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Derivation of Authorized Limits for Land Transfer at Los Alamos National Laboratory



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(on CD included with this document)

Acronyms

ALARA	as low as reasonably achievable
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
PA/CA	performance assessment/composite analysis
RESRAD	residual radioactivity (computer code)
RME	reasonable maximum exposure
SSL	soil screening level

1.0 INTRODUCTION

This report documents the calculation of Authorized Limits for radionuclides in soil to be used in the transfer of property by the Los Alamos National Laboratory (LANL or the Laboratory). The Authorized Limits support the evaluation process to clear land for release under different uses even though the soil contains small residual amounts of radioactivity. The Authorized Limits are developed for four exposure scenarios: residential, commercial/industrial, construction worker, and recreational. Exposure to radionuclides in soil under these scenarios is assessed for exposure routes that include 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.

The residual radioactivity (RESRAD) computer code, Version 7.0, developed by Argonne National Laboratory for the U.S. Department of Energy (DOE), is used to calculate the Authorized Limits presented in this report. 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). 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).

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. 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).

The dose conversion factors (DCFs) used in the Authorized Limits calculations to quantify dose for ingestion, inhalation, and external irradiation exposures 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) and are summarized in ICRP Publication 72 (ICRP 1996) and ICRP Publication 119 (ICRP 2012). For the residential and recreational scenarios, which include both child and adult exposures, DOE's gender- and age-averaged Reference Person DCFs are used. These DCFs are based on the age and gender profile of the U.S. population from the U.S. Census 2000 (DOE 2011, 600493). An adult receptor is evaluated for the industrial and construction worker scenarios. Because these scenarios do not integrate exposures for ages other than an adult, adult DCFs are appropriate for calculation of these Authorized Limits. The external DCFs for all scenarios used in the Authorized Limits calculations originate with Federal Guidance Report (FGR) 12 (EPA 1993). Both the internal and external DCFs in RESRAD used in the calculation of Authorized Limits have been updated with recent nuclear decay information from the database described in ICRP Publication 107 (ICRP 2008).

2.0 OBJECTIVES

The primary purpose of this report is to document the technical bases and assumptions for calculating Authorized Limits for soil. Soil may include hillside colluvium and alluvial sediment as well as mesa-top soil, fill, and tuff. The Authorized Limits described in this report are applicable to individual sites, areas, and watersheds. The list of radionuclides for which Authorized Limits are calculated is based upon the radionuclides historically used and/or produced by Laboratory operations and typically detected at one or more sites.

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 Authorized 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 Limits is impractical or inappropriate, DOE may approve a supplemental limit that also complies with the primary dose limit of 100 mrem/yr above background.

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 basis for Authorized Limits. The Authorized Limits presented in this report are calculated using RESRAD Version 7.0 (printouts of RESRAD Summary Reports are provided in Appendix A on CD).

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). The residential

scenario is typically 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 area (LANL 2007; LANL 2015).

The Authorized Limits are based on the soil guideline values (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 Authorized Limits calculations are provided in Appendix A (on CD) and the Authorized Limits are presented for each scenario in Table 5.0-1.

The exposure pathways used to calculate Authorized Limits 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 included in the residential scenario. There are no Authorized Limits 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 and the primary exposure pathway(s) contributing to each Authorized Limit are presented in Table 5.0-3.

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 parameters related to the nature and intensity of human exposure at the contaminated site and the age-dependent DCFs. 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. The primary sources of exposure parameter values that vary across scenarios are New Mexico Environment Department’s (NMED’s) risk assessment guidance for investigations and remediation (NMED 2015) and EPA’s Exposure Factors Handbook (EFH) (EPA 2011). The selected parameter values are intended to provide estimates of “reasonable maximum exposure” (RME) for each exposure scenario (EPA 2014).

**Table 5.0-1
Radionuclide Authorized Limits Calculated Using RESRAD Version 7.0**

Radionuclide	Residential (pCi/g)	Industrial (pCi/g)	Construction Worker (pCi/g)	Recreational (pCi/g)	Time at which Authorized Limit Applies ^a (yr)
Americium-241	320	1000	230	3200	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	150	2300	710	6600	0.0
Plutonium-238	440	1300	230	3200	0.0
Plutonium-239/240 ^c	400	1200	200	2900	0.0
Sodium-22	3.4	11	10	100	0.0
Strontium-90+D ^b	36	2400	1400	12,000	0.0
Technetium-99	99	330,000	110,000	860,000	0.0
Thorium-228+D ^b	4.9	17	15	150	0.0
Thorium-230 ^d	5	5	5	5	Not applicable
Thorium-232 ^d	5	5	5	5	Not applicable
Tritium	3700	2,400,000	1,600,000	8,200,000	0.0
Uranium-234	710	3100	1000	11,000	1000
Uranium-235+D ^b	46	160	130	1300	1000
Uranium-238+D ^c	200	710	470	4800	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. Authorized Limits for the two isotopes are identical.

^d The Authorized Limit 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 guidelines.

**Table 5.0-2
Scenario-Specific Exposure Routes**

Exposure Routes	Residential	Commercial/ Industrial	Construction Worker	Recreational
Incidental soil ingestion	X	X	X	X
Inhalation of soil particulates	X	X	X	X
External irradiation from soil	X	X	X	X
Tritium—inhale 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.

**Table 5.0-3
Primary Exposure Routes Contributing to Authorized Limits**

Analyte Code	Radionuclide	Exposure Scenarios			
		Residential	Commercial/ Industrial	Construction Worker	Recreational
AM-241	Americium-241	Soil Ingestion: 49% External: 33% Plant Ingestion: 17%	Soil Ingestion: 69% External: 31%	Soil Ingestion: 57% Inhalation: 35% External: 8%	Soil Ingestion: 89% External: 11%
CS-134	Cesium-134	External: 99%	External: 100%	External: 100%	External: 100%
CS-137	Cesium-137+D	External: 98%	External: 100%	External: 99%	External: 99%
CO-60	Cobalt-60	External: 100%	External: 100%	External: 100%	External: 100%
H-3*	Tritium	Plant Ingestion: 96%	Inhalation: 85% Soil Ingestion: 15%	Inhalation: 64% Soil Ingestion: 36%	Inhalation: 97%
I-129	Iodine-129	Plant Ingestion: 84% Soil Ingestion: 12%	Soil Ingestion: 82% External: 18%	Soil Ingestion: 94% External: 6%	Soil Ingestion: 94% External: 6%
NA-22	Sodium-22	External: 100%	External: 100%	External: 100%	External: 100%
PU-238	Plutonium-238	Soil Ingestion: 74% Plant Ingestion: 26%	Soil Ingestion: 100%	Soil Ingestion: 62% Inhalation: 37%	Soil Ingestion: 100%
PU-239	Plutonium-239	Soil Ingestion: 74% Plant Ingestion: 26%	Soil Ingestion: 100%	Soil Ingestion: 62% Inhalation: 38%	Soil Ingestion: 100%
SR-90	Strontium-90+D	Plant Ingestion: 95%	External: 76% Soil Ingestion: 24%	Soil Ingestion: 51% External: 48%	Soil Ingestion: 57% External: 43%
TC-99	Technetium-99	Plant Ingestion: 100%	Soil Ingestion: 71% External: 29%	Soil Ingestion: 87% External: 11%	Soil Ingestion: 92% External: 8%
TH-228	Thorium-228+D	External: 99%	External: 99%	External: 97%	External: 96%
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	Plant Ingestion: 36% External: 34% Soil Ingestion: 30%	Soil Ingestion: 56% External: 44%	Soil Ingestion: 68% Inhalation: 16% External: 16%	Soil Ingestion: 83% External: 17%
U-235 ^c	Uranium-235+D	External: 95%	External: 97%	External: 86% Soil Ingestion: 10%	External: 88% Soil Ingestion: 12%
U-238 ^c	Uranium-238+D	External: 86% Soil Ingestion 7% Plant Ingestion: 7%	External: 89% Soil Ingestion: 11%	External: 66% Soil Ingestion: 28% Inhalation: 6%	External: 67% Soil Ingestion: 33%

Note: Exposure routes shown, in order of importance, are those whose sum first contributes 95% or more to the Authorized Limit.

" +D" indicates these Authorized Limits include the contribution to dose of radioactive progeny (aka, daughters).

* The inhalation pathway incorporates intake of tritium through dermal absorption at 50% of the inhalation rate of water vapor (Yu et al. 2001, section L.2.4).

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 links between those components of the model describing human exposure and those governing the physical transport of radionuclides over time. In one instance, it was necessary to modify an exposure parameter value to account for a time-based weighting used in RESRAD. Specifically, the daily soil ingestion rate parameter value was modified for application in RESRAD to assign 100% of the intake to time spent on-site (see Table 6.1-1).

6.1.1 Residential Scenario Variable Exposure Parameters

Residential exposure pertains to both adults and children. Authorized Limits are calculated for a time-integrated exposure of 26 years, beginning from birth. A total residential exposure duration of 26 years, with 6 years assigned to a child and 20 years to an adult, is based on recommendations in both NMED (NMED 2015) and EPA (EPA 2014) risk assessment screening guidance. 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) as well as from NMED guidance (NMED 2015). These values represent a RME. 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: Time-Weighted Variable Exposure Parameters**

Parameters	Value
Inhalation rate (m ³ /yr)	7072 ^a
Mass loading (g/m ³)	1.51 × 10 ^{-7b}
Outdoor time fraction	0.0932 ^c
Indoor-time fraction	0.8648 ^d
Soil ingestion (g/yr)	44.9 ^e
Fruit and vegetable ingestion (kg/yr)	15.2 ^f

^a Calculated as (6 yr/26 yr × 4712 m³/yr) + (20 yr/26 yr × 7780 m³/yr). 4712 m³/yr is from 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). 7780 m³/yr is from 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, Table 6-1).

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

^c Calculated as (6 yr/26 yr × 0.0926) + (20 yr/26 yr × 0.0934). 0.0926 is from (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, Table 16-1) and is comparable with the adult time spent outdoors at a residence. 0.0934 is from (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, 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, Table 16-22).

^d Evaluated based on remaining time not spent outdoors. Calculated as (6 yr/26 yr × 0.8656) + (20 yr/26 yr × 0.8648). 0.8656 is from [(24 h/d–2.32 h/d) × 350 d/yr] / 8766 h/yr. 0.8648 is from [(24 h/d–2.34 h/d) × 350 d/yr] / 8766 h/yr.

^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 (6 yr/26 yr × 73 g/yr) + (20 yr/26 yr × 36.5 g/yr). 73 g/yr comes from [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; EPA 2011, Table 5-1). 36.5 g/yr comes from [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).

^f See text for derivation.

Fruit and vegetable ingestion rate data are described in the EFH (EPA 2011) 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), 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). Rather than speculate on the fraction of home-produced foods originating from a home garden, the ingestion rate data from Chapter 13 (EPA 2011) 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). 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, Tables 13-1, 8-10, and 8-13). The adult mean plant ingestion rate is based on ages 21 to 65 yr (EPA 2011, 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).

Because the plant-ingestion rate values 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), consumer-only intake values may overestimate exposure over residential scenario time periods that are much longer than a 1-wk survey. Authorized Limits integrate a 26-year exposure period. 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. The average percent decrease in weight is approximately 30% for fruits and 20% for vegetables (EFH 2011, Table 13-69).

The inputs from Tables 13-1, 8-1, 8-10, and 8-13 of the EFH (EPA 2011) 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 relevant 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)

**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

* 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.

A 26-year time-integrated plant-ingestion rate was calculated by summing the age-weighted total produce ingestion rates shown in Table 6.1-3. The calculation of 15.2 kg/yr is as follows:

$$(2 \text{ yr}/26 \text{ yr} \times 10.2 \text{ kg/yr}) + (3 \text{ yr}/26 \text{ yr} \times 11.8 \text{ kg/yr}) + (5 \text{ yr}/26 \text{ yr} \times 12.6 \text{ kg/yr}) + (10 \text{ yr}/26 \text{ yr} \times 15.3 \text{ kg/yr}) + (6 \text{ yr}/26 \text{ yr} \times 20.7 \text{ kg/yr})$$

Equation 6.1-1

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) as well as those obtained from the EFH (EPA 2011). These values and their derivation (described in table notes) are presented in Table 6.1-4.

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

Parameters	Value
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 m³/d × 365.25 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, Table 6-1).

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

^c Calculated as (8 h/d × 225 d/yr) / 8766 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).

^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).

^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 g/d × 225 d/yr] / [indoor + outdoor time fractions], where 0.1 g/d is the site-related daily adult soil-ingestion rate (NMED 2015).

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) as well as those obtained from the EFH (EPA 2011). These values and their derivation (described in the table notes) are presented in Table 6.1-5.

**Table 6.1-5
Construction Worker Scenario: Variable Exposure Parameters**

Parameters	Value
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 m³/d × 365.25 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, Table 6-1).

^b Calculated as (1 / 2.1 × 10⁶ m³/kg) × 1000 g/kg, where 2.1 × 10⁶ m³/kg is the particulate emission factor (NMED 2015).

^c Calculated as (8 h/d × 250 d/yr) / 8766 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).

^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 g/d × 250 d/yr] / [indoor + outdoor time fractions], where 0.33 g/d is the site-related daily soil ingestion rate for a construction worker (NMED 2015).

6.1.4 Recreational Scenario Variable Exposure Parameters

A recreational exposure 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 (LANL 2015). Authorized Limits are calculated for a time-integrated exposure of 26 years, beginning at age 6 yr. A total exposure duration of 26 years is based on recommendations for residential exposure in both NMED (NMED 2015) and EPA (2014) risk assessment screening guidance. The recreational parameter values were obtained from NMED guidance (NMED 2015) and the EFH (EPA 2011) and their derivation (described in the table notes) is 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 at a site or an area that is accessible. The 200-d/yr exposure frequency is equivalent to 4 d/wk for 50 wk/yr.

**Table 6.1-6
Recreational Scenario: Time-Weighted Variable Exposure Parameters**

Parameters	Value
Inhalation rate (m ³ /yr)	18,650 ^a
Mass loading (g/m ³)	1.51 × 10 ^{-7b}
Outdoor time fraction	0.0228 ^c
Indoor time fraction	0
Soil ingestion (g/yr)	350 ^d

^a Calculated as (5 yr/26 yr × 15,250 m³/yr) + (21 yr/26 yr × 19,460 m³/yr). 15,250 m³/yr is from (0.029 m³/min × 60 min/h × 24 h/d × 365.25 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, Table 6-2). 19,460 m³/yr is from (0.037 m³/min × 60 min/h × 24 h/d × 365.25 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, Table 6-2).

^b Calculated as (1 / 6.61 × 10⁹ m³/kg) × 1000 g/kg, where 6.61 × 10⁹ m³/kg is the particulate emission factor used for residential and industrial scenarios (NMED 2015).

^c Calculated as (1 h/d × 200 d/yr) / 8766 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 2015b).

^d 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 (5 yr/26 yr × 797 g/yr) + (21 yr/26 yr × 244 g/yr). 797 g/yr is from [(0.2 g/d / 2.2 h/d) × 1 h/d × 200 d/yr] / [indoor + 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, Table 5-1; NMED 2015, 600575). 244 g/yr is from [(0.1 g/d / 3.6 h/d) × 1 h/d × 200 d/yr] / [indoor + 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, Table 16-1) and where 0.1 g/d is the adult soil ingestion rate (NMED 2015).

6.1.5 Dose Conversion Factors

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). The ICRP 72 DCFs are based on the internal dosimetry methodology described in ICRP Publication 60 (ICRP 1991). The age dependency of the DCFs is particularly significant for the residential and recreational scenarios, which include exposure of individuals younger than adults. 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), and the resulting DCFs are referred to as “DCFPAK 3.02” in RESRAD’s library of dose coefficients.

The Authorized Limits published in this report use the DCFPAK 3.02 internal DCFs available in RESRAD Version 7.0. The adult DCFPAK 3.02 DCFs were used to calculate the Authorized Limits 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). 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. Reference Person DCFs were applied in the calculation of Authorized Limits for the residential and recreational scenarios.

The external DCFs used in the Authorized Limits dose calculations 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 dosimetry described in FGR 12 (EPA 1993). Both internal and external DCFs 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. However, the relevant form of tritium related to Laboratory operations and environmental sampling is tritiated water. Authorized Limits for tritium 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 Authorized Limits 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 Authorized Limits for certain radionuclides associated with the ingrowth of radioactive progeny, such as isotopes of uranium.

To calculate Authorized Limits applicable to 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.

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). Because only 10% to 15% of the suspended dust at the theoretical site used in the 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, an analogous 250-acre site would still have an area factor of less than 20%.

The evapotranspiration coefficient 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 the contaminated zone 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 soil criteria. 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 soil criterion for tritium. Additionally, the soil-erosion rate has been set at zero. 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 Authorized Limits (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.

Authorized Limits 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 Authorized Limits 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 Authorized Limits 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 the Authorized Limits calculations).

**Table 6.2-1
Unchanging RESRAD Input Parameters**

RESRAD Data Field	Parameter	Units	Values	Rationale
Soil Concentration	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, 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
	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 2015)
	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 2015)

Table 6.2-1 (continued)

RESRAD Data Field	Parameter	Units	Values	Rationale
	Precipitation	m/yr	0.29	Lower 5 th percentile of annual precipitation (LANL 2015); 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
Cover and CZ Hydrological Data (continued)	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)
	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, Appendix 2e)
	Effective porosity	unitless	0.40	Calculated as total porosity minus water content of approximately 0.08 (Hollis et al. 1997, 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
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

Table 6.2-1 (continued)

RESRAD Data Field	Parameter	Units	Values	Rationale
	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

7.0 APPLICATION OF AUTHORIZED LIMITS

To determine the applicability of Authorized Limits to a particular site or area 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 Authorized Limits, a comparison of site data to Authorized Limits 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 Authorized Limits. 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. Appendix K of Yu et al. (2001) 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.

Authorized Limits 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 Authorized Limit. 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 25 mrem/yr dose limit. This is accomplished by dividing the soil concentration of each radionuclide by the Authorized Limit for that radionuclide to produce a ratio, and then summing the ratios. If the sum exceeds a value of 1.0, then the dose for a hypothetical receptor exceeds 25 mrem/yr.

8.0 SUMMARY

In summary, Authorized Limits are applicable for evaluating the release of land containing small residual amounts of radioactivity under different uses. The limits are protectively biased within the bounds of the assumptions used in the calculations. The user must verify these bounds are appropriate for applying the Authorized Limits at a specific site. The applicability of the Authorized Limits can be established by comparing the conceptual model underlying the Authorized Limits, described in this document, with site-specific conditions.

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Appendix A

*Scenario-Specific RESRAD
Summary Reports for Authorized Limits*

The 25-mrem/yr summary reports from the 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 Authorized Limits for each scenario. 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.

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Dose Conversion Factor (and Related) Parameter Summary

Dose Library: DOE STD (RefPer) HTO Plus DOE STD-1196-2011 (Reference Person)

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	Pb-214 (Source: DCFPAK3.02)	1.257E+00	1.257E+00	DCF1(40)
A-1	Po-210 (Source: DCFPAK3.02)	5.641E-05	5.642E-05	DCF1(41)
A-1	Po-211 (Source: DCFPAK3.02)	4.707E-02	4.708E-02	DCF1(42)
A-1	Po-212 (Source: DCFPAK3.02)	0.000E+00	0.000E+00	DCF1(43)
A-1	Po-213 (Source: DCFPAK3.02)	2.167E-04	2.167E-04	DCF1(44)
A-1	Po-214 (Source: DCFPAK3.02)	4.801E-04	4.801E-04	DCF1(45)
A-1	Po-215 (Source: DCFPAK3.02)	9.452E-04	9.453E-04	DCF1(46)
A-1	Po-216 (Source: DCFPAK3.02)	8.873E-05	8.874E-05	DCF1(47)
A-1	Po-218 (Source: DCFPAK3.02)	9.228E-09	9.229E-09	DCF1(48)
A-1	Pu-238 (Source: DCFPAK3.02)	1.111E-04	1.112E-04	DCF1(49)

Dose Conversion Factor (and Related) Parameter Summary (continued)
 Dose Library: DOE STD (RefPer) HTO Plus DOE STD-1196-2011 (Reference Person)

Menu	Parameter	Current Value#	Base Case*	Parameter Name
A-1	Pu-239 (Source: DCFPAK3.02)	2.765E-04	2.765E-04	DCF1(50)
A-1	Ra-223 (Source: DCFPAK3.02)	5.791E-01	5.791E-01	DCF1(51)
A-1	Ra-224 (Source: DCFPAK3.02)	4.950E-02	4.951E-02	DCF1(52)
A-1	Ra-225 (Source: DCFPAK3.02)	8.910E-03	8.911E-03	DCF1(53)
A-1	Ra-226 (Source: DCFPAK3.02)	3.176E-02	3.176E-02	DCF1(54)
A-1	Ra-228 (Source: DCFPAK3.02)	6.575E-05	6.576E-05	DCF1(55)
A-1	Rh-106 (Source: DCFPAK3.02)	1.252E+00	1.252E+00	DCF1(56)
A-1	Rn-218 (Source: DCFPAK3.02)	4.259E-03	4.260E-03	DCF1(57)
A-1	Rn-219 (Source: DCFPAK3.02)	2.970E-01	2.970E-01	DCF1(58)
A-1	Rn-220 (Source: DCFPAK3.02)	3.474E-03	3.475E-03	DCF1(59)
A-1	Rn-222 (Source: DCFPAK3.02)	2.130E-03	2.130E-03	DCF1(60)
A-1	Ru-106 (Source: DCFPAK3.02)	0.000E+00	0.000E+00	DCF1(61)
A-1	Sm-148 (Source: DCFPAK3.02)	0.000E+00	0.000E+00	DCF1(62)
A-1	Sr-90 (Source: DCFPAK3.02)	6.463E-04	6.464E-04	DCF1(63)
A-1	Tc-99 (Source: DCFPAK3.02)	1.104E-04	1.104E-04	DCF1(64)
A-1	Th-227 (Source: DCFPAK3.02)	5.641E-01	5.642E-01	DCF1(65)
A-1	Th-228 (Source: DCFPAK3.02)	7.248E-03	7.249E-03	DCF1(66)
A-1	Th-229 (Source: DCFPAK3.02)	2.877E-01	2.877E-01	DCF1(67)
A-1	Th-230 (Source: DCFPAK3.02)	1.106E-03	1.106E-03	DCF1(68)
A-1	Th-231 (Source: DCFPAK3.02)	3.250E-02	3.251E-02	DCF1(69)
A-1	Th-232 (Source: DCFPAK3.02)	4.782E-04	4.783E-04	DCF1(70)
A-1	Th-234 (Source: DCFPAK3.02)	2.316E-02	2.317E-02	DCF1(71)
A-1	Tl-206 (Source: DCFPAK3.02)	1.278E-02	1.278E-02	DCF1(72)
A-1	Tl-207 (Source: DCFPAK3.02)	2.391E-02	2.391E-02	DCF1(73)
A-1	Tl-208 (Source: DCFPAK3.02)	2.167E+01	2.167E+01	DCF1(74)
A-1	Tl-209 (Source: DCFPAK3.02)	1.287E+01	1.287E+01	DCF1(75)
A-1	Tl-210 (Source: DCFPAK3.02)	1.677E+01	1.678E+01	DCF1(76)
A-1	U-233 (Source: DCFPAK3.02)	9.191E-04	9.192E-04	DCF1(77)
A-1	U-234 (Source: DCFPAK3.02)	3.456E-04	3.456E-04	DCF1(78)
A-1	U-235 (Source: DCFPAK3.02)	7.005E-01	7.006E-01	DCF1(79)
A-1	U-235m (Source: DCFPAK3.02)	0.000E+00	0.000E+00	DCF1(80)
A-1	U-238 (Source: DCFPAK3.02)	1.713E-04	1.713E-04	DCF1(81)
A-1	Y-90 (Source: DCFPAK3.02)	4.016E-02	4.017E-02	DCF1(82)
B-1	Dose conversion factors for inhalation, mrem/pCi:			
B-1	Ac-227+D	6.719E-01	5.957E-01	DCF2(1)
B-1	Ac-227+D1	6.719E-01	5.957E-01	DCF2(2)
B-1	Ac-227+D2	6.305E-01	5.957E-01	DCF2(3)
B-1	Ac-227+D3	6.305E-01	5.957E-01	DCF2(4)
B-1	Ac-227+D4	5.958E-01	5.957E-01	DCF2(5)
B-1	Ac-227+D5	5.958E-01	5.957E-01	DCF2(6)
B-1	Am-241	3.630E-01	3.630E-01	DCF2(7)
B-1	Co-60	1.221E-04	1.221E-04	DCF2(8)
B-1	Cs-134	8.214E-05	8.214E-05	DCF2(9)
B-1	Cs-137+D	1.543E-04	1.543E-04	DCF2(10)
B-1	Eu-152	3.674E-04	3.674E-04	DCF2(11)
B-1	Eu-154	4.255E-04	4.255E-04	DCF2(13)
B-1	Eu-155	5.106E-05	5.106E-05	DCF2(14)
B-1	Gd-152	7.437E-02	7.437E-02	DCF2(15)
B-1	H-3	7.141E-08	1.069E-06	DCF2(16)

Dose Conversion Factor (and Related) Parameter Summary (continued)
 Dose Library: DOE STD (RefPer) HTO Plus DOE STD-1196-2011 (Reference Person)

Menu	Parameter	Current Value#	Base Case*	Parameter Name
B-1	I-129	3.996E-04	3.996E-04	DCF2(17)
B-1	Mn-54	1.332E-05	1.332E-05	DCF2(18)
B-1	Na-22	1.165E-04	1.165E-04	DCF2(19)
B-1	Nd-144	7.437E-02	7.437E-02	DCF2(20)
B-1	Ni-63	8.251E-06	8.251E-06	DCF2(21)
B-1	Np-237+D	1.869E-01	1.868E-01	DCF2(22)
B-1	Pa-231	8.769E-01	8.769E-01	DCF2(23)
B-1	Pb-210+D	4.017E-02	2.231E-02	DCF2(29)
B-1	Pb-210+D1	2.285E-02	2.231E-02	DCF2(30)
B-1	Pb-210+D2	2.231E-02	2.231E-02	DCF2(31)
B-1	Pu-238	4.070E-01	4.070E-01	DCF2(32)
B-1	Pu-239	4.477E-01	4.477E-01	DCF2(48)
B-1	Pu-239+D	4.477E-01	4.477E-01	DCF2(54)
B-1	Ra-226+D	3.823E-02	3.811E-02	DCF2(60)
B-1	Ra-226+D1	3.823E-02	3.811E-02	DCF2(63)
B-1	Ra-226+D2	3.817E-02	3.811E-02	DCF2(66)
B-1	Ra-226+D3	3.817E-02	3.811E-02	DCF2(69)
B-1	Ra-226+D4	3.811E-02	3.811E-02	DCF2(72)
B-1	Ra-228+D	6.333E-02	6.327E-02	DCF2(75)
B-1	Ru-106+D	2.675E-04	2.675E-04	DCF2(76)
B-1	Sm-148	7.770E-02	7.770E-02	DCF2(77)
B-1	Sr-90+D	6.133E-04	6.068E-04	DCF2(78)
B-1	Tc-99	5.254E-05	5.254E-05	DCF2(79)
B-1	Th-228+D	1.753E-01	1.610E-01	DCF2(80)
B-1	Th-229+D	9.865E-01	9.213E-01	DCF2(81)
B-1	Th-230	3.848E-01	3.848E-01	DCF2(82)
B-1	Th-232	4.255E-01	4.255E-01	DCF2(97)
B-1	U-233	3.811E-02	3.811E-02	DCF2(98)
B-1	U-234	3.737E-02	3.737E-02	DCF2(99)
B-1	U-235+D	3.378E-02	3.378E-02	DCF2(114)
B-1	U-238	3.212E-02	3.212E-02	DCF2(120)
B-1	U-238+D	3.215E-02	3.212E-02	DCF2(121)
B-1	U-238+D1	3.215E-02	3.212E-02	DCF2(136)
D-1	Dose conversion factors for ingestion, mrem/pCi:			
D-1	Ac-227+D	2.309E-03	1.450E-03	DCF3(1)
D-1	Ac-227+D1	2.309E-03	1.450E-03	DCF3(2)
D-1	Ac-227+D2	2.266E-03	1.450E-03	DCF3(3)
D-1	Ac-227+D3	2.266E-03	1.450E-03	DCF3(4)
D-1	Ac-227+D4	1.463E-03	1.450E-03	DCF3(5)
D-1	Ac-227+D5	1.463E-03	1.450E-03	DCF3(6)
D-1	Am-241	8.806E-04	8.806E-04	DCF3(7)
D-1	Co-60	2.031E-05	2.031E-05	DCF3(8)
D-1	Cs-134	6.919E-05	6.919E-05	DCF3(9)
D-1	Cs-137+D	4.921E-05	4.921E-05	DCF3(10)
D-1	Eu-152	6.438E-06	6.438E-06	DCF3(11)
D-1	Eu-154	9.657E-06	9.657E-06	DCF3(13)
D-1	Eu-155	1.672E-06	1.672E-06	DCF3(14)
D-1	Gd-152	1.968E-04	1.968E-04	DCF3(15)
D-1	H-3	7.770E-08	1.695E-07	DCF3(16)

Dose Conversion Factor (and Related) Parameter Summary (continued)
 Dose Library: DOE STD (RefPer) HTO Plus DOE STD-1196-2011 (Reference Person)

Menu	Parameter	Current Value#	Base Case*	Parameter Name
D-1	I-129	4.477E-04	4.477E-04	DCF3(17)
D-1	Mn-54	3.293E-06	3.293E-06	DCF3(18)
D-1	Na-22	1.436E-05	1.436E-05	DCF3(19)
D-1	Nd-144	1.954E-04	1.954E-04	DCF3(20)
D-1	Ni-63	7.326E-07	7.326E-07	DCF3(21)
D-1	Np-237+D	4.674E-04	4.625E-04	DCF3(22)
D-1	Pa-231	2.068E-03	2.068E-03	DCF3(23)
D-1	Pb-210+D	1.026E-02	3.774E-03	DCF3(29)
D-1	Pb-210+D1	3.781E-03	3.774E-03	DCF3(30)
D-1	Pb-210+D2	3.774E-03	3.774E-03	DCF3(31)
D-1	Pu-238	9.731E-04	9.731E-04	DCF3(32)
D-1	Pu-239	1.066E-03	1.066E-03	DCF3(48)
D-1	Pu-239+D	1.066E-03	1.066E-03	DCF3(54)
D-1	Ra-226+D	1.677E-03	1.676E-03	DCF3(60)
D-1	Ra-226+D1	1.677E-03	1.676E-03	DCF3(63)
D-1	Ra-226+D2	1.677E-03	1.676E-03	DCF3(66)
D-1	Ra-226+D3	1.677E-03	1.676E-03	DCF3(69)
D-1	Ra-226+D4	1.676E-03	1.676E-03	DCF3(72)
D-1	Ra-228+D	5.922E-03	5.920E-03	DCF3(75)
D-1	Ru-106+D	3.548E-05	3.548E-05	DCF3(76)
D-1	Sm-148	2.035E-04	2.035E-04	DCF3(77)
D-1	Sr-90+D	1.469E-04	1.332E-04	DCF3(78)
D-1	Tc-99	3.330E-06	3.330E-06	DCF3(79)
D-1	Th-228+D	9.348E-04	4.292E-04	DCF3(80)
D-1	Th-229+D	3.329E-03	2.253E-03	DCF3(81)
D-1	Th-230	9.361E-04	9.361E-04	DCF3(82)
D-1	Th-232	1.029E-03	1.029E-03	DCF3(97)
D-1	U-233	2.227E-04	2.227E-04	DCF3(98)
D-1	U-234	2.150E-04	2.150E-04	DCF3(99)
D-1	U-235+D	2.048E-04	2.031E-04	DCF3(114)
D-1	U-238	1.939E-04	1.939E-04	DCF3(120)
D-1	U-238+D	2.133E-04	1.939E-04	DCF3(121)
D-1	U-238+D1	2.112E-04	1.939E-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	Ac-227+D1 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-05	2.000E-05	RTF(2,2)
D-34	Ac-227+D1 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-05	2.000E-05	RTF(2,3)
D-34	Ac-227+D2 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(3,1)
D-34	Ac-227+D2 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-05	2.000E-05	RTF(3,2)
D-34	Ac-227+D2 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-05	2.000E-05	RTF(3,3)
D-34	Ac-227+D3 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(4,1)
D-34	Ac-227+D3 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-05	2.000E-05	RTF(4,2)
D-34	Ac-227+D3 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-05	2.000E-05	RTF(4,3)

Dose Conversion Factor (and Related) Parameter Summary (continued)
 Dose Library: DOE STD (RefPer) HTO Plus DOE STD-1196-2011 (Reference Person)

Menu	Parameter	Current Value#	Base Case*	Parameter Name
D-34	Ac-227+D4 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(5,1)
D-34	Ac-227+D4 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-05	2.000E-05	RTF(5,2)
D-34	Ac-227+D4 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-05	2.000E-05	RTF(5,3)
D-34	Ac-227+D5 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(6,1)
D-34	Ac-227+D5 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-05	2.000E-05	RTF(6,2)
D-34	Ac-227+D5 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-05	2.000E-05	RTF(6,3)
D-34	Am-241 , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(7,1)
D-34	Am-241 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	5.000E-05	5.000E-05	RTF(7,2)
D-34	Am-241 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-06	2.000E-06	RTF(7,3)
D-34	Co-60 , plant/soil concentration ratio, dimensionless	8.000E-02	8.000E-02	RTF(8,1)
D-34	Co-60 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-02	2.000E-02	RTF(8,2)
D-34	Co-60 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-03	2.000E-03	RTF(8,3)
D-34	Cs-134 , plant/soil concentration ratio, dimensionless	4.000E-02	4.000E-02	RTF(9,1)
D-34	Cs-134 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.000E-02	3.000E-02	RTF(9,2)
D-34	Cs-134 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	8.000E-03	8.000E-03	RTF(9,3)
D-34	Cs-137+D , plant/soil concentration ratio, dimensionless	4.000E-02	4.000E-02	RTF(10,1)
D-34	Cs-137+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.000E-02	3.000E-02	RTF(10,2)
D-34	Cs-137+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	8.000E-03	8.000E-03	RTF(10,3)
D-34	Eu-152 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(11,1)
D-34	Eu-152 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-03	2.000E-03	RTF(11,2)
D-34	Eu-152 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-05	5.000E-05	RTF(11,3)
D-34	Eu-154 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(13,1)
D-34	Eu-154 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-03	2.000E-03	RTF(13,2)
D-34	Eu-154 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-05	5.000E-05	RTF(13,3)
D-34	Eu-155 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(14,1)
D-34	Eu-155 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-03	2.000E-03	RTF(14,2)
D-34	Eu-155 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-05	5.000E-05	RTF(14,3)
D-34	Gd-152 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(15,1)
D-34	Gd-152 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-03	2.000E-03	RTF(15,2)
D-34	Gd-152 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-05	2.000E-05	RTF(15,3)
D-34	H-3 , plant/soil concentration ratio, dimensionless	4.800E+00	4.800E+00	RTF(16,1)
D-34	H-3 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.200E-02	1.200E-02	RTF(16,2)
D-34	H-3 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-02	1.000E-02	RTF(16,3)
D-34	I-129 , plant/soil concentration ratio, dimensionless	2.000E-02	2.000E-02	RTF(17,1)
D-34	I-129 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	7.000E-03	7.000E-03	RTF(17,2)
D-34	I-129 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-02	1.000E-02	RTF(17,3)

Dose Conversion Factor (and Related) Parameter Summary (continued)
 Dose Library: DOE STD (RefPer) HTO Plus DOE STD-1196-2011 (Reference Person)

Menu	Parameter	Current Value#	Base Case*	Parameter Name
D-34	Mn-54 , plant/soil concentration ratio, dimensionless	3.000E-01	3.000E-01	RTF(18,1)
D-34	Mn-54 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	5.000E-04	5.000E-04	RTF(18,2)
D-34	Mn-54 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3.000E-04	3.000E-04	RTF(18,3)
D-34	Na-22 , plant/soil concentration ratio, dimensionless	5.000E-02	5.000E-02	RTF(19,1)
D-34	Na-22 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	8.000E-02	8.000E-02	RTF(19,2)
D-34	Na-22 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	4.000E-02	4.000E-02	RTF(19,3)
D-34	Nd-144 , plant/soil concentration ratio, dimensionless	2.400E-03	2.400E-03	RTF(20,1)
D-34	Nd-144 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-03	2.000E-03	RTF(20,2)
D-34	Nd-144 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-05	2.000E-05	RTF(20,3)
D-34	Ni-63 , plant/soil concentration ratio, dimensionless	5.000E-02	5.000E-02	RTF(21,1)
D-34	Ni-63 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	5.000E-03	5.000E-03	RTF(21,2)
D-34	Ni-63 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-02	2.000E-02	RTF(21,3)
D-34	Np-237+D , plant/soil concentration ratio, dimensionless	2.000E-02	2.000E-02	RTF(22,1)
D-34	Np-237+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-03	1.000E-03	RTF(22,2)
D-34	Np-237+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-06	5.000E-06	RTF(22,3)
D-34	Pa-231 , plant/soil concentration ratio, dimensionless	1.000E-02	1.000E-02	RTF(23,1)
D-34	Pa-231 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	5.000E-03	5.000E-03	RTF(23,2)
D-34	Pa-231 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-06	5.000E-06	RTF(23,3)
D-34	Pb-210+D , plant/soil concentration ratio, dimensionless	1.000E-02	1.000E-02	RTF(29,1)
D-34	Pb-210+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	8.000E-04	8.000E-04	RTF(29,2)
D-34	Pb-210+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3.000E-04	3.000E-04	RTF(29,3)
D-34	Pb-210+D1 , plant/soil concentration ratio, dimensionless	1.000E-02	1.000E-02	RTF(30,1)
D-34	Pb-210+D1 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	8.000E-04	8.000E-04	RTF(30,2)
D-34	Pb-210+D1 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3.000E-04	3.000E-04	RTF(30,3)
D-34	Pb-210+D2 , plant/soil concentration ratio, dimensionless	1.000E-02	1.000E-02	RTF(31,1)
D-34	Pb-210+D2 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	8.000E-04	8.000E-04	RTF(31,2)
D-34	Pb-210+D2 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3.000E-04	3.000E-04	RTF(31,3)
D-34	Pu-238 , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(32,1)
D-34	Pu-238 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-04	1.000E-04	RTF(32,2)
D-34	Pu-238 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-06	1.000E-06	RTF(32,3)
D-34	Pu-239 , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(48,1)
D-34	Pu-239 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-04	1.000E-04	RTF(48,2)
D-34	Pu-239 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-06	1.000E-06	RTF(48,3)
D-34	Pu-239+D , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(54,1)
D-34	Pu-239+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-04	1.000E-04	RTF(54,2)
D-34	Pu-239+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-06	1.000E-06	RTF(54,3)

Dose Conversion Factor (and Related) Parameter Summary (continued)
 Dose Library: DOE STD (RefPer) HTO Plus DOE STD-1196-2011 (Reference Person)

Menu	Parameter	Current Value#	Base Case*	Parameter Name
D-34	Ra-226+D , plant/soil concentration ratio, dimensionless	4.000E-02	4.000E-02	RTF(60,1)
D-34	Ra-226+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-03	1.000E-03	RTF(60,2)
D-34	Ra-226+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-03	1.000E-03	RTF(60,3)
D-34	Ra-226+D1 , plant/soil concentration ratio, dimensionless	4.000E-02	4.000E-02	RTF(63,1)
D-34	Ra-226+D1 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-03	1.000E-03	RTF(63,2)
D-34	Ra-226+D1 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-03	1.000E-03	RTF(63,3)
D-34	Ra-226+D2 , plant/soil concentration ratio, dimensionless	4.000E-02	4.000E-02	RTF(66,1)
D-34	Ra-226+D2 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-03	1.000E-03	RTF(66,2)
D-34	Ra-226+D2 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-03	1.000E-03	RTF(66,3)
D-34	Ra-226+D3 , plant/soil concentration ratio, dimensionless	4.000E-02	4.000E-02	RTF(69,1)
D-34	Ra-226+D3 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-03	1.000E-03	RTF(69,2)
D-34	Ra-226+D3 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-03	1.000E-03	RTF(69,3)
D-34	Ra-226+D4 , plant/soil concentration ratio, dimensionless	4.000E-02	4.000E-02	RTF(72,1)
D-34	Ra-226+D4 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-03	1.000E-03	RTF(72,2)
D-34	Ra-226+D4 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-03	1.000E-03	RTF(72,3)
D-34	Ra-228+D , plant/soil concentration ratio, dimensionless	4.000E-02	4.000E-02	RTF(75,1)
D-34	Ra-228+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-03	1.000E-03	RTF(75,2)
D-34	Ra-228+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-03	1.000E-03	RTF(75,3)
D-34	Ru-106+D , plant/soil concentration ratio, dimensionless	3.000E-02	3.000E-02	RTF(76,1)
D-34	Ru-106+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-03	2.000E-03	RTF(76,2)
D-34	Ru-106+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3.300E-06	3.300E-06	RTF(76,3)
D-34	Sm-148 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(77,1)
D-34	Sm-148 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-03	2.000E-03	RTF(77,2)
D-34	Sm-148 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-05	2.000E-05	RTF(77,3)
D-34	Sr-90+D , plant/soil concentration ratio, dimensionless	3.000E-01	3.000E-01	RTF(78,1)
D-34	Sr-90+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	8.000E-03	8.000E-03	RTF(78,2)
D-34	Sr-90+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-03	2.000E-03	RTF(78,3)
D-34	Tc-99 , plant/soil concentration ratio, dimensionless	5.000E+00	5.000E+00	RTF(79,1)
D-34	Tc-99 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-04	1.000E-04	RTF(79,2)
D-34	Tc-99 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-03	1.000E-03	RTF(79,3)
D-34	Th-228+D , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(80,1)
D-34	Th-228+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-04	1.000E-04	RTF(80,2)
D-34	Th-228+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-06	5.000E-06	RTF(80,3)
D-34	Th-229+D , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(81,1)
D-34	Th-229+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-04	1.000E-04	RTF(81,2)
D-34	Th-229+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-06	5.000E-06	RTF(81,3)

Dose Conversion Factor (and Related) Parameter Summary (continued)
 Dose Library: DOE STD (RefPer) HTO Plus DOE STD-1196-2011 (Reference Person)

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	Ac-227+D2 , fish	1.500E+01	1.500E+01	BIOFAC(3,1)
D-5	Ac-227+D2 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(3,2)
D-5	Ac-227+D3 , fish	1.500E+01	1.500E+01	BIOFAC(4,1)
D-5	Ac-227+D3 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(4,2)
D-5	Ac-227+D4 , fish	1.500E+01	1.500E+01	BIOFAC(5,1)
D-5	Ac-227+D4 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(5,2)

Dose Conversion Factor (and Related) Parameter Summary (continued)
 Dose Library: DOE STD (RefPer) HTO Plus DOE STD-1196-2011 (Reference Person)

Menu	Parameter	Current Value#	Base Case*	Parameter Name
D-5	Ac-227+D5 , fish	1.500E+01	1.500E+01	BIOFAC(6,1)
D-5	Ac-227+D5 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(6,2)
D-5	Am-241 , fish	3.000E+01	3.000E+01	BIOFAC(7,1)
D-5	Am-241 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(7,2)
D-5	Co-60 , fish	3.000E+02	3.000E+02	BIOFAC(8,1)
D-5	Co-60 , crustacea and mollusks	2.000E+02	2.000E+02	BIOFAC(8,2)
D-5	Cs-134 , fish	2.000E+03	2.000E+03	BIOFAC(9,1)
D-5	Cs-134 , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(9,2)
D-5	Cs-137+D , fish	2.000E+03	2.000E+03	BIOFAC(10,1)
D-5	Cs-137+D , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(10,2)
D-5	Eu-152 , fish	5.000E+01	5.000E+01	BIOFAC(11,1)
D-5	Eu-152 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(11,2)
D-5	Eu-154 , fish	5.000E+01	5.000E+01	BIOFAC(13,1)
D-5	Eu-154 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(13,2)
D-5	Eu-155 , fish	5.000E+01	5.000E+01	BIOFAC(14,1)
D-5	Eu-155 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(14,2)
D-5	Gd-152 , fish	2.500E+01	2.500E+01	BIOFAC(15,1)
D-5	Gd-152 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(15,2)
D-5	H-3 , fish	1.000E+00	1.000E+00	BIOFAC(16,1)
D-5	H-3 , crustacea and mollusks	1.000E+00	1.000E+00	BIOFAC(16,2)
D-5	I-129 , fish	4.000E+01	4.000E+01	BIOFAC(17,1)
D-5	I-129 , crustacea and mollusks	5.000E+00	5.000E+00	BIOFAC(17,2)
D-5	Mn-54 , fish	4.000E+02	4.000E+02	BIOFAC(18,1)
D-5	Mn-54 , crustacea and mollusks	9.000E+04	9.000E+04	BIOFAC(18,2)
D-5	Na-22 , fish	2.000E+01	2.000E+01	BIOFAC(19,1)
D-5	Na-22 , crustacea and mollusks	2.000E+02	2.000E+02	BIOFAC(19,2)
D-5	Nd-144 , fish	1.000E+02	1.000E+02	BIOFAC(20,1)
D-5	Nd-144 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(20,2)
D-5	Ni-63 , fish	1.000E+02	1.000E+02	BIOFAC(21,1)
D-5	Ni-63 , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(21,2)
D-5	Np-237+D , fish	3.000E+01	3.000E+01	BIOFAC(22,1)
D-5	Np-237+D , crustacea and mollusks	4.000E+02	4.000E+02	BIOFAC(22,2)
D-5	Pa-231 , fish	1.000E+01	1.000E+01	BIOFAC(23,1)
D-5	Pa-231 , crustacea and mollusks	1.100E+02	1.100E+02	BIOFAC(23,2)

Dose Conversion Factor (and Related) Parameter Summary (continued)
 Dose Library: DOE STD (RefPer) HTO Plus DOE STD-1196-2011 (Reference Person)

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	Sm-148 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(77,2)
D-5	Sr-90+D , fish	6.000E+01	6.000E+01	BIOFAC(78,1)
D-5	Sr-90+D , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(78,2)
D-5	Tc-99 , fish	2.000E+01	2.000E+01	BIOFAC(79,1)
D-5	Tc-99 , crustacea and mollusks	5.000E+00	5.000E+00	BIOFAC(79,2)
D-5	Th-228+D , fish	1.000E+02	1.000E+02	BIOFAC(80,1)
D-5	Th-228+D , crustacea and mollusks	5.000E+02	5.000E+02	BIOFAC(80,2)

Dose Conversion Factor (and Related) Parameter Summary (continued)
 Dose Library: DOE STD (RefPer) HTO Plus DOE STD-1196-2011 (Reference Person)

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

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

Site-Specific Parameter Summary		Used by RESRAD		Parameter
Menu	Parameter	Input	Default	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)	1.000E+02	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	Concentration in groundwater (pCi/L): Co-60	not used	0.000E+00	W1(8)
R012	Concentration in groundwater (pCi/L): Cs-134	not used	0.000E+00	W1(9)
R012	Concentration in groundwater (pCi/L): Cs-137	not used	0.000E+00	W1(10)
R012	Concentration in groundwater (pCi/L): Eu-152	not used	0.000E+00	W1(11)
R012	Concentration in groundwater (pCi/L): Eu-154	not used	0.000E+00	W1(13)
R012	Concentration in groundwater (pCi/L): Eu-155	not used	0.000E+00	W1(14)
R012	Concentration in groundwater (pCi/L): H-3	not used	0.000E+00	W1(16)
R012	Concentration in groundwater (pCi/L): I-129	not used	0.000E+00	W1(17)
R012	Concentration in groundwater (pCi/L): Mn-54	not used	0.000E+00	W1(18)

Site-Specific Parameter Summary (continued)

Menu	Parameter	User	Input	Default	Used by RESRAD	Parameter Name
R012	Concentration in groundwater (pCi/L): Na-22	not used	0.000E+00	0.000E+00	---	W1(19)
R012	Concentration in groundwater (pCi/L): Ni-63	not used	0.000E+00	0.000E+00	---	W1(21)
R012	Concentration in groundwater (pCi/L): Np-237	not used	0.000E+00	0.000E+00	---	W1(22)
R012	Concentration in groundwater (pCi/L): Pu-238	not used	0.000E+00	0.000E+00	---	W1(32)
R012	Concentration in groundwater (pCi/L): Pu-239	not used	0.000E+00	0.000E+00	---	W1(48)
R012	Concentration in groundwater (pCi/L): Ru-106	not used	0.000E+00	0.000E+00	---	W1(76)
R012	Concentration in groundwater (pCi/L): Sr-90	not used	0.000E+00	0.000E+00	---	W1(78)
R012	Concentration in groundwater (pCi/L): Tc-99	not used	0.000E+00	0.000E+00	---	W1(79)
R012	Concentration in groundwater (pCi/L): Th-228	not used	0.000E+00	0.000E+00	---	W1(80)
R012	Concentration in groundwater (pCi/L): Th-230	not used	0.000E+00	0.000E+00	---	W1(82)
R012	Concentration in groundwater (pCi/L): Th-232	not used	0.000E+00	0.000E+00	---	W1(97)
R012	Concentration in groundwater (pCi/L): U-234	not used	0.000E+00	0.000E+00	---	W1(99)
R012	Concentration in groundwater (pCi/L): U-235	not used	0.000E+00	0.000E+00	---	W1(**)
R012	Concentration in groundwater (pCi/L): U-238	not used	0.000E+00	0.000E+00	---	W1(**)
R013	Cover depth (m)	0.000E+00	0.000E+00	0.000E+00	---	COVER0
R013	Density of cover material (g/cm**3)	not used	1.500E+00	1.500E+00	---	DENSCV
R013	Cover depth erosion rate (m/yr)	not used	1.000E-03	1.000E-03	---	VCV
R013	Density of contaminated zone (g/cm**3)	1.500E+00	1.500E+00	1.500E+00	---	DENSCZ
R013	Contaminated zone erosion rate (m/yr)	0.000E+00	1.000E-03	1.000E-03	---	V CZ
R013	Contaminated zone total porosity	4.800E-01	4.000E-01	4.000E-01	---	TPCZ
R013	Contaminated zone field capacity	2.000E-01	2.000E-01	2.000E-01	---	FCCZ
R013	Contaminated zone hydraulic conductivity (m/yr)	1.000E+01	1.000E+01	1.000E+01	---	HCCZ
R013	Contaminated zone b parameter	5.300E+00	5.300E+00	5.300E+00	---	BCZ
R013	Average annual wind speed (m/sec)	3.000E+00	2.000E+00	2.000E+00	---	WIND
R013	Humidity in air (g/m**3)	5.550E+00	8.000E+00	8.000E+00	---	HUMID
R013	Evapotranspiration coefficient	9.990E-01	5.000E-01	5.000E-01	---	EVAPTR
R013	Precipitation (m/yr)	2.900E-01	1.000E+00	1.000E+00	---	PRECIP
R013	Irrigation (m/yr)	0.000E+00	2.000E-01	2.000E-01	---	RI
R013	Irrigation mode	overhead	overhead	overhead	---	IDITCH
R013	Runoff coefficient	9.000E-01	2.000E-01	2.000E-01	---	RUNOFF
R013	Watershed area for nearby stream or pond (m**2)	1.000E+06	1.000E+06	1.000E+06	---	WAREA
R013	Accuracy for water/soil computations	1.000E-03	1.000E-03	1.000E-03	---	EPS
R014	Density of saturated zone (g/cm**3)	1.500E+00	1.500E+00	1.500E+00	---	DENSAQ
R014	Saturated zone total porosity	4.000E-01	4.000E-01	4.000E-01	---	TPSZ
R014	Saturated zone effective porosity	2.000E-01	2.000E-01	2.000E-01	---	EPSZ
R014	Saturated zone field capacity	2.000E-01	2.000E-01	2.000E-01	---	FCSZ
R014	Saturated zone hydraulic conductivity (m/yr)	1.000E+02	1.000E+02	1.000E+02	---	HCSZ
R014	Saturated zone hydraulic gradient	2.000E-02	2.000E-02	2.000E-02	---	HGWT
R014	Saturated zone b parameter	5.300E+00	5.300E+00	5.300E+00	---	BSZ
R014	Water table drop rate (m/yr)	1.000E-03	1.000E-03	1.000E-03	---	VWT
R014	Well pump intake depth (m below water table)	1.000E+01	1.000E+01	1.000E+01	---	DWIBWT
R014	Model: Nondispersion (ND) or Mass-Balance (MB)	ND	ND	ND	---	MODEL
R014	Well pumping rate (m**3/yr)	2.500E+02	2.500E+02	2.500E+02	---	UW
R015	Number of unsaturated zone strata	1	1	1	---	NS

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
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	Unsat. 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	Unsat. 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	Unsat. 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	Unsat. 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	Unsat. 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	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(11)
R016	Distribution coefficients for Eu-154				
R016	Contaminated zone (cm**3/g)	-1.000E+00	-1.000E+00	8.249E+02	DCNUCC(13)
R016	Unsat. zone 1 (cm**3/g)	-1.000E+00	-1.000E+00	8.249E+02	DCNUCU(13,1)
R016	Saturated zone (cm**3/g)	-1.000E+00	-1.000E+00	8.249E+02	DCNUCS(13)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.172E-08	ALEACH(13)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(13)

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD	Parameter Name
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+00	³ 1.000E+03	1.541E+02	³ DCNUCC(21)
R016	Unsaturated zone 1 (cm**3/g)	³ -1.000E+00	³ 1.000E+03	1.541E+02	³ DCNUCU(21,1)
R016	Saturated zone (cm**3/g)	³ -1.000E+00	³ 1.000E+03	1.541E+02	³ DCNUCS(21)
R016	Leach rate (/yr)	³ 0.000E+00	³ 0.000E+00	6.267E-08	³ ALEACH(21)
R016	Solubility constant	³ 0.000E+00	³ 0.000E+00	not used	³ SOLUBK(21)
R016	Distribution coefficients for Np-237				
R016	Contaminated zone (cm**3/g)	³ -1.000E+00	³ -1.000E+00	2.574E+02	³ DCNUCC(22)
R016	Unsaturated zone 1 (cm**3/g)	³ -1.000E+00	³ -1.000E+00	2.574E+02	³ DCNUCU(22,1)
R016	Saturated zone (cm**3/g)	³ -1.000E+00	³ -1.000E+00	2.574E+02	³ DCNUCS(22)
R016	Leach rate (/yr)	³ 0.000E+00	³ 0.000E+00	3.753E-08	³ ALEACH(22)
R016	Solubility constant	³ 0.000E+00	³ 0.000E+00	not used	³ SOLUBK(22)

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD	Parameter Name
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)	3.000E+01	0.000E+00	---	DCNUCC (76)
R016	Unsaturated zone 1 (cm**3/g)	3.000E+01	0.000E+00	---	DCNUCU (76,1)
R016	Saturated zone (cm**3/g)	3.000E+01	0.000E+00	---	DCNUCS (76)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	3.208E-07	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)	6.000E+04	3.000E+01	---	DCNUCC (78)
R016	Unsaturated zone 1 (cm**3/g)	6.000E+04	3.000E+01	---	DCNUCU (78,1)
R016	Saturated zone (cm**3/g)	6.000E+04	3.000E+01	---	DCNUCS (78)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.611E-10	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)
R016	Distribution coefficients for Th-230				
R016	Contaminated zone (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCC (82)
R016	Unsaturated zone 1 (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCU (82,1)
R016	Saturated zone (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCS (82)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.611E-10	ALEACH (82)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK (82)

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD	Parameter Name
R016	Distribution coefficients for Th-232				
R016	Contaminated zone (cm**3/g)	5.000E+01	6.000E+04	---	DCNUCC(97)
R016	Unsaturated zone 1 (cm**3/g)	5.000E+01	6.000E+04	---	DCNUCU(97,1)
R016	Saturated zone (cm**3/g)	5.000E+01	6.000E+04	---	DCNUCS(97)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.928E-07	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)
R016	Distribution coefficients for daughter Nd-144				
R016	Contaminated zone (cm**3/g)	1.580E+02	1.580E+02	---	DCNUCC(20)
R016	Unsaturated zone 1 (cm**3/g)	1.580E+02	1.580E+02	---	DCNUCU(20,1)
R016	Saturated zone (cm**3/g)	1.580E+02	1.580E+02	---	DCNUCS(20)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	6.113E-08	ALEACH(20)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(20)

Site-Specific Parameter Summary (continued)

Menu	Parameter	User	Default	Used by RESRAD	Parameter Name
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	Distribution coefficients for daughter U-233				
R016	Contaminated zone (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCC(98)
R016	Unsaturated zone 1 (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCU(98,1)
R016	Saturated zone (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCS(98)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.928E-07	ALEACH(98)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(98)
R017	Inhalation rate (m**3/yr)	7.072E+03	8.400E+03	---	INHALR

Site-Specific Parameter Summary (continued)

Menu	Parameter	User	Input	Default	Used by RESRAD	Parameter Name
R017	Mass loading for inhalation (g/m**3)	3	1.510E-07	3 1.000E-04	---	3 MLINH
R017	Exposure duration	3	2.600E+01	3 3.000E+01	---	3 ED
R017	Shielding factor, inhalation	3	1.000E+00	3 4.000E-01	---	3 SHF3
R017	Shielding factor, external gamma	3	7.000E-01	3 7.000E-01	---	3 SHF1
R017	Fraction of time spent indoors	3	8.650E-01	3 5.000E-01	---	3 FIND
R017	Fraction of time spent outdoors (on site)	3	9.320E-02	3 2.500E-01	---	3 FOTD
R017	Shape factor flag, external gamma	3	1.000E+00	3 1.000E+00	>0 shows circular AREA.	3 FS
R017	Radii of shape factor array (used if FS = -1):	3		3		3
R017	Outer annular radius (m), ring 1:	3	not used	3 5.000E+01	---	3 RAD_SHAPE(1)
R017	Outer annular radius (m), ring 2:	3	not used	3 7.071E+01	---	3 RAD_SHAPE(2)
R017	Outer annular radius (m), ring 3:	3	not used	3 0.000E+00	---	3 RAD_SHAPE(3)
R017	Outer annular radius (m), ring 4:	3	not used	3 0.000E+00	---	3 RAD_SHAPE(4)
R017	Outer annular radius (m), ring 5:	3	not used	3 0.000E+00	---	3 RAD_SHAPE(5)
R017	Outer annular radius (m), ring 6:	3	not used	3 0.000E+00	---	3 RAD_SHAPE(6)
R017	Outer annular radius (m), ring 7:	3	not used	3 0.000E+00	---	3 RAD_SHAPE(7)
R017	Outer annular radius (m), ring 8:	3	not used	3 0.000E+00	---	3 RAD_SHAPE(8)
R017	Outer annular radius (m), ring 9:	3	not used	3 0.000E+00	---	3 RAD_SHAPE(9)
R017	Outer annular radius (m), ring 10:	3	not used	3 0.000E+00	---	3 RAD_SHAPE(10)
R017	Outer annular radius (m), ring 11:	3	not used	3 0.000E+00	---	3 RAD_SHAPE(11)
R017	Outer annular radius (m), ring 12:	3	not used	3 0.000E+00	---	3 RAD_SHAPE(12)
R017	Fractions of annular areas within AREA:	3		3		3
R017	Ring 1	3	not used	3 1.000E+00	---	3 FRACA(1)
R017	Ring 2	3	not used	3 2.732E-01	---	3 FRACA(2)
R017	Ring 3	3	not used	3 0.000E+00	---	3 FRACA(3)
R017	Ring 4	3	not used	3 0.000E+00	---	3 FRACA(4)
R017	Ring 5	3	not used	3 0.000E+00	---	3 FRACA(5)
R017	Ring 6	3	not used	3 0.000E+00	---	3 FRACA(6)
R017	Ring 7	3	not used	3 0.000E+00	---	3 FRACA(7)
R017	Ring 8	3	not used	3 0.000E+00	---	3 FRACA(8)
R017	Ring 9	3	not used	3 0.000E+00	---	3 FRACA(9)
R017	Ring 10	3	not used	3 0.000E+00	---	3 FRACA(10)
R017	Ring 11	3	not used	3 0.000E+00	---	3 FRACA(11)
R017	Ring 12	3	not used	3 0.000E+00	---	3 FRACA(12)
R018	Fruits, vegetables and grain consumption (kg/yr)	3	1.520E+01	3 1.600E+02	---	3 DIET(1)
R018	Leafy vegetable consumption (kg/yr)	3	0.000E+00	3 1.400E+01	---	3 DIET(2)
R018	Milk consumption (L/yr)	3	not used	3 9.200E+01	---	3 DIET(3)
R018	Meat and poultry consumption (kg/yr)	3	not used	3 6.300E+01	---	3 DIET(4)
R018	Fish consumption (kg/yr)	3	not used	3 5.400E+00	---	3 DIET(5)
R018	Other seafood consumption (kg/yr)	3	not used	3 9.000E-01	---	3 DIET(6)
R018	Soil ingestion rate (g/yr)	3	4.490E+01	3 3.650E+01	---	3 SOIL
R018	Drinking water intake (L/yr)	3	not used	3 5.100E+02	---	3 DWI
R018	Contamination fraction of drinking water	3	not used	3 1.000E+00	---	3 FDW
R018	Contamination fraction of household water	3	not used	3 1.000E+00	---	3 FHHW
R018	Contamination fraction of livestock water	3	not used	3 1.000E+00	---	3 FLW
R018	Contamination fraction of irrigation water	3	0.000E+00	3 1.000E+00	---	3 FIRW
R018	Contamination fraction of aquatic food	3	not used	3 5.000E-01	---	3 FR9
R018	Contamination fraction of plant food	3	1.000E+00	3 -1	---	3 FPLANT
R018	Contamination fraction of meat	3	not used	3 -1	---	3 FMEAT

