.000E+00	1.502E-01	1.664E+02	1.502E-01	1.664E+02
Eu-155	1.000E+01	0.000E+00	3.396E-03	7.361E+03	3.396E-03	7.361E+03
H-3	1.000E+01	0.000E+00	4.354E-06	5.742E+06	4.354E-06	5.742E+06
I-129	1.000E+01	0.000E+00	1.266E-02	1.975E+03	1.266E-02	1.975E+03
Mn-54	1.000E+01	0.000E+00	7.130E-02	3.506E+02	7.130E-02	3.506E+02
Na-22	1.000E+01	0.000E+00	2.427E-01	1.030E+02	2.427E-01	1.030E+02
Ni-63	1.000E+01	0.000E+00	2.269E-05	1.102E+06	2.269E-05	1.102E+06
Np-237	1.000E+01	1.000E+03	3.212E-02	7.784E+02	3.208E-02	7.792E+02
Pu-238	1.000E+01	0.000E+00	1.768E-02	1.414E+03	1.768E-02	1.414E+03
Pu-239	1.000E+01	0.000E+00	1.956E-02	1.278E+03	1.956E-02	1.278E+03
Ru-106	1.000E+01	0.000E+00	2.029E-02	1.232E+03	2.029E-02	1.232E+03
Sr-90	1.000E+01	0.000E+00	5.056E-03	4.945E+03	5.056E-03	4.945E+03
Tc-99	1.000E+01	0.000E+00	1.116E-04	2.241E+05	1.116E-04	2.241E+05
Th-228	1.000E+01	0.000E+00	1.906E-01	1.312E+02	1.906E-01	1.312E+02
Th-230	1.000E+01	1.000E+03	2.192E-01	1.140E+02	1.798E-02	1.390E+03
Th-232	1.000E+01	190.5 ñ 0.4	6.194E-01	4.036E+01	4.389E-02	5.696E+02
U-234	1.000E+01	1.000E+03	6.454E-03	3.874E+03	5.329E-03	4.691E+03
U-235	1.000E+01	1.000E+03	2.404E-02	1.040E+03	2.111E-02	1.185E+03
U-238	1.000E+01	1.000E+03	8.942E-03	2.796E+03	8.928E-03	2.800E+03
iiiiiiii	iiiiiiiiii	iiiiiiiiiiiiiiiiii	iiiiiiiiii	iiiiiiiiii	iiiiiiiiii	iiiiiiiiii

Individual Nuclide Dose Summed Over All Pathways

Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	DOSE(j,t), mrem/yr									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Am-241	Am-241	1.000E+00		1.688E-01	1.685E-01	1.622E-01	1.609E-01	1.558E-01	1.438E-01	1.130E-01	7.569E-02	3.394E-02
ONp-237	Am-241	1.000E+00		5.184E-08	1.554E-07	2.592E-06	3.088E-06	5.032E-06	9.627E-06	2.140E-05	3.569E-05	5.166E-05
Np-237	Np-237	1.000E+00		3.208E-01	3.208E-01	3.208E-01	3.208E-01	3.208E-01	3.208E-01	3.208E-01	3.208E-01	3.207E-01
Np-237	äDOSE(j)			3.208E-01	3.208E-01	3.208E-01	3.208E-01	3.208E-01	3.208E-01	3.208E-01	3.208E-01	3.208E-01
OU-233	Am-241	1.000E+00		1.235E-14	8.638E-14	2.377E-11	3.391E-11	9.199E-11	3.549E-10	2.042E-09	7.220E-09	2.316E-08
U-233	Np-237	1.000E+00		1.146E-07	3.438E-07	5.845E-06	6.991E-06	1.157E-05	2.303E-05	5.738E-05	1.146E-04	2.288E-04
U-233	äDOSE(j)			1.146E-07	3.438E-07	5.845E-06	6.991E-06	1.157E-05	2.303E-05	5.739E-05	1.146E-04	2.288E-04
0Th-229	Am-241	1.000E+00		6.225E-18	9.334E-17	4.087E-13	6.978E-13	3.140E-12	2.424E-11	3.529E-10	2.552E-09	1.700E-08
Th-229	Np-237	1.000E+00		7.705E-11	5.393E-10	1.502E-07	2.148E-07	5.885E-07	2.327E-06	1.438E-05	5.695E-05	2.239E-04
Th-229	äDOSE(j)			7.705E-11	5.393E-10	1.502E-07	2.148E-07	5.885E-07	2.327E-06	1.439E-05	5.696E-05	2.239E-04
0Co-60	Co-60	1.000E+00		3.102E+00	2.720E+00	1.159E-01	6.004E-02	4.328E-03	6.039E-06	1.640E-14	8.647E-29	0.000E+00
0Cs-134	Cs-134	1.000E+00		1.620E+00	1.158E+00	3.670E-04	6.851E-05	8.316E-08	4.269E-15	0.000E+00	0.000E+00	0.000E+00
0Cs-137	Cs-137	1.000E+00		6.803E-01	6.648E-01	3.830E-01	3.415E-01	2.157E-01	6.836E-02	2.178E-03	6.971E-06	7.144E-11
0Eu-152	Eu-152	7.210E-01		1.013E+00	9.624E-01	2.816E-01	2.180E-01	7.829E-02	6.051E-03	2.794E-06	7.705E-12	5.861E-23
Eu-152	Eu-152	2.790E-01		3.920E-01	3.724E-01	1.090E-01	8.436E-02	3.030E-02	2.341E-03	1.081E-06	2.982E-12	2.268E-23
Eu-152	äDOSE(j)			1.405E+00	1.335E+00	3.906E-01	3.024E-01	1.086E-01	8.392E-03	3.875E-06	1.069E-11	8.130E-23
0Gd-152	Eu-152	2.790E-01		3.143E-17	9.219E-17	9.103E-16	9.868E-16	1.155E-15	1.241E-15	1.249E-15	1.249E-15	1.249E-15
0Sm-148	Eu-152	2.790E-01		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.036E-29	2.952E-29	6.148E-29	1.254E-28
0Nd-144	Eu-152	2.790E-01		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
0Eu-154	Eu-154	1.000E+00		1.502E+00	1.386E+00	2.000E-01	1.336E-01	2.662E-02	4.716E-04	2.623E-09	4.579E-18	0.000E+00
0Eu-155	Eu-155	1.000E+00		3.396E-02	2.936E-02	8.919E-04	4.307E-04	2.342E-05	1.615E-08	5.299E-18	0.000E+00	0.000E+00
0H-3	H-3	1.000E+00		4.354E-05	3.827E-05	1.736E-06	9.112E-07	6.921E-08	1.100E-10	4.418E-19	0.000E+00	0.000E+00
0I-129	I-129	1.000E+00		1.266E-01	1.266E-01	1.265E-01	1.264E-01	1.263E-01	1.261E-01	1.253E-01	1.240E-01	1.215E-01
0Mn-54	Mn-54	1.000E+00		7.130E-01	3.168E-01	1.112E-09	1.927E-11	1.736E-18	0.000E+00	0.000E+00	0.000E+00	0.000E+00
0Na-22	Na-22	1.000E+00		2.427E+00	1.859E+00	3.109E-03	8.206E-04	3.983E-06	6.537E-12	2.885E-29	0.000E+00	0.000E+00
0Ni-63	Ni-63	1.000E+00		2.269E-04	2.253E-04	1.908E-04	1.843E-04	1.605E-04	1.135E-04	4.018E-05	7.115E-06	2.231E-07
0Pu-238	Pu-238	1.850E-09		3.270E-10	3.244E-10	2.684E-10	2.580E-10	2.203E-10	1.484E-10	4.534E-11	6.285E-12	1.208E-13
Pu-238	Pu-238	9.996E-01		1.767E-01	1.753E-01	1.450E-01	1.394E-01	1.190E-01	8.016E-02	2.450E-02	3.396E-03	6.527E-05
Pu-238	äDOSE(j)			1.767E-01	1.753E-01	1.450E-01	1.394E-01	1.190E-01	8.016E-02	2.450E-02	3.396E-03	6.527E-05
0U-234	Pu-238	9.996E-01		7.500E-08	2.242E-07	3.473E-06	4.076E-06	6.262E-06	1.043E-05	1.639E-05	1.864E-05	1.897E-05

Individual Nuclide Dose Summed Over All Pathways

Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	DOSE(j,t), mrem/yr									
(j)	(i)		t= 0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03	
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
U-234	Pu-238	1.899E-08	1.425E-15	4.260E-15	6.599E-14	7.744E-14	1.190E-13	1.981E-13	3.115E-13	3.542E-13	3.605E-13	
U-234	Pu-238	2.100E-04	1.575E-11	4.709E-11	7.295E-10	8.561E-10	1.315E-09	2.190E-09	3.443E-09	3.916E-09	3.985E-09	
U-234	Pu-238	2.771E-10	2.079E-17	6.216E-17	9.630E-16	1.130E-15	1.736E-15	2.891E-15	4.545E-15	5.169E-15	5.260E-15	
U-234	Pu-238	3.989E-12	2.993E-19	8.948E-19	1.386E-17	1.627E-17	2.499E-17	4.162E-17	6.542E-17	7.440E-17	7.571E-17	
U-234	Pu-238	1.998E-04	1.499E-11	4.481E-11	6.941E-10	8.145E-10	1.251E-09	2.084E-09	3.276E-09	3.726E-09	3.791E-09	
U-234	Pu-238	2.637E-10	1.978E-17	5.914E-17	9.162E-16	1.075E-15	1.652E-15	2.751E-15	4.324E-15	4.918E-15	5.004E-15	
U-234	Pu-238	3.795E-12	2.848E-19	8.513E-19	1.319E-17	1.548E-17	2.378E-17	3.959E-17	6.224E-17	7.079E-17	7.203E-17	
U-234	Pu-238	4.196E-08	3.148E-15	9.411E-15	1.458E-13	1.711E-13	2.628E-13	4.377E-13	6.881E-13	7.825E-13	7.963E-13	
U-234	Pu-238	5.538E-14	4.156E-21	1.242E-20	1.924E-19	2.258E-19	3.469E-19	5.778E-19	9.083E-19	1.033E-18	1.051E-18	
U-234	Pu-238	7.972E-16	5.981E-23	1.788E-22	2.770E-21	3.251E-21	4.994E-21	8.317E-21	1.307E-20	1.487E-20	1.513E-20	
U-234	Pu-238	2.000E-07	1.501E-14	4.486E-14	6.949E-13	8.155E-13	1.253E-12	2.086E-12	3.280E-12	3.730E-12	3.796E-12	
U-234	Pu-238	2.640E-13	1.981E-20	5.922E-20	9.173E-19	1.076E-18	1.654E-18	2.754E-18	4.330E-18	4.924E-18	5.011E-18	
U-234	Pu-238	3.800E-15	2.851E-22	8.524E-22	1.320E-20	1.549E-20	2.380E-20	3.964E-20	6.232E-20	7.087E-20	7.212E-20	
U-234	U-234	9.996E-01	5.327E-02	5.327E-02	5.326E-02	5.326E-02	5.326E-02	5.325E-02	5.323E-02	5.319E-02	5.311E-02	
U-234	U-238	1.599E-03	1.203E-10	3.609E-10	6.136E-09	7.339E-09	1.215E-08	2.418E-08	6.025E-08	1.203E-07	2.404E-07	
U-234	U-238	2.111E-09	1.588E-16	4.765E-16	8.099E-15	9.687E-15	1.604E-14	3.192E-14	7.954E-14	1.588E-13	3.173E-13	
U-234	U-238	3.039E-11	2.286E-18	6.858E-18	1.166E-16	1.394E-16	2.309E-16	4.594E-16	1.145E-15	2.286E-15	4.567E-15	
U-234	U-238	3.359E-07	2.527E-14	7.581E-14	1.289E-12	1.542E-12	2.552E-12	5.079E-12	1.266E-11	2.528E-11	5.049E-11	
U-234	U-238	4.434E-13	3.336E-20	1.001E-19	1.701E-18	2.035E-18	3.369E-18	6.704E-18	1.671E-17	3.337E-17	6.664E-17	
U-234	U-238	6.383E-15	4.802E-22	1.440E-21	2.449E-20	2.929E-20	4.849E-20	9.650E-20	2.405E-19	4.803E-19	9.593E-19	
U-234	U-238	3.196E-07	2.404E-14	7.213E-14	1.226E-12	1.467E-12	2.428E-12	4.832E-12	1.204E-11	2.405E-11	4.803E-11	
U-234	U-238	4.219E-13	3.174E-20	9.521E-20	1.619E-18	1.936E-18	3.205E-18	6.378E-18	1.589E-17	3.174E-17	6.341E-17	
U-234	U-238	6.073E-15	4.568E-22	1.371E-21	2.330E-20	2.787E-20	4.614E-20	9.181E-20	2.288E-19	4.569E-19	9.127E-19	
U-234	U-238	6.713E-11	5.050E-18	1.515E-17	2.576E-16	3.081E-16	5.100E-16	1.015E-15	2.529E-15	5.051E-15	1.009E-14	
U-234	U-238	8.862E-17	6.666E-24	2.000E-23	3.400E-22	4.066E-22	6.733E-22	1.340E-21	3.339E-21	6.668E-21	1.332E-20	
U-234	U-238	1.276E-18	9.595E-26	2.879E-25	4.894E-24	5.853E-24	9.691E-24	1.928E-23	4.805E-23	9.597E-23	1.917E-22	
U-234	U-238	3.200E-10	2.407E-17	7.222E-17	1.228E-15	1.468E-15	2.431E-15	4.838E-15	1.206E-14	2.408E-14	4.809E-14	
U-234	U-238	4.224E-16	3.178E-23	9.533E-23	1.621E-21	1.938E-21	3.209E-21	6.386E-21	1.591E-20	3.178E-20	6.348E-20	
U-234	U-238	6.080E-18	4.574E-25	1.372E-24	2.333E-23	2.790E-23	4.619E-23	9.192E-23	2.291E-22	4.575E-22	9.138E-22	
U-234	U-238	9.980E-01	7.508E-08	2.252E-07	3.829E-06	4.579E-06	7.582E-06	1.509E-05	3.760E-05	7.509E-05	1.500E-04	
U-234	U-238	1.317E-06	9.910E-14	2.973E-13	5.054E-12	6.045E-12	1.001E-11	1.992E-11	4.963E-11	9.912E-11	1.980E-10	
U-234	U-238	1.896E-08	1.426E-15	4.279E-15	7.275E-14	8.701E-14	1.441E-13	2.867E-13	7.144E-13	1.427E-12	2.850E-12	
U-234	U-238	2.096E-04	1.577E-11	4.731E-11	8.042E-10	9.619E-10	1.593E-09	3.169E-09	7.897E-09	1.577E-08	3.150E-08	
U-234	U-238	2.767E-10	2.082E-17	6.245E-17	1.062E-15	1.270E-15	2.102E-15	4.183E-15	1.042E-14	2.082E-14	4.159E-14	
U-234	U-238	3.983E-12	2.996E-19	8.989E-19	1.528E-17	1.828E-17	3.026E-17	6.021E-17	1.501E-16	2.997E-16	5.986E-16	
U-234	U-238	1.994E-04	1.500E-11	4.501E-11	7.651E-10	9.152E-10	1.515E-09	3.015E-09	7.514E-09	1.501E-08	2.997E-08	
U-234	U-238	2.633E-10	1.980E-17	5.941E-17	1.010E-15	1.208E-15	2.000E-15	3.980E-15	9.918E-15	1.981E-14	3.957E-14	
U-234	U-238	3.789E-12	2.851E-19	8.552E-19	1.454E-17	1.739E-17	2.879E-17	5.729E-17	1.428E-16	2.851E-16	5.695E-16	
U-234	U-238	4.189E-08	3.151E-15	9.454E-15	1.607E-13	1.922E-13	3.183E-13	6.333E-13	1.578E-12	3.152E-12	6.296E-12	
U-234	U-238	5.530E-14	4.160E-21	1.248E-20	2.121E-19	2.537E-19	4.201E-19	8.360E-19	2.083E-18	4.161E-18	8.310E-18	

U-234	U-238	7.959E-16	5.988E-23	1.796E-22	3.054E-21	3.652E-21	6.047E-21	1.203E-20	2.999E-20	5.989E-20	1.196E-19
U-234	U-238	1.997E-07	1.502E-14	4.506E-14	7.661E-13	9.163E-13	1.517E-12	3.019E-12	7.523E-12	1.502E-11	3.001E-11
U-234	U-238	2.636E-13	1.983E-20	5.949E-20	1.011E-18	1.209E-18	2.003E-18	3.985E-18	9.930E-18	1.983E-17	3.961E-17
U-234	U-238	3.794E-15	2.854E-22	8.562E-22	1.456E-20	1.741E-20	2.882E-20	5.736E-20	1.429E-19	2.855E-19	5.702E-19
U-234	äDOSE(j)		5.327E-02	5.327E-02	5.327E-02	5.327E-02	5.327E-02	5.328E-02	5.328E-02	5.328E-02	5.328E-02
0Th-230	Pu-238	9.996E-01	7.735E-13	5.403E-12	1.415E-09	1.999E-09	5.213E-09	1.832E-08	8.313E-08	2.209E-07	5.115E-07
Th-230	Pu-238	1.899E-08	1.470E-20	1.026E-19	2.689E-17	3.798E-17	9.904E-17	3.481E-16	1.579E-15	4.197E-15	9.718E-15
Th-230	Pu-238	2.100E-04	1.625E-16	1.135E-15	2.973E-13	4.199E-13	1.095E-12	3.848E-12	1.746E-11	4.640E-11	1.074E-10

Individual Nuclide Dose Summed Over All Pathways

Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	DOSE(j,t), mrem/yr									
(j)	(i)		t= 0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03	
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Th-230	Pu-238	2.771E-10	2.145E-22	1.498E-21	3.924E-19	5.543E-19	1.445E-18	5.080E-18	2.305E-17	6.125E-17	1.418E-16	
Th-230	Pu-238	3.989E-12	3.087E-24	2.156E-23	5.648E-21	7.978E-21	2.080E-20	7.312E-20	3.318E-19	8.816E-19	2.041E-18	
Th-230	Pu-238	1.998E-04	1.546E-16	1.080E-15	2.828E-13	3.995E-13	1.042E-12	3.661E-12	1.661E-11	4.415E-11	1.022E-10	
Th-230	Pu-238	2.637E-10	2.041E-22	1.425E-21	3.733E-19	5.273E-19	1.375E-18	4.833E-18	2.193E-17	5.827E-17	1.349E-16	
Th-230	Pu-238	3.795E-12	2.937E-24	2.051E-23	5.374E-21	7.591E-21	1.979E-20	6.956E-20	3.156E-19	8.388E-19	1.942E-18	
Th-230	Pu-238	4.196E-08	3.247E-20	2.268E-19	5.941E-17	8.391E-17	2.188E-16	7.690E-16	3.489E-15	9.273E-15	2.147E-14	
Th-230	Pu-238	5.538E-14	4.285E-26	2.993E-25	7.842E-23	1.108E-22	2.888E-22	1.015E-21	4.606E-21	1.224E-20	2.834E-20	
Th-230	Pu-238	7.972E-16	6.160E-28	4.302E-27	1.129E-24	1.594E-24	4.157E-24	1.461E-23	6.630E-23	1.762E-22	4.079E-22	
Th-230	Pu-238	2.000E-07	1.548E-19	1.081E-18	2.832E-16	4.000E-16	1.043E-15	3.666E-15	1.663E-14	4.420E-14	1.023E-13	
Th-230	Pu-238	2.640E-13	2.043E-25	1.427E-24	3.738E-22	5.280E-22	1.377E-21	4.839E-21	2.196E-20	5.834E-20	1.351E-19	
Th-230	Pu-238	3.800E-15	2.936E-27	2.053E-26	5.380E-24	7.600E-24	1.982E-23	6.965E-23	3.160E-22	8.398E-22	1.944E-21	
Th-230	Th-230	9.996E-01	1.791E-01	1.791E-01	1.791E-01	1.791E-01	1.790E-01	1.790E-01	1.787E-01	1.783E-01	1.775E-01	
Th-230	U-234	9.996E-01	8.235E-07	2.471E-06	4.199E-05	5.023E-05	8.315E-05	1.654E-04	4.120E-04	8.219E-04	1.638E-03	
Th-230	U-234	1.319E-06	1.087E-12	3.261E-12	5.543E-11	6.630E-11	1.098E-10	2.184E-10	5.438E-10	1.085E-09	2.162E-09	
Th-230	U-234	1.899E-08	1.565E-14	4.694E-14	7.979E-13	9.543E-13	1.580E-12	3.143E-12	7.827E-12	1.562E-11	3.112E-11	
Th-230	U-234	2.100E-04	1.730E-10	5.189E-10	8.821E-09	1.055E-08	1.747E-08	3.475E-08	8.653E-08	1.726E-07	3.440E-07	
Th-230	U-234	2.771E-10	2.283E-16	6.850E-16	1.164E-14	1.393E-14	2.305E-14	4.587E-14	1.142E-13	2.279E-13	4.541E-13	
Th-230	U-234	3.989E-12	3.287E-18	9.860E-18	1.676E-16	2.004E-16	3.318E-16	6.602E-16	1.644E-15	3.280E-15	6.537E-15	
Th-230	U-234	1.998E-04	1.646E-10	4.937E-10	8.392E-09	1.004E-08	1.662E-08	3.306E-08	8.233E-08	1.642E-07	3.273E-07	
Th-230	U-234	2.637E-10	2.172E-16	6.517E-16	1.108E-14	1.325E-14	2.193E-14	4.364E-14	1.087E-13	2.168E-13	4.321E-13	
Th-230	U-234	3.795E-12	3.127E-18	9.381E-18	1.595E-16	1.907E-16	3.157E-16	6.281E-16	1.564E-15	3.121E-15	6.219E-15	
Th-230	U-234	4.196E-08	3.457E-14	1.037E-13	1.763E-12	2.108E-12	3.490E-12	6.944E-12	1.729E-11	3.450E-11	6.875E-11	
Th-230	U-234	5.538E-14	4.563E-20	1.369E-19	2.327E-18	2.783E-18	4.607E-18	9.166E-18	2.283E-17	4.554E-17	9.075E-17	
Th-230	U-234	7.972E-16	6.568E-22	1.970E-21	3.349E-20	4.006E-20	6.632E-20	1.319E-19	3.286E-19	6.555E-19	1.306E-18	
Th-230	U-234	2.000E-07	1.648E-13	4.943E-13	8.402E-12	1.005E-11	1.664E-11	3.310E-11	8.243E-11	1.644E-10	3.277E-10	
Th-230	U-234	2.640E-13	2.175E-19	6.525E-19	1.109E-17	1.327E-17	2.196E-17	4.369E-17	1.088E-16	2.171E-16	4.326E-16	
Th-230	U-234	3.800E-15	3.131E-21	9.392E-21	1.596E-19	1.909E-19	3.161E-19	6.289E-19	1.566E-18	3.124E-18	6.226E-18	
Th-230	U-238	1.599E-03	1.240E-15	8.681E-15	2.419E-12	3.461E-12	9.486E-12	3.756E-11	2.332E-10	9.300E-10	3.709E-09	
Th-230	U-238	2.111E-09	1.637E-21	1.146E-20	3.193E-18	4.568E-18	1.252E-17	4.958E-17	3.078E-16	1.228E-15	4.895E-15	
Th-230	U-238	3.039E-11	2.356E-23	1.649E-22	4.596E-20	6.575E-20	1.802E-19	7.137E-19	4.431E-18	1.767E-17	7.046E-17	
Th-230	U-238	3.359E-07	2.605E-19	1.823E-18	5.081E-16	7.269E-16	1.992E-15	7.889E-15	4.898E-14	1.953E-13	7.790E-13	
Th-230	U-238	4.434E-13	3.438E-25	2.407E-24	6.707E-22	9.595E-22	2.630E-21	1.041E-20	6.466E-20	2.579E-19	1.028E-18	
Th-230	U-238	6.383E-15	4.941E-27	3.464E-26	9.655E-24	1.381E-23	3.786E-23	1.499E-22	9.307E-22	3.712E-21	1.480E-20	
Th-230	U-238	3.196E-07	2.478E-19	1.735E-18	4.835E-16	6.916E-16	1.896E-15	7.506E-15	4.660E-14	1.859E-13	7.411E-13	
Th-230	U-238	4.219E-13	3.271E-25	2.290E-24	6.382E-22	9.129E-22	2.502E-21	9.908E-21	6.152E-20	2.453E-19	9.783E-19	
Th-230	U-238	6.073E-15	4.701E-27	3.295E-26	9.186E-24	1.314E-23	3.602E-23	1.426E-22	8.855E-22	3.531E-21	1.408E-20	
Th-230	U-238	6.713E-11	5.205E-23	3.644E-22	1.015E-19	1.453E-19	3.982E-19	1.577E-18	9.789E-18	3.904E-17	1.557E-16	
Th-230	U-238	8.862E-17	6.860E-29	4.802E-28	1.340E-25	1.917E-25	5.256E-25	2.081E-24	1.292E-23	5.153E-23	2.055E-22	
Th-230	U-238	1.276E-18	0.000E+00	0.000E+00	1.926E-27	2.756E-27	7.564E-27	2.995E-26	1.860E-25	7.417E-25	2.958E-24	
Th-230	U-238	3.200E-10	2.481E-22	1.737E-21	4.840E-19	6.924E-19	1.898E-18	7.515E-18	4.666E-17	1.861E-16	7.420E-16	

Th-230	U-238	4.224E-16	3.270E-28	2.289E-27	6.389E-25	9.140E-25	2.505E-24	9.920E-24	6.159E-23	2.456E-22	9.795E-22
Th-230	U-238	6.080E-18	0.000E+00	3.295E-29	9.195E-27	1.315E-26	3.605E-26	1.428E-25	8.866E-25	3.536E-24	1.410E-23
Th-230	U-238	9.980E-01	7.738E-13	5.417E-12	1.510E-09	2.159E-09	5.919E-09	2.344E-08	1.455E-07	5.803E-07	2.314E-06
Th-230	U-238	1.317E-06	1.021E-18	7.150E-18	1.993E-15	2.851E-15	7.813E-15	3.094E-14	1.921E-13	7.660E-13	3.055E-12
Th-230	U-238	1.896E-08	1.470E-20	1.029E-19	2.868E-17	4.103E-17	1.125E-16	4.453E-16	2.765E-15	1.103E-14	4.397E-14
Th-230	U-238	2.096E-04	1.625E-16	1.138E-15	3.171E-13	4.536E-13	1.243E-12	4.923E-12	3.057E-11	1.219E-10	4.861E-10
Th-230	U-238	2.767E-10	2.145E-22	1.502E-21	4.185E-19	5.987E-19	1.641E-18	6.498E-18	4.035E-17	1.609E-16	6.416E-16
Th-230	U-238	3.983E-12	3.088E-24	2.162E-23	6.024E-21	8.618E-21	2.362E-20	9.354E-20	5.808E-19	2.316E-18	9.236E-18
Th-230	U-238	1.994E-04	1.546E-16	1.082E-15	3.017E-13	4.315E-13	1.183E-12	4.684E-12	2.908E-11	1.160E-10	4.625E-10

Individual Nuclide Dose Summed Over All Pathways

Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	DOSE(j,t), mrem/yr									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Th-230	U-238	2.633E-10	2.041E-22	1.429E-21	3.982E-19	5.696E-19	1.561E-18	6.183E-18	3.839E-17	1.531E-16	6.105E-16	
Th-230	U-238	3.789E-12	2.938E-24	2.057E-23	5.732E-21	8.199E-21	2.248E-20	8.899E-20	5.525E-19	2.203E-18	8.787E-18	
Th-230	U-238	4.189E-08	3.248E-20	2.274E-19	6.336E-17	9.064E-17	2.485E-16	9.838E-16	6.108E-15	2.436E-14	9.714E-14	
Th-230	U-238	5.530E-14	4.287E-26	3.001E-25	8.364E-23	1.197E-22	3.280E-22	1.299E-21	8.063E-21	3.215E-20	1.282E-19	
Th-230	U-238	7.959E-16	6.162E-28	4.313E-27	1.204E-24	1.722E-24	4.721E-24	1.869E-23	1.161E-22	4.628E-22	1.846E-21	
Th-230	U-238	1.997E-07	1.548E-19	1.084E-18	3.020E-16	4.321E-16	1.184E-15	4.690E-15	2.912E-14	1.161E-13	4.630E-13	
Th-230	U-238	2.636E-13	2.044E-25	1.431E-24	3.987E-22	5.703E-22	1.563E-21	6.190E-21	3.843E-20	1.533E-19	6.112E-19	
Th-230	U-238	3.794E-15	2.937E-27	2.059E-26	5.739E-24	8.209E-24	2.250E-23	8.910E-23	5.532E-22	2.206E-21	8.798E-21	
Th-230	äDOSE(j)		1.791E-01	1.791E-01	1.791E-01	1.791E-01	1.791E-01	1.791E-01	1.791E-01	1.791E-01	1.791E-01	1.791E-01
0Ra-226	Pu-238	9.996E-01	1.300E-15	1.946E-14	8.196E-11	1.388E-10	6.053E-10	4.333E-09	5.171E-08	2.883E-07	1.353E-06	
Ra-226	Pu-238	1.899E-08	2.469E-23	3.698E-22	1.557E-18	2.638E-18	1.150E-17	8.233E-17	9.825E-16	5.477E-15	2.571E-14	
Ra-226	Th-230	9.996E-01	6.017E-04	1.805E-03	3.052E-02	3.646E-02	6.010E-02	1.183E-01	2.854E-01	5.402E-01	9.722E-01	
Ra-226	Th-230	1.319E-06	7.942E-10	2.382E-09	4.028E-08	4.813E-08	7.934E-08	1.562E-07	3.767E-07	7.131E-07	1.283E-06	
Ra-226	Th-230	1.899E-08	1.143E-11	3.429E-11	5.798E-10	6.927E-10	1.142E-09	2.248E-09	5.422E-09	1.026E-08	1.847E-08	
Ra-226	U-234	9.996E-01	1.844E-09	1.291E-08	3.585E-06	5.125E-06	1.401E-05	5.506E-05	3.346E-04	1.288E-03	4.798E-03	
Ra-226	U-234	1.319E-06	2.434E-15	1.704E-14	4.732E-12	6.764E-12	1.849E-11	7.268E-11	4.417E-10	1.701E-09	6.333E-09	
Ra-226	U-234	1.899E-08	3.504E-17	2.453E-16	6.811E-14	9.737E-14	2.661E-13	1.046E-12	6.358E-12	2.448E-11	9.116E-11	
Ra-226	U-238	1.599E-03	2.083E-18	3.124E-17	1.378E-13	2.357E-13	1.067E-12	8.364E-12	1.274E-10	9.888E-10	7.490E-09	
Ra-226	U-238	2.111E-09	2.749E-24	4.124E-23	1.819E-19	3.111E-19	1.409E-18	1.104E-17	1.682E-16	1.305E-15	9.886E-15	
Ra-226	U-238	3.039E-11	3.957E-26	5.936E-25	2.619E-21	4.478E-21	2.028E-20	1.589E-19	2.421E-18	1.879E-17	1.423E-16	
Ra-226	U-238	9.980E-01	1.300E-15	1.949E-14	8.600E-11	1.471E-10	6.659E-10	5.219E-09	7.949E-08	6.170E-07	4.673E-06	
Ra-226	U-238	1.317E-06	1.716E-21	2.573E-20	1.135E-16	1.941E-16	8.790E-16	6.889E-15	1.049E-13	8.145E-13	6.169E-12	
Ra-226	U-238	1.896E-08	2.469E-23	3.704E-22	1.634E-18	2.794E-18	1.265E-17	9.916E-17	1.510E-15	1.172E-14	8.880E-14	
Ra-226	äDOSE(j)		6.017E-04	1.805E-03	3.052E-02	3.647E-02	6.012E-02	1.184E-01	2.857E-01	5.415E-01	9.770E-01	
0Pb-210	Pu-238	9.996E-01	8.882E-18	2.735E-16	1.557E-11	3.073E-11	2.006E-10	2.287E-09	4.140E-08	2.728E-07	1.391E-06	
Pb-210	Pu-238	1.319E-06	5.054E-24	1.556E-22	8.862E-18	1.748E-17	1.142E-16	1.301E-15	2.355E-14	1.552E-13	7.914E-13	
Pb-210	Pu-238	2.100E-04	1.866E-21	5.744E-20	3.271E-15	6.454E-15	4.214E-14	4.803E-13	8.695E-12	5.731E-11	2.921E-10	
Pb-210	Pu-238	1.998E-04	1.775E-21	5.465E-20	3.112E-15	6.141E-15	4.009E-14	4.570E-13	8.272E-12	5.452E-11	2.779E-10	
Pb-210	Pu-238	4.196E-08	3.728E-25	1.148E-23	6.537E-19	1.290E-18	8.421E-18	9.599E-17	1.738E-15	1.145E-14	5.838E-14	
Pb-210	Pu-238	2.000E-07	1.777E-24	5.472E-23	3.116E-18	6.148E-18	4.014E-17	4.576E-16	8.282E-15	5.459E-14	2.783E-13	
Pb-210	Th-230	9.996E-01	6.833E-06	4.740E-05	1.044E-02	1.426E-02	3.293E-02	9.083E-02	2.753E-01	5.596E-01	1.042E+00	
Pb-210	Th-230	2.100E-04	1.435E-09	9.956E-09	2.192E-06	2.996E-06	6.917E-06	1.908E-05	5.783E-05	1.175E-04	2.188E-04	
Pb-210	Th-230	1.998E-04	1.365E-09	9.472E-09	2.086E-06	2.851E-06	6.581E-06	1.815E-05	5.502E-05	1.118E-04	2.081E-04	
Pb-210	Th-230	4.196E-08	2.868E-13	1.990E-12	4.381E-10	5.987E-10	1.382E-09	3.812E-09	1.156E-08	2.349E-08	4.372E-08	
Pb-210	Th-230	2.000E-07	1.367E-12	9.484E-12	2.088E-09	2.854E-09	6.589E-09	1.817E-08	5.509E-08	1.120E-07	2.084E-07	
Pb-210	U-234	9.996E-01	1.573E-11	2.344E-10	8.681E-07	1.434E-06	5.704E-06	3.380E-05	2.869E-04	1.252E-03	4.970E-03	
Pb-210	U-234	2.100E-04	3.304E-15	4.923E-14	1.823E-10	3.013E-10	1.198E-09	6.027E-08	6.027E-08	2.630E-07	1.044E-06	
Pb-210	U-234	1.998E-04	3.144E-15	4.684E-14	1.735E-10	2.866E-10	1.140E-09	6.755E-09	5.734E-08	2.502E-07	9.931E-07	
Pb-210	U-234	4.196E-08	6.603E-19	9.839E-18	3.644E-14	6.020E-14	2.394E-13	1.419E-12	1.204E-11	5.256E-11	2.086E-10	
Pb-210	U-234	2.000E-07	3.148E-18	4.690E-17	1.737E-13	2.870E-13	1.141E-12	6.763E-12	5.741E-11	2.505E-10	9.943E-10	

Pb-210	U-238	1.599E-03	1.423E-20	4.387E-19	2.595E-14	5.163E-14	3.482E-13	4.307E-12	9.857E-11	9.062E-10	7.517E-09
Pb-210	U-238	3.359E-07	2.989E-24	9.215E-23	5.452E-18	1.084E-17	7.313E-17	9.046E-16	2.070E-14	1.903E-13	1.579E-12
Pb-210	U-238	3.196E-07	2.844E-24	8.768E-23	5.187E-18	1.032E-17	6.958E-17	8.606E-16	1.970E-14	1.811E-13	1.502E-12
Pb-210	U-238	6.713E-11	5.970E-28	1.842E-26	1.089E-21	2.167E-21	1.462E-20	1.808E-19	4.138E-18	3.804E-17	3.155E-16
Pb-210	U-238	3.200E-10	2.846E-27	8.778E-26	5.193E-21	1.033E-20	6.967E-20	8.617E-19	1.972E-17	1.813E-16	1.504E-15
Pb-210	U-238	9.980E-01	8.880E-18	2.738E-16	1.620E-11	3.221E-11	2.173E-10	2.687E-09	6.151E-08	5.655E-07	4.690E-06
Pb-210	U-238	2.096E-04	1.865E-21	5.750E-20	3.402E-15	6.766E-15	4.564E-14	5.645E-13	1.292E-11	1.188E-10	9.852E-10

Individual Nuclide Dose Summed Over All Pathways

Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	DOSE(j,t), mrem/yr									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Pb-210	U-238	1.994E-04		1.775E-21	5.471E-20	3.237E-15	6.438E-15	4.342E-14	5.370E-13	1.229E-11	1.130E-10	9.373E-10
Pb-210	U-238	4.189E-08		3.727E-25	1.149E-23	6.798E-19	1.352E-18	9.120E-18	1.128E-16	2.582E-15	2.374E-14	1.969E-13
Pb-210	U-238	1.997E-07		1.777E-24	5.478E-23	3.240E-18	6.446E-18	4.347E-17	5.377E-16	1.231E-14	1.131E-13	9.385E-13
Pb-210	äDOSE(j)			6.835E-06	4.742E-05	1.044E-02	1.427E-02	3.295E-02	9.090E-02	2.757E-01	5.611E-01	1.047E+00
0Pu-238	Pu-238	1.319E-06		2.332E-07	2.314E-07	1.914E-07	1.840E-07	1.571E-07	1.058E-07	3.234E-08	4.483E-09	8.616E-11
Pu-238	Pu-238	1.899E-08		3.357E-09	3.331E-09	2.755E-09	2.649E-09	2.261E-09	1.523E-09	4.654E-10	6.453E-11	1.240E-12
Pu-238	äDOSE(j)			2.366E-07	2.347E-07	1.942E-07	1.867E-07	1.594E-07	1.073E-07	3.280E-08	4.547E-09	8.740E-11
0U-234	Pu-238	1.319E-06		9.900E-14	2.960E-13	4.585E-12	5.380E-12	8.266E-12	1.376E-11	2.164E-11	2.461E-11	2.504E-11
0Th-230	Pu-238	1.319E-06		1.021E-18	7.131E-18	1.868E-15	2.639E-15	6.881E-15	2.418E-14	1.097E-13	2.916E-13	6.751E-13
0Ra-226	Pu-238	1.319E-06		1.716E-21	2.569E-20	1.082E-16	1.832E-16	7.990E-16	5.720E-15	6.826E-14	3.805E-13	1.786E-12
0Pb-210	Pu-238	1.899E-08		7.991E-26	2.460E-24	1.401E-19	2.764E-19	1.805E-18	2.057E-17	3.724E-16	2.454E-15	1.251E-14
Pb-210	Pu-238	3.989E-12		1.521E-29	5.168E-28	2.943E-23	5.806E-23	3.791E-22	4.321E-21	7.822E-20	5.155E-19	2.628E-18
Pb-210	Pu-238	3.795E-12		1.447E-29	4.917E-28	2.800E-23	5.524E-23	3.607E-22	4.111E-21	7.442E-20	4.905E-19	2.500E-18
Pb-210	Pu-238	7.972E-16		0.000E+00	0.000E+00	5.881E-27	1.160E-26	7.575E-26	8.636E-25	1.563E-23	1.030E-22	5.252E-22
Pb-210	Pu-238	3.800E-15		0.000E+00	0.000E+00	2.803E-26	5.531E-26	3.611E-25	4.116E-24	7.451E-23	4.911E-22	2.503E-21
Pb-210	Th-230	1.899E-08		6.147E-14	4.264E-13	9.390E-11	1.283E-10	2.962E-10	8.171E-10	2.477E-09	5.034E-09	9.370E-09
Pb-210	Th-230	3.989E-12		1.291E-17	8.957E-17	1.972E-14	2.695E-14	6.223E-14	1.716E-13	5.202E-13	1.057E-12	1.968E-12
Pb-210	Th-230	3.795E-12		1.228E-17	8.522E-17	1.877E-14	2.564E-14	5.920E-14	1.633E-13	4.950E-13	1.006E-12	1.872E-12
Pb-210	Th-230	7.972E-16		2.580E-21	1.790E-20	3.942E-18	5.386E-18	1.244E-17	3.430E-17	1.040E-16	2.113E-16	3.933E-16
Pb-210	Th-230	3.800E-15		1.230E-20	8.532E-20	1.879E-17	2.568E-17	5.927E-17	1.635E-16	4.956E-16	1.007E-15	1.875E-15
Pb-210	U-234	1.899E-08		1.415E-19	2.109E-18	7.809E-15	1.290E-14	5.132E-14	3.041E-13	2.581E-12	1.126E-11	4.471E-11
Pb-210	U-234	3.989E-12		2.973E-23	4.429E-22	1.640E-18	2.710E-18	1.078E-17	6.387E-17	5.422E-16	2.366E-15	9.390E-15
Pb-210	U-234	3.795E-12		2.828E-23	4.214E-22	1.561E-18	2.579E-18	1.025E-17	6.077E-17	5.158E-16	2.251E-15	8.934E-15
Pb-210	U-234	7.972E-16		5.941E-27	8.851E-26	3.278E-22	5.416E-22	2.154E-21	1.276E-20	1.083E-19	4.728E-19	1.877E-18
Pb-210	U-234	3.800E-15		2.832E-26	4.219E-25	1.562E-21	2.582E-21	1.027E-20	6.084E-20	5.165E-19	2.254E-18	8.945E-18
Pb-210	U-238	3.039E-11		1.280E-28	3.947E-27	2.335E-22	4.644E-22	3.132E-21	3.874E-20	8.868E-19	8.152E-18	6.762E-17
Pb-210	U-238	6.383E-15		0.000E+00	0.000E+00	4.904E-26	9.755E-26	6.579E-25	8.138E-24	1.863E-22	1.712E-21	1.420E-20
Pb-210	U-238	6.073E-15		0.000E+00	0.000E+00	4.666E-26	9.281E-26	6.260E-25	7.742E-24	1.772E-22	1.629E-21	1.351E-20
Pb-210	U-238	1.276E-18		0.000E+00	0.000E+00	0.000E+00	1.766E-29	1.315E-28	1.626E-27	3.722E-26	3.422E-25	2.838E-24
Pb-210	U-238	6.080E-18		0.000E+00	0.000E+00	4.233E-29	8.420E-29	6.267E-28	7.752E-27	1.774E-25	1.631E-24	1.353E-23
Pb-210	U-238	1.896E-08		7.989E-26	2.463E-24	1.457E-19	2.898E-19	1.955E-18	2.418E-17	5.534E-16	5.087E-15	4.220E-14
Pb-210	U-238	3.983E-12		1.520E-29	5.173E-28	3.060E-23	6.087E-23	4.106E-22	5.078E-21	1.162E-19	1.068E-18	8.863E-18
Pb-210	U-238	3.789E-12		1.446E-29	4.922E-28	2.912E-23	5.792E-23	3.906E-22	4.831E-21	1.106E-19	1.017E-18	8.432E-18
Pb-210	U-238	7.959E-16		0.000E+00	0.000E+00	6.116E-27	1.216E-26	8.204E-26	1.015E-24	2.323E-23	2.135E-22	1.771E-21
Pb-210	U-238	3.794E-15		0.000E+00	0.000E+00	2.915E-26	5.799E-26	3.911E-25	4.837E-24	1.107E-22	1.018E-21	8.443E-21
Pb-210	äDOSE(j)			6.149E-14	4.266E-13	9.395E-11	1.284E-10	2.964E-10	8.177E-10	2.480E-09	5.048E-09	9.418E-09
0Pu-238	Pu-238	2.100E-04		3.711E-05	3.682E-05	3.046E-05	2.928E-05	2.500E-05	1.684E-05	5.145E-06	7.133E-07	1.371E-08
Pu-238	Pu-238	2.771E-10		4.899E-11	4.861E-11	4.021E-11	3.865E-11	3.300E-11	2.223E-11	6.792E-12	9.416E-13	1.810E-14
Pu-238	äDOSE(j)			3.711E-05	3.682E-05	3.046E-05	2.928E-05	2.500E-05	1.684E-05	5.145E-06	7.133E-07	1.371E-08
0Ra-226	Pu-238	2.100E-04		6.257E-19	9.368E-18	3.946E-14	6.683E-14	2.914E-13	2.086E-12	2.489E-11	1.388E-10	6.515E-10

Ra-226	Pu-238	2.771E-10	8.259E-25	1.237E-23	5.208E-20	8.821E-20	3.846E-19	2.753E-18	3.286E-17	1.832E-16	8.599E-16
Ra-226	Pu-238	3.989E-12	1.189E-26	1.780E-25	7.497E-22	1.270E-21	5.537E-21	3.963E-20	4.730E-19	2.637E-18	1.238E-17

Individual Nuclide Dose Summed Over All Pathways

Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	DOSE(j,t), mrem/yr									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Ra-226	Th-230	2.100E-04	2.896E-07	8.687E-07	1.469E-05	1.755E-05	2.893E-05	5.695E-05	1.374E-04	2.601E-04	4.680E-04	
Ra-226	Th-230	2.771E-10	3.823E-13	1.147E-12	1.939E-11	2.317E-11	3.819E-11	7.517E-11	1.813E-10	3.433E-10	6.178E-10	
Ra-226	Th-230	3.989E-12	5.503E-15	1.651E-14	2.791E-13	3.335E-13	5.497E-13	1.082E-12	2.610E-12	4.941E-12	8.892E-12	
Ra-226	U-234	2.100E-04	8.878E-13	6.214E-12	1.726E-09	2.467E-09	6.743E-09	2.651E-08	1.611E-07	6.202E-07	2.310E-06	
Ra-226	U-234	2.771E-10	1.172E-18	8.202E-18	2.278E-15	3.256E-15	8.900E-15	3.499E-14	2.126E-13	8.187E-13	3.049E-12	
Ra-226	U-234	3.989E-12	1.687E-20	1.181E-19	3.279E-17	4.687E-17	1.281E-16	5.036E-16	3.061E-15	1.178E-14	4.388E-14	
Ra-226	U-238	3.359E-07	1.003E-21	1.504E-20	6.634E-17	1.134E-16	5.137E-16	4.026E-15	6.133E-14	4.760E-13	3.605E-12	
Ra-226	U-238	4.434E-13	1.324E-27	1.985E-26	8.757E-23	1.497E-22	6.781E-22	5.315E-21	8.095E-20	6.283E-19	4.759E-18	
Ra-226	U-238	6.383E-15	1.744E-29	2.857E-28	1.261E-24	2.155E-24	9.761E-24	7.650E-23	1.165E-21	9.044E-21	6.850E-20	
Ra-226	U-238	2.096E-04	6.257E-19	9.384E-18	4.140E-14	7.079E-14	3.206E-13	2.512E-12	3.827E-11	2.970E-10	2.250E-09	
Ra-226	U-238	2.767E-10	8.259E-25	1.239E-23	5.465E-20	9.344E-20	4.231E-19	3.316E-18	5.051E-17	3.921E-16	2.970E-15	
Ra-226	U-238	3.983E-12	1.189E-26	1.783E-25	7.866E-22	1.345E-21	6.091E-21	4.774E-20	7.271E-19	5.644E-18	4.274E-17	
Ra-226	äDOSE(j)		2.896E-07	8.687E-07	1.469E-05	1.755E-05	2.894E-05	5.697E-05	1.375E-04	2.607E-04	4.703E-04	
0Pb-210	Pu-238	2.771E-10	1.058E-27	3.269E-26	1.861E-21	3.672E-21	2.398E-20	2.733E-19	4.948E-18	3.261E-17	1.662E-16	
Pb-210	Pu-238	2.637E-10	1.007E-27	3.110E-26	1.771E-21	3.494E-21	2.281E-20	2.600E-19	4.707E-18	3.102E-17	1.582E-16	
Pb-210	Pu-238	5.538E-14	0.000E+00	0.000E+00	3.720E-25	7.339E-25	4.792E-24	5.462E-23	9.887E-22	6.516E-21	3.322E-20	
Pb-210	Pu-238	2.640E-13	0.000E+00	3.103E-29	1.773E-24	3.498E-24	2.284E-23	2.604E-22	4.713E-21	3.106E-20	1.583E-19	
Pb-210	Th-230	1.319E-06	3.888E-12	2.697E-11	5.939E-09	8.117E-09	1.874E-08	5.168E-08	1.567E-07	3.184E-07	5.927E-07	
Pb-210	Th-230	2.771E-10	8.166E-16	5.665E-15	1.248E-12	1.705E-12	3.936E-12	1.086E-11	3.291E-11	6.688E-11	1.245E-10	
Pb-210	Th-230	2.637E-10	7.769E-16	5.390E-15	1.187E-12	1.622E-12	3.745E-12	1.033E-11	3.131E-11	6.363E-11	1.184E-10	
Pb-210	Th-230	5.538E-14	1.632E-19	1.132E-18	2.493E-16	3.407E-16	7.865E-16	2.169E-15	6.576E-15	1.337E-14	2.488E-14	
Pb-210	Th-230	2.640E-13	7.779E-19	5.396E-18	1.188E-15	1.624E-15	3.749E-15	1.034E-14	3.135E-14	6.371E-14	1.186E-13	
Pb-210	U-234	1.319E-06	8.952E-18	1.334E-16	4.939E-13	8.161E-13	3.246E-12	1.923E-11	1.633E-10	7.125E-10	2.828E-09	
Pb-210	U-234	2.771E-10	1.880E-21	2.801E-20	1.038E-16	1.714E-16	6.818E-16	4.040E-15	3.429E-14	1.496E-13	5.940E-13	
Pb-210	U-234	2.637E-10	1.789E-21	2.665E-20	9.871E-17	1.631E-16	6.486E-16	3.844E-15	3.263E-14	1.424E-13	5.651E-13	
Pb-210	U-234	5.538E-14	3.757E-25	5.598E-24	2.073E-20	3.426E-20	1.362E-19	8.074E-19	6.853E-18	2.991E-17	1.187E-16	
Pb-210	U-234	2.640E-13	1.791E-24	2.669E-23	9.883E-20	1.633E-19	6.494E-19	3.848E-18	3.267E-17	1.426E-16	5.658E-16	
Pb-210	U-238	2.111E-09	8.098E-27	2.496E-25	1.477E-20	2.938E-20	1.981E-19	2.451E-18	5.609E-17	5.156E-16	4.277E-15	
Pb-210	U-238	4.434E-13	0.000E+00	5.226E-29	3.102E-24	6.170E-24	4.162E-23	5.147E-22	1.178E-20	1.083E-19	8.984E-19	
Pb-210	U-238	4.219E-13	0.000E+00	4.972E-29	2.951E-24	5.870E-24	3.959E-23	4.897E-22	1.121E-20	1.030E-19	8.547E-19	
Pb-210	U-238	8.862E-17	0.000E+00	0.000E+00	6.179E-28	1.229E-27	8.316E-27	1.029E-25	2.354E-24	2.164E-23	1.795E-22	
Pb-210	U-238	4.224E-16	0.000E+00	0.000E+00	2.945E-27	5.878E-27	3.964E-26	4.903E-25	1.122E-23	1.032E-22	8.558E-22	
Pb-210	U-238	1.317E-06	5.053E-24	1.558E-22	9.216E-18	1.833E-17	1.236E-16	1.529E-15	3.500E-14	3.218E-13	2.669E-12	
Pb-210	U-238	2.767E-10	1.058E-27	3.272E-26	1.936E-21	3.850E-21	2.597E-20	3.212E-19	7.352E-18	6.758E-17	5.606E-16	
Pb-210	U-238	2.633E-10	1.006E-27	3.113E-26	1.842E-21	3.663E-21	2.471E-20	3.056E-19	6.994E-18	6.430E-17	5.334E-16	
Pb-210	U-238	5.530E-14	0.000E+00	0.000E+00	3.868E-25	7.694E-25	5.189E-24	6.419E-23	1.469E-21	1.351E-20	1.120E-19	
Pb-210	U-238	2.636E-13	0.000E+00	3.107E-29	1.844E-24	3.668E-24	2.474E-23	3.060E-22	7.003E-21	6.438E-20	5.340E-19	
Pb-210	äDOSE(j)		3.889E-12	2.698E-11	5.942E-09	8.121E-09	1.875E-08	5.172E-08	1.569E-07	3.193E-07	5.957E-07	
0Pu-238	Pu-238	3.989E-12	7.052E-13	6.996E-13	5.787E-13	5.563E-13	4.750E-13	3.199E-13	9.776E-14	1.355E-14	2.605E-16	
Pu-238	Pu-238	1.998E-04	3.531E-05	3.503E-05	2.898E-05	2.786E-05	2.378E-05	1.602E-05	4.895E-06	6.787E-07	1.304E-08	

Pu-238	äDOSE(j)		3.531E-05	3.503E-05	2.898E-05	2.786E-05	2.378E-05	1.602E-05	4.895E-06	6.787E-07	1.304E-08
0Ra-226	Pu-238	1.998E-04	2.343E-19	3.508E-18	1.477E-14	2.502E-14	1.091E-13	7.810E-13	9.321E-12	5.196E-11	2.439E-10
Ra-226	Pu-238	3.795E-12	4.451E-27	6.665E-26	2.807E-22	4.754E-22	2.073E-21	1.484E-20	1.771E-19	9.872E-19	4.635E-18
Ra-226	Th-230	1.998E-04	1.084E-07	3.253E-07	5.501E-06	6.572E-06	1.083E-05	2.132E-05	5.143E-05	9.737E-05	1.752E-04
Ra-226	Th-230	2.637E-10	1.432E-13	4.294E-13	7.261E-12	8.675E-12	1.430E-11	2.815E-11	6.789E-11	1.285E-10	2.313E-10
Ra-226	Th-230	3.795E-12	2.061E-15	6.180E-15	1.045E-13	1.249E-13	2.058E-13	4.051E-13	9.773E-13	1.850E-12	3.330E-12

Individual Nuclide Dose Summed Over All Pathways

Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	DOSE(j,t), mrem/yr									
(j)	(i)		t= 0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03	
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Ra-226	U-234	1.998E-04	3.324E-13	2.327E-12	6.462E-10	9.237E-10	2.525E-09	9.925E-09	6.032E-08	2.322E-07	8.648E-07	
Ra-226	U-234	2.637E-10	4.388E-19	3.071E-18	8.530E-16	1.219E-15	3.333E-15	1.310E-14	7.962E-14	3.066E-13	1.142E-12	
Ra-226	U-234	3.795E-12	6.316E-21	4.421E-20	1.228E-17	1.755E-17	4.797E-17	1.886E-16	1.146E-15	4.412E-15	1.643E-14	
Ra-226	U-238	3.196E-07	3.754E-22	5.631E-21	2.484E-17	4.248E-17	1.924E-16	1.508E-15	2.296E-14	1.782E-13	1.350E-12	
Ra-226	U-238	4.219E-13	4.956E-28	7.433E-27	3.279E-23	5.607E-23	2.539E-22	1.990E-21	3.031E-20	2.353E-19	1.782E-18	
Ra-226	U-238	6.073E-15	0.000E+00	1.070E-28	4.720E-25	8.071E-25	3.655E-24	2.864E-23	4.363E-22	3.386E-21	2.565E-20	
Ra-226	U-238	1.994E-04	2.343E-19	3.514E-18	1.550E-14	2.651E-14	1.200E-13	9.408E-13	1.433E-11	1.112E-10	8.424E-10	
Ra-226	U-238	2.633E-10	3.092E-25	4.638E-24	2.046E-20	3.499E-20	1.584E-19	1.242E-18	1.891E-17	1.468E-16	1.112E-15	
Ra-226	U-238	3.789E-12	4.451E-27	6.676E-26	2.945E-22	5.036E-22	2.281E-21	1.787E-20	2.722E-19	2.113E-18	1.601E-17	
Ra-226	äDOSE(j)		1.084E-07	3.253E-07	5.501E-06	6.573E-06	1.084E-05	2.133E-05	5.150E-05	9.761E-05	1.761E-04	
0Pu-238	Pu-238	2.637E-10	4.661E-11	4.624E-11	3.825E-11	3.677E-11	3.140E-11	2.115E-11	6.462E-12	8.959E-13	1.722E-14	
Pu-238	Pu-238	3.795E-12	6.709E-13	6.656E-13	5.506E-13	5.293E-13	4.519E-13	3.044E-13	9.301E-14	1.289E-14	2.478E-16	
Pu-238	äDOSE(j)		4.728E-11	4.691E-11	3.880E-11	3.730E-11	3.185E-11	2.145E-11	6.555E-12	9.087E-13	1.747E-14	
0Ra-226	Pu-238	2.637E-10	3.092E-25	4.630E-24	1.950E-20	3.303E-20	1.440E-19	1.031E-18	1.230E-17	6.859E-17	3.220E-16	
0Pu-238	Pu-238	4.196E-08	7.417E-09	7.358E-09	6.087E-09	5.851E-09	4.996E-09	3.365E-09	1.028E-09	1.426E-10	2.740E-12	
Pu-238	Pu-238	5.538E-14	9.790E-15	9.713E-15	8.035E-15	7.724E-15	6.594E-15	4.442E-15	1.357E-15	1.882E-16	3.617E-18	
Pu-238	äDOSE(j)		7.417E-09	7.359E-09	6.087E-09	5.851E-09	4.996E-09	3.365E-09	1.028E-09	1.426E-10	2.740E-12	
0Ra-226	Pu-238	4.196E-08	1.197E-22	1.792E-21	7.548E-18	1.278E-17	5.574E-17	3.990E-16	4.762E-15	2.655E-14	1.246E-13	
Ra-226	Pu-238	5.538E-14	1.580E-28	2.366E-27	9.963E-24	1.687E-23	7.358E-23	5.267E-22	6.286E-21	3.504E-20	1.645E-19	
Ra-226	Pu-238	7.972E-16	0.000E+00	3.104E-29	1.434E-25	2.429E-25	1.059E-24	7.581E-24	9.047E-23	5.044E-22	2.368E-21	
Ra-226	Th-230	4.196E-08	5.540E-11	1.662E-10	2.810E-09	3.357E-09	5.535E-09	1.089E-08	2.628E-08	4.975E-08	8.953E-08	
Ra-226	Th-230	5.538E-14	7.313E-17	2.194E-16	3.709E-15	4.432E-15	7.306E-15	1.438E-14	3.469E-14	6.566E-14	1.182E-13	
Ra-226	Th-230	7.972E-16	1.053E-18	3.157E-18	5.339E-17	6.379E-17	1.052E-16	2.070E-16	4.993E-16	9.452E-16	1.701E-15	
Ra-226	U-234	4.196E-08	1.698E-16	1.189E-15	3.301E-13	4.719E-13	1.290E-12	5.070E-12	3.082E-11	1.186E-10	4.418E-10	
Ra-226	U-234	5.538E-14	2.242E-22	1.569E-21	4.358E-19	6.229E-19	1.703E-18	6.693E-18	4.068E-17	1.566E-16	5.832E-16	
Ra-226	U-234	7.972E-16	3.227E-24	2.258E-23	6.272E-21	8.966E-21	2.451E-20	9.634E-20	5.855E-19	2.254E-18	8.394E-18	
Ra-226	U-238	6.713E-11	1.918E-25	2.877E-24	1.269E-20	2.170E-20	9.827E-20	7.702E-19	1.173E-17	9.106E-17	6.897E-16	
Ra-226	U-238	8.862E-17	0.000E+00	0.000E+00	1.675E-26	2.865E-26	1.297E-25	1.017E-24	1.549E-23	1.202E-22	9.104E-22	
Ra-226	U-238	1.276E-18	0.000E+00	0.000E+00	2.411E-28	4.123E-28	1.867E-27	1.463E-26	2.229E-25	1.730E-24	1.310E-23	
Ra-226	U-238	4.189E-08	1.197E-22	1.795E-21	7.919E-18	1.354E-17	6.132E-17	4.806E-16	7.320E-15	5.682E-14	4.304E-13	
Ra-226	U-238	5.530E-14	1.580E-28	2.369E-27	1.045E-23	1.787E-23	8.094E-23	6.344E-22	9.663E-21	7.500E-20	5.681E-19	
Ra-226	U-238	7.959E-16	0.000E+00	3.109E-29	1.505E-25	2.573E-25	1.165E-24	9.132E-24	1.391E-22	1.080E-21	8.177E-21	
Ra-226	äDOSE(j)		5.540E-11	1.662E-10	2.810E-09	3.358E-09	5.536E-09	1.090E-08	2.631E-08	4.986E-08	8.997E-08	
0Pu-238	Pu-238	7.972E-16	1.409E-16	1.398E-16	1.157E-16	1.112E-16	9.492E-17	6.393E-17	1.954E-17	2.708E-18	5.206E-20	
Pu-238	Pu-238	2.000E-07	3.535E-08	3.508E-08	2.902E-08	2.789E-08	2.381E-08	1.604E-08	4.901E-09	6.795E-10	1.306E-11	
Pu-238	äDOSE(j)		3.535E-08	3.508E-08	2.902E-08	2.789E-08	2.381E-08	1.604E-08	4.901E-09	6.795E-10	1.306E-11	
0Ra-226	Pu-238	2.000E-07	5.124E-23	7.672E-22	3.231E-18	5.473E-18	2.386E-17	1.708E-16	2.039E-15	1.136E-14	5.335E-14	
Ra-226	Pu-238	3.800E-15	0.000E+00	1.435E-29	6.139E-26	1.040E-25	4.534E-25	3.246E-24	3.873E-23	2.159E-22	1.014E-21	
Ra-226	Th-230	2.000E-07	2.372E-11	7.114E-11	1.203E-09	1.437E-09	2.369E-09	4.664E-09	1.125E-08	2.130E-08	3.833E-08	
Ra-226	Th-230	2.640E-13	3.131E-17	9.391E-17	1.588E-15	1.897E-15	3.128E-15	6.156E-15	1.485E-14	2.811E-14	5.059E-14	

Ra-226	Th-230	3.800E-15	4.507E-19	1.352E-18	2.286E-17	2.731E-17	4.502E-17	8.861E-17	2.137E-16	4.046E-16	7.282E-16
Ra-226	U-234	2.000E-07	7.271E-17	5.089E-16	1.413E-13	2.020E-13	5.522E-13	2.171E-12	1.319E-11	5.079E-11	1.891E-10
Ra-226	U-234	2.640E-13	9.597E-23	6.717E-22	1.866E-19	2.667E-19	7.289E-19	2.865E-18	1.741E-17	6.705E-17	2.497E-16

Individual Nuclide Dose Summed Over All Pathways

Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	DOSE(j,t), mrem/yr									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Ra-226	U-234	3.800E-15	1.381E-24	9.669E-24	2.685E-21	3.839E-21	1.049E-20	4.124E-20	2.507E-19	9.651E-19	3.594E-18	
Ra-226	U-238	3.200E-10	8.211E-26	1.232E-24	5.433E-21	9.291E-21	4.207E-20	3.297E-19	5.022E-18	3.898E-17	2.953E-16	
Ra-226	U-238	4.224E-16	0.000E+00	0.000E+00	7.172E-27	1.226E-26	5.553E-26	4.353E-25	6.629E-24	5.146E-23	3.897E-22	
Ra-226	U-238	6.080E-18	0.000E+00	0.000E+00	1.017E-28	1.738E-28	7.994E-28	6.265E-27	9.542E-26	7.407E-25	5.610E-24	
Ra-226	U-238	1.997E-07	5.124E-23	7.685E-22	3.390E-18	5.797E-18	2.625E-17	2.058E-16	3.134E-15	2.433E-14	1.842E-13	
Ra-226	U-238	2.636E-13	6.660E-29	1.014E-27	4.475E-24	7.653E-24	3.465E-23	2.716E-22	4.137E-21	3.211E-20	2.432E-19	
Ra-226	U-238	3.794E-15	0.000E+00	1.438E-29	6.442E-26	1.102E-25	4.988E-25	3.909E-24	5.954E-23	4.622E-22	3.501E-21	
Ra-226	äDOSE(j)		2.372E-11	7.114E-11	1.203E-09	1.438E-09	2.370E-09	4.666E-09	1.126E-08	2.135E-08	3.852E-08	
0Pu-238	Pu-238	2.640E-13	4.667E-14	4.630E-14	3.830E-14	3.682E-14	3.143E-14	2.117E-14	6.470E-15	8.969E-16	1.724E-17	
Pu-238	Pu-238	3.800E-15	6.717E-16	6.664E-16	5.513E-16	5.299E-16	4.524E-16	3.047E-16	9.312E-17	1.291E-17	2.481E-19	
Pu-238	äDOSE(j)		4.734E-14	4.697E-14	3.885E-14	3.735E-14	3.189E-14	2.148E-14	6.563E-15	9.098E-16	1.749E-17	
0Ra-226	Pu-238	2.640E-13	6.660E-29	1.013E-27	4.265E-24	7.224E-24	3.150E-23	2.255E-22	2.691E-21	1.500E-20	7.043E-20	
0Pu-239	Pu-239	5.901E-04	1.154E-04	1.154E-04	1.154E-04	1.153E-04	1.153E-04	1.151E-04	1.146E-04	1.138E-04	1.122E-04	
Pu-239	Pu-239	1.633E-06	3.195E-07	3.195E-07	3.193E-07	3.192E-07	3.190E-07	3.186E-07	3.172E-07	3.149E-07	3.104E-07	
Pu-239	äDOSE(j)		1.158E-04	1.158E-04	1.157E-04	1.157E-04	1.156E-04	1.154E-04	1.149E-04	1.141E-04	1.125E-04	
0U-235	Pu-239	5.901E-04	6.131E-14	1.839E-13	3.126E-12	3.738E-12	6.188E-12	1.231E-11	3.061E-11	6.093E-11	1.209E-10	
U-235	Pu-239	1.633E-06	1.697E-16	5.090E-16	8.651E-15	1.035E-14	1.713E-14	3.406E-14	8.470E-14	1.686E-13	3.347E-13	
U-235	Pu-239	8.257E-06	8.579E-16	2.574E-15	4.373E-14	5.231E-14	8.658E-14	1.722E-13	4.282E-13	8.525E-13	1.692E-12	
U-235	Pu-239	2.285E-08	2.374E-18	7.123E-18	1.210E-16	1.448E-16	2.396E-16	4.765E-16	1.185E-15	2.359E-15	4.683E-15	
U-235	Pu-239	4.954E-10	5.147E-20	1.544E-19	2.624E-18	3.139E-18	5.195E-18	1.033E-17	2.570E-17	5.115E-17	1.015E-16	
U-235	Pu-239	1.371E-12	1.425E-22	4.274E-22	7.263E-21	8.686E-21	1.438E-20	2.859E-20	7.112E-20	1.416E-19	2.810E-19	
U-235	Pu-239	9.829E-01	1.021E-10	3.064E-10	5.206E-09	6.227E-09	1.031E-08	2.050E-08	5.098E-08	1.015E-07	2.014E-07	
U-235	Pu-239	2.720E-03	2.826E-13	8.479E-13	1.441E-11	1.723E-11	2.853E-11	5.673E-11	1.411E-10	2.809E-10	5.574E-10	
U-235	Pu-239	1.375E-02	1.429E-12	4.287E-12	7.285E-11	8.713E-11	1.442E-10	2.868E-10	7.133E-10	1.420E-09	2.818E-09	
U-235	Pu-239	3.806E-05	3.955E-15	1.186E-14	2.016E-13	2.411E-13	3.991E-13	7.937E-13	1.974E-12	3.930E-12	7.800E-12	
U-235	Pu-239	8.252E-07	8.574E-17	2.572E-16	4.371E-15	5.228E-15	8.653E-15	1.721E-14	4.280E-14	8.521E-14	1.691E-13	
U-235	Pu-239	2.284E-09	2.373E-19	7.119E-19	1.210E-17	1.447E-17	2.395E-17	4.763E-17	1.185E-16	2.358E-16	4.680E-16	
U-235	U-235	9.835E-01	2.076E-01	2.076E-01	2.076E-01	2.076E-01	2.076E-01	2.076E-01	2.076E-01	2.076E-01	2.075E-01	2.075E-01
U-235	äDOSE(j)		2.076E-01	2.076E-01	2.076E-01	2.076E-01	2.076E-01	2.076E-01	2.076E-01	2.076E-01	2.075E-01	2.075E-01
0Pa-231	Pu-239	5.901E-04	8.498E-19	5.949E-18	1.657E-15	2.371E-15	6.496E-15	2.571E-14	1.593E-13	6.333E-13	2.510E-12	
Pa-231	Pu-239	1.633E-06	2.352E-21	1.646E-20	4.587E-18	6.561E-18	1.798E-17	7.115E-17	4.409E-16	1.753E-15	6.946E-15	
Pa-231	Pu-239	8.257E-06	1.189E-20	8.323E-20	2.319E-17	3.317E-17	9.090E-17	3.597E-16	2.229E-15	8.861E-15	3.511E-14	
Pa-231	Pu-239	2.285E-08	3.291E-23	2.304E-22	6.418E-20	9.180E-20	2.516E-19	9.955E-19	6.169E-18	2.453E-17	9.719E-17	
Pa-231	Pu-239	4.954E-10	7.135E-25	4.994E-24	1.391E-21	1.990E-21	5.454E-21	2.158E-20	1.338E-19	5.317E-19	2.107E-18	
Pa-231	Pu-239	1.371E-12	1.974E-27	1.382E-26	3.851E-24	5.509E-24	1.510E-23	5.973E-23	3.702E-22	1.472E-21	5.831E-21	
Pa-231	Pu-239	9.829E-01	1.415E-15	9.908E-15	2.760E-12	3.949E-12	1.082E-11	4.282E-11	2.654E-10	1.055E-09	4.180E-09	
Pa-231	Pu-239	2.720E-03	3.918E-18	2.742E-17	7.640E-15	1.093E-14	2.995E-14	1.185E-13	7.344E-13	2.920E-12	1.157E-11	
Pa-231	Pu-239	1.375E-02	1.981E-17	1.386E-16	3.863E-14	5.525E-14	1.514E-13	5.991E-13	3.713E-12	1.476E-11	5.849E-11	
Pa-231	Pu-239	3.806E-05	5.482E-20	3.837E-19	1.069E-16	1.529E-16	4.190E-16	1.658E-15	1.028E-14	4.085E-14	1.619E-13	
Pa-231	Pu-239	8.252E-07	1.188E-21	8.319E-21	2.318E-18	3.315E-18	9.085E-18	3.595E-17	2.228E-16	8.857E-16	3.510E-15	

Pa-231	Pu-239	2.284E-09	3.289E-24	2.302E-23	6.414E-21	9.175E-21	2.514E-20	9.950E-20	6.166E-19	2.451E-18	9.713E-18
Pa-231	U-235	9.835E-01	4.316E-06	1.295E-05	2.200E-04	2.632E-04	4.356E-04	8.665E-04	2.156E-03	4.297E-03	8.543E-03
Pa-231	U-235	2.722E-03	1.194E-08	3.583E-08	6.090E-07	7.283E-07	1.206E-06	2.398E-06	5.968E-06	1.189E-05	2.364E-05
Pa-231	U-235	1.376E-02	6.038E-08	1.812E-07	3.079E-06	3.682E-06	6.096E-06	1.212E-05	3.017E-05	6.012E-05	1.195E-04

Individual Nuclide Dose Summed Over All Pathways

Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	DOSE(j,t), mrem/yr									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Pa-231	U-235	3.809E-05		1.671E-10	5.014E-10	8.521E-09	1.019E-08	1.687E-08	3.356E-08	8.350E-08	1.664E-07	3.308E-07
Pa-231	U-235	8.257E-07		3.623E-12	1.087E-11	1.847E-10	2.210E-10	3.658E-10	7.275E-10	1.810E-09	3.607E-09	7.173E-09
Pa-231	U-235	2.285E-09		1.003E-14	3.008E-14	5.113E-13	6.115E-13	1.012E-12	2.013E-12	5.011E-12	9.984E-12	1.985E-11
Pa-231	äDOSE(j)			4.388E-06	1.316E-05	2.237E-04	2.676E-04	4.430E-04	8.811E-04	2.193E-03	4.369E-03	8.687E-03
0Ac-227	Pu-239	5.901E-04		1.654E-20	2.465E-19	9.121E-16	1.507E-15	5.994E-15	3.559E-14	3.062E-13	1.376E-12	5.804E-12
Ac-227	Pu-239	9.829E-01		2.756E-17	4.105E-16	1.519E-12	2.510E-12	9.983E-12	5.928E-11	5.101E-10	2.292E-09	9.668E-09
Ac-227	U-235	9.835E-01		1.118E-07	7.758E-07	1.707E-04	2.333E-04	5.390E-04	1.494E-03	4.644E-03	9.915E-03	2.037E-02
Ac-227	äDOSE(j)			1.118E-07	7.758E-07	1.707E-04	2.333E-04	5.390E-04	1.494E-03	4.644E-03	9.915E-03	2.037E-02
0Ac-227	Pu-239	1.633E-06		4.601E-23	6.854E-22	2.537E-18	4.191E-18	1.667E-17	9.898E-17	8.516E-16	3.827E-15	1.614E-14
Ac-227	Pu-239	8.257E-06		2.096E-22	3.123E-21	1.156E-17	1.909E-17	7.594E-17	4.509E-16	3.880E-15	1.743E-14	7.354E-14
Ac-227	Pu-239	2.720E-03		7.663E-20	1.142E-18	4.225E-15	6.981E-15	2.776E-14	1.649E-13	1.419E-12	6.374E-12	2.689E-11
Ac-227	U-235	2.722E-03		3.110E-10	2.158E-09	4.748E-07	6.489E-07	1.499E-06	4.154E-06	1.291E-05	2.757E-05	5.666E-05
Ac-227	äDOSE(j)			3.110E-10	2.158E-09	4.748E-07	6.489E-07	1.499E-06	4.154E-06	1.291E-05	2.757E-05	5.666E-05
0Pu-239	Pu-239	8.257E-06		1.615E-06	1.615E-06	1.614E-06	1.614E-06	1.613E-06	1.611E-06	1.604E-06	1.592E-06	1.569E-06
Pu-239	Pu-239	2.285E-08		4.470E-09	4.470E-09	4.467E-09	4.466E-09	4.464E-09	4.457E-09	4.438E-09	4.406E-09	4.344E-09
Pu-239	äDOSE(j)			1.620E-06	1.620E-06	1.618E-06	1.618E-06	1.617E-06	1.615E-06	1.608E-06	1.597E-06	1.574E-06
0Ac-227	Pu-239	2.285E-08		5.832E-25	8.688E-24	3.215E-20	5.312E-20	2.113E-19	1.255E-18	1.080E-17	4.851E-17	2.046E-16
Ac-227	Pu-239	4.954E-10		9.850E-27	1.468E-25	5.431E-22	8.973E-22	3.569E-21	2.119E-20	1.824E-19	8.194E-19	3.456E-18
Ac-227	Pu-239	3.806E-05		9.714E-22	1.447E-20	5.355E-17	8.848E-17	3.519E-16	2.090E-15	1.798E-14	8.080E-14	3.408E-13
Ac-227	U-235	3.809E-05		3.942E-12	2.735E-11	6.018E-09	8.225E-09	1.900E-08	5.266E-08	1.637E-07	3.495E-07	7.182E-07
Ac-227	äDOSE(j)			3.942E-12	2.735E-11	6.018E-09	8.225E-09	1.900E-08	5.266E-08	1.637E-07	3.495E-07	7.182E-07
0Pu-239	Pu-239	4.954E-10		9.692E-11	9.691E-11	9.685E-11	9.683E-11	9.678E-11	9.664E-11	9.622E-11	9.553E-11	9.417E-11
Pu-239	Pu-239	1.371E-12		2.682E-13	2.682E-13	2.680E-13	2.680E-13	2.678E-13	2.675E-13	2.663E-13	2.644E-13	2.606E-13
Pu-239	äDOSE(j)			9.719E-11	9.718E-11	9.712E-11	9.710E-11	9.705E-11	9.691E-11	9.649E-11	9.580E-11	9.443E-11
0Ac-227	Pu-239	1.371E-12		1.784E-29	4.089E-28	1.513E-24	2.500E-24	9.945E-24	5.905E-23	5.081E-22	2.283E-21	9.631E-21
Ac-227	Pu-239	2.284E-09		4.572E-26	6.812E-25	2.521E-21	4.165E-21	1.657E-20	9.837E-20	8.464E-19	3.803E-18	1.604E-17
Ac-227	U-235	2.285E-09		1.856E-16	1.287E-15	2.833E-13	3.872E-13	8.944E-13	2.479E-12	7.705E-12	1.645E-11	3.381E-11
Ac-227	äDOSE(j)			1.856E-16	1.287E-15	2.833E-13	3.872E-13	8.944E-13	2.479E-12	7.705E-12	1.645E-11	3.381E-11
0Pu-239	Pu-239	9.829E-01		1.923E-01	1.923E-01	1.921E-01	1.921E-01	1.920E-01	1.917E-01	1.909E-01	1.895E-01	1.868E-01
Pu-239	Pu-239	2.720E-03		5.321E-04	5.321E-04	5.318E-04	5.317E-04	5.314E-04	5.306E-04	5.283E-04	5.246E-04	5.171E-04
Pu-239	äDOSE(j)			1.928E-01	1.928E-01	1.927E-01	1.926E-01	1.925E-01	1.923E-01	1.914E-01	1.901E-01	1.873E-01
0Pu-239	Pu-239	1.375E-02		2.690E-03	2.690E-03	2.688E-03	2.688E-03	2.686E-03	2.683E-03	2.671E-03	2.652E-03	2.614E-03
Pu-239	Pu-239	3.806E-05		7.446E-06	7.446E-06	7.441E-06	7.440E-06	7.435E-06	7.425E-06	7.393E-06	7.340E-06	7.235E-06
Pu-239	äDOSE(j)			2.698E-03	2.698E-03	2.696E-03	2.695E-03	2.694E-03	2.690E-03	2.678E-03	2.659E-03	2.621E-03
0Ac-227	Pu-239	1.375E-02		3.491E-19	5.201E-18	1.925E-14	3.180E-14	1.265E-13	7.511E-13	6.462E-12	2.904E-11	1.225E-10
Ac-227	U-235	1.376E-02		1.417E-09	9.829E-09	2.163E-06	2.956E-06	6.829E-06	1.892E-05	5.883E-05	1.256E-04	2.581E-04
Ac-227	äDOSE(j)			1.417E-09	9.829E-09	2.163E-06	2.956E-06	6.829E-06	1.892E-05	5.883E-05	1.256E-04	2.581E-04
0Pu-239	Pu-239	8.252E-07		1.614E-07	1.614E-07	1.613E-07	1.613E-07	1.612E-07	1.610E-07	1.603E-07	1.591E-07	1.569E-07
Pu-239	Pu-239	2.284E-09		4.468E-10	4.468E-10	4.465E-10	4.464E-10	4.461E-10	4.455E-10	4.436E-10	4.404E-10	4.341E-10
Pu-239	äDOSE(j)			1.619E-07	1.619E-07	1.618E-07	1.617E-07	1.616E-07	1.614E-07	1.607E-07	1.596E-07	1.573E-07

Individual Nuclide Dose Summed Over All Pathways

Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	DOSE(j,t), mrem/yr									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Ac-227	Pu-239	8.252E-07	1.641E-23	2.445E-22	9.047E-19	1.495E-18	5.945E-18	3.530E-17	3.037E-16	1.365E-15	5.757E-15	
Ac-227	U-235	8.257E-07	6.660E-14	4.620E-13	1.017E-10	1.389E-10	3.210E-10	8.895E-10	2.765E-09	5.904E-09	1.213E-08	
Ac-227	äDOSE(j)		6.660E-14	4.620E-13	1.017E-10	1.389E-10	3.210E-10	8.895E-10	2.765E-09	5.904E-09	1.213E-08	
ORu-106	Ru-106	1.000E+00	2.029E-01	1.031E-01	8.904E-09	3.006E-10	3.907E-16	0.000E+00	0.000E+00	0.000E+00	0.000E+00	
OSr-90	Sr-90	1.000E+00	5.056E-02	4.936E-02	2.769E-02	2.455E-02	1.517E-02	4.552E-03	1.230E-04	2.990E-07	1.768E-12	
OTc-99	Tc-99	1.000E+00	1.116E-03	1.116E-03	1.114E-03	1.113E-03	1.112E-03	1.107E-03	1.095E-03	1.074E-03	1.034E-03	
0Th-228	Th-228	1.000E+00	1.906E+00	1.326E+00	2.204E-04	3.596E-05	2.548E-08	3.408E-16	0.000E+00	0.000E+00	0.000E+00	
Th-228	Th-232	1.000E+00	1.470E-02	9.019E-02	2.115E+00	2.186E+00	2.264E+00	2.272E+00	2.272E+00	2.272E+00	2.272E+00	
Th-228	äDOSE(j)		1.920E+00	1.416E+00	2.115E+00	2.186E+00	2.264E+00	2.272E+00	2.272E+00	2.272E+00	2.272E+00	
0Th-230	Th-230	1.319E-06	2.364E-07	2.364E-07	2.364E-07	2.364E-07	2.363E-07	2.362E-07	2.359E-07	2.354E-07	2.343E-07	
Th-230	Th-230	1.899E-08	3.403E-09	3.403E-09	3.403E-09	3.402E-09	3.402E-09	3.400E-09	3.395E-09	3.388E-09	3.372E-09	
Th-230	äDOSE(j)		2.398E-07	2.398E-07	2.398E-07	2.398E-07	2.397E-07	2.396E-07	2.393E-07	2.387E-07	2.376E-07	
0Th-230	Th-230	2.100E-04	3.762E-05	3.762E-05	3.761E-05	3.761E-05	3.761E-05	3.759E-05	3.754E-05	3.745E-05	3.728E-05	
Th-230	Th-230	2.771E-10	4.966E-11	4.966E-11	4.965E-11	4.965E-11	4.964E-11	4.962E-11	4.955E-11	4.943E-11	4.921E-11	
Th-230	äDOSE(j)		3.762E-05	3.762E-05	3.761E-05	3.761E-05	3.761E-05	3.759E-05	3.754E-05	3.745E-05	3.728E-05	
0Th-230	Th-230	3.989E-12	7.148E-13	7.148E-13	7.147E-13	7.146E-13	7.145E-13	7.142E-13	7.132E-13	7.116E-13	7.083E-13	
Th-230	Th-230	1.998E-04	3.580E-05	3.580E-05	3.579E-05	3.579E-05	3.578E-05	3.576E-05	3.571E-05	3.563E-05	3.547E-05	
Th-230	äDOSE(j)		3.580E-05	3.580E-05	3.579E-05	3.579E-05	3.578E-05	3.576E-05	3.571E-05	3.563E-05	3.547E-05	
0Th-230	Th-230	2.637E-10	4.725E-11	4.725E-11	4.724E-11	4.724E-11	4.723E-11	4.721E-11	4.714E-11	4.703E-11	4.682E-11	
Th-230	Th-230	3.795E-12	6.801E-13	6.801E-13	6.800E-13	6.799E-13	6.798E-13	6.795E-13	6.786E-13	6.770E-13	6.739E-13	
Th-230	äDOSE(j)		4.793E-11	4.793E-11	4.792E-11	4.792E-11	4.791E-11	4.789E-11	4.782E-11	4.771E-11	4.749E-11	
0Th-230	Th-230	4.196E-08	7.519E-09	7.519E-09	7.517E-09	7.517E-09	7.515E-09	7.512E-09	7.501E-09	7.484E-09	7.450E-09	
Th-230	Th-230	5.538E-14	9.925E-15	9.924E-15	9.922E-15	9.922E-15	9.920E-15	9.915E-15	9.902E-15	9.879E-15	9.834E-15	
Th-230	äDOSE(j)		7.519E-09	7.519E-09	7.517E-09	7.517E-09	7.515E-09	7.512E-09	7.501E-09	7.484E-09	7.450E-09	
0Th-230	Th-230	7.972E-16	1.429E-16	1.429E-16	1.428E-16	1.428E-16	1.428E-16	1.427E-16	1.425E-16	1.422E-16	1.415E-16	
Th-230	Th-230	2.000E-07	3.584E-08	3.584E-08	3.583E-08	3.583E-08	3.582E-08	3.581E-08	3.576E-08	3.567E-08	3.551E-08	
Th-230	äDOSE(j)		3.584E-08	3.584E-08	3.583E-08	3.583E-08	3.582E-08	3.581E-08	3.576E-08	3.567E-08	3.551E-08	
0Th-230	Th-230	2.640E-13	4.731E-14	4.731E-14	4.730E-14	4.729E-14	4.729E-14	4.726E-14	4.720E-14	4.709E-14	4.687E-14	
Th-230	Th-230	3.800E-15	6.809E-16	6.809E-16	6.808E-16	6.807E-16	6.806E-16	6.803E-16	6.794E-16	6.778E-16	6.747E-16	
Th-230	äDOSE(j)		4.799E-14	4.799E-14	4.798E-14	4.797E-14	4.797E-14	4.794E-14	4.788E-14	4.777E-14	4.755E-14	
0Th-232	Th-232	1.000E+00	2.091E-01	2.091E-01	2.091E-01	2.091E-01	2.091E-01	2.091E-01	2.091E-01	2.091E-01	2.091E-01	
ORa-228	Th-232	1.000E+00	2.151E-01	6.123E-01	3.541E+00	3.619E+00	3.704E+00	3.713E+00	3.713E+00	3.713E+00	3.713E+00	
OU-234	U-234	1.319E-06	7.031E-08	7.031E-08	7.031E-08	7.031E-08	7.030E-08	7.029E-08	7.026E-08	7.021E-08	7.010E-08	
U-234	U-234	1.899E-08	1.012E-09	1.012E-09	1.012E-09	1.012E-09	1.012E-09	1.012E-09	1.011E-09	1.011E-09	1.009E-09	
U-234	äDOSE(j)		7.132E-08	7.132E-08	7.132E-08	7.132E-08	7.131E-08	7.130E-08	7.127E-08	7.122E-08	7.111E-08	

Individual Nuclide Dose Summed Over All Pathways

Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	DOSE(j,t), mrem/yr									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
U-234	U-234	2.100E-04		1.119E-05	1.119E-05	1.119E-05	1.119E-05	1.119E-05	1.119E-05	1.118E-05	1.117E-05	1.115E-05
U-234	U-234	2.771E-10		1.477E-11	1.477E-11	1.477E-11	1.477E-11	1.477E-11	1.476E-11	1.476E-11	1.475E-11	1.472E-11
U-234	äDOSE(j)			1.119E-05	1.119E-05	1.119E-05	1.119E-05	1.119E-05	1.119E-05	1.118E-05	1.117E-05	1.115E-05
0U-234	U-234	3.989E-12		2.126E-13	2.126E-13	2.126E-13	2.126E-13	2.125E-13	2.125E-13	2.124E-13	2.123E-13	2.119E-13
U-234	U-234	1.998E-04		1.064E-05	1.064E-05	1.064E-05	1.064E-05	1.064E-05	1.064E-05	1.064E-05	1.063E-05	1.061E-05
U-234	äDOSE(j)			1.064E-05	1.064E-05	1.064E-05	1.064E-05	1.064E-05	1.064E-05	1.064E-05	1.063E-05	1.061E-05
0U-234	U-234	2.637E-10		1.405E-11	1.405E-11	1.405E-11	1.405E-11	1.405E-11	1.405E-11	1.404E-11	1.403E-11	1.401E-11
U-234	U-234	3.795E-12		2.023E-13	2.023E-13	2.022E-13	2.022E-13	2.022E-13	2.022E-13	2.021E-13	2.019E-13	2.016E-13
U-234	äDOSE(j)			1.425E-11	1.425E-11	1.425E-11	1.425E-11	1.425E-11	1.425E-11	1.424E-11	1.423E-11	1.421E-11
0U-234	U-234	4.196E-08		2.236E-09	2.236E-09	2.236E-09	2.236E-09	2.236E-09	2.235E-09	2.234E-09	2.233E-09	2.229E-09
U-234	U-234	5.538E-14		2.951E-15	2.951E-15	2.951E-15	2.951E-15	2.951E-15	2.951E-15	2.949E-15	2.947E-15	2.943E-15
U-234	äDOSE(j)			2.236E-09	2.236E-09	2.236E-09	2.236E-09	2.236E-09	2.235E-09	2.234E-09	2.233E-09	2.229E-09
0U-234	U-234	7.972E-16		4.248E-17	4.248E-17	4.248E-17	4.248E-17	4.248E-17	4.247E-17	4.245E-17	4.242E-17	4.235E-17
U-234	U-234	2.000E-07		1.066E-08	1.066E-08	1.066E-08	1.066E-08	1.066E-08	1.065E-08	1.065E-08	1.064E-08	1.063E-08
U-234	äDOSE(j)			1.066E-08	1.066E-08	1.066E-08	1.066E-08	1.066E-08	1.065E-08	1.065E-08	1.064E-08	1.063E-08
0U-234	U-234	2.640E-13		1.407E-14	1.407E-14	1.407E-14	1.407E-14	1.407E-14	1.406E-14	1.406E-14	1.405E-14	1.403E-14
U-234	U-234	3.800E-15		2.025E-16	2.025E-16	2.025E-16	2.025E-16	2.025E-16	2.024E-16	2.023E-16	2.022E-16	2.019E-16
U-234	äDOSE(j)			1.427E-14	1.427E-14	1.427E-14	1.427E-14	1.427E-14	1.427E-14	1.426E-14	1.425E-14	1.423E-14
0U-235	U-235	2.722E-03		5.745E-04	5.745E-04	5.745E-04	5.745E-04	5.745E-04	5.745E-04	5.744E-04	5.744E-04	5.744E-04
U-235	U-235	1.376E-02		2.904E-03	2.904E-03	2.904E-03	2.904E-03	2.904E-03	2.904E-03	2.904E-03	2.904E-03	2.904E-03
U-235	äDOSE(j)			3.479E-03	3.479E-03	3.479E-03	3.479E-03	3.479E-03	3.479E-03	3.479E-03	3.478E-03	3.478E-03
0U-235	U-235	3.809E-05		8.038E-06	8.038E-06	8.038E-06	8.038E-06	8.038E-06	8.038E-06	8.038E-06	8.037E-06	8.037E-06
U-235	U-235	8.257E-07		1.743E-07	1.743E-07	1.743E-07	1.743E-07	1.743E-07	1.743E-07	1.743E-07	1.743E-07	1.742E-07
U-235	äDOSE(j)			8.212E-06	8.212E-06	8.212E-06	8.212E-06	8.212E-06	8.212E-06	8.212E-06	8.212E-06	8.211E-06
0U-235	U-235	2.285E-09		4.823E-10	4.823E-10	4.823E-10	4.823E-10	4.823E-10	4.823E-10	4.823E-10	4.823E-10	4.822E-10
0U-238	U-238	5.450E-07		2.635E-08	2.635E-08	2.635E-08	2.635E-08	2.635E-08	2.635E-08	2.634E-08	2.634E-08	2.634E-08
U-238	U-238	1.599E-03		2.967E-03	2.967E-03	2.967E-03	2.967E-03	2.967E-03	2.967E-03	2.967E-03	2.966E-03	2.966E-03
U-238	äDOSE(j)			2.967E-03	2.967E-03	2.967E-03	2.967E-03	2.967E-03	2.967E-03	2.967E-03	2.966E-03	2.966E-03
0U-238	U-238	2.111E-09		3.916E-09	3.916E-09	3.916E-09	3.916E-09	3.916E-09	3.916E-09	3.916E-09	3.916E-09	3.915E-09
U-238	U-238	3.039E-11		5.637E-11	5.637E-11	5.637E-11	5.637E-11	5.637E-11	5.637E-11	5.637E-11	5.636E-11	5.636E-11
U-238	äDOSE(j)			3.972E-09	3.972E-09	3.972E-09	3.972E-09	3.972E-09	3.972E-09	3.972E-09	3.972E-09	3.972E-09
0U-238	U-238	3.359E-07		6.231E-07	6.231E-07	6.231E-07	6.231E-07	6.231E-07	6.231E-07	6.231E-07	6.231E-07	6.230E-07
U-238	U-238	4.434E-13		8.226E-13	8.226E-13	8.226E-13	8.226E-13	8.226E-13	8.225E-13	8.225E-13	8.225E-13	8.224E-13
U-238	äDOSE(j)			6.232E-07	6.232E-07	6.231E-07	6.231E-07	6.231E-07	6.231E-07	6.231E-07	6.231E-07	6.230E-07
0U-238	U-238	6.383E-15		1.184E-14	1.184E-14	1.184E-14	1.184E-14	1.184E-14	1.184E-14	1.184E-14	1.184E-14	1.184E-14
U-238	U-238	3.196E-07		5.929E-07	5.929E-07	5.929E-07	5.929E-07	5.929E-07	5.929E-07	5.928E-07	5.928E-07	5.928E-07
U-238	äDOSE(j)			5.929E-07	5.929E-07	5.929E-07	5.929E-07	5.929E-07	5.929E-07	5.928E-07	5.928E-07	5.928E-07

Individual Nuclide Dose Summed Over All Pathways

Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	DOSE(j,t), mrem/yr									
(j)	(i)		t= 0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03	
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
U-238	U-238	4.219E-13	7.826E-13	7.826E-13	7.826E-13	7.826E-13	7.826E-13	7.826E-13	7.826E-13	7.825E-13	7.824E-13	
U-238	U-238	6.073E-15	1.126E-14	1.126E-14	1.126E-14	1.126E-14	1.126E-14	1.126E-14	1.126E-14	1.126E-14	1.126E-14	
U-238	äDOSE(j)		7.939E-13	7.939E-13	7.939E-13	7.939E-13	7.939E-13	7.938E-13	7.938E-13	7.938E-13	7.937E-13	
0U-238	U-238	6.713E-11	1.245E-10	1.245E-10	1.245E-10	1.245E-10	1.245E-10	1.245E-10	1.245E-10	1.245E-10	1.245E-10	
U-238	U-238	8.862E-17	1.644E-16	1.644E-16	1.644E-16	1.644E-16	1.644E-16	1.644E-16	1.644E-16	1.644E-16	1.643E-16	
U-238	äDOSE(j)		1.245E-10	1.245E-10	1.245E-10	1.245E-10	1.245E-10	1.245E-10	1.245E-10	1.245E-10	1.245E-10	
0U-238	U-238	1.276E-18	2.366E-18	2.366E-18	2.366E-18	2.366E-18	2.366E-18	2.366E-18	2.366E-18	2.366E-18	2.366E-18	
U-238	U-238	3.200E-10	5.936E-10	5.936E-10	5.936E-10	5.936E-10	5.936E-10	5.936E-10	5.936E-10	5.935E-10	5.935E-10	
U-238	äDOSE(j)		5.936E-10	5.936E-10	5.936E-10	5.936E-10	5.936E-10	5.936E-10	5.936E-10	5.935E-10	5.935E-10	
0U-238	U-238	4.224E-16	7.835E-16	7.835E-16	7.835E-16	7.835E-16	7.835E-16	7.835E-16	7.835E-16	7.835E-16	7.834E-16	
U-238	U-238	6.080E-18	1.128E-17	1.128E-17	1.128E-17	1.128E-17	1.128E-17	1.128E-17	1.128E-17	1.128E-17	1.128E-17	
U-238	äDOSE(j)		7.948E-16	7.948E-16	7.948E-16	7.948E-16	7.948E-16	7.948E-16	7.948E-16	7.947E-16	7.947E-16	
0U-238	U-238	9.980E-01	8.628E-02	8.628E-02	8.628E-02	8.628E-02	8.627E-02	8.627E-02	8.627E-02	8.627E-02	8.626E-02	
U-238	U-238	1.317E-06	1.139E-07	1.139E-07	1.139E-07	1.139E-07	1.139E-07	1.139E-07	1.139E-07	1.139E-07	1.139E-07	
U-238	äDOSE(j)		8.628E-02	8.628E-02	8.628E-02	8.628E-02	8.627E-02	8.627E-02	8.627E-02	8.627E-02	8.626E-02	
0U-238	U-238	1.896E-08	1.639E-09	1.639E-09	1.639E-09	1.639E-09	1.639E-09	1.639E-09	1.639E-09	1.639E-09	1.639E-09	
U-238	U-238	2.096E-04	1.812E-05	1.812E-05	1.812E-05	1.812E-05	1.812E-05	1.812E-05	1.812E-05	1.812E-05	1.812E-05	
U-238	äDOSE(j)		1.812E-05	1.812E-05	1.812E-05	1.812E-05	1.812E-05	1.812E-05	1.812E-05	1.812E-05	1.812E-05	
0U-238	U-238	2.767E-10	2.392E-11	2.392E-11	2.392E-11	2.392E-11	2.392E-11	2.392E-11	2.392E-11	2.392E-11	2.392E-11	
U-238	U-238	3.983E-12	3.443E-13	3.443E-13	3.443E-13	3.443E-13	3.443E-13	3.443E-13	3.443E-13	3.443E-13	3.442E-13	
U-238	äDOSE(j)		2.426E-11	2.426E-11	2.426E-11	2.426E-11	2.426E-11	2.426E-11	2.426E-11	2.426E-11	2.426E-11	
0U-238	U-238	1.994E-04	1.724E-05	1.724E-05	1.724E-05	1.724E-05	1.724E-05	1.724E-05	1.724E-05	1.724E-05	1.724E-05	
U-238	U-238	2.633E-10	2.276E-11	2.276E-11	2.276E-11	2.276E-11	2.276E-11	2.276E-11	2.276E-11	2.276E-11	2.275E-11	
U-238	äDOSE(j)		1.724E-05	1.724E-05	1.724E-05	1.724E-05	1.724E-05	1.724E-05	1.724E-05	1.724E-05	1.724E-05	
0U-238	U-238	3.789E-12	3.276E-13	3.276E-13	3.276E-13	3.276E-13	3.276E-13	3.276E-13	3.276E-13	3.276E-13	3.275E-13	
U-238	U-238	4.189E-08	3.621E-09	3.621E-09	3.621E-09	3.621E-09	3.621E-09	3.621E-09	3.621E-09	3.621E-09	3.621E-09	
U-238	äDOSE(j)		3.622E-09	3.622E-09	3.622E-09	3.622E-09	3.622E-09	3.622E-09	3.622E-09	3.622E-09	3.621E-09	
0U-238	U-238	5.530E-14	4.780E-15	4.780E-15	4.780E-15	4.780E-15	4.780E-15	4.780E-15	4.780E-15	4.780E-15	4.779E-15	
U-238	U-238	7.959E-16	6.881E-17	6.881E-17	6.881E-17	6.881E-17	6.881E-17	6.881E-17	6.880E-17	6.880E-17	6.879E-17	
U-238	äDOSE(j)		4.849E-15	4.849E-15	4.849E-15	4.849E-15	4.849E-15	4.849E-15	4.849E-15	4.849E-15	4.848E-15	
0U-238	U-238	1.997E-07	1.726E-08	1.726E-08	1.726E-08	1.726E-08	1.726E-08	1.726E-08	1.726E-08	1.726E-08	1.726E-08	
U-238	U-238	2.636E-13	2.279E-14	2.279E-14	2.279E-14	2.279E-14	2.279E-14	2.279E-14	2.279E-14	2.278E-14	2.278E-14	
U-238	äDOSE(j)		1.726E-08	1.726E-08	1.726E-08	1.726E-08	1.726E-08	1.726E-08	1.726E-08	1.726E-08	1.726E-08	
0U-238	U-238	3.794E-15	3.280E-16	3.280E-16	3.280E-16	3.280E-16	3.280E-16	3.280E-16	3.280E-16	3.280E-16	3.279E-16	
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii

THF(i) is the thread fraction of the parent nuclide.

Individual Nuclide Soil Concentration
 Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	S(j,t), pCi/g									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Am-241	Am-241	1.000E+00		1.000E+01	9.984E+00	9.607E+00	9.530E+00	9.229E+00	8.518E+00	6.696E+00	4.484E+00	2.010E+00
0Np-237	Am-241	1.000E+00		0.000E+00	3.230E-06	7.922E-05	9.469E-05	1.553E-04	2.987E-04	6.658E-04	1.112E-03	1.610E-03
Np-237	Np-237	1.000E+00		1.000E+01	1.000E+01	1.000E+01	1.000E+01	1.000E+01	1.000E+01	9.999E+00	9.998E+00	9.996E+00
Np-237	äS(j):			1.000E+01	1.000E+01	1.000E+01	1.000E+01	1.000E+01	1.000E+01	1.000E+01	9.999E+00	9.998E+00
0U-233	Am-241	1.000E+00		0.000E+00	7.034E-12	4.340E-09	6.234E-09	1.713E-08	6.675E-08	3.864E-07	1.369E-06	4.396E-06
U-233	Np-237	1.000E+00		0.000E+00	4.354E-05	1.088E-03	1.306E-03	2.177E-03	4.353E-03	1.088E-02	2.174E-02	4.343E-02
U-233	äS(j):			0.000E+00	4.354E-05	1.088E-03	1.306E-03	2.177E-03	4.353E-03	1.088E-02	2.174E-02	4.344E-02
0Th-229	Am-241	1.000E+00		0.000E+00	2.215E-16	3.425E-12	5.906E-12	2.711E-11	2.124E-10	3.121E-09	2.263E-08	1.510E-07
Th-229	Np-237	1.000E+00		0.000E+00	2.056E-09	1.284E-06	1.848E-06	5.131E-06	2.049E-05	1.274E-04	5.055E-04	1.989E-03
Th-229	äS(j):			0.000E+00	2.056E-09	1.284E-06	1.848E-06	5.131E-06	2.049E-05	1.274E-04	5.056E-04	1.989E-03
0Co-60	Co-60	1.000E+00		1.000E+01	8.768E+00	3.735E-01	1.935E-01	1.395E-02	1.947E-05	5.286E-14	2.795E-28	0.000E+00
0Cs-134	Cs-134	1.000E+00		1.000E+01	7.148E+00	2.266E-03	4.229E-04	5.134E-07	2.636E-14	3.566E-36	0.000E+00	0.000E+00
0Cs-137	Cs-137	1.000E+00		1.000E+01	9.773E+00	5.630E+00	5.019E+00	3.170E+00	1.005E+00	3.201E-02	1.025E-04	1.050E-09
0Eu-152	Eu-152	7.210E-01		7.210E+00	6.850E+00	2.004E+00	1.552E+00	5.573E-01	4.307E-02	1.989E-05	5.485E-11	4.172E-22
Eu-152	Eu-152	2.790E-01		2.790E+00	2.651E+00	7.756E-01	6.005E-01	2.156E-01	1.667E-02	7.695E-06	2.122E-11	1.614E-22
Eu-152	äS(j):			1.000E+01	9.501E+00	2.780E+00	2.152E+00	7.729E-01	5.974E-02	2.758E-05	7.607E-11	5.787E-22
0Gd-152	Eu-152	2.790E-01		0.000E+00	1.746E-14	2.525E-13	2.744E-13	3.227E-13	3.476E-13	3.497E-13	3.497E-13	3.497E-13
0Sm-148	Eu-152	2.790E-01		0.000E+00	8.716E-31	3.774E-28	5.081E-28	1.107E-27	2.791E-27	7.981E-27	1.664E-26	3.395E-26
0Nd-144	Eu-152	2.790E-01		0.000E+00	0.000E+00	1.037E-42	1.710E-42	6.558E-42	3.592E-41	2.804E-40	1.212E-39	5.040E-39
0Eu-154	Eu-154	1.000E+00		1.000E+01	9.225E+00	1.331E+00	8.893E-01	1.772E-01	3.139E-03	1.746E-08	3.048E-17	9.290E-35
0Eu-155	Eu-155	1.000E+00		1.000E+01	8.645E+00	2.626E-01	1.268E-01	6.897E-03	4.757E-06	1.560E-15	2.435E-31	0.000E+00
0H-3	H-3	1.000E+00		1.000E+01	8.791E+00	3.987E-01	2.093E-01	1.590E-02	2.527E-05	1.015E-13	1.030E-27	0.000E+00
0I-129	I-129	1.000E+00		1.000E+01	1.000E+01	9.990E+00	9.988E+00	9.979E+00	9.959E+00	9.897E+00	9.795E+00	9.594E+00
0Mn-54	Mn-54	1.000E+00		1.000E+01	4.444E+00	1.560E-08	2.703E-10	2.434E-17	5.926E-35	0.000E+00	0.000E+00	0.000E+00
0Na-22	Na-22	1.000E+00		1.000E+01	7.661E+00	1.281E-02	3.381E-03	1.641E-05	2.694E-11	1.191E-28	0.000E+00	0.000E+00
0Ni-63	Ni-63	1.000E+00		1.000E+01	9.931E+00	8.410E+00	8.124E+00	7.074E+00	5.003E+00	1.771E+00	3.136E-01	9.833E-03
0Pu-238	Pu-238	1.850E-09		1.850E-08	1.835E-08	1.518E-08	1.459E-08	1.246E-08	8.393E-09	2.565E-09	3.556E-10	6.834E-12
Pu-238	Pu-238	9.996E-01		9.996E+00	9.917E+00	8.204E+00	7.886E+00	6.733E+00	4.535E+00	1.386E+00	1.921E-01	3.693E-03
Pu-238	äS(j):			9.996E+00	9.917E+00	8.204E+00	7.886E+00	6.733E+00	4.535E+00	1.386E+00	1.921E-01	3.693E-03
0U-234	Pu-238	9.996E-01		0.000E+00	2.811E-05	6.402E-04	7.537E-04	1.166E-03	1.950E-03	3.074E-03	3.498E-03	3.560E-03

Individual Nuclide Soil Concentration
Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	S(j,t), pCi/g									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
U-234	Pu-238	1.899E-08	0.000E+00	5.341E-13	1.216E-11	1.432E-11	2.215E-11	3.706E-11	5.841E-11	6.646E-11	6.764E-11	
U-234	Pu-238	2.100E-04	0.000E+00	5.905E-09	1.345E-07	1.583E-07	2.448E-07	4.097E-07	6.457E-07	7.348E-07	7.478E-07	
U-234	Pu-238	2.771E-10	0.000E+00	7.794E-15	1.775E-13	2.090E-13	3.232E-13	5.408E-13	8.524E-13	9.699E-13	9.871E-13	
U-234	Pu-238	3.989E-12	0.000E+00	1.122E-16	2.555E-15	3.008E-15	4.652E-15	7.784E-15	1.227E-14	1.396E-14	1.421E-14	
U-234	Pu-238	1.998E-04	0.000E+00	5.618E-09	1.279E-07	1.506E-07	2.329E-07	3.898E-07	6.144E-07	6.991E-07	7.115E-07	
U-234	Pu-238	2.637E-10	0.000E+00	7.415E-15	1.689E-13	1.988E-13	3.075E-13	5.145E-13	8.110E-13	9.228E-13	9.391E-13	
U-234	Pu-238	3.795E-12	0.000E+00	1.067E-16	2.431E-15	2.862E-15	4.426E-15	7.406E-15	1.167E-14	1.328E-14	1.352E-14	
U-234	Pu-238	4.196E-08	0.000E+00	1.180E-12	2.687E-11	3.164E-11	4.893E-11	8.187E-11	1.290E-10	1.468E-10	1.494E-10	
U-234	Pu-238	5.538E-14	0.000E+00	1.558E-18	3.547E-17	4.176E-17	6.458E-17	1.081E-16	1.703E-16	1.938E-16	1.973E-16	
U-234	Pu-238	7.972E-16	0.000E+00	2.242E-20	5.106E-19	6.011E-19	9.296E-19	1.556E-18	2.452E-18	2.790E-18	2.839E-18	
U-234	Pu-238	2.000E-07	0.000E+00	5.625E-12	1.281E-10	1.508E-10	2.332E-10	3.903E-10	6.151E-10	6.999E-10	7.123E-10	
U-234	Pu-238	2.640E-13	0.000E+00	7.424E-18	1.691E-16	1.991E-16	3.078E-16	5.151E-16	8.119E-16	9.239E-16	9.403E-16	
U-234	Pu-238	3.800E-15	0.000E+00	1.069E-19	2.434E-18	2.865E-18	4.431E-18	7.415E-18	1.169E-17	1.330E-17	1.353E-17	
U-234	U-234	9.996E-01	9.996E+00	9.996E+00	9.995E+00	9.995E+00	9.994E+00	9.993E+00	9.988E+00	9.981E+00	9.966E+00	
U-234	U-238	1.599E-03	0.000E+00	4.516E-08	1.129E-06	1.355E-06	2.258E-06	4.515E-06	1.128E-05	2.256E-05	4.508E-05	
U-234	U-238	2.111E-09	0.000E+00	5.961E-14	1.490E-12	1.788E-12	2.980E-12	5.960E-12	1.490E-11	2.978E-11	5.951E-11	
U-234	U-238	3.039E-11	0.000E+00	8.580E-16	2.145E-14	2.574E-14	4.289E-14	8.578E-14	2.144E-13	4.286E-13	8.566E-13	
U-234	U-238	3.359E-07	0.000E+00	9.485E-12	2.371E-10	2.845E-10	4.742E-10	9.483E-10	2.370E-09	4.739E-09	9.470E-09	
U-234	U-238	4.434E-13	0.000E+00	1.252E-17	3.130E-16	3.756E-16	6.259E-16	1.252E-15	3.129E-15	6.255E-15	1.250E-14	
U-234	U-238	6.383E-15	0.000E+00	1.802E-19	4.505E-18	5.406E-18	9.010E-18	1.802E-17	4.503E-17	9.003E-17	1.799E-16	
U-234	U-238	3.196E-07	0.000E+00	9.024E-12	2.256E-10	2.707E-10	4.512E-10	9.023E-10	2.255E-09	4.508E-09	9.010E-09	
U-234	U-238	4.219E-13	0.000E+00	1.191E-17	2.978E-16	3.573E-16	5.955E-16	1.191E-15	2.977E-15	5.951E-15	1.189E-14	
U-234	U-238	6.073E-15	0.000E+00	1.715E-19	4.286E-18	5.143E-18	8.572E-18	1.714E-17	4.285E-17	8.566E-17	1.712E-16	
U-234	U-238	6.713E-11	0.000E+00	1.895E-15	4.738E-14	5.686E-14	9.476E-14	1.895E-13	4.737E-13	9.470E-13	1.892E-12	
U-234	U-238	8.862E-17	0.000E+00	2.502E-21	6.255E-20	7.506E-20	1.251E-19	2.502E-19	6.252E-19	1.250E-18	2.498E-18	
U-234	U-238	1.276E-18	0.000E+00	3.601E-23	9.003E-22	1.080E-21	1.801E-21	3.601E-21	9.000E-21	1.799E-20	3.596E-20	
U-234	U-238	3.200E-10	0.000E+00	9.035E-15	2.259E-13	2.710E-13	4.517E-13	9.033E-13	2.258E-12	4.514E-12	9.020E-12	
U-234	U-238	4.224E-16	0.000E+00	1.193E-20	2.981E-19	3.578E-19	5.963E-19	1.192E-18	2.980E-18	5.958E-18	1.191E-17	
U-234	U-238	6.080E-18	0.000E+00	1.717E-22	4.291E-21	5.150E-21	8.582E-21	1.716E-20	4.290E-20	8.576E-20	1.714E-19	
U-234	U-238	9.980E-01	0.000E+00	2.818E-05	7.044E-04	8.453E-04	1.409E-03	2.817E-03	7.042E-03	1.408E-02	2.813E-02	
U-234	U-238	1.317E-06	0.000E+00	3.719E-11	9.298E-10	1.116E-09	1.860E-09	3.719E-09	9.295E-09	1.858E-08	3.713E-08	
U-234	U-238	1.896E-08	0.000E+00	5.354E-13	1.338E-11	1.606E-11	2.677E-11	5.353E-11	1.338E-10	2.675E-10	5.345E-10	
U-234	U-238	2.096E-04	0.000E+00	5.918E-09	1.480E-07	1.775E-07	2.959E-07	5.918E-07	1.479E-06	2.957E-06	5.909E-06	
U-234	U-238	2.767E-10	0.000E+00	7.812E-15	1.953E-13	2.344E-13	3.906E-13	7.811E-13	1.952E-12	3.903E-12	7.800E-12	
U-234	U-238	3.983E-12	0.000E+00	1.125E-16	2.811E-15	3.373E-15	5.622E-15	1.124E-14	2.810E-14	5.618E-14	1.123E-13	
U-234	U-238	1.994E-04	0.000E+00	5.631E-09	1.408E-07	1.689E-07	2.815E-07	5.630E-07	1.407E-06	2.813E-06	5.622E-06	
U-234	U-238	2.633E-10	0.000E+00	7.433E-15	1.858E-13	2.230E-13	3.716E-13	7.432E-13	1.857E-12	3.713E-12	7.421E-12	
U-234	U-238	3.789E-12	0.000E+00	1.070E-16	2.675E-15	3.209E-15	5.349E-15	1.070E-14	2.674E-14	5.345E-14	1.068E-13	
U-234	U-238	4.189E-08	0.000E+00	1.183E-12	2.957E-11	3.548E-11	5.913E-11	1.183E-10	2.956E-10	5.909E-10	1.181E-09	
U-234	U-238	5.530E-14	0.000E+00	1.561E-18	3.903E-17	4.683E-17	7.806E-17	1.561E-16	3.902E-16	7.800E-16	1.559E-15	

U-234	U-238	7.959E-16	0.000E+00	2.247E-20	5.618E-19	6.741E-19	1.124E-18	2.247E-18	5.616E-18	1.123E-17	2.244E-17
U-234	U-238	1.997E-07	0.000E+00	5.638E-12	1.409E-10	1.691E-10	2.819E-10	5.637E-10	1.409E-09	2.817E-09	5.629E-09
U-234	U-238	2.636E-13	0.000E+00	7.442E-18	1.860E-16	2.232E-16	3.721E-16	7.441E-16	1.860E-15	3.718E-15	7.430E-15
U-234	U-238	3.794E-15	0.000E+00	1.071E-19	2.678E-18	3.213E-18	5.355E-18	1.071E-17	2.677E-17	5.352E-17	1.069E-16
U-234	äS(j):		9.996E+00	9.996E+00	9.996E+00	9.997E+00	9.997E+00	9.998E+00	9.998E+00	9.998E+00	9.998E+00
0Th-230	Pu-238	9.996E-01	0.000E+00	1.294E-10	7.600E-08	1.081E-07	2.855E-07	1.013E-06	4.625E-06	1.231E-05	2.853E-05
Th-230	Pu-238	1.899E-08	0.000E+00	2.459E-18	1.444E-15	2.053E-15	5.425E-15	1.926E-14	8.787E-14	2.339E-13	5.420E-13
Th-230	Pu-238	2.100E-04	0.000E+00	2.718E-14	1.596E-11	2.270E-11	5.997E-11	2.129E-10	9.714E-10	2.586E-09	5.992E-09

Individual Nuclide Soil Concentration
Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	S(j,t), pCi/g									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Th-230	Pu-238	2.771E-10	0.000E+00	3.588E-20	2.107E-17	2.996E-17	7.916E-17	2.810E-16	1.282E-15	3.414E-15	7.909E-15	
Th-230	Pu-238	3.989E-12	0.000E+00	5.165E-22	3.033E-19	4.313E-19	1.139E-18	4.044E-18	1.846E-17	4.914E-17	1.138E-16	
Th-230	Pu-238	1.998E-04	0.000E+00	2.586E-14	1.519E-11	2.159E-11	5.706E-11	2.025E-10	9.242E-10	2.460E-09	5.701E-09	
Th-230	Pu-238	2.637E-10	0.000E+00	3.414E-20	2.005E-17	2.851E-17	7.532E-17	2.673E-16	1.220E-15	3.248E-15	7.525E-15	
Th-230	Pu-238	3.795E-12	0.000E+00	4.914E-22	2.886E-19	4.103E-19	1.084E-18	3.848E-18	1.756E-17	4.675E-17	1.083E-16	
Th-230	Pu-238	4.196E-08	0.000E+00	5.432E-18	3.190E-15	4.536E-15	1.198E-14	4.254E-14	1.941E-13	5.168E-13	1.197E-12	
Th-230	Pu-238	5.538E-14	0.000E+00	7.171E-24	4.211E-21	5.987E-21	1.582E-20	5.615E-20	2.563E-19	6.822E-19	1.581E-18	
Th-230	Pu-238	7.972E-16	0.000E+00	1.032E-25	6.061E-23	8.618E-23	2.277E-22	8.082E-22	3.689E-21	9.819E-21	2.275E-20	
Th-230	Pu-238	2.000E-07	0.000E+00	2.589E-17	1.521E-14	2.162E-14	5.713E-14	2.028E-13	9.254E-13	2.463E-12	5.708E-12	
Th-230	Pu-238	2.640E-13	0.000E+00	3.418E-23	2.007E-20	2.854E-20	7.541E-20	2.677E-19	1.221E-18	3.252E-18	7.534E-18	
Th-230	Pu-238	3.800E-15	0.000E+00	4.920E-25	2.889E-22	4.108E-22	1.085E-21	3.853E-21	1.758E-20	4.680E-20	1.084E-19	
Th-230	Th-230	9.996E-01	9.996E+00	9.996E+00	9.994E+00	9.993E+00	9.991E+00	9.987E+00	9.973E+00	9.950E+00	9.904E+00	
Th-230	U-234	9.996E-01	0.000E+00	9.192E-05	2.298E-03	2.757E-03	4.594E-03	9.186E-03	2.294E-02	4.582E-02	9.136E-02	
Th-230	U-234	1.319E-06	0.000E+00	1.213E-10	3.033E-09	3.639E-09	6.065E-09	1.213E-08	3.029E-08	6.048E-08	1.206E-07	
Th-230	U-234	1.899E-08	0.000E+00	1.746E-12	4.365E-11	5.238E-11	8.729E-11	1.745E-10	4.359E-10	8.705E-10	1.736E-09	
Th-230	U-234	2.100E-04	0.000E+00	1.931E-08	4.826E-07	5.791E-07	9.650E-07	1.929E-06	4.819E-06	9.624E-06	1.919E-05	
Th-230	U-234	2.771E-10	0.000E+00	2.548E-14	6.370E-13	7.644E-13	1.274E-12	2.547E-12	6.361E-12	1.270E-11	2.533E-11	
Th-230	U-234	3.989E-12	0.000E+00	3.668E-16	9.169E-15	1.100E-14	1.834E-14	3.666E-14	9.157E-14	1.829E-13	3.646E-13	
Th-230	U-234	1.998E-04	0.000E+00	1.837E-08	4.591E-07	5.510E-07	9.181E-07	1.836E-06	4.585E-06	9.156E-06	1.826E-05	
Th-230	U-234	2.637E-10	0.000E+00	2.425E-14	6.061E-13	7.273E-13	1.212E-12	2.423E-12	6.052E-12	1.209E-11	2.410E-11	
Th-230	U-234	3.795E-12	0.000E+00	3.490E-16	8.724E-15	1.047E-14	1.744E-14	3.488E-14	8.712E-14	1.740E-13	3.469E-13	
Th-230	U-234	4.196E-08	0.000E+00	3.858E-12	9.644E-11	1.157E-10	1.929E-10	3.856E-10	9.631E-10	1.923E-09	3.835E-09	
Th-230	U-234	5.538E-14	0.000E+00	5.093E-18	1.273E-16	1.528E-16	2.546E-16	5.090E-16	1.271E-15	2.539E-15	5.062E-15	
Th-230	U-234	7.972E-16	0.000E+00	7.331E-20	1.832E-18	2.199E-18	3.664E-18	7.326E-18	1.830E-17	3.654E-17	7.286E-17	
Th-230	U-234	2.000E-07	0.000E+00	1.839E-11	4.597E-10	5.516E-10	9.193E-10	1.838E-09	4.591E-09	9.167E-09	1.828E-08	
Th-230	U-234	2.640E-13	0.000E+00	2.428E-17	6.068E-16	7.281E-16	1.213E-15	2.426E-15	6.060E-15	1.210E-14	2.413E-14	
Th-230	U-234	3.800E-15	0.000E+00	3.494E-19	8.734E-18	1.048E-17	1.747E-17	3.492E-17	8.722E-17	1.742E-16	3.473E-16	
Th-230	U-238	1.599E-03	0.000E+00	2.076E-13	1.297E-10	1.868E-10	5.189E-10	2.075E-09	1.296E-08	5.180E-08	2.068E-07	
Th-230	U-238	2.111E-09	0.000E+00	2.740E-19	1.713E-16	2.466E-16	6.850E-16	2.739E-15	1.711E-14	6.837E-14	2.729E-13	
Th-230	U-238	3.039E-11	0.000E+00	3.945E-21	2.465E-18	3.550E-18	9.860E-18	3.943E-17	2.463E-16	9.841E-16	3.928E-15	
Th-230	U-238	3.359E-07	0.000E+00	4.361E-17	2.725E-14	3.924E-14	1.090E-13	4.359E-13	2.723E-12	1.088E-11	4.343E-11	
Th-230	U-238	4.434E-13	0.000E+00	5.756E-23	3.597E-20	5.180E-20	1.439E-19	5.754E-19	3.594E-18	1.436E-17	5.733E-17	
Th-230	U-238	6.383E-15	0.000E+00	8.285E-25	5.178E-22	7.456E-22	2.071E-21	8.282E-21	5.173E-20	2.067E-19	8.251E-19	
Th-230	U-238	3.196E-07	0.000E+00	4.149E-17	2.593E-14	3.734E-14	1.037E-13	4.147E-13	2.590E-12	1.035E-11	4.132E-11	
Th-230	U-238	4.219E-13	0.000E+00	5.477E-23	3.423E-20	4.928E-20	1.369E-19	5.474E-19	3.419E-18	1.366E-17	5.454E-17	
Th-230	U-238	6.073E-15	0.000E+00	7.883E-25	4.926E-22	7.094E-22	1.970E-21	7.880E-21	4.922E-20	1.967E-19	7.850E-19	
Th-230	U-238	6.713E-11	0.000E+00	8.715E-21	5.446E-18	7.842E-18	2.178E-17	8.711E-17	5.441E-16	2.174E-15	8.679E-15	
Th-230	U-238	8.862E-17	0.000E+00	1.150E-26	7.189E-24	1.035E-23	2.875E-23	1.150E-22	7.182E-22	2.870E-21	1.146E-20	
Th-230	U-238	1.276E-18	0.000E+00	1.656E-28	1.035E-25	1.490E-25	4.139E-25	1.655E-24	1.034E-23	4.131E-23	1.649E-22	
Th-230	U-238	3.200E-10	0.000E+00	4.154E-20	2.596E-17	3.738E-17	1.038E-16	4.152E-16	2.594E-15	1.036E-14	4.137E-14	

Th-230	U-238	4.224E-16	0.000E+00	5.483E-26	3.427E-23	4.934E-23	1.371E-22	5.481E-22	3.423E-21	1.368E-20	5.461E-20
Th-230	U-238	6.080E-18	0.000E+00	7.893E-28	4.932E-25	7.102E-25	1.973E-24	7.889E-24	4.928E-23	1.969E-22	7.860E-22
Th-230	U-238	9.980E-01	0.000E+00	1.295E-10	8.096E-08	1.166E-07	3.238E-07	1.295E-06	8.089E-06	3.232E-05	1.290E-04
Th-230	U-238	1.317E-06	0.000E+00	1.710E-16	1.069E-13	1.539E-13	4.274E-13	1.709E-12	1.068E-11	4.266E-11	1.703E-10
Th-230	U-238	1.896E-08	0.000E+00	2.461E-18	1.538E-15	2.215E-15	6.152E-15	2.460E-14	1.537E-13	6.141E-13	2.451E-12
Th-230	U-238	2.096E-04	0.000E+00	2.721E-14	1.701E-11	2.449E-11	6.801E-11	2.720E-10	1.699E-09	6.789E-09	2.710E-08
Th-230	U-238	2.767E-10	0.000E+00	3.592E-20	2.245E-17	3.232E-17	8.978E-17	3.590E-16	2.243E-15	8.961E-15	3.577E-14
Th-230	U-238	3.983E-12	0.000E+00	5.170E-22	3.231E-19	4.653E-19	1.292E-18	5.168E-18	3.228E-17	1.290E-16	5.149E-16
Th-230	U-238	1.994E-04	0.000E+00	2.589E-14	1.618E-11	2.330E-11	6.471E-11	2.588E-10	1.616E-09	6.459E-09	2.578E-08

Individual Nuclide Soil Concentration
Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	S(j,t), pCi/g									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Th-230	U-238	2.633E-10	0.000E+00	3.417E-20	2.136E-17	3.075E-17	8.542E-17	3.416E-16	2.134E-15	8.526E-15	3.403E-14	
Th-230	U-238	3.789E-12	0.000E+00	4.919E-22	3.074E-19	4.427E-19	1.229E-18	4.917E-18	3.071E-17	1.227E-16	4.899E-16	
Th-230	U-238	4.189E-08	0.000E+00	5.438E-18	3.398E-15	4.894E-15	1.359E-14	5.436E-14	3.395E-13	1.357E-12	5.415E-12	
Th-230	U-238	5.530E-14	0.000E+00	7.178E-24	4.486E-21	6.459E-21	1.794E-20	7.175E-20	4.482E-19	1.791E-18	7.148E-18	
Th-230	U-238	7.959E-16	0.000E+00	1.033E-25	6.457E-23	9.298E-23	2.582E-22	1.033E-21	6.451E-21	2.578E-20	1.029E-19	
Th-230	U-238	1.997E-07	0.000E+00	2.592E-17	1.620E-14	2.333E-14	6.479E-14	2.591E-13	1.618E-12	6.467E-12	2.581E-11	
Th-230	U-238	2.636E-13	0.000E+00	3.422E-23	2.138E-20	3.079E-20	8.552E-20	3.420E-19	2.136E-18	8.536E-18	3.407E-17	
Th-230	U-238	3.794E-15	0.000E+00	4.925E-25	3.078E-22	4.432E-22	1.231E-21	4.923E-21	3.075E-20	1.229E-19	4.905E-19	
Th-230	äS(j):		9.996E+00	9.996E+00	9.996E+00	9.996E+00	9.996E+00	9.996E+00	9.996E+00	9.996E+00	9.996E+00	9.996E+00
0Ra-226	Pu-238	9.996E-01	0.000E+00	1.870E-14	2.781E-10	4.757E-10	2.116E-09	1.537E-08	1.851E-07	1.035E-06	4.864E-06	
Ra-226	Pu-238	1.899E-08	0.000E+00	3.553E-22	5.284E-18	9.038E-18	4.020E-17	2.921E-16	3.517E-15	1.966E-14	9.242E-14	
Ra-226	Th-230	9.996E-01	0.000E+00	4.329E-03	1.077E-01	1.291E-01	2.141E-01	4.236E-01	1.025E+00	1.942E+00	3.497E+00	
Ra-226	Th-230	1.319E-06	0.000E+00	5.715E-09	1.421E-07	1.704E-07	2.827E-07	5.591E-07	1.353E-06	2.564E-06	4.616E-06	
Ra-226	Th-230	1.899E-08	0.000E+00	8.226E-11	2.046E-09	2.452E-09	4.069E-09	8.048E-09	1.947E-08	3.690E-08	6.644E-08	
Ra-226	U-234	9.996E-01	0.000E+00	1.991E-08	1.240E-05	1.784E-05	4.941E-05	1.962E-04	1.199E-03	4.627E-03	1.725E-02	
Ra-226	U-234	1.319E-06	0.000E+00	2.628E-14	1.636E-11	2.355E-11	6.522E-11	2.589E-10	1.583E-09	6.108E-09	2.277E-08	
Ra-226	U-234	1.899E-08	0.000E+00	3.782E-16	2.356E-13	3.389E-13	9.387E-13	3.727E-12	2.279E-11	8.791E-11	3.277E-10	
Ra-226	U-238	1.599E-03	0.000E+00	2.998E-17	4.671E-13	8.068E-13	3.727E-12	2.965E-11	4.557E-10	3.547E-09	2.691E-08	
Ra-226	U-238	2.111E-09	0.000E+00	3.957E-23	6.166E-19	1.065E-18	4.919E-18	3.914E-17	6.015E-16	4.683E-15	3.552E-14	
Ra-226	U-238	3.039E-11	0.000E+00	5.696E-25	8.876E-21	1.533E-20	7.081E-20	5.633E-19	8.658E-18	6.740E-17	5.113E-16	
Ra-226	U-238	9.980E-01	0.000E+00	1.871E-14	2.915E-10	5.034E-10	2.326E-09	1.850E-08	2.843E-07	2.214E-06	1.679E-05	
Ra-226	U-238	1.317E-06	0.000E+00	2.469E-20	3.848E-16	6.645E-16	3.070E-15	2.442E-14	3.753E-13	2.922E-12	2.216E-11	
Ra-226	U-238	1.896E-08	0.000E+00	3.554E-22	5.538E-18	9.565E-18	4.418E-17	3.515E-16	5.402E-15	4.206E-14	3.190E-13	
Ra-226	äS(j):		0.000E+00	4.329E-03	1.077E-01	1.291E-01	2.142E-01	4.238E-01	1.026E+00	1.947E+00	3.514E+00	
0Pb-210	Pu-238	9.996E-01	0.000E+00	1.451E-16	4.722E-11	9.441E-11	6.329E-10	7.357E-09	1.347E-07	8.905E-07	4.546E-06	
Pb-210	Pu-238	1.319E-06	0.000E+00	1.915E-22	6.233E-17	1.246E-16	8.354E-16	9.711E-15	1.778E-13	1.175E-12	6.001E-12	
Pb-210	Pu-238	2.100E-04	0.000E+00	3.048E-20	9.918E-15	1.983E-14	1.329E-13	1.545E-12	2.829E-11	1.870E-10	9.549E-10	
Pb-210	Pu-238	1.998E-04	0.000E+00	2.900E-20	9.436E-15	1.887E-14	1.265E-13	1.470E-12	2.691E-11	1.780E-10	9.085E-10	
Pb-210	Pu-238	4.196E-08	0.000E+00	6.091E-24	1.982E-18	3.963E-18	2.657E-17	3.088E-16	5.653E-15	3.738E-14	1.908E-13	
Pb-210	Pu-238	2.000E-07	0.000E+00	2.903E-23	9.448E-18	1.889E-17	1.266E-16	1.472E-15	2.694E-14	1.782E-13	9.096E-13	
Pb-210	Th-230	9.996E-01	0.000E+00	6.690E-05	3.298E-02	4.536E-02	1.061E-01	2.952E-01	8.989E-01	1.829E+00	3.407E+00	
Pb-210	Th-230	2.100E-04	0.000E+00	1.405E-08	6.927E-06	9.528E-06	2.228E-05	6.200E-05	1.888E-04	3.842E-04	7.156E-04	
Pb-210	Th-230	1.998E-04	0.000E+00	1.337E-08	6.590E-06	9.065E-06	2.120E-05	5.899E-05	1.796E-04	3.656E-04	6.808E-04	
Pb-210	Th-230	4.196E-08	0.000E+00	2.808E-12	1.384E-09	1.904E-09	4.452E-09	1.239E-08	3.773E-08	7.679E-08	1.430E-07	
Pb-210	Th-230	2.000E-07	0.000E+00	1.338E-11	6.598E-09	9.076E-09	2.122E-08	5.906E-08	1.799E-07	3.660E-07	6.816E-07	
Pb-210	U-234	9.996E-01	0.000E+00	2.056E-10	2.685E-06	4.481E-06	1.817E-05	1.092E-04	9.347E-04	4.089E-03	1.625E-02	
Pb-210	U-234	2.100E-04	0.000E+00	4.318E-14	5.640E-10	9.411E-10	3.817E-09	2.295E-08	1.963E-07	8.588E-07	3.412E-06	
Pb-210	U-234	1.998E-04	0.000E+00	4.108E-14	5.366E-10	8.954E-10	3.632E-09	2.183E-08	1.868E-07	8.171E-07	3.247E-06	
Pb-210	U-234	4.196E-08	0.000E+00	8.629E-18	1.127E-13	1.881E-13	7.628E-13	4.586E-12	3.924E-11	1.716E-10	6.819E-10	
Pb-210	U-234	2.000E-07	0.000E+00	4.113E-17	5.373E-13	8.965E-13	3.636E-12	2.186E-11	1.870E-10	8.181E-10	3.250E-09	