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD	Parameter Name
R018	Contamination fraction of milk	not used	-1	---	F MILK
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)	1.000E-04	1.000E-04	---	MLFD
R019	Depth of soil mixing layer (m)	1.500E-01	1.500E-01	---	DM
R019	Depth of roots (m)	9.000E-01	9.000E-01	---	DROOT
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	1.000E+00	1.000E+00	---	FGWIR
R19B	Wet weight crop yield for Non-Leafy (kg/m**2)	7.000E-01	7.000E-01	---	YV(1)
R19B	Wet weight crop yield for Leafy (kg/m**2)	1.500E+00	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)	1.700E-01	1.700E-01	---	TE(1)
R19B	Growing Season for Leafy (years)	2.500E-01	2.500E-01	---	TE(2)
R19B	Growing Season for Fodder (years)	not used	8.000E-02	---	TE(3)
R19B	Translocation Factor for Non-Leafy	1.000E-01	1.000E-01	---	TIV(1)
R19B	Translocation Factor for Leafy	1.000E+00	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	2.500E-01	2.500E-01	---	RDRY(1)
R19B	Dry Foliar Interception Fraction for Leafy	2.500E-01	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	2.500E-01	2.500E-01	---	RWET(1)
R19B	Wet Foliar Interception Fraction for Leafy	2.500E-01	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	2.000E+01	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
STOR	Storage times of contaminated foodstuffs (days):				
STOR	Fruits, non-leafy vegetables, and grain	1.000E+00	1.400E+01	---	STOR_T(1)
STOR	Leafy vegetables	1.000E+00	1.000E+00	---	STOR_T(2)
STOR	Milk	1.000E+00	1.000E+00	---	STOR_T(3)
STOR	Meat and poultry	2.000E+01	2.000E+01	---	STOR_T(4)
STOR	Fish	7.000E+00	7.000E+00	---	STOR_T(5)
STOR	Crustacea and mollusks	7.000E+00	7.000E+00	---	STOR_T(6)
STOR	Well water	1.000E+00	1.000E+00	---	STOR_T(7)

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD	Parameter Name
STOR	Surface water	1.000E+00	1.000E+00	---	STOR_T(8)
STOR	Livestock fodder	4.500E+01	4.500E+01	---	STOR_T(9)
R021	Thickness of building foundation (m)	not used	1.500E-01	---	FLOOR1
R021	Bulk density of building foundation (g/cm**3)	not used	2.400E+00	---	DENSFL
R021	Total porosity of the cover material	not used	4.000E-01	---	TPCV
R021	Total porosity of the building foundation	not used	1.000E-01	---	TPFL
R021	Volumetric water content of the cover material	not used	5.000E-02	---	PH2OCV
R021	Volumetric water content of the foundation	not used	3.000E-02	---	PH2OFL
R021	Diffusion coefficient for radon gas (m/sec):				
R021	in cover material	not used	2.000E-06	---	DIFCV
R021	in foundation material	not used	3.000E-07	---	DIFFL
R021	in contaminated zone soil	not used	2.000E-06	---	DIFCZ
R021	Radon vertical dimension of mixing (m)	not used	2.000E+00	---	HMIX
R021	Average building air exchange rate (1/hr)	not used	5.000E-01	---	REXG
R021	Height of the building (room) (m)	not used	2.500E+00	---	HRM
R021	Building interior area factor	not used	0.000E+00	---	FAI
R021	Building depth below ground surface (m)	not used	-1.000E+00	---	DMFL
R021	Emanating power of Rn-222 gas	not used	2.500E-01	---	EMANA(1)
R021	Emanating power of Rn-220 gas	not used	1.500E-01	---	EMANA(2)
TITL	Number of graphical time points	32	---	---	NPTS
TITL	Maximum number of integration points for dose	17	---	---	LYMAX
TITL	Maximum number of integration points for risk	257	---	---	KYMAX

Summary of Pathway Selections

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

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):	4.430E+02	3.723E+02	1.853E+02	1.806E+02	1.689E+02	1.612E+02	1.639E+02	1.729E+02	1.884E+02
M(t):	1.772E+01	1.489E+01	7.411E+00	7.223E+00	6.756E+00	6.446E+00	6.558E+00	6.914E+00	7.535E+00

0Maximum TDOSE(t): 4.430E+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)

	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
Radio- Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
Am-241	2.576E-01	0.0006	5.464E-04	0.0000	0.000E+00	0.0000	1.339E-01	0.0003	0.000E+00	0.0000	0.000E+00	0.0000	3.786E-01	0.0009
Co-60	9.482E+01	0.2140	1.724E-07	0.0000	0.000E+00	0.0000	2.315E-01	0.0005	0.000E+00	0.0000	0.000E+00	0.0000	8.189E-03	0.0000
Cs-134	4.940E+01	0.1115	1.051E-07	0.0000	0.000E+00	0.0000	3.574E-01	0.0008	0.000E+00	0.0000	0.000E+00	0.0000	2.529E-02	0.0001
Cs-137	2.064E+01	0.0466	2.298E-07	0.0000	0.000E+00	0.0000	2.958E-01	0.0007	0.000E+00	0.0000	0.000E+00	0.0000	2.093E-02	0.0000
Eu-152	4.299E+01	0.0971	5.396E-07	0.0000	0.000E+00	0.0000	2.386E-03	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.700E-03	0.0000
Eu-154	4.595E+01	0.1037	6.159E-07	0.0000	0.000E+00	0.0000	3.527E-03	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.992E-03	0.0000
Eu-155	1.025E+00	0.0023	7.159E-08	0.0000	0.000E+00	0.0000	5.916E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.696E-04	0.0000
H-3	0.000E+00	0.0000	3.909E-04	0.0000	0.000E+00	0.0000	6.643E-02	0.0001	0.000E+00	0.0000	0.000E+00	0.0000	3.136E-05	0.0000
I-129	6.727E-02	0.0002	6.021E-07	0.0000	0.000E+00	0.0000	1.362E+00	0.0031	0.000E+00	0.0000	0.000E+00	0.0000	1.926E-01	0.0004
Mn-54	2.183E+01	0.0493	1.375E-08	0.0000	0.000E+00	0.0000	1.029E-01	0.0002	0.000E+00	0.0000	0.000E+00	0.0000	9.705E-04	0.0000
Na-22	7.426E+01	0.1676	1.542E-07	0.0000	0.000E+00	0.0000	9.578E-02	0.0002	0.000E+00	0.0000	0.000E+00	0.0000	5.422E-03	0.0000
Ni-63	0.000E+00	0.0000	1.239E-08	0.0000	0.000E+00	0.0000	5.549E-03	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.141E-04	0.0000
Np-237	7.223E+00	0.0163	2.815E-04	0.0000	0.000E+00	0.0000	1.421E+00	0.0032	0.000E+00	0.0000	0.000E+00	0.0000	2.011E-01	0.0005
Pu-238	7.718E-04	0.0000	6.108E-04	0.0000	0.000E+00	0.0000	1.474E-01	0.0003	0.000E+00	0.0000	0.000E+00	0.0000	4.170E-01	0.0009
Pu-239	1.853E-03	0.0000	6.745E-04	0.0000	0.000E+00	0.0000	1.621E-01	0.0004	0.000E+00	0.0000	0.000E+00	0.0000	4.584E-01	0.0010
Ru-106	5.947E+00	0.0134	2.927E-07	0.0000	0.000E+00	0.0000	1.175E-01	0.0003	0.000E+00	0.0000	0.000E+00	0.0000	1.109E-02	0.0000
Sr-90	2.646E-01	0.0006	9.131E-07	0.0000	0.000E+00	0.0000	6.618E+00	0.0149	0.000E+00	0.0000	0.000E+00	0.0000	6.244E-02	0.0001
Tc-99	7.382E-04	0.0000	7.916E-08	0.0000	0.000E+00	0.0000	2.531E+00	0.0057	0.000E+00	0.0000	0.000E+00	0.0000	1.433E-03	0.0000
Th-228	5.025E+01	0.1134	2.215E-04	0.0000	0.000E+00	0.0000	1.193E-01	0.0003	0.000E+00	0.0000	0.000E+00	0.0000	3.373E-01	0.0008
Th-230	2.230E-02	0.0001	5.798E-04	0.0000	0.000E+00	0.0000	1.446E-01	0.0003	0.000E+00	0.0000	0.000E+00	0.0000	4.029E-01	0.0009
Th-232	2.302E+00	0.0052	6.483E-04	0.0000	0.000E+00	0.0000	2.233E+00	0.0050	0.000E+00	0.0000	0.000E+00	0.0000	5.927E-01	0.0013
U-234	2.411E-03	0.0000	5.631E-05	0.0000	0.000E+00	0.0000	8.172E-02	0.0002	0.000E+00	0.0000	0.000E+00	0.0000	9.249E-02	0.0002
U-235	4.887E+00	0.0110	5.091E-05	0.0000	0.000E+00	0.0000	7.790E-02	0.0002	0.000E+00	0.0000	0.000E+00	0.0000	8.814E-02	0.0002
U-238	1.069E+00	0.0024	4.844E-05	0.0000	0.000E+00	0.0000	8.028E-02	0.0002	0.000E+00	0.0000	0.000E+00	0.0000	9.086E-02	0.0002
iiiiiiii	iiiiiiiiii	iiiiiiii	iiiiiiiiii	iiiiiiii	iiiiiiiiii	iiiiiiii	iiiiiiiiii	iiiiiiii	iiiiiiiiii	iiiiiiii	iiiiiiiiii	iiiiiiii	iiiiiiiiii	iiiiiiii
Total	4.232E+02	0.9553	4.113E-03	0.0000	0.000E+00	0.0000	1.639E+01	0.0370	0.000E+00	0.0000	0.000E+00	0.0000	3.396E+00	0.0077

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-	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.		
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		
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	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		
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	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		
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	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		
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		
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		
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	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		
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	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		
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		
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		
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		
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*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)

	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
Radio- Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
Am-241	2.572E-01	0.0007	5.456E-04	0.0000	0.000E+00	0.0000	1.336E-01	0.0004	0.000E+00	0.0000	0.000E+00	0.0000	3.780E-01	0.0010
Co-60	8.313E+01	0.2233	1.511E-07	0.0000	0.000E+00	0.0000	2.029E-01	0.0005	0.000E+00	0.0000	0.000E+00	0.0000	7.180E-03	0.0000
Cs-134	3.531E+01	0.0948	7.515E-08	0.0000	0.000E+00	0.0000	2.555E-01	0.0007	0.000E+00	0.0000	0.000E+00	0.0000	1.808E-02	0.0000
Cs-137	2.017E+01	0.0542	2.246E-07	0.0000	0.000E+00	0.0000	2.891E-01	0.0008	0.000E+00	0.0000	0.000E+00	0.0000	2.045E-02	0.0001
Eu-152	4.085E+01	0.1097	5.127E-07	0.0000	0.000E+00	0.0000	2.267E-03	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.565E-03	0.0000
Eu-154	4.239E+01	0.1139	5.682E-07	0.0000	0.000E+00	0.0000	3.253E-03	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.682E-03	0.0000
Eu-155	8.858E-01	0.0024	6.189E-08	0.0000	0.000E+00	0.0000	5.115E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.789E-04	0.0000
H-3	0.000E+00	0.0000	3.436E-04	0.0000	0.000E+00	0.0000	5.840E-02	0.0002	0.000E+00	0.0000	0.000E+00	0.0000	2.757E-05	0.0000
I-129	6.727E-02	0.0002	6.020E-07	0.0000	0.000E+00	0.0000	1.361E+00	0.0037	0.000E+00	0.0000	0.000E+00	0.0000	1.926E-01	0.0005
Mn-54	9.700E+00	0.0261	6.109E-09	0.0000	0.000E+00	0.0000	4.571E-02	0.0001	0.000E+00	0.0000	0.000E+00	0.0000	4.313E-04	0.0000
Na-22	5.689E+01	0.1528	1.181E-07	0.0000	0.000E+00	0.0000	7.338E-02	0.0002	0.000E+00	0.0000	0.000E+00	0.0000	4.154E-03	0.0000
Ni-63	0.000E+00	0.0000	1.230E-08	0.0000	0.000E+00	0.0000	5.510E-03	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.119E-04	0.0000
Np-237	7.223E+00	0.0194	2.815E-04	0.0000	0.000E+00	0.0000	1.421E+00	0.0038	0.000E+00	0.0000	0.000E+00	0.0000	2.011E-01	0.0005
Pu-238	7.657E-04	0.0000	6.060E-04	0.0000	0.000E+00	0.0000	1.463E-01	0.0004	0.000E+00	0.0000	0.000E+00	0.0000	4.137E-01	0.0011
Pu-239	1.853E-03	0.0000	6.745E-04	0.0000	0.000E+00	0.0000	1.621E-01	0.0004	0.000E+00	0.0000	0.000E+00	0.0000	4.584E-01	0.0012
Ru-106	3.020E+00	0.0081	1.487E-07	0.0000	0.000E+00	0.0000	5.968E-02	0.0002	0.000E+00	0.0000	0.000E+00	0.0000	5.630E-03	0.0000
Sr-90	2.583E-01	0.0007	8.914E-07	0.0000	0.000E+00	0.0000	6.461E+00	0.0174	0.000E+00	0.0000	0.000E+00	0.0000	6.096E-02	0.0002
Tc-99	7.381E-04	0.0000	7.915E-08	0.0000	0.000E+00	0.0000	2.531E+00	0.0068	0.000E+00	0.0000	0.000E+00	0.0000	1.433E-03	0.0000
Th-228	3.497E+01	0.0939	1.542E-04	0.0000	0.000E+00	0.0000	8.300E-02	0.0002	0.000E+00	0.0000	0.000E+00	0.0000	2.347E-01	0.0006
Th-230	5.203E-02	0.0001	5.798E-04	0.0000	0.000E+00	0.0000	1.493E-01	0.0004	0.000E+00	0.0000	0.000E+00	0.0000	4.033E-01	0.0011
Th-232	7.822E+00	0.0210	6.673E-04	0.0000	0.000E+00	0.0000	6.089E+00	0.0164	0.000E+00	0.0000	0.000E+00	0.0000	8.787E-01	0.0024
U-234	2.412E-03	0.0000	5.631E-05	0.0000	0.000E+00	0.0000	8.172E-02	0.0002	0.000E+00	0.0000	0.000E+00	0.0000	9.249E-02	0.0002
U-235	4.887E+00	0.0131	5.094E-05	0.0000	0.000E+00	0.0000	7.796E-02	0.0002	0.000E+00	0.0000	0.000E+00	0.0000	8.816E-02	0.0002
U-238	1.069E+00	0.0029	4.844E-05	0.0000	0.000E+00	0.0000	8.028E-02	0.0002	0.000E+00	0.0000	0.000E+00	0.0000	9.087E-02	0.0002
iiiiiiii	iiiiiiiiii	iiiiiiii	iiiiiiiiii	iiiiiiii	iiiiiiiiii	iiiiiiii	iiiiiiiiii	iiiiiiii	iiiiiiiiii	iiiiiiii	iiiiiiiiii	iiiiiiii	iiiiiiiiii	iiiiiiii
Total	3.490E+02	0.9373	4.012E-03	0.0000	0.000E+00	0.0000	1.977E+01	0.0531	0.000E+00	0.0000	0.000E+00	0.0000	3.557E+00	0.0096

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

0	Water Dependent Pathways															
0	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*			
Radio-	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.		
AAAAAAA	AAAAAAA	AAAAAA	AAAAAAA	AAAAAA	AAAAAAA	AAAAAA	AAAAAAA	AAAAAA	AAAAAAA	AAAAAA	AAAAAAA	AAAAAA	AAAAAAA	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	7.694E-01	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	8.334E+01	0.2239
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	3.559E+01	0.0956
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	2.048E+01	0.0550
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	4.085E+01	0.1097
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	4.240E+01	0.1139
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	8.869E-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	0.000E+00	0.0000	5.877E-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	1.621E+00	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	9.746E+00	0.0262
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	5.697E+01	0.1530
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	5.822E-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	8.845E+00	0.0238
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	5.614E-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	6.231E-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	0.000E+00	0.0000	3.085E+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	0.000E+00	0.0000	6.780E+00	0.0182
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	2.533E+00	0.0068
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	3.529E+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	0.000E+00	0.0000	6.051E-01	0.0016
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	1.479E+01	0.0397
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	1.767E-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	0.000E+00	0.0000	5.053E+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	0.000E+00	0.0000	1.240E+00	0.0033
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	3.723E+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

Radio- Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
Am-241	2.476E-01	0.0013	5.250E-04	0.0000	0.000E+00	0.0000	1.286E-01	0.0007	0.000E+00	0.0000	0.000E+00	0.0000	3.637E-01	0.0020
Co-60	3.542E+00	0.0191	6.439E-09	0.0000	0.000E+00	0.0000	8.645E-03	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.059E-04	0.0000
Cs-134	1.119E-02	0.0001	2.382E-11	0.0000	0.000E+00	0.0000	8.097E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.729E-06	0.0000
Cs-137	1.162E+01	0.0627	1.294E-07	0.0000	0.000E+00	0.0000	1.665E-01	0.0009	0.000E+00	0.0000	0.000E+00	0.0000	1.178E-02	0.0001
Eu-152	1.195E+01	0.0645	1.500E-07	0.0000	0.000E+00	0.0000	6.632E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.507E-04	0.0000
Eu-154	6.116E+00	0.0330	8.198E-08	0.0000	0.000E+00	0.0000	4.694E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.313E-04	0.0000
Eu-155	2.691E-02	0.0001	1.880E-09	0.0000	0.000E+00	0.0000	1.554E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.758E-05	0.0000
H-3	0.000E+00	0.0000	1.558E-05	0.0000	0.000E+00	0.0000	2.649E-03	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.250E-06	0.0000
I-129	6.720E-02	0.0004	6.014E-07	0.0000	0.000E+00	0.0000	1.360E+00	0.0073	0.000E+00	0.0000	0.000E+00	0.0000	1.924E-01	0.0010
Mn-54	3.406E-08	0.0000	2.145E-17	0.0000	0.000E+00	0.0000	1.605E-10	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.514E-12	0.0000
Na-22	9.513E-02	0.0005	1.975E-10	0.0000	0.000E+00	0.0000	1.227E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.946E-06	0.0000
Ni-63	0.000E+00	0.0000	1.042E-08	0.0000	0.000E+00	0.0000	4.667E-03	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.642E-04	0.0000
Np-237	7.222E+00	0.0390	2.815E-04	0.0000	0.000E+00	0.0000	1.421E+00	0.0077	0.000E+00	0.0000	0.000E+00	0.0000	2.011E-01	0.0011
Pu-238	6.336E-04	0.0000	5.013E-04	0.0000	0.000E+00	0.0000	1.210E-01	0.0007	0.000E+00	0.0000	0.000E+00	0.0000	3.422E-01	0.0018
Pu-239	1.852E-03	0.0000	6.740E-04	0.0000	0.000E+00	0.0000	1.620E-01	0.0009	0.000E+00	0.0000	0.000E+00	0.0000	4.581E-01	0.0025
Ru-106	2.609E-07	0.0000	1.284E-14	0.0000	0.000E+00	0.0000	5.157E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.865E-10	0.0000
Sr-90	1.449E-01	0.0008	5.002E-07	0.0000	0.000E+00	0.0000	3.625E+00	0.0196	0.000E+00	0.0000	0.000E+00	0.0000	3.420E-02	0.0002
Tc-99	7.368E-04	0.0000	7.901E-08	0.0000	0.000E+00	0.0000	2.526E+00	0.0136	0.000E+00	0.0000	0.000E+00	0.0000	1.430E-03	0.0000
Th-228	5.811E-03	0.0000	2.562E-08	0.0000	0.000E+00	0.0000	1.379E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.901E-05	0.0000
Th-230	7.618E-01	0.0041	5.805E-04	0.0000	0.000E+00	0.0000	3.077E-01	0.0017	0.000E+00	0.0000	0.000E+00	0.0000	4.256E-01	0.0023
Th-232	8.723E+01	0.4709	9.779E-04	0.0000	0.000E+00	0.0000	3.462E+01	0.1869	0.000E+00	0.0000	0.000E+00	0.0000	3.247E+00	0.0175
U-234	2.501E-03	0.0000	5.644E-05	0.0000	0.000E+00	0.0000	8.176E-02	0.0004	0.000E+00	0.0000	0.000E+00	0.0000	9.258E-02	0.0005
U-235	4.889E+00	0.0264	5.178E-05	0.0000	0.000E+00	0.0000	7.971E-02	0.0004	0.000E+00	0.0000	0.000E+00	0.0000	8.878E-02	0.0005
U-238	1.069E+00	0.0058	4.844E-05	0.0000	0.000E+00	0.0000	8.029E-02	0.0004	0.000E+00	0.0000	0.000E+00	0.0000	9.087E-02	0.0005
iiiiiiii	iiiiiiiiii	iiiiiiii	iiiiiiiiii	iiiiiiii	iiiiiiiiii	iiiiiiii	iiiiiiiiii	iiiiiiii	iiiiiiiiii	iiiiiiii	iiiiiiiiii	iiiiiiii	iiiiiiiiii	iiiiiiii
Total	1.350E+02	0.7287	3.714E-03	0.0000	0.000E+00	0.0000	4.470E+01	0.2413	0.000E+00	0.0000	0.000E+00	0.0000	5.552E+00	0.0300

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															
	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*			
Radio-	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.		
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		
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	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		
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	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		
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	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		
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		
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		
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	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		
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	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		
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		
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		
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		
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*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

Radio- Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
Am-241	2.456E-01	0.0014	5.208E-04	0.0000	0.000E+00	0.0000	1.276E-01	0.0007	0.000E+00	0.0000	0.000E+00	0.0000	3.608E-01	0.0020
Co-60	1.835E+00	0.0102	3.336E-09	0.0000	0.000E+00	0.0000	4.480E-03	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.585E-04	0.0000
Cs-134	2.089E-03	0.0000	4.446E-12	0.0000	0.000E+00	0.0000	1.511E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.069E-06	0.0000
Cs-137	1.036E+01	0.0574	1.153E-07	0.0000	0.000E+00	0.0000	1.485E-01	0.0008	0.000E+00	0.0000	0.000E+00	0.0000	1.051E-02	0.0001
Eu-152	9.253E+00	0.0512	1.161E-07	0.0000	0.000E+00	0.0000	5.134E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.811E-04	0.0000
Eu-154	4.086E+00	0.0226	5.477E-08	0.0000	0.000E+00	0.0000	3.136E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.550E-04	0.0000
Eu-155	1.299E-02	0.0001	9.079E-10	0.0000	0.000E+00	0.0000	7.503E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.492E-06	0.0000
H-3	0.000E+00	0.0000	8.181E-06	0.0000	0.000E+00	0.0000	1.390E-03	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.564E-07	0.0000
I-129	6.719E-02	0.0004	6.013E-07	0.0000	0.000E+00	0.0000	1.360E+00	0.0075	0.000E+00	0.0000	0.000E+00	0.0000	1.924E-01	0.0011
Mn-54	5.900E-10	0.0000	3.716E-19	0.0000	0.000E+00	0.0000	2.780E-12	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.623E-14	0.0000
Na-22	2.511E-02	0.0001	5.213E-11	0.0000	0.000E+00	0.0000	3.239E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.833E-06	0.0000
Ni-63	0.000E+00	0.0000	1.006E-08	0.0000	0.000E+00	0.0000	4.508E-03	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.552E-04	0.0000
Np-237	7.222E+00	0.0400	2.816E-04	0.0000	0.000E+00	0.0000	1.421E+00	0.0079	0.000E+00	0.0000	0.000E+00	0.0000	2.011E-01	0.0011
Pu-238	6.090E-04	0.0000	4.819E-04	0.0000	0.000E+00	0.0000	1.163E-01	0.0006	0.000E+00	0.0000	0.000E+00	0.0000	3.290E-01	0.0018
Pu-239	1.852E-03	0.0000	6.739E-04	0.0000	0.000E+00	0.0000	1.620E-01	0.0009	0.000E+00	0.0000	0.000E+00	0.0000	4.581E-01	0.0025
Ru-106	8.810E-09	0.0000	4.337E-16	0.0000	0.000E+00	0.0000	1.741E-10	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.643E-11	0.0000
Sr-90	1.285E-01	0.0007	4.434E-07	0.0000	0.000E+00	0.0000	3.214E+00	0.0178	0.000E+00	0.0000	0.000E+00	0.0000	3.032E-02	0.0002
Tc-99	7.365E-04	0.0000	7.898E-08	0.0000	0.000E+00	0.0000	2.525E+00	0.0140	0.000E+00	0.0000	0.000E+00	0.0000	1.429E-03	0.0000
Th-228	9.482E-04	0.0000	4.180E-09	0.0000	0.000E+00	0.0000	2.251E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.365E-06	0.0000
Th-230	9.087E-01	0.0050	5.806E-04	0.0000	0.000E+00	0.0000	3.490E-01	0.0019	0.000E+00	0.0000	0.000E+00	0.0000	4.327E-01	0.0024
Th-232	8.980E+01	0.4973	9.882E-04	0.0000	0.000E+00	0.0000	3.538E+01	0.1959	0.000E+00	0.0000	0.000E+00	0.0000	3.313E+00	0.0183
U-234	2.540E-03	0.0000	5.646E-05	0.0000	0.000E+00	0.0000	8.177E-02	0.0005	0.000E+00	0.0000	0.000E+00	0.0000	9.259E-02	0.0005
U-235	4.890E+00	0.0271	5.199E-05	0.0000	0.000E+00	0.0000	8.009E-02	0.0004	0.000E+00	0.0000	0.000E+00	0.0000	8.893E-02	0.0005
U-238	1.069E+00	0.0059	4.844E-05	0.0000	0.000E+00	0.0000	8.029E-02	0.0004	0.000E+00	0.0000	0.000E+00	0.0000	9.087E-02	0.0005
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	1.299E+02	0.7194	3.693E-03	0.0000	0.000E+00	0.0000	4.506E+01	0.2495	0.000E+00	0.0000	0.000E+00	0.0000	5.603E+00	0.0310

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

0		Water Dependent Pathways																
0		Water		Fish		Radon		Plant		Meat		Milk		All Pathways*				
Radio-	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	AAAAAA			
Am-241	0.000E+00	0.0000	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.345E-01	0.0041	
Co-60	0.000E+00	0.0000	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.840E+00	0.0102	
Cs-134	0.000E+00	0.0000	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.105E-03	0.0000	
Cs-137	0.000E+00	0.0000	0.0000	0.000E+00	0.0000	0.000E+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	0.0583	
Eu-152	0.000E+00	0.0000	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.254E+00	0.0512	
Eu-154	0.000E+00	0.0000	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.087E+00	0.0226	
Eu-155	0.000E+00	0.0000	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.301E-02	0.0001	
H-3	0.000E+00	0.0000	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.399E-03	0.0000	
I-129	0.000E+00	0.0000	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.619E+00	0.0090	
Mn-54	0.000E+00	0.0000	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.928E-10	0.0000	
Na-22	0.000E+00	0.0000	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.514E-02	0.0001	
Ni-63	0.000E+00	0.0000	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.763E-03	0.0000	
Np-237	0.000E+00	0.0000	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.845E+00	0.0490	
Pu-238	0.000E+00	0.0000	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.464E-01	0.0025	
Pu-239	0.000E+00	0.0000	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.225E-01	0.0034	
Ru-106	0.000E+00	0.0000	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.000E-09	0.0000	
Sr-90	0.000E+00	0.0000	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.373E+00	0.0187	
Tc-99	0.000E+00	0.0000	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.527E+00	0.0140	
Th-228	0.000E+00	0.0000	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.568E-04	0.0000	
Th-230	0.000E+00	0.0000	0.0000	0.000E+00	0.0000	0.000E+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+00	0.0094	
Th-232	0.000E+00	0.0000	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.285E+02	0.7116	
U-234	0.000E+00	0.0000	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.770E-01	0.0010	
U-235	0.000E+00	0.0000	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.060E+00	0.0280	
U-238	0.000E+00	0.0000	0.0000	0.000E+00	0.0000	0.000E+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+00	0.0069	
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	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.806E+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

	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
Radio- Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
Am-241	2.379E-01	0.0014	5.043E-04	0.0000	0.000E+00	0.0000	1.236E-01	0.0007	0.000E+00	0.0000	0.000E+00	0.0000	3.494E-01	0.0021
Co-60	1.323E-01	0.0008	2.405E-10	0.0000	0.000E+00	0.0000	3.229E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.143E-05	0.0000
Cs-134	2.536E-06	0.0000	5.397E-15	0.0000	0.000E+00	0.0000	1.835E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.298E-09	0.0000
Cs-137	6.543E+00	0.0387	7.285E-08	0.0000	0.000E+00	0.0000	9.377E-02	0.0006	0.000E+00	0.0000	0.000E+00	0.0000	6.635E-03	0.0000
Eu-152	3.323E+00	0.0197	4.171E-08	0.0000	0.000E+00	0.0000	1.844E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.087E-04	0.0000
Eu-154	8.141E-01	0.0048	1.091E-08	0.0000	0.000E+00	0.0000	6.248E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.072E-05	0.0000
Eu-155	7.067E-04	0.0000	4.938E-11	0.0000	0.000E+00	0.0000	4.080E-07	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.618E-07	0.0000
H-3	0.000E+00	0.0000	6.213E-07	0.0000	0.000E+00	0.0000	1.056E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.985E-08	0.0000
I-129	6.714E-02	0.0004	6.008E-07	0.0000	0.000E+00	0.0000	1.359E+00	0.0080	0.000E+00	0.0000	0.000E+00	0.0000	1.922E-01	0.0011
Mn-54	5.314E-17	0.0000	3.347E-26	0.0000	0.000E+00	0.0000	2.504E-19	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.363E-21	0.0000
Na-22	1.219E-04	0.0000	2.530E-13	0.0000	0.000E+00	0.0000	1.572E-07	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.899E-09	0.0000
Ni-63	0.000E+00	0.0000	8.763E-09	0.0000	0.000E+00	0.0000	3.925E-03	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.222E-04	0.0000
Np-237	7.222E+00	0.0428	2.816E-04	0.0000	0.000E+00	0.0000	1.421E+00	0.0084	0.000E+00	0.0000	0.000E+00	0.0000	2.011E-01	0.0012
Pu-238	5.201E-04	0.0000	4.114E-04	0.0000	0.000E+00	0.0000	9.932E-02	0.0006	0.000E+00	0.0000	0.000E+00	0.0000	2.809E-01	0.0017
Pu-239	1.851E-03	0.0000	6.736E-04	0.0000	0.000E+00	0.0000	1.619E-01	0.0010	0.000E+00	0.0000	0.000E+00	0.0000	4.578E-01	0.0027
Ru-106	1.145E-14	0.0000	5.635E-22	0.0000	0.000E+00	0.0000	2.262E-16	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.135E-17	0.0000
Sr-90	7.939E-02	0.0005	2.740E-07	0.0000	0.000E+00	0.0000	1.986E+00	0.0118	0.000E+00	0.0000	0.000E+00	0.0000	1.874E-02	0.0001
Tc-99	7.354E-04	0.0000	7.886E-08	0.0000	0.000E+00	0.0000	2.521E+00	0.0149	0.000E+00	0.0000	0.000E+00	0.0000	1.427E-03	0.0000
Th-228	6.720E-07	0.0000	2.963E-12	0.0000	0.000E+00	0.0000	1.595E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.511E-09	0.0000
Th-230	1.493E+00	0.0088	5.814E-04	0.0000	0.000E+00	0.0000	5.311E-01	0.0031	0.000E+00	0.0000	0.000E+00	0.0000	4.657E-01	0.0028
Th-232	9.263E+01	0.5484	9.995E-04	0.0000	0.000E+00	0.0000	3.622E+01	0.2144	0.000E+00	0.0000	0.000E+00	0.0000	3.385E+00	0.0200
U-234	2.760E-03	0.0000	5.657E-05	0.0000	0.000E+00	0.0000	8.185E-02	0.0005	0.000E+00	0.0000	0.000E+00	0.0000	9.267E-02	0.0005
U-235	4.895E+00	0.0290	5.285E-05	0.0000	0.000E+00	0.0000	8.169E-02	0.0005	0.000E+00	0.0000	0.000E+00	0.0000	8.961E-02	0.0005
U-238	1.069E+00	0.0063	4.844E-05	0.0000	0.000E+00	0.0000	8.029E-02	0.0005	0.000E+00	0.0000	0.000E+00	0.0000	9.088E-02	0.0005
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	1.185E+02	0.7016	3.611E-03	0.0000	0.000E+00	0.0000	4.476E+01	0.2650	0.000E+00	0.0000	0.000E+00	0.0000	5.633E+00	0.0333

Summary : Authorized Limits_Residential_Aug2016

File : C:\ACTIVE PROJECTS\ADELANTE\MTOA4_CONTRACT\TO1\RISK\2016 SALS AUTHORIZED LIMITS\RES_REFPERSON_2016.RAD

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-	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.		
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		
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	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		
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	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		
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	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		
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		
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		
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	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		
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	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		
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		
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		
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		
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*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)

	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
Radio-	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
0														
0														
Am-241	2.197E-01	0.0014	4.655E-04	0.0000	0.000E+00	0.0000	1.141E-01	0.0007	0.000E+00	0.0000	0.000E+00	0.0000	3.225E-01	0.0020
Co-60	1.846E-04	0.0000	3.355E-13	0.0000	0.000E+00	0.0000	4.505E-07	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.594E-08	0.0000
Cs-134	1.302E-13	0.0000	2.771E-22	0.0000	0.000E+00	0.0000	9.418E-16	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.664E-17	0.0000
Cs-137	2.074E+00	0.0129	2.309E-08	0.0000	0.000E+00	0.0000	2.972E-02	0.0002	0.000E+00	0.0000	0.000E+00	0.0000	2.103E-03	0.0000
Eu-152	2.568E-01	0.0016	3.224E-09	0.0000	0.000E+00	0.0000	1.425E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.613E-05	0.0000
Eu-154	1.442E-02	0.0001	1.933E-10	0.0000	0.000E+00	0.0000	1.107E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.253E-06	0.0000
Eu-155	4.874E-07	0.0000	3.405E-14	0.0000	0.000E+00	0.0000	2.814E-10	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.185E-10	0.0000
H-3	0.000E+00	0.0000	9.876E-10	0.0000	0.000E+00	0.0000	1.678E-07	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.924E-11	0.0000
I-129	6.700E-02	0.0004	5.996E-07	0.0000	0.000E+00	0.0000	1.356E+00	0.0084	0.000E+00	0.0000	0.000E+00	0.0000	1.918E-01	0.0012
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	4.152E-19	0.0000	0.000E+00	0.0000	2.580E-13	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.461E-14	0.0000
Ni-63	0.000E+00	0.0000	6.199E-09	0.0000	0.000E+00	0.0000	2.776E-03	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.572E-04	0.0000
Np-237	7.222E+00	0.0448	2.816E-04	0.0000	0.000E+00	0.0000	1.421E+00	0.0088	0.000E+00	0.0000	0.000E+00	0.0000	2.011E-01	0.0012
Pu-238	3.507E-04	0.0000	2.771E-04	0.0000	0.000E+00	0.0000	6.691E-02	0.0004	0.000E+00	0.0000	0.000E+00	0.0000	1.892E-01	0.0012
Pu-239	1.848E-03	0.0000	6.726E-04	0.0000	0.000E+00	0.0000	1.616E-01	0.0010	0.000E+00	0.0000	0.000E+00	0.0000	4.571E-01	0.0028
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	0.0001	8.221E-08	0.0000	0.000E+00	0.0000	5.958E-01	0.0037	0.000E+00	0.0000	0.000E+00	0.0000	5.622E-03	0.0000
Tc-99	7.326E-04	0.0000	7.856E-08	0.0000	0.000E+00	0.0000	2.512E+00	0.0156	0.000E+00	0.0000	0.000E+00	0.0000	1.422E-03	0.0000
Th-228	8.987E-15	0.0000	3.962E-20	0.0000	0.000E+00	0.0000	2.133E-17	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.033E-17	0.0000
Th-230	2.933E+00	0.0182	5.835E-04	0.0000	0.000E+00	0.0000	1.040E+00	0.0065	0.000E+00	0.0000	0.000E+00	0.0000	5.643E-01	0.0035
Th-232	9.291E+01	0.5765	1.001E-03	0.0000	0.000E+00	0.0000	3.630E+01	0.2252	0.000E+00	0.0000	0.000E+00	0.0000	3.392E+00	0.0211
U-234	3.779E-03	0.0000	5.682E-05	0.0000	0.000E+00	0.0000	8.220E-02	0.0005	0.000E+00	0.0000	0.000E+00	0.0000	9.289E-02	0.0006
U-235	4.909E+00	0.0305	5.521E-05	0.0000	0.000E+00	0.0000	8.584E-02	0.0005	0.000E+00	0.0000	0.000E+00	0.0000	9.149E-02	0.0006
U-238	1.069E+00	0.0066	4.845E-05	0.0000	0.000E+00	0.0000	8.030E-02	0.0005	0.000E+00	0.0000	0.000E+00	0.0000	9.089E-02	0.0006
iiiiiiii	iiiiiiii	iiiiiiii	iiiiiiii	iiiiiiii	iiiiiiii	iiiiiiii	iiiiiiii	iiiiiiii	iiiiiiii	iiiiiiii	iiiiiiii	iiiiiiii	iiiiiiii	iiiiiiii
Total	1.117E+02	0.6931	3.442E-03	0.0000	0.000E+00	0.0000	4.385E+01	0.2721	0.000E+00	0.0000	0.000E+00	0.0000	5.603E+00	0.0348

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-	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.		
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		
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	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		
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	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		
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	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		
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		
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		
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	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		
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	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		
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		
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		
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		
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*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)

	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
Radio-	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
Am-241	1.730E-01	0.0011	3.659E-04	0.0000	0.000E+00	0.0000	8.972E-02	0.0005	0.000E+00	0.0000	0.000E+00	0.0000	2.535E-01	0.0015
Co-60	5.012E-13	0.0000	9.113E-22	0.0000	0.000E+00	0.0000	1.224E-15	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.329E-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	6.608E-02	0.0004	7.357E-10	0.0000	0.000E+00	0.0000	9.469E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.700E-05	0.0000
Eu-152	1.186E-04	0.0000	1.488E-12	0.0000	0.000E+00	0.0000	6.580E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.447E-09	0.0000
Eu-154	8.022E-08	0.0000	1.075E-15	0.0000	0.000E+00	0.0000	6.157E-12	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.969E-12	0.0000
Eu-155	1.599E-16	0.0000	1.117E-23	0.0000	0.000E+00	0.0000	9.232E-20	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.045E-19	0.0000
H-3	0.000E+00	0.0000	3.966E-18	0.0000	0.000E+00	0.0000	6.741E-16	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.182E-19	0.0000
I-129	6.658E-02	0.0004	5.958E-07	0.0000	0.000E+00	0.0000	1.347E+00	0.0082	0.000E+00	0.0000	0.000E+00	0.0000	1.906E-01	0.0012
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	8.842E-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	2.194E-09	0.0000	0.000E+00	0.0000	9.826E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.562E-05	0.0000
Np-237	7.222E+00	0.0441	2.816E-04	0.0000	0.000E+00	0.0000	1.421E+00	0.0087	0.000E+00	0.0000	0.000E+00	0.0000	2.012E-01	0.0012
Pu-238	1.090E-04	0.0000	8.470E-05	0.0000	0.000E+00	0.0000	2.047E-02	0.0001	0.000E+00	0.0000	0.000E+00	0.0000	5.784E-02	0.0004
Pu-239	1.841E-03	0.0000	6.697E-04	0.0000	0.000E+00	0.0000	1.609E-01	0.0010	0.000E+00	0.0000	0.000E+00	0.0000	4.552E-01	0.0028
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	6.435E-04	0.0000	2.221E-09	0.0000	0.000E+00	0.0000	1.610E-02	0.0001	0.000E+00	0.0000	0.000E+00	0.0000	1.519E-04	0.0000
Tc-99	7.243E-04	0.0000	7.767E-08	0.0000	0.000E+00	0.0000	2.483E+00	0.0151	0.000E+00	0.0000	0.000E+00	0.0000	1.406E-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	7.064E+00	0.0431	5.898E-04	0.0000	0.000E+00	0.0000	2.595E+00	0.0158	0.000E+00	0.0000	0.000E+00	0.0000	8.736E-01	0.0053
Th-232	9.290E+01	0.5667	1.001E-03	0.0000	0.000E+00	0.0000	3.630E+01	0.2214	0.000E+00	0.0000	0.000E+00	0.0000	3.392E+00	0.0207
U-234	1.070E-02	0.0001	5.761E-05	0.0000	0.000E+00	0.0000	8.467E-02	0.0005	0.000E+00	0.0000	0.000E+00	0.0000	9.384E-02	0.0006
U-235	4.955E+00	0.0302	6.256E-05	0.0000	0.000E+00	0.0000	9.854E-02	0.0006	0.000E+00	0.0000	0.000E+00	0.0000	9.742E-02	0.0006
U-238	1.069E+00	0.0065	4.847E-05	0.0000	0.000E+00	0.0000	8.034E-02	0.0005	0.000E+00	0.0000	0.000E+00	0.0000	9.093E-02	0.0006
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	1.135E+02	0.6925	3.162E-03	0.0000	0.000E+00	0.0000	4.470E+01	0.2726	0.000E+00	0.0000	0.000E+00	0.0000	5.708E+00	0.0348

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-	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.		
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		
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	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		
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	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		
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	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	0.0539		
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	0.0005		
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	0.0038		
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	0.000E+00	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	0.000E+00	0.0152		
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	0.000E+00	0.0643		
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	0.8088		
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	0.0012		
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	0.0314		
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	0.0076		
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	1.639E+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 = 5.000E+02 years

Radio- Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
Am-241	1.163E-01	0.0007	2.450E-04	0.0000	0.000E+00	0.0000	6.017E-02	0.0003	0.000E+00	0.0000	0.000E+00	0.0000	1.698E-01	0.0010
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	2.355E-12	0.0000	0.000E+00	0.0000	3.031E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.145E-07	0.0000
Eu-152	3.270E-10	0.0000	8.023E-18	0.0000	0.000E+00	0.0000	2.076E-14	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.350E-14	0.0000
Eu-154	1.400E-16	0.0000	1.877E-24	0.0000	0.000E+00	0.0000	1.075E-20	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.217E-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	6.589E-02	0.0004	5.897E-07	0.0000	0.000E+00	0.0000	1.334E+00	0.0077	0.000E+00	0.0000	0.000E+00	0.0000	1.887E-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
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	3.885E-10	0.0000	0.000E+00	0.0000	1.740E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.849E-06	0.0000
Np-237	7.222E+00	0.0418	2.817E-04	0.0000	0.000E+00	0.0000	1.421E+00	0.0082	0.000E+00	0.0000	0.000E+00	0.0000	2.013E-01	0.0012
Pu-238	2.281E-05	0.0000	1.176E-05	0.0000	0.000E+00	0.0000	2.865E-03	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.048E-03	0.0000
Pu-239	1.829E-03	0.0000	6.649E-04	0.0000	0.000E+00	0.0000	1.598E-01	0.0009	0.000E+00	0.0000	0.000E+00	0.0000	4.519E-01	0.0026
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	5.401E-12	0.0000	0.000E+00	0.0000	3.915E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.694E-07	0.0000
Tc-99	7.107E-04	0.0000	7.621E-08	0.0000	0.000E+00	0.0000	2.437E+00	0.0141	0.000E+00	0.0000	0.000E+00	0.0000	1.379E-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	1.337E+01	0.0773	5.994E-04	0.0000	0.000E+00	0.0000	4.982E+00	0.0288	0.000E+00	0.0000	0.000E+00	0.0000	1.349E+00	0.0078
Th-232	9.290E+01	0.5374	1.001E-03	0.0000	0.000E+00	0.0000	3.629E+01	0.2100	0.000E+00	0.0000	0.000E+00	0.0000	3.392E+00	0.0196
U-234	3.430E-02	0.0002	5.893E-05	0.0000	0.000E+00	0.0000	9.337E-02	0.0005	0.000E+00	0.0000	0.000E+00	0.0000	9.634E-02	0.0006
U-235	5.033E+00	0.0291	7.480E-05	0.0000	0.000E+00	0.0000	1.196E-01	0.0007	0.000E+00	0.0000	0.000E+00	0.0000	1.073E-01	0.0006
U-238	1.069E+00	0.0062	4.851E-05	0.0000	0.000E+00	0.0000	8.039E-02	0.0005	0.000E+00	0.0000	0.000E+00	0.0000	9.099E-02	0.0005
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	1.198E+02	0.6931	2.986E-03	0.0000	0.000E+00	0.0000	4.698E+01	0.2718	0.000E+00	0.0000	0.000E+00	0.0000	6.057E+00	0.0350

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															
	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*			
Radio-	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.		
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		
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	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		
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	0.000E+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	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	0.0512		
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	0.0001		
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	0.000E+00	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	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	0.0141		
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	0.000E+00	0.1140		
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	0.7671		
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	0.0013		
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	0.000E+00	0.0304		
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	0.0072		
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	0.000E+00	1.729E+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

Radio- Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
Am-241	5.296E-02	0.0003	1.099E-04	0.0000	0.000E+00	0.0000	2.714E-02	0.0001	0.000E+00	0.0000	0.000E+00	0.0000	7.614E-02	0.0004
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	2.413E-17	0.0000	0.000E+00	0.0000	3.106E-11	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.198E-12	0.0000
Eu-152	2.488E-21	0.0000	3.918E-18	0.0000	0.000E+00	0.0000	2.617E-15	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.962E-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	6.454E-02	0.0003	5.776E-07	0.0000	0.000E+00	0.0000	1.306E+00	0.0069	0.000E+00	0.0000	0.000E+00	0.0000	1.848E-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	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+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	1.218E-11	0.0000	0.000E+00	0.0000	5.456E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.088E-07	0.0000
Np-237	7.222E+00	0.0383	2.820E-04	0.0000	0.000E+00	0.0000	1.421E+00	0.0075	0.000E+00	0.0000	0.000E+00	0.0000	2.017E-01	0.0011
Pu-238	3.463E-05	0.0000	2.474E-07	0.0000	0.000E+00	0.0000	9.605E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.905E-04	0.0000
Pu-239	1.806E-03	0.0000	6.554E-04	0.0000	0.000E+00	0.0000	1.575E-01	0.0008	0.000E+00	0.0000	0.000E+00	0.0000	4.455E-01	0.0024
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	9.258E-12	0.0000	3.195E-17	0.0000	0.000E+00	0.0000	2.316E-10	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.185E-12	0.0000
Tc-99	6.843E-04	0.0000	7.338E-08	0.0000	0.000E+00	0.0000	2.346E+00	0.0125	0.000E+00	0.0000	0.000E+00	0.0000	1.328E-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	2.405E+01	0.1277	6.152E-04	0.0000	0.000E+00	0.0000	9.027E+00	0.0479	0.000E+00	0.0000	0.000E+00	0.0000	2.156E+00	0.0114
Th-232	9.289E+01	0.4931	1.000E-03	0.0000	0.000E+00	0.0000	3.629E+01	0.1926	0.000E+00	0.0000	0.000E+00	0.0000	3.392E+00	0.0180
U-234	1.211E-01	0.0006	6.163E-05	0.0000	0.000E+00	0.0000	1.258E-01	0.0007	0.000E+00	0.0000	0.000E+00	0.0000	1.043E-01	0.0006
U-235	5.186E+00	0.0275	9.908E-05	0.0000	0.000E+00	0.0000	1.615E-01	0.0009	0.000E+00	0.0000	0.000E+00	0.0000	1.269E-01	0.0007
U-238	1.069E+00	0.0057	4.859E-05	0.0000	0.000E+00	0.0000	8.054E-02	0.0004	0.000E+00	0.0000	0.000E+00	0.0000	9.112E-02	0.0005
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	1.307E+02	0.6936	2.873E-03	0.0000	0.000E+00	0.0000	5.094E+01	0.2704	0.000E+00	0.0000	0.000E+00	0.0000	6.780E+00	0.0360

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															
		Water		Fish		Radon		Plant		Meat		Milk		All Pathways*			
Radio-	Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.		
0	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		
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		
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	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		
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	0.000E+00	0.0083		
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	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	0.0469		
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		
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	0.0032		
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	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	0.0125		
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	0.000E+00	0.1870		
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	0.7037		
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	0.0019		
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	0.000E+00	0.0291		
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	0.0066		
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	1.884E+02		

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 (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
	Am-241	Am-241	1.000E+00	7.706E-02	7.693E-02	7.403E-02	7.344E-02	7.112E-02	6.564E-02	5.160E-02	3.455E-02	1.549E-02
	Am-241	Np-237+D	1.000E+00	1.428E-07	4.283E-07	7.144E-06	8.511E-06	1.387E-05	2.654E-05	5.898E-05	9.838E-05	1.424E-04
	Am-241	U-233	1.000E+00	4.489E-15	3.097E-14	8.435E-12	1.203E-11	3.263E-11	1.259E-10	7.240E-10	2.560E-09	8.214E-09
	Am-241	Th-229+D	1.000E+00	6.349E-18	9.516E-17	4.165E-13	7.112E-13	3.200E-12	2.470E-11	3.597E-10	2.600E-09	1.732E-08
	Am-241	äDSR(j)		7.706E-02	7.694E-02	7.404E-02	7.345E-02	7.113E-02	6.566E-02	5.166E-02	3.465E-02	1.563E-02
	0Co-60	Co-60	1.000E+00	9.505E+00	8.334E+00	3.551E-01	1.840E-01	1.326E-02	1.850E-05	5.025E-14	2.656E-28	0.000E+00
	0Cs-134	Cs-134	1.000E+00	4.978E+00	3.559E+00	1.128E-03	2.105E-04	2.556E-07	1.312E-14	1.775E-36	0.000E+00	0.000E+00
	0Cs-137+D	Cs-137+D	1.000E+00	2.096E+00	2.048E+00	1.180E+00	1.052E+00	6.644E-01	2.106E-01	6.709E-03	2.148E-05	2.201E-10
	0Eu-152	Eu-152	7.210E-01	3.100E+00	2.945E+00	8.619E-01	6.672E-01	2.396E-01	1.852E-02	8.550E-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	9.272E-02	7.166E-03	3.309E-06	9.126E-12	6.942E-23
	Eu-152	Gd-152	2.790E-01	1.405E-17	4.121E-17	4.069E-16	4.411E-16	5.161E-16	5.550E-16	5.582E-16	5.582E-16	5.582E-16
	Eu-152	Sm-148	2.790E-01	4.815E-34	3.322E-33	6.436E-31	8.610E-31	1.854E-30	4.634E-30	1.320E-29	2.748E-29	5.606E-29
	Eu-152	Nd-144	2.790E-01	0.000E+00	0.000E+00	1.401E-45	1.401E-45	9.809E-45	5.605E-44	4.372E-43	1.888E-42	7.842E-42
	Eu-152	äDSR(j)		1.200E+00	1.140E+00	3.335E-01	2.582E-01	9.272E-02	7.166E-03	3.309E-06	9.126E-12	5.582E-16
	0Eu-154	Eu-154	1.000E+00	4.596E+00	4.240E+00	6.117E-01	4.087E-01	8.142E-02	1.443E-03	8.023E-09	1.401E-17	4.269E-35
	0Eu-155	Eu-155	1.000E+00	1.026E-01	8.869E-02	2.694E-03	1.301E-03	7.076E-05	4.880E-08	1.601E-17	2.498E-33	0.000E+00
	0H-3	H-3	1.000E+00	6.685E-03	5.877E-03	2.665E-04	1.399E-04	1.063E-05	1.689E-08	6.784E-17	6.883E-31	0.000E+00
	0I-129	I-129	1.000E+00	1.621E-01	1.621E-01	1.620E-01	1.619E-01	1.618E-01	1.615E-01	1.605E-01	1.588E-01	1.556E-01
	0Mn-54	Mn-54	1.000E+00	2.193E+00	9.746E-01	3.422E-09	5.928E-11	5.339E-18	1.300E-35	0.000E+00	0.000E+00	0.000E+00
	0Na-22	Na-22	1.000E+00	7.436E+00	5.697E+00	9.526E-03	2.514E-03	1.220E-05	2.003E-11	8.854E-29	0.000E+00	0.000E+00
	0Ni-63	Ni-63	1.000E+00	5.863E-04	5.822E-04	4.931E-04	4.763E-04	4.147E-04	2.933E-04	1.038E-04	1.838E-05	5.765E-07
	0Np-237+D	Np-237+D	1.000E+00	8.845E-01	8.845E-01	8.845E-01	8.845E-01	8.845E-01	8.845E-01	8.845E-01	8.844E-01	8.843E-01
	Np-237+D	U-233	1.000E+00	4.124E-08	1.226E-07	2.073E-06	2.480E-06	4.105E-06	8.167E-06	2.035E-05	4.063E-05	8.112E-05
	Np-237+D	Th-229+D	1.000E+00	7.856E-11	5.497E-10	1.531E-07	2.189E-07	5.997E-07	2.371E-06	1.466E-05	5.804E-05	2.282E-04
	Np-237+D	äDSR(j)		8.845E-01	8.845E-01	8.845E-01	8.845E-01	8.845E-01	8.845E-01	8.845E-01	8.844E-01	8.845E-01
	0Pu-238	Pu-238	1.850E-09	1.047E-10	1.039E-10	8.591E-11	8.258E-11	7.051E-11	4.749E-11	1.451E-11	2.012E-12	3.867E-14
	0Pu-238	Pu-238	9.996E-01	5.656E-02	5.612E-02	4.642E-02	4.462E-02	3.810E-02	2.566E-02	7.841E-03	1.087E-03	2.089E-05
	Pu-238	U-234	9.996E-01	2.483E-08	7.430E-08	1.151E-06	1.351E-06	2.076E-06	3.457E-06	5.435E-06	6.181E-06	6.290E-06
	Pu-238	Th-230	9.996E-01	2.395E-13	1.670E-12	4.369E-10	6.171E-10	1.609E-09	5.656E-09	2.566E-08	6.819E-08	1.579E-07
	Pu-238	Ra-226+D	9.996E-01	3.716E-15	5.567E-14	2.346E-10	3.974E-10	1.733E-09	1.240E-08	1.480E-07	8.252E-07	3.874E-06
	Pu-238	Pb-210+D	9.996E-01	6.016E-18	1.823E-16	1.023E-11	2.018E-11	1.317E-10	1.501E-09	2.717E-08	1.791E-07	9.128E-07
	Pu-238	äDSR(j)		5.656E-02	5.612E-02	4.642E-02	4.462E-02	3.810E-02	2.566E-02	7.847E-03	1.094E-03	3.213E-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	7.466E-08	7.407E-08	6.127E-08	5.890E-08	5.029E-08	3.387E-08	1.035E-08	1.435E-09	2.758E-11
	Pu-238	U-234	1.319E-06	3.278E-14	9.807E-14	1.520E-12	1.784E-12	2.740E-12	4.563E-12	7.174E-12	8.158E-12	8.302E-12
	Pu-238	Th-230	1.319E-06	3.162E-19	2.204E-18	5.767E-16	8.146E-16	2.124E-15	7.465E-15	3.387E-14	9.001E-14	2.084E-13
	Pu-238	Ra-226+D	1.319E-06	4.905E-21	7.349E-20	3.097E-16	5.245E-16	2.287E-15	1.637E-14	1.954E-13	1.089E-12	5.113E-12
	Pu-238	Pb-210+D1	1.319E-06	2.852E-24	8.825E-23	5.048E-18	9.961E-18	6.504E-17	7.415E-16	1.342E-14	8.847E-14	4.510E-13
	Pu-238	äDSR(j)	7.466E-08	7.407E-08	6.128E-08	5.890E-08	5.029E-08	3.388E-08	1.036E-08	1.444E-09	4.165E-11	
0	Pu-238	Pu-238	1.899E-08	1.075E-09	1.066E-09	8.820E-10	8.478E-10	7.238E-10	4.875E-10	1.490E-10	2.065E-11	3.970E-13
	Pu-238	U-234	1.899E-08	4.718E-16	1.412E-15	2.188E-14	2.567E-14	3.944E-14	6.569E-14	1.033E-13	1.174E-13	1.195E-13
	Pu-238	Th-230	1.899E-08	4.551E-21	3.173E-20	8.302E-18	1.173E-17	3.057E-17	1.075E-16	4.876E-16	1.296E-15	3.000E-15
	Pu-238	Ra-226+D	1.899E-08	7.060E-23	1.058E-21	4.458E-18	7.550E-18	3.292E-17	2.357E-16	2.812E-15	1.568E-14	7.360E-14
	Pu-238	Pb-210+D2	1.899E-08	6.323E-26	1.953E-24	1.116E-19	2.201E-19	1.437E-18	1.639E-17	2.966E-16	1.955E-15	9.966E-15
	Pu-238	äDSR(j)	1.075E-09	1.066E-09	8.820E-10	8.478E-10	7.239E-10	4.876E-10	1.491E-10	2.079E-11	6.031E-13	
0	Pu-238	Pu-238	2.100E-04	1.188E-05	1.179E-05	9.750E-06	9.372E-06	8.002E-06	5.390E-06	1.647E-06	2.283E-07	4.389E-09
	Pu-238	U-234	2.100E-04	5.216E-12	1.561E-11	2.418E-10	2.838E-10	4.360E-10	7.262E-10	1.142E-09	1.298E-09	1.321E-09
	Pu-238	Th-230	2.100E-04	5.031E-17	3.508E-16	9.177E-14	1.296E-13	3.380E-13	1.188E-12	5.390E-12	1.432E-11	3.316E-11
	Pu-238	Ra-226+D1	2.100E-04	1.861E-18	2.788E-17	1.174E-13	1.989E-13	8.673E-13	6.208E-12	7.409E-11	4.130E-10	1.939E-09
	Pu-238	Pb-210+D	2.100E-04	1.264E-21	3.828E-20	2.149E-15	4.239E-15	2.767E-14	3.153E-13	5.707E-12	3.761E-11	1.917E-10
	Pu-238	äDSR(j)	1.188E-05	1.179E-05	9.750E-06	9.373E-06	8.002E-06	5.391E-06	1.648E-06	2.301E-07	7.874E-09	
0	Pu-238	Pu-238	2.771E-10	1.568E-11	1.556E-11	1.287E-11	1.237E-11	1.056E-11	7.115E-12	2.174E-12	3.014E-13	5.793E-15
	Pu-238	U-234	2.771E-10	6.885E-18	2.060E-17	3.192E-16	3.746E-16	5.756E-16	9.585E-16	1.507E-15	1.714E-15	1.744E-15
	Pu-238	Th-230	2.771E-10	6.641E-23	4.630E-22	1.211E-19	1.711E-19	4.462E-19	1.568E-18	7.115E-18	1.891E-17	4.378E-17
	Pu-238	Ra-226+D1	2.771E-10	2.457E-24	3.680E-23	1.550E-19	2.625E-19	1.145E-18	8.195E-18	9.780E-17	5.452E-16	2.559E-15
	Pu-238	Pb-210+D1	2.771E-10	5.990E-28	1.854E-26	1.060E-21	2.092E-21	1.366E-20	1.558E-19	2.819E-18	1.858E-17	9.473E-17
	Pu-238	äDSR(j)	1.568E-11	1.556E-11	1.287E-11	1.237E-11	1.056E-11	7.116E-12	2.176E-12	3.037E-13	1.023E-14	
0	Pu-238	Pu-238	3.989E-12	2.257E-13	2.239E-13	1.853E-13	1.781E-13	1.520E-13	1.024E-13	3.129E-14	4.338E-15	8.338E-17
	Pu-238	U-234	3.989E-12	9.910E-20	2.965E-19	4.595E-18	5.393E-18	8.285E-18	1.380E-17	2.169E-17	2.467E-17	2.510E-17
	Pu-238	Th-230	3.989E-12	9.559E-25	6.665E-24	1.744E-21	2.463E-21	6.422E-21	2.257E-20	1.024E-19	2.721E-19	6.301E-19
	Pu-238	Ra-226+D1	3.989E-12	3.536E-26	5.296E-25	2.231E-21	3.779E-21	1.648E-20	1.180E-19	1.408E-18	7.847E-18	3.684E-17
	Pu-238	Pb-210+D2	3.989E-12	1.328E-29	4.103E-28	2.343E-23	4.624E-23	3.019E-22	3.442E-21	6.230E-20	4.106E-19	2.093E-18
	Pu-238	äDSR(j)	2.257E-13	2.239E-13	1.853E-13	1.781E-13	1.520E-13	1.024E-13	3.132E-14	4.372E-15	1.480E-16	
0	Pu-238	Pu-238	1.998E-04	1.130E-05	1.121E-05	9.276E-06	8.917E-06	7.613E-06	5.128E-06	1.567E-06	2.172E-07	4.175E-09
	Pu-238	U-234	1.998E-04	4.963E-12	1.485E-11	2.301E-10	2.700E-10	4.149E-10	6.909E-10	1.086E-09	1.235E-09	1.257E-09
	Pu-238	Th-230	1.998E-04	4.787E-17	3.337E-16	8.732E-14	1.233E-13	3.216E-13	1.130E-12	5.128E-12	1.363E-11	3.155E-11
	Pu-238	Ra-226+D2	1.998E-04	6.645E-19	9.957E-18	4.196E-14	7.107E-14	3.099E-13	2.219E-12	2.648E-11	1.476E-10	6.929E-10
	Pu-238	Pb-210+D	1.998E-04	1.202E-21	3.642E-20	2.045E-15	4.033E-15	2.632E-14	3.000E-13	5.430E-12	3.578E-11	1.824E-10
	Pu-238	äDSR(j)	1.130E-05	1.121E-05	9.277E-06	8.917E-06	7.614E-06	5.129E-06	1.568E-06	2.187E-07	6.339E-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	1.492E-11	1.480E-11	1.224E-11	1.177E-11	1.005E-11	6.769E-12	2.068E-12	2.868E-13	5.512E-15
	Pu-238	U-234	2.637E-10	6.551E-18	1.960E-17	3.037E-16	3.564E-16	5.476E-16	9.120E-16	1.434E-15	1.630E-15	1.659E-15
	Pu-238	Th-230	2.637E-10	6.319E-23	4.405E-22	1.153E-19	1.628E-19	4.245E-19	1.492E-18	6.769E-18	1.799E-17	4.165E-17
	Pu-238	Ra-226+D2	2.637E-10	8.771E-25	1.314E-23	5.539E-20	9.382E-20	4.091E-19	2.928E-18	3.495E-17	1.948E-16	9.146E-16
	Pu-238	Pb-210+D1	2.637E-10	5.699E-28	1.764E-26	1.009E-21	1.991E-21	1.300E-20	1.482E-19	2.682E-18	1.768E-17	9.013E-17
	Pu-238	äDSR(j)		1.492E-11	1.480E-11	1.225E-11	1.177E-11	1.005E-11	6.770E-12	2.070E-12	2.886E-13	8.217E-15
0	Pu-238	Pu-238	3.795E-12	2.148E-13	2.131E-13	1.763E-13	1.694E-13	1.447E-13	9.743E-14	2.977E-14	4.128E-15	7.933E-17
	Pu-238	U-234	3.795E-12	9.429E-20	2.821E-19	4.372E-18	5.131E-18	7.882E-18	1.313E-17	2.064E-17	2.347E-17	2.388E-17
	Pu-238	Th-230	3.795E-12	9.095E-25	6.341E-24	1.659E-21	2.343E-21	6.110E-21	2.147E-20	9.743E-20	2.589E-19	5.995E-19
	Pu-238	Ra-226+D2	3.795E-12	1.263E-26	1.892E-25	7.973E-22	1.350E-21	5.889E-21	4.215E-20	5.030E-19	2.804E-18	1.317E-17
	Pu-238	Pb-210+D2	3.795E-12	1.264E-29	3.904E-28	2.230E-23	4.399E-23	2.872E-22	3.275E-21	5.928E-20	3.907E-19	1.992E-18
	Pu-238	äDSR(j)		2.148E-13	2.131E-13	1.763E-13	1.694E-13	1.447E-13	9.744E-14	2.979E-14	4.155E-15	1.190E-16
0	Pu-238	Pu-238	4.196E-08	2.374E-09	2.355E-09	1.948E-09	1.873E-09	1.599E-09	1.077E-09	3.291E-10	4.563E-11	8.770E-13
	Pu-238	U-234	4.196E-08	1.042E-15	3.119E-15	4.833E-14	5.672E-14	8.714E-14	1.451E-13	2.281E-13	2.594E-13	2.640E-13
	Pu-238	Th-230	4.196E-08	1.005E-20	7.010E-20	1.834E-17	2.590E-17	6.755E-17	2.374E-16	1.077E-15	2.862E-15	6.627E-15
	Pu-238	Ra-226+D3	4.196E-08	3.555E-22	5.325E-21	2.243E-17	3.800E-17	1.657E-16	1.186E-15	1.415E-14	7.890E-14	3.704E-13
	Pu-238	Pb-210+D	4.196E-08	2.525E-25	7.650E-24	4.294E-19	8.472E-19	5.529E-18	6.301E-17	1.140E-15	7.516E-15	3.832E-14
	Pu-238	äDSR(j)		2.374E-09	2.355E-09	1.949E-09	1.873E-09	1.599E-09	1.077E-09	3.294E-10	4.598E-11	1.556E-12
0	Pu-238	Pu-238	5.538E-14	3.134E-15	3.109E-15	2.572E-15	2.472E-15	2.111E-15	1.422E-15	4.345E-16	6.023E-17	1.158E-18
	Pu-238	U-234	5.538E-14	1.376E-21	4.117E-21	6.380E-20	7.487E-20	1.150E-19	1.916E-19	3.011E-19	3.425E-19	3.485E-19
	Pu-238	Th-230	5.538E-14	1.327E-26	9.253E-26	2.421E-23	3.419E-23	8.916E-23	3.134E-22	1.422E-21	3.778E-21	8.748E-21
	Pu-238	Ra-226+D3	5.538E-14	4.693E-28	7.029E-27	2.961E-23	5.015E-23	2.187E-22	1.566E-21	1.868E-20	1.042E-19	4.890E-19
	Pu-238	Pb-210+D1	5.538E-14	1.197E-31	3.704E-30	2.119E-25	4.181E-25	2.730E-24	3.113E-23	5.634E-22	3.714E-21	1.893E-20
	Pu-238	äDSR(j)		3.134E-15	3.109E-15	2.572E-15	2.472E-15	2.111E-15	1.422E-15	4.348E-16	6.069E-17	2.023E-18
0	Pu-238	Pu-238	7.972E-16	4.511E-17	4.475E-17	3.702E-17	3.559E-17	3.038E-17	2.046E-17	6.254E-18	8.670E-19	1.666E-20
	Pu-238	U-234	7.972E-16	1.980E-23	5.925E-23	9.183E-22	1.078E-21	1.656E-21	2.757E-21	4.334E-21	4.929E-21	5.016E-21
	Pu-238	Th-230	7.972E-16	1.910E-28	1.332E-27	3.485E-25	4.922E-25	1.283E-24	4.510E-24	2.047E-23	5.439E-23	1.259E-22
	Pu-238	Ra-226+D3	7.972E-16	6.755E-30	1.012E-28	4.262E-25	7.219E-25	3.148E-24	2.253E-23	2.689E-22	1.499E-21	7.038E-21
	Pu-238	Pb-210+D2	7.972E-16	2.654E-33	8.199E-32	4.683E-27	9.240E-27	6.033E-26	6.878E-25	1.245E-23	8.206E-23	4.183E-22
	Pu-238	äDSR(j)		4.511E-17	4.475E-17	3.702E-17	3.559E-17	3.038E-17	2.047E-17	6.258E-18	8.735E-19	2.926E-20
0	Pu-238	Pu-238	2.000E-07	1.132E-08	1.123E-08	9.288E-09	8.928E-09	7.622E-09	5.134E-09	1.569E-09	2.175E-10	4.180E-12
	Pu-238	U-234	2.000E-07	4.969E-15	1.487E-14	2.304E-13	2.704E-13	4.154E-13	6.917E-13	1.087E-12	1.237E-12	1.258E-12
	Pu-238	Th-230	2.000E-07	4.793E-20	3.341E-19	8.742E-17	1.235E-16	3.220E-16	1.132E-15	5.134E-15	1.364E-14	3.159E-14
	Pu-238	Ra-226+D4	2.000E-07	1.035E-22	1.558E-21	6.588E-18	1.116E-17	4.867E-17	3.484E-16	4.158E-15	2.318E-14	1.088E-13
	Pu-238	Pb-210+D	2.000E-07	1.204E-24	3.647E-23	2.047E-18	4.038E-18	2.636E-17	3.004E-16	5.436E-15	3.583E-14	1.826E-13
	Pu-238	äDSR(j)		1.132E-08	1.123E-08	9.288E-09	8.928E-09	7.623E-09	5.135E-09	1.570E-09	2.188E-10	5.762E-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)								
	AAAAAA	AAAAAA	AAAAAA	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	1.494E-14	1.482E-14	1.226E-14	1.178E-14	1.006E-14	6.777E-15	2.071E-15	2.871E-16	5.518E-18
	Pu-238	U-234	2.640E-13	6.558E-21	1.962E-20	3.041E-19	3.569E-19	5.483E-19	9.131E-19	1.435E-18	1.632E-18	1.661E-18
	Pu-238	Th-230	2.640E-13	6.326E-26	4.411E-25	1.154E-22	1.630E-22	4.250E-22	1.494E-21	6.777E-21	1.801E-20	4.170E-20
	Pu-238	Ra-226+D4	2.640E-13	1.366E-28	2.056E-27	8.697E-24	1.473E-23	6.424E-23	4.599E-22	5.488E-21	3.060E-20	1.436E-19
	Pu-238	Pb-210+D1	2.640E-13	5.706E-31	1.766E-29	1.010E-24	1.993E-24	1.301E-23	1.484E-22	2.686E-21	1.770E-20	9.024E-20
	Pu-238	äDSR(j)		1.494E-14	1.482E-14	1.226E-14	1.179E-14	1.006E-14	6.778E-15	2.072E-15	2.888E-16	7.455E-18
0	Pu-238	Pu-238	3.800E-15	2.150E-16	2.133E-16	1.765E-16	1.696E-16	1.448E-16	9.755E-17	2.981E-17	4.133E-18	7.943E-20
	Pu-238	U-234	3.800E-15	9.440E-23	2.824E-22	4.377E-21	5.137E-21	7.892E-21	1.314E-20	2.066E-20	2.350E-20	2.391E-20
	Pu-238	Th-230	3.800E-15	9.106E-28	6.349E-27	1.661E-24	2.346E-24	6.117E-24	2.150E-23	9.755E-23	2.592E-22	6.002E-22
	Pu-238	Ra-226+D4	3.800E-15	1.967E-30	2.960E-29	1.252E-25	2.120E-25	9.247E-25	6.619E-24	7.900E-23	4.404E-22	2.067E-21
	Pu-238	Pb-210+D2	3.800E-15	1.265E-32	3.908E-31	2.232E-26	4.405E-26	2.876E-25	3.278E-24	5.935E-23	3.911E-22	1.994E-21
	Pu-238	äDSR(j)		2.150E-16	2.133E-16	1.765E-16	1.696E-16	1.448E-16	9.756E-17	2.983E-17	4.157E-18	1.080E-19
0	Pu-239	Pu-239	5.901E-04	3.677E-05	3.677E-05	3.674E-05	3.674E-05	3.671E-05	3.666E-05	3.650E-05	3.624E-05	3.573E-05
	Pu-239	U-235+D	5.901E-04	1.468E-13	4.403E-13	7.483E-12	8.949E-12	1.481E-11	2.946E-11	7.327E-11	1.459E-10	2.895E-10
	Pu-239	Pa-231	5.901E-04	1.042E-18	7.306E-18	2.039E-15	2.916E-15	7.992E-15	3.162E-14	1.960E-13	7.791E-13	3.087E-12
	Pu-239	Ac-227+D	5.901E-04	2.534E-20	3.772E-19	1.395E-15	2.305E-15	9.166E-15	5.443E-14	4.683E-13	2.104E-12	8.876E-12
	Pu-239	äDSR(j)		3.677E-05	3.677E-05	3.674E-05	3.674E-05	3.671E-05	3.666E-05	3.650E-05	3.624E-05	3.573E-05
0	Pu-239	Pu-239	1.633E-06	1.018E-07	1.018E-07	1.017E-07	1.017E-07	1.016E-07	1.015E-07	1.010E-07	1.003E-07	9.887E-08
	Pu-239	U-235+D	1.633E-06	4.062E-16	1.219E-15	2.071E-14	2.477E-14	4.100E-14	8.153E-14	2.028E-13	4.037E-13	8.012E-13
	Pu-239	Pa-231	1.633E-06	2.883E-21	2.022E-20	5.642E-18	8.071E-18	2.212E-17	8.752E-17	5.424E-16	2.156E-15	8.545E-15
	Pu-239	Ac-227+D1	1.633E-06	7.065E-23	1.053E-21	3.898E-18	6.440E-18	2.561E-17	1.521E-16	1.309E-15	5.880E-15	2.480E-14
	Pu-239	äDSR(j)		1.018E-07	1.018E-07	1.017E-07	1.017E-07	1.016E-07	1.015E-07	1.010E-07	1.003E-07	9.887E-08
0	Pu-239	Pu-239	8.257E-06	5.145E-07	5.144E-07	5.141E-07	5.140E-07	5.137E-07	5.130E-07	5.108E-07	5.071E-07	4.999E-07
	Pu-239	U-235+D	8.257E-06	2.054E-15	6.161E-15	1.047E-13	1.252E-13	2.073E-13	4.122E-13	1.025E-12	2.041E-12	4.051E-12
	Pu-239	Pa-231	8.257E-06	1.458E-20	1.022E-19	2.852E-17	4.080E-17	1.118E-16	4.425E-16	2.742E-15	1.090E-14	4.320E-14
	Pu-239	Ac-227+D2	8.257E-06	2.944E-22	4.387E-21	1.624E-17	2.683E-17	1.067E-16	6.337E-16	5.453E-15	2.450E-14	1.034E-13
	Pu-239	äDSR(j)		5.145E-07	5.144E-07	5.141E-07	5.140E-07	5.137E-07	5.130E-07	5.108E-07	5.071E-07	4.999E-07
0	Pu-239	Pu-239	2.285E-08	1.424E-09	1.424E-09	1.423E-09	1.423E-09	1.422E-09	1.420E-09	1.414E-09	1.403E-09	1.383E-09
	Pu-239	U-235+D	2.285E-08	5.684E-18	1.705E-17	2.898E-16	3.466E-16	5.737E-16	1.141E-15	2.837E-15	5.649E-15	1.121E-14
	Pu-239	Pa-231	2.285E-08	4.034E-23	2.829E-22	7.895E-20	1.129E-19	3.095E-19	1.225E-18	7.589E-18	3.017E-17	1.196E-16
	Pu-239	Ac-227+D3	2.285E-08	8.242E-25	1.228E-23	4.547E-20	7.513E-20	2.988E-19	1.774E-18	1.527E-17	6.861E-17	2.894E-16
	Pu-239	äDSR(j)		1.424E-09	1.424E-09	1.423E-09	1.423E-09	1.422E-09	1.420E-09	1.414E-09	1.403E-09	1.383E-09
0	Pu-239	Pu-239	4.954E-10	3.087E-11	3.087E-11	3.085E-11	3.084E-11	3.082E-11	3.078E-11	3.065E-11	3.043E-11	2.999E-11
	Pu-239	U-235+D	4.954E-10	1.232E-19	3.697E-19	6.283E-18	7.514E-18	1.244E-17	2.473E-17	6.152E-17	1.225E-16	2.431E-16
	Pu-239	Pa-231	4.954E-10	8.746E-25	6.134E-24	1.712E-21	2.448E-21	6.710E-21	2.655E-20	1.645E-19	6.541E-19	2.592E-18
	Pu-239	Ac-227+D4	4.954E-10	2.116E-26	3.153E-25	1.167E-21	1.928E-21	7.668E-21	4.553E-20	3.918E-19	1.761E-18	7.426E-18
	Pu-239	äDSR(j)		3.087E-11	3.087E-11	3.085E-11	3.084E-11	3.082E-11	3.078E-11	3.065E-11	3.043E-11	2.999E-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	8.543E-14	8.543E-14	8.537E-14	8.536E-14	8.531E-14	8.519E-14	8.482E-14	8.421E-14	8.301E-14
	Pu-239	U-235+D	1.371E-12	3.410E-22	1.023E-21	1.739E-20	2.080E-20	3.442E-20	6.845E-20	1.703E-19	3.389E-19	6.727E-19
	Pu-239	Pa-231	1.371E-12	2.421E-27	1.698E-26	4.737E-24	6.776E-24	1.857E-23	7.348E-23	4.554E-22	1.810E-21	7.174E-21
	Pu-239	Ac-227+D5	1.371E-12	5.913E-29	8.811E-28	3.261E-24	5.388E-24	2.143E-23	1.272E-22	1.095E-21	4.920E-21	2.075E-20
	Pu-239	äDSR(j)		8.543E-14	8.543E-14	8.537E-14	8.536E-14	8.531E-14	8.519E-14	8.482E-14	8.421E-14	8.301E-14
0	Pu-239+D	Pu-239+D	9.829E-01	6.124E-02	6.124E-02	6.120E-02	6.119E-02	6.115E-02	6.107E-02	6.080E-02	6.037E-02	5.951E-02
	Pu-239+D	U-235+D	9.829E-01	2.445E-10	7.334E-10	1.246E-08	1.491E-08	2.467E-08	4.907E-08	1.220E-07	2.430E-07	4.822E-07
	Pu-239+D	Pa-231	9.829E-01	1.735E-15	1.217E-14	3.396E-12	4.857E-12	1.331E-11	5.267E-11	3.264E-10	1.298E-09	5.142E-09
	Pu-239+D	Ac-227+D	9.829E-01	4.222E-17	6.284E-16	2.323E-12	3.839E-12	1.527E-11	9.066E-11	7.800E-10	3.505E-09	1.478E-08
	Pu-239+D	äDSR(j)		6.124E-02	6.124E-02	6.120E-02	6.119E-02	6.115E-02	6.107E-02	6.080E-02	6.037E-02	5.951E-02
0	Pu-239+D	Pu-239+D	2.720E-03	1.695E-04	1.695E-04	1.694E-04	1.693E-04	1.693E-04	1.690E-04	1.683E-04	1.671E-04	1.647E-04
	Pu-239+D	U-235+D	2.720E-03	6.766E-13	2.030E-12	3.450E-11	4.126E-11	6.829E-11	1.358E-10	3.378E-10	6.724E-10	1.335E-09
	Pu-239+D	Pa-231	2.720E-03	4.802E-18	3.368E-17	9.398E-15	1.344E-14	3.684E-14	1.458E-13	9.035E-13	3.592E-12	1.423E-11
	Pu-239+D	Ac-227+D1	2.720E-03	1.177E-19	1.754E-18	6.492E-15	1.073E-14	4.266E-14	2.533E-13	2.180E-12	9.795E-12	4.131E-11
	Pu-239+D	äDSR(j)		1.695E-04	1.695E-04	1.694E-04	1.693E-04	1.693E-04	1.690E-04	1.683E-04	1.671E-04	1.647E-04
0	Pu-239+D	Pu-239+D	1.375E-02	8.569E-04	8.569E-04	8.563E-04	8.562E-04	8.557E-04	8.544E-04	8.508E-04	8.447E-04	8.326E-04
	Pu-239+D	U-235+D	1.375E-02	3.421E-12	1.026E-11	1.744E-10	2.086E-10	3.453E-10	6.866E-10	1.708E-09	3.400E-09	6.747E-09
	Pu-239+D	Pa-231	1.375E-02	2.428E-17	1.703E-16	4.751E-14	6.796E-14	1.863E-13	7.370E-13	4.568E-12	1.816E-11	7.195E-11
	Pu-239+D	Ac-227+D2	1.375E-02	4.903E-19	7.308E-18	2.705E-14	4.470E-14	1.778E-13	1.056E-12	9.083E-12	4.081E-11	1.722E-10
	Pu-239+D	äDSR(j)		8.569E-04	8.569E-04	8.563E-04	8.562E-04	8.557E-04	8.544E-04	8.508E-04	8.447E-04	8.326E-04
0	Pu-239+D	Pu-239+D	3.806E-05	2.372E-06	2.372E-06	2.370E-06	2.370E-06	2.368E-06	2.365E-06	2.355E-06	2.338E-06	2.304E-06
	Pu-239+D	U-235+D	3.806E-05	9.467E-15	2.840E-14	4.827E-13	5.773E-13	9.555E-13	1.900E-12	4.726E-12	9.409E-12	1.867E-11
	Pu-239+D	Pa-231	3.806E-05	6.719E-20	4.713E-19	1.315E-16	1.881E-16	5.155E-16	2.040E-15	1.264E-14	5.025E-14	1.991E-13
	Pu-239+D	Ac-227+D3	3.806E-05	1.373E-21	2.046E-20	7.574E-17	1.251E-16	4.977E-16	2.956E-15	2.543E-14	1.143E-13	4.820E-13
	Pu-239+D	äDSR(j)		2.372E-06	2.372E-06	2.370E-06	2.370E-06	2.368E-06	2.365E-06	2.355E-06	2.338E-06	2.304E-06
0	Pu-239+D	Pu-239+D	8.252E-07	5.142E-08	5.142E-08	5.138E-08	5.137E-08	5.134E-08	5.127E-08	5.105E-08	5.068E-08	4.996E-08
	Pu-239+D	U-235+D	8.252E-07	2.053E-16	6.158E-16	1.046E-14	1.252E-14	2.072E-14	4.120E-14	1.025E-13	2.040E-13	4.048E-13
	Pu-239+D	Pa-231	8.252E-07	1.457E-21	1.022E-20	2.851E-18	4.078E-18	1.118E-17	4.423E-17	2.741E-16	1.090E-15	4.317E-15
	Pu-239+D	Ac-227+D4	8.252E-07	3.524E-23	5.252E-22	1.944E-18	3.211E-18	1.277E-17	7.585E-17	6.526E-16	2.932E-15	1.237E-14
	Pu-239+D	äDSR(j)		5.142E-08	5.142E-08	5.138E-08	5.137E-08	5.134E-08	5.127E-08	5.105E-08	5.068E-08	4.996E-08
0	Pu-239+D	Pu-239+D	2.284E-09	1.423E-10	1.423E-10	1.422E-10	1.422E-10	1.421E-10	1.419E-10	1.413E-10	1.403E-10	1.383E-10
	Pu-239+D	U-235+D	2.284E-09	5.681E-19	1.704E-18	2.896E-17	3.464E-17	5.734E-17	1.140E-16	2.836E-16	5.646E-16	1.120E-15
	Pu-239+D	Pa-231	2.284E-09	4.032E-24	2.828E-23	7.890E-21	1.129E-20	3.093E-20	1.224E-19	7.585E-19	3.015E-18	1.195E-17
	Pu-239+D	Ac-227+D5	2.284E-09	9.848E-26	1.468E-24	5.432E-21	8.974E-21	3.569E-20	2.120E-19	1.824E-18	8.195E-18	3.457E-17
	Pu-239+D	äDSR(j)		1.423E-10	1.423E-10	1.422E-10	1.422E-10	1.421E-10	1.419E-10	1.413E-10	1.403E-10	1.383E-10
0	Ru-106+D	Ru-106+D	1.000E+00	6.076E-01	3.085E-01	2.666E-08	9.000E-10	1.170E-15	2.252E-30	0.000E+00	0.000E+00	0.000E+00
0	Sr-90+D	Sr-90+D	1.000E+00	6.945E-01	6.780E-01	3.804E-01	3.373E-01	2.084E-01	6.253E-02	1.689E-03	4.108E-06	2.430E-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	2.533E-01	2.533E-01	2.528E-01	2.527E-01	2.523E-01	2.514E-01	2.485E-01	2.439E-01	2.348E-01	
	0Th-228+D	Th-228+D	1.000E+00	5.071E+00	3.529E+00	5.864E-04	9.568E-05	6.781E-08	9.069E-16	2.169E-39	0.000E+00	0.000E+00	
	0Th-230	Th-230	9.996E-01	5.529E-02	5.529E-02	5.528E-02	5.528E-02	5.527E-02	5.524E-02	5.517E-02	5.504E-02	5.479E-02	
	Th-230	Ra-226+D	9.996E-01	1.721E-03	5.164E-03	8.735E-02	1.044E-01	1.720E-01	3.386E-01	8.168E-01	1.546E+00	2.783E+00	
	Th-230	Pb-210+D	9.996E-01	4.568E-06	3.136E-05	6.854E-03	9.365E-03	2.162E-02	5.962E-02	1.807E-01	3.673E-01	6.836E-01	
	Th-230	äDSR(j)		5.702E-02	6.049E-02	1.495E-01	1.690E-01	2.489E-01	4.535E-01	1.053E+00	1.969E+00	3.521E+00	
	0Th-230	Th-230	1.319E-06	7.299E-08	7.299E-08	7.297E-08	7.297E-08	7.295E-08	7.292E-08	7.282E-08	7.265E-08	7.232E-08	
	Th-230	Ra-226+D	1.319E-06	2.272E-09	6.817E-09	1.153E-07	1.378E-07	2.271E-07	4.470E-07	1.078E-06	2.041E-06	3.674E-06	
	Th-230	Pb-210+D1	1.319E-06	2.202E-12	1.533E-11	3.384E-09	4.625E-09	1.068E-08	2.945E-08	8.928E-08	1.815E-07	3.377E-07	
	Th-230	äDSR(j)		7.526E-08	7.982E-08	1.917E-07	2.154E-07	3.107E-07	5.494E-07	1.240E-06	2.295E-06	4.084E-06	
	0Th-230	Th-230	1.899E-08	1.051E-09	1.051E-09	1.050E-09	1.050E-09	1.050E-09	1.050E-09	1.048E-09	1.046E-09	1.041E-09	
	Th-230	Ra-226+D	1.899E-08	3.270E-11	9.813E-11	1.660E-09	1.983E-09	3.269E-09	6.434E-09	1.552E-08	2.938E-08	5.288E-08	
	Th-230	Pb-210+D2	1.899E-08	4.877E-14	3.391E-13	7.479E-11	1.022E-10	2.360E-10	6.508E-10	1.973E-09	4.010E-09	7.463E-09	
	Th-230	äDSR(j)		1.083E-09	1.149E-09	2.785E-09	3.135E-09	4.555E-09	8.134E-09	1.854E-08	3.444E-08	6.138E-08	
	0Th-230	Th-230	2.100E-04	1.161E-05	1.161E-05	1.161E-05	1.161E-05	1.161E-05	1.160E-05	1.159E-05	1.156E-05	1.151E-05	
	Th-230	Ra-226+D1	2.100E-04	8.618E-07	2.585E-06	4.372E-05	5.224E-05	8.611E-05	1.695E-04	4.088E-04	7.740E-04	1.393E-03	
	Th-230	Pb-210+D	2.100E-04	9.596E-10	6.588E-09	1.440E-06	1.967E-06	4.541E-06	1.252E-05	3.796E-05	7.714E-05	1.436E-04	
	Th-230	äDSR(j)		1.248E-05	1.421E-05	5.677E-05	6.582E-05	1.023E-04	1.936E-04	4.584E-04	8.627E-04	1.548E-03	
	0Th-230	Th-230	2.771E-10	1.533E-11	1.533E-11	1.533E-11	1.533E-11	1.532E-11	1.532E-11	1.530E-11	1.526E-11	1.519E-11	
	Th-230	Ra-226+D1	2.771E-10	1.138E-12	3.413E-12	5.771E-11	6.895E-11	1.137E-10	2.237E-10	5.397E-10	1.022E-09	1.839E-09	
	Th-230	Pb-210+D1	2.771E-10	4.626E-16	3.220E-15	7.108E-13	9.715E-13	2.243E-12	6.186E-12	1.875E-11	3.812E-11	7.094E-11	
	Th-230	äDSR(j)		1.647E-11	1.875E-11	7.375E-11	8.525E-11	1.312E-10	2.452E-10	5.737E-10	1.075E-09	1.925E-09	
	0Th-230	Th-230	3.989E-12	2.207E-13	2.207E-13	2.206E-13	2.206E-13	2.206E-13	2.205E-13	2.202E-13	2.197E-13	2.186E-13	
	Th-230	Ra-226+D1	3.989E-12	1.637E-14	4.912E-14	8.307E-13	9.925E-13	1.636E-12	3.220E-12	7.768E-12	1.471E-11	2.647E-11	
	Th-230	Pb-210+D2	3.989E-12	1.024E-17	7.122E-17	1.571E-14	2.147E-14	4.956E-14	1.367E-13	4.144E-13	8.422E-13	1.568E-12	
	Th-230	äDSR(j)		2.370E-13	2.699E-13	1.067E-12	1.235E-12	1.906E-12	3.578E-12	8.403E-12	1.577E-11	2.825E-11	
	0Th-230	Th-230	1.998E-04	1.105E-05	1.105E-05	1.105E-05	1.105E-05	1.104E-05	1.104E-05	1.102E-05	1.100E-05	1.095E-05	
	Th-230	Ra-226+D2	1.998E-04	3.079E-07	9.237E-07	1.562E-05	1.867E-05	3.077E-05	6.057E-05	1.461E-04	2.766E-04	4.978E-04	
	Th-230	Pb-210+D	1.998E-04	9.130E-10	6.268E-09	1.370E-06	1.872E-06	4.320E-06	1.191E-05	3.611E-05	7.340E-05	1.366E-04	
	Th-230	äDSR(j)		1.136E-05	1.198E-05	2.804E-05	3.159E-05	4.614E-05	8.352E-05	1.932E-04	3.610E-04	6.453E-04	
	0Th-230	Th-230	2.637E-10	1.459E-11	1.459E-11	1.458E-11	1.458E-11	1.458E-11	1.457E-11	1.455E-11	1.452E-11	1.445E-11	
	Th-230	Ra-226+D2	2.637E-10	4.064E-13	1.219E-12	2.062E-11	2.464E-11	4.062E-11	7.995E-11	1.929E-10	3.651E-10	6.571E-10	
	Th-230	Pb-210+D1	2.637E-10	4.401E-16	3.064E-15	6.763E-13	9.243E-13	2.134E-12	5.886E-12	1.784E-11	3.626E-11	6.749E-11	
	Th-230	äDSR(j)		1.499E-11	1.581E-11	3.588E-11	4.015E-11	5.733E-11	1.004E-10	2.252E-10	4.159E-10	7.390E-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	Th-230	3.795E-12	2.099E-13	2.099E-13	2.099E-13	2.099E-13	2.098E-13	2.098E-13	2.095E-13	2.090E-13	2.080E-13
Th-230	Ra-226+D2	Th-230	3.795E-12	5.849E-15	1.755E-14	2.969E-13	3.547E-13	5.847E-13	1.151E-12	2.776E-12	5.255E-12	9.458E-12
Th-230	Pb-210+D2	Th-230	3.795E-12	9.746E-18	6.776E-17	1.495E-14	2.042E-14	4.715E-14	1.301E-13	3.942E-13	8.013E-13	1.491E-12
Th-230	äDSR(j)	Th-230	3.795E-12	2.158E-13	2.276E-13	5.217E-13	5.850E-13	8.417E-13	1.491E-12	3.380E-12	6.266E-12	1.116E-11
0Th-230	Th-230	Th-230	4.196E-08	2.321E-09	2.321E-09	2.320E-09	2.320E-09	2.320E-09	2.319E-09	2.316E-09	2.310E-09	2.300E-09
Th-230	Ra-226+D3	Th-230	4.196E-08	1.646E-10	4.939E-10	8.353E-09	9.980E-09	1.645E-08	3.238E-08	7.811E-08	1.479E-07	2.661E-07
Th-230	Pb-210+D	Th-230	4.196E-08	1.918E-13	1.316E-12	2.877E-10	3.931E-10	9.074E-10	2.502E-09	7.585E-09	1.542E-08	2.869E-08
Th-230	äDSR(j)	Th-230	4.196E-08	2.486E-09	2.816E-09	1.096E-08	1.269E-08	1.968E-08	3.720E-08	8.801E-08	1.656E-07	2.971E-07
0Th-230	Th-230	Th-230	5.538E-14	3.064E-15	3.064E-15	3.063E-15	3.063E-15	3.062E-15	3.061E-15	3.057E-15	3.050E-15	3.036E-15
Th-230	Ra-226+D3	Th-230	5.538E-14	2.173E-16	6.520E-16	1.103E-14	1.317E-14	2.172E-14	4.274E-14	1.031E-13	1.952E-13	3.513E-13
Th-230	Pb-210+D1	Th-230	5.538E-14	9.245E-20	6.435E-19	1.421E-16	1.941E-16	4.482E-16	1.236E-15	3.747E-15	7.617E-15	1.418E-14
Th-230	äDSR(j)	Th-230	5.538E-14	3.281E-15	3.716E-15	1.423E-14	1.643E-14	2.523E-14	4.704E-14	1.099E-13	2.058E-13	3.685E-13
0Th-230	Th-230	Th-230	7.972E-16	4.410E-17	4.410E-17	4.409E-17	4.409E-17	4.408E-17	4.406E-17	4.400E-17	4.390E-17	4.369E-17
Th-230	Ra-226+D3	Th-230	7.972E-16	3.128E-18	9.384E-18	1.587E-16	1.896E-16	3.126E-16	6.152E-16	1.484E-15	2.809E-15	5.056E-15
Th-230	Pb-210+D2	Th-230	7.972E-16	2.047E-21	1.423E-20	3.139E-18	4.290E-18	9.904E-18	2.732E-17	8.281E-17	1.683E-16	3.133E-16
Th-230	äDSR(j)	Th-230	7.972E-16	4.723E-17	5.350E-17	2.059E-16	2.380E-16	3.665E-16	6.866E-16	1.611E-15	3.022E-15	5.413E-15
0Th-230	Th-230	Th-230	2.000E-07	1.106E-08	1.106E-08	1.106E-08	1.106E-08	1.106E-08	1.105E-08	1.104E-08	1.101E-08	1.096E-08
Th-230	Ra-226+D4	Th-230	2.000E-07	4.818E-11	1.449E-10	2.453E-09	2.931E-09	4.832E-09	9.512E-09	2.294E-08	4.344E-08	7.817E-08
Th-230	Pb-210+D	Th-230	2.000E-07	9.141E-13	6.275E-12	1.371E-09	1.874E-09	4.325E-09	1.193E-08	3.615E-08	7.349E-08	1.368E-07
Th-230	äDSR(j)	Th-230	2.000E-07	1.111E-08	1.121E-08	1.489E-08	1.587E-08	2.022E-08	3.249E-08	7.014E-08	1.279E-07	2.259E-07
0Th-230	Th-230	Th-230	2.640E-13	1.460E-14	1.460E-14	1.460E-14	1.460E-14	1.460E-14	1.459E-14	1.457E-14	1.454E-14	1.447E-14
Th-230	Ra-226+D4	Th-230	2.640E-13	6.359E-17	1.912E-16	3.239E-15	3.869E-15	6.379E-15	1.256E-14	3.029E-14	5.734E-14	1.032E-13
Th-230	Pb-210+D1	Th-230	2.640E-13	4.407E-19	3.067E-18	6.771E-16	9.254E-16	2.136E-15	5.893E-15	1.786E-14	3.631E-14	6.758E-14
Th-230	äDSR(j)	Th-230	2.640E-13	1.467E-14	1.480E-14	1.852E-14	1.939E-14	2.311E-14	3.304E-14	6.272E-14	1.082E-13	1.852E-13
0Th-230	Th-230	Th-230	3.800E-15	2.102E-16	2.102E-16	2.101E-16	2.101E-16	2.101E-16	2.100E-16	2.097E-16	2.092E-16	2.083E-16
Th-230	Ra-226+D4	Th-230	3.800E-15	9.153E-19	2.752E-18	4.662E-17	5.570E-17	9.182E-17	1.807E-16	4.359E-16	8.253E-16	1.485E-15
Th-230	Pb-210+D2	Th-230	3.800E-15	9.758E-21	6.784E-20	1.496E-17	2.045E-17	4.721E-17	1.302E-16	3.947E-16	8.023E-16	1.493E-15
Th-230	äDSR(j)	Th-230	3.800E-15	2.111E-16	2.130E-16	2.717E-16	2.863E-16	3.491E-16	5.209E-16	1.040E-15	1.837E-15	3.187E-15
0Th-232	Th-232	Th-232	1.000E+00	6.030E-02	6.030E-02	6.030E-02	6.030E-02	6.030E-02	6.030E-02	6.030E-02	6.029E-02	6.029E-02
Th-232	Ra-228+D	Th-232	1.000E+00	4.134E-01	1.179E+00	6.822E+00	6.972E+00	7.137E+00	7.153E+00	7.153E+00	7.153E+00	7.152E+00
Th-232	Th-228+D	Th-232	1.000E+00	3.915E-02	2.401E-01	5.627E+00	5.817E+00	6.026E+00	6.046E+00	6.046E+00	6.046E+00	6.045E+00
Th-232	äDSR(j)	Th-232	1.000E+00	5.129E-01	1.479E+00	1.251E+01	1.285E+01	1.322E+01	1.326E+01	1.326E+01	1.326E+01	1.326E+01
0U-234	U-234	U-234	9.996E-01	1.766E-02	1.766E-02	1.766E-02	1.766E-02	1.766E-02	1.765E-02	1.765E-02	1.763E-02	1.761E-02
U-234	Th-230	U-234	9.996E-01	2.547E-07	7.632E-07	1.296E-05	1.550E-05	2.567E-05	5.107E-05	1.272E-04	2.537E-04	5.056E-04
U-234	Ra-226+D	U-234	9.996E-01	5.274E-09	3.693E-08	1.026E-05	1.467E-05	4.009E-05	1.576E-04	9.579E-04	3.688E-03	1.373E-02
U-234	Pb-210+D	U-234	9.996E-01	1.059E-11	1.557E-10	5.701E-07	9.419E-07	3.745E-06	2.219E-05	1.883E-04	8.218E-04	3.262E-03
U-234	äDSR(j)	U-234	9.996E-01	1.766E-02	1.766E-02	1.768E-02	1.769E-02	1.773E-02	1.789E-02	1.892E-02	2.240E-02	3.511E-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	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA	
	U-234	U-234	1.319E-06	2.331E-08	2.331E-08	2.331E-08	2.331E-08	2.331E-08	2.331E-08	2.330E-08	2.329E-08	2.328E-08	2.324E-08	U-234	Th-230	1.319E-06	3.362E-13	1.007E-12	1.711E-11	2.047E-11	3.388E-11	6.741E-11	1.679E-10	3.349E-10	6.674E-10
	U-234	Ra-226+D	1.319E-06	6.962E-15	4.875E-14	1.355E-11	1.936E-11	5.292E-11	2.081E-10	1.264E-09	4.868E-09	1.813E-08	U-234	Pb-210+D1	1.319E-06	5.061E-18	7.572E-17	2.814E-13	4.650E-13	1.849E-12	1.096E-11	9.304E-11	4.060E-10	1.611E-09	
	U-234	äDSR(j)		2.331E-08	2.331E-08	2.334E-08	2.335E-08	2.340E-08	2.359E-08	2.482E-08	2.888E-08	4.365E-08	OU-234	U-234	1.899E-08	3.355E-10	3.355E-10	3.355E-10	3.355E-10	3.355E-10	3.354E-10	3.353E-10	3.350E-10	3.345E-10	
	U-234	Th-230	1.899E-08	4.839E-15	1.450E-14	2.463E-13	2.946E-13	4.877E-13	7.889E-13	9.703E-13	2.416E-12	4.820E-12	9.606E-12	U-234	Ra-226+D	1.899E-08	1.002E-16	7.017E-16	1.950E-13	2.787E-13	7.618E-13	2.995E-12	1.820E-11	7.007E-11	2.609E-10
	U-234	Pb-210+D2	1.899E-08	1.121E-19	1.675E-18	6.219E-15	1.028E-14	4.087E-14	2.422E-13	2.056E-12	8.972E-12	3.561E-11	U-234	äDSR(j)		3.355E-10	3.355E-10	3.360E-10	3.361E-10	3.396E-10	3.580E-10	3.580E-10	4.189E-10	6.407E-10	
	OU-234	U-234	2.100E-04	3.709E-06	3.709E-06	3.709E-06	3.709E-06	3.709E-06	3.708E-06	3.707E-06	3.704E-06	3.698E-06	U-234	Th-230	2.100E-04	5.349E-11	1.603E-10	2.723E-09	3.257E-09	5.392E-09	1.073E-08	2.671E-08	5.329E-08	1.062E-07	
	U-234	Ra-226+D1	2.100E-04	2.641E-12	1.849E-11	5.136E-09	7.342E-09	2.007E-08	7.889E-08	4.795E-07	1.846E-06	6.874E-06	U-234	Pb-210+D	2.100E-04	2.224E-15	3.270E-14	1.198E-10	1.978E-10	7.866E-10	4.661E-09	3.956E-08	1.726E-07	6.851E-07	
	U-234	äDSR(j)		3.709E-06	3.709E-06	3.717E-06	3.720E-06	3.735E-06	3.802E-06	4.252E-06	5.776E-06	1.136E-05	OU-234	U-234	2.771E-10	4.896E-12	4.896E-12	4.896E-12	4.896E-12	4.895E-12	4.893E-12	4.889E-12	4.882E-12		
	U-234	Th-230	2.771E-10	7.061E-17	2.116E-16	3.594E-15	4.299E-15	7.117E-15	1.416E-14	3.526E-14	7.034E-14	1.402E-13	U-234	Ra-226+D1	2.771E-10	3.486E-18	2.441E-17	6.780E-15	9.692E-15	2.649E-14	1.041E-13	6.329E-13	2.437E-12	9.074E-12	
	U-234	Pb-210+D1	2.771E-10	1.063E-21	1.590E-20	5.911E-17	9.767E-17	3.885E-16	2.302E-15	1.954E-14	8.528E-14	3.385E-13	U-234	äDSR(j)		4.896E-12	4.897E-12	4.906E-12	4.910E-12	4.930E-12	5.015E-12	5.580E-12	7.481E-12	1.443E-11	
	OU-234	U-234	3.989E-12	7.048E-14	7.048E-14	7.047E-14	7.047E-14	7.047E-14	7.046E-14	7.042E-14	7.037E-14	7.026E-14	U-234	Th-230	3.989E-12	1.016E-18	3.046E-18	5.174E-17	6.188E-17	1.024E-16	2.038E-16	5.075E-16	1.012E-15	2.018E-15	
	U-234	Ra-226+D1	3.989E-12	5.018E-20	3.513E-19	9.759E-17	1.395E-16	3.813E-16	1.499E-15	9.110E-15	3.507E-14	1.306E-13	U-234	Pb-210+D2	3.989E-12	2.356E-23	3.519E-22	1.306E-18	2.158E-18	8.585E-18	5.087E-17	4.318E-16	1.884E-15	7.479E-15	
	U-234	äDSR(j)		7.048E-14	7.048E-14	7.062E-14	7.067E-14	7.096E-14	7.221E-14	8.047E-14	1.083E-13	2.104E-13	OU-234	U-234	1.998E-04	3.529E-06	3.529E-06	3.529E-06	3.529E-06	3.529E-06	3.528E-06	3.526E-06	3.524E-06	3.518E-06	
	U-234	Th-230	1.998E-04	5.089E-11	1.525E-10	2.591E-09	3.099E-09	5.130E-09	1.021E-08	2.541E-08	5.070E-08	1.010E-07	U-234	Ra-226+D2	1.998E-04	9.432E-13	6.606E-12	1.835E-09	2.624E-09	7.171E-09	2.819E-08	1.713E-07	6.597E-07	2.457E-06	
	U-234	Pb-210+D	1.998E-04	2.116E-15	3.111E-14	1.139E-10	1.882E-10	7.484E-10	4.434E-09	3.763E-08	1.642E-07	6.518E-07	U-234	äDSR(j)		3.529E-06	3.529E-06	3.533E-06	3.535E-06	3.542E-06	3.571E-06	4.398E-06	6.728E-06		
	OU-234	U-234	2.637E-10	4.658E-12	4.658E-12	4.658E-12	4.658E-12	4.658E-12	4.657E-12	4.655E-12	4.651E-12	4.644E-12	U-234	Th-230	2.637E-10	6.718E-17	2.013E-16	3.420E-15	4.090E-15	6.771E-15	1.347E-14	3.355E-14	6.692E-14	1.334E-13	
	U-234	Ra-226+D2	2.637E-10	1.245E-18	8.720E-18	2.423E-15	3.463E-15	9.466E-15	3.721E-14	2.262E-13	8.708E-13	3.243E-12	U-234	Pb-210+D1	2.637E-10	1.011E-21	1.513E-20	5.624E-17	9.293E-17	3.696E-16	2.190E-15	1.859E-14	8.114E-14	3.220E-13	
	U-234	äDSR(j)		4.658E-12	4.659E-12	4.664E-12	4.666E-12	4.674E-12	4.710E-12	4.933E-12	5.670E-12	8.342E-12	OU-234	U-234	3.795E-12	6.705E-14	6.705E-14	6.705E-14	6.705E-14	6.704E-14	6.703E-14	6.700E-14	6.695E-14	6.685E-14	
	U-234	Th-230	3.795E-12	9.670E-19	2.898E-18	4.922E-17	5.887E-17	9.746E-17	1.939E-16	4.829E-16	9.633E-16	1.920E-15	U-234	Ra-226+D2	3.795E-12	1.792E-20	1.255E-19	3.487E-17	4.985E-17	1.363E-16	5.357E-16	3.255E-15	1.253E-14	4.667E-14	
	U-234	Pb-210+D2	3.795E-12	2.241E-23	3.348E-22	1.243E-18	2.054E-18	8.167E-18	4.840E-17	4.109E-16	1.793E-15	7.116E-15	U-234	äDSR(j)		6.705E-14	6.706E-14	6.713E-14	6.716E-14	6.728E-14	6.781E-14	7.115E-14	8.224E-14	1.226E-13	

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
U-234	U-234	U-234	4.196E-08	7.413E-10	7.413E-10	7.412E-10	7.412E-10	7.412E-10	7.410E-10	7.407E-10	7.401E-10	7.390E-10
U-234	Th-230	Th-230	4.196E-08	1.069E-14	3.203E-14	5.442E-13	6.508E-13	1.077E-12	2.144E-12	5.338E-12	1.065E-11	2.122E-11
U-234	Ra-226+D3	Ra-226+D3	4.196E-08	5.046E-16	3.532E-15	9.812E-13	1.403E-12	3.834E-12	1.507E-11	9.160E-11	3.527E-10	1.313E-09
U-234	Pb-210+D	Pb-210+D	4.196E-08	4.445E-19	6.534E-18	2.393E-14	3.954E-14	1.572E-13	9.314E-13	7.905E-12	3.449E-11	1.369E-10
U-234	äDSR(j)	äDSR(j)		7.413E-10	7.413E-10	7.428E-10	7.433E-10	7.462E-10	7.592E-10	8.455E-10	1.138E-09	2.210E-09
OU-234	U-234	U-234	5.538E-14	9.785E-16	9.785E-16	9.784E-16	9.784E-16	9.783E-16	9.782E-16	9.777E-16	9.770E-16	9.755E-16
U-234	Th-230	Th-230	5.538E-14	1.411E-20	4.229E-20	7.183E-19	8.591E-19	1.422E-18	2.829E-18	7.046E-18	1.406E-17	2.801E-17
U-234	Ra-226+D3	Ra-226+D3	5.538E-14	6.660E-22	4.663E-21	1.295E-18	1.852E-18	5.061E-18	1.989E-17	1.209E-16	4.655E-16	1.733E-15
U-234	Pb-210+D1	Pb-210+D1	5.538E-14	2.124E-25	3.178E-24	1.181E-20	1.952E-20	7.763E-20	4.601E-19	3.905E-18	1.704E-17	6.764E-17
U-234	äDSR(j)	äDSR(j)		9.785E-16	9.785E-16	9.804E-16	9.811E-16	9.849E-16	1.001E-15	1.110E-15	1.474E-15	2.805E-15
OU-234	U-234	U-234	7.972E-16	1.408E-17	1.408E-17	1.408E-17	1.408E-17	1.408E-17	1.408E-17	1.407E-17	1.406E-17	1.404E-17
U-234	Th-230	Th-230	7.972E-16	2.031E-22	6.087E-22	1.034E-20	1.237E-20	2.047E-20	4.073E-20	1.014E-19	2.023E-19	4.032E-19
U-234	Ra-226+D3	Ra-226+D3	7.972E-16	9.587E-24	6.712E-23	1.864E-20	2.665E-20	7.284E-20	2.864E-19	1.740E-18	6.700E-18	2.495E-17
U-234	Pb-210+D2	Pb-210+D2	7.972E-16	4.707E-27	7.033E-26	2.611E-22	4.313E-22	1.716E-21	1.017E-20	8.630E-20	3.766E-19	1.495E-18
U-234	äDSR(j)	äDSR(j)		1.408E-17	1.408E-17	1.411E-17	1.412E-17	1.418E-17	1.442E-17	1.600E-17	2.134E-17	4.089E-17
OU-234	U-234	U-234	2.000E-07	3.533E-09	3.533E-09	3.533E-09	3.533E-09	3.533E-09	3.532E-09	3.531E-09	3.528E-09	3.523E-09
U-234	Th-230	Th-230	2.000E-07	5.096E-14	1.527E-13	2.594E-12	3.102E-12	5.136E-12	1.022E-11	2.544E-11	5.076E-11	1.012E-10
U-234	Ra-226+D4	Ra-226+D4	2.000E-07	1.472E-16	1.035E-15	2.882E-13	4.120E-13	1.126E-12	4.427E-12	2.691E-11	1.036E-10	3.858E-10
U-234	Pb-210+D	Pb-210+D	2.000E-07	2.119E-18	3.115E-17	1.141E-13	1.885E-13	7.493E-13	4.440E-12	3.768E-11	1.644E-10	6.526E-10
U-234	äDSR(j)	äDSR(j)		3.533E-09	3.534E-09	3.536E-09	3.537E-09	3.540E-09	3.551E-09	3.621E-09	3.847E-09	4.662E-09
OU-234	U-234	U-234	2.640E-13	4.664E-15	4.664E-15	4.664E-15	4.664E-15	4.663E-15	4.663E-15	4.661E-15	4.657E-15	4.650E-15
U-234	Th-230	Th-230	2.640E-13	6.726E-20	2.016E-19	3.424E-18	4.095E-18	6.779E-18	1.349E-17	3.359E-17	6.700E-17	1.335E-16
U-234	Ra-226+D4	Ra-226+D4	2.640E-13	1.943E-22	1.366E-21	3.804E-19	5.438E-19	1.486E-18	5.844E-18	3.552E-17	1.367E-16	5.092E-16
U-234	Pb-210+D1	Pb-210+D1	2.640E-13	1.013E-24	1.515E-23	5.631E-20	9.304E-20	3.701E-19	2.193E-18	1.862E-17	8.124E-17	3.224E-16
U-234	äDSR(j)	äDSR(j)		4.664E-15	4.664E-15	4.668E-15	4.668E-15	4.672E-15	4.684E-15	4.748E-15	4.942E-15	5.615E-15
OU-234	U-234	U-234	3.800E-15	6.713E-17	6.713E-17	6.713E-17	6.713E-17	6.712E-17	6.711E-17	6.708E-17	6.703E-17	6.693E-17
U-234	Th-230	Th-230	3.800E-15	9.682E-22	2.901E-21	4.928E-20	5.894E-20	9.758E-20	1.941E-19	4.834E-19	9.644E-19	1.922E-18
U-234	Ra-226+D4	Ra-226+D4	3.800E-15	2.797E-24	1.966E-23	5.476E-21	7.828E-21	2.140E-20	8.412E-20	5.112E-19	1.968E-18	7.330E-18
U-234	Pb-210+D2	Pb-210+D2	3.800E-15	2.244E-26	3.352E-25	1.244E-21	2.056E-21	8.177E-21	4.846E-20	4.114E-19	1.795E-18	7.125E-18
U-234	äDSR(j)	äDSR(j)		6.714E-17	6.714E-17	6.719E-17	6.720E-17	6.725E-17	6.744E-17	6.849E-17	7.176E-17	8.331E-17
OU-235+D	U-235+D	U-235+D	9.835E-01	4.969E-01	4.969E-01	4.969E-01	4.969E-01	4.969E-01	4.969E-01	4.969E-01	4.969E-01	4.968E-01
U-235+D	Pa-231	Pa-231	9.835E-01	5.298E-06	1.591E-05	2.707E-04	3.237E-04	5.359E-04	1.066E-03	2.653E-03	5.286E-03	1.051E-02
U-235+D	Ac-227+D	Ac-227+D	9.835E-01	1.713E-07	1.187E-06	2.611E-04	3.568E-04	8.243E-04	2.284E-03	7.101E-03	1.516E-02	3.116E-02
U-235+D	äDSR(j)	äDSR(j)		4.969E-01	4.969E-01	4.974E-01	4.976E-01	4.983E-01	5.003E-01	5.066E-01	5.173E-01	5.385E-01
OU-235+D	U-235+D	U-235+D	2.722E-03	1.375E-03	1.375E-03	1.375E-03	1.375E-03	1.375E-03	1.375E-03	1.375E-03	1.375E-03	1.375E-03
U-235+D	Pa-231	Pa-231	2.722E-03	1.466E-08	4.404E-08	7.491E-07	8.960E-07	1.483E-06	2.950E-06	7.342E-06	1.463E-05	2.909E-05
U-235+D	Ac-227+D1	Ac-227+D1	2.722E-03	4.777E-10	3.315E-09	7.296E-07	9.971E-07	2.303E-06	6.383E-06	1.984E-05	4.237E-05	8.707E-05
U-235+D	äDSR(j)	äDSR(j)		1.375E-03	1.375E-03	1.377E-03	1.377E-03	1.379E-03	1.385E-03	1.402E-03	1.432E-03	1.491E-03

Summary : Authorized Limits_Residential_Aug2016

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

Table with columns: Parent (i), Product (j), Thread Fraction, DSR(j,t) At Time in Years (mrem/yr)/(pCi/g). Rows include radionuclides like U-238, U-235, Ra-226, Pb-210, Th-230, and Th-232 with their respective ratios and decay chains.

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
U-238+D1	U-238+D1	U-238+D1	1.997E-07	2.303E-08	2.303E-08	2.303E-08	2.303E-08	2.303E-08	2.303E-08	2.303E-08	2.303E-08	2.303E-08
U-238+D1	U-234	U-234	1.997E-07	4.980E-15	1.494E-14	2.540E-13	3.038E-13	5.029E-13	1.001E-12	2.494E-12	4.981E-12	9.949E-12
U-238+D1	Th-230	Th-230	1.997E-07	4.794E-20	3.350E-19	9.324E-17	1.334E-16	3.656E-16	1.448E-15	8.988E-15	3.584E-14	1.429E-13
U-238+D1	Ra-226+D4	Ra-226+D4	1.997E-07	1.035E-22	1.560E-21	6.913E-18	1.182E-17	5.354E-17	4.196E-16	6.392E-15	4.961E-14	3.758E-13
U-238+D1	Pb-210+D	Pb-210+D	1.997E-07	1.203E-24	3.651E-23	2.129E-18	4.234E-18	2.854E-17	3.530E-16	8.078E-15	7.426E-14	6.159E-13
U-238+D1	äDSR(j)	äDSR(j)		2.303E-08	2.303E-08	2.303E-08	2.303E-08	2.303E-08	2.303E-08	2.303E-08	2.303E-08	2.304E-08
0U-238+D1	U-238+D1	U-238+D1	2.636E-13	3.040E-14	3.040E-14	3.040E-14	3.040E-14	3.040E-14	3.040E-14	3.040E-14	3.040E-14	3.039E-14
U-238+D1	U-234	U-234	2.636E-13	6.574E-21	1.972E-20	3.352E-19	4.010E-19	6.639E-19	1.321E-18	3.292E-18	6.575E-18	1.313E-17
U-238+D1	Th-230	Th-230	2.636E-13	6.329E-26	4.422E-25	1.231E-22	1.761E-22	4.826E-22	1.911E-21	1.186E-20	4.731E-20	1.887E-19
U-238+D1	Ra-226+D4	Ra-226+D4	2.636E-13	1.366E-28	2.060E-27	9.125E-24	1.560E-23	7.067E-23	5.539E-22	8.437E-21	6.549E-20	4.960E-19
U-238+D1	Pb-210+D1	Pb-210+D1	2.636E-13	5.704E-31	1.768E-29	1.050E-24	2.090E-24	1.409E-23	1.743E-22	3.991E-21	3.669E-20	3.043E-19
U-238+D1	äDSR(j)	äDSR(j)		3.040E-14	3.040E-14	3.040E-14	3.040E-14	3.040E-14	3.040E-14	3.040E-14	3.040E-14	3.041E-14
0U-238+D1	U-238+D1	U-238+D1	3.794E-15	4.376E-16	4.376E-16	4.376E-16	4.376E-16	4.376E-16	4.376E-16	4.376E-16	4.375E-16	4.375E-16
U-238+D1	U-234	U-234	3.794E-15	9.462E-23	2.839E-22	4.826E-21	5.772E-21	9.556E-21	1.902E-20	4.739E-20	9.464E-20	1.890E-19
U-238+D1	Th-230	Th-230	3.794E-15	9.109E-28	6.365E-27	1.772E-24	2.534E-24	6.947E-24	2.750E-23	1.708E-22	6.810E-22	2.716E-21
U-238+D1	Ra-226+D4	Ra-226+D4	3.794E-15	1.967E-30	2.964E-29	1.313E-25	2.246E-25	1.017E-24	7.973E-24	1.214E-22	9.426E-22	7.140E-21
U-238+D1	Pb-210+D2	Pb-210+D2	3.794E-15	1.265E-32	3.912E-31	2.321E-26	4.618E-26	3.115E-25	3.853E-24	8.818E-23	8.107E-22	6.725E-21
U-238+D1	äDSR(j)	äDSR(j)		4.376E-16	4.376E-16	4.376E-16	4.376E-16	4.376E-16	4.376E-16	4.376E-16	4.376E-16	4.377E-16
	iiiiiiii	iiiiiiii	iiiiiiii	iiiiiiii	iiiiiiii	iiiiiiii	iiiiiiii	iiiiiiii	iiiiiiii	iiiiiiii	iiiiiiii	iiiiiiii

The DSR includes contributions from associated (half-life 6 180 days) daughters.