Pb-210	U-238	1.599E-03	0.000E+00	2.325E-19	7.863E-14	1.585E-13	1.098E-12	1.384E-11	3.204E-10	2.956E-09	2.456E-08
Pb-210	U-238	3.359E-07	0.000E+00	4.884E-23	1.652E-17	3.329E-17	2.305E-16	2.908E-15	6.731E-14	6.209E-13	5.158E-12
Pb-210	U-238	3.196E-07	0.000E+00	4.647E-23	1.571E-17	3.167E-17	2.193E-16	2.766E-15	6.404E-14	5.907E-13	4.908E-12
Pb-210	U-238	6.713E-11	0.000E+00	9.761E-27	3.301E-21	6.653E-21	4.607E-20	5.811E-19	1.345E-17	1.241E-16	1.031E-15
Pb-210	U-238	3.200E-10	0.000E+00	4.653E-26	1.573E-20	3.171E-20	2.196E-19	2.770E-18	6.411E-17	5.914E-16	4.914E-15
Pb-210	U-238	9.980E-01	0.000E+00	1.451E-16	4.907E-11	9.890E-11	6.849E-10	8.638E-09	2.000E-07	1.845E-06	1.532E-05
Pb-210	U-238	2.096E-04	0.000E+00	3.048E-20	1.031E-14	2.077E-14	1.439E-13	1.814E-12	4.200E-11	3.874E-10	3.219E-09

Individual Nuclide Soil Concentration
Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	S(j,t), pCi/g									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Pb-210	U-238	1.994E-04	0.000E+00	2.900E-20	9.805E-15	1.976E-14	1.369E-13	1.726E-12	3.996E-11	3.686E-10	3.063E-09	
Pb-210	U-238	4.189E-08	0.000E+00	6.091E-24	2.060E-18	4.151E-18	2.875E-17	3.626E-16	8.393E-15	7.742E-14	6.433E-13	
Pb-210	U-238	1.997E-07	0.000E+00	2.903E-23	9.817E-18	1.979E-17	1.370E-16	1.728E-15	4.001E-14	3.691E-13	3.066E-12	
Pb-210	äS(j):		0.000E+00	6.692E-05	3.300E-02	4.538E-02	1.061E-01	2.954E-01	9.002E-01	1.834E+00	3.424E+00	
0Pu-238	Pu-238	1.319E-06	1.319E-05	1.309E-05	1.083E-05	1.041E-05	8.887E-06	5.986E-06	1.829E-06	2.536E-07	4.874E-09	
Pu-238	Pu-238	1.899E-08	1.899E-07	1.884E-07	1.559E-07	1.498E-07	1.279E-07	8.616E-08	2.633E-08	3.650E-09	7.016E-11	
Pu-238	äS(j):		1.338E-05	1.328E-05	1.098E-05	1.056E-05	9.015E-06	6.072E-06	1.856E-06	2.572E-07	4.944E-09	
0U-234	Pu-238	1.319E-06	0.000E+00	3.711E-11	8.451E-10	9.949E-10	1.539E-09	2.575E-09	4.058E-09	4.618E-09	4.699E-09	
0Th-230	Pu-238	1.319E-06	0.000E+00	1.708E-16	1.003E-13	1.426E-13	3.769E-13	1.338E-12	6.105E-12	1.625E-11	3.766E-11	
0Ra-226	Pu-238	1.319E-06	0.000E+00	2.468E-20	3.671E-16	6.279E-16	2.793E-15	2.029E-14	2.443E-13	1.366E-12	6.421E-12	
0Pb-210	Pu-238	1.899E-08	0.000E+00	2.757E-24	8.972E-19	1.794E-18	1.202E-17	1.398E-16	2.559E-15	1.692E-14	8.638E-14	
Pb-210	Pu-238	3.989E-12	0.000E+00	5.791E-28	1.884E-22	3.768E-22	2.526E-21	2.936E-20	5.374E-19	3.554E-18	1.814E-17	
Pb-210	Pu-238	3.795E-12	0.000E+00	5.510E-28	1.793E-22	3.585E-22	2.403E-21	2.793E-20	5.113E-19	3.381E-18	1.726E-17	
Pb-210	Pu-238	7.972E-16	0.000E+00	1.157E-31	3.766E-26	7.529E-26	5.047E-25	5.867E-24	1.074E-22	7.102E-22	3.626E-21	
Pb-210	Pu-238	3.800E-15	0.000E+00	5.516E-31	1.795E-25	3.589E-25	2.406E-24	2.797E-23	5.119E-22	3.385E-21	1.728E-20	
Pb-210	Th-230	1.899E-08	0.000E+00	1.271E-12	6.266E-10	8.618E-10	2.015E-09	5.609E-09	1.708E-08	3.476E-08	6.473E-08	
Pb-210	Th-230	3.989E-12	0.000E+00	2.670E-16	1.316E-13	1.810E-13	4.233E-13	1.178E-12	3.587E-12	7.301E-12	1.360E-11	
Pb-210	Th-230	3.795E-12	0.000E+00	2.540E-16	1.252E-13	1.722E-13	4.027E-13	1.121E-12	3.413E-12	6.946E-12	1.294E-11	
Pb-210	Th-230	7.972E-16	0.000E+00	5.335E-20	2.630E-17	3.618E-17	8.459E-17	2.354E-16	7.169E-16	1.459E-15	2.717E-15	
Pb-210	Th-230	3.800E-15	0.000E+00	2.543E-19	1.254E-16	1.724E-16	4.032E-16	1.122E-15	3.417E-15	6.954E-15	1.295E-14	
Pb-210	U-234	1.899E-08	0.000E+00	3.906E-18	5.102E-14	8.513E-14	3.453E-13	2.076E-12	1.776E-11	7.768E-11	3.087E-10	
Pb-210	U-234	3.989E-12	0.000E+00	8.204E-22	1.072E-17	1.788E-17	7.252E-17	4.360E-16	3.730E-15	1.632E-14	6.483E-14	
Pb-210	U-234	3.795E-12	0.000E+00	7.806E-22	1.020E-17	1.701E-17	6.900E-17	4.148E-16	3.549E-15	1.552E-14	6.168E-14	
Pb-210	U-234	7.972E-16	0.000E+00	1.640E-25	2.142E-21	3.573E-21	1.449E-20	8.713E-20	7.455E-19	3.261E-18	1.296E-17	
Pb-210	U-234	3.800E-15	0.000E+00	7.815E-25	1.021E-20	1.703E-20	6.908E-20	4.153E-19	3.553E-18	1.554E-17	6.176E-17	
Pb-210	U-238	3.039E-11	0.000E+00	4.418E-27	1.494E-21	3.011E-21	2.085E-20	2.630E-19	6.088E-18	5.616E-17	4.666E-16	
Pb-210	U-238	6.383E-15	0.000E+00	9.280E-31	3.138E-25	6.325E-25	4.380E-24	5.525E-23	1.279E-21	1.180E-20	9.801E-20	
Pb-210	U-238	6.073E-15	0.000E+00	8.830E-31	2.986E-25	6.018E-25	4.167E-24	5.256E-23	1.217E-21	1.122E-20	9.325E-20	
Pb-210	U-238	1.276E-18	0.000E+00	1.855E-34	6.271E-29	1.264E-28	8.753E-28	1.104E-26	2.556E-25	2.357E-24	1.959E-23	
Pb-210	U-238	6.080E-18	0.000E+00	8.840E-34	2.989E-28	6.025E-28	4.172E-27	5.263E-26	1.218E-24	1.124E-23	9.336E-23	
Pb-210	U-238	1.896E-08	0.000E+00	2.757E-24	9.323E-19	1.879E-18	1.301E-17	1.641E-16	3.799E-15	3.505E-14	2.912E-13	
Pb-210	U-238	3.983E-12	0.000E+00	5.791E-28	1.958E-22	3.947E-22	2.733E-21	3.447E-20	7.980E-19	7.361E-18	6.116E-17	
Pb-210	U-238	3.789E-12	0.000E+00	5.510E-28	1.863E-22	3.755E-22	2.600E-21	3.280E-20	7.592E-19	7.004E-18	5.819E-17	
Pb-210	U-238	7.959E-16	0.000E+00	1.157E-31	3.913E-26	7.887E-26	5.462E-25	6.889E-24	1.595E-22	1.471E-21	1.222E-20	
Pb-210	U-238	3.794E-15	0.000E+00	5.516E-31	1.865E-25	3.760E-25	2.604E-24	3.284E-23	7.601E-22	7.012E-21	5.826E-20	
Pb-210	äS(j):		0.000E+00	1.272E-12	6.269E-10	8.623E-10	2.016E-09	5.613E-09	1.710E-08	3.485E-08	6.506E-08	
0Pu-238	Pu-238	2.100E-04	2.100E-03	2.083E-03	1.723E-03	1.656E-03	1.414E-03	9.525E-04	2.911E-04	4.035E-05	7.756E-07	
Pu-238	Pu-238	2.771E-10	2.771E-09	2.750E-09	2.275E-09	2.186E-09	1.867E-09	1.257E-09	3.842E-10	5.327E-11	1.024E-12	
Pu-238	äS(j):		2.100E-03	2.083E-03	1.723E-03	1.656E-03	1.414E-03	9.525E-04	2.911E-04	4.035E-05	7.756E-07	
0Ra-226	Pu-238	2.100E-04	0.000E+00	3.928E-18	5.841E-14	9.992E-14	4.444E-13	3.229E-12	3.888E-11	2.174E-10	1.022E-09	

Ra-226	Pu-238	2.771E-10	0.000E+00	5.184E-24	7.710E-20	1.319E-19	5.867E-19	4.262E-18	5.132E-17	2.869E-16	1.349E-15
Ra-226	Pu-238	3.989E-12	0.000E+00	7.462E-26	1.110E-21	1.898E-21	8.444E-21	6.135E-20	7.387E-19	4.130E-18	1.941E-17

Individual Nuclide Soil Concentration
Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	S(j,t), pCi/g									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Ra-226	Th-230	2.100E-04	0.000E+00	9.094E-07	2.261E-05	2.711E-05	4.498E-05	8.897E-05	2.153E-04	4.079E-04	7.345E-04	
Ra-226	Th-230	2.771E-10	0.000E+00	1.200E-12	2.985E-11	3.578E-11	5.937E-11	1.174E-10	2.841E-10	5.385E-10	9.695E-10	
Ra-226	Th-230	3.989E-12	0.000E+00	1.728E-14	4.297E-13	5.150E-13	8.546E-13	1.690E-12	4.090E-12	7.750E-12	1.396E-11	
Ra-226	U-234	2.100E-04	0.000E+00	4.181E-12	2.604E-09	3.747E-09	1.038E-08	4.120E-08	2.519E-07	9.719E-07	3.623E-06	
Ra-226	U-234	2.771E-10	0.000E+00	5.519E-18	3.437E-15	4.946E-15	1.370E-14	5.439E-14	3.325E-13	1.283E-12	4.782E-12	
Ra-226	U-234	3.989E-12	0.000E+00	7.944E-20	4.948E-17	7.119E-17	1.972E-16	7.829E-16	4.787E-15	1.847E-14	6.883E-14	
Ra-226	U-238	3.359E-07	0.000E+00	6.297E-21	9.812E-17	1.695E-16	7.828E-16	6.228E-15	9.571E-14	7.451E-13	5.652E-12	
Ra-226	U-238	4.434E-13	0.000E+00	8.311E-27	1.295E-22	2.237E-22	1.033E-21	8.221E-21	1.263E-19	9.836E-19	7.461E-18	
Ra-226	U-238	6.383E-15	0.000E+00	1.196E-28	1.864E-24	3.220E-24	1.487E-23	1.183E-22	1.819E-21	1.416E-20	1.074E-19	
Ra-226	U-238	2.096E-04	0.000E+00	3.929E-18	6.123E-14	1.057E-13	4.885E-13	3.886E-12	5.972E-11	4.650E-10	3.527E-09	
Ra-226	U-238	2.767E-10	0.000E+00	5.186E-24	8.082E-20	1.396E-19	6.448E-19	5.130E-18	7.884E-17	6.137E-16	4.656E-15	
Ra-226	U-238	3.983E-12	0.000E+00	7.465E-26	1.163E-21	2.009E-21	9.281E-21	7.384E-20	1.135E-18	8.834E-18	6.701E-17	
Ra-226	äS(j):		0.000E+00	9.094E-07	2.262E-05	2.711E-05	4.499E-05	8.901E-05	2.155E-04	4.089E-04	7.381E-04	
0Pb-210	Pu-238	2.771E-10	0.000E+00	4.023E-26	1.309E-20	2.618E-20	1.755E-19	2.040E-18	3.734E-17	2.469E-16	1.260E-15	
Pb-210	Pu-238	2.637E-10	0.000E+00	3.828E-26	1.246E-20	2.490E-20	1.669E-19	1.941E-18	3.552E-17	2.349E-16	1.199E-15	
Pb-210	Pu-238	5.538E-14	0.000E+00	8.040E-30	2.616E-24	5.231E-24	3.507E-23	4.076E-22	7.461E-21	4.934E-20	2.519E-19	
Pb-210	Pu-238	2.640E-13	0.000E+00	3.832E-29	1.247E-23	2.493E-23	1.672E-22	1.943E-21	3.557E-20	2.352E-19	1.201E-18	
Pb-210	Th-230	1.319E-06	0.000E+00	8.830E-11	4.353E-08	5.988E-08	1.400E-07	3.897E-07	1.187E-06	2.415E-06	4.497E-06	
Pb-210	Th-230	2.771E-10	0.000E+00	1.855E-14	9.144E-12	1.258E-11	2.941E-11	8.185E-11	2.492E-10	5.072E-10	9.445E-10	
Pb-210	Th-230	2.637E-10	0.000E+00	1.765E-14	8.699E-12	1.197E-11	2.798E-11	7.787E-11	2.371E-10	4.826E-10	8.986E-10	
Pb-210	Th-230	5.538E-14	0.000E+00	3.707E-18	1.827E-15	2.513E-15	5.877E-15	1.636E-14	4.981E-14	1.014E-13	1.888E-13	
Pb-210	Th-230	2.640E-13	0.000E+00	1.767E-17	8.710E-15	1.198E-14	2.801E-14	7.796E-14	2.374E-13	4.831E-13	8.997E-13	
Pb-210	U-234	1.319E-06	0.000E+00	2.714E-16	3.545E-12	5.915E-12	2.399E-11	1.442E-10	1.234E-09	5.397E-09	2.144E-08	
Pb-210	U-234	2.771E-10	0.000E+00	5.700E-20	7.445E-16	1.242E-15	5.038E-15	3.029E-14	2.592E-13	1.134E-12	4.504E-12	
Pb-210	U-234	2.637E-10	0.000E+00	5.423E-20	7.083E-16	1.182E-15	4.794E-15	2.882E-14	2.466E-13	1.079E-12	4.285E-12	
Pb-210	U-234	5.538E-14	0.000E+00	1.139E-23	1.488E-19	2.483E-19	1.007E-18	6.053E-18	5.179E-17	2.265E-16	9.001E-16	
Pb-210	U-234	2.640E-13	0.000E+00	5.430E-23	7.092E-19	1.183E-18	4.799E-18	2.885E-17	2.469E-16	1.080E-15	4.291E-15	
Pb-210	U-238	2.111E-09	0.000E+00	3.070E-25	1.038E-19	2.092E-19	1.449E-18	1.827E-17	4.230E-16	3.902E-15	3.242E-14	
Pb-210	U-238	4.434E-13	0.000E+00	6.447E-29	2.180E-23	4.394E-23	3.043E-22	3.838E-21	8.884E-20	8.196E-19	6.809E-18	
Pb-210	U-238	4.219E-13	0.000E+00	6.134E-29	2.074E-23	4.181E-23	2.895E-22	3.652E-21	8.453E-20	7.797E-19	6.478E-18	
Pb-210	U-238	8.862E-17	0.000E+00	1.288E-32	4.357E-27	8.781E-27	6.081E-26	7.670E-25	1.775E-23	1.638E-22	1.361E-21	
Pb-210	U-238	4.224E-16	0.000E+00	6.142E-32	2.077E-26	4.186E-26	2.899E-25	3.656E-24	8.463E-23	7.807E-22	6.486E-21	
Pb-210	U-238	1.317E-06	0.000E+00	1.915E-22	6.477E-17	1.305E-16	9.040E-16	1.140E-14	2.639E-13	2.435E-12	2.023E-11	
Pb-210	U-238	2.767E-10	0.000E+00	4.023E-26	1.360E-20	2.742E-20	1.899E-19	2.395E-18	5.544E-17	5.114E-16	4.249E-15	
Pb-210	U-238	2.633E-10	0.000E+00	3.828E-26	1.294E-20	2.609E-20	1.807E-19	2.279E-18	5.274E-17	4.866E-16	4.043E-15	
Pb-210	U-238	5.530E-14	0.000E+00	8.040E-30	2.719E-24	5.480E-24	3.795E-23	4.786E-22	1.108E-20	1.022E-19	8.491E-19	
Pb-210	U-238	2.636E-13	0.000E+00	3.832E-29	1.296E-23	2.612E-23	1.809E-22	2.281E-21	5.281E-20	4.871E-19	4.047E-18	
Pb-210	äS(j):		0.000E+00	8.834E-11	4.355E-08	5.991E-08	1.401E-07	3.900E-07	1.188E-06	2.421E-06	4.520E-06	
0Pu-238	Pu-238	3.989E-12	3.989E-11	3.958E-11	3.274E-11	3.147E-11	2.687E-11	1.810E-11	5.530E-12	7.667E-13	1.474E-14	
Pu-238	Pu-238	1.998E-04	1.998E-03	1.982E-03	1.639E-03	1.576E-03	1.345E-03	9.063E-04	2.769E-04	3.839E-05	7.379E-07	

Pu-238	äS(j):		1.998E-03	1.982E-03	1.639E-03	1.576E-03	1.345E-03	9.063E-04	2.769E-04	3.839E-05	7.379E-07
0Ra-226	Pu-238	1.998E-04	0.000E+00	3.737E-18	5.557E-14	9.506E-14	4.229E-13	3.072E-12	3.699E-11	2.068E-10	9.721E-10
Ra-226	Pu-238	3.795E-12	0.000E+00	7.100E-26	1.056E-21	1.806E-21	8.034E-21	5.837E-20	7.028E-19	3.929E-18	1.847E-17
Ra-226	Th-230	1.998E-04	0.000E+00	8.652E-07	2.152E-05	2.579E-05	4.279E-05	8.465E-05	2.048E-04	3.881E-04	6.988E-04
Ra-226	Th-230	2.637E-10	0.000E+00	1.142E-12	2.840E-11	3.404E-11	5.649E-11	1.117E-10	2.703E-10	5.123E-10	9.224E-10
Ra-226	Th-230	3.795E-12	0.000E+00	1.644E-14	4.088E-13	4.900E-13	8.131E-13	1.608E-12	3.891E-12	7.374E-12	1.328E-11

Individual Nuclide Soil Concentration
Parent Nuclide and Branch Fraction Indicated

0Nuclide Parent	THF(i)	S(j,t), pCi/g									
(j)	(i)	t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Ra-226	U-234	1.998E-04	0.000E+00	3.978E-12	2.478E-09	3.565E-09	9.873E-09	3.920E-08	2.397E-07	9.247E-07	3.447E-06
Ra-226	U-234	2.637E-10	0.000E+00	5.251E-18	3.270E-15	4.706E-15	1.303E-14	5.175E-14	3.164E-13	1.221E-12	4.550E-12
Ra-226	U-234	3.795E-12	0.000E+00	7.559E-20	4.707E-17	6.773E-17	1.876E-16	7.449E-16	4.554E-15	1.757E-14	6.549E-14
Ra-226	U-238	3.196E-07	0.000E+00	5.991E-21	9.335E-17	1.612E-16	7.448E-16	5.925E-15	9.106E-14	7.089E-13	5.378E-12
Ra-226	U-238	4.219E-13	0.000E+00	7.908E-27	1.232E-22	2.128E-22	9.831E-22	7.821E-21	1.202E-19	9.358E-19	7.098E-18
Ra-226	U-238	6.073E-15	0.000E+00	1.138E-28	1.774E-24	3.063E-24	1.415E-23	1.126E-22	1.730E-21	1.347E-20	1.022E-19
Ra-226	U-238	1.994E-04	0.000E+00	3.738E-18	5.825E-14	1.006E-13	4.647E-13	3.697E-12	5.682E-11	4.424E-10	3.356E-09
Ra-226	U-238	2.633E-10	0.000E+00	4.934E-24	7.689E-20	1.328E-19	6.134E-19	4.880E-18	7.501E-17	5.839E-16	4.429E-15
Ra-226	U-238	3.789E-12	0.000E+00	7.103E-26	1.107E-21	1.911E-21	8.830E-21	7.025E-20	1.080E-18	8.405E-18	6.376E-17
Ra-226	äS(j):		0.000E+00	8.652E-07	2.152E-05	2.579E-05	4.280E-05	8.469E-05	2.050E-04	3.890E-04	7.023E-04
0Pu-238	Pu-238	2.637E-10	2.637E-09	2.616E-09	2.164E-09	2.080E-09	1.776E-09	1.196E-09	3.656E-10	5.068E-11	9.740E-13
Pu-238	Pu-238	3.795E-12	3.795E-11	3.766E-11	3.115E-11	2.994E-11	2.556E-11	1.722E-11	5.262E-12	7.295E-13	1.402E-14
Pu-238	äS(j):		2.675E-09	2.654E-09	2.195E-09	2.110E-09	1.802E-09	1.213E-09	3.708E-10	5.141E-11	9.881E-13
0Ra-226	Pu-238	2.637E-10	0.000E+00	4.933E-24	7.336E-20	1.255E-19	5.582E-19	4.055E-18	4.883E-17	2.730E-16	1.283E-15
0Pu-238	Pu-238	4.196E-08	4.196E-07	4.163E-07	3.444E-07	3.310E-07	2.826E-07	1.904E-07	5.817E-08	8.064E-09	1.550E-10
Pu-238	Pu-238	5.538E-14	5.538E-13	5.495E-13	4.545E-13	4.369E-13	3.730E-13	2.513E-13	7.678E-14	1.064E-14	2.046E-16
Pu-238	äS(j):		4.196E-07	4.163E-07	3.444E-07	3.310E-07	2.826E-07	1.904E-07	5.817E-08	8.064E-09	1.550E-10
0Ra-226	Pu-238	4.196E-08	0.000E+00	7.849E-22	1.167E-17	1.997E-17	8.882E-17	6.453E-16	7.770E-15	4.344E-14	2.042E-13
Ra-226	Pu-238	5.538E-14	0.000E+00	1.036E-27	1.541E-23	2.636E-23	1.172E-22	8.518E-22	1.026E-20	5.734E-20	2.695E-19
Ra-226	Pu-238	7.972E-16	0.000E+00	1.491E-29	2.218E-25	3.794E-25	1.688E-24	1.226E-23	1.476E-22	8.253E-22	3.879E-21
Ra-226	Th-230	4.196E-08	0.000E+00	1.817E-10	4.519E-09	5.417E-09	8.989E-09	1.778E-08	4.302E-08	8.152E-08	1.468E-07
Ra-226	Th-230	5.538E-14	0.000E+00	2.399E-16	5.965E-15	7.150E-15	1.186E-14	2.347E-14	5.678E-14	1.076E-13	1.938E-13
Ra-226	Th-230	7.972E-16	0.000E+00	3.453E-18	8.586E-17	1.029E-16	1.708E-16	3.378E-16	8.173E-16	1.549E-15	2.789E-15
Ra-226	U-234	4.196E-08	0.000E+00	8.356E-16	5.204E-13	7.488E-13	2.074E-12	8.234E-12	5.034E-11	1.942E-10	7.240E-10
Ra-226	U-234	5.538E-14	0.000E+00	1.103E-21	6.869E-19	9.884E-19	2.737E-18	1.087E-17	6.645E-17	2.564E-16	9.556E-16
Ra-226	U-234	7.972E-16	0.000E+00	1.588E-23	9.887E-21	1.423E-20	3.940E-20	1.565E-19	9.565E-19	3.690E-18	1.376E-17
Ra-226	U-238	6.713E-11	0.000E+00	1.258E-24	1.961E-20	3.386E-20	1.564E-19	1.245E-18	1.913E-17	1.489E-16	1.130E-15
Ra-226	U-238	8.862E-17	0.000E+00	1.661E-30	2.588E-26	4.470E-26	2.065E-25	1.643E-24	2.525E-23	1.966E-22	1.491E-21
Ra-226	U-238	1.276E-18	0.000E+00	2.391E-32	3.726E-28	6.434E-28	2.972E-27	2.365E-26	3.634E-25	2.829E-24	2.146E-23
Ra-226	U-238	4.189E-08	0.000E+00	7.852E-22	1.224E-17	2.113E-17	9.761E-17	7.766E-16	1.194E-14	9.292E-14	7.048E-13
Ra-226	U-238	5.530E-14	0.000E+00	1.036E-27	1.615E-23	2.789E-23	1.288E-22	1.025E-21	1.575E-20	1.227E-19	9.304E-19
Ra-226	U-238	7.959E-16	0.000E+00	1.492E-29	2.325E-25	4.015E-25	1.855E-24	1.476E-23	2.268E-22	1.765E-21	1.339E-20
Ra-226	äS(j):		0.000E+00	1.817E-10	4.520E-09	5.418E-09	8.991E-09	1.779E-08	4.307E-08	8.171E-08	1.475E-07
0Pu-238	Pu-238	7.972E-16	7.972E-15	7.909E-15	6.543E-15	6.289E-15	5.370E-15	3.617E-15	1.105E-15	1.532E-16	2.945E-18
Pu-238	Pu-238	2.000E-07	2.000E-06	1.984E-06	1.641E-06	1.578E-06	1.347E-06	9.074E-07	2.773E-07	3.844E-08	7.388E-10
Pu-238	äS(j):		2.000E-06	1.984E-06	1.641E-06	1.578E-06	1.347E-06	9.074E-07	2.773E-07	3.844E-08	7.388E-10
0Ra-226	Pu-238	2.000E-07	0.000E+00	3.741E-21	5.564E-17	9.518E-17	4.234E-16	3.076E-15	3.704E-14	2.070E-13	9.733E-13
Ra-226	Pu-238	3.800E-15	0.000E+00	7.108E-29	1.057E-24	1.808E-24	8.044E-24	5.844E-23	7.037E-22	3.934E-21	1.849E-20
Ra-226	Th-230	2.000E-07	0.000E+00	8.662E-10	2.154E-08	2.582E-08	4.285E-08	8.475E-08	2.050E-07	3.886E-07	6.997E-07
Ra-226	Th-230	2.640E-13	0.000E+00	1.143E-15	2.843E-14	3.408E-14	5.656E-14	1.119E-13	2.707E-13	5.129E-13	9.236E-13

Ra-226	Th-230	3.800E-15	0.000E+00	1.646E-17	4.093E-16	4.906E-16	8.141E-16	1.610E-15	3.896E-15	7.383E-15	1.329E-14
Ra-226	U-234	2.000E-07	0.000E+00	3.983E-15	2.481E-12	3.569E-12	9.885E-12	3.925E-11	2.400E-10	9.258E-10	3.451E-09
Ra-226	U-234	2.640E-13	0.000E+00	5.258E-21	3.274E-18	4.711E-18	1.305E-17	5.181E-17	3.168E-16	1.222E-15	4.555E-15

Individual Nuclide Soil Concentration
Parent Nuclide and Branch Fraction Indicated

ONuclide	Parent	THF(i)	S(j,t), pCi/g									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA		AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Ra-226	U-234	3.800E-15		0.000E+00	7.568E-23	4.713E-20	6.782E-20	1.878E-19	7.458E-19	4.560E-18	1.759E-17	6.557E-17
Ra-226	U-238	3.200E-10		0.000E+00	5.998E-24	9.347E-20	1.614E-19	7.457E-19	5.932E-18	9.117E-17	7.098E-16	5.384E-15
Ra-226	U-238	4.224E-16		0.000E+00	7.917E-30	1.234E-25	2.131E-25	9.843E-25	7.831E-24	1.203E-22	9.369E-22	7.107E-21
Ra-226	U-238	6.080E-18		0.000E+00	1.140E-31	1.776E-27	3.067E-27	1.417E-26	1.127E-25	1.732E-24	1.349E-23	1.023E-22
Ra-226	U-238	1.997E-07		0.000E+00	3.743E-21	5.832E-17	1.007E-16	4.653E-16	3.702E-15	5.689E-14	4.429E-13	3.360E-12
Ra-226	U-238	2.636E-13		0.000E+00	4.940E-27	7.699E-23	1.330E-22	6.142E-22	4.886E-21	7.510E-20	5.846E-19	4.435E-18
Ra-226	U-238	3.794E-15		0.000E+00	7.111E-29	1.108E-24	1.914E-24	8.841E-24	7.033E-23	1.081E-21	8.415E-21	6.383E-20
Ra-226	äS(j):			0.000E+00	8.662E-10	2.154E-08	2.582E-08	4.286E-08	8.479E-08	2.053E-07	3.895E-07	7.031E-07
0Pu-238	Pu-238	2.640E-13		2.640E-12	2.619E-12	2.167E-12	2.083E-12	1.778E-12	1.198E-12	3.660E-13	5.074E-14	9.752E-16
Pu-238	Pu-238	3.800E-15		3.800E-14	3.770E-14	3.119E-14	2.998E-14	2.560E-14	1.724E-14	5.268E-15	7.304E-16	1.404E-17
Pu-238	äS(j):			2.678E-12	2.657E-12	2.198E-12	2.113E-12	1.804E-12	1.215E-12	3.713E-13	5.147E-14	9.893E-16
0Ra-226	Pu-238	2.640E-13		0.000E+00	4.939E-27	7.345E-23	1.256E-22	5.588E-22	4.060E-21	4.889E-20	2.733E-19	1.285E-18
0Pu-239	Pu-239	5.901E-04		5.901E-03	5.901E-03	5.897E-03	5.896E-03	5.892E-03	5.884E-03	5.859E-03	5.817E-03	5.734E-03
Pu-239	Pu-239	1.633E-06		1.633E-05	1.633E-05	1.632E-05	1.632E-05	1.631E-05	1.628E-05	1.621E-05	1.610E-05	1.587E-05
Pu-239	äS(j):			5.917E-03	5.917E-03	5.913E-03	5.912E-03	5.909E-03	5.900E-03	5.875E-03	5.833E-03	5.749E-03
0U-235	Pu-239	5.901E-04		0.000E+00	5.810E-12	1.452E-10	1.742E-10	2.903E-10	5.802E-10	1.447E-09	2.884E-09	5.727E-09
U-235	Pu-239	1.633E-06		0.000E+00	1.608E-14	4.018E-13	4.822E-13	8.034E-13	1.606E-12	4.005E-12	7.982E-12	1.585E-11
U-235	Pu-239	8.257E-06		0.000E+00	8.129E-14	2.032E-12	2.438E-12	4.062E-12	8.118E-12	2.025E-11	4.035E-11	8.013E-11
U-235	Pu-239	2.285E-08		0.000E+00	2.250E-16	5.623E-15	6.747E-15	1.124E-14	2.247E-14	5.604E-14	1.117E-13	2.218E-13
U-235	Pu-239	4.954E-10		0.000E+00	4.878E-18	1.219E-16	1.463E-16	2.437E-16	4.871E-16	1.215E-15	2.421E-15	4.808E-15
U-235	Pu-239	1.371E-12		0.000E+00	1.350E-20	3.374E-19	4.048E-19	6.745E-19	1.348E-18	3.363E-18	6.702E-18	1.331E-17
U-235	Pu-239	9.829E-01		0.000E+00	9.677E-09	2.418E-07	2.902E-07	4.835E-07	9.663E-07	2.411E-06	4.804E-06	9.539E-06
U-235	Pu-239	2.720E-03		0.000E+00	2.678E-11	6.693E-10	8.032E-10	1.338E-09	2.674E-09	6.672E-09	1.330E-08	2.640E-08
U-235	Pu-239	1.375E-02		0.000E+00	1.354E-10	3.384E-09	4.060E-09	6.766E-09	1.352E-08	3.373E-08	6.722E-08	1.335E-07
U-235	Pu-239	3.806E-05		0.000E+00	3.748E-13	9.366E-12	1.124E-11	1.872E-11	3.742E-11	9.335E-11	1.860E-10	3.694E-10
U-235	Pu-239	8.252E-07		0.000E+00	8.125E-15	2.031E-13	2.436E-13	4.060E-13	8.113E-13	2.024E-12	4.033E-12	8.008E-12
U-235	Pu-239	2.284E-09		0.000E+00	2.249E-17	5.620E-16	6.743E-16	1.124E-15	2.245E-15	5.601E-15	1.116E-14	2.216E-14
U-235	U-235	9.835E-01		9.835E+00	9.835E+00	9.835E+00	9.835E+00	9.835E+00	9.835E+00	9.834E+00	9.834E+00	9.833E+00
U-235	äS(j):			9.835E+00	9.835E+00	9.835E+00	9.835E+00	9.835E+00	9.835E+00	9.834E+00	9.834E+00	9.833E+00
0Pa-231	Pu-239	5.901E-04		0.000E+00	6.146E-17	3.840E-14	5.529E-14	1.535E-13	6.136E-13	3.825E-12	1.524E-11	6.044E-11
Pa-231	Pu-239	1.633E-06		0.000E+00	1.701E-19	1.063E-16	1.530E-16	4.249E-16	1.698E-15	1.059E-14	4.217E-14	1.673E-13
Pa-231	Pu-239	8.257E-06		0.000E+00	8.600E-19	5.373E-16	7.736E-16	2.148E-15	8.586E-15	5.353E-14	2.132E-13	8.457E-13
Pa-231	Pu-239	2.285E-08		0.000E+00	2.380E-21	1.487E-18	2.141E-18	5.946E-18	2.376E-17	1.481E-16	5.901E-16	2.341E-15
Pa-231	Pu-239	4.954E-10		0.000E+00	5.160E-23	3.224E-20	4.642E-20	1.289E-19	5.152E-19	3.212E-18	1.279E-17	5.075E-17
Pa-231	Pu-239	1.371E-12		0.000E+00	1.428E-25	8.923E-23	1.285E-22	3.568E-22	1.426E-21	8.889E-21	3.541E-20	1.404E-19
Pa-231	Pu-239	9.829E-01		0.000E+00	1.024E-13	6.396E-11	9.209E-11	2.557E-10	1.022E-09	6.372E-09	2.538E-08	1.007E-07
Pa-231	Pu-239	2.720E-03		0.000E+00	2.833E-16	1.770E-13	2.549E-13	7.078E-13	2.829E-12	1.764E-11	7.025E-11	2.786E-10
Pa-231	Pu-239	1.375E-02		0.000E+00	1.432E-15	8.949E-13	1.289E-12	3.578E-12	1.430E-11	8.916E-11	3.551E-10	1.409E-09
Pa-231	Pu-239	3.806E-05		0.000E+00	3.965E-18	2.477E-15	3.566E-15	9.903E-15	3.958E-14	2.468E-13	9.829E-13	3.899E-12
Pa-231	Pu-239	8.252E-07		0.000E+00	8.595E-20	5.370E-17	7.732E-17	2.147E-16	8.581E-16	5.350E-15	2.131E-14	8.453E-14

Pa-231	Pu-239	2.284E-09	0.000E+00	2.379E-22	1.486E-19	2.140E-19	5.942E-19	2.375E-18	1.481E-17	5.898E-17	2.339E-16
Pa-231	U-235	9.835E-01	0.000E+00	2.081E-04	5.201E-03	6.241E-03	1.040E-02	2.079E-02	5.188E-02	1.035E-01	2.059E-01
Pa-231	U-235	2.722E-03	0.000E+00	5.759E-07	1.439E-05	1.727E-05	2.878E-05	5.753E-05	1.436E-04	2.864E-04	5.698E-04
Pa-231	U-235	1.376E-02	0.000E+00	2.912E-06	7.277E-05	8.732E-05	1.455E-04	2.908E-04	7.259E-04	1.448E-03	2.880E-03

Individual Nuclide Soil Concentration
 Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	S(j,t), pCi/g									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Pa-231	U-235	3.809E-05	0.000E+00	8.058E-09	2.014E-07	2.417E-07	4.027E-07	8.050E-07	2.009E-06	4.008E-06	7.972E-06	
Pa-231	U-235	8.257E-07	0.000E+00	1.747E-10	4.367E-09	5.240E-09	8.731E-09	1.745E-08	4.356E-08	8.688E-08	1.728E-07	
Pa-231	U-235	2.285E-09	0.000E+00	4.835E-13	1.208E-11	1.450E-11	2.416E-11	4.830E-11	1.206E-10	2.405E-10	4.784E-10	
Pa-231	äS(j):		0.000E+00	2.116E-04	5.288E-03	6.345E-03	1.057E-02	2.114E-02	5.275E-02	1.052E-01	2.093E-01	
0Ac-227	Pu-239	5.901E-04	0.000E+00	6.471E-19	8.445E-15	1.409E-14	5.716E-14	3.443E-13	2.986E-12	1.345E-11	5.679E-11	
Ac-227	Pu-239	9.829E-01	0.000E+00	1.078E-15	1.407E-11	2.347E-11	9.520E-11	5.735E-10	4.974E-09	2.240E-08	9.460E-08	
Ac-227	U-235	9.835E-01	0.000E+00	3.278E-06	1.615E-03	2.221E-03	5.197E-03	1.453E-02	4.538E-02	9.701E-02	1.995E-01	
Ac-227	äS(j):		0.000E+00	3.278E-06	1.615E-03	2.221E-03	5.197E-03	1.453E-02	4.538E-02	9.701E-02	1.995E-01	
0Ac-227	Pu-239	1.633E-06	0.000E+00	1.791E-21	2.337E-17	3.900E-17	1.582E-16	9.529E-16	8.264E-15	3.722E-14	1.572E-13	
Ac-227	Pu-239	8.257E-06	0.000E+00	9.054E-21	1.182E-16	1.972E-16	7.997E-16	4.817E-15	4.178E-14	1.882E-13	7.947E-13	
Ac-227	Pu-239	2.720E-03	0.000E+00	2.983E-18	3.893E-14	6.496E-14	2.635E-13	1.587E-12	1.377E-11	6.200E-11	2.618E-10	
Ac-227	U-235	2.722E-03	0.000E+00	9.071E-09	4.469E-06	6.147E-06	1.438E-05	4.022E-05	1.256E-04	2.685E-04	5.520E-04	
Ac-227	äS(j):		0.000E+00	9.071E-09	4.469E-06	6.147E-06	1.438E-05	4.022E-05	1.256E-04	2.685E-04	5.520E-04	
0Pu-239	Pu-239	8.257E-06	8.257E-05	8.256E-05	8.251E-05	8.250E-05	8.245E-05	8.233E-05	8.198E-05	8.139E-05	8.023E-05	
Pu-239	Pu-239	2.285E-08	2.285E-07	2.285E-07	2.284E-07	2.283E-07	2.282E-07	2.279E-07	2.269E-07	2.253E-07	2.220E-07	
Pu-239	äS(j):		8.280E-05	8.279E-05	8.274E-05	8.272E-05	8.268E-05	8.256E-05	8.220E-05	8.161E-05	8.045E-05	
0Ac-227	Pu-239	2.285E-08	0.000E+00	2.506E-23	3.271E-19	5.457E-19	2.213E-18	1.333E-17	1.156E-16	5.208E-16	2.199E-15	
Ac-227	Pu-239	4.954E-10	0.000E+00	5.433E-25	7.091E-21	1.183E-20	4.799E-20	2.891E-19	2.507E-18	1.129E-17	4.768E-17	
Ac-227	Pu-239	3.806E-05	0.000E+00	4.174E-20	5.448E-16	9.090E-16	3.687E-15	2.221E-14	1.926E-13	8.675E-13	3.663E-12	
Ac-227	U-235	3.809E-05	0.000E+00	1.269E-10	6.253E-08	8.601E-08	2.012E-07	5.627E-07	1.757E-06	3.757E-06	7.724E-06	
Ac-227	äS(j):		0.000E+00	1.269E-10	6.253E-08	8.601E-08	2.012E-07	5.627E-07	1.757E-06	3.757E-06	7.724E-06	
0Pu-239	Pu-239	4.954E-10	4.954E-09	4.954E-09	4.951E-09	4.950E-09	4.947E-09	4.940E-09	4.919E-09	4.884E-09	4.814E-09	
Pu-239	Pu-239	1.371E-12	1.371E-11	1.371E-11	1.370E-11	1.370E-11	1.369E-11	1.367E-11	1.361E-11	1.352E-11	1.332E-11	
Pu-239	äS(j):		4.968E-09	4.968E-09	4.964E-09	4.964E-09	4.961E-09	4.954E-09	4.932E-09	4.897E-09	4.827E-09	
0Ac-227	Pu-239	1.371E-12	0.000E+00	1.504E-27	1.962E-23	3.274E-23	1.328E-22	8.000E-22	6.939E-21	3.125E-20	1.320E-19	
Ac-227	Pu-239	2.284E-09	0.000E+00	2.505E-24	3.269E-20	5.454E-20	2.212E-19	1.333E-18	1.156E-17	5.206E-17	2.198E-16	
Ac-227	U-235	2.285E-09	0.000E+00	7.616E-15	3.752E-12	5.161E-12	1.208E-11	3.376E-11	1.054E-10	2.254E-10	4.635E-10	
Ac-227	äS(j):		0.000E+00	7.616E-15	3.752E-12	5.161E-12	1.208E-11	3.376E-11	1.054E-10	2.254E-10	4.635E-10	
0Pu-239	Pu-239	9.829E-01	9.829E+00	9.829E+00	9.822E+00	9.820E+00	9.815E+00	9.801E+00	9.758E+00	9.689E+00	9.550E+00	
Pu-239	Pu-239	2.720E-03	2.720E-02	2.720E-02	2.718E-02	2.718E-02	2.716E-02	2.712E-02	2.701E-02	2.681E-02	2.643E-02	
Pu-239	äS(j):		9.856E+00	9.856E+00	9.849E+00	9.848E+00	9.842E+00	9.828E+00	9.785E+00	9.715E+00	9.577E+00	
0Pu-239	Pu-239	1.375E-02	1.375E-01	1.375E-01	1.374E-01	1.374E-01	1.373E-01	1.371E-01	1.365E-01	1.356E-01	1.336E-01	
Pu-239	Pu-239	3.806E-05	3.806E-04	3.806E-04	3.804E-04	3.803E-04	3.801E-04	3.795E-04	3.779E-04	3.752E-04	3.698E-04	
Pu-239	äS(j):		1.379E-01	1.379E-01	1.378E-01	1.378E-01	1.377E-01	1.375E-01	1.369E-01	1.359E-01	1.340E-01	
0Ac-227	Pu-239	1.375E-02	0.000E+00	1.508E-17	1.968E-13	3.284E-13	1.332E-12	8.024E-12	6.959E-11	3.135E-10	1.324E-09	
Ac-227	U-235	1.376E-02	0.000E+00	4.586E-08	2.259E-05	3.108E-05	7.271E-05	2.033E-04	6.349E-04	1.357E-03	2.791E-03	
Ac-227	äS(j):		0.000E+00	4.586E-08	2.259E-05	3.108E-05	7.271E-05	2.033E-04	6.349E-04	1.357E-03	2.791E-03	
0Pu-239	Pu-239	8.252E-07	8.252E-06	8.252E-06	8.246E-06	8.245E-06	8.240E-06	8.228E-06	8.193E-06	8.134E-06	8.018E-06	
Pu-239	Pu-239	2.284E-09	2.284E-08	2.284E-08	2.282E-08	2.282E-08	2.281E-08	2.277E-08	2.268E-08	2.251E-08	2.219E-08	
Pu-239	äS(j):		8.275E-06	8.275E-06	8.269E-06	8.268E-06	8.263E-06	8.251E-06	8.216E-06	8.157E-06	8.040E-06	

Individual Nuclide Soil Concentration
Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	S(j,t), pCi/g									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Ac-227	Pu-239	8.252E-07	0.000E+00	9.050E-22	1.181E-17	1.971E-17	7.993E-17	4.815E-16	4.176E-15	1.881E-14	7.942E-14	
Ac-227	U-235	8.257E-07	0.000E+00	2.752E-12	1.356E-09	1.865E-09	4.363E-09	1.220E-08	3.810E-08	8.145E-08	1.675E-07	
Ac-227	äS(j):		0.000E+00	2.752E-12	1.356E-09	1.865E-09	4.363E-09	1.220E-08	3.810E-08	8.145E-08	1.675E-07	
ORu-106	Ru-106	1.000E+00	1.000E+01	5.078E+00	4.388E-07	1.481E-08	1.925E-14	3.706E-29	0.000E+00	0.000E+00	0.000E+00	
OSr-90	Sr-90	1.000E+00	1.000E+01	9.762E+00	5.478E+00	4.856E+00	3.000E+00	9.003E-01	2.432E-02	5.914E-05	3.498E-10	
OTc-99	Tc-99	1.000E+00	1.000E+01	9.999E+00	9.981E+00	9.977E+00	9.962E+00	9.925E+00	9.812E+00	9.628E+00	9.270E+00	
0Th-228	Th-228	1.000E+00	1.000E+01	6.959E+00	1.156E-03	1.887E-04	1.337E-07	1.788E-15	4.277E-39	0.000E+00	0.000E+00	
Th-228	Th-232	1.000E+00	0.000E+00	1.866E-01	9.265E+00	9.597E+00	9.964E+00	1.000E+01	1.000E+01	1.000E+01	1.000E+01	
Th-228	äS(j):		1.000E+01	7.145E+00	9.266E+00	9.598E+00	9.964E+00	1.000E+01	1.000E+01	1.000E+01	1.000E+01	
0Th-230	Th-230	1.319E-06	1.319E-05	1.319E-05	1.319E-05	1.319E-05	1.319E-05	1.318E-05	1.316E-05	1.313E-05	1.307E-05	
Th-230	Th-230	1.899E-08	1.899E-07	1.899E-07	1.899E-07	1.899E-07	1.898E-07	1.897E-07	1.895E-07	1.891E-07	1.882E-07	
Th-230	äS(j):		1.338E-05	1.338E-05	1.338E-05	1.338E-05	1.338E-05	1.337E-05	1.335E-05	1.332E-05	1.326E-05	
0Th-230	Th-230	2.100E-04	2.100E-03	2.100E-03	2.099E-03	2.099E-03	2.099E-03	2.098E-03	2.095E-03	2.090E-03	2.080E-03	
Th-230	Th-230	2.771E-10	2.771E-09	2.771E-09	2.771E-09	2.771E-09	2.770E-09	2.769E-09	2.765E-09	2.759E-09	2.746E-09	
Th-230	äS(j):		2.100E-03	2.100E-03	2.099E-03	2.099E-03	2.099E-03	2.098E-03	2.095E-03	2.090E-03	2.080E-03	
0Th-230	Th-230	3.989E-12	3.989E-11	3.989E-11	3.988E-11	3.988E-11	3.987E-11	3.986E-11	3.980E-11	3.971E-11	3.953E-11	
Th-230	Th-230	1.998E-04	1.998E-03	1.998E-03	1.997E-03	1.997E-03	1.997E-03	1.996E-03	1.993E-03	1.988E-03	1.979E-03	
Th-230	äS(j):		1.998E-03	1.998E-03	1.997E-03	1.997E-03	1.997E-03	1.996E-03	1.993E-03	1.988E-03	1.979E-03	
0Th-230	Th-230	2.637E-10	2.637E-09	2.637E-09	2.636E-09	2.636E-09	2.636E-09	2.634E-09	2.631E-09	2.625E-09	2.613E-09	
Th-230	Th-230	3.795E-12	3.795E-11	3.795E-11	3.795E-11	3.794E-11	3.794E-11	3.792E-11	3.787E-11	3.778E-11	3.761E-11	
Th-230	äS(j):		2.675E-09	2.675E-09	2.674E-09	2.674E-09	2.674E-09	2.672E-09	2.669E-09	2.662E-09	2.650E-09	
0Th-230	Th-230	4.196E-08	4.196E-07	4.196E-07	4.195E-07	4.195E-07	4.194E-07	4.192E-07	4.186E-07	4.177E-07	4.157E-07	
Th-230	Th-230	5.538E-14	5.538E-13	5.538E-13	5.537E-13	5.537E-13	5.536E-13	5.533E-13	5.526E-13	5.513E-13	5.488E-13	
Th-230	äS(j):		4.196E-07	4.196E-07	4.195E-07	4.195E-07	4.194E-07	4.192E-07	4.186E-07	4.177E-07	4.157E-07	
0Th-230	Th-230	7.972E-16	7.972E-15	7.972E-15	7.970E-15	7.970E-15	7.968E-15	7.965E-15	7.954E-15	7.935E-15	7.899E-15	
Th-230	Th-230	2.000E-07	2.000E-06	2.000E-06	2.000E-06	1.999E-06	1.999E-06	1.998E-06	1.995E-06	1.991E-06	1.982E-06	
Th-230	äS(j):		2.000E-06	2.000E-06	2.000E-06	1.999E-06	1.999E-06	1.998E-06	1.995E-06	1.991E-06	1.982E-06	
0Th-230	Th-230	2.640E-13	2.640E-12	2.640E-12	2.639E-12	2.639E-12	2.639E-12	2.638E-12	2.634E-12	2.628E-12	2.616E-12	
Th-230	Th-230	3.800E-15	3.800E-14	3.800E-14	3.799E-14	3.799E-14	3.798E-14	3.797E-14	3.791E-14	3.783E-14	3.765E-14	
Th-230	äS(j):		2.678E-12	2.678E-12	2.677E-12	2.677E-12	2.677E-12	2.676E-12	2.672E-12	2.666E-12	2.653E-12	
0Th-232	Th-232	1.000E+00	1.000E+01	1.000E+01	1.000E+01	1.000E+01	1.000E+01	1.000E+01	1.000E+01	1.000E+01	1.000E+01	
ORa-228	Th-232	1.000E+00	0.000E+00	1.136E+00	9.509E+00	9.731E+00	9.976E+00	1.000E+01	1.000E+01	1.000E+01	1.000E+01	
OU-234	U-234	1.319E-06	1.319E-05	1.319E-05	1.319E-05	1.319E-05	1.319E-05	1.319E-05	1.318E-05	1.317E-05	1.315E-05	
U-234	U-234	1.899E-08	1.899E-07	1.899E-07	1.899E-07	1.899E-07	1.899E-07	1.899E-07	1.898E-07	1.896E-07	1.894E-07	
U-234	äS(j):		1.338E-05	1.338E-05	1.338E-05	1.338E-05	1.338E-05	1.338E-05	1.337E-05	1.336E-05	1.334E-05	

Individual Nuclide Soil Concentration
Parent Nuclide and Branch Fraction Indicated

[illegible]

Individual Nuclide Soil Concentration
Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	S(j,t), pCi/g									
(j)	(i)		t= 0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03	
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
U-238	U-238	4.219E-13	4.219E-12	4.219E-12	4.219E-12	4.219E-12	4.219E-12	4.219E-12	4.219E-12	4.218E-12	4.218E-12	
U-238	U-238	6.073E-15	6.073E-14	6.073E-14	6.073E-14	6.073E-14	6.073E-14	6.073E-14	6.072E-14	6.072E-14	6.071E-14	
U-238	äS(j):		4.280E-12	4.280E-12	4.280E-12	4.280E-12	4.280E-12	4.280E-12	4.279E-12	4.279E-12	4.279E-12	
0U-238	U-238	6.713E-11	6.713E-10	6.713E-10	6.713E-10	6.713E-10	6.713E-10	6.713E-10	6.713E-10	6.713E-10	6.712E-10	
U-238	U-238	8.862E-17	8.862E-16	8.862E-16	8.861E-16	8.861E-16	8.861E-16	8.861E-16	8.861E-16	8.861E-16	8.860E-16	
U-238	äS(j):		6.713E-10	6.713E-10	6.713E-10	6.713E-10	6.713E-10	6.713E-10	6.713E-10	6.713E-10	6.712E-10	
0U-238	U-238	1.276E-18	1.276E-17	1.276E-17	1.276E-17	1.276E-17	1.276E-17	1.275E-17	1.275E-17	1.275E-17	1.275E-17	
U-238	U-238	3.200E-10	3.200E-09	3.200E-09	3.200E-09	3.200E-09	3.200E-09	3.200E-09	3.200E-09	3.200E-09	3.199E-09	
U-238	äS(j):		3.200E-09	3.200E-09	3.200E-09	3.200E-09	3.200E-09	3.200E-09	3.200E-09	3.200E-09	3.199E-09	
0U-238	U-238	4.224E-16	4.224E-15	4.224E-15	4.224E-15	4.224E-15	4.224E-15	4.224E-15	4.224E-15	4.224E-15	4.223E-15	
U-238	U-238	6.080E-18	6.080E-17	6.080E-17	6.080E-17	6.080E-17	6.080E-17	6.080E-17	6.080E-17	6.079E-17	6.079E-17	
U-238	äS(j):		4.285E-15	4.285E-15	4.285E-15	4.285E-15	4.285E-15	4.285E-15	4.285E-15	4.284E-15	4.284E-15	
0U-238	U-238	9.980E-01	9.980E+00	9.980E+00	9.980E+00	9.980E+00	9.980E+00	9.980E+00	9.979E+00	9.979E+00	9.978E+00	
U-238	U-238	1.317E-06	1.317E-05	1.317E-05	1.317E-05	1.317E-05	1.317E-05	1.317E-05	1.317E-05	1.317E-05	1.317E-05	
U-238	äS(j):		9.980E+00	9.980E+00	9.980E+00	9.980E+00	9.980E+00	9.980E+00	9.979E+00	9.979E+00	9.978E+00	
0U-238	U-238	1.896E-08	1.896E-07	1.896E-07	1.896E-07	1.896E-07	1.896E-07	1.896E-07	1.896E-07	1.896E-07	1.896E-07	
U-238	U-238	2.096E-04	2.096E-03	2.096E-03	2.096E-03	2.096E-03	2.096E-03	2.096E-03	2.096E-03	2.096E-03	2.096E-03	
U-238	äS(j):		2.096E-03	2.096E-03	2.096E-03	2.096E-03	2.096E-03	2.096E-03	2.096E-03	2.096E-03	2.096E-03	
0U-238	U-238	2.767E-10	2.767E-09	2.767E-09	2.767E-09	2.767E-09	2.767E-09	2.767E-09	2.767E-09	2.767E-09	2.766E-09	
U-238	U-238	3.983E-12	3.983E-11	3.983E-11	3.983E-11	3.983E-11	3.983E-11	3.983E-11	3.983E-11	3.982E-11	3.982E-11	
U-238	äS(j):		2.807E-09	2.807E-09	2.807E-09	2.807E-09	2.807E-09	2.807E-09	2.807E-09	2.807E-09	2.806E-09	
0U-238	U-238	1.994E-04	1.994E-03	1.994E-03	1.994E-03	1.994E-03	1.994E-03	1.994E-03	1.994E-03	1.994E-03	1.994E-03	
U-238	U-238	2.633E-10	2.633E-09	2.633E-09	2.633E-09	2.633E-09	2.633E-09	2.633E-09	2.632E-09	2.632E-09	2.632E-09	
U-238	äS(j):		1.994E-03	1.994E-03	1.994E-03	1.994E-03	1.994E-03	1.994E-03	1.994E-03	1.994E-03	1.994E-03	
0U-238	U-238	3.789E-12	3.789E-11	3.789E-11	3.789E-11	3.789E-11	3.789E-11	3.789E-11	3.789E-11	3.789E-11	3.789E-11	
U-238	U-238	4.189E-08	4.189E-07	4.189E-07	4.189E-07	4.189E-07	4.189E-07	4.189E-07	4.189E-07	4.189E-07	4.188E-07	
U-238	äS(j):		4.189E-07	4.189E-07	4.189E-07	4.189E-07	4.189E-07	4.189E-07	4.189E-07	4.189E-07	4.189E-07	
0U-238	U-238	5.530E-14	5.530E-13	5.530E-13	5.530E-13	5.530E-13	5.530E-13	5.529E-13	5.529E-13	5.529E-13	5.529E-13	
U-238	U-238	7.959E-16	7.959E-15	7.959E-15	7.959E-15	7.959E-15	7.959E-15	7.959E-15	7.959E-15	7.958E-15	7.958E-15	
U-238	äS(j):		5.609E-13	5.609E-13	5.609E-13	5.609E-13	5.609E-13	5.609E-13	5.609E-13	5.609E-13	5.608E-13	
0U-238	U-238	1.997E-07	1.997E-06	1.997E-06	1.997E-06	1.997E-06	1.997E-06	1.997E-06	1.997E-06	1.997E-06	1.996E-06	
U-238	U-238	2.636E-13	2.636E-12	2.636E-12	2.636E-12	2.636E-12	2.636E-12	2.636E-12	2.636E-12	2.636E-12	2.635E-12	
U-238	äS(j):		1.997E-06	1.997E-06	1.997E-06	1.997E-06	1.997E-06	1.997E-06	1.997E-06	1.997E-06	1.996E-06	
0U-238	U-238	3.794E-15	3.794E-14	3.794E-14	3.794E-14	3.794E-14	3.794E-14	3.794E-14	3.794E-14	3.794E-14	3.793E-14	
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii

THF(i) is the thread fraction of the parent nuclide.
0RESCALC.EXE execution time = 158.38 seconds

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Time = 0.000E+00	24
Time = 1.000E+00	26
Time = 2.500E+01	28
Time = 3.000E+01	30
Time = 5.000E+01	32
Time = 1.000E+02	34
Time = 2.500E+02	36
Time = 5.000E+02	38
Time = 1.000E+03	40
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Menu	Parameter	Current Value#	Base Case*	Parameter Name
A-1	DCF's for external ground radiation, (mrem/yr)/(pCi/g)			
A-1	Ac-225 (Source: DCFPAK3.02)	5.286E-02	5.287E-02	DCF1(1)
A-1	Ac-227 (Source: DCFPAK3.02)	2.615E-04	2.615E-04	DCF1(2)
A-1	Ac-228 (Source: DCFPAK3.02)	5.044E+00	5.044E+00	DCF1(3)
A-1	Am-241 (Source: DCFPAK3.02)	3.717E-02	3.718E-02	DCF1(4)
A-1	At-217 (Source: DCFPAK3.02)	1.186E-03	1.186E-03	DCF1(5)
A-1	At-218 (Source: DCFPAK3.02)	5.567E-05	5.567E-05	DCF1(6)
A-1	At-219 (Source: DCFPAK3.02)	0.000E+00	0.000E+00	DCF1(7)
A-1	Ba-137m (Source: DCFPAK3.02)	3.381E+00	3.381E+00	DCF1(8)
A-1	Bi-210 (Source: DCFPAK3.02)	5.473E-03	5.474E-03	DCF1(9)
A-1	Bi-211 (Source: DCFPAK3.02)	2.410E-01	2.410E-01	DCF1(10)
A-1	Bi-212 (Source: DCFPAK3.02)	6.258E-01	6.259E-01	DCF1(11)
A-1	Bi-213 (Source: DCFPAK3.02)	6.874E-01	6.875E-01	DCF1(12)
A-1	Bi-214 (Source: DCFPAK3.02)	9.135E+00	9.136E+00	DCF1(13)
A-1	Bi-215 (Source: DCFPAK3.02)	1.369E+00	1.369E+00	DCF1(14)
A-1	Co-60 (Source: DCFPAK3.02)	1.539E+01	1.539E+01	DCF1(15)
A-1	Cs-134 (Source: DCFPAK3.02)	8.892E+00	8.893E+00	DCF1(16)
A-1	Cs-137 (Source: DCFPAK3.02)	8.686E-04	8.687E-04	DCF1(17)
A-1	Eu-152 (Source: DCFPAK3.02)	6.743E+00	6.744E+00	DCF1(18)
A-1	Eu-154 (Source: DCFPAK3.02)	7.285E+00	7.286E+00	DCF1(19)
A-1	Eu-155 (Source: DCFPAK3.02)	1.633E-01	1.633E-01	DCF1(20)
A-1	Fr-221 (Source: DCFPAK3.02)	1.332E-01	1.332E-01	DCF1(21)
A-1	Fr-223 (Source: DCFPAK3.02)	1.758E-01	1.758E-01	DCF1(22)
A-1	Gd-152 (Source: DCFPAK3.02)	0.000E+00	0.000E+00	DCF1(23)
A-1	H-3 (Source: DCFPAK3.02)	0.000E+00	0.000E+00	DCF1(24)
A-1	Hg-206 (Source: DCFPAK3.02)	6.127E-01	6.128E-01	DCF1(25)
A-1	I-129 (Source: DCFPAK3.02)	9.695E-03	9.696E-03	DCF1(26)
A-1	Mn-54 (Source: DCFPAK3.02)	4.857E+00	4.857E+00	DCF1(27)
A-1	Na-22 (Source: DCFPAK3.02)	1.289E+01	1.289E+01	DCF1(28)
A-1	Nd-144 (Source: DCFPAK3.02)	0.000E+00	0.000E+00	DCF1(29)
A-1	Ni-63 (Source: DCFPAK3.02)	0.000E+00	0.000E+00	DCF1(30)
A-1	Np-237 (Source: DCFPAK3.02)	6.706E-02	6.707E-02	DCF1(31)
A-1	Pa-231 (Source: DCFPAK3.02)	1.608E-01	1.609E-01	DCF1(32)
A-1	Pa-233 (Source: DCFPAK3.02)	1.018E+00	1.018E+00	DCF1(33)
A-1	Pa-234 (Source: DCFPAK3.02)	8.275E+00	8.276E+00	DCF1(34)
A-1	Pa-234m (Source: DCFPAK3.02)	1.257E-01	1.257E-01	DCF1(35)
A-1	Pb-209 (Source: DCFPAK3.02)	7.528E-04	7.529E-04	DCF1(36)
A-1	Pb-210 (Source: DCFPAK3.02)	2.092E-03	2.092E-03	DCF1(37)
A-1	Pb-211 (Source: DCFPAK3.02)	3.680E-01	3.680E-01	DCF1(38)
A-1	Pb-212 (Source: DCFPAK3.02)	6.314E-01	6.315E-01	DCF1(39)

A-1 ³ Pb-214 (Source: DCFPAK3.02)
 A-1 ³ Po-210 (Source: DCFPAK3.02)
 A-1 ³ Po-211 (Source: DCFPAK3.02)
 A-1 ³ Po-212 (Source: DCFPAK3.02)
 A-1 ³ Po-213 (Source: DCFPAK3.02)
 A-1 ³ Po-214 (Source: DCFPAK3.02)
 A-1 ³ Po-215 (Source: DCFPAK3.02)
 A-1 ³ Po-216 (Source: DCFPAK3.02)
 A-1 ³ Po-218 (Source: DCFPAK3.02)
 A-1 ³ Pu-238 (Source: DCFPAK3.02)

³ 1.257E+00 ³ 1.257E+00 ³ DCF1(40)
³ 5.641E-05 ³ 5.642E-05 ³ DCF1(41)
³ 4.707E-02 ³ 4.708E-02 ³ DCF1(42)
³ 0.000E+00 ³ 0.000E+00 ³ DCF1(43)
³ 2.167E-04 ³ 2.167E-04 ³ DCF1(44)
³ 4.801E-04 ³ 4.801E-04 ³ DCF1(45)
³ 9.452E-04 ³ 9.453E-04 ³ DCF1(46)
³ 8.873E-05 ³ 8.874E-05 ³ DCF1(47)
³ 9.228E-09 ³ 9.229E-09 ³ DCF1(48)
³ 1.111E-04 ³ 1.112E-04 ³ DCF1(49)

Dose Conversion Factor (and Related) Parameter Summary (continued)

Dose Library: DCFPAK adult HTO Plus DCFPAK3.02 (Adult)

0	3		3	Current	3	Base	3	Parameter
Menu	3	Parameter	3	Value#	3	Case*	3	Name
AA								
A-1	3	Pu-239 (Source: DCFPAK3.02)	3	2.765E-04	3	2.765E-04	3	DCF1(50)
A-1	3	Ra-223 (Source: DCFPAK3.02)	3	5.791E-01	3	5.791E-01	3	DCF1(51)
A-1	3	Ra-224 (Source: DCFPAK3.02)	3	4.950E-02	3	4.951E-02	3	DCF1(52)
A-1	3	Ra-225 (Source: DCFPAK3.02)	3	8.910E-03	3	8.911E-03	3	DCF1(53)
A-1	3	Ra-226 (Source: DCFPAK3.02)	3	3.176E-02	3	3.176E-02	3	DCF1(54)
A-1	3	Ra-228 (Source: DCFPAK3.02)	3	6.575E-05	3	6.576E-05	3	DCF1(55)
A-1	3	Rh-106 (Source: DCFPAK3.02)	3	1.252E+00	3	1.252E+00	3	DCF1(56)
A-1	3	Rn-218 (Source: DCFPAK3.02)	3	4.259E-03	3	4.260E-03	3	DCF1(57)
A-1	3	Rn-219 (Source: DCFPAK3.02)	3	2.970E-01	3	2.970E-01	3	DCF1(58)
A-1	3	Rn-220 (Source: DCFPAK3.02)	3	3.474E-03	3	3.475E-03	3	DCF1(59)
A-1	3	Rn-222 (Source: DCFPAK3.02)	3	2.130E-03	3	2.130E-03	3	DCF1(60)
A-1	3	Ru-106 (Source: DCFPAK3.02)	3	0.000E+00	3	0.000E+00	3	DCF1(61)
A-1	3	Sm-148 (Source: DCFPAK3.02)	3	0.000E+00	3	0.000E+00	3	DCF1(62)
A-1	3	Sr-90 (Source: DCFPAK3.02)	3	6.463E-04	3	6.464E-04	3	DCF1(63)
A-1	3	Tc-99 (Source: DCFPAK3.02)	3	1.104E-04	3	1.104E-04	3	DCF1(64)
A-1	3	Th-227 (Source: DCFPAK3.02)	3	5.641E-01	3	5.642E-01	3	DCF1(65)
A-1	3	Th-228 (Source: DCFPAK3.02)	3	7.248E-03	3	7.249E-03	3	DCF1(66)
A-1	3	Th-229 (Source: DCFPAK3.02)	3	2.877E-01	3	2.877E-01	3	DCF1(67)
A-1	3	Th-230 (Source: DCFPAK3.02)	3	1.106E-03	3	1.106E-03	3	DCF1(68)
A-1	3	Th-231 (Source: DCFPAK3.02)	3	3.250E-02	3	3.251E-02	3	DCF1(69)
A-1	3	Th-232 (Source: DCFPAK3.02)	3	4.782E-04	3	4.783E-04	3	DCF1(70)
A-1	3	Th-234 (Source: DCFPAK3.02)	3	2.316E-02	3	2.317E-02	3	DCF1(71)
A-1	3	Tl-206 (Source: DCFPAK3.02)	3	1.278E-02	3	1.278E-02	3	DCF1(72)
A-1	3	Tl-207 (Source: DCFPAK3.02)	3	2.391E-02	3	2.391E-02	3	DCF1(73)
A-1	3	Tl-208 (Source: DCFPAK3.02)	3	2.167E+01	3	2.167E+01	3	DCF1(74)
A-1	3	Tl-209 (Source: DCFPAK3.02)	3	1.287E+01	3	1.287E+01	3	DCF1(75)
A-1	3	Tl-210 (Source: DCFPAK3.02)	3	1.677E+01	3	1.678E+01	3	DCF1(76)
A-1	3	U-233 (Source: DCFPAK3.02)	3	9.191E-04	3	9.192E-04	3	DCF1(77)
A-1	3	U-234 (Source: DCFPAK3.02)	3	3.456E-04	3	3.456E-04	3	DCF1(78)
A-1	3	U-235 (Source: DCFPAK3.02)	3	7.005E-01	3	7.006E-01	3	DCF1(79)
A-1	3	U-235m (Source: DCFPAK3.02)	3	0.000E+00	3	0.000E+00	3	DCF1(80)
A-1	3	U-238 (Source: DCFPAK3.02)	3	1.713E-04	3	1.713E-04	3	DCF1(81)
A-1	3	Y-90 (Source: DCFPAK3.02)	3	4.016E-02	3	4.017E-02	3	DCF1(82)
3								
B-1	3	Dose conversion factors for inhalation, mrem/pCi:	3		3		3	
B-1	3	Ac-227+D	3	6.464E-01	3	5.760E-01	3	DCF2(1)
B-1	3	Ac-227+D1	3	6.464E-01	3	5.760E-01	3	DCF2(2)
B-1	3	Ac-227+D2	3	6.081E-01	3	5.760E-01	3	DCF2(3)
B-1	3	Ac-227+D3	3	6.081E-01	3	5.760E-01	3	DCF2(4)
B-1	3	Ac-227+D4	3	5.761E-01	3	5.760E-01	3	DCF2(5)

B-1 ³ Ac-227+D5
B-1 ³ Am-241
B-1 ³ Co-60
B-1 ³ Cs-134
B-1 ³ Cs-137+D
B-1 ³ Eu-152
B-1 ³ Eu-154
B-1 ³ Eu-155
B-1 ³ Gd-152
B-1 ³ H-3

³ 5.761E-01 ³ 5.760E-01 ³ DCF2(6)
³ 3.566E-01 ³ 3.566E-01 ³ DCF2(7)
³ 1.138E-04 ³ 1.138E-04 ³ DCF2(8)
³ 7.558E-05 ³ 7.558E-05 ³ DCF2(9)
³ 1.457E-04 ³ 1.457E-04 ³ DCF2(10)
³ 3.452E-04 ³ 3.452E-04 ³ DCF2(11)
³ 3.947E-04 ³ 3.947E-04 ³ DCF2(13)
³ 4.599E-05 ³ 4.599E-05 ³ DCF2(14)
³ 7.037E-02 ³ 7.037E-02 ³ DCF2(15)
³ 6.778E-08 ³ 9.689E-07 ³ DCF2(16)

Dose Conversion Factor (and Related) Parameter Summary (continued)

Dose Library: DCFPAK adult HTO Plus DCFPAK3.02 (Adult)

0	3		3	Current	3	Base	3	Parameter
Menu	3	Parameter	3	Value#	3	Case*	3	Name
AA								
B-1	3	I-129	3	3.630E-04	3	3.630E-04	3	DCF2(17)
B-1	3	Mn-54	3	1.210E-05	3	1.210E-05	3	DCF2(18)
B-1	3	Na-22	3	1.075E-04	3	1.075E-04	3	DCF2(19)
B-1	3	Nd-144	3	7.037E-02	3	7.037E-02	3	DCF2(20)
B-1	3	Ni-63	3	7.388E-06	3	7.388E-06	3	DCF2(21)
B-1	3	Np-237+D	3	1.839E-01	3	1.839E-01	3	DCF2(22)
B-1	3	Pa-231	3	8.505E-01	3	8.505E-01	3	DCF2(23)
B-1	3	Pb-210+D	3	3.708E-02	3	2.077E-02	3	DCF2(29)
B-1	3	Pb-210+D1	3	2.126E-02	3	2.077E-02	3	DCF2(30)
B-1	3	Pb-210+D2	3	2.077E-02	3	2.077E-02	3	DCF2(31)
B-1	3	Pu-238	3	3.999E-01	3	3.999E-01	3	DCF2(32)
B-1	3	Pu-239	3	4.410E-01	3	4.410E-01	3	DCF2(48)
B-1	3	Pu-239+D	3	4.410E-01	3	4.410E-01	3	DCF2(54)
B-1	3	Ra-226+D	3	3.528E-02	3	3.517E-02	3	DCF2(60)
B-1	3	Ra-226+D1	3	3.528E-02	3	3.517E-02	3	DCF2(63)
B-1	3	Ra-226+D2	3	3.523E-02	3	3.517E-02	3	DCF2(66)
B-1	3	Ra-226+D3	3	3.523E-02	3	3.517E-02	3	DCF2(69)
B-1	3	Ra-226+D4	3	3.517E-02	3	3.517E-02	3	DCF2(72)
B-1	3	Ra-228+D	3	5.943E-02	3	5.938E-02	3	DCF2(75)
B-1	3	Ru-106+D	3	2.461E-04	3	2.461E-04	3	DCF2(76)
B-1	3	Sm-148	3	7.340E-02	3	7.340E-02	3	DCF2(77)
B-1	3	Sr-90+D	3	5.841E-04	3	5.786E-04	3	DCF2(78)
B-1	3	Tc-99	3	4.935E-05	3	4.935E-05	3	DCF2(79)
B-1	3	Th-228+D	3	1.600E-01	3	1.468E-01	3	DCF2(80)
B-1	3	Th-229+D	3	9.433E-01	3	8.831E-01	3	DCF2(81)
B-1	3	Th-230	3	3.759E-01	3	3.759E-01	3	DCF2(82)
B-1	3	Th-232	3	4.070E-01	3	4.070E-01	3	DCF2(97)
B-1	3	U-233	3	3.549E-02	3	3.549E-02	3	DCF2(98)
B-1	3	U-234	3	3.479E-02	3	3.479E-02	3	DCF2(99)
B-1	3	U-235+D	3	3.132E-02	3	3.132E-02	3	DCF2(114)
B-1	3	U-238	3	2.973E-02	3	2.973E-02	3	DCF2(120)
B-1	3	U-238+D	3	2.976E-02	3	2.973E-02	3	DCF2(121)
B-1	3	U-238+D1	3	2.976E-02	3	2.973E-02	3	DCF2(136)
3								
D-1	3	Dose conversion factors for ingestion, mrem/pCi:	3		3		3	
D-1	3	Ac-227+D	3	1.607E-03	3	1.191E-03	3	DCF3(1)
D-1	3	Ac-227+D1	3	1.607E-03	3	1.191E-03	3	DCF3(2)
D-1	3	Ac-227+D2	3	1.582E-03	3	1.191E-03	3	DCF3(3)
D-1	3	Ac-227+D3	3	1.582E-03	3	1.191E-03	3	DCF3(4)
D-1	3	Ac-227+D4	3	1.201E-03	3	1.191E-03	3	DCF3(5)

D-1 ³ Ac-227+D5
D-1 ³ Am-241
D-1 ³ Co-60
D-1 ³ Cs-134
D-1 ³ Cs-137+D
D-1 ³ Eu-152
D-1 ³ Eu-154
D-1 ³ Eu-155
D-1 ³ Gd-152
D-1 ³ H-3

³ 1.201E-03 ³ 1.191E-03 ³ DCF3(6)
³ 7.548E-04 ³ 7.548E-04 ³ DCF3(7)
³ 1.265E-05 ³ 1.265E-05 ³ DCF3(8)
³ 7.141E-05 ³ 7.141E-05 ³ DCF3(9)
³ 5.032E-05 ³ 5.032E-05 ³ DCF3(10)
³ 4.958E-06 ³ 4.958E-06 ³ DCF3(11)
³ 7.289E-06 ³ 7.289E-06 ³ DCF3(13)
³ 1.228E-06 ³ 1.228E-06 ³ DCF3(14)
³ 1.517E-04 ³ 1.517E-04 ³ DCF3(15)
³ 7.067E-08 ³ 1.550E-07 ³ DCF3(16)

Dose Conversion Factor (and Related) Parameter Summary (continued)

Dose Library: DCFPAK adult HTO Plus DCFPAK3.02 (Adult)

0	3		3	Current	3	Base	3	Parameter
Menu	3	Parameter	3	Value#	3	Case*	3	Name
AA								
D-1	3	I-129	3	3.996E-04	3	3.996E-04	3	DCF3(17)
D-1	3	Mn-54	3	2.668E-06	3	2.668E-06	3	DCF3(18)
D-1	3	Na-22	3	1.173E-05	3	1.173E-05	3	DCF3(19)
D-1	3	Nd-144	3	1.510E-04	3	1.510E-04	3	DCF3(20)
D-1	3	Ni-63	3	5.735E-07	3	5.735E-07	3	DCF3(21)
D-1	3	Np-237+D	3	3.995E-04	3	3.959E-04	3	DCF3(22)
D-1	3	Pa-231	3	1.772E-03	3	1.772E-03	3	DCF3(23)
D-1	3	Pb-210+D	3	7.057E-03	3	2.575E-03	3	DCF3(29)
D-1	3	Pb-210+D1	3	2.580E-03	3	2.575E-03	3	DCF3(30)
D-1	3	Pb-210+D2	3	2.575E-03	3	2.575E-03	3	DCF3(31)
D-1	3	Pu-238	3	8.436E-04	3	8.436E-04	3	DCF3(32)
D-1	3	Pu-239	3	9.287E-04	3	9.287E-04	3	DCF3(48)
D-1	3	Pu-239+D	3	9.287E-04	3	9.287E-04	3	DCF3(54)
D-1	3	Ra-226+D	3	1.037E-03	3	1.036E-03	3	DCF3(60)
D-1	3	Ra-226+D1	3	1.037E-03	3	1.036E-03	3	DCF3(63)
D-1	3	Ra-226+D2	3	1.036E-03	3	1.036E-03	3	DCF3(66)
D-1	3	Ra-226+D3	3	1.036E-03	3	1.036E-03	3	DCF3(69)
D-1	3	Ra-226+D4	3	1.036E-03	3	1.036E-03	3	DCF3(72)
D-1	3	Ra-228+D	3	2.577E-03	3	2.575E-03	3	DCF3(75)
D-1	3	Ru-106+D	3	2.597E-05	3	2.597E-05	3	DCF3(76)
D-1	3	Sm-148	3	1.576E-04	3	1.576E-04	3	DCF3(77)
D-1	3	Sr-90+D	3	1.120E-04	3	1.021E-04	3	DCF3(78)
D-1	3	Tc-99	3	2.375E-06	3	2.375E-06	3	DCF3(79)
D-1	3	Th-228+D	3	5.286E-04	3	2.664E-04	3	DCF3(80)
D-1	3	Th-229+D	3	2.359E-03	3	1.846E-03	3	DCF3(81)
D-1	3	Th-230	3	7.918E-04	3	7.918E-04	3	DCF3(82)
D-1	3	Th-232	3	8.547E-04	3	8.547E-04	3	DCF3(97)
D-1	3	U-233	3	1.894E-04	3	1.894E-04	3	DCF3(98)
D-1	3	U-234	3	1.831E-04	3	1.831E-04	3	DCF3(99)
D-1	3	U-235+D	3	1.740E-04	3	1.728E-04	3	DCF3(114)
D-1	3	U-238	3	1.650E-04	3	1.650E-04	3	DCF3(120)
D-1	3	U-238+D	3	1.791E-04	3	1.650E-04	3	DCF3(121)
D-1	3	U-238+D1	3	1.776E-04	3	1.650E-04	3	DCF3(136)
	3		3		3		3	
D-34	3	Food transfer factors:	3		3		3	
D-34	3	Ac-227+D , plant/soil concentration ratio, dimensionless	3	2.500E-03	3	2.500E-03	3	RTF(1,1)
D-34	3	Ac-227+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	2.000E-05	3	2.000E-05	3	RTF(1,2)
D-34	3	Ac-227+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	2.000E-05	3	2.000E-05	3	RTF(1,3)
D-34	3		3		3		3	
D-34	3	Ac-227+D1 , plant/soil concentration ratio, dimensionless	3	2.500E-03	3	2.500E-03	3	RTF(2,1)

D-34	³	Ac-227+D1 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	³	2.000E-05	³	2.000E-05	³	RTF(	2,2)
D-34	³	Ac-227+D1 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	³	2.000E-05	³	2.000E-05	³	RTF(	2,3)
D-34	³		³		³		³		
D-34	³	Ac-227+D2 , plant/soil concentration ratio, dimensionless	³	2.500E-03	³	2.500E-03	³	RTF(	3,1)
D-34	³	Ac-227+D2 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	³	2.000E-05	³	2.000E-05	³	RTF(	3,2)
D-34	³	Ac-227+D2 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	³	2.000E-05	³	2.000E-05	³	RTF(	3,3)
D-34	³		³		³		³		
D-34	³	Ac-227+D3 , plant/soil concentration ratio, dimensionless	³	2.500E-03	³	2.500E-03	³	RTF(	4,1)
D-34	³	Ac-227+D3 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	³	2.000E-05	³	2.000E-05	³	RTF(	4,2)
D-34	³	Ac-227+D3 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	³	2.000E-05	³	2.000E-05	³	RTF(	4,3)

Dose Conversion Factor (and Related) Parameter Summary (continued)

Dose Library: DCFPAK adult HTO Plus DCFPAK3.02 (Adult)

0	3		3	Current	3	Base	3	Parameter
Menu	3	Parameter	3	Value#	3	Case*	3	Name
AA								
D-34	3	Ac-227+D4 , plant/soil concentration ratio, dimensionless	3	2.500E-03	3	2.500E-03	3	RTF(5,1)
D-34	3	Ac-227+D4 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	2.000E-05	3	2.000E-05	3	RTF(5,2)
D-34	3	Ac-227+D4 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	2.000E-05	3	2.000E-05	3	RTF(5,3)
D-34	3		3		3		3	
D-34	3	Ac-227+D5 , plant/soil concentration ratio, dimensionless	3	2.500E-03	3	2.500E-03	3	RTF(6,1)
D-34	3	Ac-227+D5 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	2.000E-05	3	2.000E-05	3	RTF(6,2)
D-34	3	Ac-227+D5 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	2.000E-05	3	2.000E-05	3	RTF(6,3)
D-34	3		3		3		3	
D-34	3	Am-241 , plant/soil concentration ratio, dimensionless	3	1.000E-03	3	1.000E-03	3	RTF(7,1)
D-34	3	Am-241 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	5.000E-05	3	5.000E-05	3	RTF(7,2)
D-34	3	Am-241 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	2.000E-06	3	2.000E-06	3	RTF(7,3)
D-34	3		3		3		3	
D-34	3	Co-60 , plant/soil concentration ratio, dimensionless	3	8.000E-02	3	8.000E-02	3	RTF(8,1)
D-34	3	Co-60 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	2.000E-02	3	2.000E-02	3	RTF(8,2)
D-34	3	Co-60 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	2.000E-03	3	2.000E-03	3	RTF(8,3)
D-34	3		3		3		3	
D-34	3	Cs-134 , plant/soil concentration ratio, dimensionless	3	4.000E-02	3	4.000E-02	3	RTF(9,1)
D-34	3	Cs-134 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	3.000E-02	3	3.000E-02	3	RTF(9,2)
D-34	3	Cs-134 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	8.000E-03	3	8.000E-03	3	RTF(9,3)
D-34	3		3		3		3	
D-34	3	Cs-137+D , plant/soil concentration ratio, dimensionless	3	4.000E-02	3	4.000E-02	3	RTF(10,1)
D-34	3	Cs-137+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	3.000E-02	3	3.000E-02	3	RTF(10,2)
D-34	3	Cs-137+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	8.000E-03	3	8.000E-03	3	RTF(10,3)
D-34	3		3		3		3	
D-34	3	Eu-152 , plant/soil concentration ratio, dimensionless	3	2.500E-03	3	2.500E-03	3	RTF(11,1)
D-34	3	Eu-152 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	2.000E-03	3	2.000E-03	3	RTF(11,2)
D-34	3	Eu-152 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	5.000E-05	3	5.000E-05	3	RTF(11,3)
D-34	3		3		3		3	
D-34	3	Eu-154 , plant/soil concentration ratio, dimensionless	3	2.500E-03	3	2.500E-03	3	RTF(13,1)
D-34	3	Eu-154 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	2.000E-03	3	2.000E-03	3	RTF(13,2)
D-34	3	Eu-154 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	5.000E-05	3	5.000E-05	3	RTF(13,3)
D-34	3		3		3		3	
D-34	3	Eu-155 , plant/soil concentration ratio, dimensionless	3	2.500E-03	3	2.500E-03	3	RTF(14,1)
D-34	3	Eu-155 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	2.000E-03	3	2.000E-03	3	RTF(14,2)
D-34	3	Eu-155 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	5.000E-05	3	5.000E-05	3	RTF(14,3)
D-34	3		3		3		3	
D-34	3	Gd-152 , plant/soil concentration ratio, dimensionless	3	2.500E-03	3	2.500E-03	3	RTF(15,1)
D-34	3	Gd-152 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	2.000E-03	3	2.000E-03	3	RTF(15,2)
D-34	3	Gd-152 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	2.000E-05	3	2.000E-05	3	RTF(15,3)
D-34	3		3		3		3	

D-34	³	H-3	, plant/soil concentration ratio, dimensionless	³	4.800E+00	³	4.800E+00	³	RTF(16,1)
D-34	³	H-3	, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	³	1.200E-02	³	1.200E-02	³	RTF(16,2)
D-34	³	H-3	, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	³	1.000E-02	³	1.000E-02	³	RTF(16,3)
D-34	³			³		³		³	
D-34	³	I-129	, plant/soil concentration ratio, dimensionless	³	2.000E-02	³	2.000E-02	³	RTF(17,1)
D-34	³	I-129	, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	³	7.000E-03	³	7.000E-03	³	RTF(17,2)
D-34	³	I-129	, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	³	1.000E-02	³	1.000E-02	³	RTF(17,3)
D-34	³			³		³		³	

Dose Conversion Factor (and Related) Parameter Summary (continued)

Dose Library: DCFPAK adult HTO Plus DCFPAK3.02 (Adult)

0	3		3	Current	3	Base	3	Parameter
Menu	3	Parameter	3	Value#	3	Case*	3	Name
AAAAA	3	AAAAA	3	AAAAA	3	AAAAA	3	AAAAA
D-34	3	Mn-54 , plant/soil concentration ratio, dimensionless	3	3.000E-01	3	3.000E-01	3	RTF(18,1)
D-34	3	Mn-54 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	5.000E-04	3	5.000E-04	3	RTF(18,2)
D-34	3	Mn-54 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	3.000E-04	3	3.000E-04	3	RTF(18,3)
D-34	3		3		3		3	
D-34	3	Na-22 , plant/soil concentration ratio, dimensionless	3	5.000E-02	3	5.000E-02	3	RTF(19,1)
D-34	3	Na-22 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	8.000E-02	3	8.000E-02	3	RTF(19,2)
D-34	3	Na-22 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	4.000E-02	3	4.000E-02	3	RTF(19,3)
D-34	3		3		3		3	
D-34	3	Nd-144 , plant/soil concentration ratio, dimensionless	3	2.400E-03	3	2.400E-03	3	RTF(20,1)
D-34	3	Nd-144 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	2.000E-03	3	2.000E-03	3	RTF(20,2)
D-34	3	Nd-144 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	2.000E-05	3	2.000E-05	3	RTF(20,3)
D-34	3		3		3		3	
D-34	3	Ni-63 , plant/soil concentration ratio, dimensionless	3	5.000E-02	3	5.000E-02	3	RTF(21,1)
D-34	3	Ni-63 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	5.000E-03	3	5.000E-03	3	RTF(21,2)
D-34	3	Ni-63 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	2.000E-02	3	2.000E-02	3	RTF(21,3)
D-34	3		3		3		3	
D-34	3	Np-237+D , plant/soil concentration ratio, dimensionless	3	2.000E-02	3	2.000E-02	3	RTF(22,1)
D-34	3	Np-237+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	1.000E-03	3	1.000E-03	3	RTF(22,2)
D-34	3	Np-237+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	5.000E-06	3	5.000E-06	3	RTF(22,3)
D-34	3		3		3		3	
D-34	3	Pa-231 , plant/soil concentration ratio, dimensionless	3	1.000E-02	3	1.000E-02	3	RTF(23,1)
D-34	3	Pa-231 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	5.000E-03	3	5.000E-03	3	RTF(23,2)
D-34	3	Pa-231 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	5.000E-06	3	5.000E-06	3	RTF(23,3)
D-34	3		3		3		3	
D-34	3	Pb-210+D , plant/soil concentration ratio, dimensionless	3	1.000E-02	3	1.000E-02	3	RTF(29,1)
D-34	3	Pb-210+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	8.000E-04	3	8.000E-04	3	RTF(29,2)
D-34	3	Pb-210+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	3.000E-04	3	3.000E-04	3	RTF(29,3)
D-34	3		3		3		3	
D-34	3	Pb-210+D1 , plant/soil concentration ratio, dimensionless	3	1.000E-02	3	1.000E-02	3	RTF(30,1)
D-34	3	Pb-210+D1 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	8.000E-04	3	8.000E-04	3	RTF(30,2)
D-34	3	Pb-210+D1 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	3.000E-04	3	3.000E-04	3	RTF(30,3)
D-34	3		3		3		3	
D-34	3	Pb-210+D2 , plant/soil concentration ratio, dimensionless	3	1.000E-02	3	1.000E-02	3	RTF(31,1)
D-34	3	Pb-210+D2 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	8.000E-04	3	8.000E-04	3	RTF(31,2)
D-34	3	Pb-210+D2 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	3.000E-04	3	3.000E-04	3	RTF(31,3)
D-34	3		3		3		3	
D-34	3	Pu-238 , plant/soil concentration ratio, dimensionless	3	1.000E-03	3	1.000E-03	3	RTF(32,1)
D-34	3	Pu-238 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	1.000E-04	3	1.000E-04	3	RTF(32,2)
D-34	3	Pu-238 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	1.000E-06	3	1.000E-06	3	RTF(32,3)
D-34	3		3		3		3	

D-34	³	Pu-239	, plant/soil concentration ratio, dimensionless	³	1.000E-03	³	1.000E-03	³	RTF(48,1)
D-34	³	Pu-239	, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	³	1.000E-04	³	1.000E-04	³	RTF(48,2)
D-34	³	Pu-239	, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	³	1.000E-06	³	1.000E-06	³	RTF(48,3)
D-34	³			³		³		³	
D-34	³	Pu-239+D	, plant/soil concentration ratio, dimensionless	³	1.000E-03	³	1.000E-03	³	RTF(54,1)
D-34	³	Pu-239+D	, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	³	1.000E-04	³	1.000E-04	³	RTF(54,2)
D-34	³	Pu-239+D	, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	³	1.000E-06	³	1.000E-06	³	RTF(54,3)
D-34	³			³		³		³	

D-34	³	Th-228+D	, plant/soil concentration ratio, dimensionless	³	1.000E-03	³	1.000E-03	³	RTF(80,1)
D-34	³	Th-228+D	, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	³	1.000E-04	³	1.000E-04	³	RTF(80,2)
D-34	³	Th-228+D	, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	³	5.000E-06	³	5.000E-06	³	RTF(80,3)
D-34	³			³		³		³	
D-34	³	Th-229+D	, plant/soil concentration ratio, dimensionless	³	1.000E-03	³	1.000E-03	³	RTF(81,1)
D-34	³	Th-229+D	, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	³	1.000E-04	³	1.000E-04	³	RTF(81,2)
D-34	³	Th-229+D	, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	³	5.000E-06	³	5.000E-06	³	RTF(81,3)
D-34	³			³		³		³	

Dose Library: DCFPAK adult HT0 Plus DCFPAK3.02 (Adult)

Menu	Parameter	Current Value#	Base Case*	Parameter Name
D-34	Th-230 , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(82,1)
D-34	Th-230 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-04	1.000E-04	RTF(82,2)
D-34	Th-230 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-06	5.000E-06	RTF(82,3)
D-34	Th-232 , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(97,1)
D-34	Th-232 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-04	1.000E-04	RTF(97,2)
D-34	Th-232 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-06	5.000E-06	RTF(97,3)
D-34	U-233 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(98,1)
D-34	U-233 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.400E-04	3.400E-04	RTF(98,2)
D-34	U-233 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	6.000E-04	6.000E-04	RTF(98,3)
D-34	U-234 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(99,1)
D-34	U-234 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.400E-04	3.400E-04	RTF(99,2)
D-34	U-234 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	6.000E-04	6.000E-04	RTF(99,3)
D-34	U-235+D , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(114,1)
D-34	U-235+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.400E-04	3.400E-04	RTF(114,2)
D-34	U-235+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	6.000E-04	6.000E-04	RTF(114,3)
D-34	U-238 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(120,1)
D-34	U-238 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.400E-04	3.400E-04	RTF(120,2)
D-34	U-238 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	6.000E-04	6.000E-04	RTF(120,3)
D-34	U-238+D , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(121,1)
D-34	U-238+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.400E-04	3.400E-04	RTF(121,2)
D-34	U-238+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	6.000E-04	6.000E-04	RTF(121,3)
D-34	U-238+D1 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(136,1)
D-34	U-238+D1 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.400E-04	3.400E-04	RTF(136,2)
D-34	U-238+D1 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	6.000E-04	6.000E-04	RTF(136,3)
D-5	Bioaccumulation factors, fresh water, L/kg:			
D-5	Ac-227+D , fish	1.500E+01	1.500E+01	BIOFAC(1,1)
D-5	Ac-227+D , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(1,2)
D-5	Ac-227+D1 , fish	1.500E+01	1.500E+01	BIOFAC(2,1)
D-5	Ac-227+D1 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(2,2)

D-5 ³ Ac-227+D2 , fish
 D-5 ³ Ac-227+D2 , crustacea and mollusks
 D-5 ³
 D-5 ³ Ac-227+D3 , fish
 D-5 ³ Ac-227+D3 , crustacea and mollusks
 D-5 ³
 D-5 ³ Ac-227+D4 , fish
 D-5 ³ Ac-227+D4 , crustacea and mollusks
 D-5 ³

³ 1.500E+01 ³ 1.500E+01 ³ BIOFAC(3,1)
³ 1.000E+03 ³ 1.000E+03 ³ BIOFAC(3,2)
³ ³ ³
³ 1.500E+01 ³ 1.500E+01 ³ BIOFAC(4,1)
³ 1.000E+03 ³ 1.000E+03 ³ BIOFAC(4,2)
³ ³ ³
³ 1.500E+01 ³ 1.500E+01 ³ BIOFAC(5,1)
³ 1.000E+03 ³ 1.000E+03 ³ BIOFAC(5,2)
³ ³ ³

Dose Conversion Factor (and Related) Parameter Summary (continued)

Dose Library: DCFPAK adult HTO Plus DCFPAK3.02 (Adult)

0	3		3	Current	3	Base	3	Parameter
Menu	3	Parameter	3	Value#	3	Case*	3	Name
AAAAA	3	AAAAA	3	AAAAA	3	AAAAA	3	AAAAA
D-5	3	Ac-227+D5 , fish	3	1.500E+01	3	1.500E+01	3	BIOFAC(6,1)
D-5	3	Ac-227+D5 , crustacea and mollusks	3	1.000E+03	3	1.000E+03	3	BIOFAC(6,2)
D-5	3		3		3		3	
D-5	3	Am-241 , fish	3	3.000E+01	3	3.000E+01	3	BIOFAC(7,1)
D-5	3	Am-241 , crustacea and mollusks	3	1.000E+03	3	1.000E+03	3	BIOFAC(7,2)
D-5	3		3		3		3	
D-5	3	Co-60 , fish	3	3.000E+02	3	3.000E+02	3	BIOFAC(8,1)
D-5	3	Co-60 , crustacea and mollusks	3	2.000E+02	3	2.000E+02	3	BIOFAC(8,2)
D-5	3		3		3		3	
D-5	3	Cs-134 , fish	3	2.000E+03	3	2.000E+03	3	BIOFAC(9,1)
D-5	3	Cs-134 , crustacea and mollusks	3	1.000E+02	3	1.000E+02	3	BIOFAC(9,2)
D-5	3		3		3		3	
D-5	3	Cs-137+D , fish	3	2.000E+03	3	2.000E+03	3	BIOFAC(10,1)
D-5	3	Cs-137+D , crustacea and mollusks	3	1.000E+02	3	1.000E+02	3	BIOFAC(10,2)
D-5	3		3		3		3	
D-5	3	Eu-152 , fish	3	5.000E+01	3	5.000E+01	3	BIOFAC(11,1)
D-5	3	Eu-152 , crustacea and mollusks	3	1.000E+03	3	1.000E+03	3	BIOFAC(11,2)
D-5	3		3		3		3	
D-5	3	Eu-154 , fish	3	5.000E+01	3	5.000E+01	3	BIOFAC(13,1)
D-5	3	Eu-154 , crustacea and mollusks	3	1.000E+03	3	1.000E+03	3	BIOFAC(13,2)
D-5	3		3		3		3	
D-5	3	Eu-155 , fish	3	5.000E+01	3	5.000E+01	3	BIOFAC(14,1)
D-5	3	Eu-155 , crustacea and mollusks	3	1.000E+03	3	1.000E+03	3	BIOFAC(14,2)
D-5	3		3		3		3	
D-5	3	Gd-152 , fish	3	2.500E+01	3	2.500E+01	3	BIOFAC(15,1)
D-5	3	Gd-152 , crustacea and mollusks	3	1.000E+03	3	1.000E+03	3	BIOFAC(15,2)
D-5	3		3		3		3	
D-5	3	H-3 , fish	3	1.000E+00	3	1.000E+00	3	BIOFAC(16,1)
D-5	3	H-3 , crustacea and mollusks	3	1.000E+00	3	1.000E+00	3	BIOFAC(16,2)
D-5	3		3		3		3	
D-5	3	I-129 , fish	3	4.000E+01	3	4.000E+01	3	BIOFAC(17,1)
D-5	3	I-129 , crustacea and mollusks	3	5.000E+00	3	5.000E+00	3	BIOFAC(17,2)
D-5	3		3		3		3	
D-5	3	Mn-54 , fish	3	4.000E+02	3	4.000E+02	3	BIOFAC(18,1)
D-5	3	Mn-54 , crustacea and mollusks	3	9.000E+04	3	9.000E+04	3	BIOFAC(18,2)
D-5	3		3		3		3	
D-5	3	Na-22 , fish	3	2.000E+01	3	2.000E+01	3	BIOFAC(19,1)
D-5	3	Na-22 , crustacea and mollusks	3	2.000E+02	3	2.000E+02	3	BIOFAC(19,2)
D-5	3		3		3		3	
D-5	3	Nd-144 , fish	3	1.000E+02	3	1.000E+02	3	BIOFAC(20,1)

D-5 ³ Nd-144 , crustacea and mollusks
 D-5 ³
 D-5 ³ Ni-63 , fish
 D-5 ³ Ni-63 , crustacea and mollusks
 D-5 ³
 D-5 ³ Np-237+D , fish
 D-5 ³ Np-237+D , crustacea and mollusks
 D-5 ³
 D-5 ³ Pa-231 , fish
 D-5 ³ Pa-231 , crustacea and mollusks

³ 1.000E+03 ³ 1.000E+03 ³ BIOFAC(20,2)
³
³ 1.000E+02 ³ 1.000E+02 ³ BIOFAC(21,1)
³ 1.000E+02 ³ 1.000E+02 ³ BIOFAC(21,2)
³
³ 3.000E+01 ³ 3.000E+01 ³ BIOFAC(22,1)
³ 4.000E+02 ³ 4.000E+02 ³ BIOFAC(22,2)
³
³ 1.000E+01 ³ 1.000E+01 ³ BIOFAC(23,1)
³ 1.100E+02 ³ 1.100E+02 ³ BIOFAC(23,2)

Dose Conversion Factor (and Related) Parameter Summary (continued)

Dose Library: DCFPAK adult HTO Plus DCFPAK3.02 (Adult)

0	3		3	Current	3	Base	3	Parameter
Menu	3	Parameter	3	Value#	3	Case*	3	Name
AAAAA	3	AAAAA	3	AAAAA	3	AAAAA	3	AAAAA
D-5	3	Pb-210+D , fish	3	3.000E+02	3	3.000E+02	3	BIOFAC(29,1)
D-5	3	Pb-210+D , crustacea and mollusks	3	1.000E+02	3	1.000E+02	3	BIOFAC(29,2)
D-5	3		3		3		3	
D-5	3	Pb-210+D1 , fish	3	3.000E+02	3	3.000E+02	3	BIOFAC(30,1)
D-5	3	Pb-210+D1 , crustacea and mollusks	3	1.000E+02	3	1.000E+02	3	BIOFAC(30,2)
D-5	3		3		3		3	
D-5	3	Pb-210+D2 , fish	3	3.000E+02	3	3.000E+02	3	BIOFAC(31,1)
D-5	3	Pb-210+D2 , crustacea and mollusks	3	1.000E+02	3	1.000E+02	3	BIOFAC(31,2)
D-5	3		3		3		3	
D-5	3	Pu-238 , fish	3	3.000E+01	3	3.000E+01	3	BIOFAC(32,1)
D-5	3	Pu-238 , crustacea and mollusks	3	1.000E+02	3	1.000E+02	3	BIOFAC(32,2)
D-5	3		3		3		3	
D-5	3	Pu-239 , fish	3	3.000E+01	3	3.000E+01	3	BIOFAC(48,1)
D-5	3	Pu-239 , crustacea and mollusks	3	1.000E+02	3	1.000E+02	3	BIOFAC(48,2)
D-5	3		3		3		3	
D-5	3	Pu-239+D , fish	3	3.000E+01	3	3.000E+01	3	BIOFAC(54,1)
D-5	3	Pu-239+D , crustacea and mollusks	3	1.000E+02	3	1.000E+02	3	BIOFAC(54,2)
D-5	3		3		3		3	
D-5	3	Ra-226+D , fish	3	5.000E+01	3	5.000E+01	3	BIOFAC(60,1)
D-5	3	Ra-226+D , crustacea and mollusks	3	2.500E+02	3	2.500E+02	3	BIOFAC(60,2)
D-5	3		3		3		3	
D-5	3	Ra-226+D1 , fish	3	5.000E+01	3	5.000E+01	3	BIOFAC(63,1)
D-5	3	Ra-226+D1 , crustacea and mollusks	3	2.500E+02	3	2.500E+02	3	BIOFAC(63,2)
D-5	3		3		3		3	
D-5	3	Ra-226+D2 , fish	3	5.000E+01	3	5.000E+01	3	BIOFAC(66,1)
D-5	3	Ra-226+D2 , crustacea and mollusks	3	2.500E+02	3	2.500E+02	3	BIOFAC(66,2)
D-5	3		3		3		3	
D-5	3	Ra-226+D3 , fish	3	5.000E+01	3	5.000E+01	3	BIOFAC(69,1)
D-5	3	Ra-226+D3 , crustacea and mollusks	3	2.500E+02	3	2.500E+02	3	BIOFAC(69,2)
D-5	3		3		3		3	
D-5	3	Ra-226+D4 , fish	3	5.000E+01	3	5.000E+01	3	BIOFAC(72,1)
D-5	3	Ra-226+D4 , crustacea and mollusks	3	2.500E+02	3	2.500E+02	3	BIOFAC(72,2)
D-5	3		3		3		3	
D-5	3	Ra-228+D , fish	3	5.000E+01	3	5.000E+01	3	BIOFAC(75,1)
D-5	3	Ra-228+D , crustacea and mollusks	3	2.500E+02	3	2.500E+02	3	BIOFAC(75,2)
D-5	3		3		3		3	
D-5	3	Ru-106+D , fish	3	1.000E+01	3	1.000E+01	3	BIOFAC(76,1)
D-5	3	Ru-106+D , crustacea and mollusks	3	3.000E+02	3	3.000E+02	3	BIOFAC(76,2)
D-5	3		3		3		3	
D-5	3	Sm-148 , fish	3	2.500E+01	3	2.500E+01	3	BIOFAC(77,1)

D-5 ³ Sm-148 , crustacea and mollusks
 D-5 ³
 D-5 ³ Sr-90+D , fish
 D-5 ³ Sr-90+D , crustacea and mollusks
 D-5 ³
 D-5 ³ Tc-99 , fish
 D-5 ³ Tc-99 , crustacea and mollusks
 D-5 ³
 D-5 ³ Th-228+D , fish
 D-5 ³ Th-228+D , crustacea and mollusks

³ 1.000E+03 ³ 1.000E+03 ³ BIOFAC(77,2)
³
³ 6.000E+01 ³ 6.000E+01 ³ BIOFAC(78,1)
³ 1.000E+02 ³ 1.000E+02 ³ BIOFAC(78,2)
³
³ 2.000E+01 ³ 2.000E+01 ³ BIOFAC(79,1)
³ 5.000E+00 ³ 5.000E+00 ³ BIOFAC(79,2)
³
³ 1.000E+02 ³ 1.000E+02 ³ BIOFAC(80,1)
³ 5.000E+02 ³ 5.000E+02 ³ BIOFAC(80,2)

Dose Conversion Factor (and Related) Parameter Summary (continued)

Dose Library: DCFPAK adult HTO Plus DCFPAK3.02 (Adult)

0	3		3	Current	3	Base	3	Parameter
Menu	3	Parameter	3	Value#	3	Case*	3	Name
AAAAA	3	AAAAA	3	AAAAA	3	AAAAA	3	AAAAA
D-5	3	Th-229+D , fish	3	1.000E+02	3	1.000E+02	3	BIOFAC(81,1)
D-5	3	Th-229+D , crustacea and mollusks	3	5.000E+02	3	5.000E+02	3	BIOFAC(81,2)
D-5	3		3		3		3	
D-5	3	Th-230 , fish	3	1.000E+02	3	1.000E+02	3	BIOFAC(82,1)
D-5	3	Th-230 , crustacea and mollusks	3	5.000E+02	3	5.000E+02	3	BIOFAC(82,2)
D-5	3		3		3		3	
D-5	3	Th-232 , fish	3	1.000E+02	3	1.000E+02	3	BIOFAC(97,1)
D-5	3	Th-232 , crustacea and mollusks	3	5.000E+02	3	5.000E+02	3	BIOFAC(97,2)
D-5	3		3		3		3	
D-5	3	U-233 , fish	3	1.000E+01	3	1.000E+01	3	BIOFAC(98,1)
D-5	3	U-233 , crustacea and mollusks	3	6.000E+01	3	6.000E+01	3	BIOFAC(98,2)
D-5	3		3		3		3	
D-5	3	U-234 , fish	3	1.000E+01	3	1.000E+01	3	BIOFAC(99,1)
D-5	3	U-234 , crustacea and mollusks	3	6.000E+01	3	6.000E+01	3	BIOFAC(99,2)
D-5	3		3		3		3	
D-5	3	U-235+D , fish	3	1.000E+01	3	1.000E+01	3	BIOFAC(114,1)
D-5	3	U-235+D , crustacea and mollusks	3	6.000E+01	3	6.000E+01	3	BIOFAC(114,2)
D-5	3		3		3		3	
D-5	3	U-238 , fish	3	1.000E+01	3	1.000E+01	3	BIOFAC(120,1)
D-5	3	U-238 , crustacea and mollusks	3	6.000E+01	3	6.000E+01	3	BIOFAC(120,2)
D-5	3		3		3		3	
D-5	3	U-238+D , fish	3	1.000E+01	3	1.000E+01	3	BIOFAC(121,1)
D-5	3	U-238+D , crustacea and mollusks	3	6.000E+01	3	6.000E+01	3	BIOFAC(121,2)
D-5	3		3		3		3	
D-5	3	U-238+D1 , fish	3	1.000E+01	3	1.000E+01	3	BIOFAC(136,1)
D-5	3	U-238+D1 , crustacea and mollusks	3	6.000E+01	3	6.000E+01	3	BIOFAC(136,2)
D-5	3		3		3		3	

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#For DCF1(XXX) only, factors are for infinite depth & area. See ETFG table in Ground Pathway of Detailed Report.

*Base Case means Default.Lib w/o Associate Nuclide contributions.

Site-Specific Parameter Summary

0	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3</
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R012	³	Concentration in groundwater	(pCi/L):	Co-60	³	not used	³	0.000E+00	³	---	³	W1(8)
R012	³	Concentration in groundwater	(pCi/L):	Cs-134	³	not used	³	0.000E+00	³	---	³	W1(9)
R012	³	Concentration in groundwater	(pCi/L):	Cs-137	³	not used	³	0.000E+00	³	---	³	W1(10)
R012	³	Concentration in groundwater	(pCi/L):	Eu-152	³	not used	³	0.000E+00	³	---	³	W1(11)
R012	³	Concentration in groundwater	(pCi/L):	Eu-154	³	not used	³	0.000E+00	³	---	³	W1(13)
R012	³	Concentration in groundwater	(pCi/L):	Eu-155	³	not used	³	0.000E+00	³	---	³	W1(14)
R012	³	Concentration in groundwater	(pCi/L):	H-3	³	not used	³	0.000E+00	³	---	³	W1(16)
R012	³	Concentration in groundwater	(pCi/L):	I-129	³	not used	³	0.000E+00	³	---	³	W1(17)
R012	³	Concentration in groundwater	(pCi/L):	Mn-54	³	not used	³	0.000E+00	³	---	³	W1(18)

Site-Specific Parameter Summary (continued)

0	3	3	3	3	3	3	3
Menu	Parameter	User	Default	Used by RESRAD	Parameter		
		Input	(If different from user input)		Name		
AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
R012	Concentration in groundwater (pCi/L): Na-22	not used	0.000E+00	---	W1(19)		
R012	Concentration in groundwater (pCi/L): Ni-63	not used	0.000E+00	---	W1(21)		
R012	Concentration in groundwater (pCi/L): Np-237	not used	0.000E+00	---	W1(22)		
R012	Concentration in groundwater (pCi/L): Pu-238	not used	0.000E+00	---	W1(32)		
R012	Concentration in groundwater (pCi/L): Pu-239	not used	0.000E+00	---	W1(48)		
R012	Concentration in groundwater (pCi/L): Ru-106	not used	0.000E+00	---	W1(76)		
R012	Concentration in groundwater (pCi/L): Sr-90	not used	0.000E+00	---	W1(78)		
R012	Concentration in groundwater (pCi/L): Tc-99	not used	0.000E+00	---	W1(79)		
R012	Concentration in groundwater (pCi/L): Th-228	not used	0.000E+00	---	W1(80)		
R012	Concentration in groundwater (pCi/L): Th-230	not used	0.000E+00	---	W1(82)		
R012	Concentration in groundwater (pCi/L): Th-232	not used	0.000E+00	---	W1(97)		
R012	Concentration in groundwater (pCi/L): U-234	not used	0.000E+00	---	W1(99)		
R012	Concentration in groundwater (pCi/L): U-235	not used	0.000E+00	---	W1(**)		
R012	Concentration in groundwater (pCi/L): U-238	not used	0.000E+00	---	W1(**)		
R013	Cover depth (m)	0.000E+00	0.000E+00	---	COVER0		
R013	Density of cover material (g/cm**3)	not used	1.500E+00	---	DENSCV		
R013	Cover depth erosion rate (m/yr)	not used	1.000E-03	---	VCV		
R013	Density of contaminated zone (g/cm**3)	1.500E+00	1.500E+00	---	DENSCZ		
R013	Contaminated zone erosion rate (m/yr)	0.000E+00	1.000E-03	---	VCZ		
R013	Contaminated zone total porosity	4.800E-01	4.000E-01	---	TPCZ		
R013	Contaminated zone field capacity	2.000E-01	2.000E-01	---	FCCZ		
R013	Contaminated zone hydraulic conductivity (m/yr)	1.000E+01	1.000E+01	---	HCCZ		
R013	Contaminated zone b parameter	5.300E+00	5.300E+00	---	BCZ		
R013	Average annual wind speed (m/sec)	3.000E+00	2.000E+00	---	WIND		
R013	Humidity in air (g/m**3)	5.550E+00	8.000E+00	---	HUMID		
R013	Evapotranspiration coefficient	9.990E-01	5.000E-01	---	EVAPTR		
R013	Precipitation (m/yr)	2.900E-01	1.000E+00	---	PRECIP		
R013	Irrigation (m/yr)	0.000E+00	2.000E-01	---	RI		
R013	Irrigation mode	overhead	overhead	---	IDITCH		
R013	Runoff coefficient	9.000E-01	2.000E-01	---	RUNOFF		
R013	Watershed area for nearby stream or pond (m**2)	1.000E+06	1.000E+06	---	WAREA		
R013	Accuracy for water/soil computations	1.000E-03	1.000E-03	---	EPS		
R014	Density of saturated zone (g/cm**3)	1.500E+00	1.500E+00	---	DENSAQ		
R014	Saturated zone total porosity	4.000E-01	4.000E-01	---	TPSZ		
R014	Saturated zone effective porosity	2.000E-01	2.000E-01	---	EPSZ		
R014	Saturated zone field capacity	2.000E-01	2.000E-01	---	FCSZ		
R014	Saturated zone hydraulic conductivity (m/yr)	1.000E+02	1.000E+02	---	HCSZ		
R014	Saturated zone hydraulic gradient	2.000E-02	2.000E-02	---	HGWT		
R014	Saturated zone b parameter	5.300E+00	5.300E+00	---	BSZ		

R014	³	Water table drop rate (m/yr)	³	1.000E-03	³	1.000E-03	³	---	³	VWT
R014	³	Well pump intake depth (m below water table)	³	1.000E+01	³	1.000E+01	³	---	³	DWIBWT
R014	³	Model: Nondispersion (ND) or Mass-Balance (MB)	³	ND	³	ND	³	---	³	MODEL
R014	³	Well pumping rate (m ³ /yr)	³	2.500E+02	³	2.500E+02	³	---	³	UW
	³		³		³		³		³	
R015	³	Number of unsaturated zone strata	³	1	³	1	³	---	³	NS

Site-Specific Parameter Summary (continued)

0	3	3	3	3	3	3	3
Menu	Parameter	User	Default	Used by RESRAD	Parameter		
		Input	(If different from user input)		Name		
AAAAA							
R015	Unsat. zone 1, thickness (m)	3.000E+02	4.000E+00	---	H(1)		
R015	Unsat. zone 1, soil density (g/cm**3)	1.500E+00	1.500E+00	---	DENSUZ(1)		
R015	Unsat. zone 1, total porosity	4.800E-01	4.000E-01	---	TPUZ(1)		
R015	Unsat. zone 1, effective porosity	4.000E-01	2.000E-01	---	EPUZ(1)		
R015	Unsat. zone 1, field capacity	2.000E-01	2.000E-01	---	FCUZ(1)		
R015	Unsat. zone 1, soil-specific b parameter	5.300E+00	5.300E+00	---	BUZ(1)		
R015	Unsat. zone 1, hydraulic conductivity (m/yr)	1.000E+01	1.000E+01	---	HCUZ(1)		
R016	Distribution coefficients for Am-241						
R016	Contaminated zone (cm**3/g)	2.000E+01	2.000E+01	---	DCNUCC(7)		
R016	Unsaturated zone 1 (cm**3/g)	2.000E+01	2.000E+01	---	DCNUCU(7,1)		
R016	Saturated zone (cm**3/g)	2.000E+01	2.000E+01	---	DCNUCS(7)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	4.801E-07	ALEACH(7)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(7)		
R016	Distribution coefficients for Co-60						
R016	Contaminated zone (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCC(8)		
R016	Unsaturated zone 1 (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCU(8,1)		
R016	Saturated zone (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCS(8)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	9.665E-09	ALEACH(8)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(8)		
R016	Distribution coefficients for Cs-134						
R016	Contaminated zone (cm**3/g)	4.600E+03	4.600E+03	---	DCNUCC(9)		
R016	Unsaturated zone 1 (cm**3/g)	4.600E+03	4.600E+03	---	DCNUCU(9,1)		
R016	Saturated zone (cm**3/g)	4.600E+03	4.600E+03	---	DCNUCS(9)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	2.101E-09	ALEACH(9)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(9)		
R016	Distribution coefficients for Cs-137						
R016	Contaminated zone (cm**3/g)	4.600E+03	4.600E+03	---	DCNUCC(10)		
R016	Unsaturated zone 1 (cm**3/g)	4.600E+03	4.600E+03	---	DCNUCU(10,1)		
R016	Saturated zone (cm**3/g)	4.600E+03	4.600E+03	---	DCNUCS(10)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	2.101E-09	ALEACH(10)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(10)		
R016	Distribution coefficients for Eu-152						
R016	Contaminated zone (cm**3/g)	-1.000E+00	-1.000E+00	8.249E+02	DCNUCC(11)		
R016	Unsaturated zone 1 (cm**3/g)	-1.000E+00	-1.000E+00	8.249E+02	DCNUCU(11,1)		
R016	Saturated zone (cm**3/g)	-1.000E+00	-1.000E+00	8.249E+02	DCNUCS(11)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.172E-08	ALEACH(11)		

R016	³	Solubility constant	³	0.000E+00	³	0.000E+00	³	not used	³	SOLUBK(11)
	³		³		³		³		³	
R016	³	Distribution coefficients for Eu-154	³		³		³		³	
R016	³	Contaminated zone (cm**3/g)	³	-1.000E+00	³	-1.000E+00	³	8.249E+02	³	DCNUCC(13)
R016	³	Unsaturated zone 1 (cm**3/g)	³	-1.000E+00	³	-1.000E+00	³	8.249E+02	³	DCNUCU(13,1)
R016	³	Saturated zone (cm**3/g)	³	-1.000E+00	³	-1.000E+00	³	8.249E+02	³	DCNUCS(13)
R016	³	Leach rate (/yr)	³	0.000E+00	³	0.000E+00	³	1.172E-08	³	ALEACH(13)
R016	³	Solubility constant	³	0.000E+00	³	0.000E+00	³	not used	³	SOLUBK(13)

Site-Specific Parameter Summary (continued)

0	3	3	3	3	3	3
Menu	Parameter	User	Default	Used by RESRAD	(If different from user input)	Parameter Name
AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
R016	Distribution coefficients for Eu-155	3	3	3	3	3
R016	Contaminated zone (cm**3/g)	3 -1.000E+00	3 -1.000E+00	3 8.249E+02	3	3 DCNUCC(14)
R016	Unsaturated zone 1 (cm**3/g)	3 -1.000E+00	3 -1.000E+00	3 8.249E+02	3	3 DCNUCU(14,1)
R016	Saturated zone (cm**3/g)	3 -1.000E+00	3 -1.000E+00	3 8.249E+02	3	3 DCNUCS(14)
R016	Leach rate (/yr)	3 0.000E+00	3 0.000E+00	3 1.172E-08	3	3 ALEACH(14)
R016	Solubility constant	3 0.000E+00	3 0.000E+00	3 not used	3	3 SOLUBK(14)
3	3	3	3	3	3	3
R016	Distribution coefficients for H-3	3	3	3	3	3
R016	Contaminated zone (cm**3/g)	3 0.000E+00	3 0.000E+00	3 ---	3	3 DCNUCC(16)
R016	Unsaturated zone 1 (cm**3/g)	3 0.000E+00	3 0.000E+00	3 ---	3	3 DCNUCU(16,1)
R016	Saturated zone (cm**3/g)	3 0.000E+00	3 0.000E+00	3 ---	3	3 DCNUCS(16)
R016	Leach rate (/yr)	3 0.000E+00	3 0.000E+00	3 7.250E-05	3	3 ALEACH(16)
R016	Solubility constant	3 0.000E+00	3 0.000E+00	3 not used	3	3 SOLUBK(16)
3	3	3	3	3	3	3
R016	Distribution coefficients for I-129	3	3	3	3	3
R016	Contaminated zone (cm**3/g)	3 1.000E-01	3 1.000E-01	3 ---	3	3 DCNUCC(17)
R016	Unsaturated zone 1 (cm**3/g)	3 1.000E-01	3 1.000E-01	3 ---	3	3 DCNUCU(17,1)
R016	Saturated zone (cm**3/g)	3 1.000E-01	3 1.000E-01	3 ---	3	3 DCNUCS(17)
R016	Leach rate (/yr)	3 0.000E+00	3 0.000E+00	3 4.143E-05	3	3 ALEACH(17)
R016	Solubility constant	3 0.000E+00	3 0.000E+00	3 not used	3	3 SOLUBK(17)
3	3	3	3	3	3	3
R016	Distribution coefficients for Mn-54	3	3	3	3	3
R016	Contaminated zone (cm**3/g)	3 2.000E+02	3 2.000E+02	3 ---	3	3 DCNUCC(18)
R016	Unsaturated zone 1 (cm**3/g)	3 2.000E+02	3 2.000E+02	3 ---	3	3 DCNUCU(18,1)
R016	Saturated zone (cm**3/g)	3 2.000E+02	3 2.000E+02	3 ---	3	3 DCNUCS(18)
R016	Leach rate (/yr)	3 0.000E+00	3 0.000E+00	3 4.830E-08	3	3 ALEACH(18)
R016	Solubility constant	3 0.000E+00	3 0.000E+00	3 not used	3	3 SOLUBK(18)
3	3	3	3	3	3	3
R016	Distribution coefficients for Na-22	3	3	3	3	3
R016	Contaminated zone (cm**3/g)	3 1.000E+01	3 1.000E+01	3 ---	3	3 DCNUCC(19)
R016	Unsaturated zone 1 (cm**3/g)	3 1.000E+01	3 1.000E+01	3 ---	3	3 DCNUCU(19,1)
R016	Saturated zone (cm**3/g)	3 1.000E+01	3 1.000E+01	3 ---	3	3 DCNUCS(19)
R016	Leach rate (/yr)	3 0.000E+00	3 0.000E+00	3 9.539E-07	3	3 ALEACH(19)
R016	Solubility constant	3 0.000E+00	3 0.000E+00	3 not used	3	3 SOLUBK(19)
3	3	3	3	3	3	3
R016	Distribution coefficients for Ni-63	3	3	3	3	3
R016	Contaminated zone (cm**3/g)	3 1.000E+03	3 1.000E+03	3 ---	3	3 DCNUCC(21)
R016	Unsaturated zone 1 (cm**3/g)	3 1.000E+03	3 1.000E+03	3 ---	3	3 DCNUCU(21,1)
R016	Saturated zone (cm**3/g)	3 1.000E+03	3 1.000E+03	3 ---	3	3 DCNUCS(21)
R016	Leach rate (/yr)	3 0.000E+00	3 0.000E+00	3 9.665E-09	3	3 ALEACH(21)
R016	Solubility constant	3 0.000E+00	3 0.000E+00	3 not used	3	3 SOLUBK(21)

	³		³	³		³
R016	³	Distribution coefficients for Np-237	³	³		³
R016	³	Contaminated zone (cm**3/g)	³	³	³	³ DCNUCC(22)
R016	³	Unsaturated zone 1 (cm**3/g)	³	³	³	³ DCNUCU(22,1)
R016	³	Saturated zone (cm**3/g)	³	³	³	³ DCNUCS(22)
R016	³	Leach rate (/yr)	³	³	³	³ ALEACH(22)
R016	³	Solubility constant	³	³	³	³ SOLUBK(22)

³ -1.000E+00

³ -1.000E+00

2.574E+02

³ -1.000E+00

³ -1.000E+00

2.574E+02

³ -1.000E+00

³ -1.000E+00

2.574E+02

³ 0.000E+00

³ 0.000E+00

3.753E-08

³ 0.000E+00

³ 0.000E+00

not used

Site-Specific Parameter Summary (continued)

0	3	3	3	3	3	3	3
Menu	Parameter	User	Default	Used by RESRAD	Parameter		
	Input		(If different from user input)		Name		
AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
R016	Distribution coefficients for Pu-238						
R016	Contaminated zone (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCC(32)		
R016	Unsaturated zone 1 (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCU(32,1)		
R016	Saturated zone (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCS(32)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	4.833E-09	ALEACH(32)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(32)		
R016	Distribution coefficients for Pu-239						
R016	Contaminated zone (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCC(48)		
R016	Unsaturated zone 1 (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCU(48,1)		
R016	Saturated zone (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCS(48)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	4.833E-09	ALEACH(48)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(48)		
R016	Distribution coefficients for Ru-106						
R016	Contaminated zone (cm**3/g)	6.000E+04	0.000E+00	---	DCNUCC(76)		
R016	Unsaturated zone 1 (cm**3/g)	6.000E+04	0.000E+00	---	DCNUCU(76,1)		
R016	Saturated zone (cm**3/g)	6.000E+04	0.000E+00	---	DCNUCS(76)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.611E-10	ALEACH(76)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(76)		
R016	Distribution coefficients for Sr-90						
R016	Contaminated zone (cm**3/g)	3.000E+01	3.000E+01	---	DCNUCC(78)		
R016	Unsaturated zone 1 (cm**3/g)	3.000E+01	3.000E+01	---	DCNUCU(78,1)		
R016	Saturated zone (cm**3/g)	3.000E+01	3.000E+01	---	DCNUCS(78)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	3.208E-07	ALEACH(78)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(78)		
R016	Distribution coefficients for Tc-99						
R016	Contaminated zone (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCC(79)		
R016	Unsaturated zone 1 (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCU(79,1)		
R016	Saturated zone (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCS(79)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	7.250E-05	ALEACH(79)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(79)		
R016	Distribution coefficients for Th-228						
R016	Contaminated zone (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCC(80)		
R016	Unsaturated zone 1 (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCU(80,1)		
R016	Saturated zone (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCS(80)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.611E-10	ALEACH(80)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(80)		

Site-Specific Parameter Summary (continued)

0	3	3	3	3	3	3	3
Menu	Parameter	User Input	Default	Used by RESRAD	(If different from user input)	Parameter Name	
AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
R016	Distribution coefficients for Th-232						
R016	Contaminated zone (cm**3/g)	6.000E+04	6.000E+04	---		DCNUCC(97)	
R016	Unsaturated zone 1 (cm**3/g)	6.000E+04	6.000E+04	---		DCNUCU(97,1)	
R016	Saturated zone (cm**3/g)	6.000E+04	6.000E+04	---		DCNUCS(97)	
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.611E-10		ALEACH(97)	
R016	Solubility constant	0.000E+00	0.000E+00	not used		SOLUBK(97)	
R016	Distribution coefficients for U-234						
R016	Contaminated zone (cm**3/g)	5.000E+01	5.000E+01	---		DCNUCC(99)	
R016	Unsaturated zone 1 (cm**3/g)	5.000E+01	5.000E+01	---		DCNUCU(99,1)	
R016	Saturated zone (cm**3/g)	5.000E+01	5.000E+01	---		DCNUCS(99)	
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.928E-07		ALEACH(99)	
R016	Solubility constant	0.000E+00	0.000E+00	not used		SOLUBK(99)	
R016	Distribution coefficients for U-235						
R016	Contaminated zone (cm**3/g)	5.000E+01	5.000E+01	---		DCNUCC(**)	
R016	Unsaturated zone 1 (cm**3/g)	5.000E+01	5.000E+01	---		DCNUCU(**,1)	
R016	Saturated zone (cm**3/g)	5.000E+01	5.000E+01	---		DCNUCS(**)	
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.928E-07		ALEACH(**)	
R016	Solubility constant	0.000E+00	0.000E+00	not used		SOLUBK(**)	
R016	Distribution coefficients for U-238						
R016	Contaminated zone (cm**3/g)	5.000E+01	5.000E+01	---		DCNUCC(**)	
R016	Unsaturated zone 1 (cm**3/g)	5.000E+01	5.000E+01	---		DCNUCU(**,1)	
R016	Saturated zone (cm**3/g)	5.000E+01	5.000E+01	---		DCNUCS(**)	
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.928E-07		ALEACH(**)	
R016	Solubility constant	0.000E+00	0.000E+00	not used		SOLUBK(**)	
R016	Distribution coefficients for daughter Ac-227						
R016	Contaminated zone (cm**3/g)	2.000E+01	2.000E+01	---		DCNUCC(1)	
R016	Unsaturated zone 1 (cm**3/g)	2.000E+01	2.000E+01	---		DCNUCU(1,1)	
R016	Saturated zone (cm**3/g)	2.000E+01	2.000E+01	---		DCNUCS(1)	
R016	Leach rate (/yr)	0.000E+00	0.000E+00	4.801E-07		ALEACH(1)	
R016	Solubility constant	0.000E+00	0.000E+00	not used		SOLUBK(1)	
R016	Distribution coefficients for daughter Gd-152						
R016	Contaminated zone (cm**3/g)	-1.000E+00	-1.000E+00	8.249E+02		DCNUCC(15)	
R016	Unsaturated zone 1 (cm**3/g)	-1.000E+00	-1.000E+00	8.249E+02		DCNUCU(15,1)	
R016	Saturated zone (cm**3/g)	-1.000E+00	-1.000E+00	8.249E+02		DCNUCS(15)	
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.172E-08		ALEACH(15)	
R016	Solubility constant	0.000E+00	0.000E+00	not used		SOLUBK(15)	

	³		³	³		³
R016	³	Distribution coefficients for daughter Nd-144	³	³		³
R016	³	Contaminated zone (cm**3/g)	³	1.580E+02	³	1.580E+02 ³ --- ³ DCNUCC(20)
R016	³	Unsaturated zone 1 (cm**3/g)	³	1.580E+02	³	1.580E+02 ³ --- ³ DCNUCU(20,1)
R016	³	Saturated zone (cm**3/g)	³	1.580E+02	³	1.580E+02 ³ --- ³ DCNUCS(20)
R016	³	Leach rate (/yr)	³	0.000E+00	³	0.000E+00 ³ 6.113E-08 ³ ALEACH(20)
R016	³	Solubility constant	³	0.000E+00	³	0.000E+00 ³ not used ³ SOLUBK(20)

Site-Specific Parameter Summary (continued)

0	3	3	3	3	3	3	3
Menu	Parameter	User	Default	Used by RESRAD	Parameter		
		Input	(If different from user input)		Name		
AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
R016	Distribution coefficients for daughter Pa-231						
R016	Contaminated zone (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCC(23)		
R016	Unsaturated zone 1 (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCU(23,1)		
R016	Saturated zone (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCS(23)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.928E-07	ALEACH(23)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(23)		
R016	Distribution coefficients for daughter Pb-210						
R016	Contaminated zone (cm**3/g)	1.000E+02	1.000E+02	---	DCNUCC(29)		
R016	Unsaturated zone 1 (cm**3/g)	1.000E+02	1.000E+02	---	DCNUCU(29,1)		
R016	Saturated zone (cm**3/g)	1.000E+02	1.000E+02	---	DCNUCS(29)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	9.654E-08	ALEACH(29)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(29)		
R016	Distribution coefficients for daughter Ra-226						
R016	Contaminated zone (cm**3/g)	7.000E+01	7.000E+01	---	DCNUCC(60)		
R016	Unsaturated zone 1 (cm**3/g)	7.000E+01	7.000E+01	---	DCNUCU(60,1)		
R016	Saturated zone (cm**3/g)	7.000E+01	7.000E+01	---	DCNUCS(60)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.378E-07	ALEACH(60)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(60)		
R016	Distribution coefficients for daughter Ra-228						
R016	Contaminated zone (cm**3/g)	7.000E+01	7.000E+01	---	DCNUCC(75)		
R016	Unsaturated zone 1 (cm**3/g)	7.000E+01	7.000E+01	---	DCNUCU(75,1)		
R016	Saturated zone (cm**3/g)	7.000E+01	7.000E+01	---	DCNUCS(75)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.378E-07	ALEACH(75)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(75)		
R016	Distribution coefficients for daughter Sm-148						
R016	Contaminated zone (cm**3/g)	-1.000E+00	-1.000E+00	8.249E+02	DCNUCC(77)		
R016	Unsaturated zone 1 (cm**3/g)	-1.000E+00	-1.000E+00	8.249E+02	DCNUCU(77,1)		
R016	Saturated zone (cm**3/g)	-1.000E+00	-1.000E+00	8.249E+02	DCNUCS(77)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.172E-08	ALEACH(77)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(77)		
R016	Distribution coefficients for daughter Th-229						
R016	Contaminated zone (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCC(81)		
R016	Unsaturated zone 1 (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCU(81,1)		
R016	Saturated zone (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCS(81)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.611E-10	ALEACH(81)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(81)		