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

ONuclide	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
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Am-241	3.244E+02	3.249E+02	3.377E+02	3.404E+02	3.515E+02	3.807E+02	4.840E+02	7.215E+02	1.599E+03
Co-60	2.630E+00	3.000E+00	7.041E+01	1.359E+02	1.885E+03	1.351E+06	4.975E+14	*1.113E+15	*1.113E+15
Cs-134	5.022E+00	7.025E+00	2.216E+04	1.187E+05	9.782E+07	*1.283E+15	*1.283E+15	*1.283E+15	*1.283E+15
Cs-137	1.193E+01	1.221E+01	2.119E+01	2.377E+01	3.763E+01	1.187E+02	3.726E+03	1.164E+06	1.136E+11
Eu-152	5.814E+00	6.120E+00	2.091E+01	2.702E+01	7.523E+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	9.279E+03	1.921E+04	3.533E+05	5.123E+08	*4.815E+14	*4.815E+14	*4.815E+14
H-3	3.740E+03	4.254E+03	9.379E+04	1.787E+05	2.353E+06	1.480E+09	*9.621E+15	*9.621E+15	*9.621E+15
I-129	1.542E+02	1.542E+02	1.543E+02	1.544E+02	1.545E+02	1.548E+02	1.558E+02	1.574E+02	1.607E+02
Mn-54	1.140E+01	2.565E+01	7.306E+09	4.217E+11	*7.615E+15	*7.615E+15	*7.615E+15	*7.615E+15	*7.615E+15
Na-22	3.362E+00	4.389E+00	2.624E+03	9.943E+03	2.049E+06	1.248E+12	*5.976E+15	*5.976E+15	*5.976E+15
Ni-63	4.264E+04	4.294E+04	5.070E+04	5.249E+04	6.028E+04	8.523E+04	2.408E+05	1.360E+06	4.337E+07
Np-237	2.827E+01	2.827E+01	2.827E+01	2.827E+01	2.827E+01	2.827E+01	2.827E+01	2.827E+01	2.827E+01
Pu-238	4.418E+02	4.453E+02	5.383E+02	5.600E+02	6.559E+02	9.737E+02	3.185E+03	2.284E+04	7.778E+05
Pu-239	4.012E+02	4.012E+02	4.015E+02	4.016E+02	4.018E+02	4.024E+02	4.041E+02	4.070E+02	4.129E+02
Ru-106	4.115E+01	8.103E+01	9.378E+08	2.778E+10	*3.269E+15	*3.269E+15	*3.269E+15	*3.269E+15	*3.269E+15
Sr-90	3.600E+01	3.687E+01	6.571E+01	7.412E+01	1.200E+02	3.998E+02	1.480E+04	6.085E+06	1.029E+12
Tc-99	9.870E+01	9.871E+01	9.889E+01	9.893E+01	9.908E+01	9.945E+01	1.006E+02	1.025E+02	1.065E+02
Th-228	4.930E+00	7.085E+00	4.263E+04	2.613E+05	3.687E+08	*8.201E+14	*8.201E+14	*8.201E+14	*8.201E+14
Th-230	4.383E+02	4.131E+02	1.671E+02	1.478E+02	1.004E+02	5.509E+01	2.373E+01	1.269E+01	7.095E+00
Th-232	4.874E+01	1.690E+01	1.998E+00	1.946E+00	1.891E+00	1.885E+00	1.885E+00	1.886E+00	1.886E+00
U-234	1.415E+03	1.415E+03	1.413E+03	1.413E+03	1.410E+03	1.397E+03	1.321E+03	1.116E+03	7.117E+02
U-235	4.948E+01	4.948E+01	4.943E+01	4.941E+01	4.934E+01	4.915E+01	4.853E+01	4.753E+01	4.567E+01
U-238	2.016E+02	2.016E+02	2.016E+02	2.016E+02	2.016E+02	2.016E+02	2.016E+02	2.016E+02	2.015E+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)	(pCi/g)	(pCi/g)
Am-241	1.000E+01	0.000E+00	7.706E-02	3.244E+02	7.706E-02	3.244E+02
Co-60	1.000E+01	0.000E+00	9.505E+00	2.630E+00	9.505E+00	2.630E+00
Cs-134	1.000E+01	0.000E+00	4.978E+00	5.022E+00	4.978E+00	5.022E+00
Cs-137	1.000E+01	0.000E+00	2.096E+00	1.193E+01	2.096E+00	1.193E+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	6.685E-03	3.740E+03	6.685E-03	3.740E+03
I-129	1.000E+01	0.000E+00	1.621E-01	1.542E+02	1.621E-01	1.542E+02
Mn-54	1.000E+01	0.000E+00	2.193E+00	1.140E+01	2.193E+00	1.140E+01
Na-22	1.000E+01	0.000E+00	7.436E+00	3.362E+00	7.436E+00	3.362E+00
Ni-63	1.000E+01	0.000E+00	5.863E-04	4.264E+04	5.863E-04	4.264E+04
Np-237	1.000E+01	0.000E+00	8.845E-01	2.827E+01	8.845E-01	2.827E+01
Pu-238	1.000E+01	0.000E+00	5.658E-02	4.418E+02	5.658E-02	4.418E+02
Pu-239	1.000E+01	0.000E+00	6.231E-02	4.012E+02	6.231E-02	4.012E+02
Ru-106	1.000E+01	0.000E+00	6.076E-01	4.115E+01	6.076E-01	4.115E+01
Sr-90	1.000E+01	0.000E+00	6.945E-01	3.600E+01	6.945E-01	3.600E+01
Tc-99	1.000E+01	0.000E+00	2.533E-01	9.870E+01	2.533E-01	9.870E+01
Th-228	1.000E+01	0.000E+00	5.071E+00	4.930E+00	5.071E+00	4.930E+00
Th-230	1.000E+01	1.000E+03	3.524E+00	7.095E+00	5.704E-02	4.383E+02
Th-232	1.000E+01	113.1 to 0.2	1.326E+01	1.885E+00	5.129E-01	4.874E+01
U-234	1.000E+01	1.000E+03	3.513E-02	7.117E+02	1.767E-02	1.415E+03
U-235	1.000E+01	1.000E+03	5.475E-01	4.567E+01	5.053E-01	4.948E+01
U-238	1.000E+01	1.000E+03	1.241E-01	2.015E+02	1.240E-01	2.016E+02

Individual Nuclide Dose Summed Over All Pathways
 Parent Nuclide and Branch Fraction Indicated

ONuclide	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	7.706E-01	7.693E-01	7.403E-01	7.344E-01	7.112E-01	6.564E-01	5.160E-01	3.455E-01	1.549E-01	
ONp-237	Am-241	1.000E+00	1.428E-06	4.283E-06	7.144E-05	8.511E-05	1.387E-04	2.654E-04	5.898E-04	9.838E-04	1.424E-03	
Np-237	Np-237	1.000E+00	8.845E+00	8.845E+00	8.845E+00	8.845E+00	8.845E+00	8.845E+00	8.844E+00	8.843E+00	8.842E+00	
Np-237	äDOSE(j)		8.845E+00	8.845E+00	8.845E+00	8.845E+00	8.845E+00	8.845E+00	8.845E+00	8.844E+00	8.843E+00	
OU-233	Am-241	1.000E+00	4.489E-14	3.097E-13	8.435E-11	1.203E-10	3.263E-10	1.259E-09	7.240E-09	2.560E-08	8.214E-08	
U-233	Np-237	1.000E+00	4.124E-07	1.226E-06	2.073E-05	2.480E-05	4.105E-05	8.167E-05	2.035E-04	4.063E-04	8.112E-04	
U-233	äDOSE(j)		4.124E-07	1.226E-06	2.073E-05	2.480E-05	4.105E-05	8.167E-05	2.035E-04	4.063E-04	8.113E-04	
OTTh-229	Am-241	1.000E+00	6.349E-17	9.516E-16	4.165E-12	7.112E-12	3.200E-11	2.470E-10	3.597E-09	2.600E-08	1.732E-07	
Th-229	Np-237	1.000E+00	7.856E-10	5.497E-09	1.531E-06	2.189E-06	5.997E-06	2.371E-05	1.466E-04	5.804E-04	2.282E-03	
Th-229	äDOSE(j)		7.856E-10	5.497E-09	1.531E-06	2.189E-06	5.997E-06	2.371E-05	1.466E-04	5.804E-04	2.282E-03	
0Co-60	Co-60	1.000E+00	9.505E+01	8.334E+01	3.551E+00	1.840E+00	1.326E-01	1.850E-04	5.025E-13	2.650E-27	0.000E+00	
OCs-134	Cs-134	1.000E+00	4.978E+01	3.559E+01	1.128E-02	2.105E-03	2.556E-06	1.312E-13	0.000E+00	0.000E+00	0.000E+00	
OCs-137	Cs-137	1.000E+00	2.096E+01	2.048E+01	1.180E+01	1.052E+01	6.644E+00	2.106E+00	6.709E-02	2.148E-04	2.201E-09	
0Eu-152	Eu-152	7.210E-01	3.100E+01	2.945E+01	8.619E+00	6.672E+00	2.396E+00	1.852E-01	8.550E-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	9.272E-01	7.166E-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	1.405E-16	4.121E-16	4.069E-15	4.411E-15	5.161E-15	5.550E-15	5.582E-15	5.582E-15	5.582E-15	
0Sm-148	Eu-152	2.790E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.630E-29	1.319E-28	2.747E-28	5.602E-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	6.117E+00	4.087E+00	8.142E-01	1.443E-02	8.023E-08	1.401E-16	0.000E+00	
0Eu-155	Eu-155	1.000E+00	1.026E+00	8.869E-01	2.694E-02	1.301E-02	7.076E-04	4.880E-07	1.601E-16	0.000E+00	0.000E+00	
0H-3	H-3	1.000E+00	6.685E-02	5.877E-02	2.665E-03	1.399E-03	1.063E-04	1.689E-07	6.784E-16	0.000E+00	0.000E+00	
0I-129	I-129	1.000E+00	1.621E+00	1.621E+00	1.620E+00	1.619E+00	1.618E+00	1.615E+00	1.605E+00	1.588E+00	1.556E+00	
0Mn-54	Mn-54	1.000E+00	2.193E+01	9.746E+00	3.422E-08	5.928E-10	5.339E-17	0.000E+00	0.000E+00	0.000E+00	0.000E+00	
0Na-22	Na-22	1.000E+00	7.436E+01	5.697E+01	9.526E-02	2.514E-02	1.220E-04	2.003E-10	8.842E-28	0.000E+00	0.000E+00	
0Ni-63	Ni-63	1.000E+00	5.863E-03	5.822E-03	4.931E-03	4.763E-03	4.147E-03	2.933E-03	1.038E-03	1.838E-04	5.765E-06	
0Pu-238	Pu-238	1.850E-09	1.047E-09	1.039E-09	8.591E-10	8.258E-10	7.051E-10	4.749E-10	1.451E-10	2.012E-11	3.867E-13	
Pu-238	Pu-238	9.996E-01	5.656E-01	5.612E-01	4.642E-01	4.462E-01	3.810E-01	2.566E-01	7.841E-02	1.087E-02	2.089E-04	
Pu-238	äDOSE(j)		5.656E-01	5.612E-01	4.642E-01	4.462E-01	3.810E-01	2.566E-01	7.841E-02	1.087E-02	2.089E-04	
OU-234	Pu-238	9.996E-01	2.483E-07	7.430E-07	1.151E-05	1.351E-05	2.076E-05	3.457E-05	5.435E-05	6.181E-05	6.290E-05	

Individual Nuclide Dose Summed Over All Pathways
 Parent Nuclide and Branch Fraction Indicated

ONuclide	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
AAAAAAAA	AAAAAAAA	AAAAAAAA	AAAAAAAA	AAAAAAAA	AAAAAAAA	AAAAAAAA	AAAAAAAA	AAAAAAAA	AAAAAAAA	AAAAAAAA	AAAAAAAA
U-234	Pu-238	1.899E-08	4.718E-15	1.412E-14	2.188E-13	2.567E-13	3.944E-13	6.569E-13	1.033E-12	1.174E-12	1.195E-12
U-234	Pu-238	2.100E-04	5.216E-11	1.561E-10	2.418E-09	2.838E-09	4.360E-09	7.262E-09	1.142E-08	1.298E-08	1.321E-08
U-234	Pu-238	2.771E-10	6.885E-17	2.060E-16	3.192E-15	3.746E-15	5.756E-15	9.585E-15	1.507E-14	1.714E-14	1.744E-14
U-234	Pu-238	3.989E-12	9.910E-19	2.965E-18	4.595E-17	5.393E-17	8.285E-17	1.380E-16	2.169E-16	2.467E-16	2.510E-16
U-234	Pu-238	1.998E-04	4.963E-11	1.485E-10	2.301E-09	2.700E-09	4.149E-09	6.909E-09	1.086E-08	1.235E-08	1.257E-08
U-234	Pu-238	2.637E-10	6.551E-17	1.960E-16	3.037E-15	3.564E-15	5.476E-15	9.120E-15	1.434E-14	1.630E-14	1.659E-14
U-234	Pu-238	3.795E-12	9.429E-19	2.821E-18	4.372E-17	5.131E-17	7.882E-17	1.313E-16	2.064E-16	2.347E-16	2.388E-16
U-234	Pu-238	4.196E-08	1.042E-14	3.119E-14	4.833E-13	5.672E-13	8.714E-13	1.451E-12	2.281E-12	2.594E-12	2.640E-12
U-234	Pu-238	5.538E-14	1.376E-20	4.117E-20	6.380E-19	7.487E-19	1.150E-18	1.916E-18	3.011E-18	3.425E-18	3.485E-18
U-234	Pu-238	7.972E-16	1.980E-22	5.925E-22	9.183E-21	1.078E-20	1.656E-20	2.757E-20	4.334E-20	4.929E-20	5.016E-20
U-234	Pu-238	2.000E-07	4.969E-14	1.487E-13	2.304E-12	2.704E-12	4.154E-12	6.917E-12	1.087E-11	1.237E-11	1.258E-11
U-234	Pu-238	2.640E-13	6.558E-20	1.962E-19	3.041E-18	3.569E-18	5.483E-18	9.131E-18	1.435E-17	1.632E-17	1.661E-17
U-234	Pu-238	3.800E-15	9.440E-22	2.824E-21	4.377E-20	5.137E-20	7.892E-20	1.314E-19	2.066E-19	2.350E-19	2.391E-19
U-234	U-234	9.996E-01	1.766E-01	1.766E-01	1.766E-01	1.766E-01	1.766E-01	1.765E-01	1.765E-01	1.763E-01	1.761E-01
U-234	U-238	1.599E-03	3.989E-10	1.197E-09	2.034E-08	2.433E-08	4.028E-08	8.016E-08	1.998E-07	3.990E-07	7.969E-07
U-234	U-238	2.111E-09	5.265E-16	1.580E-15	2.685E-14	3.212E-14	5.317E-14	1.058E-13	2.637E-13	5.266E-13	1.052E-12
U-234	U-238	3.039E-11	7.579E-18	2.274E-17	3.865E-16	4.623E-16	7.654E-16	1.523E-15	3.795E-15	7.580E-15	1.514E-14
U-234	U-238	3.359E-07	8.378E-14	2.513E-13	4.273E-12	5.111E-12	8.461E-12	1.684E-11	4.196E-11	8.380E-11	1.674E-10
U-234	U-238	4.434E-13	1.106E-19	3.318E-19	5.640E-18	6.746E-18	1.117E-17	2.223E-17	5.539E-17	1.106E-16	2.209E-16
U-234	U-238	6.383E-15	1.592E-21	4.776E-21	8.118E-20	9.710E-20	1.608E-19	3.199E-19	7.972E-19	1.592E-18	3.180E-18
U-234	U-238	3.196E-07	7.971E-14	2.391E-13	4.065E-12	4.862E-12	8.050E-12	1.602E-11	3.992E-11	7.973E-11	1.592E-10
U-234	U-238	4.219E-13	1.052E-19	3.157E-19	5.366E-18	6.418E-18	1.063E-17	2.115E-17	5.269E-17	1.052E-16	2.102E-16
U-234	U-238	6.073E-15	1.515E-21	4.544E-21	7.724E-20	9.238E-20	1.530E-19	3.044E-19	7.585E-19	1.515E-18	3.026E-18
U-234	U-238	6.713E-11	1.674E-17	5.023E-17	8.539E-16	1.021E-15	1.691E-15	3.365E-15	8.385E-15	1.675E-14	3.345E-14
U-234	U-238	8.862E-17	2.210E-23	6.630E-23	1.127E-21	1.348E-21	2.232E-21	4.442E-21	1.107E-20	2.211E-20	4.415E-20
U-234	U-238	1.276E-18	3.181E-25	9.544E-25	1.622E-23	1.940E-23	3.213E-23	6.393E-23	1.593E-22	3.182E-22	6.355E-22
U-234	U-238	3.200E-10	7.981E-17	2.394E-16	4.070E-15	4.868E-15	8.060E-15	1.604E-14	3.997E-14	7.983E-14	1.594E-13
U-234	U-238	4.224E-16	1.053E-22	3.160E-22	5.373E-21	6.426E-21	1.064E-20	2.117E-20	5.276E-20	1.054E-19	2.105E-19
U-234	U-238	6.080E-18	1.516E-24	4.549E-24	7.733E-23	9.249E-23	1.531E-22	3.047E-22	7.594E-22	1.517E-21	3.029E-21
U-234	U-238	9.980E-01	2.489E-07	7.467E-07	1.269E-05	1.518E-05	2.514E-05	5.002E-05	1.247E-04	2.490E-04	4.973E-04
U-234	U-238	1.317E-06	3.286E-13	9.857E-13	1.676E-11	2.004E-11	3.318E-11	6.603E-11	1.645E-10	3.286E-10	6.564E-10
U-234	U-238	1.896E-08	4.729E-15	1.419E-14	2.412E-13	2.885E-13	4.776E-13	9.504E-13	2.368E-12	4.730E-12	9.448E-12
U-234	U-238	2.096E-04	5.228E-11	1.568E-10	2.666E-09	3.189E-09	5.280E-09	1.051E-08	2.618E-08	5.229E-08	1.044E-07
U-234	U-238	2.767E-10	6.901E-17	2.070E-16	3.519E-15	4.209E-15	6.970E-15	1.387E-14	3.456E-14	6.902E-14	1.379E-13
U-234	U-238	3.983E-12	9.933E-19	2.980E-18	5.066E-17	6.059E-17	1.003E-16	1.996E-16	4.975E-16	9.935E-16	1.984E-15
U-234	U-238	1.994E-04	4.974E-11	1.492E-10	2.537E-09	3.034E-09	5.023E-09	9.996E-09	2.491E-08	4.975E-08	9.937E-08
U-234	U-238	2.633E-10	6.566E-17	1.970E-16	3.348E-15	4.005E-15	6.631E-15	1.320E-14	3.288E-14	6.567E-14	1.312E-13
U-234	U-238	3.789E-12	9.451E-19	2.835E-18	4.820E-17	5.765E-17	9.545E-17	1.899E-16	4.733E-16	9.453E-16	1.888E-15
U-234	U-238	4.189E-08	1.045E-14	3.134E-14	5.328E-13	6.373E-13	1.055E-12	2.100E-12	5.232E-12	1.045E-11	2.087E-11
U-234	U-238	5.530E-14	1.379E-20	4.137E-20	7.033E-19	8.412E-19	1.393E-18	2.772E-18	6.907E-18	1.379E-17	2.755E-17
U-234	U-238	7.959E-16	1.985E-22	5.955E-22	1.012E-20	1.211E-20	2.005E-20	3.989E-20	9.941E-20	1.985E-19	3.966E-19
U-234	U-238	1.997E-07	4.980E-14	1.494E-13	2.540E-12	3.038E-12	5.029E-12	1.001E-11	2.494E-11	4.981E-11	9.949E-11
U-234	U-238	2.636E-13	6.574E-20	1.972E-19	3.352E-18	4.010E-18	6.639E-18	1.321E-17	3.292E-17	6.575E-17	1.313E-16
U-234	U-238	3.794E-15	9.462E-22	2.839E-21	4.826E-20	5.772E-20	9.556E-20	1.902E-19	4.739E-19	9.464E-19	1.890E-18
U-234	äDOSE(j)		1.766E-01	1.766E-01	1.766E-01	1.766E-01	1.766E-01	1.766E-01	1.766E-01	1.766E-01	1.766E-01
0Th-230	Pu-238	9.996E-01	2.395E-12	1.670E-11	4.369E-09	6.171E-09	1.609E-08	5.656E-08	2.566E-07	6.819E-07	1.579E-06
Th-230	Pu-238	1.899E-08	4.551E-20	3.173E-19	8.302E-17	1.173E-16	3.057E-16	1.075E-15	4.876E-15	1.296E-14	3.000E-14
Th-230	Pu-238	2.100E-04	5.031E-16	3.508E-15	9.177E-13	1.296E-12	3.380E-12	1.188E-11	5.390E-11	1.432E-10	3.316E-10

Individual Nuclide Dose Summed Over All Pathways
 Parent Nuclide and Branch Fraction Indicated

ONuclide	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
Th-230	Pu-238	2.771E-10	6.641E-22	4.630E-21	1.211E-18	1.711E-18	4.462E-18	1.568E-17	7.115E-17	1.891E-16	4.378E-16
Th-230	Pu-238	3.989E-12	9.559E-24	6.665E-23	1.744E-20	2.463E-20	6.422E-20	2.257E-19	1.024E-18	2.721E-18	6.301E-18
Th-230	Pu-238	1.998E-04	4.787E-16	3.337E-15	8.732E-13	1.233E-12	3.216E-12	1.130E-11	5.128E-11	1.363E-10	3.155E-10
Th-230	Pu-238	2.637E-10	6.319E-22	4.405E-21	1.153E-18	1.628E-18	4.245E-18	1.492E-17	6.769E-17	1.799E-16	4.165E-16
Th-230	Pu-238	3.795E-12	9.095E-24	6.341E-23	1.659E-20	2.343E-20	6.110E-20	2.147E-19	9.743E-19	2.589E-18	5.995E-18
Th-230	Pu-238	4.196E-08	1.005E-19	7.010E-19	1.834E-16	2.590E-16	6.755E-16	2.374E-15	1.077E-14	2.862E-14	6.627E-14
Th-230	Pu-238	5.538E-14	1.327E-25	9.253E-25	2.421E-22	3.419E-22	8.916E-22	3.134E-21	1.422E-20	3.778E-20	8.748E-20
Th-230	Pu-238	7.972E-16	1.908E-27	1.332E-26	3.485E-24	4.922E-24	1.283E-23	4.510E-23	2.047E-22	5.439E-22	1.259E-21
Th-230	Pu-238	2.000E-07	4.793E-19	3.341E-18	8.742E-16	1.235E-15	3.220E-15	1.132E-14	5.134E-14	1.364E-13	3.159E-13
Th-230	Pu-238	2.640E-13	6.326E-25	4.411E-24	1.154E-21	1.630E-21	4.250E-21	1.494E-20	6.777E-20	1.801E-19	4.170E-19
Th-230	Pu-238	3.800E-15	9.096E-27	6.349E-26	1.661E-23	2.346E-23	6.117E-23	2.150E-22	9.755E-22	2.592E-21	6.002E-21
Th-230	U-234	9.996E-01	5.529E-01	5.529E-01	5.528E-01	5.528E-01	5.527E-01	5.524E-01	5.517E-01	5.504E-01	5.479E-01
Th-230	U-234	9.996E-01	2.547E-06	7.632E-06	1.296E-04	1.550E-04	2.567E-04	5.107E-04	1.272E-03	2.537E-03	5.056E-03
Th-230	U-234	1.319E-06	3.362E-12	1.007E-11	1.711E-10	2.047E-10	3.388E-10	6.741E-10	1.679E-09	3.349E-09	6.674E-09
Th-230	U-234	1.899E-08	4.839E-14	1.450E-13	2.463E-12	2.946E-12	4.877E-12	9.703E-12	2.416E-11	4.820E-11	9.606E-11
Th-230	U-234	2.100E-04	5.349E-10	1.603E-09	2.723E-08	3.257E-08	5.392E-08	1.073E-07	2.671E-07	5.329E-07	1.062E-06
Th-230	U-234	2.771E-10	7.061E-16	2.116E-15	3.594E-14	4.299E-14	7.117E-14	1.416E-13	3.526E-13	7.034E-13	1.402E-12
Th-230	U-234	3.989E-12	1.016E-17	3.046E-17	5.174E-16	6.188E-16	1.024E-15	2.038E-15	5.075E-15	1.012E-14	2.018E-14
Th-230	U-234	1.998E-04	5.089E-10	1.525E-09	2.591E-08	3.099E-08	5.130E-08	1.021E-07	2.541E-07	5.070E-07	1.010E-06
Th-230	U-234	2.637E-10	6.718E-16	2.013E-15	3.420E-14	4.090E-14	6.771E-14	1.347E-13	3.355E-13	6.692E-13	1.334E-12
Th-230	U-234	3.795E-12	9.670E-18	2.898E-17	4.922E-16	5.887E-16	9.746E-16	1.939E-15	4.829E-15	9.633E-15	1.920E-14
Th-230	U-234	4.196E-08	1.069E-13	3.203E-13	5.442E-12	6.508E-12	1.077E-11	2.144E-11	5.338E-11	1.065E-10	2.122E-10
Th-230	U-234	5.538E-14	1.411E-19	4.229E-19	7.183E-18	8.591E-18	1.422E-17	2.829E-17	7.046E-17	1.406E-16	2.801E-16
Th-230	U-234	7.972E-16	2.031E-21	6.087E-21	1.034E-19	1.237E-19	2.047E-19	4.073E-19	1.014E-18	2.023E-18	4.032E-18
Th-230	U-234	2.000E-07	5.096E-13	1.527E-12	2.594E-11	3.102E-11	5.136E-11	1.022E-10	2.544E-10	5.076E-10	1.012E-09
Th-230	U-234	2.640E-13	6.726E-19	2.016E-18	3.424E-17	4.095E-17	6.779E-17	1.349E-16	3.359E-16	6.700E-16	1.335E-15
Th-230	U-234	3.800E-15	9.682E-21	2.901E-20	4.928E-19	5.894E-19	9.758E-19	1.941E-18	4.834E-18	9.644E-18	1.922E-17
Th-230	U-238	1.599E-03	3.840E-15	2.683E-14	7.468E-12	1.068E-11	2.928E-11	1.159E-10	7.199E-10	2.871E-09	1.145E-08
Th-230	U-238	2.111E-09	5.069E-21	3.542E-20	9.858E-18	1.410E-17	3.865E-17	1.531E-16	9.503E-16	3.790E-15	1.511E-14
Th-230	U-238	3.039E-11	7.296E-23	5.098E-22	1.419E-19	2.030E-19	5.564E-19	2.203E-18	1.368E-17	5.455E-17	2.175E-16
Th-230	U-238	3.359E-07	8.066E-19	5.636E-18	1.569E-15	2.244E-15	6.151E-15	2.435E-14	1.512E-13	6.030E-13	2.405E-12
Th-230	U-238	4.434E-13	1.065E-24	7.440E-24	2.071E-21	2.962E-21	8.119E-21	3.215E-20	1.996E-19	7.960E-19	3.174E-18
Th-230	U-238	6.383E-15	1.533E-26	1.071E-25	2.981E-23	4.264E-23	1.169E-22	4.627E-22	2.873E-21	1.146E-20	4.569E-20
Th-230	U-238	3.196E-07	7.674E-19	5.362E-18	1.492E-15	2.135E-15	5.852E-15	2.317E-14	1.439E-13	5.737E-13	2.288E-12
Th-230	U-238	4.219E-13	1.013E-24	7.078E-24	1.970E-21	2.818E-21	7.725E-21	3.059E-20	1.899E-19	7.573E-19	3.020E-18
Th-230	U-238	6.073E-15	1.458E-26	1.019E-25	2.836E-23	4.056E-23	1.112E-22	4.403E-22	2.733E-21	1.090E-20	4.347E-20
Th-230	U-238	6.713E-11	1.612E-22	1.126E-21	3.135E-19	4.484E-19	1.229E-18	4.867E-18	3.022E-17	1.205E-16	4.805E-16
Th-230	U-238	8.862E-17	2.097E-28	1.485E-27	4.138E-25	5.919E-25	1.623E-24	6.424E-24	3.989E-23	1.591E-22	6.343E-22
Th-230	U-238	1.276E-18	0.000E+00	1.556E-29	5.950E-27	8.511E-27	2.335E-26	9.247E-26	5.741E-25	2.290E-24	9.130E-24
Th-230	U-238	3.200E-10	7.683E-22	5.369E-21	1.494E-18	2.138E-18	5.859E-18	2.320E-17	1.440E-16	5.744E-16	2.291E-15
Th-230	U-238	4.224E-16	1.013E-27	7.079E-27	1.972E-24	2.822E-24	7.734E-24	3.062E-23	1.901E-22	7.582E-22	3.024E-21
Th-230	U-238	6.080E-18	1.060E-29	1.005E-28	2.839E-26	4.061E-26	1.113E-25	4.408E-25	2.737E-24	1.091E-23	4.352E-23
Th-230	U-238	9.980E-01	2.396E-12	1.674E-11	4.660E-09	6.667E-09	1.827E-08	7.235E-08	4.492E-07	1.791E-06	7.144E-06
Th-230	U-238	1.317E-06	3.163E-18	2.210E-17	6.152E-15	8.800E-15	2.412E-14	9.550E-14	5.930E-13	2.365E-12	9.430E-12
Th-230	U-238	1.896E-08	4.553E-20	3.181E-19	8.855E-17	1.267E-16	3.472E-16	1.375E-15	8.535E-15	3.404E-14	1.357E-13
Th-230	U-238	2.096E-04	5.033E-16	3.517E-15	9.789E-13	1.400E-12	3.838E-12	1.520E-11	9.436E-11	3.763E-10	1.500E-09
Th-230	U-238	2.767E-10	6.644E-22	4.642E-21	1.292E-18	1.848E-18	5.066E-18	2.006E-17	1.245E-16	4.967E-16	1.981E-15
Th-230	U-238	3.983E-12	9.563E-24	6.682E-23	1.860E-20	2.661E-20	7.292E-20	2.887E-19	1.793E-18	7.149E-18	2.851E-17
Th-230	U-238	1.994E-04	4.789E-16	3.346E-15	9.313E-13	1.332E-12	3.652E-12	1.446E-11	8.977E-11	3.580E-10	1.428E-09

Individual Nuclide Dose Summed Over All Pathways
 Parent Nuclide and Branch Fraction Indicated

ONuclide	Parent (j)	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
Th-230	U-238	2.633E-10	6.321E-22	4.417E-21	1.229E-18	1.759E-18	4.820E-18	1.909E-17	1.185E-16	4.726E-16	1.884E-15
Th-230	U-238	3.789E-12	9.098E-24	6.358E-23	1.769E-20	2.531E-20	6.938E-20	2.747E-19	1.706E-18	6.802E-18	2.712E-17
Th-230	U-238	4.189E-08	1.006E-19	7.028E-19	1.956E-16	2.798E-16	7.670E-16	3.037E-15	1.886E-14	7.520E-14	2.999E-13
Th-230	U-238	5.530E-14	1.328E-25	9.277E-25	2.582E-22	3.694E-22	1.012E-21	4.009E-21	2.489E-20	9.926E-20	3.958E-19
Th-230	U-238	7.959E-16	1.909E-27	1.335E-26	3.717E-24	5.317E-24	1.457E-23	5.770E-23	3.583E-22	1.429E-21	5.697E-21
Th-230	U-238	1.997E-07	4.794E-19	3.350E-18	9.324E-16	1.334E-15	3.656E-15	1.448E-14	8.988E-14	3.584E-13	1.429E-12
Th-230	U-238	2.636E-13	6.329E-25	4.422E-24	1.231E-21	1.761E-21	4.826E-21	1.911E-20	1.186E-19	4.731E-19	1.887E-18
Th-230	U-238	3.794E-15	9.100E-27	6.365E-26	1.772E-23	2.534E-23	6.947E-23	2.750E-22	1.708E-21	6.810E-21	2.716E-20
Th-230	äDOSE(j)		5.529E-01	5.529E-01	5.529E-01	5.529E-01	5.529E-01	5.529E-01	5.529E-01	5.529E-01	5.529E-01
ORa-226	Pu-238	9.996E-01	3.716E-14	5.567E-13	2.346E-09	3.974E-09	1.733E-08	1.240E-07	1.480E-06	8.252E-06	3.874E-05
Ra-226	Pu-238	1.899E-08	7.060E-22	1.058E-20	4.458E-17	7.550E-17	3.292E-16	2.357E-15	2.812E-14	1.568E-13	7.360E-13
Ra-226	Th-230	9.996E-01	1.721E-02	5.164E-02	8.735E-01	1.044E+00	1.720E+00	3.386E+00	8.168E+00	1.546E+01	2.783E+01
Ra-226	Th-230	1.319E-06	2.272E-08	6.817E-08	1.153E-06	1.467E-06	2.201E-06	4.470E-06	1.078E-05	2.041E-05	3.674E-05
Ra-226	Th-230	1.899E-08	3.270E-10	9.813E-10	1.660E-08	1.983E-08	3.269E-08	6.434E-08	1.552E-07	2.938E-07	5.288E-07
Ra-226	U-234	9.996E-01	5.274E-08	3.693E-07	1.026E-04	1.467E-04	4.009E-04	1.576E-03	9.579E-03	3.688E-02	1.373E-01
Ra-226	U-234	1.319E-06	6.962E-14	4.875E-13	1.355E-10	1.936E-10	5.292E-10	2.081E-09	1.264E-08	4.868E-08	1.813E-07
Ra-226	U-234	1.899E-08	1.002E-15	7.017E-15	1.950E-12	2.787E-12	7.618E-12	2.995E-11	1.820E-10	7.007E-10	2.609E-09
Ra-226	U-238	1.599E-03	5.954E-17	8.937E-16	3.945E-12	6.746E-12	3.055E-11	2.394E-10	3.647E-09	2.830E-08	2.144E-07
Ra-226	U-238	2.111E-09	7.860E-23	1.180E-21	5.207E-18	8.904E-18	4.032E-17	3.160E-16	4.814E-15	3.736E-14	2.830E-13
Ra-226	U-238	3.039E-11	1.131E-24	1.698E-23	7.495E-20	1.282E-19	5.804E-19	4.549E-18	6.929E-17	5.378E-16	4.073E-15
Ra-226	U-238	9.980E-01	3.716E-14	5.576E-13	2.462E-09	4.209E-09	1.906E-08	1.494E-07	2.275E-06	1.766E-05	1.338E-04
Ra-226	U-238	1.317E-06	4.905E-20	7.361E-19	3.249E-15	5.556E-15	2.516E-14	1.972E-13	3.004E-12	2.331E-11	1.766E-10
Ra-226	U-238	1.896E-08	7.060E-22	1.060E-20	4.677E-17	7.998E-17	3.622E-16	2.839E-15	4.323E-14	3.356E-13	2.542E-12
Ra-226	äDOSE(j)		1.721E-02	5.165E-02	8.736E-01	1.044E+00	1.721E+00	3.388E+00	8.178E+00	1.550E+01	2.797E+01
OPb-210	Pu-238	9.996E-01	6.016E-17	1.823E-15	1.023E-10	2.018E-10	1.317E-09	1.501E-08	2.717E-07	1.791E-06	9.128E-06
Pb-210	Pu-238	1.319E-06	2.852E-23	8.825E-22	5.048E-17	9.961E-17	6.504E-16	7.415E-15	1.342E-13	8.847E-13	4.510E-12
Pb-210	Pu-238	2.100E-04	1.264E-20	3.828E-19	2.149E-14	4.239E-14	2.767E-13	3.153E-12	5.707E-11	3.761E-10	1.917E-09
Pb-210	Pu-238	1.998E-04	1.202E-20	3.642E-19	2.045E-14	4.033E-14	2.632E-13	3.000E-12	5.430E-11	3.578E-10	1.824E-09
Pb-210	Pu-238	4.196E-08	2.525E-24	7.650E-23	4.294E-18	8.472E-18	5.529E-17	6.301E-16	1.140E-14	7.516E-14	3.832E-13
Pb-210	Pu-238	2.000E-07	1.204E-23	3.647E-22	2.047E-17	4.038E-17	2.636E-16	3.004E-15	5.436E-14	3.583E-13	1.826E-12
Pb-210	Th-230	9.996E-01	4.568E-05	3.136E-04	6.854E-02	9.365E-02	2.162E-01	5.962E-01	1.807E+00	3.673E+00	6.836E+00
Pb-210	Th-230	2.100E-04	9.596E-09	6.588E-08	1.440E-05	1.967E-05	4.541E-05	1.252E-04	3.796E-04	7.714E-04	1.436E-03
Pb-210	Th-230	1.998E-04	9.130E-09	6.268E-08	1.370E-05	1.872E-05	4.320E-05	1.191E-04	3.611E-04	7.340E-04	1.366E-03
Pb-210	Th-230	4.196E-08	1.918E-12	1.316E-11	2.877E-09	3.931E-09	9.074E-09	2.502E-08	7.585E-08	1.542E-07	2.869E-07
Pb-210	Th-230	2.000E-07	9.141E-12	6.275E-11	1.371E-08	1.874E-08	4.325E-08	1.193E-07	3.615E-07	7.349E-07	1.368E-06
Pb-210	U-234	9.996E-01	1.059E-10	1.557E-09	5.701E-06	9.419E-06	3.745E-05	2.219E-04	1.883E-03	8.218E-03	3.262E-02
Pb-210	U-234	2.100E-04	2.224E-14	3.270E-13	1.198E-09	1.978E-09	7.866E-09	4.661E-08	3.956E-07	1.726E-06	6.851E-06
Pb-210	U-234	1.998E-04	2.116E-14	3.111E-13	1.139E-09	1.882E-09	7.484E-09	4.434E-08	3.763E-07	1.642E-06	6.518E-06
Pb-210	U-234	4.196E-08	4.445E-18	6.534E-17	2.393E-13	3.954E-13	1.572E-12	9.314E-12	7.905E-11	3.449E-10	1.369E-09
Pb-210	U-234	2.000E-07	2.119E-17	3.115E-16	1.141E-12	1.885E-12	7.493E-12	4.440E-11	3.768E-10	1.644E-09	6.526E-09
Pb-210	U-238	1.599E-03	9.639E-20	2.924E-18	1.705E-13	3.391E-13	2.286E-12	2.827E-11	6.470E-10	5.948E-09	4.933E-08
Pb-210	U-238	3.359E-07	2.025E-23	6.142E-22	3.581E-17	7.123E-17	4.802E-16	5.938E-15	1.359E-13	1.249E-12	1.036E-11
Pb-210	U-238	3.196E-07	1.926E-23	5.843E-22	3.407E-17	6.776E-17	4.569E-16	5.650E-15	1.293E-13	1.189E-12	9.859E-12
Pb-210	U-238	6.713E-11	4.036E-27	1.227E-25	7.157E-21	1.423E-20	9.597E-20	1.187E-18	2.716E-17	2.497E-16	2.071E-15
Pb-210	U-238	3.200E-10	1.929E-26	5.850E-25	3.412E-20	6.785E-20	4.574E-19	5.657E-18	1.295E-16	1.190E-15	9.871E-15
Pb-210	U-238	9.980E-01	6.015E-17	1.825E-15	1.064E-10	2.116E-10	1.427E-09	1.764E-08	4.037E-07	3.711E-06	3.078E-05
Pb-210	U-238	2.096E-04	1.263E-20	3.832E-19	2.235E-14	4.444E-14	2.997E-13	3.705E-12	8.480E-11	7.795E-10	6.466E-09

Individual Nuclide Dose Summed Over All Pathways
 Parent Nuclide and Branch Fraction Indicated

ONuclide	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
Pb-210	U-238	1.994E-04	1.202E-20	3.646E-19	2.126E-14	4.229E-14	2.851E-13	3.525E-12	8.068E-11	7.417E-10	6.152E-09
Pb-210	U-238	4.189E-08	2.525E-24	7.659E-23	4.466E-18	8.882E-18	5.988E-17	7.405E-16	1.695E-14	1.558E-13	1.292E-12
Pb-210	U-238	1.997E-07	1.203E-23	3.651E-22	2.129E-17	4.234E-17	2.854E-16	3.530E-15	8.078E-14	7.426E-13	6.159E-12
Pb-210	äDOSE(j)		4.570E-05	3.138E-04	6.857E-02	9.370E-02	2.163E-01	5.966E-01	1.810E+00	3.682E+00	6.871E+00
OPu-238	Pu-238	1.319E-06	7.466E-07	7.407E-07	6.127E-07	5.890E-07	5.029E-07	3.387E-07	1.035E-07	1.435E-08	2.758E-10
Pu-238	Pu-238	1.899E-08	1.075E-08	1.066E-08	8.820E-09	8.478E-09	7.238E-09	4.875E-09	1.490E-09	2.065E-10	3.970E-12
Pu-238	äDOSE(j)		7.573E-07	7.514E-07	6.216E-07	5.975E-07	5.101E-07	3.436E-07	1.050E-07	1.456E-08	2.798E-10
OU-234	Pu-238	1.319E-06	3.278E-13	9.807E-13	1.520E-11	1.784E-11	2.740E-11	4.563E-11	7.174E-11	8.158E-11	8.302E-11
OTh-230	Pu-238	1.319E-06	3.162E-18	2.204E-17	5.767E-15	8.146E-15	2.124E-14	7.465E-14	3.387E-13	9.001E-13	2.084E-12
ORa-226	Pu-238	1.319E-06	4.905E-20	7.349E-19	3.097E-15	5.245E-15	2.287E-14	1.637E-13	1.954E-12	1.089E-11	5.113E-11
OPb-210	Pu-238	1.899E-08	6.323E-25	1.953E-23	1.116E-18	2.201E-18	1.437E-17	1.639E-16	2.966E-15	1.955E-14	9.966E-14
Pb-210	Pu-238	3.989E-12	1.328E-28	4.103E-27	2.343E-22	4.624E-22	3.019E-21	3.442E-20	6.230E-19	4.106E-18	2.093E-17
Pb-210	Pu-238	3.795E-12	1.264E-28	3.904E-27	2.230E-22	4.399E-22	2.875E-21	3.275E-20	5.928E-19	3.907E-18	1.992E-17
Pb-210	Pu-238	7.972E-16	0.000E+00	0.000E+00	4.683E-26	9.240E-26	6.033E-25	6.878E-24	1.245E-22	8.206E-22	4.183E-21
Pb-210	Pu-238	3.800E-15	0.000E+00	0.000E+00	2.232E-25	4.405E-25	2.876E-24	3.278E-23	5.935E-22	3.911E-21	1.994E-20
Pb-210	Th-230	1.899E-08	4.877E-13	3.391E-12	7.479E-10	1.022E-09	2.360E-09	6.508E-09	1.973E-08	4.010E-08	7.463E-08
Pb-210	Th-230	3.989E-12	1.024E-16	7.122E-16	1.571E-13	2.147E-13	4.956E-13	1.367E-12	4.144E-12	8.422E-12	1.568E-11
Pb-210	Th-230	3.795E-12	9.746E-17	6.776E-16	1.495E-13	2.042E-13	4.715E-13	1.301E-12	3.942E-12	8.013E-12	1.491E-11
Pb-210	Th-230	7.972E-16	2.047E-20	1.423E-19	3.139E-17	4.290E-17	9.904E-17	2.732E-16	8.281E-16	1.683E-15	3.133E-15
Pb-210	Th-230	3.800E-15	9.758E-20	6.784E-19	1.496E-16	2.045E-16	4.721E-16	1.302E-15	3.947E-15	8.023E-15	1.493E-14
Pb-210	U-234	1.899E-08	1.121E-18	1.675E-17	6.219E-14	1.028E-13	4.087E-13	2.422E-12	2.056E-11	8.972E-11	3.561E-10
Pb-210	U-234	3.989E-12	2.356E-22	3.519E-21	1.306E-17	2.158E-17	8.585E-17	5.087E-16	4.318E-15	1.884E-14	7.479E-14
Pb-210	U-234	3.795E-12	2.241E-22	3.348E-21	1.243E-17	2.054E-17	8.167E-17	4.840E-16	4.109E-15	1.793E-14	7.116E-14
Pb-210	U-234	7.972E-16	4.707E-26	7.032E-25	2.611E-21	4.313E-21	1.716E-20	1.017E-19	8.630E-19	3.766E-18	1.495E-17
Pb-210	U-234	3.800E-15	2.244E-25	3.352E-24	1.244E-20	2.056E-20	8.177E-20	4.846E-19	4.114E-18	1.795E-17	7.125E-17
Pb-210	U-238	3.039E-11	1.013E-27	3.134E-26	1.859E-21	3.699E-21	2.495E-20	3.086E-19	7.063E-18	6.493E-17	5.386E-16
Pb-210	U-238	6.383E-15	0.000E+00	0.000E+00	3.906E-25	7.769E-25	5.240E-24	6.481E-23	1.484E-21	1.364E-20	1.131E-19
Pb-210	U-238	6.073E-15	0.000E+00	0.000E+00	3.716E-25	7.391E-25	4.985E-24	6.167E-23	1.411E-21	1.298E-20	1.076E-19
Pb-210	U-238	1.276E-18	0.000E+00	0.000E+00	7.805E-29	1.552E-28	1.047E-27	1.295E-26	2.965E-25	2.726E-24	2.261E-23
Pb-210	U-238	6.080E-18	0.000E+00	0.000E+00	3.720E-28	7.400E-28	4.991E-27	6.174E-26	1.413E-24	1.299E-23	1.078E-22
Pb-210	U-238	1.896E-08	6.322E-25	1.955E-23	1.160E-18	2.308E-18	1.557E-17	1.926E-16	4.407E-15	4.052E-14	3.361E-13
Pb-210	U-238	3.983E-12	1.328E-28	4.107E-27	2.437E-22	4.848E-22	3.270E-21	4.044E-20	9.257E-19	8.510E-18	7.059E-17
Pb-210	U-238	3.789E-12	1.263E-28	3.908E-27	2.319E-22	4.612E-22	3.111E-21	3.848E-20	8.808E-19	8.097E-18	6.716E-17
Pb-210	U-238	7.959E-16	0.000E+00	0.000E+00	4.870E-26	9.688E-26	6.534E-25	8.082E-24	1.850E-22	1.701E-21	1.411E-20
Pb-210	U-238	3.794E-15	0.000E+00	0.000E+00	2.321E-25	4.618E-25	3.115E-24	3.853E-23	8.818E-22	8.107E-21	6.725E-20
Pb-210	äDOSE(j)		4.879E-13	3.392E-12	7.482E-10	1.023E-09	2.361E-09	6.513E-09	1.976E-08	4.020E-08	7.502E-08
OPu-238	Pu-238	2.100E-04	1.188E-04	1.179E-04	9.750E-05	9.372E-05	8.002E-05	5.390E-05	1.647E-05	2.283E-06	4.389E-08
Pu-238	Pu-238	2.771E-10	1.568E-10	1.556E-10	1.287E-10	1.237E-10	1.056E-10	7.115E-11	2.174E-11	3.014E-12	5.793E-14
Pu-238	äDOSE(j)		1.188E-04	1.179E-04	9.750E-05	9.372E-05	8.002E-05	5.390E-05	1.647E-05	2.283E-06	4.389E-08
ORa-226	Pu-238	2.100E-04	1.861E-17	2.788E-16	1.174E-12	1.989E-12	8.673E-12	6.208E-11	7.409E-10	4.130E-09	1.939E-08
Ra-226	Pu-238	2.771E-10	2.457E-23	3.680E-22	1.550E-18	2.625E-18	1.145E-17	8.195E-17	9.780E-16	5.452E-15	2.559E-14
Ra-226	Pu-238	3.989E-12	3.536E-25	5.296E-24	2.231E-20	3.779E-20	1.648E-19	1.180E-18	1.408E-17	7.847E-17	3.684E-16

Individual Nuclide Dose Summed Over All Pathways
Parent Nuclide and Branch Fraction Indicated

ONuclide	Parent (j)	THF(i)	DOSE(j,t), mrem/yr									
			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
Ra-226	Th-230	2.100E-04	8.618E-06	2.585E-05	4.372E-04	5.224E-04	8.611E-04	1.695E-03	4.088E-03	7.740E-03	1.393E-02	
Ra-226	Th-230	2.771E-10	1.138E-11	3.413E-11	5.771E-10	6.895E-10	1.137E-09	2.237E-09	5.397E-09	1.022E-08	1.839E-08	
Ra-226	Th-230	3.989E-12	1.637E-13	4.912E-13	8.307E-12	9.925E-12	1.636E-11	3.220E-11	7.768E-11	1.471E-10	2.647E-10	
Ra-226	U-234	2.100E-04	2.641E-11	1.849E-10	5.136E-08	7.342E-08	2.007E-07	7.889E-07	4.795E-06	1.846E-05	6.874E-05	
Ra-226	U-234	2.771E-10	3.486E-17	2.441E-16	6.780E-14	9.692E-14	2.649E-13	1.041E-12	6.329E-12	2.437E-11	9.074E-11	
Ra-226	U-234	3.989E-12	5.018E-19	3.513E-18	9.759E-16	1.395E-15	3.813E-15	1.499E-14	9.110E-14	3.507E-13	1.306E-12	
Ra-226	U-238	3.359E-07	2.983E-20	4.475E-19	1.975E-15	3.376E-15	1.529E-14	1.198E-13	1.825E-12	1.417E-11	1.073E-10	
Ra-226	U-238	4.434E-13	3.937E-26	5.907E-25	2.606E-21	4.457E-21	2.018E-20	1.582E-19	2.409E-18	1.870E-17	1.416E-16	
Ra-226	U-238	6.383E-15	5.645E-28	8.502E-27	3.752E-23	6.415E-23	2.905E-22	2.277E-21	3.468E-20	2.692E-19	2.039E-18	
Ra-226	U-238	2.096E-04	1.861E-17	2.792E-16	1.232E-12	2.107E-12	9.541E-12	7.478E-11	1.139E-09	8.840E-09	6.696E-08	
Ra-226	U-238	2.767E-10	2.457E-23	3.686E-22	1.626E-18	2.781E-18	1.259E-17	9.871E-17	1.503E-15	1.167E-14	8.839E-14	
Ra-226	U-238	3.983E-12	3.536E-25	5.305E-24	2.341E-20	4.003E-20	1.813E-19	1.421E-18	2.164E-17	1.680E-16	1.272E-15	
Ra-226	äDOSE(j)		8.618E-06	2.585E-05	4.373E-04	5.225E-04	8.613E-04	1.696E-03	4.093E-03	7.758E-03	1.400E-02	
OPb-210	Pu-238	2.771E-10	5.990E-27	1.854E-25	1.060E-20	2.092E-20	1.366E-19	1.558E-18	2.819E-17	1.858E-16	9.473E-16	
Pb-210	Pu-238	2.637E-10	5.699E-27	1.764E-25	1.009E-20	1.991E-20	1.300E-19	1.482E-18	2.682E-17	1.768E-16	9.013E-16	
Pb-210	Pu-238	5.538E-14	0.000E+00	2.831E-29	2.119E-24	4.181E-24	2.730E-23	3.113E-22	5.634E-21	3.714E-20	1.893E-19	
Pb-210	Pu-238	2.640E-13	0.000E+00	1.734E-28	1.010E-23	1.993E-23	1.301E-22	1.484E-21	2.686E-20	1.770E-19	9.024E-19	
Pb-210	Th-230	1.319E-06	2.202E-11	1.533E-10	3.384E-08	4.625E-08	1.068E-07	2.945E-07	8.928E-07	1.815E-06	3.377E-06	
Pb-210	Th-230	2.771E-10	4.626E-15	3.220E-14	7.108E-12	9.715E-12	2.243E-11	6.186E-11	1.875E-10	3.812E-10	7.094E-10	
Pb-210	Th-230	2.637E-10	4.401E-15	3.064E-14	6.773E-12	9.243E-12	2.134E-11	5.886E-11	1.784E-10	3.626E-10	6.749E-10	
Pb-210	Th-230	5.538E-14	9.245E-19	6.435E-18	1.421E-15	1.941E-15	4.482E-15	1.236E-14	3.747E-14	7.617E-14	1.418E-13	
Pb-210	Th-230	2.640E-13	4.407E-18	3.067E-17	6.771E-15	9.254E-15	2.136E-14	5.893E-14	1.786E-13	3.631E-13	6.758E-13	
Pb-210	U-234	1.319E-06	5.061E-17	7.572E-16	2.814E-12	4.650E-12	1.849E-11	1.096E-10	9.304E-10	4.060E-09	1.611E-08	
Pb-210	U-234	2.771E-10	1.063E-20	1.590E-19	5.911E-16	9.767E-16	3.885E-15	2.302E-14	1.954E-13	8.528E-13	3.385E-12	
Pb-210	U-234	2.637E-10	1.011E-20	1.513E-19	5.624E-16	9.293E-16	3.696E-15	2.190E-14	1.859E-13	8.114E-13	3.220E-12	
Pb-210	U-234	5.538E-14	2.124E-24	3.178E-23	1.181E-19	1.952E-19	7.763E-19	4.601E-18	3.905E-17	1.704E-16	6.764E-16	
Pb-210	U-234	2.640E-13	1.013E-23	1.515E-22	5.631E-19	9.304E-19	3.701E-18	2.193E-17	1.862E-16	8.124E-16	3.224E-15	
Pb-210	U-238	2.111E-09	4.569E-26	1.416E-24	8.414E-20	1.674E-19	1.129E-18	1.396E-17	3.196E-16	2.938E-15	2.437E-14	
Pb-210	U-238	4.434E-13	0.000E+00	2.920E-28	1.767E-23	3.515E-23	2.371E-22	2.933E-21	6.714E-20	6.172E-19	5.120E-18	
Pb-210	U-238	4.219E-13	0.000E+00	2.778E-28	1.681E-23	3.345E-23	2.256E-22	2.791E-21	6.388E-20	5.872E-19	4.871E-18	
Pb-210	U-238	8.862E-17	0.000E+00	0.000E+00	3.532E-27	7.025E-27	4.739E-26	5.861E-25	1.342E-23	1.233E-22	1.023E-21	
Pb-210	U-238	4.224E-16	0.000E+00	0.000E+00	1.683E-26	3.349E-26	2.259E-25	2.794E-24	6.395E-23	5.879E-22	4.877E-21	
Pb-210	U-238	1.317E-06	2.851E-23	8.834E-22	5.250E-17	1.044E-16	7.044E-16	8.714E-15	1.995E-13	1.834E-12	1.521E-11	
Pb-210	U-238	2.767E-10	5.988E-27	1.856E-25	1.103E-20	2.194E-20	1.480E-19	1.830E-18	4.189E-17	3.851E-16	3.195E-15	
Pb-210	U-238	2.633E-10	5.697E-27	1.765E-25	1.049E-20	2.087E-20	1.408E-19	1.741E-18	3.986E-17	3.664E-16	3.039E-15	
Pb-210	U-238	5.530E-14	0.000E+00	2.834E-29	2.204E-24	4.384E-24	2.957E-23	3.658E-22	8.372E-21	7.697E-20	6.384E-19	
Pb-210	U-238	2.636E-13	0.000E+00	1.736E-28	1.050E-23	2.090E-23	1.409E-22	1.743E-21	3.991E-20	3.669E-19	3.043E-18	
Pb-210	äDOSE(j)		2.203E-11	1.534E-10	3.386E-08	4.627E-08	1.068E-07	2.947E-07	8.941E-07	1.819E-06	3.395E-06	
OPu-238	Pu-238	3.989E-12	2.257E-12	2.239E-12	1.853E-12	1.781E-12	1.520E-12	1.024E-12	3.129E-13	4.338E-14	8.338E-16	
Pu-238	Pu-238	1.998E-04	1.130E-04	1.121E-04	9.276E-05	8.917E-05	7.613E-05	5.128E-05	1.567E-05	2.172E-06	4.175E-08	
Pu-238	äDOSE(j)		1.130E-04	1.121E-04	9.276E-05	8.917E-05	7.613E-05	5.128E-05	1.567E-05	2.172E-06	4.175E-08	
ORa-226	Pu-238	1.998E-04	6.645E-18	9.957E-17	4.196E-13	7.107E-13	3.099E-12	2.219E-11	2.648E-10	1.476E-09	6.929E-09	
Ra-226	Pu-238	3.795E-12	1.263E-25	1.892E-24	7.973E-21	1.350E-20	5.889E-20	4.215E-19	5.030E-18	2.804E-17	1.317E-16	
Ra-226	Th-230	1.998E-04	3.079E-06	9.237E-06	1.562E-04	1.867E-04	3.077E-04	6.057E-04	1.461E-03	2.766E-03	4.978E-03	
Ra-226	Th-230	2.637E-10	4.064E-12	1.219E-11	2.062E-10	2.464E-10	4.062E-10	7.995E-10	1.929E-09	3.651E-09	6.571E-09	
Ra-226	Th-230	3.795E-12	5.849E-14	1.755E-13	2.969E-12	3.547E-12	5.847E-12	1.151E-11	2.776E-11	5.255E-11	9.458E-11	

Individual Nuclide Dose Summed Over All Pathways
Parent Nuclide and Branch Fraction Indicated

ONuclide	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	9.432E-12	6.606E-11	1.835E-08	2.624E-08	7.171E-08	2.819E-07	1.713E-06	6.597E-06	2.457E-05	
Ra-226	U-234	2.637E-10	1.245E-17	8.720E-17	2.423E-14	3.463E-14	9.466E-14	3.721E-13	2.262E-12	8.708E-12	3.243E-11	
Ra-226	U-234	3.795E-12	1.792E-19	1.255E-18	3.487E-16	4.985E-16	1.363E-15	5.357E-15	3.255E-14	1.253E-13	4.667E-13	
Ra-226	U-238	3.196E-07	1.065E-20	1.598E-19	7.056E-16	1.207E-15	5.464E-15	4.282E-14	6.523E-13	5.063E-12	3.835E-11	
Ra-226	U-238	4.219E-13	1.406E-26	2.110E-25	9.314E-22	1.593E-21	7.212E-21	5.653E-20	8.610E-19	6.683E-18	5.062E-17	
Ra-226	U-238	6.073E-15	2.003E-28	3.037E-27	1.341E-23	2.293E-23	1.038E-22	8.137E-22	1.239E-20	9.619E-20	7.286E-19	
Ra-226	U-238	1.994E-04	6.645E-18	9.974E-17	4.403E-13	7.529E-13	3.409E-12	2.672E-11	4.070E-10	3.159E-09	2.393E-08	
Ra-226	U-238	2.633E-10	8.771E-24	1.317E-22	5.812E-19	9.938E-19	4.500E-18	3.527E-17	5.373E-16	4.170E-15	3.159E-14	
Ra-226	U-238	3.789E-12	1.262E-25	1.895E-24	8.366E-21	1.431E-20	6.478E-20	5.077E-19	7.733E-18	6.002E-17	4.546E-16	
Ra-226	äDOSE(j)		3.079E-06	9.238E-06	1.563E-04	1.867E-04	3.078E-04	6.060E-04	1.463E-03	2.773E-03	5.002E-03	
OPu-238	Pu-238	2.637E-10	1.492E-10	1.480E-10	1.224E-10	1.177E-10	1.005E-10	6.769E-11	2.068E-11	2.868E-12	5.512E-14	
Pu-238	Pu-238	3.795E-12	2.148E-12	2.131E-12	1.763E-12	1.694E-12	1.447E-12	9.743E-13	2.977E-13	4.128E-14	7.933E-16	
Pu-238	äDOSE(j)		1.513E-10	1.502E-10	1.242E-10	1.194E-10	1.019E-10	6.866E-11	2.098E-11	2.909E-12	5.591E-14	
ORa-226	Pu-238	2.637E-10	8.771E-24	1.314E-22	5.539E-19	9.382E-19	4.091E-18	2.928E-17	3.495E-16	1.948E-15	9.146E-15	
OPu-238	Pu-238	4.196E-08	2.374E-08	2.355E-08	1.948E-08	1.873E-08	1.599E-08	1.077E-08	3.291E-09	4.563E-10	8.770E-12	
Pu-238	Pu-238	5.538E-14	3.134E-14	3.109E-14	2.572E-14	2.472E-14	2.111E-14	1.422E-14	4.345E-15	6.023E-16	1.158E-17	
Pu-238	äDOSE(j)		2.374E-08	2.355E-08	1.948E-08	1.873E-08	1.599E-08	1.077E-08	3.291E-09	4.563E-10	8.770E-12	
ORa-226	Pu-238	4.196E-08	3.555E-21	5.325E-20	2.243E-16	3.800E-16	1.657E-15	1.186E-14	1.415E-13	7.890E-13	3.704E-12	
Ra-226	Pu-238	5.538E-14	4.693E-27	7.029E-26	2.961E-22	5.015E-22	2.187E-21	1.566E-20	1.868E-19	1.042E-18	4.890E-18	
Ra-226	Pu-238	7.972E-16	6.352E-29	1.008E-27	4.262E-24	7.219E-24	3.148E-23	2.253E-22	2.689E-21	1.499E-20	7.038E-20	
Ra-226	Th-230	4.196E-08	1.646E-09	4.939E-09	8.353E-08	9.980E-08	1.645E-07	3.238E-07	7.811E-07	1.479E-06	2.661E-06	
Ra-226	Th-230	5.538E-14	2.173E-15	6.520E-15	1.103E-13	1.317E-13	2.172E-13	4.274E-13	1.031E-12	1.952E-12	3.513E-12	
Ra-226	Th-230	7.972E-16	3.128E-17	9.384E-17	1.587E-15	1.896E-15	3.126E-15	6.152E-15	1.484E-14	2.809E-14	5.056E-14	
Ra-226	U-234	4.196E-08	5.046E-15	3.532E-14	9.812E-12	1.403E-11	3.834E-11	1.507E-10	9.160E-10	3.527E-09	1.313E-08	
Ra-226	U-234	5.538E-14	6.660E-21	4.663E-20	1.295E-17	1.852E-17	5.061E-17	1.989E-16	1.209E-15	4.655E-15	1.733E-14	
Ra-226	U-234	7.972E-16	9.587E-23	6.712E-22	1.864E-19	2.665E-19	7.284E-19	2.864E-18	1.740E-17	6.700E-17	2.495E-16	
Ra-226	U-238	6.713E-11	5.698E-24	8.548E-23	3.772E-19	6.450E-19	2.921E-18	2.289E-17	3.487E-16	2.707E-15	2.050E-14	
Ra-226	U-238	8.862E-17	0.000E+00	1.061E-28	4.979E-25	8.515E-25	3.856E-24	3.022E-23	4.603E-22	3.573E-21	2.706E-20	
Ra-226	U-238	1.276E-18	0.000E+00	0.000E+00	7.167E-27	1.226E-26	5.550E-26	4.350E-25	6.625E-24	5.142E-23	3.895E-22	
Ra-226	U-238	4.189E-08	3.555E-21	5.334E-20	2.354E-16	4.025E-16	1.823E-15	1.429E-14	2.176E-13	1.689E-12	1.279E-11	
Ra-226	U-238	5.530E-14	4.693E-27	7.041E-26	3.107E-22	5.313E-22	2.406E-21	1.886E-20	2.872E-19	2.229E-18	1.689E-17	
Ra-226	U-238	7.959E-16	6.352E-29	1.009E-27	4.472E-24	7.648E-24	3.463E-23	2.714E-22	4.134E-21	3.209E-20	2.430E-19	
Ra-226	äDOSE(j)		1.646E-09	4.939E-09	8.354E-08	9.981E-08	1.645E-07	3.240E-07	7.820E-07	1.482E-06	2.674E-06	
OPu-238	Pu-238	7.972E-16	4.511E-16	4.475E-16	3.702E-16	3.559E-16	3.038E-16	2.046E-16	6.254E-17	8.670E-18	1.666E-19	
Pu-238	Pu-238	2.000E-07	1.132E-07	1.123E-07	9.288E-08	8.928E-08	7.622E-08	5.134E-08	1.569E-08	2.175E-09	4.180E-11	
Pu-238	äDOSE(j)		1.132E-07	1.123E-07	9.288E-08	8.928E-08	7.622E-08	5.134E-08	1.569E-08	2.175E-09	4.180E-11	
ORa-226	Pu-238	2.000E-07	1.035E-21	1.558E-20	6.588E-17	1.116E-16	4.867E-16	3.484E-15	4.158E-14	2.318E-13	1.088E-12	
Ra-226	Pu-238	3.800E-15	1.793E-29	2.891E-28	1.252E-24	2.120E-24	9.247E-24	6.619E-23	7.900E-22	4.404E-21	2.067E-20	
Ra-226	Th-230	2.000E-07	4.818E-10	1.449E-09	2.453E-08	2.931E-08	4.832E-08	9.512E-08	2.294E-07	4.344E-07	7.817E-07	
Ra-226	Th-230	2.640E-13	6.359E-16	1.912E-15	3.239E-14	3.869E-14	6.379E-14	1.256E-13	3.029E-13	5.734E-13	1.032E-12	
Ra-226	Th-230	3.800E-15	9.153E-18	2.752E-17	4.662E-16	5.570E-16	9.182E-16	1.807E-15	4.359E-15	8.253E-15	1.485E-14	
Ra-226	U-234	2.000E-07	1.472E-15	1.035E-14	2.882E-12	4.120E-12	1.126E-11	4.427E-11	2.691E-10	1.036E-09	3.858E-09	
Ra-226	U-234	2.640E-13	1.943E-21	1.366E-20	3.804E-18	5.438E-18	1.486E-17	5.844E-17	3.552E-16	1.367E-15	5.092E-15	

Individual Nuclide Dose Summed Over All Pathways
 Parent Nuclide and Branch Fraction Indicated

ONuclide	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
Ra-226	U-234	3.800E-15	2.797E-23	1.966E-22	5.476E-20	7.828E-20	2.140E-19	8.412E-19	5.112E-18	1.968E-17	7.330E-17
Ra-226	U-238	3.200E-10	1.659E-24	2.500E-23	1.108E-19	1.894E-19	8.579E-19	6.725E-18	1.024E-16	7.951E-16	6.022E-15
Ra-226	U-238	4.224E-16	0.000E+00	3.010E-29	1.462E-25	2.501E-25	1.132E-24	8.877E-24	1.352E-22	1.049E-21	7.949E-21
Ra-226	U-238	6.080E-18	0.000E+00	0.000E+00	2.105E-27	3.599E-27	1.630E-26	1.278E-25	1.946E-24	1.511E-23	1.144E-22
Ra-226	U-238	1.997E-07	1.035E-21	1.560E-20	6.913E-17	1.182E-16	5.354E-16	4.196E-15	6.392E-14	4.961E-13	3.758E-12
Ra-226	U-238	2.636E-13	1.366E-27	2.060E-26	9.125E-23	1.560E-22	7.067E-22	5.539E-21	8.437E-20	6.549E-19	4.960E-18
Ra-226	U-238	3.794E-15	1.793E-29	2.896E-28	1.313E-24	2.246E-24	1.017E-23	7.973E-23	1.214E-21	9.426E-21	7.140E-20
Ra-226	äDOSE(j)		4.818E-10	1.449E-09	2.454E-08	2.932E-08	4.833E-08	9.516E-08	2.297E-07	4.354E-07	7.856E-07
OPu-238	Pu-238	2.640E-13	1.494E-13	1.482E-13	1.226E-13	1.178E-13	1.006E-13	6.777E-14	2.071E-14	2.871E-15	5.518E-17
Pu-238	Pu-238	3.800E-15	2.150E-15	2.133E-15	1.765E-15	1.696E-15	1.448E-15	9.755E-16	2.981E-16	4.133E-17	7.943E-19
Pu-238	äDOSE(j)		1.515E-13	1.503E-13	1.244E-13	1.195E-13	1.021E-13	6.875E-14	2.101E-14	2.912E-15	5.598E-17
ORa-226	Pu-238	2.640E-13	1.366E-27	2.056E-26	8.697E-23	1.473E-22	6.424E-22	4.599E-21	5.488E-20	3.060E-19	1.436E-18
OPu-239	Pu-239	5.901E-04	3.677E-04	3.677E-04	3.674E-04	3.674E-04	3.671E-04	3.666E-04	3.650E-04	3.624E-04	3.572E-04
Pu-239	Pu-239	1.633E-06	1.018E-06	1.018E-06	1.017E-06	1.017E-06	1.016E-06	1.015E-06	1.010E-06	1.003E-06	9.887E-07
Pu-239	äDOSE(j)		3.687E-04	3.687E-04	3.684E-04	3.684E-04	3.682E-04	3.676E-04	3.660E-04	3.634E-04	3.582E-04
OU-235	Pu-239	5.901E-04	1.468E-12	4.403E-12	7.848E-11	8.949E-11	1.481E-10	2.946E-10	7.327E-10	1.459E-09	2.895E-09
U-235	Pu-239	1.633E-06	4.062E-15	1.219E-14	2.071E-13	2.477E-13	4.100E-13	8.153E-13	2.028E-12	4.037E-12	8.012E-12
U-235	Pu-239	8.257E-06	2.054E-14	6.161E-14	1.047E-12	1.252E-12	2.073E-12	4.122E-12	1.025E-11	2.041E-11	4.051E-11
U-235	Pu-239	2.285E-08	5.684E-17	1.705E-16	2.898E-15	3.466E-15	5.737E-15	1.141E-14	2.837E-14	5.649E-14	1.121E-13
U-235	Pu-239	4.954E-10	1.232E-18	3.697E-18	6.283E-17	7.514E-17	1.244E-16	2.473E-16	6.152E-16	1.225E-15	2.431E-15
U-235	Pu-239	1.371E-12	3.410E-21	1.023E-20	1.739E-19	2.080E-19	3.442E-19	6.845E-19	1.703E-18	3.389E-18	6.727E-18
U-235	Pu-239	9.829E-01	2.445E-09	7.334E-09	1.246E-07	1.491E-07	2.467E-07	4.907E-07	1.220E-06	2.430E-06	4.822E-06
U-235	Pu-239	2.720E-03	6.766E-12	2.030E-11	3.450E-10	4.126E-10	6.829E-10	1.358E-09	3.378E-09	6.724E-09	1.335E-08
U-235	Pu-239	1.375E-02	3.421E-11	1.026E-10	1.744E-09	2.086E-09	3.453E-09	6.866E-09	1.708E-08	3.400E-08	6.747E-08
U-235	Pu-239	3.806E-05	9.467E-14	2.840E-13	4.827E-12	5.773E-12	9.555E-12	1.900E-11	4.726E-11	9.409E-11	1.867E-10
U-235	Pu-239	8.252E-07	2.053E-15	6.158E-15	1.046E-13	1.252E-13	2.072E-13	4.120E-13	1.025E-12	2.040E-12	4.048E-12
U-235	Pu-239	2.284E-09	5.681E-18	1.704E-17	2.896E-16	3.464E-16	5.734E-16	1.140E-15	2.836E-15	5.646E-15	1.120E-14
U-235	U-235	9.835E-01	4.969E+00	4.969E+00	4.969E+00	4.969E+00	4.969E+00	4.969E+00	4.969E+00	4.969E+00	4.968E+00
U-235	äDOSE(j)		4.969E+00	4.969E+00	4.969E+00	4.969E+00	4.969E+00	4.969E+00	4.969E+00	4.969E+00	4.968E+00
OPa-231	Pu-239	5.901E-04	1.042E-17	7.306E-17	2.039E-14	2.916E-14	7.992E-14	3.162E-13	1.960E-12	7.791E-12	3.087E-11
Pa-231	Pu-239	1.633E-06	2.883E-20	2.022E-19	5.642E-17	8.071E-17	2.212E-16	8.752E-16	5.424E-15	2.156E-14	8.545E-14
Pa-231	Pu-239	8.257E-06	1.458E-19	1.022E-18	2.852E-16	4.080E-16	1.118E-15	4.425E-15	2.742E-14	1.090E-13	4.320E-13
Pa-231	Pu-239	2.285E-08	4.034E-22	8.229E-21	7.895E-19	1.129E-18	3.095E-18	1.225E-17	7.589E-17	3.017E-16	1.196E-15
Pa-231	Pu-239	4.954E-10	8.746E-24	6.134E-23	1.712E-20	2.448E-20	6.710E-20	2.655E-19	1.645E-18	6.541E-18	2.592E-17
Pa-231	Pu-239	1.371E-12	2.420E-26	1.698E-25	4.737E-23	6.776E-23	1.857E-22	7.348E-22	4.554E-21	1.810E-20	7.174E-20
Pa-231	Pu-239	9.829E-01	1.735E-14	1.217E-13	3.396E-11	4.857E-11	1.331E-10	5.267E-10	3.264E-09	1.298E-08	5.142E-08
Pa-231	Pu-239	2.720E-03	4.802E-17	3.368E-16	9.398E-14	1.344E-13	3.684E-13	1.458E-12	9.035E-12	3.592E-11	1.423E-10
Pa-231	Pu-239	1.375E-02	2.428E-16	1.703E-15	4.751E-13	6.796E-13	1.863E-12	7.370E-12	4.568E-11	1.816E-10	7.195E-10
Pa-231	Pu-239	3.806E-05	6.719E-19	4.713E-18	1.315E-15	1.881E-15	5.155E-15	2.040E-14	1.264E-13	5.025E-13	1.991E-12
Pa-231	Pu-239	8.252E-07	1.457E-20	1.022E-19	2.851E-17	4.078E-17	1.118E-16	4.423E-16	2.741E-15	1.090E-14	4.317E-14
Pa-231	Pu-239	2.284E-09	4.032E-23	2.828E-22	7.890E-20	1.129E-19	3.093E-19	1.224E-18	7.585E-18	3.015E-17	1.195E-16
Pa-231	U-235	9.835E-01	5.298E-05	1.591E-04	2.707E-03	3.237E-03	5.359E-03	1.066E-02	2.653E-02	5.286E-02	1.051E-01
Pa-231	U-235	2.722E-03	1.466E-07	4.404E-07	7.491E-06	8.960E-06	1.483E-05	2.950E-05	7.342E-05	1.463E-04	2.909E-04
Pa-231	U-235	1.376E-02	7.412E-07	2.227E-06	3.787E-05	4.530E-05	7.499E-05	1.492E-04	3.712E-04	7.396E-04	1.471E-03

Individual Nuclide Dose Summed Over All Pathways
Parent Nuclide and Branch Fraction Indicated

ONuclide	Parent (j)	THF(i)	DOSE(j,t), mrem/yr									
			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
Pa-231	U-235	3.809E-05	2.052E-09	6.163E-09	1.048E-07	1.254E-07	2.075E-07	4.128E-07	1.027E-06	2.047E-06	4.070E-06	
Pa-231	U-235	8.257E-07	4.448E-11	1.336E-10	2.273E-09	2.718E-09	4.499E-09	8.950E-09	2.227E-08	4.438E-08	8.824E-08	
Pa-231	U-235	2.285E-09	1.231E-13	3.698E-13	6.290E-12	7.523E-12	1.245E-11	2.477E-11	6.164E-11	1.228E-10	2.442E-10	
Pa-231	äDOSE(j)		5.387E-05	1.618E-04	2.752E-03	3.292E-03	5.449E-03	1.084E-02	2.697E-02	5.375E-02	1.069E-01	
0Ac-227	Pu-239	5.901E-04	2.534E-19	3.772E-18	1.395E-14	2.305E-14	9.166E-14	5.443E-13	4.683E-12	2.104E-11	8.876E-11	
Ac-227	Pu-239	9.829E-01	4.222E-16	6.284E-15	2.323E-11	3.839E-11	1.527E-10	9.066E-10	7.800E-09	3.505E-08	1.478E-07	
Ac-227	U-235	9.835E-01	1.713E-06	1.187E-05	2.611E-03	3.568E-03	8.243E-03	2.284E-02	7.101E-02	1.516E-01	3.116E-01	
Ac-227	äDOSE(j)		1.713E-06	1.187E-05	2.611E-03	3.568E-03	8.243E-03	2.284E-02	7.101E-02	1.516E-01	3.116E-01	
0Ac-227	Pu-239	1.633E-06	7.065E-22	1.053E-20	3.898E-17	6.440E-17	2.561E-16	1.521E-15	1.309E-14	5.880E-14	2.480E-13	
Ac-227	Pu-239	8.257E-06	2.944E-21	4.387E-20	1.624E-16	2.683E-16	1.067E-15	6.337E-15	5.453E-14	2.450E-13	1.034E-12	
Ac-227	Pu-239	2.720E-03	1.177E-18	1.754E-17	6.492E-14	1.073E-13	4.266E-13	2.533E-12	2.180E-11	9.795E-11	4.131E-10	
Ac-227	U-235	2.722E-03	4.777E-09	3.315E-08	7.296E-06	9.971E-06	2.303E-05	6.383E-05	1.984E-04	4.237E-04	8.707E-04	
Ac-227	äDOSE(j)		4.777E-09	3.315E-08	7.296E-06	9.971E-06	2.303E-05	6.383E-05	1.984E-04	4.237E-04	8.707E-04	
0Pu-239	Pu-239	8.257E-06	5.145E-06	5.144E-06	5.141E-06	5.140E-06	5.137E-06	5.130E-06	5.108E-06	5.071E-06	4.999E-06	
Pu-239	Pu-239	2.285E-08	1.424E-08	1.424E-08	1.423E-08	1.423E-08	1.422E-08	1.420E-08	1.414E-08	1.403E-08	1.383E-08	
Pu-239	äDOSE(j)		5.159E-06	5.159E-06	5.155E-06	5.154E-06	5.151E-06	5.144E-06	5.122E-06	5.085E-06	5.013E-06	
0Ac-227	Pu-239	2.285E-08	8.242E-24	1.228E-22	4.547E-19	7.513E-19	2.988E-18	1.774E-17	1.527E-16	6.861E-16	2.894E-15	
Ac-227	Pu-239	4.954E-10	2.116E-25	3.153E-24	1.167E-20	1.928E-20	7.668E-20	4.553E-19	3.918E-18	1.761E-17	7.426E-17	
Ac-227	Pu-239	3.806E-05	1.373E-20	2.046E-19	7.574E-16	1.251E-15	4.977E-15	2.956E-14	2.543E-13	1.143E-12	4.820E-12	
Ac-227	U-235	3.809E-05	5.573E-11	3.867E-10	8.512E-08	1.163E-07	2.687E-07	7.447E-07	2.315E-06	4.943E-06	1.016E-05	
Ac-227	äDOSE(j)		5.573E-11	3.867E-10	8.512E-08	1.163E-07	2.687E-07	7.447E-07	2.315E-06	4.943E-06	1.016E-05	
0Pu-239	Pu-239	4.954E-10	3.087E-10	3.087E-10	3.085E-10	3.084E-10	3.082E-10	3.078E-10	3.065E-10	3.043E-10	2.999E-10	
Pu-239	Pu-239	1.371E-12	8.543E-13	8.543E-13	8.537E-13	8.536E-13	8.531E-13	8.519E-13	8.482E-13	8.421E-13	8.301E-13	
Pu-239	äDOSE(j)		3.095E-10	3.095E-10	3.093E-10	3.093E-10	3.091E-10	3.087E-10	3.073E-10	3.051E-10	3.008E-10	
0Ac-227	Pu-239	1.371E-12	5.912E-28	8.810E-27	3.261E-23	5.388E-23	2.143E-22	1.272E-21	1.095E-20	4.920E-20	2.075E-19	
Ac-227	Pu-239	2.284E-09	9.848E-25	1.468E-23	5.432E-20	8.974E-20	3.569E-19	2.120E-18	1.824E-17	8.195E-17	3.457E-16	
Ac-227	U-235	2.285E-09	3.997E-15	2.773E-14	6.104E-12	8.342E-12	1.927E-11	5.341E-11	1.660E-10	3.545E-10	7.285E-10	
Ac-227	äDOSE(j)		3.997E-15	2.773E-14	6.104E-12	8.342E-12	1.927E-11	5.341E-11	1.660E-10	3.545E-10	7.285E-10	
0Pu-239	Pu-239	9.829E-01	6.124E-01	6.124E-01	6.120E-01	6.119E-01	6.115E-01	6.107E-01	6.080E-01	6.037E-01	5.951E-01	
Pu-239	Pu-239	2.720E-03	1.695E-03	1.695E-03	1.694E-03	1.693E-03	1.693E-03	1.690E-03	1.683E-03	1.671E-03	1.647E-03	
Pu-239	äDOSE(j)		6.141E-01	6.141E-01	6.137E-01	6.136E-01	6.132E-01	6.123E-01	6.097E-01	6.053E-01	5.967E-01	
0Pu-239	Pu-239	1.375E-02	8.569E-03	8.569E-03	8.563E-03	8.562E-03	8.557E-03	8.544E-03	8.508E-03	8.447E-03	8.326E-03	
Pu-239	Pu-239	3.806E-05	2.372E-05	2.372E-05	2.370E-05	2.370E-05	2.368E-05	2.365E-05	2.355E-05	2.338E-05	2.304E-05	
Pu-239	äDOSE(j)		8.593E-03	8.593E-03	8.587E-03	8.585E-03	8.580E-03	8.568E-03	8.531E-03	8.470E-03	8.349E-03	
0Ac-227	Pu-239	1.375E-02	4.903E-18	7.308E-17	2.705E-13	4.470E-13	1.778E-12	1.056E-11	9.083E-11	4.081E-10	1.722E-09	
Ac-227	U-235	1.376E-02	1.990E-08	1.381E-07	3.040E-05	4.155E-05	9.598E-05	2.660E-04	8.269E-04	1.766E-03	3.628E-03	
Ac-227	äDOSE(j)		1.990E-08	1.381E-07	3.040E-05	4.155E-05	9.598E-05	2.660E-04	8.269E-04	1.766E-03	3.628E-03	
0Pu-239	Pu-239	8.252E-07	5.142E-07	5.142E-07	5.138E-07	5.137E-07	5.134E-07	5.127E-07	5.105E-07	5.068E-07	4.996E-07	
Pu-239	Pu-239	2.284E-09	1.423E-09	1.423E-09	1.422E-09	1.422E-09	1.421E-09	1.419E-09	1.413E-09	1.403E-09	1.383E-09	
Pu-239	äDOSE(j)		5.156E-07	5.156E-07	5.152E-07	5.152E-07	5.149E-07	5.141E-07	5.119E-07	5.082E-07	5.010E-07	

Individual Nuclide Dose Summed Over All Pathways
 Parent Nuclide and Branch Fraction Indicated

ONuclide	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		3.524E-22	5.252E-21	1.944E-17	3.211E-17	1.277E-16	7.585E-16	6.526E-15	2.932E-14	1.237E-13
Ac-227	U-235	8.257E-07		1.430E-12	9.925E-12	2.184E-09	2.985E-09	6.896E-09	1.911E-08	5.941E-08	1.269E-07	2.607E-07
Ac-227		äDOSE(j)		1.430E-12	9.925E-12	2.184E-09	2.985E-09	6.896E-09	1.911E-08	5.941E-08	1.269E-07	2.607E-07
ORu-106	Ru-106	1.000E+00		6.076E+00	3.085E+00	2.666E-07	9.000E-09	1.170E-14	2.204E-29	0.000E+00	0.000E+00	0.000E+00
OSr-90	Sr-90	1.000E+00		6.945E+00	6.780E+00	3.804E+00	3.373E+00	2.084E+00	6.253E-01	1.689E-02	4.108E-05	2.430E-10
OTc-99	Tc-99	1.000E+00		2.533E+00	2.533E+00	2.528E+00	2.527E+00	2.523E+00	2.514E+00	2.485E+00	2.439E+00	2.348E+00
0Th-228	Th-228	1.000E+00		5.071E+01	3.529E+01	5.864E-03	9.568E-04	6.781E-07	9.069E-15	0.000E+00	0.000E+00	0.000E+00
Th-228	Th-232	1.000E+00		3.915E-01	2.401E+00	5.627E+01	5.817E+01	6.026E+01	6.046E+01	6.046E+01	6.046E+01	6.045E+01
Th-228		äDOSE(j)		5.110E+01	3.769E+01	5.628E+01	5.817E+01	6.026E+01	6.046E+01	6.046E+01	6.046E+01	6.045E+01
0Th-230	Th-230	1.319E-06		7.299E-07	7.299E-07	7.297E-07	7.297E-07	7.295E-07	7.292E-07	7.282E-07	7.265E-07	7.232E-07
Th-230	Th-230	1.899E-08		1.051E-08	1.051E-08	1.050E-08	1.050E-08	1.050E-08	1.050E-08	1.048E-08	1.046E-08	1.041E-08
Th-230		äDOSE(j)		7.404E-07	7.404E-07	7.402E-07	7.402E-07	7.400E-07	7.397E-07	7.387E-07	7.370E-07	7.336E-07
0Th-230	Th-230	2.100E-04		1.161E-04	1.161E-04	1.161E-04	1.161E-04	1.161E-04	1.160E-04	1.159E-04	1.156E-04	1.151E-04
Th-230	Th-230	2.771E-10		1.533E-10	1.533E-10	1.533E-10	1.533E-10	1.532E-10	1.532E-10	1.530E-10	1.526E-10	1.519E-10
Th-230		äDOSE(j)		1.161E-04	1.161E-04	1.161E-04	1.161E-04	1.161E-04	1.160E-04	1.159E-04	1.156E-04	1.151E-04
0Th-230	Th-230	3.989E-12		2.207E-12	2.207E-12	2.206E-12	2.206E-12	2.206E-12	2.205E-12	2.202E-12	2.197E-12	2.186E-12
Th-230	Th-230	1.998E-04		1.105E-04	1.105E-04	1.105E-04	1.105E-04	1.104E-04	1.104E-04	1.102E-04	1.100E-04	1.095E-04
Th-230		äDOSE(j)		1.105E-04	1.105E-04	1.105E-04	1.105E-04	1.104E-04	1.104E-04	1.102E-04	1.100E-04	1.095E-04
0Th-230	Th-230	2.637E-10		1.459E-10	1.459E-10	1.458E-10	1.458E-10	1.458E-10	1.457E-10	1.455E-10	1.452E-10	1.445E-10
Th-230	Th-230	3.795E-12		2.099E-12	2.099E-12	2.099E-12	2.099E-12	2.098E-12	2.098E-12	2.095E-12	2.090E-12	2.080E-12
Th-230		äDOSE(j)		1.480E-10	1.480E-10	1.479E-10	1.479E-10	1.479E-10	1.478E-10	1.476E-10	1.473E-10	1.466E-10
0Th-230	Th-230	4.196E-08		2.321E-08	2.321E-08	2.320E-08	2.320E-08	2.320E-08	2.319E-08	2.316E-08	2.310E-08	2.300E-08
Th-230	Th-230	5.538E-14		3.064E-14	3.064E-14	3.063E-14	3.063E-14	3.062E-14	3.061E-14	3.057E-14	3.050E-14	3.036E-14
Th-230		äDOSE(j)		2.321E-08	2.321E-08	2.320E-08	2.320E-08	2.320E-08	2.319E-08	2.316E-08	2.310E-08	2.300E-08
0Th-230	Th-230	7.972E-16		4.410E-16	4.410E-16	4.409E-16	4.409E-16	4.408E-16	4.406E-16	4.400E-16	4.390E-16	4.369E-16
Th-230	Th-230	2.000E-07		1.106E-07	1.106E-07	1.106E-07	1.106E-07	1.106E-07	1.105E-07	1.104E-07	1.101E-07	1.096E-07
Th-230		äDOSE(j)		1.106E-07	1.106E-07	1.106E-07	1.106E-07	1.106E-07	1.105E-07	1.104E-07	1.101E-07	1.096E-07
0Th-230	Th-230	2.640E-13		1.460E-13	1.460E-13	1.460E-13	1.460E-13	1.460E-13	1.459E-13	1.457E-13	1.454E-13	1.447E-13
Th-230	Th-230	3.800E-15		2.102E-15	2.102E-15	2.101E-15	2.101E-15	2.101E-15	2.100E-15	2.097E-15	2.092E-15	2.083E-15
Th-230		äDOSE(j)		1.481E-13	1.481E-13	1.481E-13	1.481E-13	1.481E-13	1.480E-13	1.478E-13	1.475E-13	1.468E-13
0Th-232	Th-232	1.000E+00		6.030E-01	6.030E-01	6.030E-01	6.030E-01	6.030E-01	6.030E-01	6.030E-01	6.029E-01	6.029E-01
ORa-228	Th-232	1.000E+00		4.134E+00	1.179E+01	6.822E+01	6.972E+01	7.137E+01	7.153E+01	7.153E+01	7.153E+01	7.152E+01
OU-234	U-234	1.319E-06		2.331E-07	2.331E-07	2.331E-07	2.331E-07	2.331E-07	2.330E-07	2.329E-07	2.328E-07	2.324E-07
U-234	U-234	1.899E-08		3.355E-09	3.355E-09	3.355E-09	3.355E-09	3.355E-09	3.354E-09	3.353E-09	3.350E-09	3.345E-09
U-234		äDOSE(j)		2.365E-07	2.365E-07	2.364E-07	2.364E-07	2.364E-07	2.364E-07	2.363E-07	2.361E-07	2.358E-07

Individual Nuclide Dose Summed Over All Pathways
 Parent Nuclide and Branch Fraction Indicated

ONuclide	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	
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	3.360E-13	3.360E-13	3.359E-13	
U-238	U-238	6.713E-11	2.368E-11	2.368E-11	2.368E-11	2.368E-11	2.368E-11	2.368E-11	2.368E-11	2.368E-11	2.367E-11	
U-238	U-238	8.862E-17	3.714E-09	3.714E-09	3.714E-09	3.714E-09	3.714E-09	3.714E-09	3.714E-09	3.714E-09	3.714E-09	
U-238	U-238	1.276E-18	4.903E-15	4.903E-15	4.903E-15	4.903E-15	4.903E-15	4.903E-15	4.903E-15	4.903E-15	4.902E-15	
U-238	U-238	3.200E-10	3.714E-09	3.714E-09	3.714E-09	3.714E-09	3.714E-09	3.714E-09	3.714E-09	3.714E-09	3.714E-09	
U-238	U-238	4.224E-16	7.057E-17	7.057E-17	7.057E-17	7.057E-17	7.057E-17	7.057E-17	7.057E-17	7.057E-17	7.056E-17	
U-238	U-238	6.080E-18	1.771E-08	1.771E-08	1.771E-08	1.771E-08	1.771E-08	1.771E-08	1.770E-08	1.770E-08	1.770E-08	
U-238	U-238	9.980E-01	1.771E-08	1.771E-08	1.771E-08	1.771E-08	1.771E-08	1.771E-08	1.770E-08	1.770E-08	1.770E-08	
U-238	U-238	1.317E-06	2.337E-14	2.337E-14	2.337E-14	2.337E-14	2.337E-14	2.337E-14	2.337E-14	2.337E-14	2.337E-14	
U-238	U-238	1.896E-08	3.364E-16	3.364E-16	3.364E-16	3.364E-16	3.364E-16	3.364E-16	3.364E-16	3.364E-16	3.363E-16	
U-238	U-238	2.096E-04	2.371E-14	2.371E-14	2.371E-14	2.371E-14	2.371E-14	2.371E-14	2.371E-14	2.371E-14	2.370E-14	
U-238	U-238	2.767E-10	1.151E+00	1.151E+00	1.151E+00	1.151E+00	1.151E+00	1.151E+00	1.151E+00	1.151E+00	1.151E+00	
U-238	U-238	3.983E-12	1.519E-06	1.519E-06	1.519E-06	1.519E-06	1.519E-06	1.519E-06	1.519E-06	1.519E-06	1.519E-06	
U-238	U-238	1.994E-04	1.151E+00	1.151E+00	1.151E+00	1.151E+00	1.151E+00	1.151E+00	1.151E+00	1.151E+00	1.151E+00	
U-238	U-238	2.633E-10	2.187E-08	2.187E-08	2.187E-08	2.187E-08	2.187E-08	2.187E-08	2.187E-08	2.187E-08	2.187E-08	
U-238	U-238	3.789E-12	2.418E-04	2.418E-04	2.418E-04	2.418E-04	2.418E-04	2.418E-04	2.418E-04	2.418E-04	2.417E-04	
U-238	U-238	4.189E-08	2.418E-04	2.418E-04	2.418E-04	2.418E-04	2.418E-04	2.418E-04	2.418E-04	2.418E-04	2.418E-04	
U-238	U-238	5.530E-14	3.191E-10	3.191E-10	3.191E-10	3.191E-10	3.191E-10	3.191E-10	3.191E-10	3.191E-10	3.191E-10	
U-238	U-238	7.959E-16	4.594E-12	4.594E-12	4.594E-12	4.594E-12	4.594E-12	4.594E-12	4.594E-12	4.593E-12	4.593E-12	
U-238	U-238	1.997E-07	3.237E-10	3.237E-10	3.237E-10	3.237E-10	3.237E-10	3.237E-10	3.237E-10	3.237E-10	3.237E-10	
U-238	U-238	2.636E-13	2.300E-04	2.300E-04	2.300E-04	2.300E-04	2.300E-04	2.300E-04	2.300E-04	2.300E-04	2.300E-04	
U-238	U-238	3.794E-15	3.036E-10	3.036E-10	3.036E-10	3.036E-10	3.036E-10	3.036E-10	3.036E-10	3.036E-10	3.036E-10	
U-238	U-238	4.189E-08	2.300E-04	2.300E-04	2.300E-04	2.300E-04	2.300E-04	2.300E-04	2.300E-04	2.300E-04	2.300E-04	
U-238	U-238	5.530E-14	4.371E-12	4.371E-12	4.371E-12	4.371E-12	4.371E-12	4.371E-12	4.370E-12	4.370E-12	4.370E-12	
U-238	U-238	7.959E-16	4.832E-08	4.832E-08	4.832E-08	4.832E-08	4.832E-08	4.832E-08	4.831E-08	4.831E-08	4.831E-08	
U-238	U-238	1.997E-07	4.832E-08	4.832E-08	4.832E-08	4.832E-08	4.832E-08	4.832E-08	4.832E-08	4.832E-08	4.831E-08	
U-238	U-238	2.636E-13	6.378E-14	6.378E-14	6.378E-14	6.378E-14	6.378E-14	6.378E-14	6.377E-14	6.377E-14	6.377E-14	
U-238	U-238	3.794E-15	9.180E-16	9.180E-16	9.180E-16	9.180E-16	9.180E-16	9.180E-16	9.180E-16	9.179E-16	9.178E-16	
U-238	U-238	4.189E-08	6.470E-14	6.470E-14	6.470E-14	6.470E-14	6.470E-14	6.469E-14	6.469E-14	6.469E-14	6.468E-14	
U-238	U-238	5.530E-14	2.303E-07	2.303E-07	2.303E-07	2.303E-07	2.303E-07	2.303E-07	2.303E-07	2.303E-07	2.303E-07	
U-238	U-238	7.959E-16	3.040E-13	3.040E-13	3.040E-13	3.040E-13	3.040E-13	3.040E-13	3.040E-13	3.040E-13	3.039E-13	
U-238	U-238	1.997E-07	2.303E-07	2.303E-07	2.303E-07	2.303E-07	2.303E-07	2.303E-07	2.303E-07	2.303E-07	2.303E-07	
U-238	U-238	2.636E-13	4.376E-15	4.376E-15	4.376E-15	4.376E-15	4.376E-15	4.376E-15	4.376E-15	4.375E-15	4.375E-15	
U-238	U-238	3.794E-15	4.376E-15	4.376E-15	4.376E-15	4.376E-15	4.376E-15	4.376E-15	4.376E-15	4.375E-15	4.375E-15	

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	7.073E+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

ONuclide	Parent	THF(i)	S(j,t), pCi/g								
(j)	(i)		t= 0.000E+00								
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	âS(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

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
AAAAAAAA	AAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA
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
OPu-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
OU-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
OTh-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
ORa-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
OPb-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
OPu-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
ORa-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	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	6.647E-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	
OPu-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	
ORa-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	
OPu-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	
ORa-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	
OPu-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	
ORa-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
AAAAAAAA	AAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA
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

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
AAAAAA	AAAAAA	AAAAAA		AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA
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	3.001E+00	9.003E-01	2.432E-02	5.915E-05	3.499E-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	9.999E+00	9.998E+00
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	9.999E+00	9.998E+00
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	9.999E+00
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	9.999E+00	9.998E+00
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	
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	4.219E-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	
U-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	U-238	1.276E-18	1.276E-17	1.276E-17	1.276E-17	1.276E-17	1.276E-17	1.276E-17	1.276E-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	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	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	9.978E+00	
U-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	2.767E-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	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	2.633E-09	2.632E-09	2.632E-09	
U-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	U-238	5.530E-14	5.530E-13	5.530E-13	5.530E-13	5.530E-13	5.530E-13	5.530E-13	5.530E-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	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	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	

THF(i) is the thread fraction of the parent nuclide.
 ORESALC.EXE execution time = 64.62 seconds

Dose Conversion Factor (and Related) Parameter Summary

Dose Library: DOE STD (RefPer) HTO Plus DOE STD-1196-2011 (Reference Person)

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	Pb-214 (Source: DCFPAK3.02)	1.257E+00	1.257E+00	DCF1(40)
A-1	Po-210 (Source: DCFPAK3.02)	5.641E-05	5.642E-05	DCF1(41)
A-1	Po-211 (Source: DCFPAK3.02)	4.707E-02	4.708E-02	DCF1(42)
A-1	Po-212 (Source: DCFPAK3.02)	0.000E+00	0.000E+00	DCF1(43)
A-1	Po-213 (Source: DCFPAK3.02)	2.167E-04	2.167E-04	DCF1(44)
A-1	Po-214 (Source: DCFPAK3.02)	4.801E-04	4.801E-04	DCF1(45)
A-1	Po-215 (Source: DCFPAK3.02)	9.452E-04	9.453E-04	DCF1(46)
A-1	Po-216 (Source: DCFPAK3.02)	8.873E-05	8.874E-05	DCF1(47)
A-1	Po-218 (Source: DCFPAK3.02)	9.228E-09	9.229E-09	DCF1(48)
A-1	Pu-238 (Source: DCFPAK3.02)	1.111E-04	1.112E-04	DCF1(49)

Dose Conversion Factor (and Related) Parameter Summary (continued)
 Dose Library: DOE STD (RefPer) HTO Plus DOE STD-1196-2011 (Reference Person)

Menu	Parameter	Current Value#	Base Case*	Parameter Name
A-1	Pu-239 (Source: DCFPAK3.02)	2.765E-04	2.765E-04	DCF1(50)
A-1	Ra-223 (Source: DCFPAK3.02)	5.791E-01	5.791E-01	DCF1(51)
A-1	Ra-224 (Source: DCFPAK3.02)	4.950E-02	4.951E-02	DCF1(52)
A-1	Ra-225 (Source: DCFPAK3.02)	8.910E-03	8.911E-03	DCF1(53)
A-1	Ra-226 (Source: DCFPAK3.02)	3.176E-02	3.176E-02	DCF1(54)
A-1	Ra-228 (Source: DCFPAK3.02)	6.575E-05	6.576E-05	DCF1(55)
A-1	Rh-106 (Source: DCFPAK3.02)	1.252E+00	1.252E+00	DCF1(56)
A-1	Rn-218 (Source: DCFPAK3.02)	4.259E-03	4.260E-03	DCF1(57)
A-1	Rn-219 (Source: DCFPAK3.02)	2.970E-01	2.970E-01	DCF1(58)
A-1	Rn-220 (Source: DCFPAK3.02)	3.474E-03	3.475E-03	DCF1(59)
A-1	Rn-222 (Source: DCFPAK3.02)	2.130E-03	2.130E-03	DCF1(60)
A-1	Ru-106 (Source: DCFPAK3.02)	0.000E+00	0.000E+00	DCF1(61)
A-1	Sm-148 (Source: DCFPAK3.02)	0.000E+00	0.000E+00	DCF1(62)
A-1	Sr-90 (Source: DCFPAK3.02)	6.463E-04	6.464E-04	DCF1(63)
A-1	Tc-99 (Source: DCFPAK3.02)	1.104E-04	1.104E-04	DCF1(64)
A-1	Th-227 (Source: DCFPAK3.02)	5.641E-01	5.642E-01	DCF1(65)
A-1	Th-228 (Source: DCFPAK3.02)	7.248E-03	7.249E-03	DCF1(66)
A-1	Th-229 (Source: DCFPAK3.02)	2.877E-01	2.877E-01	DCF1(67)
A-1	Th-230 (Source: DCFPAK3.02)	1.106E-03	1.106E-03	DCF1(68)
A-1	Th-231 (Source: DCFPAK3.02)	3.250E-02	3.251E-02	DCF1(69)
A-1	Th-232 (Source: DCFPAK3.02)	4.782E-04	4.783E-04	DCF1(70)
A-1	Th-234 (Source: DCFPAK3.02)	2.316E-02	2.317E-02	DCF1(71)
A-1	Tl-206 (Source: DCFPAK3.02)	1.278E-02	1.278E-02	DCF1(72)
A-1	Tl-207 (Source: DCFPAK3.02)	2.391E-02	2.391E-02	DCF1(73)
A-1	Tl-208 (Source: DCFPAK3.02)	2.167E+01	2.167E+01	DCF1(74)
A-1	Tl-209 (Source: DCFPAK3.02)	1.287E+01	1.287E+01	DCF1(75)
A-1	Tl-210 (Source: DCFPAK3.02)	1.677E+01	1.678E+01	DCF1(76)
A-1	U-233 (Source: DCFPAK3.02)	9.191E-04	9.192E-04	DCF1(77)
A-1	U-234 (Source: DCFPAK3.02)	3.456E-04	3.456E-04	DCF1(78)
A-1	U-235 (Source: DCFPAK3.02)	7.005E-01	7.006E-01	DCF1(79)
A-1	U-235m (Source: DCFPAK3.02)	0.000E+00	0.000E+00	DCF1(80)
A-1	U-238 (Source: DCFPAK3.02)	1.713E-04	1.713E-04	DCF1(81)
A-1	Y-90 (Source: DCFPAK3.02)	4.016E-02	4.017E-02	DCF1(82)
B-1	Dose conversion factors for inhalation, mrem/pCi:			
B-1	Ac-227+D	6.719E-01	5.957E-01	DCF2(1)
B-1	Ac-227+D1	6.719E-01	5.957E-01	DCF2(2)
B-1	Ac-227+D2	6.305E-01	5.957E-01	DCF2(3)
B-1	Ac-227+D3	6.305E-01	5.957E-01	DCF2(4)
B-1	Ac-227+D4	5.958E-01	5.957E-01	DCF2(5)
B-1	Ac-227+D5	5.958E-01	5.957E-01	DCF2(6)
B-1	Am-241	3.630E-01	3.630E-01	DCF2(7)
B-1	Co-60	1.221E-04	1.221E-04	DCF2(8)
B-1	Cs-134	8.214E-05	8.214E-05	DCF2(9)
B-1	Cs-137+D	1.543E-04	1.543E-04	DCF2(10)
B-1	Eu-152	3.674E-04	3.674E-04	DCF2(11)
B-1	Eu-154	4.255E-04	4.255E-04	DCF2(13)
B-1	Eu-155	5.106E-05	5.106E-05	DCF2(14)
B-1	Gd-152	7.437E-02	7.437E-02	DCF2(15)
B-1	H-3	7.141E-08	1.069E-06	DCF2(16)

Dose Conversion Factor (and Related) Parameter Summary (continued)
 Dose Library: DOE STD (RefPer) HTO Plus DOE STD-1196-2011 (Reference Person)

Menu	Parameter	Current Value#	Base Case*	Parameter Name
B-1	I-129	3.996E-04	3.996E-04	DCF2(17)
B-1	Mn-54	1.332E-05	1.332E-05	DCF2(18)
B-1	Na-22	1.165E-04	1.165E-04	DCF2(19)
B-1	Nd-144	7.437E-02	7.437E-02	DCF2(20)
B-1	Ni-63	8.251E-06	8.251E-06	DCF2(21)
B-1	Np-237+D	1.869E-01	1.868E-01	DCF2(22)
B-1	Pa-231	8.769E-01	8.769E-01	DCF2(23)
B-1	Pb-210+D	4.017E-02	2.231E-02	DCF2(29)
B-1	Pb-210+D1	2.285E-02	2.231E-02	DCF2(30)
B-1	Pb-210+D2	2.231E-02	2.231E-02	DCF2(31)
B-1	Pu-238	4.070E-01	4.070E-01	DCF2(32)
B-1	Pu-239	4.477E-01	4.477E-01	DCF2(48)
B-1	Pu-239+D	4.477E-01	4.477E-01	DCF2(54)
B-1	Ra-226+D	3.823E-02	3.811E-02	DCF2(60)
B-1	Ra-226+D1	3.823E-02	3.811E-02	DCF2(63)
B-1	Ra-226+D2	3.817E-02	3.811E-02	DCF2(66)
B-1	Ra-226+D3	3.817E-02	3.811E-02	DCF2(69)
B-1	Ra-226+D4	3.811E-02	3.811E-02	DCF2(72)
B-1	Ra-228+D	6.333E-02	6.327E-02	DCF2(75)
B-1	Ru-106+D	2.675E-04	2.675E-04	DCF2(76)
B-1	Sm-148	7.770E-02	7.770E-02	DCF2(77)
B-1	Sr-90+D	6.133E-04	6.068E-04	DCF2(78)
B-1	Tc-99	5.254E-05	5.254E-05	DCF2(79)
B-1	Th-228+D	1.753E-01	1.610E-01	DCF2(80)
B-1	Th-229+D	9.865E-01	9.213E-01	DCF2(81)
B-1	Th-230	3.848E-01	3.848E-01	DCF2(82)
B-1	Th-232	4.255E-01	4.255E-01	DCF2(97)
B-1	U-233	3.811E-02	3.811E-02	DCF2(98)
B-1	U-234	3.737E-02	3.737E-02	DCF2(99)
B-1	U-235+D	3.378E-02	3.378E-02	DCF2(114)
B-1	U-238	3.212E-02	3.212E-02	DCF2(120)
B-1	U-238+D	3.215E-02	3.212E-02	DCF2(121)
B-1	U-238+D1	3.215E-02	3.212E-02	DCF2(136)
D-1	Dose conversion factors for ingestion, mrem/pCi:			
D-1	Ac-227+D	2.309E-03	1.450E-03	DCF3(1)
D-1	Ac-227+D1	2.309E-03	1.450E-03	DCF3(2)
D-1	Ac-227+D2	2.266E-03	1.450E-03	DCF3(3)
D-1	Ac-227+D3	2.266E-03	1.450E-03	DCF3(4)
D-1	Ac-227+D4	1.463E-03	1.450E-03	DCF3(5)
D-1	Ac-227+D5	1.463E-03	1.450E-03	DCF3(6)
D-1	Am-241	8.806E-04	8.806E-04	DCF3(7)
D-1	Co-60	2.031E-05	2.031E-05	DCF3(8)
D-1	Cs-134	6.919E-05	6.919E-05	DCF3(9)
D-1	Cs-137+D	4.921E-05	4.921E-05	DCF3(10)
D-1	Eu-152	6.438E-06	6.438E-06	DCF3(11)
D-1	Eu-154	9.657E-06	9.657E-06	DCF3(13)
D-1	Eu-155	1.672E-06	1.672E-06	DCF3(14)
D-1	Gd-152	1.968E-04	1.968E-04	DCF3(15)
D-1	H-3	7.770E-08	1.695E-07	DCF3(16)

Dose Conversion Factor (and Related) Parameter Summary (continued)
 Dose Library: DOE STD (RefPer) HTO Plus DOE STD-1196-2011 (Reference Person)

Menu	Parameter	Current Value#	Base Case*	Parameter Name
D-1	I-129	4.477E-04	4.477E-04	DCF3(17)
D-1	Mn-54	3.293E-06	3.293E-06	DCF3(18)
D-1	Na-22	1.436E-05	1.436E-05	DCF3(19)
D-1	Nd-144	1.954E-04	1.954E-04	DCF3(20)
D-1	Ni-63	7.326E-07	7.326E-07	DCF3(21)
D-1	Np-237+D	4.674E-04	4.625E-04	DCF3(22)
D-1	Pa-231	2.068E-03	2.068E-03	DCF3(23)
D-1	Pb-210+D	1.026E-02	3.774E-03	DCF3(29)
D-1	Pb-210+D1	3.781E-03	3.774E-03	DCF3(30)
D-1	Pb-210+D2	3.774E-03	3.774E-03	DCF3(31)
D-1	Pu-238	9.731E-04	9.731E-04	DCF3(32)
D-1	Pu-239	1.066E-03	1.066E-03	DCF3(48)
D-1	Pu-239+D	1.066E-03	1.066E-03	DCF3(54)
D-1	Ra-226+D	1.677E-03	1.676E-03	DCF3(60)
D-1	Ra-226+D1	1.677E-03	1.676E-03	DCF3(63)
D-1	Ra-226+D2	1.677E-03	1.676E-03	DCF3(66)
D-1	Ra-226+D3	1.677E-03	1.676E-03	DCF3(69)
D-1	Ra-226+D4	1.676E-03	1.676E-03	DCF3(72)
D-1	Ra-228+D	5.922E-03	5.920E-03	DCF3(75)
D-1	Ru-106+D	3.548E-05	3.548E-05	DCF3(76)
D-1	Sm-148	2.035E-04	2.035E-04	DCF3(77)
D-1	Sr-90+D	1.469E-04	1.332E-04	DCF3(78)
D-1	Tc-99	3.330E-06	3.330E-06	DCF3(79)
D-1	Th-228+D	9.348E-04	4.292E-04	DCF3(80)
D-1	Th-229+D	3.329E-03	2.253E-03	DCF3(81)
D-1	Th-230	9.361E-04	9.361E-04	DCF3(82)
D-1	Th-232	1.029E-03	1.029E-03	DCF3(97)
D-1	U-233	2.227E-04	2.227E-04	DCF3(98)
D-1	U-234	2.150E-04	2.150E-04	DCF3(99)
D-1	U-235+D	2.048E-04	2.031E-04	DCF3(114)
D-1	U-238	1.939E-04	1.939E-04	DCF3(120)
D-1	U-238+D	2.133E-04	1.939E-04	DCF3(121)
D-1	U-238+D1	2.112E-04	1.939E-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	Ac-227+D1 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-05	2.000E-05	RTF(2,2)
D-34	Ac-227+D1 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-05	2.000E-05	RTF(2,3)
D-34	Ac-227+D2 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(3,1)
D-34	Ac-227+D2 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-05	2.000E-05	RTF(3,2)
D-34	Ac-227+D2 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-05	2.000E-05	RTF(3,3)
D-34	Ac-227+D3 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(4,1)
D-34	Ac-227+D3 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-05	2.000E-05	RTF(4,2)
D-34	Ac-227+D3 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-05	2.000E-05	RTF(4,3)

Dose Conversion Factor (and Related) Parameter Summary (continued)
 Dose Library: DOE STD (RefPer) HTO Plus DOE STD-1196-2011 (Reference Person)

Menu	Parameter	Current Value#	Base Case*	Parameter Name
D-34	Ac-227+D4 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(5,1)
D-34	Ac-227+D4 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-05	2.000E-05	RTF(5,2)
D-34	Ac-227+D4 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-05	2.000E-05	RTF(5,3)
D-34	Ac-227+D5 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(6,1)
D-34	Ac-227+D5 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-05	2.000E-05	RTF(6,2)
D-34	Ac-227+D5 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-05	2.000E-05	RTF(6,3)
D-34	Am-241 , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(7,1)
D-34	Am-241 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	5.000E-05	5.000E-05	RTF(7,2)
D-34	Am-241 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-06	2.000E-06	RTF(7,3)
D-34	Co-60 , plant/soil concentration ratio, dimensionless	8.000E-02	8.000E-02	RTF(8,1)
D-34	Co-60 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-02	2.000E-02	RTF(8,2)
D-34	Co-60 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-03	2.000E-03	RTF(8,3)
D-34	Cs-134 , plant/soil concentration ratio, dimensionless	4.000E-02	4.000E-02	RTF(9,1)
D-34	Cs-134 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.000E-02	3.000E-02	RTF(9,2)
D-34	Cs-134 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	8.000E-03	8.000E-03	RTF(9,3)
D-34	Cs-137+D , plant/soil concentration ratio, dimensionless	4.000E-02	4.000E-02	RTF(10,1)
D-34	Cs-137+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.000E-02	3.000E-02	RTF(10,2)
D-34	Cs-137+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	8.000E-03	8.000E-03	RTF(10,3)
D-34	Eu-152 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(11,1)
D-34	Eu-152 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-03	2.000E-03	RTF(11,2)
D-34	Eu-152 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-05	5.000E-05	RTF(11,3)
D-34	Eu-154 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(13,1)
D-34	Eu-154 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-03	2.000E-03	RTF(13,2)
D-34	Eu-154 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-05	5.000E-05	RTF(13,3)
D-34	Eu-155 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(14,1)
D-34	Eu-155 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-03	2.000E-03	RTF(14,2)
D-34	Eu-155 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-05	5.000E-05	RTF(14,3)
D-34	Gd-152 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(15,1)
D-34	Gd-152 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-03	2.000E-03	RTF(15,2)
D-34	Gd-152 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-05	2.000E-05	RTF(15,3)
D-34	H-3 , plant/soil concentration ratio, dimensionless	4.800E+00	4.800E+00	RTF(16,1)
D-34	H-3 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.200E-02	1.200E-02	RTF(16,2)
D-34	H-3 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-02	1.000E-02	RTF(16,3)
D-34	I-129 , plant/soil concentration ratio, dimensionless	2.000E-02	2.000E-02	RTF(17,1)
D-34	I-129 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	7.000E-03	7.000E-03	RTF(17,2)
D-34	I-129 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-02	1.000E-02	RTF(17,3)

Dose Conversion Factor (and Related) Parameter Summary (continued)
 Dose Library: DOE STD (RefPer) HTO Plus DOE STD-1196-2011 (Reference Person)

Menu	Parameter	Current Value#	Base Case*	Parameter Name
D-34	Mn-54 , plant/soil concentration ratio, dimensionless	3.000E-01	3.000E-01	RTF(18,1)
D-34	Mn-54 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	5.000E-04	5.000E-04	RTF(18,2)
D-34	Mn-54 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3.000E-04	3.000E-04	RTF(18,3)
D-34	Na-22 , plant/soil concentration ratio, dimensionless	5.000E-02	5.000E-02	RTF(19,1)
D-34	Na-22 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	8.000E-02	8.000E-02	RTF(19,2)
D-34	Na-22 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	4.000E-02	4.000E-02	RTF(19,3)
D-34	Nd-144 , plant/soil concentration ratio, dimensionless	2.400E-03	2.400E-03	RTF(20,1)
D-34	Nd-144 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-03	2.000E-03	RTF(20,2)
D-34	Nd-144 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-05	2.000E-05	RTF(20,3)
D-34	Ni-63 , plant/soil concentration ratio, dimensionless	5.000E-02	5.000E-02	RTF(21,1)
D-34	Ni-63 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	5.000E-03	5.000E-03	RTF(21,2)
D-34	Ni-63 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-02	2.000E-02	RTF(21,3)
D-34	Np-237+D , plant/soil concentration ratio, dimensionless	2.000E-02	2.000E-02	RTF(22,1)
D-34	Np-237+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-03	1.000E-03	RTF(22,2)
D-34	Np-237+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-06	5.000E-06	RTF(22,3)
D-34	Pa-231 , plant/soil concentration ratio, dimensionless	1.000E-02	1.000E-02	RTF(23,1)
D-34	Pa-231 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	5.000E-03	5.000E-03	RTF(23,2)
D-34	Pa-231 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-06	5.000E-06	RTF(23,3)
D-34	Pb-210+D , plant/soil concentration ratio, dimensionless	1.000E-02	1.000E-02	RTF(29,1)
D-34	Pb-210+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	8.000E-04	8.000E-04	RTF(29,2)
D-34	Pb-210+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3.000E-04	3.000E-04	RTF(29,3)
D-34	Pb-210+D1 , plant/soil concentration ratio, dimensionless	1.000E-02	1.000E-02	RTF(30,1)
D-34	Pb-210+D1 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	8.000E-04	8.000E-04	RTF(30,2)
D-34	Pb-210+D1 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3.000E-04	3.000E-04	RTF(30,3)
D-34	Pb-210+D2 , plant/soil concentration ratio, dimensionless	1.000E-02	1.000E-02	RTF(31,1)
D-34	Pb-210+D2 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	8.000E-04	8.000E-04	RTF(31,2)
D-34	Pb-210+D2 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3.000E-04	3.000E-04	RTF(31,3)
D-34	Pu-238 , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(32,1)
D-34	Pu-238 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-04	1.000E-04	RTF(32,2)
D-34	Pu-238 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-06	1.000E-06	RTF(32,3)
D-34	Pu-239 , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(48,1)
D-34	Pu-239 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-04	1.000E-04	RTF(48,2)
D-34	Pu-239 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-06	1.000E-06	RTF(48,3)
D-34	Pu-239+D , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(54,1)
D-34	Pu-239+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-04	1.000E-04	RTF(54,2)
D-34	Pu-239+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-06	1.000E-06	RTF(54,3)

Dose Conversion Factor (and Related) Parameter Summary (continued)
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Menu	Parameter	Current Value#	Base Case*	Parameter Name
D-34	Ra-226+D , plant/soil concentration ratio, dimensionless	4.000E-02	4.000E-02	RTF(60,1)
D-34	Ra-226+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-03	1.000E-03	RTF(60,2)
D-34	Ra-226+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-03	1.000E-03	RTF(60,3)
D-34	Ra-226+D1 , plant/soil concentration ratio, dimensionless	4.000E-02	4.000E-02	RTF(63,1)
D-34	Ra-226+D1 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-03	1.000E-03	RTF(63,2)
D-34	Ra-226+D1 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-03	1.000E-03	RTF(63,3)
D-34	Ra-226+D2 , plant/soil concentration ratio, dimensionless	4.000E-02	4.000E-02	RTF(66,1)
D-34	Ra-226+D2 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-03	1.000E-03	RTF(66,2)
D-34	Ra-226+D2 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-03	1.000E-03	RTF(66,3)
D-34	Ra-226+D3 , plant/soil concentration ratio, dimensionless	4.000E-02	4.000E-02	RTF(69,1)
D-34	Ra-226+D3 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-03	1.000E-03	RTF(69,2)
D-34	Ra-226+D3 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-03	1.000E-03	RTF(69,3)
D-34	Ra-226+D4 , plant/soil concentration ratio, dimensionless	4.000E-02	4.000E-02	RTF(72,1)
D-34	Ra-226+D4 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-03	1.000E-03	RTF(72,2)
D-34	Ra-226+D4 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-03	1.000E-03	RTF(72,3)
D-34	Ra-228+D , plant/soil concentration ratio, dimensionless	4.000E-02	4.000E-02	RTF(75,1)
D-34	Ra-228+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-03	1.000E-03	RTF(75,2)
D-34	Ra-228+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-03	1.000E-03	RTF(75,3)
D-34	Ru-106+D , plant/soil concentration ratio, dimensionless	3.000E-02	3.000E-02	RTF(76,1)
D-34	Ru-106+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-03	2.000E-03	RTF(76,2)
D-34	Ru-106+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3.300E-06	3.300E-06	RTF(76,3)
D-34	Sm-148 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(77,1)
D-34	Sm-148 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-03	2.000E-03	RTF(77,2)
D-34	Sm-148 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-05	2.000E-05	RTF(77,3)
D-34	Sr-90+D , plant/soil concentration ratio, dimensionless	3.000E-01	3.000E-01	RTF(78,1)
D-34	Sr-90+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	8.000E-03	8.000E-03	RTF(78,2)
D-34	Sr-90+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-03	2.000E-03	RTF(78,3)
D-34	Tc-99 , plant/soil concentration ratio, dimensionless	5.000E+00	5.000E+00	RTF(79,1)
D-34	Tc-99 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-04	1.000E-04	RTF(79,2)
D-34	Tc-99 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-03	1.000E-03	RTF(79,3)
D-34	Th-228+D , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(80,1)
D-34	Th-228+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-04	1.000E-04	RTF(80,2)
D-34	Th-228+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-06	5.000E-06	RTF(80,3)
D-34	Th-229+D , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(81,1)
D-34	Th-229+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-04	1.000E-04	RTF(81,2)
D-34	Th-229+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-06	5.000E-06	RTF(81,3)

Dose Conversion Factor (and Related) Parameter Summary (continued)
 Dose Library: DOE STD (RefPer) HTO Plus DOE STD-1196-2011 (Reference Person)