R016	3	Distribution coefficients for daughter U-233	3	3	3	3				
R016	3	Contaminated zone (cm**3/g)	3	5.000E+01	3	5.000E+01	3	---	3	DCNUCC(98)
R016	3	Unsaturated zone 1 (cm**3/g)	3	5.000E+01	3	5.000E+01	3	---	3	DCNUCU(98,1)
R016	3	Saturated zone (cm**3/g)	3	5.000E+01	3	5.000E+01	3	---	3	DCNUCS(98)
R016	3	Leach rate (/yr)	3	0.000E+00	3	0.000E+00	3	1.928E-07	3	ALEACH(98)
R016	3	Solubility constant	3	0.000E+00	3	0.000E+00	3	not used	3	SOLUBK(98)
R017	3	Inhalation rate (m**3/yr)	3	7.780E+03	3	8.400E+03	3	---	3	INHALR

Site-Specific Parameter Summary (continued)

0	3	3	3	3	3	3	3
Menu	Parameter	User	Default	Used by RESRAD	Parameter		
	Input		(If different from user input)		Name		
AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
R017	Mass loading for inhalation (g/m**3)	1.510E-07	1.000E-04	---	MLINH		
R017	Exposure duration	2.000E+01	3.000E+01	---	ED		
R017	Shielding factor, inhalation	1.000E+00	4.000E-01	---	SHF3		
R017	Shielding factor, external gamma	7.000E-01	7.000E-01	---	SHF1		
R017	Fraction of time spent indoors	8.648E-01	5.000E-01	---	FIND		
R017	Fraction of time spent outdoors (on site)	9.340E-02	2.500E-01	---	FOTD		
R017	Shape factor flag, external gamma	1.000E+00	1.000E+00	>0 shows circular AREA.	FS		
R017	Radii of shape factor array (used if FS = -1):						
R017	Outer annular radius (m), ring 1:	not used	5.000E+01	---	RAD_SHAPE(1)		
R017	Outer annular radius (m), ring 2:	not used	7.071E+01	---	RAD_SHAPE(2)		
R017	Outer annular radius (m), ring 3:	not used	0.000E+00	---	RAD_SHAPE(3)		
R017	Outer annular radius (m), ring 4:	not used	0.000E+00	---	RAD_SHAPE(4)		
R017	Outer annular radius (m), ring 5:	not used	0.000E+00	---	RAD_SHAPE(5)		
R017	Outer annular radius (m), ring 6:	not used	0.000E+00	---	RAD_SHAPE(6)		
R017	Outer annular radius (m), ring 7:	not used	0.000E+00	---	RAD_SHAPE(7)		
R017	Outer annular radius (m), ring 8:	not used	0.000E+00	---	RAD_SHAPE(8)		
R017	Outer annular radius (m), ring 9:	not used	0.000E+00	---	RAD_SHAPE(9)		
R017	Outer annular radius (m), ring 10:	not used	0.000E+00	---	RAD_SHAPE(10)		
R017	Outer annular radius (m), ring 11:	not used	0.000E+00	---	RAD_SHAPE(11)		
R017	Outer annular radius (m), ring 12:	not used	0.000E+00	---	RAD_SHAPE(12)		
R017	Fractions of annular areas within AREA:						
R017	Ring 1	not used	1.000E+00	---	FRACA(1)		
R017	Ring 2	not used	2.732E-01	---	FRACA(2)		
R017	Ring 3	not used	0.000E+00	---	FRACA(3)		
R017	Ring 4	not used	0.000E+00	---	FRACA(4)		
R017	Ring 5	not used	0.000E+00	---	FRACA(5)		
R017	Ring 6	not used	0.000E+00	---	FRACA(6)		
R017	Ring 7	not used	0.000E+00	---	FRACA(7)		
R017	Ring 8	not used	0.000E+00	---	FRACA(8)		
R017	Ring 9	not used	0.000E+00	---	FRACA(9)		
R017	Ring 10	not used	0.000E+00	---	FRACA(10)		
R017	Ring 11	not used	0.000E+00	---	FRACA(11)		
R017	Ring 12	not used	0.000E+00	---	FRACA(12)		
R018	Fruits, vegetables and grain consumption (kg/yr)	2.210E+01	1.600E+02	---	DIET(1)		
R018	Leafy vegetable consumption (kg/yr)	0.000E+00	1.400E+01	---	DIET(2)		
R018	Milk consumption (L/yr)	not used	9.200E+01	---	DIET(3)		
R018	Meat and poultry consumption (kg/yr)	not used	6.300E+01	---	DIET(4)		
R018	Fish consumption (kg/yr)	not used	5.400E+00	---	DIET(5)		
R018	Other seafood consumption (kg/yr)	not used	9.000E-01	---	DIET(6)		

R018	³	Soil ingestion rate (g/yr)	³	3.650E+01	³	3.650E+01	³	---	³	SOIL
R018	³	Drinking water intake (L/yr)	³	not used	³	5.100E+02	³	---	³	DWI
R018	³	Contamination fraction of drinking water	³	not used	³	1.000E+00	³	---	³	FDW
R018	³	Contamination fraction of household water	³	not used	³	1.000E+00	³	---	³	FHHW
R018	³	Contamination fraction of livestock water	³	not used	³	1.000E+00	³	---	³	FLW
R018	³	Contamination fraction of irrigation water	³	0.000E+00	³	1.000E+00	³	---	³	FIRW
R018	³	Contamination fraction of aquatic food	³	not used	³	5.000E-01	³	---	³	FR9
R018	³	Contamination fraction of plant food	³	1.000E+00	³	-1	³	---	³	FPLANT
R018	³	Contamination fraction of meat	³	not used	³	-1	³	---	³	FMEAT

Site-Specific Parameter Summary (continued)

0	3	3	3	3	3	3
Menu	Parameter	User	Input	Default	Used by RESRAD	Parameter
					(If different from user input)	Name
AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
R018	Contamination fraction of milk	not used	3	-1	---	FMILK
R019	Livestock fodder intake for meat (kg/day)	not used	3	6.800E+01	---	LFI5
R019	Livestock fodder intake for milk (kg/day)	not used	3	5.500E+01	---	LFI6
R019	Livestock water intake for meat (L/day)	not used	3	5.000E+01	---	LWI5
R019	Livestock water intake for milk (L/day)	not used	3	1.600E+02	---	LWI6
R019	Livestock soil intake (kg/day)	not used	3	5.000E-01	---	LSI
R019	Mass loading for foliar deposition (g/m**3)	1.000E-04	3	1.000E-04	---	MLFD
R019	Depth of soil mixing layer (m)	1.500E-01	3	1.500E-01	---	DM
R019	Depth of roots (m)	9.000E-01	3	9.000E-01	---	DR00T
R019	Drinking water fraction from ground water	not used	3	1.000E+00	---	FGWDW
R019	Household water fraction from ground water	not used	3	1.000E+00	---	FGWHH
R019	Livestock water fraction from ground water	not used	3	1.000E+00	---	FGWLW
R019	Irrigation fraction from ground water	1.000E+00	3	1.000E+00	---	FGWIR
R19B	Wet weight crop yield for Non-Leafy (kg/m**2)	7.000E-01	3	7.000E-01	---	YV(1)
R19B	Wet weight crop yield for Leafy (kg/m**2)	1.500E+00	3	1.500E+00	---	YV(2)
R19B	Wet weight crop yield for Fodder (kg/m**2)	not used	3	1.100E+00	---	YV(3)
R19B	Growing Season for Non-Leafy (years)	1.700E-01	3	1.700E-01	---	TE(1)
R19B	Growing Season for Leafy (years)	2.500E-01	3	2.500E-01	---	TE(2)
R19B	Growing Season for Fodder (years)	not used	3	8.000E-02	---	TE(3)
R19B	Translocation Factor for Non-Leafy	1.000E-01	3	1.000E-01	---	TIV(1)
R19B	Translocation Factor for Leafy	1.000E+00	3	1.000E+00	---	TIV(2)
R19B	Translocation Factor for Fodder	not used	3	1.000E+00	---	TIV(3)
R19B	Dry Foliar Interception Fraction for Non-Leafy	2.500E-01	3	2.500E-01	---	RDRY(1)
R19B	Dry Foliar Interception Fraction for Leafy	2.500E-01	3	2.500E-01	---	RDRY(2)
R19B	Dry Foliar Interception Fraction for Fodder	not used	3	2.500E-01	---	RDRY(3)
R19B	Wet Foliar Interception Fraction for Non-Leafy	2.500E-01	3	2.500E-01	---	RWET(1)
R19B	Wet Foliar Interception Fraction for Leafy	2.500E-01	3	2.500E-01	---	RWET(2)
R19B	Wet Foliar Interception Fraction for Fodder	not used	3	2.500E-01	---	RWET(3)
R19B	Weathering Removal Constant for Vegetation	2.000E+01	3	2.000E+01	---	WLAM
C14	C-12 concentration in water (g/cm**3)	not used	3	2.000E-05	---	C12WTR
C14	C-12 concentration in contaminated soil (g/g)	not used	3	3.000E-02	---	C12CZ
C14	Fraction of vegetation carbon from soil	not used	3	2.000E-02	---	CSOIL
C14	Fraction of vegetation carbon from air	not used	3	9.800E-01	---	CAIR
C14	C-14 evasion layer thickness in soil (m)	not used	3	3.000E-01	---	DMC
C14	C-14 evasion flux rate from soil (1/sec)	not used	3	7.000E-07	---	EVSN
C14	C-12 evasion flux rate from soil (1/sec)	not used	3	1.000E-10	---	REVSN
C14	Fraction of grain in beef cattle feed	not used	3	8.000E-01	---	AVFG4
C14	Fraction of grain in milk cow feed	not used	3	2.000E-01	---	AVFG5

	³		³		³		³
STOR	³	Storage times of contaminated foodstuffs (days):	³		³		³
STOR	³	Fruits, non-leafy vegetables, and grain	³	1.000E+00	³	1.400E+01	³
STOR	³	Leafy vegetables	³	1.000E+00	³	1.000E+00	³
STOR	³	Milk	³	1.000E+00	³	1.000E+00	³
STOR	³	Meat and poultry	³	2.000E+01	³	2.000E+01	³
STOR	³	Fish	³	7.000E+00	³	7.000E+00	³
STOR	³	Crustacea and mollusks	³	7.000E+00	³	7.000E+00	³
STOR	³	Well water	³	1.000E+00	³	1.000E+00	³

---	³	STOR_T(1)
---	³	STOR_T(2)
---	³	STOR_T(3)
---	³	STOR_T(4)
---	³	STOR_T(5)
---	³	STOR_T(6)
---	³	STOR_T(7)

Site-Specific Parameter Summary (continued)

0	3	3	3	3	3	3	3
Menu	Parameter	User	Input	Default	Used by RESRAD	(If different from user input)	Parameter Name
STOR	Surface water	3	1.000E+00	3	1.000E+00	---	3 STOR_T(8)
STOR	Livestock fodder	3	4.500E+01	3	4.500E+01	---	3 STOR_T(9)
R021	Thickness of building foundation (m)	3	not used	3	1.500E-01	---	3 FLOOR1
R021	Bulk density of building foundation (g/cm**3)	3	not used	3	2.400E+00	---	3 DENSFL
R021	Total porosity of the cover material	3	not used	3	4.000E-01	---	3 TPCV
R021	Total porosity of the building foundation	3	not used	3	1.000E-01	---	3 TPFL
R021	Volumetric water content of the cover material	3	not used	3	5.000E-02	---	3 PH20CV
R021	Volumetric water content of the foundation	3	not used	3	3.000E-02	---	3 PH20FL
R021	Diffusion coefficient for radon gas (m/sec):	3		3			3
R021	in cover material	3	not used	3	2.000E-06	---	3 DIFCV
R021	in foundation material	3	not used	3	3.000E-07	---	3 DIFFL
R021	in contaminated zone soil	3	not used	3	2.000E-06	---	3 DIFCZ
R021	Radon vertical dimension of mixing (m)	3	not used	3	2.000E+00	---	3 HMIX
R021	Average building air exchange rate (1/hr)	3	not used	3	5.000E-01	---	3 REXG
R021	Height of the building (room) (m)	3	not used	3	2.500E+00	---	3 HRM
R021	Building interior area factor	3	not used	3	0.000E+00	---	3 FAI
R021	Building depth below ground surface (m)	3	not used	3	-1.000E+00	---	3 DMFL
R021	Emanating power of Rn-222 gas	3	not used	3	2.500E-01	---	3 EMANA(1)
R021	Emanating power of Rn-220 gas	3	not used	3	1.500E-01	---	3 EMANA(2)
TITL	Number of graphical time points	3	32	3	---	---	3 NPTS
TITL	Maximum number of integration points for dose	3	17	3	---	---	3 LYMAX
TITL	Maximum number of integration points for risk	3	257	3	---	---	3 KYMAX

Summary of Pathway Selections

Pathway	3	User Selection
1 -- external gamma	3	active
2 -- inhalation (w/o radon)	3	active
3 -- plant ingestion	3	active
4 -- meat ingestion	3	suppressed
5 -- milk ingestion	3	suppressed
6 -- aquatic foods	3	suppressed
7 -- drinking water	3	suppressed
8 -- soil ingestion	3	active
9 -- radon	3	suppressed

Contaminated Zone Dimensions	Initial Soil Concentrations, pCi/g
AAAAAAAAAAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAAAAAAAAAA
Area: 10000.00 square meters	Am-241 1.000E+01
Thickness: 2.00 meters	Co-60 1.000E+01
Cover Depth: 0.00 meters	Cs-134 1.000E+01
	Cs-137 1.000E+01
	Eu-152 1.000E+01
	Eu-154 1.000E+01
	Eu-155 1.000E+01
	H-3 1.000E+01
	I-129 1.000E+01
	Mn-54 1.000E+01
	Na-22 1.000E+01
	Ni-63 1.000E+01
	Np-237 1.000E+01
	Pu-238 1.000E+01
	Pu-239 1.000E+01
	Ru-106 1.000E+01
	Sr-90 1.000E+01
	Tc-99 1.000E+01
	Th-228 1.000E+01
	Th-230 1.000E+01
	Th-232 1.000E+01
	U-234 1.000E+01
	U-235 1.000E+01
	U-238 1.000E+01

0

Total Dose TDOSE(t), mrem/yr
 Basic Radiation Dose Limit = 2.500E+01 mrem/yr
 Total Mixture Sum M(t) = Fraction of Basic Dose Limit Received at Time (t)
 AA

t (years):	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
TDOSE(t):	4.432E+02	3.709E+02	1.716E+02	1.665E+02	1.543E+02	1.463E+02	1.489E+02	1.575E+02	1.725E+02
M(t):	1.773E+01	1.484E+01	6.863E+00	6.660E+00	6.173E+00	5.852E+00	5.955E+00	6.300E+00	6.901E+00

0Maximum TDOSE(t): 4.432E+02 mrem/yr at t = 0.000E+00 years

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)

As mrem/yr and Fraction of Total Dose At t = 0.000E+00 years

Water Independent Pathways (Inhalation excludes radon)

0	Water Independent Pathways (Inhalation excludes radon)													
0	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA
Am-241	2.577E-01	0.0006	5.906E-04	0.0000	0.000E+00	0.0000	1.668E-01	0.0004	0.000E+00	0.0000	0.000E+00	0.0000	2.638E-01	0.0006
Co-60	9.482E+01	0.2139	1.767E-07	0.0000	0.000E+00	0.0000	2.096E-01	0.0005	0.000E+00	0.0000	0.000E+00	0.0000	4.147E-03	0.0000
Cs-134	4.940E+01	0.1115	1.064E-07	0.0000	0.000E+00	0.0000	5.362E-01	0.0012	0.000E+00	0.0000	0.000E+00	0.0000	2.122E-02	0.0000
Cs-137	2.064E+01	0.0466	2.387E-07	0.0000	0.000E+00	0.0000	4.398E-01	0.0010	0.000E+00	0.0000	0.000E+00	0.0000	1.740E-02	0.0000
Eu-152	4.300E+01	0.0970	5.578E-07	0.0000	0.000E+00	0.0000	2.671E-03	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.690E-03	0.0000
Eu-154	4.595E+01	0.1037	6.285E-07	0.0000	0.000E+00	0.0000	3.870E-03	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.449E-03	0.0000
Eu-155	1.025E+00	0.0023	7.094E-08	0.0000	0.000E+00	0.0000	6.318E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.998E-04	0.0000
H-3	0.000E+00	0.0000	4.082E-04	0.0000	0.000E+00	0.0000	8.785E-02	0.0002	0.000E+00	0.0000	0.000E+00	0.0000	2.319E-05	0.0000
I-129	6.728E-02	0.0002	6.017E-07	0.0000	0.000E+00	0.0000	1.767E+00	0.0040	0.000E+00	0.0000	0.000E+00	0.0000	1.398E-01	0.0003
Mn-54	2.183E+01	0.0493	1.374E-08	0.0000	0.000E+00	0.0000	1.212E-01	0.0003	0.000E+00	0.0000	0.000E+00	0.0000	6.391E-04	0.0000
Na-22	7.426E+01	0.1675	1.564E-07	0.0000	0.000E+00	0.0000	1.138E-01	0.0003	0.000E+00	0.0000	0.000E+00	0.0000	3.601E-03	0.0000
Ni-63	0.000E+00	0.0000	1.220E-08	0.0000	0.000E+00	0.0000	6.315E-03	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.999E-04	0.0000
Np-237	7.223E+00	0.0163	3.048E-04	0.0000	0.000E+00	0.0000	1.766E+00	0.0040	0.000E+00	0.0000	0.000E+00	0.0000	1.397E-01	0.0003
Pu-238	7.718E-04	0.0000	6.602E-04	0.0000	0.000E+00	0.0000	1.859E-01	0.0004	0.000E+00	0.0000	0.000E+00	0.0000	2.939E-01	0.0007
Pu-239	1.853E-03	0.0000	7.309E-04	0.0000	0.000E+00	0.0000	2.054E-01	0.0005	0.000E+00	0.0000	0.000E+00	0.0000	3.248E-01	0.0007
Ru-106	5.947E+00	0.0134	2.963E-07	0.0000	0.000E+00	0.0000	1.251E-01	0.0003	0.000E+00	0.0000	0.000E+00	0.0000	6.598E-03	0.0000
Sr-90	2.646E-01	0.0006	9.567E-07	0.0000	0.000E+00	0.0000	7.339E+00	0.0166	0.000E+00	0.0000	0.000E+00	0.0000	3.872E-02	0.0001
Tc-99	7.382E-04	0.0000	8.179E-08	0.0000	0.000E+00	0.0000	2.625E+00	0.0059	0.000E+00	0.0000	0.000E+00	0.0000	8.307E-04	0.0000
Th-228	5.026E+01	0.1134	2.225E-04	0.0000	0.000E+00	0.0000	9.806E-02	0.0002	0.000E+00	0.0000	0.000E+00	0.0000	1.551E-01	0.0003
Th-230	2.230E-02	0.0001	6.231E-04	0.0000	0.000E+00	0.0000	1.771E-01	0.0004	0.000E+00	0.0000	0.000E+00	0.0000	2.770E-01	0.0006
Th-232	2.302E+00	0.0052	6.820E-04	0.0000	0.000E+00	0.0000	1.503E+00	0.0034	0.000E+00	0.0000	0.000E+00	0.0000	3.523E-01	0.0008
U-234	2.411E-03	0.0000	5.767E-05	0.0000	0.000E+00	0.0000	1.012E-01	0.0002	0.000E+00	0.0000	0.000E+00	0.0000	6.406E-02	0.0001
U-235	4.887E+00	0.0110	5.193E-05	0.0000	0.000E+00	0.0000	9.622E-02	0.0002	0.000E+00	0.0000	0.000E+00	0.0000	6.087E-02	0.0001
U-238	1.069E+00	0.0024	4.932E-05	0.0000	0.000E+00	0.0000	9.814E-02	0.0002	0.000E+00	0.0000	0.000E+00	0.0000	6.210E-02	0.0001
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	4.232E+02	0.9549	4.385E-03	0.0000	0.000E+00	0.0000	1.778E+01	0.0401	0.000E+00	0.0000	0.000E+00	0.0000	2.231E+00	0.0050

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
 As mrem/yr and Fraction of Total Dose At t = 0.000E+00 years

		Water Dependent Pathways													
0		Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
Radio-	AAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAA		AAAAAAAAAAAAAAAA		AAAAAAAAAAAAAAAA		AAAAAAAAAAAAAAAA		AAAAAAAAAAAAAAAA		AAAAAAAAAAAAAAAA		AAAAAAAAAAAAAAAA	
Nuclide	mrem/yr fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAAA	AAAAAAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA
Am-241	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.888E-01 0.0016
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.504E+01 0.2144
Cs-134	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.996E+01 0.1127
Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.110E+01 0.0476
Eu-152	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.300E+01 0.0970
Eu-154	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.596E+01 0.1037
Eu-155	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.026E+00 0.0023
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.828E-02 0.0002
I-129	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.974E+00 0.0045
Mn-54	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.195E+01 0.0495
Na-22	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.438E+01 0.1678
Ni-63	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.515E-03 0.0000
Np-237	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.129E+00 0.0206
Pu-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.812E-01 0.0011
Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.328E-01 0.0012
Ru-106	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.079E+00 0.0137
Sr-90	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.643E+00 0.0172
Tc-99	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.626E+00 0.0059
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.051E+01 0.1140
Th-230	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.771E-01 0.0011
Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.158E+00 0.0094
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.677E-01 0.0004
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.044E+00 0.0114
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.229E+00 0.0028
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.432E+02 1.0000

0*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)

As mrem/yr and Fraction of Total Dose At t = 1.000E+00 years

Water Independent Pathways (Inhalation excludes radon)

0	Water Independent Pathways (Inhalation excludes radon)													
0	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA
Am-241	2.572E-01	0.0007	5.896E-04	0.0000	0.000E+00	0.0000	1.665E-01	0.0004	0.000E+00	0.0000	0.000E+00	0.0000	2.634E-01	0.0007
Co-60	8.314E+01	0.2241	1.550E-07	0.0000	0.000E+00	0.0000	1.838E-01	0.0005	0.000E+00	0.0000	0.000E+00	0.0000	3.636E-03	0.0000
Cs-134	3.531E+01	0.0952	7.607E-08	0.0000	0.000E+00	0.0000	3.833E-01	0.0010	0.000E+00	0.0000	0.000E+00	0.0000	1.517E-02	0.0000
Cs-137	2.017E+01	0.0544	2.333E-07	0.0000	0.000E+00	0.0000	4.298E-01	0.0012	0.000E+00	0.0000	0.000E+00	0.0000	1.700E-02	0.0000
Eu-152	4.085E+01	0.1101	5.299E-07	0.0000	0.000E+00	0.0000	2.538E-03	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.606E-03	0.0000
Eu-154	4.239E+01	0.1143	5.798E-07	0.0000	0.000E+00	0.0000	3.570E-03	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.259E-03	0.0000
Eu-155	8.859E-01	0.0024	6.133E-08	0.0000	0.000E+00	0.0000	5.462E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.456E-04	0.0000
H-3	0.000E+00	0.0000	3.588E-04	0.0000	0.000E+00	0.0000	7.723E-02	0.0002	0.000E+00	0.0000	0.000E+00	0.0000	2.039E-05	0.0000
I-129	6.728E-02	0.0002	6.016E-07	0.0000	0.000E+00	0.0000	1.767E+00	0.0048	0.000E+00	0.0000	0.000E+00	0.0000	1.397E-01	0.0004
Mn-54	9.701E+00	0.0262	6.105E-09	0.0000	0.000E+00	0.0000	5.384E-02	0.0001	0.000E+00	0.0000	0.000E+00	0.0000	2.840E-04	0.0000
Na-22	5.689E+01	0.1534	1.198E-07	0.0000	0.000E+00	0.0000	8.717E-02	0.0002	0.000E+00	0.0000	0.000E+00	0.0000	2.759E-03	0.0000
Ni-63	0.000E+00	0.0000	1.212E-08	0.0000	0.000E+00	0.0000	6.272E-03	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.985E-04	0.0000
Np-237	7.223E+00	0.0195	3.048E-04	0.0000	0.000E+00	0.0000	1.766E+00	0.0048	0.000E+00	0.0000	0.000E+00	0.0000	1.397E-01	0.0004
Pu-238	7.658E-04	0.0000	6.550E-04	0.0000	0.000E+00	0.0000	1.844E-01	0.0005	0.000E+00	0.0000	0.000E+00	0.0000	2.916E-01	0.0008
Pu-239	1.853E-03	0.0000	7.309E-04	0.0000	0.000E+00	0.0000	2.054E-01	0.0006	0.000E+00	0.0000	0.000E+00	0.0000	3.248E-01	0.0009
Ru-106	3.020E+00	0.0081	1.504E-07	0.0000	0.000E+00	0.0000	6.352E-02	0.0002	0.000E+00	0.0000	0.000E+00	0.0000	3.350E-03	0.0000
Sr-90	2.583E-01	0.0007	9.339E-07	0.0000	0.000E+00	0.0000	7.165E+00	0.0193	0.000E+00	0.0000	0.000E+00	0.0000	3.779E-02	0.0001
Tc-99	7.382E-04	0.0000	8.179E-08	0.0000	0.000E+00	0.0000	2.625E+00	0.0071	0.000E+00	0.0000	0.000E+00	0.0000	8.307E-04	0.0000
Th-228	3.497E+01	0.0943	1.548E-04	0.0000	0.000E+00	0.0000	6.824E-02	0.0002	0.000E+00	0.0000	0.000E+00	0.0000	1.079E-01	0.0003
Th-230	5.204E-02	0.0001	6.231E-04	0.0000	0.000E+00	0.0000	1.813E-01	0.0005	0.000E+00	0.0000	0.000E+00	0.0000	2.772E-01	0.0007
Th-232	7.823E+00	0.0211	7.014E-04	0.0000	0.000E+00	0.0000	3.943E+00	0.0106	0.000E+00	0.0000	0.000E+00	0.0000	4.549E-01	0.0012
U-234	2.412E-03	0.0000	5.767E-05	0.0000	0.000E+00	0.0000	1.012E-01	0.0003	0.000E+00	0.0000	0.000E+00	0.0000	6.406E-02	0.0002
U-235	4.887E+00	0.0132	5.196E-05	0.0000	0.000E+00	0.0000	9.630E-02	0.0003	0.000E+00	0.0000	0.000E+00	0.0000	6.088E-02	0.0002
U-238	1.069E+00	0.0029	4.933E-05	0.0000	0.000E+00	0.0000	9.814E-02	0.0003	0.000E+00	0.0000	0.000E+00	0.0000	6.210E-02	0.0002
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	3.490E+02	0.9409	4.281E-03	0.0000	0.000E+00	0.0000	1.966E+01	0.0530	0.000E+00	0.0000	0.000E+00	0.0000	2.271E+00	0.0061

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
 As mrem/yr and Fraction of Total Dose At t = 1.000E+00 years

Water Dependent Pathways														
0	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA
Am-241	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.877E-01	0.0019
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.333E+01	0.2247
Cs-134	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.571E+01	0.0963
Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.062E+01	0.0556
Eu-152	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.085E+01	0.1101
Eu-154	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.240E+01	0.1143
Eu-155	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.868E-01	0.0024
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.761E-02	0.0002
I-129	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.974E+00	0.0053
Mn-54	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.755E+00	0.0263
Na-22	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.698E+01	0.1536
Ni-63	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.470E-03	0.0000
Np-237	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.129E+00	0.0246
Pu-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.774E-01	0.0013
Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.328E-01	0.0014
Ru-106	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.087E+00	0.0083
Sr-90	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.461E+00	0.0201
Tc-99	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.626E+00	0.0071
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.515E+01	0.0948
Th-230	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.112E-01	0.0014
Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.222E+01	0.0330
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.678E-01	0.0005
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.044E+00	0.0136
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.229E+00	0.0033
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.709E+02	1.0000

0*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)

As mrem/yr and Fraction of Total Dose At t = 2.500E+01 years

Water Independent Pathways (Inhalation excludes radon)

0	Water Independent Pathways (Inhalation excludes radon)													
0	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA
Am-241	2.476E-01	0.0014	5.674E-04	0.0000	0.000E+00	0.0000	1.603E-01	0.0009	0.000E+00	0.0000	0.000E+00	0.0000	2.534E-01	0.0015
Co-60	3.542E+00	0.0206	6.602E-09	0.0000	0.000E+00	0.0000	7.831E-03	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.549E-04	0.0000
Cs-134	1.119E-02	0.0001	2.411E-11	0.0000	0.000E+00	0.0000	1.215E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.807E-06	0.0000
Cs-137	1.162E+01	0.0677	1.344E-07	0.0000	0.000E+00	0.0000	2.476E-01	0.0014	0.000E+00	0.0000	0.000E+00	0.0000	9.796E-03	0.0001
Eu-152	1.195E+01	0.0697	1.551E-07	0.0000	0.000E+00	0.0000	7.426E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.699E-04	0.0000
Eu-154	6.117E+00	0.0357	8.366E-08	0.0000	0.000E+00	0.0000	5.152E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.260E-04	0.0000
Eu-155	2.691E-02	0.0002	1.863E-09	0.0000	0.000E+00	0.0000	1.659E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.050E-05	0.0000
H-3	0.000E+00	0.0000	1.627E-05	0.0000	0.000E+00	0.0000	3.502E-03	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.245E-07	0.0000
I-129	6.721E-02	0.0004	6.010E-07	0.0000	0.000E+00	0.0000	1.765E+00	0.0103	0.000E+00	0.0000	0.000E+00	0.0000	1.396E-01	0.0008
Mn-54	3.406E-08	0.0000	2.144E-17	0.0000	0.000E+00	0.0000	1.890E-10	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.972E-13	0.0000
Na-22	9.514E-02	0.0006	2.004E-10	0.0000	0.000E+00	0.0000	1.458E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.613E-06	0.0000
Ni-63	0.000E+00	0.0000	1.026E-08	0.0000	0.000E+00	0.0000	5.312E-03	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.681E-04	0.0000
Np-237	7.223E+00	0.0421	3.048E-04	0.0000	0.000E+00	0.0000	1.766E+00	0.0103	0.000E+00	0.0000	0.000E+00	0.0000	1.397E-01	0.0008
Pu-238	6.336E-04	0.0000	5.419E-04	0.0000	0.000E+00	0.0000	1.525E-01	0.0009	0.000E+00	0.0000	0.000E+00	0.0000	2.412E-01	0.0014
Pu-239	1.852E-03	0.0000	7.304E-04	0.0000	0.000E+00	0.0000	2.053E-01	0.0012	0.000E+00	0.0000	0.000E+00	0.0000	3.246E-01	0.0019
Ru-106	2.610E-07	0.0000	1.300E-14	0.0000	0.000E+00	0.0000	5.488E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.895E-10	0.0000
Sr-90	1.449E-01	0.0008	5.240E-07	0.0000	0.000E+00	0.0000	4.020E+00	0.0234	0.000E+00	0.0000	0.000E+00	0.0000	2.121E-02	0.0001
Tc-99	7.368E-04	0.0000	8.164E-08	0.0000	0.000E+00	0.0000	2.620E+00	0.0153	0.000E+00	0.0000	0.000E+00	0.0000	8.292E-04	0.0000
Th-228	5.812E-03	0.0000	2.573E-08	0.0000	0.000E+00	0.0000	1.134E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.793E-05	0.0000
Th-230	7.618E-01	0.0044	6.238E-04	0.0000	0.000E+00	0.0000	3.291E-01	0.0019	0.000E+00	0.0000	0.000E+00	0.0000	2.893E-01	0.0017
Th-232	8.724E+01	0.5085	1.015E-03	0.0000	0.000E+00	0.0000	2.202E+01	0.1283	0.000E+00	0.0000	0.000E+00	0.0000	1.330E+00	0.0078
U-234	2.502E-03	0.0000	5.781E-05	0.0000	0.000E+00	0.0000	1.013E-01	0.0006	0.000E+00	0.0000	0.000E+00	0.0000	6.412E-02	0.0004
U-235	4.890E+00	0.0285	5.286E-05	0.0000	0.000E+00	0.0000	9.844E-02	0.0006	0.000E+00	0.0000	0.000E+00	0.0000	6.129E-02	0.0004
U-238	1.069E+00	0.0062	4.933E-05	0.0000	0.000E+00	0.0000	9.814E-02	0.0006	0.000E+00	0.0000	0.000E+00	0.0000	6.211E-02	0.0004
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	1.350E+02	0.7870	3.962E-03	0.0000	0.000E+00	0.0000	3.360E+01	0.1958	0.000E+00	0.0000	0.000E+00	0.0000	2.939E+00	0.0171

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
 As mrem/yr and Fraction of Total Dose At t = 2.500E+01 years

Water Dependent Pathways														
0	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA
Am-241	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.618E-01	0.0039
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.550E+00	0.0207
Cs-134	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.132E-02	0.0001
Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.188E+01	0.0692
Eu-152	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.195E+01	0.0697
Eu-154	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.118E+00	0.0357
Eu-155	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.694E-02	0.0002
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.520E-03	0.0000
I-129	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.972E+00	0.0115
Mn-54	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.425E-08	0.0000
Na-22	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.529E-02	0.0006
Ni-63	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.480E-03	0.0000
Np-237	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.129E+00	0.0532
Pu-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.949E-01	0.0023
Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.324E-01	0.0031
Ru-106	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.667E-07	0.0000
Sr-90	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.186E+00	0.0244
Tc-99	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.621E+00	0.0153
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.841E-03	0.0000
Th-230	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.381E+00	0.0080
Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.106E+02	0.6446
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.679E-01	0.0010
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.050E+00	0.0294
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.229E+00	0.0072
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.716E+02	1.0000

0*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)

As mrem/yr and Fraction of Total Dose At t = 3.000E+01 years

Water Independent Pathways (Inhalation excludes radon)

0	Water Independent Pathways (Inhalation excludes radon)													
0	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA
Am-241	2.456E-01	0.0015	5.628E-04	0.0000	0.000E+00	0.0000	1.590E-01	0.0010	0.000E+00	0.0000	0.000E+00	0.0000	2.514E-01	0.0015
Co-60	1.835E+00	0.0110	3.421E-09	0.0000	0.000E+00	0.0000	4.057E-03	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.026E-05	0.0000
Cs-134	2.089E-03	0.0000	4.501E-12	0.0000	0.000E+00	0.0000	2.268E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.972E-07	0.0000
Cs-137	1.036E+01	0.0622	1.198E-07	0.0000	0.000E+00	0.0000	2.207E-01	0.0013	0.000E+00	0.0000	0.000E+00	0.0000	8.733E-03	0.0001
Eu-152	9.253E+00	0.0556	1.200E-07	0.0000	0.000E+00	0.0000	5.749E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.638E-04	0.0000
Eu-154	4.087E+00	0.0245	5.589E-08	0.0000	0.000E+00	0.0000	3.442E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.178E-04	0.0000
Eu-155	1.300E-02	0.0001	8.997E-10	0.0000	0.000E+00	0.0000	8.013E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.070E-06	0.0000
H-3	0.000E+00	0.0000	8.543E-06	0.0000	0.000E+00	0.0000	1.839E-03	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.854E-07	0.0000
I-129	6.720E-02	0.0004	6.009E-07	0.0000	0.000E+00	0.0000	1.765E+00	0.0106	0.000E+00	0.0000	0.000E+00	0.0000	1.396E-01	0.0008
Mn-54	5.901E-10	0.0000	3.713E-19	0.0000	0.000E+00	0.0000	3.275E-12	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.728E-14	0.0000
Na-22	2.511E-02	0.0002	5.289E-11	0.0000	0.000E+00	0.0000	3.847E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.218E-06	0.0000
Ni-63	0.000E+00	0.0000	9.914E-09	0.0000	0.000E+00	0.0000	5.131E-03	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.624E-04	0.0000
Np-237	7.223E+00	0.0434	3.048E-04	0.0000	0.000E+00	0.0000	1.766E+00	0.0106	0.000E+00	0.0000	0.000E+00	0.0000	1.397E-01	0.0008
Pu-238	6.091E-04	0.0000	5.209E-04	0.0000	0.000E+00	0.0000	1.466E-01	0.0009	0.000E+00	0.0000	0.000E+00	0.0000	2.318E-01	0.0014
Pu-239	1.852E-03	0.0000	7.303E-04	0.0000	0.000E+00	0.0000	2.052E-01	0.0012	0.000E+00	0.0000	0.000E+00	0.0000	3.245E-01	0.0019
Ru-106	8.811E-09	0.0000	4.389E-16	0.0000	0.000E+00	0.0000	1.853E-10	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.774E-12	0.0000
Sr-90	1.285E-01	0.0008	4.646E-07	0.0000	0.000E+00	0.0000	3.564E+00	0.0214	0.000E+00	0.0000	0.000E+00	0.0000	1.880E-02	0.0001
Tc-99	7.366E-04	0.0000	8.161E-08	0.0000	0.000E+00	0.0000	2.619E+00	0.0157	0.000E+00	0.0000	0.000E+00	0.0000	8.289E-04	0.0000
Th-228	9.483E-04	0.0000	4.198E-09	0.0000	0.000E+00	0.0000	1.850E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.926E-06	0.0000
Th-230	9.088E-01	0.0055	6.239E-04	0.0000	0.000E+00	0.0000	3.683E-01	0.0022	0.000E+00	0.0000	0.000E+00	0.0000	2.931E-01	0.0018
Th-232	8.981E+01	0.5394	1.026E-03	0.0000	0.000E+00	0.0000	2.250E+01	0.1351	0.000E+00	0.0000	0.000E+00	0.0000	1.355E+00	0.0081
U-234	2.540E-03	0.0000	5.783E-05	0.0000	0.000E+00	0.0000	1.013E-01	0.0006	0.000E+00	0.0000	0.000E+00	0.0000	6.413E-02	0.0004
U-235	4.891E+00	0.0294	5.307E-05	0.0000	0.000E+00	0.0000	9.891E-02	0.0006	0.000E+00	0.0000	0.000E+00	0.0000	6.139E-02	0.0004
U-238	1.069E+00	0.0064	4.933E-05	0.0000	0.000E+00	0.0000	9.814E-02	0.0006	0.000E+00	0.0000	0.000E+00	0.0000	6.211E-02	0.0004
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	1.299E+02	0.7803	3.939E-03	0.0000	0.000E+00	0.0000	3.362E+01	0.2019	0.000E+00	0.0000	0.000E+00	0.0000	2.952E+00	0.0177

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)

As mrem/yr and Fraction of Total Dose At t = 5.000E+01 years

Water Independent Pathways (Inhalation excludes radon)

0	Water Independent Pathways (Inhalation excludes radon)													
0	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA
Am-241	2.379E-01	0.0015	5.451E-04	0.0000	0.000E+00	0.0000	1.540E-01	0.0010	0.000E+00	0.0000	0.000E+00	0.0000	2.434E-01	0.0016
Co-60	1.323E-01	0.0009	2.466E-10	0.0000	0.000E+00	0.0000	2.925E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.786E-06	0.0000
Cs-134	2.536E-06	0.0000	5.463E-15	0.0000	0.000E+00	0.0000	2.753E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.089E-09	0.0000
Cs-137	6.544E+00	0.0424	7.568E-08	0.0000	0.000E+00	0.0000	1.394E-01	0.0009	0.000E+00	0.0000	0.000E+00	0.0000	5.515E-03	0.0000
Eu-152	3.323E+00	0.0215	4.311E-08	0.0000	0.000E+00	0.0000	2.065E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.306E-04	0.0000
Eu-154	8.142E-01	0.0053	1.114E-08	0.0000	0.000E+00	0.0000	6.857E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.339E-05	0.0000
Eu-155	7.068E-04	0.0000	4.893E-11	0.0000	0.000E+00	0.0000	4.357E-07	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.757E-07	0.0000
H-3	0.000E+00	0.0000	6.488E-07	0.0000	0.000E+00	0.0000	1.396E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.686E-08	0.0000
I-129	6.714E-02	0.0004	6.004E-07	0.0000	0.000E+00	0.0000	1.763E+00	0.0114	0.000E+00	0.0000	0.000E+00	0.0000	1.395E-01	0.0009
Mn-54	5.314E-17	0.0000	3.345E-26	0.0000	0.000E+00	0.0000	2.950E-19	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.556E-21	0.0000
Na-22	1.219E-04	0.0000	2.567E-13	0.0000	0.000E+00	0.0000	1.867E-07	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.910E-09	0.0000
Ni-63	0.000E+00	0.0000	8.632E-09	0.0000	0.000E+00	0.0000	4.467E-03	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.414E-04	0.0000
Np-237	7.223E+00	0.0468	3.048E-04	0.0000	0.000E+00	0.0000	1.766E+00	0.0114	0.000E+00	0.0000	0.000E+00	0.0000	1.397E-01	0.0009
Pu-238	5.202E-04	0.0000	4.447E-04	0.0000	0.000E+00	0.0000	1.252E-01	0.0008	0.000E+00	0.0000	0.000E+00	0.0000	1.980E-01	0.0013
Pu-239	1.851E-03	0.0000	7.299E-04	0.0000	0.000E+00	0.0000	2.051E-01	0.0013	0.000E+00	0.0000	0.000E+00	0.0000	3.243E-01	0.0021
Ru-106	1.145E-14	0.0000	5.704E-22	0.0000	0.000E+00	0.0000	2.408E-16	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.270E-17	0.0000
Sr-90	7.939E-02	0.0005	2.870E-07	0.0000	0.000E+00	0.0000	2.202E+00	0.0143	0.000E+00	0.0000	0.000E+00	0.0000	1.162E-02	0.0001
Tc-99	7.354E-04	0.0000	8.149E-08	0.0000	0.000E+00	0.0000	2.615E+00	0.0169	0.000E+00	0.0000	0.000E+00	0.0000	8.276E-04	0.0000
Th-228	6.721E-07	0.0000	2.976E-12	0.0000	0.000E+00	0.0000	1.311E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.074E-09	0.0000
Th-230	1.493E+00	0.0097	6.247E-04	0.0000	0.000E+00	0.0000	5.416E-01	0.0035	0.000E+00	0.0000	0.000E+00	0.0000	3.113E-01	0.0020
Th-232	9.264E+01	0.6003	1.037E-03	0.0000	0.000E+00	0.0000	2.303E+01	0.1492	0.000E+00	0.0000	0.000E+00	0.0000	1.382E+00	0.0090
U-234	2.761E-03	0.0000	5.795E-05	0.0000	0.000E+00	0.0000	1.014E-01	0.0007	0.000E+00	0.0000	0.000E+00	0.0000	6.418E-02	0.0004
U-235	4.895E+00	0.0317	5.399E-05	0.0000	0.000E+00	0.0000	1.008E-01	0.0007	0.000E+00	0.0000	0.000E+00	0.0000	6.183E-02	0.0004
U-238	1.069E+00	0.0069	4.933E-05	0.0000	0.000E+00	0.0000	9.815E-02	0.0006	0.000E+00	0.0000	0.000E+00	0.0000	6.211E-02	0.0004
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	1.185E+02	0.7680	3.850E-03	0.0000	0.000E+00	0.0000	3.285E+01	0.2128	0.000E+00	0.0000	0.000E+00	0.0000	2.945E+00	0.0191

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
 As mrem/yr and Fraction of Total Dose At t = 5.000E+01 years

Water Dependent Pathways														
0	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA
Am-241	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.359E-01	0.0041
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.326E-01	0.0009
Cs-134	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.565E-06	0.0000
Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.689E+00	0.0433
Eu-152	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.323E+00	0.0215
Eu-154	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.143E-01	0.0053
Eu-155	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.075E-04	0.0000
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.403E-04	0.0000
I-129	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.970E+00	0.0128
Mn-54	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.344E-17	0.0000
Na-22	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.221E-04	0.0000
Ni-63	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.609E-03	0.0000
Np-237	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.129E+00	0.0592
Pu-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.241E-01	0.0021
Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.320E-01	0.0034
Ru-106	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.170E-14	0.0000
Sr-90	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.293E+00	0.0149
Tc-99	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.616E+00	0.0170
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.755E-07	0.0000
Th-230	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.347E+00	0.0152
Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.170E+02	0.7585
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.684E-01	0.0011
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.058E+00	0.0328
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.229E+00	0.0080
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.543E+02	1.0000

0*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)

As mrem/yr and Fraction of Total Dose At t = 1.000E+02 years

Water Independent Pathways (Inhalation excludes radon)

0	Water Independent Pathways (Inhalation excludes radon)													
0	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA
Am-241	2.197E-01	0.0015	5.031E-04	0.0000	0.000E+00	0.0000	1.421E-01	0.0010	0.000E+00	0.0000	0.000E+00	0.0000	2.247E-01	0.0015
Co-60	1.846E-04	0.0000	3.440E-13	0.0000	0.000E+00	0.0000	4.081E-07	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.072E-09	0.0000
Cs-134	1.302E-13	0.0000	2.805E-22	0.0000	0.000E+00	0.0000	1.413E-15	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.591E-17	0.0000
Cs-137	2.074E+00	0.0142	2.399E-08	0.0000	0.000E+00	0.0000	4.419E-02	0.0003	0.000E+00	0.0000	0.000E+00	0.0000	1.748E-03	0.0000
Eu-152	2.568E-01	0.0018	3.332E-09	0.0000	0.000E+00	0.0000	1.596E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.010E-05	0.0000
Eu-154	1.442E-02	0.0001	1.973E-10	0.0000	0.000E+00	0.0000	1.215E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.688E-07	0.0000
Eu-155	4.874E-07	0.0000	3.374E-14	0.0000	0.000E+00	0.0000	3.005E-10	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.902E-10	0.0000
H-3	0.000E+00	0.0000	1.031E-09	0.0000	0.000E+00	0.0000	2.220E-07	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.859E-11	0.0000
I-129	6.700E-02	0.0005	5.992E-07	0.0000	0.000E+00	0.0000	1.760E+00	0.0120	0.000E+00	0.0000	0.000E+00	0.0000	1.392E-01	0.0010
Mn-54	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Na-22	2.000E-10	0.0000	4.213E-19	0.0000	0.000E+00	0.0000	3.065E-13	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.700E-15	0.0000
Ni-63	0.000E+00	0.0000	6.106E-09	0.0000	0.000E+00	0.0000	3.160E-03	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.000E-04	0.0000
Np-237	7.223E+00	0.0494	3.049E-04	0.0000	0.000E+00	0.0000	1.766E+00	0.0121	0.000E+00	0.0000	0.000E+00	0.0000	1.397E-01	0.0010
Pu-238	3.507E-04	0.0000	2.995E-04	0.0000	0.000E+00	0.0000	8.434E-02	0.0006	0.000E+00	0.0000	0.000E+00	0.0000	1.333E-01	0.0009
Pu-239	1.849E-03	0.0000	7.288E-04	0.0000	0.000E+00	0.0000	2.048E-01	0.0014	0.000E+00	0.0000	0.000E+00	0.0000	3.239E-01	0.0022
Ru-106	2.204E-29	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Sr-90	2.382E-02	0.0002	8.613E-08	0.0000	0.000E+00	0.0000	6.607E-01	0.0045	0.000E+00	0.0000	0.000E+00	0.0000	3.486E-03	0.0000
Tc-99	7.327E-04	0.0000	8.118E-08	0.0000	0.000E+00	0.0000	2.605E+00	0.0178	0.000E+00	0.0000	0.000E+00	0.0000	8.245E-04	0.0000
Th-228	8.988E-15	0.0000	3.979E-20	0.0000	0.000E+00	0.0000	1.754E-17	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.773E-17	0.0000
Th-230	2.933E+00	0.0200	6.268E-04	0.0000	0.000E+00	0.0000	1.029E+00	0.0070	0.000E+00	0.0000	0.000E+00	0.0000	3.655E-01	0.0025
Th-232	9.292E+01	0.6351	1.038E-03	0.0000	0.000E+00	0.0000	2.308E+01	0.1578	0.000E+00	0.0000	0.000E+00	0.0000	1.385E+00	0.0095
U-234	3.779E-03	0.0000	5.822E-05	0.0000	0.000E+00	0.0000	1.017E-01	0.0007	0.000E+00	0.0000	0.000E+00	0.0000	6.433E-02	0.0004
U-235	4.910E+00	0.0336	5.650E-05	0.0000	0.000E+00	0.0000	1.058E-01	0.0007	0.000E+00	0.0000	0.000E+00	0.0000	6.302E-02	0.0004
U-238	1.069E+00	0.0073	4.934E-05	0.0000	0.000E+00	0.0000	9.816E-02	0.0007	0.000E+00	0.0000	0.000E+00	0.0000	6.212E-02	0.0004
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	1.117E+02	0.7635	3.666E-03	0.0000	0.000E+00	0.0000	3.169E+01	0.2166	0.000E+00	0.0000	0.000E+00	0.0000	2.907E+00	0.0199

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
 As mrem/yr and Fraction of Total Dose At t = 1.000E+02 years

		Water Dependent Pathways														
0		Water		Fish		Radon		Plant		Meat		Milk		All Pathways*		
Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAAA	AAAAA
Am-241	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.870E-01	0.0040
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.850E-04	0.0000
Cs-134	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.317E-13	0.0000
Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.120E+00	0.0145
Eu-152	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.569E-01	0.0018
Eu-154	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.443E-02	0.0001
Eu-155	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.879E-07	0.0000
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.230E-07	0.0000
I-129	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.966E+00	0.0134
Mn-54	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Na-22	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.003E-10	0.0000
Ni-63	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.260E-03	0.0000
Np-237	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.129E+00	0.0624
Pu-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.183E-01	0.0015
Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.313E-01	0.0036
Ru-106	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.204E-29	0.0000
Sr-90	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.881E-01	0.0047
Tc-99	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.606E+00	0.0178
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.033E-15	0.0000
Th-230	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.328E+00	0.0296
Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.174E+02	0.8023
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.699E-01	0.0012
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.078E+00	0.0347
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.229E+00	0.0084
iiiiiii	iiiiiii	iiiiii	iiiiiii	iiiiii	iiiiiii	iiiiii	iiiiiii	iiiiii	iiiiiii	iiiiii	iiiiiii	iiiiii	iiiiiii	iiiiii	iiiiiii	iiiiii
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.463E+02	1.0000

0*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)

As mrem/yr and Fraction of Total Dose At t = 2.500E+02 years

Water Independent Pathways (Inhalation excludes radon)

		Water Independent Pathways (Inhalation excludes radon)														
0		Ground		Inhalation		Radon		Plant		Meat		Milk		Soil		
Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA
Am-241	1.730E-01	0.0012	3.955E-04	0.0000	0.000E+00	0.0000	1.118E-01	0.0008	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.766E-01	0.0012
Co-60	5.013E-13	0.0000	9.344E-22	0.0000	0.000E+00	0.0000	1.108E-15	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.192E-17	0.0000
Cs-134	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Cs-137	6.608E-02	0.0004	7.643E-10	0.0000	0.000E+00	0.0000	1.408E-03	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.570E-05	0.0000
Eu-152	1.186E-04	0.0000	1.538E-12	0.0000	0.000E+00	0.0000	7.367E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.662E-09	0.0000
Eu-154	8.023E-08	0.0000	1.097E-15	0.0000	0.000E+00	0.0000	6.757E-12	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.276E-12	0.0000
Eu-155	1.599E-16	0.0000	1.107E-23	0.0000	0.000E+00	0.0000	9.859E-20	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.239E-20	0.0000
H-3	0.000E+00	0.0000	4.142E-18	0.0000	0.000E+00	0.0000	8.914E-16	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.353E-19	0.0000
I-129	6.659E-02	0.0004	5.955E-07	0.0000	0.000E+00	0.0000	1.749E+00	0.0117	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.383E-01	0.0009
Mn-54	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Na-22	8.843E-28	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Ni-63	0.000E+00	0.0000	2.161E-09	0.0000	0.000E+00	0.0000	1.118E-03	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.540E-05	0.0000
Np-237	7.223E+00	0.0485	3.049E-04	0.0000	0.000E+00	0.0000	1.766E+00	0.0119	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.398E-01	0.0009
Pu-238	1.090E-04	0.0000	9.155E-05	0.0000	0.000E+00	0.0000	2.580E-02	0.0002	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.076E-02	0.0003
Pu-239	1.841E-03	0.0000	7.257E-04	0.0000	0.000E+00	0.0000	2.039E-01	0.0014	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.225E-01	0.0022
Ru-106	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Sr-90	6.435E-04	0.0000	2.327E-09	0.0000	0.000E+00	0.0000	1.785E-02	0.0001	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.415E-05	0.0000
Tc-99	7.244E-04	0.0000	8.026E-08	0.0000	0.000E+00	0.0000	2.575E+00	0.0173	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.152E-04	0.0000
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Th-230	7.065E+00	0.0475	6.332E-04	0.0000	0.000E+00	0.0000	2.522E+00	0.0169	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.360E-01	0.0036
Th-232	9.292E+01	0.6242	1.038E-03	0.0000	0.000E+00	0.0000	2.308E+01	0.1550	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.385E+00	0.0093
U-234	1.070E-02	0.0001	5.907E-05	0.0000	0.000E+00	0.0000	1.041E-01	0.0007	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.492E-02	0.0004
U-235	4.956E+00	0.0333	6.431E-05	0.0000	0.000E+00	0.0000	1.210E-01	0.0008	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.674E-02	0.0004
U-238	1.069E+00	0.0072	4.936E-05	0.0000	0.000E+00	0.0000	9.820E-02	0.0007	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.214E-02	0.0004
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	1.135E+02	0.7628	3.363E-03	0.0000	0.000E+00	0.0000	3.238E+01	0.2175	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.934E+00	0.0197

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
 As mrem/yr and Fraction of Total Dose At t = 2.500E+02 years

	Water Dependent Pathways													
0	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
0	Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	
	Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	
	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	
	Am-241	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.619E-01 0.0031
	Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.024E-13 0.0000
	Cs-134	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00 0.0000
	Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.754E-02 0.0005
	Eu-152	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.186E-04 0.0000
	Eu-154	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.024E-08 0.0000
	Eu-155	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.601E-16 0.0000
	H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.958E-16 0.0000
	I-129	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.954E+00 0.0131
	Mn-54	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00 0.0000
	Na-22	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.843E-28 0.0000
	Ni-63	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.154E-03 0.0000
	Np-237	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.128E+00 0.0613
	Pu-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.676E-02 0.0004
	Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.290E-01 0.0036
	Ru-106	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00 0.0000
	Sr-90	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.859E-02 0.0001
	Tc-99	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.577E+00 0.0173
	Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00 0.0000
	Th-230	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.012E+01 0.0680
	Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.174E+02 0.7885
	U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.798E-01 0.0012
	U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.144E+00 0.0346
	U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.229E+00 0.0083
	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
	Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.489E+02 1.0000

0*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)

As mrem/yr and Fraction of Total Dose At t = 5.000E+02 years

Water Independent Pathways (Inhalation excludes radon)

0	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil		
0	Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	
	Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
	Am-241	1.163E-01	0.0007	2.648E-04	0.0000	0.000E+00	0.0000	7.499E-02	0.0005	0.000E+00	0.0000	0.000E+00	0.0000	1.183E-01	0.0008
	Co-60	2.650E-27	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
	Cs-134	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
	Cs-137	2.115E-04	0.0000	2.447E-12	0.0000	0.000E+00	0.0000	4.507E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.783E-07	0.0000
	Eu-152	3.271E-10	0.0000	8.322E-18	0.0000	0.000E+00	0.0000	2.325E-14	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.471E-14	0.0000
	Eu-154	1.401E-16	0.0000	1.916E-24	0.0000	0.000E+00	0.0000	1.180E-20	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.465E-21	0.0000
	Eu-155	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
	H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
	I-129	6.590E-02	0.0004	5.893E-07	0.0000	0.000E+00	0.0000	1.731E+00	0.0110	0.000E+00	0.0000	0.000E+00	0.0000	1.369E-01	0.0009
	Mn-54	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
	Na-22	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
	Ni-63	0.000E+00	0.0000	3.827E-10	0.0000	0.000E+00	0.0000	1.980E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.268E-06	0.0000
	Np-237	7.222E+00	0.0459	3.050E-04	0.0000	0.000E+00	0.0000	1.766E+00	0.0112	0.000E+00	0.0000	0.000E+00	0.0000	1.399E-01	0.0009
	Pu-238	2.282E-05	0.0000	1.271E-05	0.0000	0.000E+00	0.0000	3.610E-03	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.671E-03	0.0000
	Pu-239	1.829E-03	0.0000	7.205E-04	0.0000	0.000E+00	0.0000	2.025E-01	0.0013	0.000E+00	0.0000	0.000E+00	0.0000	3.202E-01	0.0020
	Ru-106	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
	Sr-90	1.565E-06	0.0000	5.658E-12	0.0000	0.000E+00	0.0000	4.341E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.290E-07	0.0000
	Tc-99	7.108E-04	0.0000	7.875E-08	0.0000	0.000E+00	0.0000	2.527E+00	0.0160	0.000E+00	0.0000	0.000E+00	0.0000	7.999E-04	0.0000
	Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
	Th-230	1.337E+01	0.0849	6.428E-04	0.0000	0.000E+00	0.0000	4.815E+00	0.0306	0.000E+00	0.0000	0.000E+00	0.0000	7.983E-01	0.0051
	Th-232	9.292E+01	0.5900	1.038E-03	0.0000	0.000E+00	0.0000	2.308E+01	0.1465	0.000E+00	0.0000	0.000E+00	0.0000	1.385E+00	0.0088
	U-234	3.431E-02	0.0002	6.049E-05	0.0000	0.000E+00	0.0000	1.125E-01	0.0007	0.000E+00	0.0000	0.000E+00	0.0000	6.641E-02	0.0004
	U-235	5.033E+00	0.0320	7.733E-05	0.0000	0.000E+00	0.0000	1.462E-01	0.0009	0.000E+00	0.0000	0.000E+00	0.0000	7.294E-02	0.0005
	U-238	1.069E+00	0.0068	4.940E-05	0.0000	0.000E+00	0.0000	9.828E-02	0.0006	0.000E+00	0.0000	0.000E+00	0.0000	6.219E-02	0.0004
	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
	Total	1.198E+02	0.7608	3.172E-03	0.0000	0.000E+00	0.0000	3.456E+01	0.2194	0.000E+00	0.0000	0.000E+00	0.0000	3.106E+00	0.0197

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
 As mrem/yr and Fraction of Total Dose At t = 5.000E+02 years

	Water Dependent Pathways														
0	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*		
0	Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	
	Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
	Am-241	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.099E-01	0.0020
	Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.650E-27	0.0000
	Cs-134	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
	Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.162E-04	0.0000
	Eu-152	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.271E-10	0.0000
	Eu-154	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.401E-16	0.0000
	Eu-155	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
	H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
	I-129	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.933E+00	0.0123
	Mn-54	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
	Na-22	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
	Ni-63	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.043E-04	0.0000
	Np-237	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.128E+00	0.0580
	Pu-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.317E-03	0.0001
	Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.252E-01	0.0033
	Ru-106	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
	Sr-90	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.520E-05	0.0000
	Tc-99	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.529E+00	0.0161
	Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
	Th-230	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.898E+01	0.1205
	Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.174E+02	0.7453
	U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.133E-01	0.0014
	U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.252E+00	0.0333
	U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.229E+00	0.0078
	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
	Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.575E+02	1.0000

0*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)

As mrem/yr and Fraction of Total Dose At t = 1.000E+03 years

Water Independent Pathways (Inhalation excludes radon)

0	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil		
0	Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	
	Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
	Am-241	5.296E-02	0.0003	1.188E-04	0.0000	0.000E+00	0.0000	3.382E-02	0.0002	0.000E+00	0.0000	0.000E+00	0.0000	5.305E-02	0.0003
	Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
	Cs-134	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
	Cs-137	2.168E-09	0.0000	2.507E-17	0.0000	0.000E+00	0.0000	4.618E-11	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.827E-12	0.0000
	Eu-152	2.488E-21	0.0000	4.079E-18	0.0000	0.000E+00	0.0000	2.932E-15	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.855E-15	0.0000
	Eu-154	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
	Eu-155	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
	H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
	I-129	6.455E-02	0.0004	5.772E-07	0.0000	0.000E+00	0.0000	1.695E+00	0.0098	0.000E+00	0.0000	0.000E+00	0.0000	1.341E-01	0.0008
	Mn-54	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
	Na-22	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
	Ni-63	0.000E+00	0.0000	1.200E-11	0.0000	0.000E+00	0.0000	6.210E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.966E-07	0.0000
	Np-237	7.222E+00	0.0419	3.053E-04	0.0000	0.000E+00	0.0000	1.766E+00	0.0102	0.000E+00	0.0000	0.000E+00	0.0000	1.401E-01	0.0008
	Pu-238	3.464E-05	0.0000	2.663E-07	0.0000	0.000E+00	0.0000	1.168E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.335E-04	0.0000
	Pu-239	1.806E-03	0.0000	7.102E-04	0.0000	0.000E+00	0.0000	1.996E-01	0.0012	0.000E+00	0.0000	0.000E+00	0.0000	3.156E-01	0.0018
	Ru-106	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
	Sr-90	9.255E-12	0.0000	3.346E-17	0.0000	0.000E+00	0.0000	2.567E-10	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.354E-12	0.0000
	Tc-99	6.844E-04	0.0000	7.583E-08	0.0000	0.000E+00	0.0000	2.433E+00	0.0141	0.000E+00	0.0000	0.000E+00	0.0000	7.701E-04	0.0000
	Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
	Th-230	2.405E+01	0.1394	6.588E-04	0.0000	0.000E+00	0.0000	8.701E+00	0.0504	0.000E+00	0.0000	0.000E+00	0.0000	1.243E+00	0.0072
	Th-232	9.292E+01	0.5386	1.038E-03	0.0000	0.000E+00	0.0000	2.308E+01	0.1338	0.000E+00	0.0000	0.000E+00	0.0000	1.385E+00	0.0080
	U-234	1.211E-01	0.0007	6.339E-05	0.0000	0.000E+00	0.0000	1.437E-01	0.0008	0.000E+00	0.0000	0.000E+00	0.0000	7.104E-02	0.0004
	U-235	5.187E+00	0.0301	1.032E-04	0.0000	0.000E+00	0.0000	1.962E-01	0.0011	0.000E+00	0.0000	0.000E+00	0.0000	8.523E-02	0.0005
	U-238	1.069E+00	0.0062	4.949E-05	0.0000	0.000E+00	0.0000	9.844E-02	0.0006	0.000E+00	0.0000	0.000E+00	0.0000	6.228E-02	0.0004
	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
	Total	1.307E+02	0.7575	3.048E-03	0.0000	0.000E+00	0.0000	3.835E+01	0.2223	0.000E+00	0.0000	0.000E+00	0.0000	3.490E+00	0.0202

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
 As mrem/yr and Fraction of Total Dose At t = 1.000E+03 years

	Water Dependent Pathways														
0	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*		
0	Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	
	Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
	Am-241	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.400E-01	0.0008
	Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
	Cs-134	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
	Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.216E-09	0.0000
	Eu-152	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.791E-15	0.0000
	Eu-154	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
	Eu-155	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
	H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
	I-129	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.894E+00	0.0110
	Mn-54	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
	Na-22	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
	Ni-63	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.407E-06	0.0000
	Np-237	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.129E+00	0.0529
	Pu-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.851E-04	0.0000
	Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.177E-01	0.0030
	Ru-106	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
	Sr-90	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.673E-10	0.0000
	Tc-99	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.435E+00	0.0141
	Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
	Th-230	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.400E+01	0.1971
	Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.174E+02	0.6804
	U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.360E-01	0.0019
	U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.468E+00	0.0317
	U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.230E+00	0.0071
	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
	Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.725E+02	1.0000

0*Sum of all water independent and dependent pathways.

Dose/Source Ratios Summed Over All Pathways

Parent and Progeny Principal Radionuclide Contributions Indicated

0	Parent	Product	Thread	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)								
	(i)	(j)	Fraction	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
	Am-241	Am-241	1.000E+00	6.888E-02	6.877E-02	6.617E-02	6.565E-02	6.357E-02	5.867E-02	4.612E-02	3.089E-02	1.385E-02
	Am-241	Np-237+D	1.000E+00	1.474E-07	4.420E-07	7.374E-06	8.785E-06	1.432E-05	2.739E-05	6.088E-05	1.015E-04	1.470E-04
	Am-241	U-233	1.000E+00	4.292E-15	2.949E-14	8.005E-12	1.142E-11	3.097E-11	1.194E-10	6.870E-10	2.429E-09	7.794E-09
	Am-241	Th-229+D	1.000E+00	6.022E-18	9.025E-17	3.951E-13	6.745E-13	3.035E-12	2.343E-11	3.411E-10	2.466E-09	1.643E-08
	Am-241	àDSR(j)		6.888E-02	6.877E-02	6.618E-02	6.565E-02	6.359E-02	5.870E-02	4.619E-02	3.099E-02	1.400E-02
	0Co-60	Co-60	1.000E+00	9.504E+00	8.333E+00	3.550E-01	1.839E-01	1.326E-02	1.850E-05	5.024E-14	2.656E-28	0.000E+00
	0Cs-134	Cs-134	1.000E+00	4.996E+00	3.571E+00	1.132E-03	2.113E-04	2.565E-07	1.317E-14	1.781E-36	0.000E+00	0.000E+00
	0Cs-137+D	Cs-137+D	1.000E+00	2.110E+00	2.062E+00	1.188E+00	1.059E+00	6.689E-01	2.120E-01	6.754E-03	2.162E-05	2.216E-10
	0Eu-152	Eu-152	7.210E-01	3.100E+00	2.946E+00	8.619E-01	6.672E-01	2.396E-01	1.852E-02	8.551E-06	2.358E-11	1.794E-22
	0Eu-152	Eu-152	2.790E-01	1.200E+00	1.140E+00	3.335E-01	2.582E-01	9.273E-02	7.167E-03	3.309E-06	9.126E-12	6.942E-23
	Eu-152	Gd-152	2.790E-01	1.206E-17	3.537E-17	3.493E-16	3.786E-16	4.430E-16	4.764E-16	4.791E-16	4.791E-16	4.791E-16
	Eu-152	Sm-148	2.790E-01	4.154E-34	2.866E-33	5.552E-31	7.428E-31	1.599E-30	3.997E-30	1.139E-29	2.371E-29	4.836E-29
	Eu-152	Nd-144	2.790E-01	0.000E+00	0.000E+00	0.000E+00	1.401E-45	8.408E-45	4.764E-44	3.727E-43	1.616E-42	6.709E-42
	Eu-152	àDSR(j)		1.200E+00	1.140E+00	3.335E-01	2.582E-01	9.273E-02	7.167E-03	3.309E-06	9.127E-12	4.791E-16
	0Eu-154	Eu-154	1.000E+00	4.596E+00	4.240E+00	6.118E-01	4.087E-01	8.143E-02	1.443E-03	8.024E-09	1.401E-17	4.269E-35
	0Eu-155	Eu-155	1.000E+00	1.026E-01	8.868E-02	2.694E-03	1.301E-03	7.075E-05	4.879E-08	1.601E-17	2.498E-33	0.000E+00
	0H-3	H-3	1.000E+00	8.828E-03	7.761E-03	3.520E-04	1.848E-04	1.403E-05	2.230E-08	8.958E-17	9.089E-31	0.000E+00
	0I-129	I-129	1.000E+00	1.974E-01	1.974E-01	1.972E-01	1.971E-01	1.970E-01	1.966E-01	1.954E-01	1.933E-01	1.894E-01
	0Mn-54	Mn-54	1.000E+00	2.195E+00	9.755E-01	3.425E-09	5.934E-11	5.344E-18	1.301E-35	0.000E+00	0.000E+00	0.000E+00
	0Na-22	Na-22	1.000E+00	7.438E+00	5.698E+00	9.529E-03	2.515E-03	1.221E-05	2.003E-11	8.857E-29	0.000E+00	0.000E+00
	0Ni-63	Ni-63	1.000E+00	6.515E-04	6.470E-04	5.480E-04	5.293E-04	4.609E-04	3.260E-04	1.154E-04	2.043E-05	6.407E-07
	0Np-237+D	Np-237+D	1.000E+00	9.129E-01	9.129E-01	9.129E-01	9.129E-01	9.129E-01	9.129E-01	9.128E-01	9.127E-01	9.126E-01
	Np-237+D	U-233	1.000E+00	3.931E-08	1.166E-07	1.967E-06	2.353E-06	3.895E-06	7.750E-06	1.931E-05	3.855E-05	7.698E-05
	Np-237+D	Th-229+D	1.000E+00	7.451E-11	5.214E-10	1.452E-07	2.076E-07	5.688E-07	2.249E-06	1.390E-05	5.505E-05	2.164E-04
	Np-237+D	àDSR(j)		9.129E-01	9.129E-01	9.129E-01	9.129E-01	9.129E-01	9.129E-01	9.128E-01	9.128E-01	9.129E-01
	0Pu-238	Pu-238	1.850E-09	8.902E-11	8.831E-11	7.306E-11	7.022E-11	5.996E-11	4.038E-11	1.234E-11	1.711E-12	3.288E-14
	0Pu-238	Pu-238	9.996E-01	4.810E-02	4.772E-02	3.947E-02	3.794E-02	3.240E-02	2.182E-02	6.668E-03	9.244E-04	1.777E-05
	Pu-238	U-234	9.996E-01	2.357E-08	7.053E-08	1.093E-06	1.283E-06	1.971E-06	3.283E-06	5.160E-06	5.869E-06	5.972E-06
	Pu-238	Th-230	9.996E-01	1.995E-13	1.390E-12	3.634E-10	5.134E-10	1.339E-09	4.704E-09	2.134E-08	5.672E-08	1.313E-07
	Pu-238	Ra-226+D	9.996E-01	3.651E-15	5.471E-14	2.305E-10	3.904E-10	1.703E-09	1.219E-08	1.454E-07	8.108E-07	3.806E-06
	Pu-238	Pb-210+D	9.996E-01	5.453E-18	1.649E-16	9.244E-12	1.824E-11	1.190E-10	1.356E-09	2.455E-08	1.618E-07	8.247E-07
	Pu-238	àDSR(j)		4.810E-02	4.772E-02	3.947E-02	3.794E-02	3.240E-02	2.182E-02	6.673E-03	9.313E-04	2.850E-05

Dose/Source Ratios Summed Over All Pathways

Parent and Progeny Principal Radionuclide Contributions Indicated

0	Parent (i)	Product (j)	Thread Fraction	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)								
	AAAAA	AAAAA	AAAAA	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
	Pu-238	Pu-238	1.319E-06	6.349E-08	6.299E-08	5.210E-08	5.009E-08	4.276E-08	2.880E-08	8.802E-09	1.220E-09	2.345E-11
	Pu-238	U-234	1.319E-06	3.111E-14	9.310E-14	1.443E-12	1.694E-12	2.602E-12	4.333E-12	6.812E-12	7.746E-12	7.883E-12
	Pu-238	Th-230	1.319E-06	2.634E-19	1.835E-18	4.798E-16	6.776E-16	1.767E-15	6.210E-15	2.818E-14	7.487E-14	1.734E-13
	Pu-238	Ra-226+D	1.319E-06	4.820E-21	7.221E-20	3.043E-16	5.154E-16	2.247E-15	1.609E-14	1.920E-13	1.070E-12	5.024E-12
	Pu-238	Pb-210+D1	1.319E-06	2.557E-24	7.917E-23	4.531E-18	8.941E-18	5.838E-17	6.656E-16	1.205E-14	7.941E-14	4.048E-13
	Pu-238	äDSR(j)		6.349E-08	6.299E-08	5.211E-08	5.009E-08	4.277E-08	2.881E-08	8.809E-09	1.229E-09	3.694E-11
0	Pu-238	Pu-238	1.899E-08	9.138E-10	9.066E-10	7.500E-10	7.209E-10	6.155E-10	4.146E-10	1.267E-10	1.756E-11	3.376E-13
	Pu-238	U-234	1.899E-08	4.478E-16	1.340E-15	2.077E-14	2.438E-14	3.745E-14	6.237E-14	9.805E-14	1.115E-13	1.135E-13
	Pu-238	Th-230	1.899E-08	3.791E-21	2.641E-20	6.906E-18	9.754E-18	2.543E-17	8.938E-17	4.056E-16	1.078E-15	2.495E-15
	Pu-238	Ra-226+D	1.899E-08	6.938E-23	1.039E-21	4.380E-18	7.418E-18	3.235E-17	2.316E-16	2.763E-15	1.541E-14	7.232E-14
	Pu-238	Pb-210+D2	1.899E-08	5.900E-26	1.823E-24	1.041E-19	2.055E-19	1.342E-18	1.529E-17	2.768E-16	1.825E-15	9.302E-15
	Pu-238	äDSR(j)		9.138E-10	9.066E-10	7.500E-10	7.210E-10	6.156E-10	4.147E-10	1.268E-10	1.769E-11	5.352E-13
0	Pu-238	Pu-238	2.100E-04	1.010E-05	1.002E-05	8.291E-06	7.970E-06	6.805E-06	4.583E-06	1.401E-06	1.942E-07	3.732E-09
	Pu-238	U-234	2.100E-04	4.951E-12	1.481E-11	2.296E-10	2.695E-10	4.140E-10	6.895E-10	1.084E-09	1.233E-09	1.254E-09
	Pu-238	Th-230	2.100E-04	4.191E-17	2.920E-16	7.634E-14	1.078E-13	2.812E-13	9.881E-13	4.483E-12	1.191E-11	2.758E-11
	Pu-238	Ra-226+D1	2.100E-04	1.848E-18	2.767E-17	1.166E-13	1.974E-13	8.610E-13	6.163E-12	7.355E-11	4.100E-10	1.925E-09
	Pu-238	Pb-210+D	2.100E-04	1.145E-21	3.464E-20	1.942E-15	3.830E-15	2.500E-14	2.849E-13	5.156E-12	3.398E-11	1.732E-10
	Pu-238	äDSR(j)		1.010E-05	1.002E-05	8.291E-06	7.970E-06	6.805E-06	4.584E-06	1.402E-06	1.959E-07	7.112E-09
0	Pu-238	Pu-238	2.771E-10	1.334E-11	1.323E-11	1.094E-11	1.052E-11	8.982E-12	6.050E-12	1.849E-12	2.563E-13	4.926E-15
	Pu-238	U-234	2.771E-10	6.535E-18	1.956E-17	3.031E-16	3.557E-16	5.465E-16	9.101E-16	1.431E-15	1.627E-15	1.656E-15
	Pu-238	Th-230	2.771E-10	5.532E-23	3.854E-22	1.008E-19	1.423E-19	3.711E-19	1.304E-18	5.918E-18	1.573E-17	3.641E-17
	Pu-238	Ra-226+D1	2.771E-10	2.439E-24	3.653E-23	1.539E-19	2.606E-19	1.137E-18	8.135E-18	9.709E-17	5.412E-16	2.541E-15
	Pu-238	Pb-210+D1	2.771E-10	5.371E-28	1.663E-26	9.518E-22	1.878E-21	1.226E-20	1.398E-19	2.531E-18	1.668E-17	8.503E-17
	Pu-238	äDSR(j)		1.334E-11	1.323E-11	1.094E-11	1.052E-11	8.983E-12	6.051E-12	1.850E-12	2.585E-13	9.244E-15
0	Pu-238	Pu-238	3.989E-12	1.919E-13	1.904E-13	1.575E-13	1.514E-13	1.293E-13	8.708E-14	2.661E-14	3.689E-15	7.091E-17
	Pu-238	U-234	3.989E-12	9.406E-20	2.815E-19	4.363E-18	5.120E-18	7.866E-18	1.310E-17	2.059E-17	2.342E-17	2.383E-17
	Pu-238	Th-230	3.989E-12	7.963E-25	5.547E-24	1.450E-21	2.049E-21	5.342E-21	1.877E-20	8.518E-20	2.264E-19	5.241E-19
	Pu-238	Ra-226+D1	3.989E-12	3.511E-26	5.258E-25	2.215E-21	3.752E-21	1.636E-20	1.171E-19	1.397E-18	7.790E-18	3.657E-17
	Pu-238	Pb-210+D2	3.989E-12	1.239E-29	3.829E-28	2.187E-23	4.316E-23	2.818E-22	3.212E-21	5.815E-20	3.833E-19	1.954E-18
	Pu-238	äDSR(j)		1.919E-13	1.904E-13	1.575E-13	1.514E-13	1.293E-13	8.710E-14	2.663E-14	3.721E-15	1.338E-16
0	Pu-238	Pu-238	1.998E-04	9.612E-06	9.536E-06	7.888E-06	7.583E-06	6.474E-06	4.361E-06	1.333E-06	1.847E-07	3.551E-09
	Pu-238	U-234	1.998E-04	4.710E-12	1.410E-11	2.185E-10	2.564E-10	3.939E-10	6.560E-10	1.031E-09	1.173E-09	1.193E-09
	Pu-238	Th-230	1.998E-04	3.988E-17	2.778E-16	7.263E-14	1.026E-13	2.675E-13	9.401E-13	4.266E-12	1.134E-11	2.624E-11
	Pu-238	Ra-226+D2	1.998E-04	6.516E-19	9.764E-18	4.115E-14	6.969E-14	3.039E-13	2.175E-12	2.596E-11	1.447E-10	6.794E-10
	Pu-238	Pb-210+D	1.998E-04	1.090E-21	3.296E-20	1.847E-15	3.644E-15	2.378E-14	2.710E-13	4.905E-12	3.233E-11	1.648E-10
	Pu-238	äDSR(j)		9.612E-06	9.536E-06	7.889E-06	7.583E-06	6.474E-06	4.361E-06	1.334E-06	1.861E-07	5.614E-09

Dose/Source Ratios Summed Over All Pathways

Parent and Progeny Principal Radionuclide Contributions Indicated

0	Parent (i)	Product (j)	Thread Fraction	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)								
	AAAAA	AAAAA	AAAAA	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
	Pu-238	Pu-238	2.637E-10	1.269E-11	1.259E-11	1.041E-11	1.001E-11	8.546E-12	5.756E-12	1.759E-12	2.438E-13	4.687E-15
	Pu-238	U-234	2.637E-10	6.217E-18	1.861E-17	2.884E-16	3.384E-16	5.200E-16	8.659E-16	1.361E-15	1.548E-15	1.575E-15
	Pu-238	Th-230	2.637E-10	5.264E-23	3.667E-22	9.587E-20	1.354E-19	3.531E-19	1.241E-18	5.631E-18	1.496E-17	3.464E-17
	Pu-238	Ra-226+D2	2.637E-10	8.602E-25	1.289E-23	5.431E-20	9.199E-20	4.011E-19	2.871E-18	3.427E-17	1.910E-16	8.968E-16
	Pu-238	Pb-210+D1	2.637E-10	5.110E-28	1.582E-26	9.055E-22	1.787E-21	1.167E-20	1.330E-19	2.408E-18	1.587E-17	8.090E-17
	Pu-238	äDSR(j)		1.269E-11	1.259E-11	1.041E-11	1.001E-11	8.546E-12	5.757E-12	1.760E-12	2.456E-13	7.274E-15
0	Pu-238	Pu-238	3.795E-12	1.826E-13	1.812E-13	1.499E-13	1.441E-13	1.230E-13	8.285E-14	2.532E-14	3.510E-15	6.746E-17
	Pu-238	U-234	3.795E-12	8.949E-20	2.678E-19	4.151E-18	4.871E-18	7.484E-18	1.246E-17	1.959E-17	2.228E-17	2.268E-17
	Pu-238	Th-230	3.795E-12	7.576E-25	5.278E-24	1.380E-21	1.949E-21	5.082E-21	1.786E-20	8.105E-20	2.154E-19	4.986E-19
	Pu-238	Ra-226+D2	3.795E-12	1.238E-26	1.855E-25	7.818E-22	1.324E-21	5.774E-21	4.133E-20	4.933E-19	2.750E-18	1.291E-17
	Pu-238	Pb-210+D2	3.795E-12	1.179E-29	3.643E-28	2.081E-23	4.106E-23	2.681E-22	3.056E-21	5.533E-20	3.646E-19	1.859E-18
	Pu-238	äDSR(j)		1.826E-13	1.812E-13	1.499E-13	1.441E-13	1.230E-13	8.286E-14	2.534E-14	3.536E-15	1.054E-16
0	Pu-238	Pu-238	4.196E-08	2.019E-09	2.003E-09	1.657E-09	1.593E-09	1.360E-09	9.159E-10	2.799E-10	3.880E-11	7.458E-13
	Pu-238	U-234	4.196E-08	9.893E-16	2.961E-15	4.589E-14	5.385E-14	8.274E-14	1.378E-13	2.166E-13	2.463E-13	2.507E-13
	Pu-238	Th-230	4.196E-08	8.376E-21	5.834E-20	1.526E-17	2.155E-17	5.619E-17	1.975E-16	8.960E-16	2.381E-15	5.513E-15
	Pu-238	Ra-226+D3	4.196E-08	3.529E-22	5.285E-21	2.226E-17	3.771E-17	1.644E-16	1.177E-15	1.405E-14	7.830E-14	3.676E-13
	Pu-238	Pb-210+D	4.196E-08	2.289E-25	6.923E-24	3.880E-19	7.654E-19	4.996E-18	5.693E-17	1.030E-15	6.791E-15	3.462E-14
	Pu-238	äDSR(j)		2.019E-09	2.003E-09	1.657E-09	1.593E-09	1.360E-09	9.161E-10	2.801E-10	3.914E-11	1.404E-12
0	Pu-238	Pu-238	5.538E-14	2.665E-15	2.644E-15	2.187E-15	2.102E-15	1.795E-15	1.209E-15	3.694E-16	5.122E-17	9.844E-19
	Pu-238	U-234	5.538E-14	1.306E-21	3.908E-21	6.057E-20	7.109E-20	1.092E-19	1.819E-19	2.859E-19	3.252E-19	3.309E-19
	Pu-238	Th-230	5.538E-14	1.106E-26	7.702E-26	2.014E-23	2.844E-23	7.416E-23	2.607E-22	1.183E-21	3.143E-21	7.277E-21
	Pu-238	Ra-226+D3	5.538E-14	4.658E-28	6.976E-27	2.939E-23	4.977E-23	2.170E-22	1.554E-21	1.854E-20	1.034E-19	4.852E-19
	Pu-238	Pb-210+D1	5.538E-14	1.073E-31	3.323E-30	1.902E-25	3.753E-25	2.451E-24	2.794E-23	5.057E-22	3.333E-21	1.699E-20
	Pu-238	äDSR(j)		2.665E-15	2.644E-15	2.187E-15	2.102E-15	1.795E-15	1.209E-15	3.698E-16	5.165E-17	1.825E-18
0	Pu-238	Pu-238	7.972E-16	3.836E-17	3.806E-17	3.148E-17	3.026E-17	2.584E-17	1.740E-17	5.318E-18	7.372E-19	1.417E-20
	Pu-238	U-234	7.972E-16	1.880E-23	5.625E-23	8.719E-22	1.023E-21	1.572E-21	2.618E-21	4.115E-21	4.680E-21	4.763E-21
	Pu-238	Th-230	7.972E-16	1.591E-28	1.109E-27	2.899E-25	4.094E-25	1.068E-24	3.752E-24	1.702E-23	4.524E-23	1.047E-22
	Pu-238	Ra-226+D3	7.972E-16	6.704E-30	1.004E-28	4.230E-25	7.164E-25	3.124E-24	2.236E-23	2.669E-22	1.488E-21	6.985E-21
	Pu-238	Pb-210+D2	7.972E-16	2.476E-33	7.651E-32	4.371E-27	8.625E-27	5.631E-26	6.420E-25	1.162E-23	7.659E-23	3.905E-22
	Pu-238	äDSR(j)		3.836E-17	3.806E-17	3.148E-17	3.026E-17	2.584E-17	1.741E-17	5.322E-18	7.435E-19	2.641E-20
0	Pu-238	Pu-238	2.000E-07	9.623E-09	9.547E-09	7.898E-09	7.592E-09	6.482E-09	4.366E-09	1.334E-09	1.850E-10	3.555E-12
	Pu-238	U-234	2.000E-07	4.716E-15	1.411E-14	2.187E-13	2.567E-13	3.944E-13	6.568E-13	1.032E-12	1.174E-12	1.195E-12
	Pu-238	Th-230	2.000E-07	3.992E-20	2.781E-19	7.272E-17	1.027E-16	2.678E-16	9.413E-16	4.271E-15	1.135E-14	2.628E-14
	Pu-238	Ra-226+D4	2.000E-07	9.060E-23	1.363E-21	5.768E-18	9.769E-18	4.260E-17	3.050E-16	3.640E-15	2.029E-14	9.526E-14
	Pu-238	Pb-210+D	2.000E-07	1.091E-24	3.300E-23	1.850E-18	3.649E-18	2.381E-17	2.714E-16	4.911E-15	3.237E-14	1.650E-13
	Pu-238	äDSR(j)		9.623E-09	9.547E-09	7.898E-09	7.592E-09	6.482E-09	4.367E-09	1.335E-09	1.862E-10	5.036E-12

Dose/Source Ratios Summed Over All Pathways

Parent and Progeny Principal Radionuclide Contributions Indicated

0	Parent	Product	Thread	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)								
	(i)	(j)	Fraction	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA
	Pu-238	Pu-238	2.640E-13	1.270E-14	1.260E-14	1.043E-14	1.002E-14	8.556E-15	5.763E-15	1.761E-15	2.441E-16	4.692E-18
	Pu-238	U-234	2.640E-13	6.225E-21	1.863E-20	2.887E-19	3.388E-19	5.206E-19	8.670E-19	1.363E-18	1.550E-18	1.577E-18
	Pu-238	Th-230	2.640E-13	5.270E-26	3.671E-25	9.599E-23	1.356E-22	3.535E-22	1.242E-21	5.637E-21	1.498E-20	3.468E-20
	Pu-238	Ra-226+D4	2.640E-13	1.196E-28	1.800E-27	7.613E-24	1.290E-23	5.624E-23	4.026E-22	4.805E-21	2.678E-20	1.257E-19
	Pu-238	Pb-210+D1	2.640E-13	5.116E-31	1.584E-29	9.066E-25	1.789E-24	1.168E-23	1.332E-22	2.411E-21	1.589E-20	8.100E-20
	Pu-238	äDSR(j)		1.270E-14	1.260E-14	1.043E-14	1.002E-14	8.557E-15	5.764E-15	1.762E-15	2.458E-16	6.511E-18
0	Pu-238	Pu-238	3.800E-15	1.828E-16	1.814E-16	1.501E-16	1.442E-16	1.232E-16	8.295E-17	2.535E-17	3.514E-18	6.754E-20
	Pu-238	U-234	3.800E-15	8.960E-23	2.681E-22	4.156E-21	4.877E-21	7.493E-21	1.248E-20	1.962E-20	2.231E-20	2.270E-20
	Pu-238	Th-230	3.800E-15	7.586E-28	5.284E-27	1.382E-24	1.952E-24	5.089E-24	1.788E-23	8.114E-23	2.156E-22	4.993E-22
	Pu-238	Ra-226+D4	3.800E-15	1.721E-30	2.591E-29	1.096E-25	1.856E-25	8.095E-25	5.795E-24	6.916E-23	3.855E-22	1.810E-21
	Pu-238	Pb-210+D2	3.800E-15	1.180E-32	3.647E-31	2.084E-26	4.111E-26	2.684E-25	3.060E-24	5.539E-23	3.651E-22	1.861E-21
	Pu-238	äDSR(j)		1.828E-16	1.814E-16	1.501E-16	1.442E-16	1.232E-16	8.296E-17	2.537E-17	3.537E-18	9.442E-20
0	Pu-239	Pu-239	5.901E-04	3.144E-05	3.144E-05	3.142E-05	3.141E-05	3.139E-05	3.135E-05	3.121E-05	3.099E-05	3.055E-05
	Pu-239	U-235+D	5.901E-04	1.465E-13	4.396E-13	7.470E-12	8.934E-12	1.479E-11	2.941E-11	7.315E-11	1.456E-10	2.890E-10
	Pu-239	Pa-231	5.901E-04	1.144E-18	8.025E-18	2.240E-15	3.204E-15	8.780E-15	3.474E-14	2.153E-13	8.559E-13	3.392E-12
	Pu-239	Ac-227+D	5.901E-04	2.467E-20	3.671E-19	1.357E-15	2.243E-15	8.920E-15	5.296E-14	4.557E-13	2.048E-12	8.638E-12
	Pu-239	äDSR(j)		3.144E-05	3.144E-05	3.142E-05	3.141E-05	3.139E-05	3.135E-05	3.121E-05	3.099E-05	3.055E-05
0	Pu-239	Pu-239	1.633E-06	8.701E-08	8.701E-08	8.695E-08	8.694E-08	8.689E-08	8.676E-08	8.639E-08	8.577E-08	8.455E-08
	Pu-239	U-235+D	1.633E-06	4.055E-16	1.217E-15	2.067E-14	2.473E-14	4.093E-14	8.140E-14	2.024E-13	4.030E-13	7.998E-13
	Pu-239	Pa-231	1.633E-06	3.166E-21	2.221E-20	6.198E-18	8.867E-18	2.430E-17	9.615E-17	5.959E-16	2.369E-15	9.387E-15
	Pu-239	Ac-227+D1	1.633E-06	6.877E-23	1.025E-21	3.794E-18	6.268E-18	2.493E-17	1.480E-16	1.274E-15	5.724E-15	2.414E-14
	Pu-239	äDSR(j)		8.701E-08	8.701E-08	8.695E-08	8.694E-08	8.689E-08	8.676E-08	8.639E-08	8.577E-08	8.455E-08
0	Pu-239	Pu-239	8.257E-06	4.399E-07	4.399E-07	4.396E-07	4.395E-07	4.393E-07	4.386E-07	4.368E-07	4.336E-07	4.274E-07
	Pu-239	U-235+D	8.257E-06	2.050E-15	6.151E-15	1.045E-13	1.250E-13	2.069E-13	4.115E-13	1.023E-12	2.038E-12	4.044E-12
	Pu-239	Pa-231	8.257E-06	1.601E-20	1.123E-19	3.134E-17	4.483E-17	1.228E-16	4.861E-16	3.013E-15	1.198E-14	4.746E-14
	Pu-239	Ac-227+D2	8.257E-06	2.851E-22	4.250E-21	1.573E-17	2.599E-17	1.034E-16	6.139E-16	5.282E-15	2.373E-14	1.001E-13
	Pu-239	äDSR(j)		4.399E-07	4.399E-07	4.396E-07	4.395E-07	4.393E-07	4.386E-07	4.368E-07	4.336E-07	4.274E-07
0	Pu-239	Pu-239	2.285E-08	1.218E-09	1.217E-09	1.217E-09	1.216E-09	1.216E-09	1.214E-09	1.209E-09	1.200E-09	1.183E-09
	Pu-239	U-235+D	2.285E-08	5.674E-18	1.702E-17	2.893E-16	3.460E-16	5.727E-16	1.139E-15	2.833E-15	5.639E-15	1.119E-14
	Pu-239	Pa-231	2.285E-08	4.430E-23	3.108E-22	8.673E-20	1.241E-19	3.400E-19	1.345E-18	8.338E-18	3.315E-17	1.313E-16
	Pu-239	Ac-227+D3	2.285E-08	7.986E-25	1.190E-23	4.406E-20	7.280E-20	2.896E-19	1.719E-18	1.479E-17	6.648E-17	2.804E-16
	Pu-239	äDSR(j)		1.218E-09	1.217E-09	1.217E-09	1.216E-09	1.216E-09	1.214E-09	1.209E-09	1.200E-09	1.183E-09
0	Pu-239	Pu-239	4.954E-10	2.640E-11	2.640E-11	2.638E-11	2.637E-11	2.636E-11	2.632E-11	2.621E-11	2.602E-11	2.565E-11
	Pu-239	U-235+D	4.954E-10	1.230E-19	3.691E-19	6.272E-18	7.501E-18	1.242E-17	2.469E-17	6.141E-17	1.223E-16	2.426E-16
	Pu-239	Pa-231	4.954E-10	9.604E-25	6.738E-24	1.880E-21	2.690E-21	7.371E-21	2.917E-20	1.808E-19	7.186E-19	2.848E-18
	Pu-239	Ac-227+D4	4.954E-10	2.102E-26	3.132E-25	1.159E-21	1.915E-21	7.619E-21	4.524E-20	3.893E-19	1.749E-18	7.378E-18
	Pu-239	äDSR(j)		2.640E-11	2.640E-11	2.638E-11	2.637E-11	2.636E-11	2.632E-11	2.621E-11	2.602E-11	2.565E-11

Dose/Source Ratios Summed Over All Pathways												
Parent and Progeny Principal Radionuclide Contributions Indicated												
0	Parent	Product	Thread	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)								
	(i)	(j)	Fraction	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA
	Pu-239	Pu-239	1.371E-12	7.305E-14	7.305E-14	7.300E-14	7.299E-14	7.295E-14	7.284E-14	7.253E-14	7.201E-14	7.098E-14
	Pu-239	U-235+D	1.371E-12	3.405E-22	1.021E-21	1.736E-20	2.076E-20	3.436E-20	6.834E-20	1.700E-19	3.384E-19	6.715E-19
	Pu-239	Pa-231	1.371E-12	2.658E-27	1.865E-26	5.204E-24	7.444E-24	2.040E-23	8.073E-23	5.003E-22	1.989E-21	7.881E-21
	Pu-239	Ac-227+D5	1.371E-12	5.874E-29	8.754E-28	3.240E-24	5.353E-24	2.129E-23	1.264E-22	1.088E-21	4.888E-21	2.062E-20
	Pu-239	äDSR(j)		7.305E-14	7.305E-14	7.300E-14	7.299E-14	7.295E-14	7.284E-14	7.253E-14	7.201E-14	7.098E-14
0	Pu-239+D	Pu-239+D	9.829E-01	5.237E-02	5.237E-02	5.233E-02	5.232E-02	5.229E-02	5.222E-02	5.199E-02	5.162E-02	5.088E-02
	Pu-239+D	U-235+D	9.829E-01	2.441E-10	7.322E-10	1.244E-08	1.488E-08	2.463E-08	4.899E-08	1.218E-07	2.426E-07	4.814E-07
	Pu-239+D	Pa-231	9.829E-01	1.905E-15	1.337E-14	3.730E-12	5.336E-12	1.462E-11	5.787E-11	3.586E-10	1.426E-09	5.650E-09
	Pu-239+D	Ac-227+D	9.829E-01	4.108E-17	6.115E-16	2.261E-12	3.735E-12	1.486E-11	8.822E-11	7.591E-10	3.411E-09	1.439E-08
	Pu-239+D	äDSR(j)		5.237E-02	5.237E-02	5.233E-02	5.232E-02	5.229E-02	5.222E-02	5.199E-02	5.162E-02	5.088E-02
0	Pu-239+D	Pu-239+D	2.720E-03	1.449E-04	1.449E-04	1.448E-04	1.448E-04	1.447E-04	1.445E-04	1.439E-04	1.429E-04	1.408E-04
	Pu-239+D	U-235+D	2.720E-03	6.755E-13	2.026E-12	3.444E-11	4.119E-11	6.818E-11	1.356E-10	3.372E-10	6.713E-10	1.332E-09
	Pu-239+D	Pa-231	2.720E-03	5.273E-18	3.699E-17	1.032E-14	1.477E-14	4.047E-14	1.602E-13	9.926E-13	3.946E-12	1.564E-11
	Pu-239+D	Ac-227+D1	2.720E-03	1.145E-19	1.707E-18	6.319E-15	1.044E-14	4.153E-14	2.466E-13	2.122E-12	9.534E-12	4.021E-11
	Pu-239+D	äDSR(j)		1.449E-04	1.449E-04	1.448E-04	1.448E-04	1.447E-04	1.445E-04	1.439E-04	1.429E-04	1.408E-04
0	Pu-239+D	Pu-239+D	1.375E-02	7.327E-04	7.327E-04	7.322E-04	7.321E-04	7.317E-04	7.306E-04	7.275E-04	7.223E-04	7.120E-04
	Pu-239+D	U-235+D	1.375E-02	3.415E-12	1.024E-11	1.741E-10	2.082E-10	3.447E-10	6.854E-10	1.705E-09	3.394E-09	6.736E-09
	Pu-239+D	Pa-231	1.375E-02	2.666E-17	1.870E-16	5.220E-14	7.467E-14	2.046E-13	8.097E-13	5.018E-12	1.995E-11	7.905E-11
	Pu-239+D	Ac-227+D2	1.375E-02	4.749E-19	7.079E-18	2.620E-14	4.329E-14	1.722E-13	1.022E-12	8.798E-12	3.953E-11	1.668E-10
	Pu-239+D	äDSR(j)		7.327E-04	7.327E-04	7.322E-04	7.321E-04	7.317E-04	7.306E-04	7.275E-04	7.223E-04	7.120E-04
0	Pu-239+D	Pu-239+D	3.806E-05	2.028E-06	2.028E-06	2.026E-06	2.026E-06	2.025E-06	2.022E-06	2.013E-06	1.999E-06	1.970E-06
	Pu-239+D	U-235+D	3.806E-05	9.451E-15	2.835E-14	4.819E-13	5.763E-13	9.539E-13	1.897E-12	4.718E-12	9.393E-12	1.864E-11
	Pu-239+D	Pa-231	3.806E-05	7.378E-20	5.176E-19	1.445E-16	2.066E-16	5.663E-16	2.241E-15	1.389E-14	5.521E-14	2.188E-13
	Pu-239+D	Ac-227+D3	3.806E-05	1.330E-21	1.983E-20	7.339E-17	1.213E-16	4.823E-16	2.864E-15	2.464E-14	1.107E-13	4.671E-13
	Pu-239+D	äDSR(j)		2.028E-06	2.028E-06	2.026E-06	2.026E-06	2.025E-06	2.022E-06	2.013E-06	1.999E-06	1.970E-06
0	Pu-239+D	Pu-239+D	8.252E-07	4.397E-08	4.397E-08	4.394E-08	4.393E-08	4.390E-08	4.384E-08	4.365E-08	4.334E-08	4.272E-08
	Pu-239+D	U-235+D	8.252E-07	2.049E-16	6.147E-16	1.045E-14	1.249E-14	2.068E-14	4.113E-14	1.023E-13	2.036E-13	4.042E-13
	Pu-239+D	Pa-231	8.252E-07	1.600E-21	1.122E-20	3.132E-18	4.480E-18	1.228E-17	4.859E-17	3.011E-16	1.197E-15	4.743E-15
	Pu-239+D	Ac-227+D4	8.252E-07	3.501E-23	5.217E-22	1.931E-18	3.191E-18	1.269E-17	7.535E-17	6.484E-16	2.913E-15	1.229E-14
	Pu-239+D	äDSR(j)		4.397E-08	4.397E-08	4.394E-08	4.393E-08	4.390E-08	4.384E-08	4.365E-08	4.334E-08	4.272E-08
0	Pu-239+D	Pu-239+D	2.284E-09	1.217E-10	1.217E-10	1.216E-10	1.216E-10	1.215E-10	1.213E-10	1.208E-10	1.199E-10	1.182E-10
	Pu-239+D	U-235+D	2.284E-09	5.671E-19	1.701E-18	2.891E-17	3.458E-17	5.724E-17	1.138E-16	2.831E-16	5.636E-16	1.119E-15
	Pu-239+D	Pa-231	2.284E-09	4.427E-24	3.106E-23	8.668E-21	1.240E-20	3.398E-20	1.345E-19	8.333E-19	3.313E-18	1.313E-17
	Pu-239+D	Ac-227+D5	2.284E-09	9.784E-26	1.458E-24	5.397E-21	8.917E-21	3.547E-20	2.106E-19	1.812E-18	8.142E-18	3.434E-17
	Pu-239+D	äDSR(j)		1.217E-10	1.217E-10	1.216E-10	1.216E-10	1.215E-10	1.213E-10	1.208E-10	1.199E-10	1.182E-10
0	Ru-106+D	Ru-106+D	1.000E+00	6.079E-01	3.087E-01	2.667E-08	9.006E-10	1.170E-15	2.253E-30	0.000E+00	0.000E+00	0.000E+00
0	Sr-90+D	Sr-90+D	1.000E+00	7.643E-01	7.461E-01	4.186E-01	3.712E-01	2.293E-01	6.881E-02	1.859E-03	4.520E-06	2.673E-11

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 Summary : Adult residential SALS 2015
 File : D:\ACTIVE PROJECTS\ADELANTE\MT0A4_CONTRACT\T01\RISK\2015 RADSALES\DOSE-BASED SALS\RESRAD CALCS\ADULTRES2015.RAD

Dose/Source Ratios Summed Over All Pathways

Parent and Progeny Principal Radionuclide Contributions Indicated

0	Parent (i)	Product (j)	Thread Fraction	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)								
	AAAAA	AAAAA	AAAAA	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
	Tc-99	Tc-99	1.000E+00	2.626E-01	2.626E-01	2.621E-01	2.620E-01	2.616E-01	2.606E-01	2.577E-01	2.529E-01	2.435E-01
0	Th-228+D	Th-228+D	1.000E+00	5.051E+00	3.515E+00	5.841E-04	9.530E-05	6.755E-08	9.033E-16	2.160E-39	0.000E+00	0.000E+00
0	Th-230	Th-230	9.996E-01	4.599E-02	4.599E-02	4.598E-02	4.598E-02	4.597E-02	4.595E-02	4.589E-02	4.578E-02	4.557E-02
	Th-230	Ra-226+D	9.996E-01	1.691E-03	5.075E-03	8.583E-02	1.025E-01	1.690E-01	3.327E-01	8.026E-01	1.519E+00	2.735E+00
	Th-230	Pb-210+D	9.996E-01	4.135E-06	2.836E-05	6.192E-03	8.461E-03	1.953E-02	5.386E-02	1.633E-01	3.318E-01	6.176E-01
	Th-230	äDSR(j)		4.769E-02	5.109E-02	1.380E-01	1.570E-01	2.345E-01	4.325E-01	1.012E+00	1.897E+00	3.398E+00
0	Th-230	Th-230	1.319E-06	6.071E-08	6.071E-08	6.070E-08	6.069E-08	6.068E-08	6.065E-08	6.057E-08	6.043E-08	6.015E-08
	Th-230	Ra-226+D	1.319E-06	2.233E-09	6.699E-09	1.133E-07	1.354E-07	2.231E-07	4.392E-07	1.059E-06	2.006E-06	3.610E-06
	Th-230	Pb-210+D1	1.319E-06	1.976E-12	1.376E-11	3.038E-09	4.151E-09	9.584E-09	2.644E-08	8.013E-08	1.629E-07	3.032E-07
	Th-230	äDSR(j)		6.294E-08	6.742E-08	1.770E-07	2.002E-07	2.934E-07	5.263E-07	1.200E-06	2.229E-06	3.973E-06
0	Th-230	Th-230	1.899E-08	8.738E-10	8.738E-10	8.736E-10	8.736E-10	8.734E-10	8.730E-10	8.718E-10	8.698E-10	8.658E-10
	Th-230	Ra-226+D	1.899E-08	3.214E-11	9.642E-11	1.631E-09	1.948E-09	3.212E-09	6.322E-09	1.525E-08	2.887E-08	5.196E-08
	Th-230	Pb-210+D2	1.899E-08	4.551E-14	3.164E-13	6.980E-11	9.539E-11	2.202E-10	6.074E-10	1.841E-09	3.743E-09	6.966E-09
	Th-230	äDSR(j)		9.060E-10	9.706E-10	2.574E-09	2.917E-09	4.306E-09	7.802E-09	1.796E-08	3.348E-08	5.979E-08
0	Th-230	Th-230	2.100E-04	9.660E-06	9.660E-06	9.658E-06	9.658E-06	9.656E-06	9.651E-06	9.638E-06	9.616E-06	9.572E-06
	Th-230	Ra-226+D1	2.100E-04	8.556E-07	2.567E-06	4.341E-05	5.186E-05	8.549E-05	1.683E-04	4.059E-04	7.684E-04	1.383E-03
	Th-230	Pb-210+D	2.100E-04	8.686E-10	5.957E-09	1.301E-06	1.777E-06	4.102E-06	1.131E-05	3.429E-05	6.970E-05	1.297E-04
	Th-230	äDSR(j)		1.052E-05	1.223E-05	5.436E-05	6.329E-05	9.925E-05	1.892E-04	4.498E-04	8.477E-04	1.522E-03
0	Th-230	Th-230	2.771E-10	1.275E-11	1.275E-11	1.275E-11	1.275E-11	1.275E-11	1.274E-11	1.272E-11	1.269E-11	1.263E-11
	Th-230	Ra-226+D1	2.771E-10	1.129E-12	3.388E-12	5.730E-11	6.845E-11	1.128E-10	2.221E-10	5.358E-10	1.014E-09	1.825E-09
	Th-230	Pb-210+D1	2.771E-10	4.150E-16	2.889E-15	6.380E-13	8.719E-13	2.013E-12	5.553E-12	1.683E-11	3.421E-11	6.368E-11
	Th-230	äDSR(j)		1.388E-11	1.614E-11	7.068E-11	8.207E-11	1.276E-10	2.404E-10	5.653E-10	1.061E-09	1.902E-09
0	Th-230	Th-230	3.989E-12	1.835E-13	1.835E-13	1.835E-13	1.835E-13	1.835E-13	1.834E-13	1.831E-13	1.827E-13	1.819E-13
	Th-230	Ra-226+D1	3.989E-12	1.626E-14	4.877E-14	8.247E-13	9.853E-13	1.624E-12	3.197E-12	7.712E-12	1.460E-11	2.627E-11
	Th-230	Pb-210+D2	3.989E-12	9.559E-18	6.646E-17	1.466E-14	2.004E-14	4.626E-14	1.276E-13	3.868E-13	7.861E-13	1.463E-12
	Th-230	äDSR(j)		1.998E-13	2.324E-13	1.023E-12	1.189E-12	1.854E-12	3.508E-12	8.282E-12	1.557E-11	2.792E-11
0	Th-230	Th-230	1.998E-04	9.191E-06	9.191E-06	9.189E-06	9.188E-06	9.187E-06	9.183E-06	9.170E-06	9.149E-06	9.107E-06
	Th-230	Ra-226+D2	1.998E-04	3.019E-07	9.058E-07	1.532E-05	1.830E-05	3.017E-05	5.939E-05	1.433E-04	2.712E-04	4.881E-04
	Th-230	Pb-210+D	1.998E-04	8.264E-10	5.667E-09	1.237E-06	1.691E-06	3.903E-06	1.076E-05	3.262E-05	6.631E-05	1.234E-04
	Th-230	äDSR(j)		9.494E-06	1.010E-05	2.575E-05	2.918E-05	4.326E-05	7.934E-05	1.851E-04	3.467E-04	6.206E-04
0	Th-230	Th-230	2.637E-10	1.213E-11	1.213E-11	1.213E-11	1.213E-11	1.213E-11	1.212E-11	1.210E-11	1.208E-11	1.202E-11
	Th-230	Ra-226+D2	2.637E-10	3.985E-13	1.196E-12	2.022E-11	2.416E-11	3.983E-11	7.840E-11	1.891E-10	3.580E-10	6.443E-10
	Th-230	Pb-210+D1	2.637E-10	3.948E-16	2.749E-15	6.070E-13	8.296E-13	1.915E-12	5.283E-12	1.601E-11	3.255E-11	6.058E-11
	Th-230	äDSR(j)		1.253E-11	1.333E-11	3.296E-11	3.712E-11	5.387E-11	9.580E-11	2.172E-10	4.026E-10	7.169E-10

Dose/Source Ratios Summed Over All Pathways

Parent and Progeny Principal Radionuclide Contributions Indicated

0	Parent (i)	Product (j)	Thread Fraction	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)								
	AAAAA	AAAAA	AAAAA	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
	Th-230	Th-230	3.795E-12	1.746E-13	1.746E-13	1.746E-13	1.746E-13	1.745E-13	1.745E-13	1.742E-13	1.738E-13	1.730E-13
	Th-230	Ra-226+D2	3.795E-12	5.736E-15	1.721E-14	2.911E-13	3.478E-13	5.733E-13	1.128E-12	2.722E-12	5.153E-12	9.274E-12
	Th-230	Pb-210+D2	3.795E-12	9.094E-18	6.324E-17	1.395E-14	1.906E-14	4.401E-14	1.214E-13	3.680E-13	7.479E-13	1.392E-12
	Th-230	äDSR(j)		1.804E-13	1.919E-13	4.796E-13	5.414E-13	7.919E-13	1.424E-12	3.264E-12	6.075E-12	1.084E-11
0	Th-230	Th-230	4.196E-08	1.931E-09	1.931E-09	1.930E-09	1.930E-09	1.930E-09	1.929E-09	1.926E-09	1.922E-09	1.913E-09
	Th-230	Ra-226+D3	4.196E-08	1.634E-10	4.902E-10	8.289E-09	9.904E-09	1.633E-08	3.213E-08	7.751E-08	1.467E-07	2.641E-07
	Th-230	Pb-210+D	4.196E-08	1.736E-13	1.190E-12	2.599E-10	3.552E-10	8.198E-10	2.261E-09	6.853E-09	1.393E-08	2.592E-08
	Th-230	äDSR(j)		2.094E-09	2.422E-09	1.048E-08	1.219E-08	1.908E-08	3.632E-08	8.629E-08	1.626E-07	2.919E-07
0	Th-230	Th-230	5.538E-14	2.548E-15	2.548E-15	2.548E-15	2.548E-15	2.547E-15	2.546E-15	2.542E-15	2.537E-15	2.525E-15
	Th-230	Ra-226+D3	5.538E-14	2.157E-16	6.470E-16	1.094E-14	1.307E-14	2.155E-14	4.242E-14	1.023E-13	1.937E-13	3.486E-13
	Th-230	Pb-210+D1	5.538E-14	8.293E-20	5.774E-19	1.275E-16	1.743E-16	4.023E-16	1.110E-15	3.364E-15	6.837E-15	1.272E-14
	Th-230	äDSR(j)		2.764E-15	3.196E-15	1.362E-14	1.579E-14	2.450E-14	4.607E-14	1.082E-13	2.031E-13	3.639E-13
0	Th-230	Th-230	7.972E-16	3.668E-17	3.668E-17	3.667E-17	3.667E-17	3.666E-17	3.665E-17	3.660E-17	3.651E-17	3.634E-17
	Th-230	Ra-226+D3	7.972E-16	3.104E-18	9.313E-18	1.575E-16	1.882E-16	3.102E-16	6.106E-16	1.473E-15	2.788E-15	5.018E-15
	Th-230	Pb-210+D2	7.972E-16	1.910E-21	1.328E-20	2.930E-18	4.004E-18	9.244E-18	2.550E-17	7.729E-17	1.571E-16	2.924E-16
	Th-230	äDSR(j)		3.979E-17	4.601E-17	1.971E-16	2.288E-16	3.561E-16	6.727E-16	1.587E-15	2.982E-15	5.346E-15
0	Th-230	Th-230	2.000E-07	9.202E-09	9.202E-09	9.200E-09	9.200E-09	9.198E-09	9.194E-09	9.181E-09	9.160E-09	9.118E-09
	Th-230	Ra-226+D4	2.000E-07	4.217E-11	1.268E-10	2.148E-09	2.566E-09	4.230E-09	8.327E-09	2.009E-08	3.803E-08	6.844E-08
	Th-230	Pb-210+D	2.000E-07	8.274E-13	5.674E-12	1.239E-09	1.693E-09	3.908E-09	1.078E-08	3.266E-08	6.639E-08	1.236E-07
	Th-230	äDSR(j)		9.245E-09	9.335E-09	1.259E-08	1.346E-08	1.734E-08	2.830E-08	6.193E-08	1.136E-07	2.011E-07
0	Th-230	Th-230	2.640E-13	1.215E-14	1.215E-14	1.214E-14	1.214E-14	1.214E-14	1.214E-14	1.212E-14	1.209E-14	1.204E-14
	Th-230	Ra-226+D4	2.640E-13	5.566E-17	1.674E-16	2.835E-15	3.387E-15	5.584E-15	1.099E-14	2.651E-14	5.019E-14	9.033E-14
	Th-230	Pb-210+D1	2.640E-13	3.953E-19	2.752E-18	6.078E-16	8.306E-16	1.918E-15	5.289E-15	1.603E-14	3.259E-14	6.066E-14
	Th-230	äDSR(j)		1.220E-14	1.232E-14	1.559E-14	1.636E-14	1.964E-14	2.842E-14	5.467E-14	9.487E-14	1.630E-13
0	Th-230	Th-230	3.800E-15	1.748E-16	1.748E-16	1.748E-16	1.748E-16	1.748E-16	1.747E-16	1.744E-16	1.740E-16	1.732E-16
	Th-230	Ra-226+D4	3.800E-15	8.012E-19	2.410E-18	4.081E-17	4.876E-17	8.038E-17	1.582E-16	3.816E-16	7.225E-16	1.300E-15
	Th-230	Pb-210+D2	3.800E-15	9.105E-21	6.331E-20	1.397E-17	1.909E-17	4.406E-17	1.215E-16	3.684E-16	7.488E-16	1.394E-15
	Th-230	äDSR(j)		1.757E-16	1.773E-16	2.296E-16	2.426E-16	2.992E-16	4.544E-16	9.245E-16	1.645E-15	2.867E-15
0	Th-232	Th-232	1.000E+00	4.920E-02	4.920E-02	4.920E-02	4.920E-02	4.920E-02	4.920E-02	4.920E-02	4.920E-02	4.920E-02
	Th-232	Ra-228+D	1.000E+00	3.276E-01	9.339E-01	5.405E+00	5.523E+00	5.654E+00	5.667E+00	5.667E+00	5.667E+00	5.667E+00
	Th-232	Th-228+D	1.000E+00	3.899E-02	2.391E-01	5.605E+00	5.794E+00	6.002E+00	6.022E+00	6.022E+00	6.022E+00	6.022E+00
	Th-232	äDSR(j)		4.158E-01	1.222E+00	1.106E+01	1.137E+01	1.170E+01	1.174E+01	1.174E+01	1.174E+01	1.174E+01
0	U-234	U-234	9.996E-01	1.677E-02	1.677E-02	1.677E-02	1.677E-02	1.677E-02	1.676E-02	1.676E-02	1.674E-02	1.672E-02
	U-234	Th-230	9.996E-01	2.120E-07	6.350E-07	1.078E-05	1.290E-05	2.135E-05	4.248E-05	1.058E-04	2.110E-04	4.206E-04
	U-234	Ra-226+D	9.996E-01	5.182E-09	3.629E-08	1.008E-05	1.441E-05	3.939E-05	1.549E-04	9.412E-04	3.624E-03	1.349E-02
	U-234	Pb-210+D	9.996E-01	9.592E-12	1.408E-10	5.151E-07	8.510E-07	3.383E-06	2.005E-05	1.701E-04	7.424E-04	2.947E-03
	U-234	äDSR(j)		1.677E-02	1.677E-02	1.679E-02	1.679E-02	1.683E-02	1.698E-02	1.797E-02	2.132E-02	3.358E-02

Dose/Source Ratios Summed Over All Pathways												
Parent and Progeny Principal Radionuclide Contributions Indicated												
0	Parent	Product	Thread	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)								
	(i)	(j)	Fraction	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
	AAAAAAAA	AAAAAAAA	AAAAAAAA	AAAAAAAA	AAAAAAAA	AAAAAAAA	AAAAAAAA	AAAAAAAA	AAAAAAAA	AAAAAAAA	AAAAAAAA	AAAAAAAA
	U-234	U-234	1.319E-06	2.213E-08	2.213E-08	2.213E-08	2.213E-08	2.213E-08	2.213E-08	2.212E-08	2.210E-08	2.207E-08
	U-234	Th-230	1.319E-06	2.799E-13	8.382E-13	1.423E-11	1.702E-11	2.818E-11	5.607E-11	1.396E-10	2.786E-10	5.551E-10
	U-234	Ra-226+D	1.319E-06	6.841E-15	4.790E-14	1.331E-11	1.903E-11	5.200E-11	2.044E-10	1.242E-09	4.783E-09	1.781E-08
	U-234	Pb-210+D1	1.319E-06	4.539E-18	6.794E-17	2.526E-13	4.174E-13	1.660E-12	9.838E-12	8.351E-11	3.644E-10	1.446E-09
	U-234	àDSR(j)		2.213E-08	2.213E-08	2.216E-08	2.217E-08	2.221E-08	2.240E-08	2.358E-08	2.753E-08	4.188E-08
0U-234	U-234		1.899E-08	3.186E-10	3.186E-10	3.186E-10	3.186E-10	3.185E-10	3.185E-10	3.183E-10	3.181E-10	3.176E-10
	U-234	Th-230	1.899E-08	4.028E-15	1.207E-14	2.049E-13	2.450E-13	4.057E-13	8.071E-13	2.010E-12	4.009E-12	7.990E-12
	U-234	Ra-226+D	1.899E-08	9.847E-17	6.895E-16	1.916E-13	2.739E-13	7.485E-13	2.943E-12	1.788E-11	6.885E-11	2.564E-10
	U-234	Pb-210+D2	1.899E-08	1.046E-19	1.564E-18	5.805E-15	9.591E-15	3.815E-14	2.261E-13	1.919E-12	8.374E-12	3.324E-11
	U-234	àDSR(j)		3.186E-10	3.186E-10	3.190E-10	3.191E-10	3.197E-10	3.225E-10	3.402E-10	3.993E-10	6.153E-10
0U-234	U-234		2.100E-04	3.522E-06	3.522E-06	3.522E-06	3.522E-06	3.521E-06	3.521E-06	3.519E-06	3.517E-06	3.511E-06
	U-234	Th-230	2.100E-04	4.453E-11	1.334E-10	2.265E-09	2.709E-09	4.485E-09	8.922E-09	2.222E-08	4.432E-08	8.833E-08
	U-234	Ra-226+D1	2.100E-04	2.622E-12	1.836E-11	5.099E-09	7.289E-09	1.992E-08	7.832E-08	4.760E-07	1.833E-06	6.824E-06
	U-234	Pb-210+D	2.100E-04	2.015E-15	2.958E-14	1.082E-10	1.787E-10	7.107E-10	4.211E-09	3.574E-08	1.559E-07	6.189E-07
	U-234	àDSR(j)		3.522E-06	3.522E-06	3.529E-06	3.532E-06	3.547E-06	3.612E-06	4.053E-06	5.550E-06	1.104E-05
0U-234	U-234		2.771E-10	4.649E-12	4.649E-12	4.649E-12	4.649E-12	4.648E-12	4.648E-12	4.646E-12	4.642E-12	4.635E-12
	U-234	Th-230	2.771E-10	5.878E-17	1.761E-16	2.990E-15	3.576E-15	5.920E-15	1.178E-14	2.933E-14	5.851E-14	1.166E-13
	U-234	Ra-226+D1	2.771E-10	3.461E-18	2.423E-17	6.731E-15	9.621E-15	2.630E-14	1.034E-13	6.283E-13	2.419E-12	9.008E-12
	U-234	Pb-210+D1	2.771E-10	9.534E-22	1.427E-20	5.306E-17	8.767E-17	3.487E-16	2.066E-15	1.754E-14	7.655E-14	3.038E-13
	U-234	àDSR(j)		4.649E-12	4.649E-12	4.658E-12	4.662E-12	4.681E-12	4.765E-12	5.321E-12	7.196E-12	1.406E-11
0U-234	U-234		3.989E-12	6.692E-14	6.692E-14	6.691E-14	6.691E-14	6.691E-14	6.690E-14	6.687E-14	6.682E-14	6.672E-14
	U-234	Th-230	3.989E-12	8.461E-19	2.534E-18	4.303E-17	5.147E-17	8.521E-17	1.695E-16	4.221E-16	8.422E-16	1.678E-15
	U-234	Ra-226+D1	3.989E-12	4.982E-20	3.488E-19	9.688E-17	1.385E-16	3.785E-16	1.488E-15	9.044E-15	3.482E-14	1.297E-13
	U-234	Pb-210+D2	3.989E-12	2.198E-23	3.284E-22	1.219E-18	2.015E-18	8.012E-18	4.748E-17	4.031E-16	1.759E-15	6.981E-15
	U-234	àDSR(j)		6.692E-14	6.692E-14	6.705E-14	6.710E-14	6.738E-14	6.860E-14	7.674E-14	1.042E-13	2.050E-13
0U-234	U-234		1.998E-04	3.351E-06	3.351E-06	3.351E-06	3.351E-06	3.350E-06	3.350E-06	3.348E-06	3.346E-06	3.341E-06
	U-234	Th-230	1.998E-04	4.237E-11	1.269E-10	2.155E-09	2.577E-09	4.267E-09	8.489E-09	2.114E-08	4.217E-08	8.404E-08
	U-234	Ra-226+D2	1.998E-04	9.249E-13	6.477E-12	1.800E-09	2.573E-09	7.032E-09	2.764E-08	1.680E-07	6.468E-07	2.409E-06
	U-234	Pb-210+D	1.998E-04	1.917E-15	2.814E-14	1.029E-10	1.701E-10	6.762E-10	4.006E-09	3.400E-08	1.484E-07	5.889E-07
	U-234	àDSR(j)		3.351E-06	3.351E-06	3.355E-06	3.356E-06	3.362E-06	3.390E-06	3.571E-06	4.183E-06	6.422E-06
0U-234	U-234		2.637E-10	4.423E-12	4.423E-12	4.423E-12	4.423E-12	4.422E-12	4.422E-12	4.420E-12	4.416E-12	4.410E-12
	U-234	Th-230	2.637E-10	5.593E-17	1.675E-16	2.845E-15	3.402E-15	5.632E-15	1.121E-14	2.790E-14	5.567E-14	1.109E-13
	U-234	Ra-226+D2	2.637E-10	1.221E-18	8.550E-18	2.376E-15	3.396E-15	9.282E-15	3.649E-14	2.218E-13	8.538E-13	3.180E-12
	U-234	Pb-210+D1	2.637E-10	9.070E-22	1.358E-20	5.048E-17	8.341E-17	3.317E-16	1.966E-15	1.669E-14	7.283E-14	2.891E-13
	U-234	àDSR(j)		4.423E-12	4.423E-12	4.428E-12	4.430E-12	4.438E-12	4.471E-12	4.686E-12	5.399E-12	7.989E-12
0U-234	U-234		3.795E-12	6.367E-14	6.367E-14	6.366E-14	6.366E-14	6.366E-14	6.365E-14	6.362E-14	6.357E-14	6.348E-14
	U-234	Th-230	3.795E-12	8.050E-19	2.411E-18	4.094E-17	4.897E-17	8.107E-17	1.613E-16	4.016E-16	8.013E-16	1.597E-15
	U-234	Ra-226+D2	3.795E-12	1.757E-20	1.231E-19	3.419E-17	4.888E-17	1.336E-16	5.252E-16	3.192E-15	1.229E-14	4.577E-14
	U-234	Pb-210+D2	3.795E-12	2.091E-23	3.125E-22	1.160E-18	1.917E-18	7.623E-18	4.518E-17	3.835E-16	1.673E-15	6.642E-15
	U-234	àDSR(j)		6.367E-14	6.367E-14	6.374E-14	6.376E-14	6.388E-14	6.438E-14	6.760E-14	7.834E-14	1.175E-13

Dose/Source Ratios Summed Over All Pathways

Parent and Progeny Principal Radionuclide Contributions Indicated

0	Parent (i)	Product (j)	Thread Fraction	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)								
	AAAAA	AAAAA	AAAAA	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
	U-234	U-234	4.196E-08	7.038E-10	7.038E-10	7.038E-10	7.038E-10	7.037E-10	7.036E-10	7.033E-10	7.028E-10	7.017E-10
	U-234	Th-230	4.196E-08	8.900E-15	2.666E-14	4.526E-13	5.414E-13	8.962E-13	1.783E-12	4.440E-12	8.858E-12	1.765E-11
	U-234	Ra-226+D3	4.196E-08	5.008E-16	3.506E-15	9.738E-13	1.392E-12	3.805E-12	1.496E-11	9.090E-11	3.500E-10	1.303E-09
	U-234	Pb-210+D	4.196E-08	4.026E-19	5.911E-18	2.162E-14	3.572E-14	1.420E-13	8.415E-13	7.142E-12	3.116E-11	1.237E-10
	U-234	äDSR(j)		7.038E-10	7.039E-10	7.052E-10	7.057E-10	7.086E-10	7.212E-10	8.058E-10	1.093E-09	2.146E-09
0U-234	U-234		5.538E-14	9.291E-16	9.291E-16	9.290E-16	9.290E-16	9.289E-16	9.288E-16	9.284E-16	9.277E-16	9.263E-16
	U-234	Th-230	5.538E-14	1.175E-20	3.519E-20	5.975E-19	7.146E-19	1.183E-18	2.354E-18	5.861E-18	1.169E-17	2.330E-17
	U-234	Ra-226+D3	5.538E-14	6.610E-22	4.627E-21	1.285E-18	1.837E-18	5.022E-18	1.974E-17	1.200E-16	4.620E-16	1.720E-15
	U-234	Pb-210+D1	5.538E-14	1.905E-25	2.852E-24	1.060E-20	1.752E-20	6.968E-20	4.130E-19	3.505E-18	1.530E-17	6.071E-17
	U-234	äDSR(j)		9.291E-16	9.291E-16	9.309E-16	9.315E-16	9.352E-16	9.513E-16	1.058E-15	1.417E-15	2.731E-15
0U-234	U-234		7.972E-16	1.337E-17	1.337E-17	1.337E-17	1.337E-17	1.337E-17	1.337E-17	1.336E-17	1.335E-17	1.333E-17
	U-234	Th-230	7.972E-16	1.691E-22	5.065E-22	8.600E-21	1.029E-20	1.703E-20	3.388E-20	8.436E-20	1.683E-19	3.354E-19
	U-234	Ra-226+D3	7.972E-16	9.514E-24	6.661E-23	1.850E-20	2.645E-20	7.229E-20	2.842E-19	1.727E-18	6.650E-18	2.476E-17
	U-234	Pb-210+D2	7.972E-16	4.392E-27	6.563E-26	2.437E-22	4.026E-22	1.601E-21	9.489E-21	8.055E-20	3.515E-19	1.395E-18
	U-234	äDSR(j)		1.337E-17	1.337E-17	1.340E-17	1.341E-17	1.346E-17	1.370E-17	1.525E-17	2.052E-17	3.983E-17
0U-234	U-234		2.000E-07	3.355E-09	3.355E-09	3.355E-09	3.355E-09	3.354E-09	3.354E-09	3.352E-09	3.350E-09	3.345E-09
	U-234	Th-230	2.000E-07	4.242E-14	1.271E-13	2.158E-12	2.580E-12	4.272E-12	8.499E-12	2.116E-11	4.222E-11	8.414E-11
	U-234	Ra-226+D4	2.000E-07	1.289E-16	9.056E-16	2.523E-13	3.607E-13	9.858E-13	3.876E-12	2.356E-11	9.069E-11	3.377E-10
	U-234	Pb-210+D	2.000E-07	1.919E-18	2.817E-17	1.031E-13	1.703E-13	6.770E-13	4.011E-12	3.404E-11	1.485E-10	5.896E-10
	U-234	äDSR(j)		3.355E-09	3.355E-09	3.357E-09	3.358E-09	3.360E-09	3.370E-09	3.431E-09	3.631E-09	4.356E-09
0U-234	U-234		2.640E-13	4.429E-15	4.429E-15	4.428E-15	4.428E-15	4.428E-15	4.427E-15	4.425E-15	4.422E-15	4.415E-15
	U-234	Th-230	2.640E-13	5.600E-20	1.677E-19	2.848E-18	3.406E-18	5.639E-18	1.122E-17	2.794E-17	5.573E-17	1.111E-16
	U-234	Ra-226+D4	2.640E-13	1.701E-22	1.195E-21	3.330E-19	4.761E-19	1.301E-18	5.116E-18	3.109E-17	1.197E-16	4.458E-16
	U-234	Pb-210+D1	2.640E-13	9.081E-25	1.359E-23	5.054E-20	8.351E-20	3.321E-19	1.968E-18	1.671E-17	7.292E-17	2.894E-16
	U-234	äDSR(j)		4.429E-15	4.429E-15	4.431E-15	4.432E-15	4.435E-15	4.445E-15	4.501E-15	4.670E-15	5.261E-15
0U-234	U-234		3.800E-15	6.374E-17	6.374E-17	6.374E-17	6.374E-17	6.373E-17	6.372E-17	6.370E-17	6.365E-17	6.355E-17
	U-234	Th-230	3.800E-15	8.060E-22	2.414E-21	4.099E-20	4.903E-20	8.117E-20	1.615E-19	4.021E-19	8.022E-19	1.599E-18
	U-234	Ra-226+D4	3.800E-15	2.448E-24	1.721E-23	4.794E-21	6.853E-21	1.873E-20	7.364E-20	4.475E-19	1.723E-18	6.417E-18
	U-234	Pb-210+D2	3.800E-15	2.094E-26	3.128E-25	1.161E-21	1.919E-21	7.632E-21	4.523E-20	3.839E-19	1.675E-18	6.650E-18
	U-234	äDSR(j)		6.374E-17	6.375E-17	6.379E-17	6.380E-17	6.384E-17	6.401E-17	6.493E-17	6.785E-17	7.822E-17
0U-235+D	U-235+D		9.835E-01	4.961E-01	4.961E-01	4.961E-01	4.961E-01	4.961E-01	4.961E-01	4.961E-01	4.960E-01	4.960E-01
	U-235+D	Pa-231	9.835E-01	5.818E-06	1.748E-05	2.974E-04	3.557E-04	5.888E-04	1.171E-03	2.914E-03	5.807E-03	1.155E-02
	U-235+D	Ac-227+D	9.835E-01	1.667E-07	1.155E-06	2.541E-04	3.472E-04	8.022E-04	2.223E-03	6.910E-03	1.476E-02	3.032E-02
	U-235+D	äDSR(j)		4.961E-01	4.961E-01	4.966E-01	4.968E-01	4.975E-01	4.995E-01	5.059E-01	5.166E-01	5.378E-01
0U-235+D	U-235+D		2.722E-03	1.373E-03	1.373E-03	1.373E-03	1.373E-03	1.373E-03	1.373E-03	1.373E-03	1.373E-03	1.373E-03
	U-235+D	Pa-231	2.722E-03	1.610E-08	4.838E-08	8.230E-07	9.843E-07	1.629E-06	3.241E-06	8.066E-06	1.607E-05	3.196E-05
	U-235+D	Ac-227+D1	2.722E-03	4.650E-10	3.226E-09	7.102E-07	7.705E-07	2.242E-06	6.213E-06	1.932E-05	4.124E-05	8.475E-05
	U-235+D	äDSR(j)		1.373E-03	1.373E-03	1.374E-03	1.375E-03	1.377E-03	1.382E-03	1.400E-03	1.430E-03	1.489E-03

Dose/Source Ratios Summed Over All Pathways

Parent and Progeny Principal Radionuclide Contributions Indicated

0	Parent (i)	Product (j)	Thread Fraction	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)								
	AAAAA	AAAAA	AAAAA	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
	U-238+D	U-238+D	3.359E-07	1.859E-06	1.859E-06	1.858E-06	1.858E-06	1.858E-06	1.858E-06	1.858E-06	1.858E-06	1.858E-06
	U-238+D	U-234	3.359E-07	7.955E-15	2.387E-14	4.057E-13	4.852E-13	8.034E-13	1.599E-12	3.984E-12	7.957E-12	1.589E-11
	U-238+D	Th-230	3.359E-07	6.719E-20	4.691E-19	1.305E-16	1.867E-16	5.116E-16	2.026E-15	1.258E-14	5.016E-14	2.000E-13
	U-238+D	Ra-226+D1	3.359E-07	2.961E-21	4.442E-20	1.960E-16	3.352E-16	1.518E-15	1.190E-14	1.812E-13	1.406E-12	1.065E-11
	U-238+D	Pb-210+D	3.359E-07	1.835E-24	5.558E-23	3.236E-18	6.435E-18	4.339E-17	5.365E-16	1.228E-14	1.129E-13	9.362E-13
	U-238+D	äDSR(j)		1.859E-06	1.859E-06	1.858E-06	1.858E-06	1.858E-06	1.858E-06	1.858E-06	1.858E-06	1.858E-06
0U-	238+D	U-238+D	4.434E-13	2.453E-12	2.453E-12	2.453E-12	2.453E-12	2.453E-12	2.453E-12	2.453E-12	2.453E-12	2.453E-12
	U-238+D	U-234	4.434E-13	1.050E-20	3.150E-20	5.355E-19	6.405E-19	1.061E-18	2.110E-18	5.259E-18	1.050E-17	2.098E-17
	U-238+D	Th-230	4.434E-13	8.870E-26	6.192E-25	1.722E-22	2.464E-22	6.754E-22	2.674E-21	1.660E-20	6.621E-20	2.640E-19
	U-238+D	Ra-226+D1	4.434E-13	3.909E-27	5.864E-26	2.588E-22	4.425E-22	2.004E-21	1.570E-20	2.392E-19	1.857E-18	1.406E-17
	U-238+D	Pb-210+D1	4.434E-13	8.605E-31	2.668E-29	1.586E-24	3.155E-24	2.128E-23	2.633E-22	6.026E-21	5.540E-20	4.595E-19
	U-238+D	äDSR(j)		2.453E-12	2.453E-12	2.453E-12	2.453E-12	2.453E-12	2.453E-12	2.453E-12	2.453E-12	2.453E-12
0U-	238+D	U-238+D	6.383E-15	3.531E-14	3.531E-14	3.531E-14	3.531E-14	3.531E-14	3.531E-14	3.531E-14	3.531E-14	3.530E-14
	U-238+D	U-234	6.383E-15	1.511E-22	4.534E-22	7.708E-21	9.220E-21	1.526E-20	3.038E-20	7.570E-20	1.512E-19	3.020E-19
	U-238+D	Th-230	6.383E-15	1.277E-27	8.913E-27	2.479E-24	3.547E-24	9.721E-24	3.849E-23	2.390E-22	9.530E-22	3.800E-21
	U-238+D	Ra-226+D1	6.383E-15	5.626E-29	8.440E-28	3.724E-24	6.369E-24	2.884E-23	2.260E-22	3.443E-21	2.672E-20	2.024E-19
	U-238+D	Pb-210+D2	6.383E-15	1.985E-32	6.142E-31	3.645E-26	7.251E-26	4.891E-25	6.050E-24	1.385E-22	1.273E-21	1.056E-20
	U-238+D	äDSR(j)		3.531E-14	3.531E-14	3.531E-14	3.531E-14	3.531E-14	3.531E-14	3.531E-14	3.531E-14	3.531E-14
0U-	238+D	U-238+D	3.196E-07	1.768E-06	1.768E-06	1.768E-06	1.768E-06	1.768E-06	1.768E-06	1.768E-06	1.768E-06	1.768E-06
	U-238+D	U-234	3.196E-07	7.569E-15	2.271E-14	3.860E-13	4.617E-13	7.644E-13	1.521E-12	3.790E-12	7.570E-12	1.512E-11
	U-238+D	Th-230	3.196E-07	6.393E-20	4.463E-19	1.241E-16	1.776E-16	4.868E-16	1.927E-15	1.197E-14	4.772E-14	1.903E-13
	U-238+D	Ra-226+D2	3.196E-07	1.044E-21	1.567E-20	6.919E-17	1.183E-16	5.358E-16	4.199E-15	6.396E-14	4.964E-13	3.760E-12
	U-238+D	Pb-210+D	3.196E-07	1.746E-24	5.288E-23	3.079E-18	6.123E-18	4.128E-17	5.104E-16	1.168E-14	1.074E-13	8.907E-13
	U-238+D	äDSR(j)		1.768E-06	1.768E-06	1.768E-06	1.768E-06	1.768E-06	1.768E-06	1.768E-06	1.768E-06	1.768E-06
0U-	238+D	U-238+D	4.219E-13	2.334E-12	2.334E-12	2.334E-12	2.334E-12	2.334E-12	2.334E-12	2.334E-12	2.334E-12	2.334E-12
	U-238+D	U-234	4.219E-13	9.991E-21	2.997E-20	5.095E-19	6.094E-19	1.009E-18	2.008E-18	5.003E-18	9.993E-18	1.996E-17
	U-238+D	Th-230	4.219E-13	8.439E-26	5.891E-25	1.639E-22	2.344E-22	6.425E-22	2.544E-21	1.580E-20	6.299E-20	2.512E-19
	U-238+D	Ra-226+D2	4.219E-13	1.378E-27	2.069E-26	9.133E-23	1.562E-22	7.072E-22	5.543E-21	8.442E-20	6.553E-19	4.963E-18
	U-238+D	Pb-210+D1	4.219E-13	8.187E-31	2.538E-29	1.509E-24	3.002E-24	2.025E-23	2.505E-22	5.733E-21	5.271E-20	4.372E-19
	U-238+D	äDSR(j)		2.334E-12	2.334E-12	2.334E-12	2.334E-12	2.334E-12	2.334E-12	2.334E-12	2.334E-12	2.334E-12
0U-	238+D	U-238+D	6.073E-15	3.360E-14	3.360E-14	3.360E-14	3.360E-14	3.360E-14	3.360E-14	3.359E-14	3.359E-14	3.359E-14
	U-238+D	U-234	6.073E-15	1.438E-22	4.314E-22	7.334E-21	8.772E-21	1.452E-20	2.890E-20	7.202E-20	1.438E-19	2.873E-19
	U-238+D	Th-230	6.073E-15	1.215E-27	8.480E-27	2.359E-24	3.374E-24	9.249E-24	3.662E-23	2.274E-22	9.067E-22	3.616E-21
	U-238+D	Ra-226+D2	6.073E-15	1.984E-29	2.978E-28	1.315E-24	2.248E-24	1.018E-23	7.978E-23	1.215E-21	9.432E-21	7.144E-20
	U-238+D	Pb-210+D2	6.073E-15	1.889E-32	5.844E-31	3.468E-26	6.899E-26	4.653E-25	5.756E-24	1.317E-22	1.211E-21	1.005E-20
	U-238+D	äDSR(j)		3.360E-14	3.360E-14	3.360E-14	3.360E-14	3.360E-14	3.360E-14	3.359E-14	3.359E-14	3.359E-14

Dose/Source Ratios Summed Over All Pathways

Parent and Progeny Principal Radionuclide Contributions Indicated

0	Parent (i)	Product (j)	Thread Fraction	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)								
	AAAAA	AAAAA	AAAAA	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
	U-238+D1	U-238+D1	1.994E-04	2.279E-05	2.279E-05	2.279E-05	2.279E-05	2.279E-05	2.279E-05	2.279E-05	2.278E-05	2.278E-05
	U-238+D1	U-234	1.994E-04	4.723E-12	1.417E-11	2.409E-10	2.881E-10	4.770E-10	9.491E-10	2.365E-09	4.724E-09	9.435E-09
	U-238+D1	Th-230	1.994E-04	3.989E-17	2.785E-16	7.747E-14	1.108E-13	3.038E-13	1.203E-12	7.467E-12	2.978E-11	1.187E-10
	U-238+D1	Ra-226+D2	1.994E-04	6.516E-19	9.780E-18	4.317E-14	7.383E-14	3.343E-13	2.620E-12	3.991E-11	3.098E-10	2.346E-09
	U-238+D1	Pb-210+D	1.994E-04	1.090E-21	3.300E-20	1.921E-15	3.821E-15	2.576E-14	3.185E-13	7.289E-12	6.701E-11	5.558E-10
	U-238+D1	äDSR(j)		2.279E-05	2.279E-05	2.279E-05	2.279E-05	2.279E-05	2.279E-05	2.279E-05	2.279E-05	2.280E-05
0U-	238+D1	U-238+D1	2.633E-10	3.008E-11	3.008E-11	3.008E-11	3.008E-11	3.008E-11	3.008E-11	3.008E-11	3.008E-11	3.007E-11
	U-238+D1	U-234	2.633E-10	6.234E-18	1.870E-17	3.179E-16	3.803E-16	6.296E-16	1.253E-15	3.122E-15	6.235E-15	1.245E-14
	U-238+D1	Th-230	2.633E-10	5.266E-23	3.676E-22	1.023E-19	1.463E-19	4.010E-19	1.588E-18	9.857E-18	3.931E-17	1.567E-16
	U-238+D1	Ra-226+D2	2.633E-10	8.601E-25	1.291E-23	5.699E-20	9.745E-20	4.413E-19	3.459E-18	5.268E-17	4.089E-16	3.097E-15
	U-238+D1	Pb-210+D1	2.633E-10	5.109E-28	1.584E-26	9.417E-22	1.873E-21	1.264E-20	1.563E-19	3.578E-18	3.289E-17	2.728E-16
	U-238+D1	äDSR(j)		3.008E-11	3.008E-11	3.008E-11	3.008E-11	3.008E-11	3.008E-11	3.008E-11	3.008E-11	3.009E-11
0U-	238+D1	U-238+D1	3.789E-12	4.330E-13	4.330E-13	4.330E-13	4.330E-13	4.330E-13	4.329E-13	4.329E-13	4.329E-13	4.329E-13
	U-238+D1	U-234	3.789E-12	8.973E-20	2.692E-19	4.576E-18	5.474E-18	9.062E-18	1.803E-17	4.494E-17	8.975E-17	1.793E-16
	U-238+D1	Th-230	3.789E-12	7.579E-25	5.292E-24	1.472E-21	2.106E-21	5.771E-21	2.285E-20	1.419E-19	5.658E-19	2.256E-18
	U-238+D1	Ra-226+D2	3.789E-12	1.238E-26	1.858E-25	8.203E-22	1.403E-21	6.352E-21	4.978E-20	7.583E-19	5.886E-18	4.458E-17
	U-238+D1	Pb-210+D2	3.789E-12	1.179E-29	3.647E-28	2.164E-23	4.305E-23	2.904E-22	3.592E-21	8.221E-20	7.557E-19	6.269E-18
	U-238+D1	äDSR(j)		4.330E-13	4.330E-13	4.330E-13	4.330E-13	4.330E-13	4.330E-13	4.330E-13	4.330E-13	4.331E-13
0U-	238+D1	U-238+D1	4.189E-08	4.786E-09	4.786E-09	4.786E-09	4.786E-09	4.786E-09	4.786E-09	4.786E-09	4.786E-09	4.785E-09
	U-238+D1	U-234	4.189E-08	9.920E-16	2.976E-15	5.059E-14	6.051E-14	1.002E-13	1.994E-13	4.968E-13	9.922E-13	1.982E-12
	U-238+D1	Th-230	4.189E-08	8.379E-21	5.850E-20	1.627E-17	2.328E-17	6.380E-17	2.526E-16	1.568E-15	6.255E-15	2.494E-14
	U-238+D1	Ra-226+D3	4.189E-08	3.529E-22	5.294E-21	2.336E-17	3.994E-17	1.809E-16	1.418E-15	2.159E-14	1.676E-13	1.269E-12
	U-238+D1	Pb-210+D	4.189E-08	2.288E-25	6.931E-24	4.035E-19	8.025E-19	5.410E-18	6.690E-17	1.531E-15	1.407E-14	1.167E-13
	U-238+D1	äDSR(j)		4.786E-09	4.786E-09	4.786E-09	4.786E-09	4.786E-09	4.786E-09	4.787E-09	4.787E-09	4.789E-09
0U-	238+D1	U-238+D1	5.530E-14	6.318E-15	6.318E-15	6.318E-15	6.318E-15	6.318E-15	6.318E-15	6.318E-15	6.317E-15	6.317E-15
	U-238+D1	U-234	5.530E-14	1.309E-21	3.928E-21	6.678E-20	7.987E-20	1.322E-19	2.632E-19	6.558E-19	1.310E-18	2.616E-18
	U-238+D1	Th-230	5.530E-14	1.106E-26	7.722E-26	2.148E-23	3.073E-23	8.422E-23	3.335E-22	2.070E-21	8.256E-21	3.292E-20
	U-238+D1	Ra-226+D3	5.530E-14	4.658E-28	6.988E-27	3.084E-23	5.273E-23	2.388E-22	1.871E-21	2.850E-20	2.212E-19	1.676E-18
	U-238+D1	Pb-210+D1	5.530E-14	1.073E-31	3.327E-30	1.978E-25	3.935E-25	2.654E-24	3.283E-23	7.515E-22	6.908E-21	5.730E-20
	U-238+D1	äDSR(j)		6.318E-15	6.318E-15	6.318E-15	6.318E-15	6.318E-15	6.318E-15	6.318E-15	6.319E-15	6.321E-15
0U-	238+D1	U-238+D1	7.959E-16	9.094E-17	9.094E-17	9.094E-17	9.094E-17	9.094E-17	9.094E-17	9.094E-17	9.093E-17	9.092E-17
	U-238+D1	U-234	7.959E-16	1.885E-23	5.654E-23	9.612E-22	1.150E-21	1.904E-21	3.788E-21	9.439E-21	1.885E-20	3.765E-20
	U-238+D1	Th-230	7.959E-16	1.592E-28	1.111E-27	3.092E-25	4.423E-25	1.212E-24	4.800E-24	2.980E-23	1.188E-22	4.739E-22
	U-238+D1	Ra-226+D3	7.959E-16	6.704E-30	1.006E-28	4.438E-25	7.590E-25	3.437E-24	2.694E-23	4.103E-22	3.185E-21	2.412E-20
	U-238+D1	Pb-210+D2	7.959E-16	2.476E-33	7.660E-32	4.546E-27	9.042E-27	6.099E-26	7.544E-25	1.727E-23	1.587E-22	1.317E-21
	U-238+D1	äDSR(j)		9.094E-17	9.094E-17	9.094E-17	9.094E-17	9.094E-17	9.094E-17	9.095E-17	9.095E-17	9.099E-17

Dose/Source Ratios Summed Over All Pathways												
Parent and Progeny Principal Radionuclide Contributions Indicated												
0	Parent	Product	Thread	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)								
	(i)	(j)	Fraction	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA
	U-238+D1	U-238+D1	1.997E-07	2.281E-08	2.281E-08	2.281E-08	2.281E-08	2.281E-08	2.281E-08	2.281E-08	2.281E-08	2.281E-08
	U-238+D1	U-234	1.997E-07	4.729E-15	1.419E-14	2.411E-13	2.884E-13	4.776E-13	9.503E-13	2.368E-12	4.730E-12	9.447E-12
	U-238+D1	Th-230	1.997E-07	3.994E-20	2.788E-19	7.756E-17	1.110E-16	3.041E-16	1.204E-15	7.476E-15	2.981E-14	1.189E-13
	U-238+D1	Ra-226+D4	1.997E-07	9.060E-23	1.366E-21	6.052E-18	1.035E-17	4.687E-17	3.674E-16	5.595E-15	4.343E-14	3.290E-13
	U-238+D1	Pb-210+D	1.997E-07	1.091E-24	3.304E-23	1.923E-18	3.825E-18	2.579E-17	3.189E-16	7.298E-15	6.709E-14	5.565E-13
	U-238+D1	äDSR(j)		2.281E-08	2.281E-08	2.281E-08	2.281E-08	2.281E-08	2.282E-08	2.282E-08	2.282E-08	2.282E-08
0U	238+D1	U-238+D1	2.636E-13	3.012E-14	3.012E-14	3.012E-14	3.012E-14	3.012E-14	3.011E-14	3.011E-14	3.011E-14	3.011E-14
	U-238+D1	U-234	2.636E-13	6.242E-21	1.873E-20	3.183E-19	3.807E-19	6.304E-19	1.254E-18	3.126E-18	6.243E-18	1.247E-17
	U-238+D1	Th-230	2.636E-13	5.272E-26	3.681E-25	1.024E-22	1.465E-22	4.014E-22	1.589E-21	9.869E-21	3.935E-20	1.569E-19
	U-238+D1	Ra-226+D4	2.636E-13	1.196E-28	1.803E-27	7.988E-24	1.366E-23	6.186E-23	4.849E-22	7.386E-21	5.733E-20	4.342E-19
	U-238+D1	Pb-210+D1	2.636E-13	5.115E-31	1.586E-29	9.429E-25	1.876E-24	1.265E-23	1.565E-22	3.582E-21	3.293E-20	2.732E-19
	U-238+D1	äDSR(j)		3.012E-14	3.012E-14	3.012E-14	3.012E-14	3.012E-14	3.012E-14	3.012E-14	3.012E-14	3.012E-14
0U	238+D1	U-238+D1	3.794E-15	4.335E-16	4.335E-16	4.335E-16	4.335E-16	4.335E-16	4.335E-16	4.335E-16	4.334E-16	4.334E-16
	U-238+D1	U-234	3.794E-15	8.984E-23	2.695E-22	4.582E-21	5.480E-21	9.073E-21	1.806E-20	4.499E-20	8.986E-20	1.795E-19
	U-238+D1	Th-230	3.794E-15	7.589E-28	5.298E-27	1.474E-24	2.108E-24	5.778E-24	2.288E-23	1.420E-22	5.665E-22	2.259E-21
	U-238+D1	Ra-226+D4	3.794E-15	1.721E-30	2.595E-29	1.150E-25	1.966E-25	8.905E-25	6.980E-24	1.063E-22	8.252E-22	6.250E-21
	U-238+D1	Pb-210+D2	3.794E-15	1.180E-32	3.651E-31	2.167E-26	4.310E-26	2.907E-25	3.596E-24	8.231E-23	7.567E-22	6.276E-21
	U-238+D1	äDSR(j)		4.335E-16	4.335E-16	4.335E-16	4.335E-16	4.335E-16	4.335E-16	4.335E-16	4.335E-16	4.336E-16
	iiiiiiiiii	iiiiiiiiii	iiiiiiiiii	iiiiiiiiii	iiiiiiiiii	iiiiiiiiii	iiiiiiiiii	iiiiiiiiii	iiiiiiiiii	iiiiiiiiii	iiiiiiiiii	iiiiiiiiii

The DSR includes contributions from associated (half-life ó 180 days) daughters.