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	Ac-227+D2 , fish	1.500E+01	1.500E+01	BIOFAC(3,1)
D-5	Ac-227+D2 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(3,2)
D-5	Ac-227+D3 , fish	1.500E+01	1.500E+01	BIOFAC(4,1)
D-5	Ac-227+D3 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(4,2)
D-5	Ac-227+D4 , fish	1.500E+01	1.500E+01	BIOFAC(5,1)
D-5	Ac-227+D4 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(5,2)

Dose Conversion Factor (and Related) Parameter Summary (continued)
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Menu	Parameter	Current Value#	Base Case*	Parameter Name
D-5	Ac-227+D5 , fish	1.500E+01	1.500E+01	BIOFAC(6,1)
D-5	Ac-227+D5 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(6,2)
D-5	Am-241 , fish	3.000E+01	3.000E+01	BIOFAC(7,1)
D-5	Am-241 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(7,2)
D-5	Co-60 , fish	3.000E+02	3.000E+02	BIOFAC(8,1)
D-5	Co-60 , crustacea and mollusks	2.000E+02	2.000E+02	BIOFAC(8,2)
D-5	Cs-134 , fish	2.000E+03	2.000E+03	BIOFAC(9,1)
D-5	Cs-134 , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(9,2)
D-5	Cs-137+D , fish	2.000E+03	2.000E+03	BIOFAC(10,1)
D-5	Cs-137+D , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(10,2)
D-5	Eu-152 , fish	5.000E+01	5.000E+01	BIOFAC(11,1)
D-5	Eu-152 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(11,2)
D-5	Eu-154 , fish	5.000E+01	5.000E+01	BIOFAC(13,1)
D-5	Eu-154 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(13,2)
D-5	Eu-155 , fish	5.000E+01	5.000E+01	BIOFAC(14,1)
D-5	Eu-155 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(14,2)
D-5	Gd-152 , fish	2.500E+01	2.500E+01	BIOFAC(15,1)
D-5	Gd-152 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(15,2)
D-5	H-3 , fish	1.000E+00	1.000E+00	BIOFAC(16,1)
D-5	H-3 , crustacea and mollusks	1.000E+00	1.000E+00	BIOFAC(16,2)
D-5	I-129 , fish	4.000E+01	4.000E+01	BIOFAC(17,1)
D-5	I-129 , crustacea and mollusks	5.000E+00	5.000E+00	BIOFAC(17,2)
D-5	Mn-54 , fish	4.000E+02	4.000E+02	BIOFAC(18,1)
D-5	Mn-54 , crustacea and mollusks	9.000E+04	9.000E+04	BIOFAC(18,2)
D-5	Na-22 , fish	2.000E+01	2.000E+01	BIOFAC(19,1)
D-5	Na-22 , crustacea and mollusks	2.000E+02	2.000E+02	BIOFAC(19,2)
D-5	Nd-144 , fish	1.000E+02	1.000E+02	BIOFAC(20,1)
D-5	Nd-144 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(20,2)
D-5	Ni-63 , fish	1.000E+02	1.000E+02	BIOFAC(21,1)
D-5	Ni-63 , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(21,2)
D-5	Np-237+D , fish	3.000E+01	3.000E+01	BIOFAC(22,1)
D-5	Np-237+D , crustacea and mollusks	4.000E+02	4.000E+02	BIOFAC(22,2)
D-5	Pa-231 , fish	1.000E+01	1.000E+01	BIOFAC(23,1)
D-5	Pa-231 , crustacea and mollusks	1.100E+02	1.100E+02	BIOFAC(23,2)

Dose Conversion Factor (and Related) Parameter Summary (continued)
 Dose Library: DOE STD (RefPer) HTO Plus DOE STD-1196-2011 (Reference Person)

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	Sm-148 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(77,2)
D-5	Sr-90+D , fish	6.000E+01	6.000E+01	BIOFAC(78,1)
D-5	Sr-90+D , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(78,2)
D-5	Tc-99 , fish	2.000E+01	2.000E+01	BIOFAC(79,1)
D-5	Tc-99 , crustacea and mollusks	5.000E+00	5.000E+00	BIOFAC(79,2)
D-5	Th-228+D , fish	1.000E+02	1.000E+02	BIOFAC(80,1)
D-5	Th-228+D , crustacea and mollusks	5.000E+02	5.000E+02	BIOFAC(80,2)

Dose Conversion Factor (and Related) Parameter Summary (continued)
 Dose Library: DOE STD (RefPer) HTO Plus DOE STD-1196-2011 (Reference Person)

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

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

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

Site-Specific Parameter Summary (continued)

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

Site-Specific Parameter Summary (continued)

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

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R016	Distribution coefficients for Eu-155				
R016	Contaminated zone (cm**3/g)	-1.000E+00	-1.000E+00	8.249E+02	DCNUCC(14)
R016	Unsaturated zone 1 (cm**3/g)	not used	-1.000E+00	---	DCNUCU(14,1)
R016	Saturated zone (cm**3/g)	not used	-1.000E+00	---	DCNUCS(14)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.172E-08	ALEACH(14)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(14)
R016	Distribution coefficients for H-3				
R016	Contaminated zone (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCC(16)
R016	Unsaturated zone 1 (cm**3/g)	not used	0.000E+00	---	DCNUCU(16,1)
R016	Saturated zone (cm**3/g)	not used	0.000E+00	---	DCNUCS(16)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	7.250E-05	ALEACH(16)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(16)
R016	Distribution coefficients for I-129				
R016	Contaminated zone (cm**3/g)	1.000E-01	1.000E-01	---	DCNUCC(17)
R016	Unsaturated zone 1 (cm**3/g)	not used	1.000E-01	---	DCNUCU(17,1)
R016	Saturated zone (cm**3/g)	not used	1.000E-01	---	DCNUCS(17)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	4.143E-05	ALEACH(17)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(17)
R016	Distribution coefficients for Mn-54				
R016	Contaminated zone (cm**3/g)	2.000E+02	2.000E+02	---	DCNUCC(18)
R016	Unsaturated zone 1 (cm**3/g)	not used	2.000E+02	---	DCNUCU(18,1)
R016	Saturated zone (cm**3/g)	not used	2.000E+02	---	DCNUCS(18)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	4.830E-08	ALEACH(18)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(18)
R016	Distribution coefficients for Na-22				
R016	Contaminated zone (cm**3/g)	1.000E+01	1.000E+01	---	DCNUCC(19)
R016	Unsaturated zone 1 (cm**3/g)	not used	1.000E+01	---	DCNUCU(19,1)
R016	Saturated zone (cm**3/g)	not used	1.000E+01	---	DCNUCS(19)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	9.539E-07	ALEACH(19)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(19)
R016	Distribution coefficients for Ni-63				
R016	Contaminated zone (cm**3/g)	-1.000E+00	1.000E+03	1.541E+02	DCNUCC(21)
R016	Unsaturated zone 1 (cm**3/g)	not used	1.000E+03	---	DCNUCU(21,1)
R016	Saturated zone (cm**3/g)	not used	1.000E+03	---	DCNUCS(21)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	6.267E-08	ALEACH(21)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(21)
R016	Distribution coefficients for Np-237				
R016	Contaminated zone (cm**3/g)	-1.000E+00	-1.000E+00	2.574E+02	DCNUCC(22)
R016	Unsaturated zone 1 (cm**3/g)	not used	-1.000E+00	---	DCNUCU(22,1)
R016	Saturated zone (cm**3/g)	not used	-1.000E+00	---	DCNUCS(22)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	3.753E-08	ALEACH(22)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(22)

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
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)	3.000E+01	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	3.208E-07	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)	6.000E+04	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	1.611E-10	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 Th-230				
R016	Contaminated zone (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCC (82)
R016	Unsaturated zone 1 (cm**3/g)	not used	6.000E+04	---	DCNUCU (82,1)
R016	Saturated zone (cm**3/g)	not used	6.000E+04	---	DCNUCS (82)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.611E-10	ALEACH (82)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK (82)

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD	Parameter Name
R016	Distribution coefficients for Th-232				
R016	Contaminated zone (cm**3/g)	5.000E+01	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	1.928E-07	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	Distribution coefficients for daughter Nd-144				
R016	Contaminated zone (cm**3/g)	1.580E+02	1.580E+02	---	DCNUCC(20)
R016	Unsaturated zone 1 (cm**3/g)	not used	1.580E+02	---	DCNUCU(20,1)
R016	Saturated zone (cm**3/g)	not used	1.580E+02	---	DCNUCS(20)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	6.113E-08	ALEACH(20)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(20)

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD	Parameter Name
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	Distribution coefficients for daughter U-233				
R016	Contaminated zone (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCC(98)
R016	Unsaturated zone 1 (cm**3/g)	not used	5.000E+01	---	DCNUCU(98,1)
R016	Saturated zone (cm**3/g)	not used	5.000E+01	---	DCNUCS(98)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.928E-07	ALEACH(98)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(98)
R017	Inhalation rate (m**3/yr)	1.865E+04	8.400E+03	---	INHALR

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD	Parameter Name
R017	Mass loading for inhalation (g/m**3)	1.510E-07	1.000E-04	---	MLINH
R017	Exposure duration	2.600E+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	Soil ingestion rate (g/yr)	3.500E+02	3.650E+01	---	SOIL
R018	Drinking water intake (L/yr)	not used	5.100E+02	---	DWI
R018	Contamination fraction of drinking water	not used	1.000E+00	---	FDW
R018	Contamination fraction of household water	not used	1.000E+00	---	FHHW
R018	Contamination fraction of livestock water	not used	1.000E+00	---	FLW
R018	Contamination fraction of irrigation water	not used	1.000E+00	---	FIRW
R018	Contamination fraction of aquatic food	not used	5.000E-01	---	FR9
R018	Contamination fraction of plant food	not used	-1	---	FPLANT
R018	Contamination fraction of meat	not used	-1	---	FMEAT

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD	Parameter Name
R018	Contamination fraction of milk	not used	-1	---	F MILK
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	---	DROOT
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
STOR	Storage times of contaminated foodstuffs (days):				
STOR	Fruits, non-leafy vegetables, and grain	1.000E+00	1.400E+01	---	STOR_T(1)
STOR	Leafy vegetables	1.000E+00	1.000E+00	---	STOR_T(2)
STOR	Milk	1.000E+00	1.000E+00	---	STOR_T(3)
STOR	Meat and poultry	2.000E+01	2.000E+01	---	STOR_T(4)
STOR	Fish	7.000E+00	7.000E+00	---	STOR_T(5)
STOR	Crustacea and mollusks	7.000E+00	7.000E+00	---	STOR_T(6)
STOR	Well water	1.000E+00	1.000E+00	---	STOR_T(7)

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD	Parameter Name
STOR	Surface water	1.000E+00	1.000E+00	---	STOR_T(8)
STOR	Livestock fodder	4.500E+01	4.500E+01	---	STOR_T(9)
R021	Thickness of building foundation (m)	not used	1.500E-01	---	FLOOR1
R021	Bulk density of building foundation (g/cm**3)	not used	2.400E+00	---	DENSFL
R021	Total porosity of the cover material	not used	4.000E-01	---	TPCV
R021	Total porosity of the building foundation	not used	1.000E-01	---	TPFL
R021	Volumetric water content of the cover material	not used	5.000E-02	---	PH2OCV
R021	Volumetric water content of the foundation	not used	3.000E-02	---	PH2OFL
R021	Diffusion coefficient for radon gas (m/sec):				
R021	in cover material	not used	2.000E-06	---	DIFCV
R021	in foundation material	not used	3.000E-07	---	DIFFL
R021	in contaminated zone soil	not used	2.000E-06	---	DIFCZ
R021	Radon vertical dimension of mixing (m)	not used	2.000E+00	---	HMIX
R021	Average building air exchange rate (1/hr)	not used	5.000E-01	---	REXG
R021	Height of the building (room) (m)	not used	2.500E+00	---	HRM
R021	Building interior area factor	not used	0.000E+00	---	FAI
R021	Building depth below ground surface (m)	not used	-1.000E+00	---	DMFL
R021	Emanating power of Rn-222 gas	not used	2.500E-01	---	EMANA(1)
R021	Emanating power of Rn-220 gas	not used	1.500E-01	---	EMANA(2)
TITL	Number of graphical time points	32	---	---	NPTS
TITL	Maximum number of integration points for dose	17	---	---	LYMAX
TITL	Maximum number of integration points for risk	257	---	---	KYMAX

Summary of Pathway Selections

Pathway	User Selection
1 -- external gamma	active
2 -- inhalation (w/o radon)	active
3 -- plant ingestion	suppressed
4 -- meat ingestion	suppressed
5 -- milk ingestion	suppressed
6 -- aquatic foods	suppressed
7 -- drinking water	suppressed
8 -- soil ingestion	active
9 -- radon	suppressed
Find peak pathway doses	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):	1.444E+01	1.205E+01	5.436E+00	5.279E+00	4.912E+00	4.685E+00	4.764E+00	5.033E+00	5.521E+00
M(t):	5.776E-01	4.819E-01	2.174E-01	2.112E-01	1.965E-01	1.874E-01	1.906E-01	2.013E-01	2.209E-01
0Maximum TDOSE(t):	1.444E+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)

	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
Radio- Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
Am-241	8.407E-03	0.0006	3.429E-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	0.0049
Co-60	3.094E+00	0.2143	1.082E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.519E-03	0.0001
Cs-134	1.612E+00	0.1116	6.597E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.690E-03	0.0003
Cs-137	6.736E-01	0.0466	1.442E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.882E-03	0.0003
Eu-152	1.403E+00	0.0972	3.386E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.008E-04	0.0000
Eu-154	1.499E+00	0.1038	3.865E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.404E-04	0.0001
Eu-155	3.344E-02	0.0023	4.492E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.242E-04	0.0000
H-3	0.000E+00	0.0000	2.453E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.818E-06	0.0000
I-129	2.195E-03	0.0002	3.778E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.573E-02	0.0025
Mn-54	7.123E-01	0.0493	8.627E-10	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.800E-04	0.0000
Na-22	2.423E+00	0.1678	9.673E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.006E-03	0.0001
Ni-63	0.000E+00	0.0000	7.774E-10	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.826E-05	0.0000
Np-237	2.357E-01	0.0163	1.767E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.730E-02	0.0026
Pu-238	2.518E-05	0.0000	3.833E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.735E-02	0.0054
Pu-239	6.048E-05	0.0000	4.233E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.503E-02	0.0059
Ru-106	1.941E-01	0.0134	1.837E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.057E-03	0.0001
Sr-90	8.634E-03	0.0006	5.730E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.158E-02	0.0008
Tc-99	2.409E-05	0.0000	4.967E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.657E-04	0.0000
Th-228	1.640E+00	0.1136	1.390E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.257E-02	0.0043
Th-230	7.277E-04	0.0001	3.638E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.473E-02	0.0052
Th-232	7.512E-02	0.0052	4.068E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.099E-01	0.0076
U-234	7.868E-05	0.0000	3.533E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.715E-02	0.0012
U-235	1.595E-01	0.0110	3.195E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.635E-02	0.0011
U-238	3.488E-02	0.0024	3.039E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.685E-02	0.0012
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	1.381E+01	0.9564	2.581E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.298E-01	0.0436

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- Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
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
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	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
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	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
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	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
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
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
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	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
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	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
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
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
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
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*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	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.
	Am-241	8.394E-03	0.0007	3.423E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.010E-02	0.0058
	Co-60	2.713E+00	0.2252	9.484E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.332E-03	0.0001
	Cs-134	1.152E+00	0.0956	4.716E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.353E-03	0.0003
	Cs-137	6.583E-01	0.0546	1.409E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.794E-03	0.0003
	Eu-152	1.333E+00	0.1106	3.217E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.758E-04	0.0000
	Eu-154	1.383E+00	0.1148	3.565E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.830E-04	0.0001
	Eu-155	2.891E-02	0.0024	3.884E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.074E-04	0.0000
	H-3	0.000E+00	0.0000	2.156E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.114E-06	0.0000
	I-129	2.195E-03	0.0002	3.778E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.572E-02	0.0030
	Mn-54	3.165E-01	0.0263	3.833E-10	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.999E-05	0.0000
	Na-22	1.856E+00	0.1541	7.411E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.705E-04	0.0001
	Ni-63	0.000E+00	0.0000	7.720E-10	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.786E-05	0.0000
	Np-237	2.357E-01	0.0196	1.767E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.730E-02	0.0031
	Pu-238	2.499E-05	0.0000	3.803E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.674E-02	0.0064
	Pu-239	6.048E-05	0.0000	4.233E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.503E-02	0.0071
	Ru-106	9.854E-02	0.0082	9.328E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.044E-03	0.0001
	Sr-90	8.428E-03	0.0007	5.593E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.131E-02	0.0009
	Tc-99	2.409E-05	0.0000	4.967E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.657E-04	0.0000
	Th-228	1.141E+00	0.0947	9.674E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.354E-02	0.0036
	Th-230	1.698E-03	0.0001	3.638E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.480E-02	0.0062
	Th-232	2.553E-01	0.0212	4.187E-05	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	0.0135
	U-234	7.869E-05	0.0000	3.534E-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	0.0014
	U-235	1.595E-01	0.0132	3.197E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.635E-02	0.0014
	U-238	3.488E-02	0.0029	3.039E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.685E-02	0.0014
	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
	Total	1.139E+01	0.9452	2.517E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.598E-01	0.0548

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- Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
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
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	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
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	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
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	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
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
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
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	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
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	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
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
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
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
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*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 Dependent Pathways																
		Water		Fish		Radon		Plant		Meat		Milk		All Pathways*				
Radio-	Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.			
Am-241	0.000E+00	0.0000	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.557E-02	0.0139	
Co-60	0.000E+00	0.0000	0.0000	0.000E+00	0.0000	0.000E+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	0.0213	
Cs-134	0.000E+00	0.0000	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.663E-04	0.0001	
Cs-137	0.000E+00	0.0000	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.814E-01	0.0702	
Eu-152	0.000E+00	0.0000	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.902E-01	0.0718	
Eu-154	0.000E+00	0.0000	0.0000	0.000E+00	0.0000	0.000E+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-01	0.0367	
Eu-155	0.000E+00	0.0000	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.814E-04	0.0002	
H-3	0.000E+00	0.0000	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.210E-06	0.0000	
I-129	0.000E+00	0.0000	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.788E-02	0.0070	
Mn-54	0.000E+00	0.0000	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.106E-03	0.0006	
Ni-63	0.000E+00	0.0000	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.900E-05	0.0000	
Np-237	0.000E+00	0.0000	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.730E-01	0.0502	
Pu-238	0.000E+00	0.0000	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.353E-02	0.0117	
Pu-239	0.000E+00	0.0000	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.508E-02	0.0157	
Ru-106	0.000E+00	0.0000	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.605E-09	0.0000	
Sr-90	0.000E+00	0.0000	0.0000	0.000E+00	0.0000	0.000E+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-02	0.0020	
Tc-99	0.000E+00	0.0000	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.893E-04	0.0001	
Th-228	0.000E+00	0.0000	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.969E-04	0.0000	
Th-230	0.000E+00	0.0000	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.038E-01	0.0191	
Th-232	0.000E+00	0.0000	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.449E+00	0.6345	
U-234	0.000E+00	0.0000	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.726E-02	0.0032	
U-235	0.000E+00	0.0000	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.760E-01	0.0324	
U-238	0.000E+00	0.0000	0.0000	0.000E+00	0.0000	0.000E+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-02	0.0095	
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	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.436E+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 Dependent Pathways													
0		Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
Radio-	Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
0	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
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
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	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
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	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
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	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
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
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
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	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
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	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
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
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
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
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*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

Radio- Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
Am-241	7.763E-03	0.0016	3.165E-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	0.0132
Co-60	4.317E-03	0.0009	1.509E-11	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-134	8.275E-08	0.0000	3.387E-16	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.408E-10	0.0000
Cs-137	2.135E-01	0.0435	4.571E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.231E-03	0.0003
Eu-152	1.084E-01	0.0221	2.617E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.871E-05	0.0000
Eu-154	2.657E-02	0.0054	6.848E-10	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
Eu-155	2.306E-05	0.0000	3.098E-12	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.566E-08	0.0000
H-3	0.000E+00	0.0000	3.899E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.247E-09	0.0000
I-129	2.191E-03	0.0004	3.770E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.565E-02	0.0073
Mn-54	1.734E-18	0.0000	2.100E-27	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.382E-22	0.0000
Na-22	3.977E-06	0.0000	1.588E-14	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.651E-09	0.0000
Ni-63	0.000E+00	0.0000	5.499E-10	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.121E-05	0.0000
Np-237	2.357E-01	0.0480	1.767E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.730E-02	0.0076
Pu-238	1.697E-05	0.0000	2.582E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.210E-02	0.0106
Pu-239	6.040E-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	8.491E-02	0.0173
Ru-106	3.736E-16	0.0000	3.536E-23	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.959E-18	0.0000
Sr-90	2.591E-03	0.0005	1.719E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.475E-03	0.0007
Tc-99	2.400E-05	0.0000	4.948E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.647E-04	0.0001
Th-228	2.193E-08	0.0000	1.859E-13	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.368E-10	0.0000
Th-230	4.873E-02	0.0099	3.648E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.638E-02	0.0176
Th-232	3.023E+00	0.6153	6.272E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.279E-01	0.1278
U-234	9.008E-05	0.0000	3.549E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.719E-02	0.0035
U-235	1.597E-01	0.0325	3.316E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.662E-02	0.0034
U-238	3.488E-02	0.0071	3.040E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.686E-02	0.0034
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	3.867E+00	0.7873	2.266E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.045E+00	0.2127

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-	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
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
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	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
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	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
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	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
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
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
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	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
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	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
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
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
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
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*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)

	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
Radio- Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
Am-241	7.168E-03	0.0015	2.921E-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	0.0128
Co-60	6.023E-06	0.0000	2.106E-14	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.957E-09	0.0000
Cs-134	4.248E-15	0.0000	1.739E-23	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.236E-17	0.0000
Cs-137	6.769E-02	0.0144	1.449E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.901E-04	0.0001
Eu-152	8.381E-03	0.0018	2.023E-10	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.992E-06	0.0000
Eu-154	4.707E-04	0.0001	1.213E-11	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.324E-07	0.0000
Eu-155	1.590E-08	0.0000	2.137E-15	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.908E-11	0.0000
H-3	0.000E+00	0.0000	6.197E-11	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.470E-11	0.0000
I-129	2.186E-03	0.0005	3.762E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.558E-02	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	6.527E-12	0.0000	2.606E-20	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.709E-15	0.0000
Ni-63	0.000E+00	0.0000	3.890E-10	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.915E-05	0.0000
Np-237	2.357E-01	0.0503	1.767E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.730E-02	0.0080
Pu-238	1.144E-05	0.0000	1.739E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.509E-02	0.0075
Pu-239	6.032E-05	0.0000	4.220E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.479E-02	0.0181
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	5.158E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.043E-03	0.0002
Tc-99	2.391E-05	0.0000	4.930E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.637E-04	0.0001
Th-228	2.933E-16	0.0000	2.486E-21	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.119E-17	0.0000
Th-230	9.569E-02	0.0204	3.661E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.047E-01	0.0223
Th-232	3.032E+00	0.6472	6.279E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.292E-01	0.1343
U-234	1.233E-04	0.0000	3.566E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.723E-02	0.0037
U-235	1.602E-01	0.0342	3.464E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.697E-02	0.0036
U-238	3.488E-02	0.0074	3.040E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.686E-02	0.0036
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	3.645E+00	0.7781	2.160E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.039E+00	0.2218

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- Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
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
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	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
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	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
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	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
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
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
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	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
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	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
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
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
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
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*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.
	Am-241	5.645E-03	0.0012	2.296E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.702E-02	0.0099
	Co-60	1.636E-14	0.0000	5.718E-23	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.030E-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	4.616E-11	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.243E-05	0.0000
	Eu-152	3.869E-06	0.0000	9.339E-14	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.381E-09	0.0000
	Eu-154	2.618E-09	0.0000	6.747E-17	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.293E-12	0.0000
	Eu-155	5.218E-18	0.0000	7.010E-25	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.938E-20	0.0000
	H-3	0.000E+00	0.0000	2.489E-19	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.903E-20	0.0000
	I-129	2.173E-03	0.0005	3.739E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.536E-02	0.0074
	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	1.377E-10	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.032E-05	0.0000
	Np-237	2.357E-01	0.0495	1.767E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.732E-02	0.0078
	Pu-238	3.557E-06	0.0000	5.315E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.073E-02	0.0023
	Pu-239	6.008E-05	0.0000	4.202E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.442E-02	0.0177
	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	1.393E-10	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.817E-05	0.0000
	Tc-99	2.364E-05	0.0000	4.874E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.607E-04	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	2.305E-01	0.0484	3.701E-05	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	0.0340
	Th-232	3.032E+00	0.6364	6.279E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.292E-01	0.1321
	U-234	3.492E-04	0.0001	3.615E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.741E-02	0.0037
	U-235	1.617E-01	0.0339	3.926E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.807E-02	0.0038
	U-238	3.488E-02	0.0073	3.042E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.687E-02	0.0035
	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
	Total	3.705E+00	0.7777	1.984E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.059E+00	0.2222

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-	Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.			
Am-241	0.000E+00	0.0000	0.0000	0.000E+00	0.0000	0.000E+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-02	0.0111	
Co-60	0.000E+00	0.0000	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.169E-03	0.0005	
Eu-152	0.000E+00	0.0000	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.871E-06	0.0000	
Eu-154	0.000E+00	0.0000	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.619E-09	0.0000	
Eu-155	0.000E+00	0.0000	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.237E-18	0.0000	
H-3	0.000E+00	0.0000	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.079E-19	0.0000	
I-129	0.000E+00	0.0000	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.753E-02	0.0079	
Mn-54	0.000E+00	0.0000	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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-05	0.0000	
Np-237	0.000E+00	0.0000	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.730E-01	0.0573	
Pu-238	0.000E+00	0.0000	0.0000	0.000E+00	0.0000	0.000E+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-02	0.0023	
Pu-239	0.000E+00	0.0000	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.453E-02	0.0177	
Ru-106	0.000E+00	0.0000	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.917E-05	0.0000	
Tc-99	0.000E+00	0.0000	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.844E-04	0.0001	
Th-228	0.000E+00	0.0000	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.926E-01	0.0824	
Th-232	0.000E+00	0.0000	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.661E+00	0.7685	
U-234	0.000E+00	0.0000	0.0000	0.000E+00	0.0000	0.000E+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-02	0.0037	
U-235	0.000E+00	0.0000	0.0000	0.000E+00	0.0000	0.000E+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	0.0377	
U-238	0.000E+00	0.0000	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.175E-02	0.0109	
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	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.764E+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)

	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
Radio- Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
Am-241	3.796E-03	0.0008	1.538E-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	0.0063
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	1.478E-13	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.978E-08	0.0000
Eu-152	1.067E-11	0.0000	5.035E-19	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.359E-15	0.0000
Eu-154	4.570E-18	0.0000	1.178E-25	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.257E-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	0.0004	3.700E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.499E-02	0.0070
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	2.438E-11	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.827E-06	0.0000
Np-237	2.357E-01	0.0468	1.768E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.734E-02	0.0074
Pu-238	7.445E-07	0.0000	7.379E-07	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.493E-03	0.0003
Pu-239	5.969E-05	0.0000	4.172E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.382E-02	0.0167
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	5.107E-08	0.0000	3.389E-13	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.851E-08	0.0000
Tc-99	2.319E-05	0.0000	4.782E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.558E-04	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	4.362E-01	0.0867	3.761E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.503E-01	0.0497
Th-232	3.032E+00	0.6023	6.278E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.292E-01	0.1250
U-234	1.119E-03	0.0002	3.698E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.787E-02	0.0036
U-235	1.642E-01	0.0326	4.694E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.990E-02	0.0040
U-238	3.488E-02	0.0069	3.044E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.688E-02	0.0034
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	3.910E+00	0.7767	1.874E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.124E+00	0.2232

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													
	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
Radio- Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
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
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	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
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	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
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	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	0.0542
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	0.0003
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	0.0167
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	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	0.0001
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	0.000E+00	0.1364
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	0.7273
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	0.0038
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	0.0366
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	0.0103
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	0.000E+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

Radio- Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
Am-241	1.728E-03	0.0003	6.896E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.412E-02	0.0026
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	1.514E-18	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.077E-13	0.0000
Eu-152	8.118E-23	0.0000	2.459E-19	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.493E-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	2.106E-03	0.0004	3.624E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.427E-02	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	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	7.644E-13	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.729E-08	0.0000
Np-237	2.357E-01	0.0427	1.769E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.741E-02	0.0068
Pu-238	1.130E-06	0.0000	1.552E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.533E-05	0.0000
Pu-239	5.892E-05	0.0000	4.113E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.262E-02	0.0150
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	3.021E-13	0.0000	2.005E-18	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.052E-13	0.0000
Tc-99	2.233E-05	0.0000	4.605E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.463E-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	7.849E-01	0.1421	3.861E-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-01	0.0724
Th-232	3.031E+00	0.5490	6.278E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.291E-01	0.1139
U-234	3.953E-03	0.0007	3.868E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.935E-02	0.0035
U-235	1.692E-01	0.0307	6.217E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.354E-02	0.0043
U-238	3.488E-02	0.0063	3.049E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.690E-02	0.0031
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	4.264E+00	0.7722	1.803E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.258E+00	0.2278

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															
	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*			
Radio- 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.
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	1.586E-02	0.0029
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	7.114E-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	5.496E-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
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	3.638E-02	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
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	5.729E-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	0.000E+00	0.0000	2.731E-01	0.0495
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	3.648E-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	8.272E-02	0.0150
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	7.073E-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	0.000E+00	0.0000	2.687E-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	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.185E+00	0.2146
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	3.660E+00	0.6629
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	2.330E-02	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	0.000E+00	0.0000	1.928E-01	0.0349
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	5.178E-02	0.0094
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	5.521E+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 (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
	Am-241	Am-241	1.000E+00	7.866E-03	7.853E-03	7.556E-03	7.496E-03	7.259E-03	6.700E-03	5.267E-03	3.527E-03	1.581E-03
	Am-241	Np-237+D	1.000E+00	4.411E-09	1.322E-08	2.205E-07	2.627E-07	4.281E-07	8.192E-07	1.821E-06	3.037E-06	4.396E-06
	Am-241	U-233	1.000E+00	4.216E-16	2.950E-15	8.117E-13	1.158E-12	3.141E-12	1.212E-11	6.972E-11	2.465E-10	7.910E-10
	Am-241	Th-229+D	1.000E+00	3.191E-19	4.785E-18	2.095E-14	3.577E-14	1.610E-13	1.242E-12	1.809E-11	1.308E-10	8.713E-10
	Am-241	äDSR(j)		7.866E-03	7.853E-03	7.557E-03	7.496E-03	7.260E-03	6.701E-03	5.269E-03	3.530E-03	1.586E-03
	0Co-60	Co-60	1.000E+00	3.096E-01	2.714E-01	1.156E-02	5.991E-03	4.319E-04	6.026E-07	1.636E-15	8.651E-30	0.000E+00
	0Cs-134	Cs-134	1.000E+00	1.617E-01	1.156E-01	3.663E-05	6.837E-06	8.299E-09	4.261E-16	5.765E-38	0.000E+00	0.000E+00
	0Cs-137+D	Cs-137+D	1.000E+00	6.774E-02	6.621E-02	3.814E-02	3.400E-02	2.147E-02	6.808E-03	2.169E-04	6.942E-07	7.114E-12
	0Eu-152	Eu-152	7.210E-01	1.012E-01	9.614E-02	2.813E-02	2.178E-02	7.821E-03	6.045E-04	2.791E-07	7.697E-13	5.855E-24
	0Eu-152	Eu-152	2.790E-01	3.916E-02	3.720E-02	1.089E-02	8.427E-03	3.026E-03	2.339E-04	1.080E-07	2.979E-13	2.266E-24
	Eu-152	Gd-152	2.790E-01	1.383E-18	4.057E-18	4.006E-17	4.343E-17	5.082E-17	5.464E-17	5.496E-17	5.496E-17	5.496E-17
	Eu-152	Sm-148	2.790E-01	4.740E-35	3.271E-34	6.337E-32	8.477E-32	1.825E-31	4.562E-31	1.299E-30	2.706E-30	5.519E-30
	Eu-152	Nd-144	2.790E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.401E-45	5.605E-45	4.344E-44	1.892E-43	7.875E-43
	Eu-152	äDSR(j)		3.916E-02	3.720E-02	1.089E-02	8.427E-03	3.026E-03	2.339E-04	1.080E-07	2.979E-13	5.496E-17
	0Eu-154	Eu-154	1.000E+00	1.500E-01	1.384E-01	1.997E-02	1.334E-02	2.658E-03	4.709E-05	2.619E-10	4.572E-19	1.394E-36
	0Eu-155	Eu-155	1.000E+00	3.356E-03	2.901E-03	8.814E-05	4.256E-05	2.315E-06	1.596E-09	5.237E-19	8.172E-35	0.000E+00
	0H-3	H-3	1.000E+00	3.035E-06	2.668E-06	1.210E-07	6.351E-08	4.824E-09	7.667E-12	3.079E-20	3.124E-34	0.000E+00
	0I-129	I-129	1.000E+00	3.792E-03	3.792E-03	3.788E-03	3.787E-03	3.784E-03	3.776E-03	3.753E-03	3.714E-03	3.638E-03
	0Mn-54	Mn-54	1.000E+00	7.125E-02	3.166E-02	1.112E-10	1.926E-12	1.735E-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	3.106E-04	8.197E-05	3.979E-07	6.530E-13	2.887E-30	0.000E+00	0.000E+00
	0Ni-63	Ni-63	1.000E+00	5.826E-06	5.786E-06	4.900E-06	4.733E-06	4.121E-06	2.915E-06	1.032E-06	1.827E-07	5.729E-09
	0Np-237+D	Np-237+D	1.000E+00	2.730E-02	2.730E-02	2.730E-02	2.730E-02	2.730E-02	2.730E-02	2.730E-02	2.730E-02	2.729E-02
	Np-237+D	U-233	1.000E+00	3.914E-09	1.174E-08	1.996E-07	2.387E-07	3.952E-07	7.865E-07	1.960E-06	3.913E-06	7.812E-06
	Np-237+D	Th-229+D	1.000E+00	3.949E-12	2.764E-11	7.699E-09	1.101E-08	3.017E-08	1.193E-07	7.373E-07	2.919E-06	1.148E-05
	Np-237+D	äDSR(j)		2.730E-02	2.730E-02	2.730E-02	2.730E-02	2.730E-02	2.730E-02	2.730E-02	2.730E-02	2.731E-02
	0Pu-238	Pu-238	1.850E-09	1.432E-11	1.421E-11	1.175E-11	1.130E-11	9.646E-12	6.497E-12	1.985E-12	2.752E-13	5.290E-15
	0Pu-238	Pu-238	9.996E-01	7.738E-03	7.677E-03	6.351E-03	6.104E-03	5.212E-03	3.511E-03	1.073E-03	1.487E-04	2.858E-06
	Pu-238	U-234	9.996E-01	2.426E-09	7.252E-09	1.123E-07	1.318E-07	2.025E-07	3.373E-07	5.302E-07	6.030E-07	6.137E-07
	Pu-238	Th-230	9.996E-01	3.237E-14	2.261E-13	5.922E-11	8.365E-11	2.181E-10	7.666E-10	3.478E-09	9.243E-09	2.140E-08
	Pu-238	Ra-226+D	9.996E-01	1.110E-16	1.662E-15	7.000E-12	1.186E-11	5.170E-11	3.700E-10	4.416E-09	2.462E-08	1.156E-07
	Pu-238	Pb-210+D	9.996E-01	2.384E-19	7.338E-18	4.179E-13	8.245E-13	5.383E-12	6.137E-11	1.111E-09	7.321E-09	3.732E-08
	Pu-238	äDSR(j)		7.738E-03	7.677E-03	6.351E-03	6.105E-03	5.212E-03	3.511E-03	1.073E-03	1.494E-04	3.646E-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)								
	AAAAAA	AAAAAA	AAAAAA	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	1.021E-08	1.013E-08	8.383E-09	8.058E-09	6.880E-09	4.634E-09	1.416E-09	1.963E-10	3.773E-12
	Pu-238	U-234	1.319E-06	3.202E-15	9.573E-15	1.483E-13	1.740E-13	2.674E-13	4.452E-13	6.999E-13	7.960E-13	8.100E-13
	Pu-238	Th-230	1.319E-06	4.272E-20	2.984E-19	7.817E-17	1.104E-16	2.879E-16	1.012E-15	4.591E-15	1.220E-14	2.825E-14
	Pu-238	Ra-226+D	1.319E-06	1.465E-22	2.194E-21	9.240E-18	1.565E-17	6.824E-17	4.885E-16	5.829E-15	3.250E-14	1.526E-13
	Pu-238	Pb-210+D1	1.319E-06	1.174E-25	3.616E-24	2.059E-19	4.062E-19	2.652E-18	3.023E-17	5.473E-16	3.607E-15	1.839E-14
	Pu-238	äDSR(j)	1.319E-06	1.021E-08	1.013E-08	8.383E-09	8.058E-09	6.880E-09	4.634E-09	1.417E-09	1.972E-10	4.782E-12
0Pu-238	Pu-238	U-234	1.899E-08	1.470E-10	1.459E-10	1.207E-10	1.160E-10	9.903E-11	6.670E-11	2.038E-11	2.826E-12	5.431E-14
	Pu-238	U-234	1.899E-08	4.609E-17	1.378E-16	2.134E-15	2.505E-15	3.848E-15	6.409E-15	1.007E-14	1.146E-14	1.166E-14
	Pu-238	Th-230	1.899E-08	6.150E-22	4.295E-21	1.125E-18	1.589E-18	4.144E-18	1.457E-17	6.609E-17	1.756E-16	4.066E-16
	Pu-238	Ra-226+D	1.899E-08	2.109E-24	3.158E-23	1.330E-19	2.253E-19	8.222E-19	7.031E-18	8.391E-17	4.678E-16	2.196E-15
	Pu-238	Pb-210+D2	1.899E-08	2.414E-27	7.431E-26	4.232E-21	8.350E-21	5.451E-20	6.214E-19	1.125E-17	7.414E-17	3.780E-16
	Pu-238	äDSR(j)	1.899E-08	1.470E-10	1.459E-10	1.207E-10	1.160E-10	9.903E-11	6.671E-11	2.039E-11	2.838E-12	6.895E-14
0Pu-238	Pu-238	U-234	2.100E-04	1.625E-06	1.613E-06	1.334E-06	1.282E-06	1.095E-06	7.374E-07	2.253E-07	3.124E-08	6.004E-10
	Pu-238	U-234	2.100E-04	5.096E-13	1.523E-12	2.360E-11	2.769E-11	4.254E-11	7.085E-11	1.114E-10	1.267E-10	1.289E-10
	Pu-238	Th-230	2.100E-04	6.798E-18	4.748E-17	1.244E-14	1.757E-14	4.581E-14	1.610E-13	7.306E-13	1.942E-12	4.495E-12
	Pu-238	Ra-226+D1	2.100E-04	5.858E-20	8.772E-19	3.694E-15	6.257E-15	2.728E-14	1.953E-13	2.331E-12	1.299E-11	6.100E-11
	Pu-238	Pb-210+D	2.100E-04	5.006E-23	1.541E-21	8.778E-17	1.732E-16	1.131E-15	1.289E-14	2.333E-13	1.538E-12	7.839E-12
	Pu-238	äDSR(j)	2.100E-04	1.625E-06	1.613E-06	1.334E-06	1.282E-06	1.095E-06	7.374E-07	2.254E-07	3.138E-08	8.026E-10
0Pu-238	Pu-238	U-234	2.771E-10	2.145E-12	2.129E-12	1.761E-12	1.693E-12	1.445E-12	9.733E-13	2.974E-13	4.123E-14	7.925E-16
	Pu-238	U-234	2.771E-10	6.726E-19	2.011E-18	3.115E-17	3.655E-17	5.616E-17	9.352E-17	1.470E-16	1.672E-16	1.701E-16
	Pu-238	Th-230	2.771E-10	8.974E-24	6.268E-23	1.642E-20	2.319E-20	6.047E-20	2.125E-19	9.644E-19	2.563E-18	5.934E-18
	Pu-238	Ra-226+D1	2.771E-10	7.733E-26	1.158E-24	4.876E-21	8.259E-21	3.601E-20	2.578E-19	3.077E-18	1.715E-17	8.052E-17
	Pu-238	Pb-210+D1	2.771E-10	2.467E-29	7.594E-28	4.325E-23	8.533E-23	5.571E-22	6.350E-21	1.150E-19	7.576E-19	3.862E-18
	Pu-238	äDSR(j)	2.771E-10	2.145E-12	2.129E-12	1.761E-12	1.693E-12	1.445E-12	9.734E-13	2.976E-13	4.142E-14	1.053E-15
0Pu-238	Pu-238	U-234	3.989E-12	3.088E-14	3.064E-14	2.534E-14	2.436E-14	2.080E-14	1.401E-14	4.281E-15	5.935E-16	1.141E-17
	Pu-238	U-234	3.989E-12	9.682E-21	2.894E-20	4.483E-19	5.261E-19	8.083E-19	1.346E-18	2.116E-18	2.407E-18	2.449E-18
	Pu-238	Th-230	3.989E-12	1.292E-25	9.022E-25	2.363E-22	3.338E-22	8.705E-22	3.059E-21	1.388E-20	3.689E-20	8.541E-20
	Pu-238	Ra-226+D1	3.989E-12	1.113E-27	1.667E-26	7.019E-23	1.189E-22	5.184E-22	3.711E-21	4.428E-20	2.469E-19	1.159E-18
	Pu-238	Pb-210+D2	3.989E-12	5.070E-31	1.561E-29	8.889E-25	1.754E-24	1.145E-23	1.305E-22	2.363E-21	1.557E-20	7.939E-20
	Pu-238	äDSR(j)	3.989E-12	3.088E-14	3.064E-14	2.534E-14	2.436E-14	2.080E-14	1.401E-14	4.283E-15	5.962E-16	1.518E-17
0Pu-238	Pu-238	U-234	1.998E-04	1.546E-06	1.534E-06	1.269E-06	1.220E-06	1.042E-06	7.015E-07	2.144E-07	2.972E-08	5.712E-10
	Pu-238	U-234	1.998E-04	4.848E-13	1.449E-12	2.245E-11	2.635E-11	4.048E-11	6.741E-11	1.060E-10	1.205E-10	1.226E-10
	Pu-238	Th-230	1.998E-04	6.468E-18	4.517E-17	1.183E-14	1.672E-14	4.359E-14	1.532E-13	6.951E-13	1.847E-12	4.277E-12
	Pu-238	Ra-226+D2	1.998E-04	1.964E-20	2.940E-19	1.238E-15	2.097E-15	9.146E-15	6.547E-14	7.813E-13	4.355E-12	2.045E-11
	Pu-238	Pb-210+D	1.998E-04	4.763E-23	1.467E-21	8.351E-17	1.648E-16	1.076E-15	1.226E-14	2.220E-13	1.463E-12	7.458E-12
	Pu-238	äDSR(j)	1.998E-04	1.546E-06	1.534E-06	1.269E-06	1.220E-06	1.042E-06	7.016E-07	2.145E-07	2.985E-08	7.260E-10