Single Radionuclide Soil Guidelines G(i,t) in pCi/g
 Basic Radiation Dose Limit = 2.500E+01 mrem/yr

0Nuclide	t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
(i)	t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA
Am-241	3.629E+02	3.635E+02	3.777E+02	3.808E+02	3.932E+02	4.259E+02	5.413E+02	8.068E+02	1.786E+03	
Co-60	2.631E+00	3.000E+00	7.043E+01	1.359E+02	1.885E+03	1.351E+06	4.976E+14	*1.113E+15	*1.113E+15	
Cs-134	5.004E+00	7.000E+00	2.209E+04	1.183E+05	9.747E+07	*1.283E+15	*1.283E+15	*1.283E+15	*1.283E+15	
Cs-137	1.185E+01	1.212E+01	2.104E+01	2.361E+01	3.738E+01	1.179E+02	3.701E+03	1.156E+06	1.128E+11	
Eu-152	5.814E+00	6.119E+00	2.091E+01	2.701E+01	7.522E+01	9.733E+02	2.108E+06	7.643E+11	*1.727E+14	
Eu-154	5.440E+00	5.897E+00	4.087E+01	6.117E+01	3.070E+02	1.733E+04	3.116E+09	*2.685E+14	*2.685E+14	
Eu-155	2.437E+02	2.819E+02	9.280E+03	1.922E+04	3.534E+05	5.124E+08	*4.815E+14	*4.815E+14	*4.815E+14	
H-3	2.832E+03	3.221E+03	7.103E+04	1.353E+05	1.782E+06	1.121E+09	*9.621E+15	*9.621E+15	*9.621E+15	
I-129	1.267E+02	1.267E+02	1.268E+02	1.268E+02	1.269E+02	1.272E+02	1.280E+02	1.293E+02	1.320E+02	
Mn-54	1.139E+01	2.563E+01	7.299E+09	4.213E+11	*7.615E+15	*7.615E+15	*7.615E+15	*7.615E+15	*7.615E+15	
Na-22	3.361E+00	4.387E+00	2.624E+03	9.940E+03	2.048E+06	1.248E+12	*5.976E+15	*5.976E+15	*5.976E+15	
Ni-63	3.837E+04	3.864E+04	4.562E+04	4.723E+04	5.425E+04	7.669E+04	2.167E+05	1.224E+06	3.902E+07	
Np-237	2.739E+01	2.739E+01	2.739E+01	2.739E+01	2.739E+01	2.739E+01	2.739E+01	2.739E+01	2.739E+01	
Pu-238	5.196E+02	5.237E+02	6.331E+02	6.586E+02	7.713E+02	1.145E+03	3.745E+03	2.683E+04	8.768E+05	
Pu-239	4.692E+02	4.692E+02	4.696E+02	4.696E+02	4.699E+02	4.706E+02	4.726E+02	4.760E+02	4.829E+02	
Ru-106	4.112E+01	8.099E+01	9.373E+08	2.776E+10	*3.269E+15	*3.269E+15	*3.269E+15	*3.269E+15	*3.269E+15	
Sr-90	3.271E+01	3.351E+01	5.972E+01	6.736E+01	1.090E+02	3.633E+02	1.345E+04	5.531E+06	9.352E+11	
Tc-99	9.519E+01	9.520E+01	9.537E+01	9.541E+01	9.555E+01	9.592E+01	9.701E+01	9.887E+01	1.027E+02	
Th-228	4.950E+00	7.113E+00	4.280E+04	2.623E+05	3.701E+08	*8.201E+14	*8.201E+14	*8.201E+14	*8.201E+14	
Th-230	5.240E+02	4.891E+02	1.810E+02	1.592E+02	1.065E+02	5.776E+01	2.469E+01	1.317E+01	7.353E+00	
Th-232	6.012E+01	2.045E+01	2.261E+00	2.199E+00	2.136E+00	2.130E+00	2.130E+00	2.130E+00	2.130E+00	
U-234	1.490E+03	1.490E+03	1.489E+03	1.488E+03	1.485E+03	1.472E+03	1.390E+03	1.172E+03	7.441E+02	
U-235	4.956E+01	4.956E+01	4.951E+01	4.949E+01	4.942E+01	4.923E+01	4.860E+01	4.760E+01	4.572E+01	
U-238	2.034E+02	2.034E+02	2.034E+02	2.034E+02	2.034E+02	2.034E+02	2.034E+02	2.034E+02	2.033E+02	
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	

*At specific activity limit

Summed Dose/Source Ratios DSR(i,t) in (mrem/yr)/(pCi/g)
and Single Radionuclide Soil Guidelines G(i,t) in pCi/g
at tmin = time of minimum single radionuclide soil guideline
and at tmax = time of maximum total dose = 0.000E+00 years

0Nuclide	Initial	tmin	DSR(i,tmin)	G(i,tmin)	DSR(i,tmax)	G(i,tmax)
(i)	(pCi/g)	(years)		(pCi/g)		(pCi/g)
AAAAAAA	AAAAAAAAA	AAAAAAAAAAAAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA
Am-241	1.000E+01	0.000E+00	6.888E-02	3.629E+02	6.888E-02	3.629E+02
Co-60	1.000E+01	0.000E+00	9.504E+00	2.631E+00	9.504E+00	2.631E+00
Cs-134	1.000E+01	0.000E+00	4.996E+00	5.004E+00	4.996E+00	5.004E+00
Cs-137	1.000E+01	0.000E+00	2.110E+00	1.185E+01	2.110E+00	1.185E+01
Eu-152	1.000E+01	0.000E+00	4.300E+00	5.814E+00	4.300E+00	5.814E+00
Eu-154	1.000E+01	0.000E+00	4.596E+00	5.440E+00	4.596E+00	5.440E+00
Eu-155	1.000E+01	0.000E+00	1.026E-01	2.437E+02	1.026E-01	2.437E+02
H-3	1.000E+01	0.000E+00	8.828E-03	2.832E+03	8.828E-03	2.832E+03
I-129	1.000E+01	0.000E+00	1.974E-01	1.267E+02	1.974E-01	1.267E+02
Mn-54	1.000E+01	0.000E+00	2.195E+00	1.139E+01	2.195E+00	1.139E+01
Na-22	1.000E+01	0.000E+00	7.438E+00	3.361E+00	7.438E+00	3.361E+00
Ni-63	1.000E+01	0.000E+00	6.515E-04	3.837E+04	6.515E-04	3.837E+04
Np-237	1.000E+01	0.000E+00	9.129E-01	2.739E+01	9.129E-01	2.739E+01
Pu-238	1.000E+01	0.000E+00	4.812E-02	5.196E+02	4.812E-02	5.196E+02
Pu-239	1.000E+01	0.000E+00	5.328E-02	4.692E+02	5.328E-02	4.692E+02
Ru-106	1.000E+01	0.000E+00	6.079E-01	4.112E+01	6.079E-01	4.112E+01
Sr-90	1.000E+01	0.000E+00	7.643E-01	3.271E+01	7.643E-01	3.271E+01
Tc-99	1.000E+01	0.000E+00	2.626E-01	9.519E+01	2.626E-01	9.519E+01
Th-228	1.000E+01	0.000E+00	5.051E+00	4.950E+00	5.051E+00	4.950E+00
Th-230	1.000E+01	1.000E+03	3.400E+00	7.353E+00	4.771E-02	5.240E+02
Th-232	1.000E+01	144.5 ñ 0.3	1.174E+01	2.130E+00	4.158E-01	6.012E+01
U-234	1.000E+01	1.000E+03	3.360E-02	7.441E+02	1.677E-02	1.490E+03
U-235	1.000E+01	1.000E+03	5.468E-01	4.572E+01	5.044E-01	4.956E+01
U-238	1.000E+01	1.000E+03	1.230E-01	2.033E+02	1.229E-01	2.034E+02
iiiiiiii	iiiiiiiiii	iiiiiiiiiiiiiiiiii	iiiiiiiiii	iiiiiiiiii	iiiiiiiiii	iiiiiiiiii

Individual Nuclide Dose Summed Over All Pathways

Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	DOSE(j,t), mrem/yr									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Am-241	Am-241	1.000E+00		6.888E-01	6.877E-01	6.617E-01	6.565E-01	6.357E-01	5.867E-01	4.612E-01	3.089E-01	1.385E-01
0Np-237	Am-241	1.000E+00		1.474E-06	4.420E-06	7.374E-05	8.785E-05	1.432E-04	2.739E-04	6.088E-04	1.015E-03	1.470E-03
Np-237	Np-237	1.000E+00		9.129E+00	9.129E+00	9.129E+00	9.129E+00	9.129E+00	9.129E+00	9.128E+00	9.127E+00	9.126E+00
Np-237	äDOSE(j)			9.129E+00	9.129E+00	9.129E+00	9.129E+00	9.129E+00	9.129E+00	9.129E+00	9.128E+00	9.127E+00
0U-233	Am-241	1.000E+00		4.292E-14	2.949E-13	8.005E-11	1.142E-10	3.097E-10	1.194E-09	6.870E-09	2.429E-08	7.794E-08
U-233	Np-237	1.000E+00		3.931E-07	1.166E-06	1.967E-05	2.353E-05	3.895E-05	7.750E-05	1.931E-04	3.855E-04	7.698E-04
U-233	äDOSE(j)			3.931E-07	1.166E-06	1.967E-05	2.353E-05	3.895E-05	7.750E-05	1.931E-04	3.856E-04	7.698E-04
0Th-229	Am-241	1.000E+00		6.022E-17	9.025E-16	3.951E-12	6.745E-12	3.035E-11	2.343E-10	3.411E-09	2.466E-08	1.643E-07
Th-229	Np-237	1.000E+00		7.451E-10	5.214E-09	1.452E-06	2.076E-06	5.688E-06	2.249E-05	1.390E-04	5.505E-04	2.164E-03
Th-229	äDOSE(j)			7.451E-10	5.214E-09	1.452E-06	2.076E-06	5.688E-06	2.249E-05	1.390E-04	5.505E-04	2.164E-03
0Co-60	Co-60	1.000E+00		9.504E+01	8.333E+01	3.550E+00	1.839E+00	1.326E-01	1.850E-04	5.024E-13	2.650E-27	0.000E+00
0Cs-134	Cs-134	1.000E+00		4.996E+01	3.571E+01	1.132E-02	2.113E-03	2.565E-06	1.317E-13	0.000E+00	0.000E+00	0.000E+00
0Cs-137	Cs-137	1.000E+00		2.110E+01	2.062E+01	1.188E+01	1.059E+01	6.689E+00	2.120E+00	6.754E-02	2.162E-04	2.216E-09
0Eu-152	Eu-152	7.210E-01		3.100E+01	2.946E+01	8.619E+00	6.672E+00	2.396E+00	1.852E-01	8.551E-05	2.358E-10	1.794E-21
Eu-152	Eu-152	2.790E-01		1.200E+01	1.140E+01	3.335E+00	2.582E+00	9.273E-01	7.167E-02	3.309E-05	9.126E-11	6.942E-22
Eu-152	äDOSE(j)			4.300E+01	4.085E+01	1.195E+01	9.254E+00	3.323E+00	2.569E-01	1.186E-04	3.271E-10	2.488E-21
0Gd-152	Eu-152	2.790E-01		1.206E-16	3.537E-16	3.493E-15	3.786E-15	4.430E-15	4.764E-15	4.791E-15	4.791E-15	4.791E-15
0Sm-148	Eu-152	2.790E-01		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.994E-29	1.138E-28	2.369E-28	4.832E-28
0Nd-144	Eu-152	2.790E-01		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
0Eu-154	Eu-154	1.000E+00		4.596E+01	4.240E+01	6.118E+00	4.087E+00	8.143E-01	1.443E-02	8.024E-08	1.401E-16	0.000E+00
0Eu-155	Eu-155	1.000E+00		1.026E+00	8.868E-01	2.694E-02	1.301E-02	7.075E-04	4.879E-07	1.601E-16	0.000E+00	0.000E+00
0H-3	H-3	1.000E+00		8.828E-02	7.761E-02	3.520E-03	1.848E-03	1.403E-04	2.230E-07	8.958E-16	0.000E+00	0.000E+00
0I-129	I-129	1.000E+00		1.974E+00	1.974E+00	1.972E+00	1.971E+00	1.970E+00	1.966E+00	1.954E+00	1.933E+00	1.894E+00
0Mn-54	Mn-54	1.000E+00		2.195E+01	9.755E+00	3.425E-08	5.934E-10	5.344E-17	0.000E+00	0.000E+00	0.000E+00	0.000E+00
0Na-22	Na-22	1.000E+00		7.438E+01	5.698E+01	9.529E-02	2.515E-02	1.221E-04	2.003E-10	8.843E-28	0.000E+00	0.000E+00
0Ni-63	Ni-63	1.000E+00		6.515E-03	6.470E-03	5.480E-03	5.293E-03	4.609E-03	3.260E-03	1.154E-03	2.043E-04	6.407E-06
0Pu-238	Pu-238	1.850E-09		8.902E-10	8.831E-10	7.306E-10	7.022E-10	5.996E-10	4.038E-10	1.234E-10	1.711E-11	3.288E-13
Pu-238	Pu-238	9.996E-01		4.810E-01	4.772E-01	3.947E-01	3.794E-01	3.240E-01	2.182E-01	6.668E-02	9.244E-03	1.777E-04
Pu-238	äDOSE(j)			4.810E-01	4.772E-01	3.947E-01	3.794E-01	3.240E-01	2.182E-01	6.668E-02	9.244E-03	1.777E-04
0U-234	Pu-238	9.996E-01		2.357E-07	7.053E-07	1.093E-05	1.283E-05	1.971E-05	3.283E-05	5.160E-05	5.869E-05	5.972E-05

Individual Nuclide Dose Summed Over All Pathways

Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	DOSE(j,t), mrem/yr									
(j)	(i)		t= 0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03	
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
U-234	Pu-238	1.899E-08	4.478E-15	1.340E-14	2.077E-13	2.438E-13	3.745E-13	6.237E-13	9.805E-13	1.115E-12	1.135E-12	
U-234	Pu-238	2.100E-04	4.951E-11	1.481E-10	2.296E-09	2.695E-09	4.140E-09	6.895E-09	1.084E-08	1.233E-08	1.254E-08	
U-234	Pu-238	2.771E-10	6.535E-17	1.956E-16	3.031E-15	3.557E-15	5.465E-15	9.101E-15	1.431E-14	1.627E-14	1.656E-14	
U-234	Pu-238	3.989E-12	9.406E-19	2.815E-18	4.363E-17	5.120E-17	7.866E-17	1.310E-16	2.059E-16	2.342E-16	2.383E-16	
U-234	Pu-238	1.998E-04	4.710E-11	1.410E-10	2.185E-09	2.564E-09	3.939E-09	6.560E-09	1.031E-08	1.173E-08	1.193E-08	
U-234	Pu-238	2.637E-10	6.217E-17	1.861E-16	2.884E-15	3.384E-15	5.200E-15	8.659E-15	1.361E-14	1.548E-14	1.575E-14	
U-234	Pu-238	3.795E-12	8.949E-19	2.678E-18	4.151E-17	4.871E-17	7.484E-17	1.246E-16	1.959E-16	2.228E-16	2.268E-16	
U-234	Pu-238	4.196E-08	9.893E-15	2.961E-14	4.589E-13	5.385E-13	8.274E-13	1.378E-12	2.166E-12	2.463E-12	2.507E-12	
U-234	Pu-238	5.538E-14	1.306E-20	3.908E-20	6.057E-19	7.109E-19	1.092E-18	1.819E-18	2.859E-18	3.252E-18	3.309E-18	
U-234	Pu-238	7.972E-16	1.880E-22	5.625E-22	8.719E-21	1.023E-20	1.572E-20	2.618E-20	4.115E-20	4.680E-20	4.763E-20	
U-234	Pu-238	2.000E-07	4.716E-14	1.411E-13	2.187E-12	2.567E-12	3.944E-12	6.568E-12	1.032E-11	1.174E-11	1.195E-11	
U-234	Pu-238	2.640E-13	6.225E-20	1.863E-19	2.887E-18	3.388E-18	5.206E-18	8.670E-18	1.363E-17	1.550E-17	1.577E-17	
U-234	Pu-238	3.800E-15	8.960E-22	2.681E-21	4.156E-20	4.877E-20	7.493E-20	1.248E-19	1.962E-19	2.231E-19	2.270E-19	
U-234	U-234	9.996E-01	1.677E-01	1.677E-01	1.677E-01	1.677E-01	1.677E-01	1.676E-01	1.676E-01	1.674E-01	1.672E-01	
U-234	U-238	1.599E-03	3.787E-10	1.136E-09	1.931E-08	2.310E-08	3.825E-08	7.611E-08	1.897E-07	3.788E-07	7.566E-07	
U-234	U-238	2.111E-09	4.999E-16	1.500E-15	2.550E-14	3.049E-14	5.049E-14	1.005E-13	2.504E-13	5.000E-13	9.988E-13	
U-234	U-238	3.039E-11	7.196E-18	2.159E-17	3.670E-16	4.389E-16	7.267E-16	1.446E-15	3.604E-15	7.197E-15	1.438E-14	
U-234	U-238	3.359E-07	7.955E-14	2.387E-13	4.057E-12	4.852E-12	8.034E-12	1.599E-11	3.984E-11	7.957E-11	1.589E-10	
U-234	U-238	4.434E-13	1.050E-19	3.150E-19	5.355E-18	6.405E-18	1.061E-17	2.110E-17	5.259E-17	1.050E-16	2.098E-16	
U-234	U-238	6.383E-15	1.511E-21	4.534E-21	7.708E-20	9.220E-20	1.526E-19	3.038E-19	7.570E-19	1.512E-18	3.020E-18	
U-234	U-238	3.196E-07	7.569E-14	2.271E-13	3.860E-12	4.617E-12	7.644E-12	1.521E-11	3.790E-11	7.570E-11	1.512E-10	
U-234	U-238	4.219E-13	9.991E-20	2.997E-19	5.095E-18	6.094E-18	1.009E-17	2.008E-17	5.003E-17	9.993E-17	1.996E-16	
U-234	U-238	6.073E-15	1.438E-21	4.314E-21	7.334E-20	8.772E-20	1.452E-19	2.890E-19	7.202E-19	1.438E-18	2.873E-18	
U-234	U-238	6.713E-11	1.590E-17	4.769E-17	8.107E-16	9.697E-16	1.606E-15	3.195E-15	7.962E-15	1.590E-14	3.176E-14	
U-234	U-238	8.862E-17	2.098E-23	6.295E-23	1.070E-21	1.280E-21	2.119E-21	4.217E-21	1.051E-20	2.099E-20	4.192E-20	
U-234	U-238	1.276E-18	3.021E-25	9.062E-25	1.540E-23	1.842E-23	3.051E-23	6.070E-23	1.513E-22	3.021E-22	6.034E-22	
U-234	U-238	3.200E-10	7.578E-17	2.273E-16	3.865E-15	4.622E-15	7.653E-15	1.523E-14	3.795E-14	7.579E-14	1.514E-13	
U-234	U-238	4.224E-16	1.000E-22	3.001E-22	5.101E-21	6.101E-21	1.010E-20	2.010E-20	5.009E-20	1.000E-19	1.998E-19	
U-234	U-238	6.080E-18	1.440E-24	4.319E-24	7.343E-23	8.782E-23	1.454E-22	2.894E-22	7.211E-22	1.440E-21	2.876E-21	
U-234	U-238	9.980E-01	2.363E-07	7.090E-07	1.205E-05	1.442E-05	2.387E-05	4.750E-05	1.184E-04	2.364E-04	4.721E-04	
U-234	U-238	1.317E-06	3.120E-13	9.359E-13	1.591E-11	1.903E-11	3.151E-11	6.269E-11	1.562E-10	3.120E-10	6.232E-10	
U-234	U-238	1.896E-08	4.490E-15	1.347E-14	2.290E-13	2.739E-13	4.535E-13	9.024E-13	2.249E-12	4.491E-12	8.971E-12	
U-234	U-238	2.096E-04	4.964E-11	1.489E-10	2.532E-09	3.028E-09	5.013E-09	9.976E-09	2.486E-08	4.965E-08	9.917E-08	
U-234	U-238	2.767E-10	6.553E-17	1.966E-16	3.342E-15	3.997E-15	6.618E-15	1.317E-14	3.282E-14	6.554E-14	1.309E-13	
U-234	U-238	3.983E-12	9.432E-19	2.830E-18	4.810E-17	5.753E-17	9.525E-17	1.895E-16	4.723E-16	9.434E-16	1.884E-15	
U-234	U-238	1.994E-04	4.723E-11	1.417E-10	2.409E-09	2.881E-09	4.770E-09	9.491E-09	2.365E-08	4.724E-08	9.435E-08	
U-234	U-238	2.633E-10	6.234E-17	1.870E-16	3.179E-15	3.803E-15	6.296E-15	1.253E-14	3.122E-14	6.235E-14	1.245E-13	
U-234	U-238	3.789E-12	8.973E-19	2.692E-18	4.576E-17	5.474E-17	9.062E-17	1.803E-16	4.494E-16	8.975E-16	1.793E-15	
U-234	U-238	4.189E-08	9.920E-15	2.976E-14	5.059E-13	6.051E-13	1.002E-12	1.994E-12	4.968E-12	9.922E-12	1.982E-11	
U-234	U-238	5.530E-14	1.309E-20	3.928E-20	6.678E-19	7.987E-19	1.322E-18	2.632E-18	6.558E-18	1.310E-17	2.616E-17	

U-234	U-238	7.959E-16	1.885E-22	5.654E-22	9.612E-21	1.150E-20	1.904E-20	3.788E-20	9.439E-20	1.885E-19	3.765E-19
U-234	U-238	1.997E-07	4.729E-14	1.419E-13	2.411E-12	2.884E-12	4.776E-12	9.503E-12	2.368E-11	4.730E-11	9.447E-11
U-234	U-238	2.636E-13	6.242E-20	1.873E-19	3.183E-18	3.807E-18	6.304E-18	1.254E-17	3.126E-17	6.243E-17	1.247E-16
U-234	U-238	3.794E-15	8.984E-22	2.695E-21	4.582E-20	5.480E-20	9.073E-20	1.806E-19	4.499E-19	8.986E-19	1.795E-18
U-234	äDOSE(j)		1.677E-01	1.677E-01	1.677E-01	1.677E-01	1.677E-01	1.677E-01	1.677E-01	1.677E-01	1.677E-01
0Th-230	Pu-238	9.996E-01	1.995E-12	1.390E-11	3.634E-09	5.134E-09	1.339E-08	4.704E-08	2.134E-07	5.672E-07	1.313E-06
Th-230	Pu-238	1.899E-08	3.791E-20	2.641E-19	6.906E-17	9.754E-17	2.543E-16	8.938E-16	4.056E-15	1.078E-14	2.495E-14
Th-230	Pu-238	2.100E-04	4.191E-16	2.920E-15	7.634E-13	1.078E-12	2.812E-12	9.881E-12	4.483E-11	1.191E-10	2.758E-10

Individual Nuclide Dose Summed Over All Pathways

Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	DOSE(j,t), mrem/yr									
(j)	(i)		t= 0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03	
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	
Th-230	Pu-238	2.771E-10	5.532E-22	3.854E-21	1.008E-18	1.423E-18	3.711E-18	1.304E-17	5.918E-17	1.573E-16	3.641E-16	
Th-230	Pu-238	3.989E-12	7.963E-24	5.547E-23	1.450E-20	2.049E-20	5.342E-20	1.877E-19	8.518E-19	2.264E-18	5.241E-18	
Th-230	Pu-238	1.998E-04	3.988E-16	2.778E-15	7.263E-13	1.026E-12	2.675E-12	9.401E-12	4.266E-11	1.134E-10	2.624E-10	
Th-230	Pu-238	2.637E-10	5.264E-22	3.667E-21	9.587E-19	1.354E-18	3.531E-18	1.241E-17	5.631E-17	1.496E-16	3.464E-16	
Th-230	Pu-238	3.795E-12	7.576E-24	5.278E-23	1.380E-20	1.949E-20	5.082E-20	1.786E-19	8.105E-19	2.154E-18	4.986E-18	
Th-230	Pu-238	4.196E-08	8.376E-20	5.834E-19	1.526E-16	2.155E-16	5.619E-16	1.975E-15	8.960E-15	2.381E-14	5.513E-14	
Th-230	Pu-238	5.538E-14	1.106E-25	7.702E-25	2.014E-22	2.844E-22	7.416E-22	2.607E-21	1.183E-20	3.143E-20	7.277E-20	
Th-230	Pu-238	7.972E-16	1.589E-27	1.109E-26	2.899E-24	4.094E-24	1.068E-23	3.752E-23	1.702E-22	4.524E-22	1.047E-21	
Th-230	Pu-238	2.000E-07	3.992E-19	2.781E-18	7.272E-16	1.027E-15	2.678E-15	9.413E-15	4.271E-14	1.135E-13	2.628E-13	
Th-230	Pu-238	2.640E-13	5.270E-25	3.671E-24	9.599E-22	1.356E-21	3.535E-21	1.242E-20	5.637E-20	1.498E-19	3.468E-19	
Th-230	Pu-238	3.800E-15	7.586E-27	5.284E-26	1.382E-23	1.952E-23	5.089E-23	1.788E-22	8.114E-22	2.156E-21	4.993E-21	
Th-230	Th-230	9.996E-01	4.599E-01	4.599E-01	4.598E-01	4.598E-01	4.597E-01	4.595E-01	4.589E-01	4.578E-01	4.557E-01	
Th-230	U-234	9.996E-01	2.120E-06	6.350E-06	1.078E-04	1.290E-04	2.135E-04	4.248E-04	1.058E-03	2.110E-03	4.206E-03	
Th-230	U-234	1.319E-06	2.799E-12	8.382E-12	1.423E-10	1.702E-10	2.818E-10	5.607E-10	1.396E-09	2.786E-09	5.551E-09	
Th-230	U-234	1.899E-08	4.028E-14	1.207E-13	2.049E-12	2.450E-12	4.057E-12	8.071E-12	2.010E-11	4.009E-11	7.990E-11	
Th-230	U-234	2.100E-04	4.453E-10	1.334E-09	2.265E-08	2.709E-08	4.485E-08	8.922E-08	2.222E-07	4.432E-07	8.833E-07	
Th-230	U-234	2.771E-10	5.878E-16	1.761E-15	2.990E-14	3.576E-14	5.920E-14	1.178E-13	2.933E-13	5.851E-13	1.166E-12	
Th-230	U-234	3.989E-12	8.461E-18	2.534E-17	4.303E-16	5.147E-16	8.521E-16	1.695E-15	4.221E-15	8.422E-15	1.678E-14	
Th-230	U-234	1.998E-04	4.237E-10	1.269E-09	2.155E-08	2.577E-08	4.267E-08	8.489E-08	2.114E-07	4.217E-07	8.404E-07	
Th-230	U-234	2.637E-10	5.593E-16	1.675E-15	2.845E-14	3.402E-14	5.632E-14	1.121E-13	2.790E-13	5.567E-13	1.109E-12	
Th-230	U-234	3.795E-12	8.050E-18	2.411E-17	4.094E-16	4.897E-16	8.107E-16	1.613E-15	4.016E-15	8.013E-15	1.597E-14	
Th-230	U-234	4.196E-08	8.900E-14	2.666E-13	4.526E-12	5.414E-12	8.962E-12	1.783E-11	4.440E-11	8.858E-11	1.765E-10	
Th-230	U-234	5.538E-14	1.175E-19	3.519E-19	5.975E-18	7.146E-18	1.183E-17	2.354E-17	5.861E-17	1.169E-16	2.330E-16	
Th-230	U-234	7.972E-16	1.691E-21	5.065E-21	8.600E-20	1.029E-19	1.703E-19	3.388E-19	8.436E-19	1.683E-18	3.354E-18	
Th-230	U-234	2.000E-07	4.242E-13	1.271E-12	2.158E-11	2.580E-11	4.272E-11	8.499E-11	2.116E-10	4.222E-10	8.414E-10	
Th-230	U-234	2.640E-13	5.600E-19	1.677E-18	2.848E-17	3.406E-17	5.639E-17	1.122E-16	2.794E-16	5.573E-16	1.111E-15	
Th-230	U-234	3.800E-15	8.060E-21	2.414E-20	4.099E-19	4.903E-19	8.117E-19	1.615E-18	4.021E-18	8.022E-18	1.599E-17	
Th-230	U-238	1.599E-03	3.199E-15	2.233E-14	6.212E-12	8.887E-12	2.436E-11	9.645E-11	5.988E-10	2.388E-09	9.523E-09	
Th-230	U-238	2.111E-09	4.223E-21	2.948E-20	8.200E-18	1.173E-17	3.215E-17	1.273E-16	7.904E-16	3.152E-15	1.257E-14	
Th-230	U-238	3.039E-11	6.078E-23	4.243E-22	1.180E-19	1.688E-19	4.628E-19	1.832E-18	1.138E-17	4.537E-17	1.809E-16	
Th-230	U-238	3.359E-07	6.719E-19	4.691E-18	1.305E-15	1.867E-15	5.116E-15	2.026E-14	1.258E-13	5.016E-13	2.000E-12	
Th-230	U-238	4.434E-13	8.870E-25	6.192E-24	1.722E-21	2.464E-21	6.754E-21	2.674E-20	1.660E-19	6.621E-19	2.640E-18	
Th-230	U-238	6.383E-15	1.277E-26	8.913E-26	2.479E-23	3.547E-23	9.721E-23	3.849E-22	2.390E-21	9.530E-21	3.800E-20	
Th-230	U-238	3.196E-07	6.393E-19	4.463E-18	1.241E-15	1.776E-15	4.868E-15	1.927E-14	1.197E-13	4.772E-13	1.903E-12	
Th-230	U-238	4.219E-13	8.439E-25	5.891E-24	1.639E-21	2.344E-21	6.425E-21	2.544E-20	1.580E-19	6.299E-19	2.512E-18	
Th-230	U-238	6.073E-15	1.215E-26	8.480E-26	2.359E-23	3.374E-23	9.249E-23	3.662E-22	2.274E-21	9.067E-21	3.616E-20	
Th-230	U-238	6.713E-11	1.343E-22	9.375E-22	2.608E-19	3.730E-19	1.022E-18	4.048E-18	2.514E-17	1.002E-16	3.997E-16	
Th-230	U-238	8.862E-17	1.742E-28	1.236E-27	3.442E-25	4.924E-25	1.350E-24	5.344E-24	3.318E-23	1.323E-22	5.276E-22	
Th-230	U-238	1.276E-18	0.000E+00	1.070E-29	4.948E-27	7.078E-27	1.943E-26	7.692E-26	4.776E-25	1.904E-24	7.595E-24	
Th-230	U-238	3.200E-10	6.401E-22	4.469E-21	1.243E-18	1.778E-18	4.874E-18	1.930E-17	1.198E-16	4.778E-16	1.905E-15	

Th-230	U-238	4.224E-16	8.437E-28	5.891E-27	1.641E-24	2.347E-24	6.433E-24	2.547E-23	1.582E-22	6.307E-22	2.515E-21
Th-230	U-238	6.080E-18	0.000E+00	8.342E-29	2.362E-26	3.378E-26	9.260E-26	3.666E-25	2.276E-24	9.078E-24	3.620E-23
Th-230	U-238	9.980E-01	1.996E-12	1.394E-11	3.877E-09	5.545E-09	1.520E-08	6.018E-08	3.737E-07	1.490E-06	5.942E-06
Th-230	U-238	1.317E-06	2.635E-18	1.840E-17	5.117E-15	7.320E-15	2.006E-14	7.944E-14	4.932E-13	1.967E-12	7.844E-12
Th-230	U-238	1.896E-08	3.793E-20	2.648E-19	7.365E-17	1.054E-16	2.888E-16	1.143E-15	7.099E-15	2.831E-14	1.129E-13
Th-230	U-238	2.096E-04	4.193E-16	2.927E-15	8.142E-13	1.165E-12	3.193E-12	1.264E-11	7.848E-11	3.130E-10	1.248E-09
Th-230	U-238	2.767E-10	5.535E-22	3.864E-21	1.075E-18	1.537E-18	4.214E-18	1.669E-17	1.036E-16	4.131E-16	1.648E-15
Th-230	U-238	3.983E-12	7.966E-24	5.562E-23	1.547E-20	2.213E-20	6.066E-20	2.402E-19	1.491E-18	5.947E-18	2.371E-17
Th-230	U-238	1.994E-04	3.989E-16	2.785E-15	7.747E-13	1.108E-12	3.038E-12	1.203E-11	7.467E-11	2.978E-10	1.187E-09

Individual Nuclide Dose Summed Over All Pathways

Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	DOSE(j,t), mrem/yr									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Th-230	U-238	2.633E-10	5.266E-22	3.676E-21	1.023E-18	1.463E-18	4.010E-18	1.588E-17	9.857E-17	3.931E-16	1.567E-15	
Th-230	U-238	3.789E-12	7.579E-24	5.292E-23	1.472E-20	2.106E-20	5.771E-20	2.285E-19	1.419E-18	5.658E-18	2.256E-17	
Th-230	U-238	4.189E-08	8.379E-20	5.850E-19	1.627E-16	2.328E-16	6.380E-16	2.526E-15	1.568E-14	6.255E-14	2.494E-13	
Th-230	U-238	5.530E-14	1.106E-25	7.722E-25	2.148E-22	3.073E-22	8.422E-22	3.335E-21	2.070E-20	8.256E-20	3.292E-19	
Th-230	U-238	7.959E-16	1.590E-27	1.111E-26	3.092E-24	4.423E-24	1.212E-23	4.800E-23	2.980E-22	1.188E-21	4.739E-21	
Th-230	U-238	1.997E-07	3.994E-19	2.788E-18	7.756E-16	1.110E-15	3.041E-15	1.204E-14	7.476E-14	2.981E-13	1.189E-12	
Th-230	U-238	2.636E-13	5.272E-25	3.681E-24	1.024E-21	1.465E-21	4.014E-21	1.589E-20	9.869E-20	3.935E-19	1.569E-18	
Th-230	U-238	3.794E-15	7.589E-27	5.298E-26	1.474E-23	2.108E-23	5.778E-23	2.288E-22	1.420E-21	5.665E-21	2.259E-20	
Th-230	äDOSE(j)		4.599E-01	4.599E-01	4.599E-01	4.599E-01	4.599E-01	4.599E-01	4.599E-01	4.599E-01	4.599E-01	4.599E-01
0Ra-226	Pu-238	9.996E-01	3.651E-14	5.471E-13	2.305E-09	3.904E-09	1.703E-08	1.219E-07	1.454E-06	8.108E-06	3.806E-05	
Ra-226	Pu-238	1.899E-08	6.938E-22	1.039E-20	4.380E-17	7.418E-17	3.235E-16	2.316E-15	2.763E-14	1.541E-13	7.232E-13	
Ra-226	Th-230	9.996E-01	1.691E-02	5.075E-02	8.583E-01	1.025E+00	1.690E+00	3.327E+00	8.026E+00	1.519E+01	2.735E+01	
Ra-226	Th-230	1.319E-06	2.233E-08	6.699E-08	1.133E-06	1.354E-06	2.231E-06	4.392E-06	1.059E-05	2.006E-05	3.610E-05	
Ra-226	Th-230	1.899E-08	3.214E-10	9.642E-10	1.631E-08	1.948E-08	3.212E-08	6.322E-08	1.525E-07	2.887E-07	5.196E-07	
Ra-226	U-234	9.996E-01	5.182E-08	3.629E-07	1.008E-04	1.441E-04	3.939E-04	1.549E-03	9.412E-03	3.624E-02	1.349E-01	
Ra-226	U-234	1.319E-06	6.841E-14	4.790E-13	1.331E-10	1.903E-10	5.200E-10	2.044E-09	1.242E-08	4.783E-08	1.781E-07	
Ra-226	U-234	1.899E-08	9.847E-16	6.895E-15	1.916E-12	2.739E-12	7.485E-12	2.943E-11	1.788E-10	6.885E-10	2.564E-09	
Ra-226	U-238	1.599E-03	5.851E-17	8.782E-16	3.876E-12	6.628E-12	3.001E-11	2.352E-10	3.583E-09	2.781E-08	2.107E-07	
Ra-226	U-238	2.111E-09	7.724E-23	1.159E-21	5.117E-18	8.749E-18	3.962E-17	3.105E-16	4.730E-15	3.671E-14	2.781E-13	
Ra-226	U-238	3.039E-11	1.112E-24	1.668E-23	7.365E-20	1.259E-19	5.703E-19	4.470E-18	6.808E-17	5.284E-16	4.002E-15	
Ra-226	U-238	9.980E-01	3.651E-14	5.480E-13	2.419E-09	4.136E-09	1.873E-08	1.468E-07	2.236E-06	1.735E-05	1.314E-04	
Ra-226	U-238	1.317E-06	4.820E-20	7.233E-19	3.193E-15	5.460E-15	2.472E-14	1.938E-13	2.951E-12	2.291E-11	1.735E-10	
Ra-226	U-238	1.896E-08	6.937E-22	1.041E-20	4.596E-17	7.858E-17	3.559E-16	2.789E-15	4.248E-14	3.297E-13	2.497E-12	
Ra-226	äDOSE(j)		1.691E-02	5.075E-02	8.584E-01	1.026E+00	1.691E+00	3.329E+00	8.035E+00	1.523E+01	2.748E+01	
0Pb-210	Pu-238	9.996E-01	5.453E-17	1.649E-15	9.244E-11	1.824E-10	1.190E-09	1.356E-08	2.455E-07	1.618E-06	8.247E-06	
Pb-210	Pu-238	1.319E-06	2.557E-23	7.917E-22	4.531E-17	8.941E-17	5.838E-16	6.656E-15	1.205E-13	7.941E-13	4.048E-12	
Pb-210	Pu-238	2.100E-04	1.145E-20	3.464E-19	1.942E-14	3.830E-14	2.500E-13	2.849E-12	5.156E-11	3.398E-10	1.732E-09	
Pb-210	Pu-238	1.998E-04	1.090E-20	3.296E-19	1.847E-14	3.644E-14	2.378E-13	2.710E-12	4.905E-11	3.233E-10	1.648E-09	
Pb-210	Pu-238	4.196E-08	2.289E-24	6.923E-23	3.880E-18	7.654E-18	4.996E-17	5.693E-16	1.030E-14	6.791E-14	3.462E-13	
Pb-210	Pu-238	2.000E-07	1.091E-23	3.300E-22	1.850E-17	3.649E-17	2.381E-16	2.714E-15	4.911E-14	3.237E-13	1.650E-12	
Pb-210	Th-230	9.996E-01	4.135E-05	2.836E-04	6.192E-02	8.461E-02	1.953E-01	5.386E-01	1.633E+00	3.318E+00	6.176E+00	
Pb-210	Th-230	2.100E-04	8.686E-09	5.957E-08	1.301E-05	1.777E-05	4.102E-05	1.131E-04	3.429E-04	6.970E-04	1.297E-03	
Pb-210	Th-230	1.998E-04	8.264E-09	5.667E-08	1.237E-05	1.691E-05	3.903E-05	1.076E-04	3.262E-04	6.631E-04	1.234E-03	
Pb-210	Th-230	4.196E-08	1.736E-12	1.190E-11	2.599E-09	3.552E-09	8.198E-09	2.261E-08	6.853E-08	1.393E-07	2.592E-07	
Pb-210	Th-230	2.000E-07	8.274E-12	5.674E-11	1.239E-08	1.693E-08	3.908E-08	1.078E-07	3.266E-07	6.639E-07	1.236E-06	
Pb-210	U-234	9.996E-01	9.592E-11	1.408E-09	5.151E-06	8.510E-06	3.383E-05	2.005E-04	1.701E-03	7.424E-03	2.947E-02	
Pb-210	U-234	2.100E-04	2.015E-14	2.958E-13	1.082E-09	1.787E-09	7.107E-09	4.211E-08	3.574E-07	1.559E-06	6.189E-06	
Pb-210	U-234	1.998E-04	1.917E-14	2.814E-13	1.029E-09	1.701E-09	6.762E-09	4.006E-08	3.400E-07	1.484E-06	5.889E-06	
Pb-210	U-234	4.196E-08	4.026E-18	5.911E-17	2.162E-13	3.572E-13	1.420E-12	8.415E-12	7.142E-11	3.116E-10	1.237E-09	
Pb-210	U-234	2.000E-07	1.919E-17	2.817E-16	1.031E-12	1.703E-12	6.770E-12	4.011E-11	3.404E-10	1.485E-09	5.896E-09	

Pb-210	U-238	1.599E-03	8.737E-20	2.646E-18	1.541E-13	3.064E-13	2.066E-12	2.554E-11	5.845E-10	5.373E-09	4.457E-08
Pb-210	U-238	3.359E-07	1.835E-23	5.558E-22	3.236E-17	6.435E-17	4.339E-16	5.365E-15	1.228E-13	1.129E-12	9.362E-12
Pb-210	U-238	3.196E-07	1.746E-23	5.288E-22	3.079E-17	6.123E-17	4.128E-16	5.104E-15	1.168E-13	1.074E-12	8.907E-12
Pb-210	U-238	6.713E-11	3.657E-27	1.111E-25	6.467E-21	1.286E-20	8.671E-20	1.072E-18	2.454E-17	2.255E-16	1.871E-15
Pb-210	U-238	3.200E-10	1.748E-26	5.294E-25	3.082E-20	6.130E-20	4.133E-19	5.111E-18	1.170E-16	1.075E-15	8.918E-15
Pb-210	U-238	9.980E-01	5.452E-17	1.651E-15	9.613E-11	1.912E-10	1.289E-09	1.594E-08	3.648E-07	3.353E-06	2.781E-05
Pb-210	U-238	2.096E-04	1.145E-20	3.468E-19	2.019E-14	4.016E-14	2.707E-13	3.348E-12	7.661E-11	7.043E-10	5.842E-09

Individual Nuclide Dose Summed Over All Pathways

Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	DOSE(j,t), mrem/yr									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Pb-210	U-238	1.994E-04		1.090E-20	3.300E-19	1.921E-14	3.821E-14	2.576E-13	3.185E-12	7.289E-11	6.701E-10	5.558E-09
Pb-210	U-238	4.189E-08		2.288E-24	6.931E-23	4.035E-18	8.025E-18	5.410E-17	6.690E-16	1.531E-14	1.407E-13	1.167E-12
Pb-210	U-238	1.997E-07		1.091E-23	3.304E-22	1.923E-17	3.825E-17	2.579E-16	3.189E-15	7.298E-14	6.709E-13	5.565E-12
Pb-210	äDOSE(j)			4.137E-05	2.837E-04	6.195E-02	8.466E-02	1.954E-01	5.390E-01	1.635E+00	3.327E+00	6.208E+00
0Pu-238	Pu-238	1.319E-06		6.349E-07	6.299E-07	5.210E-07	5.009E-07	4.276E-07	2.880E-07	8.802E-08	1.220E-08	2.345E-10
Pu-238	Pu-238	1.899E-08		9.138E-09	9.066E-09	7.500E-09	7.209E-09	6.155E-09	4.146E-09	1.267E-09	1.756E-10	3.376E-12
Pu-238	äDOSE(j)			6.440E-07	6.389E-07	5.285E-07	5.081E-07	4.338E-07	2.922E-07	8.928E-08	1.238E-08	2.379E-10
0U-234	Pu-238	1.319E-06		3.111E-13	9.310E-13	1.443E-11	1.694E-11	2.602E-11	4.333E-11	6.812E-11	7.746E-11	7.883E-11
0Th-230	Pu-238	1.319E-06		2.634E-18	1.835E-17	4.798E-15	6.776E-15	1.767E-14	6.210E-14	2.818E-13	7.487E-13	1.734E-12
0Ra-226	Pu-238	1.319E-06		4.820E-20	7.221E-19	3.043E-15	5.154E-15	2.247E-14	1.609E-13	1.920E-12	1.070E-11	5.024E-11
0Pb-210	Pu-238	1.899E-08		5.900E-25	1.823E-23	1.041E-18	2.055E-18	1.342E-17	1.529E-16	2.768E-15	1.825E-14	9.302E-14
Pb-210	Pu-238	3.989E-12		1.239E-28	3.829E-27	2.187E-22	4.316E-22	2.818E-21	3.212E-20	5.815E-19	3.833E-18	1.954E-17
Pb-210	Pu-238	3.795E-12		1.080E-28	3.643E-27	2.081E-22	4.106E-22	2.681E-21	3.056E-20	5.533E-19	3.646E-18	1.859E-17
Pb-210	Pu-238	7.972E-16		0.000E+00	0.000E+00	4.371E-26	8.624E-26	5.631E-25	6.420E-24	1.162E-22	7.659E-22	3.905E-21
Pb-210	Pu-238	3.800E-15		0.000E+00	0.000E+00	2.084E-25	4.111E-25	2.684E-24	3.060E-23	5.539E-22	3.651E-21	1.861E-20
Pb-210	Th-230	1.899E-08		4.551E-13	3.164E-12	6.980E-10	9.539E-10	2.202E-09	6.074E-09	1.841E-08	3.743E-08	6.966E-08
Pb-210	Th-230	3.989E-12		9.559E-17	6.646E-16	1.466E-13	2.004E-13	4.626E-13	1.276E-12	3.868E-12	7.861E-12	1.463E-11
Pb-210	Th-230	3.795E-12		9.094E-17	6.324E-16	1.395E-13	1.906E-13	4.401E-13	1.214E-12	3.680E-12	7.479E-12	1.392E-11
Pb-210	Th-230	7.972E-16		1.910E-20	1.328E-19	2.930E-17	4.004E-17	9.244E-17	2.550E-16	7.729E-16	1.571E-15	2.924E-15
Pb-210	Th-230	3.800E-15		9.105E-20	6.331E-19	1.397E-16	1.909E-16	4.406E-16	1.215E-15	3.684E-15	7.488E-15	1.394E-14
Pb-210	U-234	1.899E-08		1.046E-18	1.564E-17	5.805E-14	9.591E-14	3.815E-13	2.261E-12	1.919E-11	8.374E-11	3.324E-10
Pb-210	U-234	3.989E-12		2.198E-22	3.284E-21	1.219E-17	2.015E-17	8.012E-17	4.748E-16	4.031E-15	1.759E-14	6.981E-14
Pb-210	U-234	3.795E-12		2.091E-22	3.125E-21	1.160E-17	1.917E-17	7.623E-17	4.518E-16	3.835E-15	1.673E-14	6.642E-14
Pb-210	U-234	7.972E-16		4.392E-26	6.563E-25	2.437E-21	4.026E-21	1.601E-20	9.489E-20	8.055E-19	3.515E-18	1.395E-17
Pb-210	U-234	3.800E-15		2.094E-25	3.128E-24	1.161E-20	1.919E-20	7.632E-20	4.523E-19	3.839E-18	1.675E-17	6.650E-17
Pb-210	U-238	3.039E-11		9.452E-28	2.924E-26	1.735E-21	3.452E-21	2.328E-20	2.880E-19	6.593E-18	6.060E-17	5.027E-16
Pb-210	U-238	6.383E-15		0.000E+00	0.000E+00	3.645E-25	7.251E-25	4.891E-24	6.050E-23	1.385E-21	1.273E-20	1.056E-19
Pb-210	U-238	6.073E-15		0.000E+00	0.000E+00	3.468E-25	6.899E-25	4.653E-24	5.756E-23	1.317E-21	1.211E-20	1.005E-19
Pb-210	U-238	1.276E-18		0.000E+00	0.000E+00	6.675E-29	1.449E-28	9.774E-28	1.209E-26	2.767E-25	2.544E-24	2.110E-23
Pb-210	U-238	6.080E-18		0.000E+00	0.000E+00	3.472E-28	6.907E-28	4.659E-27	5.763E-26	1.319E-24	1.213E-23	1.006E-22
Pb-210	U-238	1.896E-08		5.898E-25	1.825E-23	1.083E-18	2.154E-18	1.453E-17	1.797E-16	4.114E-15	3.782E-14	3.137E-13
Pb-210	U-238	3.983E-12		1.239E-28	3.833E-27	2.275E-22	4.525E-22	3.052E-21	3.775E-20	8.641E-19	7.943E-18	6.589E-17
Pb-210	U-238	3.789E-12		1.079E-28	3.647E-27	2.164E-22	4.305E-22	2.904E-21	3.592E-20	8.221E-19	7.557E-18	6.269E-17
Pb-210	U-238	7.959E-16		0.000E+00	0.000E+00	4.546E-26	9.042E-26	6.099E-25	7.544E-24	1.727E-22	1.587E-21	1.317E-20
Pb-210	U-238	3.794E-15		0.000E+00	0.000E+00	2.167E-25	4.310E-25	2.907E-24	3.596E-23	8.231E-22	7.567E-21	6.276E-20
Pb-210	äDOSE(j)			4.553E-13	3.166E-12	6.984E-10	9.544E-10	2.204E-09	6.079E-09	1.844E-08	3.753E-08	7.002E-08
0Pu-238	Pu-238	2.100E-04		1.010E-04	1.002E-04	8.291E-05	7.970E-05	6.805E-05	4.583E-05	1.401E-05	1.942E-06	3.732E-08
Pu-238	Pu-238	2.771E-10		1.334E-10	1.323E-10	1.094E-10	1.052E-10	8.982E-11	6.050E-11	1.849E-11	2.563E-12	4.926E-14
Pu-238	äDOSE(j)			1.010E-04	1.002E-04	8.291E-05	7.970E-05	6.805E-05	4.583E-05	1.401E-05	1.942E-06	3.732E-08
0Ra-226	Pu-238	2.100E-04		1.848E-17	2.767E-16	1.166E-12	1.974E-12	8.610E-12	6.163E-11	7.355E-10	4.100E-09	1.925E-08

Ra-226	Pu-238	2.771E-10	2.439E-23	3.653E-22	1.539E-18	2.606E-18	1.137E-17	8.135E-17	9.709E-16	5.412E-15	2.541E-14
Ra-226	Pu-238	3.989E-12	3.511E-25	5.258E-24	2.215E-20	3.752E-20	1.636E-19	1.171E-18	1.397E-17	7.790E-17	3.657E-16

Individual Nuclide Dose Summed Over All Pathways

Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	DOSE(j,t), mrem/yr									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Ra-226	Th-230	2.100E-04	8.556E-06	2.567E-05	4.341E-04	5.186E-04	8.549E-04	1.683E-03	4.059E-03	7.684E-03	1.383E-02	
Ra-226	Th-230	2.771E-10	1.129E-11	3.388E-11	5.730E-10	6.845E-10	1.128E-09	2.221E-09	5.358E-09	1.014E-08	1.825E-08	
Ra-226	Th-230	3.989E-12	1.626E-13	4.877E-13	8.247E-12	9.853E-12	1.624E-11	3.197E-11	7.712E-11	1.460E-10	2.627E-10	
Ra-226	U-234	2.100E-04	2.622E-11	1.836E-10	5.099E-08	7.289E-08	1.992E-07	7.832E-07	4.760E-06	1.833E-05	6.824E-05	
Ra-226	U-234	2.771E-10	3.461E-17	2.423E-16	6.731E-14	9.621E-14	2.630E-13	1.034E-12	6.283E-12	2.419E-11	9.008E-11	
Ra-226	U-234	3.989E-12	4.982E-19	3.488E-18	9.688E-16	1.385E-15	3.785E-15	1.488E-14	9.044E-14	3.482E-13	1.297E-12	
Ra-226	U-238	3.359E-07	2.961E-20	4.442E-19	1.960E-15	3.352E-15	1.518E-14	1.190E-13	1.812E-12	1.406E-11	1.065E-10	
Ra-226	U-238	4.434E-13	3.909E-26	5.864E-25	2.588E-21	4.425E-21	2.004E-20	1.570E-19	2.392E-18	1.857E-17	1.406E-16	
Ra-226	U-238	6.383E-15	5.615E-28	8.440E-27	3.724E-23	6.369E-23	2.884E-22	2.260E-21	3.443E-20	2.672E-19	2.024E-18	
Ra-226	U-238	2.096E-04	1.848E-17	2.772E-16	1.223E-12	2.092E-12	9.472E-12	7.424E-11	1.131E-09	8.776E-09	6.647E-08	
Ra-226	U-238	2.767E-10	2.439E-23	3.659E-22	1.615E-18	2.761E-18	1.250E-17	9.799E-17	1.493E-15	1.158E-14	8.774E-14	
Ra-226	U-238	3.983E-12	3.511E-25	5.267E-24	2.324E-20	3.974E-20	1.800E-19	1.410E-18	2.148E-17	1.667E-16	1.263E-15	
Ra-226	äDOSE(j)		8.556E-06	2.567E-05	4.341E-04	5.187E-04	8.551E-04	1.683E-03	4.064E-03	7.702E-03	1.390E-02	
0Pb-210	Pu-238	2.771E-10	5.371E-27	1.663E-25	9.518E-21	1.878E-20	1.226E-19	1.398E-18	2.531E-17	1.668E-16	8.503E-16	
Pb-210	Pu-238	2.637E-10	5.110E-27	1.582E-25	9.055E-21	1.787E-20	1.167E-19	1.330E-18	2.408E-17	1.587E-16	8.090E-16	
Pb-210	Pu-238	5.538E-14	0.000E+00	2.809E-29	1.902E-24	3.753E-24	2.451E-23	2.794E-22	5.057E-21	3.333E-20	1.699E-19	
Pb-210	Pu-238	2.640E-13	0.000E+00	1.552E-28	9.066E-24	1.789E-23	1.168E-22	1.332E-21	2.411E-20	1.589E-19	8.100E-19	
Pb-210	Th-230	1.319E-06	1.976E-11	1.376E-10	3.038E-08	4.151E-08	9.584E-08	2.644E-07	8.013E-07	1.629E-06	3.032E-06	
Pb-210	Th-230	2.771E-10	4.150E-15	2.889E-14	6.380E-12	8.719E-12	2.013E-11	5.553E-11	1.683E-10	3.421E-10	6.368E-10	
Pb-210	Th-230	2.637E-10	3.948E-15	2.749E-14	6.070E-12	8.296E-12	1.915E-11	5.283E-11	1.601E-10	3.255E-10	6.058E-10	
Pb-210	Th-230	5.538E-14	8.293E-19	5.774E-18	1.275E-15	1.743E-15	4.023E-15	1.110E-14	3.364E-14	6.837E-14	1.272E-13	
Pb-210	Th-230	2.640E-13	3.953E-18	2.752E-17	6.078E-15	8.306E-15	1.918E-14	5.289E-14	1.603E-13	3.259E-13	6.066E-13	
Pb-210	U-234	1.319E-06	4.539E-17	6.794E-16	2.526E-12	4.174E-12	1.660E-11	9.838E-11	8.351E-10	3.644E-09	1.446E-08	
Pb-210	U-234	2.771E-10	9.534E-21	1.427E-19	5.306E-16	8.767E-16	3.487E-15	2.066E-14	1.754E-13	7.655E-13	3.038E-12	
Pb-210	U-234	2.637E-10	9.070E-21	1.358E-19	5.048E-16	8.341E-16	3.317E-15	1.966E-14	1.669E-13	7.283E-13	2.891E-12	
Pb-210	U-234	5.538E-14	1.905E-24	2.852E-23	1.060E-19	1.752E-19	6.968E-19	4.130E-18	3.505E-17	1.530E-16	6.071E-16	
Pb-210	U-234	2.640E-13	9.081E-24	1.359E-22	5.054E-19	8.351E-19	3.321E-18	1.968E-17	1.671E-16	7.292E-16	2.894E-15	
Pb-210	U-238	2.111E-09	4.097E-26	1.270E-24	7.552E-20	1.502E-19	1.013E-18	1.253E-17	2.869E-16	2.638E-15	2.188E-14	
Pb-210	U-238	4.434E-13	0.000E+00	2.614E-28	1.586E-23	3.155E-23	2.128E-22	2.633E-21	6.026E-20	5.540E-19	4.595E-18	
Pb-210	U-238	4.219E-13	0.000E+00	2.487E-28	1.509E-23	3.002E-23	2.025E-22	2.505E-21	5.733E-20	5.271E-19	4.372E-18	
Pb-210	U-238	8.862E-17	0.000E+00	0.000E+00	3.170E-27	6.305E-27	4.253E-26	5.261E-25	1.204E-23	1.107E-22	9.183E-22	
Pb-210	U-238	4.224E-16	0.000E+00	0.000E+00	1.511E-26	3.006E-26	2.027E-25	2.508E-24	5.740E-23	5.277E-22	4.377E-21	
Pb-210	U-238	1.317E-06	2.556E-23	7.925E-22	4.712E-17	9.374E-17	6.323E-16	7.821E-15	1.790E-13	1.646E-12	1.365E-11	
Pb-210	U-238	2.767E-10	5.370E-27	1.665E-25	9.898E-21	1.969E-20	1.328E-19	1.643E-18	3.760E-17	3.457E-16	2.868E-15	
Pb-210	U-238	2.633E-10	5.109E-27	1.584E-25	9.417E-21	1.873E-20	1.264E-19	1.563E-18	3.578E-17	3.289E-16	2.728E-15	
Pb-210	U-238	5.530E-14	0.000E+00	2.812E-29	1.978E-24	3.935E-24	2.654E-23	3.283E-22	7.515E-21	6.908E-20	5.730E-19	
Pb-210	U-238	2.636E-13	0.000E+00	1.554E-28	9.429E-24	1.876E-23	1.265E-22	1.565E-21	3.582E-20	3.293E-19	2.732E-18	
Pb-210	äDOSE(j)		1.976E-11	1.376E-10	3.039E-08	4.153E-08	9.590E-08	2.646E-07	8.025E-07	1.633E-06	3.047E-06	
0Pu-238	Pu-238	3.989E-12	1.919E-12	1.904E-12	1.575E-12	1.514E-12	1.293E-12	8.708E-13	2.661E-13	3.689E-14	7.091E-16	
Pu-238	Pu-238	1.998E-04	9.612E-05	9.536E-05	7.888E-05	7.583E-05	6.474E-05	4.361E-05	1.333E-05	1.847E-06	3.551E-08	

Pu-238	äDOSE(j)		9.612E-05	9.536E-05	7.888E-05	7.583E-05	6.474E-05	4.361E-05	1.333E-05	1.847E-06	3.551E-08
0Ra-226	Pu-238	1.998E-04	6.516E-18	9.764E-17	4.115E-13	6.969E-13	3.039E-12	2.175E-11	2.596E-10	1.447E-09	6.794E-09
Ra-226	Pu-238	3.795E-12	1.238E-25	1.855E-24	7.818E-21	1.324E-20	5.774E-20	4.133E-19	4.933E-18	2.750E-17	1.291E-16
Ra-226	Th-230	1.998E-04	3.019E-06	9.058E-06	1.532E-04	1.830E-04	3.017E-04	5.939E-04	1.433E-03	2.712E-03	4.881E-03
Ra-226	Th-230	2.637E-10	3.985E-12	1.196E-11	2.022E-10	2.416E-10	3.983E-10	7.840E-10	1.891E-09	3.580E-09	6.443E-09
Ra-226	Th-230	3.795E-12	5.736E-14	1.721E-13	2.911E-12	3.478E-12	5.733E-12	1.128E-11	2.722E-11	5.153E-11	9.274E-11

Individual Nuclide Dose Summed Over All Pathways

Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	DOSE(j,t), mrem/yr									
(j)	(i)		t= 0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03	
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Ra-226	U-234	1.998E-04	9.249E-12	6.477E-11	1.800E-08	2.573E-08	7.032E-08	2.764E-07	1.680E-06	6.468E-06	2.409E-05	
Ra-226	U-234	2.637E-10	1.221E-17	8.550E-17	2.376E-14	3.396E-14	9.282E-14	3.649E-13	2.218E-12	8.538E-12	3.180E-11	
Ra-226	U-234	3.795E-12	1.757E-19	1.231E-18	3.419E-16	4.888E-16	1.336E-15	5.252E-15	3.192E-14	1.229E-13	4.577E-13	
Ra-226	U-238	3.196E-07	1.044E-20	1.567E-19	6.919E-16	1.183E-15	5.358E-15	4.199E-14	6.396E-13	4.964E-12	3.760E-11	
Ra-226	U-238	4.219E-13	1.378E-26	2.069E-25	9.133E-22	1.562E-21	7.072E-21	5.543E-20	8.442E-19	6.553E-18	4.963E-17	
Ra-226	U-238	6.073E-15	1.974E-28	2.978E-27	1.315E-23	2.248E-23	1.018E-22	7.978E-22	1.215E-20	9.432E-20	7.144E-19	
Ra-226	U-238	1.994E-04	6.516E-18	9.780E-17	4.317E-13	7.383E-13	3.343E-12	2.620E-11	3.991E-10	3.098E-09	2.346E-08	
Ra-226	U-238	2.633E-10	8.601E-24	1.291E-22	5.699E-19	9.745E-19	4.413E-18	3.459E-17	5.268E-16	4.089E-15	3.097E-14	
Ra-226	U-238	3.789E-12	1.238E-25	1.858E-24	8.203E-21	1.403E-20	6.352E-20	4.978E-19	7.583E-18	5.886E-17	4.458E-16	
Ra-226	äDOSE(j)		3.019E-06	9.058E-06	1.532E-04	1.831E-04	3.018E-04	5.942E-04	1.434E-03	2.719E-03	4.905E-03	
0Pu-238	Pu-238	2.637E-10	1.269E-10	1.259E-10	1.041E-10	1.001E-10	8.546E-11	5.756E-11	1.759E-11	2.438E-12	4.687E-14	
Pu-238	Pu-238	3.795E-12	1.826E-12	1.812E-12	1.499E-12	1.441E-12	1.230E-12	8.285E-13	2.532E-13	3.510E-14	6.746E-16	
Pu-238	äDOSE(j)		1.287E-10	1.277E-10	1.056E-10	1.015E-10	8.669E-11	5.839E-11	1.784E-11	2.474E-12	4.754E-14	
0Ra-226	Pu-238	2.637E-10	8.602E-24	1.289E-22	5.431E-19	9.199E-19	4.011E-18	2.871E-17	3.427E-16	1.910E-15	8.968E-15	
0Pu-238	Pu-238	4.196E-08	2.019E-08	2.003E-08	1.657E-08	1.593E-08	1.360E-08	9.159E-09	2.799E-09	3.880E-10	7.458E-12	
Pu-238	Pu-238	5.538E-14	2.665E-14	2.644E-14	2.187E-14	2.102E-14	1.795E-14	1.209E-14	3.694E-15	5.122E-16	9.844E-18	
Pu-238	äDOSE(j)		2.019E-08	2.003E-08	1.657E-08	1.593E-08	1.360E-08	9.159E-09	2.799E-09	3.880E-10	7.458E-12	
0Ra-226	Pu-238	4.196E-08	3.529E-21	5.285E-20	2.226E-16	3.771E-16	1.644E-15	1.177E-14	1.405E-13	7.830E-13	3.676E-12	
Ra-226	Pu-238	5.538E-14	4.648E-27	6.976E-26	2.939E-22	4.977E-22	2.170E-21	1.554E-20	1.854E-19	1.034E-18	4.852E-18	
Ra-226	Pu-238	7.972E-16	6.353E-29	1.002E-27	4.230E-24	7.164E-24	3.124E-23	2.236E-22	2.669E-21	1.488E-20	6.985E-20	
Ra-226	Th-230	4.196E-08	1.634E-09	4.902E-09	8.289E-08	9.904E-08	1.633E-07	3.213E-07	7.751E-07	1.467E-06	2.641E-06	
Ra-226	Th-230	5.538E-14	2.157E-15	6.470E-15	1.094E-13	1.307E-13	2.155E-13	4.242E-13	1.023E-12	1.937E-12	3.486E-12	
Ra-226	Th-230	7.972E-16	3.104E-17	9.313E-17	1.575E-15	1.882E-15	3.102E-15	6.106E-15	1.473E-14	2.788E-14	5.018E-14	
Ra-226	U-234	4.196E-08	5.008E-15	3.506E-14	9.738E-12	1.392E-11	3.805E-11	1.496E-10	9.090E-10	3.500E-09	1.303E-08	
Ra-226	U-234	5.538E-14	6.610E-21	4.627E-20	1.285E-17	1.837E-17	5.022E-17	1.974E-16	1.200E-15	4.620E-15	1.720E-14	
Ra-226	U-234	7.972E-16	9.514E-23	6.661E-22	1.850E-19	2.645E-19	7.229E-19	2.842E-18	1.727E-17	6.650E-17	2.476E-16	
Ra-226	U-238	6.713E-11	5.655E-24	8.484E-23	3.744E-19	6.401E-19	2.899E-18	2.272E-17	3.460E-16	2.686E-15	2.034E-14	
Ra-226	U-238	8.862E-17	0.000E+00	1.061E-28	4.942E-25	8.450E-25	3.826E-24	2.999E-23	4.568E-22	3.546E-21	2.685E-20	
Ra-226	U-238	1.276E-18	0.000E+00	0.000E+00	7.113E-27	1.216E-26	5.508E-26	4.317E-25	6.575E-24	5.103E-23	3.865E-22	
Ra-226	U-238	4.189E-08	3.529E-21	5.294E-20	2.336E-16	3.994E-16	1.809E-15	1.418E-14	2.159E-13	1.676E-12	1.269E-11	
Ra-226	U-238	5.530E-14	4.648E-27	6.988E-26	3.084E-22	5.273E-22	2.388E-21	1.871E-20	2.850E-19	2.212E-18	1.676E-17	
Ra-226	U-238	7.959E-16	6.353E-29	1.004E-27	4.438E-24	7.590E-24	3.437E-23	2.694E-22	4.103E-21	3.185E-20	2.412E-19	
Ra-226	äDOSE(j)		1.634E-09	4.902E-09	8.290E-08	9.905E-08	1.633E-07	3.215E-07	7.760E-07	1.471E-06	2.654E-06	
0Pu-238	Pu-238	7.972E-16	3.836E-16	3.806E-16	3.148E-16	3.026E-16	2.584E-16	1.740E-16	5.318E-17	7.372E-18	1.417E-19	
Pu-238	Pu-238	2.000E-07	9.623E-08	9.547E-08	7.898E-08	7.592E-08	6.482E-08	4.366E-08	1.334E-08	1.850E-09	3.555E-11	
Pu-238	äDOSE(j)		9.623E-08	9.547E-08	7.898E-08	7.592E-08	6.482E-08	4.366E-08	1.334E-08	1.850E-09	3.555E-11	
0Ra-226	Pu-238	2.000E-07	9.060E-22	1.363E-20	5.768E-17	9.769E-17	4.260E-16	3.050E-15	3.640E-14	2.029E-13	9.526E-13	
Ra-226	Pu-238	3.800E-15	1.611E-29	2.426E-28	1.096E-24	1.856E-24	8.095E-24	5.795E-23	6.916E-22	3.855E-21	1.810E-20	
Ra-226	Th-230	2.000E-07	4.217E-10	1.268E-09	2.148E-08	2.566E-08	4.230E-08	8.327E-08	2.009E-07	3.803E-07	6.844E-07	
Ra-226	Th-230	2.640E-13	5.566E-16	1.674E-15	2.835E-14	3.387E-14	5.584E-14	1.099E-13	2.651E-13	5.019E-13	9.033E-13	

Ra-226	Th-230	3.800E-15	8.012E-18	2.410E-17	4.081E-16	4.876E-16	8.038E-16	1.582E-15	3.816E-15	7.225E-15	1.300E-14
Ra-226	U-234	2.000E-07	1.289E-15	9.056E-15	2.523E-12	3.607E-12	9.858E-12	3.876E-11	2.356E-10	9.069E-10	3.377E-09
Ra-226	U-234	2.640E-13	1.701E-21	1.195E-20	3.330E-18	4.761E-18	1.301E-17	5.116E-17	3.109E-16	1.197E-15	4.458E-15

Individual Nuclide Dose Summed Over All Pathways

Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	DOSE(j,t), mrem/yr									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Ra-226	U-234	3.800E-15	2.448E-23	1.721E-22	4.794E-20	6.853E-20	1.873E-19	7.364E-19	4.475E-18	1.723E-17	6.417E-17	
Ra-226	U-238	3.200E-10	1.452E-24	2.189E-23	9.698E-20	1.658E-19	7.511E-19	5.887E-18	8.967E-17	6.960E-16	5.272E-15	
Ra-226	U-238	4.224E-16	0.000E+00	2.705E-29	1.280E-25	2.189E-25	9.914E-25	7.771E-24	1.184E-22	9.188E-22	6.959E-21	
Ra-226	U-238	6.080E-18	0.000E+00	0.000E+00	1.843E-27	3.151E-27	1.427E-26	1.119E-25	1.704E-24	1.322E-23	1.002E-22	
Ra-226	U-238	1.997E-07	9.060E-22	1.366E-20	6.052E-17	1.035E-16	4.687E-16	3.674E-15	5.595E-14	4.343E-13	3.290E-12	
Ra-226	U-238	2.636E-13	1.196E-27	1.803E-26	7.988E-23	1.366E-22	6.186E-22	4.849E-21	7.386E-20	5.733E-19	4.342E-18	
Ra-226	U-238	3.794E-15	1.611E-29	2.430E-28	1.150E-24	1.966E-24	8.905E-24	6.980E-23	1.063E-21	8.252E-21	6.250E-20	
Ra-226	äDOSE(j)		4.217E-10	1.268E-09	2.148E-08	2.567E-08	4.231E-08	8.331E-08	2.011E-07	3.812E-07	6.877E-07	
0Pu-238	Pu-238	2.640E-13	1.270E-13	1.260E-13	1.043E-13	1.002E-13	8.556E-14	5.763E-14	1.761E-14	2.441E-15	4.692E-17	
Pu-238	Pu-238	3.800E-15	1.828E-15	1.814E-15	1.501E-15	1.442E-15	1.232E-15	8.295E-16	2.535E-16	3.514E-17	6.754E-19	
Pu-238	äDOSE(j)		1.289E-13	1.278E-13	1.058E-13	1.017E-13	8.679E-14	5.846E-14	1.786E-14	2.477E-15	4.760E-17	
0Ra-226	Pu-238	2.640E-13	1.196E-27	1.800E-26	7.613E-23	1.290E-22	5.624E-22	4.026E-21	4.805E-20	2.678E-19	1.257E-18	
0Pu-239	Pu-239	5.901E-04	3.144E-04	3.144E-04	3.142E-04	3.141E-04	3.139E-04	3.135E-04	3.121E-04	3.099E-04	3.055E-04	
Pu-239	Pu-239	1.633E-06	8.701E-07	8.701E-07	8.695E-07	8.694E-07	8.689E-07	8.676E-07	8.639E-07	8.577E-07	8.455E-07	
Pu-239	äDOSE(j)		3.153E-04	3.153E-04	3.150E-04	3.150E-04	3.148E-04	3.144E-04	3.130E-04	3.108E-04	3.063E-04	
0U-235	Pu-239	5.901E-04	1.465E-12	4.396E-12	7.470E-11	8.934E-11	1.479E-10	2.941E-10	7.315E-10	1.456E-09	2.890E-09	
U-235	Pu-239	1.633E-06	4.055E-15	1.217E-14	2.067E-13	2.473E-13	4.093E-13	8.140E-13	2.024E-12	4.030E-12	7.998E-12	
U-235	Pu-239	8.257E-06	2.050E-14	6.151E-14	1.045E-12	1.250E-12	2.069E-12	4.115E-12	1.023E-11	2.038E-11	4.044E-11	
U-235	Pu-239	2.285E-08	5.674E-17	1.702E-16	2.893E-15	3.460E-15	5.727E-15	1.139E-14	2.833E-14	5.639E-14	1.119E-13	
U-235	Pu-239	4.954E-10	1.230E-18	3.691E-18	6.272E-17	7.501E-17	1.242E-16	2.469E-16	6.141E-16	1.223E-15	2.426E-15	
U-235	Pu-239	1.371E-12	3.405E-21	1.021E-20	1.736E-19	2.076E-19	3.436E-19	6.834E-19	1.700E-18	3.384E-18	6.715E-18	
U-235	Pu-239	9.829E-01	2.441E-09	7.322E-09	1.244E-07	1.488E-07	2.463E-07	4.899E-07	1.218E-06	2.426E-06	4.814E-06	
U-235	Pu-239	2.720E-03	6.755E-12	2.026E-11	3.444E-10	4.119E-10	6.818E-10	1.356E-09	3.372E-09	6.713E-09	1.332E-08	
U-235	Pu-239	1.375E-02	3.415E-11	1.024E-10	1.741E-09	2.082E-09	3.447E-09	6.854E-09	1.705E-08	3.394E-08	6.736E-08	
U-235	Pu-239	3.806E-05	9.451E-14	2.835E-13	4.819E-12	5.763E-12	9.539E-12	1.897E-11	4.718E-11	9.393E-11	1.864E-10	
U-235	Pu-239	8.252E-07	2.049E-15	6.147E-15	1.045E-13	1.249E-13	2.068E-13	4.113E-13	1.023E-12	2.036E-12	4.042E-12	
U-235	Pu-239	2.284E-09	5.671E-18	1.701E-17	2.891E-16	3.458E-16	5.724E-16	1.138E-15	2.831E-15	5.636E-15	1.119E-14	
U-235	U-235	9.835E-01	4.961E+00	4.961E+00	4.961E+00	4.961E+00	4.961E+00	4.961E+00	4.961E+00	4.961E+00	4.961E+00	
U-235	äDOSE(j)		4.961E+00	4.961E+00	4.961E+00	4.961E+00	4.961E+00	4.961E+00	4.961E+00	4.961E+00	4.961E+00	
0Pa-231	Pu-239	5.901E-04	1.144E-17	8.025E-17	2.240E-14	3.204E-14	8.780E-14	3.474E-13	2.153E-12	8.559E-12	3.392E-11	
Pa-231	Pu-239	1.633E-06	3.166E-20	2.221E-19	6.198E-17	8.867E-17	2.430E-16	9.615E-16	5.959E-15	2.369E-14	9.387E-14	
Pa-231	Pu-239	8.257E-06	1.601E-19	1.123E-18	3.134E-16	4.483E-16	1.228E-15	4.861E-15	3.013E-14	1.198E-13	4.746E-13	
Pa-231	Pu-239	2.285E-08	4.430E-22	3.108E-21	8.673E-19	1.241E-18	3.400E-18	1.345E-17	8.338E-17	3.315E-16	1.313E-15	
Pa-231	Pu-239	4.954E-10	9.604E-24	6.738E-23	1.880E-20	2.690E-20	7.371E-20	2.917E-19	1.808E-18	7.186E-18	2.848E-17	
Pa-231	Pu-239	1.371E-12	2.657E-26	1.865E-25	5.204E-23	7.444E-23	2.040E-22	8.073E-22	5.003E-21	1.989E-20	7.881E-20	
Pa-231	Pu-239	9.829E-01	1.905E-14	1.337E-13	3.730E-11	5.336E-11	1.462E-10	5.787E-10	3.586E-09	1.426E-08	5.650E-08	
Pa-231	Pu-239	2.720E-03	5.273E-17	3.699E-16	1.032E-13	1.477E-13	4.047E-13	1.602E-12	9.926E-12	3.946E-11	1.564E-10	
Pa-231	Pu-239	1.375E-02	2.666E-16	1.870E-15	5.220E-13	7.467E-13	2.046E-12	8.097E-12	5.018E-11	1.995E-10	7.905E-10	
Pa-231	Pu-239	3.806E-05	7.378E-19	5.176E-18	1.445E-15	2.066E-15	5.663E-15	2.241E-14	1.389E-13	5.521E-13	2.188E-12	
Pa-231	Pu-239	8.252E-07	1.600E-20	1.122E-19	3.132E-17	4.480E-17	1.228E-16	4.859E-16	3.011E-15	1.197E-14	4.743E-14	

Pa-231	Pu-239	2.284E-09	4.427E-23	3.106E-22	8.668E-20	1.240E-19	3.398E-19	1.345E-18	8.333E-18	3.313E-17	1.313E-16
Pa-231	U-235	9.835E-01	5.818E-05	1.748E-04	2.974E-03	3.557E-03	5.888E-03	1.171E-02	2.914E-02	5.807E-02	1.155E-01
Pa-231	U-235	2.722E-03	1.610E-07	4.838E-07	8.230E-06	9.843E-06	1.629E-05	3.241E-05	8.066E-05	1.607E-04	3.196E-04
Pa-231	U-235	1.376E-02	8.141E-07	2.446E-06	4.161E-05	4.976E-05	8.238E-05	1.639E-04	4.078E-04	8.125E-04	1.616E-03

Individual Nuclide Dose Summed Over All Pathways

Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	DOSE(j,t), mrem/yr									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Pa-231	U-235	3.809E-05		2.253E-09	6.770E-09	1.152E-07	1.377E-07	2.280E-07	4.535E-07	1.129E-06	2.249E-06	4.471E-06
Pa-231	U-235	8.257E-07		4.885E-11	1.468E-10	2.497E-09	2.986E-09	4.943E-09	9.832E-09	2.447E-08	4.876E-08	9.694E-08
Pa-231	U-235	2.285E-09		1.352E-13	4.062E-13	6.910E-12	8.264E-12	1.368E-11	2.721E-11	6.772E-11	1.349E-10	2.683E-10
Pa-231	äDOSE(j)			5.916E-05	1.777E-04	3.024E-03	3.616E-03	5.986E-03	1.191E-02	2.963E-02	5.905E-02	1.174E-01
0Ac-227	Pu-239	5.901E-04		2.467E-19	3.671E-18	1.357E-14	2.243E-14	8.920E-14	5.296E-13	4.557E-12	2.048E-11	8.638E-11
Ac-227	Pu-239	9.829E-01		4.108E-16	6.115E-15	2.261E-11	3.735E-11	1.486E-10	8.822E-10	7.591E-09	3.411E-08	1.439E-07
Ac-227	U-235	9.835E-01		1.667E-06	1.155E-05	2.541E-03	3.472E-03	8.022E-03	2.223E-02	6.910E-02	1.476E-01	3.032E-01
Ac-227	äDOSE(j)			1.667E-06	1.155E-05	2.541E-03	3.472E-03	8.022E-03	2.223E-02	6.910E-02	1.476E-01	3.032E-01
0Ac-227	Pu-239	1.633E-06		6.877E-22	1.025E-20	3.794E-17	6.268E-17	2.493E-16	1.480E-15	1.274E-14	5.724E-14	2.414E-13
Ac-227	Pu-239	8.257E-06		2.851E-21	4.250E-20	1.573E-16	2.599E-16	1.034E-15	6.139E-15	5.282E-14	2.373E-13	1.001E-12
Ac-227	Pu-239	2.720E-03		1.145E-18	1.707E-17	6.319E-14	1.044E-13	4.153E-13	2.466E-12	2.122E-11	9.534E-11	4.021E-10
Ac-227	U-235	2.722E-03		4.650E-09	3.226E-08	7.102E-06	9.705E-06	2.242E-05	6.213E-05	1.932E-04	4.124E-04	8.475E-04
Ac-227	äDOSE(j)			4.650E-09	3.226E-08	7.102E-06	9.705E-06	2.242E-05	6.213E-05	1.932E-04	4.124E-04	8.475E-04
0Pu-239	Pu-239	8.257E-06		4.399E-06	4.399E-06	4.396E-06	4.395E-06	4.393E-06	4.386E-06	4.368E-06	4.336E-06	4.274E-06
Pu-239	Pu-239	2.285E-08		1.218E-08	1.217E-08	1.217E-08	1.216E-08	1.216E-08	1.214E-08	1.209E-08	1.200E-08	1.183E-08
Pu-239	äDOSE(j)			4.411E-06	4.411E-06	4.408E-06	4.407E-06	4.405E-06	4.399E-06	4.380E-06	4.348E-06	4.286E-06
0Ac-227	Pu-239	2.285E-08		7.986E-24	1.190E-22	4.406E-19	7.280E-19	2.896E-18	1.719E-17	1.479E-16	6.648E-16	2.804E-15
Ac-227	Pu-239	4.954E-10		2.102E-25	3.132E-24	1.159E-20	1.915E-20	7.619E-20	4.524E-19	3.893E-18	1.749E-17	7.378E-17
Ac-227	Pu-239	3.806E-05		1.330E-20	1.983E-19	7.339E-16	1.213E-15	4.823E-15	2.864E-14	2.464E-13	1.107E-12	4.671E-12
Ac-227	U-235	3.809E-05		5.400E-11	3.747E-10	8.248E-08	1.127E-07	2.604E-07	7.216E-07	2.243E-06	4.790E-06	9.843E-06
Ac-227	äDOSE(j)			5.400E-11	3.747E-10	8.248E-08	1.127E-07	2.604E-07	7.216E-07	2.243E-06	4.790E-06	9.843E-06
0Pu-239	Pu-239	4.954E-10		2.640E-10	2.640E-10	2.638E-10	2.637E-10	2.636E-10	2.632E-10	2.621E-10	2.602E-10	2.565E-10
Pu-239	Pu-239	1.371E-12		7.305E-13	7.305E-13	7.300E-13	7.299E-13	7.295E-13	7.284E-13	7.253E-13	7.201E-13	7.098E-13
Pu-239	äDOSE(j)			2.647E-10	2.647E-10	2.645E-10	2.645E-10	2.643E-10	2.639E-10	2.628E-10	2.609E-10	2.572E-10
0Ac-227	Pu-239	1.371E-12		5.874E-28	8.753E-27	3.240E-23	5.353E-23	2.129E-22	1.264E-21	1.088E-20	4.888E-20	2.062E-19
Ac-227	Pu-239	2.284E-09		9.784E-25	1.458E-23	5.397E-20	8.917E-20	3.547E-19	2.106E-18	1.812E-17	8.142E-17	3.434E-16
Ac-227	U-235	2.285E-09		3.972E-15	2.756E-14	6.065E-12	8.289E-12	1.915E-11	5.306E-11	1.650E-10	3.522E-10	7.238E-10
Ac-227	äDOSE(j)			3.972E-15	2.756E-14	6.065E-12	8.289E-12	1.915E-11	5.306E-11	1.650E-10	3.522E-10	7.238E-10
0Pu-239	Pu-239	9.829E-01		5.237E-01	5.237E-01	5.233E-01	5.232E-01	5.229E-01	5.222E-01	5.199E-01	5.162E-01	5.088E-01
Pu-239	Pu-239	2.720E-03		1.449E-03	1.449E-03	1.448E-03	1.448E-03	1.447E-03	1.445E-03	1.439E-03	1.429E-03	1.408E-03
Pu-239	äDOSE(j)			5.251E-01	5.251E-01	5.247E-01	5.247E-01	5.244E-01	5.236E-01	5.214E-01	5.176E-01	5.102E-01
0Pu-239	Pu-239	1.375E-02		7.327E-03	7.327E-03	7.322E-03	7.321E-03	7.317E-03	7.306E-03	7.275E-03	7.223E-03	7.120E-03
Pu-239	Pu-239	3.806E-05		2.028E-05	2.028E-05	2.026E-05	2.026E-05	2.025E-05	2.022E-05	2.013E-05	1.999E-05	1.970E-05
Pu-239	äDOSE(j)			7.348E-03	7.347E-03	7.342E-03	7.341E-03	7.337E-03	7.327E-03	7.295E-03	7.243E-03	7.139E-03
0Ac-227	Pu-239	1.375E-02		4.749E-18	7.079E-17	2.620E-13	4.329E-13	1.722E-12	1.022E-11	8.798E-11	3.953E-10	1.668E-09
Ac-227	U-235	1.376E-02		1.928E-08	1.338E-07	2.945E-05	4.024E-05	9.297E-05	2.576E-04	8.009E-04	1.710E-03	3.514E-03
Ac-227	äDOSE(j)			1.928E-08	1.338E-07	2.945E-05	4.024E-05	9.297E-05	2.576E-04	8.009E-04	1.710E-03	3.514E-03
0Pu-239	Pu-239	8.252E-07		4.397E-07	4.397E-07	4.394E-07	4.393E-07	4.390E-07	4.384E-07	4.365E-07	4.334E-07	4.272E-07
Pu-239	Pu-239	2.284E-09		1.217E-09	1.217E-09	1.216E-09	1.216E-09	1.215E-09	1.213E-09	1.208E-09	1.199E-09	1.182E-09
Pu-239	äDOSE(j)			4.409E-07	4.409E-07	4.406E-07	4.405E-07	4.403E-07	4.396E-07	4.377E-07	4.346E-07	4.284E-07

Individual Nuclide Dose Summed Over All Pathways

Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	DOSE(j,t), mrem/yr									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Ac-227	Pu-239	8.252E-07		3.501E-22	5.217E-21	1.931E-17	3.191E-17	1.269E-16	7.535E-16	6.484E-15	2.913E-14	1.229E-13
Ac-227	U-235	8.257E-07		1.421E-12	9.860E-12	2.170E-09	2.966E-09	6.852E-09	1.899E-08	5.902E-08	1.260E-07	2.590E-07
Ac-227	äDOSE(j)			1.421E-12	9.860E-12	2.170E-09	2.966E-09	6.852E-09	1.899E-08	5.902E-08	1.260E-07	2.590E-07
ORu-106	Ru-106	1.000E+00		6.079E+00	3.087E+00	2.667E-07	9.006E-09	1.170E-14	2.204E-29	0.000E+00	0.000E+00	0.000E+00
OSr-90	Sr-90	1.000E+00		7.643E+00	7.461E+00	4.186E+00	3.712E+00	2.293E+00	6.881E-01	1.859E-02	4.520E-05	2.673E-10
OTc-99	Tc-99	1.000E+00		2.626E+00	2.626E+00	2.621E+00	2.620E+00	2.616E+00	2.606E+00	2.577E+00	2.529E+00	2.435E+00
0Th-228	Th-228	1.000E+00		5.051E+01	3.515E+01	5.841E-03	9.530E-04	6.755E-07	9.033E-15	0.000E+00	0.000E+00	0.000E+00
Th-228	Th-232	1.000E+00		3.899E-01	2.391E+00	5.605E+01	5.794E+01	6.002E+01	6.022E+01	6.022E+01	6.022E+01	6.022E+01
Th-228	äDOSE(j)			5.090E+01	3.754E+01	5.606E+01	5.794E+01	6.002E+01	6.022E+01	6.022E+01	6.022E+01	6.022E+01
0Th-230	Th-230	1.319E-06		6.071E-07	6.071E-07	6.070E-07	6.069E-07	6.068E-07	6.065E-07	6.057E-07	6.043E-07	6.015E-07
Th-230	Th-230	1.899E-08		8.738E-09	8.738E-09	8.736E-09	8.736E-09	8.734E-09	8.730E-09	8.718E-09	8.698E-09	8.658E-09
Th-230	äDOSE(j)			6.158E-07	6.158E-07	6.157E-07	6.157E-07	6.155E-07	6.153E-07	6.144E-07	6.130E-07	6.102E-07
0Th-230	Th-230	2.100E-04		9.660E-05	9.660E-05	9.658E-05	9.658E-05	9.656E-05	9.651E-05	9.638E-05	9.616E-05	9.572E-05
Th-230	Th-230	2.771E-10		1.275E-10	1.275E-10	1.275E-10	1.275E-10	1.275E-10	1.274E-10	1.272E-10	1.269E-10	1.263E-10
Th-230	äDOSE(j)			9.660E-05	9.660E-05	9.658E-05	9.658E-05	9.656E-05	9.651E-05	9.638E-05	9.616E-05	9.572E-05
0Th-230	Th-230	3.989E-12		1.835E-12	1.835E-12	1.835E-12	1.835E-12	1.835E-12	1.834E-12	1.831E-12	1.827E-12	1.819E-12
Th-230	Th-230	1.998E-04		9.191E-05	9.191E-05	9.189E-05	9.188E-05	9.187E-05	9.183E-05	9.170E-05	9.149E-05	9.107E-05
Th-230	äDOSE(j)			9.191E-05	9.191E-05	9.189E-05	9.188E-05	9.187E-05	9.183E-05	9.170E-05	9.149E-05	9.107E-05
0Th-230	Th-230	2.637E-10		1.213E-10	1.213E-10	1.213E-10	1.213E-10	1.213E-10	1.212E-10	1.210E-10	1.208E-10	1.202E-10
Th-230	Th-230	3.795E-12		1.746E-12	1.746E-12	1.746E-12	1.746E-12	1.745E-12	1.745E-12	1.742E-12	1.738E-12	1.730E-12
Th-230	äDOSE(j)			1.231E-10	1.231E-10	1.230E-10	1.230E-10	1.230E-10	1.230E-10	1.228E-10	1.225E-10	1.219E-10
0Th-230	Th-230	4.196E-08		1.931E-08	1.931E-08	1.930E-08	1.930E-08	1.930E-08	1.929E-08	1.926E-08	1.922E-08	1.913E-08
Th-230	Th-230	5.538E-14		2.548E-14	2.548E-14	2.548E-14	2.548E-14	2.547E-14	2.546E-14	2.542E-14	2.537E-14	2.525E-14
Th-230	äDOSE(j)			1.931E-08	1.931E-08	1.930E-08	1.930E-08	1.930E-08	1.929E-08	1.926E-08	1.922E-08	1.913E-08
0Th-230	Th-230	7.972E-16		3.668E-16	3.668E-16	3.667E-16	3.667E-16	3.666E-16	3.665E-16	3.660E-16	3.651E-16	3.634E-16
Th-230	Th-230	2.000E-07		9.202E-08	9.202E-08	9.200E-08	9.200E-08	9.198E-08	9.194E-08	9.181E-08	9.160E-08	9.118E-08
Th-230	äDOSE(j)			9.202E-08	9.202E-08	9.200E-08	9.200E-08	9.198E-08	9.194E-08	9.181E-08	9.160E-08	9.118E-08
0Th-230	Th-230	2.640E-13		1.215E-13	1.215E-13	1.214E-13	1.214E-13	1.214E-13	1.214E-13	1.212E-13	1.209E-13	1.204E-13
Th-230	Th-230	3.800E-15		1.748E-15	1.748E-15	1.748E-15	1.748E-15	1.748E-15	1.747E-15	1.744E-15	1.740E-15	1.732E-15
Th-230	äDOSE(j)			1.232E-13	1.232E-13	1.232E-13	1.232E-13	1.232E-13	1.231E-13	1.229E-13	1.227E-13	1.221E-13
0Th-232	Th-232	1.000E+00		4.920E-01	4.920E-01	4.920E-01	4.920E-01	4.920E-01	4.920E-01	4.920E-01	4.920E-01	4.920E-01
ORa-228	Th-232	1.000E+00		3.276E+00	9.339E+00	5.405E+01	5.523E+01	5.654E+01	5.667E+01	5.667E+01	5.667E+01	5.667E+01
OU-234	U-234	1.319E-06		2.213E-07	2.213E-07	2.213E-07	2.213E-07	2.213E-07	2.213E-07	2.212E-07	2.210E-07	2.207E-07
U-234	U-234	1.899E-08		3.186E-09	3.186E-09	3.186E-09	3.186E-09	3.185E-09	3.185E-09	3.183E-09	3.181E-09	3.176E-09
U-234	äDOSE(j)			2.245E-07	2.245E-07	2.245E-07	2.245E-07	2.245E-07	2.245E-07	2.244E-07	2.242E-07	2.238E-07

Individual Nuclide Dose Summed Over All Pathways

Parent Nuclide and Branch Fraction Indicated

[illegible]

Individual Nuclide Dose Summed Over All Pathways

Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	DOSE(j,t), mrem/yr									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
U-238	U-238	4.219E-13		2.334E-11	2.334E-11	2.334E-11	2.334E-11	2.334E-11	2.334E-11	2.334E-11	2.334E-11	2.334E-11
U-238	U-238	6.073E-15		3.360E-13	3.360E-13	3.360E-13	3.360E-13	3.360E-13	3.360E-13	3.359E-13	3.359E-13	3.359E-13
U-238	äDOSE(j)			2.368E-11	2.368E-11	2.368E-11	2.368E-11	2.368E-11	2.368E-11	2.368E-11	2.367E-11	2.367E-11
0U-238	U-238	6.713E-11		3.714E-09	3.714E-09	3.714E-09	3.714E-09	3.714E-09	3.714E-09	3.714E-09	3.714E-09	3.713E-09
U-238	U-238	8.862E-17		4.903E-15	4.903E-15	4.903E-15	4.902E-15	4.902E-15	4.902E-15	4.902E-15	4.902E-15	4.902E-15
U-238	äDOSE(j)			3.714E-09	3.714E-09	3.714E-09	3.714E-09	3.714E-09	3.714E-09	3.714E-09	3.714E-09	3.713E-09
0U-238	U-238	1.276E-18		7.057E-17	7.057E-17	7.057E-17	7.057E-17	7.057E-17	7.057E-17	7.056E-17	7.056E-17	7.055E-17
U-238	U-238	3.200E-10		1.770E-08	1.770E-08	1.770E-08	1.770E-08	1.770E-08	1.770E-08	1.770E-08	1.770E-08	1.770E-08
U-238	äDOSE(j)			1.770E-08	1.770E-08	1.770E-08	1.770E-08	1.770E-08	1.770E-08	1.770E-08	1.770E-08	1.770E-08
0U-238	U-238	4.224E-16		2.337E-14	2.337E-14	2.337E-14	2.337E-14	2.337E-14	2.337E-14	2.337E-14	2.337E-14	2.336E-14
U-238	U-238	6.080E-18		3.364E-16	3.364E-16	3.364E-16	3.364E-16	3.364E-16	3.364E-16	3.364E-16	3.363E-16	3.363E-16
U-238	äDOSE(j)			2.371E-14	2.371E-14	2.370E-14	2.370E-14	2.370E-14	2.370E-14	2.370E-14	2.370E-14	2.370E-14
0U-238	U-238	9.980E-01		1.140E+00	1.140E+00	1.140E+00	1.140E+00	1.140E+00	1.140E+00	1.140E+00	1.140E+00	1.140E+00
U-238	U-238	1.317E-06		1.505E-06	1.505E-06	1.505E-06	1.505E-06	1.505E-06	1.505E-06	1.505E-06	1.505E-06	1.505E-06
U-238	äDOSE(j)			1.140E+00	1.140E+00	1.140E+00	1.140E+00	1.140E+00	1.140E+00	1.140E+00	1.140E+00	1.140E+00
0U-238	U-238	1.896E-08		2.167E-08	2.167E-08	2.167E-08	2.166E-08	2.166E-08	2.166E-08	2.166E-08	2.166E-08	2.166E-08
U-238	U-238	2.096E-04		2.395E-04	2.395E-04	2.395E-04	2.395E-04	2.395E-04	2.395E-04	2.395E-04	2.395E-04	2.395E-04
U-238	äDOSE(j)			2.395E-04	2.395E-04	2.395E-04	2.395E-04	2.395E-04	2.395E-04	2.395E-04	2.395E-04	2.395E-04
0U-238	U-238	2.767E-10		3.161E-10	3.161E-10	3.161E-10	3.161E-10	3.161E-10	3.161E-10	3.161E-10	3.161E-10	3.161E-10
U-238	U-238	3.983E-12		4.551E-12	4.551E-12	4.551E-12	4.551E-12	4.551E-12	4.551E-12	4.550E-12	4.550E-12	4.550E-12
U-238	äDOSE(j)			3.207E-10	3.207E-10	3.207E-10	3.207E-10	3.207E-10	3.207E-10	3.207E-10	3.207E-10	3.206E-10
0U-238	U-238	1.994E-04		2.279E-04	2.279E-04	2.279E-04	2.279E-04	2.279E-04	2.279E-04	2.279E-04	2.278E-04	2.278E-04
U-238	U-238	2.633E-10		3.008E-10	3.008E-10	3.008E-10	3.008E-10	3.008E-10	3.008E-10	3.008E-10	3.008E-10	3.007E-10
U-238	äDOSE(j)			2.279E-04	2.279E-04	2.279E-04	2.279E-04	2.279E-04	2.279E-04	2.279E-04	2.278E-04	2.278E-04
0U-238	U-238	3.789E-12		4.330E-12	4.330E-12	4.330E-12	4.330E-12	4.330E-12	4.329E-12	4.329E-12	4.329E-12	4.329E-12
U-238	U-238	4.189E-08		4.786E-08	4.786E-08	4.786E-08	4.786E-08	4.786E-08	4.786E-08	4.786E-08	4.786E-08	4.785E-08
U-238	äDOSE(j)			4.787E-08	4.787E-08	4.787E-08	4.787E-08	4.787E-08	4.787E-08	4.787E-08	4.786E-08	4.786E-08
0U-238	U-238	5.530E-14		6.318E-14	6.318E-14	6.318E-14	6.318E-14	6.318E-14	6.318E-14	6.318E-14	6.317E-14	6.317E-14
U-238	U-238	7.959E-16		9.094E-16	9.094E-16	9.094E-16	9.094E-16	9.094E-16	9.094E-16	9.094E-16	9.093E-16	9.092E-16
U-238	äDOSE(j)			6.409E-14	6.409E-14	6.409E-14	6.409E-14	6.409E-14	6.409E-14	6.409E-14	6.408E-14	6.408E-14
0U-238	U-238	1.997E-07		2.281E-07	2.281E-07	2.281E-07	2.281E-07	2.281E-07	2.281E-07	2.281E-07	2.281E-07	2.281E-07
U-238	U-238	2.636E-13		3.012E-13	3.012E-13	3.012E-13	3.012E-13	3.012E-13	3.011E-13	3.011E-13	3.011E-13	3.011E-13
U-238	äDOSE(j)			2.281E-07	2.281E-07	2.281E-07	2.281E-07	2.281E-07	2.281E-07	2.281E-07	2.281E-07	2.281E-07
0U-238	U-238	3.794E-15		4.335E-15	4.335E-15	4.335E-15	4.335E-15	4.335E-15	4.335E-15	4.335E-15	4.334E-15	4.334E-15
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii

THF(i) is the thread fraction of the parent nuclide.

Individual Nuclide Soil Concentration
 Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	S(j,t), pCi/g									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Am-241	Am-241	1.000E+00		1.000E+01	9.984E+00	9.607E+00	9.530E+00	9.229E+00	8.518E+00	6.696E+00	4.484E+00	2.010E+00
0Np-237	Am-241	1.000E+00		0.000E+00	3.230E-06	7.922E-05	9.469E-05	1.553E-04	2.987E-04	6.658E-04	1.112E-03	1.610E-03
Np-237	Np-237	1.000E+00		1.000E+01	1.000E+01	1.000E+01	1.000E+01	1.000E+01	1.000E+01	9.999E+00	9.998E+00	9.996E+00
Np-237	äS(j):			1.000E+01	1.000E+01	1.000E+01	1.000E+01	1.000E+01	1.000E+01	1.000E+01	9.999E+00	9.998E+00
0U-233	Am-241	1.000E+00		0.000E+00	7.034E-12	4.340E-09	6.234E-09	1.713E-08	6.675E-08	3.864E-07	1.369E-06	4.396E-06
U-233	Np-237	1.000E+00		0.000E+00	4.354E-05	1.088E-03	1.306E-03	2.177E-03	4.353E-03	1.088E-02	2.174E-02	4.343E-02
U-233	äS(j):			0.000E+00	4.354E-05	1.088E-03	1.306E-03	2.177E-03	4.353E-03	1.088E-02	2.174E-02	4.344E-02
0Th-229	Am-241	1.000E+00		0.000E+00	2.215E-16	3.425E-12	5.906E-12	2.711E-11	2.124E-10	3.121E-09	2.263E-08	1.510E-07
Th-229	Np-237	1.000E+00		0.000E+00	2.056E-09	1.284E-06	1.848E-06	5.131E-06	2.049E-05	1.274E-04	5.055E-04	1.989E-03
Th-229	äS(j):			0.000E+00	2.056E-09	1.284E-06	1.848E-06	5.131E-06	2.049E-05	1.274E-04	5.056E-04	1.989E-03
0Co-60	Co-60	1.000E+00		1.000E+01	8.768E+00	3.735E-01	1.935E-01	1.395E-02	1.947E-05	5.286E-14	2.795E-28	0.000E+00
0Cs-134	Cs-134	1.000E+00		1.000E+01	7.148E+00	2.266E-03	4.229E-04	5.134E-07	2.636E-14	3.566E-36	0.000E+00	0.000E+00
0Cs-137	Cs-137	1.000E+00		1.000E+01	9.773E+00	5.630E+00	5.019E+00	3.170E+00	1.005E+00	3.201E-02	1.025E-04	1.050E-09
0Eu-152	Eu-152	7.210E-01		7.210E+00	6.850E+00	2.004E+00	1.552E+00	5.573E-01	4.307E-02	1.989E-05	5.485E-11	4.172E-22
Eu-152	Eu-152	2.790E-01		2.790E+00	2.651E+00	7.756E-01	6.005E-01	2.156E-01	1.667E-02	7.695E-06	2.122E-11	1.614E-22
Eu-152	äS(j):			1.000E+01	9.501E+00	2.780E+00	2.152E+00	7.729E-01	5.974E-02	2.758E-05	7.607E-11	5.787E-22
0Gd-152	Eu-152	2.790E-01		0.000E+00	1.746E-14	2.525E-13	2.744E-13	3.227E-13	3.476E-13	3.497E-13	3.497E-13	3.497E-13
0Sm-148	Eu-152	2.790E-01		0.000E+00	8.716E-31	3.774E-28	5.081E-28	1.107E-27	2.791E-27	7.981E-27	1.664E-26	3.395E-26
0Nd-144	Eu-152	2.790E-01		0.000E+00	0.000E+00	1.037E-42	1.710E-42	6.558E-42	3.592E-41	2.804E-40	1.212E-39	5.040E-39
0Eu-154	Eu-154	1.000E+00		1.000E+01	9.225E+00	1.331E+00	8.893E-01	1.772E-01	3.139E-03	1.746E-08	3.048E-17	9.290E-35
0Eu-155	Eu-155	1.000E+00		1.000E+01	8.645E+00	2.626E-01	1.268E-01	6.897E-03	4.757E-06	1.560E-15	2.435E-31	0.000E+00
0H-3	H-3	1.000E+00		1.000E+01	8.791E+00	3.987E-01	2.093E-01	1.590E-02	2.527E-05	1.015E-13	1.030E-27	0.000E+00
0I-129	I-129	1.000E+00		1.000E+01	1.000E+01	9.990E+00	9.988E+00	9.979E+00	9.959E+00	9.897E+00	9.795E+00	9.594E+00
0Mn-54	Mn-54	1.000E+00		1.000E+01	4.444E+00	1.560E-08	2.703E-10	2.434E-17	5.926E-35	0.000E+00	0.000E+00	0.000E+00
0Na-22	Na-22	1.000E+00		1.000E+01	7.661E+00	1.281E-02	3.381E-03	1.641E-05	2.694E-11	1.191E-28	0.000E+00	0.000E+00
0Ni-63	Ni-63	1.000E+00		1.000E+01	9.931E+00	8.410E+00	8.124E+00	7.074E+00	5.003E+00	1.771E+00	3.136E-01	9.833E-03
0Pu-238	Pu-238	1.850E-09		1.850E-08	1.835E-08	1.518E-08	1.459E-08	1.246E-08	8.393E-09	2.565E-09	3.556E-10	6.834E-12
Pu-238	Pu-238	9.996E-01		9.996E+00	9.917E+00	8.204E+00	7.886E+00	6.733E+00	4.535E+00	1.386E+00	1.921E-01	3.693E-03
Pu-238	äS(j):			9.996E+00	9.917E+00	8.204E+00	7.886E+00	6.733E+00	4.535E+00	1.386E+00	1.921E-01	3.693E-03
0U-234	Pu-238	9.996E-01		0.000E+00	2.811E-05	6.402E-04	7.537E-04	1.166E-03	1.950E-03	3.074E-03	3.498E-03	3.560E-03

Individual Nuclide Soil Concentration
Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	S(j,t), pCi/g									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA		AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
U-234	Pu-238	1.899E-08		0.000E+00	5.341E-13	1.216E-11	1.432E-11	2.215E-11	3.706E-11	5.841E-11	6.646E-11	6.764E-11
U-234	Pu-238	2.100E-04		0.000E+00	5.905E-09	1.345E-07	1.583E-07	2.448E-07	4.097E-07	6.457E-07	7.348E-07	7.478E-07
U-234	Pu-238	2.771E-10		0.000E+00	7.794E-15	1.775E-13	2.090E-13	3.232E-13	5.408E-13	8.524E-13	9.699E-13	9.871E-13
U-234	Pu-238	3.989E-12		0.000E+00	1.122E-16	2.555E-15	3.008E-15	4.652E-15	7.784E-15	1.227E-14	1.396E-14	1.421E-14
U-234	Pu-238	1.998E-04		0.000E+00	5.618E-09	1.279E-07	1.506E-07	2.329E-07	3.898E-07	6.144E-07	6.991E-07	7.115E-07
U-234	Pu-238	2.637E-10		0.000E+00	7.415E-15	1.689E-13	1.988E-13	3.075E-13	5.145E-13	8.110E-13	9.228E-13	9.391E-13
U-234	Pu-238	3.795E-12		0.000E+00	1.067E-16	2.431E-15	2.862E-15	4.426E-15	7.406E-15	1.167E-14	1.328E-14	1.352E-14
U-234	Pu-238	4.196E-08		0.000E+00	1.180E-12	2.687E-11	3.164E-11	4.893E-11	8.187E-11	1.290E-10	1.468E-10	1.494E-10
U-234	Pu-238	5.538E-14		0.000E+00	1.558E-18	3.547E-17	4.176E-17	6.458E-17	1.081E-16	1.703E-16	1.938E-16	1.973E-16
U-234	Pu-238	7.972E-16		0.000E+00	2.242E-20	5.106E-19	6.011E-19	9.296E-19	1.556E-18	2.452E-18	2.790E-18	2.839E-18
U-234	Pu-238	2.000E-07		0.000E+00	5.625E-12	1.281E-10	1.508E-10	2.332E-10	3.903E-10	6.151E-10	6.999E-10	7.123E-10
U-234	Pu-238	2.640E-13		0.000E+00	7.424E-18	1.691E-16	1.991E-16	3.078E-16	5.151E-16	8.119E-16	9.239E-16	9.403E-16
U-234	Pu-238	3.800E-15		0.000E+00	1.069E-19	2.434E-18	2.865E-18	4.431E-18	7.415E-18	1.169E-17	1.330E-17	1.353E-17
U-234	U-234	9.996E-01		9.996E+00	9.996E+00	9.995E+00	9.995E+00	9.994E+00	9.993E+00	9.988E+00	9.981E+00	9.966E+00
U-234	U-238	1.599E-03		0.000E+00	4.516E-08	1.129E-06	1.355E-06	2.258E-06	4.515E-06	1.128E-05	2.256E-05	4.508E-05
U-234	U-238	2.111E-09		0.000E+00	5.961E-14	1.490E-12	1.788E-12	2.980E-12	5.960E-12	1.490E-11	2.978E-11	5.951E-11
U-234	U-238	3.039E-11		0.000E+00	8.580E-16	2.145E-14	2.574E-14	4.289E-14	8.578E-14	2.144E-13	4.286E-13	8.566E-13
U-234	U-238	3.359E-07		0.000E+00	9.485E-12	2.371E-10	2.845E-10	4.742E-10	9.483E-10	2.370E-09	4.739E-09	9.470E-09
U-234	U-238	4.434E-13		0.000E+00	1.252E-17	3.130E-16	3.756E-16	6.259E-16	1.252E-15	3.129E-15	6.255E-15	1.250E-14
U-234	U-238	6.383E-15		0.000E+00	1.802E-19	4.505E-18	5.406E-18	9.010E-18	1.802E-17	4.503E-17	9.003E-17	1.799E-16
U-234	U-238	3.196E-07		0.000E+00	9.024E-12	2.256E-10	2.707E-10	4.512E-10	9.023E-10	2.255E-09	4.508E-09	9.010E-09
U-234	U-238	4.219E-13		0.000E+00	1.191E-17	2.978E-16	3.573E-16	5.955E-16	1.191E-15	2.977E-15	5.951E-15	1.189E-14
U-234	U-238	6.073E-15		0.000E+00	1.715E-19	4.286E-18	5.143E-18	8.572E-18	1.714E-17	4.285E-17	8.566E-17	1.712E-16
U-234	U-238	6.713E-11		0.000E+00	1.895E-15	4.738E-14	5.686E-14	9.476E-14	1.895E-13	4.737E-13	9.470E-13	1.892E-12
U-234	U-238	8.862E-17		0.000E+00	2.502E-21	6.255E-20	7.506E-20	1.251E-19	2.502E-19	6.252E-19	1.250E-18	2.498E-18
U-234	U-238	1.276E-18		0.000E+00	3.601E-23	9.003E-22	1.080E-21	1.801E-21	3.601E-21	9.000E-21	1.799E-20	3.596E-20
U-234	U-238	3.200E-10		0.000E+00	9.035E-15	2.259E-13	2.710E-13	4.517E-13	9.033E-13	2.258E-12	4.514E-12	9.020E-12
U-234	U-238	4.224E-16		0.000E+00	1.193E-20	2.981E-19	3.578E-19	5.963E-19	1.192E-18	2.980E-18	5.958E-18	1.191E-17
U-234	U-238	6.080E-18		0.000E+00	1.717E-22	4.291E-21	5.150E-21	8.582E-21	1.716E-20	4.290E-20	8.576E-20	1.714E-19
U-234	U-238	9.980E-01		0.000E+00	2.818E-05	7.044E-04	8.453E-04	1.409E-03	2.817E-03	7.042E-03	1.408E-02	2.813E-02
U-234	U-238	1.317E-06		0.000E+00	3.719E-11	9.298E-10	1.116E-09	1.860E-09	3.719E-09	9.295E-09	1.858E-08	3.713E-08
U-234	U-238	1.896E-08		0.000E+00	5.354E-13	1.338E-11	1.606E-11	2.677E-11	5.353E-11	1.338E-10	2.675E-10	5.345E-10
U-234	U-238	2.096E-04		0.000E+00	5.918E-09	1.480E-07	1.775E-07	2.959E-07	5.918E-07	1.479E-06	2.957E-06	5.909E-06
U-234	U-238	2.767E-10		0.000E+00	7.812E-15	1.953E-13	2.344E-13	3.906E-13	7.811E-13	1.952E-12	3.903E-12	7.800E-12
U-234	U-238	3.983E-12		0.000E+00	1.125E-16	2.811E-15	3.373E-15	5.622E-15	1.124E-14	2.810E-14	5.618E-14	1.123E-13
U-234	U-238	1.994E-04		0.000E+00	5.631E-09	1.408E-07	1.689E-07	2.815E-07	5.630E-07	1.407E-06	2.813E-06	5.622E-06
U-234	U-238	2.633E-10		0.000E+00	7.433E-15	1.858E-13	2.230E-13	3.716E-13	7.432E-13	1.857E-12	3.713E-12	7.421E-12
U-234	U-238	3.789E-12		0.000E+00	1.070E-16	2.675E-15	3.209E-15	5.349E-15	1.070E-14	2.674E-14	5.345E-14	1.068E-13
U-234	U-238	4.189E-08		0.000E+00	1.183E-12	2.957E-11	3.548E-11	5.913E-11	1.183E-10	2.956E-10	5.909E-10	1.181E-09
U-234	U-238	5.530E-14		0.000E+00	1.561E-18	3.903E-17	4.683E-17	7.806E-17	1.561E-16	3.902E-16	7.800E-16	1.559E-15

U-234	U-238	7.959E-16	0.000E+00	2.247E-20	5.618E-19	6.741E-19	1.124E-18	2.247E-18	5.616E-18	1.123E-17	2.244E-17
U-234	U-238	1.997E-07	0.000E+00	5.638E-12	1.409E-10	1.691E-10	2.819E-10	5.637E-10	1.409E-09	2.817E-09	5.629E-09
U-234	U-238	2.636E-13	0.000E+00	7.442E-18	1.860E-16	2.232E-16	3.721E-16	7.441E-16	1.860E-15	3.718E-15	7.430E-15
U-234	U-238	3.794E-15	0.000E+00	1.071E-19	2.678E-18	3.213E-18	5.355E-18	1.071E-17	2.677E-17	5.352E-17	1.069E-16
U-234	äS(j):		9.996E+00	9.996E+00	9.996E+00	9.997E+00	9.997E+00	9.998E+00	9.998E+00	9.998E+00	9.998E+00
0Th-230	Pu-238	9.996E-01	0.000E+00	1.294E-10	7.600E-08	1.081E-07	2.855E-07	1.013E-06	4.625E-06	1.231E-05	2.853E-05
Th-230	Pu-238	1.899E-08	0.000E+00	2.459E-18	1.444E-15	2.053E-15	5.425E-15	1.926E-14	8.787E-14	2.339E-13	5.420E-13
Th-230	Pu-238	2.100E-04	0.000E+00	2.718E-14	1.596E-11	2.270E-11	5.997E-11	2.129E-10	9.714E-10	2.586E-09	5.992E-09

Individual Nuclide Soil Concentration
Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	S(j,t), pCi/g									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Th-230	Pu-238	2.771E-10	0.000E+00	3.588E-20	2.107E-17	2.996E-17	7.916E-17	2.810E-16	1.282E-15	3.414E-15	7.909E-15	
Th-230	Pu-238	3.989E-12	0.000E+00	5.165E-22	3.033E-19	4.313E-19	1.139E-18	4.044E-18	1.846E-17	4.914E-17	1.138E-16	
Th-230	Pu-238	1.998E-04	0.000E+00	2.586E-14	1.519E-11	2.159E-11	5.706E-11	2.025E-10	9.242E-10	2.460E-09	5.701E-09	
Th-230	Pu-238	2.637E-10	0.000E+00	3.414E-20	2.005E-17	2.851E-17	7.532E-17	2.673E-16	1.220E-15	3.248E-15	7.525E-15	
Th-230	Pu-238	3.795E-12	0.000E+00	4.914E-22	2.886E-19	4.103E-19	1.084E-18	3.848E-18	1.756E-17	4.675E-17	1.083E-16	
Th-230	Pu-238	4.196E-08	0.000E+00	5.432E-18	3.190E-15	4.536E-15	1.198E-14	4.254E-14	1.941E-13	5.168E-13	1.197E-12	
Th-230	Pu-238	5.538E-14	0.000E+00	7.171E-24	4.211E-21	5.987E-21	1.582E-20	5.615E-20	2.563E-19	6.822E-19	1.581E-18	
Th-230	Pu-238	7.972E-16	0.000E+00	1.032E-25	6.061E-23	8.618E-23	2.277E-22	8.082E-22	3.689E-21	9.819E-21	2.275E-20	
Th-230	Pu-238	2.000E-07	0.000E+00	2.589E-17	1.521E-14	2.162E-14	5.713E-14	2.028E-13	9.254E-13	2.463E-12	5.708E-12	
Th-230	Pu-238	2.640E-13	0.000E+00	3.418E-23	2.007E-20	2.854E-20	7.541E-20	2.677E-19	1.221E-18	3.252E-18	7.534E-18	
Th-230	Pu-238	3.800E-15	0.000E+00	4.920E-25	2.889E-22	4.108E-22	1.085E-21	3.853E-21	1.758E-20	4.680E-20	1.084E-19	
Th-230	Th-230	9.996E-01	9.996E+00	9.996E+00	9.994E+00	9.993E+00	9.991E+00	9.987E+00	9.973E+00	9.950E+00	9.904E+00	
Th-230	U-234	9.996E-01	0.000E+00	9.192E-05	2.298E-03	2.757E-03	4.594E-03	9.186E-03	2.294E-02	4.582E-02	9.136E-02	
Th-230	U-234	1.319E-06	0.000E+00	1.213E-10	3.033E-09	3.639E-09	6.065E-09	1.213E-08	3.029E-08	6.048E-08	1.206E-07	
Th-230	U-234	1.899E-08	0.000E+00	1.746E-12	4.365E-11	5.238E-11	8.729E-11	1.745E-10	4.359E-10	8.705E-10	1.736E-09	
Th-230	U-234	2.100E-04	0.000E+00	1.931E-08	4.826E-07	5.791E-07	9.650E-07	1.929E-06	4.819E-06	9.624E-06	1.919E-05	
Th-230	U-234	2.771E-10	0.000E+00	2.548E-14	6.370E-13	7.644E-13	1.274E-12	2.547E-12	6.361E-12	1.270E-11	2.533E-11	
Th-230	U-234	3.989E-12	0.000E+00	3.668E-16	9.169E-15	1.100E-14	1.834E-14	3.666E-14	9.157E-14	1.829E-13	3.646E-13	
Th-230	U-234	1.998E-04	0.000E+00	1.837E-08	4.591E-07	5.510E-07	9.181E-07	1.836E-06	4.585E-06	9.156E-06	1.826E-05	
Th-230	U-234	2.637E-10	0.000E+00	2.425E-14	6.061E-13	7.273E-13	1.212E-12	2.423E-12	6.052E-12	1.209E-11	2.410E-11	
Th-230	U-234	3.795E-12	0.000E+00	3.490E-16	8.724E-15	1.047E-14	1.744E-14	3.488E-14	8.712E-14	1.740E-13	3.469E-13	
Th-230	U-234	4.196E-08	0.000E+00	3.858E-12	9.644E-11	1.157E-10	1.929E-10	3.856E-10	9.631E-10	1.923E-09	3.835E-09	
Th-230	U-234	5.538E-14	0.000E+00	5.093E-18	1.273E-16	1.528E-16	2.546E-16	5.090E-16	1.271E-15	2.539E-15	5.062E-15	
Th-230	U-234	7.972E-16	0.000E+00	7.331E-20	1.832E-18	2.199E-18	3.664E-18	7.326E-18	1.830E-17	3.654E-17	7.286E-17	
Th-230	U-234	2.000E-07	0.000E+00	1.839E-11	4.597E-10	5.516E-10	9.193E-10	1.838E-09	4.591E-09	9.167E-09	1.828E-08	
Th-230	U-234	2.640E-13	0.000E+00	2.428E-17	6.068E-16	7.281E-16	1.213E-15	2.426E-15	6.060E-15	1.210E-14	2.413E-14	
Th-230	U-234	3.800E-15	0.000E+00	3.494E-19	8.734E-18	1.048E-17	1.747E-17	3.492E-17	8.722E-17	1.742E-16	3.473E-16	
Th-230	U-238	1.599E-03	0.000E+00	2.076E-13	1.297E-10	1.868E-10	5.189E-10	2.075E-09	1.296E-08	5.180E-08	2.068E-07	
Th-230	U-238	2.111E-09	0.000E+00	2.740E-19	1.713E-16	2.466E-16	6.850E-16	2.739E-15	1.711E-14	6.837E-14	2.729E-13	
Th-230	U-238	3.039E-11	0.000E+00	3.945E-21	2.465E-18	3.550E-18	9.860E-18	3.943E-17	2.463E-16	9.841E-16	3.928E-15	
Th-230	U-238	3.359E-07	0.000E+00	4.361E-17	2.725E-14	3.924E-14	1.090E-13	4.359E-13	2.723E-12	1.088E-11	4.343E-11	
Th-230	U-238	4.434E-13	0.000E+00	5.756E-23	3.597E-20	5.180E-20	1.439E-19	5.754E-19	3.594E-18	1.436E-17	5.733E-17	
Th-230	U-238	6.383E-15	0.000E+00	8.285E-25	5.178E-22	7.456E-22	2.071E-21	8.282E-21	5.173E-20	2.067E-19	8.251E-19	
Th-230	U-238	3.196E-07	0.000E+00	4.149E-17	2.593E-14	3.734E-14	1.037E-13	4.147E-13	2.590E-12	1.035E-11	4.132E-11	
Th-230	U-238	4.219E-13	0.000E+00	5.477E-23	3.423E-20	4.928E-20	1.369E-19	5.474E-19	3.419E-18	1.366E-17	5.454E-17	
Th-230	U-238	6.073E-15	0.000E+00	7.883E-25	4.926E-22	7.094E-22	1.970E-21	7.880E-21	4.922E-20	1.967E-19	7.850E-19	
Th-230	U-238	6.713E-11	0.000E+00	8.715E-21	5.446E-18	7.842E-18	2.178E-17	8.711E-17	5.441E-16	2.174E-15	8.679E-15	
Th-230	U-238	8.862E-17	0.000E+00	1.150E-26	7.189E-24	1.035E-23	2.875E-23	1.150E-22	7.182E-22	2.870E-21	1.146E-20	
Th-230	U-238	1.276E-18	0.000E+00	1.656E-28	1.035E-25	1.490E-25	4.139E-25	1.655E-24	1.034E-23	4.131E-23	1.649E-22	
Th-230	U-238	3.200E-10	0.000E+00	4.154E-20	2.596E-17	3.738E-17	1.038E-16	4.152E-16	2.594E-15	1.036E-14	4.137E-14	

Th-230	U-238	4.224E-16	0.000E+00	5.483E-26	3.427E-23	4.934E-23	1.371E-22	5.481E-22	3.423E-21	1.368E-20	5.461E-20
Th-230	U-238	6.080E-18	0.000E+00	7.893E-28	4.932E-25	7.102E-25	1.973E-24	7.889E-24	4.928E-23	1.969E-22	7.860E-22
Th-230	U-238	9.980E-01	0.000E+00	1.295E-10	8.096E-08	1.166E-07	3.238E-07	1.295E-06	8.089E-06	3.232E-05	1.290E-04
Th-230	U-238	1.317E-06	0.000E+00	1.710E-16	1.069E-13	1.539E-13	4.274E-13	1.709E-12	1.068E-11	4.266E-11	1.703E-10
Th-230	U-238	1.896E-08	0.000E+00	2.461E-18	1.538E-15	2.215E-15	6.152E-15	2.460E-14	1.537E-13	6.141E-13	2.451E-12
Th-230	U-238	2.096E-04	0.000E+00	2.721E-14	1.701E-11	2.449E-11	6.801E-11	2.720E-10	1.699E-09	6.789E-09	2.710E-08
Th-230	U-238	2.767E-10	0.000E+00	3.592E-20	2.245E-17	3.232E-17	8.978E-17	3.590E-16	2.243E-15	8.961E-15	3.577E-14
Th-230	U-238	3.983E-12	0.000E+00	5.170E-22	3.231E-19	4.653E-19	1.292E-18	5.168E-18	3.228E-17	1.290E-16	5.149E-16
Th-230	U-238	1.994E-04	0.000E+00	2.589E-14	1.618E-11	2.330E-11	6.471E-11	2.588E-10	1.616E-09	6.459E-09	2.578E-08

Individual Nuclide Soil Concentration
Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	S(j,t), pCi/g									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Th-230	U-238	2.633E-10	0.000E+00	3.417E-20	2.136E-17	3.075E-17	8.542E-17	3.416E-16	2.134E-15	8.526E-15	3.403E-14	
Th-230	U-238	3.789E-12	0.000E+00	4.919E-22	3.074E-19	4.427E-19	1.229E-18	4.917E-18	3.071E-17	1.227E-16	4.899E-16	
Th-230	U-238	4.189E-08	0.000E+00	5.438E-18	3.398E-15	4.894E-15	1.359E-14	5.436E-14	3.395E-13	1.357E-12	5.415E-12	
Th-230	U-238	5.530E-14	0.000E+00	7.178E-24	4.486E-21	6.459E-21	1.794E-20	7.175E-20	4.482E-19	1.791E-18	7.148E-18	
Th-230	U-238	7.959E-16	0.000E+00	1.033E-25	6.457E-23	9.298E-23	2.582E-22	1.033E-21	6.451E-21	2.578E-20	1.029E-19	
Th-230	U-238	1.997E-07	0.000E+00	2.592E-17	1.620E-14	2.333E-14	6.479E-14	2.591E-13	1.618E-12	6.467E-12	2.581E-11	
Th-230	U-238	2.636E-13	0.000E+00	3.422E-23	2.138E-20	3.079E-20	8.552E-20	3.420E-19	2.136E-18	8.536E-18	3.407E-17	
Th-230	U-238	3.794E-15	0.000E+00	4.925E-25	3.078E-22	4.432E-22	1.231E-21	4.923E-21	3.075E-20	1.229E-19	4.905E-19	
Th-230	äS(j):		9.996E+00	9.996E+00	9.996E+00	9.996E+00	9.996E+00	9.996E+00	9.996E+00	9.996E+00	9.996E+00	9.996E+00
0Ra-226	Pu-238	9.996E-01	0.000E+00	1.870E-14	2.781E-10	4.757E-10	2.116E-09	1.537E-08	1.851E-07	1.035E-06	4.864E-06	
Ra-226	Pu-238	1.899E-08	0.000E+00	3.553E-22	5.284E-18	9.038E-18	4.020E-17	2.921E-16	3.517E-15	1.966E-14	9.242E-14	
Ra-226	Th-230	9.996E-01	0.000E+00	4.329E-03	1.077E-01	1.291E-01	2.141E-01	4.236E-01	1.025E+00	1.942E+00	3.497E+00	
Ra-226	Th-230	1.319E-06	0.000E+00	5.715E-09	1.421E-07	1.704E-07	2.827E-07	5.591E-07	1.353E-06	2.564E-06	4.616E-06	
Ra-226	Th-230	1.899E-08	0.000E+00	8.226E-11	2.046E-09	2.452E-09	4.069E-09	8.048E-09	1.947E-08	3.690E-08	6.644E-08	
Ra-226	U-234	9.996E-01	0.000E+00	1.991E-08	1.240E-05	1.784E-05	4.941E-05	1.962E-04	1.199E-03	4.627E-03	1.725E-02	
Ra-226	U-234	1.319E-06	0.000E+00	2.628E-14	1.636E-11	2.355E-11	6.522E-11	2.589E-10	1.583E-09	6.108E-09	2.277E-08	
Ra-226	U-234	1.899E-08	0.000E+00	3.782E-16	2.356E-13	3.389E-13	9.387E-13	3.727E-12	2.279E-11	8.791E-11	3.277E-10	
Ra-226	U-238	1.599E-03	0.000E+00	2.998E-17	4.671E-13	8.068E-13	3.727E-12	2.965E-11	4.557E-10	3.547E-09	2.691E-08	
Ra-226	U-238	2.111E-09	0.000E+00	3.957E-23	6.166E-19	1.065E-18	4.919E-18	3.914E-17	6.015E-16	4.683E-15	3.552E-14	
Ra-226	U-238	3.039E-11	0.000E+00	5.696E-25	8.876E-21	1.533E-20	7.081E-20	5.633E-19	8.658E-18	6.740E-17	5.113E-16	
Ra-226	U-238	9.980E-01	0.000E+00	1.871E-14	2.915E-10	5.034E-10	2.326E-09	1.850E-08	2.843E-07	2.214E-06	1.679E-05	
Ra-226	U-238	1.317E-06	0.000E+00	2.469E-20	3.848E-16	6.645E-16	3.070E-15	2.442E-14	3.753E-13	2.922E-12	2.216E-11	
Ra-226	U-238	1.896E-08	0.000E+00	3.554E-22	5.538E-18	9.565E-18	4.418E-17	3.515E-16	5.402E-15	4.206E-14	3.190E-13	
Ra-226	äS(j):		0.000E+00	4.329E-03	1.077E-01	1.291E-01	2.142E-01	4.238E-01	1.026E+00	1.947E+00	3.514E+00	
0Pb-210	Pu-238	9.996E-01	0.000E+00	1.451E-16	4.722E-11	9.441E-11	6.329E-10	7.357E-09	1.347E-07	8.905E-07	4.546E-06	
Pb-210	Pu-238	1.319E-06	0.000E+00	1.915E-22	6.233E-17	1.246E-16	8.354E-16	9.711E-15	1.778E-13	1.175E-12	6.001E-12	
Pb-210	Pu-238	2.100E-04	0.000E+00	3.048E-20	9.918E-15	1.983E-14	1.329E-13	1.545E-12	2.829E-11	1.870E-10	9.549E-10	
Pb-210	Pu-238	1.998E-04	0.000E+00	2.900E-20	9.436E-15	1.887E-14	1.265E-13	1.470E-12	2.691E-11	1.780E-10	9.085E-10	
Pb-210	Pu-238	4.196E-08	0.000E+00	6.091E-24	1.982E-18	3.963E-18	2.657E-17	3.088E-16	5.653E-15	3.738E-14	1.908E-13	
Pb-210	Pu-238	2.000E-07	0.000E+00	2.903E-23	9.448E-18	1.889E-17	1.266E-16	1.472E-15	2.694E-14	1.782E-13	9.096E-13	
Pb-210	Th-230	9.996E-01	0.000E+00	6.690E-05	3.298E-02	4.536E-02	1.061E-01	2.952E-01	8.989E-01	1.829E+00	3.407E+00	
Pb-210	Th-230	2.100E-04	0.000E+00	1.405E-08	6.927E-06	9.528E-06	2.228E-05	6.200E-05	1.888E-04	3.842E-04	7.156E-04	
Pb-210	Th-230	1.998E-04	0.000E+00	1.337E-08	6.590E-06	9.065E-06	2.120E-05	5.899E-05	1.796E-04	3.656E-04	6.808E-04	
Pb-210	Th-230	4.196E-08	0.000E+00	2.808E-12	1.384E-09	1.904E-09	4.452E-09	1.239E-08	3.773E-08	7.679E-08	1.430E-07	
Pb-210	Th-230	2.000E-07	0.000E+00	1.338E-11	6.598E-09	9.076E-09	2.122E-08	5.906E-08	1.799E-07	3.660E-07	6.816E-07	
Pb-210	U-234	9.996E-01	0.000E+00	2.056E-10	2.685E-06	4.481E-06	1.817E-05	1.092E-04	9.347E-04	4.089E-03	1.625E-02	
Pb-210	U-234	2.100E-04	0.000E+00	4.318E-14	5.640E-10	9.411E-10	3.817E-09	2.295E-08	1.963E-07	8.588E-07	3.412E-06	
Pb-210	U-234	1.998E-04	0.000E+00	4.108E-14	5.366E-10	8.954E-10	3.632E-09	2.183E-08	1.868E-07	8.171E-07	3.247E-06	
Pb-210	U-234	4.196E-08	0.000E+00	8.629E-18	1.127E-13	1.881E-13	7.628E-13	4.586E-12	3.924E-11	1.716E-10	6.819E-10	
Pb-210	U-234	2.000E-07	0.000E+00	4.113E-17	5.373E-13	8.965E-13	3.636E-12	2.186E-11	1.870E-10	8.181E-10	3.250E-09	

Pb-210	U-238	1.599E-03	0.000E+00	2.325E-19	7.863E-14	1.585E-13	1.098E-12	1.384E-11	3.204E-10	2.956E-09	2.456E-08
Pb-210	U-238	3.359E-07	0.000E+00	4.884E-23	1.652E-17	3.329E-17	2.305E-16	2.908E-15	6.731E-14	6.209E-13	5.158E-12
Pb-210	U-238	3.196E-07	0.000E+00	4.647E-23	1.571E-17	3.167E-17	2.193E-16	2.766E-15	6.404E-14	5.907E-13	4.908E-12
Pb-210	U-238	6.713E-11	0.000E+00	9.761E-27	3.301E-21	6.653E-21	4.607E-20	5.811E-19	1.345E-17	1.241E-16	1.031E-15
Pb-210	U-238	3.200E-10	0.000E+00	4.653E-26	1.573E-20	3.171E-20	2.196E-19	2.770E-18	6.411E-17	5.914E-16	4.914E-15
Pb-210	U-238	9.980E-01	0.000E+00	1.451E-16	4.907E-11	9.890E-11	6.849E-10	8.638E-09	2.000E-07	1.845E-06	1.532E-05
Pb-210	U-238	2.096E-04	0.000E+00	3.048E-20	1.031E-14	2.077E-14	1.439E-13	1.814E-12	4.200E-11	3.874E-10	3.219E-09

Individual Nuclide Soil Concentration
Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	S(j,t), pCi/g									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Pb-210	U-238	1.994E-04	0.000E+00	2.900E-20	9.805E-15	1.976E-14	1.369E-13	1.726E-12	3.996E-11	3.686E-10	3.063E-09	
Pb-210	U-238	4.189E-08	0.000E+00	6.091E-24	2.060E-18	4.151E-18	2.875E-17	3.626E-16	8.393E-15	7.742E-14	6.433E-13	
Pb-210	U-238	1.997E-07	0.000E+00	2.903E-23	9.817E-18	1.979E-17	1.370E-16	1.728E-15	4.001E-14	3.691E-13	3.066E-12	
Pb-210	äS(j):		0.000E+00	6.692E-05	3.300E-02	4.538E-02	1.061E-01	2.954E-01	9.002E-01	1.834E+00	3.424E+00	
0Pu-238	Pu-238	1.319E-06	1.319E-05	1.309E-05	1.083E-05	1.041E-05	8.887E-06	5.986E-06	1.829E-06	2.536E-07	4.874E-09	
Pu-238	Pu-238	1.899E-08	1.899E-07	1.884E-07	1.559E-07	1.498E-07	1.279E-07	8.616E-08	2.633E-08	3.650E-09	7.016E-11	
Pu-238	äS(j):		1.338E-05	1.328E-05	1.098E-05	1.056E-05	9.015E-06	6.072E-06	1.856E-06	2.572E-07	4.944E-09	
0U-234	Pu-238	1.319E-06	0.000E+00	3.711E-11	8.451E-10	9.949E-10	1.539E-09	2.575E-09	4.058E-09	4.618E-09	4.699E-09	
0Th-230	Pu-238	1.319E-06	0.000E+00	1.708E-16	1.003E-13	1.426E-13	3.769E-13	1.338E-12	6.105E-12	1.625E-11	3.766E-11	
0Ra-226	Pu-238	1.319E-06	0.000E+00	2.468E-20	3.671E-16	6.279E-16	2.793E-15	2.029E-14	2.443E-13	1.366E-12	6.421E-12	
0Pb-210	Pu-238	1.899E-08	0.000E+00	2.757E-24	8.972E-19	1.794E-18	1.202E-17	1.398E-16	2.559E-15	1.692E-14	8.638E-14	
Pb-210	Pu-238	3.989E-12	0.000E+00	5.791E-28	1.884E-22	3.768E-22	2.526E-21	2.936E-20	5.374E-19	3.554E-18	1.814E-17	
Pb-210	Pu-238	3.795E-12	0.000E+00	5.510E-28	1.793E-22	3.585E-22	2.403E-21	2.793E-20	5.113E-19	3.381E-18	1.726E-17	
Pb-210	Pu-238	7.972E-16	0.000E+00	1.157E-31	3.766E-26	7.529E-26	5.047E-25	5.867E-24	1.074E-22	7.102E-22	3.626E-21	
Pb-210	Pu-238	3.800E-15	0.000E+00	5.516E-31	1.795E-25	3.589E-25	2.406E-24	2.797E-23	5.119E-22	3.385E-21	1.728E-20	
Pb-210	Th-230	1.899E-08	0.000E+00	1.271E-12	6.266E-10	8.618E-10	2.015E-09	5.609E-09	1.708E-08	3.476E-08	6.473E-08	
Pb-210	Th-230	3.989E-12	0.000E+00	2.670E-16	1.316E-13	1.810E-13	4.233E-13	1.178E-12	3.587E-12	7.301E-12	1.360E-11	
Pb-210	Th-230	3.795E-12	0.000E+00	2.540E-16	1.252E-13	1.722E-13	4.027E-13	1.121E-12	3.413E-12	6.946E-12	1.294E-11	
Pb-210	Th-230	7.972E-16	0.000E+00	5.335E-20	2.630E-17	3.618E-17	8.459E-17	2.354E-16	7.169E-16	1.459E-15	2.717E-15	
Pb-210	Th-230	3.800E-15	0.000E+00	2.543E-19	1.254E-16	1.724E-16	4.032E-16	1.122E-15	3.417E-15	6.954E-15	1.295E-14	
Pb-210	U-234	1.899E-08	0.000E+00	3.906E-18	5.102E-14	8.513E-14	3.453E-13	2.076E-12	1.776E-11	7.768E-11	3.087E-10	
Pb-210	U-234	3.989E-12	0.000E+00	8.204E-22	1.072E-17	1.788E-17	7.252E-17	4.360E-16	3.730E-15	1.632E-14	6.483E-14	
Pb-210	U-234	3.795E-12	0.000E+00	7.806E-22	1.020E-17	1.701E-17	6.900E-17	4.148E-16	3.549E-15	1.552E-14	6.168E-14	
Pb-210	U-234	7.972E-16	0.000E+00	1.640E-25	2.142E-21	3.573E-21	1.449E-20	8.713E-20	7.455E-19	3.261E-18	1.296E-17	
Pb-210	U-234	3.800E-15	0.000E+00	7.815E-25	1.021E-20	1.703E-20	6.908E-20	4.153E-19	3.553E-18	1.554E-17	6.176E-17	
Pb-210	U-238	3.039E-11	0.000E+00	4.418E-27	1.494E-21	3.011E-21	2.085E-20	2.630E-19	6.088E-18	5.616E-17	4.666E-16	
Pb-210	U-238	6.383E-15	0.000E+00	9.280E-31	3.138E-25	6.325E-25	4.380E-24	5.525E-23	1.279E-21	1.180E-20	9.801E-20	
Pb-210	U-238	6.073E-15	0.000E+00	8.830E-31	2.986E-25	6.018E-25	4.167E-24	5.256E-23	1.217E-21	1.122E-20	9.325E-20	
Pb-210	U-238	1.276E-18	0.000E+00	1.855E-34	6.271E-29	1.264E-28	8.753E-28	1.104E-26	2.556E-25	2.357E-24	1.959E-23	
Pb-210	U-238	6.080E-18	0.000E+00	8.840E-34	2.989E-28	6.025E-28	4.172E-27	5.263E-26	1.218E-24	1.124E-23	9.336E-23	
Pb-210	U-238	1.896E-08	0.000E+00	2.757E-24	9.323E-19	1.879E-18	1.301E-17	1.641E-16	3.799E-15	3.505E-14	2.912E-13	
Pb-210	U-238	3.983E-12	0.000E+00	5.791E-28	1.958E-22	3.947E-22	2.733E-21	3.447E-20	7.980E-19	7.361E-18	6.116E-17	
Pb-210	U-238	3.789E-12	0.000E+00	5.510E-28	1.863E-22	3.755E-22	2.600E-21	3.280E-20	7.592E-19	7.004E-18	5.819E-17	
Pb-210	U-238	7.959E-16	0.000E+00	1.157E-31	3.913E-26	7.887E-26	5.462E-25	6.889E-24	1.595E-22	1.471E-21	1.222E-20	
Pb-210	U-238	3.794E-15	0.000E+00	5.516E-31	1.865E-25	3.760E-25	2.604E-24	3.284E-23	7.601E-22	7.012E-21	5.826E-20	
Pb-210	äS(j):		0.000E+00	1.272E-12	6.269E-10	8.623E-10	2.016E-09	5.613E-09	1.710E-08	3.485E-08	6.506E-08	
0Pu-238	Pu-238	2.100E-04	2.100E-03	2.083E-03	1.723E-03	1.656E-03	1.414E-03	9.525E-04	2.911E-04	4.035E-05	7.756E-07	
Pu-238	Pu-238	2.771E-10	2.771E-09	2.750E-09	2.275E-09	2.186E-09	1.867E-09	1.257E-09	3.842E-10	5.327E-11	1.024E-12	
Pu-238	äS(j):		2.100E-03	2.083E-03	1.723E-03	1.656E-03	1.414E-03	9.525E-04	2.911E-04	4.035E-05	7.756E-07	
0Ra-226	Pu-238	2.100E-04	0.000E+00	3.928E-18	5.841E-14	9.992E-14	4.444E-13	3.229E-12	3.888E-11	2.174E-10	1.022E-09	

Ra-226	Pu-238	2.771E-10	0.000E+00	5.184E-24	7.710E-20	1.319E-19	5.867E-19	4.262E-18	5.132E-17	2.869E-16	1.349E-15
Ra-226	Pu-238	3.989E-12	0.000E+00	7.462E-26	1.110E-21	1.898E-21	8.444E-21	6.135E-20	7.387E-19	4.130E-18	1.941E-17

Individual Nuclide Soil Concentration
 Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	S(j,t), pCi/g									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Ra-226	Th-230	2.100E-04	0.000E+00	9.094E-07	2.261E-05	2.711E-05	4.498E-05	8.897E-05	2.153E-04	4.079E-04	7.345E-04	
Ra-226	Th-230	2.771E-10	0.000E+00	1.200E-12	2.985E-11	3.578E-11	5.937E-11	1.174E-10	2.841E-10	5.385E-10	9.695E-10	
Ra-226	Th-230	3.989E-12	0.000E+00	1.728E-14	4.297E-13	5.150E-13	8.546E-13	1.690E-12	4.090E-12	7.750E-12	1.396E-11	
Ra-226	U-234	2.100E-04	0.000E+00	4.181E-12	2.604E-09	3.747E-09	1.038E-08	4.120E-08	2.519E-07	9.719E-07	3.623E-06	
Ra-226	U-234	2.771E-10	0.000E+00	5.519E-18	3.437E-15	4.946E-15	1.370E-14	5.439E-14	3.325E-13	1.283E-12	4.782E-12	
Ra-226	U-234	3.989E-12	0.000E+00	7.944E-20	4.948E-17	7.119E-17	1.972E-16	7.829E-16	4.787E-15	1.847E-14	6.883E-14	
Ra-226	U-238	3.359E-07	0.000E+00	6.297E-21	9.812E-17	1.695E-16	7.828E-16	6.228E-15	9.571E-14	7.451E-13	5.652E-12	
Ra-226	U-238	4.434E-13	0.000E+00	8.311E-27	1.295E-22	2.237E-22	1.033E-21	8.221E-21	1.263E-19	9.836E-19	7.461E-18	
Ra-226	U-238	6.383E-15	0.000E+00	1.196E-28	1.864E-24	3.220E-24	1.487E-23	1.183E-22	1.819E-21	1.416E-20	1.074E-19	
Ra-226	U-238	2.096E-04	0.000E+00	3.929E-18	6.123E-14	1.057E-13	4.885E-13	3.886E-12	5.972E-11	4.650E-10	3.527E-09	
Ra-226	U-238	2.767E-10	0.000E+00	5.186E-24	8.082E-20	1.396E-19	6.448E-19	5.130E-18	7.884E-17	6.137E-16	4.656E-15	
Ra-226	U-238	3.983E-12	0.000E+00	7.465E-26	1.163E-21	2.009E-21	9.281E-21	7.384E-20	1.135E-18	8.834E-18	6.701E-17	
Ra-226	äS(j):		0.000E+00	9.094E-07	2.262E-05	2.711E-05	4.499E-05	8.901E-05	2.155E-04	4.089E-04	7.381E-04	
0Pb-210	Pu-238	2.771E-10	0.000E+00	4.023E-26	1.309E-20	2.618E-20	1.755E-19	2.040E-18	3.734E-17	2.469E-16	1.260E-15	
Pb-210	Pu-238	2.637E-10	0.000E+00	3.828E-26	1.246E-20	2.490E-20	1.669E-19	1.941E-18	3.552E-17	2.349E-16	1.199E-15	
Pb-210	Pu-238	5.538E-14	0.000E+00	8.040E-30	2.616E-24	5.231E-24	3.507E-23	4.076E-22	7.461E-21	4.934E-20	2.519E-19	
Pb-210	Pu-238	2.640E-13	0.000E+00	3.832E-29	1.247E-23	2.493E-23	1.672E-22	1.943E-21	3.557E-20	2.352E-19	1.201E-18	
Pb-210	Th-230	1.319E-06	0.000E+00	8.830E-11	4.353E-08	5.988E-08	1.400E-07	3.897E-07	1.187E-06	2.415E-06	4.497E-06	
Pb-210	Th-230	2.771E-10	0.000E+00	1.855E-14	9.144E-12	1.258E-11	2.941E-11	8.185E-11	2.492E-10	5.072E-10	9.445E-10	
Pb-210	Th-230	2.637E-10	0.000E+00	1.765E-14	8.699E-12	1.197E-11	2.798E-11	7.787E-11	2.371E-10	4.826E-10	8.986E-10	
Pb-210	Th-230	5.538E-14	0.000E+00	3.707E-18	1.827E-15	2.513E-15	5.877E-15	1.636E-14	4.981E-14	1.014E-13	1.888E-13	
Pb-210	Th-230	2.640E-13	0.000E+00	1.767E-17	8.710E-15	1.198E-14	2.801E-14	7.796E-14	2.374E-13	4.831E-13	8.997E-13	
Pb-210	U-234	1.319E-06	0.000E+00	2.714E-16	3.545E-12	5.915E-12	2.399E-11	1.442E-10	1.234E-09	5.397E-09	2.144E-08	
Pb-210	U-234	2.771E-10	0.000E+00	5.700E-20	7.445E-16	1.242E-15	5.038E-15	3.029E-14	2.592E-13	1.134E-12	4.504E-12	
Pb-210	U-234	2.637E-10	0.000E+00	5.423E-20	7.083E-16	1.182E-15	4.794E-15	2.882E-14	2.466E-13	1.079E-12	4.285E-12	
Pb-210	U-234	5.538E-14	0.000E+00	1.139E-23	1.488E-19	2.483E-19	1.007E-18	6.053E-18	5.179E-17	2.265E-16	9.001E-16	
Pb-210	U-234	2.640E-13	0.000E+00	5.430E-23	7.092E-19	1.183E-18	4.799E-18	2.885E-17	2.469E-16	1.080E-15	4.291E-15	
Pb-210	U-238	2.111E-09	0.000E+00	3.070E-25	1.038E-19	2.092E-19	1.449E-18	1.827E-17	4.230E-16	3.902E-15	3.242E-14	
Pb-210	U-238	4.434E-13	0.000E+00	6.447E-29	2.180E-23	4.394E-23	3.043E-22	3.838E-21	8.884E-20	8.196E-19	6.809E-18	
Pb-210	U-238	4.219E-13	0.000E+00	6.134E-29	2.074E-23	4.181E-23	2.895E-22	3.652E-21	8.453E-20	7.797E-19	6.478E-18	
Pb-210	U-238	8.862E-17	0.000E+00	1.288E-32	4.357E-27	8.781E-27	6.081E-26	7.670E-25	1.775E-23	1.638E-22	1.361E-21	
Pb-210	U-238	4.224E-16	0.000E+00	6.142E-32	2.077E-26	4.186E-26	2.899E-25	3.656E-24	8.463E-23	7.807E-22	6.486E-21	
Pb-210	U-238	1.317E-06	0.000E+00	1.915E-22	6.477E-17	1.305E-16	9.040E-16	1.140E-14	2.639E-13	2.435E-12	2.023E-11	
Pb-210	U-238	2.767E-10	0.000E+00	4.023E-26	1.360E-20	2.742E-20	1.899E-19	2.395E-18	5.544E-17	5.114E-16	4.249E-15	
Pb-210	U-238	2.633E-10	0.000E+00	3.828E-26	1.294E-20	2.609E-20	1.807E-19	2.279E-18	5.274E-17	4.866E-16	4.043E-15	
Pb-210	U-238	5.530E-14	0.000E+00	8.040E-30	2.719E-24	5.480E-24	3.795E-23	4.786E-22	1.108E-20	1.022E-19	8.491E-19	
Pb-210	U-238	2.636E-13	0.000E+00	3.832E-29	1.296E-23	2.612E-23	1.809E-22	2.281E-21	5.281E-20	4.871E-19	4.047E-18	
Pb-210	äS(j):		0.000E+00	8.834E-11	4.355E-08	5.991E-08	1.401E-07	3.900E-07	1.188E-06	2.421E-06	4.520E-06	
0Pu-238	Pu-238	3.989E-12	3.989E-11	3.958E-11	3.274E-11	3.147E-11	2.687E-11	1.810E-11	5.530E-12	7.667E-13	1.474E-14	
Pu-238	Pu-238	1.998E-04	1.998E-03	1.982E-03	1.639E-03	1.576E-03	1.345E-03	9.063E-04	2.769E-04	3.839E-05	7.379E-07	

Pu-238	äS(j):		1.998E-03	1.982E-03	1.639E-03	1.576E-03	1.345E-03	9.063E-04	2.769E-04	3.839E-05	7.379E-07
0Ra-226	Pu-238	1.998E-04	0.000E+00	3.737E-18	5.557E-14	9.506E-14	4.229E-13	3.072E-12	3.699E-11	2.068E-10	9.721E-10
Ra-226	Pu-238	3.795E-12	0.000E+00	7.100E-26	1.056E-21	1.806E-21	8.034E-21	5.837E-20	7.028E-19	3.929E-18	1.847E-17
Ra-226	Th-230	1.998E-04	0.000E+00	8.652E-07	2.152E-05	2.579E-05	4.279E-05	8.465E-05	2.048E-04	3.881E-04	6.988E-04
Ra-226	Th-230	2.637E-10	0.000E+00	1.142E-12	2.840E-11	3.404E-11	5.649E-11	1.117E-10	2.703E-10	5.123E-10	9.224E-10
Ra-226	Th-230	3.795E-12	0.000E+00	1.644E-14	4.088E-13	4.900E-13	8.131E-13	1.608E-12	3.891E-12	7.374E-12	1.328E-11

Individual Nuclide Soil Concentration
Parent Nuclide and Branch Fraction Indicated

0Nuclide Parent	THF(i)	S(j,t), pCi/g									
(j)	(i)	t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Ra-226	U-234	1.998E-04	0.000E+00	3.978E-12	2.478E-09	3.565E-09	9.873E-09	3.920E-08	2.397E-07	9.247E-07	3.447E-06
Ra-226	U-234	2.637E-10	0.000E+00	5.251E-18	3.270E-15	4.706E-15	1.303E-14	5.175E-14	3.164E-13	1.221E-12	4.550E-12
Ra-226	U-234	3.795E-12	0.000E+00	7.559E-20	4.707E-17	6.773E-17	1.876E-16	7.449E-16	4.554E-15	1.757E-14	6.549E-14
Ra-226	U-238	3.196E-07	0.000E+00	5.991E-21	9.335E-17	1.612E-16	7.448E-16	5.925E-15	9.106E-14	7.089E-13	5.378E-12
Ra-226	U-238	4.219E-13	0.000E+00	7.908E-27	1.232E-22	2.128E-22	9.831E-22	7.821E-21	1.202E-19	9.358E-19	7.098E-18
Ra-226	U-238	6.073E-15	0.000E+00	1.138E-28	1.774E-24	3.063E-24	1.415E-23	1.126E-22	1.730E-21	1.347E-20	1.022E-19
Ra-226	U-238	1.994E-04	0.000E+00	3.738E-18	5.825E-14	1.006E-13	4.647E-13	3.697E-12	5.682E-11	4.424E-10	3.356E-09
Ra-226	U-238	2.633E-10	0.000E+00	4.934E-24	7.689E-20	1.328E-19	6.134E-19	4.880E-18	7.501E-17	5.839E-16	4.429E-15
Ra-226	U-238	3.789E-12	0.000E+00	7.103E-26	1.107E-21	1.911E-21	8.830E-21	7.025E-20	1.080E-18	8.405E-18	6.376E-17
Ra-226	äS(j):		0.000E+00	8.652E-07	2.152E-05	2.579E-05	4.280E-05	8.469E-05	2.050E-04	3.890E-04	7.023E-04
0Pu-238	Pu-238	2.637E-10	2.637E-09	2.616E-09	2.164E-09	2.080E-09	1.776E-09	1.196E-09	3.656E-10	5.068E-11	9.740E-13
Pu-238	Pu-238	3.795E-12	3.795E-11	3.766E-11	3.115E-11	2.994E-11	2.556E-11	1.722E-11	5.262E-12	7.295E-13	1.402E-14
Pu-238	äS(j):		2.675E-09	2.654E-09	2.195E-09	2.110E-09	1.802E-09	1.213E-09	3.708E-10	5.141E-11	9.881E-13
0Ra-226	Pu-238	2.637E-10	0.000E+00	4.933E-24	7.336E-20	1.255E-19	5.582E-19	4.055E-18	4.883E-17	2.730E-16	1.283E-15
0Pu-238	Pu-238	4.196E-08	4.196E-07	4.163E-07	3.444E-07	3.310E-07	2.826E-07	1.904E-07	5.817E-08	8.064E-09	1.550E-10
Pu-238	Pu-238	5.538E-14	5.538E-13	5.495E-13	4.545E-13	4.369E-13	3.730E-13	2.513E-13	7.678E-14	1.064E-14	2.046E-16
Pu-238	äS(j):		4.196E-07	4.163E-07	3.444E-07	3.310E-07	2.826E-07	1.904E-07	5.817E-08	8.064E-09	1.550E-10
0Ra-226	Pu-238	4.196E-08	0.000E+00	7.849E-22	1.167E-17	1.997E-17	8.882E-17	6.453E-16	7.770E-15	4.344E-14	2.042E-13
Ra-226	Pu-238	5.538E-14	0.000E+00	1.036E-27	1.541E-23	2.636E-23	1.172E-22	8.518E-22	1.026E-20	5.734E-20	2.695E-19
Ra-226	Pu-238	7.972E-16	0.000E+00	1.491E-29	2.218E-25	3.794E-25	1.688E-24	1.226E-23	1.476E-22	8.253E-22	3.879E-21
Ra-226	Th-230	4.196E-08	0.000E+00	1.817E-10	4.519E-09	5.417E-09	8.989E-09	1.778E-08	4.302E-08	8.152E-08	1.468E-07
Ra-226	Th-230	5.538E-14	0.000E+00	2.399E-16	5.965E-15	7.150E-15	1.186E-14	2.347E-14	5.678E-14	1.076E-13	1.938E-13
Ra-226	Th-230	7.972E-16	0.000E+00	3.453E-18	8.586E-17	1.029E-16	1.708E-16	3.378E-16	8.173E-16	1.549E-15	2.789E-15
Ra-226	U-234	4.196E-08	0.000E+00	8.356E-16	5.204E-13	7.488E-13	2.074E-12	8.234E-12	5.034E-11	1.942E-10	7.240E-10
Ra-226	U-234	5.538E-14	0.000E+00	1.103E-21	6.869E-19	9.884E-19	2.737E-18	1.087E-17	6.645E-17	2.564E-16	9.556E-16
Ra-226	U-234	7.972E-16	0.000E+00	1.588E-23	9.887E-21	1.423E-20	3.940E-20	1.565E-19	9.565E-19	3.690E-18	1.376E-17
Ra-226	U-238	6.713E-11	0.000E+00	1.258E-24	1.961E-20	3.386E-20	1.564E-19	1.245E-18	1.913E-17	1.489E-16	1.130E-15
Ra-226	U-238	8.862E-17	0.000E+00	1.661E-30	2.588E-26	4.470E-26	2.065E-25	1.643E-24	2.525E-23	1.966E-22	1.491E-21
Ra-226	U-238	1.276E-18	0.000E+00	2.391E-32	3.726E-28	6.434E-28	2.972E-27	2.365E-26	3.634E-25	2.829E-24	2.146E-23
Ra-226	U-238	4.189E-08	0.000E+00	7.852E-22	1.224E-17	2.113E-17	9.761E-17	7.766E-16	1.194E-14	9.292E-14	7.048E-13
Ra-226	U-238	5.530E-14	0.000E+00	1.036E-27	1.615E-23	2.789E-23	1.288E-22	1.025E-21	1.575E-20	1.227E-19	9.304E-19
Ra-226	U-238	7.959E-16	0.000E+00	1.492E-29	2.325E-25	4.015E-25	1.855E-24	1.476E-23	2.268E-22	1.765E-21	1.339E-20
Ra-226	äS(j):		0.000E+00	1.817E-10	4.520E-09	5.418E-09	8.991E-09	1.779E-08	4.307E-08	8.171E-08	1.475E-07
0Pu-238	Pu-238	7.972E-16	7.972E-15	7.909E-15	6.543E-15	6.289E-15	5.370E-15	3.617E-15	1.105E-15	1.532E-16	2.945E-18
Pu-238	Pu-238	2.000E-07	2.000E-06	1.984E-06	1.641E-06	1.578E-06	1.347E-06	9.074E-07	2.773E-07	3.844E-08	7.388E-10
Pu-238	äS(j):		2.000E-06	1.984E-06	1.641E-06	1.578E-06	1.347E-06	9.074E-07	2.773E-07	3.844E-08	7.388E-10
0Ra-226	Pu-238	2.000E-07	0.000E+00	3.741E-21	5.564E-17	9.518E-17	4.234E-16	3.076E-15	3.704E-14	2.070E-13	9.733E-13
Ra-226	Pu-238	3.800E-15	0.000E+00	7.108E-29	1.057E-24	1.808E-24	8.044E-24	5.844E-23	7.037E-22	3.934E-21	1.849E-20
Ra-226	Th-230	2.000E-07	0.000E+00	8.662E-10	2.154E-08	2.582E-08	4.285E-08	8.475E-08	2.050E-07	3.886E-07	6.997E-07
Ra-226	Th-230	2.640E-13	0.000E+00	1.143E-15	2.843E-14	3.408E-14	5.656E-14	1.119E-13	2.707E-13	5.129E-13	9.236E-13

Ra-226	Th-230	3.800E-15	0.000E+00	1.646E-17	4.093E-16	4.906E-16	8.141E-16	1.610E-15	3.896E-15	7.383E-15	1.329E-14
Ra-226	U-234	2.000E-07	0.000E+00	3.983E-15	2.481E-12	3.569E-12	9.885E-12	3.925E-11	2.400E-10	9.258E-10	3.451E-09
Ra-226	U-234	2.640E-13	0.000E+00	5.258E-21	3.274E-18	4.711E-18	1.305E-17	5.181E-17	3.168E-16	1.222E-15	4.555E-15

Individual Nuclide Soil Concentration
 Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	S(j,t), pCi/g									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Ra-226	U-234	3.800E-15	0.000E+00	7.568E-23	4.713E-20	6.782E-20	1.878E-19	7.458E-19	4.560E-18	1.759E-17	6.557E-17	
Ra-226	U-238	3.200E-10	0.000E+00	5.998E-24	9.347E-20	1.614E-19	7.457E-19	5.932E-18	9.117E-17	7.098E-16	5.384E-15	
Ra-226	U-238	4.224E-16	0.000E+00	7.917E-30	1.234E-25	2.131E-25	9.843E-25	7.831E-24	1.203E-22	9.369E-22	7.107E-21	
Ra-226	U-238	6.080E-18	0.000E+00	1.140E-31	1.776E-27	3.067E-27	1.417E-26	1.127E-25	1.732E-24	1.349E-23	1.023E-22	
Ra-226	U-238	1.997E-07	0.000E+00	3.743E-21	5.832E-17	1.007E-16	4.653E-16	3.702E-15	5.689E-14	4.429E-13	3.360E-12	
Ra-226	U-238	2.636E-13	0.000E+00	4.940E-27	7.699E-23	1.330E-22	6.142E-22	4.886E-21	7.510E-20	5.846E-19	4.435E-18	
Ra-226	U-238	3.794E-15	0.000E+00	7.111E-29	1.108E-24	1.914E-24	8.841E-24	7.033E-23	1.081E-21	8.415E-21	6.383E-20	
Ra-226	äS(j):		0.000E+00	8.662E-10	2.154E-08	2.582E-08	4.286E-08	8.479E-08	2.053E-07	3.895E-07	7.031E-07	
0Pu-238	Pu-238	2.640E-13	2.640E-12	2.619E-12	2.167E-12	2.083E-12	1.778E-12	1.198E-12	3.660E-13	5.074E-14	9.752E-16	
Pu-238	Pu-238	3.800E-15	3.800E-14	3.770E-14	3.119E-14	2.998E-14	2.560E-14	1.724E-14	5.268E-15	7.304E-16	1.404E-17	
Pu-238	äS(j):		2.678E-12	2.657E-12	2.198E-12	2.113E-12	1.804E-12	1.215E-12	3.713E-13	5.147E-14	9.893E-16	
0Ra-226	Pu-238	2.640E-13	0.000E+00	4.939E-27	7.345E-23	1.256E-22	5.588E-22	4.060E-21	4.889E-20	2.733E-19	1.285E-18	
0Pu-239	Pu-239	5.901E-04	5.901E-03	5.901E-03	5.897E-03	5.896E-03	5.892E-03	5.884E-03	5.859E-03	5.817E-03	5.734E-03	
Pu-239	Pu-239	1.633E-06	1.633E-05	1.633E-05	1.632E-05	1.632E-05	1.631E-05	1.628E-05	1.621E-05	1.610E-05	1.587E-05	
Pu-239	äS(j):		5.917E-03	5.917E-03	5.913E-03	5.912E-03	5.909E-03	5.900E-03	5.875E-03	5.833E-03	5.749E-03	
0U-235	Pu-239	5.901E-04	0.000E+00	5.810E-12	1.452E-10	1.742E-10	2.903E-10	5.802E-10	1.447E-09	2.884E-09	5.727E-09	
U-235	Pu-239	1.633E-06	0.000E+00	1.608E-14	4.018E-13	4.822E-13	8.034E-13	1.606E-12	4.005E-12	7.982E-12	1.585E-11	
U-235	Pu-239	8.257E-06	0.000E+00	8.129E-14	2.032E-12	2.438E-12	4.062E-12	8.118E-12	2.025E-11	4.035E-11	8.013E-11	
U-235	Pu-239	2.285E-08	0.000E+00	2.250E-16	5.623E-15	6.747E-15	1.124E-14	2.247E-14	5.604E-14	1.117E-13	2.218E-13	
U-235	Pu-239	4.954E-10	0.000E+00	4.878E-18	1.219E-16	1.463E-16	2.437E-16	4.871E-16	1.215E-15	2.421E-15	4.808E-15	
U-235	Pu-239	1.371E-12	0.000E+00	1.350E-20	3.374E-19	4.048E-19	6.745E-19	1.348E-18	3.363E-18	6.702E-18	1.331E-17	
U-235	Pu-239	9.829E-01	0.000E+00	9.677E-09	2.418E-07	2.902E-07	4.835E-07	9.663E-07	2.411E-06	4.804E-06	9.539E-06	
U-235	Pu-239	2.720E-03	0.000E+00	2.678E-11	6.693E-10	8.032E-10	1.338E-09	2.674E-09	6.672E-09	1.330E-08	2.640E-08	
U-235	Pu-239	1.375E-02	0.000E+00	1.354E-10	3.384E-09	4.060E-09	6.766E-09	1.352E-08	3.373E-08	6.722E-08	1.335E-07	
U-235	Pu-239	3.806E-05	0.000E+00	3.748E-13	9.366E-12	1.124E-11	1.872E-11	3.742E-11	9.335E-11	1.860E-10	3.694E-10	
U-235	Pu-239	8.252E-07	0.000E+00	8.125E-15	2.031E-13	2.436E-13	4.060E-13	8.113E-13	2.024E-12	4.033E-12	8.008E-12	
U-235	Pu-239	2.284E-09	0.000E+00	2.249E-17	5.620E-16	6.743E-16	1.124E-15	2.245E-15	5.601E-15	1.116E-14	2.216E-14	
U-235	U-235	9.835E-01	9.835E+00	9.835E+00	9.835E+00	9.835E+00	9.835E+00	9.835E+00	9.834E+00	9.834E+00	9.833E+00	
U-235	äS(j):		9.835E+00	9.835E+00	9.835E+00	9.835E+00	9.835E+00	9.835E+00	9.834E+00	9.834E+00	9.833E+00	
0Pa-231	Pu-239	5.901E-04	0.000E+00	6.146E-17	3.840E-14	5.529E-14	1.535E-13	6.136E-13	3.825E-12	1.524E-11	6.044E-11	
Pa-231	Pu-239	1.633E-06	0.000E+00	1.701E-19	1.063E-16	1.530E-16	4.249E-16	1.698E-15	1.059E-14	4.217E-14	1.673E-13	
Pa-231	Pu-239	8.257E-06	0.000E+00	8.600E-19	5.373E-16	7.736E-16	2.148E-15	8.586E-15	5.353E-14	2.132E-13	8.457E-13	
Pa-231	Pu-239	2.285E-08	0.000E+00	2.380E-21	1.487E-18	2.141E-18	5.946E-18	2.376E-17	1.481E-16	5.901E-16	2.341E-15	
Pa-231	Pu-239	4.954E-10	0.000E+00	5.160E-23	3.224E-20	4.642E-20	1.289E-19	5.152E-19	3.212E-18	1.279E-17	5.075E-17	
Pa-231	Pu-239	1.371E-12	0.000E+00	1.428E-25	8.923E-23	1.285E-22	3.568E-22	1.426E-21	8.889E-21	3.541E-20	1.404E-19	
Pa-231	Pu-239	9.829E-01	0.000E+00	1.024E-13	6.396E-11	9.209E-11	2.557E-10	1.022E-09	6.372E-09	2.538E-08	1.007E-07	
Pa-231	Pu-239	2.720E-03	0.000E+00	2.833E-16	1.770E-13	2.549E-13	7.078E-13	2.829E-12	1.764E-11	7.025E-11	2.786E-10	
Pa-231	Pu-239	1.375E-02	0.000E+00	1.432E-15	8.949E-13	1.289E-12	3.578E-12	1.430E-11	8.916E-11	3.551E-10	1.409E-09	
Pa-231	Pu-239	3.806E-05	0.000E+00	3.965E-18	2.477E-15	3.566E-15	9.903E-15	3.958E-14	2.468E-13	9.829E-13	3.899E-12	
Pa-231	Pu-239	8.252E-07	0.000E+00	8.595E-20	5.370E-17	7.732E-17	2.147E-16	8.581E-16	5.350E-15	2.131E-14	8.453E-14	

Pa-231	Pu-239	2.284E-09	0.000E+00	2.379E-22	1.486E-19	2.140E-19	5.942E-19	2.375E-18	1.481E-17	5.898E-17	2.339E-16
Pa-231	U-235	9.835E-01	0.000E+00	2.081E-04	5.201E-03	6.241E-03	1.040E-02	2.079E-02	5.188E-02	1.035E-01	2.059E-01
Pa-231	U-235	2.722E-03	0.000E+00	5.759E-07	1.439E-05	1.727E-05	2.878E-05	5.753E-05	1.436E-04	2.864E-04	5.698E-04
Pa-231	U-235	1.376E-02	0.000E+00	2.912E-06	7.277E-05	8.732E-05	1.455E-04	2.908E-04	7.259E-04	1.448E-03	2.880E-03

Individual Nuclide Soil Concentration
Parent Nuclide and Branch Fraction Indicated

ONuclide	Parent	THF(i)	S(j,t), pCi/g									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Pa-231	U-235	3.809E-05	0.000E+00	8.058E-09	2.014E-07	2.417E-07	4.027E-07	8.050E-07	2.009E-06	4.008E-06	7.972E-06	
Pa-231	U-235	8.257E-07	0.000E+00	1.747E-10	4.367E-09	5.240E-09	8.731E-09	1.745E-08	4.356E-08	8.688E-08	1.728E-07	
Pa-231	U-235	2.285E-09	0.000E+00	4.835E-13	1.208E-11	1.450E-11	2.416E-11	4.830E-11	1.206E-10	2.405E-10	4.784E-10	
Pa-231	äS(j):		0.000E+00	2.116E-04	5.288E-03	6.345E-03	1.057E-02	2.114E-02	5.275E-02	1.052E-01	2.093E-01	
0Ac-227	Pu-239	5.901E-04	0.000E+00	6.471E-19	8.445E-15	1.409E-14	5.716E-14	3.443E-13	2.986E-12	1.345E-11	5.679E-11	
Ac-227	Pu-239	9.829E-01	0.000E+00	1.078E-15	1.407E-11	2.347E-11	9.520E-11	5.735E-10	4.974E-09	2.240E-08	9.460E-08	
Ac-227	U-235	9.835E-01	0.000E+00	3.278E-06	1.615E-03	2.221E-03	5.197E-03	1.453E-02	4.538E-02	9.701E-02	1.995E-01	
Ac-227	äS(j):		0.000E+00	3.278E-06	1.615E-03	2.221E-03	5.197E-03	1.453E-02	4.538E-02	9.701E-02	1.995E-01	
0Ac-227	Pu-239	1.633E-06	0.000E+00	1.791E-21	2.337E-17	3.900E-17	1.582E-16	9.529E-16	8.264E-15	3.722E-14	1.572E-13	
Ac-227	Pu-239	8.257E-06	0.000E+00	9.054E-21	1.182E-16	1.972E-16	7.997E-16	4.817E-15	4.178E-14	1.882E-13	7.947E-13	
Ac-227	Pu-239	2.720E-03	0.000E+00	2.983E-18	3.893E-14	6.496E-14	2.635E-13	1.587E-12	1.377E-11	6.200E-11	2.618E-10	
Ac-227	U-235	2.722E-03	0.000E+00	9.071E-09	4.469E-06	6.147E-06	1.438E-05	4.022E-05	1.256E-04	2.685E-04	5.520E-04	
Ac-227	äS(j):		0.000E+00	9.071E-09	4.469E-06	6.147E-06	1.438E-05	4.022E-05	1.256E-04	2.685E-04	5.520E-04	
0Pu-239	Pu-239	8.257E-06	8.257E-05	8.256E-05	8.251E-05	8.250E-05	8.245E-05	8.233E-05	8.198E-05	8.139E-05	8.023E-05	
Pu-239	Pu-239	2.285E-08	2.285E-07	2.285E-07	2.284E-07	2.283E-07	2.282E-07	2.279E-07	2.269E-07	2.253E-07	2.220E-07	
Pu-239	äS(j):		8.280E-05	8.279E-05	8.274E-05	8.272E-05	8.268E-05	8.256E-05	8.220E-05	8.161E-05	8.045E-05	
0Ac-227	Pu-239	2.285E-08	0.000E+00	2.506E-23	3.271E-19	5.457E-19	2.213E-18	1.333E-17	1.156E-16	5.208E-16	2.199E-15	
Ac-227	Pu-239	4.954E-10	0.000E+00	5.433E-25	7.091E-21	1.183E-20	4.799E-20	2.891E-19	2.507E-18	1.129E-17	4.768E-17	
Ac-227	Pu-239	3.806E-05	0.000E+00	4.174E-20	5.448E-16	9.090E-16	3.687E-15	2.221E-14	1.926E-13	8.675E-13	3.663E-12	
Ac-227	U-235	3.809E-05	0.000E+00	1.269E-10	6.253E-08	8.601E-08	2.012E-07	5.627E-07	1.757E-06	3.757E-06	7.724E-06	
Ac-227	äS(j):		0.000E+00	1.269E-10	6.253E-08	8.601E-08	2.012E-07	5.627E-07	1.757E-06	3.757E-06	7.724E-06	
0Pu-239	Pu-239	4.954E-10	4.954E-09	4.954E-09	4.951E-09	4.950E-09	4.947E-09	4.940E-09	4.919E-09	4.884E-09	4.814E-09	
Pu-239	Pu-239	1.371E-12	1.371E-11	1.371E-11	1.370E-11	1.370E-11	1.369E-11	1.367E-11	1.361E-11	1.352E-11	1.332E-11	
Pu-239	äS(j):		4.968E-09	4.968E-09	4.964E-09	4.964E-09	4.961E-09	4.954E-09	4.932E-09	4.897E-09	4.827E-09	
0Ac-227	Pu-239	1.371E-12	0.000E+00	1.504E-27	1.962E-23	3.274E-23	1.328E-22	8.000E-22	6.939E-21	3.125E-20	1.320E-19	
Ac-227	Pu-239	2.284E-09	0.000E+00	2.505E-24	3.269E-20	5.454E-20	2.212E-19	1.333E-18	1.156E-17	5.206E-17	2.198E-16	
Ac-227	U-235	2.285E-09	0.000E+00	7.616E-15	3.752E-12	5.161E-12	1.208E-11	3.376E-11	1.054E-10	2.254E-10	4.635E-10	
Ac-227	äS(j):		0.000E+00	7.616E-15	3.752E-12	5.161E-12	1.208E-11	3.376E-11	1.054E-10	2.254E-10	4.635E-10	
0Pu-239	Pu-239	9.829E-01	9.829E+00	9.829E+00	9.822E+00	9.820E+00	9.815E+00	9.801E+00	9.758E+00	9.689E+00	9.550E+00	
Pu-239	Pu-239	2.720E-03	2.720E-02	2.720E-02	2.718E-02	2.718E-02	2.716E-02	2.712E-02	2.701E-02	2.681E-02	2.643E-02	
Pu-239	äS(j):		9.856E+00	9.856E+00	9.849E+00	9.848E+00	9.842E+00	9.828E+00	9.785E+00	9.715E+00	9.577E+00	
0Pu-239	Pu-239	1.375E-02	1.375E-01	1.375E-01	1.374E-01	1.374E-01	1.373E-01	1.371E-01	1.365E-01	1.356E-01	1.336E-01	
Pu-239	Pu-239	3.806E-05	3.806E-04	3.806E-04	3.804E-04	3.803E-04	3.801E-04	3.795E-04	3.779E-04	3.752E-04	3.698E-04	
Pu-239	äS(j):		1.379E-01	1.379E-01	1.378E-01	1.378E-01	1.377E-01	1.375E-01	1.369E-01	1.359E-01	1.340E-01	
0Ac-227	Pu-239	1.375E-02	0.000E+00	1.508E-17	1.968E-13	3.284E-13	1.332E-12	8.024E-12	6.959E-11	3.135E-10	1.324E-09	
Ac-227	U-235	1.376E-02	0.000E+00	4.586E-08	2.259E-05	3.108E-05	7.271E-05	2.033E-04	6.349E-04	1.357E-03	2.791E-03	
Ac-227	äS(j):		0.000E+00	4.586E-08	2.259E-05	3.108E-05	7.271E-05	2.033E-04	6.349E-04	1.357E-03	2.791E-03	
0Pu-239	Pu-239	8.252E-07	8.252E-06	8.252E-06	8.246E-06	8.245E-06	8.240E-06	8.228E-06	8.193E-06	8.134E-06	8.018E-06	
Pu-239	Pu-239	2.284E-09	2.284E-08	2.284E-08	2.282E-08	2.282E-08	2.281E-08	2.277E-08	2.268E-08	2.251E-08	2.219E-08	
Pu-239	äS(j):		8.275E-06	8.275E-06	8.269E-06	8.268E-06	8.263E-06	8.251E-06	8.216E-06	8.157E-06	8.040E-06	

Individual Nuclide Soil Concentration
 Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	S(j,t), pCi/g									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Ac-227	Pu-239	8.252E-07	0.000E+00	9.050E-22	1.181E-17	1.971E-17	7.993E-17	4.815E-16	4.176E-15	1.881E-14	7.942E-14	
Ac-227	U-235	8.257E-07	0.000E+00	2.752E-12	1.356E-09	1.865E-09	4.363E-09	1.220E-08	3.810E-08	8.145E-08	1.675E-07	
Ac-227	äS(j):		0.000E+00	2.752E-12	1.356E-09	1.865E-09	4.363E-09	1.220E-08	3.810E-08	8.145E-08	1.675E-07	
ORu-106	Ru-106	1.000E+00	1.000E+01	5.078E+00	4.388E-07	1.481E-08	1.925E-14	3.706E-29	0.000E+00	0.000E+00	0.000E+00	
OSr-90	Sr-90	1.000E+00	1.000E+01	9.762E+00	5.478E+00	4.856E+00	3.000E+00	9.003E-01	2.432E-02	5.914E-05	3.498E-10	
OTc-99	Tc-99	1.000E+00	1.000E+01	9.999E+00	9.981E+00	9.977E+00	9.962E+00	9.925E+00	9.812E+00	9.628E+00	9.270E+00	
0Th-228	Th-228	1.000E+00	1.000E+01	6.959E+00	1.156E-03	1.887E-04	1.337E-07	1.788E-15	4.277E-39	0.000E+00	0.000E+00	
Th-228	Th-232	1.000E+00	0.000E+00	1.866E-01	9.265E+00	9.597E+00	9.964E+00	1.000E+01	1.000E+01	1.000E+01	1.000E+01	
Th-228	äS(j):		1.000E+01	7.145E+00	9.266E+00	9.598E+00	9.964E+00	1.000E+01	1.000E+01	1.000E+01	1.000E+01	
0Th-230	Th-230	1.319E-06	1.319E-05	1.319E-05	1.319E-05	1.319E-05	1.319E-05	1.318E-05	1.316E-05	1.313E-05	1.307E-05	
Th-230	Th-230	1.899E-08	1.899E-07	1.899E-07	1.899E-07	1.899E-07	1.898E-07	1.897E-07	1.895E-07	1.891E-07	1.882E-07	
Th-230	äS(j):		1.338E-05	1.338E-05	1.338E-05	1.338E-05	1.338E-05	1.337E-05	1.335E-05	1.332E-05	1.326E-05	
0Th-230	Th-230	2.100E-04	2.100E-03	2.100E-03	2.099E-03	2.099E-03	2.099E-03	2.098E-03	2.095E-03	2.090E-03	2.080E-03	
Th-230	Th-230	2.771E-10	2.771E-09	2.771E-09	2.771E-09	2.771E-09	2.770E-09	2.769E-09	2.765E-09	2.759E-09	2.746E-09	
Th-230	äS(j):		2.100E-03	2.100E-03	2.099E-03	2.099E-03	2.099E-03	2.098E-03	2.095E-03	2.090E-03	2.080E-03	
0Th-230	Th-230	3.989E-12	3.989E-11	3.989E-11	3.988E-11	3.988E-11	3.987E-11	3.986E-11	3.980E-11	3.971E-11	3.953E-11	
Th-230	Th-230	1.998E-04	1.998E-03	1.998E-03	1.997E-03	1.997E-03	1.997E-03	1.996E-03	1.993E-03	1.988E-03	1.979E-03	
Th-230	äS(j):		1.998E-03	1.998E-03	1.997E-03	1.997E-03	1.997E-03	1.996E-03	1.993E-03	1.988E-03	1.979E-03	
0Th-230	Th-230	2.637E-10	2.637E-09	2.637E-09	2.636E-09	2.636E-09	2.636E-09	2.634E-09	2.631E-09	2.625E-09	2.613E-09	
Th-230	Th-230	3.795E-12	3.795E-11	3.795E-11	3.795E-11	3.794E-11	3.794E-11	3.792E-11	3.787E-11	3.778E-11	3.761E-11	
Th-230	äS(j):		2.675E-09	2.675E-09	2.674E-09	2.674E-09	2.674E-09	2.672E-09	2.669E-09	2.662E-09	2.650E-09	
0Th-230	Th-230	4.196E-08	4.196E-07	4.196E-07	4.195E-07	4.195E-07	4.194E-07	4.192E-07	4.186E-07	4.177E-07	4.157E-07	
Th-230	Th-230	5.538E-14	5.538E-13	5.538E-13	5.537E-13	5.537E-13	5.536E-13	5.533E-13	5.526E-13	5.513E-13	5.488E-13	
Th-230	äS(j):		4.196E-07	4.196E-07	4.195E-07	4.195E-07	4.194E-07	4.192E-07	4.186E-07	4.177E-07	4.157E-07	
0Th-230	Th-230	7.972E-16	7.972E-15	7.972E-15	7.970E-15	7.970E-15	7.968E-15	7.965E-15	7.954E-15	7.935E-15	7.899E-15	
Th-230	Th-230	2.000E-07	2.000E-06	2.000E-06	2.000E-06	1.999E-06	1.999E-06	1.998E-06	1.995E-06	1.991E-06	1.982E-06	
Th-230	äS(j):		2.000E-06	2.000E-06	2.000E-06	1.999E-06	1.999E-06	1.998E-06	1.995E-06	1.991E-06	1.982E-06	
0Th-230	Th-230	2.640E-13	2.640E-12	2.640E-12	2.639E-12	2.639E-12	2.639E-12	2.638E-12	2.634E-12	2.628E-12	2.616E-12	
Th-230	Th-230	3.800E-15	3.800E-14	3.800E-14	3.799E-14	3.799E-14	3.798E-14	3.797E-14	3.791E-14	3.783E-14	3.765E-14	
Th-230	äS(j):		2.678E-12	2.678E-12	2.677E-12	2.677E-12	2.677E-12	2.676E-12	2.672E-12	2.666E-12	2.653E-12	
0Th-232	Th-232	1.000E+00	1.000E+01	1.000E+01	1.000E+01	1.000E+01	1.000E+01	1.000E+01	1.000E+01	1.000E+01	1.000E+01	
ORa-228	Th-232	1.000E+00	0.000E+00	1.136E+00	9.509E+00	9.731E+00	9.976E+00	1.000E+01	1.000E+01	1.000E+01	1.000E+01	
OU-234	U-234	1.319E-06	1.319E-05	1.319E-05	1.319E-05	1.319E-05	1.319E-05	1.319E-05	1.318E-05	1.317E-05	1.315E-05	
U-234	U-234	1.899E-08	1.899E-07	1.899E-07	1.899E-07	1.899E-07	1.899E-07	1.899E-07	1.898E-07	1.896E-07	1.894E-07	
U-234	äS(j):		1.338E-05	1.338E-05	1.338E-05	1.338E-05	1.338E-05	1.338E-05	1.337E-05	1.336E-05	1.334E-05	

Individual Nuclide Soil Concentration
Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	S(j,t), pCi/g									
(j)	(i)		t= 0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03	
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
U-238	U-238	4.219E-13	4.219E-12	4.219E-12	4.219E-12	4.219E-12	4.219E-12	4.219E-12	4.219E-12	4.218E-12	4.218E-12	
U-238	U-238	6.073E-15	6.073E-14	6.073E-14	6.073E-14	6.073E-14	6.073E-14	6.073E-14	6.072E-14	6.072E-14	6.071E-14	
U-238	äS(j):		4.280E-12	4.280E-12	4.280E-12	4.280E-12	4.280E-12	4.280E-12	4.279E-12	4.279E-12	4.279E-12	
0U-238	U-238	6.713E-11	6.713E-10	6.713E-10	6.713E-10	6.713E-10	6.713E-10	6.713E-10	6.713E-10	6.713E-10	6.712E-10	
U-238	U-238	8.862E-17	8.862E-16	8.862E-16	8.861E-16	8.861E-16	8.861E-16	8.861E-16	8.861E-16	8.861E-16	8.860E-16	
U-238	äS(j):		6.713E-10	6.713E-10	6.713E-10	6.713E-10	6.713E-10	6.713E-10	6.713E-10	6.713E-10	6.712E-10	
0U-238	U-238	1.276E-18	1.276E-17	1.276E-17	1.276E-17	1.276E-17	1.276E-17	1.275E-17	1.275E-17	1.275E-17	1.275E-17	
U-238	U-238	3.200E-10	3.200E-09	3.200E-09	3.200E-09	3.200E-09	3.200E-09	3.200E-09	3.200E-09	3.200E-09	3.199E-09	
U-238	äS(j):		3.200E-09	3.200E-09	3.200E-09	3.200E-09	3.200E-09	3.200E-09	3.200E-09	3.200E-09	3.199E-09	
0U-238	U-238	4.224E-16	4.224E-15	4.224E-15	4.224E-15	4.224E-15	4.224E-15	4.224E-15	4.224E-15	4.224E-15	4.223E-15	
U-238	U-238	6.080E-18	6.080E-17	6.080E-17	6.080E-17	6.080E-17	6.080E-17	6.080E-17	6.080E-17	6.079E-17	6.079E-17	
U-238	äS(j):		4.285E-15	4.285E-15	4.285E-15	4.285E-15	4.285E-15	4.285E-15	4.285E-15	4.284E-15	4.284E-15	
0U-238	U-238	9.980E-01	9.980E+00	9.980E+00	9.980E+00	9.980E+00	9.980E+00	9.980E+00	9.979E+00	9.979E+00	9.978E+00	
U-238	U-238	1.317E-06	1.317E-05	1.317E-05	1.317E-05	1.317E-05	1.317E-05	1.317E-05	1.317E-05	1.317E-05	1.317E-05	
U-238	äS(j):		9.980E+00	9.980E+00	9.980E+00	9.980E+00	9.980E+00	9.980E+00	9.979E+00	9.979E+00	9.978E+00	
0U-238	U-238	1.896E-08	1.896E-07	1.896E-07	1.896E-07	1.896E-07	1.896E-07	1.896E-07	1.896E-07	1.896E-07	1.896E-07	
U-238	U-238	2.096E-04	2.096E-03	2.096E-03	2.096E-03	2.096E-03	2.096E-03	2.096E-03	2.096E-03	2.096E-03	2.096E-03	
U-238	äS(j):		2.096E-03	2.096E-03	2.096E-03	2.096E-03	2.096E-03	2.096E-03	2.096E-03	2.096E-03	2.096E-03	
0U-238	U-238	2.767E-10	2.767E-09	2.767E-09	2.767E-09	2.767E-09	2.767E-09	2.767E-09	2.767E-09	2.767E-09	2.766E-09	
U-238	U-238	3.983E-12	3.983E-11	3.983E-11	3.983E-11	3.983E-11	3.983E-11	3.983E-11	3.983E-11	3.982E-11	3.982E-11	
U-238	äS(j):		2.807E-09	2.807E-09	2.807E-09	2.807E-09	2.807E-09	2.807E-09	2.807E-09	2.807E-09	2.806E-09	
0U-238	U-238	1.994E-04	1.994E-03	1.994E-03	1.994E-03	1.994E-03	1.994E-03	1.994E-03	1.994E-03	1.994E-03	1.994E-03	
U-238	U-238	2.633E-10	2.633E-09	2.633E-09	2.633E-09	2.633E-09	2.633E-09	2.633E-09	2.632E-09	2.632E-09	2.632E-09	
U-238	äS(j):		1.994E-03	1.994E-03	1.994E-03	1.994E-03	1.994E-03	1.994E-03	1.994E-03	1.994E-03	1.994E-03	
0U-238	U-238	3.789E-12	3.789E-11	3.789E-11	3.789E-11	3.789E-11	3.789E-11	3.789E-11	3.789E-11	3.789E-11	3.789E-11	
U-238	U-238	4.189E-08	4.189E-07	4.189E-07	4.189E-07	4.189E-07	4.189E-07	4.189E-07	4.189E-07	4.189E-07	4.188E-07	
U-238	äS(j):		4.189E-07	4.189E-07	4.189E-07	4.189E-07	4.189E-07	4.189E-07	4.189E-07	4.189E-07	4.189E-07	
0U-238	U-238	5.530E-14	5.530E-13	5.530E-13	5.530E-13	5.530E-13	5.530E-13	5.529E-13	5.529E-13	5.529E-13	5.529E-13	
U-238	U-238	7.959E-16	7.959E-15	7.959E-15	7.959E-15	7.959E-15	7.959E-15	7.959E-15	7.959E-15	7.958E-15	7.958E-15	
U-238	äS(j):		5.609E-13	5.609E-13	5.609E-13	5.609E-13	5.609E-13	5.609E-13	5.609E-13	5.609E-13	5.608E-13	
0U-238	U-238	1.997E-07	1.997E-06	1.997E-06	1.997E-06	1.997E-06	1.997E-06	1.997E-06	1.997E-06	1.997E-06	1.996E-06	
U-238	U-238	2.636E-13	2.636E-12	2.636E-12	2.636E-12	2.636E-12	2.636E-12	2.636E-12	2.636E-12	2.636E-12	2.635E-12	
U-238	äS(j):		1.997E-06	1.997E-06	1.997E-06	1.997E-06	1.997E-06	1.997E-06	1.997E-06	1.997E-06	1.996E-06	
0U-238	U-238	3.794E-15	3.794E-14	3.794E-14	3.794E-14	3.794E-14	3.794E-14	3.794E-14	3.794E-14	3.794E-14	3.793E-14	
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii

THF(i) is the thread fraction of the parent nuclide.
0RESCALC.EXE execution time = 182.52 seconds

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[illegible]

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Total Dose Components	
Time = 0.000E+00	24
Time = 1.000E+00	26
Time = 2.500E+01	28
Time = 3.000E+01	30
Time = 5.000E+01	32
Time = 1.000E+02	34
Time = 2.500E+02	36
Time = 5.000E+02	38
Time = 1.000E+03	40
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A-1 ³ Pb-214 (Source: DCFPAK3.02)
 A-1 ³ Po-210 (Source: DCFPAK3.02)
 A-1 ³ Po-211 (Source: DCFPAK3.02)
 A-1 ³ Po-212 (Source: DCFPAK3.02)
 A-1 ³ Po-213 (Source: DCFPAK3.02)
 A-1 ³ Po-214 (Source: DCFPAK3.02)
 A-1 ³ Po-215 (Source: DCFPAK3.02)
 A-1 ³ Po-216 (Source: DCFPAK3.02)
 A-1 ³ Po-218 (Source: DCFPAK3.02)
 A-1 ³ Pu-238 (Source: DCFPAK3.02)

³ 1.257E+00 ³ 1.257E+00 ³ DCF1(40)
³ 5.641E-05 ³ 5.642E-05 ³ DCF1(41)
³ 4.707E-02 ³ 4.708E-02 ³ DCF1(42)
³ 0.000E+00 ³ 0.000E+00 ³ DCF1(43)
³ 2.167E-04 ³ 2.167E-04 ³ DCF1(44)
³ 4.801E-04 ³ 4.801E-04 ³ DCF1(45)
³ 9.452E-04 ³ 9.453E-04 ³ DCF1(46)
³ 8.873E-05 ³ 8.874E-05 ³ DCF1(47)
³ 9.228E-09 ³ 9.229E-09 ³ DCF1(48)
³ 1.111E-04 ³ 1.112E-04 ³ DCF1(49)

Dose Conversion Factor (and Related) Parameter Summary (continued)

Dose Library: Age 0-5 interpolate Plus DCFPAK3.02 (Age 5)

0	3		3	Current	3	Base	3	Parameter
Menu	3	Parameter	3	Value#	3	Case*	3	Name
AA								
A-1	3	Pu-239 (Source: DCFPAK3.02)	3	2.765E-04	3	2.765E-04	3	DCF1(50)
A-1	3	Ra-223 (Source: DCFPAK3.02)	3	5.791E-01	3	5.791E-01	3	DCF1(51)
A-1	3	Ra-224 (Source: DCFPAK3.02)	3	4.950E-02	3	4.951E-02	3	DCF1(52)
A-1	3	Ra-225 (Source: DCFPAK3.02)	3	8.910E-03	3	8.911E-03	3	DCF1(53)
A-1	3	Ra-226 (Source: DCFPAK3.02)	3	3.176E-02	3	3.176E-02	3	DCF1(54)
A-1	3	Ra-228 (Source: DCFPAK3.02)	3	6.575E-05	3	6.576E-05	3	DCF1(55)
A-1	3	Rh-106 (Source: DCFPAK3.02)	3	1.252E+00	3	1.252E+00	3	DCF1(56)
A-1	3	Rn-218 (Source: DCFPAK3.02)	3	4.259E-03	3	4.260E-03	3	DCF1(57)
A-1	3	Rn-219 (Source: DCFPAK3.02)	3	2.970E-01	3	2.970E-01	3	DCF1(58)
A-1	3	Rn-220 (Source: DCFPAK3.02)	3	3.474E-03	3	3.475E-03	3	DCF1(59)
A-1	3	Rn-222 (Source: DCFPAK3.02)	3	2.130E-03	3	2.130E-03	3	DCF1(60)
A-1	3	Ru-106 (Source: DCFPAK3.02)	3	0.000E+00	3	0.000E+00	3	DCF1(61)
A-1	3	Sm-148 (Source: DCFPAK3.02)	3	0.000E+00	3	0.000E+00	3	DCF1(62)
A-1	3	Sr-90 (Source: DCFPAK3.02)	3	6.463E-04	3	6.464E-04	3	DCF1(63)
A-1	3	Tc-99 (Source: DCFPAK3.02)	3	1.104E-04	3	1.104E-04	3	DCF1(64)
A-1	3	Th-227 (Source: DCFPAK3.02)	3	5.641E-01	3	5.642E-01	3	DCF1(65)
A-1	3	Th-228 (Source: DCFPAK3.02)	3	7.248E-03	3	7.249E-03	3	DCF1(66)
A-1	3	Th-229 (Source: DCFPAK3.02)	3	2.877E-01	3	2.877E-01	3	DCF1(67)
A-1	3	Th-230 (Source: DCFPAK3.02)	3	1.106E-03	3	1.106E-03	3	DCF1(68)
A-1	3	Th-231 (Source: DCFPAK3.02)	3	3.250E-02	3	3.251E-02	3	DCF1(69)
A-1	3	Th-232 (Source: DCFPAK3.02)	3	4.782E-04	3	4.783E-04	3	DCF1(70)
A-1	3	Th-234 (Source: DCFPAK3.02)	3	2.316E-02	3	2.317E-02	3	DCF1(71)
A-1	3	Tl-206 (Source: DCFPAK3.02)	3	1.278E-02	3	1.278E-02	3	DCF1(72)
A-1	3	Tl-207 (Source: DCFPAK3.02)	3	2.391E-02	3	2.391E-02	3	DCF1(73)
A-1	3	Tl-208 (Source: DCFPAK3.02)	3	2.167E+01	3	2.167E+01	3	DCF1(74)
A-1	3	Tl-209 (Source: DCFPAK3.02)	3	1.287E+01	3	1.287E+01	3	DCF1(75)
A-1	3	Tl-210 (Source: DCFPAK3.02)	3	1.677E+01	3	1.678E+01	3	DCF1(76)
A-1	3	U-233 (Source: DCFPAK3.02)	3	9.191E-04	3	9.192E-04	3	DCF1(77)
A-1	3	U-234 (Source: DCFPAK3.02)	3	3.456E-04	3	3.456E-04	3	DCF1(78)
A-1	3	U-235 (Source: DCFPAK3.02)	3	7.005E-01	3	7.006E-01	3	DCF1(79)
A-1	3	U-235m (Source: DCFPAK3.02)	3	0.000E+00	3	0.000E+00	3	DCF1(80)
A-1	3	U-238 (Source: DCFPAK3.02)	3	1.713E-04	3	1.713E-04	3	DCF1(81)
A-1	3	Y-90 (Source: DCFPAK3.02)	3	4.016E-02	3	4.017E-02	3	DCF1(82)
3								
B-1	3	Dose conversion factors for inhalation, mrem/pCi:	3		3		3	
B-1	3	Ac-227+D	3	1.007E+00	3	8.801E-01	3	DCF2(1)
B-1	3	Ac-227+D1	3	1.007E+00	3	8.801E-01	3	DCF2(2)
B-1	3	Ac-227+D2	3	9.374E-01	3	8.801E-01	3	DCF2(3)
B-1	3	Ac-227+D3	3	9.374E-01	3	8.801E-01	3	DCF2(4)
B-1	3	Ac-227+D4	3	8.803E-01	3	8.801E-01	3	DCF2(5)

B-1 ³ Ac-227+D5
B-1 ³ Am-241
B-1 ³ Co-60
B-1 ³ Cs-134
B-1 ³ Cs-137+D
B-1 ³ Eu-152
B-1 ³ Eu-154
B-1 ³ Eu-155
B-1 ³ Gd-152
B-1 ³ H-3

³ 8.803E-01 ³ 8.801E-01 ³ DCF2(6)
³ 5.776E-01 ³ 4.543E-01 ³ DCF2(7)
³ 2.794E-04 ³ 2.178E-04 ³ DCF2(8)
³ 2.042E-04 ³ 1.535E-04 ³ DCF2(9)
³ 3.346E-04 ³ 2.584E-04 ³ DCF2(10)
³ 8.416E-04 ³ 6.226E-04 ³ DCF2(11)
³ 1.096E-03 ³ 7.862E-04 ³ DCF2(13)
³ 1.580E-04 ³ 1.089E-04 ³ DCF2(14)
³ 1.242E-01 ³ 1.242E-01 ³ DCF2(15)
³ 1.613E-07 ³ 2.318E-06 ³ DCF2(16)

Dose Conversion Factor (and Related) Parameter Summary (continued)

Dose Library: Age 0-5 interpolate Plus DCFPAK3.02 (Age 5)

0	3		3	Current	3	Base	3	Parameter
Menu	3	Parameter	3	Value#	3	Case*	3	Name
AA								
B-1	3	I-129	3	6.597E-04	3	5.919E-04	3	DCF2(17)
B-1	3	Mn-54	3	3.468E-05	3	2.606E-05	3	DCF2(18)
B-1	3	Na-22	3	2.857E-04	3	2.162E-04	3	DCF2(19)
B-1	3	Nd-144	3	1.232E-01	3	1.232E-01	3	DCF2(20)
B-1	3	Ni-63	3	2.577E-05	3	1.798E-05	3	DCF2(21)
B-1	3	Np-237+D	3	3.000E-01	3	2.252E-01	3	DCF2(22)
B-1	3	Pa-231	3	1.158E+00	3	1.158E+00	3	DCF2(23)
B-1	3	Pb-210+D	3	7.536E-02	3	4.240E-02	3	DCF2(29)
B-1	3	Pb-210+D1	3	4.341E-02	3	4.240E-02	3	DCF2(30)
B-1	3	Pb-210+D2	3	4.240E-02	3	4.240E-02	3	DCF2(31)
B-1	3	Pu-238	3	6.303E-01	3	5.120E-01	3	DCF2(32)
B-1	3	Pu-239	3	6.769E-01	3	5.609E-01	3	DCF2(48)
B-1	3	Pu-239+D	3	6.769E-01	3	5.609E-01	3	DCF2(54)
B-1	3	Ra-226+D	3	7.025E-02	3	7.003E-02	3	DCF2(60)
B-1	3	Ra-226+D1	3	7.025E-02	3	7.003E-02	3	DCF2(63)
B-1	3	Ra-226+D2	3	7.015E-02	3	7.003E-02	3	DCF2(66)
B-1	3	Ra-226+D3	3	7.015E-02	3	7.003E-02	3	DCF2(69)
B-1	3	Ra-226+D4	3	7.003E-02	3	7.003E-02	3	DCF2(72)
B-1	3	Ra-228+D	3	1.175E-01	3	1.174E-01	3	DCF2(75)
B-1	3	Ru-106+D	3	7.173E-04	3	5.146E-04	3	DCF2(76)
B-1	3	Sm-148	3	1.285E-01	3	1.285E-01	3	DCF2(77)
B-1	3	Sr-90+D	3	1.302E-03	3	9.919E-04	3	DCF2(78)
B-1	3	Tc-99	3	1.183E-04	3	8.898E-05	3	DCF2(79)
B-1	3	Th-228+D	3	4.971E-01	3	3.074E-01	3	DCF2(80)
B-1	3	Th-229+D	3	1.461E+00	3	1.354E+00	3	DCF2(81)
B-1	3	Th-230	3	6.514E-01	3	5.216E-01	3	DCF2(82)
B-1	3	Th-232	3	7.447E-01	3	6.104E-01	3	DCF2(97)
B-1	3	U-233	3	7.048E-02	3	7.048E-02	3	DCF2(98)
B-1	3	U-234	3	9.373E-02	3	6.926E-02	3	DCF2(99)
B-1	3	U-235+D	3	8.503E-02	3	6.278E-02	3	DCF2(114)
B-1	3	U-238	3	8.073E-02	3	5.967E-02	3	DCF2(120)
B-1	3	U-238+D	3	8.083E-02	3	5.967E-02	3	DCF2(121)
B-1	3	U-238+D1	3	8.083E-02	3	5.967E-02	3	DCF2(136)
3								
D-1	3	Dose conversion factors for ingestion, mrem/pCi:	3		3		3	
D-1	3	Ac-227+D	3	4.111E-03	3	1.850E-03	3	DCF3(1)
D-1	3	Ac-227+D1	3	4.111E-03	3	1.850E-03	3	DCF3(2)
D-1	3	Ac-227+D2	3	4.007E-03	3	1.850E-03	3	DCF3(3)
D-1	3	Ac-227+D3	3	4.007E-03	3	1.850E-03	3	DCF3(4)
D-1	3	Ac-227+D4	3	1.884E-03	3	1.850E-03	3	DCF3(5)

D-1 ³ Ac-227+D5
D-1 ³ Am-241
D-1 ³ Co-60
D-1 ³ Cs-134
D-1 ³ Cs-137+D
D-1 ³ Eu-152
D-1 ³ Eu-154
D-1 ³ Eu-155
D-1 ³ Gd-152
D-1 ³ H-3

³ 1.884E-03 ³ 1.850E-03 ³ DCF3(6)
³ 3.295E-03 ³ 1.014E-03 ³ DCF3(7)
³ 1.009E-04 ³ 6.253E-05 ³ DCF3(8)
³ 6.046E-05 ³ 4.884E-05 ³ DCF3(9)
³ 4.710E-05 ³ 3.593E-05 ³ DCF3(10)
³ 2.679E-05 ³ 1.476E-05 ³ DCF3(11)
³ 4.249E-05 ³ 2.316E-05 ³ DCF3(13)
³ 7.927E-06 ³ 4.255E-06 ³ DCF3(14)
³ 2.834E-04 ³ 2.834E-04 ³ DCF3(15)
³ 1.835E-07 ³ 2.686E-07 ³ DCF3(16)

Dose Library: Age 0-5 interpolate Plus DCFPAK3.02 (Age 5)

Menu	Parameter	Current Value#	Base Case*	Parameter Name
D-1	I-129	7.264E-04	6.512E-04	DCF3(17)
D-1	Mn-54	1.128E-05	7.067E-06	DCF3(18)
D-1	Na-22	4.833E-05	3.127E-05	DCF3(19)
D-1	Nd-144	2.782E-04	2.782E-04	DCF3(20)
D-1	Ni-63	2.994E-06	1.717E-06	DCF3(21)
D-1	Np-237+D	1.804E-03	5.291E-04	DCF3(22)
D-1	Pa-231	2.483E-03	2.483E-03	DCF3(23)
D-1	Pb-210+D	2.429E-02	8.066E-03	DCF3(29)
D-1	Pb-210+D1	8.084E-03	8.066E-03	DCF3(30)
D-1	Pb-210+D2	8.066E-03	8.066E-03	DCF3(31)
D-1	Pu-238	3.543E-03	1.132E-03	DCF3(32)
D-1	Pu-239	3.748E-03	1.232E-03	DCF3(48)
D-1	Pu-239+D	3.748E-03	1.232E-03	DCF3(54)
D-1	Ra-226+D	2.282E-03	2.279E-03	DCF3(60)
D-1	Ra-226+D1	2.282E-03	2.279E-03	DCF3(63)
D-1	Ra-226+D2	2.281E-03	2.279E-03	DCF3(66)
D-1	Ra-226+D3	2.281E-03	2.279E-03	DCF3(69)
D-1	Ra-226+D4	2.279E-03	2.279E-03	DCF3(72)
D-1	Ra-228+D	1.270E-02	1.269E-02	DCF3(75)
D-1	Ru-106+D	1.672E-04	9.324E-05	DCF3(76)
D-1	Sm-148	2.901E-04	2.901E-04	DCF3(77)
D-1	Sr-90+D	3.888E-04	1.728E-04	DCF3(78)
D-1	Tc-99	1.725E-05	8.510E-06	DCF3(79)
D-1	Th-228+D	6.641E-03	8.103E-04	DCF3(80)
D-1	Th-229+D	5.649E-03	2.919E-03	DCF3(81)
D-1	Th-230	3.661E-03	1.143E-03	DCF3(82)
D-1	Th-232	4.112E-03	1.325E-03	DCF3(97)
D-1	U-233	3.393E-04	3.393E-04	DCF3(98)
D-1	U-234	5.704E-04	3.271E-04	DCF3(99)
D-1	U-235+D	5.551E-04	3.145E-04	DCF3(114)
D-1	U-238	5.168E-04	2.967E-04	DCF3(120)
D-1	U-238+D	6.084E-04	2.967E-04	DCF3(121)
D-1	U-238+D1	5.996E-04	2.967E-04	DCF3(136)
D-34	Food transfer factors:			
D-34	Ac-227+D , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(1,1)
D-34	Ac-227+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-05	2.000E-05	RTF(1,2)
D-34	Ac-227+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-05	2.000E-05	RTF(1,3)
D-34	Ac-227+D1 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(2,1)

D-34	³	Ac-227+D1 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	³	2.000E-05	³	2.000E-05	³	RTF(	2,2)
D-34	³	Ac-227+D1 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	³	2.000E-05	³	2.000E-05	³	RTF(	2,3)
D-34	³		³		³		³		
D-34	³	Ac-227+D2 , plant/soil concentration ratio, dimensionless	³	2.500E-03	³	2.500E-03	³	RTF(	3,1)
D-34	³	Ac-227+D2 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	³	2.000E-05	³	2.000E-05	³	RTF(	3,2)
D-34	³	Ac-227+D2 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	³	2.000E-05	³	2.000E-05	³	RTF(	3,3)
D-34	³		³		³		³		
D-34	³	Ac-227+D3 , plant/soil concentration ratio, dimensionless	³	2.500E-03	³	2.500E-03	³	RTF(	4,1)
D-34	³	Ac-227+D3 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	³	2.000E-05	³	2.000E-05	³	RTF(	4,2)
D-34	³	Ac-227+D3 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	³	2.000E-05	³	2.000E-05	³	RTF(	4,3)

Dose Conversion Factor (and Related) Parameter Summary (continued)

Dose Library: Age 0-5 interpolate Plus DCFPAK3.02 (Age 5)

0	3		3	Current	3	Base	3	Parameter
Menu	3	Parameter	3	Value#	3	Case*	3	Name
AA								
D-34	3	Ac-227+D4 , plant/soil concentration ratio, dimensionless	3	2.500E-03	3	2.500E-03	3	RTF(5,1)
D-34	3	Ac-227+D4 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	2.000E-05	3	2.000E-05	3	RTF(5,2)
D-34	3	Ac-227+D4 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	2.000E-05	3	2.000E-05	3	RTF(5,3)
D-34	3		3		3		3	
D-34	3	Ac-227+D5 , plant/soil concentration ratio, dimensionless	3	2.500E-03	3	2.500E-03	3	RTF(6,1)
D-34	3	Ac-227+D5 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	2.000E-05	3	2.000E-05	3	RTF(6,2)
D-34	3	Ac-227+D5 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	2.000E-05	3	2.000E-05	3	RTF(6,3)
D-34	3		3		3		3	
D-34	3	Am-241 , plant/soil concentration ratio, dimensionless	3	1.000E-03	3	1.000E-03	3	RTF(7,1)
D-34	3	Am-241 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	5.000E-05	3	5.000E-05	3	RTF(7,2)
D-34	3	Am-241 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	2.000E-06	3	2.000E-06	3	RTF(7,3)
D-34	3		3		3		3	
D-34	3	Co-60 , plant/soil concentration ratio, dimensionless	3	8.000E-02	3	8.000E-02	3	RTF(8,1)
D-34	3	Co-60 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	2.000E-02	3	2.000E-02	3	RTF(8,2)
D-34	3	Co-60 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	2.000E-03	3	2.000E-03	3	RTF(8,3)
D-34	3		3		3		3	
D-34	3	Cs-134 , plant/soil concentration ratio, dimensionless	3	4.000E-02	3	4.000E-02	3	RTF(9,1)
D-34	3	Cs-134 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	3.000E-02	3	3.000E-02	3	RTF(9,2)
D-34	3	Cs-134 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	8.000E-03	3	8.000E-03	3	RTF(9,3)
D-34	3		3		3		3	
D-34	3	Cs-137+D , plant/soil concentration ratio, dimensionless	3	4.000E-02	3	4.000E-02	3	RTF(10,1)
D-34	3	Cs-137+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	3.000E-02	3	3.000E-02	3	RTF(10,2)
D-34	3	Cs-137+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	8.000E-03	3	8.000E-03	3	RTF(10,3)
D-34	3		3		3		3	
D-34	3	Eu-152 , plant/soil concentration ratio, dimensionless	3	2.500E-03	3	2.500E-03	3	RTF(11,1)
D-34	3	Eu-152 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	2.000E-03	3	2.000E-03	3	RTF(11,2)
D-34	3	Eu-152 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	5.000E-05	3	5.000E-05	3	RTF(11,3)
D-34	3		3		3		3	
D-34	3	Eu-154 , plant/soil concentration ratio, dimensionless	3	2.500E-03	3	2.500E-03	3	RTF(13,1)
D-34	3	Eu-154 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	2.000E-03	3	2.000E-03	3	RTF(13,2)
D-34	3	Eu-154 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	5.000E-05	3	5.000E-05	3	RTF(13,3)
D-34	3		3		3		3	
D-34	3	Eu-155 , plant/soil concentration ratio, dimensionless	3	2.500E-03	3	2.500E-03	3	RTF(14,1)
D-34	3	Eu-155 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	2.000E-03	3	2.000E-03	3	RTF(14,2)
D-34	3	Eu-155 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	5.000E-05	3	5.000E-05	3	RTF(14,3)
D-34	3		3		3		3	
D-34	3	Gd-152 , plant/soil concentration ratio, dimensionless	3	2.500E-03	3	2.500E-03	3	RTF(15,1)
D-34	3	Gd-152 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	2.000E-03	3	2.000E-03	3	RTF(15,2)
D-34	3	Gd-152 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	2.000E-05	3	2.000E-05	3	RTF(15,3)
D-34	3		3		3		3	

D-34	³	H-3	, plant/soil concentration ratio, dimensionless	³	4.800E+00	³	4.800E+00	³	RTF(16,1)
D-34	³	H-3	, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	³	1.200E-02	³	1.200E-02	³	RTF(16,2)
D-34	³	H-3	, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	³	1.000E-02	³	1.000E-02	³	RTF(16,3)
D-34	³			³		³		³	
D-34	³	I-129	, plant/soil concentration ratio, dimensionless	³	2.000E-02	³	2.000E-02	³	RTF(17,1)
D-34	³	I-129	, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	³	7.000E-03	³	7.000E-03	³	RTF(17,2)
D-34	³	I-129	, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	³	1.000E-02	³	1.000E-02	³	RTF(17,3)
D-34	³			³		³		³	

Dose Conversion Factor (and Related) Parameter Summary (continued)

Dose Library: Age 0-5 interpolate Plus DCFPAK3.02 (Age 5)

0	3		3	Current	3	Base	3	Parameter
Menu	3	Parameter	3	Value#	3	Case*	3	Name
AAAAA	3	AAAAA	3	AAAAA	3	AAAAA	3	AAAAA
D-34	3	Mn-54 , plant/soil concentration ratio, dimensionless	3	3.000E-01	3	3.000E-01	3	RTF(18,1)
D-34	3	Mn-54 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	5.000E-04	3	5.000E-04	3	RTF(18,2)
D-34	3	Mn-54 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	3.000E-04	3	3.000E-04	3	RTF(18,3)
D-34	3		3		3		3	
D-34	3	Na-22 , plant/soil concentration ratio, dimensionless	3	5.000E-02	3	5.000E-02	3	RTF(19,1)
D-34	3	Na-22 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	8.000E-02	3	8.000E-02	3	RTF(19,2)
D-34	3	Na-22 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	4.000E-02	3	4.000E-02	3	RTF(19,3)
D-34	3		3		3		3	
D-34	3	Nd-144 , plant/soil concentration ratio, dimensionless	3	2.400E-03	3	2.400E-03	3	RTF(20,1)
D-34	3	Nd-144 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	2.000E-03	3	2.000E-03	3	RTF(20,2)
D-34	3	Nd-144 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	2.000E-05	3	2.000E-05	3	RTF(20,3)
D-34	3		3		3		3	
D-34	3	Ni-63 , plant/soil concentration ratio, dimensionless	3	5.000E-02	3	5.000E-02	3	RTF(21,1)
D-34	3	Ni-63 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	5.000E-03	3	5.000E-03	3	RTF(21,2)
D-34	3	Ni-63 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	2.000E-02	3	2.000E-02	3	RTF(21,3)
D-34	3		3		3		3	
D-34	3	Np-237+D , plant/soil concentration ratio, dimensionless	3	2.000E-02	3	2.000E-02	3	RTF(22,1)
D-34	3	Np-237+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	1.000E-03	3	1.000E-03	3	RTF(22,2)
D-34	3	Np-237+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	5.000E-06	3	5.000E-06	3	RTF(22,3)
D-34	3		3		3		3	
D-34	3	Pa-231 , plant/soil concentration ratio, dimensionless	3	1.000E-02	3	1.000E-02	3	RTF(23,1)
D-34	3	Pa-231 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	5.000E-03	3	5.000E-03	3	RTF(23,2)
D-34	3	Pa-231 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	5.000E-06	3	5.000E-06	3	RTF(23,3)
D-34	3		3		3		3	
D-34	3	Pb-210+D , plant/soil concentration ratio, dimensionless	3	1.000E-02	3	1.000E-02	3	RTF(29,1)
D-34	3	Pb-210+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	8.000E-04	3	8.000E-04	3	RTF(29,2)
D-34	3	Pb-210+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	3.000E-04	3	3.000E-04	3	RTF(29,3)
D-34	3		3		3		3	
D-34	3	Pb-210+D1 , plant/soil concentration ratio, dimensionless	3	1.000E-02	3	1.000E-02	3	RTF(30,1)
D-34	3	Pb-210+D1 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	8.000E-04	3	8.000E-04	3	RTF(30,2)
D-34	3	Pb-210+D1 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	3.000E-04	3	3.000E-04	3	RTF(30,3)
D-34	3		3		3		3	
D-34	3	Pb-210+D2 , plant/soil concentration ratio, dimensionless	3	1.000E-02	3	1.000E-02	3	RTF(31,1)
D-34	3	Pb-210+D2 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	8.000E-04	3	8.000E-04	3	RTF(31,2)
D-34	3	Pb-210+D2 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	3.000E-04	3	3.000E-04	3	RTF(31,3)
D-34	3		3		3		3	
D-34	3	Pu-238 , plant/soil concentration ratio, dimensionless	3	1.000E-03	3	1.000E-03	3	RTF(32,1)
D-34	3	Pu-238 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	1.000E-04	3	1.000E-04	3	RTF(32,2)
D-34	3	Pu-238 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	1.000E-06	3	1.000E-06	3	RTF(32,3)
D-34	3		3		3		3	

D-34	³	Pu-239	, plant/soil concentration ratio, dimensionless	³	1.000E-03	³	1.000E-03	³	RTF(48,1)
D-34	³	Pu-239	, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	³	1.000E-04	³	1.000E-04	³	RTF(48,2)
D-34	³	Pu-239	, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	³	1.000E-06	³	1.000E-06	³	RTF(48,3)
D-34	³			³		³		³	
D-34	³	Pu-239+D	, plant/soil concentration ratio, dimensionless	³	1.000E-03	³	1.000E-03	³	RTF(54,1)
D-34	³	Pu-239+D	, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	³	1.000E-04	³	1.000E-04	³	RTF(54,2)
D-34	³	Pu-239+D	, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	³	1.000E-06	³	1.000E-06	³	RTF(54,3)
D-34	³			³		³		³	

Dose Conversion Factor (and Related) Parameter Summary (continued)

Dose Library: Age 0-5 interpolate Plus DCFPAK3.02 (Age 5)

0	3		3	Current	3	Base	3	Parameter
Menu	3	Parameter	3	Value#	3	Case*	3	Name
AA								
D-34	3	Ra-226+D , plant/soil concentration ratio, dimensionless	3	4.000E-02	3	4.000E-02	3	RTF(60,1)
D-34	3	Ra-226+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	1.000E-03	3	1.000E-03	3	RTF(60,2)
D-34	3	Ra-226+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	1.000E-03	3	1.000E-03	3	RTF(60,3)
D-34	3		3		3		3	
D-34	3	Ra-226+D1 , plant/soil concentration ratio, dimensionless	3	4.000E-02	3	4.000E-02	3	RTF(63,1)
D-34	3	Ra-226+D1 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	1.000E-03	3	1.000E-03	3	RTF(63,2)
D-34	3	Ra-226+D1 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	1.000E-03	3	1.000E-03	3	RTF(63,3)
D-34	3		3		3		3	
D-34	3	Ra-226+D2 , plant/soil concentration ratio, dimensionless	3	4.000E-02	3	4.000E-02	3	RTF(66,1)
D-34	3	Ra-226+D2 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	1.000E-03	3	1.000E-03	3	RTF(66,2)
D-34	3	Ra-226+D2 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	1.000E-03	3	1.000E-03	3	RTF(66,3)
D-34	3		3		3		3	
D-34	3	Ra-226+D3 , plant/soil concentration ratio, dimensionless	3	4.000E-02	3	4.000E-02	3	RTF(69,1)
D-34	3	Ra-226+D3 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	1.000E-03	3	1.000E-03	3	RTF(69,2)
D-34	3	Ra-226+D3 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	1.000E-03	3	1.000E-03	3	RTF(69,3)
D-34	3		3		3		3	
D-34	3	Ra-226+D4 , plant/soil concentration ratio, dimensionless	3	4.000E-02	3	4.000E-02	3	RTF(72,1)
D-34	3	Ra-226+D4 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	1.000E-03	3	1.000E-03	3	RTF(72,2)
D-34	3	Ra-226+D4 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	1.000E-03	3	1.000E-03	3	RTF(72,3)
D-34	3		3		3		3	
D-34	3	Ra-228+D , plant/soil concentration ratio, dimensionless	3	4.000E-02	3	4.000E-02	3	RTF(75,1)
D-34	3	Ra-228+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	1.000E-03	3	1.000E-03	3	RTF(75,2)
D-34	3	Ra-228+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	1.000E-03	3	1.000E-03	3	RTF(75,3)
D-34	3		3		3		3	
D-34	3	Ru-106+D , plant/soil concentration ratio, dimensionless	3	3.000E-02	3	3.000E-02	3	RTF(76,1)
D-34	3	Ru-106+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	2.000E-03	3	2.000E-03	3	RTF(76,2)
D-34	3	Ru-106+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	3.300E-06	3	3.300E-06	3	RTF(76,3)
D-34	3		3		3		3	
D-34	3	Sm-148 , plant/soil concentration ratio, dimensionless	3	2.500E-03	3	2.500E-03	3	RTF(77,1)
D-34	3	Sm-148 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	2.000E-03	3	2.000E-03	3	RTF(77,2)
D-34	3	Sm-148 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	2.000E-05	3	2.000E-05	3	RTF(77,3)
D-34	3		3		3		3	
D-34	3	Sr-90+D , plant/soil concentration ratio, dimensionless	3	3.000E-01	3	3.000E-01	3	RTF(78,1)
D-34	3	Sr-90+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	8.000E-03	3	8.000E-03	3	RTF(78,2)
D-34	3	Sr-90+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	2.000E-03	3	2.000E-03	3	RTF(78,3)
D-34	3		3		3		3	
D-34	3	Tc-99 , plant/soil concentration ratio, dimensionless	3	5.000E+00	3	5.000E+00	3	RTF(79,1)
D-34	3	Tc-99 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	1.000E-04	3	1.000E-04	3	RTF(79,2)
D-34	3	Tc-99 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	1.000E-03	3	1.000E-03	3	RTF(79,3)
D-34	3		3		3		3	

D-34	³	Th-228+D	, plant/soil concentration ratio, dimensionless	³	1.000E-03	³	1.000E-03	³	RTF(80,1)
D-34	³	Th-228+D	, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	³	1.000E-04	³	1.000E-04	³	RTF(80,2)
D-34	³	Th-228+D	, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	³	5.000E-06	³	5.000E-06	³	RTF(80,3)
D-34	³			³		³		³	
D-34	³	Th-229+D	, plant/soil concentration ratio, dimensionless	³	1.000E-03	³	1.000E-03	³	RTF(81,1)
D-34	³	Th-229+D	, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	³	1.000E-04	³	1.000E-04	³	RTF(81,2)
D-34	³	Th-229+D	, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	³	5.000E-06	³	5.000E-06	³	RTF(81,3)
D-34	³			³		³		³	

Dose Conversion Factor (and Related) Parameter Summary (continued)

Dose Library: Age 0-5 interpolate Plus DCFPAK3.02 (Age 5)

0	3		3	Current	3	Base	3	Parameter
Menu	3	Parameter	3	Value#	3	Case*	3	Name
AA								
D-34	3	Th-230 , plant/soil concentration ratio, dimensionless	3	1.000E-03	3	1.000E-03	3	RTF(82,1)
D-34	3	Th-230 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	1.000E-04	3	1.000E-04	3	RTF(82,2)
D-34	3	Th-230 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	5.000E-06	3	5.000E-06	3	RTF(82,3)
D-34	3		3		3		3	
D-34	3	Th-232 , plant/soil concentration ratio, dimensionless	3	1.000E-03	3	1.000E-03	3	RTF(97,1)
D-34	3	Th-232 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	1.000E-04	3	1.000E-04	3	RTF(97,2)
D-34	3	Th-232 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	5.000E-06	3	5.000E-06	3	RTF(97,3)
D-34	3		3		3		3	
D-34	3	U-233 , plant/soil concentration ratio, dimensionless	3	2.500E-03	3	2.500E-03	3	RTF(98,1)
D-34	3	U-233 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	3.400E-04	3	3.400E-04	3	RTF(98,2)
D-34	3	U-233 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	6.000E-04	3	6.000E-04	3	RTF(98,3)
D-34	3		3		3		3	
D-34	3	U-234 , plant/soil concentration ratio, dimensionless	3	2.500E-03	3	2.500E-03	3	RTF(99,1)
D-34	3	U-234 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	3.400E-04	3	3.400E-04	3	RTF(99,2)
D-34	3	U-234 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	6.000E-04	3	6.000E-04	3	RTF(99,3)
D-34	3		3		3		3	
D-34	3	U-235+D , plant/soil concentration ratio, dimensionless	3	2.500E-03	3	2.500E-03	3	RTF(114,1)
D-34	3	U-235+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	3.400E-04	3	3.400E-04	3	RTF(114,2)
D-34	3	U-235+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	6.000E-04	3	6.000E-04	3	RTF(114,3)
D-34	3		3		3		3	
D-34	3	U-238 , plant/soil concentration ratio, dimensionless	3	2.500E-03	3	2.500E-03	3	RTF(120,1)
D-34	3	U-238 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	3.400E-04	3	3.400E-04	3	RTF(120,2)
D-34	3	U-238 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	6.000E-04	3	6.000E-04	3	RTF(120,3)
D-34	3		3		3		3	
D-34	3	U-238+D , plant/soil concentration ratio, dimensionless	3	2.500E-03	3	2.500E-03	3	RTF(121,1)
D-34	3	U-238+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	3.400E-04	3	3.400E-04	3	RTF(121,2)
D-34	3	U-238+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	6.000E-04	3	6.000E-04	3	RTF(121,3)
D-34	3		3		3		3	
D-34	3	U-238+D1 , plant/soil concentration ratio, dimensionless	3	2.500E-03	3	2.500E-03	3	RTF(136,1)
D-34	3	U-238+D1 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3	3.400E-04	3	3.400E-04	3	RTF(136,2)
D-34	3	U-238+D1 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3	6.000E-04	3	6.000E-04	3	RTF(136,3)
D-34	3		3		3		3	
D-5	3	Bioaccumulation factors, fresh water, L/kg:	3		3		3	
D-5	3	Ac-227+D , fish	3	1.500E+01	3	1.500E+01	3	BIOFAC(1,1)
D-5	3	Ac-227+D , crustacea and mollusks	3	1.000E+03	3	1.000E+03	3	BIOFAC(1,2)
D-5	3		3		3		3	
D-5	3	Ac-227+D1 , fish	3	1.500E+01	3	1.500E+01	3	BIOFAC(2,1)
D-5	3	Ac-227+D1 , crustacea and mollusks	3	1.000E+03	3	1.000E+03	3	BIOFAC(2,2)
D-5	3		3		3		3	

D-5 ³ Ac-227+D2 , fish
D-5 ³ Ac-227+D2 , crustacea and mollusks
D-5 ³
D-5 ³ Ac-227+D3 , fish
D-5 ³ Ac-227+D3 , crustacea and mollusks
D-5 ³
D-5 ³ Ac-227+D4 , fish
D-5 ³ Ac-227+D4 , crustacea and mollusks
D-5 ³

³ 1.500E+01 ³ 1.500E+01 ³ BIOFAC(3,1)
³ 1.000E+03 ³ 1.000E+03 ³ BIOFAC(3,2)
³ ³ ³
³ 1.500E+01 ³ 1.500E+01 ³ BIOFAC(4,1)
³ 1.000E+03 ³ 1.000E+03 ³ BIOFAC(4,2)
³ ³ ³
³ 1.500E+01 ³ 1.500E+01 ³ BIOFAC(5,1)
³ 1.000E+03 ³ 1.000E+03 ³ BIOFAC(5,2)
³ ³ ³

Summary : Child residential SALS 2015

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Dose Conversion Factor (and Related) Parameter Summary (continued)

Dose Library: Age 0-5 interpolate Plus DCFPAK3.02 (Age 5)

0	3		3	Current	3	Base	3	Parameter
Menu	3	Parameter	3	Value#	3	Case*	3	Name
AAAAA	3	AAAAA	3	AAAAA	3	AAAAA	3	AAAAA
D-5	3	Ac-227+D5 , fish	3	1.500E+01	3	1.500E+01	3	BIOFAC(6,1)
D-5	3	Ac-227+D5 , crustacea and mollusks	3	1.000E+03	3	1.000E+03	3	BIOFAC(6,2)
D-5	3		3		3		3	
D-5	3	Am-241 , fish	3	3.000E+01	3	3.000E+01	3	BIOFAC(7,1)
D-5	3	Am-241 , crustacea and mollusks	3	1.000E+03	3	1.000E+03	3	BIOFAC(7,2)
D-5	3		3		3		3	
D-5	3	Co-60 , fish	3	3.000E+02	3	3.000E+02	3	BIOFAC(8,1)
D-5	3	Co-60 , crustacea and mollusks	3	2.000E+02	3	2.000E+02	3	BIOFAC(8,2)
D-5	3		3		3		3	
D-5	3	Cs-134 , fish	3	2.000E+03	3	2.000E+03	3	BIOFAC(9,1)
D-5	3	Cs-134 , crustacea and mollusks	3	1.000E+02	3	1.000E+02	3	BIOFAC(9,2)
D-5	3		3		3		3	
D-5	3	Cs-137+D , fish	3	2.000E+03	3	2.000E+03	3	BIOFAC(10,1)
D-5	3	Cs-137+D , crustacea and mollusks	3	1.000E+02	3	1.000E+02	3	BIOFAC(10,2)
D-5	3		3		3		3	
D-5	3	Eu-152 , fish	3	5.000E+01	3	5.000E+01	3	BIOFAC(11,1)
D-5	3	Eu-152 , crustacea and mollusks	3	1.000E+03	3	1.000E+03	3	BIOFAC(11,2)
D-5	3		3		3		3	
D-5	3	Eu-154 , fish	3	5.000E+01	3	5.000E+01	3	BIOFAC(13,1)
D-5	3	Eu-154 , crustacea and mollusks	3	1.000E+03	3	1.000E+03	3	BIOFAC(13,2)
D-5	3		3		3		3	
D-5	3	Eu-155 , fish	3	5.000E+01	3	5.000E+01	3	BIOFAC(14,1)
D-5	3	Eu-155 , crustacea and mollusks	3	1.000E+03	3	1.000E+03	3	BIOFAC(14,2)
D-5	3		3		3		3	
D-5	3	Gd-152 , fish	3	2.500E+01	3	2.500E+01	3	BIOFAC(15,1)
D-5	3	Gd-152 , crustacea and mollusks	3	1.000E+03	3	1.000E+03	3	BIOFAC(15,2)
D-5	3		3		3		3	
D-5	3	H-3 , fish	3	1.000E+00	3	1.000E+00	3	BIOFAC(16,1)
D-5	3	H-3 , crustacea and mollusks	3	1.000E+00	3	1.000E+00	3	BIOFAC(16,2)
D-5	3		3		3		3	
D-5	3	I-129 , fish	3	4.000E+01	3	4.000E+01	3	BIOFAC(17,1)
D-5	3	I-129 , crustacea and mollusks	3	5.000E+00	3	5.000E+00	3	BIOFAC(17,2)
D-5	3		3		3		3	
D-5	3	Mn-54 , fish	3	4.000E+02	3	4.000E+02	3	BIOFAC(18,1)
D-5	3	Mn-54 , crustacea and mollusks	3	9.000E+04	3	9.000E+04	3	BIOFAC(18,2)
D-5	3		3		3		3	
D-5	3	Na-22 , fish	3	2.000E+01	3	2.000E+01	3	BIOFAC(19,1)
D-5	3	Na-22 , crustacea and mollusks	3	2.000E+02	3	2.000E+02	3	BIOFAC(19,2)
D-5	3		3		3		3	
D-5	3	Nd-144 , fish	3	1.000E+02	3	1.000E+02	3	BIOFAC(20,1)

D-5 ³ Nd-144 , crustacea and mollusks
 D-5 ³
 D-5 ³ Ni-63 , fish
 D-5 ³ Ni-63 , crustacea and mollusks
 D-5 ³
 D-5 ³ Np-237+D , fish
 D-5 ³ Np-237+D , crustacea and mollusks
 D-5 ³
 D-5 ³ Pa-231 , fish
 D-5 ³ Pa-231 , crustacea and mollusks

³ 1.000E+03 ³ 1.000E+03 ³ BIOFAC(20,2)
³
³ 1.000E+02 ³ 1.000E+02 ³ BIOFAC(21,1)
³ 1.000E+02 ³ 1.000E+02 ³ BIOFAC(21,2)
³
³ 3.000E+01 ³ 3.000E+01 ³ BIOFAC(22,1)
³ 4.000E+02 ³ 4.000E+02 ³ BIOFAC(22,2)
³
³ 1.000E+01 ³ 1.000E+01 ³ BIOFAC(23,1)
³ 1.100E+02 ³ 1.100E+02 ³ BIOFAC(23,2)

Dose Conversion Factor (and Related) Parameter Summary (continued)

Dose Library: Age 0-5 interpolate Plus DCFPAK3.02 (Age 5)

0	3		3	Current	3	Base	3	Parameter
Menu	3	Parameter	3	Value#	3	Case*	3	Name
AAAAA	3	AAAAA	3	AAAAA	3	AAAAA	3	AAAAA
D-5	3	Pb-210+D , fish	3	3.000E+02	3	3.000E+02	3	BIOFAC(29,1)
D-5	3	Pb-210+D , crustacea and mollusks	3	1.000E+02	3	1.000E+02	3	BIOFAC(29,2)
D-5	3		3		3		3	
D-5	3	Pb-210+D1 , fish	3	3.000E+02	3	3.000E+02	3	BIOFAC(30,1)
D-5	3	Pb-210+D1 , crustacea and mollusks	3	1.000E+02	3	1.000E+02	3	BIOFAC(30,2)
D-5	3		3		3		3	
D-5	3	Pb-210+D2 , fish	3	3.000E+02	3	3.000E+02	3	BIOFAC(31,1)
D-5	3	Pb-210+D2 , crustacea and mollusks	3	1.000E+02	3	1.000E+02	3	BIOFAC(31,2)
D-5	3		3		3		3	
D-5	3	Pu-238 , fish	3	3.000E+01	3	3.000E+01	3	BIOFAC(32,1)
D-5	3	Pu-238 , crustacea and mollusks	3	1.000E+02	3	1.000E+02	3	BIOFAC(32,2)
D-5	3		3		3		3	
D-5	3	Pu-239 , fish	3	3.000E+01	3	3.000E+01	3	BIOFAC(48,1)
D-5	3	Pu-239 , crustacea and mollusks	3	1.000E+02	3	1.000E+02	3	BIOFAC(48,2)
D-5	3		3		3		3	
D-5	3	Pu-239+D , fish	3	3.000E+01	3	3.000E+01	3	BIOFAC(54,1)
D-5	3	Pu-239+D , crustacea and mollusks	3	1.000E+02	3	1.000E+02	3	BIOFAC(54,2)
D-5	3		3		3		3	
D-5	3	Ra-226+D , fish	3	5.000E+01	3	5.000E+01	3	BIOFAC(60,1)
D-5	3	Ra-226+D , crustacea and mollusks	3	2.500E+02	3	2.500E+02	3	BIOFAC(60,2)
D-5	3		3		3		3	
D-5	3	Ra-226+D1 , fish	3	5.000E+01	3	5.000E+01	3	BIOFAC(63,1)
D-5	3	Ra-226+D1 , crustacea and mollusks	3	2.500E+02	3	2.500E+02	3	BIOFAC(63,2)
D-5	3		3		3		3	
D-5	3	Ra-226+D2 , fish	3	5.000E+01	3	5.000E+01	3	BIOFAC(66,1)
D-5	3	Ra-226+D2 , crustacea and mollusks	3	2.500E+02	3	2.500E+02	3	BIOFAC(66,2)
D-5	3		3		3		3	
D-5	3	Ra-226+D3 , fish	3	5.000E+01	3	5.000E+01	3	BIOFAC(69,1)
D-5	3	Ra-226+D3 , crustacea and mollusks	3	2.500E+02	3	2.500E+02	3	BIOFAC(69,2)
D-5	3		3		3		3	
D-5	3	Ra-226+D4 , fish	3	5.000E+01	3	5.000E+01	3	BIOFAC(72,1)
D-5	3	Ra-226+D4 , crustacea and mollusks	3	2.500E+02	3	2.500E+02	3	BIOFAC(72,2)
D-5	3		3		3		3	
D-5	3	Ra-228+D , fish	3	5.000E+01	3	5.000E+01	3	BIOFAC(75,1)
D-5	3	Ra-228+D , crustacea and mollusks	3	2.500E+02	3	2.500E+02	3	BIOFAC(75,2)
D-5	3		3		3		3	
D-5	3	Ru-106+D , fish	3	1.000E+01	3	1.000E+01	3	BIOFAC(76,1)
D-5	3	Ru-106+D , crustacea and mollusks	3	3.000E+02	3	3.000E+02	3	BIOFAC(76,2)
D-5	3		3		3		3	
D-5	3	Sm-148 , fish	3	2.500E+01	3	2.500E+01	3	BIOFAC(77,1)

D-5 ³ Sm-148 , crustacea and mollusks
 D-5 ³
 D-5 ³ Sr-90+D , fish
 D-5 ³ Sr-90+D , crustacea and mollusks
 D-5 ³
 D-5 ³ Tc-99 , fish
 D-5 ³ Tc-99 , crustacea and mollusks
 D-5 ³
 D-5 ³ Th-228+D , fish
 D-5 ³ Th-228+D , crustacea and mollusks

³ 1.000E+03 ³ 1.000E+03 ³ BIOFAC(77,2)
³
³ 6.000E+01 ³ 6.000E+01 ³ BIOFAC(78,1)
³ 1.000E+02 ³ 1.000E+02 ³ BIOFAC(78,2)
³
³ 2.000E+01 ³ 2.000E+01 ³ BIOFAC(79,1)
³ 5.000E+00 ³ 5.000E+00 ³ BIOFAC(79,2)
³
³ 1.000E+02 ³ 1.000E+02 ³ BIOFAC(80,1)
³ 5.000E+02 ³ 5.000E+02 ³ BIOFAC(80,2)

Dose Conversion Factor (and Related) Parameter Summary (continued)

Dose Library: Age 0-5 interpolate Plus DCFPAK3.02 (Age 5)

0	3		3	Current	3	Base	3	Parameter
Menu	3	Parameter	3	Value#	3	Case*	3	Name
AAAAA	3	AAAAA	3	AAAAA	3	AAAAA	3	AAAAA
D-5	3	Th-229+D , fish	3	1.000E+02	3	1.000E+02	3	BIOFAC(81,1)
D-5	3	Th-229+D , crustacea and mollusks	3	5.000E+02	3	5.000E+02	3	BIOFAC(81,2)
D-5	3		3		3		3	
D-5	3	Th-230 , fish	3	1.000E+02	3	1.000E+02	3	BIOFAC(82,1)
D-5	3	Th-230 , crustacea and mollusks	3	5.000E+02	3	5.000E+02	3	BIOFAC(82,2)
D-5	3		3		3		3	
D-5	3	Th-232 , fish	3	1.000E+02	3	1.000E+02	3	BIOFAC(97,1)
D-5	3	Th-232 , crustacea and mollusks	3	5.000E+02	3	5.000E+02	3	BIOFAC(97,2)
D-5	3		3		3		3	
D-5	3	U-233 , fish	3	1.000E+01	3	1.000E+01	3	BIOFAC(98,1)
D-5	3	U-233 , crustacea and mollusks	3	6.000E+01	3	6.000E+01	3	BIOFAC(98,2)
D-5	3		3		3		3	
D-5	3	U-234 , fish	3	1.000E+01	3	1.000E+01	3	BIOFAC(99,1)
D-5	3	U-234 , crustacea and mollusks	3	6.000E+01	3	6.000E+01	3	BIOFAC(99,2)
D-5	3		3		3		3	
D-5	3	U-235+D , fish	3	1.000E+01	3	1.000E+01	3	BIOFAC(114,1)
D-5	3	U-235+D , crustacea and mollusks	3	6.000E+01	3	6.000E+01	3	BIOFAC(114,2)
D-5	3		3		3		3	
D-5	3	U-238 , fish	3	1.000E+01	3	1.000E+01	3	BIOFAC(120,1)
D-5	3	U-238 , crustacea and mollusks	3	6.000E+01	3	6.000E+01	3	BIOFAC(120,2)
D-5	3		3		3		3	
D-5	3	U-238+D , fish	3	1.000E+01	3	1.000E+01	3	BIOFAC(121,1)
D-5	3	U-238+D , crustacea and mollusks	3	6.000E+01	3	6.000E+01	3	BIOFAC(121,2)
D-5	3		3		3		3	
D-5	3	U-238+D1 , fish	3	1.000E+01	3	1.000E+01	3	BIOFAC(136,1)
D-5	3	U-238+D1 , crustacea and mollusks	3	6.000E+01	3	6.000E+01	3	BIOFAC(136,2)
D-5	3		3		3		3	

 #For DCF1(XXX) only, factors are for infinite depth & area. See ETFG table in Ground Pathway of Detailed Report.
 *Base Case means Default.Lib w/o Associate Nuclide contributions.