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
	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
	Pu-238	Pu-238	2.640E-13	2.044E-13	2.028E-15	1.677E-15	1.612E-15	1.377E-15	9.272E-16	2.833E-16	3.928E-17	7.549E-19
	Pu-238	U-234	2.640E-13	6.407E-22	1.915E-21	2.967E-20	3.482E-20	5.349E-20	8.908E-20	1.400E-19	1.593E-19	1.621E-19
	Pu-238	Th-230	2.640E-13	8.548E-27	5.970E-26	1.564E-23	2.209E-23	5.761E-23	2.025E-22	9.187E-22	2.441E-21	5.652E-21
	Pu-238	Ra-226+D4	2.640E-13	1.755E-30	2.629E-29	1.107E-25	1.875E-25	8.176E-25	5.852E-24	6.984E-23	3.894E-22	1.828E-21
	Pu-238	Pb-210+D1	2.640E-13	2.350E-32	7.234E-31	4.120E-26	8.128E-26	5.307E-25	6.049E-24	1.095E-22	7.217E-22	3.679E-21
	Pu-238	äDSR(j)		2.044E-15	2.028E-15	1.677E-15	1.612E-15	1.377E-15	9.273E-16	2.835E-16	3.944E-17	9.282E-19
0Pu-238	Pu-238	3.800E-15	2.942E-17	2.918E-17	2.414E-17	2.321E-17	1.981E-17	1.981E-17	1.335E-17	4.078E-18	5.654E-19	1.087E-20
	Pu-238	U-234	3.800E-15	9.222E-24	2.757E-23	4.271E-22	5.012E-22	7.700E-22	1.282E-21	2.016E-21	2.292E-21	2.333E-21
	Pu-238	Th-230	3.800E-15	1.230E-28	8.594E-28	2.251E-25	3.180E-25	8.292E-25	2.914E-24	1.322E-23	3.514E-23	8.136E-23
	Pu-238	Ra-226+D4	3.800E-15	2.527E-32	3.784E-31	1.593E-27	2.699E-27	1.177E-26	8.424E-26	1.005E-24	5.604E-24	2.631E-23
	Pu-238	Pb-210+D2	3.800E-15	4.829E-34	1.487E-32	8.467E-28	1.671E-27	1.091E-26	1.243E-25	2.251E-24	1.483E-23	7.562E-23
	Pu-238	äDSR(j)		2.942E-17	2.918E-17	2.414E-17	2.321E-17	1.981E-17	1.335E-17	4.080E-18	5.677E-19	1.338E-20
0Pu-239	Pu-239	5.901E-04	5.024E-06	5.024E-06	5.020E-06	5.019E-06	5.017E-06	5.009E-06	5.009E-06	4.988E-06	4.952E-06	4.881E-06
	Pu-239	U-235+D	5.901E-04	5.107E-15	1.532E-14	2.604E-13	3.114E-13	5.154E-13	1.025E-12	2.549E-12	5.075E-12	1.007E-11
	Pu-239	Pa-231	5.901E-04	4.097E-20	2.868E-19	7.990E-17	1.143E-16	3.132E-16	1.239E-15	7.680E-15	3.053E-14	1.210E-13
	Pu-239	Ac-227+D	5.901E-04	1.025E-21	1.527E-20	5.652E-17	9.338E-17	3.714E-16	2.206E-15	1.898E-14	8.527E-14	3.597E-13
	Pu-239	äDSR(j)		5.024E-06	5.024E-06	5.020E-06	5.019E-06	5.017E-06	5.009E-06	4.988E-06	4.952E-06	4.881E-06
0Pu-239	Pu-239	1.633E-06	1.390E-08	1.390E-08	1.389E-08	1.389E-08	1.388E-08	1.388E-08	1.386E-08	1.380E-08	1.371E-08	1.351E-08
	Pu-239	U-235+D	1.633E-06	1.413E-17	4.240E-17	7.206E-16	8.618E-16	1.427E-15	2.837E-15	7.056E-15	1.405E-14	2.788E-14
	Pu-239	Pa-231	1.633E-06	1.134E-22	7.937E-22	2.211E-19	3.163E-19	8.668E-19	3.430E-18	2.126E-17	8.450E-17	3.348E-16
	Pu-239	Ac-227+D1	1.633E-06	2.859E-24	4.260E-23	1.577E-19	2.605E-19	1.036E-18	6.152E-18	5.293E-17	2.378E-16	1.003E-15
	Pu-239	äDSR(j)		1.390E-08	1.390E-08	1.389E-08	1.389E-08	1.388E-08	1.386E-08	1.380E-08	1.371E-08	1.351E-08
0Pu-239	Pu-239	8.257E-06	7.029E-08	7.029E-08	7.024E-08	7.023E-08	7.019E-08	7.009E-08	6.979E-08	6.929E-08	6.830E-08	6.830E-08
	Pu-239	U-235+D	8.257E-06	7.146E-17	2.144E-16	3.643E-15	4.357E-15	7.212E-15	1.434E-14	3.567E-14	7.102E-14	1.409E-13
	Pu-239	Pa-231	8.257E-06	5.732E-22	4.013E-21	1.118E-18	1.599E-18	4.382E-18	1.734E-17	1.075E-16	4.272E-16	1.693E-15
	Pu-239	Ac-227+D2	8.257E-06	1.235E-23	1.841E-22	6.812E-19	1.125E-18	4.476E-18	2.658E-17	2.287E-16	1.028E-15	4.335E-15
	Pu-239	äDSR(j)		7.029E-08	7.029E-08	7.024E-08	7.023E-08	7.019E-08	7.009E-08	6.979E-08	6.929E-08	6.830E-08
0Pu-239	Pu-239	2.285E-08	1.945E-10	1.945E-10	1.944E-10	1.944E-10	1.943E-10	1.943E-10	1.940E-10	1.932E-10	1.918E-10	1.890E-10
	Pu-239	U-235+D	2.285E-08	1.978E-19	5.933E-19	1.008E-17	1.206E-17	1.996E-17	3.970E-17	9.873E-17	1.965E-16	3.901E-16
	Pu-239	Pa-231	2.285E-08	1.587E-24	1.111E-23	3.094E-21	4.426E-21	1.213E-20	4.799E-20	2.974E-19	1.182E-18	4.685E-18
	Pu-239	Ac-227+D3	2.285E-08	3.450E-26	5.141E-25	1.902E-21	3.143E-21	1.250E-20	7.423E-20	6.387E-19	2.870E-18	1.211E-17
	Pu-239	äDSR(j)		1.945E-10	1.945E-10	1.944E-10	1.944E-10	1.943E-10	1.940E-10	1.932E-10	1.918E-10	1.890E-10
0Pu-239	Pu-239	4.954E-10	4.218E-12	4.218E-12	4.215E-12	4.214E-12	4.212E-12	4.206E-12	4.188E-12	4.158E-12	4.098E-12	4.098E-12
	Pu-239	U-235+D	4.954E-10	4.288E-21	1.286E-20	2.186E-19	2.614E-19	4.328E-19	8.606E-19	2.140E-18	4.261E-18	8.457E-18
	Pu-239	Pa-231	4.954E-10	3.440E-26	2.408E-25	6.708E-23	9.595E-23	2.630E-22	1.041E-21	6.448E-21	2.563E-20	1.016E-19
	Pu-239	Ac-227+D4	4.954E-10	7.969E-28	1.187E-26	4.394E-23	7.259E-23	2.887E-22	1.714E-21	1.475E-20	6.629E-20	2.796E-19
	Pu-239	äDSR(j)		4.218E-12	4.218E-12	4.215E-12	4.214E-12	4.212E-12	4.206E-12	4.188E-12	4.158E-12	4.098E-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	1.167E-14	1.167E-14	1.167E-14	1.166E-14	1.166E-14	1.166E-14	1.164E-14	1.159E-14	1.151E-14	1.134E-14					
	Pu-239	U-235+D	1.371E-12	1.187E-23	3.560E-23	6.050E-22	7.236E-22	1.198E-21	2.382E-21	5.924E-21	1.179E-20	2.341E-20						
	Pu-239	Pa-231	1.371E-12	9.520E-29	6.664E-28	1.857E-25	2.656E-25	7.278E-25	2.880E-24	1.785E-23	7.094E-23	2.811E-22						
	Pu-239	Ac-227+D5	1.371E-12	2.224E-30	3.314E-29	1.226E-25	2.026E-25	8.058E-25	4.785E-24	4.117E-23	1.850E-22	7.804E-22						
	Pu-239	äDSR(j)		1.167E-14	1.167E-14	1.167E-14	1.166E-14	1.166E-14	1.164E-14	1.159E-14	1.151E-14	1.134E-14						
0	Pu-239+D	Pu-239+D	9.829E-01	8.368E-03	8.368E-03	8.362E-03	8.361E-03	8.356E-03	8.344E-03	8.308E-03	8.249E-03	8.131E-03						
	Pu-239+D	U-235+D	9.829E-01	8.507E-12	2.552E-11	4.337E-10	5.187E-10	8.586E-10	1.707E-09	4.247E-09	8.454E-09	1.678E-08						
	Pu-239+D	Pa-231	9.829E-01	6.824E-17	4.777E-16	1.331E-13	1.904E-13	5.217E-13	2.064E-12	1.279E-11	5.086E-11	2.015E-10						
	Pu-239+D	Ac-227+D	9.829E-01	1.708E-18	2.544E-17	9.415E-14	1.555E-13	6.187E-13	3.674E-12	3.161E-11	1.420E-10	5.991E-10						
	Pu-239+D	äDSR(j)		8.368E-03	8.368E-03	8.362E-03	8.361E-03	8.356E-03	8.344E-03	8.308E-03	8.249E-03	8.131E-03						
0	Pu-239+D	Pu-239+D	2.720E-03	2.316E-05	2.316E-05	2.314E-05	2.314E-05	2.313E-05	2.309E-05	2.299E-05	2.283E-05	2.250E-05						
	Pu-239+D	U-235+D	2.720E-03	2.354E-14	7.063E-14	1.200E-12	1.436E-12	2.376E-12	4.725E-12	1.175E-11	2.340E-11	4.644E-11						
	Pu-239+D	Pa-231	2.720E-03	1.889E-19	1.322E-18	3.683E-16	5.269E-16	1.444E-15	5.713E-15	3.541E-14	1.407E-13	5.577E-13						
	Pu-239+D	Ac-227+D1	2.720E-03	4.763E-21	7.096E-20	2.626E-16	4.339E-16	1.726E-15	1.025E-14	8.817E-14	3.962E-13	1.671E-12						
	Pu-239+D	äDSR(j)		2.316E-05	2.316E-05	2.314E-05	2.314E-05	2.313E-05	2.309E-05	2.299E-05	2.283E-05	2.250E-05						
0	Pu-239+D	Pu-239+D	1.375E-02	1.171E-04	1.171E-04	1.170E-04	1.170E-04	1.169E-04	1.168E-04	1.168E-04	1.162E-04	1.154E-04	1.138E-04					
	Pu-239+D	U-235+D	1.375E-02	1.190E-13	3.571E-13	6.068E-12	7.258E-12	1.201E-11	2.389E-11	5.942E-11	1.183E-10	2.348E-10						
	Pu-239+D	Pa-231	1.375E-02	9.548E-19	6.684E-18	1.862E-15	2.664E-15	7.299E-15	2.888E-14	1.790E-13	7.116E-13	2.820E-12						
	Pu-239+D	Ac-227+D2	1.375E-02	2.058E-20	3.066E-19	1.135E-15	1.875E-15	7.456E-15	4.427E-14	3.809E-13	1.712E-12	7.220E-12						
	Pu-239+D	äDSR(j)		1.171E-04	1.171E-04	1.170E-04	1.170E-04	1.169E-04	1.168E-04	1.168E-04	1.162E-04	1.154E-04	1.138E-04					
0	Pu-239+D	Pu-239+D	3.806E-05	3.241E-07	3.240E-07	3.238E-07	3.238E-07	3.236E-07	3.231E-07	3.217E-07	3.194E-07	3.149E-07						
	Pu-239+D	U-235+D	3.806E-05	3.294E-16	9.883E-16	1.679E-14	2.009E-14	3.325E-14	6.612E-14	1.644E-13	3.274E-13	6.497E-13						
	Pu-239+D	Pa-231	3.806E-05	2.643E-21	1.850E-20	5.154E-18	7.372E-18	2.020E-17	7.994E-17	4.954E-16	1.969E-15	7.804E-15						
	Pu-239+D	Ac-227+D3	3.806E-05	5.747E-23	8.563E-22	3.169E-18	5.235E-18	2.082E-17	1.236E-16	1.064E-15	4.781E-15	2.016E-14						
	Pu-239+D	äDSR(j)		3.241E-07	3.240E-07	3.238E-07	3.238E-07	3.236E-07	3.231E-07	3.217E-07	3.194E-07	3.149E-07						
0	Pu-239+D	Pu-239+D	8.252E-07	7.026E-09	7.025E-09	7.021E-09	7.020E-09	7.016E-09	7.005E-09	6.975E-09	6.925E-09	6.826E-09						
	Pu-239+D	U-235+D	8.252E-07	7.142E-18	2.143E-17	3.641E-16	4.355E-16	7.208E-16	1.434E-15	3.565E-15	7.098E-15	1.409E-14						
	Pu-239+D	Pa-231	8.252E-07	5.729E-23	4.010E-22	1.117E-19	1.598E-19	4.380E-19	1.733E-18	1.074E-17	4.270E-17	1.692E-16						
	Pu-239+D	Ac-227+D4	8.252E-07	1.327E-24	1.978E-23	7.319E-20	1.209E-19	4.809E-19	2.856E-18	2.457E-17	1.104E-16	4.657E-16						
	Pu-239+D	äDSR(j)		7.026E-09	7.025E-09	7.021E-09	7.020E-09	7.016E-09	7.005E-09	6.975E-09	6.925E-09	6.827E-09						
0	Pu-239+D	Pu-239+D	2.284E-09	1.944E-11	1.944E-11	1.943E-11	1.943E-11	1.942E-11	1.939E-11	1.931E-11	1.917E-11	1.889E-11						
	Pu-239+D	U-235+D	2.284E-09	1.977E-20	5.930E-20	1.008E-18	1.205E-18	1.995E-18	3.967E-18	9.868E-18	1.964E-17	3.899E-17						
	Pu-239+D	Pa-231	2.284E-09	1.586E-25	1.110E-24	3.092E-22	4.423E-22	1.212E-21	4.797E-21	2.973E-20	1.182E-19	4.683E-19						
	Pu-239+D	Ac-227+D5	2.284E-09	3.705E-27	5.520E-26	2.043E-22	3.375E-22	1.342E-21	7.970E-21	6.858E-20	3.082E-19	1.300E-18						
	Pu-239+D	äDSR(j)		1.944E-11	1.944E-11	1.943E-11	1.943E-11	1.942E-11	1.939E-11	1.931E-11	1.917E-11	1.889E-11						
0	Ru-106+D	Ru-106+D	1.000E+00	1.961E-02	9.959E-03	8.605E-10	2.905E-11	3.775E-17	7.268E-32	0.000E+00	0.000E+00	0.000E+00						
0	Sr-90+D	Sr-90+D	1.000E+00	2.022E-03	1.973E-03	1.107E-03	9.818E-04	6.066E-04	1.820E-04	4.917E-06	1.196E-08	7.073E-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)								
	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
	Tc-99	Tc-99	1.000E+00	2.898E-05	2.898E-05	2.893E-05	2.892E-05	2.887E-05	2.876E-05	2.844E-05	2.790E-05	2.687E-05
	0Th-228+D	Th-228+D	1.000E+00	1.702E-01	1.185E-01	1.969E-05	3.212E-06	2.277E-09	3.045E-17	7.281E-41	0.000E+00	0.000E+00
	0Th-230	Th-230	9.996E-01	7.495E-03	7.495E-03	7.493E-03	7.493E-03	7.491E-03	7.488E-03	7.478E-03	7.460E-03	7.426E-03
	Th-230	Ra-226+D	9.996E-01	5.138E-05	1.541E-04	2.606E-03	3.114E-03	5.133E-03	1.010E-02	2.437E-02	4.614E-02	8.303E-02
	Th-230	Pb-210+D	9.996E-01	1.833E-07	1.272E-06	2.801E-04	3.828E-04	8.837E-04	2.437E-03	7.388E-03	1.502E-02	2.795E-02
	Th-230	äDSR(j)		7.546E-03	7.650E-03	1.038E-02	1.099E-02	1.351E-02	2.003E-02	3.924E-02	6.861E-02	1.184E-01
	0Th-230	Th-230	1.319E-06	9.893E-09	9.893E-09	9.891E-09	9.890E-09	9.889E-09	9.884E-09	9.871E-09	9.848E-09	9.803E-09
	Th-230	Ra-226+D	1.319E-06	6.783E-11	2.034E-10	3.440E-09	4.110E-09	6.775E-09	1.334E-08	3.217E-08	6.090E-08	1.096E-07
	Th-230	Pb-210+D1	1.319E-06	9.033E-14	6.267E-13	1.380E-10	1.886E-10	4.354E-10	1.201E-09	3.640E-09	7.398E-09	1.377E-08
	Th-230	äDSR(j)		9.961E-09	1.010E-08	1.347E-08	1.419E-08	1.710E-08	2.442E-08	4.568E-08	7.815E-08	1.332E-07
	0Th-230	Th-230	1.899E-08	1.424E-10	1.424E-10	1.424E-10	1.424E-10	1.423E-10	1.423E-10	1.421E-10	1.417E-10	1.411E-10
	Th-230	Ra-226+D	1.899E-08	9.763E-13	2.928E-12	4.952E-11	5.916E-11	9.752E-11	1.920E-10	4.630E-10	8.766E-10	1.578E-09
	Th-230	Pb-210+D2	1.899E-08	1.857E-15	1.288E-14	2.836E-12	3.876E-12	8.949E-12	2.468E-11	7.482E-11	1.521E-10	2.830E-10
	Th-230	äDSR(j)		1.434E-10	1.453E-10	1.947E-10	2.054E-10	2.488E-10	3.589E-10	6.799E-10	1.170E-09	2.002E-09
	0Th-230	Th-230	2.100E-04	1.574E-06	1.574E-06	1.574E-06	1.574E-06	1.574E-06	1.573E-06	1.571E-06	1.567E-06	1.560E-06
	Th-230	Ra-226+D1	2.100E-04	2.712E-08	8.134E-08	1.375E-06	1.643E-06	2.709E-06	5.332E-06	1.286E-05	2.435E-05	4.382E-05
	Th-230	Pb-210+D	2.100E-04	3.851E-11	2.672E-10	5.883E-08	8.040E-08	1.856E-07	5.119E-07	1.552E-06	3.154E-06	5.870E-06
	Th-230	äDSR(j)		1.601E-06	1.656E-06	3.008E-06	3.298E-06	4.468E-06	7.417E-06	1.598E-05	2.907E-05	5.125E-05
	0Th-230	Th-230	2.771E-10	2.078E-12	2.078E-12	2.078E-12	2.077E-12	2.077E-12	2.076E-12	2.073E-12	2.068E-12	2.059E-12
	Th-230	Ra-226+D1	2.771E-10	3.580E-14	1.074E-13	1.816E-12	2.169E-12	3.576E-12	7.038E-12	1.698E-11	3.214E-11	5.784E-11
	Th-230	Pb-210+D1	2.771E-10	1.897E-17	1.316E-16	2.899E-14	3.961E-14	9.145E-14	2.522E-13	7.645E-13	1.554E-12	2.892E-12
	Th-230	äDSR(j)		2.114E-12	2.185E-12	3.922E-12	4.286E-12	5.744E-12	9.367E-12	1.982E-11	3.576E-11	6.279E-11
	0Th-230	Th-230	3.989E-12	2.991E-14	2.991E-14	2.990E-14	2.990E-14	2.990E-14	2.988E-14	2.984E-14	2.977E-14	2.964E-14
	Th-230	Ra-226+D1	3.989E-12	5.152E-16	1.545E-15	2.613E-14	3.122E-14	5.147E-14	1.013E-13	2.444E-13	4.626E-13	8.326E-13
	Th-230	Pb-210+D2	3.989E-12	3.900E-19	2.705E-18	5.958E-16	8.142E-16	1.880E-15	5.184E-15	1.571E-14	3.194E-14	5.945E-14
	Th-230	äDSR(j)		3.043E-14	3.146E-14	5.663E-14	6.194E-14	8.325E-14	1.364E-13	2.899E-13	5.243E-13	9.217E-13
	0Th-230	Th-230	1.998E-04	1.498E-06	1.498E-06	1.497E-06	1.497E-06	1.497E-06	1.496E-06	1.494E-06	1.491E-06	1.484E-06
	Th-230	Ra-226+D2	1.998E-04	9.090E-09	2.727E-08	4.611E-07	5.509E-07	9.081E-07	1.787E-06	4.311E-06	8.162E-06	1.469E-05
	Th-230	Pb-210+D	1.998E-04	3.664E-11	2.542E-10	5.597E-08	7.649E-08	1.766E-07	4.871E-07	1.476E-06	3.001E-06	5.585E-06
	Th-230	äDSR(j)		1.507E-06	1.525E-06	2.014E-06	2.125E-06	2.582E-06	3.771E-06	7.282E-06	1.265E-05	2.176E-05
	0Th-230	Th-230	2.637E-10	1.977E-12	1.977E-12	1.977E-12	1.977E-12	1.976E-12	1.975E-12	1.973E-12	1.968E-12	1.959E-12
	Th-230	Ra-226+D2	2.637E-10	1.200E-14	3.599E-14	6.086E-13	7.271E-13	1.199E-12	2.359E-12	5.691E-12	1.077E-11	1.939E-11
	Th-230	Pb-210+D1	2.637E-10	1.805E-17	1.252E-16	2.758E-14	3.769E-14	8.700E-14	2.400E-13	7.274E-13	1.478E-12	2.752E-12
	Th-230	äDSR(j)		1.989E-12	2.013E-12	2.613E-12	2.741E-12	3.262E-12	4.575E-12	8.391E-12	1.422E-11	2.410E-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)									
	AAAAAA	AAAAAA	AAAAAA	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	2.846E-14	2.846E-14	2.845E-14	2.845E-14	2.844E-14	2.843E-14	2.839E-14	2.833E-14	2.820E-14
Th-230	Ra-226+D2			3.795E-12	1.727E-16	5.180E-16	8.760E-15	1.047E-14	1.725E-14	3.396E-14	8.192E-14	1.551E-13	2.791E-13
Th-230	Pb-210+D2			3.795E-12	3.710E-19	2.574E-18	5.668E-16	7.746E-16	1.788E-15	4.932E-15	1.495E-14	3.039E-14	5.656E-14
Th-230	äDSR(j)				2.863E-14	2.898E-14	3.778E-14	3.969E-14	4.749E-14	6.732E-14	1.253E-13	2.138E-13	3.639E-13
0Th-230	Th-230			4.196E-08	3.146E-10	3.146E-10	3.145E-10	3.145E-10	3.145E-10	3.143E-10	3.139E-10	3.132E-10	3.117E-10
Th-230	Ra-226+D3			4.196E-08	5.172E-12	1.551E-11	2.623E-10	3.134E-10	5.166E-10	1.017E-09	2.453E-09	4.644E-09	8.357E-09
Th-230	Pb-210+D			4.196E-08	7.696E-15	5.339E-14	1.176E-11	1.607E-11	3.709E-11	1.023E-10	3.101E-10	6.303E-10	1.173E-09
Th-230	äDSR(j)				3.198E-10	3.302E-10	5.886E-10	6.440E-10	8.682E-10	1.434E-09	3.077E-09	5.587E-09	9.842E-09
0Th-230	Th-230			5.538E-14	4.153E-16	4.153E-16	4.152E-16	4.152E-16	4.151E-16	4.149E-16	4.143E-16	4.134E-16	4.115E-16
Th-230	Ra-226+D3			5.538E-14	6.827E-18	2.048E-17	3.463E-16	4.137E-16	6.820E-16	1.342E-15	3.238E-15	6.130E-15	1.103E-14
Th-230	Pb-210+D1			5.538E-14	3.792E-21	2.630E-20	5.792E-18	7.916E-18	1.827E-17	5.040E-17	1.528E-16	3.105E-16	5.780E-16
Th-230	äDSR(j)				4.221E-16	4.358E-16	7.672E-16	8.368E-16	1.115E-15	1.808E-15	3.805E-15	6.854E-15	1.202E-14
0Th-230	Th-230			7.972E-16	5.977E-18	5.977E-18	5.976E-18	5.976E-18	5.975E-18	5.972E-18	5.964E-18	5.950E-18	5.923E-18
Th-230	Ra-226+D3			7.972E-16	9.826E-20	2.947E-19	4.984E-18	5.955E-18	9.816E-18	1.932E-17	4.660E-17	8.823E-17	1.588E-16
Th-230	Pb-210+D2			7.972E-16	7.793E-23	5.407E-22	1.191E-19	1.627E-19	3.756E-19	1.036E-18	3.140E-18	6.383E-18	1.188E-17
Th-230	äDSR(j)				6.076E-18	6.273E-18	1.108E-17	1.209E-17	1.617E-17	2.633E-17	5.571E-17	1.006E-16	1.766E-16
0Th-230	Th-230			2.000E-07	1.500E-09	1.500E-09	1.499E-09	1.499E-09	1.499E-09	1.498E-09	1.496E-09	1.493E-09	1.486E-09
Th-230	Ra-226+D4			2.000E-07	6.156E-13	1.847E-12	3.123E-11	3.731E-11	6.150E-11	1.210E-10	2.920E-10	5.528E-10	9.948E-10
Th-230	Pb-210+D			2.000E-07	3.668E-14	2.545E-13	5.604E-11	7.659E-11	1.768E-10	4.877E-10	1.478E-09	3.005E-09	5.592E-09
Th-230	äDSR(j)				1.500E-09	1.502E-09	1.587E-09	1.613E-09	1.737E-09	2.107E-09	3.266E-09	5.050E-09	8.073E-09
0Th-230	Th-230			2.640E-13	1.979E-15	1.979E-15	1.979E-15	1.979E-15	1.979E-15	1.978E-15	1.975E-15	1.970E-15	1.961E-15
Th-230	Ra-226+D4			2.640E-13	8.126E-19	2.437E-18	4.122E-17	4.925E-17	8.118E-17	1.598E-16	3.854E-16	7.296E-16	1.313E-15
Th-230	Pb-210+D1			2.640E-13	1.807E-20	1.254E-19	2.761E-17	3.773E-17	8.711E-17	2.403E-16	7.283E-16	1.480E-15	2.755E-15
Th-230	äDSR(j)				1.980E-15	1.982E-15	2.048E-15	2.066E-15	2.147E-15	2.378E-15	3.089E-15	4.180E-15	6.030E-15
0Th-230	Th-230			3.800E-15	2.849E-17	2.849E-17	2.849E-17	2.848E-17	2.848E-17	2.847E-17	2.843E-17	2.836E-17	2.823E-17
Th-230	Ra-226+D4			3.800E-15	1.170E-20	3.508E-20	5.933E-19	7.088E-19	1.168E-18	2.300E-18	5.548E-18	1.050E-17	1.890E-17
Th-230	Pb-210+D2			3.800E-15	3.715E-22	2.577E-21	5.675E-19	7.756E-19	1.790E-18	4.938E-18	1.497E-17	3.043E-17	5.663E-17
Th-230	äDSR(j)				2.850E-17	2.853E-17	2.965E-17	2.997E-17	3.144E-17	3.570E-17	4.894E-17	6.929E-17	1.038E-16
0Th-232	Th-232			1.000E+00	8.223E-03	8.223E-03	8.223E-03	8.223E-03	8.223E-03	8.223E-03	8.223E-03	8.222E-03	8.222E-03
Th-232	Ra-228+D			1.000E+00	8.973E-03	2.555E-02	1.478E-01	1.510E-01	1.546E-01	1.549E-01	1.549E-01	1.549E-01	1.549E-01
Th-232	Th-228+D			1.000E+00	1.313E-03	8.057E-03	1.889E-01	1.953E-01	2.023E-01	2.030E-01	2.030E-01	2.029E-01	2.029E-01
Th-232	äDSR(j)				1.851E-02	4.183E-02	3.449E-01	3.545E-01	3.651E-01	3.661E-01	3.661E-01	3.661E-01	3.660E-01
0U-234	U-234			9.996E-01	1.723E-03	1.723E-03	1.723E-03	1.723E-03	1.723E-03	1.722E-03	1.722E-03	1.720E-03	1.718E-03
U-234	Th-230			9.996E-01	3.446E-08	1.034E-07	1.757E-06	2.102E-06	3.479E-06	6.922E-06	1.724E-05	3.439E-05	6.853E-05
U-234	Ra-226+D			9.996E-01	1.575E-10	1.102E-09	3.062E-07	4.376E-07	1.196E-06	4.702E-06	2.858E-05	1.100E-04	4.097E-04
U-234	Pb-210+D			9.996E-01	4.221E-13	6.290E-12	2.329E-08	3.849E-08	1.531E-07	9.071E-07	7.699E-06	3.360E-05	1.334E-04
U-234	äDSR(j)				1.723E-03	1.723E-03	1.725E-03	1.725E-03	1.728E-03	1.735E-03	1.775E-03	1.898E-03	2.329E-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)									
	AAAAAA	AAAAAA	AAAAAA	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	U-234	1.319E-06	2.274E-09	2.274E-09	2.274E-09	2.274E-09	2.274E-09	2.274E-09	2.274E-09	2.273E-09	2.271E-09	2.267E-09
U-234	Th-230	Th-230	1.319E-06	4.549E-14	1.365E-13	2.319E-12	2.774E-12	4.593E-12	9.137E-12	2.275E-11	4.539E-11	9.046E-11	
U-234	Ra-226+D	Ra-226+D	1.319E-06	2.079E-16	1.455E-15	4.041E-13	5.777E-13	1.579E-12	6.207E-12	3.772E-11	1.452E-10	5.409E-10	
U-234	Pb-210+D1	Pb-210+D1	1.319E-06	2.080E-19	3.099E-18	1.148E-14	1.896E-14	7.541E-14	4.469E-13	3.793E-12	1.655E-11	6.570E-11	
U-234	äDSR(j)	äDSR(j)		2.274E-09	2.274E-09	2.277E-09	2.277E-09	2.280E-09	2.289E-09	2.337E-09	2.478E-09	2.965E-09	
OU-234	U-234	U-234	1.899E-08	3.274E-11	3.274E-11	3.273E-11	3.273E-11	3.273E-11	3.273E-11	3.271E-11	3.269E-11	3.264E-11	
U-234	Th-230	Th-230	1.899E-08	6.547E-16	1.964E-15	3.339E-14	3.993E-14	6.611E-14	1.315E-13	3.275E-13	6.534E-13	1.302E-12	
U-234	Ra-226+D	Ra-226+D	1.899E-08	2.993E-18	2.095E-17	5.817E-15	8.315E-15	2.273E-14	8.935E-14	5.430E-13	2.091E-12	7.785E-12	
U-234	Pb-210+D2	Pb-210+D2	1.899E-08	4.275E-21	6.370E-20	2.359E-16	3.898E-16	1.550E-15	9.186E-15	7.797E-14	3.402E-13	1.350E-12	
U-234	äDSR(j)	äDSR(j)		3.274E-11	3.274E-11	3.277E-11	3.278E-11	3.282E-11	3.296E-11	3.366E-11	3.577E-11	4.308E-11	
OU-234	U-234	U-234	2.100E-04	3.619E-07	3.619E-07	3.619E-07	3.619E-07	3.618E-07	3.618E-07	3.616E-07	3.614E-07	3.608E-07	
U-234	Th-230	Th-230	2.100E-04	7.238E-12	2.171E-11	3.691E-10	4.414E-10	7.308E-10	1.454E-09	3.621E-09	7.223E-09	1.439E-08	
U-234	Ra-226+D1	Ra-226+D1	2.100E-04	8.312E-14	5.818E-13	1.616E-10	2.310E-10	6.313E-10	2.482E-09	1.508E-08	5.807E-08	2.162E-07	
U-234	Pb-210+D	Pb-210+D	2.100E-04	8.867E-17	1.321E-15	4.893E-12	8.084E-12	3.215E-11	1.905E-10	1.617E-09	7.057E-09	2.801E-08	
U-234	äDSR(j)	äDSR(j)		3.619E-07	3.619E-07	3.624E-07	3.625E-07	3.632E-07	3.659E-07	3.819E-07	4.337E-07	6.195E-07	
OU-234	U-234	U-234	2.771E-10	4.777E-13	4.777E-13	4.777E-13	4.777E-13	4.776E-13	4.776E-13	4.773E-13	4.770E-13	4.763E-13	
U-234	Th-230	Th-230	2.771E-10	9.554E-18	2.866E-17	4.872E-16	5.827E-16	9.647E-16	1.919E-15	4.779E-15	9.534E-15	1.900E-14	
U-234	Ra-226+D1	Ra-226+D1	2.771E-10	1.097E-19	7.680E-19	2.133E-16	3.049E-16	8.333E-16	3.276E-15	1.991E-14	7.665E-14	2.854E-13	
U-234	Pb-210+D1	Pb-210+D1	2.771E-10	4.369E-23	6.509E-22	2.411E-18	3.983E-18	1.584E-17	9.387E-17	7.968E-16	3.477E-15	1.380E-14	
U-234	äDSR(j)	äDSR(j)		4.777E-13	4.777E-13	4.784E-13	4.786E-13	4.795E-13	4.829E-13	5.028E-13	5.667E-13	7.945E-13	
OU-234	U-234	U-234	3.989E-12	6.876E-15	6.876E-15	6.876E-15	6.875E-15	6.875E-15	6.874E-15	6.871E-15	6.866E-15	6.855E-15	
U-234	Th-230	Th-230	3.989E-12	1.375E-19	4.126E-19	7.012E-18	8.387E-18	1.389E-17	2.762E-17	6.879E-17	1.372E-16	2.735E-16	
U-234	Ra-226+D1	Ra-226+D1	3.989E-12	1.579E-21	1.105E-20	3.070E-18	4.389E-18	1.199E-17	4.715E-17	2.866E-16	1.103E-15	4.109E-15	
U-234	Pb-210+D2	Pb-210+D2	3.989E-12	8.979E-25	1.338E-23	4.955E-20	8.187E-20	3.256E-19	1.929E-18	1.638E-17	7.147E-17	2.837E-16	
U-234	äDSR(j)	äDSR(j)		6.876E-15	6.877E-15	6.886E-15	6.888E-15	6.901E-15	6.951E-15	7.243E-15	8.178E-15	1.152E-14	
OU-234	U-234	U-234	1.998E-04	3.443E-07	3.443E-07	3.443E-07	3.443E-07	3.443E-07	3.442E-07	3.441E-07	3.438E-07	3.433E-07	
U-234	Th-230	Th-230	1.998E-04	6.886E-12	2.066E-11	3.511E-10	4.200E-10	6.953E-10	1.383E-09	3.445E-09	6.872E-09	1.370E-08	
U-234	Ra-226+D2	Ra-226+D2	1.998E-04	2.786E-14	1.950E-13	5.416E-11	7.743E-11	2.116E-10	8.319E-10	5.056E-09	1.947E-08	7.249E-08	
U-234	Pb-210+D	Pb-210+D	1.998E-04	8.436E-17	1.257E-15	4.655E-12	7.691E-12	3.059E-11	1.813E-10	1.539E-09	6.714E-09	2.665E-08	
U-234	äDSR(j)	äDSR(j)		3.443E-07	3.443E-07	3.447E-07	3.448E-07	3.452E-07	3.466E-07	3.541E-07	3.769E-07	4.561E-07	
OU-234	U-234	U-234	2.637E-10	4.545E-13	4.545E-13	4.545E-13	4.545E-13	4.544E-13	4.544E-13	4.542E-13	4.538E-13	4.531E-13	
U-234	Th-230	Th-230	2.637E-10	9.090E-18	2.727E-17	4.635E-16	5.544E-16	9.178E-16	1.826E-15	4.547E-15	9.071E-15	1.808E-14	
U-234	Ra-226+D2	Ra-226+D2	2.637E-10	3.678E-20	2.574E-19	7.150E-17	1.022E-16	2.793E-16	1.098E-15	6.674E-15	2.570E-14	9.569E-14	
U-234	Pb-210+D1	Pb-210+D1	2.637E-10	4.156E-23	6.193E-22	2.293E-18	3.789E-18	1.507E-17	8.931E-17	7.581E-16	3.308E-15	1.313E-14	
U-234	äDSR(j)	äDSR(j)		4.545E-13	4.545E-13	4.550E-13	4.551E-13	4.556E-13	4.574E-13	4.661E-13	4.919E-13	5.800E-13	
OU-234	U-234	U-234	3.795E-12	6.542E-15	6.542E-15	6.542E-15	6.541E-15	6.541E-15	6.540E-15	6.537E-15	6.532E-15	6.522E-15	
U-234	Th-230	Th-230	3.795E-12	1.308E-19	3.925E-19	6.672E-18	7.980E-18	1.321E-17	2.628E-17	6.545E-17	1.306E-16	2.602E-16	
U-234	Ra-226+D2	Ra-226+D2	3.795E-12	5.294E-22	3.705E-21	1.029E-18	1.471E-18	4.021E-18	1.581E-17	9.606E-17	3.699E-16	1.377E-15	
U-234	Pb-210+D2	Pb-210+D2	3.795E-12	8.543E-25	1.273E-23	4.714E-20	7.789E-20	3.098E-19	1.836E-18	1.558E-17	6.799E-17	2.699E-16	
U-234	äDSR(j)	äDSR(j)		6.542E-15	6.542E-15	6.549E-15	6.551E-15	6.559E-15	6.584E-15	6.714E-15	7.101E-15	8.430E-15	

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-234	U-234	U-234	4.196E-08	7.232E-11	7.232E-11	7.232E-11	7.232E-11	7.231E-11	7.230E-11	7.227E-11	7.221E-11	7.210E-11	U-234	
U-234	Th-230	Th-230	4.196E-08	1.446E-15	4.339E-15	7.376E-14	8.822E-14	1.460E-13	2.906E-13	7.236E-13	1.443E-12	2.877E-12	U-234	
U-234	Ra-226+D3	Ra-226+D3	4.196E-08	1.585E-17	1.110E-16	3.082E-14	4.405E-14	1.204E-13	4.733E-13	2.877E-12	1.108E-11	4.124E-11	U-234	
U-234	Pb-210+D	Pb-210+D	4.196E-08	1.772E-20	2.640E-19	9.778E-16	1.616E-15	6.425E-15	3.807E-14	3.232E-13	1.410E-12	5.598E-12	U-234	
U-234	äDSR(j)	äDSR(j)		7.232E-11	7.233E-11	7.242E-11	7.245E-11	7.258E-11	7.310E-11	7.619E-11	8.614E-11	1.218E-10	U-234	
0U-234	U-234	U-234	5.538E-14	9.547E-17	9.546E-17	9.546E-17	9.546E-17	9.545E-17	9.544E-17	9.539E-17	9.532E-17	9.518E-17	0U-234	
U-234	Th-230	Th-230	5.538E-14	1.909E-21	5.728E-21	9.736E-20	1.164E-19	1.928E-19	3.835E-19	9.551E-19	1.905E-18	3.797E-18	U-234	
U-234	Ra-226+D3	Ra-226+D3	5.538E-14	2.093E-23	1.465E-22	4.068E-20	5.815E-20	1.589E-19	6.248E-19	3.797E-18	1.462E-17	5.444E-17	U-234	
U-234	Pb-210+D1	Pb-210+D1	5.538E-14	8.730E-27	1.301E-25	4.817E-22	7.959E-22	3.165E-21	1.876E-20	1.592E-19	6.948E-19	2.758E-18	U-234	
U-234	äDSR(j)	äDSR(j)		9.547E-17	9.547E-17	9.560E-17	9.563E-17	9.581E-17	9.646E-17	1.003E-16	1.125E-16	1.562E-16	U-234	
0U-234	U-234	U-234	7.972E-16	1.374E-18	1.374E-18	1.374E-18	1.374E-18	1.374E-18	1.374E-18	1.373E-18	1.372E-18	1.370E-18	0U-234	
U-234	Th-230	Th-230	7.972E-16	2.748E-23	8.245E-23	1.401E-21	1.676E-21	2.775E-21	5.521E-21	1.375E-20	2.743E-20	5.466E-20	U-234	
U-234	Ra-226+D3	Ra-226+D3	7.972E-16	3.012E-25	2.108E-24	5.855E-22	8.370E-22	2.288E-21	8.993E-21	5.465E-20	2.104E-19	7.836E-19	U-234	
U-234	Pb-210+D2	Pb-210+D2	7.972E-16	1.794E-28	2.674E-27	9.902E-24	1.636E-23	6.506E-23	3.856E-22	3.273E-21	1.428E-20	5.668E-20	U-234	
U-234	äDSR(j)	äDSR(j)		1.374E-18	1.374E-18	1.376E-18	1.377E-18	1.379E-18	1.389E-18	1.445E-18	1.624E-18	2.265E-18	U-234	
0U-234	U-234	U-234	2.000E-07	3.447E-10	3.447E-10	3.447E-10	3.447E-10	3.447E-10	3.446E-10	3.445E-10	3.442E-10	3.437E-10	0U-234	
U-234	Th-230	Th-230	2.000E-07	6.895E-15	2.068E-14	3.516E-13	4.205E-13	6.961E-13	1.385E-12	3.449E-12	6.880E-12	1.371E-11	U-234	
U-234	Ra-226+D4	Ra-226+D4	2.000E-07	1.887E-18	1.321E-17	3.668E-15	5.244E-15	1.433E-14	5.634E-14	3.424E-13	1.318E-12	4.909E-12	U-234	
U-234	Pb-210+D	Pb-210+D	2.000E-07	8.446E-20	1.258E-18	4.661E-15	7.701E-15	3.063E-14	1.815E-13	1.541E-12	6.723E-12	2.668E-11	U-234	
U-234	äDSR(j)	äDSR(j)		3.447E-10	3.448E-10	3.451E-10	3.451E-10	3.454E-10	3.463E-10	3.498E-10	3.591E-10	3.890E-10	U-234	
0U-234	U-234	U-234	2.640E-13	4.551E-16	4.550E-16	4.550E-16	4.550E-16	4.550E-16	4.549E-16	4.547E-16	4.544E-16	4.537E-16	0U-234	
U-234	Th-230	Th-230	2.640E-13	9.101E-21	2.730E-20	4.641E-19	5.551E-19	9.189E-19	1.828E-18	4.553E-18	9.082E-18	1.810E-17	U-234	
U-234	Ra-226+D4	Ra-226+D4	2.640E-13	2.491E-24	1.743E-23	4.842E-21	6.922E-21	1.892E-20	7.437E-20	4.520E-19	1.740E-18	6.480E-18	U-234	
U-234	Pb-210+D1	Pb-210+D1	2.640E-13	4.161E-26	6.200E-25	2.296E-21	3.794E-21	1.509E-20	8.942E-20	7.590E-19	3.312E-18	1.315E-17	U-234	
U-234	äDSR(j)	äDSR(j)		4.551E-16	4.551E-16	4.555E-16	4.556E-16	4.559E-16	4.569E-16	4.605E-16	4.685E-16	4.914E-16	U-234	
0U-234	U-234	U-234	3.800E-15	6.550E-18	6.550E-18	6.549E-18	6.549E-18	6.549E-18	6.548E-18	6.545E-18	6.540E-18	6.530E-18	0U-234	
U-234	Th-230	Th-230	3.800E-15	1.310E-22	3.930E-22	6.680E-21	7.989E-21	1.323E-20	2.631E-20	6.553E-20	1.307E-19	2.605E-19	U-234	
U-234	Ra-226+D4	Ra-226+D4	3.800E-15	3.585E-26	2.509E-25	6.970E-23	9.963E-23	2.723E-22	1.070E-21	6.506E-21	2.505E-20	9.328E-20	U-234	
U-234	Pb-210+D2	Pb-210+D2	3.800E-15	8.553E-28	1.274E-26	4.720E-23	7.798E-23	3.101E-22	1.838E-21	1.560E-20	6.808E-20	2.702E-19	U-234	
U-234	äDSR(j)	äDSR(j)		6.550E-18	6.550E-18	6.556E-18	6.558E-18	6.563E-18	6.577E-18	6.633E-18	6.764E-18	7.154E-18	U-234	
0U-235+D	U-235+D	U-235+D	9.835E-01	1.729E-02	1.729E-02	1.729E-02	1.729E-02	1.729E-02	1.729E-02	1.729E-02	1.729E-02	1.729E-02	0U-235+D	
U-235+D	Pa-231	Pa-231	9.835E-01	2.081E-07	6.242E-07	1.061E-05	1.269E-05	2.100E-05	4.177E-05	1.040E-04	2.071E-04	4.119E-04	U-235+D	
U-235+D	Ac-227+D	Ac-227+D	9.835E-01	6.930E-09	4.808E-08	1.058E-05	1.446E-05	3.340E-05	9.256E-05	2.878E-04	6.144E-04	1.263E-03	U-235+D	
U-235+D	äDSR(j)	äDSR(j)		1.729E-02	1.729E-02	1.731E-02	1.732E-02	1.734E-02	1.742E-02	1.768E-02	1.811E-02	1.896E-02	U-235+D	
0U-235+D	U-235+D	U-235+D	2.722E-03	4.785E-05	4.785E-05	4.785E-05	4.785E-05	4.785E-05	4.785E-05	4.785E-05	4.785E-05	4.784E-05	0U-235+D	
U-235+D	Pa-231	Pa-231	2.722E-03	5.758E-10	1.727E-09	2.936E-08	3.511E-08	5.813E-08	1.156E-07	2.877E-07	5.733E-07	1.140E-06	U-235+D	
U-235+D	Ac-227+D1	Ac-227+D1	2.722E-03	1.933E-11	1.341E-10	2.951E-08	4.033E-08	9.317E-08	2.582E-07	8.026E-07	1.714E-06	3.522E-06	U-235+D	
U-235+D	äDSR(j)	äDSR(j)		4.785E-05	4.786E-05	4.791E-05	4.793E-05	4.800E-05	4.823E-05	4.894E-05	5.014E-05	5.251E-05	U-235+D	

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	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	
U-235+D	U-235+D	U-235+D	1.376E-02	2.419E-04	2.419E-04	2.419E-04	2.419E-04	2.419E-04	2.419E-04	2.419E-04	2.419E-04	2.419E-04	2.419E-04	
U-235+D	Pa-231	Pa-231	1.376E-02	2.911E-09	8.733E-09	1.484E-07	1.775E-07	2.939E-07	5.845E-07	1.455E-06	2.898E-06	5.763E-06	2.419E-04	
U-235+D	Ac-227+D2	Ac-227+D2	1.376E-02	8.352E-11	5.794E-10	1.275E-07	1.743E-07	4.026E-07	1.116E-06	3.468E-06	7.405E-06	1.522E-05	2.419E-04	
U-235+D	äDSR(j)	äDSR(j)		2.419E-04	2.419E-04	2.422E-04	2.423E-04	2.426E-04	2.436E-04	2.468E-04	2.522E-04	2.629E-04	2.419E-04	
0U-235+D	U-235+D	U-235+D	3.809E-05	6.696E-07	6.696E-07	6.696E-07	6.696E-07	6.696E-07	6.696E-07	6.695E-07	6.695E-07	6.695E-07	6.695E-07	
U-235+D	Pa-231	Pa-231	3.809E-05	8.057E-12	2.417E-11	4.108E-10	4.913E-10	8.133E-10	1.618E-09	4.026E-09	8.022E-09	1.595E-08	2.419E-04	
U-235+D	Ac-227+D3	Ac-227+D3	3.809E-05	2.333E-13	1.618E-12	3.561E-10	4.866E-10	1.124E-09	3.115E-09	9.685E-09	2.068E-08	4.249E-08	2.419E-04	
U-235+D	äDSR(j)	äDSR(j)		6.696E-07	6.696E-07	6.703E-07	6.706E-07	6.715E-07	6.743E-07	6.833E-07	6.982E-07	7.279E-07	2.419E-04	
0U-235+D	U-235+D	U-235+D	8.257E-07	1.452E-08	1.452E-08	1.452E-08	1.452E-08	1.452E-08	1.452E-08	1.452E-08	1.452E-08	1.451E-08	2.419E-04	
U-235+D	Pa-231	Pa-231	8.257E-07	1.747E-13	5.240E-13	8.906E-12	1.065E-11	1.763E-11	3.507E-11	8.728E-11	1.739E-10	3.458E-10	2.419E-04	
U-235+D	Ac-227+D4	Ac-227+D4	8.257E-07	5.387E-15	3.737E-14	8.224E-12	1.124E-11	2.597E-11	7.196E-11	2.237E-10	4.776E-10	9.815E-10	2.419E-04	
U-235+D	äDSR(j)	äDSR(j)		1.452E-08	1.452E-08	1.453E-08	1.454E-08	1.456E-08	1.462E-08	1.483E-08	1.517E-08	1.584E-08	2.419E-04	
0U-235+D	U-235+D	U-235+D	2.285E-09	4.018E-11	4.018E-11	4.018E-11	4.018E-11	4.018E-11	4.018E-11	4.018E-11	4.017E-11	4.017E-11	2.419E-04	
U-235+D	Pa-231	Pa-231	2.285E-09	4.834E-16	1.450E-15	2.465E-14	2.948E-14	4.880E-14	9.707E-14	2.416E-13	4.813E-13	9.570E-13	2.419E-04	
U-235+D	Ac-227+D5	Ac-227+D5	2.285E-09	1.504E-17	1.043E-16	2.295E-14	3.137E-14	7.247E-14	2.008E-13	6.243E-13	1.333E-12	2.739E-12	2.419E-04	
U-235+D	äDSR(j)	äDSR(j)		4.018E-11	4.018E-11	4.022E-11	4.024E-11	4.030E-11	4.047E-11	4.104E-11	4.199E-11	4.387E-11	2.419E-04	
0U-238	U-238	U-238	5.450E-07	8.454E-10	8.454E-10	8.454E-10	8.454E-10	8.454E-10	8.454E-10	8.454E-10	8.454E-10	8.453E-10	2.419E-04	
0U-238+D	U-238+D	U-238+D	1.599E-03	2.906E-04	2.906E-04	2.906E-04	2.906E-04	2.906E-04	2.906E-04	2.906E-04	2.906E-04	2.905E-04	2.419E-04	
U-238+D	U-234	U-234	1.599E-03	3.892E-12	1.168E-11	1.985E-10	2.374E-10	3.930E-10	7.821E-10	1.949E-09	3.892E-09	7.775E-09	2.419E-04	
U-238+D	Th-230	Th-230	1.599E-03	5.189E-17	3.632E-16	1.012E-13	1.448E-13	3.969E-13	1.572E-12	9.758E-12	3.891E-11	1.552E-10	2.419E-04	
U-238+D	Ra-226+D	Ra-226+D	1.599E-03	1.779E-19	2.668E-18	1.177E-14	2.013E-14	9.114E-14	7.143E-13	1.088E-11	8.445E-11	6.396E-10	2.419E-04	
U-238+D	Pb-210+D	Pb-210+D	1.599E-03	3.819E-22	1.177E-20	6.965E-16	1.385E-15	9.343E-15	1.156E-13	2.645E-12	2.432E-11	2.017E-10	2.419E-04	
U-238+D	äDSR(j)	äDSR(j)		2.906E-04	2.906E-04	2.906E-04	2.906E-04	2.906E-04	2.906E-04	2.906E-04	2.906E-04	2.905E-04	2.419E-04	
0U-238+D	U-238+D	U-238+D	2.111E-09	3.836E-10	3.836E-10	3.836E-10	3.836E-10	3.836E-10	3.836E-10	3.836E-10	3.835E-10	3.835E-10	2.419E-04	
U-238+D	U-234	U-234	2.111E-09	5.137E-18	1.541E-17	2.620E-16	3.133E-16	5.188E-16	1.032E-15	2.573E-15	5.138E-15	1.026E-14	2.419E-04	
U-238+D	Th-230	Th-230	2.111E-09	6.849E-23	4.795E-22	1.336E-19	1.911E-19	5.239E-19	2.075E-18	1.288E-17	5.137E-17	2.048E-16	2.419E-04	
U-238+D	Ra-226+D	Ra-226+D	2.111E-09	2.348E-25	3.522E-24	1.554E-20	2.657E-20	1.203E-19	9.429E-19	1.436E-17	1.115E-16	8.443E-16	2.419E-04	
U-238+D	Pb-210+D1	Pb-210+D1	2.111E-09	1.881E-28	5.800E-27	3.431E-22	6.825E-22	4.603E-21	5.694E-20	1.303E-18	1.198E-17	9.938E-17	2.419E-04	
U-238+D	äDSR(j)	äDSR(j)		3.836E-10	3.836E-10	3.836E-10	3.836E-10	3.836E-10	3.836E-10	3.836E-10	3.835E-10	3.835E-10	2.419E-04	
0U-238+D	U-238+D	U-238+D	3.039E-11	5.521E-12	5.521E-12	5.521E-12	5.521E-12	5.521E-12	5.521E-12	5.521E-12	5.521E-12	5.520E-12	2.419E-04	
U-238+D	U-234	U-234	3.039E-11	7.394E-20	2.218E-19	3.771E-18	4.510E-18	7.468E-18	1.486E-17	3.703E-17	7.396E-17	1.477E-16	2.419E-04	
U-238+D	Th-230	Th-230	3.039E-11	9.859E-25	6.901E-24	1.923E-21	2.751E-21	7.542E-21	2.986E-20	1.854E-19	7.394E-19	2.948E-18	2.419E-04	
U-238+D	Ra-226+D	Ra-226+D	3.039E-11	3.380E-27	5.069E-26	2.236E-22	3.824E-22	1.732E-21	1.357E-20	2.067E-19	1.605E-18	1.215E-17	2.419E-04	
U-238+D	Pb-210+D2	Pb-210+D2	3.039E-11	3.867E-30	1.192E-28	7.053E-24	1.403E-23	9.462E-23	1.170E-21	2.679E-20	2.462E-19	2.043E-18	2.419E-04	
U-238+D	äDSR(j)	äDSR(j)		5.521E-12	5.521E-12	5.521E-12	5.521E-12	5.521E-12	5.521E-12	5.521E-12	5.521E-12	5.520E-12	2.419E-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)													
	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	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	4.881E-03	4.881E-03	4.881E-03	4.881E-03	4.881E-03	4.881E-03	4.881E-03	4.881E-03	4.881E-03					
	U-238+D1	U-234	9.980E-01	2.428E-09	7.285E-09	1.238E-07	1.481E-07	2.453E-07	4.880E-07	1.216E-06	2.429E-06	4.852E-06					
	U-238+D1	Th-230	9.980E-01	3.238E-14	2.267E-13	6.316E-11	9.036E-11	2.477E-10	9.807E-10	6.089E-09	2.428E-08	9.683E-08					
	U-238+D1	Ra-226+D	9.980E-01	1.110E-16	1.665E-15	7.345E-12	1.256E-11	5.687E-11	4.457E-10	6.789E-09	5.270E-08	3.991E-07					
	U-238+D1	Pb-210+D	9.980E-01	2.383E-19	7.346E-18	4.346E-13	8.644E-13	5.830E-12	7.211E-11	1.651E-09	1.517E-08	1.259E-07					
	U-238+D1	äDSR(j)		4.881E-03	4.881E-03	4.881E-03	4.881E-03	4.881E-03	4.881E-03	4.882E-03	4.883E-03	4.885E-03					
0U	U-238+D1	U-238+D1	1.317E-06	6.443E-09	6.443E-09	6.443E-09	6.443E-09	6.443E-09	6.443E-09	6.443E-09	6.442E-09	6.442E-09					
	U-238+D1	U-234	1.317E-06	3.206E-15	9.617E-15	1.635E-13	1.955E-13	3.237E-13	6.442E-13	1.605E-12	3.206E-12	6.404E-12					
	U-238+D1	Th-230	1.317E-06	4.274E-20	2.992E-19	8.338E-17	1.193E-16	3.269E-16	1.295E-15	8.038E-15	3.205E-14	1.278E-13					
	U-238+D1	Ra-226+D	1.317E-06	1.465E-22	2.198E-21	9.695E-18	1.658E-17	7.507E-17	5.884E-16	8.961E-15	6.956E-14	5.268E-13					
	U-238+D1	Pb-210+D1	1.317E-06	1.174E-25	3.619E-24	2.141E-19	4.259E-19	2.872E-18	3.553E-17	8.132E-16	7.476E-15	6.201E-14					
	U-238+D1	äDSR(j)		6.443E-09	6.443E-09	6.443E-09	6.443E-09	6.443E-09	6.443E-09	6.444E-09	6.446E-09	6.449E-09					
0U	U-238+D1	U-238+D1	1.896E-08	9.274E-11	9.274E-11	9.274E-11	9.274E-11	9.274E-11	9.274E-11	9.273E-11	9.273E-11	9.272E-11					
	U-238+D1	U-234	1.896E-08	4.614E-17	1.384E-16	2.353E-15	2.814E-15	4.660E-15	9.273E-15	2.311E-14	4.615E-14	9.218E-14					
	U-238+D1	Th-230	1.896E-08	6.152E-22	4.306E-21	1.200E-18	1.717E-18	4.706E-18	1.863E-17	1.157E-16	4.614E-16	1.840E-15					
	U-238+D1	Ra-226+D	1.896E-08	2.109E-24	3.163E-23	1.395E-19	2.386E-19	1.081E-18	8.469E-18	1.290E-16	1.001E-15	7.583E-15					
	U-238+D1	Pb-210+D2	1.896E-08	2.413E-27	7.439E-26	4.401E-21	8.754E-21	5.904E-20	7.303E-19	1.671E-17	1.537E-16	1.275E-15					
	U-238+D1	äDSR(j)		9.274E-11	9.274E-11	9.274E-11	9.274E-11	9.274E-11	9.275E-11	9.276E-11	9.278E-11	9.282E-11					
0U	U-238+D1	U-238+D1	2.096E-04	1.025E-06	1.025E-06	1.025E-06	1.025E-06	1.025E-06	1.025E-06	1.025E-06	1.025E-06	1.025E-06					
	U-238+D1	U-234	2.096E-04	5.101E-13	1.530E-12	2.601E-11	3.111E-11	5.151E-11	1.025E-10	2.554E-10	5.102E-10	1.019E-09					
	U-238+D1	Th-230	2.096E-04	6.801E-18	4.761E-17	1.327E-14	1.898E-14	5.202E-14	2.060E-13	1.279E-12	5.100E-12	2.034E-11					
	U-238+D1	Ra-226+D1	2.096E-04	5.858E-20	8.786E-19	3.876E-15	6.628E-15	3.001E-14	2.352E-13	3.583E-12	2.781E-11	2.106E-10					
	U-238+D1	Pb-210+D	2.096E-04	5.005E-23	1.543E-21	9.129E-17	1.816E-16	1.225E-15	1.515E-14	3.467E-13	3.187E-12	2.644E-11					
	U-238+D1	äDSR(j)		1.025E-06	1.025E-06	1.025E-06	1.025E-06	1.025E-06	1.025E-06	1.025E-06	1.026E-06	1.026E-06					
0U	U-238+D1	U-238+D1	2.767E-10	1.353E-12	1.353E-12	1.353E-12	1.353E-12	1.353E-12	1.353E-12	1.353E-12	1.353E-12	1.353E-12					
	U-238+D1	U-234	2.767E-10	6.733E-19	2.020E-18	3.434E-17	4.107E-17	6.800E-17	1.353E-16	3.372E-16	6.734E-16	1.345E-15					
	U-238+D1	Th-230	2.767E-10	8.977E-24	6.284E-23	1.751E-20	2.505E-20	6.867E-20	2.719E-19	1.688E-18	6.733E-18	2.685E-17					
	U-238+D1	Ra-226+D1	2.767E-10	7.733E-26	1.160E-24	5.117E-21	8.749E-21	3.962E-20	3.105E-19	4.730E-18	3.671E-17	2.780E-16					
	U-238+D1	Pb-210+D1	2.767E-10	2.466E-29	7.602E-28	4.497E-23	8.946E-23	6.033E-22	7.463E-21	1.708E-19	1.570E-18	1.302E-17					
	U-238+D1	äDSR(j)		1.353E-12	1.353E-12	1.353E-12	1.353E-12	1.353E-12	1.353E-12	1.354E-12	1.354E-12	1.355E-12					
0U	U-238+D1	U-238+D1	3.983E-12	1.948E-14	1.948E-14	1.948E-14	1.948E-14	1.948E-14	1.948E-14	1.948E-14	1.948E-14	1.948E-14					
	U-238+D1	U-234	3.983E-12	9.692E-21	2.907E-20	4.942E-19	5.912E-19	9.788E-19	1.948E-18	4.853E-18	9.693E-18	1.936E-17					
	U-238+D1	Th-230	3.983E-12	1.292E-25	9.045E-25	2.521E-22	3.606E-22	9.884E-22	3.914E-21	2.430E-20	9.691E-20	3.864E-19					
	U-238+D1	Ra-226+D1	3.983E-12	1.113E-27	1.669E-26	7.365E-23	1.259E-22	5.703E-22	4.470E-21	6.808E-20	5.284E-19	4.002E-18					
	U-238+D1	Pb-210+D2	3.983E-12	5.068E-31	1.563E-29	9.244E-25	1.839E-24	1.240E-23	1.534E-22	3.511E-21	3.228E-20	2.677E-19					
	U-238+D1	äDSR(j)		1.948E-14	1.948E-14	1.948E-14	1.948E-14	1.948E-14	1.948E-14	1.948E-14	1.949E-14	1.950E-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	1.997E-07	9.766E-10	9.766E-10	9.766E-10	9.766E-10	9.766E-10	9.766E-10	9.765E-10	9.765E-10	9.764E-10
	U-238+D1	U-234	1.997E-07	4.859E-16	1.458E-15	2.478E-14	2.964E-14	4.907E-14	9.765E-14	2.433E-13	4.860E-13	9.707E-13
	U-238+D1	Th-230	1.997E-07	6.478E-21	4.535E-20	1.264E-17	1.808E-17	4.956E-17	1.962E-16	1.218E-15	4.858E-15	1.937E-14
	U-238+D1	Ra-226+D4	1.997E-07	1.330E-24	1.995E-23	8.800E-20	1.505E-19	6.814E-19	5.340E-18	8.134E-17	6.314E-16	4.782E-15
	U-238+D1	Pb-210+D	1.997E-07	4.768E-26	1.470E-24	8.696E-20	1.730E-19	1.167E-18	1.443E-17	3.303E-16	3.036E-15	2.518E-14
	U-238+D1	äDSR(j)		9.766E-10	9.766E-10	9.766E-10	9.766E-10	9.766E-10	9.767E-10	9.768E-10	9.770E-10	9.774E-10
0U	U-238+D1	U-238+D1	2.636E-13	1.289E-15	1.289E-15	1.289E-15	1.289E-15	1.289E-15	1.289E-15	1.289E-15	1.289E-15	1.289E-15
	U-238+D1	U-234	2.636E-13	6.414E-22	1.924E-21	3.271E-20	3.912E-20	6.477E-20	1.289E-19	3.212E-19	6.415E-19	1.281E-18
	U-238+D1	Th-230	2.636E-13	8.552E-27	5.986E-26	1.668E-23	2.386E-23	6.541E-23	2.590E-22	1.608E-21	6.413E-21	2.557E-20
	U-238+D1	Ra-226+D4	2.636E-13	1.755E-30	2.633E-29	1.162E-25	1.986E-25	8.994E-25	7.049E-24	1.074E-22	8.334E-22	6.312E-21
	U-238+D1	Pb-210+D1	2.636E-13	2.349E-32	7.242E-31	4.284E-26	8.521E-26	5.747E-25	7.109E-24	1.627E-22	1.496E-21	1.241E-20
	U-238+D1	äDSR(j)		1.289E-15	1.289E-15	1.289E-15	1.289E-15	1.289E-15	1.289E-15	1.289E-15	1.290E-15	1.290E-15
0U	U-238+D1	U-238+D1	3.794E-15	1.856E-17	1.856E-17	1.856E-17	1.856E-17	1.855E-17	1.855E-17	1.855E-17	1.855E-17	1.855E-17
	U-238+D1	U-234	3.794E-15	9.232E-24	2.770E-23	4.708E-22	5.631E-22	9.323E-22	1.855E-21	4.623E-21	9.234E-21	1.844E-20
	U-238+D1	Th-230	3.794E-15	1.231E-28	8.616E-28	2.401E-25	3.435E-25	9.416E-25	3.728E-24	2.315E-23	9.231E-23	3.681E-22
	U-238+D1	Ra-226+D4	3.794E-15	2.527E-32	3.790E-31	1.672E-27	2.859E-27	1.295E-26	1.015E-25	1.545E-24	1.200E-23	9.086E-23
	U-238+D1	Pb-210+D2	3.794E-15	4.828E-34	1.489E-32	8.806E-28	1.752E-27	1.181E-26	1.461E-25	3.344E-24	3.074E-23	2.550E-22
	U-238+D1	äDSR(j)		1.856E-17	1.856E-17	1.856E-17	1.856E-17	1.856E-17	1.856E-17	1.856E-17	1.856E-17	1.857E-17
	iiiiiiii	iiiiiiii	iiiiiiii	iiiiiiii	iiiiiiii	iiiiiiii	iiiiiiii	iiiiiiii	iiiiiiii	iiiiiiii	iiiiiiii	iiiiiiii

The DSR includes contributions from associated (half-life 6 180 days) daughters.

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

ONuclide	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
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Am-241	3.178E+03	3.183E+03	3.308E+03	3.335E+03	3.444E+03	3.731E+03	4.745E+03	7.083E+03	1.577E+04
Co-60	8.076E+01	9.211E+01	2.162E+03	4.173E+03	5.789E+04	4.149E+07	*1.113E+15	*1.113E+15	*1.113E+15
Cs-134	1.546E+02	2.163E+02	6.825E+05	3.657E+06	3.012E+09	*1.283E+15	*1.283E+15	*1.283E+15	*1.283E+15
Cs-137	3.690E+02	3.776E+02	6.554E+02	7.352E+02	1.164E+03	3.672E+03	1.153E+05	3.601E+07	3.514E+12
Eu-152	1.781E+02	1.875E+02	6.407E+02	8.277E+02	2.305E+03	2.982E+04	6.459E+07	2.342E+13	*1.727E+14
Eu-154	1.666E+02	1.806E+02	1.252E+03	1.874E+03	9.406E+03	5.309E+05	9.546E+10	*2.685E+14	*2.685E+14
Eu-155	7.449E+03	8.616E+03	2.836E+05	5.874E+05	1.080E+07	1.566E+10	*4.815E+14	*4.815E+14	*4.815E+14
H-3	8.238E+06	9.371E+06	2.066E+08	3.936E+08	5.183E+09	3.261E+12	*9.621E+15	*9.621E+15	*9.621E+15
I-129	6.593E+03	6.593E+03	6.599E+03	6.601E+03	6.606E+03	6.620E+03	6.661E+03	6.731E+03	6.872E+03
Mn-54	3.509E+02	7.896E+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	8.050E+04	3.050E+05	6.284E+07	3.829E+13	*5.976E+15	*5.976E+15	*5.976E+15
Ni-63	4.291E+06	4.321E+06	5.102E+06	5.282E+06	6.066E+06	8.576E+06	2.423E+07	1.368E+08	4.364E+09
Np-237	9.157E+02	9.157E+02	9.157E+02	9.157E+02	9.157E+02	9.157E+02	9.157E+02	9.157E+02	9.154E+02
Pu-238	3.230E+03	3.255E+03	3.935E+03	4.094E+03	4.795E+03	7.118E+03	2.328E+04	1.673E+05	6.853E+06
Pu-239	2.936E+03	2.937E+03	2.939E+03	2.939E+03	2.941E+03	2.945E+03	2.958E+03	2.979E+03	3.022E+03
Ru-106	1.275E+03	2.510E+03	2.905E+10	8.605E+11	*3.269E+15	*3.269E+15	*3.269E+15	*3.269E+15	*3.269E+15
Sr-90	1.237E+04	1.267E+04	2.258E+04	2.546E+04	4.121E+04	1.374E+05	5.085E+06	2.091E+09	*1.366E+14
Tc-99	8.626E+05	8.627E+05	8.642E+05	8.646E+05	8.659E+05	8.692E+05	8.791E+05	8.959E+05	9.305E+05
Th-228	1.469E+02	2.110E+02	1.270E+06	7.783E+06	1.098E+10	*8.201E+14	*8.201E+14	*8.201E+14	*8.201E+14
Th-230	3.311E+03	3.267E+03	2.407E+03	2.274E+03	1.850E+03	1.248E+03	6.368E+02	3.641E+02	2.110E+02
Th-232	1.351E+03	5.977E+02	7.249E+01	7.052E+01	6.848E+01	6.829E+01	6.829E+01	6.829E+01	6.830E+01
U-234	1.450E+04	1.450E+04	1.449E+04	1.448E+04	1.447E+04	1.440E+04	1.408E+04	1.316E+04	1.073E+04
U-235	1.422E+03	1.422E+03	1.420E+03	1.420E+03	1.418E+03	1.411E+03	1.391E+03	1.358E+03	1.297E+03
U-238	4.832E+03	4.832E+03	4.832E+03	4.832E+03	4.832E+03	4.832E+03	4.831E+03	4.830E+03	4.828E+03
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)	(pCi/g)	(pCi/g)
Am-241	1.000E+01	0.000E+00	7.866E-03	3.178E+03	7.866E-03	3.178E+03
Co-60	1.000E+01	0.000E+00	3.096E-01	8.076E+01	3.096E-01	8.076E+01
Cs-134	1.000E+01	0.000E+00	1.617E-01	1.546E+02	1.617E-01	1.546E+02
Cs-137	1.000E+01	0.000E+00	6.774E-02	3.690E+02	6.774E-02	3.690E+02
Eu-152	1.000E+01	0.000E+00	1.403E-01	1.781E+02	1.403E-01	1.781E+02
Eu-154	1.000E+01	0.000E+00	1.500E-01	1.666E+02	1.500E-01	1.666E+02
Eu-155	1.000E+01	0.000E+00	3.356E-03	7.449E+03	3.356E-03	7.449E+03
H-3	1.000E+01	0.000E+00	3.035E-06	8.238E+06	3.035E-06	8.238E+06
I-129	1.000E+01	0.000E+00	3.792E-03	6.593E+03	3.792E-03	6.593E+03
Mn-54	1.000E+01	0.000E+00	7.125E-02	3.509E+02	7.125E-02	3.509E+02
Na-22	1.000E+01	0.000E+00	2.424E-01	1.031E+02	2.424E-01	1.031E+02
Ni-63	1.000E+01	0.000E+00	5.826E-06	4.291E+06	5.826E-06	4.291E+06
Np-237	1.000E+01	1.000E+03	2.731E-02	9.154E+02	2.730E-02	9.157E+02
Pu-238	1.000E+01	0.000E+00	7.741E-03	3.230E+03	7.741E-03	3.230E+03
Pu-239	1.000E+01	0.000E+00	8.514E-03	2.936E+03	8.514E-03	2.936E+03
Ru-106	1.000E+01	0.000E+00	1.961E-02	1.275E+03	1.961E-02	1.275E+03
Sr-90	1.000E+01	0.000E+00	2.022E-03	1.237E+04	2.022E-03	1.237E+04
Tc-99	1.000E+01	0.000E+00	2.898E-05	8.626E+05	2.898E-05	8.626E+05
Th-228	1.000E+01	0.000E+00	1.702E-01	1.469E+02	1.702E-01	1.469E+02
Th-230	1.000E+01	1.000E+03	1.185E-01	2.110E+02	7.550E-03	3.311E+03
Th-232	1.000E+01	112.6 ñ 0.2	3.661E-01	6.829E+01	1.851E-02	1.351E+03
U-234	1.000E+01	1.000E+03	2.330E-03	1.073E+04	1.724E-03	1.450E+04
U-235	1.000E+01	1.000E+03	1.928E-02	1.297E+03	1.758E-02	1.422E+03
U-238	1.000E+01	1.000E+03	5.178E-03	4.828E+03	5.174E-03	4.832E+03

Individual Nuclide Dose Summed Over All Pathways
 Parent Nuclide and Branch Fraction Indicated

ONuclide	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		7.866E-02	7.853E-02	7.556E-02	7.496E-02	7.259E-02	6.700E-02	5.267E-02	3.527E-02	1.581E-02
ONp-237	Am-241	1.000E+00		4.411E-08	1.322E-07	2.205E-06	2.627E-06	4.281E-06	8.192E-06	1.821E-05	3.037E-05	4.396E-05
Np-237	Np-237	1.000E+00		2.730E-01	2.730E-01	2.730E-01	2.730E-01	2.730E-01	2.730E-01	2.730E-01	2.730E-01	2.729E-01
Np-237	äDOSE(j)			2.730E-01	2.730E-01	2.730E-01	2.730E-01	2.730E-01	2.730E-01	2.730E-01	2.730E-01	2.729E-01
OU-233	Am-241	1.000E+00		4.216E-15	2.950E-14	8.117E-12	1.158E-11	3.141E-11	1.212E-10	6.972E-10	2.465E-09	7.910E-09
U-233	Np-237	1.000E+00		3.914E-08	1.174E-07	1.996E-06	2.387E-06	3.952E-06	7.865E-06	1.960E-05	3.913E-05	7.812E-05
U-233	äDOSE(j)			3.914E-08	1.174E-07	1.996E-06	2.387E-06	3.952E-06	7.865E-06	1.960E-05	3.913E-05	7.813E-05
OTTh-229	Am-241	1.000E+00		3.191E-18	4.785E-17	2.095E-13	3.577E-13	1.610E-12	1.242E-11	1.809E-10	1.308E-09	8.713E-09
Th-229	Np-237	1.000E+00		3.949E-11	2.764E-10	7.699E-08	1.101E-07	3.017E-07	1.193E-06	7.373E-06	2.919E-05	1.148E-04
Th-229	äDOSE(j)			3.949E-11	2.764E-10	7.699E-08	1.101E-07	3.017E-07	1.193E-06	7.373E-06	2.919E-05	1.148E-04
0Co-60	Co-60	1.000E+00		3.096E+00	2.714E+00	1.156E-01	5.991E-02	4.319E-03	6.026E-06	1.636E-14	8.647E-29	0.000E+00
0Cs-134	Cs-134	1.000E+00		1.617E+00	1.156E+00	3.663E-04	6.837E-05	8.299E-08	4.261E-15	0.000E+00	0.000E+00	0.000E+00
0Cs-137	Cs-137	1.000E+00		6.774E-01	6.621E-01	3.814E-01	3.400E-01	2.147E-01	6.808E-02	2.169E-03	6.942E-06	7.114E-11
0Eu-152	Eu-152	7.210E-01		1.012E+00	9.614E-01	2.813E-01	2.178E-01	7.821E-02	6.045E-03	2.791E-06	7.697E-12	5.855E-23
Eu-152	Eu-152	2.790E-01		3.916E-01	3.720E-01	1.089E-01	8.427E-02	3.026E-02	2.339E-03	1.080E-06	2.979E-12	2.266E-23
Eu-152	äDOSE(j)			1.403E+00	1.333E+00	3.902E-01	3.020E-01	1.085E-01	8.384E-03	3.871E-06	1.068E-11	8.121E-23
0Gd-152	Eu-152	2.790E-01		1.383E-17	4.057E-17	4.006E-16	4.343E-16	5.082E-16	5.464E-16	5.496E-16	5.496E-16	5.496E-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	1.299E-29	2.705E-29	5.516E-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	1.997E-01	1.334E-01	2.658E-02	4.709E-04	2.619E-09	4.572E-18	0.000E+00
0Eu-155	Eu-155	1.000E+00		3.356E-02	2.901E-02	8.814E-04	4.256E-04	2.315E-05	1.596E-08	5.237E-18	0.000E+00	0.000E+00
0H-3	H-3	1.000E+00		3.035E-05	2.668E-05	1.210E-06	6.351E-07	4.824E-08	7.667E-11	3.079E-19	0.000E+00	0.000E+00
0I-129	I-129	1.000E+00		3.792E-02	3.792E-02	3.788E-02	3.787E-02	3.784E-02	3.776E-02	3.753E-02	3.714E-02	3.638E-02
0Mn-54	Mn-54	1.000E+00		7.125E-01	3.166E-01	1.112E-09	1.926E-11	1.735E-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	3.106E-03	8.197E-04	3.979E-06	6.530E-12	2.885E-29	0.000E+00	0.000E+00
0Ni-63	Ni-63	1.000E+00		5.826E-05	5.786E-05	4.900E-05	4.733E-05	4.121E-05	2.915E-05	1.032E-05	1.827E-06	5.729E-08
0Pu-238	Pu-238	1.850E-09		1.432E-10	1.421E-10	1.175E-10	1.130E-10	9.646E-11	6.497E-11	1.985E-11	2.752E-12	5.290E-14
Pu-238	Pu-238	9.996E-01		7.738E-02	7.677E-02	6.351E-02	6.104E-02	5.212E-02	3.511E-02	1.073E-02	1.487E-03	2.858E-05
Pu-238	äDOSE(j)			7.738E-02	7.677E-02	6.351E-02	6.104E-02	5.212E-02	3.511E-02	1.073E-02	1.487E-03	2.858E-05
OU-234	Pu-238	9.996E-01		2.426E-08	7.252E-08	1.123E-06	1.318E-06	2.025E-06	3.373E-06	5.302E-06	6.030E-06	6.137E-06