Site-Specific Parameter Summary

0	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3</
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R012	³	Concentration in groundwater	(pCi/L):	Co-60	³	not used	³	0.000E+00	³	---	³	W1(8)
R012	³	Concentration in groundwater	(pCi/L):	Cs-134	³	not used	³	0.000E+00	³	---	³	W1(9)
R012	³	Concentration in groundwater	(pCi/L):	Cs-137	³	not used	³	0.000E+00	³	---	³	W1(10)
R012	³	Concentration in groundwater	(pCi/L):	Eu-152	³	not used	³	0.000E+00	³	---	³	W1(11)
R012	³	Concentration in groundwater	(pCi/L):	Eu-154	³	not used	³	0.000E+00	³	---	³	W1(13)
R012	³	Concentration in groundwater	(pCi/L):	Eu-155	³	not used	³	0.000E+00	³	---	³	W1(14)
R012	³	Concentration in groundwater	(pCi/L):	H-3	³	not used	³	0.000E+00	³	---	³	W1(16)
R012	³	Concentration in groundwater	(pCi/L):	I-129	³	not used	³	0.000E+00	³	---	³	W1(17)
R012	³	Concentration in groundwater	(pCi/L):	Mn-54	³	not used	³	0.000E+00	³	---	³	W1(18)

Site-Specific Parameter Summary (continued)

0	3	3	3	3	3	3	3
Menu	Parameter	User	Default	Used by RESRAD	Parameter		
		Input	(If different from user input)		Name		
AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
R012	Concentration in groundwater (pCi/L): Na-22	not used	0.000E+00	---	W1(19)		
R012	Concentration in groundwater (pCi/L): Ni-63	not used	0.000E+00	---	W1(21)		
R012	Concentration in groundwater (pCi/L): Np-237	not used	0.000E+00	---	W1(22)		
R012	Concentration in groundwater (pCi/L): Pu-238	not used	0.000E+00	---	W1(32)		
R012	Concentration in groundwater (pCi/L): Pu-239	not used	0.000E+00	---	W1(48)		
R012	Concentration in groundwater (pCi/L): Ru-106	not used	0.000E+00	---	W1(76)		
R012	Concentration in groundwater (pCi/L): Sr-90	not used	0.000E+00	---	W1(78)		
R012	Concentration in groundwater (pCi/L): Tc-99	not used	0.000E+00	---	W1(79)		
R012	Concentration in groundwater (pCi/L): Th-228	not used	0.000E+00	---	W1(80)		
R012	Concentration in groundwater (pCi/L): Th-230	not used	0.000E+00	---	W1(82)		
R012	Concentration in groundwater (pCi/L): Th-232	not used	0.000E+00	---	W1(97)		
R012	Concentration in groundwater (pCi/L): U-234	not used	0.000E+00	---	W1(99)		
R012	Concentration in groundwater (pCi/L): U-235	not used	0.000E+00	---	W1(**)		
R012	Concentration in groundwater (pCi/L): U-238	not used	0.000E+00	---	W1(**)		
R013	Cover depth (m)	0.000E+00	0.000E+00	---	COVER0		
R013	Density of cover material (g/cm**3)	not used	1.500E+00	---	DENSCV		
R013	Cover depth erosion rate (m/yr)	not used	1.000E-03	---	VCV		
R013	Density of contaminated zone (g/cm**3)	1.500E+00	1.500E+00	---	DENSCZ		
R013	Contaminated zone erosion rate (m/yr)	0.000E+00	1.000E-03	---	VCZ		
R013	Contaminated zone total porosity	4.800E-01	4.000E-01	---	TPCZ		
R013	Contaminated zone field capacity	2.000E-01	2.000E-01	---	FCCZ		
R013	Contaminated zone hydraulic conductivity (m/yr)	1.000E+01	1.000E+01	---	HCCZ		
R013	Contaminated zone b parameter	5.300E+00	5.300E+00	---	BCZ		
R013	Average annual wind speed (m/sec)	3.000E+00	2.000E+00	---	WIND		
R013	Humidity in air (g/m**3)	5.550E+00	8.000E+00	---	HUMID		
R013	Evapotranspiration coefficient	9.990E-01	5.000E-01	---	EVAPTR		
R013	Precipitation (m/yr)	2.900E-01	1.000E+00	---	PRECIP		
R013	Irrigation (m/yr)	0.000E+00	2.000E-01	---	RI		
R013	Irrigation mode	overhead	overhead	---	IDITCH		
R013	Runoff coefficient	9.000E-01	2.000E-01	---	RUNOFF		
R013	Watershed area for nearby stream or pond (m**2)	1.000E+06	1.000E+06	---	WAREA		
R013	Accuracy for water/soil computations	1.000E-03	1.000E-03	---	EPS		
R014	Density of saturated zone (g/cm**3)	1.500E+00	1.500E+00	---	DENSAQ		
R014	Saturated zone total porosity	4.000E-01	4.000E-01	---	TPSZ		
R014	Saturated zone effective porosity	2.000E-01	2.000E-01	---	EPSZ		
R014	Saturated zone field capacity	2.000E-01	2.000E-01	---	FCSZ		
R014	Saturated zone hydraulic conductivity (m/yr)	1.000E+02	1.000E+02	---	HCSZ		
R014	Saturated zone hydraulic gradient	2.000E-02	2.000E-02	---	HGWT		
R014	Saturated zone b parameter	5.300E+00	5.300E+00	---	BSZ		

R014	³	Water table drop rate (m/yr)	³	1.000E-03	³	1.000E-03	³	---	³	VWT
R014	³	Well pump intake depth (m below water table)	³	1.000E+01	³	1.000E+01	³	---	³	DWIBWT
R014	³	Model: Nondispersion (ND) or Mass-Balance (MB)	³	ND	³	ND	³	---	³	MODEL
R014	³	Well pumping rate (m ³ /yr)	³	2.500E+02	³	2.500E+02	³	---	³	UW
	³		³		³		³		³	
R015	³	Number of unsaturated zone strata	³	1	³	1	³	---	³	NS

Site-Specific Parameter Summary (continued)

0	3	3	3	3	3	3	3
Menu	Parameter	User	Default	Used by RESRAD	Parameter		
		Input	(If different from user input)		Name		
AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
R015	Unsat. zone 1, thickness (m)	3.000E+02	4.000E+00	---	H(1)		
R015	Unsat. zone 1, soil density (g/cm**3)	1.500E+00	1.500E+00	---	DENSUZ(1)		
R015	Unsat. zone 1, total porosity	4.800E-01	4.000E-01	---	TPUZ(1)		
R015	Unsat. zone 1, effective porosity	4.000E-01	2.000E-01	---	EPUZ(1)		
R015	Unsat. zone 1, field capacity	2.000E-01	2.000E-01	---	FCUZ(1)		
R015	Unsat. zone 1, soil-specific b parameter	5.300E+00	5.300E+00	---	BUZ(1)		
R015	Unsat. zone 1, hydraulic conductivity (m/yr)	1.000E+01	1.000E+01	---	HCUZ(1)		
R016	Distribution coefficients for Am-241						
R016	Contaminated zone (cm**3/g)	2.000E+01	2.000E+01	---	DCNUCC(7)		
R016	Unsaturated zone 1 (cm**3/g)	2.000E+01	2.000E+01	---	DCNUCU(7,1)		
R016	Saturated zone (cm**3/g)	2.000E+01	2.000E+01	---	DCNUCS(7)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	4.801E-07	ALEACH(7)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(7)		
R016	Distribution coefficients for Co-60						
R016	Contaminated zone (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCC(8)		
R016	Unsaturated zone 1 (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCU(8,1)		
R016	Saturated zone (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCS(8)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	9.665E-09	ALEACH(8)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(8)		
R016	Distribution coefficients for Cs-134						
R016	Contaminated zone (cm**3/g)	4.600E+03	4.600E+03	---	DCNUCC(9)		
R016	Unsaturated zone 1 (cm**3/g)	4.600E+03	4.600E+03	---	DCNUCU(9,1)		
R016	Saturated zone (cm**3/g)	4.600E+03	4.600E+03	---	DCNUCS(9)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	2.101E-09	ALEACH(9)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(9)		
R016	Distribution coefficients for Cs-137						
R016	Contaminated zone (cm**3/g)	4.600E+03	4.600E+03	---	DCNUCC(10)		
R016	Unsaturated zone 1 (cm**3/g)	4.600E+03	4.600E+03	---	DCNUCU(10,1)		
R016	Saturated zone (cm**3/g)	4.600E+03	4.600E+03	---	DCNUCS(10)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	2.101E-09	ALEACH(10)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(10)		
R016	Distribution coefficients for Eu-152						
R016	Contaminated zone (cm**3/g)	-1.000E+00	-1.000E+00	8.249E+02	DCNUCC(11)		
R016	Unsaturated zone 1 (cm**3/g)	-1.000E+00	-1.000E+00	8.249E+02	DCNUCU(11,1)		
R016	Saturated zone (cm**3/g)	-1.000E+00	-1.000E+00	8.249E+02	DCNUCS(11)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.172E-08	ALEACH(11)		

R016	³	Solubility constant	³	0.000E+00	³	0.000E+00	³	not used	³	SOLUBK(11)
	³		³		³		³		³	
R016	³	Distribution coefficients for Eu-154	³		³		³		³	
R016	³	Contaminated zone (cm**3/g)	³	-1.000E+00	³	-1.000E+00	³	8.249E+02	³	DCNUCC(13)
R016	³	Unsaturated zone 1 (cm**3/g)	³	-1.000E+00	³	-1.000E+00	³	8.249E+02	³	DCNUCU(13,1)
R016	³	Saturated zone (cm**3/g)	³	-1.000E+00	³	-1.000E+00	³	8.249E+02	³	DCNUCS(13)
R016	³	Leach rate (/yr)	³	0.000E+00	³	0.000E+00	³	1.172E-08	³	ALEACH(13)
R016	³	Solubility constant	³	0.000E+00	³	0.000E+00	³	not used	³	SOLUBK(13)

Site-Specific Parameter Summary (continued)

0	3	3	3	3	3	3	3
Menu	Parameter	User	Default	Used by RESRAD	(If different from user input)	Parameter	Name
	AAAAA						AAAAA
R016	Distribution coefficients for Eu-155						
R016	Contaminated zone (cm**3/g)	3-1.000E+00	3-1.000E+00	8.249E+02		3	DCNUCC(14)
R016	Unsaturated zone 1 (cm**3/g)	3-1.000E+00	3-1.000E+00	8.249E+02		3	DCNUCU(14,1)
R016	Saturated zone (cm**3/g)	3-1.000E+00	3-1.000E+00	8.249E+02		3	DCNUCS(14)
R016	Leach rate (/yr)	3 0.000E+00	3 0.000E+00	1.172E-08		3	ALEACH(14)
R016	Solubility constant	3 0.000E+00	3 0.000E+00	not used		3	SOLUBK(14)
R016	Distribution coefficients for H-3						
R016	Contaminated zone (cm**3/g)	3 0.000E+00	3 0.000E+00	---		3	DCNUCC(16)
R016	Unsaturated zone 1 (cm**3/g)	3 0.000E+00	3 0.000E+00	---		3	DCNUCU(16,1)
R016	Saturated zone (cm**3/g)	3 0.000E+00	3 0.000E+00	---		3	DCNUCS(16)
R016	Leach rate (/yr)	3 0.000E+00	3 0.000E+00	7.250E-05		3	ALEACH(16)
R016	Solubility constant	3 0.000E+00	3 0.000E+00	not used		3	SOLUBK(16)
R016	Distribution coefficients for I-129						
R016	Contaminated zone (cm**3/g)	3 1.000E-01	3 1.000E-01	---		3	DCNUCC(17)
R016	Unsaturated zone 1 (cm**3/g)	3 1.000E-01	3 1.000E-01	---		3	DCNUCU(17,1)
R016	Saturated zone (cm**3/g)	3 1.000E-01	3 1.000E-01	---		3	DCNUCS(17)
R016	Leach rate (/yr)	3 0.000E+00	3 0.000E+00	4.143E-05		3	ALEACH(17)
R016	Solubility constant	3 0.000E+00	3 0.000E+00	not used		3	SOLUBK(17)
R016	Distribution coefficients for Mn-54						
R016	Contaminated zone (cm**3/g)	3 2.000E+02	3 2.000E+02	---		3	DCNUCC(18)
R016	Unsaturated zone 1 (cm**3/g)	3 2.000E+02	3 2.000E+02	---		3	DCNUCU(18,1)
R016	Saturated zone (cm**3/g)	3 2.000E+02	3 2.000E+02	---		3	DCNUCS(18)
R016	Leach rate (/yr)	3 0.000E+00	3 0.000E+00	4.830E-08		3	ALEACH(18)
R016	Solubility constant	3 0.000E+00	3 0.000E+00	not used		3	SOLUBK(18)
R016	Distribution coefficients for Na-22						
R016	Contaminated zone (cm**3/g)	3 1.000E+01	3 1.000E+01	---		3	DCNUCC(19)
R016	Unsaturated zone 1 (cm**3/g)	3 1.000E+01	3 1.000E+01	---		3	DCNUCU(19,1)
R016	Saturated zone (cm**3/g)	3 1.000E+01	3 1.000E+01	---		3	DCNUCS(19)
R016	Leach rate (/yr)	3 0.000E+00	3 0.000E+00	9.539E-07		3	ALEACH(19)
R016	Solubility constant	3 0.000E+00	3 0.000E+00	not used		3	SOLUBK(19)
R016	Distribution coefficients for Ni-63						
R016	Contaminated zone (cm**3/g)	3 1.000E+03	3 1.000E+03	---		3	DCNUCC(21)
R016	Unsaturated zone 1 (cm**3/g)	3 1.000E+03	3 1.000E+03	---		3	DCNUCU(21,1)
R016	Saturated zone (cm**3/g)	3 1.000E+03	3 1.000E+03	---		3	DCNUCS(21)
R016	Leach rate (/yr)	3 0.000E+00	3 0.000E+00	9.665E-09		3	ALEACH(21)
R016	Solubility constant	3 0.000E+00	3 0.000E+00	not used		3	SOLUBK(21)

	³		³	³		³
R016	³	Distribution coefficients for Np-237	³	³		³
R016	³	Contaminated zone (cm**3/g)	³	-1.000E+00	³	-1.000E+00
R016	³	Unsaturated zone 1 (cm**3/g)	³	-1.000E+00	³	-1.000E+00
R016	³	Saturated zone (cm**3/g)	³	-1.000E+00	³	-1.000E+00
R016	³	Leach rate (/yr)	³	0.000E+00	³	0.000E+00
R016	³	Solubility constant	³	0.000E+00	³	0.000E+00
					2.574E+02	³ DCNUCC(22)
					2.574E+02	³ DCNUCU(22,1)
					2.574E+02	³ DCNUCS(22)
					3.753E-08	³ ALEACH(22)
					not used	³ SOLUBK(22)

Site-Specific Parameter Summary (continued)

0	3	3	3	3	3	3	3
Menu	Parameter	User	Default	Used by RESRAD	Parameter		
	Input		(If different from user input)		Name		
AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
R016	Distribution coefficients for Pu-238						
R016	Contaminated zone (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCC(32)		
R016	Unsaturated zone 1 (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCU(32,1)		
R016	Saturated zone (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCS(32)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	4.833E-09	ALEACH(32)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(32)		
R016	Distribution coefficients for Pu-239						
R016	Contaminated zone (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCC(48)		
R016	Unsaturated zone 1 (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCU(48,1)		
R016	Saturated zone (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCS(48)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	4.833E-09	ALEACH(48)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(48)		
R016	Distribution coefficients for Ru-106						
R016	Contaminated zone (cm**3/g)	6.000E+04	0.000E+00	---	DCNUCC(76)		
R016	Unsaturated zone 1 (cm**3/g)	6.000E+04	0.000E+00	---	DCNUCU(76,1)		
R016	Saturated zone (cm**3/g)	6.000E+04	0.000E+00	---	DCNUCS(76)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.611E-10	ALEACH(76)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(76)		
R016	Distribution coefficients for Sr-90						
R016	Contaminated zone (cm**3/g)	3.000E+01	3.000E+01	---	DCNUCC(78)		
R016	Unsaturated zone 1 (cm**3/g)	3.000E+01	3.000E+01	---	DCNUCU(78,1)		
R016	Saturated zone (cm**3/g)	3.000E+01	3.000E+01	---	DCNUCS(78)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	3.208E-07	ALEACH(78)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(78)		
R016	Distribution coefficients for Tc-99						
R016	Contaminated zone (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCC(79)		
R016	Unsaturated zone 1 (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCU(79,1)		
R016	Saturated zone (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCS(79)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	7.250E-05	ALEACH(79)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(79)		
R016	Distribution coefficients for Th-228						
R016	Contaminated zone (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCC(80)		
R016	Unsaturated zone 1 (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCU(80,1)		
R016	Saturated zone (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCS(80)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.611E-10	ALEACH(80)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(80)		

Site-Specific Parameter Summary (continued)

0	3	3	3	3	3	3	3
Menu	Parameter	User	Default	Used by RESRAD	Parameter		
	Input		(If different from user input)		Name		
AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
R016	Distribution coefficients for Th-232						
R016	Contaminated zone (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCC(97)		
R016	Unsaturated zone 1 (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCU(97,1)		
R016	Saturated zone (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCS(97)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.611E-10	ALEACH(97)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(97)		
R016	Distribution coefficients for U-234						
R016	Contaminated zone (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCC(99)		
R016	Unsaturated zone 1 (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCU(99,1)		
R016	Saturated zone (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCS(99)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.928E-07	ALEACH(99)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(99)		
R016	Distribution coefficients for U-235						
R016	Contaminated zone (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCC(**)		
R016	Unsaturated zone 1 (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCU(**,1)		
R016	Saturated zone (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCS(**)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.928E-07	ALEACH(**)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(**)		
R016	Distribution coefficients for U-238						
R016	Contaminated zone (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCC(**)		
R016	Unsaturated zone 1 (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCU(**,1)		
R016	Saturated zone (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCS(**)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.928E-07	ALEACH(**)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(**)		
R016	Distribution coefficients for daughter Ac-227						
R016	Contaminated zone (cm**3/g)	2.000E+01	2.000E+01	---	DCNUCC(1)		
R016	Unsaturated zone 1 (cm**3/g)	2.000E+01	2.000E+01	---	DCNUCU(1,1)		
R016	Saturated zone (cm**3/g)	2.000E+01	2.000E+01	---	DCNUCS(1)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	4.801E-07	ALEACH(1)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(1)		
R016	Distribution coefficients for daughter Gd-152						
R016	Contaminated zone (cm**3/g)	-1.000E+00	-1.000E+00	8.249E+02	DCNUCC(15)		
R016	Unsaturated zone 1 (cm**3/g)	-1.000E+00	-1.000E+00	8.249E+02	DCNUCU(15,1)		
R016	Saturated zone (cm**3/g)	-1.000E+00	-1.000E+00	8.249E+02	DCNUCS(15)		
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.172E-08	ALEACH(15)		
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(15)		

	³		³	³		³
R016	³	Distribution coefficients for daughter Nd-144	³	³		³
R016	³	Contaminated zone (cm**3/g)	³	1.580E+02	³	1.580E+02 ³ --- ³ DCNUCC(20)
R016	³	Unsaturated zone 1 (cm**3/g)	³	1.580E+02	³	1.580E+02 ³ --- ³ DCNUCU(20,1)
R016	³	Saturated zone (cm**3/g)	³	1.580E+02	³	1.580E+02 ³ --- ³ DCNUCS(20)
R016	³	Leach rate (/yr)	³	0.000E+00	³	0.000E+00 ³ 6.113E-08 ³ ALEACH(20)
R016	³	Solubility constant	³	0.000E+00	³	0.000E+00 ³ not used ³ SOLUBK(20)

Summary : Child residential SALs 2015

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD	Parameter Name
Distribution coefficients for daughter Pa-231					
R016	Contaminated zone (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCC(23)
R016	Unsaturated zone 1 (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCU(23,1)
R016	Saturated zone (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCS(23)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.928E-07	ALEACH(23)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(23)
Distribution coefficients for daughter Pb-210					
R016	Contaminated zone (cm**3/g)	1.000E+02	1.000E+02	---	DCNUCC(29)
R016	Unsaturated zone 1 (cm**3/g)	1.000E+02	1.000E+02	---	DCNUCU(29,1)
R016	Saturated zone (cm**3/g)	1.000E+02	1.000E+02	---	DCNUCS(29)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	9.654E-08	ALEACH(29)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(29)
Distribution coefficients for daughter Ra-226					
R016	Contaminated zone (cm**3/g)	7.000E+01	7.000E+01	---	DCNUCC(60)
R016	Unsaturated zone 1 (cm**3/g)	7.000E+01	7.000E+01	---	DCNUCU(60,1)
R016	Saturated zone (cm**3/g)	7.000E+01	7.000E+01	---	DCNUCS(60)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.378E-07	ALEACH(60)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(60)
Distribution coefficients for daughter Ra-228					
R016	Contaminated zone (cm**3/g)	7.000E+01	7.000E+01	---	DCNUCC(75)
R016	Unsaturated zone 1 (cm**3/g)	7.000E+01	7.000E+01	---	DCNUCU(75,1)
R016	Saturated zone (cm**3/g)	7.000E+01	7.000E+01	---	DCNUCS(75)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.378E-07	ALEACH(75)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(75)
Distribution coefficients for daughter Sm-148					
R016	Contaminated zone (cm**3/g)	-1.000E+00	-1.000E+00	8.249E+02	DCNUCC(77)
R016	Unsaturated zone 1 (cm**3/g)	-1.000E+00	-1.000E+00	8.249E+02	DCNUCU(77,1)
R016	Saturated zone (cm**3/g)	-1.000E+00	-1.000E+00	8.249E+02	DCNUCS(77)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.172E-08	ALEACH(77)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(77)
Distribution coefficients for daughter Th-229					
R016	Contaminated zone (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCC(81)
R016	Unsaturated zone 1 (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCU(81,1)
R016	Saturated zone (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCS(81)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.611E-10	ALEACH(81)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(81)

	³		³	³		³
R016	³	Distribution coefficients for daughter U-233	³	³		³
R016	³	Contaminated zone (cm**3/g)	³	5.000E+01	³	5.000E+01 ³ --- ³ DCNUCC(98)
R016	³	Unsaturated zone 1 (cm**3/g)	³	5.000E+01	³	5.000E+01 ³ --- ³ DCNUCU(98,1)
R016	³	Saturated zone (cm**3/g)	³	5.000E+01	³	5.000E+01 ³ --- ³ DCNUCS(98)
R016	³	Leach rate (/yr)	³	0.000E+00	³	0.000E+00 ³ 1.928E-07 ³ ALEACH(98)
R016	³	Solubility constant	³	0.000E+00	³	0.000E+00 ³ not used ³ SOLUBK(98)
	³		³	³		³
R017	³	Inhalation rate (m**3/yr)	³	4.712E+03	³	8.400E+03 ³ --- ³ INHALR

Site-Specific Parameter Summary (continued)

0	3	3	3	3	3	3	3
Menu	Parameter	User	Default	Used by RESRAD	Parameter		
	Input	Default	(If different from user input)	Name			
AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
R017	Mass loading for inhalation (g/m**3)	1.510E-07	1.000E-04	---	MLINH		
R017	Exposure duration	6.000E+00	3.000E+01	---	ED		
R017	Shielding factor, inhalation	1.000E+00	4.000E-01	---	SHF3		
R017	Shielding factor, external gamma	7.000E-01	7.000E-01	---	SHF1		
R017	Fraction of time spent indoors	8.656E-01	5.000E-01	---	FIND		
R017	Fraction of time spent outdoors (on site)	9.260E-02	2.500E-01	---	FOTD		
R017	Shape factor flag, external gamma	1.000E+00	1.000E+00	>0 shows circular AREA.	FS		
R017	Radii of shape factor array (used if FS = -1):						
R017	Outer annular radius (m), ring 1:	not used	5.000E+01	---	RAD_SHAPE(1)		
R017	Outer annular radius (m), ring 2:	not used	7.071E+01	---	RAD_SHAPE(2)		
R017	Outer annular radius (m), ring 3:	not used	0.000E+00	---	RAD_SHAPE(3)		
R017	Outer annular radius (m), ring 4:	not used	0.000E+00	---	RAD_SHAPE(4)		
R017	Outer annular radius (m), ring 5:	not used	0.000E+00	---	RAD_SHAPE(5)		
R017	Outer annular radius (m), ring 6:	not used	0.000E+00	---	RAD_SHAPE(6)		
R017	Outer annular radius (m), ring 7:	not used	0.000E+00	---	RAD_SHAPE(7)		
R017	Outer annular radius (m), ring 8:	not used	0.000E+00	---	RAD_SHAPE(8)		
R017	Outer annular radius (m), ring 9:	not used	0.000E+00	---	RAD_SHAPE(9)		
R017	Outer annular radius (m), ring 10:	not used	0.000E+00	---	RAD_SHAPE(10)		
R017	Outer annular radius (m), ring 11:	not used	0.000E+00	---	RAD_SHAPE(11)		
R017	Outer annular radius (m), ring 12:	not used	0.000E+00	---	RAD_SHAPE(12)		
R017	Fractions of annular areas within AREA:						
R017	Ring 1	not used	1.000E+00	---	FRACA(1)		
R017	Ring 2	not used	2.732E-01	---	FRACA(2)		
R017	Ring 3	not used	0.000E+00	---	FRACA(3)		
R017	Ring 4	not used	0.000E+00	---	FRACA(4)		
R017	Ring 5	not used	0.000E+00	---	FRACA(5)		
R017	Ring 6	not used	0.000E+00	---	FRACA(6)		
R017	Ring 7	not used	0.000E+00	---	FRACA(7)		
R017	Ring 8	not used	0.000E+00	---	FRACA(8)		
R017	Ring 9	not used	0.000E+00	---	FRACA(9)		
R017	Ring 10	not used	0.000E+00	---	FRACA(10)		
R017	Ring 11	not used	0.000E+00	---	FRACA(11)		
R017	Ring 12	not used	0.000E+00	---	FRACA(12)		
R018	Fruits, vegetables and grain consumption (kg/yr)	1.400E+01	1.600E+02	---	DIET(1)		
R018	Leafy vegetable consumption (kg/yr)	0.000E+00	1.400E+01	---	DIET(2)		
R018	Milk consumption (L/yr)	not used	9.200E+01	---	DIET(3)		
R018	Meat and poultry consumption (kg/yr)	not used	6.300E+01	---	DIET(4)		
R018	Fish consumption (kg/yr)	not used	5.400E+00	---	DIET(5)		
R018	Other seafood consumption (kg/yr)	not used	9.000E-01	---	DIET(6)		

R018	³	Soil ingestion rate (g/yr)	³	7.300E+01	³	3.650E+01	³	---	³	SOIL
R018	³	Drinking water intake (L/yr)	³	not used	³	5.100E+02	³	---	³	DWI
R018	³	Contamination fraction of drinking water	³	not used	³	1.000E+00	³	---	³	FDW
R018	³	Contamination fraction of household water	³	not used	³	1.000E+00	³	---	³	FHHW
R018	³	Contamination fraction of livestock water	³	not used	³	1.000E+00	³	---	³	FLW
R018	³	Contamination fraction of irrigation water	³	0.000E+00	³	1.000E+00	³	---	³	FIRW
R018	³	Contamination fraction of aquatic food	³	not used	³	5.000E-01	³	---	³	FR9
R018	³	Contamination fraction of plant food	³	1.000E+00	³	-1	³	---	³	FPLANT
R018	³	Contamination fraction of meat	³	not used	³	-1	³	---	³	FMEAT

Site-Specific Parameter Summary (continued)

0	3	3	3	3	3	3
Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name	
AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
R018	Contamination fraction of milk	not used	3-1	---	FMILK	
R019	Livestock fodder intake for meat (kg/day)	not used	3 6.800E+01	---	LFI5	
R019	Livestock fodder intake for milk (kg/day)	not used	3 5.500E+01	---	LFI6	
R019	Livestock water intake for meat (L/day)	not used	3 5.000E+01	---	LWI5	
R019	Livestock water intake for milk (L/day)	not used	3 1.600E+02	---	LWI6	
R019	Livestock soil intake (kg/day)	not used	3 5.000E-01	---	LSI	
R019	Mass loading for foliar deposition (g/m**3)	3 1.000E-04	3 1.000E-04	---	MLFD	
R019	Depth of soil mixing layer (m)	3 1.500E-01	3 1.500E-01	---	DM	
R019	Depth of roots (m)	3 9.000E-01	3 9.000E-01	---	DR00T	
R019	Drinking water fraction from ground water	not used	3 1.000E+00	---	FGWDW	
R019	Household water fraction from ground water	not used	3 1.000E+00	---	FGWHH	
R019	Livestock water fraction from ground water	not used	3 1.000E+00	---	FGWLW	
R019	Irrigation fraction from ground water	3 1.000E+00	3 1.000E+00	---	FGWIR	
R19B	Wet weight crop yield for Non-Leafy (kg/m**2)	3 7.000E-01	3 7.000E-01	---	YV(1)	
R19B	Wet weight crop yield for Leafy (kg/m**2)	3 1.500E+00	3 1.500E+00	---	YV(2)	
R19B	Wet weight crop yield for Fodder (kg/m**2)	not used	3 1.100E+00	---	YV(3)	
R19B	Growing Season for Non-Leafy (years)	3 1.700E-01	3 1.700E-01	---	TE(1)	
R19B	Growing Season for Leafy (years)	3 2.500E-01	3 2.500E-01	---	TE(2)	
R19B	Growing Season for Fodder (years)	not used	3 8.000E-02	---	TE(3)	
R19B	Translocation Factor for Non-Leafy	3 1.000E-01	3 1.000E-01	---	TIV(1)	
R19B	Translocation Factor for Leafy	3 1.000E+00	3 1.000E+00	---	TIV(2)	
R19B	Translocation Factor for Fodder	not used	3 1.000E+00	---	TIV(3)	
R19B	Dry Foliar Interception Fraction for Non-Leafy	3 2.500E-01	3 2.500E-01	---	RDRY(1)	
R19B	Dry Foliar Interception Fraction for Leafy	3 2.500E-01	3 2.500E-01	---	RDRY(2)	
R19B	Dry Foliar Interception Fraction for Fodder	not used	3 2.500E-01	---	RDRY(3)	
R19B	Wet Foliar Interception Fraction for Non-Leafy	3 2.500E-01	3 2.500E-01	---	RWET(1)	
R19B	Wet Foliar Interception Fraction for Leafy	3 2.500E-01	3 2.500E-01	---	RWET(2)	
R19B	Wet Foliar Interception Fraction for Fodder	not used	3 2.500E-01	---	RWET(3)	
R19B	Weathering Removal Constant for Vegetation	3 2.000E+01	3 2.000E+01	---	WLAM	
C14	C-12 concentration in water (g/cm**3)	not used	3 2.000E-05	---	C12WTR	
C14	C-12 concentration in contaminated soil (g/g)	not used	3 3.000E-02	---	C12CZ	
C14	Fraction of vegetation carbon from soil	not used	3 2.000E-02	---	CSOIL	
C14	Fraction of vegetation carbon from air	not used	3 9.800E-01	---	CAIR	
C14	C-14 evasion layer thickness in soil (m)	not used	3 3.000E-01	---	DMC	
C14	C-14 evasion flux rate from soil (1/sec)	not used	3 7.000E-07	---	EVSN	
C14	C-12 evasion flux rate from soil (1/sec)	not used	3 1.000E-10	---	REVSN	
C14	Fraction of grain in beef cattle feed	not used	3 8.000E-01	---	AVFG4	
C14	Fraction of grain in milk cow feed	not used	3 2.000E-01	---	AVFG5	

	³		³		³		³		³
STOR	³	Storage times of contaminated foodstuffs (days):	³		³		³		³
STOR	³	Fruits, non-leafy vegetables, and grain	³	1.000E+00	³	1.400E+01	³	---	³ STOR_T(1)
STOR	³	Leafy vegetables	³	1.000E+00	³	1.000E+00	³	---	³ STOR_T(2)
STOR	³	Milk	³	1.000E+00	³	1.000E+00	³	---	³ STOR_T(3)
STOR	³	Meat and poultry	³	2.000E+01	³	2.000E+01	³	---	³ STOR_T(4)
STOR	³	Fish	³	7.000E+00	³	7.000E+00	³	---	³ STOR_T(5)
STOR	³	Crustacea and mollusks	³	7.000E+00	³	7.000E+00	³	---	³ STOR_T(6)
STOR	³	Well water	³	1.000E+00	³	1.000E+00	³	---	³ STOR_T(7)

Site-Specific Parameter Summary (continued)

0	3	3	3	3	3	3	3
Menu	Parameter	User	Input	Default	Used by RESRAD	(If different from user input)	Parameter Name
STOR	Surface water	3	1.000E+00	3	1.000E+00	---	3 STOR_T(8)
STOR	Livestock fodder	3	4.500E+01	3	4.500E+01	---	3 STOR_T(9)
R021	Thickness of building foundation (m)	3	not used	3	1.500E-01	---	3 FLOOR1
R021	Bulk density of building foundation (g/cm**3)	3	not used	3	2.400E+00	---	3 DENSFL
R021	Total porosity of the cover material	3	not used	3	4.000E-01	---	3 TPCV
R021	Total porosity of the building foundation	3	not used	3	1.000E-01	---	3 TPFL
R021	Volumetric water content of the cover material	3	not used	3	5.000E-02	---	3 PH20CV
R021	Volumetric water content of the foundation	3	not used	3	3.000E-02	---	3 PH20FL
R021	Diffusion coefficient for radon gas (m/sec):	3		3			3
R021	in cover material	3	not used	3	2.000E-06	---	3 DIFCV
R021	in foundation material	3	not used	3	3.000E-07	---	3 DIFFL
R021	in contaminated zone soil	3	not used	3	2.000E-06	---	3 DIFCZ
R021	Radon vertical dimension of mixing (m)	3	not used	3	2.000E+00	---	3 HMIX
R021	Average building air exchange rate (1/hr)	3	not used	3	5.000E-01	---	3 REXG
R021	Height of the building (room) (m)	3	not used	3	2.500E+00	---	3 HRM
R021	Building interior area factor	3	not used	3	0.000E+00	---	3 FAI
R021	Building depth below ground surface (m)	3	not used	3	-1.000E+00	---	3 DMFL
R021	Emanating power of Rn-222 gas	3	not used	3	2.500E-01	---	3 EMANA(1)
R021	Emanating power of Rn-220 gas	3	not used	3	1.500E-01	---	3 EMANA(2)
TITL	Number of graphical time points	3	32	3	---	---	3 NPTS
TITL	Maximum number of integration points for dose	3	17	3	---	---	3 LYMAX
TITL	Maximum number of integration points for risk	3	257	3	---	---	3 KYMAX

Summary of Pathway Selections

Pathway	3	User Selection
1 -- external gamma	3	active
2 -- inhalation (w/o radon)	3	active
3 -- plant ingestion	3	active
4 -- meat ingestion	3	suppressed
5 -- milk ingestion	3	suppressed
6 -- aquatic foods	3	suppressed
7 -- drinking water	3	suppressed
8 -- soil ingestion	3	active
9 -- radon	3	suppressed

Contaminated Zone Dimensions	Initial Soil Concentrations, pCi/g
AAAAAAAAAAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAAAAAAAAAA
Area: 10000.00 square meters	Am-241 1.000E+01
Thickness: 2.00 meters	Co-60 1.000E+01
Cover Depth: 0.00 meters	Cs-134 1.000E+01
	Cs-137 1.000E+01
	Eu-152 1.000E+01
	Eu-154 1.000E+01
	Eu-155 1.000E+01
	H-3 1.000E+01
	I-129 1.000E+01
	Mn-54 1.000E+01
	Na-22 1.000E+01
	Ni-63 1.000E+01
	Np-237 1.000E+01
	Pu-238 1.000E+01
	Pu-239 1.000E+01
	Ru-106 1.000E+01
	Sr-90 1.000E+01
	Tc-99 1.000E+01
	Th-228 1.000E+01
	Th-230 1.000E+01
	Th-232 1.000E+01
	U-234 1.000E+01
	U-235 1.000E+01
	U-238 1.000E+01

0

Total Dose TDOSE(t), mrem/yr
Basic Radiation Dose Limit = 2.500E+01 mrem/yr
Total Mixture Sum M(t) = Fraction of Basic Dose Limit Received at Time (t)
AAAAAAAAAAAAAAAAAAAAAAAAAAAA

t (years):	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
TDOSE(t):	4.902E+02	4.221E+02	2.635E+02	2.592E+02	2.467E+02	2.369E+02	2.397E+02	2.508E+02	2.709E+02
M(t):	1.961E+01	1.688E+01	1.054E+01	1.037E+01	9.867E+00	9.477E+00	9.587E+00	1.003E+01	1.083E+01

0Maximum TDOSE(t): 4.902E+02 mrem/yr at t = 0.000E+00 years

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)

As mrem/yr and Fraction of Total Dose At t = 0.000E+00 years

Water Independent Pathways (Inhalation excludes radon)

Water Independent Pathways (Inhalation excludes radon)														
0	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA
Am-241	2.576E-01	0.0005	5.794E-04	0.0000	0.000E+00	0.0000	4.613E-01	0.0009	0.000E+00	0.0000	0.000E+00	0.0000	2.303E+00	0.004
Co-60	9.479E+01	0.1934	2.628E-07	0.0000	0.000E+00	0.0000	1.059E+00	0.0022	0.000E+00	0.0000	0.000E+00	0.0000	6.613E-02	0.0001
Cs-134	4.939E+01	0.1007	1.741E-07	0.0000	0.000E+00	0.0000	2.876E-01	0.0006	0.000E+00	0.0000	0.000E+00	0.0000	3.592E-02	0.0001
Cs-137	2.064E+01	0.0421	3.321E-07	0.0000	0.000E+00	0.0000	2.608E-01	0.0005	0.000E+00	0.0000	0.000E+00	0.0000	3.257E-02	0.0001
Eu-152	4.298E+01	0.0877	8.236E-07	0.0000	0.000E+00	0.0000	9.143E-03	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.827E-02	0.0000
Eu-154	4.594E+01	0.0937	1.057E-06	0.0000	0.000E+00	0.0000	1.429E-02	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.855E-02	0.0001
Eu-155	1.024E+00	0.0021	1.476E-07	0.0000	0.000E+00	0.0000	2.583E-03	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.160E-03	0.0000
H-3	0.000E+00	0.0000	5.883E-04	0.0000	0.000E+00	0.0000	1.445E-01	0.0003	0.000E+00	0.0000	0.000E+00	0.0000	1.204E-04	0.0000
I-129	6.726E-02	0.0001	6.622E-07	0.0000	0.000E+00	0.0000	2.035E+00	0.0042	0.000E+00	0.0000	0.000E+00	0.0000	5.081E-01	0.0010
Mn-54	2.182E+01	0.0445	2.385E-08	0.0000	0.000E+00	0.0000	3.245E-01	0.0007	0.000E+00	0.0000	0.000E+00	0.0000	5.405E-03	0.0000
Na-22	7.424E+01	0.1514	2.518E-07	0.0000	0.000E+00	0.0000	2.970E-01	0.0006	0.000E+00	0.0000	0.000E+00	0.0000	2.968E-02	0.0001
Ni-63	0.000E+00	0.0000	2.578E-08	0.0000	0.000E+00	0.0000	2.089E-02	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.087E-03	0.0000
Np-237	7.221E+00	0.0147	3.012E-04	0.0000	0.000E+00	0.0000	5.050E+00	0.0103	0.000E+00	0.0000	0.000E+00	0.0000	1.262E+00	0.0026
Pu-238	7.716E-04	0.0000	6.302E-04	0.0000	0.000E+00	0.0000	4.945E-01	0.0010	0.000E+00	0.0000	0.000E+00	0.0000	2.469E+00	0.0050
Pu-239	1.853E-03	0.0000	6.795E-04	0.0000	0.000E+00	0.0000	5.251E-01	0.0011	0.000E+00	0.0000	0.000E+00	0.0000	2.622E+00	0.0053
Ru-106	5.945E+00	0.0121	5.230E-07	0.0000	0.000E+00	0.0000	5.101E-01	0.0010	0.000E+00	0.0000	0.000E+00	0.0000	8.495E-02	0.0002
Sr-90	2.645E-01	0.0005	1.292E-06	0.0000	0.000E+00	0.0000	1.614E+01	0.0329	0.000E+00	0.0000	0.000E+00	0.0000	2.687E-01	0.0005
Tc-99	7.380E-04	0.0000	1.188E-07	0.0000	0.000E+00	0.0000	1.207E+01	0.0246	0.000E+00	0.0000	0.000E+00	0.0000	1.207E-02	0.0000
Th-228	5.024E+01	0.1025	4.185E-04	0.0000	0.000E+00	0.0000	7.805E-01	0.0016	0.000E+00	0.0000	0.000E+00	0.0000	3.896E+00	0.0079
Th-230	2.230E-02	0.0000	6.539E-04	0.0000	0.000E+00	0.0000	5.158E-01	0.0011	0.000E+00	0.0000	0.000E+00	0.0000	2.561E+00	0.0052
Th-232	2.301E+00	0.0047	7.576E-04	0.0000	0.000E+00	0.0000	4.683E+00	0.0096	0.000E+00	0.0000	0.000E+00	0.0000	3.421E+00	0.0070
U-234	2.411E-03	0.0000	9.410E-05	0.0000	0.000E+00	0.0000	1.997E-01	0.0004	0.000E+00	0.0000	0.000E+00	0.0000	3.990E-01	0.0008
U-235	4.885E+00	0.0100	8.537E-05	0.0000	0.000E+00	0.0000	1.944E-01	0.0004	0.000E+00	0.0000	0.000E+00	0.0000	3.883E-01	0.0008
U-238	1.069E+00	0.0022	8.114E-05	0.0000	0.000E+00	0.0000	2.099E-01	0.0004	0.000E+00	0.0000	0.000E+00	0.0000	4.194E-01	0.0009
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	4.231E+02	0.8631	4.875E-03	0.0000	0.000E+00	0.0000	4.629E+01	0.0944	0.000E+00	0.0000	0.000E+00	0.0000	2.084E+01	0.0425

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 0.000E+00 years

	Water Dependent Pathways																			
	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*							
Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA
Am-241	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.022E+00	0.0062						
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.592E+01	0.1957						
Cs-134	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.971E+01	0.1014						
Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.093E+01	0.0427						
Eu-152	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.301E+01	0.0877						
Eu-154	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.598E+01	0.0938						
Eu-155	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.032E+00	0.0021						
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.452E-01	0.0003						
I-129	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.610E+00	0.0053						
Mn-54	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.215E+01	0.0452						
Na-22	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.456E+01	0.1521						
Ni-63	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.297E-02	0.0000						
Np-237	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.353E+01	0.0276						
Pu-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.964E+00	0.0060						
Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.149E+00	0.0064						
Ru-106	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.540E+00	0.0133						
Sr-90	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.667E+01	0.0340						
Tc-99	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.209E+01	0.0247						
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.492E+01	0.1120						
Th-230	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.100E+00	0.0063						
Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.041E+01	0.0212						
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.012E-01	0.0012						
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.468E+00	0.0112						
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.698E+00	0.0035						
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.902E+02	1.0000						

0*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)

As mrem/yr and Fraction of Total Dose At t = 1.000E+00 years

Water Independent Pathways (Inhalation excludes radon)

0	Water Independent Pathways (Inhalation excludes radon)													
0	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA
Am-241	2.572E-01	0.0006	5.784E-04	0.0000	0.000E+00	0.0000	4.606E-01	0.0011	0.000E+00	0.0000	0.000E+00	0.0000	2.299E+00	0.005
Co-60	8.311E+01	0.1969	2.304E-07	0.0000	0.000E+00	0.0000	9.285E-01	0.0022	0.000E+00	0.0000	0.000E+00	0.0000	5.799E-02	0.0001
Cs-134	3.530E+01	0.0836	1.245E-07	0.0000	0.000E+00	0.0000	2.056E-01	0.0005	0.000E+00	0.0000	0.000E+00	0.0000	2.568E-02	0.0001
Cs-137	2.017E+01	0.0478	3.245E-07	0.0000	0.000E+00	0.0000	2.548E-01	0.0006	0.000E+00	0.0000	0.000E+00	0.0000	3.183E-02	0.0001
Eu-152	4.084E+01	0.0967	7.825E-07	0.0000	0.000E+00	0.0000	8.687E-03	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.736E-02	0.0000
Eu-154	4.238E+01	0.1004	9.751E-07	0.0000	0.000E+00	0.0000	1.318E-02	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.634E-02	0.0001
Eu-155	8.856E-01	0.0021	1.276E-07	0.0000	0.000E+00	0.0000	2.233E-03	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.461E-03	0.0000
H-3	0.000E+00	0.0000	5.172E-04	0.0000	0.000E+00	0.0000	1.270E-01	0.0003	0.000E+00	0.0000	0.000E+00	0.0000	1.059E-04	0.0000
I-129	6.725E-02	0.0002	6.622E-07	0.0000	0.000E+00	0.0000	2.035E+00	0.0048	0.000E+00	0.0000	0.000E+00	0.0000	5.081E-01	0.0012
Mn-54	9.697E+00	0.0230	1.060E-08	0.0000	0.000E+00	0.0000	1.442E-01	0.0003	0.000E+00	0.0000	0.000E+00	0.0000	2.402E-03	0.0000
Na-22	5.687E+01	0.1347	1.929E-07	0.0000	0.000E+00	0.0000	2.275E-01	0.0005	0.000E+00	0.0000	0.000E+00	0.0000	2.274E-02	0.0001
Ni-63	0.000E+00	0.0000	2.560E-08	0.0000	0.000E+00	0.0000	2.074E-02	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.073E-03	0.0000
Np-237	7.221E+00	0.0171	3.012E-04	0.0000	0.000E+00	0.0000	5.050E+00	0.0120	0.000E+00	0.0000	0.000E+00	0.0000	1.262E+00	0.0030
Pu-238	7.655E-04	0.0000	6.253E-04	0.0000	0.000E+00	0.0000	4.906E-01	0.0012	0.000E+00	0.0000	0.000E+00	0.0000	2.449E+00	0.0058
Pu-239	1.853E-03	0.0000	6.795E-04	0.0000	0.000E+00	0.0000	5.251E-01	0.0012	0.000E+00	0.0000	0.000E+00	0.0000	2.622E+00	0.0062
Ru-106	3.019E+00	0.0072	2.656E-07	0.0000	0.000E+00	0.0000	2.590E-01	0.0006	0.000E+00	0.0000	0.000E+00	0.0000	4.313E-02	0.0001
Sr-90	2.582E-01	0.0006	1.261E-06	0.0000	0.000E+00	0.0000	1.575E+01	0.0373	0.000E+00	0.0000	0.000E+00	0.0000	2.623E-01	0.0006
Tc-99	7.379E-04	0.0000	1.187E-07	0.0000	0.000E+00	0.0000	1.207E+01	0.0286	0.000E+00	0.0000	0.000E+00	0.0000	1.206E-02	0.0000
Th-228	3.496E+01	0.0828	2.912E-04	0.0000	0.000E+00	0.0000	5.431E-01	0.0013	0.000E+00	0.0000	0.000E+00	0.0000	2.711E+00	0.0064
Th-230	5.202E-02	0.0001	6.540E-04	0.0000	0.000E+00	0.0000	5.218E-01	0.0012	0.000E+00	0.0000	0.000E+00	0.0000	2.562E+00	0.0061
Th-232	7.820E+00	0.0185	7.868E-04	0.0000	0.000E+00	0.0000	1.232E+01	0.0292	0.000E+00	0.0000	0.000E+00	0.0000	4.525E+00	0.0107
U-234	2.411E-03	0.0000	9.410E-05	0.0000	0.000E+00	0.0000	1.997E-01	0.0005	0.000E+00	0.0000	0.000E+00	0.0000	3.990E-01	0.0009
U-235	4.885E+00	0.0116	8.539E-05	0.0000	0.000E+00	0.0000	1.945E-01	0.0005	0.000E+00	0.0000	0.000E+00	0.0000	3.884E-01	0.0009
U-238	1.069E+00	0.0025	8.114E-05	0.0000	0.000E+00	0.0000	2.099E-01	0.0005	0.000E+00	0.0000	0.000E+00	0.0000	4.194E-01	0.0010
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	3.489E+02	0.8265	4.699E-03	0.0000	0.000E+00	0.0000	5.257E+01	0.1245	0.000E+00	0.0000	0.000E+00	0.0000	2.065E+01	0.0489

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
 As mrem/yr and Fraction of Total Dose At t = 1.000E+00 years

Water Dependent Pathways														
0	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA
Am-241	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.018E+00	0.0071
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.410E+01	0.1992
Cs-134	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.553E+01	0.0842
Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.045E+01	0.0485
Eu-152	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.086E+01	0.0968
Eu-154	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.242E+01	0.1005
Eu-155	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.923E-01	0.0021
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.277E-01	0.0003
I-129	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.610E+00	0.0062
Mn-54	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.844E+00	0.0233
Na-22	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.713E+01	0.1353
Ni-63	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.281E-02	0.0001
Np-237	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.353E+01	0.0321
Pu-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.941E+00	0.0070
Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.149E+00	0.0075
Ru-106	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.321E+00	0.0079
Sr-90	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.627E+01	0.0386
Tc-99	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.209E+01	0.0286
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.821E+01	0.0905
Th-230	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.137E+00	0.0074
Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.467E+01	0.0584
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.012E-01	0.0014
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.468E+00	0.0130
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.698E+00	0.0040
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.221E+02	1.0000

0*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)

As mrem/yr and Fraction of Total Dose At t = 2.500E+01 years

Water Independent Pathways (Inhalation excludes radon)

0	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil		
0	Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	
	Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
	Am-241	2.475E-01	0.0009	5.566E-04	0.0000	0.000E+00	0.0000	4.432E-01	0.0017	0.000E+00	0.0000	0.000E+00	0.0000	2.212E+00	0.0084
	Co-60	3.541E+00	0.0134	9.817E-09	0.0000	0.000E+00	0.0000	3.955E-02	0.0002	0.000E+00	0.0000	0.000E+00	0.0000	2.470E-03	0.0000
	Cs-134	1.119E-02	0.0000	3.945E-11	0.0000	0.000E+00	0.0000	6.517E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.140E-06	0.0000
	Cs-137	1.162E+01	0.0441	1.870E-07	0.0000	0.000E+00	0.0000	1.468E-01	0.0006	0.000E+00	0.0000	0.000E+00	0.0000	1.834E-02	0.0001
	Eu-152	1.195E+01	0.0453	2.290E-07	0.0000	0.000E+00	0.0000	2.542E-03	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.079E-03	0.0000
	Eu-154	6.115E+00	0.0232	1.407E-07	0.0000	0.000E+00	0.0000	1.902E-03	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.801E-03	0.0000
	Eu-155	2.690E-02	0.0001	3.876E-09	0.0000	0.000E+00	0.0000	6.783E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.355E-04	0.0000
	H-3	0.000E+00	0.0000	2.345E-05	0.0000	0.000E+00	0.0000	5.761E-03	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.801E-06	0.0000
	I-129	6.719E-02	0.0003	6.616E-07	0.0000	0.000E+00	0.0000	2.033E+00	0.0077	0.000E+00	0.0000	0.000E+00	0.0000	5.076E-01	0.0019
	Mn-54	3.405E-08	0.0000	3.721E-17	0.0000	0.000E+00	0.0000	5.064E-10	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.433E-12	0.0000
	Na-22	9.510E-02	0.0004	3.226E-10	0.0000	0.000E+00	0.0000	3.805E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.802E-05	0.0000
	Ni-63	0.000E+00	0.0000	2.168E-08	0.0000	0.000E+00	0.0000	1.757E-02	0.0001	0.000E+00	0.0000	0.000E+00	0.0000	1.755E-03	0.0000
	Np-237	7.221E+00	0.0274	3.012E-04	0.0000	0.000E+00	0.0000	5.050E+00	0.0192	0.000E+00	0.0000	0.000E+00	0.0000	1.262E+00	0.0048
	Pu-238	6.334E-04	0.0000	5.173E-04	0.0000	0.000E+00	0.0000	4.058E-01	0.0015	0.000E+00	0.0000	0.000E+00	0.0000	2.026E+00	0.0077
	Pu-239	1.852E-03	0.0000	6.790E-04	0.0000	0.000E+00	0.0000	5.248E-01	0.0020	0.000E+00	0.0000	0.000E+00	0.0000	2.620E+00	0.0099
	Ru-106	2.609E-07	0.0000	2.295E-14	0.0000	0.000E+00	0.0000	2.238E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.727E-09	0.0000
	Sr-90	1.449E-01	0.0005	7.075E-07	0.0000	0.000E+00	0.0000	8.839E+00	0.0335	0.000E+00	0.0000	0.000E+00	0.0000	1.472E-01	0.0006
	Tc-99	7.366E-04	0.0000	1.185E-07	0.0000	0.000E+00	0.0000	1.205E+01	0.0457	0.000E+00	0.0000	0.000E+00	0.0000	1.204E-02	0.0000
	Th-228	5.810E-03	0.0000	4.840E-08	0.0000	0.000E+00	0.0000	9.026E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.506E-04	0.0000
	Th-230	7.616E-01	0.0029	6.548E-04	0.0000	0.000E+00	0.0000	7.695E-01	0.0029	0.000E+00	0.0000	0.000E+00	0.0000	2.636E+00	0.0100
	Th-232	8.721E+01	0.3310	1.325E-03	0.0000	0.000E+00	0.0000	6.926E+01	0.2628	0.000E+00	0.0000	0.000E+00	0.0000	1.567E+01	0.0595
	U-234	2.501E-03	0.0000	9.424E-05	0.0000	0.000E+00	0.0000	1.998E-01	0.0008	0.000E+00	0.0000	0.000E+00	0.0000	3.996E-01	0.0015
	U-235	4.888E+00	0.0186	8.615E-05	0.0000	0.000E+00	0.0000	1.965E-01	0.0007	0.000E+00	0.0000	0.000E+00	0.0000	3.897E-01	0.0015
	U-238	1.069E+00	0.0041	8.115E-05	0.0000	0.000E+00	0.0000	2.100E-01	0.0008	0.000E+00	0.0000	0.000E+00	0.0000	4.195E-01	0.0016
	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
	Total	1.350E+02	0.5122	4.321E-03	0.0000	0.000E+00	0.0000	1.002E+02	0.3802	0.000E+00	0.0000	0.000E+00	0.0000	2.833E+01	0.1075

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 2.500E+01 years

	Water Dependent Pathways																			
0	Water				Fish				Radon				Plant				Meat			
0																				
Radio-	Water				Fish				Radon				Plant				Meat			
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA
Am-241	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.904E+00	0.0110
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.583E+00	0.0136
Cs-134	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.126E-02	0.0000
Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.178E+01	0.0447
Eu-152	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.196E+01	0.0454
Eu-154	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.120E+00	0.0232
Eu-155	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.711E-02	0.0001
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.789E-03	0.0000
I-129	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.607E+00	0.0099
Mn-54	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.456E-08	0.0000
Na-22	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.552E-02	0.0004
Ni-63	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.932E-02	0.0001
Np-237	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.353E+01	0.0514
Pu-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.433E+00	0.0092
Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.147E+00	0.0119
Ru-106	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.870E-07	0.0000
Sr-90	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.131E+00	0.0347
Tc-99	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.206E+01	0.0458
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.351E-03	0.0000
Th-230	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.168E+00	0.0158
Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.721E+02	0.6533
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.020E-01	0.0023
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.475E+00	0.0208
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.698E+00	0.0064
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.635E+02	1.0000

0*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)

As mrem/yr and Fraction of Total Dose At t = 3.000E+01 years

Water Independent Pathways (Inhalation excludes radon)

0	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil		
0	Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	
	Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
	Am-241	2.455E-01	0.0009	5.522E-04	0.0000	0.000E+00	0.0000	4.397E-01	0.0017	0.000E+00	0.0000	0.000E+00	0.0000	2.195E+00	0.0085
	Co-60	1.835E+00	0.0071	5.087E-09	0.0000	0.000E+00	0.0000	2.050E-02	0.0001	0.000E+00	0.0000	0.000E+00	0.0000	1.280E-03	0.0000
	Cs-134	2.089E-03	0.0000	7.364E-12	0.0000	0.000E+00	0.0000	1.216E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.519E-06	0.0000
	Cs-137	1.036E+01	0.0400	1.667E-07	0.0000	0.000E+00	0.0000	1.309E-01	0.0005	0.000E+00	0.0000	0.000E+00	0.0000	1.635E-02	0.0001
	Eu-152	9.250E+00	0.0357	1.773E-07	0.0000	0.000E+00	0.0000	1.968E-03	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.931E-03	0.0000
	Eu-154	4.085E+00	0.0158	9.400E-08	0.0000	0.000E+00	0.0000	1.271E-03	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.539E-03	0.0000
	Eu-155	1.299E-02	0.0001	1.872E-09	0.0000	0.000E+00	0.0000	3.275E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.544E-05	0.0000
	H-3	0.000E+00	0.0000	1.231E-05	0.0000	0.000E+00	0.0000	3.024E-03	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.521E-06	0.0000
	I-129	6.717E-02	0.0003	6.614E-07	0.0000	0.000E+00	0.0000	2.032E+00	0.0078	0.000E+00	0.0000	0.000E+00	0.0000	5.075E-01	0.0020
	Mn-54	5.899E-10	0.0000	6.446E-19	0.0000	0.000E+00	0.0000	8.772E-12	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.461E-13	0.0000
	Na-22	2.510E-02	0.0001	8.514E-11	0.0000	0.000E+00	0.0000	1.004E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.004E-05	0.0000
	Ni-63	0.000E+00	0.0000	2.094E-08	0.0000	0.000E+00	0.0000	1.697E-02	0.0001	0.000E+00	0.0000	0.000E+00	0.0000	1.696E-03	0.0000
	Np-237	7.221E+00	0.0279	3.012E-04	0.0000	0.000E+00	0.0000	5.050E+00	0.0195	0.000E+00	0.0000	0.000E+00	0.0000	1.262E+00	0.0049
	Pu-238	6.089E-04	0.0000	4.972E-04	0.0000	0.000E+00	0.0000	3.901E-01	0.0015	0.000E+00	0.0000	0.000E+00	0.0000	1.947E+00	0.0075
	Pu-239	1.851E-03	0.0000	6.789E-04	0.0000	0.000E+00	0.0000	5.247E-01	0.0020	0.000E+00	0.0000	0.000E+00	0.0000	2.619E+00	0.0101
	Ru-106	8.808E-09	0.0000	7.748E-16	0.0000	0.000E+00	0.0000	7.556E-10	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.258E-10	0.0000
	Sr-90	1.285E-01	0.0005	6.272E-07	0.0000	0.000E+00	0.0000	7.836E+00	0.0302	0.000E+00	0.0000	0.000E+00	0.0000	1.305E-01	0.0005
	Tc-99	7.363E-04	0.0000	1.185E-07	0.0000	0.000E+00	0.0000	1.205E+01	0.0465	0.000E+00	0.0000	0.000E+00	0.0000	1.204E-02	0.0000
	Th-228	9.479E-04	0.0000	7.897E-09	0.0000	0.000E+00	0.0000	1.473E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.352E-05	0.0000
	Th-230	9.085E-01	0.0035	6.550E-04	0.0000	0.000E+00	0.0000	8.395E-01	0.0032	0.000E+00	0.0000	0.000E+00	0.0000	2.660E+00	0.0103
	Th-232	8.978E+01	0.3464	1.343E-03	0.0000	0.000E+00	0.0000	7.078E+01	0.2731	0.000E+00	0.0000	0.000E+00	0.0000	1.600E+01	0.0617
	U-234	2.539E-03	0.0000	9.427E-05	0.0000	0.000E+00	0.0000	1.999E-01	0.0008	0.000E+00	0.0000	0.000E+00	0.0000	3.997E-01	0.0015
	U-235	4.889E+00	0.0189	8.634E-05	0.0000	0.000E+00	0.0000	1.969E-01	0.0008	0.000E+00	0.0000	0.000E+00	0.0000	3.901E-01	0.0015
	U-238	1.069E+00	0.0041	8.115E-05	0.0000	0.000E+00	0.0000	2.100E-01	0.0008	0.000E+00	0.0000	0.000E+00	0.0000	4.195E-01	0.0016
	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
	Total	1.299E+02	0.5011	4.303E-03	0.0000	0.000E+00	0.0000	1.007E+02	0.3886	0.000E+00	0.0000	0.000E+00	0.0000	2.857E+01	0.1102

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
 As mrem/yr and Fraction of Total Dose At t = 3.000E+01 years

Water Dependent Pathways														
0	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
Radio-	AAAAAAAAAAAAAAAA		AAAAAAAAAAAAAAAA		AAAAAAAAAAAAAAAA		AAAAAAAAAAAAAAAA		AAAAAAAAAAAAAAAA		AAAAAAAAAAAAAAAA		AAAAAAAAAAAAAAAA	
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA
Am-241	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.881E+00	0.0111
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.856E+00	0.0072
Cs-134	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.102E-03	0.0000
Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.050E+01	0.0405
Eu-152	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.256E+00	0.0357
Eu-154	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.089E+00	0.0158
Eu-155	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.309E-02	0.0001
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.039E-03	0.0000
I-129	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.607E+00	0.0101
Mn-54	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.988E-10	0.0000
Na-22	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.521E-02	0.0001
Ni-63	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.866E-02	0.0001
Np-237	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.353E+01	0.0522
Pu-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.339E+00	0.0090
Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.147E+00	0.0121
Ru-106	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.689E-09	0.0000
Sr-90	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.095E+00	0.0312
Tc-99	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.206E+01	0.0465
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.036E-03	0.0000
Th-230	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.409E+00	0.0170
Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.766E+02	0.6812
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.022E-01	0.0023
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.476E+00	0.0211
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.698E+00	0.0066
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.592E+02	1.0000

0*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)

As mrem/yr and Fraction of Total Dose At t = 5.000E+01 years

Water Independent Pathways (Inhalation excludes radon)

0	Water Independent Pathways (Inhalation excludes radon)															
0	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil			
Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA
Am-241	2.378E-01	0.0010	5.347E-04	0.0000	0.000E+00	0.0000	4.258E-01	0.0017	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.125E+00	0.0086
Co-60	1.323E-01	0.0005	3.667E-10	0.0000	0.000E+00	0.0000	1.477E-03	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.227E-05	0.0000
Cs-134	2.535E-06	0.0000	8.939E-15	0.0000	0.000E+00	0.0000	1.477E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.844E-09	0.0000
Cs-137	6.542E+00	0.0265	1.053E-07	0.0000	0.000E+00	0.0000	8.266E-02	0.0003	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.032E-02	0.0000
Eu-152	3.322E+00	0.0135	6.366E-08	0.0000	0.000E+00	0.0000	7.067E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.412E-03	0.0000
Eu-154	8.139E-01	0.0033	1.873E-08	0.0000	0.000E+00	0.0000	2.532E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.059E-04	0.0000
Eu-155	7.065E-04	0.0000	1.018E-10	0.0000	0.000E+00	0.0000	1.781E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.559E-06	0.0000
H-3	0.000E+00	0.0000	9.351E-07	0.0000	0.000E+00	0.0000	2.297E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.914E-07	0.0000
I-129	6.712E-02	0.0003	6.609E-07	0.0000	0.000E+00	0.0000	2.030E+00	0.0082	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.070E-01	0.0021
Mn-54	5.313E-17	0.0000	5.806E-26	0.0000	0.000E+00	0.0000	7.901E-19	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.316E-20	0.0000
Na-22	1.218E-04	0.0000	4.132E-13	0.0000	0.000E+00	0.0000	4.874E-07	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.871E-08	0.0000
Ni-63	0.000E+00	0.0000	1.824E-08	0.0000	0.000E+00	0.0000	1.477E-02	0.0001	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.476E-03	0.0000
Np-237	7.221E+00	0.0293	3.012E-04	0.0000	0.000E+00	0.0000	5.050E+00	0.0205	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.262E+00	0.0051
Pu-238	5.200E-04	0.0000	4.245E-04	0.0000	0.000E+00	0.0000	3.331E-01	0.0014	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.663E+00	0.0067
Pu-239	1.850E-03	0.0000	6.785E-04	0.0000	0.000E+00	0.0000	5.244E-01	0.0021	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.618E+00	0.0106
Ru-106	1.145E-14	0.0000	1.007E-21	0.0000	0.000E+00	0.0000	9.819E-16	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.635E-16	0.0000
Sr-90	7.937E-02	0.0003	3.875E-07	0.0000	0.000E+00	0.0000	4.842E+00	0.0196	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.063E-02	0.0003
Tc-99	7.352E-04	0.0000	1.183E-07	0.0000	0.000E+00	0.0000	1.203E+01	0.0488	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.202E-02	0.0000
Th-228	6.719E-07	0.0000	5.597E-12	0.0000	0.000E+00	0.0000	1.044E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.211E-08	0.0000
Th-230	1.493E+00	0.0061	6.560E-04	0.0000	0.000E+00	0.0000	1.156E+00	0.0047	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.777E+00	0.0113
Th-232	9.261E+01	0.3754	1.363E-03	0.0000	0.000E+00	0.0000	7.245E+01	0.2937	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.637E+01	0.0663
U-234	2.760E-03	0.0000	9.438E-05	0.0000	0.000E+00	0.0000	2.000E-01	0.0008	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.002E-01	0.0016
U-235	4.894E+00	0.0198	8.714E-05	0.0000	0.000E+00	0.0000	1.988E-01	0.0008	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.917E-01	0.0016
U-238	1.069E+00	0.0043	8.115E-05	0.0000	0.000E+00	0.0000	2.100E-01	0.0009	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.195E-01	0.0017
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	1.185E+02	0.4803	4.223E-03	0.0000	0.000E+00	0.0000	9.955E+01	0.4036	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.864E+01	0.1161

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 5.000E+01 years

	Water Dependent Pathways																			
0	Water				Fish				Radon				Plant				Meat			
0																				
Radio-	Water				Fish				Radon				Plant				Meat			
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA
Am-241	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.790E+00	0.0113
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.338E-01	0.0005
Cs-134	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.552E-06	0.0000
Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.635E+00	0.0269
Eu-152	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.324E+00	0.0135
Eu-154	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.147E-01	0.0033
Eu-155	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.119E-04	0.0000
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.308E-04	0.0000
I-129	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.605E+00	0.0106
Mn-54	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.393E-17	0.0000
Na-22	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.224E-04	0.0000
Ni-63	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.625E-02	0.0001
Np-237	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.353E+01	0.0549
Pu-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.997E+00	0.0081
Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.145E+00	0.0127
Ru-106	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.259E-14	0.0000
Sr-90	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.002E+00	0.0203
Tc-99	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.204E+01	0.0488
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.344E-07	0.0000
Th-230	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.427E+00	0.0220
Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.814E+02	0.7355
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.030E-01	0.0024
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.484E+00	0.0222
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.698E+00	0.0069
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.467E+02	1.0000

0*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)

As mrem/yr and Fraction of Total Dose At t = 1.000E+02 years

Water Independent Pathways (Inhalation excludes radon)

Water Independent Pathways (Inhalation excludes radon)														
0	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA
Am-241	2.196E-01	0.0009	4.935E-04	0.0000	0.000E+00	0.0000	3.931E-01	0.0017	0.000E+00	0.0000	0.000E+00	0.0000	1.962E+00	0.0083
Co-60	1.845E-04	0.0000	5.116E-13	0.0000	0.000E+00	0.0000	2.061E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.287E-07	0.0000
Cs-134	1.302E-13	0.0000	4.589E-22	0.0000	0.000E+00	0.0000	7.580E-16	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.468E-17	0.0000
Cs-137	2.074E+00	0.0088	3.337E-08	0.0000	0.000E+00	0.0000	2.620E-02	0.0001	0.000E+00	0.0000	0.000E+00	0.0000	3.273E-03	0.0000
Eu-152	2.568E-01	0.0011	4.920E-09	0.0000	0.000E+00	0.0000	5.462E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.091E-04	0.0000
Eu-154	1.442E-02	0.0001	3.318E-10	0.0000	0.000E+00	0.0000	4.486E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.963E-06	0.0000
Eu-155	4.873E-07	0.0000	7.021E-14	0.0000	0.000E+00	0.0000	1.229E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.454E-09	0.0000
H-3	0.000E+00	0.0000	1.486E-09	0.0000	0.000E+00	0.0000	3.651E-07	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.043E-10	0.0000
I-129	6.698E-02	0.0003	6.595E-07	0.0000	0.000E+00	0.0000	2.026E+00	0.0086	0.000E+00	0.0000	0.000E+00	0.0000	5.060E-01	0.0021
Mn-54	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Na-22	2.000E-10	0.0000	6.782E-19	0.0000	0.000E+00	0.0000	8.000E-13	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.994E-14	0.0000
Ni-63	0.000E+00	0.0000	1.290E-08	0.0000	0.000E+00	0.0000	1.045E-02	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.044E-03	0.0000
Np-237	7.220E+00	0.0305	3.012E-04	0.0000	0.000E+00	0.0000	5.050E+00	0.0213	0.000E+00	0.0000	0.000E+00	0.0000	1.262E+00	0.0053
Pu-238	3.506E-04	0.0000	2.859E-04	0.0000	0.000E+00	0.0000	2.244E-01	0.0009	0.000E+00	0.0000	0.000E+00	0.0000	1.120E+00	0.0047
Pu-239	1.848E-03	0.0000	6.776E-04	0.0000	0.000E+00	0.0000	5.236E-01	0.0022	0.000E+00	0.0000	0.000E+00	0.0000	2.614E+00	0.0110
Ru-106	2.203E-29	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Sr-90	2.381E-02	0.0001	1.163E-07	0.0000	0.000E+00	0.0000	1.453E+00	0.0061	0.000E+00	0.0000	0.000E+00	0.0000	2.419E-02	0.0001
Tc-99	7.324E-04	0.0000	1.179E-07	0.0000	0.000E+00	0.0000	1.198E+01	0.0506	0.000E+00	0.0000	0.000E+00	0.0000	1.197E-02	0.0001
Th-228	8.985E-15	0.0000	7.485E-20	0.0000	0.000E+00	0.0000	1.396E-16	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.968E-16	0.0000
Th-230	2.932E+00	0.0124	6.586E-04	0.0000	0.000E+00	0.0000	2.068E+00	0.0087	0.000E+00	0.0000	0.000E+00	0.0000	3.132E+00	0.0132
Th-232	9.288E+01	0.3920	1.365E-03	0.0000	0.000E+00	0.0000	7.262E+01	0.3065	0.000E+00	0.0000	0.000E+00	0.0000	1.640E+01	0.0692
U-234	3.778E-03	0.0000	9.467E-05	0.0000	0.000E+00	0.0000	2.007E-01	0.0008	0.000E+00	0.0000	0.000E+00	0.0000	4.015E-01	0.0017
U-235	4.908E+00	0.0207	8.932E-05	0.0000	0.000E+00	0.0000	2.039E-01	0.0009	0.000E+00	0.0000	0.000E+00	0.0000	3.963E-01	0.0017
U-238	1.069E+00	0.0045	8.117E-05	0.0000	0.000E+00	0.0000	2.100E-01	0.0009	0.000E+00	0.0000	0.000E+00	0.0000	4.195E-01	0.0018
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	1.117E+02	0.4714	4.047E-03	0.0000	0.000E+00	0.0000	9.699E+01	0.4094	0.000E+00	0.0000	0.000E+00	0.0000	2.825E+01	0.1193

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
 As mrem/yr and Fraction of Total Dose At t = 1.000E+02 years

	Water Dependent Pathways																			
0	Water				Fish				Radon				Plant				Meat			
0																				
Radio-	Water				Fish				Radon				Plant				Meat			
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
0	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Am-241	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Cs-134	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Eu-152	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Eu-154	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Eu-155	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
I-129	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Mn-54	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Na-22	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Ni-63	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Np-237	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Pu-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Ru-106	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Sr-90	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Tc-99	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Th-230	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000

0*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)

As mrem/yr and Fraction of Total Dose At t = 2.500E+02 years

Water Independent Pathways (Inhalation excludes radon)

0	Water Independent Pathways (Inhalation excludes radon)													
0	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA
Am-241	1.729E-01	0.0007	3.880E-04	0.0000	0.000E+00	0.0000	3.092E-01	0.0013	0.000E+00	0.0000	0.000E+00	0.0000	1.542E+00	0.0064
Co-60	5.011E-13	0.0000	1.389E-21	0.0000	0.000E+00	0.0000	5.598E-15	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.496E-16	0.0000
Cs-134	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Cs-137	6.606E-02	0.0003	1.063E-09	0.0000	0.000E+00	0.0000	8.347E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.043E-04	0.0000
Eu-152	1.185E-04	0.0000	2.272E-12	0.0000	0.000E+00	0.0000	2.522E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.038E-08	0.0000
Eu-154	8.020E-08	0.0000	1.845E-15	0.0000	0.000E+00	0.0000	2.495E-11	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.985E-11	0.0000
Eu-155	1.599E-16	0.0000	2.303E-23	0.0000	0.000E+00	0.0000	4.030E-19	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.052E-19	0.0000
H-3	0.000E+00	0.0000	5.969E-18	0.0000	0.000E+00	0.0000	1.466E-15	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.222E-18	0.0000
I-129	6.656E-02	0.0003	6.554E-07	0.0000	0.000E+00	0.0000	2.014E+00	0.0084	0.000E+00	0.0000	0.000E+00	0.0000	5.029E-01	0.0021
Mn-54	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Na-22	8.840E-28	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Ni-63	0.000E+00	0.0000	4.565E-09	0.0000	0.000E+00	0.0000	3.699E-03	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.696E-04	0.0000
Np-237	7.220E+00	0.0301	3.013E-04	0.0000	0.000E+00	0.0000	5.050E+00	0.0211	0.000E+00	0.0000	0.000E+00	0.0000	1.262E+00	0.0053
Pu-238	1.090E-04	0.0000	8.740E-05	0.0000	0.000E+00	0.0000	6.861E-02	0.0003	0.000E+00	0.0000	0.000E+00	0.0000	3.423E-01	0.0014
Pu-239	1.841E-03	0.0000	6.746E-04	0.0000	0.000E+00	0.0000	5.214E-01	0.0022	0.000E+00	0.0000	0.000E+00	0.0000	2.603E+00	0.0109
Ru-106	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Sr-90	6.433E-04	0.0000	3.141E-09	0.0000	0.000E+00	0.0000	3.924E-02	0.0002	0.000E+00	0.0000	0.000E+00	0.0000	6.535E-04	0.0000
Tc-99	7.241E-04	0.0000	1.165E-07	0.0000	0.000E+00	0.0000	1.185E+01	0.0494	0.000E+00	0.0000	0.000E+00	0.0000	1.184E-02	0.0000
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Th-230	7.062E+00	0.0295	6.665E-04	0.0000	0.000E+00	0.0000	4.891E+00	0.0204	0.000E+00	0.0000	0.000E+00	0.0000	4.250E+00	0.0177
Th-232	9.288E+01	0.3876	1.365E-03	0.0000	0.000E+00	0.0000	7.262E+01	0.3030	0.000E+00	0.0000	0.000E+00	0.0000	1.640E+01	0.0684
U-234	1.070E-02	0.0000	9.554E-05	0.0000	0.000E+00	0.0000	2.055E-01	0.0009	0.000E+00	0.0000	0.000E+00	0.0000	4.064E-01	0.0017
U-235	4.954E+00	0.0207	9.617E-05	0.0000	0.000E+00	0.0000	2.194E-01	0.0009	0.000E+00	0.0000	0.000E+00	0.0000	4.108E-01	0.0017
U-238	1.069E+00	0.0045	8.120E-05	0.0000	0.000E+00	0.0000	2.101E-01	0.0009	0.000E+00	0.0000	0.000E+00	0.0000	4.197E-01	0.0018
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	1.135E+02	0.4736	3.756E-03	0.0000	0.000E+00	0.0000	9.800E+01	0.4089	0.000E+00	0.0000	0.000E+00	0.0000	2.815E+01	0.1175

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
 As mrem/yr and Fraction of Total Dose At t = 2.500E+02 years

	Water Dependent Pathways																			
0	Water				Fish				Radon				Plant				Meat			
0																				
Radio-	Water				Fish				Radon				Plant				Meat			
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA
Am-241	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.025E+00	0.0084
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.070E-13	0.0000
Cs-134	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.700E-02	0.0003
Eu-152	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.186E-04	0.0000
Eu-154	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.027E-08	0.0000
Eu-155	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.611E-16	0.0000
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.473E-15	0.0000
I-129	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.583E+00	0.0108
Mn-54	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Na-22	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.840E-28	0.0000
Ni-63	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.068E-03	0.0000
Np-237	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.353E+01	0.0565
Pu-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.112E-01	0.0017
Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.127E+00	0.0130
Ru-106	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Sr-90	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.054E-02	0.0002
Tc-99	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.186E+01	0.0495
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Th-230	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.620E+01	0.0676
Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.819E+02	0.7590
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.226E-01	0.0026
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.584E+00	0.0233
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.698E+00	0.0071
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.397E+02	1.0000

0*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)

As mrem/yr and Fraction of Total Dose At t = 5.000E+02 years

Water Independent Pathways (Inhalation excludes radon)

0	Water Independent Pathways (Inhalation excludes radon)													
0	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA
Am-241	1.163E-01	0.0005	2.598E-04	0.0000	0.000E+00	0.0000	2.074E-01	0.0008	0.000E+00	0.0000	0.000E+00	0.0000	1.033E+00	0.0041
Co-60	2.649E-27	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.959E-29	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Cs-134	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Cs-137	2.115E-04	0.0000	3.403E-12	0.0000	0.000E+00	0.0000	2.672E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.338E-07	0.0000
Eu-152	3.270E-10	0.0000	1.063E-17	0.0000	0.000E+00	0.0000	7.302E-14	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.459E-13	0.0000
Eu-154	1.400E-16	0.0000	3.222E-24	0.0000	0.000E+00	0.0000	4.356E-20	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.703E-20	0.0000
Eu-155	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.488E-29	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
I-129	6.588E-02	0.0003	6.487E-07	0.0000	0.000E+00	0.0000	1.993E+00	0.0079	0.000E+00	0.0000	0.000E+00	0.0000	4.977E-01	0.0020
Mn-54	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Na-22	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Ni-63	0.000E+00	0.0000	8.084E-10	0.0000	0.000E+00	0.0000	6.549E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.545E-05	0.0000
Np-237	7.220E+00	0.0288	3.014E-04	0.0000	0.000E+00	0.0000	5.050E+00	0.0201	0.000E+00	0.0000	0.000E+00	0.0000	1.262E+00	0.0050
Pu-238	2.281E-05	0.0000	1.215E-05	0.0000	0.000E+00	0.0000	9.578E-03	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.759E-02	0.0002
Pu-239	1.829E-03	0.0000	6.698E-04	0.0000	0.000E+00	0.0000	5.176E-01	0.0021	0.000E+00	0.0000	0.000E+00	0.0000	2.584E+00	0.0103
Ru-106	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Sr-90	1.564E-06	0.0000	7.639E-12	0.0000	0.000E+00	0.0000	9.543E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.589E-06	0.0000
Tc-99	7.105E-04	0.0000	1.143E-07	0.0000	0.000E+00	0.0000	1.163E+01	0.0464	0.000E+00	0.0000	0.000E+00	0.0000	1.162E-02	0.0000
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Th-230	1.336E+01	0.0533	6.785E-04	0.0000	0.000E+00	0.0000	9.228E+00	0.0368	0.000E+00	0.0000	0.000E+00	0.0000	5.972E+00	0.0238
Th-232	9.288E+01	0.3704	1.365E-03	0.0000	0.000E+00	0.0000	7.262E+01	0.2895	0.000E+00	0.0000	0.000E+00	0.0000	1.640E+01	0.0654
U-234	3.429E-02	0.0001	9.702E-05	0.0000	0.000E+00	0.0000	2.216E-01	0.0009	0.000E+00	0.0000	0.000E+00	0.0000	4.178E-01	0.0017
U-235	5.031E+00	0.0201	1.076E-04	0.0000	0.000E+00	0.0000	2.452E-01	0.0010	0.000E+00	0.0000	0.000E+00	0.0000	4.350E-01	0.0017
U-238	1.069E+00	0.0043	8.127E-05	0.0000	0.000E+00	0.0000	2.102E-01	0.0008	0.000E+00	0.0000	0.000E+00	0.0000	4.200E-01	0.0017
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	1.198E+02	0.4776	3.573E-03	0.0000	0.000E+00	0.0000	1.019E+02	0.4064	0.000E+00	0.0000	0.000E+00	0.0000	2.908E+01	0.1160

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 5.000E+02 years

		Water Dependent Pathways													
0		Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr
AAAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA
Am-241	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.357E+00
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.679E-27
Cs-134	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00
Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.145E-04
Eu-152	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.272E-10
Eu-154	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.401E-16
Eu-155	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.488E-29
I-129	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.556E+00
Mn-54	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00
Na-22	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00
Ni-63	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.204E-04
Np-237	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.353E+01
Pu-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.720E-02
Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.104E+00
Ru-106	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00
Sr-90	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.859E-05
Tc-99	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.164E+01
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00
Th-230	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.856E+01
Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.819E+02
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.739E-01
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.712E+00
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.699E+00
iiiiiii	iiiiiii	iiiiii	iiiiiii	iiiiii	iiiiiii	iiiiii	iiiiiii	iiiiii	iiiiiii	iiiiii	iiiiiii	iiiiii	iiiiiii	iiiiii	iiiiiii
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.508E+02

0*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)

As mrem/yr and Fraction of Total Dose At t = 1.000E+03 years

Water Independent Pathways (Inhalation excludes radon)

0	Water Independent Pathways (Inhalation excludes radon)															
	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil			
Radio-	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA
Am-241	5.294E-02	0.0002	1.165E-04	0.0000	0.000E+00	0.0000	9.355E-02	0.0003	0.000E+00	0.0000	0.000E+00	0.0000	4.632E-01	0.001		
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000		
Cs-134	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000		
Cs-137	2.167E-09	0.0000	3.487E-17	0.0000	0.000E+00	0.0000	2.738E-11	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.420E-12	0.0000		
Eu-152	2.487E-21	0.0000	4.360E-18	0.0000	0.000E+00	0.0000	3.470E-15	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.933E-15	0.0000		
Eu-154	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000		
Eu-155	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000		
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000		
I-129	6.452E-02	0.0002	6.353E-07	0.0000	0.000E+00	0.0000	1.952E+00	0.0072	0.000E+00	0.0000	0.000E+00	0.0000	4.875E-01	0.0018		
Mn-54	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000		
Na-22	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000		
Ni-63	0.000E+00	0.0000	2.535E-11	0.0000	0.000E+00	0.0000	2.054E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.052E-06	0.0000		
Np-237	7.220E+00	0.0267	3.017E-04	0.0000	0.000E+00	0.0000	5.049E+00	0.0186	0.000E+00	0.0000	0.000E+00	0.0000	1.263E+00	0.0047		
Pu-238	3.462E-05	0.0000	2.683E-07	0.0000	0.000E+00	0.0000	2.770E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.070E-03	0.0000		
Pu-239	1.805E-03	0.0000	6.603E-04	0.0000	0.000E+00	0.0000	5.102E-01	0.0019	0.000E+00	0.0000	0.000E+00	0.0000	2.547E+00	0.0094		
Ru-106	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000		
Sr-90	9.252E-12	0.0000	4.518E-17	0.0000	0.000E+00	0.0000	5.644E-10	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.400E-12	0.0000		
Tc-99	6.841E-04	0.0000	1.101E-07	0.0000	0.000E+00	0.0000	1.119E+01	0.0413	0.000E+00	0.0000	0.000E+00	0.0000	1.119E-02	0.0000		
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000		
Th-230	2.405E+01	0.0888	6.984E-04	0.0000	0.000E+00	0.0000	1.658E+01	0.0612	0.000E+00	0.0000	0.000E+00	0.0000	8.889E+00	0.0328		
Th-232	9.288E+01	0.3429	1.365E-03	0.0000	0.000E+00	0.0000	7.262E+01	0.2681	0.000E+00	0.0000	0.000E+00	0.0000	1.640E+01	0.0606		
U-234	1.211E-01	0.0004	1.000E-04	0.0000	0.000E+00	0.0000	2.812E-01	0.0010	0.000E+00	0.0000	0.000E+00	0.0000	4.516E-01	0.0017		
U-235	5.185E+00	0.0191	1.302E-04	0.0000	0.000E+00	0.0000	2.963E-01	0.0011	0.000E+00	0.0000	0.000E+00	0.0000	4.829E-01	0.0018		
U-238	1.069E+00	0.0039	8.140E-05	0.0000	0.000E+00	0.0000	2.105E-01	0.0008	0.000E+00	0.0000	0.000E+00	0.0000	4.205E-01	0.0016		
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	1.306E+02	0.4823	3.454E-03	0.0000	0.000E+00	0.0000	1.088E+02	0.4016	0.000E+00	0.0000	0.000E+00	0.0000	3.142E+01	0.1160		

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
 As mrem/yr and Fraction of Total Dose At t = 1.000E+03 years

Water Dependent Pathways														
0	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
Radio-	AAAAA		AAAAA		AAAAA		AAAAA		AAAAA		AAAAA		AAAAA	
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
AAAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA	AAAAAA	AAAAA
Am-241	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.098E-01	0.0023
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Cs-134	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.198E-09	0.0000
Eu-152	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.041E-14	0.0000
Eu-154	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Eu-155	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
I-129	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.504E+00	0.0092
Mn-54	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Na-22	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Ni-63	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.259E-05	0.0000
Np-237	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.353E+01	0.0500
Pu-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.382E-03	0.0000
Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.060E+00	0.0113
Ru-106	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Sr-90	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.831E-10	0.0000
Tc-99	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.121E+01	0.0414
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Th-230	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.951E+01	0.1828
Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.819E+02	0.6716
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.540E-01	0.0032
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.964E+00	0.0220
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.700E+00	0.0063
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.709E+02	1.0000

0*Sum of all water independent and dependent pathways.

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 Summary : Child residential SALS 2015
 File : D:\ACTIVE PROJECTS\ADELANTE\MT0A4_CONTRACT\T01\RISK\2015 RADSALES\DOSE-BASED SALS\RESRAD CALCS\CHILDRES2015.RAD

Dose/Source Ratios Summed Over All Pathways												
Parent and Progeny Principal Radionuclide Contributions Indicated												
0	Parent	Product	Thread	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)								
	(i)	(j)	Fraction	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA
	Am-241	Am-241	1.000E+00	3.022E-01	3.018E-01	2.904E-01	2.880E-01	2.789E-01	2.574E-01	2.024E-01	1.355E-01	6.076E-02
	Am-241	Np-237+D	1.000E+00	2.183E-07	6.550E-07	1.093E-05	1.302E-05	2.122E-05	4.061E-05	9.025E-05	1.505E-04	2.179E-04
	Am-241	U-233	1.000E+00	8.653E-15	5.993E-14	1.637E-11	2.335E-11	6.332E-11	2.442E-10	1.405E-09	4.969E-09	1.594E-08
	Am-241	Th-229+D	1.000E+00	7.903E-18	1.184E-16	5.184E-13	8.851E-13	3.983E-12	3.074E-11	4.476E-10	3.236E-09	2.156E-08
	Am-241	äDSR(j)		3.022E-01	3.018E-01	2.904E-01	2.881E-01	2.790E-01	2.575E-01	2.025E-01	1.357E-01	6.098E-02
	0Co-60	Co-60	1.000E+00	9.592E+00	8.410E+00	3.583E-01	1.856E-01	1.338E-02	1.867E-05	5.070E-14	2.680E-28	0.000E+00
	0Cs-134	Cs-134	1.000E+00	4.971E+00	3.553E+00	1.126E-03	2.102E-04	2.552E-07	1.310E-14	1.773E-36	0.000E+00	0.000E+00
	0Cs-137+D	Cs-137+D	1.000E+00	2.093E+00	2.045E+00	1.178E+00	1.050E+00	6.635E-01	2.103E-01	6.700E-03	2.145E-05	2.198E-10
	0Eu-152	Eu-152	7.210E-01	3.101E+00	2.946E+00	8.621E-01	6.674E-01	2.397E-01	1.852E-02	8.553E-06	2.359E-11	1.794E-22
	0Eu-152	Eu-152	2.790E-01	1.200E+00	1.140E+00	3.336E-01	2.582E-01	9.274E-02	7.168E-03	3.310E-06	9.128E-12	6.944E-23
	Eu-152	Gd-152	2.790E-01	2.620E-17	7.684E-17	7.587E-16	8.224E-16	9.623E-16	1.035E-15	1.041E-15	1.041E-15	1.041E-15
	Eu-152	Sm-148	2.790E-01	8.888E-34	6.132E-33	1.188E-30	1.589E-30	3.422E-30	8.552E-30	2.436E-29	5.073E-29	1.035E-28
	Eu-152	Nd-144	2.790E-01	0.000E+00	0.000E+00	2.803E-45	2.803E-45	1.822E-44	1.023E-43	8.100E-43	3.499E-42	1.454E-41
	Eu-152	äDSR(j)		1.200E+00	1.140E+00	3.336E-01	2.582E-01	9.274E-02	7.168E-03	3.310E-06	9.129E-12	1.041E-15
	0Eu-154	Eu-154	1.000E+00	4.598E+00	4.242E+00	6.120E-01	4.089E-01	8.147E-02	1.443E-03	8.027E-09	1.401E-17	4.271E-35
	0Eu-155	Eu-155	1.000E+00	1.032E-01	8.923E-02	2.711E-03	1.309E-03	7.119E-05	4.910E-08	1.611E-17	2.513E-33	0.000E+00
	0H-3	H-3	1.000E+00	1.452E-02	1.277E-02	5.789E-04	3.039E-04	2.308E-05	3.669E-08	1.473E-16	1.495E-30	0.000E+00
	0I-129	I-129	1.000E+00	2.610E-01	2.610E-01	2.607E-01	2.607E-01	2.605E-01	2.599E-01	2.583E-01	2.556E-01	2.504E-01
	0Mn-54	Mn-54	1.000E+00	2.215E+00	9.844E-01	3.456E-09	5.988E-11	5.393E-18	1.313E-35	0.000E+00	0.000E+00	0.000E+00
	0Na-22	Na-22	1.000E+00	7.456E+00	5.713E+00	9.552E-03	2.521E-03	1.224E-05	2.008E-11	8.879E-29	0.000E+00	0.000E+00
	0Ni-63	Ni-63	1.000E+00	2.297E-03	2.281E-03	1.932E-03	1.866E-03	1.625E-03	1.149E-03	4.068E-04	7.204E-05	2.259E-06
	0Np-237+D	Np-237+D	1.000E+00	1.353E+00	1.353E+00	1.353E+00	1.353E+00	1.353E+00	1.353E+00	1.353E+00	1.353E+00	1.353E+00
	Np-237+D	U-233	1.000E+00	7.972E-08	2.376E-07	4.023E-06	4.812E-06	7.966E-06	1.585E-05	3.949E-05	7.886E-05	1.574E-04
	Np-237+D	Th-229+D	1.000E+00	9.779E-11	6.842E-10	1.905E-07	2.725E-07	7.464E-07	2.951E-06	1.824E-05	7.223E-05	2.840E-04
	Np-237+D	äDSR(j)		1.353E+00	1.353E+00	1.353E+00	1.353E+00	1.353E+00	1.353E+00	1.353E+00	1.353E+00	1.353E+00
	0Pu-238	Pu-238	1.850E-09	5.484E-10	5.441E-10	4.501E-10	4.326E-10	3.694E-10	2.488E-10	7.603E-11	1.054E-11	2.026E-13
	0Pu-238	Pu-238	9.996E-01	2.963E-01	2.940E-01	2.432E-01	2.338E-01	1.996E-01	1.344E-01	4.108E-02	5.695E-03	1.095E-04
	Pu-238	U-234	9.996E-01	8.453E-08	2.529E-07	3.918E-06	4.598E-06	7.064E-06	1.176E-05	1.849E-05	2.103E-05	2.140E-05
	Pu-238	Th-230	9.996E-01	1.333E-12	9.300E-12	2.434E-09	3.438E-09	8.965E-09	3.151E-08	1.430E-07	3.799E-07	8.796E-07
	Pu-238	Ra-226+D	9.996E-01	3.875E-15	5.807E-14	2.448E-10	4.145E-10	1.808E-09	1.294E-08	1.544E-07	8.608E-07	4.041E-06
	Pu-238	Pb-210+D	9.996E-01	1.525E-17	4.630E-16	2.604E-11	5.137E-11	3.353E-10	3.821E-09	6.917E-08	4.558E-07	2.324E-06
	Pu-238	äDSR(j)		2.963E-01	2.940E-01	2.432E-01	2.338E-01	1.996E-01	1.344E-01	4.110E-02	5.718E-03	1.381E-04

Dose/Source Ratios Summed Over All Pathways

Parent and Progeny Principal Radionuclide Contributions Indicated

0	Parent (i)	Product (j)	Thread Fraction	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)								
	AAAAA	AAAAA	AAAAA	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
	Pu-238	Pu-238	1.319E-06	3.911E-07	3.881E-07	3.210E-07	3.086E-07	2.635E-07	1.775E-07	5.423E-08	7.518E-09	1.445E-10
	Pu-238	U-234	1.319E-06	1.116E-13	3.338E-13	5.172E-12	6.070E-12	9.325E-12	1.553E-11	2.441E-11	2.776E-11	2.825E-11
	Pu-238	Th-230	1.319E-06	1.760E-18	1.228E-17	3.213E-15	4.539E-15	1.183E-14	4.159E-14	1.887E-13	5.015E-13	1.161E-12
	Pu-238	Ra-226+D	1.319E-06	5.115E-21	7.666E-20	3.231E-16	5.472E-16	2.386E-15	1.708E-14	2.038E-13	1.136E-12	5.335E-12
	Pu-238	Pb-210+D1	1.319E-06	6.507E-24	2.012E-22	1.150E-17	2.270E-17	1.482E-16	1.690E-15	3.059E-14	2.016E-13	1.028E-12
	Pu-238	äDSR(j)		3.911E-07	3.881E-07	3.210E-07	3.086E-07	2.635E-07	1.775E-07	5.425E-08	7.547E-09	1.803E-10
0	Pu-238	Pu-238	1.899E-08	5.630E-09	5.586E-09	4.621E-09	4.442E-09	3.792E-09	2.554E-09	7.805E-10	1.082E-10	2.080E-12
	Pu-238	U-234	1.899E-08	1.606E-15	4.804E-15	7.445E-14	8.737E-14	1.342E-13	2.235E-13	3.514E-13	3.996E-13	4.067E-13
	Pu-238	Th-230	1.899E-08	2.533E-20	1.767E-19	4.625E-17	6.533E-17	1.703E-16	5.987E-16	2.716E-15	7.219E-15	1.671E-14
	Pu-238	Ra-226+D	1.899E-08	7.363E-23	1.103E-21	4.650E-18	7.876E-18	3.435E-17	2.458E-16	2.934E-15	1.636E-14	7.679E-14
	Pu-238	Pb-210+D2	1.899E-08	1.157E-25	3.575E-24	2.042E-19	4.030E-19	2.631E-18	3.000E-17	5.430E-16	3.579E-15	1.824E-14
	Pu-238	äDSR(j)		5.630E-09	5.586E-09	4.621E-09	4.442E-09	3.792E-09	2.554E-09	7.809E-10	1.086E-10	2.598E-12
0	Pu-238	Pu-238	2.100E-04	6.224E-05	6.175E-05	5.108E-05	4.910E-05	4.192E-05	2.824E-05	8.629E-06	1.196E-06	2.299E-08
	Pu-238	U-234	2.100E-04	1.776E-11	5.311E-11	8.230E-10	9.658E-10	1.484E-09	2.471E-09	3.885E-09	4.418E-09	4.496E-09
	Pu-238	Th-230	2.100E-04	2.800E-16	1.953E-15	5.113E-13	7.222E-13	1.883E-12	6.618E-12	3.003E-11	7.980E-11	1.848E-10
	Pu-238	Ra-226+D1	2.100E-04	1.894E-18	2.838E-17	1.195E-13	2.025E-13	8.829E-13	6.320E-12	7.542E-11	4.205E-10	1.974E-09
	Pu-238	Pb-210+D	2.100E-04	3.203E-21	9.724E-20	5.470E-15	1.079E-14	7.043E-14	8.027E-13	1.453E-11	9.574E-11	4.881E-10
	Pu-238	äDSR(j)		6.224E-05	6.175E-05	5.108E-05	4.910E-05	4.192E-05	2.824E-05	8.633E-06	1.201E-06	3.013E-08
0	Pu-238	Pu-238	2.771E-10	8.216E-11	8.151E-11	6.743E-11	6.481E-11	5.534E-11	3.727E-11	1.139E-11	1.579E-12	3.035E-14
	Pu-238	U-234	2.771E-10	2.344E-17	7.011E-17	1.086E-15	1.275E-15	1.959E-15	3.262E-15	5.128E-15	5.831E-15	5.934E-15
	Pu-238	Th-230	2.771E-10	3.696E-22	2.578E-21	6.749E-19	9.533E-19	2.486E-18	8.736E-18	3.964E-17	1.053E-16	2.439E-16
	Pu-238	Ra-226+D1	2.771E-10	2.501E-24	3.746E-23	1.578E-19	2.673E-19	1.165E-18	8.342E-18	9.956E-17	5.550E-16	2.606E-15
	Pu-238	Pb-210+D1	2.771E-10	1.367E-27	4.226E-26	2.416E-21	4.768E-21	3.113E-20	3.549E-19	6.424E-18	4.234E-17	2.159E-16
	Pu-238	äDSR(j)		8.216E-11	8.151E-11	6.743E-11	6.481E-11	5.534E-11	3.728E-11	1.140E-11	1.586E-12	3.935E-14
0	Pu-238	Pu-238	3.989E-12	1.183E-12	1.173E-12	9.705E-13	9.329E-13	7.965E-13	5.365E-13	1.639E-13	2.273E-14	4.368E-16
	Pu-238	U-234	3.989E-12	3.374E-19	1.009E-18	1.564E-17	1.835E-17	2.819E-17	4.695E-17	7.381E-17	8.394E-17	8.542E-17
	Pu-238	Th-230	3.989E-12	5.320E-24	3.711E-23	9.715E-21	1.372E-20	3.578E-20	1.257E-19	5.706E-19	1.516E-18	3.511E-18
	Pu-238	Ra-226+D1	3.989E-12	3.599E-26	5.391E-25	2.271E-21	3.847E-21	1.678E-20	1.201E-19	1.433E-18	7.989E-18	3.750E-17
	Pu-238	Pb-210+D2	3.989E-12	2.430E-29	7.509E-28	4.290E-23	8.464E-23	5.527E-22	6.300E-21	1.141E-19	7.517E-19	3.832E-18
	Pu-238	äDSR(j)		1.183E-12	1.173E-12	9.705E-13	9.329E-13	7.965E-13	5.365E-13	1.640E-13	2.282E-14	5.671E-16
0	Pu-238	Pu-238	1.998E-04	5.922E-05	5.875E-05	4.860E-05	4.672E-05	3.989E-05	2.687E-05	8.209E-06	1.138E-06	2.187E-08
	Pu-238	U-234	1.998E-04	1.689E-11	5.053E-11	7.830E-10	9.189E-10	1.412E-09	2.351E-09	3.696E-09	4.203E-09	4.277E-09
	Pu-238	Th-230	1.998E-04	2.664E-16	1.858E-15	4.865E-13	6.871E-13	1.792E-12	6.297E-12	2.857E-11	7.593E-11	1.758E-10
	Pu-238	Ra-226+D2	1.998E-04	6.963E-19	1.044E-17	4.399E-14	7.450E-14	3.249E-13	2.326E-12	2.775E-11	1.547E-10	7.263E-10
	Pu-238	Pb-210+D	1.998E-04	3.047E-21	9.252E-20	5.204E-15	1.027E-14	6.701E-14	7.637E-13	1.382E-11	9.109E-11	4.644E-10
	Pu-238	äDSR(j)		5.922E-05	5.875E-05	4.860E-05	4.672E-05	3.989E-05	2.687E-05	8.213E-06	1.143E-06	2.752E-08

Dose/Source Ratios Summed Over All Pathways

Parent and Progeny Principal Radionuclide Contributions Indicated

0	Parent (i)	Product (j)	Thread Fraction	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)								
	AAAAA	AAAAA	AAAAA	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
	Pu-238	Pu-238	2.637E-10	7.816E-11	7.755E-11	6.415E-11	6.166E-11	5.265E-11	3.546E-11	1.084E-11	1.502E-12	2.887E-14
	Pu-238	U-234	2.637E-10	2.230E-17	6.670E-17	1.034E-15	1.213E-15	1.863E-15	3.103E-15	4.879E-15	5.548E-15	5.646E-15
	Pu-238	Th-230	2.637E-10	3.516E-22	2.453E-21	6.421E-19	9.070E-19	2.365E-18	8.312E-18	3.771E-17	1.002E-16	2.320E-16
	Pu-238	Ra-226+D2	2.637E-10	9.192E-25	1.378E-23	5.806E-20	9.834E-20	4.288E-19	3.070E-18	3.663E-17	2.042E-16	9.588E-16
	Pu-238	Pb-210+D1	2.637E-10	1.300E-27	4.021E-26	2.299E-21	4.536E-21	2.962E-20	3.376E-19	6.112E-18	4.028E-17	2.054E-16
	Pu-238	äDSR(j)		7.816E-11	7.755E-11	6.415E-11	6.167E-11	5.265E-11	3.546E-11	1.084E-11	1.508E-12	3.592E-14
0	Pu-238	Pu-238	3.795E-12	1.125E-12	1.116E-12	9.234E-13	8.876E-13	7.578E-13	5.104E-13	1.560E-13	2.162E-14	4.156E-16
	Pu-238	U-234	3.795E-12	3.210E-19	9.601E-19	1.488E-17	1.746E-17	2.682E-17	4.467E-17	7.022E-17	7.986E-17	8.127E-17
	Pu-238	Th-230	3.795E-12	5.062E-24	3.531E-23	9.243E-21	1.305E-20	3.404E-20	1.196E-19	5.428E-19	1.443E-18	3.340E-18
	Pu-238	Ra-226+D2	3.795E-12	1.323E-26	1.983E-25	8.358E-22	1.416E-21	6.173E-21	4.419E-20	5.273E-19	2.940E-18	1.380E-17
	Pu-238	Pb-210+D2	3.795E-12	2.312E-29	7.144E-28	4.081E-23	8.053E-23	5.258E-22	5.994E-21	1.085E-19	7.152E-19	3.646E-18
	Pu-238	äDSR(j)		1.125E-12	1.116E-12	9.234E-13	8.876E-13	7.578E-13	5.105E-13	1.561E-13	2.171E-14	5.177E-16
0	Pu-238	Pu-238	4.196E-08	1.244E-08	1.234E-08	1.021E-08	9.812E-09	8.378E-09	5.643E-09	1.724E-09	2.391E-10	4.595E-12
	Pu-238	U-234	4.196E-08	3.548E-15	1.061E-14	1.645E-13	1.930E-13	2.965E-13	4.938E-13	7.763E-13	8.828E-13	8.984E-13
	Pu-238	Th-230	4.196E-08	5.596E-20	3.904E-19	1.022E-16	1.443E-16	3.763E-16	1.323E-15	6.001E-15	1.595E-14	3.692E-14
	Pu-238	Ra-226+D3	4.196E-08	3.622E-22	5.425E-21	2.286E-17	3.871E-17	1.688E-16	1.208E-15	1.442E-14	8.039E-14	3.774E-13
	Pu-238	Pb-210+D	4.196E-08	6.400E-25	1.943E-23	1.093E-18	2.156E-18	1.407E-17	1.604E-16	2.903E-15	1.913E-14	9.754E-14
	Pu-238	äDSR(j)		1.244E-08	1.234E-08	1.021E-08	9.813E-09	8.378E-09	5.643E-09	1.725E-09	2.401E-10	6.005E-12
0	Pu-238	Pu-238	5.538E-14	1.642E-14	1.629E-14	1.347E-14	1.295E-14	1.106E-14	7.449E-15	2.276E-15	3.156E-16	6.065E-18
	Pu-238	U-234	5.538E-14	4.684E-21	1.401E-20	2.171E-19	2.548E-19	3.914E-19	6.518E-19	1.025E-18	1.165E-18	1.186E-18
	Pu-238	Th-230	5.538E-14	7.386E-26	5.153E-25	1.349E-22	1.905E-22	4.967E-22	1.746E-21	7.922E-21	2.105E-20	4.874E-20
	Pu-238	Ra-226+D3	5.538E-14	4.781E-28	7.161E-27	3.017E-23	5.110E-23	2.228E-22	1.595E-21	1.903E-20	1.061E-19	4.982E-19
	Pu-238	Pb-210+D1	5.538E-14	2.731E-31	8.446E-30	4.829E-25	9.528E-25	6.221E-24	7.092E-23	1.284E-21	8.461E-21	4.314E-20
	Pu-238	äDSR(j)		1.642E-14	1.629E-14	1.347E-14	1.295E-14	1.106E-14	7.449E-15	2.277E-15	3.169E-16	7.841E-18
0	Pu-238	Pu-238	7.972E-16	2.363E-16	2.345E-16	1.939E-16	1.864E-16	1.592E-16	1.072E-16	3.276E-17	4.542E-18	8.730E-20
	Pu-238	U-234	7.972E-16	6.742E-23	2.017E-22	3.125E-21	3.667E-21	5.634E-21	9.383E-21	1.475E-20	1.677E-20	1.707E-20
	Pu-238	Th-230	7.972E-16	1.063E-27	7.417E-27	1.941E-24	2.742E-24	7.150E-24	2.513E-23	1.140E-22	3.030E-22	7.015E-22
	Pu-238	Ra-226+D3	7.972E-16	6.881E-30	1.031E-28	4.343E-25	7.355E-25	3.207E-24	2.296E-23	2.740E-22	1.527E-21	7.170E-21
	Pu-238	Pb-210+D2	7.972E-16	4.857E-33	1.501E-31	8.573E-27	1.692E-26	1.104E-25	1.259E-24	2.279E-23	1.502E-22	7.658E-22
	Pu-238	äDSR(j)		2.363E-16	2.345E-16	1.940E-16	1.864E-16	1.592E-16	1.072E-16	3.278E-17	4.561E-18	1.130E-19
0	Pu-238	Pu-238	2.000E-07	5.929E-08	5.882E-08	4.866E-08	4.677E-08	3.993E-08	2.690E-08	8.219E-09	1.139E-09	2.190E-11
	Pu-238	U-234	2.000E-07	1.691E-14	5.059E-14	7.840E-13	9.200E-13	1.413E-12	2.354E-12	3.700E-12	4.208E-12	4.282E-12
	Pu-238	Th-230	2.000E-07	2.667E-19	1.861E-18	4.870E-16	6.879E-16	1.794E-15	6.304E-15	2.861E-14	7.602E-14	1.760E-13
	Pu-238	Ra-226+D4	2.000E-07	1.355E-22	2.039E-21	8.621E-18	1.460E-17	6.368E-17	4.559E-16	5.441E-15	3.033E-14	1.424E-13
	Pu-238	Pb-210+D	2.000E-07	3.051E-24	9.263E-23	5.210E-18	1.028E-17	6.709E-17	7.646E-16	1.384E-14	9.120E-14	4.649E-13
	Pu-238	äDSR(j)		5.929E-08	5.882E-08	4.866E-08	4.677E-08	3.993E-08	2.690E-08	8.223E-09	1.144E-09	2.697E-11

Dose/Source Ratios Summed Over All Pathways
 Parent and Progeny Principal Radionuclide Contributions Indicated

0	Parent (i)	Product (j)	Thread Fraction	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)								
	AAAAA	AAAAA	AAAAA	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
	Pu-238	Pu-238	2.640E-13	7.826E-14	7.764E-14	6.423E-14	6.174E-14	5.271E-14	3.550E-14	1.085E-14	1.504E-15	2.891E-17
	Pu-238	U-234	2.640E-13	2.233E-20	6.678E-20	1.035E-18	1.214E-18	1.866E-18	3.107E-18	4.884E-18	5.555E-18	5.653E-18
	Pu-238	Th-230	2.640E-13	3.521E-25	2.456E-24	6.429E-22	9.081E-22	2.368E-21	8.322E-21	3.776E-20	1.003E-19	2.323E-19
	Pu-238	Ra-226+D4	2.640E-13	1.789E-28	2.691E-27	1.138E-23	1.928E-23	8.406E-23	6.017E-22	7.182E-21	4.004E-20	1.880E-19
	Pu-238	Pb-210+D1	2.640E-13	1.302E-30	4.026E-29	2.302E-24	4.542E-24	2.965E-23	3.381E-22	6.120E-21	4.033E-20	2.056E-19
	Pu-238	äDSR(j)		7.826E-14	7.764E-14	6.423E-14	6.174E-14	5.271E-14	3.551E-14	1.085E-14	1.510E-15	3.519E-17
0	Pu-238	Pu-238	3.800E-15	1.126E-15	1.118E-15	9.245E-16	8.887E-16	7.587E-16	5.111E-16	1.562E-16	2.165E-17	4.161E-19
	Pu-238	U-234	3.800E-15	3.214E-22	9.613E-22	1.490E-20	1.748E-20	2.686E-20	4.472E-20	7.031E-20	7.996E-20	8.137E-20
	Pu-238	Th-230	3.800E-15	5.068E-27	3.535E-26	9.254E-24	1.307E-23	3.408E-23	1.198E-22	5.435E-22	1.444E-21	3.344E-21
	Pu-238	Ra-226+D4	3.800E-15	2.575E-30	3.874E-29	1.638E-25	2.774E-25	1.210E-24	8.661E-24	1.034E-22	5.763E-22	2.705E-21
	Pu-238	Pb-210+D2	3.800E-15	2.315E-32	7.153E-31	4.086E-26	8.063E-26	5.265E-25	6.002E-24	1.086E-22	7.160E-22	3.650E-21
	Pu-238	äDSR(j)		1.126E-15	1.118E-15	9.245E-16	8.887E-16	7.588E-16	5.111E-16	1.562E-16	2.173E-17	5.072E-19
0	Pu-239	Pu-239	5.901E-04	1.858E-04	1.858E-04	1.857E-04	1.857E-04	1.856E-04	1.853E-04	1.845E-04	1.832E-04	1.806E-04
	Pu-239	U-235+D	5.901E-04	1.588E-13	4.765E-13	8.098E-12	9.685E-12	1.603E-11	3.188E-11	7.929E-11	1.579E-10	3.133E-10
	Pu-239	Pa-231	5.901E-04	1.283E-18	8.995E-18	2.509E-15	3.590E-15	9.837E-15	3.893E-14	2.412E-13	9.590E-13	3.800E-12
	Pu-239	Ac-227+D	5.901E-04	2.933E-20	4.364E-19	1.613E-15	2.665E-15	1.060E-14	6.294E-14	5.415E-13	2.433E-12	1.026E-11
	Pu-239	äDSR(j)		1.858E-04	1.858E-04	1.857E-04	1.857E-04	1.856E-04	1.853E-04	1.845E-04	1.832E-04	1.806E-04
0	Pu-239	Pu-239	1.633E-06	5.143E-07	5.143E-07	5.140E-07	5.139E-07	5.136E-07	5.129E-07	5.106E-07	5.070E-07	4.997E-07
	Pu-239	U-235+D	1.633E-06	4.396E-16	1.319E-15	2.241E-14	2.681E-14	4.437E-14	8.824E-14	2.195E-13	4.369E-13	8.671E-13
	Pu-239	Pa-231	1.633E-06	3.550E-21	2.489E-20	6.945E-18	9.935E-18	2.723E-17	1.077E-16	6.677E-16	2.654E-15	1.052E-14
	Pu-239	Ac-227+D1	1.633E-06	8.157E-23	1.216E-21	4.501E-18	7.436E-18	2.958E-17	1.756E-16	1.511E-15	6.791E-15	2.864E-14
	Pu-239	äDSR(j)		5.143E-07	5.143E-07	5.140E-07	5.139E-07	5.136E-07	5.129E-07	5.106E-07	5.070E-07	4.997E-07
0	Pu-239	Pu-239	8.257E-06	2.600E-06	2.600E-06	2.598E-06	2.598E-06	2.597E-06	2.593E-06	2.582E-06	2.563E-06	2.527E-06
	Pu-239	U-235+D	8.257E-06	2.222E-15	6.667E-15	1.133E-13	1.355E-13	2.243E-13	4.461E-13	1.110E-12	2.209E-12	4.384E-12
	Pu-239	Pa-231	8.257E-06	1.795E-20	1.259E-19	3.511E-17	5.023E-17	1.376E-16	5.447E-16	3.375E-15	1.342E-14	5.317E-14
	Pu-239	Ac-227+D2	8.257E-06	3.479E-22	5.186E-21	1.920E-17	3.172E-17	1.262E-16	7.492E-16	6.446E-15	2.897E-14	1.222E-13
	Pu-239	äDSR(j)		2.600E-06	2.600E-06	2.598E-06	2.598E-06	2.597E-06	2.593E-06	2.582E-06	2.563E-06	2.527E-06
0	Pu-239	Pu-239	2.285E-08	7.197E-09	7.196E-09	7.191E-09	7.190E-09	7.186E-09	7.176E-09	7.145E-09	7.094E-09	6.993E-09
	Pu-239	U-235+D	2.285E-08	6.151E-18	1.845E-17	3.136E-16	3.751E-16	6.208E-16	1.235E-15	3.071E-15	6.113E-15	1.213E-14
	Pu-239	Pa-231	2.285E-08	4.967E-23	3.483E-22	9.718E-20	1.390E-19	3.809E-19	1.507E-18	9.342E-18	3.714E-17	1.472E-16
	Pu-239	Ac-227+D3	2.285E-08	9.724E-25	1.449E-23	5.366E-20	8.866E-20	3.526E-19	2.094E-18	1.802E-17	8.096E-17	3.415E-16
	Pu-239	äDSR(j)		7.197E-09	7.196E-09	7.191E-09	7.190E-09	7.186E-09	7.176E-09	7.145E-09	7.094E-09	6.993E-09
0	Pu-239	Pu-239	4.954E-10	1.560E-10	1.560E-10	1.559E-10	1.559E-10	1.558E-10	1.556E-10	1.549E-10	1.538E-10	1.516E-10
	Pu-239	U-235+D	4.954E-10	1.334E-19	4.001E-19	6.799E-18	8.132E-18	1.346E-17	2.677E-17	6.657E-17	1.325E-16	2.630E-16
	Pu-239	Pa-231	4.954E-10	1.077E-24	7.552E-24	2.107E-21	3.014E-21	8.259E-21	3.268E-20	2.025E-19	8.052E-19	3.191E-18
	Pu-239	Ac-227+D4	4.954E-10	2.223E-26	3.312E-25	1.226E-21	2.026E-21	8.056E-21	4.784E-20	4.116E-19	1.850E-18	7.802E-18
	Pu-239	äDSR(j)		1.560E-10	1.560E-10	1.559E-10	1.559E-10	1.558E-10	1.556E-10	1.549E-10	1.538E-10	1.516E-10

Dose/Source Ratios Summed Over All Pathways

Parent and Progeny Principal Radionuclide Contributions Indicated

0	Parent (i)	Product (j)	Thread Fraction	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)								
	AAAAAAA	AAAAAAA	AAAAAAA	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
	Pu-239	Pu-239	1.371E-12	4.318E-13	4.318E-13	4.315E-13	4.314E-13	4.312E-13	4.306E-13	4.287E-13	4.257E-13	4.196E-13
	Pu-239	U-235+D	1.371E-12	3.691E-22	1.107E-21	1.882E-20	2.251E-20	3.725E-20	7.408E-20	1.843E-19	3.668E-19	7.280E-19
	Pu-239	Pa-231	1.371E-12	2.981E-27	2.090E-26	5.831E-24	8.341E-24	2.286E-23	9.045E-23	5.606E-22	2.228E-21	8.830E-21
	Pu-239	Ac-227+D5	1.371E-12	6.209E-29	9.252E-28	3.424E-24	5.658E-24	2.250E-23	1.336E-22	1.150E-21	5.167E-21	2.179E-20
	Pu-239	äDSR(j)		4.318E-13	4.318E-13	4.315E-13	4.314E-13	4.312E-13	4.306E-13	4.287E-13	4.257E-13	4.196E-13
0	Pu-239+D	Pu-239+D	9.829E-01	3.095E-01	3.095E-01	3.093E-01	3.093E-01	3.091E-01	3.087E-01	3.073E-01	3.051E-01	3.008E-01
	Pu-239+D	U-235+D	9.829E-01	2.646E-10	7.937E-10	1.349E-08	1.613E-08	2.670E-08	5.310E-08	1.321E-07	2.629E-07	5.218E-07
	Pu-239+D	Pa-231	9.829E-01	2.137E-15	1.498E-14	4.180E-12	5.979E-12	1.639E-11	6.484E-11	4.018E-10	1.597E-09	6.330E-09
	Pu-239+D	Ac-227+D	9.829E-01	4.885E-17	7.268E-16	2.687E-12	4.439E-12	1.765E-11	1.048E-10	9.020E-10	4.053E-09	1.710E-08
	Pu-239+D	äDSR(j)		3.095E-01	3.095E-01	3.093E-01	3.093E-01	3.091E-01	3.087E-01	3.073E-01	3.051E-01	3.008E-01
0	Pu-239+D	Pu-239+D	2.720E-03	8.567E-04	8.567E-04	8.561E-04	8.560E-04	8.555E-04	8.542E-04	8.506E-04	8.445E-04	8.324E-04
	Pu-239+D	U-235+D	2.720E-03	7.322E-13	2.197E-12	3.733E-11	4.465E-11	7.391E-11	1.470E-10	3.655E-10	7.277E-10	1.444E-09
	Pu-239+D	Pa-231	2.720E-03	5.913E-18	4.147E-17	1.157E-14	1.655E-14	4.535E-14	1.795E-13	1.112E-12	4.421E-12	1.752E-11
	Pu-239+D	Ac-227+D1	2.720E-03	1.359E-19	2.025E-18	7.497E-15	1.239E-14	4.927E-14	2.925E-13	2.517E-12	1.131E-11	4.771E-11
	Pu-239+D	äDSR(j)		8.567E-04	8.567E-04	8.561E-04	8.560E-04	8.555E-04	8.542E-04	8.506E-04	8.445E-04	8.324E-04
0	Pu-239+D	Pu-239+D	1.375E-02	4.331E-03	4.331E-03	4.328E-03	4.327E-03	4.325E-03	4.319E-03	4.300E-03	4.269E-03	4.208E-03
	Pu-239+D	U-235+D	1.375E-02	3.702E-12	1.111E-11	1.887E-10	2.257E-10	3.736E-10	7.430E-10	1.848E-09	3.679E-09	7.302E-09
	Pu-239+D	Pa-231	1.375E-02	2.990E-17	2.096E-16	5.848E-14	8.366E-14	2.293E-13	9.072E-13	5.622E-12	2.235E-11	8.857E-11
	Pu-239+D	Ac-227+D2	1.375E-02	5.795E-19	8.638E-18	3.198E-14	5.284E-14	2.102E-13	1.248E-12	1.074E-11	4.825E-11	2.035E-10
	Pu-239+D	äDSR(j)		4.331E-03	4.331E-03	4.328E-03	4.327E-03	4.325E-03	4.319E-03	4.300E-03	4.269E-03	4.208E-03
0	Pu-239+D	Pu-239+D	3.806E-05	1.199E-05	1.199E-05	1.198E-05	1.198E-05	1.197E-05	1.195E-05	1.190E-05	1.182E-05	1.165E-05
	Pu-239+D	U-235+D	3.806E-05	1.025E-14	3.074E-14	5.224E-13	6.247E-13	1.034E-12	2.056E-12	5.115E-12	1.018E-11	2.021E-11
	Pu-239+D	Pa-231	3.806E-05	8.274E-20	5.802E-19	1.619E-16	2.315E-16	6.345E-16	2.511E-15	1.556E-14	6.186E-14	2.451E-13
	Pu-239+D	Ac-227+D3	3.806E-05	1.620E-21	2.414E-20	8.938E-17	1.477E-16	5.874E-16	3.488E-15	3.001E-14	1.349E-13	5.688E-13
	Pu-239+D	äDSR(j)		1.199E-05	1.199E-05	1.198E-05	1.198E-05	1.197E-05	1.195E-05	1.190E-05	1.182E-05	1.165E-05
0	Pu-239+D	Pu-239+D	8.252E-07	2.599E-07	2.599E-07	2.597E-07	2.597E-07	2.595E-07	2.591E-07	2.580E-07	2.562E-07	2.525E-07
	Pu-239+D	U-235+D	8.252E-07	2.221E-16	6.664E-16	1.133E-14	1.354E-14	2.242E-14	4.459E-14	1.109E-13	2.208E-13	4.381E-13
	Pu-239+D	Pa-231	8.252E-07	1.794E-21	1.258E-20	3.509E-18	5.020E-18	1.376E-17	5.444E-17	3.374E-16	1.341E-15	5.314E-15
	Pu-239+D	Ac-227+D4	8.252E-07	3.702E-23	5.517E-22	2.042E-18	3.374E-18	1.342E-17	7.968E-17	6.856E-16	3.081E-15	1.300E-14
	Pu-239+D	äDSR(j)		2.599E-07	2.599E-07	2.597E-07	2.597E-07	2.595E-07	2.591E-07	2.580E-07	2.562E-07	2.525E-07
0	Pu-239+D	Pu-239+D	2.284E-09	7.193E-10	7.193E-10	7.188E-10	7.187E-10	7.182E-10	7.172E-10	7.141E-10	7.090E-10	6.989E-10
	Pu-239+D	U-235+D	2.284E-09	6.147E-19	1.844E-18	3.134E-17	3.749E-17	6.205E-17	1.234E-16	3.069E-16	6.110E-16	1.213E-15
	Pu-239+D	Pa-231	2.284E-09	4.965E-24	3.481E-23	9.712E-21	1.389E-20	3.807E-20	1.507E-19	9.337E-19	3.712E-18	1.471E-17
	Pu-239+D	Ac-227+D5	2.284E-09	1.034E-25	1.541E-24	5.704E-21	9.424E-21	3.748E-20	2.226E-19	1.915E-18	8.606E-18	3.630E-17
	Pu-239+D	äDSR(j)		7.193E-10	7.193E-10	7.188E-10	7.187E-10	7.182E-10	7.172E-10	7.141E-10	7.090E-10	6.989E-10
0	Ru-106+D	Ru-106+D	1.000E+00	6.540E-01	3.321E-01	2.870E-08	9.689E-10	1.259E-15	2.424E-30	0.000E+00	0.000E+00	0.000E+00
0	Sr-90+D	Sr-90+D	1.000E+00	1.667E+00	1.627E+00	9.131E-01	8.095E-01	5.002E-01	1.501E-01	4.054E-03	9.859E-06	5.831E-11

Dose/Source Ratios Summed Over All Pathways

Parent and Progeny Principal Radionuclide Contributions Indicated

0	Parent (i)	Product (j)	Thread Fraction	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)								
	AAAAA	AAAAA	AAAAA	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
	Tc-99	Tc-99	1.000E+00	1.209E+00	1.209E+00	1.206E+00	1.206E+00	1.204E+00	1.200E+00	1.186E+00	1.164E+00	1.121E+00
0	Th-228+D	Th-228+D	1.000E+00	5.492E+00	3.821E+00	6.351E-04	1.036E-04	7.344E-08	9.821E-16	2.349E-39	0.000E+00	0.000E+00
0	Th-230	Th-230	9.996E-01	3.081E-01	3.081E-01	3.080E-01	3.080E-01	3.079E-01	3.078E-01	3.073E-01	3.066E-01	3.052E-01
	Th-230	Ra-226+D	9.996E-01	1.795E-03	5.388E-03	9.113E-02	1.089E-01	1.795E-01	3.533E-01	8.521E-01	1.613E+00	2.903E+00
	Th-230	Pb-210+D	9.996E-01	1.160E-05	7.975E-05	1.745E-02	2.384E-02	5.503E-02	1.518E-01	4.600E-01	9.350E-01	1.740E+00
	Th-230	äDSR(j)		3.099E-01	3.135E-01	4.166E-01	4.407E-01	5.424E-01	8.128E-01	1.619E+00	2.855E+00	4.949E+00
0	Th-230	Th-230	1.319E-06	4.066E-07	4.066E-07	4.065E-07	4.065E-07	4.064E-07	4.063E-07	4.057E-07	4.048E-07	4.029E-07
	Th-230	Ra-226+D	1.319E-06	2.370E-09	7.112E-09	1.203E-07	1.437E-07	2.369E-07	4.663E-07	1.125E-06	2.129E-06	3.832E-06
	Th-230	Pb-210+D1	1.319E-06	5.022E-12	3.494E-11	7.711E-09	1.054E-08	2.433E-08	6.711E-08	2.034E-07	4.135E-07	7.696E-07
	Th-230	äDSR(j)		4.090E-07	4.138E-07	5.345E-07	5.608E-07	6.677E-07	9.397E-07	1.734E-06	2.948E-06	5.005E-06
0	Th-230	Th-230	1.899E-08	5.853E-09	5.853E-09	5.852E-09	5.851E-09	5.850E-09	5.848E-09	5.840E-09	5.826E-09	5.800E-09
	Th-230	Ra-226+D	1.899E-08	3.411E-11	1.024E-10	1.731E-09	2.069E-09	3.410E-09	6.712E-09	1.619E-08	3.065E-08	5.516E-08
	Th-230	Pb-210+D2	1.899E-08	8.925E-14	6.206E-13	1.369E-10	1.871E-10	4.319E-10	1.191E-09	3.611E-09	7.340E-09	1.366E-08
	Th-230	äDSR(j)		5.887E-09	5.956E-09	7.720E-09	8.107E-09	9.692E-09	1.375E-08	2.564E-08	4.382E-08	7.463E-08
0	Th-230	Th-230	2.100E-04	6.471E-05	6.471E-05	6.469E-05	6.469E-05	6.468E-05	6.465E-05	6.456E-05	6.441E-05	6.411E-05
	Th-230	Ra-226+D1	2.100E-04	8.773E-07	2.632E-06	4.451E-05	5.318E-05	8.766E-05	1.725E-04	4.162E-04	7.879E-04	1.418E-03
	Th-230	Pb-210+D	2.100E-04	2.436E-09	1.675E-08	3.664E-06	5.007E-06	1.156E-05	3.188E-05	9.662E-05	1.964E-04	3.655E-04
	Th-230	äDSR(j)		6.559E-05	6.735E-05	1.129E-04	1.229E-04	1.639E-04	2.691E-04	5.774E-04	1.049E-03	1.848E-03
0	Th-230	Th-230	2.771E-10	8.541E-11	8.541E-11	8.539E-11	8.539E-11	8.537E-11	8.533E-11	8.522E-11	8.502E-11	8.463E-11
	Th-230	Ra-226+D1	2.771E-10	1.158E-12	3.474E-12	5.875E-11	7.020E-11	1.157E-10	2.278E-10	5.494E-10	1.040E-09	1.872E-09
	Th-230	Pb-210+D1	2.771E-10	1.055E-15	7.339E-15	1.620E-12	2.214E-12	5.110E-12	1.410E-11	4.273E-11	8.685E-11	1.616E-10
	Th-230	äDSR(j)		8.657E-11	8.889E-11	1.458E-10	1.578E-10	2.062E-10	3.272E-10	6.773E-10	1.212E-09	2.118E-09
0	Th-230	Th-230	3.989E-12	1.229E-12	1.229E-12	1.229E-12	1.229E-12	1.229E-12	1.228E-12	1.227E-12	1.224E-12	1.218E-12
	Th-230	Ra-226+D1	3.989E-12	1.667E-14	5.000E-14	8.457E-13	1.010E-12	1.666E-12	3.278E-12	7.908E-12	1.497E-11	2.694E-11
	Th-230	Pb-210+D2	3.989E-12	1.875E-17	1.304E-16	2.876E-14	3.930E-14	9.073E-14	2.502E-13	7.586E-13	1.542E-12	2.870E-12
	Th-230	äDSR(j)		1.246E-12	1.280E-12	2.104E-12	2.279E-12	2.985E-12	4.757E-12	9.893E-12	1.774E-11	3.103E-11
0	Th-230	Th-230	1.998E-04	6.156E-05	6.156E-05	6.155E-05	6.155E-05	6.153E-05	6.151E-05	6.142E-05	6.128E-05	6.100E-05
	Th-230	Ra-226+D2	1.998E-04	3.227E-07	9.683E-07	1.638E-05	1.957E-05	3.226E-05	6.349E-05	1.532E-04	2.899E-04	5.218E-04
	Th-230	Pb-210+D	1.998E-04	2.318E-09	1.594E-08	3.486E-06	4.764E-06	1.100E-05	3.033E-05	9.193E-05	1.868E-04	3.477E-04
	Th-230	äDSR(j)		6.189E-05	6.255E-05	8.141E-05	8.588E-05	1.048E-04	1.553E-04	3.065E-04	5.381E-04	9.306E-04
0	Th-230	Th-230	2.637E-10	8.126E-11	8.126E-11	8.124E-11	8.124E-11	8.122E-11	8.119E-11	8.108E-11	8.089E-11	8.052E-11
	Th-230	Ra-226+D2	2.637E-10	4.259E-13	1.278E-12	2.162E-11	2.583E-11	4.258E-11	8.381E-11	2.022E-10	3.827E-10	6.888E-10
	Th-230	Pb-210+D1	2.637E-10	1.004E-15	6.983E-15	1.541E-12	2.106E-12	4.862E-12	1.341E-11	4.065E-11	8.263E-11	1.538E-10
	Th-230	äDSR(j)		8.169E-11	8.255E-11	1.044E-10	1.092E-10	1.287E-10	1.784E-10	3.239E-10	5.462E-10	9.231E-10

Dose/Source Ratios Summed Over All Pathways

Parent and Progeny Principal Radionuclide Contributions Indicated

0	Parent (i)	Product (j)	Thread Fraction	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)								
	AAAAAAA	AAAAAAA	AAAAAAA	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
	Th-230	Th-230	3.795E-12	1.170E-12	1.170E-12	1.169E-12	1.169E-12	1.169E-12	1.169E-12	1.167E-12	1.164E-12	1.159E-12
	Th-230	Ra-226+D2	3.795E-12	6.131E-15	1.840E-14	3.112E-13	3.718E-13	6.129E-13	1.206E-12	2.910E-12	5.509E-12	9.914E-12
	Th-230	Pb-210+D2	3.795E-12	1.784E-17	1.240E-16	2.736E-14	3.739E-14	8.632E-14	2.381E-13	7.217E-13	1.467E-12	2.730E-12
	Th-230	äDSR(j)		1.176E-12	1.188E-12	1.508E-12	1.579E-12	1.868E-12	2.613E-12	4.799E-12	8.140E-12	1.380E-11
0	Th-230	Th-230	4.196E-08	1.293E-08	1.293E-08	1.293E-08	1.293E-08	1.292E-08	1.292E-08	1.290E-08	1.287E-08	1.281E-08
	Th-230	Ra-226+D3	4.196E-08	1.677E-10	5.032E-10	8.510E-09	1.017E-08	1.676E-08	3.299E-08	7.957E-08	1.506E-07	2.711E-07
	Th-230	Pb-210+D	4.196E-08	4.869E-13	3.347E-12	7.323E-10	1.001E-09	2.310E-09	6.370E-09	1.931E-08	3.924E-08	7.304E-08
	Th-230	äDSR(j)		1.310E-08	1.344E-08	2.217E-08	2.410E-08	3.199E-08	5.228E-08	1.118E-07	2.028E-07	3.570E-07
0	Th-230	Th-230	5.538E-14	1.707E-14	1.707E-14	1.706E-14	1.706E-14	1.706E-14	1.705E-14	1.703E-14	1.699E-14	1.691E-14
	Th-230	Ra-226+D3	5.538E-14	2.214E-16	6.642E-16	1.123E-14	1.342E-14	2.212E-14	4.355E-14	1.050E-13	1.989E-13	3.579E-13
	Th-230	Pb-210+D1	5.538E-14	2.108E-19	1.467E-18	3.237E-16	4.424E-16	1.021E-15	2.817E-15	8.539E-15	1.736E-14	3.230E-14
	Th-230	äDSR(j)		1.729E-14	1.773E-14	2.862E-14	3.093E-14	4.021E-14	6.342E-14	1.306E-13	2.332E-13	4.071E-13
0	Th-230	Th-230	7.972E-16	2.457E-16	2.457E-16	2.456E-16	2.456E-16	2.456E-16	2.455E-16	2.451E-16	2.446E-16	2.434E-16
	Th-230	Ra-226+D3	7.972E-16	3.187E-18	9.560E-18	1.617E-16	1.932E-16	3.184E-16	6.268E-16	1.512E-15	2.862E-15	5.151E-15
	Th-230	Pb-210+D2	7.972E-16	3.746E-21	2.605E-20	5.747E-18	7.853E-18	1.813E-17	5.001E-17	1.516E-16	3.081E-16	5.735E-16
	Th-230	äDSR(j)		2.489E-16	2.553E-16	4.131E-16	4.466E-16	5.821E-16	9.223E-16	1.909E-15	3.415E-15	5.968E-15
0	Th-230	Th-230	2.000E-07	6.164E-08	6.164E-08	6.162E-08	6.162E-08	6.161E-08	6.158E-08	6.150E-08	6.135E-08	6.107E-08
	Th-230	Ra-226+D4	2.000E-07	6.305E-11	1.896E-10	3.211E-09	3.836E-09	6.323E-09	1.245E-08	3.002E-08	5.684E-08	1.023E-07
	Th-230	Pb-210+D	2.000E-07	2.321E-12	1.596E-11	3.491E-09	4.770E-09	1.101E-08	3.036E-08	9.204E-08	1.871E-07	3.482E-07
	Th-230	äDSR(j)		6.170E-08	6.184E-08	6.832E-08	7.023E-08	7.894E-08	1.044E-07	1.836E-07	3.053E-07	5.115E-07
0	Th-230	Th-230	2.640E-13	8.136E-14	8.136E-14	8.134E-14	8.134E-14	8.132E-14	8.129E-14	8.117E-14	8.099E-14	8.062E-14
	Th-230	Ra-226+D4	2.640E-13	8.323E-17	2.502E-16	4.238E-15	5.063E-15	8.347E-15	1.643E-14	3.963E-14	7.503E-14	1.350E-13
	Th-230	Pb-210+D1	2.640E-13	1.005E-18	6.991E-18	1.543E-15	2.109E-15	4.868E-15	1.343E-14	4.070E-14	8.273E-14	1.540E-13
	Th-230	äDSR(j)		8.144E-14	8.162E-14	8.712E-14	8.851E-14	9.454E-14	1.111E-13	1.615E-13	2.387E-13	3.696E-13
0	Th-230	Th-230	3.800E-15	1.171E-15	1.171E-15	1.171E-15	1.171E-15	1.171E-15	1.170E-15	1.168E-15	1.166E-15	1.160E-15
	Th-230	Ra-226+D4	3.800E-15	1.198E-18	3.602E-18	6.100E-17	7.288E-17	1.201E-16	2.365E-16	5.704E-16	1.080E-15	1.944E-15
	Th-230	Pb-210+D2	3.800E-15	1.786E-20	1.242E-19	2.739E-17	3.743E-17	8.642E-17	2.384E-16	7.226E-16	1.469E-15	2.734E-15
	Th-230	äDSR(j)		1.172E-15	1.175E-15	1.259E-15	1.281E-15	1.377E-15	1.645E-15	2.461E-15	3.714E-15	5.837E-15
0	Th-232	Th-232	1.000E+00	3.457E-01	3.457E-01	3.457E-01	3.457E-01	3.457E-01	3.457E-01	3.457E-01	3.457E-01	3.457E-01
	Th-232	Ra-228+D	1.000E+00	6.524E-01	1.861E+00	1.077E+01	1.101E+01	1.127E+01	1.129E+01	1.129E+01	1.129E+01	1.129E+01
	Th-232	Th-228+D	1.000E+00	4.257E-02	2.605E-01	6.097E+00	6.303E+00	6.529E+00	6.551E+00	6.551E+00	6.551E+00	6.551E+00
	Th-232	äDSR(j)		1.041E+00	2.467E+00	1.721E+01	1.766E+01	1.814E+01	1.819E+01	1.819E+01	1.819E+01	1.819E+01
0	U-234	U-234	9.996E-01	6.009E-02	6.009E-02	6.009E-02	6.009E-02	6.009E-02	6.008E-02	6.005E-02	6.000E-02	5.991E-02
	U-234	Th-230	9.996E-01	1.418E-06	4.251E-06	7.222E-05	8.638E-05	1.430E-04	2.845E-04	7.085E-04	1.413E-03	2.817E-03
	U-234	Ra-226+D	9.996E-01	5.501E-09	3.853E-08	1.071E-05	1.530E-05	4.183E-05	1.644E-04	9.993E-04	3.848E-03	1.433E-02
	U-234	Pb-210+D	9.996E-01	2.686E-11	3.956E-10	1.451E-06	2.398E-06	9.533E-06	5.648E-05	4.794E-04	2.092E-03	8.303E-03
	U-234	äDSR(j)		6.010E-02	6.010E-02	6.017E-02	6.019E-02	6.028E-02	6.058E-02	6.224E-02	6.736E-02	8.536E-02

Dose/Source Ratios Summed Over All Pathways

Parent and Progeny Principal Radionuclide Contributions Indicated

0	Parent (i)	Product (j)	Thread Fraction	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)								
	AAAAA	AAAAA	AAAAA	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
	U-234	U-234	1.319E-06	7.933E-08	7.932E-08	7.932E-08	7.932E-08	7.931E-08	7.930E-08	7.927E-08	7.921E-08	7.909E-08
	U-234	Th-230	1.319E-06	1.872E-12	5.611E-12	9.534E-11	1.140E-10	1.888E-10	3.756E-10	9.352E-10	1.866E-09	3.718E-09
	U-234	Ra-226+D	1.319E-06	7.261E-15	5.085E-14	1.413E-11	2.020E-11	5.521E-11	2.170E-10	1.319E-09	5.079E-09	1.891E-08
	U-234	Pb-210+D1	1.319E-06	1.154E-17	1.726E-16	6.413E-13	1.060E-12	4.214E-12	2.497E-11	2.120E-10	9.251E-10	3.672E-09
	U-234	äDSR(j)		7.933E-08	7.933E-08	7.943E-08	7.945E-08	7.956E-08	7.992E-08	8.173E-08	8.708E-08	1.054E-07
0U-234	U-234		1.899E-08	1.142E-09	1.142E-09	1.142E-09	1.142E-09	1.142E-09	1.141E-09	1.141E-09	1.140E-09	1.138E-09
	U-234	Th-230	1.899E-08	2.694E-14	8.077E-14	1.372E-12	1.641E-12	2.717E-12	5.406E-12	1.346E-11	2.686E-11	5.352E-11
	U-234	Ra-226+D	1.899E-08	1.045E-16	7.320E-16	2.034E-13	2.908E-13	7.947E-13	3.124E-12	1.899E-11	7.310E-11	2.722E-10
	U-234	Pb-210+D2	1.899E-08	2.052E-19	3.066E-18	1.138E-14	1.881E-14	7.482E-14	4.434E-13	3.764E-12	1.642E-11	6.519E-11
	U-234	äDSR(j)		1.142E-09	1.142E-09	1.143E-09	1.144E-09	1.145E-09	1.150E-09	1.177E-09	1.256E-09	1.529E-09
0U-234	U-234		2.100E-04	1.262E-05	1.262E-05	1.262E-05	1.262E-05	1.262E-05	1.262E-05	1.261E-05	1.260E-05	1.258E-05
	U-234	Th-230	2.100E-04	2.978E-10	8.929E-10	1.517E-08	1.814E-08	3.004E-08	5.976E-08	1.488E-07	2.969E-07	5.917E-07
	U-234	Ra-226+D1	2.100E-04	2.689E-12	1.882E-11	5.229E-09	7.474E-09	2.043E-08	8.031E-08	4.881E-07	1.879E-06	6.998E-06
	U-234	Pb-210+D	2.100E-04	5.642E-15	8.310E-14	3.048E-10	5.036E-10	2.002E-09	1.186E-08	1.007E-07	4.394E-07	1.744E-06
	U-234	äDSR(j)		1.262E-05	1.262E-05	1.264E-05	1.265E-05	1.267E-05	1.277E-05	1.335E-05	1.522E-05	2.192E-05
0U-234	U-234		2.771E-10	1.666E-11	1.666E-11	1.666E-11	1.666E-11	1.666E-11	1.666E-11	1.665E-11	1.664E-11	1.661E-11
	U-234	Th-230	2.771E-10	3.932E-16	1.179E-15	2.002E-14	2.395E-14	3.965E-14	7.888E-14	1.964E-13	3.919E-13	7.810E-13
	U-234	Ra-226+D1	2.771E-10	3.549E-18	2.485E-17	6.902E-15	9.866E-15	2.697E-14	1.060E-13	6.443E-13	2.481E-12	9.237E-12
	U-234	Pb-210+D1	2.771E-10	2.425E-21	3.626E-20	1.347E-16	2.226E-16	8.852E-16	5.246E-15	4.453E-14	1.943E-13	7.713E-13
	U-234	äDSR(j)		1.666E-11	1.666E-11	1.669E-11	1.669E-11	1.673E-11	1.685E-11	1.753E-11	1.970E-11	2.740E-11
0U-234	U-234		3.989E-12	2.398E-13	2.398E-13	2.398E-13	2.398E-13	2.398E-13	2.398E-13	2.396E-13	2.395E-13	2.391E-13
	U-234	Th-230	3.989E-12	5.659E-18	1.696E-17	2.882E-16	3.447E-16	5.707E-16	1.135E-15	2.828E-15	5.641E-15	1.124E-14
	U-234	Ra-226+D1	3.989E-12	5.108E-20	3.576E-19	9.934E-17	1.420E-16	3.882E-16	1.526E-15	9.274E-15	3.571E-14	1.330E-13
	U-234	Pb-210+D2	3.989E-12	4.310E-23	6.441E-22	2.391E-18	3.951E-18	1.571E-17	9.313E-17	7.905E-16	3.450E-15	1.369E-14
	U-234	äDSR(j)		2.398E-13	2.398E-13	2.402E-13	2.403E-13	2.408E-13	2.425E-13	2.525E-13	2.843E-13	3.970E-13
0U-234	U-234		1.998E-04	1.201E-05	1.201E-05	1.201E-05	1.201E-05	1.201E-05	1.201E-05	1.200E-05	1.199E-05	1.197E-05
	U-234	Th-230	1.998E-04	2.834E-10	8.495E-10	1.443E-08	1.726E-08	2.858E-08	5.686E-08	1.416E-07	2.825E-07	5.629E-07
	U-234	Ra-226+D2	1.998E-04	9.885E-13	6.924E-12	1.924E-09	2.750E-09	7.517E-09	2.955E-08	1.796E-07	6.915E-07	2.575E-06
	U-234	Pb-210+D	1.998E-04	5.368E-15	7.906E-14	2.900E-10	4.791E-10	1.905E-09	1.129E-08	9.580E-08	4.181E-07	1.659E-06
	U-234	äDSR(j)		1.201E-05	1.201E-05	1.203E-05	1.203E-05	1.205E-05	1.210E-05	1.242E-05	1.338E-05	1.677E-05
0U-234	U-234		2.637E-10	1.585E-11	1.585E-11	1.585E-11	1.585E-11	1.585E-11	1.585E-11	1.584E-11	1.583E-11	1.580E-11
	U-234	Th-230	2.637E-10	3.741E-16	1.121E-15	1.905E-14	2.279E-14	3.772E-14	7.505E-14	1.869E-13	3.729E-13	7.431E-13
	U-234	Ra-226+D2	2.637E-10	1.305E-18	9.139E-18	2.540E-15	3.630E-15	9.923E-15	3.901E-14	2.371E-13	9.128E-13	3.399E-12
	U-234	Pb-210+D1	2.637E-10	2.307E-21	3.450E-20	1.281E-16	2.117E-16	8.422E-16	4.991E-15	4.237E-14	1.849E-13	7.338E-13
	U-234	äDSR(j)		1.585E-11	1.585E-11	1.587E-11	1.588E-11	1.590E-11	1.597E-11	1.631E-11	1.730E-11	2.068E-11
0U-234	U-234		3.795E-12	2.282E-13	2.282E-13	2.282E-13	2.282E-13	2.281E-13	2.281E-13	2.280E-13	2.278E-13	2.275E-13
	U-234	Th-230	3.795E-12	5.384E-18	1.614E-17	2.742E-16	3.280E-16	5.430E-16	1.080E-15	2.690E-15	5.367E-15	1.070E-14
	U-234	Ra-226+D2	3.795E-12	1.878E-20	1.316E-19	3.656E-17	5.226E-17	1.428E-16	5.615E-16	3.413E-15	1.314E-14	4.893E-14
	U-234	Pb-210+D2	3.795E-12	4.101E-23	6.128E-22	2.275E-18	3.759E-18	1.495E-17	8.861E-17	7.521E-16	3.282E-15	1.303E-14
	U-234	äDSR(j)		2.282E-13	2.282E-13	2.285E-13	2.285E-13	2.288E-13	2.298E-13	2.349E-13	2.496E-13	3.001E-13

Dose/Source Ratios Summed Over All Pathways

Parent and Progeny Principal Radionuclide Contributions Indicated

0	Parent (i)	Product (j)	Thread Fraction	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)								
	AAAAA	AAAAA	AAAAA	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
	U-234	U-234	4.196E-08	2.522E-09	2.522E-09	2.522E-09	2.522E-09	2.522E-09	2.522E-09	2.521E-09	2.519E-09	2.515E-09
	U-234	Th-230	4.196E-08	5.952E-14	1.784E-13	3.032E-12	3.626E-12	6.003E-12	1.194E-11	2.974E-11	5.933E-11	1.182E-10
	U-234	Ra-226+D3	4.196E-08	5.140E-16	3.599E-15	9.997E-13	1.429E-12	3.906E-12	1.535E-11	9.332E-11	3.593E-10	1.338E-09
	U-234	Pb-210+D	4.196E-08	1.127E-18	1.661E-17	6.091E-14	1.006E-13	4.001E-13	2.371E-12	2.012E-11	8.781E-11	3.485E-10
	U-234	äDSR(j)		2.523E-09	2.523E-09	2.526E-09	2.527E-09	2.532E-09	2.551E-09	2.664E-09	3.025E-09	4.320E-09
0U-234	U-234		5.538E-14	3.330E-15	3.330E-15	3.329E-15	3.329E-15	3.329E-15	3.329E-15	3.327E-15	3.325E-15	3.320E-15
U-234	Th-230		5.538E-14	7.857E-20	2.355E-19	4.002E-18	4.786E-18	7.924E-18	1.576E-17	3.926E-17	7.832E-17	1.561E-16
U-234	Ra-226+D3		5.538E-14	6.785E-22	4.750E-21	1.320E-18	1.886E-18	5.156E-18	2.027E-17	1.232E-16	4.743E-16	1.766E-15
U-234	Pb-210+D1		5.538E-14	4.846E-25	7.246E-24	2.692E-20	4.448E-20	1.769E-19	1.048E-18	8.899E-18	3.883E-17	1.541E-16
U-234	äDSR(j)			3.330E-15	3.330E-15	3.335E-15	3.336E-15	3.342E-15	3.366E-15	3.499E-15	3.916E-15	5.396E-15
0U-234	U-234		7.972E-16	4.793E-17	4.793E-17	4.792E-17	4.792E-17	4.792E-17	4.791E-17	4.789E-17	4.786E-17	4.778E-17
U-234	Th-230		7.972E-16	1.131E-21	3.390E-21	5.760E-20	6.889E-20	1.141E-19	2.269E-19	5.651E-19	1.127E-18	2.247E-18
U-234	Ra-226+D3		7.972E-16	9.766E-24	6.837E-23	1.899E-20	2.715E-20	7.421E-20	2.917E-19	1.773E-18	6.826E-18	2.542E-17
U-234	Pb-210+D2		7.972E-16	8.614E-27	1.287E-25	4.779E-22	7.896E-22	3.140E-21	1.861E-20	1.580E-19	6.894E-19	2.736E-18
U-234	äDSR(j)			4.793E-17	4.793E-17	4.800E-17	4.802E-17	4.811E-17	4.845E-17	5.039E-17	5.650E-17	7.819E-17
0U-234	U-234		2.000E-07	1.202E-08	1.202E-08	1.202E-08	1.202E-08	1.202E-08	1.202E-08	1.201E-08	1.201E-08	1.199E-08
U-234	Th-230		2.000E-07	2.837E-13	8.505E-13	1.445E-11	1.728E-11	2.861E-11	5.693E-11	1.418E-10	2.828E-10	5.636E-10
U-234	Ra-226+D4		2.000E-07	1.927E-16	1.354E-15	3.771E-13	5.391E-13	1.474E-12	5.793E-12	3.521E-11	1.356E-10	5.048E-10
U-234	Pb-210+D		2.000E-07	5.374E-18	7.915E-17	2.904E-13	4.797E-13	1.907E-12	1.130E-11	9.592E-11	4.186E-10	1.661E-09
U-234	äDSR(j)			1.202E-08	1.202E-08	1.204E-08	1.204E-08	1.205E-08	1.209E-08	1.229E-08	1.284E-08	1.472E-08
0U-234	U-234		2.640E-13	1.587E-14	1.587E-14	1.587E-14	1.587E-14	1.587E-14	1.587E-14	1.586E-14	1.585E-14	1.582E-14
U-234	Th-230		2.640E-13	3.745E-19	1.123E-18	1.908E-17	2.281E-17	3.777E-17	7.514E-17	1.871E-16	3.733E-16	7.440E-16
U-234	Ra-226+D4		2.640E-13	2.544E-22	1.787E-21	4.978E-19	7.116E-19	1.945E-18	7.647E-18	4.648E-17	1.789E-16	6.663E-16
U-234	Pb-210+D1		2.640E-13	2.310E-24	3.454E-23	1.283E-19	2.120E-19	8.432E-19	4.997E-18	4.242E-17	1.851E-16	7.347E-16
U-234	äDSR(j)			1.587E-14	1.587E-14	1.589E-14	1.589E-14	1.591E-14	1.595E-14	1.614E-14	1.658E-14	1.797E-14
0U-234	U-234		3.800E-15	2.285E-16	2.285E-16	2.284E-16	2.284E-16	2.284E-16	2.284E-16	2.283E-16	2.281E-16	2.278E-16
U-234	Th-230		3.800E-15	5.391E-21	1.616E-20	2.746E-19	3.284E-19	5.437E-19	1.082E-18	2.693E-18	5.373E-18	1.071E-17
U-234	Ra-226+D4		3.800E-15	3.662E-24	2.573E-23	7.165E-21	1.024E-20	2.800E-20	1.101E-19	6.690E-19	2.576E-18	9.591E-18
U-234	Pb-210+D2		3.800E-15	4.106E-26	6.135E-25	2.278E-21	3.764E-21	1.497E-20	8.871E-20	7.530E-19	3.286E-18	1.304E-17
U-234	äDSR(j)			2.285E-16	2.285E-16	2.287E-16	2.288E-16	2.290E-16	2.297E-16	2.324E-16	2.393E-16	2.611E-16
0U-235+D	U-235+D		9.835E-01	5.378E-01	5.378E-01	5.378E-01	5.378E-01	5.378E-01	5.378E-01	5.378E-01	5.377E-01	5.377E-01
U-235+D	Pa-231		9.835E-01	6.522E-06	1.959E-05	3.332E-04	3.985E-04	6.597E-04	1.312E-03	3.265E-03	6.506E-03	1.294E-02
U-235+D	Ac-227+D		9.835E-01	1.981E-07	1.373E-06	3.019E-04	4.126E-04	9.532E-04	2.641E-03	8.211E-03	1.753E-02	3.603E-02
U-235+D	äDSR(j)			5.378E-01	5.378E-01	5.384E-01	5.386E-01	5.394E-01	5.417E-01	5.492E-01	5.618E-01	5.866E-01
0U-235+D	U-235+D		2.722E-03	1.488E-03	1.488E-03	1.488E-03	1.488E-03	1.488E-03	1.488E-03	1.488E-03	1.488E-03	1.488E-03
U-235+D	Pa-231		2.722E-03	1.805E-08	5.422E-08	9.221E-07	1.103E-06	1.826E-06	3.631E-06	9.037E-06	1.801E-05	3.580E-05
U-235+D	Ac-227+D1		2.722E-03	5.516E-10	3.827E-09	8.425E-07	1.151E-06	2.609E-06	7.371E-06	2.292E-05	4.893E-05	1.005E-04
U-235+D	äDSR(j)			1.488E-03	1.488E-03	1.490E-03	1.491E-03	1.493E-03	1.499E-03	1.520E-03	1.555E-03	1.624E-03

Dose/Source Ratios Summed Over All Pathways
Parent and Progeny Principal Radionuclide Contributions Indicated

0	Parent (i)	Product (j)	Thread Fraction	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)									
	AAAAA	AAAAA	AAAAA	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03	AAAAA
	U-238+D	U-238+D	6.713E-11	3.745E-10	3.745E-10	3.745E-10	3.745E-10	3.745E-10	3.745E-10	3.745E-10	3.744E-10	3.744E-10	
	U-238+D	U-234	6.713E-11	5.698E-18	1.709E-17	2.906E-16	3.475E-16	5.754E-16	1.145E-15	2.853E-15	5.699E-15	1.138E-14	
	U-238+D	Th-230	6.713E-11	8.971E-23	6.272E-22	1.747E-19	2.498E-19	6.848E-19	2.712E-18	1.684E-17	6.714E-17	2.677E-16	
	U-238+D	Ra-226+D3	6.713E-11	5.804E-25	8.709E-24	3.843E-20	6.572E-20	2.976E-19	2.332E-18	3.553E-17	2.757E-16	2.089E-15	
	U-238+D	Pb-210+D	6.713E-11	1.025E-27	3.118E-26	1.822E-21	3.623E-21	2.443E-20	3.021E-19	6.913E-18	6.355E-17	5.271E-16	
	U-238+D	äDSR(j)		3.745E-10	3.745E-10	3.745E-10	3.745E-10	3.745E-10	3.745E-10	3.745E-10	3.744E-10	3.744E-10	
0U-	238+D	U-238+D	8.862E-17	4.943E-16	4.943E-16	4.943E-16	4.943E-16	4.943E-16	4.943E-16	4.943E-16	4.943E-16	4.942E-16	
	U-238+D	U-234	8.862E-17	7.521E-24	2.256E-23	3.835E-22	4.588E-22	7.595E-22	1.511E-21	3.766E-21	7.522E-21	1.503E-20	
	U-238+D	Th-230	8.862E-17	1.184E-28	8.279E-28	2.305E-25	3.298E-25	9.040E-25	3.579E-24	2.222E-23	8.862E-23	3.534E-22	
	U-238+D	Ra-226+D3	8.862E-17	7.661E-31	1.150E-29	5.073E-26	8.675E-26	3.928E-25	3.079E-24	4.689E-23	3.640E-22	2.757E-21	
	U-238+D	Pb-210+D1	8.862E-17	4.376E-34	1.355E-32	8.048E-28	1.601E-27	1.080E-26	1.336E-25	3.057E-24	2.810E-23	2.331E-22	
	U-238+D	äDSR(j)		4.943E-16	4.943E-16	4.943E-16	4.943E-16	4.943E-16	4.943E-16	4.943E-16	4.943E-16	4.942E-16	
0U-	238+D	U-238+D	1.276E-18	7.115E-18	7.115E-18	7.115E-18	7.115E-18	7.115E-18	7.115E-18	7.115E-18	7.114E-18	7.114E-18	
	U-238+D	U-234	1.276E-18	1.083E-25	3.248E-25	5.521E-24	6.603E-24	1.093E-23	2.176E-23	5.421E-23	1.083E-22	2.163E-22	
	U-238+D	Th-230	1.276E-18	1.704E-30	1.192E-29	3.318E-27	4.747E-27	1.301E-26	5.152E-26	3.199E-25	1.276E-24	5.087E-24	
	U-238+D	Ra-226+D3	1.276E-18	1.103E-32	1.655E-31	7.302E-28	1.249E-27	5.654E-27	4.432E-26	6.750E-25	5.239E-24	3.968E-23	
	U-238+D	Pb-210+D2	1.276E-18	7.781E-36	2.407E-34	1.429E-29	2.842E-29	1.917E-28	2.371E-27	5.427E-26	4.989E-25	4.139E-24	
	U-238+D	äDSR(j)		7.115E-18	7.115E-18	7.115E-18	7.115E-18	7.115E-18	7.115E-18	7.115E-18	7.115E-18	7.114E-18	
0U-	238+D	U-238+D	3.200E-10	1.785E-09	1.785E-09	1.785E-09	1.785E-09	1.785E-09	1.785E-09	1.785E-09	1.785E-09	1.785E-09	
	U-238+D	U-234	3.200E-10	2.716E-17	8.148E-17	1.385E-15	1.657E-15	2.743E-15	5.458E-15	1.360E-14	2.716E-14	5.426E-14	
	U-238+D	Th-230	3.200E-10	4.276E-22	2.990E-21	8.325E-19	1.191E-18	3.264E-18	1.293E-17	8.025E-17	3.200E-16	1.276E-15	
	U-238+D	Ra-226+D4	3.200E-10	2.172E-25	3.273E-24	1.450E-20	2.479E-20	1.123E-19	8.800E-19	1.340E-17	1.040E-16	7.880E-16	
	U-238+D	Pb-210+D	3.200E-10	4.887E-27	1.486E-25	8.683E-21	1.727E-20	1.164E-19	1.440E-18	3.295E-17	3.029E-16	2.513E-15	
	U-238+D	äDSR(j)		1.785E-09	1.785E-09	1.785E-09	1.785E-09	1.785E-09	1.785E-09	1.785E-09	1.785E-09	1.785E-09	
0U-	238+D	U-238+D	4.224E-16	2.356E-15	2.356E-15	2.356E-15	2.356E-15	2.356E-15	2.356E-15	2.356E-15	2.356E-15	2.356E-15	
	U-238+D	U-234	4.224E-16	3.585E-23	1.075E-22	1.828E-21	2.187E-21	3.621E-21	7.205E-21	1.795E-20	3.586E-20	7.162E-20	
	U-238+D	Th-230	4.224E-16	5.644E-28	3.946E-27	1.099E-24	1.572E-24	4.309E-24	1.706E-23	1.059E-22	4.224E-22	1.685E-21	
	U-238+D	Ra-226+D4	4.224E-16	2.867E-31	4.320E-30	1.914E-26	3.272E-26	1.482E-25	1.162E-24	1.769E-23	1.373E-22	1.040E-21	
	U-238+D	Pb-210+D1	4.224E-16	2.086E-33	6.459E-32	3.836E-27	7.630E-27	5.147E-26	6.366E-25	1.457E-23	1.340E-22	1.111E-21	
	U-238+D	äDSR(j)		2.356E-15	2.356E-15	2.356E-15	2.356E-15	2.356E-15	2.356E-15	2.356E-15	2.356E-15	2.356E-15	
0U-	238+D	U-238+D	6.080E-18	3.392E-17	3.392E-17	3.392E-17	3.392E-17	3.392E-17	3.391E-17	3.391E-17	3.391E-17	3.391E-17	
	U-238+D	U-234	6.080E-18	5.160E-25	1.548E-24	2.632E-23	3.148E-23	5.211E-23	1.037E-22	2.584E-22	5.161E-22	1.031E-21	
	U-238+D	Th-230	6.080E-18	8.124E-30	5.680E-29	1.582E-26	2.263E-26	6.202E-26	2.456E-25	1.525E-24	6.081E-24	2.425E-23	
	U-238+D	Ra-226+D4	6.080E-18	4.126E-33	6.218E-32	2.754E-28	4.710E-28	2.133E-27	1.672E-26	2.547E-25	1.977E-24	1.497E-23	
	U-238+D	Pb-210+D2	6.080E-18	3.709E-35	1.148E-33	6.810E-29	1.355E-28	9.137E-28	1.130E-26	2.587E-25	2.378E-24	1.973E-23	
	U-238+D	äDSR(j)		3.392E-17	3.392E-17	3.392E-17	3.392E-17	3.392E-17	3.391E-17	3.391E-17	3.391E-17	3.391E-17	

Dose/Source Ratios Summed Over All Pathways
Parent and Progeny Principal Radionuclide Contributions Indicated

0	Parent (i)	Product (j)	Thread Fraction	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)									
	AAAAA	AAAAA	AAAAA	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03	AAAAA
	U-238+D1	U-238+D1	9.980E-01	1.608E-01	1.608E-01	1.608E-01	1.608E-01	1.608E-01	1.608E-01	1.608E-01	1.608E-01	1.608E-01	1.608E-01
	U-238+D1	U-234	9.980E-01	8.470E-08	2.541E-07	4.320E-06	5.166E-06	8.554E-06	1.702E-05	4.242E-05	8.472E-05	1.692E-04	
	U-238+D1	Th-230	9.980E-01	1.334E-12	9.324E-12	2.596E-09	3.714E-09	1.018E-08	4.031E-08	2.503E-07	9.981E-07	3.980E-06	
	U-238+D1	Ra-226+D	9.980E-01	3.875E-15	5.817E-14	2.568E-10	4.391E-10	1.989E-09	1.559E-08	2.374E-07	1.843E-06	1.396E-05	
	U-238+D1	Pb-210+D	9.980E-01	1.524E-17	4.635E-16	2.708E-11	5.386E-11	3.631E-10	4.491E-09	1.028E-07	9.448E-07	7.837E-06	
	U-238+D1	äDSR(j)		1.608E-01	1.608E-01	1.608E-01	1.608E-01	1.608E-01	1.608E-01	1.608E-01	1.609E-01	1.610E-01	
0U-	238+D1	U-238+D1	1.317E-06	2.123E-07	2.123E-07	2.123E-07	2.123E-07	2.123E-07	2.123E-07	2.123E-07	2.123E-07	2.122E-07	
	U-238+D1	U-234	1.317E-06	1.118E-13	3.354E-13	5.702E-12	6.820E-12	1.129E-11	2.247E-11	5.599E-11	1.118E-10	2.234E-10	
	U-238+D1	Th-230	1.317E-06	1.760E-18	1.231E-17	3.427E-15	4.903E-15	1.344E-14	5.321E-14	3.304E-13	1.317E-12	5.254E-12	
	U-238+D1	Ra-226+D	1.317E-06	5.115E-21	7.678E-20	3.390E-16	5.797E-16	2.625E-15	2.057E-14	3.134E-13	2.432E-12	1.842E-11	
	U-238+D1	Pb-210+D1	1.317E-06	6.505E-24	2.014E-22	1.196E-17	2.380E-17	1.605E-16	1.985E-15	4.545E-14	4.178E-13	3.466E-12	
	U-238+D1	äDSR(j)		2.123E-07	2.123E-07	2.123E-07	2.123E-07	2.123E-07	2.123E-07	2.123E-07	2.124E-07	2.125E-07	
0U-	238+D1	U-238+D1	1.896E-08	3.055E-09	3.055E-09	3.055E-09	3.055E-09	3.055E-09	3.055E-09	3.055E-09	3.055E-09	3.055E-09	
	U-238+D1	U-234	1.896E-08	1.609E-15	4.828E-15	8.207E-14	9.816E-14	1.625E-13	3.234E-13	8.059E-13	1.610E-12	3.215E-12	
	U-238+D1	Th-230	1.896E-08	2.534E-20	1.772E-19	4.933E-17	7.057E-17	1.934E-16	7.659E-16	4.755E-15	1.896E-14	7.562E-14	
	U-238+D1	Ra-226+D	1.896E-08	7.363E-23	1.105E-21	4.879E-18	8.343E-18	3.778E-17	2.961E-16	4.510E-15	3.501E-14	2.652E-13	
	U-238+D1	Pb-210+D2	1.896E-08	1.157E-25	3.579E-24	2.124E-19	4.225E-19	2.850E-18	3.525E-17	8.068E-16	7.417E-15	6.152E-14	
	U-238+D1	äDSR(j)		3.055E-09	3.055E-09	3.056E-09	3.056E-09	3.056E-09	3.056E-09	3.056E-09	3.057E-09	3.059E-09	
0U-	238+D1	U-238+D1	2.096E-04	3.378E-05	3.378E-05	3.378E-05	3.378E-05	3.378E-05	3.378E-05	3.378E-05	3.377E-05	3.377E-05	
	U-238+D1	U-234	2.096E-04	1.779E-11	5.337E-11	9.073E-10	1.085E-09	1.797E-09	3.575E-09	8.910E-09	1.779E-08	3.554E-08	
	U-238+D1	Th-230	2.096E-04	2.801E-16	1.958E-15	5.453E-13	7.801E-13	2.138E-12	8.467E-12	5.257E-11	2.096E-10	8.360E-10	
	U-238+D1	Ra-226+D1	2.096E-04	1.894E-18	2.842E-17	1.254E-13	2.145E-13	9.713E-13	7.612E-12	1.159E-10	9.000E-10	6.816E-09	
	U-238+D1	Pb-210+D	2.096E-04	3.202E-21	9.735E-20	5.688E-15	1.131E-14	7.628E-14	9.432E-13	2.159E-11	1.984E-10	1.646E-09	
	U-238+D1	äDSR(j)		3.378E-05	3.378E-05	3.378E-05	3.378E-05	3.378E-05	3.378E-05	3.379E-05	3.379E-05	3.382E-05	
0U-	238+D1	U-238+D1	2.767E-10	4.459E-11	4.459E-11	4.459E-11	4.459E-11	4.459E-11	4.459E-11	4.459E-11	4.458E-11	4.458E-11	
	U-238+D1	U-234	2.767E-10	2.348E-17	7.045E-17	1.198E-15	1.432E-15	2.372E-15	4.720E-15	1.176E-14	2.349E-14	4.692E-14	
	U-238+D1	Th-230	2.767E-10	3.697E-22	2.585E-21	7.199E-19	1.030E-18	2.823E-18	1.118E-17	6.939E-17	2.767E-16	1.104E-15	
	U-238+D1	Ra-226+D1	2.767E-10	2.501E-24	3.752E-23	1.656E-19	2.831E-19	1.282E-18	1.005E-17	1.530E-16	1.188E-15	8.998E-15	
	U-238+D1	Pb-210+D1	2.767E-10	1.366E-27	4.231E-26	2.513E-21	4.998E-21	3.371E-20	4.170E-19	9.546E-18	8.776E-17	7.279E-16	
	U-238+D1	äDSR(j)		4.459E-11	4.459E-11	4.459E-11	4.459E-11	4.459E-11	4.459E-11	4.460E-11	4.461E-11	4.464E-11	
0U-	238+D1	U-238+D1	3.983E-12	6.418E-13	6.418E-13	6.418E-13	6.418E-13	6.418E-13	6.418E-13	6.418E-13	6.417E-13	6.417E-13	
	U-238+D1	U-234	3.983E-12	3.380E-19	1.014E-18	1.724E-17	2.062E-17	3.414E-17	6.793E-17	1.693E-16	3.381E-16	6.753E-16	
	U-238+D1	Th-230	3.983E-12	5.322E-24	3.721E-23	1.036E-20	1.482E-20	4.063E-20	1.609E-19	9.988E-19	3.983E-18	1.588E-17	
	U-238+D1	Ra-226+D1	3.983E-12	3.599E-26	5.400E-25	2.383E-21	4.075E-21	1.845E-20	1.446E-19	2.203E-18	1.710E-17	1.295E-16	
	U-238+D1	Pb-210+D2	3.983E-12	2.430E-29	7.517E-28	4.461E-23	8.874E-23	5.986E-22	7.404E-21	1.695E-19	1.558E-18	1.292E-17	
	U-238+D1	äDSR(j)		6.418E-13	6.418E-13	6.418E-13	6.418E-13	6.418E-13	6.418E-13	6.419E-13	6.421E-13	6.425E-13	

Dose/Source Ratios Summed Over All Pathways
Parent and Progeny Principal Radionuclide Contributions Indicated

0	Parent (i)	Product (j)	Thread Fraction	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)								
	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA
	U-238+D1	U-238+D1	1.994E-04	3.214E-05	3.214E-05	3.214E-05	3.214E-05	3.214E-05	3.214E-05	3.214E-05	3.213E-05	3.213E-05
	U-238+D1	U-234	1.994E-04	1.693E-11	5.078E-11	8.632E-10	1.032E-09	1.709E-09	3.402E-09	8.477E-09	1.693E-08	3.382E-08
	U-238+D1	Th-230	1.994E-04	2.665E-16	1.863E-15	5.189E-13	7.422E-13	2.034E-12	8.056E-12	5.002E-11	1.995E-10	7.954E-10
	U-238+D1	Ra-226+D2	1.994E-04	6.963E-19	1.045E-17	4.615E-14	7.892E-14	3.574E-13	2.801E-12	4.267E-11	3.312E-10	2.508E-09
	U-238+D1	Pb-210+D	1.994E-04	3.046E-21	9.262E-20	5.412E-15	1.076E-14	7.257E-14	8.974E-13	2.054E-11	1.888E-10	1.566E-09
	U-238+D1	ΔDSR(j)		3.214E-05	3.214E-05	3.214E-05	3.214E-05	3.214E-05	3.214E-05	3.214E-05	3.215E-05	3.217E-05
0U	U-238+D1	U-238+D1	2.633E-10	4.242E-11	4.242E-11	4.242E-11	4.242E-11	4.242E-11	4.242E-11	4.242E-11	4.242E-11	4.241E-11
	U-238+D1	U-234	2.633E-10	2.234E-17	6.703E-17	1.139E-15	1.363E-15	2.256E-15	4.490E-15	1.119E-14	2.235E-14	4.464E-14
	U-238+D1	Th-230	2.633E-10	3.518E-22	2.460E-21	6.849E-19	9.797E-19	2.686E-18	1.063E-17	6.602E-17	2.633E-16	1.050E-15
	U-238+D1	Ra-226+D2	2.633E-10	9.192E-25	1.380E-23	6.092E-20	1.042E-19	4.718E-19	3.698E-18	5.632E-17	4.371E-16	3.311E-15
	U-238+D1	Pb-210+D1	2.633E-10	1.300E-27	4.025E-26	2.391E-21	4.756E-21	3.208E-20	3.968E-19	9.082E-18	8.349E-17	6.926E-16
	U-238+D1	ΔDSR(j)		4.242E-11	4.242E-11	4.242E-11	4.242E-11	4.242E-11	4.242E-11	4.243E-11	4.244E-11	4.246E-11
0U	U-238+D1	U-238+D1	3.789E-12	6.106E-13	6.106E-13	6.106E-13	6.106E-13	6.106E-13	6.106E-13	6.106E-13	6.105E-13	6.105E-13
	U-238+D1	U-234	3.789E-12	3.216E-19	9.648E-19	1.640E-17	1.962E-17	3.248E-17	6.463E-17	1.611E-16	3.217E-16	6.425E-16
	U-238+D1	Th-230	3.789E-12	5.063E-24	3.540E-23	9.858E-21	1.410E-20	3.865E-20	1.531E-19	9.503E-19	3.790E-18	1.511E-17
	U-238+D1	Ra-226+D2	3.789E-12	1.323E-26	1.986E-25	8.769E-22	1.500E-21	6.790E-21	5.322E-20	8.106E-19	6.292E-18	4.766E-17
	U-238+D1	Pb-210+D2	3.789E-12	2.312E-29	7.152E-28	4.245E-23	8.443E-23	5.695E-22	7.044E-21	1.612E-19	1.482E-18	1.230E-17
	U-238+D1	ΔDSR(j)		6.106E-13	6.106E-13	6.106E-13	6.106E-13	6.106E-13	6.107E-13	6.107E-13	6.109E-13	6.112E-13
0U	U-238+D1	U-238+D1	4.189E-08	6.750E-09	6.750E-09	6.750E-09	6.750E-09	6.750E-09	6.750E-09	6.750E-09	6.750E-09	6.749E-09
	U-238+D1	U-234	4.189E-08	3.555E-15	1.067E-14	1.813E-13	2.169E-13	3.591E-13	7.145E-13	1.780E-12	3.556E-12	7.103E-12
	U-238+D1	Th-230	4.189E-08	5.598E-20	3.914E-19	1.090E-16	1.559E-16	4.273E-16	1.692E-15	1.051E-14	4.189E-14	1.671E-13
	U-238+D1	Ra-226+D3	4.189E-08	3.622E-22	5.434E-21	2.398E-17	4.101E-17	1.857E-16	1.455E-15	2.217E-14	1.721E-13	1.303E-12
	U-238+D1	Pb-210+D	4.189E-08	6.398E-25	1.945E-23	1.137E-18	2.261E-18	1.524E-17	1.885E-16	4.314E-15	3.966E-14	3.289E-13
	U-238+D1	ΔDSR(j)		6.750E-09	6.750E-09	6.750E-09	6.750E-09	6.751E-09	6.751E-09	6.752E-09	6.753E-09	6.758E-09
0U	U-238+D1	U-238+D1	5.530E-14	8.910E-15	8.910E-15	8.910E-15	8.910E-15	8.910E-15	8.910E-15	8.910E-15	8.909E-15	8.909E-15
	U-238+D1	U-234	5.530E-14	4.693E-21	1.408E-20	2.393E-19	2.863E-19	4.740E-19	9.431E-19	2.350E-18	4.694E-18	9.376E-18
	U-238+D1	Th-230	5.530E-14	7.389E-26	5.166E-25	1.439E-22	2.058E-22	5.641E-22	2.233E-21	1.387E-20	5.530E-20	2.205E-19
	U-238+D1	Ra-226+D3	5.530E-14	4.781E-28	7.173E-27	3.166E-23	5.413E-23	2.451E-22	1.921E-21	2.926E-20	2.271E-19	1.720E-18
	U-238+D1	Pb-210+D1	5.530E-14	2.730E-31	8.455E-30	5.022E-25	9.989E-25	6.738E-24	8.334E-23	1.908E-21	1.754E-20	1.455E-19
	U-238+D1	ΔDSR(j)		8.910E-15	8.910E-15	8.910E-15	8.911E-15	8.911E-15	8.911E-15	8.912E-15	8.914E-15	8.920E-15
0U	U-238+D1	U-238+D1	7.959E-16	1.283E-16	1.283E-16	1.283E-16	1.283E-16	1.283E-16	1.283E-16	1.282E-16	1.282E-16	1.282E-16
	U-238+D1	U-234	7.959E-16	6.755E-23	2.027E-22	3.445E-21	4.120E-21	6.822E-21	1.358E-20	3.383E-20	6.756E-20	1.350E-19
	U-238+D1	Th-230	7.959E-16	1.064E-27	7.436E-27	2.071E-24	2.962E-24	8.119E-24	3.215E-23	1.996E-22	7.960E-22	3.174E-21
	U-238+D1	Ra-226+D3	7.959E-16	6.881E-30	1.032E-28	4.556E-25	7.791E-25	3.528E-24	2.765E-23	4.212E-22	3.269E-21	2.476E-20
	U-238+D1	Pb-210+D2	7.959E-16	4.855E-33	1.502E-31	8.915E-27	1.773E-26	1.196E-25	1.480E-24	3.387E-23	3.113E-22	2.583E-21
	U-238+D1	ΔDSR(j)		1.283E-16	1.283E-16	1.283E-16	1.283E-16	1.283E-16	1.283E-16	1.283E-16	1.283E-16	1.284E-16

Dose/Source Ratios Summed Over All Pathways												
Parent and Progeny Principal Radionuclide Contributions Indicated												
0	Parent	Product	Thread	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)								
	(i)	(j)	Fraction	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA
	U-238+D1	U-238+D1	1.997E-07	3.218E-08	3.218E-08	3.218E-08	3.218E-08	3.218E-08	3.218E-08	3.217E-08	3.217E-08	3.217E-08
	U-238+D1	U-234	1.997E-07	1.695E-14	5.084E-14	8.643E-13	1.034E-12	1.712E-12	3.406E-12	8.487E-12	1.695E-11	3.386E-11
	U-238+D1	Th-230	1.997E-07	2.668E-19	1.866E-18	5.195E-16	7.431E-16	2.037E-15	8.065E-15	5.008E-14	1.997E-13	7.963E-13
	U-238+D1	Ra-226+D4	1.997E-07	1.355E-22	2.042E-21	9.046E-18	1.547E-17	7.005E-17	5.491E-16	8.364E-15	6.492E-14	4.917E-13
	U-238+D1	Pb-210+D	1.997E-07	3.050E-24	9.273E-23	5.418E-18	1.078E-17	7.266E-17	8.985E-16	2.056E-14	1.890E-13	1.568E-12
	U-238+D1	äDSR(j)		3.218E-08	3.218E-08	3.218E-08	3.218E-08	3.218E-08	3.218E-08	3.218E-08	3.219E-08	3.221E-08
0U	238+D1	U-238+D1	2.636E-13	4.247E-14	4.247E-14	4.247E-14	4.247E-14	4.247E-14	4.247E-14	4.247E-14	4.247E-14	4.246E-14
	U-238+D1	U-234	2.636E-13	2.237E-20	6.711E-20	1.141E-18	1.365E-18	2.259E-18	4.496E-18	1.120E-17	2.237E-17	4.469E-17
	U-238+D1	Th-230	2.636E-13	3.522E-25	2.463E-24	6.857E-22	9.809E-22	2.689E-21	1.065E-20	6.610E-20	2.636E-19	1.051E-18
	U-238+D1	Ra-226+D4	2.636E-13	1.789E-28	2.696E-27	1.194E-23	2.042E-23	9.247E-23	7.248E-22	1.104E-20	8.569E-20	6.491E-19
	U-238+D1	Pb-210+D1	2.636E-13	1.302E-30	4.030E-29	2.394E-24	4.761E-24	3.212E-23	3.973E-22	9.093E-21	8.359E-20	6.934E-19
	U-238+D1	äDSR(j)		4.247E-14	4.247E-14	4.247E-14	4.247E-14	4.247E-14	4.248E-14	4.248E-14	4.249E-14	4.251E-14
0U	238+D1	U-238+D1	3.794E-15	6.113E-16	6.113E-16	6.113E-16	6.113E-16	6.113E-16	6.113E-16	6.113E-16	6.113E-16	6.112E-16
	U-238+D1	U-234	3.794E-15	3.220E-22	9.660E-22	1.642E-20	1.964E-20	3.252E-20	6.471E-20	1.613E-19	3.221E-19	6.433E-19
	U-238+D1	Th-230	3.794E-15	5.070E-27	3.545E-26	9.870E-24	1.412E-23	3.870E-23	1.532E-22	9.514E-22	3.794E-21	1.513E-20
	U-238+D1	Ra-226+D4	3.794E-15	2.575E-30	3.880E-29	1.719E-25	2.939E-25	1.331E-24	1.043E-23	1.589E-22	1.233E-21	9.343E-21
	U-238+D1	Pb-210+D2	3.794E-15	2.314E-32	7.161E-31	4.250E-26	8.453E-26	5.702E-25	7.053E-24	1.614E-22	1.484E-21	1.231E-20
	U-238+D1	äDSR(j)		6.113E-16	6.113E-16	6.114E-16	6.114E-16	6.114E-16	6.114E-16	6.115E-16	6.116E-16	6.119E-16
	iiiiiiiiii	iiiiiiiiii	iiiiiiiiii	iiiiiiiiii	iiiiiiiiii	iiiiiiiiii	iiiiiiiiii	iiiiiiiiii	iiiiiiiiii	iiiiiiiiii	iiiiiiiiii	iiiiiiiiii

The DSR includes contributions from associated (half-life ó 180 days) daughters.

Single Radionuclide Soil Guidelines G(i,t) in pCi/g
 Basic Radiation Dose Limit = 2.500E+01 mrem/yr

0Nuclide	t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
(i)	t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA
Am-241	8.272E+01	8.285E+01	8.610E+01	8.679E+01	8.962E+01	9.709E+01	1.235E+02	1.843E+02	4.100E+02	4.100E+02
Co-60	2.606E+00	2.973E+00	6.978E+01	1.347E+02	1.868E+03	1.339E+06	4.930E+14	*1.113E+15	*1.113E+15	*1.113E+15
Cs-134	5.029E+00	7.036E+00	2.220E+04	1.189E+05	9.797E+07	*1.283E+15	*1.283E+15	*1.283E+15	*1.283E+15	*1.283E+15
Cs-137	1.195E+01	1.222E+01	2.122E+01	2.380E+01	3.768E+01	1.189E+02	3.731E+03	1.166E+06	1.137E+11	1.137E+11
Eu-152	5.813E+00	6.118E+00	2.091E+01	2.701E+01	7.521E+01	9.731E+02	2.108E+06	7.641E+11	*1.727E+14	*1.727E+14
Eu-154	5.437E+00	5.894E+00	4.085E+01	6.114E+01	3.069E+02	1.732E+04	3.114E+09	*2.685E+14	*2.685E+14	*2.685E+14
Eu-155	2.422E+02	2.802E+02	9.223E+03	1.910E+04	3.512E+05	5.092E+08	*4.815E+14	*4.815E+14	*4.815E+14	*4.815E+14
H-3	1.722E+03	1.958E+03	4.318E+04	8.226E+04	1.083E+06	6.814E+08	*9.621E+15	*9.621E+15	*9.621E+15	*9.621E+15
I-129	9.578E+01	9.579E+01	9.588E+01	9.590E+01	9.598E+01	9.618E+01	9.678E+01	9.779E+01	9.984E+01	9.984E+01
Mn-54	1.129E+01	2.540E+01	7.233E+09	4.175E+11	*7.615E+15	*7.615E+15	*7.615E+15	*7.615E+15	*7.615E+15	*7.615E+15
Na-22	3.353E+00	4.376E+00	2.617E+03	9.916E+03	2.043E+06	1.245E+12	*5.976E+15	*5.976E+15	*5.976E+15	*5.976E+15
Ni-63	1.088E+04	1.096E+04	1.294E+04	1.339E+04	1.538E+04	2.175E+04	6.145E+04	3.470E+05	1.107E+07	1.107E+07
Np-237	1.847E+01	1.847E+01	1.847E+01	1.847E+01	1.847E+01	1.847E+01	1.847E+01	1.848E+01	1.847E+01	1.847E+01
Pu-238	8.433E+01	8.500E+01	1.028E+02	1.069E+02	1.252E+02	1.859E+02	6.080E+02	4.370E+03	1.809E+05	1.809E+05
Pu-239	7.938E+01	7.938E+01	7.944E+01	7.945E+01	7.950E+01	7.961E+01	7.996E+01	8.053E+01	8.170E+01	8.170E+01
Ru-106	3.822E+01	7.527E+01	8.712E+08	2.580E+10	*3.269E+15	*3.269E+15	*3.269E+15	*3.269E+15	*3.269E+15	*3.269E+15
Sr-90	1.500E+01	1.536E+01	2.738E+01	3.088E+01	4.998E+01	1.666E+02	6.167E+03	2.536E+06	4.288E+11	4.288E+11
Tc-99	2.068E+01	2.068E+01	2.072E+01	2.073E+01	2.076E+01	2.084E+01	2.108E+01	2.148E+01	2.231E+01	2.231E+01
Th-228	4.552E+00	6.542E+00	3.937E+04	2.413E+05	3.404E+08	*8.201E+14	*8.201E+14	*8.201E+14	*8.201E+14	*8.201E+14
Th-230	8.065E+01	7.971E+01	5.999E+01	5.670E+01	4.607E+01	3.074E+01	1.543E+01	8.752E+00	5.049E+00	5.049E+00
Th-232	2.403E+01	1.013E+01	1.452E+00	1.416E+00	1.378E+00	1.374E+00	1.374E+00	1.374E+00	1.374E+00	1.374E+00
U-234	4.158E+02	4.158E+02	4.153E+02	4.152E+02	4.146E+02	4.125E+02	4.015E+02	3.710E+02	2.927E+02	2.927E+02
U-235	4.572E+01	4.572E+01	4.567E+01	4.565E+01	4.558E+01	4.539E+01	4.477E+01	4.377E+01	4.192E+01	4.192E+01
U-238	1.472E+02	1.472E+02	1.472E+02	1.472E+02	1.472E+02	1.472E+02	1.472E+02	1.472E+02	1.471E+02	1.471E+02
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii

*At specific activity limit

File : D:\ACTIVE PROJECTS\ADELANTE\MT0A4 CONTRACT\T01\RISK\2015 RADSALS\DOSE-BASED SALS\RESRAD CALCS\CHILDRES2015.RAD

and Single Radionuclide Soil Guidelines $G(i,t)$ in pCi/g

and at tmax = time of maximum total dose = 0.000E+00 years

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side Initial      tmin      DSR(i,tmin) G(i,tmin) DSR(i

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(i)	(pCi/g)	(years)	(pCi/g)	(pCi/g)	(pCi/g)	(pCi/g)
AAAAAAA	AAAAAAAAA	AAAAAAAAAAAAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA
Am-241	1.000E+01	0.000E+00	3.022E-01	8.272E+01	3.022E-01	8.272E+01
Co-60	1.000E+01	0.000E+00	9.592E+00	2.606E+00	9.592E+00	2.606E+00
Cs-134	1.000E+01	0.000E+00	4.971E+00	5.029E+00	4.971E+00	5.029E+00
Cs-137	1.000E+01	0.000E+00	2.093E+00	1.195E+01	2.093E+00	1.195E+01
Eu-152	1.000E+01	0.000E+00	4.301E+00	5.813E+00	4.301E+00	5.813E+00
Eu-154	1.000E+01	0.000E+00	4.598E+00	5.437E+00	4.598E+00	5.437E+00
Eu-155	1.000E+01	0.000E+00	1.032E-01	2.422E+02	1.032E-01	2.422E+02
H-3	1.000E+01	0.000E+00	1.452E-02	1.722E+03	1.452E-02	1.722E+03
I-129	1.000E+01	0.000E+00	2.610E-01	9.578E+01	2.610E-01	9.578E+01
Mn-54	1.000E+01	0.000E+00	2.215E+00	1.129E+01	2.215E+00	1.129E+01
Na-22	1.000E+01	0.000E+00	7.456E+00	3.353E+00	7.456E+00	3.353E+00
Ni-63	1.000E+01	0.000E+00	2.297E-03	1.088E+04	2.297E-03	1.088E+04
Np-237	1.000E+01	0.000E+00	1.353E+00	1.847E+01	1.353E+00	1.847E+01
Pu-238	1.000E+01	0.000E+00	2.964E-01	8.433E+01	2.964E-01	8.433E+01
Pu-239	1.000E+01	0.000E+00	3.149E-01	7.938E+01	3.149E-01	7.938E+01
Ru-106	1.000E+01	0.000E+00	6.540E-01	3.822E+01	6.540E-01	3.822E+01
Sr-90	1.000E+01	0.000E+00	1.667E+00	1.500E+01	1.667E+00	1.500E+01
Tc-99	1.000E+01	0.000E+00	1.209E+00	2.068E+01	1.209E+00	2.068E+01
Th-228	1.000E+01	0.000E+00	5.492E+00	4.552E+00	5.492E+00	4.552E+00
Th-230	1.000E+01	1.000E+03	4.951E+00	5.049E+00	3.100E-01	8.065E+01
Th-232	1.000E+01	144.7 ñ 0.3	1.819E+01	1.374E+00	1.041E+00	2.403E+01
U-234	1.000E+01	1.000E+03	8.540E-02	2.927E+02	6.012E-02	4.158E+02
U-235	1.000E+01	1.000E+03	5.964E-01	4.192E+01	5.468E-01	4.572E+01
U-238	1.000E+01	1.000E+03	1.700E-01	1.471E+02	1.698E-01	1.472E+02
iiiiiiii	iiiiiiiiii	iiiiiiiiiiiiiiiiiiii	iiiiiiiiii	iiiiiiiiii	iiiiiiiiii	iiiiiiiiii

Individual Nuclide Dose Summed Over All Pathways

Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	DOSE(j,t), mrem/yr									
(j)	(i)		t= 0.000E+00 1.000E+00 2.500E+01 3.000E+01 5.000E+01 1.000E+02 2.500E+02 5.000E+02 1.000E+03									
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Am-241	Am-241	1.000E+00	3.022E+00	3.018E+00	2.904E+00	2.880E+00	2.789E+00	2.574E+00	2.024E+00	1.355E+00	6.076E-01	
0Np-237	Am-241	1.000E+00	2.183E-06	6.550E-06	1.093E-04	1.302E-04	2.122E-04	4.061E-04	9.025E-04	1.505E-03	2.179E-03	
Np-237	Np-237	1.000E+00	1.353E+01	1.353E+01	1.353E+01	1.353E+01	1.353E+01	1.353E+01	1.353E+01	1.353E+01	1.353E+01	1.353E+01
Np-237	äDOSE(j)		1.353E+01	1.353E+01	1.353E+01	1.353E+01	1.353E+01	1.353E+01	1.353E+01	1.353E+01	1.353E+01	1.353E+01
0U-233	Am-241	1.000E+00	8.653E-14	5.993E-13	1.637E-10	2.335E-10	6.332E-10	2.442E-09	1.405E-08	4.969E-08	1.594E-07	
U-233	Np-237	1.000E+00	7.972E-07	2.376E-06	4.023E-05	4.812E-05	7.966E-05	1.585E-04	3.949E-04	7.886E-04	1.574E-03	
U-233	äDOSE(j)		7.972E-07	2.376E-06	4.023E-05	4.812E-05	7.966E-05	1.585E-04	3.949E-04	7.886E-04	1.575E-03	
0Th-229	Am-241	1.000E+00	7.903E-17	1.184E-15	5.184E-12	8.851E-12	3.983E-11	3.074E-10	4.476E-09	3.236E-08	2.156E-07	
Th-229	Np-237	1.000E+00	9.779E-10	6.842E-09	1.905E-06	2.725E-06	7.464E-06	2.951E-05	1.824E-04	7.223E-04	2.840E-03	
Th-229	äDOSE(j)		9.779E-10	6.842E-09	1.905E-06	2.725E-06	7.464E-06	2.951E-05	1.824E-04	7.224E-04	2.840E-03	
0Co-60	Co-60	1.000E+00	9.592E+01	8.410E+01	3.583E+00	1.856E+00	1.338E-01	1.867E-04	5.070E-13	2.679E-27	0.000E+00	
0Cs-134	Cs-134	1.000E+00	4.971E+01	3.553E+01	1.126E-02	2.102E-03	2.552E-06	1.310E-13	0.000E+00	0.000E+00	0.000E+00	
0Cs-137	Cs-137	1.000E+00	2.093E+01	2.045E+01	1.178E+01	1.050E+01	6.635E+00	2.103E+00	6.700E-02	2.145E-04	2.198E-09	
0Eu-152	Eu-152	7.210E-01	3.101E+01	2.946E+01	8.621E+00	6.674E+00	2.397E+00	1.852E-01	8.553E-05	2.359E-10	1.794E-21	
Eu-152	Eu-152	2.790E-01	1.200E+01	1.140E+01	3.336E+00	2.582E+00	9.274E-01	7.168E-02	3.310E-05	9.128E-11	6.944E-22	
Eu-152	äDOSE(j)		4.301E+01	4.086E+01	1.196E+01	9.256E+00	3.324E+00	2.569E-01	1.186E-04	3.272E-10	2.489E-21	
0Gd-152	Eu-152	2.790E-01	2.620E-16	7.684E-16	7.587E-15	8.224E-15	9.623E-15	1.035E-14	1.041E-14	1.041E-14	1.041E-14	
0Sm-148	Eu-152	2.790E-01	0.000E+00	0.000E+00	0.000E+00	1.059E-29	3.420E-29	8.549E-29	2.435E-28	5.071E-28	1.034E-27	
0Nd-144	Eu-152	2.790E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	
0Eu-154	Eu-154	1.000E+00	4.598E+01	4.242E+01	6.120E+00	4.089E+00	8.147E-01	1.443E-02	8.027E-08	1.401E-16	0.000E+00	
0Eu-155	Eu-155	1.000E+00	1.032E+00	8.923E-01	2.711E-02	1.309E-02	7.119E-04	4.910E-07	1.611E-16	0.000E+00	0.000E+00	
0H-3	H-3	1.000E+00	1.452E-01	1.277E-01	5.789E-03	3.039E-03	2.308E-04	3.669E-07	1.473E-15	1.488E-29	0.000E+00	
0I-129	I-129	1.000E+00	2.610E+00	2.610E+00	2.607E+00	2.607E+00	2.605E+00	2.599E+00	2.583E+00	2.556E+00	2.504E+00	
0Mn-54	Mn-54	1.000E+00	2.215E+01	9.844E+00	3.456E-08	5.988E-10	5.393E-17	0.000E+00	0.000E+00	0.000E+00	0.000E+00	
0Na-22	Na-22	1.000E+00	7.456E+01	5.713E+01	9.552E-02	2.521E-02	1.224E-04	2.008E-10	8.840E-28	0.000E+00	0.000E+00	
0Ni-63	Ni-63	1.000E+00	2.297E-02	2.281E-02	1.932E-02	1.866E-02	1.625E-02	1.149E-02	4.068E-03	7.204E-04	2.259E-05	
0Pu-238	Pu-238	1.850E-09	5.484E-09	5.441E-09	4.501E-09	4.326E-09	3.694E-09	2.488E-09	7.603E-10	1.054E-10	2.026E-12	
Pu-238	Pu-238	9.996E-01	2.963E+00	2.940E+00	2.432E+00	2.338E+00	1.996E+00	1.344E+00	4.108E-01	5.695E-02	1.095E-03	
Pu-238	äDOSE(j)		2.963E+00	2.940E+00	2.432E+00	2.338E+00	1.996E+00	1.344E+00	4.108E-01	5.695E-02	1.095E-03	
0U-234	Pu-238	9.996E-01	8.453E-07	2.529E-06	3.918E-05	4.598E-05	7.064E-05	1.176E-04	1.849E-04	2.103E-04	2.140E-04	

Individual Nuclide Dose Summed Over All Pathways

Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	DOSE(j,t), mrem/yr									
(j)	(i)		t= 0.000E+00 1.000E+00 2.500E+01 3.000E+01 5.000E+01 1.000E+02 2.500E+02 5.000E+02 1.000E+03									
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
U-234	Pu-238	1.899E-08	1.606E-14	4.804E-14	7.445E-13	8.737E-13	1.342E-12	2.235E-12	3.514E-12	3.996E-12	4.067E-12	
U-234	Pu-238	2.100E-04	1.776E-10	5.311E-10	8.230E-09	9.658E-09	1.484E-08	2.471E-08	3.885E-08	4.418E-08	4.496E-08	
U-234	Pu-238	2.771E-10	2.344E-16	7.011E-16	1.086E-14	1.275E-14	1.959E-14	3.262E-14	5.128E-14	5.831E-14	5.934E-14	
U-234	Pu-238	3.989E-12	3.374E-18	1.009E-17	1.564E-16	1.835E-16	2.819E-16	4.695E-16	7.381E-16	8.394E-16	8.542E-16	
U-234	Pu-238	1.998E-04	1.689E-10	5.053E-10	7.830E-09	9.189E-09	1.412E-08	2.351E-08	3.696E-08	4.203E-08	4.277E-08	
U-234	Pu-238	2.637E-10	2.230E-16	6.670E-16	1.034E-14	1.213E-14	1.863E-14	3.103E-14	4.879E-14	5.548E-14	5.646E-14	
U-234	Pu-238	3.795E-12	3.210E-18	9.601E-18	1.488E-16	1.746E-16	2.682E-16	4.467E-16	7.022E-16	7.986E-16	8.127E-16	
U-234	Pu-238	4.196E-08	3.548E-14	1.061E-13	1.645E-12	1.930E-12	2.965E-12	4.938E-12	7.763E-12	8.828E-12	8.984E-12	
U-234	Pu-238	5.538E-14	4.684E-20	1.401E-19	2.171E-18	2.548E-18	3.914E-18	6.518E-18	1.025E-17	1.165E-17	1.186E-17	
U-234	Pu-238	7.972E-16	6.742E-22	2.017E-21	3.125E-20	3.667E-20	5.634E-20	9.383E-20	1.475E-19	1.677E-19	1.707E-19	
U-234	Pu-238	2.000E-07	1.691E-13	5.059E-13	7.840E-12	9.200E-12	1.413E-11	2.354E-11	3.700E-11	4.208E-11	4.282E-11	
U-234	Pu-238	2.640E-13	2.233E-19	6.678E-19	1.035E-17	1.214E-17	1.866E-17	3.107E-17	4.884E-17	5.555E-17	5.653E-17	
U-234	Pu-238	3.800E-15	3.214E-21	9.613E-21	1.490E-19	1.748E-19	2.686E-19	4.472E-19	7.031E-19	7.996E-19	8.137E-19	
U-234	U-234	9.996E-01	6.009E-01	6.009E-01	6.009E-01	6.009E-01	6.009E-01	6.008E-01	6.005E-01	6.000E-01	5.991E-01	
U-234	U-238	1.599E-03	1.357E-09	4.072E-09	6.922E-08	8.280E-08	1.371E-07	2.728E-07	6.798E-07	1.358E-06	2.712E-06	
U-234	U-238	2.111E-09	1.792E-15	5.375E-15	9.138E-14	1.093E-13	1.810E-13	3.601E-13	8.973E-13	1.792E-12	3.580E-12	
U-234	U-238	3.039E-11	2.579E-17	7.737E-17	1.315E-15	1.573E-15	2.605E-15	5.183E-15	1.292E-14	2.580E-14	5.152E-14	
U-234	U-238	3.359E-07	2.851E-13	8.553E-13	1.454E-11	1.739E-11	2.879E-11	5.730E-11	1.428E-10	2.852E-10	5.696E-10	
U-234	U-238	4.434E-13	3.763E-19	1.129E-18	1.919E-17	2.296E-17	3.801E-17	7.563E-17	1.885E-16	3.764E-16	7.519E-16	
U-234	U-238	6.383E-15	5.417E-21	1.625E-20	2.763E-19	3.304E-19	5.471E-19	1.089E-18	2.713E-18	5.418E-18	1.082E-17	
U-234	U-238	3.196E-07	2.713E-13	8.138E-13	1.383E-11	1.655E-11	2.739E-11	5.451E-11	1.358E-10	2.713E-10	5.419E-10	
U-234	U-238	4.219E-13	3.581E-19	1.074E-18	1.826E-17	2.184E-17	3.616E-17	7.196E-17	1.793E-16	3.581E-16	7.153E-16	
U-234	U-238	6.073E-15	5.154E-21	1.546E-20	2.628E-19	3.144E-19	5.205E-19	1.036E-18	2.581E-18	5.155E-18	1.030E-17	
U-234	U-238	6.713E-11	5.698E-17	1.709E-16	2.906E-15	3.475E-15	5.754E-15	1.145E-14	2.853E-14	5.699E-14	1.138E-13	
U-234	U-238	8.862E-17	7.521E-23	2.256E-22	3.835E-21	4.588E-21	7.595E-21	1.511E-20	3.766E-20	7.522E-20	1.503E-19	
U-234	U-238	1.276E-18	1.083E-24	3.248E-24	5.521E-23	6.603E-23	1.093E-22	2.176E-22	5.421E-22	1.083E-21	2.163E-21	
U-234	U-238	3.200E-10	2.716E-16	8.148E-16	1.385E-14	1.657E-14	2.743E-14	5.458E-14	1.360E-13	2.716E-13	5.426E-13	
U-234	U-238	4.224E-16	3.585E-22	1.075E-21	1.828E-20	2.187E-20	3.621E-20	7.205E-20	1.795E-19	3.586E-19	7.162E-19	
U-234	U-238	6.080E-18	5.160E-24	1.548E-23	2.632E-22	3.148E-22	5.211E-22	1.037E-21	2.584E-21	5.161E-21	1.031E-20	
U-234	U-238	9.980E-01	8.470E-07	2.541E-06	4.320E-05	5.166E-05	8.554E-05	1.702E-04	4.242E-04	8.472E-04	1.692E-03	
U-234	U-238	1.317E-06	1.118E-12	3.354E-12	5.702E-11	6.820E-11	1.129E-10	2.247E-10	5.599E-10	1.118E-09	2.234E-09	
U-234	U-238	1.896E-08	1.609E-14	4.828E-14	8.207E-13	9.816E-13	1.625E-12	3.234E-12	8.059E-12	1.610E-11	3.215E-11	
U-234	U-238	2.096E-04	1.779E-10	5.337E-10	9.073E-09	1.085E-08	1.797E-08	3.575E-08	8.910E-08	1.779E-07	3.554E-07	
U-234	U-238	2.767E-10	2.348E-16	7.045E-16	1.198E-14	1.432E-14	2.372E-14	4.720E-14	1.176E-13	2.349E-13	4.692E-13	
U-234	U-238	3.983E-12	3.380E-18	1.014E-17	1.724E-16	2.062E-16	3.414E-16	6.793E-16	1.693E-15	3.381E-15	6.753E-15	
U-234	U-238	1.994E-04	1.693E-10	5.078E-10	8.632E-09	1.032E-08	1.709E-08	3.402E-08	8.477E-08	1.693E-07	3.382E-07	
U-234	U-238	2.633E-10	2.234E-16	6.703E-16	1.139E-14	1.363E-14	2.256E-14	4.490E-14	1.119E-13	2.235E-13	4.464E-13	
U-234	U-238	3.789E-12	3.216E-18	9.648E-18	1.640E-16	1.962E-16	3.248E-16	6.463E-16	1.611E-15	3.217E-15	6.425E-15	
U-234	U-238	4.189E-08	3.555E-14	1.067E-13	1.813E-12	2.169E-12	3.591E-12	7.145E-12	1.780E-11	3.556E-11	7.103E-11	
U-234	U-238	5.530E-14	4.693E-20	1.408E-19	2.393E-18	2.863E-18	4.740E-18	9.431E-18	2.350E-17	4.694E-17	9.376E-17	

U-234	U-238	7.959E-16	6.755E-22	2.027E-21	3.445E-20	4.120E-20	6.822E-20	1.358E-19	3.383E-19	6.756E-19	1.350E-18
U-234	U-238	1.997E-07	1.695E-13	5.084E-13	8.643E-12	1.034E-11	1.712E-11	3.406E-11	8.487E-11	1.695E-10	3.386E-10
U-234	U-238	2.636E-13	2.237E-19	6.711E-19	1.141E-17	1.365E-17	2.259E-17	4.496E-17	1.120E-16	2.237E-16	4.469E-16
U-234	U-238	3.794E-15	3.220E-21	9.660E-21	1.642E-19	1.964E-19	3.252E-19	6.471E-19	1.613E-18	3.221E-18	6.433E-18
U-234	äDOSE(j)		6.009E-01	6.010E-01	6.010E-01	6.010E-01	6.010E-01	6.011E-01	6.011E-01	6.011E-01	6.010E-01
0Th-230	Pu-238	9.996E-01	1.333E-11	9.300E-11	2.434E-08	3.438E-08	8.965E-08	3.151E-07	1.430E-06	3.799E-06	8.796E-06
Th-230	Pu-238	1.899E-08	2.533E-19	1.767E-18	4.625E-16	6.533E-16	1.703E-15	5.987E-15	2.716E-14	7.219E-14	1.671E-13
Th-230	Pu-238	2.100E-04	2.800E-15	1.953E-14	5.113E-12	7.222E-12	1.883E-11	6.618E-11	3.003E-10	7.980E-10	1.848E-09

Individual Nuclide Dose Summed Over All Pathways

Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	DOSE(j,t), mrem/yr									
(j)	(i)		t= 0.000E+00 1.000E+00 2.500E+01 3.000E+01 5.000E+01 1.000E+02 2.500E+02 5.000E+02 1.000E+03									
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Th-230	Pu-238	2.771E-10	3.696E-21	2.578E-20	6.749E-18	9.533E-18	2.486E-17	8.736E-17	3.964E-16	1.053E-15	2.439E-15	
Th-230	Pu-238	3.989E-12	5.320E-23	3.711E-22	9.715E-20	1.372E-19	3.578E-19	1.257E-18	5.706E-18	1.516E-17	3.511E-17	
Th-230	Pu-238	1.998E-04	2.664E-15	1.858E-14	4.865E-12	6.871E-12	1.792E-11	6.297E-11	2.857E-10	7.593E-10	1.758E-09	
Th-230	Pu-238	2.637E-10	3.516E-21	2.453E-20	6.421E-18	9.070E-18	2.365E-17	8.312E-17	3.771E-16	1.002E-15	2.320E-15	
Th-230	Pu-238	3.795E-12	5.062E-23	3.531E-22	9.243E-20	1.305E-19	3.404E-19	1.196E-18	5.428E-18	1.443E-17	3.340E-17	
Th-230	Pu-238	4.196E-08	5.596E-19	3.904E-18	1.022E-15	1.443E-15	3.763E-15	1.323E-14	6.001E-14	1.595E-13	3.692E-13	
Th-230	Pu-238	5.538E-14	7.386E-25	5.153E-24	1.349E-21	1.905E-21	4.967E-21	1.746E-20	7.922E-20	2.105E-19	4.874E-19	
Th-230	Pu-238	7.972E-16	1.063E-26	7.417E-26	1.941E-23	2.742E-23	7.150E-23	2.513E-22	1.140E-21	3.030E-21	7.015E-21	
Th-230	Pu-238	2.000E-07	2.667E-18	1.861E-17	4.870E-15	6.879E-15	1.794E-14	6.304E-14	2.861E-13	7.602E-13	1.760E-12	
Th-230	Pu-238	2.640E-13	3.521E-24	2.456E-23	6.429E-21	9.081E-21	2.368E-20	8.322E-20	3.776E-19	1.003E-18	2.323E-18	
Th-230	Pu-238	3.800E-15	5.068E-26	3.535E-25	9.254E-23	1.307E-22	3.408E-22	1.198E-21	5.435E-21	1.444E-20	3.344E-20	
Th-230	Th-230	9.996E-01	3.081E+00	3.081E+00	3.080E+00	3.080E+00	3.079E+00	3.078E+00	3.073E+00	3.066E+00	3.052E+00	
Th-230	U-234	9.996E-01	1.418E-05	4.251E-05	7.222E-04	8.638E-04	1.430E-03	2.845E-03	7.085E-03	1.413E-02	2.817E-02	
Th-230	U-234	1.319E-06	1.872E-11	5.611E-11	9.534E-10	1.140E-09	1.888E-09	3.756E-09	9.352E-09	1.866E-08	3.718E-08	
Th-230	U-234	1.899E-08	2.694E-13	8.077E-13	1.372E-11	1.641E-11	2.717E-11	5.406E-11	1.346E-10	2.686E-10	5.352E-10	
Th-230	U-234	2.100E-04	2.978E-09	8.929E-09	1.517E-07	1.814E-07	3.004E-07	5.976E-07	1.488E-06	2.969E-06	5.917E-06	
Th-230	U-234	2.771E-10	3.932E-15	1.179E-14	2.002E-13	2.395E-13	3.965E-13	7.888E-13	1.964E-12	3.919E-12	7.810E-12	
Th-230	U-234	3.989E-12	5.659E-17	1.696E-16	2.882E-15	3.447E-15	5.707E-15	1.135E-14	2.828E-14	5.641E-14	1.124E-13	
Th-230	U-234	1.998E-04	2.834E-09	8.495E-09	1.443E-07	1.726E-07	2.858E-07	5.686E-07	1.416E-06	2.825E-06	5.629E-06	
Th-230	U-234	2.637E-10	3.741E-15	1.121E-14	1.905E-13	2.279E-13	3.772E-13	7.505E-13	1.869E-12	3.729E-12	7.431E-12	
Th-230	U-234	3.795E-12	5.384E-17	1.614E-16	2.742E-15	3.280E-15	5.430E-15	1.080E-14	2.690E-14	5.367E-14	1.070E-13	
Th-230	U-234	4.196E-08	5.952E-13	1.784E-12	3.032E-11	3.626E-11	6.003E-11	1.194E-10	2.974E-10	5.933E-10	1.182E-09	
Th-230	U-234	5.538E-14	7.857E-19	2.355E-18	4.002E-17	4.786E-17	7.924E-17	1.576E-16	3.926E-16	7.832E-16	1.561E-15	
Th-230	U-234	7.972E-16	1.131E-20	3.390E-20	5.760E-19	6.889E-19	1.141E-18	2.269E-18	5.651E-18	1.127E-17	2.247E-17	
Th-230	U-234	2.000E-07	2.837E-12	8.505E-12	1.445E-10	1.728E-10	2.861E-10	5.693E-10	1.418E-09	2.828E-09	5.636E-09	
Th-230	U-234	2.640E-13	3.745E-18	1.123E-17	1.908E-16	2.281E-16	3.777E-16	7.514E-16	1.871E-15	3.733E-15	7.440E-15	
Th-230	U-234	3.800E-15	5.391E-20	1.616E-19	2.746E-18	3.284E-18	5.437E-18	1.082E-17	2.693E-17	5.373E-17	1.071E-16	
Th-230	U-238	1.599E-03	2.137E-14	1.494E-13	4.161E-11	5.952E-11	1.631E-10	6.460E-10	4.011E-09	1.599E-08	6.378E-08	
Th-230	U-238	2.111E-09	2.821E-20	1.972E-19	5.492E-17	7.857E-17	2.154E-16	8.527E-16	5.294E-15	2.111E-14	8.419E-14	
Th-230	U-238	3.039E-11	4.061E-22	2.839E-21	7.906E-19	1.131E-18	3.100E-18	1.227E-17	7.621E-17	3.039E-16	1.212E-15	
Th-230	U-238	3.359E-07	4.489E-18	3.139E-17	8.740E-15	1.250E-14	3.427E-14	1.357E-13	8.425E-13	3.360E-12	1.340E-11	
Th-230	U-238	4.434E-13	5.925E-24	4.143E-23	1.154E-20	1.650E-20	4.523E-20	1.791E-19	1.112E-18	4.435E-18	1.768E-17	
Th-230	U-238	6.383E-15	8.529E-26	5.963E-25	1.661E-22	2.375E-22	6.511E-22	2.578E-21	1.601E-20	6.383E-20	2.545E-19	
Th-230	U-238	3.196E-07	4.271E-18	2.986E-17	8.315E-15	1.189E-14	3.260E-14	1.291E-13	8.015E-13	3.196E-12	1.275E-11	
Th-230	U-238	4.219E-13	5.637E-24	3.942E-23	1.098E-20	1.570E-20	4.304E-20	1.704E-19	1.058E-18	4.219E-18	1.683E-17	
Th-230	U-238	6.073E-15	8.115E-26	5.674E-25	1.580E-22	2.260E-22	6.195E-22	2.453E-21	1.523E-20	6.073E-20	2.422E-19	
Th-230	U-238	6.713E-11	8.971E-22	6.272E-21	1.747E-18	2.498E-18	6.848E-18	2.712E-17	1.684E-16	6.714E-16	2.677E-15	
Th-230	U-238	8.862E-17	1.181E-27	8.277E-27	2.305E-24	3.298E-24	9.040E-24	3.579E-23	2.222E-22	8.862E-22	3.534E-21	
Th-230	U-238	1.276E-18	1.413E-29	1.189E-28	3.318E-26	4.747E-26	1.301E-25	5.152E-25	3.199E-24	1.276E-23	5.087E-23	
Th-230	U-238	3.200E-10	4.276E-21	2.990E-20	8.325E-18	1.191E-17	3.264E-17	1.293E-16	8.025E-16	3.200E-15	1.276E-14	

Th-230	U-238	4.224E-16	5.643E-27	3.946E-26	1.099E-23	1.572E-23	4.309E-23	1.706E-22	1.059E-21	4.224E-21	1.685E-20
Th-230	U-238	6.080E-18	8.103E-29	5.666E-28	1.582E-25	2.263E-25	6.202E-25	2.456E-24	1.525E-23	6.081E-23	2.425E-22
Th-230	U-238	9.980E-01	1.334E-11	9.324E-11	2.596E-08	3.714E-08	1.018E-07	4.031E-07	2.503E-06	9.981E-06	3.980E-05
Th-230	U-238	1.317E-06	1.760E-17	1.231E-16	3.427E-14	4.903E-14	1.344E-13	5.321E-13	3.304E-12	1.317E-11	5.254E-11
Th-230	U-238	1.896E-08	2.534E-19	1.772E-18	4.933E-16	7.057E-16	1.934E-15	7.659E-15	4.755E-14	1.896E-13	7.562E-13
Th-230	U-238	2.096E-04	2.801E-15	1.958E-14	5.453E-12	7.801E-12	2.138E-11	8.467E-11	5.257E-10	2.096E-09	8.360E-09
Th-230	U-238	2.767E-10	3.697E-21	2.585E-20	7.199E-18	1.030E-17	2.823E-17	1.118E-16	6.939E-16	2.767E-15	1.104E-14
Th-230	U-238	3.983E-12	5.322E-23	3.721E-22	1.036E-19	1.482E-19	4.063E-19	1.609E-18	9.988E-18	3.983E-17	1.588E-16
Th-230	U-238	1.994E-04	2.665E-15	1.863E-14	5.189E-12	7.422E-12	2.034E-11	8.056E-11	5.002E-10	1.995E-09	7.954E-09

Individual Nuclide Dose Summed Over All Pathways

Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	DOSE(j,t), mrem/yr									
(j)	(i)		t= 0.000E+00 1.000E+00 2.500E+01 3.000E+01 5.000E+01 1.000E+02 2.500E+02 5.000E+02 1.000E+03									
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Th-230	U-238	2.633E-10	3.518E-21	2.460E-20	6.849E-18	9.797E-18	2.686E-17	1.063E-16	6.602E-16	2.633E-15	1.050E-14	
Th-230	U-238	3.789E-12	5.063E-23	3.540E-22	9.858E-20	1.410E-19	3.865E-19	1.531E-18	9.503E-18	3.790E-17	1.511E-16	
Th-230	U-238	4.189E-08	5.598E-19	3.914E-18	1.090E-15	1.559E-15	4.273E-15	1.692E-14	1.051E-13	4.189E-13	1.671E-12	
Th-230	U-238	5.530E-14	7.389E-25	5.166E-24	1.439E-21	2.058E-21	5.641E-21	2.233E-20	1.387E-19	5.530E-19	2.205E-18	
Th-230	U-238	7.959E-16	1.063E-26	7.436E-26	2.071E-23	2.962E-23	8.119E-23	3.215E-22	1.996E-21	7.960E-21	3.174E-20	
Th-230	U-238	1.997E-07	2.668E-18	1.866E-17	5.195E-15	7.431E-15	2.037E-14	8.065E-14	5.008E-13	1.997E-12	7.963E-12	
Th-230	U-238	2.636E-13	3.522E-24	2.463E-23	6.857E-21	9.809E-21	2.689E-20	1.065E-19	6.610E-19	2.636E-18	1.051E-17	
Th-230	U-238	3.794E-15	5.070E-26	3.545E-25	9.870E-23	1.412E-22	3.870E-22	1.532E-21	9.514E-21	3.794E-20	1.513E-19	
Th-230	äDOSE(j)		3.081E+00	3.081E+00	3.081E+00	3.081E+00	3.081E+00	3.081E+00	3.081E+00	3.081E+00	3.081E+00	
0Ra-226	Pu-238	9.996E-01	3.875E-14	5.807E-13	2.448E-09	4.145E-09	1.808E-08	1.294E-07	1.544E-06	8.608E-06	4.041E-05	
Ra-226	Pu-238	1.899E-08	7.363E-22	1.103E-20	4.650E-17	7.876E-17	3.435E-16	2.458E-15	2.934E-14	1.636E-13	7.679E-13	
Ra-226	Th-230	9.996E-01	1.795E-02	5.388E-02	9.113E-01	1.089E+00	1.795E+00	3.533E+00	8.521E+00	1.613E+01	2.903E+01	
Ra-226	Th-230	1.319E-06	2.370E-08	7.112E-08	1.203E-06	1.437E-06	2.369E-06	4.663E-06	1.125E-05	2.129E-05	3.832E-05	
Ra-226	Th-230	1.899E-08	3.411E-10	1.024E-09	1.731E-08	2.069E-08	3.410E-08	6.712E-08	1.619E-07	3.065E-07	5.516E-07	
Ra-226	U-234	9.996E-01	5.501E-08	3.853E-07	1.071E-04	1.530E-04	4.183E-04	1.644E-03	9.993E-03	3.848E-02	1.433E-01	
Ra-226	U-234	1.319E-06	7.261E-14	5.085E-13	1.413E-10	2.020E-10	5.521E-10	2.170E-09	1.319E-08	5.079E-08	1.891E-07	
Ra-226	U-234	1.899E-08	1.045E-15	7.320E-15	2.034E-12	2.908E-12	7.947E-12	3.124E-11	1.899E-10	7.310E-10	2.722E-09	
Ra-226	U-238	1.599E-03	6.210E-17	9.322E-16	4.115E-12	7.037E-12	3.187E-11	2.498E-10	3.804E-09	2.953E-08	2.237E-07	
Ra-226	U-238	2.111E-09	8.198E-23	1.231E-21	5.432E-18	9.289E-18	4.207E-17	3.297E-16	5.022E-15	3.898E-14	2.952E-13	
Ra-226	U-238	3.039E-11	1.180E-24	1.771E-23	7.819E-20	1.337E-19	6.055E-19	4.746E-18	7.228E-17	5.610E-16	4.249E-15	
Ra-226	U-238	9.980E-01	3.875E-14	5.817E-13	2.568E-09	4.391E-09	1.989E-08	1.559E-07	2.374E-06	1.843E-05	1.396E-04	
Ra-226	U-238	1.317E-06	5.115E-20	7.678E-19	3.390E-15	5.797E-15	2.625E-14	2.057E-13	3.134E-12	2.432E-11	1.842E-10	
Ra-226	U-238	1.896E-08	7.363E-22	1.105E-20	4.879E-17	8.343E-17	3.778E-16	2.961E-15	4.510E-14	3.501E-13	2.652E-12	
Ra-226	äDOSE(j)		1.795E-02	5.388E-02	9.114E-01	1.089E+00	1.795E+00	3.534E+00	8.531E+00	1.617E+01	2.918E+01	
0Pb-210	Pu-238	9.996E-01	1.525E-16	4.630E-15	2.604E-10	5.137E-10	3.353E-09	3.821E-08	6.917E-07	4.558E-06	2.324E-05	
Pb-210	Pu-238	1.319E-06	6.507E-23	2.012E-21	1.150E-16	2.270E-16	1.482E-15	1.690E-14	3.059E-13	2.016E-12	1.028E-11	
Pb-210	Pu-238	2.100E-04	3.203E-20	9.724E-19	5.470E-14	1.079E-13	7.043E-13	8.027E-12	1.453E-10	9.574E-10	4.881E-09	
Pb-210	Pu-238	1.998E-04	3.047E-20	9.252E-19	5.204E-14	1.027E-13	6.701E-13	7.637E-12	1.382E-10	9.109E-10	4.644E-09	
Pb-210	Pu-238	4.196E-08	6.400E-24	1.943E-22	1.093E-17	2.156E-17	1.407E-16	1.604E-15	2.903E-14	1.913E-13	9.754E-13	
Pb-210	Pu-238	2.000E-07	3.051E-23	9.263E-22	5.210E-17	1.028E-16	6.709E-16	7.646E-15	1.384E-13	9.120E-13	4.649E-12	
Pb-210	Th-230	9.996E-01	1.160E-04	7.975E-04	1.745E-01	2.384E-01	5.503E-01	1.518E+00	4.600E+00	9.350E+00	1.740E+01	
Pb-210	Th-230	2.100E-04	2.436E-08	1.675E-07	3.664E-05	5.007E-05	1.156E-04	3.188E-04	9.662E-04	1.964E-03	3.655E-03	
Pb-210	Th-230	1.998E-04	2.318E-08	1.594E-07	3.486E-05	4.764E-05	1.100E-04	3.033E-04	9.193E-04	1.868E-03	3.477E-03	
Pb-210	Th-230	4.196E-08	4.869E-12	3.347E-11	7.323E-09	1.001E-08	2.310E-08	6.370E-08	1.931E-07	3.924E-07	7.304E-07	
Pb-210	Th-230	2.000E-07	2.321E-11	1.596E-10	3.491E-08	4.770E-08	1.101E-07	3.036E-07	9.204E-07	1.871E-06	3.482E-06	
Pb-210	U-234	9.996E-01	2.686E-10	3.956E-09	1.451E-05	2.398E-05	9.533E-05	5.648E-04	4.794E-03	2.092E-02	8.303E-02	
Pb-210	U-234	2.100E-04	5.642E-14	8.310E-13	3.048E-09	5.036E-09	2.002E-08	1.186E-07	1.007E-06	4.394E-06	1.744E-05	
Pb-210	U-234	1.998E-04	5.368E-14	7.906E-13	2.900E-09	4.791E-09	1.905E-08	1.129E-07	9.580E-07	4.181E-06	1.659E-05	
Pb-210	U-234	4.196E-08	1.127E-17	1.661E-16	6.091E-13	1.006E-12	4.001E-12	2.371E-11	2.012E-10	8.781E-10	3.485E-09	
Pb-210	U-234	2.000E-07	5.374E-17	7.915E-16	2.904E-12	4.797E-12	1.907E-11	1.130E-10	9.592E-10	4.186E-09	1.661E-08	

Pb-210	U-238	1.599E-03	2.443E-19	7.427E-18	4.340E-13	8.631E-13	5.820E-12	7.197E-11	1.647E-09	1.514E-08	1.256E-07
Pb-210	U-238	3.359E-07	5.131E-23	1.560E-21	9.116E-17	1.813E-16	1.222E-15	1.512E-14	3.459E-13	3.180E-12	2.638E-11
Pb-210	U-238	3.196E-07	4.882E-23	1.484E-21	8.673E-17	1.725E-16	1.163E-15	1.438E-14	3.291E-13	3.026E-12	2.510E-11
Pb-210	U-238	6.713E-11	1.024E-26	3.118E-25	1.822E-20	3.623E-20	2.443E-19	3.021E-18	6.913E-17	6.355E-16	5.271E-15
Pb-210	U-238	3.200E-10	4.887E-26	1.486E-24	8.683E-20	1.727E-19	1.164E-18	1.440E-17	3.295E-16	3.029E-15	2.513E-14
Pb-210	U-238	9.980E-01	1.524E-16	4.635E-15	2.708E-10	5.386E-10	3.631E-09	4.491E-08	1.028E-06	9.448E-06	7.837E-05
Pb-210	U-238	2.096E-04	3.202E-20	9.735E-19	5.688E-14	1.131E-13	7.628E-13	9.432E-12	2.159E-10	1.984E-09	1.646E-08

Individual Nuclide Dose Summed Over All Pathways

Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	DOSE(j,t), mrem/yr									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Pb-210	U-238	1.994E-04		3.046E-20	9.262E-19	5.412E-14	1.076E-13	7.257E-13	8.974E-12	2.054E-10	1.888E-09	1.566E-08
Pb-210	U-238	4.189E-08		6.398E-24	1.945E-22	1.137E-17	2.261E-17	1.524E-16	1.885E-15	4.314E-14	3.966E-13	3.289E-12
Pb-210	U-238	1.997E-07		3.050E-23	9.273E-22	5.418E-17	1.078E-16	7.266E-16	8.985E-15	2.056E-13	1.890E-12	1.568E-11
Pb-210	äDOSE(j)			1.160E-04	7.978E-04	1.745E-01	2.385E-01	5.506E-01	1.519E+00	4.607E+00	9.374E+00	1.749E+01
0Pu-238	Pu-238	1.319E-06		3.911E-06	3.881E-06	3.210E-06	3.086E-06	2.635E-06	1.775E-06	5.423E-07	7.518E-08	1.445E-09
Pu-238	Pu-238	1.899E-08		5.630E-08	5.586E-08	4.621E-08	4.442E-08	3.792E-08	2.554E-08	7.805E-09	1.082E-09	2.080E-11
Pu-238	äDOSE(j)			3.968E-06	3.936E-06	3.256E-06	3.130E-06	2.672E-06	1.800E-06	5.501E-07	7.626E-08	1.466E-09
0U-234	Pu-238	1.319E-06		1.116E-12	3.338E-12	5.172E-11	6.070E-11	9.325E-11	1.553E-10	2.441E-10	2.776E-10	2.825E-10
0Th-230	Pu-238	1.319E-06		1.760E-17	1.228E-16	3.213E-14	4.539E-14	1.183E-13	4.159E-13	1.887E-12	5.015E-12	1.161E-11
0Ra-226	Pu-238	1.319E-06		5.115E-20	7.666E-19	3.231E-15	5.472E-15	2.386E-14	1.708E-13	2.038E-12	1.136E-11	5.335E-11
0Pb-210	Pu-238	1.899E-08		1.157E-24	3.575E-23	2.042E-18	4.030E-18	2.631E-17	3.000E-16	5.430E-15	3.579E-14	1.824E-13
Pb-210	Pu-238	3.989E-12		2.430E-28	7.509E-27	4.290E-22	8.464E-22	5.527E-21	6.300E-20	1.141E-18	7.517E-18	3.832E-17
Pb-210	Pu-238	3.795E-12		2.312E-28	7.144E-27	4.081E-22	8.053E-22	5.258E-21	5.994E-20	1.085E-18	7.152E-18	3.646E-17
Pb-210	Pu-238	7.972E-16		0.000E+00	0.000E+00	8.573E-26	1.692E-25	1.104E-24	1.259E-23	2.279E-22	1.502E-21	7.658E-21
Pb-210	Pu-238	3.800E-15		0.000E+00	0.000E+00	4.086E-25	8.063E-25	5.265E-24	6.002E-23	1.086E-21	7.160E-21	3.650E-20
Pb-210	Th-230	1.899E-08		8.925E-13	6.206E-12	1.369E-09	1.871E-09	4.319E-09	1.191E-08	3.611E-08	7.340E-08	1.366E-07
Pb-210	Th-230	3.989E-12		1.875E-16	1.304E-15	2.876E-13	3.930E-13	9.073E-13	2.502E-12	7.586E-12	1.542E-11	2.870E-11
Pb-210	Th-230	3.795E-12		1.784E-16	1.240E-15	2.736E-13	3.739E-13	8.632E-13	2.381E-12	7.217E-12	1.467E-11	2.730E-11
Pb-210	Th-230	7.972E-16		3.746E-20	2.605E-19	5.747E-17	7.853E-17	1.813E-16	5.001E-16	1.516E-15	3.081E-15	5.735E-15
Pb-210	Th-230	3.800E-15		1.786E-19	1.242E-18	2.739E-16	3.743E-16	8.642E-16	2.384E-15	7.226E-15	1.469E-14	2.734E-14
Pb-210	U-234	1.899E-08		2.052E-18	3.066E-17	1.138E-13	1.881E-13	7.482E-13	4.434E-12	3.764E-11	1.642E-10	6.519E-10
Pb-210	U-234	3.989E-12		4.310E-22	6.441E-21	2.391E-17	3.951E-17	1.571E-16	9.313E-16	7.905E-15	3.450E-14	1.369E-13
Pb-210	U-234	3.795E-12		4.101E-22	6.128E-21	2.275E-17	3.759E-17	1.495E-16	8.861E-16	7.521E-15	3.282E-14	1.303E-13
Pb-210	U-234	7.972E-16		8.614E-26	1.287E-24	4.779E-21	7.896E-21	3.140E-20	1.861E-19	1.580E-18	6.894E-18	2.736E-17
Pb-210	U-234	3.800E-15		4.106E-25	6.135E-24	2.278E-20	3.764E-20	1.497E-19	8.871E-19	7.530E-18	3.286E-17	1.304E-16
Pb-210	U-238	3.039E-11		1.854E-27	5.735E-26	3.404E-21	6.771E-21	4.567E-20	5.649E-19	1.293E-17	1.189E-16	9.860E-16
Pb-210	U-238	6.383E-15		0.000E+00	0.000E+00	7.149E-25	1.422E-24	9.592E-24	1.187E-22	2.716E-21	2.497E-20	2.071E-19
Pb-210	U-238	6.073E-15		0.000E+00	0.000E+00	6.802E-25	1.353E-24	9.126E-24	1.129E-22	2.584E-21	2.375E-20	1.970E-19
Pb-210	U-238	1.276E-18		0.000E+00	0.000E+00	1.429E-28	2.842E-28	1.917E-27	2.371E-26	5.427E-25	4.989E-24	4.139E-23
Pb-210	U-238	6.080E-18		0.000E+00	0.000E+00	6.810E-28	1.355E-27	9.137E-27	1.130E-25	2.587E-24	2.378E-23	1.973E-22
Pb-210	U-238	1.896E-08		1.157E-24	3.579E-23	2.124E-18	4.225E-18	2.850E-17	3.525E-16	8.068E-15	7.417E-14	6.152E-13
Pb-210	U-238	3.983E-12		2.430E-28	7.517E-27	4.461E-22	8.874E-22	5.986E-21	7.404E-20	1.695E-18	1.558E-17	1.292E-16
Pb-210	U-238	3.789E-12		2.312E-28	7.152E-27	4.245E-22	8.443E-22	5.695E-21	7.044E-20	1.612E-18	1.482E-17	1.230E-16
Pb-210	U-238	7.959E-16		0.000E+00	0.000E+00	8.915E-26	1.773E-25	1.196E-24	1.480E-23	3.387E-22	3.113E-21	2.583E-20
Pb-210	U-238	3.794E-15		0.000E+00	0.000E+00	4.250E-25	8.453E-25	5.702E-24	7.053E-23	1.614E-21	1.484E-20	1.231E-19
Pb-210	äDOSE(j)			8.929E-13	6.209E-12	1.370E-09	1.872E-09	4.322E-09	1.192E-08	3.617E-08	7.360E-08	1.373E-07
0Pu-238	Pu-238	2.100E-04		6.224E-04	6.175E-04	5.108E-04	4.910E-04	4.192E-04	2.824E-04	8.629E-05	1.196E-05	2.299E-07
Pu-238	Pu-238	2.771E-10		8.216E-10	8.151E-10	6.743E-10	6.481E-10	5.534E-10	3.727E-10	1.139E-10	1.579E-11	3.035E-13
Pu-238	äDOSE(j)			6.224E-04	6.175E-04	5.108E-04	4.910E-04	4.192E-04	2.824E-04	8.629E-05	1.196E-05	2.299E-07
0Ra-226	Pu-238	2.100E-04		1.894E-17	2.838E-16	1.195E-12	2.025E-12	8.829E-12	6.320E-11	7.542E-10	4.205E-09	1.974E-08

Ra-226	Pu-238	2.771E-10	2.501E-23	3.746E-22	1.578E-18	2.673E-18	1.165E-17	8.342E-17	9.956E-16	5.550E-15	2.606E-14
Ra-226	Pu-238	3.989E-12	3.599E-25	5.391E-24	2.271E-20	3.847E-20	1.678E-19	1.201E-18	1.433E-17	7.989E-17	3.750E-16

Individual Nuclide Dose Summed Over All Pathways

Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	DOSE(j,t), mrem/yr									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Ra-226	Th-230	2.100E-04	8.773E-06	2.632E-05	4.451E-04	5.318E-04	8.766E-04	1.725E-03	4.162E-03	7.879E-03	1.418E-02	
Ra-226	Th-230	2.771E-10	1.158E-11	3.474E-11	5.875E-10	7.020E-10	1.157E-09	2.278E-09	5.494E-09	1.040E-08	1.872E-08	
Ra-226	Th-230	3.989E-12	1.667E-13	5.000E-13	8.457E-12	1.010E-11	1.666E-11	3.278E-11	7.908E-11	1.497E-10	2.694E-10	
Ra-226	U-234	2.100E-04	2.689E-11	1.882E-10	5.229E-08	7.474E-08	2.043E-07	8.031E-07	4.881E-06	1.879E-05	6.998E-05	
Ra-226	U-234	2.771E-10	3.549E-17	2.485E-16	6.902E-14	9.866E-14	2.697E-13	1.060E-12	6.443E-12	2.481E-11	9.237E-11	
Ra-226	U-234	3.989E-12	5.108E-19	3.576E-18	9.934E-16	1.420E-15	3.882E-15	1.526E-14	9.274E-14	3.571E-13	1.330E-12	
Ra-226	U-238	3.359E-07	3.036E-20	4.555E-19	2.010E-15	3.437E-15	1.556E-14	1.220E-13	1.858E-12	1.442E-11	1.092E-10	
Ra-226	U-238	4.434E-13	4.007E-26	6.013E-25	2.653E-21	4.537E-21	2.055E-20	1.610E-19	2.453E-18	1.904E-17	1.442E-16	
Ra-226	U-238	6.383E-15	5.720E-28	8.654E-27	3.819E-23	6.531E-23	2.957E-22	2.318E-21	3.530E-20	2.740E-19	2.076E-18	
Ra-226	U-238	2.096E-04	1.894E-17	2.842E-16	1.254E-12	2.145E-12	9.713E-12	7.612E-11	1.159E-09	9.000E-09	6.816E-08	
Ra-226	U-238	2.767E-10	2.501E-23	3.752E-22	1.656E-18	2.831E-18	1.282E-17	1.005E-16	1.530E-15	1.188E-14	8.998E-14	
Ra-226	U-238	3.983E-12	3.599E-25	5.400E-24	2.383E-20	4.075E-20	1.845E-19	1.446E-18	2.203E-17	1.710E-16	1.295E-15	
Ra-226	äDOSE(j)		8.773E-06	2.632E-05	4.451E-04	5.319E-04	8.768E-04	1.726E-03	4.167E-03	7.898E-03	1.425E-02	
0Pb-210	Pu-238	2.771E-10	1.367E-26	4.226E-25	2.416E-20	4.768E-20	3.113E-19	3.549E-18	6.424E-17	4.234E-16	2.159E-15	
Pb-210	Pu-238	2.637E-10	1.300E-26	4.021E-25	2.299E-20	4.536E-20	2.962E-19	3.376E-18	6.112E-17	4.028E-16	2.054E-15	
Pb-210	Pu-238	5.538E-14	0.000E+00	8.379E-29	4.829E-24	9.528E-24	6.221E-23	7.092E-22	1.284E-20	8.461E-20	4.314E-19	
Pb-210	Pu-238	2.640E-13	0.000E+00	3.994E-28	2.302E-23	4.542E-23	2.965E-22	3.381E-21	6.120E-20	4.033E-19	2.056E-18	
Pb-210	Th-230	1.319E-06	5.022E-11	3.494E-10	7.711E-08	1.054E-07	2.433E-07	6.711E-07	2.034E-06	4.135E-06	7.696E-06	
Pb-210	Th-230	2.771E-10	1.055E-14	7.339E-14	1.620E-11	2.214E-11	5.110E-11	1.410E-10	4.273E-10	8.685E-10	1.616E-09	
Pb-210	Th-230	2.637E-10	1.004E-14	6.983E-14	1.541E-11	2.106E-11	4.862E-11	1.341E-10	4.065E-10	8.263E-10	1.538E-09	
Pb-210	Th-230	5.538E-14	2.108E-18	1.467E-17	3.237E-15	4.424E-15	1.021E-14	2.817E-14	8.539E-14	1.736E-13	3.230E-13	
Pb-210	Th-230	2.640E-13	1.005E-17	6.991E-17	1.543E-14	2.109E-14	4.868E-14	1.343E-13	4.070E-13	8.273E-13	1.540E-12	
Pb-210	U-234	1.319E-06	1.154E-16	1.726E-15	6.413E-12	1.060E-11	4.214E-11	2.497E-10	2.120E-09	9.251E-09	3.672E-08	
Pb-210	U-234	2.771E-10	2.425E-20	3.626E-19	1.347E-15	2.226E-15	8.852E-15	5.246E-14	4.453E-13	1.943E-12	7.713E-12	
Pb-210	U-234	2.637E-10	2.307E-20	3.450E-19	1.281E-15	2.117E-15	8.422E-15	4.991E-14	4.237E-13	1.849E-12	7.338E-12	
Pb-210	U-234	5.538E-14	4.846E-24	7.246E-23	2.692E-19	4.448E-19	1.769E-18	1.048E-17	8.899E-17	3.883E-16	1.541E-15	
Pb-210	U-234	2.640E-13	2.310E-23	3.454E-22	1.283E-18	2.120E-18	8.432E-18	4.997E-17	4.242E-16	1.851E-15	7.347E-15	
Pb-210	U-238	2.111E-09	1.042E-25	3.228E-24	1.917E-19	3.814E-19	2.572E-18	3.182E-17	7.283E-16	6.695E-15	5.554E-14	
Pb-210	U-238	4.434E-13	1.442E-29	6.727E-28	4.027E-23	8.010E-23	5.403E-22	6.683E-21	1.530E-19	1.406E-18	1.167E-17	
Pb-210	U-238	4.219E-13	1.372E-29	6.400E-28	3.831E-23	7.621E-23	5.141E-22	6.359E-21	1.455E-19	1.338E-18	1.110E-17	
Pb-210	U-238	8.862E-17	0.000E+00	0.000E+00	8.048E-27	1.601E-26	1.080E-25	1.336E-24	3.057E-23	2.810E-22	2.331E-21	
Pb-210	U-238	4.224E-16	0.000E+00	0.000E+00	3.836E-26	7.630E-26	5.147E-25	6.366E-24	1.457E-22	1.340E-21	1.111E-20	
Pb-210	U-238	1.317E-06	6.505E-23	2.014E-21	1.196E-16	2.380E-16	1.605E-15	1.985E-14	4.545E-13	4.178E-12	3.466E-11	
Pb-210	U-238	2.767E-10	1.366E-26	4.231E-25	2.513E-20	4.998E-20	3.371E-19	4.170E-18	9.546E-17	8.776E-16	7.279E-15	
Pb-210	U-238	2.633E-10	1.300E-26	4.025E-25	2.391E-20	4.756E-20	3.208E-19	3.968E-18	9.082E-17	8.349E-16	6.926E-15	
Pb-210	U-238	5.530E-14	0.000E+00	8.388E-29	5.022E-24	9.989E-24	6.738E-23	8.334E-22	1.908E-20	1.754E-19	1.455E-18	
Pb-210	U-238	2.636E-13	0.000E+00	3.998E-28	2.394E-23	4.761E-23	3.212E-22	3.973E-21	9.093E-20	8.359E-19	6.934E-18	
Pb-210	äDOSE(j)		5.024E-11	3.496E-10	7.715E-08	1.054E-07	2.434E-07	6.716E-07	2.037E-06	4.146E-06	7.736E-06	
0Pu-238	Pu-238	3.989E-12	1.183E-11	1.173E-11	9.705E-12	9.329E-12	7.965E-12	5.365E-12	1.639E-12	2.273E-13	4.368E-15	
Pu-238	Pu-238	1.998E-04	5.922E-04	5.875E-04	4.860E-04	4.672E-04	3.989E-04	2.687E-04	8.209E-05	1.138E-05	2.187E-07	

Pu-238	äDOSE(j)		5.922E-04	5.875E-04	4.860E-04	4.672E-04	3.989E-04	2.687E-04	8.209E-05	1.138E-05	2.187E-07
0Ra-226	Pu-238	1.998E-04	6.963E-18	1.044E-16	4.399E-13	7.450E-13	3.249E-12	2.326E-11	2.775E-10	1.547E-09	7.263E-09
Ra-226	Pu-238	3.795E-12	1.323E-25	1.983E-24	8.358E-21	1.416E-20	6.173E-20	4.419E-19	5.273E-18	2.940E-17	1.380E-16
Ra-226	Th-230	1.998E-04	3.227E-06	9.683E-06	1.638E-04	1.957E-04	3.226E-04	6.349E-04	1.532E-03	2.899E-03	5.218E-03
Ra-226	Th-230	2.637E-10	4.259E-12	1.278E-11	2.162E-10	2.583E-10	4.258E-10	8.381E-10	2.022E-09	3.827E-09	6.888E-09
Ra-226	Th-230	3.795E-12	6.131E-14	1.840E-13	3.112E-12	3.718E-12	6.129E-12	1.206E-11	2.910E-11	5.509E-11	9.914E-11

Individual Nuclide Dose Summed Over All Pathways

Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	DOSE(j,t), mrem/yr									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Ra-226	U-234	1.998E-04	9.885E-12	6.924E-11	1.924E-08	2.750E-08	7.517E-08	2.955E-07	1.796E-06	6.915E-06	2.575E-05	
Ra-226	U-234	2.637E-10	1.305E-17	9.139E-17	2.540E-14	3.630E-14	9.923E-14	3.901E-13	2.371E-12	9.128E-12	3.399E-11	
Ra-226	U-234	3.795E-12	1.878E-19	1.316E-18	3.656E-16	5.226E-16	1.428E-15	5.615E-15	3.413E-14	1.314E-13	4.893E-13	
Ra-226	U-238	3.196E-07	1.116E-20	1.675E-19	7.397E-16	1.265E-15	5.727E-15	4.489E-14	6.837E-13	5.307E-12	4.020E-11	
Ra-226	U-238	4.219E-13	1.473E-26	2.211E-25	9.763E-22	1.670E-21	7.560E-21	5.926E-20	9.025E-19	7.005E-18	5.306E-17	
Ra-226	U-238	6.073E-15	2.075E-28	3.183E-27	1.405E-23	2.403E-23	1.088E-22	8.529E-22	1.299E-20	1.008E-19	7.637E-19	
Ra-226	U-238	1.994E-04	6.963E-18	1.045E-16	4.615E-13	7.892E-13	3.574E-12	2.801E-11	4.267E-10	3.312E-09	2.508E-08	
Ra-226	U-238	2.633E-10	9.191E-24	1.380E-22	6.092E-19	1.042E-18	4.718E-18	3.698E-17	5.632E-16	4.371E-15	3.311E-14	
Ra-226	U-238	3.789E-12	1.323E-25	1.986E-24	8.769E-21	1.500E-20	6.790E-20	5.322E-19	8.106E-18	6.292E-17	4.766E-16	
Ra-226	äDOSE(j)		3.227E-06	9.683E-06	1.638E-04	1.957E-04	3.226E-04	6.352E-04	1.533E-03	2.906E-03	5.244E-03	
0Pu-238	Pu-238	2.637E-10	7.816E-10	7.755E-10	6.415E-10	6.166E-10	5.265E-10	3.546E-10	1.084E-10	1.502E-11	2.887E-13	
Pu-238	Pu-238	3.795E-12	1.125E-11	1.116E-11	9.234E-12	8.876E-12	7.578E-12	5.104E-12	1.560E-12	2.162E-13	4.156E-15	
Pu-238	äDOSE(j)		7.929E-10	7.867E-10	6.507E-10	6.255E-10	5.341E-10	3.597E-10	1.099E-10	1.524E-11	2.929E-13	
0Ra-226	Pu-238	2.637E-10	9.192E-24	1.378E-22	5.806E-19	9.834E-19	4.288E-18	3.070E-17	3.663E-16	2.042E-15	9.588E-15	
0Pu-238	Pu-238	4.196E-08	1.244E-07	1.234E-07	1.021E-07	9.812E-08	8.378E-08	5.643E-08	1.724E-08	2.391E-09	4.595E-11	
Pu-238	Pu-238	5.538E-14	1.642E-13	1.629E-13	1.347E-13	1.295E-13	1.106E-13	7.449E-14	2.276E-14	3.156E-15	6.065E-17	
Pu-238	äDOSE(j)		1.244E-07	1.234E-07	1.021E-07	9.812E-08	8.378E-08	5.643E-08	1.724E-08	2.391E-09	4.595E-11	
0Ra-226	Pu-238	4.196E-08	3.622E-21	5.425E-20	2.286E-16	3.871E-16	1.688E-15	1.208E-14	1.442E-13	8.039E-13	3.774E-12	
Ra-226	Pu-238	5.538E-14	4.781E-27	7.161E-26	3.017E-22	5.110E-22	2.228E-21	1.595E-20	1.903E-19	1.061E-18	4.982E-18	
Ra-226	Pu-238	7.972E-16	6.351E-29	1.022E-27	4.343E-24	7.355E-24	3.207E-23	2.296E-22	2.740E-21	1.527E-20	7.170E-20	
Ra-226	Th-230	4.196E-08	1.677E-09	5.032E-09	8.510E-08	1.017E-07	1.676E-07	3.299E-07	7.957E-07	1.506E-06	2.711E-06	
Ra-226	Th-230	5.538E-14	2.214E-15	6.642E-15	1.123E-13	1.342E-13	2.212E-13	4.355E-13	1.050E-12	1.989E-12	3.579E-12	
Ra-226	Th-230	7.972E-16	3.187E-17	9.560E-17	1.617E-15	1.932E-15	3.184E-15	6.268E-15	1.512E-14	2.862E-14	5.151E-14	
Ra-226	U-234	4.196E-08	5.140E-15	3.599E-14	9.997E-12	1.429E-11	3.906E-11	1.535E-10	9.332E-10	3.593E-09	1.338E-08	
Ra-226	U-234	5.538E-14	6.785E-21	4.750E-20	1.320E-17	1.886E-17	5.156E-17	2.027E-16	1.232E-15	4.743E-15	1.766E-14	
Ra-226	U-234	7.972E-16	9.766E-23	6.837E-22	1.899E-19	2.715E-19	7.421E-19	2.917E-18	1.773E-17	6.826E-17	2.542E-16	
Ra-226	U-238	6.713E-11	5.804E-24	8.709E-23	3.843E-19	6.572E-19	2.976E-18	2.332E-17	3.553E-16	2.757E-15	2.089E-14	
Ra-226	U-238	8.862E-17	0.000E+00	1.060E-28	5.073E-25	8.675E-25	3.928E-24	3.079E-23	4.689E-22	3.640E-21	2.757E-20	
Ra-226	U-238	1.276E-18	0.000E+00	0.000E+00	7.302E-27	1.249E-26	5.654E-26	4.432E-25	6.750E-24	5.239E-23	3.968E-22	
Ra-226	U-238	4.189E-08	3.622E-21	5.434E-20	2.398E-16	4.101E-16	1.857E-15	1.455E-14	2.217E-13	1.721E-12	1.303E-11	
Ra-226	U-238	5.530E-14	4.781E-27	7.173E-26	3.166E-22	5.413E-22	2.451E-21	1.921E-20	2.926E-19	2.271E-18	1.720E-17	
Ra-226	U-238	7.959E-16	6.350E-29	1.024E-27	4.556E-24	7.791E-24	3.528E-23	2.765E-22	4.212E-21	3.269E-20	2.476E-19	
Ra-226	äDOSE(j)		1.677E-09	5.032E-09	8.511E-08	1.017E-07	1.676E-07	3.300E-07	7.967E-07	1.510E-06	2.725E-06	
0Pu-238	Pu-238	7.972E-16	2.363E-15	2.345E-15	1.939E-15	1.864E-15	1.592E-15	1.072E-15	3.276E-16	4.542E-17	8.730E-19	
Pu-238	Pu-238	2.000E-07	5.929E-07	5.882E-07	4.866E-07	4.677E-07	3.993E-07	2.690E-07	8.219E-08	1.139E-08	2.190E-10	
Pu-238	äDOSE(j)		5.929E-07	5.882E-07	4.866E-07	4.677E-07	3.993E-07	2.690E-07	8.219E-08	1.139E-08	2.190E-10	
0Ra-226	Pu-238	2.000E-07	1.355E-21	2.039E-20	8.621E-17	1.460E-16	6.368E-16	4.559E-15	5.441E-14	3.033E-13	1.424E-12	
Ra-226	Pu-238	3.800E-15	2.246E-29	3.805E-28	1.638E-24	2.774E-24	1.210E-23	8.661E-23	1.034E-21	5.763E-21	2.705E-20	
Ra-226	Th-230	2.000E-07	6.305E-10	1.896E-09	3.211E-08	3.836E-08	6.323E-08	1.245E-07	3.002E-07	5.684E-07	1.023E-06	
Ra-226	Th-230	2.640E-13	8.323E-16	2.502E-15	4.238E-14	5.063E-14	8.347E-14	1.643E-13	3.963E-13	7.503E-13	1.350E-12	

Ra-226	Th-230	3.800E-15	1.198E-17	3.602E-17	6.100E-16	7.288E-16	1.201E-15	2.365E-15	5.704E-15	1.080E-14	1.944E-14
Ra-226	U-234	2.000E-07	1.927E-15	1.354E-14	3.771E-12	5.391E-12	1.474E-11	5.793E-11	3.521E-10	1.356E-09	5.048E-09
Ra-226	U-234	2.640E-13	2.544E-21	1.787E-20	4.978E-18	7.116E-18	1.945E-17	7.647E-17	4.648E-16	1.789E-15	6.663E-15

Individual Nuclide Dose Summed Over All Pathways

Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	DOSE(j,t), mrem/yr									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Ra-226	U-234	3.800E-15	3.662E-23	2.573E-22	7.165E-20	1.024E-19	2.800E-19	1.101E-18	6.690E-18	2.576E-17	9.591E-17	
Ra-226	U-238	3.200E-10	2.172E-24	3.273E-23	1.450E-19	2.479E-19	1.123E-18	8.800E-18	1.340E-16	1.040E-15	7.880E-15	
Ra-226	U-238	4.224E-16	0.000E+00	3.770E-29	1.914E-25	3.272E-25	1.482E-24	1.162E-23	1.769E-22	1.373E-21	1.040E-20	
Ra-226	U-238	6.080E-18	0.000E+00	0.000E+00	2.754E-27	4.710E-27	2.133E-26	1.672E-25	2.547E-24	1.977E-23	1.497E-22	
Ra-226	U-238	1.997E-07	1.355E-21	2.042E-20	9.046E-17	1.547E-16	7.005E-16	5.491E-15	8.364E-14	6.492E-13	4.917E-12	
Ra-226	U-238	2.636E-13	1.789E-27	2.696E-26	1.194E-22	2.042E-22	9.247E-22	7.248E-21	1.104E-19	8.569E-19	6.491E-18	
Ra-226	U-238	3.794E-15	2.246E-29	3.812E-28	1.719E-24	2.939E-24	1.331E-23	1.043E-22	1.589E-21	1.233E-20	9.343E-20	
Ra-226	äDOSE(j)		6.305E-10	1.896E-09	3.211E-08	3.836E-08	6.325E-08	1.245E-07	3.006E-07	5.697E-07	1.028E-06	
0Pu-238	Pu-238	2.640E-13	7.826E-13	7.764E-13	6.423E-13	6.174E-13	5.271E-13	3.550E-13	1.085E-13	1.504E-14	2.891E-16	
Pu-238	Pu-238	3.800E-15	1.126E-14	1.118E-14	9.245E-15	8.887E-15	7.587E-15	5.111E-15	1.562E-15	2.165E-16	4.161E-18	
Pu-238	äDOSE(j)		7.939E-13	7.876E-13	6.515E-13	6.263E-13	5.347E-13	3.602E-13	1.101E-13	1.526E-14	2.933E-16	
0Ra-226	Pu-238	2.640E-13	1.789E-27	2.691E-26	1.138E-22	1.928E-22	8.406E-22	6.017E-21	7.182E-20	4.004E-19	1.880E-18	
0Pu-239	Pu-239	5.901E-04	1.858E-03	1.858E-03	1.857E-03	1.857E-03	1.856E-03	1.853E-03	1.845E-03	1.832E-03	1.806E-03	
Pu-239	Pu-239	1.633E-06	5.143E-06	5.143E-06	5.140E-06	5.139E-06	5.136E-06	5.129E-06	5.106E-06	5.070E-06	4.997E-06	
Pu-239	äDOSE(j)		1.864E-03	1.863E-03	1.862E-03	1.862E-03	1.861E-03	1.858E-03	1.850E-03	1.837E-03	1.811E-03	
0U-235	Pu-239	5.901E-04	1.588E-12	4.765E-12	8.098E-11	9.685E-11	1.603E-10	3.188E-10	7.929E-10	1.579E-09	3.133E-09	
U-235	Pu-239	1.633E-06	4.396E-15	1.319E-14	2.241E-13	2.681E-13	4.437E-13	8.824E-13	2.195E-12	4.369E-12	8.671E-12	
U-235	Pu-239	8.257E-06	2.222E-14	6.667E-14	1.133E-12	1.355E-12	2.243E-12	4.461E-12	1.110E-11	2.209E-11	4.384E-11	
U-235	Pu-239	2.285E-08	6.151E-17	1.845E-16	3.136E-15	3.751E-15	6.208E-15	1.235E-14	3.071E-14	6.113E-14	1.213E-13	
U-235	Pu-239	4.954E-10	1.334E-18	4.001E-18	6.799E-17	8.132E-17	1.346E-16	2.677E-16	6.657E-16	1.325E-15	2.630E-15	
U-235	Pu-239	1.371E-12	3.691E-21	1.107E-20	1.882E-19	2.251E-19	3.725E-19	7.408E-19	1.843E-18	3.668E-18	7.280E-18	
U-235	Pu-239	9.829E-01	2.646E-09	7.937E-09	1.349E-07	1.613E-07	2.670E-07	5.310E-07	1.321E-06	2.629E-06	5.218E-06	
U-235	Pu-239	2.720E-03	7.322E-12	2.197E-11	3.733E-10	4.465E-10	7.391E-10	1.470E-09	3.655E-09	7.277E-09	1.444E-08	
U-235	Pu-239	1.375E-02	3.702E-11	1.111E-10	1.887E-09	2.257E-09	3.736E-09	7.430E-09	1.848E-08	3.679E-08	7.302E-08	
U-235	Pu-239	3.806E-05	1.025E-13	3.074E-13	5.224E-12	6.247E-12	1.034E-11	2.056E-11	5.115E-11	1.018E-10	2.021E-10	
U-235	Pu-239	8.252E-07	2.221E-15	6.664E-15	1.133E-13	1.354E-13	2.242E-13	4.459E-13	1.109E-12	2.208E-12	4.381E-12	
U-235	Pu-239	2.284E-09	6.147E-18	1.844E-17	3.134E-16	3.749E-16	6.205E-16	1.234E-15	3.069E-15	6.110E-15	1.213E-14	
U-235	U-235	9.835E-01	5.378E+00	5.378E+00	5.378E+00	5.378E+00	5.378E+00	5.378E+00	5.378E+00	5.377E+00	5.377E+00	
U-235	äDOSE(j)		5.378E+00	5.378E+00	5.378E+00	5.378E+00	5.378E+00	5.378E+00	5.378E+00	5.377E+00	5.377E+00	
0Pa-231	Pu-239	5.901E-04	1.283E-17	8.995E-17	2.509E-14	3.590E-14	9.837E-14	3.893E-13	2.412E-12	9.590E-12	3.800E-11	
Pa-231	Pu-239	1.633E-06	3.550E-20	2.489E-19	6.945E-17	9.935E-17	2.723E-16	1.077E-15	6.677E-15	2.654E-14	1.052E-13	
Pa-231	Pu-239	8.257E-06	1.795E-19	1.259E-18	3.511E-16	5.023E-16	1.376E-15	5.447E-15	3.375E-14	1.342E-13	5.317E-13	
Pa-231	Pu-239	2.285E-08	4.967E-22	3.483E-21	9.718E-19	1.390E-18	3.809E-18	1.507E-17	9.342E-17	3.714E-16	1.472E-15	
Pa-231	Pu-239	4.954E-10	1.077E-23	7.552E-23	2.107E-20	3.014E-20	8.259E-20	3.268E-19	2.025E-18	8.052E-18	3.191E-17	
Pa-231	Pu-239	1.371E-12	2.980E-26	2.090E-25	5.831E-23	8.341E-23	2.286E-22	9.045E-22	5.606E-21	2.228E-20	8.830E-20	
Pa-231	Pu-239	9.829E-01	2.137E-14	1.498E-13	4.180E-11	5.979E-11	1.639E-10	6.484E-10	4.018E-09	1.597E-08	6.330E-08	
Pa-231	Pu-239	2.720E-03	5.913E-17	4.147E-16	1.157E-13	1.655E-13	4.535E-13	1.795E-12	1.112E-11	4.421E-11	1.752E-10	
Pa-231	Pu-239	1.375E-02	2.990E-16	2.096E-15	5.848E-13	8.366E-13	2.293E-12	9.072E-12	5.622E-11	2.235E-10	8.857E-10	
Pa-231	Pu-239	3.806E-05	8.274E-19	5.802E-18	1.619E-15	2.315E-15	6.345E-15	2.511E-14	1.556E-13	6.186E-13	2.451E-12	
Pa-231	Pu-239	8.252E-07	1.794E-20	1.258E-19	3.509E-17	5.020E-17	1.376E-16	5.444E-16	3.374E-15	1.341E-14	5.314E-14	

Pa-231	Pu-239	2.284E-09	4.965E-23	3.481E-22	9.712E-20	1.389E-19	3.807E-19	1.507E-18	9.337E-18	3.712E-17	1.471E-16
Pa-231	U-235	9.835E-01	6.522E-05	1.959E-04	3.332E-03	3.985E-03	6.597E-03	1.312E-02	3.265E-02	6.506E-02	1.294E-01
Pa-231	U-235	2.722E-03	1.805E-07	5.422E-07	9.221E-06	1.103E-05	1.826E-05	3.631E-05	9.037E-05	1.801E-04	3.580E-04
Pa-231	U-235	1.376E-02	9.126E-07	2.741E-06	4.662E-05	5.576E-05	9.230E-05	1.836E-04	4.569E-04	9.104E-04	1.810E-03

Individual Nuclide Dose Summed Over All Pathways

Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	DOSE(j,t), mrem/yr									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Pa-231	U-235	3.809E-05		2.526E-09	7.586E-09	1.290E-07	1.543E-07	2.555E-07	5.081E-07	1.264E-06	2.520E-06	5.010E-06
Pa-231	U-235	8.257E-07		5.476E-11	1.645E-10	2.797E-09	3.346E-09	5.538E-09	1.102E-08	2.741E-08	5.463E-08	1.086E-07
Pa-231	U-235	2.285E-09		1.516E-13	4.552E-13	7.742E-12	9.260E-12	1.533E-11	3.049E-11	7.587E-11	1.512E-10	3.006E-10
Pa-231	äDOSE(j)			6.632E-05	1.992E-04	3.388E-03	4.052E-03	6.707E-03	1.334E-02	3.320E-02	6.616E-02	1.315E-01
0Ac-227	Pu-239	5.901E-04		2.933E-19	4.364E-18	1.613E-14	2.665E-14	1.060E-13	6.294E-13	5.415E-12	2.433E-11	1.026E-10
Ac-227	Pu-239	9.829E-01		4.885E-16	7.268E-15	2.687E-11	4.439E-11	1.765E-10	1.048E-09	9.020E-09	4.053E-08	1.710E-07
Ac-227	U-235	9.835E-01		1.981E-06	1.373E-05	3.019E-03	4.126E-03	9.532E-03	2.641E-02	8.211E-02	1.753E-01	3.603E-01
Ac-227	äDOSE(j)			1.981E-06	1.373E-05	3.019E-03	4.126E-03	9.532E-03	2.641E-02	8.211E-02	1.753E-01	3.603E-01
0Ac-227	Pu-239	1.633E-06		8.157E-22	1.216E-20	4.501E-17	7.436E-17	2.958E-16	1.756E-15	1.511E-14	6.791E-14	2.864E-13
Ac-227	Pu-239	8.257E-06		3.479E-21	5.186E-20	1.920E-16	3.172E-16	1.262E-15	7.492E-15	6.446E-14	2.897E-13	1.222E-12
Ac-227	Pu-239	2.720E-03		1.359E-18	2.025E-17	7.497E-14	1.239E-13	4.927E-13	2.925E-12	2.517E-11	1.131E-10	4.771E-10
Ac-227	U-235	2.722E-03		5.516E-09	3.827E-08	8.425E-06	1.151E-05	2.660E-05	7.371E-05	2.292E-04	4.893E-04	1.005E-03
Ac-227	äDOSE(j)			5.516E-09	3.827E-08	8.425E-06	1.151E-05	2.660E-05	7.371E-05	2.292E-04	4.893E-04	1.005E-03
0Pu-239	Pu-239	8.257E-06		2.600E-05	2.600E-05	2.598E-05	2.598E-05	2.597E-05	2.593E-05	2.582E-05	2.563E-05	2.527E-05
Pu-239	Pu-239	2.285E-08		7.197E-08	7.196E-08	7.191E-08	7.190E-08	7.186E-08	7.176E-08	7.145E-08	7.094E-08	6.993E-08
Pu-239	äDOSE(j)			2.607E-05	2.607E-05	2.606E-05	2.605E-05	2.604E-05	2.600E-05	2.589E-05	2.570E-05	2.534E-05
0Ac-227	Pu-239	2.285E-08		9.724E-24	1.449E-22	5.366E-19	8.866E-19	3.526E-18	2.094E-17	1.802E-16	8.096E-16	3.415E-15
Ac-227	Pu-239	4.954E-10		2.223E-25	3.312E-24	1.226E-20	2.026E-20	8.056E-20	4.784E-19	4.116E-18	1.850E-17	7.802E-17
Ac-227	Pu-239	3.806E-05		1.620E-20	2.414E-19	8.938E-16	1.477E-15	5.874E-15	3.488E-14	3.001E-13	1.349E-12	5.688E-12
Ac-227	U-235	3.809E-05		6.575E-11	4.563E-10	1.004E-07	1.373E-07	3.171E-07	8.788E-07	2.732E-06	5.834E-06	1.199E-05
Ac-227	äDOSE(j)			6.575E-11	4.563E-10	1.004E-07	1.373E-07	3.171E-07	8.788E-07	2.732E-06	5.834E-06	1.199E-05
0Pu-239	Pu-239	4.954E-10		1.560E-09	1.560E-09	1.559E-09	1.559E-09	1.558E-09	1.556E-09	1.549E-09	1.538E-09	1.516E-09
Pu-239	Pu-239	1.371E-12		4.318E-12	4.318E-12	4.315E-12	4.314E-12	4.312E-12	4.306E-12	4.287E-12	4.257E-12	4.196E-12
Pu-239	äDOSE(j)			1.565E-09	1.565E-09	1.563E-09	1.563E-09	1.562E-09	1.560E-09	1.553E-09	1.542E-09	1.520E-09
0Ac-227	Pu-239	1.371E-12		6.208E-28	9.252E-27	3.424E-23	5.658E-23	2.250E-22	1.336E-21	1.150E-20	5.167E-20	2.179E-19
Ac-227	Pu-239	2.284E-09		1.034E-24	1.541E-23	5.704E-20	9.424E-20	3.748E-19	2.226E-18	1.915E-17	8.606E-17	3.630E-16
Ac-227	U-235	2.285E-09		4.198E-15	2.912E-14	6.410E-12	8.760E-12	2.024E-11	5.608E-11	1.743E-10	3.723E-10	7.650E-10
Ac-227	äDOSE(j)			4.198E-15	2.912E-14	6.410E-12	8.760E-12	2.024E-11	5.608E-11	1.743E-10	3.723E-10	7.650E-10
0Pu-239	Pu-239	9.829E-01		3.095E+00	3.095E+00	3.093E+00	3.093E+00	3.091E+00	3.087E+00	3.073E+00	3.051E+00	3.008E+00
Pu-239	Pu-239	2.720E-03		8.567E-03	8.567E-03	8.561E-03	8.560E-03	8.555E-03	8.542E-03	8.506E-03	8.445E-03	8.324E-03
Pu-239	äDOSE(j)			3.104E+00	3.104E+00	3.102E+00	3.101E+00	3.100E+00	3.095E+00	3.082E+00	3.060E+00	3.016E+00
0Pu-239	Pu-239	1.375E-02		4.331E-02	4.331E-02	4.328E-02	4.327E-02	4.325E-02	4.319E-02	4.300E-02	4.269E-02	4.208E-02
Pu-239	Pu-239	3.806E-05		1.199E-04	1.199E-04	1.198E-04	1.198E-04	1.197E-04	1.195E-04	1.190E-04	1.182E-04	1.165E-04
Pu-239	äDOSE(j)			4.343E-02	4.343E-02	4.340E-02	4.339E-02	4.337E-02	4.331E-02	4.312E-02	4.281E-02	4.220E-02
0Ac-227	Pu-239	1.375E-02		5.795E-18	8.638E-17	3.198E-13	5.284E-13	2.102E-12	1.248E-11	1.074E-10	4.825E-10	2.035E-09
Ac-227	U-235	1.376E-02		2.353E-08	1.633E-07	3.594E-05	4.912E-05	1.135E-04	3.144E-04	9.775E-04	2.087E-03	4.289E-03
Ac-227	äDOSE(j)			2.353E-08	1.633E-07	3.594E-05	4.912E-05	1.135E-04	3.144E-04	9.775E-04	2.087E-03	4.289E-03
0Pu-239	Pu-239	8.252E-07		2.599E-06	2.599E-06	2.597E-06	2.597E-06	2.595E-06	2.591E-06	2.580E-06	2.562E-06	2.525E-06
Pu-239	Pu-239	2.284E-09		7.193E-09	7.193E-09	7.188E-09	7.187E-09	7.182E-09	7.172E-09	7.141E-09	7.090E-09	6.989E-09
Pu-239	äDOSE(j)			2.606E-06	2.606E-06	2.604E-06	2.604E-06	2.602E-06	2.599E-06	2.587E-06	2.569E-06	2.532E-06

Individual Nuclide Dose Summed Over All Pathways

Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	DOSE(j,t), mrem/yr									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Ac-227	Pu-239	8.252E-07		3.702E-22	5.517E-21	2.042E-17	3.374E-17	1.342E-16	7.968E-16	6.856E-15	3.081E-14	1.300E-13
Ac-227	U-235	8.257E-07		1.503E-12	1.043E-11	2.295E-09	3.136E-09	7.246E-09	2.008E-08	6.242E-08	1.333E-07	2.739E-07
Ac-227	äDOSE(j)			1.503E-12	1.043E-11	2.295E-09	3.136E-09	7.246E-09	2.008E-08	6.242E-08	1.333E-07	2.739E-07
ORu-106	Ru-106	1.000E+00		6.540E+00	3.321E+00	2.870E-07	9.689E-09	1.259E-14	2.203E-29	0.000E+00	0.000E+00	0.000E+00
OSr-90	Sr-90	1.000E+00		1.667E+01	1.627E+01	9.131E+00	8.095E+00	5.002E+00	1.501E+00	4.054E-02	9.859E-05	5.831E-10
OTc-99	Tc-99	1.000E+00		1.209E+01	1.209E+01	1.206E+01	1.206E+01	1.204E+01	1.200E+01	1.186E+01	1.164E+01	1.121E+01
0Th-228	Th-228	1.000E+00		5.492E+01	3.821E+01	6.351E-03	1.036E-03	7.344E-07	9.821E-15	0.000E+00	0.000E+00	0.000E+00
Th-228	Th-232	1.000E+00		4.257E-01	2.605E+00	6.097E+01	6.303E+01	6.529E+01	6.551E+01	6.551E+01	6.551E+01	6.551E+01
Th-228	äDOSE(j)			5.534E+01	4.082E+01	6.098E+01	6.303E+01	6.529E+01	6.551E+01	6.551E+01	6.551E+01	6.551E+01
0Th-230	Th-230	1.319E-06		4.066E-06	4.066E-06	4.065E-06	4.065E-06	4.064E-06	4.063E-06	4.057E-06	4.048E-06	4.029E-06
Th-230	Th-230	1.899E-08		5.853E-08	5.853E-08	5.852E-08	5.851E-08	5.850E-08	5.848E-08	5.840E-08	5.826E-08	5.800E-08
Th-230	äDOSE(j)			4.125E-06	4.125E-06	4.124E-06	4.124E-06	4.123E-06	4.121E-06	4.115E-06	4.106E-06	4.087E-06
0Th-230	Th-230	2.100E-04		6.471E-04	6.471E-04	6.469E-04	6.469E-04	6.468E-04	6.465E-04	6.456E-04	6.441E-04	6.411E-04
Th-230	Th-230	2.771E-10		8.541E-10	8.541E-10	8.539E-10	8.539E-10	8.537E-10	8.533E-10	8.522E-10	8.502E-10	8.463E-10
Th-230	äDOSE(j)			6.471E-04	6.471E-04	6.469E-04	6.469E-04	6.468E-04	6.465E-04	6.456E-04	6.441E-04	6.411E-04
0Th-230	Th-230	3.989E-12		1.229E-11	1.229E-11	1.229E-11	1.229E-11	1.229E-11	1.228E-11	1.227E-11	1.224E-11	1.218E-11
Th-230	Th-230	1.998E-04		6.156E-04	6.156E-04	6.155E-04	6.155E-04	6.153E-04	6.151E-04	6.142E-04	6.128E-04	6.100E-04
Th-230	äDOSE(j)			6.156E-04	6.156E-04	6.155E-04	6.155E-04	6.153E-04	6.151E-04	6.142E-04	6.128E-04	6.100E-04
0Th-230	Th-230	2.637E-10		8.126E-10	8.126E-10	8.124E-10	8.124E-10	8.122E-10	8.119E-10	8.108E-10	8.089E-10	8.052E-10
Th-230	Th-230	3.795E-12		1.170E-11	1.170E-11	1.169E-11	1.169E-11	1.169E-11	1.169E-11	1.167E-11	1.164E-11	1.159E-11
Th-230	äDOSE(j)			8.243E-10	8.243E-10	8.241E-10	8.241E-10	8.239E-10	8.236E-10	8.224E-10	8.205E-10	8.168E-10
0Th-230	Th-230	4.196E-08		1.293E-07	1.293E-07	1.293E-07	1.293E-07	1.292E-07	1.292E-07	1.290E-07	1.287E-07	1.281E-07
Th-230	Th-230	5.538E-14		1.707E-13	1.707E-13	1.706E-13	1.706E-13	1.706E-13	1.705E-13	1.703E-13	1.699E-13	1.691E-13
Th-230	äDOSE(j)			1.293E-07	1.293E-07	1.293E-07	1.293E-07	1.292E-07	1.292E-07	1.290E-07	1.287E-07	1.281E-07
0Th-230	Th-230	7.972E-16		2.457E-15	2.457E-15	2.456E-15	2.456E-15	2.456E-15	2.455E-15	2.451E-15	2.446E-15	2.434E-15
Th-230	Th-230	2.000E-07		6.164E-07	6.164E-07	6.162E-07	6.162E-07	6.161E-07	6.158E-07	6.150E-07	6.135E-07	6.107E-07
Th-230	äDOSE(j)			6.164E-07	6.164E-07	6.162E-07	6.162E-07	6.161E-07	6.158E-07	6.150E-07	6.135E-07	6.107E-07
0Th-230	Th-230	2.640E-13		8.136E-13	8.136E-13	8.134E-13	8.134E-13	8.132E-13	8.129E-13	8.117E-13	8.099E-13	8.062E-13
Th-230	Th-230	3.800E-15		1.171E-14	1.171E-14	1.171E-14	1.171E-14	1.171E-14	1.170E-14	1.168E-14	1.166E-14	1.160E-14
Th-230	äDOSE(j)			8.253E-13	8.253E-13	8.251E-13	8.251E-13	8.249E-13	8.246E-13	8.234E-13	8.215E-13	8.178E-13
0Th-232	Th-232	1.000E+00		3.457E+00	3.457E+00	3.457E+00	3.457E+00	3.457E+00	3.457E+00	3.457E+00	3.457E+00	3.457E+00
ORa-228	Th-232	1.000E+00		6.524E+00	1.861E+01	1.077E+02	1.101E+02	1.127E+02	1.129E+02	1.129E+02	1.129E+02	1.129E+02
OU-234	U-234	1.319E-06		7.933E-07	7.932E-07	7.932E-07	7.932E-07	7.931E-07	7.930E-07	7.927E-07	7.921E-07	7.909E-07
U-234	U-234	1.899E-08		1.142E-08	1.142E-08	1.142E-08	1.142E-08	1.142E-08	1.141E-08	1.141E-08	1.140E-08	1.138E-08
U-234	äDOSE(j)			8.047E-07	8.047E-07	8.046E-07	8.046E-07	8.045E-07	8.044E-07	8.041E-07	8.035E-07	8.022E-07

Individual Nuclide Dose Summed Over All Pathways

Parent Nuclide and Branch Fraction Indicated

[illegible]

Individual Nuclide Dose Summed Over All Pathways

Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	DOSE(j,t), mrem/yr									
(j)	(i)		t= 0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03	
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
U-238	U-238	4.219E-13	2.353E-11	2.353E-11	2.353E-11	2.353E-11	2.353E-11	2.353E-11	2.353E-11	2.353E-11	2.353E-11	2.353E-11
U-238	U-238	6.073E-15	3.387E-13	3.387E-13	3.387E-13	3.387E-13	3.387E-13	3.387E-13	3.387E-13	3.387E-13	3.387E-13	3.387E-13
U-238	äDOSE(j)		2.387E-11	2.387E-11	2.387E-11	2.387E-11	2.387E-11	2.387E-11	2.387E-11	2.387E-11	2.387E-11	2.387E-11
0U-238	U-238	6.713E-11	3.745E-09	3.745E-09	3.745E-09	3.745E-09	3.745E-09	3.745E-09	3.745E-09	3.744E-09	3.744E-09	3.744E-09
U-238	U-238	8.862E-17	4.943E-15	4.943E-15	4.943E-15	4.943E-15	4.943E-15	4.943E-15	4.943E-15	4.943E-15	4.942E-15	4.942E-15
U-238	äDOSE(j)		3.745E-09	3.745E-09	3.745E-09	3.745E-09	3.745E-09	3.745E-09	3.745E-09	3.744E-09	3.744E-09	3.744E-09
0U-238	U-238	1.276E-18	7.115E-17	7.115E-17	7.115E-17	7.115E-17	7.115E-17	7.115E-17	7.115E-17	7.114E-17	7.114E-17	7.114E-17
U-238	U-238	3.200E-10	1.785E-08	1.785E-08	1.785E-08	1.785E-08	1.785E-08	1.785E-08	1.785E-08	1.785E-08	1.785E-08	1.785E-08
U-238	äDOSE(j)		1.785E-08	1.785E-08	1.785E-08	1.785E-08	1.785E-08	1.785E-08	1.785E-08	1.785E-08	1.785E-08	1.785E-08
0U-238	U-238	4.224E-16	2.356E-14	2.356E-14	2.356E-14	2.356E-14	2.356E-14	2.356E-14	2.356E-14	2.356E-14	2.356E-14	2.356E-14
U-238	U-238	6.080E-18	3.392E-16	3.392E-16	3.392E-16	3.392E-16	3.392E-16	3.391E-16	3.391E-16	3.391E-16	3.391E-16	3.391E-16
U-238	äDOSE(j)		2.390E-14	2.390E-14	2.390E-14	2.390E-14	2.390E-14	2.390E-14	2.390E-14	2.390E-14	2.390E-14	2.390E-14
0U-238	U-238	9.980E-01	1.608E+00	1.608E+00	1.608E+00	1.608E+00	1.608E+00	1.608E+00	1.608E+00	1.608E+00	1.608E+00	1.608E+00
U-238	U-238	1.317E-06	2.123E-06	2.123E-06	2.123E-06	2.123E-06	2.123E-06	2.123E-06	2.123E-06	2.123E-06	2.122E-06	2.122E-06
U-238	äDOSE(j)		1.608E+00	1.608E+00	1.608E+00	1.608E+00	1.608E+00	1.608E+00	1.608E+00	1.608E+00	1.608E+00	1.608E+00
0U-238	U-238	1.896E-08	3.055E-08	3.055E-08	3.055E-08	3.055E-08	3.055E-08	3.055E-08	3.055E-08	3.055E-08	3.055E-08	3.055E-08
U-238	U-238	2.096E-04	3.378E-04	3.378E-04	3.378E-04	3.378E-04	3.378E-04	3.378E-04	3.378E-04	3.377E-04	3.377E-04	3.377E-04
U-238	äDOSE(j)		3.378E-04	3.378E-04	3.378E-04	3.378E-04	3.378E-04	3.378E-04	3.378E-04	3.378E-04	3.377E-04	3.377E-04
0U-238	U-238	2.767E-10	4.459E-10	4.459E-10	4.459E-10	4.459E-10	4.459E-10	4.459E-10	4.459E-10	4.458E-10	4.458E-10	4.458E-10
U-238	U-238	3.983E-12	6.418E-12	6.418E-12	6.418E-12	6.418E-12	6.418E-12	6.418E-12	6.418E-12	6.417E-12	6.417E-12	6.417E-12
U-238	äDOSE(j)		4.523E-10	4.523E-10	4.523E-10	4.523E-10	4.523E-10	4.523E-10	4.523E-10	4.522E-10	4.522E-10	4.522E-10
0U-238	U-238	1.994E-04	3.214E-04	3.214E-04	3.214E-04	3.214E-04	3.214E-04	3.214E-04	3.214E-04	3.213E-04	3.213E-04	3.213E-04
U-238	U-238	2.633E-10	4.242E-10	4.242E-10	4.242E-10	4.242E-10	4.242E-10	4.242E-10	4.242E-10	4.242E-10	4.241E-10	4.241E-10
U-238	äDOSE(j)		3.214E-04	3.214E-04	3.214E-04	3.214E-04	3.214E-04	3.214E-04	3.214E-04	3.213E-04	3.213E-04	3.213E-04
0U-238	U-238	3.789E-12	6.106E-12	6.106E-12	6.106E-12	6.106E-12	6.106E-12	6.106E-12	6.106E-12	6.105E-12	6.105E-12	6.105E-12
U-238	U-238	4.189E-08	6.750E-08	6.750E-08	6.750E-08	6.750E-08	6.750E-08	6.750E-08	6.750E-08	6.750E-08	6.749E-08	6.749E-08
U-238	äDOSE(j)		6.751E-08	6.751E-08	6.751E-08	6.751E-08	6.751E-08	6.751E-08	6.751E-08	6.750E-08	6.750E-08	6.750E-08
0U-238	U-238	5.530E-14	8.910E-14	8.910E-14	8.910E-14	8.910E-14	8.910E-14	8.910E-14	8.910E-14	8.909E-14	8.909E-14	8.909E-14
U-238	U-238	7.959E-16	1.283E-15	1.283E-15	1.283E-15	1.283E-15	1.283E-15	1.283E-15	1.282E-15	1.282E-15	1.282E-15	1.282E-15
U-238	äDOSE(j)		9.039E-14	9.039E-14	9.039E-14	9.038E-14	9.038E-14	9.038E-14	9.038E-14	9.038E-14	9.037E-14	9.037E-14
0U-238	U-238	1.997E-07	3.218E-07	3.218E-07	3.218E-07	3.218E-07	3.218E-07	3.218E-07	3.217E-07	3.217E-07	3.217E-07	3.217E-07
U-238	U-238	2.636E-13	4.247E-13	4.247E-13	4.247E-13	4.247E-13	4.247E-13	4.247E-13	4.247E-13	4.247E-13	4.246E-13	4.246E-13
U-238	äDOSE(j)		3.218E-07	3.218E-07	3.218E-07	3.218E-07	3.218E-07	3.218E-07	3.217E-07	3.217E-07	3.217E-07	3.217E-07
0U-238	U-238	3.794E-15	6.113E-15	6.113E-15	6.113E-15	6.113E-15	6.113E-15	6.113E-15	6.113E-15	6.113E-15	6.112E-15	6.112E-15
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii

THF(i) is the thread fraction of the parent nuclide.

Individual Nuclide Soil Concentration
 Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	S(j,t), pCi/g									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA		AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Am-241	Am-241	1.000E+00		1.000E+01	9.984E+00	9.607E+00	9.530E+00	9.229E+00	8.518E+00	6.696E+00	4.484E+00	2.010E+00
0Np-237	Am-241	1.000E+00		0.000E+00	3.230E-06	7.922E-05	9.469E-05	1.553E-04	2.987E-04	6.658E-04	1.112E-03	1.610E-03
Np-237	Np-237	1.000E+00		1.000E+01	1.000E+01	1.000E+01	1.000E+01	1.000E+01	1.000E+01	9.999E+00	9.998E+00	9.996E+00
Np-237	äS(j):			1.000E+01	1.000E+01	1.000E+01	1.000E+01	1.000E+01	1.000E+01	1.000E+01	9.999E+00	9.998E+00
0U-233	Am-241	1.000E+00		0.000E+00	7.034E-12	4.340E-09	6.234E-09	1.713E-08	6.675E-08	3.864E-07	1.369E-06	4.396E-06
U-233	Np-237	1.000E+00		0.000E+00	4.354E-05	1.088E-03	1.306E-03	2.177E-03	4.353E-03	1.088E-02	2.174E-02	4.343E-02
U-233	äS(j):			0.000E+00	4.354E-05	1.088E-03	1.306E-03	2.177E-03	4.353E-03	1.088E-02	2.174E-02	4.344E-02
0Th-229	Am-241	1.000E+00		0.000E+00	2.215E-16	3.425E-12	5.906E-12	2.711E-11	2.124E-10	3.121E-09	2.263E-08	1.510E-07
Th-229	Np-237	1.000E+00		0.000E+00	2.056E-09	1.284E-06	1.848E-06	5.131E-06	2.049E-05	1.274E-04	5.055E-04	1.989E-03
Th-229	äS(j):			0.000E+00	2.056E-09	1.284E-06	1.848E-06	5.131E-06	2.049E-05	1.274E-04	5.056E-04	1.989E-03
0Co-60	Co-60	1.000E+00		1.000E+01	8.768E+00	3.735E-01	1.935E-01	1.395E-02	1.947E-05	5.286E-14	2.795E-28	0.000E+00
0Cs-134	Cs-134	1.000E+00		1.000E+01	7.148E+00	2.266E-03	4.229E-04	5.134E-07	2.636E-14	3.566E-36	0.000E+00	0.000E+00
0Cs-137	Cs-137	1.000E+00		1.000E+01	9.773E+00	5.630E+00	5.019E+00	3.170E+00	1.005E+00	3.201E-02	1.025E-04	1.050E-09
0Eu-152	Eu-152	7.210E-01		7.210E+00	6.850E+00	2.004E+00	1.552E+00	5.573E-01	4.307E-02	1.989E-05	5.485E-11	4.172E-22
Eu-152	Eu-152	2.790E-01		2.790E+00	2.651E+00	7.756E-01	6.005E-01	2.156E-01	1.667E-02	7.695E-06	2.122E-11	1.614E-22
Eu-152	äS(j):			1.000E+01	9.501E+00	2.780E+00	2.152E+00	7.729E-01	5.974E-02	2.758E-05	7.607E-11	5.787E-22
0Gd-152	Eu-152	2.790E-01		0.000E+00	1.746E-14	2.525E-13	2.744E-13	3.227E-13	3.476E-13	3.497E-13	3.497E-13	3.497E-13
0Sm-148	Eu-152	2.790E-01		0.000E+00	8.716E-31	3.774E-28	5.081E-28	1.107E-27	2.791E-27	7.981E-27	1.664E-26	3.395E-26
0Nd-144	Eu-152	2.790E-01		0.000E+00	0.000E+00	1.037E-42	1.710E-42	6.558E-42	3.592E-41	2.804E-40	1.212E-39	5.040E-39
0Eu-154	Eu-154	1.000E+00		1.000E+01	9.225E+00	1.331E+00	8.893E-01	1.772E-01	3.139E-03	1.746E-08	3.048E-17	9.290E-35
0Eu-155	Eu-155	1.000E+00		1.000E+01	8.645E+00	2.626E-01	1.268E-01	6.897E-03	4.757E-06	1.560E-15	2.435E-31	0.000E+00
0H-3	H-3	1.000E+00		1.000E+01	8.791E+00	3.987E-01	2.093E-01	1.590E-02	2.527E-05	1.015E-13	1.030E-27	0.000E+00
0I-129	I-129	1.000E+00		1.000E+01	1.000E+01	9.990E+00	9.988E+00	9.979E+00	9.959E+00	9.897E+00	9.795E+00	9.594E+00
0Mn-54	Mn-54	1.000E+00		1.000E+01	4.444E+00	1.560E-08	2.703E-10	2.434E-17	5.926E-35	0.000E+00	0.000E+00	0.000E+00
0Na-22	Na-22	1.000E+00		1.000E+01	7.661E+00	1.281E-02	3.381E-03	1.641E-05	2.694E-11	1.191E-28	0.000E+00	0.000E+00
0Ni-63	Ni-63	1.000E+00		1.000E+01	9.931E+00	8.410E+00	8.124E+00	7.074E+00	5.003E+00	1.771E+00	3.136E-01	9.833E-03
0Pu-238	Pu-238	1.850E-09		1.850E-08	1.835E-08	1.518E-08	1.459E-08	1.246E-08	8.393E-09	2.565E-09	3.556E-10	6.834E-12
Pu-238	Pu-238	9.996E-01		9.996E+00	9.917E+00	8.204E+00	7.886E+00	6.733E+00	4.535E+00	1.386E+00	1.921E-01	3.693E-03
Pu-238	äS(j):			9.996E+00	9.917E+00	8.204E+00	7.886E+00	6.733E+00	4.535E+00	1.386E+00	1.921E-01	3.693E-03
0U-234	Pu-238	9.996E-01		0.000E+00	2.811E-05	6.402E-04	7.537E-04	1.166E-03	1.950E-03	3.074E-03	3.498E-03	3.560E-03

Individual Nuclide Soil Concentration
Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	S(j,t), pCi/g									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA		AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
U-234	Pu-238	1.899E-08		0.000E+00	5.341E-13	1.216E-11	1.432E-11	2.215E-11	3.706E-11	5.841E-11	6.646E-11	6.764E-11
U-234	Pu-238	2.100E-04		0.000E+00	5.905E-09	1.345E-07	1.583E-07	2.448E-07	4.097E-07	6.457E-07	7.348E-07	7.478E-07
U-234	Pu-238	2.771E-10		0.000E+00	7.794E-15	1.775E-13	2.090E-13	3.232E-13	5.408E-13	8.524E-13	9.699E-13	9.871E-13
U-234	Pu-238	3.989E-12		0.000E+00	1.122E-16	2.555E-15	3.008E-15	4.652E-15	7.784E-15	1.227E-14	1.396E-14	1.421E-14
U-234	Pu-238	1.998E-04		0.000E+00	5.618E-09	1.279E-07	1.506E-07	2.329E-07	3.898E-07	6.144E-07	6.991E-07	7.115E-07
U-234	Pu-238	2.637E-10		0.000E+00	7.415E-15	1.689E-13	1.988E-13	3.075E-13	5.145E-13	8.110E-13	9.228E-13	9.391E-13
U-234	Pu-238	3.795E-12		0.000E+00	1.067E-16	2.431E-15	2.862E-15	4.426E-15	7.406E-15	1.167E-14	1.328E-14	1.352E-14
U-234	Pu-238	4.196E-08		0.000E+00	1.180E-12	2.687E-11	3.164E-11	4.893E-11	8.187E-11	1.290E-10	1.468E-10	1.494E-10
U-234	Pu-238	5.538E-14		0.000E+00	1.558E-18	3.547E-17	4.176E-17	6.458E-17	1.081E-16	1.703E-16	1.938E-16	1.973E-16
U-234	Pu-238	7.972E-16		0.000E+00	2.242E-20	5.106E-19	6.011E-19	9.296E-19	1.556E-18	2.452E-18	2.790E-18	2.839E-18
U-234	Pu-238	2.000E-07		0.000E+00	5.625E-12	1.281E-10	1.508E-10	2.332E-10	3.903E-10	6.151E-10	6.999E-10	7.123E-10
U-234	Pu-238	2.640E-13		0.000E+00	7.424E-18	1.691E-16	1.991E-16	3.078E-16	5.151E-16	8.119E-16	9.239E-16	9.403E-16
U-234	Pu-238	3.800E-15		0.000E+00	1.069E-19	2.434E-18	2.865E-18	4.431E-18	7.415E-18	1.169E-17	1.330E-17	1.353E-17
U-234	U-234	9.996E-01		9.996E+00	9.996E+00	9.995E+00	9.995E+00	9.994E+00	9.993E+00	9.988E+00	9.981E+00	9.966E+00
U-234	U-238	1.599E-03		0.000E+00	4.516E-08	1.129E-06	1.355E-06	2.258E-06	4.515E-06	1.128E-05	2.256E-05	4.508E-05
U-234	U-238	2.111E-09		0.000E+00	5.961E-14	1.490E-12	1.788E-12	2.980E-12	5.960E-12	1.490E-11	2.978E-11	5.951E-11
U-234	U-238	3.039E-11		0.000E+00	8.580E-16	2.145E-14	2.574E-14	4.289E-14	8.578E-14	2.144E-13	4.286E-13	8.566E-13
U-234	U-238	3.359E-07		0.000E+00	9.485E-12	2.371E-10	2.845E-10	4.742E-10	9.483E-10	2.370E-09	4.739E-09	9.470E-09
U-234	U-238	4.434E-13		0.000E+00	1.252E-17	3.130E-16	3.756E-16	6.259E-16	1.252E-15	3.129E-15	6.255E-15	1.250E-14
U-234	U-238	6.383E-15		0.000E+00	1.802E-19	4.505E-18	5.406E-18	9.010E-18	1.802E-17	4.503E-17	9.003E-17	1.799E-16
U-234	U-238	3.196E-07		0.000E+00	9.024E-12	2.256E-10	2.707E-10	4.512E-10	9.023E-10	2.255E-09	4.508E-09	9.010E-09
U-234	U-238	4.219E-13		0.000E+00	1.191E-17	2.978E-16	3.573E-16	5.955E-16	1.191E-15	2.977E-15	5.951E-15	1.189E-14
U-234	U-238	6.073E-15		0.000E+00	1.715E-19	4.286E-18	5.143E-18	8.572E-18	1.714E-17	4.285E-17	8.566E-17	1.712E-16
U-234	U-238	6.713E-11		0.000E+00	1.895E-15	4.738E-14	5.686E-14	9.476E-14	1.895E-13	4.737E-13	9.470E-13	1.892E-12
U-234	U-238	8.862E-17		0.000E+00	2.502E-21	6.255E-20	7.506E-20	1.251E-19	2.502E-19	6.252E-19	1.250E-18	2.498E-18
U-234	U-238	1.276E-18		0.000E+00	3.601E-23	9.003E-22	1.080E-21	1.801E-21	3.601E-21	9.000E-21	1.799E-20	3.596E-20
U-234	U-238	3.200E-10		0.000E+00	9.035E-15	2.259E-13	2.710E-13	4.517E-13	9.033E-13	2.258E-12	4.514E-12	9.020E-12
U-234	U-238	4.224E-16		0.000E+00	1.193E-20	2.981E-19	3.578E-19	5.963E-19	1.192E-18	2.980E-18	5.958E-18	1.191E-17
U-234	U-238	6.080E-18		0.000E+00	1.717E-22	4.291E-21	5.150E-21	8.582E-21	1.716E-20	4.290E-20	8.576E-20	1.714E-19
U-234	U-238	9.980E-01		0.000E+00	2.818E-05	7.044E-04	8.453E-04	1.409E-03	2.817E-03	7.042E-03	1.408E-02	2.813E-02
U-234	U-238	1.317E-06		0.000E+00	3.719E-11	9.298E-10	1.116E-09	1.860E-09	3.719E-09	9.295E-09	1.858E-08	3.713E-08
U-234	U-238	1.896E-08		0.000E+00	5.354E-13	1.338E-11	1.606E-11	2.677E-11	5.353E-11	1.338E-10	2.675E-10	5.345E-10
U-234	U-238	2.096E-04		0.000E+00	5.918E-09	1.480E-07	1.775E-07	2.959E-07	5.918E-07	1.479E-06	2.957E-06	5.909E-06
U-234	U-238	2.767E-10		0.000E+00	7.812E-15	1.953E-13	2.344E-13	3.906E-13	7.811E-13	1.952E-12	3.903E-12	7.800E-12
U-234	U-238	3.983E-12		0.000E+00	1.125E-16	2.811E-15	3.373E-15	5.622E-15	1.124E-14	2.810E-14	5.618E-14	1.123E-13
U-234	U-238	1.994E-04		0.000E+00	5.631E-09	1.408E-07	1.689E-07	2.815E-07	5.630E-07	1.407E-06	2.813E-06	5.622E-06
U-234	U-238	2.633E-10		0.000E+00	7.433E-15	1.858E-13	2.230E-13	3.716E-13	7.432E-13	1.857E-12	3.713E-12	7.421E-12
U-234	U-238	3.789E-12		0.000E+00	1.070E-16	2.675E-15	3.209E-15	5.349E-15	1.070E-14	2.674E-14	5.345E-14	1.068E-13
U-234	U-238	4.189E-08		0.000E+00	1.183E-12	2.957E-11	3.548E-11	5.913E-11	1.183E-10	2.956E-10	5.909E-10	1.181E-09
U-234	U-238	5.530E-14		0.000E+00	1.561E-18	3.903E-17	4.683E-17	7.806E-17	1.561E-16	3.902E-16	7.800E-16	1.559E-15

U-234	U-238	7.959E-16	0.000E+00	2.247E-20	5.618E-19	6.741E-19	1.124E-18	2.247E-18	5.616E-18	1.123E-17	2.244E-17
U-234	U-238	1.997E-07	0.000E+00	5.638E-12	1.409E-10	1.691E-10	2.819E-10	5.637E-10	1.409E-09	2.817E-09	5.629E-09
U-234	U-238	2.636E-13	0.000E+00	7.442E-18	1.860E-16	2.232E-16	3.721E-16	7.441E-16	1.860E-15	3.718E-15	7.430E-15
U-234	U-238	3.794E-15	0.000E+00	1.071E-19	2.678E-18	3.213E-18	5.355E-18	1.071E-17	2.677E-17	5.352E-17	1.069E-16
U-234	äS(j):		9.996E+00	9.996E+00	9.996E+00	9.997E+00	9.997E+00	9.998E+00	9.998E+00	9.998E+00	9.998E+00
0Th-230	Pu-238	9.996E-01	0.000E+00	1.294E-10	7.600E-08	1.081E-07	2.855E-07	1.013E-06	4.625E-06	1.231E-05	2.853E-05
Th-230	Pu-238	1.899E-08	0.000E+00	2.459E-18	1.444E-15	2.053E-15	5.425E-15	1.926E-14	8.787E-14	2.339E-13	5.420E-13
Th-230	Pu-238	2.100E-04	0.000E+00	2.718E-14	1.596E-11	2.270E-11	5.997E-11	2.129E-10	9.714E-10	2.586E-09	5.992E-09

Individual Nuclide Soil Concentration
Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	S(j,t), pCi/g									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Th-230	Pu-238	2.771E-10	0.000E+00	3.588E-20	2.107E-17	2.996E-17	7.916E-17	2.810E-16	1.282E-15	3.414E-15	7.909E-15	
Th-230	Pu-238	3.989E-12	0.000E+00	5.165E-22	3.033E-19	4.313E-19	1.139E-18	4.044E-18	1.846E-17	4.914E-17	1.138E-16	
Th-230	Pu-238	1.998E-04	0.000E+00	2.586E-14	1.519E-11	2.159E-11	5.706E-11	2.025E-10	9.242E-10	2.460E-09	5.701E-09	
Th-230	Pu-238	2.637E-10	0.000E+00	3.414E-20	2.005E-17	2.851E-17	7.532E-17	2.673E-16	1.220E-15	3.248E-15	7.525E-15	
Th-230	Pu-238	3.795E-12	0.000E+00	4.914E-22	2.886E-19	4.103E-19	1.084E-18	3.848E-18	1.756E-17	4.675E-17	1.083E-16	
Th-230	Pu-238	4.196E-08	0.000E+00	5.432E-18	3.190E-15	4.536E-15	1.198E-14	4.254E-14	1.941E-13	5.168E-13	1.197E-12	
Th-230	Pu-238	5.538E-14	0.000E+00	7.171E-24	4.211E-21	5.987E-21	1.582E-20	5.615E-20	2.563E-19	6.822E-19	1.581E-18	
Th-230	Pu-238	7.972E-16	0.000E+00	1.032E-25	6.061E-23	8.618E-23	2.277E-22	8.082E-22	3.689E-21	9.819E-21	2.275E-20	
Th-230	Pu-238	2.000E-07	0.000E+00	2.589E-17	1.521E-14	2.162E-14	5.713E-14	2.028E-13	9.254E-13	2.463E-12	5.708E-12	
Th-230	Pu-238	2.640E-13	0.000E+00	3.418E-23	2.007E-20	2.854E-20	7.541E-20	2.677E-19	1.221E-18	3.252E-18	7.534E-18	
Th-230	Pu-238	3.800E-15	0.000E+00	4.920E-25	2.889E-22	4.108E-22	1.085E-21	3.853E-21	1.758E-20	4.680E-20	1.084E-19	
Th-230	Th-230	9.996E-01	9.996E+00	9.996E+00	9.994E+00	9.993E+00	9.991E+00	9.987E+00	9.973E+00	9.950E+00	9.904E+00	
Th-230	U-234	9.996E-01	0.000E+00	9.192E-05	2.298E-03	2.757E-03	4.594E-03	9.186E-03	2.294E-02	4.582E-02	9.136E-02	
Th-230	U-234	1.319E-06	0.000E+00	1.213E-10	3.033E-09	3.639E-09	6.065E-09	1.213E-08	3.029E-08	6.048E-08	1.206E-07	
Th-230	U-234	1.899E-08	0.000E+00	1.746E-12	4.365E-11	5.238E-11	8.729E-11	1.745E-10	4.359E-10	8.705E-10	1.736E-09	
Th-230	U-234	2.100E-04	0.000E+00	1.931E-08	4.826E-07	5.791E-07	9.650E-07	1.929E-06	4.819E-06	9.624E-06	1.919E-05	
Th-230	U-234	2.771E-10	0.000E+00	2.548E-14	6.370E-13	7.644E-13	1.274E-12	2.547E-12	6.361E-12	1.270E-11	2.533E-11	
Th-230	U-234	3.989E-12	0.000E+00	3.668E-16	9.169E-15	1.100E-14	1.834E-14	3.666E-14	9.157E-14	1.829E-13	3.646E-13	
Th-230	U-234	1.998E-04	0.000E+00	1.837E-08	4.591E-07	5.510E-07	9.181E-07	1.836E-06	4.585E-06	9.156E-06	1.826E-05	
Th-230	U-234	2.637E-10	0.000E+00	2.425E-14	6.061E-13	7.273E-13	1.212E-12	2.423E-12	6.052E-12	1.209E-11	2.410E-11	
Th-230	U-234	3.795E-12	0.000E+00	3.490E-16	8.724E-15	1.047E-14	1.744E-14	3.488E-14	8.712E-14	1.740E-13	3.469E-13	
Th-230	U-234	4.196E-08	0.000E+00	3.858E-12	9.644E-11	1.157E-10	1.929E-10	3.856E-10	9.631E-10	1.923E-09	3.835E-09	
Th-230	U-234	5.538E-14	0.000E+00	5.093E-18	1.273E-16	1.528E-16	2.546E-16	5.090E-16	1.271E-15	2.539E-15	5.062E-15	
Th-230	U-234	7.972E-16	0.000E+00	7.331E-20	1.832E-18	2.199E-18	3.664E-18	7.326E-18	1.830E-17	3.654E-17	7.286E-17	
Th-230	U-234	2.000E-07	0.000E+00	1.839E-11	4.597E-10	5.516E-10	9.193E-10	1.838E-09	4.591E-09	9.167E-09	1.828E-08	
Th-230	U-234	2.640E-13	0.000E+00	2.428E-17	6.068E-16	7.281E-16	1.213E-15	2.426E-15	6.060E-15	1.210E-14	2.413E-14	
Th-230	U-234	3.800E-15	0.000E+00	3.494E-19	8.734E-18	1.048E-17	1.747E-17	3.492E-17	8.722E-17	1.742E-16	3.473E-16	
Th-230	U-238	1.599E-03	0.000E+00	2.076E-13	1.297E-10	1.868E-10	5.189E-10	2.075E-09	1.296E-08	5.180E-08	2.068E-07	
Th-230	U-238	2.111E-09	0.000E+00	2.740E-19	1.713E-16	2.466E-16	6.850E-16	2.739E-15	1.711E-14	6.837E-14	2.729E-13	
Th-230	U-238	3.039E-11	0.000E+00	3.945E-21	2.465E-18	3.550E-18	9.860E-18	3.943E-17	2.463E-16	9.841E-16	3.928E-15	
Th-230	U-238	3.359E-07	0.000E+00	4.361E-17	2.725E-14	3.924E-14	1.090E-13	4.359E-13	2.723E-12	1.088E-11	4.343E-11	
Th-230	U-238	4.434E-13	0.000E+00	5.756E-23	3.597E-20	5.180E-20	1.439E-19	5.754E-19	3.594E-18	1.436E-17	5.733E-17	
Th-230	U-238	6.383E-15	0.000E+00	8.285E-25	5.178E-22	7.456E-22	2.071E-21	8.282E-21	5.173E-20	2.067E-19	8.251E-19	
Th-230	U-238	3.196E-07	0.000E+00	4.149E-17	2.593E-14	3.734E-14	1.037E-13	4.147E-13	2.590E-12	1.035E-11	4.132E-11	
Th-230	U-238	4.219E-13	0.000E+00	5.477E-23	3.423E-20	4.928E-20	1.369E-19	5.474E-19	3.419E-18	1.366E-17	5.454E-17	
Th-230	U-238	6.073E-15	0.000E+00	7.883E-25	4.926E-22	7.094E-22	1.970E-21	7.880E-21	4.922E-20	1.967E-19	7.850E-19	
Th-230	U-238	6.713E-11	0.000E+00	8.715E-21	5.446E-18	7.842E-18	2.178E-17	8.711E-17	5.441E-16	2.174E-15	8.679E-15	
Th-230	U-238	8.862E-17	0.000E+00	1.150E-26	7.189E-24	1.035E-23	2.875E-23	1.150E-22	7.182E-22	2.870E-21	1.146E-20	
Th-230	U-238	1.276E-18	0.000E+00	1.656E-28	1.035E-25	1.490E-25	4.139E-25	1.655E-24	1.034E-23	4.131E-23	1.649E-22	
Th-230	U-238	3.200E-10	0.000E+00	4.154E-20	2.596E-17	3.738E-17	1.038E-16	4.152E-16	2.594E-15	1.036E-14	4.137E-14	

Th-230	U-238	4.224E-16	0.000E+00	5.483E-26	3.427E-23	4.934E-23	1.371E-22	5.481E-22	3.423E-21	1.368E-20	5.461E-20
Th-230	U-238	6.080E-18	0.000E+00	7.893E-28	4.932E-25	7.102E-25	1.973E-24	7.889E-24	4.928E-23	1.969E-22	7.860E-22
Th-230	U-238	9.980E-01	0.000E+00	1.295E-10	8.096E-08	1.166E-07	3.238E-07	1.295E-06	8.089E-06	3.232E-05	1.290E-04
Th-230	U-238	1.317E-06	0.000E+00	1.710E-16	1.069E-13	1.539E-13	4.274E-13	1.709E-12	1.068E-11	4.266E-11	1.703E-10
Th-230	U-238	1.896E-08	0.000E+00	2.461E-18	1.538E-15	2.215E-15	6.152E-15	2.460E-14	1.537E-13	6.141E-13	2.451E-12
Th-230	U-238	2.096E-04	0.000E+00	2.721E-14	1.701E-11	2.449E-11	6.801E-11	2.720E-10	1.699E-09	6.789E-09	2.710E-08
Th-230	U-238	2.767E-10	0.000E+00	3.592E-20	2.245E-17	3.232E-17	8.978E-17	3.590E-16	2.243E-15	8.961E-15	3.577E-14
Th-230	U-238	3.983E-12	0.000E+00	5.170E-22	3.231E-19	4.653E-19	1.292E-18	5.168E-18	3.228E-17	1.290E-16	5.149E-16
Th-230	U-238	1.994E-04	0.000E+00	2.589E-14	1.618E-11	2.330E-11	6.471E-11	2.588E-10	1.616E-09	6.459E-09	2.578E-08

Individual Nuclide Soil Concentration
Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	S(j,t), pCi/g									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Th-230	U-238	2.633E-10	0.000E+00	3.417E-20	2.136E-17	3.075E-17	8.542E-17	3.416E-16	2.134E-15	8.526E-15	3.403E-14	
Th-230	U-238	3.789E-12	0.000E+00	4.919E-22	3.074E-19	4.427E-19	1.229E-18	4.917E-18	3.071E-17	1.227E-16	4.899E-16	
Th-230	U-238	4.189E-08	0.000E+00	5.438E-18	3.398E-15	4.894E-15	1.359E-14	5.436E-14	3.395E-13	1.357E-12	5.415E-12	
Th-230	U-238	5.530E-14	0.000E+00	7.178E-24	4.486E-21	6.459E-21	1.794E-20	7.175E-20	4.482E-19	1.791E-18	7.148E-18	
Th-230	U-238	7.959E-16	0.000E+00	1.033E-25	6.457E-23	9.298E-23	2.582E-22	1.033E-21	6.451E-21	2.578E-20	1.029E-19	
Th-230	U-238	1.997E-07	0.000E+00	2.592E-17	1.620E-14	2.333E-14	6.479E-14	2.591E-13	1.618E-12	6.467E-12	2.581E-11	
Th-230	U-238	2.636E-13	0.000E+00	3.422E-23	2.138E-20	3.079E-20	8.552E-20	3.420E-19	2.136E-18	8.536E-18	3.407E-17	
Th-230	U-238	3.794E-15	0.000E+00	4.925E-25	3.078E-22	4.432E-22	1.231E-21	4.923E-21	3.075E-20	1.229E-19	4.905E-19	
Th-230	äS(j):		9.996E+00	9.996E+00	9.996E+00	9.996E+00	9.996E+00	9.996E+00	9.996E+00	9.996E+00	9.996E+00	9.996E+00
0Ra-226	Pu-238	9.996E-01	0.000E+00	1.870E-14	2.781E-10	4.757E-10	2.116E-09	1.537E-08	1.851E-07	1.035E-06	4.864E-06	
Ra-226	Pu-238	1.899E-08	0.000E+00	3.553E-22	5.284E-18	9.038E-18	4.020E-17	2.921E-16	3.517E-15	1.966E-14	9.242E-14	
Ra-226	Th-230	9.996E-01	0.000E+00	4.329E-03	1.077E-01	1.291E-01	2.141E-01	4.236E-01	1.025E+00	1.942E+00	3.497E+00	
Ra-226	Th-230	1.319E-06	0.000E+00	5.715E-09	1.421E-07	1.704E-07	2.827E-07	5.591E-07	1.353E-06	2.564E-06	4.616E-06	
Ra-226	Th-230	1.899E-08	0.000E+00	8.226E-11	2.046E-09	2.452E-09	4.069E-09	8.048E-09	1.947E-08	3.690E-08	6.644E-08	
Ra-226	U-234	9.996E-01	0.000E+00	1.991E-08	1.240E-05	1.784E-05	4.941E-05	1.962E-04	1.199E-03	4.627E-03	1.725E-02	
Ra-226	U-234	1.319E-06	0.000E+00	2.628E-14	1.636E-11	2.355E-11	6.522E-11	2.589E-10	1.583E-09	6.108E-09	2.277E-08	
Ra-226	U-234	1.899E-08	0.000E+00	3.782E-16	2.356E-13	3.389E-13	9.387E-13	3.727E-12	2.279E-11	8.791E-11	3.277E-10	
Ra-226	U-238	1.599E-03	0.000E+00	2.998E-17	4.671E-13	8.068E-13	3.727E-12	2.965E-11	4.557E-10	3.547E-09	2.691E-08	
Ra-226	U-238	2.111E-09	0.000E+00	3.957E-23	6.166E-19	1.065E-18	4.919E-18	3.914E-17	6.015E-16	4.683E-15	3.552E-14	
Ra-226	U-238	3.039E-11	0.000E+00	5.696E-25	8.876E-21	1.533E-20	7.081E-20	5.633E-19	8.658E-18	6.740E-17	5.113E-16	
Ra-226	U-238	9.980E-01	0.000E+00	1.871E-14	2.915E-10	5.034E-10	2.326E-09	1.850E-08	2.843E-07	2.214E-06	1.679E-05	
Ra-226	U-238	1.317E-06	0.000E+00	2.469E-20	3.848E-16	6.645E-16	3.070E-15	2.442E-14	3.753E-13	2.922E-12	2.216E-11	
Ra-226	U-238	1.896E-08	0.000E+00	3.554E-22	5.538E-18	9.565E-18	4.418E-17	3.515E-16	5.402E-15	4.206E-14	3.190E-13	
Ra-226	äS(j):		0.000E+00	4.329E-03	1.077E-01	1.291E-01	2.142E-01	4.238E-01	1.026E+00	1.947E+00	3.514E+00	
0Pb-210	Pu-238	9.996E-01	0.000E+00	1.451E-16	4.722E-11	9.441E-11	6.329E-10	7.357E-09	1.347E-07	8.905E-07	4.546E-06	
Pb-210	Pu-238	1.319E-06	0.000E+00	1.915E-22	6.233E-17	1.246E-16	8.354E-16	9.711E-15	1.778E-13	1.175E-12	6.001E-12	
Pb-210	Pu-238	2.100E-04	0.000E+00	3.048E-20	9.918E-15	1.983E-14	1.329E-13	1.545E-12	2.829E-11	1.870E-10	9.549E-10	
Pb-210	Pu-238	1.998E-04	0.000E+00	2.900E-20	9.436E-15	1.887E-14	1.265E-13	1.470E-12	2.691E-11	1.780E-10	9.085E-10	
Pb-210	Pu-238	4.196E-08	0.000E+00	6.091E-24	1.982E-18	3.963E-18	2.657E-17	3.088E-16	5.653E-15	3.738E-14	1.908E-13	
Pb-210	Pu-238	2.000E-07	0.000E+00	2.903E-23	9.448E-18	1.889E-17	1.266E-16	1.472E-15	2.694E-14	1.782E-13	9.096E-13	
Pb-210	Th-230	9.996E-01	0.000E+00	6.690E-05	3.298E-02	4.536E-02	1.061E-01	2.952E-01	8.989E-01	1.829E+00	3.407E+00	
Pb-210	Th-230	2.100E-04	0.000E+00	1.405E-08	6.927E-06	9.528E-06	2.228E-05	6.200E-05	1.888E-04	3.842E-04	7.156E-04	
Pb-210	Th-230	1.998E-04	0.000E+00	1.337E-08	6.590E-06	9.065E-06	2.120E-05	5.899E-05	1.796E-04	3.656E-04	6.808E-04	
Pb-210	Th-230	4.196E-08	0.000E+00	2.808E-12	1.384E-09	1.904E-09	4.452E-09	1.239E-08	3.773E-08	7.679E-08	1.430E-07	
Pb-210	Th-230	2.000E-07	0.000E+00	1.338E-11	6.598E-09	9.076E-09	2.122E-08	5.906E-08	1.799E-07	3.660E-07	6.816E-07	
Pb-210	U-234	9.996E-01	0.000E+00	2.056E-10	2.685E-06	4.481E-06	1.817E-05	1.092E-04	9.347E-04	4.089E-03	1.625E-02	
Pb-210	U-234	2.100E-04	0.000E+00	4.318E-14	5.640E-10	9.411E-10	3.817E-09	2.295E-08	1.963E-07	8.588E-07	3.412E-06	
Pb-210	U-234	1.998E-04	0.000E+00	4.108E-14	5.366E-10	8.954E-10	3.632E-09	2.183E-08	1.868E-07	8.171E-07	3.247E-06	
Pb-210	U-234	4.196E-08	0.000E+00	8.629E-18	1.127E-13	1.881E-13	7.628E-13	4.586E-12	3.924E-11	1.716E-10	6.819E-10	
Pb-210	U-234	2.000E-07	0.000E+00	4.113E-17	5.373E-13	8.965E-13	3.636E-12	2.186E-11	1.870E-10	8.181E-10	3.250E-09	

Pb-210	U-238	1.599E-03	0.000E+00	2.325E-19	7.863E-14	1.585E-13	1.098E-12	1.384E-11	3.204E-10	2.956E-09	2.456E-08
Pb-210	U-238	3.359E-07	0.000E+00	4.884E-23	1.652E-17	3.329E-17	2.305E-16	2.908E-15	6.731E-14	6.209E-13	5.158E-12
Pb-210	U-238	3.196E-07	0.000E+00	4.647E-23	1.571E-17	3.167E-17	2.193E-16	2.766E-15	6.404E-14	5.907E-13	4.908E-12
Pb-210	U-238	6.713E-11	0.000E+00	9.761E-27	3.301E-21	6.653E-21	4.607E-20	5.811E-19	1.345E-17	1.241E-16	1.031E-15
Pb-210	U-238	3.200E-10	0.000E+00	4.653E-26	1.573E-20	3.171E-20	2.196E-19	2.770E-18	6.411E-17	5.914E-16	4.914E-15
Pb-210	U-238	9.980E-01	0.000E+00	1.451E-16	4.907E-11	9.890E-11	6.849E-10	8.638E-09	2.000E-07	1.845E-06	1.532E-05
Pb-210	U-238	2.096E-04	0.000E+00	3.048E-20	1.031E-14	2.077E-14	1.439E-13	1.814E-12	4.200E-11	3.874E-10	3.219E-09

Individual Nuclide Soil Concentration
 Parent Nuclide and Branch Fraction Indicated

ONuclide	Parent	THF(i)	S(j,t), pCi/g									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Pb-210	U-238	1.994E-04	0.000E+00	2.900E-20	9.805E-15	1.976E-14	1.369E-13	1.726E-12	3.996E-11	3.686E-10	3.063E-09	
Pb-210	U-238	4.189E-08	0.000E+00	6.091E-24	2.060E-18	4.151E-18	2.875E-17	3.626E-16	8.393E-15	7.742E-14	6.433E-13	
Pb-210	U-238	1.997E-07	0.000E+00	2.903E-23	9.817E-18	1.979E-17	1.370E-16	1.728E-15	4.001E-14	3.691E-13	3.066E-12	
Pb-210	äS(j):		0.000E+00	6.692E-05	3.300E-02	4.538E-02	1.061E-01	2.954E-01	9.002E-01	1.834E+00	3.424E+00	
0Pu-238	Pu-238	1.319E-06	1.319E-05	1.309E-05	1.083E-05	1.041E-05	8.887E-06	5.986E-06	1.829E-06	2.536E-07	4.874E-09	
Pu-238	Pu-238	1.899E-08	1.899E-07	1.884E-07	1.559E-07	1.498E-07	1.279E-07	8.616E-08	2.633E-08	3.650E-09	7.016E-11	
Pu-238	äS(j):		1.338E-05	1.328E-05	1.098E-05	1.056E-05	9.015E-06	6.072E-06	1.856E-06	2.572E-07	4.944E-09	
0U-234	Pu-238	1.319E-06	0.000E+00	3.711E-11	8.451E-10	9.949E-10	1.539E-09	2.575E-09	4.058E-09	4.618E-09	4.699E-09	
0Th-230	Pu-238	1.319E-06	0.000E+00	1.708E-16	1.003E-13	1.426E-13	3.769E-13	1.338E-12	6.105E-12	1.625E-11	3.766E-11	
0Ra-226	Pu-238	1.319E-06	0.000E+00	2.468E-20	3.671E-16	6.279E-16	2.793E-15	2.029E-14	2.443E-13	1.366E-12	6.421E-12	
0Pb-210	Pu-238	1.899E-08	0.000E+00	2.757E-24	8.972E-19	1.794E-18	1.202E-17	1.398E-16	2.559E-15	1.692E-14	8.638E-14	
Pb-210	Pu-238	3.989E-12	0.000E+00	5.791E-28	1.884E-22	3.768E-22	2.526E-21	2.936E-20	5.374E-19	3.554E-18	1.814E-17	
Pb-210	Pu-238	3.795E-12	0.000E+00	5.510E-28	1.793E-22	3.585E-22	2.403E-21	2.793E-20	5.113E-19	3.381E-18	1.726E-17	
Pb-210	Pu-238	7.972E-16	0.000E+00	1.157E-31	3.766E-26	7.529E-26	5.047E-25	5.867E-24	1.074E-22	7.102E-22	3.626E-21	
Pb-210	Pu-238	3.800E-15	0.000E+00	5.516E-31	1.795E-25	3.589E-25	2.406E-24	2.797E-23	5.119E-22	3.385E-21	1.728E-20	
Pb-210	Th-230	1.899E-08	0.000E+00	1.271E-12	6.266E-10	8.618E-10	2.015E-09	5.609E-09	1.708E-08	3.476E-08	6.473E-08	
Pb-210	Th-230	3.989E-12	0.000E+00	2.670E-16	1.316E-13	1.810E-13	4.233E-13	1.178E-12	3.587E-12	7.301E-12	1.360E-11	
Pb-210	Th-230	3.795E-12	0.000E+00	2.540E-16	1.252E-13	1.722E-13	4.027E-13	1.121E-12	3.413E-12	6.946E-12	1.294E-11	
Pb-210	Th-230	7.972E-16	0.000E+00	5.335E-20	2.630E-17	3.618E-17	8.459E-17	2.354E-16	7.169E-16	1.459E-15	2.717E-15	
Pb-210	Th-230	3.800E-15	0.000E+00	2.543E-19	1.254E-16	1.724E-16	4.032E-16	1.122E-15	3.417E-15	6.954E-15	1.295E-14	
Pb-210	U-234	1.899E-08	0.000E+00	3.906E-18	5.102E-14	8.513E-14	3.453E-13	2.076E-12	1.776E-11	7.768E-11	3.087E-10	
Pb-210	U-234	3.989E-12	0.000E+00	8.204E-22	1.072E-17	1.788E-17	7.252E-17	4.360E-16	3.730E-15	1.632E-14	6.483E-14	
Pb-210	U-234	3.795E-12	0.000E+00	7.806E-22	1.020E-17	1.701E-17	6.900E-17	4.148E-16	3.549E-15	1.552E-14	6.168E-14	
Pb-210	U-234	7.972E-16	0.000E+00	1.640E-25	2.142E-21	3.573E-21	1.449E-20	8.713E-20	7.455E-19	3.261E-18	1.296E-17	
Pb-210	U-234	3.800E-15	0.000E+00	7.815E-25	1.021E-20	1.703E-20	6.908E-20	4.153E-19	3.553E-18	1.554E-17	6.176E-17	
Pb-210	U-238	3.039E-11	0.000E+00	4.418E-27	1.494E-21	3.011E-21	2.085E-20	2.630E-19	6.088E-18	5.616E-17	4.666E-16	
Pb-210	U-238	6.383E-15	0.000E+00	9.280E-31	3.138E-25	6.325E-25	4.380E-24	5.525E-23	1.279E-21	1.180E-20	9.801E-20	
Pb-210	U-238	6.073E-15	0.000E+00	8.830E-31	2.986E-25	6.018E-25	4.167E-24	5.256E-23	1.217E-21	1.122E-20	9.325E-20	
Pb-210	U-238	1.276E-18	0.000E+00	1.855E-34	6.271E-29	1.264E-28	8.753E-28	1.104E-26	2.556E-25	2.357E-24	1.959E-23	
Pb-210	U-238	6.080E-18	0.000E+00	8.840E-34	2.989E-28	6.025E-28	4.172E-27	5.263E-26	1.218E-24	1.124E-23	9.336E-23	
Pb-210	U-238	1.896E-08	0.000E+00	2.757E-24	9.323E-19	1.879E-18	1.301E-17	1.641E-16	3.799E-15	3.505E-14	2.912E-13	
Pb-210	U-238	3.983E-12	0.000E+00	5.791E-28	1.958E-22	3.947E-22	2.733E-21	3.447E-20	7.980E-19	7.361E-18	6.116E-17	
Pb-210	U-238	3.789E-12	0.000E+00	5.510E-28	1.863E-22	3.755E-22	2.600E-21	3.280E-20	7.592E-19	7.004E-18	5.819E-17	
Pb-210	U-238	7.959E-16	0.000E+00	1.157E-31	3.913E-26	7.887E-26	5.462E-25	6.889E-24	1.595E-22	1.471E-21	1.222E-20	
Pb-210	U-238	3.794E-15	0.000E+00	5.516E-31	1.865E-25	3.760E-25	2.604E-24	3.284E-23	7.601E-22	7.012E-21	5.826E-20	
Pb-210	äS(j):		0.000E+00	1.272E-12	6.269E-10	8.623E-10	2.016E-09	5.613E-09	1.710E-08	3.485E-08	6.506E-08	
0Pu-238	Pu-238	2.100E-04	2.100E-03	2.083E-03	1.723E-03	1.656E-03	1.414E-03	9.525E-04	2.911E-04	4.035E-05	7.756E-07	
Pu-238	Pu-238	2.771E-10	2.771E-09	2.750E-09	2.275E-09	2.186E-09	1.867E-09	1.257E-09	3.842E-10	5.327E-11	1.024E-12	
Pu-238	äS(j):		2.100E-03	2.083E-03	1.723E-03	1.656E-03	1.414E-03	9.525E-04	2.911E-04	4.035E-05	7.756E-07	
0Ra-226	Pu-238	2.100E-04	0.000E+00	3.928E-18	5.841E-14	9.992E-14	4.444E-13	3.229E-12	3.888E-11	2.174E-10	1.022E-09	

Ra-226	Pu-238	2.771E-10	0.000E+00	5.184E-24	7.710E-20	1.319E-19	5.867E-19	4.262E-18	5.132E-17	2.869E-16	1.349E-15
Ra-226	Pu-238	3.989E-12	0.000E+00	7.462E-26	1.110E-21	1.898E-21	8.444E-21	6.135E-20	7.387E-19	4.130E-18	1.941E-17

Individual Nuclide Soil Concentration
 Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	S(j,t), pCi/g									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Ra-226	Th-230	2.100E-04	0.000E+00	9.094E-07	2.261E-05	2.711E-05	4.498E-05	8.897E-05	2.153E-04	4.079E-04	7.345E-04	
Ra-226	Th-230	2.771E-10	0.000E+00	1.200E-12	2.985E-11	3.578E-11	5.937E-11	1.174E-10	2.841E-10	5.385E-10	9.695E-10	
Ra-226	Th-230	3.989E-12	0.000E+00	1.728E-14	4.297E-13	5.150E-13	8.546E-13	1.690E-12	4.090E-12	7.750E-12	1.396E-11	
Ra-226	U-234	2.100E-04	0.000E+00	4.181E-12	2.604E-09	3.747E-09	1.038E-08	4.120E-08	2.519E-07	9.719E-07	3.623E-06	
Ra-226	U-234	2.771E-10	0.000E+00	5.519E-18	3.437E-15	4.946E-15	1.370E-14	5.439E-14	3.325E-13	1.283E-12	4.782E-12	
Ra-226	U-234	3.989E-12	0.000E+00	7.944E-20	4.948E-17	7.119E-17	1.972E-16	7.829E-16	4.787E-15	1.847E-14	6.883E-14	
Ra-226	U-238	3.359E-07	0.000E+00	6.297E-21	9.812E-17	1.695E-16	7.828E-16	6.228E-15	9.571E-14	7.451E-13	5.652E-12	
Ra-226	U-238	4.434E-13	0.000E+00	8.311E-27	1.295E-22	2.237E-22	1.033E-21	8.221E-21	1.263E-19	9.836E-19	7.461E-18	
Ra-226	U-238	6.383E-15	0.000E+00	1.196E-28	1.864E-24	3.220E-24	1.487E-23	1.183E-22	1.819E-21	1.416E-20	1.074E-19	
Ra-226	U-238	2.096E-04	0.000E+00	3.929E-18	6.123E-14	1.057E-13	4.885E-13	3.886E-12	5.972E-11	4.650E-10	3.527E-09	
Ra-226	U-238	2.767E-10	0.000E+00	5.186E-24	8.082E-20	1.396E-19	6.448E-19	5.130E-18	7.884E-17	6.137E-16	4.656E-15	
Ra-226	U-238	3.983E-12	0.000E+00	7.465E-26	1.163E-21	2.009E-21	9.281E-21	7.384E-20	1.135E-18	8.834E-18	6.701E-17	
Ra-226	äS(j):		0.000E+00	9.094E-07	2.262E-05	2.711E-05	4.499E-05	8.901E-05	2.155E-04	4.089E-04	7.381E-04	
0Pb-210	Pu-238	2.771E-10	0.000E+00	4.023E-26	1.309E-20	2.618E-20	1.755E-19	2.040E-18	3.734E-17	2.469E-16	1.260E-15	
Pb-210	Pu-238	2.637E-10	0.000E+00	3.828E-26	1.246E-20	2.490E-20	1.669E-19	1.941E-18	3.552E-17	2.349E-16	1.199E-15	
Pb-210	Pu-238	5.538E-14	0.000E+00	8.040E-30	2.616E-24	5.231E-24	3.507E-23	4.076E-22	7.461E-21	4.934E-20	2.519E-19	
Pb-210	Pu-238	2.640E-13	0.000E+00	3.832E-29	1.247E-23	2.493E-23	1.672E-22	1.943E-21	3.557E-20	2.352E-19	1.201E-18	
Pb-210	Th-230	1.319E-06	0.000E+00	8.830E-11	4.353E-08	5.988E-08	1.400E-07	3.897E-07	1.187E-06	2.415E-06	4.497E-06	
Pb-210	Th-230	2.771E-10	0.000E+00	1.855E-14	9.144E-12	1.258E-11	2.941E-11	8.185E-11	2.492E-10	5.072E-10	9.445E-10	
Pb-210	Th-230	2.637E-10	0.000E+00	1.765E-14	8.699E-12	1.197E-11	2.798E-11	7.787E-11	2.371E-10	4.826E-10	8.986E-10	
Pb-210	Th-230	5.538E-14	0.000E+00	3.707E-18	1.827E-15	2.513E-15	5.877E-15	1.636E-14	4.981E-14	1.014E-13	1.888E-13	
Pb-210	Th-230	2.640E-13	0.000E+00	1.767E-17	8.710E-15	1.198E-14	2.801E-14	7.796E-14	2.374E-13	4.831E-13	8.997E-13	
Pb-210	U-234	1.319E-06	0.000E+00	2.714E-16	3.545E-12	5.915E-12	2.399E-11	1.442E-10	1.234E-09	5.397E-09	2.144E-08	
Pb-210	U-234	2.771E-10	0.000E+00	5.700E-20	7.445E-16	1.242E-15	5.038E-15	3.029E-14	2.592E-13	1.134E-12	4.504E-12	
Pb-210	U-234	2.637E-10	0.000E+00	5.423E-20	7.083E-16	1.182E-15	4.794E-15	2.882E-14	2.466E-13	1.079E-12	4.285E-12	
Pb-210	U-234	5.538E-14	0.000E+00	1.139E-23	1.488E-19	2.483E-19	1.007E-18	6.053E-18	5.179E-17	2.265E-16	9.001E-16	
Pb-210	U-234	2.640E-13	0.000E+00	5.430E-23	7.092E-19	1.183E-18	4.799E-18	2.885E-17	2.469E-16	1.080E-15	4.291E-15	
Pb-210	U-238	2.111E-09	0.000E+00	3.070E-25	1.038E-19	2.092E-19	1.449E-18	1.827E-17	4.230E-16	3.902E-15	3.242E-14	
Pb-210	U-238	4.434E-13	0.000E+00	6.447E-29	2.180E-23	4.394E-23	3.043E-22	3.838E-21	8.884E-20	8.196E-19	6.809E-18	
Pb-210	U-238	4.219E-13	0.000E+00	6.134E-29	2.074E-23	4.181E-23	2.895E-22	3.652E-21	8.453E-20	7.797E-19	6.478E-18	
Pb-210	U-238	8.862E-17	0.000E+00	1.288E-32	4.357E-27	8.781E-27	6.081E-26	7.670E-25	1.775E-23	1.638E-22	1.361E-21	
Pb-210	U-238	4.224E-16	0.000E+00	6.142E-32	2.077E-26	4.186E-26	2.899E-25	3.656E-24	8.463E-23	7.807E-22	6.486E-21	
Pb-210	U-238	1.317E-06	0.000E+00	1.915E-22	6.477E-17	1.305E-16	9.040E-16	1.140E-14	2.639E-13	2.435E-12	2.023E-11	
Pb-210	U-238	2.767E-10	0.000E+00	4.023E-26	1.360E-20	2.742E-20	1.899E-19	2.395E-18	5.544E-17	5.114E-16	4.249E-15	
Pb-210	U-238	2.633E-10	0.000E+00	3.828E-26	1.294E-20	2.609E-20	1.807E-19	2.279E-18	5.274E-17	4.866E-16	4.043E-15	
Pb-210	U-238	5.530E-14	0.000E+00	8.040E-30	2.719E-24	5.480E-24	3.795E-23	4.786E-22	1.108E-20	1.022E-19	8.491E-19	
Pb-210	U-238	2.636E-13	0.000E+00	3.832E-29	1.296E-23	2.612E-23	1.809E-22	2.281E-21	5.281E-20	4.871E-19	4.047E-18	
Pb-210	äS(j):		0.000E+00	8.834E-11	4.355E-08	5.991E-08	1.401E-07	3.900E-07	1.188E-06	2.421E-06	4.520E-06	
0Pu-238	Pu-238	3.989E-12	3.989E-11	3.958E-11	3.274E-11	3.147E-11	2.687E-11	1.810E-11	5.530E-12	7.667E-13	1.474E-14	
Pu-238	Pu-238	1.998E-04	1.998E-03	1.982E-03	1.639E-03	1.576E-03	1.345E-03	9.063E-04	2.769E-04	3.839E-05	7.379E-07	

Pu-238	äS(j):		1.998E-03	1.982E-03	1.639E-03	1.576E-03	1.345E-03	9.063E-04	2.769E-04	3.839E-05	7.379E-07
0Ra-226	Pu-238	1.998E-04	0.000E+00	3.737E-18	5.557E-14	9.506E-14	4.229E-13	3.072E-12	3.699E-11	2.068E-10	9.721E-10
Ra-226	Pu-238	3.795E-12	0.000E+00	7.100E-26	1.056E-21	1.806E-21	8.034E-21	5.837E-20	7.028E-19	3.929E-18	1.847E-17
Ra-226	Th-230	1.998E-04	0.000E+00	8.652E-07	2.152E-05	2.579E-05	4.279E-05	8.465E-05	2.048E-04	3.881E-04	6.988E-04
Ra-226	Th-230	2.637E-10	0.000E+00	1.142E-12	2.840E-11	3.404E-11	5.649E-11	1.117E-10	2.703E-10	5.123E-10	9.224E-10
Ra-226	Th-230	3.795E-12	0.000E+00	1.644E-14	4.088E-13	4.900E-13	8.131E-13	1.608E-12	3.891E-12	7.374E-12	1.328E-11

Individual Nuclide Soil Concentration
Parent Nuclide and Branch Fraction Indicated

0Nuclide Parent	THF(i)	S(j,t), pCi/g									
(j)	(i)	t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Ra-226	U-234	1.998E-04	0.000E+00	3.978E-12	2.478E-09	3.565E-09	9.873E-09	3.920E-08	2.397E-07	9.247E-07	3.447E-06
Ra-226	U-234	2.637E-10	0.000E+00	5.251E-18	3.270E-15	4.706E-15	1.303E-14	5.175E-14	3.164E-13	1.221E-12	4.550E-12
Ra-226	U-234	3.795E-12	0.000E+00	7.559E-20	4.707E-17	6.773E-17	1.876E-16	7.449E-16	4.554E-15	1.757E-14	6.549E-14
Ra-226	U-238	3.196E-07	0.000E+00	5.991E-21	9.335E-17	1.612E-16	7.448E-16	5.925E-15	9.106E-14	7.089E-13	5.378E-12
Ra-226	U-238	4.219E-13	0.000E+00	7.908E-27	1.232E-22	2.128E-22	9.831E-22	7.821E-21	1.202E-19	9.358E-19	7.098E-18
Ra-226	U-238	6.073E-15	0.000E+00	1.138E-28	1.774E-24	3.063E-24	1.415E-23	1.126E-22	1.730E-21	1.347E-20	1.022E-19
Ra-226	U-238	1.994E-04	0.000E+00	3.738E-18	5.825E-14	1.006E-13	4.647E-13	3.697E-12	5.682E-11	4.424E-10	3.356E-09
Ra-226	U-238	2.633E-10	0.000E+00	4.934E-24	7.689E-20	1.328E-19	6.134E-19	4.880E-18	7.501E-17	5.839E-16	4.429E-15
Ra-226	U-238	3.789E-12	0.000E+00	7.103E-26	1.107E-21	1.911E-21	8.830E-21	7.025E-20	1.080E-18	8.405E-18	6.376E-17
Ra-226	äS(j):		0.000E+00	8.652E-07	2.152E-05	2.579E-05	4.280E-05	8.469E-05	2.050E-04	3.890E-04	7.023E-04
0Pu-238	Pu-238	2.637E-10	2.637E-09	2.616E-09	2.164E-09	2.080E-09	1.776E-09	1.196E-09	3.656E-10	5.068E-11	9.740E-13
Pu-238	Pu-238	3.795E-12	3.795E-11	3.766E-11	3.115E-11	2.994E-11	2.556E-11	1.722E-11	5.262E-12	7.295E-13	1.402E-14
Pu-238	äS(j):		2.675E-09	2.654E-09	2.195E-09	2.110E-09	1.802E-09	1.213E-09	3.708E-10	5.141E-11	9.881E-13
0Ra-226	Pu-238	2.637E-10	0.000E+00	4.933E-24	7.336E-20	1.255E-19	5.582E-19	4.055E-18	4.883E-17	2.730E-16	1.283E-15
0Pu-238	Pu-238	4.196E-08	4.196E-07	4.163E-07	3.444E-07	3.310E-07	2.826E-07	1.904E-07	5.817E-08	8.064E-09	1.550E-10
Pu-238	Pu-238	5.538E-14	5.538E-13	5.495E-13	4.545E-13	4.369E-13	3.730E-13	2.513E-13	7.678E-14	1.064E-14	2.046E-16
Pu-238	äS(j):		4.196E-07	4.163E-07	3.444E-07	3.310E-07	2.826E-07	1.904E-07	5.817E-08	8.064E-09	1.550E-10
0Ra-226	Pu-238	4.196E-08	0.000E+00	7.849E-22	1.167E-17	1.997E-17	8.882E-17	6.453E-16	7.770E-15	4.344E-14	2.042E-13
Ra-226	Pu-238	5.538E-14	0.000E+00	1.036E-27	1.541E-23	2.636E-23	1.172E-22	8.518E-22	1.026E-20	5.734E-20	2.695E-19
Ra-226	Pu-238	7.972E-16	0.000E+00	1.491E-29	2.218E-25	3.794E-25	1.688E-24	1.226E-23	1.476E-22	8.253E-22	3.879E-21
Ra-226	Th-230	4.196E-08	0.000E+00	1.817E-10	4.519E-09	5.417E-09	8.989E-09	1.778E-08	4.302E-08	8.152E-08	1.468E-07
Ra-226	Th-230	5.538E-14	0.000E+00	2.399E-16	5.965E-15	7.150E-15	1.186E-14	2.347E-14	5.678E-14	1.076E-13	1.938E-13
Ra-226	Th-230	7.972E-16	0.000E+00	3.453E-18	8.586E-17	1.029E-16	1.708E-16	3.378E-16	8.173E-16	1.549E-15	2.789E-15
Ra-226	U-234	4.196E-08	0.000E+00	8.356E-16	5.204E-13	7.488E-13	2.074E-12	8.234E-12	5.034E-11	1.942E-10	7.240E-10
Ra-226	U-234	5.538E-14	0.000E+00	1.103E-21	6.869E-19	9.884E-19	2.737E-18	1.087E-17	6.645E-17	2.564E-16	9.556E-16
Ra-226	U-234	7.972E-16	0.000E+00	1.588E-23	9.887E-21	1.423E-20	3.940E-20	1.565E-19	9.565E-19	3.690E-18	1.376E-17
Ra-226	U-238	6.713E-11	0.000E+00	1.258E-24	1.961E-20	3.386E-20	1.564E-19	1.245E-18	1.913E-17	1.489E-16	1.130E-15
Ra-226	U-238	8.862E-17	0.000E+00	1.661E-30	2.588E-26	4.470E-26	2.065E-25	1.643E-24	2.525E-23	1.966E-22	1.491E-21
Ra-226	U-238	1.276E-18	0.000E+00	2.391E-32	3.726E-28	6.434E-28	2.972E-27	2.365E-26	3.634E-25	2.829E-24	2.146E-23
Ra-226	U-238	4.189E-08	0.000E+00	7.852E-22	1.224E-17	2.113E-17	9.761E-17	7.766E-16	1.194E-14	9.292E-14	7.048E-13
Ra-226	U-238	5.530E-14	0.000E+00	1.036E-27	1.615E-23	2.789E-23	1.288E-22	1.025E-21	1.575E-20	1.227E-19	9.304E-19
Ra-226	U-238	7.959E-16	0.000E+00	1.492E-29	2.325E-25	4.015E-25	1.855E-24	1.476E-23	2.268E-22	1.765E-21	1.339E-20
Ra-226	äS(j):		0.000E+00	1.817E-10	4.520E-09	5.418E-09	8.991E-09	1.779E-08	4.307E-08	8.171E-08	1.475E-07
0Pu-238	Pu-238	7.972E-16	7.972E-15	7.909E-15	6.543E-15	6.289E-15	5.370E-15	3.617E-15	1.105E-15	1.532E-16	2.945E-18
Pu-238	Pu-238	2.000E-07	2.000E-06	1.984E-06	1.641E-06	1.578E-06	1.347E-06	9.074E-07	2.773E-07	3.844E-08	7.388E-10
Pu-238	äS(j):		2.000E-06	1.984E-06	1.641E-06	1.578E-06	1.347E-06	9.074E-07	2.773E-07	3.844E-08	7.388E-10
0Ra-226	Pu-238	2.000E-07	0.000E+00	3.741E-21	5.564E-17	9.518E-17	4.234E-16	3.076E-15	3.704E-14	2.070E-13	9.733E-13
Ra-226	Pu-238	3.800E-15	0.000E+00	7.108E-29	1.057E-24	1.808E-24	8.044E-24	5.844E-23	7.037E-22	3.934E-21	1.849E-20
Ra-226	Th-230	2.000E-07	0.000E+00	8.662E-10	2.154E-08	2.582E-08	4.285E-08	8.475E-08	2.050E-07	3.886E-07	6.997E-07
Ra-226	Th-230	2.640E-13	0.000E+00	1.143E-15	2.843E-14	3.408E-14	5.656E-14	1.119E-13	2.707E-13	5.129E-13	9.236E-13

Ra-226	Th-230	3.800E-15	0.000E+00	1.646E-17	4.093E-16	4.906E-16	8.141E-16	1.610E-15	3.896E-15	7.383E-15	1.329E-14
Ra-226	U-234	2.000E-07	0.000E+00	3.983E-15	2.481E-12	3.569E-12	9.885E-12	3.925E-11	2.400E-10	9.258E-10	3.451E-09
Ra-226	U-234	2.640E-13	0.000E+00	5.258E-21	3.274E-18	4.711E-18	1.305E-17	5.181E-17	3.168E-16	1.222E-15	4.555E-15

Individual Nuclide Soil Concentration
Parent Nuclide and Branch Fraction Indicated

ONuclide	Parent	THF(i)	S(j,t), pCi/g									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA		AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Ra-226	U-234	3.800E-15		0.000E+00	7.568E-23	4.713E-20	6.782E-20	1.878E-19	7.458E-19	4.560E-18	1.759E-17	6.557E-17
Ra-226	U-238	3.200E-10		0.000E+00	5.998E-24	9.347E-20	1.614E-19	7.457E-19	5.932E-18	9.117E-17	7.098E-16	5.384E-15
Ra-226	U-238	4.224E-16		0.000E+00	7.917E-30	1.234E-25	2.131E-25	9.843E-25	7.831E-24	1.203E-22	9.369E-22	7.107E-21
Ra-226	U-238	6.080E-18		0.000E+00	1.140E-31	1.776E-27	3.067E-27	1.417E-26	1.127E-25	1.732E-24	1.349E-23	1.023E-22
Ra-226	U-238	1.997E-07		0.000E+00	3.743E-21	5.832E-17	1.007E-16	4.653E-16	3.702E-15	5.689E-14	4.429E-13	3.360E-12
Ra-226	U-238	2.636E-13		0.000E+00	4.940E-27	7.699E-23	1.330E-22	6.142E-22	4.886E-21	7.510E-20	5.846E-19	4.435E-18
Ra-226	U-238	3.794E-15		0.000E+00	7.111E-29	1.108E-24	1.914E-24	8.841E-24	7.033E-23	1.081E-21	8.415E-21	6.383E-20
Ra-226	äS(j):			0.000E+00	8.662E-10	2.154E-08	2.582E-08	4.286E-08	8.479E-08	2.053E-07	3.895E-07	7.031E-07
0Pu-238	Pu-238	2.640E-13		2.640E-12	2.619E-12	2.167E-12	2.083E-12	1.778E-12	1.198E-12	3.660E-13	5.074E-14	9.752E-16
Pu-238	Pu-238	3.800E-15		3.800E-14	3.770E-14	3.119E-14	2.998E-14	2.560E-14	1.724E-14	5.268E-15	7.304E-16	1.404E-17
Pu-238	äS(j):			2.678E-12	2.657E-12	2.198E-12	2.113E-12	1.804E-12	1.215E-12	3.713E-13	5.147E-14	9.893E-16
0Ra-226	Pu-238	2.640E-13		0.000E+00	4.939E-27	7.345E-23	1.256E-22	5.588E-22	4.060E-21	4.889E-20	2.733E-19	1.285E-18
0Pu-239	Pu-239	5.901E-04		5.901E-03	5.901E-03	5.897E-03	5.896E-03	5.892E-03	5.884E-03	5.859E-03	5.817E-03	5.734E-03
Pu-239	Pu-239	1.633E-06		1.633E-05	1.633E-05	1.632E-05	1.632E-05	1.631E-05	1.628E-05	1.621E-05	1.610E-05	1.587E-05
Pu-239	äS(j):			5.917E-03	5.917E-03	5.913E-03	5.912E-03	5.909E-03	5.900E-03	5.875E-03	5.833E-03	5.749E-03
0U-235	Pu-239	5.901E-04		0.000E+00	5.810E-12	1.452E-10	1.742E-10	2.903E-10	5.802E-10	1.447E-09	2.884E-09	5.727E-09
U-235	Pu-239	1.633E-06		0.000E+00	1.608E-14	4.018E-13	4.822E-13	8.034E-13	1.606E-12	4.005E-12	7.982E-12	1.585E-11
U-235	Pu-239	8.257E-06		0.000E+00	8.129E-14	2.032E-12	2.438E-12	4.062E-12	8.118E-12	2.025E-11	4.035E-11	8.013E-11
U-235	Pu-239	2.285E-08		0.000E+00	2.250E-16	5.623E-15	6.747E-15	1.124E-14	2.247E-14	5.604E-14	1.117E-13	2.218E-13
U-235	Pu-239	4.954E-10		0.000E+00	4.878E-18	1.219E-16	1.463E-16	2.437E-16	4.871E-16	1.215E-15	2.421E-15	4.808E-15
U-235	Pu-239	1.371E-12		0.000E+00	1.350E-20	3.374E-19	4.048E-19	6.745E-19	1.348E-18	3.363E-18	6.702E-18	1.331E-17
U-235	Pu-239	9.829E-01		0.000E+00	9.677E-09	2.418E-07	2.902E-07	4.835E-07	9.663E-07	2.411E-06	4.804E-06	9.539E-06
U-235	Pu-239	2.720E-03		0.000E+00	2.678E-11	6.693E-10	8.032E-10	1.338E-09	2.674E-09	6.672E-09	1.330E-08	2.640E-08
U-235	Pu-239	1.375E-02		0.000E+00	1.354E-10	3.384E-09	4.060E-09	6.766E-09	1.352E-08	3.373E-08	6.722E-08	1.335E-07
U-235	Pu-239	3.806E-05		0.000E+00	3.748E-13	9.366E-12	1.124E-11	1.872E-11	3.742E-11	9.335E-11	1.860E-10	3.694E-10
U-235	Pu-239	8.252E-07		0.000E+00	8.125E-15	2.031E-13	2.436E-13	4.060E-13	8.113E-13	2.024E-12	4.033E-12	8.008E-12
U-235	Pu-239	2.284E-09		0.000E+00	2.249E-17	5.620E-16	6.743E-16	1.124E-15	2.245E-15	5.601E-15	1.116E-14	2.216E-14
U-235	U-235	9.835E-01		9.835E+00	9.835E+00	9.835E+00	9.835E+00	9.835E+00	9.835E+00	9.834E+00	9.834E+00	9.833E+00
U-235	äS(j):			9.835E+00	9.835E+00	9.835E+00	9.835E+00	9.835E+00	9.835E+00	9.834E+00	9.834E+00	9.833E+00
0Pa-231	Pu-239	5.901E-04		0.000E+00	6.146E-17	3.840E-14	5.529E-14	1.535E-13	6.136E-13	3.825E-12	1.524E-11	6.044E-11
Pa-231	Pu-239	1.633E-06		0.000E+00	1.701E-19	1.063E-16	1.530E-16	4.249E-16	1.698E-15	1.059E-14	4.217E-14	1.673E-13
Pa-231	Pu-239	8.257E-06		0.000E+00	8.600E-19	5.373E-16	7.736E-16	2.148E-15	8.586E-15	5.353E-14	2.132E-13	8.457E-13
Pa-231	Pu-239	2.285E-08		0.000E+00	2.380E-21	1.487E-18	2.141E-18	5.946E-18	2.376E-17	1.481E-16	5.901E-16	2.341E-15
Pa-231	Pu-239	4.954E-10		0.000E+00	5.160E-23	3.224E-20	4.642E-20	1.289E-19	5.152E-19	3.212E-18	1.279E-17	5.075E-17
Pa-231	Pu-239	1.371E-12		0.000E+00	1.428E-25	8.923E-23	1.285E-22	3.568E-22	1.426E-21	8.889E-21	3.541E-20	1.404E-19
Pa-231	Pu-239	9.829E-01		0.000E+00	1.024E-13	6.396E-11	9.209E-11	2.557E-10	1.022E-09	6.372E-09	2.538E-08	1.007E-07
Pa-231	Pu-239	2.720E-03		0.000E+00	2.833E-16	1.770E-13	2.549E-13	7.078E-13	2.829E-12	1.764E-11	7.025E-11	2.786E-10
Pa-231	Pu-239	1.375E-02		0.000E+00	1.432E-15	8.949E-13	1.289E-12	3.578E-12	1.430E-11	8.916E-11	3.551E-10	1.409E-09
Pa-231	Pu-239	3.806E-05		0.000E+00	3.965E-18	2.477E-15	3.566E-15	9.903E-15	3.958E-14	2.468E-13	9.829E-13	3.899E-12
Pa-231	Pu-239	8.252E-07		0.000E+00	8.595E-20	5.370E-17	7.732E-17	2.147E-16	8.581E-16	5.350E-15	2.131E-14	8.453E-14

Pa-231	Pu-239	2.284E-09	0.000E+00	2.379E-22	1.486E-19	2.140E-19	5.942E-19	2.375E-18	1.481E-17	5.898E-17	2.339E-16
Pa-231	U-235	9.835E-01	0.000E+00	2.081E-04	5.201E-03	6.241E-03	1.040E-02	2.079E-02	5.188E-02	1.035E-01	2.059E-01
Pa-231	U-235	2.722E-03	0.000E+00	5.759E-07	1.439E-05	1.727E-05	2.878E-05	5.753E-05	1.436E-04	2.864E-04	5.698E-04
Pa-231	U-235	1.376E-02	0.000E+00	2.912E-06	7.277E-05	8.732E-05	1.455E-04	2.908E-04	7.259E-04	1.448E-03	2.880E-03

Individual Nuclide Soil Concentration
 Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	S(j,t), pCi/g									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Pa-231	U-235	3.809E-05	0.000E+00	8.058E-09	2.014E-07	2.417E-07	4.027E-07	8.050E-07	2.009E-06	4.008E-06	7.972E-06	
Pa-231	U-235	8.257E-07	0.000E+00	1.747E-10	4.367E-09	5.240E-09	8.731E-09	1.745E-08	4.356E-08	8.688E-08	1.728E-07	
Pa-231	U-235	2.285E-09	0.000E+00	4.835E-13	1.208E-11	1.450E-11	2.416E-11	4.830E-11	1.206E-10	2.405E-10	4.784E-10	
Pa-231	äS(j):		0.000E+00	2.116E-04	5.288E-03	6.345E-03	1.057E-02	2.114E-02	5.275E-02	1.052E-01	2.093E-01	
0Ac-227	Pu-239	5.901E-04	0.000E+00	6.471E-19	8.445E-15	1.409E-14	5.716E-14	3.443E-13	2.986E-12	1.345E-11	5.679E-11	
Ac-227	Pu-239	9.829E-01	0.000E+00	1.078E-15	1.407E-11	2.347E-11	9.520E-11	5.735E-10	4.974E-09	2.240E-08	9.460E-08	
Ac-227	U-235	9.835E-01	0.000E+00	3.278E-06	1.615E-03	2.221E-03	5.197E-03	1.453E-02	4.538E-02	9.701E-02	1.995E-01	
Ac-227	äS(j):		0.000E+00	3.278E-06	1.615E-03	2.221E-03	5.197E-03	1.453E-02	4.538E-02	9.701E-02	1.995E-01	
0Ac-227	Pu-239	1.633E-06	0.000E+00	1.791E-21	2.337E-17	3.900E-17	1.582E-16	9.529E-16	8.264E-15	3.722E-14	1.572E-13	
Ac-227	Pu-239	8.257E-06	0.000E+00	9.054E-21	1.182E-16	1.972E-16	7.997E-16	4.817E-15	4.178E-14	1.882E-13	7.947E-13	
Ac-227	Pu-239	2.720E-03	0.000E+00	2.983E-18	3.893E-14	6.496E-14	2.635E-13	1.587E-12	1.377E-11	6.200E-11	2.618E-10	
Ac-227	U-235	2.722E-03	0.000E+00	9.071E-09	4.469E-06	6.147E-06	1.438E-05	4.022E-05	1.256E-04	2.685E-04	5.520E-04	
Ac-227	äS(j):		0.000E+00	9.071E-09	4.469E-06	6.147E-06	1.438E-05	4.022E-05	1.256E-04	2.685E-04	5.520E-04	
0Pu-239	Pu-239	8.257E-06	8.257E-05	8.256E-05	8.251E-05	8.250E-05	8.245E-05	8.233E-05	8.198E-05	8.139E-05	8.023E-05	
Pu-239	Pu-239	2.285E-08	2.285E-07	2.285E-07	2.284E-07	2.283E-07	2.282E-07	2.279E-07	2.269E-07	2.253E-07	2.220E-07	
Pu-239	äS(j):		8.280E-05	8.279E-05	8.274E-05	8.272E-05	8.268E-05	8.256E-05	8.220E-05	8.161E-05	8.045E-05	
0Ac-227	Pu-239	2.285E-08	0.000E+00	2.506E-23	3.271E-19	5.457E-19	2.213E-18	1.333E-17	1.156E-16	5.208E-16	2.199E-15	
Ac-227	Pu-239	4.954E-10	0.000E+00	5.433E-25	7.091E-21	1.183E-20	4.799E-20	2.891E-19	2.507E-18	1.129E-17	4.768E-17	
Ac-227	Pu-239	3.806E-05	0.000E+00	4.174E-20	5.448E-16	9.090E-16	3.687E-15	2.221E-14	1.926E-13	8.675E-13	3.663E-12	
Ac-227	U-235	3.809E-05	0.000E+00	1.269E-10	6.253E-08	8.601E-08	2.012E-07	5.627E-07	1.757E-06	3.757E-06	7.724E-06	
Ac-227	äS(j):		0.000E+00	1.269E-10	6.253E-08	8.601E-08	2.012E-07	5.627E-07	1.757E-06	3.757E-06	7.724E-06	
0Pu-239	Pu-239	4.954E-10	4.954E-09	4.954E-09	4.951E-09	4.950E-09	4.947E-09	4.940E-09	4.919E-09	4.884E-09	4.814E-09	
Pu-239	Pu-239	1.371E-12	1.371E-11	1.371E-11	1.370E-11	1.370E-11	1.369E-11	1.367E-11	1.361E-11	1.352E-11	1.332E-11	
Pu-239	äS(j):		4.968E-09	4.968E-09	4.964E-09	4.964E-09	4.961E-09	4.954E-09	4.932E-09	4.897E-09	4.827E-09	
0Ac-227	Pu-239	1.371E-12	0.000E+00	1.504E-27	1.962E-23	3.274E-23	1.328E-22	8.000E-22	6.939E-21	3.125E-20	1.320E-19	
Ac-227	Pu-239	2.284E-09	0.000E+00	2.505E-24	3.269E-20	5.454E-20	2.212E-19	1.333E-18	1.156E-17	5.206E-17	2.198E-16	
Ac-227	U-235	2.285E-09	0.000E+00	7.616E-15	3.752E-12	5.161E-12	1.208E-11	3.376E-11	1.054E-10	2.254E-10	4.635E-10	
Ac-227	äS(j):		0.000E+00	7.616E-15	3.752E-12	5.161E-12	1.208E-11	3.376E-11	1.054E-10	2.254E-10	4.635E-10	
0Pu-239	Pu-239	9.829E-01	9.829E+00	9.829E+00	9.822E+00	9.820E+00	9.815E+00	9.801E+00	9.758E+00	9.689E+00	9.550E+00	
Pu-239	Pu-239	2.720E-03	2.720E-02	2.720E-02	2.718E-02	2.718E-02	2.716E-02	2.712E-02	2.701E-02	2.681E-02	2.643E-02	
Pu-239	äS(j):		9.856E+00	9.856E+00	9.849E+00	9.848E+00	9.842E+00	9.828E+00	9.785E+00	9.715E+00	9.577E+00	
0Pu-239	Pu-239	1.375E-02	1.375E-01	1.375E-01	1.374E-01	1.374E-01	1.373E-01	1.371E-01	1.365E-01	1.356E-01	1.336E-01	
Pu-239	Pu-239	3.806E-05	3.806E-04	3.806E-04	3.804E-04	3.803E-04	3.801E-04	3.795E-04	3.779E-04	3.752E-04	3.698E-04	
Pu-239	äS(j):		1.379E-01	1.379E-01	1.378E-01	1.378E-01	1.377E-01	1.375E-01	1.369E-01	1.359E-01	1.340E-01	
0Ac-227	Pu-239	1.375E-02	0.000E+00	1.508E-17	1.968E-13	3.284E-13	1.332E-12	8.024E-12	6.959E-11	3.135E-10	1.324E-09	
Ac-227	U-235	1.376E-02	0.000E+00	4.586E-08	2.259E-05	3.108E-05	7.271E-05	2.033E-04	6.349E-04	1.357E-03	2.791E-03	
Ac-227	äS(j):		0.000E+00	4.586E-08	2.259E-05	3.108E-05	7.271E-05	2.033E-04	6.349E-04	1.357E-03	2.791E-03	
0Pu-239	Pu-239	8.252E-07	8.252E-06	8.252E-06	8.246E-06	8.245E-06	8.240E-06	8.228E-06	8.193E-06	8.134E-06	8.018E-06	
Pu-239	Pu-239	2.284E-09	2.284E-08	2.284E-08	2.282E-08	2.282E-08	2.281E-08	2.277E-08	2.268E-08	2.251E-08	2.219E-08	
Pu-239	äS(j):		8.275E-06	8.275E-06	8.269E-06	8.268E-06	8.263E-06	8.251E-06	8.216E-06	8.157E-06	8.040E-06	

Individual Nuclide Soil Concentration
Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	S(j,t), pCi/g									
(j)	(i)		t=	0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Ac-227	Pu-239	8.252E-07	0.000E+00	9.050E-22	1.181E-17	1.971E-17	7.993E-17	4.815E-16	4.176E-15	1.881E-14	7.942E-14	
Ac-227	U-235	8.257E-07	0.000E+00	2.752E-12	1.356E-09	1.865E-09	4.363E-09	1.220E-08	3.810E-08	8.145E-08	1.675E-07	
Ac-227	äS(j):		0.000E+00	2.752E-12	1.356E-09	1.865E-09	4.363E-09	1.220E-08	3.810E-08	8.145E-08	1.675E-07	
ORu-106	Ru-106	1.000E+00	1.000E+01	5.078E+00	4.388E-07	1.481E-08	1.925E-14	3.706E-29	0.000E+00	0.000E+00	0.000E+00	
OSr-90	Sr-90	1.000E+00	1.000E+01	9.762E+00	5.478E+00	4.856E+00	3.000E+00	9.003E-01	2.432E-02	5.914E-05	3.498E-10	
OTc-99	Tc-99	1.000E+00	1.000E+01	9.999E+00	9.981E+00	9.977E+00	9.962E+00	9.925E+00	9.812E+00	9.628E+00	9.270E+00	
0Th-228	Th-228	1.000E+00	1.000E+01	6.959E+00	1.156E-03	1.887E-04	1.337E-07	1.788E-15	4.277E-39	0.000E+00	0.000E+00	
Th-228	Th-232	1.000E+00	0.000E+00	1.866E-01	9.265E+00	9.597E+00	9.964E+00	1.000E+01	1.000E+01	1.000E+01	1.000E+01	
Th-228	äS(j):		1.000E+01	7.145E+00	9.266E+00	9.598E+00	9.964E+00	1.000E+01	1.000E+01	1.000E+01	1.000E+01	
0Th-230	Th-230	1.319E-06	1.319E-05	1.319E-05	1.319E-05	1.319E-05	1.319E-05	1.318E-05	1.316E-05	1.313E-05	1.307E-05	
Th-230	Th-230	1.899E-08	1.899E-07	1.899E-07	1.899E-07	1.899E-07	1.898E-07	1.897E-07	1.895E-07	1.891E-07	1.882E-07	
Th-230	äS(j):		1.338E-05	1.338E-05	1.338E-05	1.338E-05	1.338E-05	1.337E-05	1.335E-05	1.332E-05	1.326E-05	
0Th-230	Th-230	2.100E-04	2.100E-03	2.100E-03	2.099E-03	2.099E-03	2.099E-03	2.098E-03	2.095E-03	2.090E-03	2.080E-03	
Th-230	Th-230	2.771E-10	2.771E-09	2.771E-09	2.771E-09	2.771E-09	2.770E-09	2.769E-09	2.765E-09	2.759E-09	2.746E-09	
Th-230	äS(j):		2.100E-03	2.100E-03	2.099E-03	2.099E-03	2.099E-03	2.098E-03	2.095E-03	2.090E-03	2.080E-03	
0Th-230	Th-230	3.989E-12	3.989E-11	3.989E-11	3.988E-11	3.988E-11	3.987E-11	3.986E-11	3.980E-11	3.971E-11	3.953E-11	
Th-230	Th-230	1.998E-04	1.998E-03	1.998E-03	1.997E-03	1.997E-03	1.997E-03	1.996E-03	1.993E-03	1.988E-03	1.979E-03	
Th-230	äS(j):		1.998E-03	1.998E-03	1.997E-03	1.997E-03	1.997E-03	1.996E-03	1.993E-03	1.988E-03	1.979E-03	
0Th-230	Th-230	2.637E-10	2.637E-09	2.637E-09	2.636E-09	2.636E-09	2.636E-09	2.634E-09	2.631E-09	2.625E-09	2.613E-09	
Th-230	Th-230	3.795E-12	3.795E-11	3.795E-11	3.795E-11	3.794E-11	3.794E-11	3.792E-11	3.787E-11	3.778E-11	3.761E-11	
Th-230	äS(j):		2.675E-09	2.675E-09	2.674E-09	2.674E-09	2.674E-09	2.672E-09	2.669E-09	2.662E-09	2.650E-09	
0Th-230	Th-230	4.196E-08	4.196E-07	4.196E-07	4.195E-07	4.195E-07	4.194E-07	4.192E-07	4.186E-07	4.177E-07	4.157E-07	
Th-230	Th-230	5.538E-14	5.538E-13	5.538E-13	5.537E-13	5.537E-13	5.536E-13	5.533E-13	5.526E-13	5.513E-13	5.488E-13	
Th-230	äS(j):		4.196E-07	4.196E-07	4.195E-07	4.195E-07	4.194E-07	4.192E-07	4.186E-07	4.177E-07	4.157E-07	
0Th-230	Th-230	7.972E-16	7.972E-15	7.972E-15	7.970E-15	7.970E-15	7.968E-15	7.965E-15	7.954E-15	7.935E-15	7.899E-15	
Th-230	Th-230	2.000E-07	2.000E-06	2.000E-06	2.000E-06	1.999E-06	1.999E-06	1.998E-06	1.995E-06	1.991E-06	1.982E-06	
Th-230	äS(j):		2.000E-06	2.000E-06	2.000E-06	1.999E-06	1.999E-06	1.998E-06	1.995E-06	1.991E-06	1.982E-06	
0Th-230	Th-230	2.640E-13	2.640E-12	2.640E-12	2.639E-12	2.639E-12	2.639E-12	2.638E-12	2.634E-12	2.628E-12	2.616E-12	
Th-230	Th-230	3.800E-15	3.800E-14	3.800E-14	3.799E-14	3.799E-14	3.798E-14	3.797E-14	3.791E-14	3.783E-14	3.765E-14	
Th-230	äS(j):		2.678E-12	2.678E-12	2.677E-12	2.677E-12	2.677E-12	2.676E-12	2.672E-12	2.666E-12	2.653E-12	
0Th-232	Th-232	1.000E+00	1.000E+01	1.000E+01	1.000E+01	1.000E+01	1.000E+01	1.000E+01	1.000E+01	1.000E+01	1.000E+01	
ORa-228	Th-232	1.000E+00	0.000E+00	1.136E+00	9.509E+00	9.731E+00	9.976E+00	1.000E+01	1.000E+01	1.000E+01	1.000E+01	
OU-234	U-234	1.319E-06	1.319E-05	1.319E-05	1.319E-05	1.319E-05	1.319E-05	1.319E-05	1.318E-05	1.317E-05	1.315E-05	
U-234	U-234	1.899E-08	1.899E-07	1.899E-07	1.899E-07	1.899E-07	1.899E-07	1.899E-07	1.898E-07	1.896E-07	1.894E-07	
U-234	äS(j):		1.338E-05	1.338E-05	1.338E-05	1.338E-05	1.338E-05	1.338E-05	1.337E-05	1.336E-05	1.334E-05	

Individual Nuclide Soil Concentration
Parent Nuclide and Branch Fraction Indicated

0Nuclide	Parent	THF(i)	S(j,t), pCi/g									
(j)	(i)		t= 0.000E+00	1.000E+00	2.500E+01	3.000E+01	5.000E+01	1.000E+02	2.500E+02	5.000E+02	1.000E+03	
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
U-238	U-238	4.219E-13	4.219E-12	4.219E-12	4.219E-12	4.219E-12	4.219E-12	4.219E-12	4.219E-12	4.218E-12	4.218E-12	
U-238	U-238	6.073E-15	6.073E-14	6.073E-14	6.073E-14	6.073E-14	6.073E-14	6.073E-14	6.072E-14	6.072E-14	6.071E-14	
U-238	äS(j):		4.280E-12	4.280E-12	4.280E-12	4.280E-12	4.280E-12	4.280E-12	4.279E-12	4.279E-12	4.279E-12	
0U-238	U-238	6.713E-11	6.713E-10	6.713E-10	6.713E-10	6.713E-10	6.713E-10	6.713E-10	6.713E-10	6.713E-10	6.712E-10	
U-238	U-238	8.862E-17	8.862E-16	8.862E-16	8.861E-16	8.861E-16	8.861E-16	8.861E-16	8.861E-16	8.861E-16	8.860E-16	
U-238	äS(j):		6.713E-10	6.713E-10	6.713E-10	6.713E-10	6.713E-10	6.713E-10	6.713E-10	6.713E-10	6.712E-10	
0U-238	U-238	1.276E-18	1.276E-17	1.276E-17	1.276E-17	1.276E-17	1.276E-17	1.275E-17	1.275E-17	1.275E-17	1.275E-17	
U-238	U-238	3.200E-10	3.200E-09	3.200E-09	3.200E-09	3.200E-09	3.200E-09	3.200E-09	3.200E-09	3.200E-09	3.199E-09	
U-238	äS(j):		3.200E-09	3.200E-09	3.200E-09	3.200E-09	3.200E-09	3.200E-09	3.200E-09	3.200E-09	3.199E-09	
0U-238	U-238	4.224E-16	4.224E-15	4.224E-15	4.224E-15	4.224E-15	4.224E-15	4.224E-15	4.224E-15	4.224E-15	4.223E-15	
U-238	U-238	6.080E-18	6.080E-17	6.080E-17	6.080E-17	6.080E-17	6.080E-17	6.080E-17	6.080E-17	6.079E-17	6.079E-17	
U-238	äS(j):		4.285E-15	4.285E-15	4.285E-15	4.285E-15	4.285E-15	4.285E-15	4.285E-15	4.284E-15	4.284E-15	
0U-238	U-238	9.980E-01	9.980E+00	9.980E+00	9.980E+00	9.980E+00	9.980E+00	9.980E+00	9.979E+00	9.979E+00	9.978E+00	
U-238	U-238	1.317E-06	1.317E-05	1.317E-05	1.317E-05	1.317E-05	1.317E-05	1.317E-05	1.317E-05	1.317E-05	1.317E-05	
U-238	äS(j):		9.980E+00	9.980E+00	9.980E+00	9.980E+00	9.980E+00	9.980E+00	9.979E+00	9.979E+00	9.978E+00	
0U-238	U-238	1.896E-08	1.896E-07	1.896E-07	1.896E-07	1.896E-07	1.896E-07	1.896E-07	1.896E-07	1.896E-07	1.896E-07	
U-238	U-238	2.096E-04	2.096E-03	2.096E-03	2.096E-03	2.096E-03	2.096E-03	2.096E-03	2.096E-03	2.096E-03	2.096E-03	
U-238	äS(j):		2.096E-03	2.096E-03	2.096E-03	2.096E-03	2.096E-03	2.096E-03	2.096E-03	2.096E-03	2.096E-03	
0U-238	U-238	2.767E-10	2.767E-09	2.767E-09	2.767E-09	2.767E-09	2.767E-09	2.767E-09	2.767E-09	2.767E-09	2.766E-09	
U-238	U-238	3.983E-12	3.983E-11	3.983E-11	3.983E-11	3.983E-11	3.983E-11	3.983E-11	3.983E-11	3.982E-11	3.982E-11	
U-238	äS(j):		2.807E-09	2.807E-09	2.807E-09	2.807E-09	2.807E-09	2.807E-09	2.807E-09	2.807E-09	2.806E-09	
0U-238	U-238	1.994E-04	1.994E-03	1.994E-03	1.994E-03	1.994E-03	1.994E-03	1.994E-03	1.994E-03	1.994E-03	1.994E-03	
U-238	U-238	2.633E-10	2.633E-09	2.633E-09	2.633E-09	2.633E-09	2.633E-09	2.633E-09	2.632E-09	2.632E-09	2.632E-09	
U-238	äS(j):		1.994E-03	1.994E-03	1.994E-03	1.994E-03	1.994E-03	1.994E-03	1.994E-03	1.994E-03	1.994E-03	
0U-238	U-238	3.789E-12	3.789E-11	3.789E-11	3.789E-11	3.789E-11	3.789E-11	3.789E-11	3.789E-11	3.789E-11	3.789E-11	
U-238	U-238	4.189E-08	4.189E-07	4.189E-07	4.189E-07	4.189E-07	4.189E-07	4.189E-07	4.189E-07	4.189E-07	4.188E-07	
U-238	äS(j):		4.189E-07	4.189E-07	4.189E-07	4.189E-07	4.189E-07	4.189E-07	4.189E-07	4.189E-07	4.189E-07	
0U-238	U-238	5.530E-14	5.530E-13	5.530E-13	5.530E-13	5.530E-13	5.530E-13	5.529E-13	5.529E-13	5.529E-13	5.529E-13	
U-238	U-238	7.959E-16	7.959E-15	7.959E-15	7.959E-15	7.959E-15	7.959E-15	7.959E-15	7.959E-15	7.958E-15	7.958E-15	
U-238	äS(j):		5.609E-13	5.609E-13	5.609E-13	5.609E-13	5.609E-13	5.609E-13	5.609E-13	5.609E-13	5.608E-13	
0U-238	U-238	1.997E-07	1.997E-06	1.997E-06	1.997E-06	1.997E-06	1.997E-06	1.997E-06	1.997E-06	1.997E-06	1.996E-06	
U-238	U-238	2.636E-13	2.636E-12	2.636E-12	2.636E-12	2.636E-12	2.636E-12	2.636E-12	2.636E-12	2.636E-12	2.635E-12	
U-238	äS(j):		1.997E-06	1.997E-06	1.997E-06	1.997E-06	1.997E-06	1.997E-06	1.997E-06	1.997E-06	1.996E-06	
0U-238	U-238	3.794E-15	3.794E-14	3.794E-14	3.794E-14	3.794E-14	3.794E-14	3.794E-14	3.794E-14	3.794E-14	3.793E-14	
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii

THF(i) is the thread fraction of the parent nuclide.
0RESCALC.EXE execution time = 156.06 seconds

Appendix B

Radionuclide Screening Action Levels

The radionuclide screening action levels (SALs) calculated according to the methods described in this guidance are shown in Table B-1. SALs are provided based on the 25 mrem/yr public dose limit specified in DOE Order 458.1 as well as the SALs based on 15 mrem/yr. The exposure pathway(s) contributing most to the SALs are presented in Table B-2. Residential and recreational SALs were calculated for both adult and child receptors where these receptors were differentiated based on exposure parameters such as the daily rates of incidental soil ingestion and inhalation. For all radionuclides, the residential SALs for the child (ages 0 to less than 6 yr) were lower than or approximately equal to those for an adult. Therefore, the residential SALs from the residual radioactivity (RESRAD) 7.0 results for the child receptor are used. For the child, the residential SAL is weighted across an age range of 0 to less than 6 yr because that is the age range used in calculating chemical SSLs for a child.

The child recreational scenario is based on an “extended backyard” in which a child of age 6 to less than 12 yr is playing in an undeveloped area near a residence. The adult receptor is described as a “trail user,” walking or hiking through the site in question. Because recreational SALs for children are also approximately equal to or lower than those for adults, the RESRAD 7.0 results for the child receptor are presented.

An adult receptor was evaluated for the industrial and construction worker scenarios.

Table B-1
Radionuclide SALs Using RESRAD Version 7.0

Radionuclide	Residential SAL (pCi/g)		Industrial SAL (pCi/g)		Construction Worker SAL (pCi/g)		Recreational SAL (pCi/g)		Time at Which SAL Applies ^a (yr)
	15 mrem/yr	25 mrem/yr	15 mrem/yr	25 mrem/yr	15 mrem/yr	25 mrem/yr	15 mrem/yr	25 mrem/yr	
Americium-241	50	83	610	1000	140	230	890	1500	0.0
Cesium-134	3.0	5.0	10	17	9.3	15	92	150	0.0
Cesium-137+D ^b	7.2	12	25	41	22	37	220	370	0.0
Cobalt-60	1.6	2.6	5.4	9.0	4.8	8.1	48	81	0.0
Iodine-129	57	96	1400	2300	430	710	1200	2000	0.0
Plutonium-238	51	84	790	1300	140	230	850	1400	0.0
Plutonium-239/240 ^c	48	79	710	1200	120	200	770	1300	0.0
Sodium-22	2.0	3.4	6.9	11	6.2	10	62	100	0.0
Strontium-90+D ^b	9.0	15	1500	2400	840	1400	3000	4900	0.0
Technetium-99	12	21	200,000	330,000	67,000	110,000	130,000	220,000	0.0
Thorium-228+D ^b	3.0	4.6	10	17	8.9	15	79	130	0.0
Thorium-230 ^d	5	5	5	5	5	5	5 ^e	5 ^e	Not applicable ^f
Thorium-232 ^d	5	5	5	5	5	5	5 ^e	5 ^e	Not applicable ^f
Tritium	1000	1700	1,500,000	2,400,000	990,000	1,600,000	3,400,000	5,700,000	0.0
Uranium-234	180	290	1800	3100	610	1000	2300	3900	1000
Uranium-235+D ^b	25	42	95	160	77	130	620	1000	1000
Uranium-238+D ^b	88	150	420	710	280	470	1700	2800	1000

Notes: See RESRAD summary reports on CD in Appendix A for details of the inputs to the calculations. Values for 15 mrem/yr and 25 mrem/yr may differ slightly from the exact ratio of 15/25 because the values were rounded independently.

^a Modeling period is 1000 yr. Soil criteria at other times within the modeling period are higher (less protective).

^b Includes contribution to dose of radioactive progeny (plus Daughters). Cesium-137 progeny is barium-137m; strontium-90 progeny is yttrium-90; thorium-228 progeny include radium-224, radon-220, polonium-216, lead-212, bismuth-212, and thallium-208; uranium-235 progeny is thorium-231, and uranium-238 progeny include thorium-234, protactinium-234m and protactinium-234.

^c Plutonium-239 and plutonium-240 are typically unresolved in laboratory analysis. SALs for the two isotopes are identical.

^d The SAL is the generic soil guideline for release of property published in Chapter 4 ("Residual Radioactive Material") of U.S. Department of Energy (DOE) Order 458.1. For the concentration averaged over the first 15 cm of soil below the surface, 5 pCi/g applies; for subsequent 15-cm-thick layers, the generic soil guideline is 15 pCi/g. If both thorium-230 and radium-226 or both thorium-232 and radium-228 are present and not in secular equilibrium, or if other mixtures of radon-generating radionuclides occur, DOE Order 458.1 presents guidance for establishing soil criteria.

^e The value of 5 pCi/g is protective of all possible recreational activities, including situations where enclosed structures may exist on the site to capture radon gas. In topographically constrained areas where structures are not feasible, such as hillsides or drainages, dose-based SALs may be employed as follows:

- Thorium-230: 68.4 pCi/g at 15 mrem/yr; 114 at 25 mrem/yr (at model year 1000)
- Thorium-232: 24.2 pCi/g at 15 mrem/yr; 40.4 at 25 mrem/yr (at model years 100–1000)

^f The generic soil guideline of 5 pCi/g is not a calculated value.

Table B-2
Primary Exposure Routes Contributing to SALs

Analyte Code	Radionuclide	Exposure Scenarios			
		Residential	Commercial/ Industrial	Construction Worker	Recreational
AM-241	Americium-241	Soil Ingestion: 76% Plant Ingestion: 15% External: 9%	Soil Ingestion: 69% External: 31%	Soil Ingestion: 57% Inhalation: 35% External: 8%	Soil Ingestion: 95% External: 5%
CS-134	Cesium-134	External: 99%	External: 100%	External: 100%	External: 100%
CS-137	Cesium-137+D	External: 99%	External: 100%	External: 99%	External: 99%
CO-60	Cobalt-60	External: 99%	External: 100%	External: 100%	External: 100%
H-3 ^a	Tritium	Plant Ingestion: 100%	Inhalation: 85% Soil Ingestion: 15%	Inhalation: 64% Soil Ingestion: 36%	Inhalation: 60% Soil Ingestion: 40%
I-129	Iodine-129	Plant Ingestion: 78% Soil Ingestion: 19%	Soil Ingestion: 82% External: 18%	Soil Ingestion: 94% External: 6%	Soil Ingestion: 98%
NA-22	Sodium-22	External: 100%	External: 100%	External: 100%	External: 100%
PU-238	Plutonium-238	Soil Ingestion: 83% Plant Ingestion: 17%	Soil Ingestion: 100%	Soil Ingestion: 62% Inhalation: 37%	Soil Ingestion: 100%
PU-239	Plutonium-239	Soil Ingestion: 83% Plant Ingestion: 17%	Soil Ingestion: 100%	Soil Ingestion: 62% Inhalation: 38%	Soil Ingestion: 100%
SR-90	Strontium-90+D	Plant Ingestion: 97%	External: 76% Soil Ingestion: 24%	Soil Ingestion: 51% External: 48%	Soil Ingestion: 83% External: 17%
TC-99	Technetium-99	Plant Ingestion: 100%	Soil Ingestion: 71% External: 29%	Soil Ingestion: 87% External: 11%	Soil Ingestion: 98%
TH-228	Thorium-228+D	External: 91% Soil Ingestion: 7%	External: 99%	External: 97%	External: 86% Soil Ingestion: 14%
TH-230	Thorium-230	n/a ^b	n/a	n/a	n/a
TH-232	Thorium-232	n/a	n/a	n/a	n/a
U-234 ^c	Uranium-234	Soil Ingestion: 53% Plant Ingestion: 33% External: 14%	Soil Ingestion: 56% External: 44%	Soil Ingestion: 68% Inhalation: 16% External: 16%	Soil Ingestion: 94% External: 6%
U-235 ^c	Uranium-235+D	External: 87% Soil Ingestion: 8% Plant Ingestion: 5%	External: 97%	External: 86% Soil Ingestion: 10%	External: 70% Soil Ingestion: 30%
U-238 ^c	Uranium-238+D	External: 63% Soil Ingestion: 25% Plant Ingestion: 12%	External: 89% Soil Ingestion: 11%	External: 66% Soil Ingestion: 28% Inhalation: 6%	Soil Ingestion: 61% External: 39%

Note: Exposure routes shown, in order of importance, are those whose sum first contributes 95% or more to the SAL.

^a The inhalation pathway incorporates intake of tritium through dermal absorption at 50% of the inhalation rate of water vapor (Yu et al. 2001, 076874, section L.2.4).

^b n/a = Not applicable. The SAL pertains to protection against radon gas based on generic soil guidelines published in DOE Order 458.1.

^c The percent contribution of individual exposure routes to the SAL pertains to the combination of parent and long-lived progeny present at 1000 yr.

REFERENCE

The following list includes all documents cited in this appendix. Parenthetical information following each reference provides the author(s), publication date, and ER ID or ESH ID. This information is also included in text citations. ER IDs were assigned by the Environmental Programs Directorate's Records Processing Facility (IDs through 599999), and ESH IDs are assigned by the Environment, Safety, and Health (ESH) Directorate (IDs 600000 and above). IDs are used to locate documents in the Laboratory's Electronic Document Management System and, where applicable, in the master reference set.

Yu, C.A., A.J. Zielen, J.-J. Cheng, D.J. LePoire, E. Gnanapragasam, S. Kamboj, J. Arnish, A. Wallo, III, W.A. Williams, and H. Peterson, July 2001. "User's Manual for RESRAD Version 6," ANL/EAD-4, Environmental Assessment Division, Argonne National Laboratory, Argonne, Illinois.
(Yu et al. 2001, 076874)

Appendix C

*Interpolated Dose Conversion Factors
for the Residential and Recreational Scenarios
(on CD included with this document)*

The Excel workbook 'DCF interpolation.xlsx' was used to calculate interpolated residential scenario child (age 0 to less than 6 yr) and recreational scenario child (ages 6 to less than 12 yr) DCFs. Note that this workbook contains calculations for radionuclides that are not commonly associated with LANL operations and for which SALs are not generated.

The following is a description of the worksheets contained in 'DCF interpolation.xlsx'.

- inputs. ICRP 72 DCFPAK 3.02 ingestion and inhalation DCFs pasted from the RESRAD Version 7.0 dose conversion factor editor for age groups infant, 1 year, 5 year, 10 year, 15 year, and adult. This worksheet also contains the DCFs for radionuclides that include the contribution of radioactive progeny, and DCFs for these radionuclides (designated with "+D" to signify the value includes the contribution of radioactive daughters) were copied from the RESRAD summary reports.
- inputs +D. ICRP 72 DCFPAK 3.02 ingestion and inhalation DCFs pasted from the RESRAD Version 7.0 dose conversion factor editor for age groups infant, 1 year, 5 year, 10 year, 15 year, and adult. This worksheet also contains the DCFs for the individual progeny radionuclides identified with "+D" in the worksheet 'inputs'.
- calculation. Calculation of interpolated DCFs for the age categories "0 to less than 6 yr" and "6 to less than 12 yr".
- paste to RESRAD. Tabulation of rounded ingestion and inhalation interpolated DCF values for pasting into a new dose library in RESRAD version 7.0.

ICRP 72 (DCFPK 3.02) Age-Dependent Internal Dose Coefficients for RadSAL Radionuclides

	Ing DC (mrem/pCi)	Inh DC (mrem/pCi)		Ing DC (mrem/pCi)	Inh DC (mrem/pCi)		Ing DC (mrem/pCi)	Inh DC (mrem/pCi)		Ing DC (mrem/pCi)	Inh DC (mrem/pCi)		Ing DC (mrem/pCi)	Inh DC (mrem/pCi)		Ing DC (mrem/pCi)	Inh DC (mrem/pCi)
Am-241			H-3			I-129			Th-228+D			Pu-238			U-234		
infant	1.376E-02	6.881E-01	infant	2.786E-07	2.347E-07	infant	6.956E-04	6.315E-04	infant	2.426E-02	7.039E-01	infant	1.473E-02	7.351E-01	infant	1.365E-03	1.225E-01
1 yr	1.388E-03	6.567E-01	1 yr	2.039E-07	1.796E-07	1 yr	8.140E-04	7.388E-04	1 yr	4.023E-03	5.806E-01	1 yr	1.480E-03	7.066E-01	1 yr	4.958E-04	1.067E-01
5 yr	1.014E-03	4.543E-01	5 yr	1.251E-07	1.137E-07	5 yr	6.512E-04	5.919E-04	5 yr	2.212E-03	3.309E-01	5 yr	1.132E-03	5.120E-01	5 yr	3.271E-04	6.926E-02
10 yr	8.214E-04	3.737E-01	10 yr	9.065E-08	8.413E-08	10 yr	7.104E-04	6.452E-04	10 yr	1.531E-03	2.217E-01	10 yr	9.028E-04	4.132E-01	10 yr	2.757E-04	4.499E-02
15 yr	7.548E-04	3.432E-01	15 yr	7.067E-08	6.656E-08	15 yr	5.291E-04	4.787E-04	15 yr	1.115E-03	1.907E-01	15 yr	8.140E-04	3.718E-01	15 yr	2.757E-04	3.792E-02
Co-60			Sr-90+D			Tc-99			Th-230			Pu-239			U-235+D		
infant	2.009E-04	3.388E-04	infant	9.553E-04	1.575E-03	infant	3.811E-05	1.497E-04	infant	1.532E-02	7.666E-01	infant	1.550E-02	7.762E-01	infant	1.317E-03	1.112E-01
1 yr	9.916E-05	3.173E-04	1 yr	3.415E-04	1.487E-03	1 yr	1.765E-05	1.350E-04	1 yr	1.517E-03	7.351E-01	1 yr	1.561E-03	7.532E-01	1 yr	4.865E-04	9.679E-02
5 yr	6.253E-05	2.178E-04	5 yr	2.096E-04	1.008E-03	5 yr	8.510E-06	8.898E-05	5 yr	1.143E-03	5.216E-01	5 yr	1.232E-03	5.609E-01	5 yr	3.191E-04	6.278E-02
10 yr	4.144E-05	1.491E-04	10 yr	2.423E-04	6.842E-04	10 yr	4.847E-06	6.082E-05	10 yr	9.102E-04	4.177E-01	10 yr	1.003E-03	4.613E-01	10 yr	2.665E-04	4.058E-02
15 yr	2.938E-05	1.266E-04	15 yr	3.032E-04	5.948E-04	15 yr	3.049E-06	5.372E-05	15 yr	8.103E-04	3.703E-01	15 yr	9.102E-04	4.158E-01	15 yr	2.613E-04	3.400E-02
Cs-134			Cs-137+D			Na-22			Th-232						U-238+D		
infant	9.546E-05	2.577E-04	infant	7.807E-05	4.073E-04	infant	7.585E-05	3.572E-04	infant	1.713E-02	8.594E-01				infant	1.402E-03	1.056E-01
1 yr	5.809E-05	2.336E-04	1 yr	4.588E-05	3.818E-04	1 yr	5.439E-05	3.267E-04	1 yr	1.691E-03	8.331E-01				1 yr	5.509E-04	9.205E-02
5 yr	4.884E-05	1.535E-04	5 yr	3.593E-05	2.584E-04	5 yr	3.127E-05	2.162E-04	5 yr	1.325E-03	6.104E-01				5 yr	3.485E-04	5.974E-02
10 yr	5.217E-05	1.036E-04	10 yr	3.774E-05	1.762E-04	10 yr	2.039E-05	1.461E-04	10 yr	1.069E-03	4.961E-01				10 yr	2.813E-04	3.852E-02
15 yr	7.030E-05	8.576E-05	15 yr	4.958E-05	1.532E-04	15 yr	1.388E-05	1.213E-04	15 yr	9.361E-04	4.303E-01				15 yr	2.662E-04	3.218E-02

ICRP 72 DCFPAK 3.02 dose coefficients were pasted from RESRAD Version 7.0 dose conversion factor editor, or copied from summary report files (for the '+D' DCF values that include progeny contribution).
Inhalation dose coefficients are for the most protective lung clearance class (excepting tritium, where the value for water vapor is used).

ICRP 72 (DCFPK 3.02) Age-Dependent Internal Dose Coefficients - components of '+D' radionuclides that include progeny contribution

	Ing DC (mrem/pCi)	Inh DC (mrem/pCi)		Ing DC (mrem/pCi)	Inh DC (mrem/pCi)		Ing DC (mrem/pCi)	Inh DC (mrem/pCi)		Ing DC (mrem/pCi)	Inh DC (mrem/pCi)		Ing DC (mrem/pCi)	Inh DC (mrem/pCi)
Cs-137			Ba-137m	(-2 value in RESRAD)		Sr-90			Y-90			Pa-234		
infant	7.807E-05	4.073E-04	infant	0.000E+00	0.000E+00	infant	8.399E-04	1.527E-03	infant	1.154E-04	4.802E-05	infant	1.517E-05	9.086E-06
1 yr	4.588E-05	3.818E-04	1 yr	0.000E+00	0.000E+00	1 yr	2.675E-04	1.454E-03	1 yr	7.400E-05	3.268E-05	1 yr	9.916E-06	6.589E-06
5 yr	3.593E-05	2.584E-04	5 yr	0.000E+00	0.000E+00	5 yr	1.728E-04	9.919E-04	5 yr	3.685E-05	1.563E-05	5 yr	5.180E-06	3.350E-06
10 yr	3.774E-05	1.762E-04	10 yr	0.000E+00	0.000E+00	10 yr	2.205E-04	6.741E-04	10 yr	2.179E-05	1.010E-05	10 yr	3.182E-06	2.223E-06
15 yr	4.958E-05	1.532E-04	15 yr	0.000E+00	0.000E+00	15 yr	2.908E-04	5.882E-04	15 yr	1.236E-05	6.582E-06	15 yr	1.943E-06	1.566E-06
Po216	(-2 value in RESRAD)		Pb-212			Bi212			Th-228			Ra-224		
infant	0.000E+00	0.000E+00	infant	5.291E-04	2.770E-03	infant	1.195E-05	6.093E-04	infant	1.369E-02	6.552E-01	infant	1.003E-02	4.532E-02
1 yr	0.000E+00	0.000E+00	1 yr	2.353E-04	1.872E-03	1 yr	6.660E-06	4.380E-04	1 yr	1.369E-03	5.442E-01	1 yr	2.412E-03	3.405E-02
5 yr	0.000E+00	0.000E+00	5 yr	1.221E-04	1.221E-03	5 yr	3.260E-06	2.400E-04	5 yr	8.103E-04	3.074E-01	5 yr	1.277E-03	2.205E-02
10 yr	0.000E+00	0.000E+00	10 yr	7.548E-05	9.193E-04	10 yr	1.883E-06	1.758E-04	10 yr	5.069E-04	2.042E-01	10 yr	9.472E-04	1.639E-02
15 yr	0.000E+00	0.000E+00	15 yr	4.625E-05	8.872E-04	15 yr	1.228E-06	1.506E-04	15 yr	3.463E-04	1.741E-01	15 yr	7.215E-04	1.557E-02
U-235			Th-231			U-238			Po-212	(-2 value in RESRAD)		Tl-208	(-2 value in RESRAD)	
infant	1.302E-03	1.112E-01	infant	1.439E-05	8.716E-06	infant	1.240E-03	1.054E-01	infant	0.000E+00	0.000E+00	infant	0.000E+00	0.000E+00
1 yr	4.773E-04	9.678E-02	1 yr	9.213E-06	6.101E-06	1 yr	4.477E-04	9.193E-02	1 yr	0.000E+00	0.000E+00	1 yr	0.000E+00	0.000E+00
5 yr	3.145E-04	6.278E-02	5 yr	4.588E-06	2.997E-06	5 yr	2.967E-04	5.967E-02	5 yr	0.000E+00	0.000E+00	5 yr	0.000E+00	0.000E+00
10 yr	2.638E-04	4.058E-02	10 yr	2.716E-06	1.936E-06	10 yr	2.505E-04	3.848E-02	10 yr	0.000E+00	0.000E+00	10 yr	0.000E+00	0.000E+00
15 yr	2.597E-04	3.400E-02	15 yr	1.543E-06	1.512E-06	15 yr	2.486E-04	3.214E-02	15 yr	0.000E+00	0.000E+00	15 yr	0.000E+00	0.000E+00
									Th234			Pa-234m	(-2 value in RESRAD)	
									infant	1.473E-04	1.509E-04	infant	0.000E+00	0.000E+00
									1 yr	9.324E-05	1.128E-04	1 yr	0.000E+00	0.000E+00
									5 yr	4.662E-05	6.267E-05	5 yr	0.000E+00	0.000E+00
									10 yr	2.760E-05	4.255E-05	10 yr	0.000E+00	0.000E+00
									15 yr	1.561E-05	3.363E-05	15 yr	0.000E+00	0.000E+00
ICRP 72 DCFPAK 3.02 dose coefficients were pasted from RESRAD Version 7.0 dose conversion factor editor.														
Inhalation dose coefficients are for the most protective lung clearance class.														

ICRP 72 DCFPAK 3.02 dose coefficients were pasted from RESRAD Version 7.0 dose conversion factor editor.
Inhalation dose coefficients are for the most protective lung clearance class.

Linear Interpolation of ICRP 72 (DCFPK 3.02) Age-Dependent Internal Dose Coefficients for RadSALs

Values from cells K4:N4 for the DCs entered in B5:C10 are pasted by row 1

		ICRP			
		category	year	Ing DC	Inh DC
		infant	0.25	1.376E-02	6.881E-01
infant	Ing DC	1-year	1	1.388E-03	6.567E-01
1 yr	Inh DC		2	1.294E-03	6.061E-01
5 yr			3	1.201E-03	5.555E-01
10 yr			4	1.107E-03	5.049E-01
15 yr		5-year	5	1.014E-03	4.543E-01
			6	9.753E-04	4.382E-01
			7	9.368E-04	4.221E-01
			8	8.984E-04	4.059E-01
			9	8.599E-04	3.898E-01
		10-year	10	8.214E-04	3.737E-01
			11	8.081E-04	3.676E-01
			12	7.948E-04	3.615E-01
			13	7.814E-04	3.554E-01
			14	7.681E-04	3.493E-01
		15-year	15	7.548E-04	3.432E-01

copied from input sheets

	INGESTION		INHALATION	
	0-5 yr avg	6-11 yr avg	0-5 yr avg	6-11 yr avg
	3.295E-03	8.833E-04	5.776E-01	3.996E-01
Am241	3.295E-03	8.833E-04	5.776E-01	3.996E-01
Co60	1.009E-04	4.807E-05	2.794E-04	1.713E-04
Cs134	6.046E-05	5.166E-05	2.042E-04	1.196E-04
Cs137	4.710E-05	3.753E-05	3.346E-04	2.028E-04
Ba137m	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Cs137+D	4.710E-05	3.753E-05	3.346E-04	2.028E-04
H3	1.835E-07	1.015E-07	1.613E-07	9.340E-08
I129	7.264E-04	6.846E-04	6.597E-04	6.219E-04
Na22	4.833E-05	2.380E-05	2.857E-04	1.686E-04
Pu238	3.543E-03	9.763E-04	6.303E-01	4.448E-01
Pu239	3.748E-03	1.076E-03	6.769E-01	4.930E-01
Sr90	3.234E-04	2.070E-04	1.274E-03	7.772E-04
Y90	6.543E-05	2.650E-05	2.813E-05	1.183E-05
Sr90+D	3.888E-04	2.334E-04	1.302E-03	7.892E-04
Tc99	1.725E-05	6.008E-06	1.183E-04	6.997E-05
Th228	3.190E-03	6.027E-04	4.640E-01	2.376E-01
Ra224	3.208E-03	1.049E-03	3.093E-02	1.825E-02
Po216	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb212	2.371E-04	9.005E-05	1.750E-03	1.019E-03
Bi212	6.125E-06	2.320E-06	3.841E-04	1.964E-04
Po212	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Tl208	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Th228+D	6.641E-03	1.744E-03	4.971E-01	2.571E-01
Th230	3.661E-03	9.846E-04	6.514E-01	4.508E-01
Th232	4.112E-03	1.150E-03	7.447E-01	5.320E-01
U234	5.704E-04	2.928E-04	9.373E-02	5.284E-02
U235	5.470E-04	2.806E-04	8.502E-02	4.776E-02
Th231	8.149E-06	3.301E-06	5.244E-06	2.276E-06
U235+D	5.552E-04	2.839E-04	8.502E-02	4.776E-02
U238	5.168E-04	2.658E-04	8.073E-02	4.533E-02
Th234	8.282E-05	3.354E-05	9.826E-05	4.896E-05
Pa234m	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pa234	8.818E-06	3.807E-06	5.656E-06	2.577E-06
U238+D	6.084E-04	3.032E-04	8.085E-02	4.538E-02

6 - 11 yr interpolated values for pasting to RESRAD DCF Editor

	ing	inh		ing	inh
Am241	8.833E-04	3.996E-01	Am241	8.833E-04	3.996E-01
Co60	4.807E-05	1.713E-04	Co60	4.807E-05	1.713E-04
Cs134	5.166E-05	1.196E-04	Cs134	5.166E-05	1.196E-04
Cs137	3.753E-05	2.028E-04	Cs137	3.753E-05	2.028E-04
Ba137m	0.000E+00	0.000E+00	Ba137m	0.000E+00	0.000E+00
H3	1.015E-07	9.340E-08	H3	1.015E-07	9.340E-08
I129	6.846E-04	6.219E-04	I129	6.846E-04	6.219E-04
Na22	2.380E-05	1.686E-04	Na22	2.380E-05	1.686E-04
Pu238	9.763E-04	4.448E-01	Pu238	9.763E-04	4.448E-01
Pu239	1.076E-03	4.930E-01	Pu239	1.076E-03	4.930E-01
Sr90	2.070E-04	7.772E-04	Sr90	2.070E-04	7.772E-04
Y90	2.650E-05	1.183E-05	Y90	2.650E-05	1.183E-05
Tc99	6.008E-06	6.997E-05	Tc99	6.008E-06	6.997E-05
Th228	6.027E-04	2.376E-01	Th228	6.027E-04	2.376E-01
Ra224	1.049E-03	1.825E-02	Ra224	1.049E-03	1.825E-02
Po216	0.000E+00	0.000E+00	Po216	0.000E+00	0.000E+00
Pb212	9.005E-05	1.019E-03	Pb212	9.005E-05	1.019E-03
Bi212	2.320E-06	1.964E-04	Bi212	2.320E-06	1.964E-04
Po212	0.000E+00	0.000E+00	Po212	0.000E+00	0.000E+00
Tl208	0.000E+00	0.000E+00	Tl208	0.000E+00	0.000E+00
Th230	9.846E-04	4.508E-01	Th230	9.846E-04	4.508E-01
Th232	1.150E-03	5.320E-01	Th232	1.150E-03	5.320E-01
U234	2.928E-04	5.284E-02	U234	2.928E-04	5.284E-02
U235	2.806E-04	4.776E-02	U235	2.806E-04	4.776E-02
Th231	3.301E-06	2.276E-06	Th231	3.301E-06	2.276E-06
U238	2.658E-04	4.533E-02	U238	2.658E-04	4.533E-02
Th234	3.354E-05	4.896E-05	Th234	3.354E-05	4.896E-05
Pa234m	0.000E+00	0.000E+00	Pa234m	0.000E+00	0.000E+00
Pa234	3.807E-06	2.577E-06	Pa234	3.807E-06	2.577E-06

0 - 5 yr interpolated values for pasting to RESRAD DCF Editor

	ing	inh		ing	inh
Am241	3.295E-03	5.776E-01	Am241	3.295E-03	5.776E-01
Co60	1.009E-04	2.794E-04	Co60	1.009E-04	2.794E-04
Cs134	6.046E-05	2.042E-04	Cs134	6.046E-05	2.042E-04
Cs137	4.710E-05	3.346E-04	Cs137	4.710E-05	3.346E-04
Ba137m	0.000E+00	0.000E+00	Ba137m	0.000E+00	0.000E+00
H3	1.835E-07	1.613E-07	H3	1.835E-07	1.613E-07
I129	7.264E-04	6.597E-04	I129	7.264E-04	6.597E-04
Na22	4.833E-05	2.857E-04	Na22	4.833E-05	2.857E-04
Pu238	3.543E-03	6.303E-01	Pu238	3.543E-03	6.303E-01
Pu239	3.748E-03	6.769E-01	Pu239	3.748E-03	6.769E-01
Sr90	3.234E-04	1.274E-03	Sr90	3.234E-04	1.274E-03
Y90	6.543E-05	2.813E-05	Y90	6.543E-05	2.813E-05
Tc99	1.725E-05	1.183E-04	Tc99	1.725E-05	1.183E-04
Th228	3.190E-03	4.640E-01	Th228	3.190E-03	4.640E-01
Ra224	3.208E-03	3.093E-02	Ra224	3.208E-03	3.093E-02
Po216	0.000E+00	0.000E+00	Po216	0.000E+00	0.000E+00
Pb212	2.371E-04	1.750E-03	Pb212	2.371E-04	1.750E-03
Bi212	6.125E-06	3.841E-04	Bi212	6.125E-06	3.841E-04
Po212	0.000E+00	0.000E+00	Po212	0.000E+00	0.000E+00
Tl208	0.000E+00	0.000E+00	Tl208	0.000E+00	0.000E+00
Th230	3.661E-03	6.514E-01	Th230	3.661E-03	6.514E-01
Th232	4.112E-03	7.447E-01	Th232	4.112E-03	7.447E-01
U234	5.704E-04	9.373E-02	U234	5.704E-04	9.373E-02
U235	5.470E-04	8.502E-02	U235	5.470E-04	8.502E-02
Th231	8.149E-06	5.244E-06	Th231	8.149E-06	5.244E-06
U238	5.168E-04	8.073E-02	U238	5.168E-04	8.073E-02
Th234	8.282E-05	9.826E-05	Th234	8.282E-05	9.826E-05
Pa234m	0.000E+00	0.000E+00	Pa234m	0.000E+00	0.000E+00
Pa234	8.818E-06	5.656E-06	Pa234	8.818E-06	5.656E-06