Individual Nuclide Dose Summed Over All Pathways
 Parent Nuclide and Branch Fraction Indicated

ONuclide	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
U-234	Pu-238	1.899E-08	4.609E-16	1.378E-15	2.134E-14	2.505E-14	3.848E-14	6.409E-14	1.007E-13	1.146E-13	1.166E-13
U-234	Pu-238	2.100E-04	5.096E-12	1.523E-11	2.360E-10	2.769E-10	4.254E-10	7.085E-10	1.114E-09	1.267E-09	1.289E-09
U-234	Pu-238	2.771E-10	6.726E-18	2.011E-17	3.115E-16	3.655E-16	5.616E-16	9.352E-16	1.470E-15	1.672E-15	1.701E-15
U-234	Pu-238	3.989E-12	9.682E-20	2.894E-19	4.483E-18	5.261E-18	8.083E-18	1.346E-17	2.116E-17	2.407E-17	2.449E-17
U-234	Pu-238	1.998E-04	4.848E-12	1.449E-11	2.245E-10	2.635E-10	4.048E-10	6.741E-10	1.060E-09	1.205E-09	1.226E-09
U-234	Pu-238	2.637E-10	6.399E-18	1.913E-17	2.963E-16	3.478E-16	5.343E-16	8.898E-16	1.399E-15	1.591E-15	1.619E-15
U-234	Pu-238	3.795E-12	9.211E-20	2.754E-19	4.266E-18	5.006E-18	7.690E-18	1.281E-17	2.013E-17	2.290E-17	2.330E-17
U-234	Pu-238	4.196E-08	1.018E-15	3.044E-15	4.716E-14	5.534E-14	8.502E-14	1.416E-13	2.226E-13	2.531E-13	2.576E-13
U-234	Pu-238	5.538E-14	1.344E-21	4.018E-21	6.225E-20	7.305E-20	1.122E-19	1.869E-19	2.938E-19	3.341E-19	3.400E-19
U-234	Pu-238	7.972E-16	1.935E-23	5.784E-23	8.960E-22	1.051E-21	1.615E-21	2.690E-21	4.229E-21	4.809E-21	4.894E-21
U-234	Pu-238	2.000E-07	4.854E-15	1.451E-14	2.248E-13	2.638E-13	4.052E-13	6.749E-13	1.061E-12	1.207E-12	1.228E-12
U-234	Pu-238	2.640E-13	6.407E-21	1.915E-20	2.967E-19	3.482E-19	5.349E-19	8.908E-19	1.400E-18	1.593E-18	1.621E-18
U-234	Pu-238	3.800E-15	9.222E-23	2.757E-22	4.271E-21	5.012E-21	7.700E-21	1.282E-20	2.016E-20	2.292E-20	2.333E-20
U-234	U-234	9.996E-01	1.723E-02	1.723E-02	1.723E-02	1.723E-02	1.723E-02	1.722E-02	1.722E-02	1.720E-02	1.718E-02
U-234	U-238	1.599E-03	3.892E-11	1.168E-10	1.985E-09	2.374E-09	3.930E-09	7.821E-09	1.949E-08	3.892E-08	7.775E-08
U-234	U-238	2.111E-09	5.137E-17	1.541E-16	2.620E-15	3.133E-15	5.188E-15	1.032E-14	2.573E-14	5.138E-14	1.026E-13
U-234	U-238	3.039E-11	7.394E-19	2.218E-18	3.771E-17	4.510E-17	7.468E-17	1.486E-16	3.703E-16	7.396E-16	1.477E-15
U-234	U-238	3.359E-07	8.174E-15	2.452E-14	4.169E-13	4.986E-13	8.255E-13	1.643E-12	4.094E-12	8.176E-12	1.633E-11
U-234	U-238	4.434E-13	1.079E-20	3.237E-20	5.503E-19	6.582E-19	1.090E-18	2.168E-18	5.404E-18	1.079E-17	2.156E-17
U-234	U-238	6.383E-15	1.553E-22	4.659E-22	7.921E-21	9.474E-21	1.569E-20	3.121E-20	7.778E-20	1.553E-19	3.103E-19
U-234	U-238	3.196E-07	7.777E-15	2.333E-14	3.966E-13	4.744E-13	7.854E-13	1.563E-12	3.895E-12	7.779E-12	1.554E-11
U-234	U-238	4.219E-13	1.027E-20	3.080E-20	5.235E-19	6.262E-19	1.037E-18	2.063E-18	5.141E-18	1.027E-17	2.051E-17
U-234	U-238	6.073E-15	1.478E-22	4.433E-22	7.536E-21	9.013E-21	1.492E-20	2.970E-20	7.400E-20	1.478E-19	2.952E-19
U-234	U-238	6.713E-11	1.634E-18	4.901E-18	8.331E-17	9.964E-17	1.650E-16	3.283E-16	8.181E-16	1.634E-15	3.264E-15
U-234	U-238	8.862E-17	2.156E-24	6.469E-24	1.100E-22	1.315E-22	2.178E-22	4.333E-22	1.080E-21	2.157E-21	4.308E-21
U-234	U-238	1.276E-18	3.103E-26	9.311E-26	1.583E-24	1.893E-24	3.135E-24	6.238E-24	1.554E-23	3.104E-23	6.201E-23
U-234	U-238	3.200E-10	7.787E-18	2.336E-17	3.971E-16	4.750E-16	7.864E-16	1.565E-15	3.900E-15	7.788E-15	1.556E-14
U-234	U-238	4.224E-16	1.028E-23	3.084E-23	5.242E-22	6.270E-22	1.038E-21	2.066E-21	5.147E-21	1.028E-20	2.053E-20
U-234	U-238	6.080E-18	1.479E-25	4.438E-25	7.545E-24	9.024E-24	1.494E-23	2.973E-23	7.409E-23	1.480E-22	2.956E-22
U-234	U-238	9.980E-01	2.428E-08	7.285E-08	1.238E-06	1.481E-06	2.453E-06	4.880E-06	1.216E-05	2.429E-05	4.852E-05
U-234	U-238	1.317E-06	3.206E-14	9.617E-14	1.635E-12	1.955E-12	3.237E-12	6.442E-12	1.605E-11	3.206E-11	6.404E-11
U-234	U-238	1.896E-08	4.614E-16	1.384E-15	2.353E-14	2.814E-14	4.660E-14	9.273E-14	2.311E-13	4.615E-13	9.218E-13
U-234	U-238	2.096E-04	5.101E-12	1.530E-11	2.601E-10	3.111E-10	5.151E-10	1.025E-09	2.554E-09	5.102E-09	1.019E-08
U-234	U-238	2.767E-10	6.733E-18	2.020E-17	3.434E-16	4.107E-16	6.800E-16	1.353E-15	3.372E-15	6.734E-15	1.345E-14
U-234	U-238	3.983E-12	9.692E-20	2.907E-19	4.942E-18	5.912E-18	9.788E-18	1.948E-17	4.853E-17	9.693E-17	1.936E-16
U-234	U-238	1.994E-04	4.853E-12	1.456E-11	2.475E-10	2.960E-10	4.901E-10	9.753E-10	2.430E-09	4.854E-09	9.695E-09
U-234	U-238	2.633E-10	6.406E-18	1.922E-17	3.267E-16	3.907E-16	6.469E-16	1.287E-15	3.208E-15	6.407E-15	1.280E-14
U-234	U-238	3.789E-12	9.221E-20	2.766E-19	4.702E-18	5.624E-18	9.312E-18	1.853E-17	4.618E-17	9.222E-17	1.842E-16
U-234	U-238	4.189E-08	1.019E-15	3.058E-15	5.198E-14	6.218E-14	1.029E-13	2.049E-13	5.105E-13	1.020E-12	2.036E-12
U-234	U-238	5.530E-14	1.346E-21	4.037E-21	6.862E-20	8.207E-20	1.359E-19	2.704E-19	6.738E-19	1.346E-18	2.688E-18
U-234	U-238	7.959E-16	1.937E-23	5.810E-23	9.877E-22	1.181E-21	1.956E-21	3.892E-21	9.699E-21	1.937E-20	3.869E-20
U-234	U-238	1.997E-07	4.859E-15	1.458E-14	2.478E-13	2.964E-13	4.907E-13	9.765E-13	2.433E-12	4.860E-12	9.707E-12
U-234	U-238	2.636E-13	6.414E-21	1.924E-20	3.271E-19	3.912E-19	6.477E-19	1.289E-18	3.212E-18	6.415E-18	1.281E-17
U-234	U-238	3.794E-15	9.232E-23	2.770E-22	4.708E-21	5.631E-21	9.323E-21	1.855E-20	4.623E-20	9.234E-20	1.844E-19
U-234	äDOSE(j)		1.723E-02	1.723E-02	1.723E-02	1.723E-02	1.723E-02	1.723E-02	1.723E-02	1.723E-02	1.723E-02
0Th-230	Pu-238	9.996E-01	3.237E-13	2.261E-12	5.922E-10	8.365E-10	2.181E-09	7.666E-09	3.478E-08	9.243E-08	2.140E-07
Th-230	Pu-238	1.899E-08	6.150E-21	4.295E-20	1.125E-17	1.589E-17	4.144E-17	1.457E-16	6.609E-16	1.756E-15	4.066E-15
Th-230	Pu-238	2.100E-04	6.798E-17	4.748E-16	1.244E-13	1.757E-13	4.581E-13	1.610E-12	7.306E-12	1.942E-11	4.495E-11

Individual Nuclide Dose Summed Over All Pathways
 Parent Nuclide and Branch Fraction Indicated

ONuclide	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	AAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Th-230	Pu-238	2.771E-10	8.974E-23	6.268E-22	1.642E-19	2.319E-19	6.047E-19	2.125E-18	9.644E-18	2.563E-17	5.934E-17
Th-230	Pu-238	3.989E-12	1.292E-24	9.022E-24	2.363E-21	3.338E-21	8.705E-21	3.059E-20	1.388E-19	3.689E-19	8.541E-19
Th-230	Pu-238	1.998E-04	6.468E-17	4.517E-16	1.183E-13	1.672E-13	4.359E-13	1.532E-12	6.951E-12	1.847E-11	4.277E-11
Th-230	Pu-238	2.637E-10	8.538E-23	5.963E-22	1.562E-19	2.207E-19	5.754E-19	2.022E-18	9.175E-18	2.438E-17	5.645E-17
Th-230	Pu-238	3.795E-12	1.229E-24	8.583E-24	2.249E-21	3.176E-21	8.282E-21	2.911E-20	1.321E-19	3.510E-19	8.126E-19
Th-230	Pu-238	4.196E-08	1.359E-20	9.489E-20	2.486E-17	3.511E-17	9.155E-17	3.218E-16	1.460E-15	3.880E-15	8.983E-15
Th-230	Pu-238	5.538E-14	1.792E-26	1.253E-25	3.281E-23	4.635E-23	1.209E-22	4.248E-22	1.927E-21	5.122E-21	1.186E-20
Th-230	Pu-238	7.972E-16	2.572E-28	1.796E-27	4.723E-25	6.671E-25	1.740E-24	6.114E-24	2.774E-23	7.372E-23	1.707E-22
Th-230	Pu-238	2.000E-07	6.476E-20	4.523E-19	1.185E-16	1.674E-16	4.364E-16	1.534E-15	6.960E-15	1.849E-14	4.282E-14
Th-230	Pu-238	2.640E-13	8.548E-26	5.970E-25	1.564E-22	2.209E-22	5.761E-22	2.025E-21	9.187E-21	2.441E-20	5.652E-20
Th-230	Pu-238	3.800E-15	1.226E-27	8.589E-27	2.251E-24	3.180E-24	8.292E-24	2.914E-23	1.322E-22	3.514E-22	8.136E-22
Th-230	U-234	9.996E-01	7.495E-02	7.495E-02	7.493E-02	7.493E-02	7.491E-02	7.488E-02	7.478E-02	7.460E-02	7.426E-02
Th-230	U-234	9.996E-01	3.446E-07	1.034E-06	1.757E-05	2.102E-05	3.479E-05	6.922E-05	1.724E-04	3.439E-04	6.852E-04
Th-230	U-234	1.319E-06	4.549E-13	1.365E-12	2.319E-11	2.774E-11	4.593E-11	9.137E-11	2.275E-10	4.539E-10	9.046E-10
Th-230	U-234	1.899E-08	6.547E-15	1.964E-14	3.339E-13	3.993E-13	6.611E-13	1.315E-12	3.275E-12	6.534E-12	1.302E-11
Th-230	U-234	2.100E-04	7.238E-11	2.171E-10	3.691E-09	4.414E-09	7.308E-09	1.454E-08	3.621E-08	7.223E-08	1.439E-07
Th-230	U-234	2.771E-10	9.554E-17	2.866E-16	4.872E-15	5.827E-15	9.647E-15	1.919E-14	4.779E-14	9.534E-14	1.900E-13
Th-230	U-234	3.989E-12	1.375E-18	4.126E-18	7.012E-17	8.387E-17	1.389E-16	2.762E-16	6.879E-16	1.372E-15	2.735E-15
Th-230	U-234	1.998E-04	6.886E-11	2.066E-10	3.511E-09	4.200E-09	6.953E-09	1.383E-08	3.445E-08	6.872E-08	1.370E-07
Th-230	U-234	2.637E-10	9.090E-17	2.727E-16	4.635E-15	5.544E-15	9.178E-15	1.826E-14	4.547E-14	9.071E-14	1.808E-13
Th-230	U-234	3.795E-12	1.308E-18	3.925E-18	6.672E-17	7.980E-17	1.321E-16	2.628E-16	6.545E-16	1.306E-15	2.602E-15
Th-230	U-234	4.196E-08	1.446E-14	4.339E-14	7.376E-13	8.822E-13	1.460E-12	2.906E-12	7.236E-12	1.443E-11	2.877E-11
Th-230	U-234	5.538E-14	1.909E-20	5.728E-20	9.736E-19	1.164E-18	1.928E-18	3.835E-18	9.551E-18	1.905E-17	3.797E-17
Th-230	U-234	7.972E-16	2.748E-22	8.245E-22	1.401E-20	1.676E-20	2.775E-20	5.521E-20	1.375E-19	2.743E-19	5.466E-19
Th-230	U-234	2.000E-07	6.895E-14	2.068E-13	3.516E-12	4.205E-12	6.961E-12	1.385E-11	3.449E-11	6.880E-11	1.371E-10
Th-230	U-234	2.640E-13	9.101E-20	2.730E-19	4.641E-18	5.551E-18	9.189E-18	1.828E-17	4.553E-17	9.082E-17	1.810E-16
Th-230	U-234	3.800E-15	1.310E-21	3.930E-21	6.680E-20	7.989E-20	1.323E-19	2.631E-19	6.553E-19	1.307E-18	2.605E-18
Th-230	U-238	1.599E-03	5.189E-16	3.632E-15	1.012E-12	1.448E-12	3.969E-12	1.572E-11	9.758E-11	3.891E-10	1.552E-09
Th-230	U-238	2.111E-09	6.849E-22	4.795E-21	1.336E-18	1.911E-18	5.239E-18	2.075E-17	1.288E-16	5.137E-16	2.048E-15
Th-230	U-238	3.039E-11	9.859E-24	6.901E-23	1.923E-20	2.751E-20	7.542E-20	2.986E-19	1.854E-18	7.394E-18	2.948E-17
Th-230	U-238	3.359E-07	1.090E-19	7.629E-19	2.126E-16	3.042E-16	8.337E-16	3.301E-15	2.050E-14	8.174E-14	3.259E-13
Th-230	U-238	4.434E-13	1.439E-25	1.007E-24	2.807E-22	4.015E-22	1.100E-21	4.358E-21	2.706E-20	1.079E-19	4.303E-19
Th-230	U-238	6.383E-15	2.063E-27	1.449E-26	4.040E-24	5.779E-24	1.584E-23	6.272E-23	3.894E-22	1.553E-21	6.193E-21
Th-230	U-238	3.196E-07	1.037E-19	7.259E-19	2.023E-16	2.894E-16	7.932E-16	3.141E-15	1.950E-14	7.777E-14	3.101E-13
Th-230	U-238	4.219E-13	1.369E-25	9.581E-25	2.670E-22	3.820E-22	1.047E-21	4.146E-21	2.574E-20	1.027E-19	4.093E-19
Th-230	U-238	6.073E-15	1.963E-27	1.378E-26	3.843E-24	5.498E-24	1.507E-23	5.967E-23	3.705E-22	1.478E-21	5.892E-21
Th-230	U-238	6.713E-11	2.178E-23	1.525E-22	4.249E-20	6.078E-20	1.666E-19	6.597E-19	4.096E-18	1.633E-17	6.514E-17
Th-230	U-238	8.862E-17	2.864E-29	2.005E-28	5.609E-26	8.023E-26	2.199E-25	8.708E-25	5.407E-24	2.156E-23	8.598E-23
Th-230	U-238	1.276E-18	0.000E+00	0.000E+00	8.043E-28	1.151E-27	3.164E-27	1.253E-26	7.782E-26	3.104E-25	1.238E-24
Th-230	U-238	3.200E-10	1.038E-22	7.267E-22	2.025E-19	2.897E-19	7.942E-19	3.145E-18	1.952E-17	7.786E-17	3.105E-16
Th-230	U-238	4.224E-16	1.365E-28	9.557E-28	2.673E-25	3.824E-25	1.048E-24	4.151E-24	2.577E-23	1.028E-22	4.098E-22
Th-230	U-238	6.080E-18	0.000E+00	1.376E-29	3.846E-27	5.502E-27	1.508E-26	5.975E-26	3.710E-25	1.479E-24	5.899E-24
Th-230	U-238	9.980E-01	3.238E-13	2.267E-12	6.316E-10	9.036E-10	2.477E-09	9.807E-09	6.089E-08	2.428E-07	9.683E-07
Th-230	U-238	1.317E-06	4.274E-19	2.992E-18	8.338E-16	1.193E-15	3.269E-15	1.295E-14	8.038E-14	3.205E-13	1.278E-12
Th-230	U-238	1.896E-08	6.152E-21	4.306E-20	1.200E-17	1.717E-17	4.706E-17	1.863E-16	1.157E-15	4.614E-15	1.840E-14
Th-230	U-238	2.096E-04	6.801E-17	4.761E-16	1.327E-13	1.898E-13	5.202E-13	2.060E-12	1.279E-11	5.100E-11	2.034E-10
Th-230	U-238	2.767E-10	8.977E-23	6.284E-22	1.751E-19	2.505E-19	6.867E-19	2.719E-18	1.688E-17	6.733E-17	2.685E-16
Th-230	U-238	3.983E-12	1.292E-24	9.045E-24	2.521E-21	3.606E-21	9.884E-21	3.914E-20	2.430E-19	9.691E-19	3.864E-18
Th-230	U-238	1.994E-04	6.471E-17	4.529E-16	1.262E-13	1.806E-13	4.950E-13	1.960E-12	1.217E-11	4.853E-11	1.935E-10

Individual Nuclide Dose Summed Over All Pathways
 Parent Nuclide and Branch Fraction Indicated

ONuclide	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
AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA
Th-230	U-238	2.633E-10	8.541E-23	5.979E-22	1.666E-19	2.384E-19	6.533E-19	2.587E-18	1.606E-17	6.405E-17	2.554E-16
Th-230	U-238	3.789E-12	1.229E-24	8.606E-24	2.398E-21	3.431E-21	9.404E-21	3.724E-20	2.312E-19	9.220E-19	3.677E-18
Th-230	U-238	4.189E-08	1.359E-20	9.514E-20	2.651E-17	3.793E-17	1.040E-16	4.117E-16	2.556E-15	1.019E-14	4.065E-14
Th-230	U-238	5.530E-14	1.793E-26	1.256E-25	3.500E-23	5.006E-23	1.372E-22	5.434E-22	3.374E-21	1.345E-20	5.365E-20
Th-230	U-238	7.959E-16	2.573E-28	1.801E-27	5.038E-25	7.206E-25	1.975E-24	7.821E-24	4.856E-23	1.937E-22	7.723E-22
Th-230	U-238	1.997E-07	6.478E-20	4.535E-19	1.264E-16	1.808E-16	4.956E-16	1.962E-15	1.218E-14	4.858E-14	1.937E-13
Th-230	U-238	2.636E-13	8.552E-26	5.986E-25	1.668E-22	2.386E-22	6.541E-22	2.590E-21	1.608E-20	6.413E-20	2.557E-19
Th-230	U-238	3.794E-15	1.226E-27	8.612E-27	2.401E-24	3.435E-24	9.416E-24	3.728E-23	2.315E-22	9.231E-22	3.681E-21
Th-230	äDOSE(j)		7.495E-02	7.495E-02	7.495E-02	7.495E-02	7.495E-02	7.495E-02	7.495E-02	7.495E-02	7.495E-02
ORa-226	Pu-238	9.996E-01	1.110E-15	1.662E-14	7.000E-11	1.186E-10	5.170E-10	3.700E-09	4.416E-08	2.462E-07	1.156E-06
Ra-226	Pu-238	1.899E-08	2.109E-23	3.158E-22	1.330E-18	2.253E-18	9.822E-18	7.031E-17	8.391E-16	4.678E-15	2.196E-14
Ra-226	Th-230	9.996E-01	5.138E-04	1.541E-03	2.606E-02	3.114E-02	5.133E-02	1.010E-01	2.437E-01	4.614E-01	8.303E-01
Ra-226	Th-230	1.319E-06	6.783E-10	2.034E-09	3.440E-08	4.110E-08	6.775E-08	1.334E-07	3.217E-07	6.090E-07	1.096E-06
Ra-226	Th-230	1.899E-08	9.763E-12	2.928E-11	4.952E-10	5.916E-10	9.752E-10	1.920E-09	4.630E-09	8.766E-09	1.578E-08
Ra-226	U-234	9.996E-01	1.575E-09	1.102E-08	3.062E-06	4.376E-06	1.196E-05	4.702E-05	2.858E-04	1.100E-03	4.097E-03
Ra-226	U-234	1.319E-06	2.079E-15	1.455E-14	4.041E-12	5.777E-12	1.579E-11	6.207E-11	3.772E-10	1.452E-09	5.409E-09
Ra-226	U-234	1.899E-08	2.993E-17	2.095E-16	5.817E-14	8.315E-14	2.273E-13	8.935E-13	5.430E-12	2.091E-11	7.785E-11
Ra-226	U-238	1.599E-03	1.779E-18	2.668E-17	1.177E-13	2.013E-13	9.114E-13	7.143E-12	1.088E-10	8.445E-10	6.396E-09
Ra-226	U-238	2.111E-09	2.348E-24	3.522E-23	1.554E-19	2.657E-19	1.203E-18	9.429E-18	1.436E-16	1.115E-15	8.443E-15
Ra-226	U-238	3.039E-11	3.380E-26	5.069E-25	2.236E-21	3.824E-21	1.732E-20	1.357E-19	2.067E-18	1.605E-17	1.215E-16
Ra-226	U-238	9.980E-01	1.110E-15	1.665E-14	7.345E-11	1.256E-10	5.687E-10	4.457E-09	6.789E-08	5.270E-07	3.991E-06
Ra-226	U-238	1.317E-06	1.465E-21	2.198E-20	9.695E-17	1.658E-16	7.507E-16	5.884E-15	8.961E-14	6.956E-13	5.268E-12
Ra-226	U-238	1.896E-08	2.109E-23	3.163E-22	1.395E-18	2.386E-18	1.081E-17	8.469E-17	1.290E-15	1.001E-14	7.583E-14
Ra-226	äDOSE(j)		5.138E-04	1.541E-03	2.606E-02	3.114E-02	5.134E-02	1.011E-01	2.440E-01	4.625E-01	8.344E-01
OPb-210	Pu-238	9.996E-01	2.384E-18	7.338E-17	4.179E-12	8.245E-12	5.383E-11	6.137E-10	1.111E-08	7.321E-08	3.732E-07
Pb-210	Pu-238	1.319E-06	1.174E-24	3.616E-23	2.059E-18	4.062E-18	2.652E-17	3.023E-16	5.473E-15	3.607E-14	1.839E-13
Pb-210	Pu-238	2.100E-04	5.006E-22	1.541E-20	8.778E-16	1.732E-15	1.131E-14	1.289E-13	2.333E-12	1.538E-11	7.839E-11
Pb-210	Pu-238	1.998E-04	4.763E-22	1.467E-20	8.351E-16	1.648E-15	1.076E-14	1.226E-13	2.220E-12	1.463E-11	7.458E-11
Pb-210	Pu-238	4.196E-08	1.000E-25	3.080E-24	1.754E-19	3.461E-19	2.260E-18	2.576E-17	4.663E-16	3.073E-15	1.567E-14
Pb-210	Pu-238	2.000E-07	4.769E-25	1.468E-23	8.361E-19	1.650E-18	1.077E-17	1.228E-16	2.223E-15	1.465E-14	7.467E-14
Pb-210	Th-230	9.996E-01	1.833E-06	1.272E-05	2.801E-03	3.828E-03	8.837E-03	2.437E-02	7.388E-02	1.502E-01	2.795E-01
Pb-210	Th-230	2.100E-04	3.851E-10	2.672E-09	5.883E-07	8.040E-07	1.856E-06	5.119E-06	1.552E-05	3.154E-05	5.870E-05
Pb-210	Th-230	1.998E-04	3.664E-10	2.542E-09	5.597E-07	7.649E-07	1.766E-06	4.871E-06	1.476E-05	3.001E-05	5.585E-05
Pb-210	Th-230	4.196E-08	7.696E-14	5.339E-13	1.176E-10	1.607E-10	3.709E-10	1.023E-09	3.101E-09	6.303E-09	1.173E-08
Pb-210	Th-230	2.000E-07	3.668E-13	2.545E-12	5.604E-10	7.659E-10	1.768E-09	4.877E-09	1.478E-08	3.005E-08	5.592E-08
Pb-210	U-234	9.996E-01	4.221E-12	6.290E-11	2.329E-07	3.849E-07	1.531E-06	9.071E-06	7.699E-05	3.360E-04	1.334E-03
Pb-210	U-234	1.319E-06	8.867E-16	1.321E-14	4.893E-11	8.084E-11	3.215E-10	1.905E-09	1.617E-08	7.057E-08	2.801E-07
Pb-210	U-234	1.998E-04	8.436E-16	1.257E-14	4.655E-11	7.691E-11	3.059E-10	1.813E-09	1.539E-08	6.714E-08	2.665E-07
Pb-210	U-234	4.196E-08	1.772E-19	2.640E-18	9.778E-15	1.616E-14	6.425E-14	3.807E-13	3.232E-12	1.410E-11	5.598E-11
Pb-210	U-234	2.000E-07	8.446E-19	1.258E-17	4.661E-14	7.701E-14	3.063E-13	1.815E-12	1.541E-11	6.723E-11	2.668E-10
Pb-210	U-238	1.599E-03	3.819E-21	1.177E-19	6.965E-15	1.385E-14	9.343E-14	1.156E-12	2.645E-11	2.432E-10	2.017E-09
Pb-210	U-238	3.359E-07	8.021E-25	2.473E-23	1.463E-18	2.910E-18	1.963E-17	2.427E-16	5.556E-15	5.108E-14	4.237E-13
Pb-210	U-238	3.196E-07	7.631E-25	2.353E-23	1.392E-18	2.768E-18	1.867E-17	2.309E-16	5.286E-15	4.859E-14	4.031E-13
Pb-210	U-238	6.713E-11	1.600E-28	4.942E-27	2.923E-22	5.815E-22	3.922E-21	4.851E-20	1.110E-18	1.021E-17	8.467E-17
Pb-210	U-238	3.200E-10	7.625E-28	2.356E-26	1.394E-21	2.772E-21	1.869E-20	2.312E-19	5.292E-18	4.865E-17	4.036E-16
Pb-210	U-238	9.980E-01	2.383E-18	7.346E-17	4.346E-12	8.644E-12	5.830E-11	7.211E-10	1.651E-08	1.517E-07	1.259E-06
Pb-210	U-238	2.096E-04	5.005E-22	1.543E-20	9.129E-16	1.816E-15	1.225E-14	1.515E-13	3.467E-12	3.187E-11	2.644E-10

Individual Nuclide Dose Summed Over All Pathways
 Parent Nuclide and Branch Fraction Indicated

ONuclide	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	4.762E-22	1.468E-20	8.685E-16	1.728E-15	1.165E-14	1.441E-13	3.299E-12	3.032E-11	2.515E-10	
Pb-210	U-238	4.189E-08	1.000E-25	3.084E-24	1.824E-19	3.629E-19	2.447E-18	3.027E-17	6.928E-16	6.369E-15	5.283E-14	
Pb-210	U-238	1.997E-07	4.768E-25	1.470E-23	8.696E-19	1.730E-18	1.167E-17	1.443E-16	3.303E-15	3.036E-14	2.518E-13	
Pb-210	äDOSE(j)		1.834E-06	1.272E-05	2.802E-03	3.830E-03	8.842E-03	2.439E-02	7.399E-02	1.506E-01	2.809E-01	
OPu-238	Pu-238	1.319E-06	1.021E-07	1.013E-07	8.383E-08	8.058E-08	6.880E-08	4.634E-08	1.416E-08	1.963E-09	3.773E-11	
Pu-238	Pu-238	1.899E-08	1.470E-09	1.459E-09	1.207E-09	1.160E-09	9.903E-10	6.670E-10	2.038E-10	2.826E-11	5.431E-13	
Pu-238	äDOSE(j)		1.036E-07	1.028E-07	8.503E-08	8.174E-08	6.979E-08	4.701E-08	1.436E-08	1.991E-09	3.827E-11	
OU-234	Pu-238	1.319E-06	3.202E-14	9.573E-14	1.483E-12	1.740E-12	2.674E-12	4.452E-12	6.999E-12	7.960E-12	8.100E-12	
OTh-230	Pu-238	1.319E-06	4.272E-19	2.984E-18	7.817E-16	1.104E-15	2.879E-15	1.012E-14	4.591E-14	1.220E-13	2.825E-13	
ORa-226	Pu-238	1.319E-06	1.465E-21	2.194E-20	9.240E-17	1.565E-16	6.824E-16	4.885E-15	5.829E-14	3.250E-13	1.526E-12	
OPb-210	Pu-238	1.899E-08	2.414E-26	7.431E-25	4.232E-20	8.350E-20	5.451E-19	6.214E-18	1.125E-16	7.414E-16	3.780E-15	
Pb-210	Pu-238	3.989E-12	0.000E+00	1.561E-28	8.889E-24	1.754E-23	1.145E-22	1.305E-21	2.363E-20	1.557E-19	7.939E-19	
Pb-210	Pu-238	3.795E-12	0.000E+00	1.485E-28	8.457E-24	1.669E-23	1.089E-22	1.242E-21	2.248E-20	1.482E-19	7.553E-19	
Pb-210	Pu-238	7.972E-16	0.000E+00	0.000E+00	1.776E-27	3.505E-27	2.288E-26	2.608E-25	4.722E-24	3.112E-23	1.586E-22	
Pb-210	Pu-238	3.800E-15	0.000E+00	0.000E+00	8.467E-27	1.671E-26	1.091E-25	1.243E-24	2.251E-23	1.483E-22	7.562E-22	
Pb-210	Th-230	1.899E-08	1.857E-14	1.288E-13	2.836E-11	3.876E-11	8.949E-11	2.468E-10	7.482E-10	1.521E-09	2.830E-09	
Pb-210	Th-230	3.989E-12	3.900E-18	2.705E-17	5.958E-15	8.142E-15	1.880E-14	5.184E-14	1.571E-13	3.194E-13	5.945E-13	
Pb-210	Th-230	3.795E-12	3.710E-18	2.574E-17	5.668E-15	7.746E-15	1.788E-14	4.932E-14	1.495E-13	3.039E-13	5.656E-13	
Pb-210	Th-230	7.972E-16	7.793E-22	5.407E-21	1.191E-18	1.627E-18	3.756E-18	1.036E-17	3.140E-17	6.383E-17	1.188E-16	
Pb-210	Th-230	3.800E-15	3.715E-21	2.577E-20	5.675E-18	7.756E-18	1.790E-17	4.938E-17	1.497E-16	3.043E-16	5.663E-16	
Pb-210	U-234	1.899E-08	4.275E-20	6.370E-19	2.359E-15	3.898E-15	1.550E-14	9.186E-14	7.797E-13	3.402E-12	1.350E-11	
Pb-210	U-234	3.989E-12	8.979E-24	1.338E-22	4.955E-19	8.187E-19	3.256E-18	1.929E-17	1.638E-16	7.147E-16	2.837E-15	
Pb-210	U-234	3.795E-12	8.543E-24	1.273E-22	4.714E-19	7.789E-19	3.098E-18	1.836E-17	1.558E-16	6.799E-16	2.699E-15	
Pb-210	U-234	7.972E-16	1.794E-27	2.674E-26	9.902E-23	1.636E-22	6.506E-22	3.856E-21	3.273E-20	1.428E-19	5.668E-19	
Pb-210	U-234	3.800E-15	8.553E-27	1.274E-25	4.720E-22	7.798E-22	3.101E-21	1.838E-20	1.560E-19	6.808E-19	2.702E-18	
Pb-210	U-238	3.039E-11	3.867E-29	1.192E-27	7.053E-23	1.403E-22	9.462E-22	1.170E-20	2.679E-19	2.462E-18	2.043E-17	
Pb-210	U-238	6.383E-15	0.000E+00	0.000E+00	1.481E-26	2.947E-26	1.987E-25	2.458E-24	5.626E-23	5.172E-22	4.290E-21	
Pb-210	U-238	6.073E-15	0.000E+00	0.000E+00	1.409E-26	2.804E-26	1.891E-25	2.339E-24	5.353E-23	4.921E-22	4.082E-21	
Pb-210	U-238	1.276E-18	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.972E-29	4.912E-28	1.124E-26	1.034E-25	8.574E-25	
Pb-210	U-238	6.080E-18	0.000E+00	0.000E+00	0.000E+00	1.934E-29	1.893E-28	2.342E-27	5.359E-26	4.927E-25	4.087E-24	
Pb-210	U-238	1.896E-08	2.413E-26	7.439E-25	4.401E-20	8.754E-20	5.904E-19	7.303E-18	1.671E-16	1.537E-15	1.275E-14	
Pb-210	U-238	3.983E-12	0.000E+00	1.563E-28	9.244E-24	1.839E-23	1.240E-22	1.534E-21	3.511E-20	3.228E-19	2.677E-18	
Pb-210	U-238	3.789E-12	0.000E+00	1.487E-28	8.795E-24	1.749E-23	1.180E-22	1.459E-21	3.340E-20	3.071E-19	2.547E-18	
Pb-210	U-238	7.959E-16	0.000E+00	0.000E+00	1.847E-27	3.674E-27	2.478E-26	3.065E-25	7.016E-24	6.450E-23	5.350E-22	
Pb-210	U-238	3.794E-15	0.000E+00	0.000E+00	8.806E-27	1.752E-26	1.181E-25	1.461E-24	3.344E-23	3.074E-22	2.550E-21	
Pb-210	äDOSE(j)		1.857E-14	1.289E-13	2.838E-11	3.878E-11	8.954E-11	2.470E-10	7.492E-10	1.525E-09	2.845E-09	
OPu-238	Pu-238	2.100E-04	1.625E-05	1.613E-05	1.334E-05	1.282E-05	1.095E-05	7.374E-06	2.253E-06	3.124E-07	6.004E-09	
Pu-238	Pu-238	2.771E-10	2.145E-11	2.129E-11	1.761E-11	1.693E-11	1.445E-11	9.733E-12	2.974E-12	4.123E-13	7.925E-15	
Pu-238	äDOSE(j)		1.625E-05	1.613E-05	1.334E-05	1.282E-05	1.095E-05	7.374E-06	2.253E-06	3.124E-07	6.004E-09	
ORa-226	Pu-238	2.100E-04	5.858E-19	8.772E-18	3.694E-14	6.257E-14	2.728E-13	1.953E-12	2.331E-11	1.299E-10	6.100E-10	
Ra-226	Pu-238	2.771E-10	7.733E-25	1.158E-23	4.876E-20	8.259E-20	3.601E-19	2.578E-18	3.077E-17	1.715E-16	8.052E-16	
Ra-226	Pu-238	3.989E-12	1.113E-26	1.667E-25	7.019E-22	1.189E-21	5.184E-21	3.711E-20	4.428E-19	2.469E-18	1.159E-17	

Individual Nuclide Dose Summed Over All Pathways
 Parent Nuclide and Branch Fraction Indicated

ONuclide	Parent (j)	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
Ra-226	Th-230	2.100E-04	2.712E-07	8.134E-07	1.375E-05	1.643E-05	2.709E-05	5.332E-05	1.286E-04	2.435E-04	4.382E-04
Ra-226	Th-230	2.771E-10	3.580E-13	1.074E-12	1.816E-11	2.169E-11	3.576E-11	7.038E-11	1.698E-10	3.214E-10	5.784E-10
Ra-226	Th-230	3.989E-12	5.152E-15	1.545E-14	2.613E-13	3.122E-13	5.147E-13	1.013E-12	2.444E-12	4.626E-12	8.326E-12
Ra-226	U-234	2.100E-04	8.312E-13	5.818E-12	1.616E-09	2.310E-09	6.313E-09	2.482E-08	1.508E-07	5.807E-07	2.162E-06
Ra-226	U-234	2.771E-10	1.097E-18	7.680E-18	2.133E-15	3.049E-15	8.333E-15	3.276E-14	1.991E-13	7.665E-13	2.854E-12
Ra-226	U-234	3.989E-12	1.579E-20	1.105E-19	3.070E-17	4.389E-17	1.199E-16	4.715E-16	2.866E-15	1.103E-14	4.109E-14
Ra-226	U-238	3.359E-07	9.388E-22	1.408E-20	6.212E-17	1.062E-16	4.810E-16	3.770E-15	5.742E-14	4.457E-13	3.376E-12
Ra-226	U-238	4.434E-13	1.239E-27	1.859E-26	8.200E-23	1.402E-22	6.349E-22	4.976E-21	7.579E-20	5.883E-19	4.456E-18
Ra-226	U-238	6.383E-15	1.744E-29	2.615E-28	1.180E-24	2.018E-24	9.139E-24	7.163E-23	1.091E-21	8.468E-21	6.414E-20
Ra-226	U-238	2.096E-04	5.858E-19	8.786E-18	3.876E-14	6.628E-14	3.001E-13	2.352E-12	3.583E-11	2.781E-10	2.106E-09
Ra-226	U-238	2.767E-10	7.733E-25	1.160E-23	5.117E-20	8.749E-20	3.962E-19	3.105E-18	4.730E-17	3.671E-16	2.780E-15
Ra-226	U-238	3.983E-12	1.113E-26	1.669E-25	7.365E-22	1.259E-21	5.703E-21	4.470E-20	6.808E-19	5.284E-18	4.002E-17
Ra-226	äDOSE(j)		2.712E-07	8.134E-07	1.376E-05	1.644E-05	2.710E-05	5.335E-05	1.288E-04	2.441E-04	4.404E-04
OPb-210	Pu-238	2.771E-10	2.431E-28	7.594E-27	4.325E-22	8.533E-22	5.571E-21	6.350E-20	1.150E-18	7.576E-18	3.862E-17
Pb-210	Pu-238	2.637E-10	2.313E-28	7.225E-27	4.115E-22	8.118E-22	5.300E-21	6.042E-20	1.094E-18	7.208E-18	3.675E-17
Pb-210	Pu-238	5.538E-14	0.000E+00	0.000E+00	8.642E-26	1.705E-25	1.113E-24	1.269E-23	2.297E-22	1.514E-21	7.718E-21
Pb-210	Pu-238	2.640E-13	0.000E+00	0.000E+00	4.119E-25	8.128E-25	5.307E-24	6.049E-23	1.095E-21	7.217E-21	3.679E-20
Pb-210	Th-230	1.319E-06	9.033E-13	6.267E-12	1.380E-09	1.886E-09	4.354E-09	1.201E-08	3.640E-08	7.398E-08	1.377E-07
Pb-210	Th-230	2.771E-10	1.897E-16	1.316E-15	2.899E-13	3.961E-13	9.145E-13	2.522E-12	7.645E-12	1.554E-11	2.892E-11
Pb-210	Th-230	2.637E-10	1.805E-16	1.252E-15	2.758E-13	3.769E-13	8.700E-13	2.400E-12	7.274E-12	1.478E-11	2.752E-11
Pb-210	Th-230	5.538E-14	3.792E-20	2.630E-19	5.792E-17	7.916E-17	1.827E-16	5.040E-16	1.528E-15	3.105E-15	5.780E-15
Pb-210	Th-230	2.640E-13	1.807E-19	1.254E-18	2.761E-16	3.773E-16	8.711E-16	2.403E-15	7.283E-15	1.480E-14	2.755E-14
Pb-210	U-234	1.319E-06	2.080E-18	3.099E-17	1.148E-13	1.896E-13	7.541E-13	4.469E-12	3.793E-11	1.655E-10	6.570E-10
Pb-210	U-234	2.771E-10	4.369E-22	6.509E-21	2.411E-17	3.983E-17	1.584E-16	9.387E-16	7.968E-15	3.477E-14	1.380E-13
Pb-210	U-234	2.637E-10	4.156E-22	6.193E-21	2.293E-17	3.789E-17	1.507E-16	8.931E-16	7.581E-15	3.308E-14	1.313E-13
Pb-210	U-234	5.538E-14	8.730E-26	1.301E-24	4.817E-21	7.959E-21	3.165E-20	1.876E-19	1.592E-18	6.948E-18	2.758E-17
Pb-210	U-234	2.640E-13	4.161E-25	6.200E-24	2.296E-20	3.794E-20	1.509E-19	8.942E-19	7.590E-18	3.312E-17	1.315E-16
Pb-210	U-238	2.111E-09	1.881E-27	5.800E-26	3.431E-21	6.825E-21	4.603E-20	5.694E-19	1.303E-17	1.198E-16	9.938E-16
Pb-210	U-238	4.434E-13	0.000E+00	1.201E-29	7.207E-25	1.434E-24	9.669E-24	1.196E-22	2.737E-21	2.516E-20	2.087E-19
Pb-210	U-238	4.219E-13	0.000E+00	1.143E-29	6.857E-25	1.364E-24	9.199E-24	1.138E-22	2.604E-21	2.394E-20	1.986E-19
Pb-210	U-238	8.862E-17	0.000E+00	0.000E+00	1.420E-28	2.824E-28	1.932E-27	2.390E-26	5.470E-25	5.029E-24	4.171E-23
Pb-210	U-238	4.224E-16	0.000E+00	0.000E+00	6.767E-28	1.366E-27	9.210E-27	1.139E-25	2.607E-24	2.397E-23	1.988E-22
Pb-210	U-238	1.317E-06	1.174E-24	3.619E-23	2.141E-18	4.259E-18	2.872E-17	3.553E-16	8.132E-15	7.476E-14	6.201E-13
Pb-210	U-238	2.767E-10	2.431E-28	7.602E-27	4.497E-22	8.946E-22	6.033E-21	7.463E-20	1.708E-18	1.570E-17	1.302E-16
Pb-210	U-238	2.633E-10	2.312E-28	7.233E-27	4.279E-22	8.511E-22	5.740E-21	7.100E-20	1.625E-18	1.494E-17	1.239E-16
Pb-210	U-238	5.530E-14	0.000E+00	0.000E+00	8.988E-26	1.778E-25	1.206E-24	1.491E-23	3.413E-22	3.138E-21	2.603E-20
Pb-210	U-238	2.636E-13	0.000E+00	0.000E+00	4.284E-25	8.521E-25	5.747E-24	7.109E-23	1.627E-21	1.496E-20	1.241E-19
Pb-210	äDOSE(j)		9.037E-13	6.269E-12	1.381E-09	1.887E-09	4.356E-09	1.202E-08	3.645E-08	7.418E-08	1.384E-07
OPu-238	Pu-238	3.989E-12	3.088E-13	3.064E-13	2.534E-13	2.436E-13	2.080E-13	1.401E-13	4.281E-14	5.935E-15	1.141E-16
Pu-238	Pu-238	1.998E-04	1.546E-05	1.534E-05	1.269E-05	1.220E-05	1.042E-05	7.015E-06	2.144E-06	2.972E-07	5.712E-09
Pu-238	äDOSE(j)		1.546E-05	1.534E-05	1.269E-05	1.220E-05	1.042E-05	7.015E-06	2.144E-06	2.972E-07	5.712E-09
ORa-226	Pu-238	1.998E-04	1.964E-19	2.940E-18	1.238E-14	2.097E-14	9.146E-14	6.547E-13	7.813E-12	4.355E-11	2.045E-10
Ra-226	Pu-238	3.795E-12	3.731E-27	5.587E-26	2.353E-22	3.985E-22	1.738E-21	1.244E-20	1.484E-19	8.275E-19	3.885E-18
Ra-226	Th-230	1.998E-04	9.090E-08	2.727E-07	4.611E-06	5.509E-06	9.081E-06	1.787E-05	4.311E-05	8.162E-05	1.469E-04
Ra-226	Th-230	2.637E-10	1.200E-13	3.599E-13	6.086E-12	7.271E-12	1.199E-11	2.359E-11	5.691E-11	1.077E-10	1.939E-10
Ra-226	Th-230	3.795E-12	1.727E-15	5.180E-15	8.760E-14	1.047E-13	1.725E-13	3.396E-13	8.192E-13	1.551E-12	2.791E-12

Individual Nuclide Dose Summed Over All Pathways
 Parent Nuclide and Branch Fraction Indicated

ONuclide	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
Ra-226	U-234	1.998E-04	2.786E-13	1.950E-12	5.416E-10	7.743E-10	2.116E-09	8.319E-09	5.056E-08	1.947E-07	7.249E-07
Ra-226	U-234	2.637E-10	3.678E-19	2.574E-18	7.150E-16	1.022E-15	2.793E-15	1.098E-14	6.674E-14	2.570E-13	9.569E-13
Ra-226	U-234	3.795E-12	5.294E-21	3.705E-20	1.029E-17	1.471E-17	4.021E-17	1.581E-16	9.606E-16	3.699E-15	1.377E-14
Ra-226	U-238	3.196E-07	3.147E-22	4.720E-21	2.082E-17	3.561E-17	1.612E-16	1.264E-15	1.925E-14	1.494E-13	1.132E-12
Ra-226	U-238	4.219E-13	4.154E-28	6.230E-27	2.749E-23	4.700E-23	2.128E-22	1.668E-21	2.541E-20	1.972E-19	1.494E-18
Ra-226	U-238	6.073E-15	0.000E+00	8.397E-29	3.956E-25	6.765E-25	3.063E-24	2.401E-23	3.657E-22	2.839E-21	2.150E-20
Ra-226	U-238	1.994E-04	1.964E-19	2.945E-18	1.299E-14	2.222E-14	1.006E-13	7.885E-13	1.201E-11	9.322E-11	7.061E-10
Ra-226	U-238	2.633E-10	2.592E-25	3.888E-24	1.715E-20	2.933E-20	1.328E-19	1.041E-18	1.585E-17	1.231E-16	9.320E-16
Ra-226	U-238	3.789E-12	3.731E-27	5.596E-26	2.469E-22	4.221E-22	1.912E-21	1.498E-20	2.282E-19	1.771E-18	1.342E-17
Ra-226	äDOSE(j)		9.090E-08	2.727E-07	4.611E-06	5.509E-06	9.083E-06	1.788E-05	4.316E-05	8.181E-05	1.476E-04
OPu-238	Pu-238	2.637E-10	2.041E-11	2.025E-11	1.675E-11	1.610E-11	1.375E-11	9.260E-12	2.830E-12	3.923E-13	7.540E-15
Pu-238	Pu-238	3.795E-12	2.938E-13	2.915E-13	2.411E-13	2.318E-13	1.979E-13	1.333E-13	4.073E-14	5.647E-15	1.085E-16
Pu-238	äDOSE(j)		2.071E-11	2.054E-11	1.699E-11	1.633E-11	1.395E-11	9.394E-12	2.871E-12	3.980E-13	7.649E-15
ORa-226	Pu-238	2.637E-10	2.592E-25	3.881E-24	1.635E-20	2.769E-20	1.207E-19	8.642E-19	1.031E-17	5.749E-17	2.699E-16
OPu-238	Pu-238	4.196E-08	3.248E-09	3.222E-09	2.666E-09	2.562E-09	2.188E-09	1.474E-09	4.503E-10	6.243E-11	1.200E-12
Pu-238	Pu-238	5.538E-14	4.287E-15	4.254E-15	3.519E-15	3.382E-15	2.888E-15	1.945E-15	5.944E-16	8.240E-17	1.584E-18
Pu-238	äDOSE(j)		3.248E-09	3.222E-09	2.666E-09	2.562E-09	2.188E-09	1.474E-09	4.503E-10	6.243E-11	1.200E-12
ORa-226	Pu-238	4.196E-08	1.117E-22	1.673E-21	7.045E-18	1.193E-17	5.203E-17	3.725E-16	4.445E-15	2.478E-14	1.163E-13
Ra-226	Pu-238	5.538E-14	1.440E-28	2.208E-27	9.300E-24	1.575E-23	6.869E-23	4.917E-22	5.867E-21	3.271E-20	1.536E-19
Ra-226	Pu-238	7.972E-16	0.000E+00	3.104E-29	1.339E-25	2.267E-25	9.887E-25	7.077E-24	8.446E-23	4.708E-22	2.210E-21
Ra-226	Th-230	4.196E-08	5.172E-11	1.551E-10	2.623E-09	3.134E-09	5.166E-09	1.017E-08	2.453E-08	4.644E-08	8.357E-08
Ra-226	Th-230	5.538E-14	6.827E-17	2.048E-16	3.463E-15	4.137E-15	6.820E-15	1.342E-14	3.238E-14	6.130E-14	1.103E-13
Ra-226	Th-230	7.972E-16	9.826E-19	2.947E-18	4.984E-17	5.955E-17	9.816E-17	1.932E-16	4.660E-16	8.823E-16	1.588E-15
Ra-226	U-234	4.196E-08	1.585E-16	1.110E-15	3.082E-13	4.405E-13	1.204E-12	4.733E-12	2.877E-11	1.108E-10	4.124E-10
Ra-226	U-234	5.538E-14	2.093E-22	1.465E-21	4.068E-19	5.815E-19	1.589E-18	6.248E-18	3.797E-17	1.462E-16	5.444E-16
Ra-226	U-234	7.972E-16	3.012E-24	2.108E-23	5.855E-21	8.370E-21	2.288E-20	8.993E-20	5.465E-19	2.104E-18	7.836E-18
Ra-226	U-238	6.713E-11	1.790E-25	2.685E-24	1.185E-20	2.026E-20	9.173E-20	7.190E-19	1.095E-17	8.500E-17	6.438E-16
Ra-226	U-238	8.862E-17	0.000E+00	0.000E+00	1.564E-26	2.674E-26	1.211E-25	9.490E-25	1.446E-23	1.122E-22	8.498E-22
Ra-226	U-238	1.276E-18	0.000E+00	0.000E+00	2.198E-28	3.758E-28	1.743E-27	1.366E-26	2.081E-25	1.615E-24	1.223E-23
Ra-226	U-238	4.189E-08	1.117E-22	1.676E-21	7.392E-18	1.264E-17	5.724E-17	4.486E-16	6.833E-15	5.304E-14	4.017E-13
Ra-226	U-238	5.530E-14	1.440E-28	2.212E-27	9.758E-24	1.669E-23	7.556E-23	5.922E-22	9.020E-21	7.001E-20	5.303E-19
Ra-226	U-238	7.959E-16	0.000E+00	3.109E-29	1.405E-25	2.402E-25	1.088E-24	8.524E-24	1.298E-22	1.008E-21	7.633E-21
Ra-226	äDOSE(j)		5.172E-11	1.551E-10	2.624E-09	3.135E-09	5.168E-09	1.017E-08	2.456E-08	4.655E-08	8.399E-08
OPu-238	Pu-238	7.972E-16	6.171E-17	6.123E-17	5.065E-17	4.868E-17	4.157E-17	2.800E-17	8.555E-18	1.186E-18	2.280E-20
Pu-238	Pu-238	2.000E-07	1.548E-08	1.536E-08	1.271E-08	1.221E-08	1.043E-08	7.024E-09	2.146E-09	2.976E-10	5.719E-12
Pu-238	äDOSE(j)		1.548E-08	1.536E-08	1.271E-08	1.221E-08	1.043E-08	7.024E-09	2.146E-09	2.976E-10	5.719E-12
ORa-226	Pu-238	2.000E-07	1.330E-23	1.991E-22	8.387E-19	1.420E-18	6.194E-18	4.434E-17	5.291E-16	2.950E-15	1.385E-14
Ra-226	Pu-238	3.800E-15	0.000E+00	0.000E+00	1.593E-26	2.699E-26	1.177E-25	8.424E-25	1.005E-23	5.604E-23	2.631E-22
Ra-226	Th-230	2.000E-07	6.156E-12	1.847E-11	3.123E-10	3.731E-10	6.150E-10	1.210E-09	2.920E-09	5.528E-09	9.948E-09
Ra-226	Th-230	2.640E-13	8.126E-18	2.437E-17	4.122E-16	4.925E-16	8.118E-16	1.598E-15	3.854E-15	7.296E-15	1.313E-14
Ra-226	Th-230	3.800E-15	1.170E-19	3.508E-19	5.933E-18	7.088E-18	1.168E-17	2.300E-17	5.548E-17	1.050E-16	1.890E-16
Ra-226	U-234	2.000E-07	1.887E-17	1.321E-16	3.668E-14	5.244E-14	1.433E-13	5.634E-13	3.424E-12	1.318E-11	4.909E-11
Ra-226	U-234	2.640E-13	2.491E-23	1.743E-22	4.842E-20	6.922E-20	1.892E-19	7.437E-19	4.520E-18	1.740E-17	6.480E-17

Individual Nuclide Dose Summed Over All Pathways
 Parent Nuclide and Branch Fraction Indicated

ONuclide	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
AAAAAAAA	AAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA
Ra-226	U-234	3.800E-15	3.585E-25	2.509E-24	6.970E-22	9.963E-22	2.723E-21	1.070E-20	6.506E-20	2.505E-19	9.328E-19	
Ra-226	U-238	3.200E-10	2.131E-26	3.196E-25	1.410E-21	2.411E-21	1.092E-20	8.558E-20	1.304E-18	1.012E-17	7.663E-17	
Ra-226	U-238	4.224E-16	0.000E+00	0.000E+00	1.861E-27	3.183E-27	1.441E-26	1.130E-25	1.721E-24	1.336E-23	1.012E-22	
Ra-226	U-238	6.080E-18	0.000E+00	0.000E+00	2.521E-29	4.312E-29	2.075E-28	1.626E-27	2.477E-26	1.922E-25	1.456E-24	
Ra-226	U-238	1.997E-07	1.330E-23	1.995E-22	8.800E-19	1.505E-18	6.814E-18	5.340E-17	8.134E-16	6.314E-15	4.782E-14	
Ra-226	U-238	2.636E-13	1.652E-29	2.633E-28	1.162E-24	1.986E-24	8.994E-24	7.049E-23	1.074E-21	8.334E-21	6.312E-20	
Ra-226	U-238	3.794E-15	0.000E+00	0.000E+00	1.672E-26	2.859E-26	1.295E-25	1.015E-24	1.545E-23	1.200E-22	9.086E-22	
Ra-226	äDOSE(j)		6.156E-12	1.847E-11	3.123E-10	3.731E-10	6.151E-10	1.211E-09	2.923E-09	5.541E-09	9.997E-09	
OPu-238	Pu-238	2.640E-13	2.044E-14	2.028E-14	1.677E-14	1.612E-14	1.377E-14	9.272E-15	2.833E-15	3.928E-16	7.549E-18	
Pu-238	Pu-238	3.800E-15	2.942E-16	2.918E-16	2.414E-16	2.321E-16	1.981E-16	1.335E-16	4.078E-17	5.654E-18	1.087E-19	
Pu-238	äDOSE(j)		2.073E-14	2.057E-14	1.701E-14	1.635E-14	1.396E-14	9.405E-15	2.874E-15	3.984E-16	7.658E-18	
ORa-226	Pu-238	2.640E-13	1.652E-29	2.628E-28	1.107E-24	1.875E-24	8.176E-24	5.852E-23	6.984E-22	3.894E-21	1.828E-20	
OPu-239	Pu-239	5.901E-04	5.024E-05	5.024E-05	5.020E-05	5.019E-05	5.017E-05	5.009E-05	4.988E-05	4.952E-05	4.881E-05	
Pu-239	Pu-239	1.633E-06	1.390E-07	1.390E-07	1.389E-07	1.389E-07	1.388E-07	1.386E-07	1.380E-07	1.371E-07	1.351E-07	
Pu-239	äDOSE(j)		5.038E-05	5.038E-05	5.034E-05	5.033E-05	5.030E-05	5.023E-05	5.002E-05	4.966E-05	4.895E-05	
OU-235	Pu-239	5.901E-04	5.107E-14	1.532E-13	2.604E-12	3.114E-12	5.154E-12	1.025E-11	2.549E-11	5.075E-11	1.007E-10	
U-235	Pu-239	1.633E-06	1.413E-16	4.240E-16	7.206E-15	8.618E-15	1.427E-14	2.837E-14	7.056E-14	1.405E-13	2.788E-13	
U-235	Pu-239	8.257E-06	7.146E-16	2.144E-15	3.643E-14	4.357E-14	7.212E-14	1.434E-13	3.567E-13	7.102E-13	1.409E-12	
U-235	Pu-239	2.285E-08	1.978E-18	5.933E-18	1.008E-16	1.206E-16	1.996E-16	3.970E-16	9.873E-16	1.965E-15	3.087E-15	
U-235	Pu-239	4.954E-10	4.288E-20	1.286E-19	2.186E-18	2.614E-18	4.328E-18	8.606E-18	2.140E-17	4.261E-17	8.457E-17	
U-235	Pu-239	1.371E-12	1.187E-22	3.560E-22	6.050E-21	7.236E-21	1.198E-20	2.382E-20	5.924E-20	1.179E-19	2.341E-19	
U-235	Pu-239	9.829E-01	8.507E-11	2.552E-10	4.337E-09	5.187E-09	8.586E-09	1.707E-08	4.247E-08	8.454E-08	1.678E-07	
U-235	Pu-239	2.720E-03	2.354E-13	7.063E-13	1.200E-11	1.436E-11	2.376E-11	4.725E-11	1.175E-10	2.340E-10	4.644E-10	
U-235	Pu-239	1.375E-02	1.190E-12	3.571E-12	6.068E-11	7.258E-11	1.201E-10	2.389E-10	5.942E-10	1.183E-09	2.348E-09	
U-235	Pu-239	3.806E-05	3.294E-15	9.883E-15	1.679E-13	2.009E-13	3.225E-13	6.612E-13	1.644E-12	3.274E-12	6.497E-12	
U-235	Pu-239	8.252E-07	7.142E-17	2.143E-16	3.641E-15	4.355E-15	7.208E-15	1.434E-14	3.565E-14	7.098E-14	1.409E-13	
U-235	Pu-239	2.284E-09	1.977E-19	5.930E-19	1.008E-17	1.205E-17	1.995E-17	3.967E-17	9.868E-17	1.964E-16	3.899E-16	
U-235	U-235	9.835E-01	1.729E-01	1.729E-01	1.729E-01	1.729E-01	1.729E-01	1.729E-01	1.729E-01	1.729E-01	1.729E-01	
U-235	äDOSE(j)		1.729E-01	1.729E-01	1.729E-01	1.729E-01	1.729E-01	1.729E-01	1.729E-01	1.729E-01	1.729E-01	
OPa-231	Pu-239	5.901E-04	4.097E-19	2.868E-18	7.990E-16	1.143E-15	3.132E-15	1.239E-14	7.680E-14	3.053E-13	1.210E-12	
Pa-231	Pu-239	1.633E-06	1.134E-21	7.937E-21	2.211E-18	3.163E-18	8.668E-18	3.430E-17	2.126E-16	8.450E-16	3.348E-15	
Pa-231	Pu-239	8.257E-06	5.732E-21	4.013E-20	1.118E-17	1.599E-17	4.382E-17	1.734E-16	1.075E-15	4.272E-15	1.693E-14	
Pa-231	Pu-239	2.285E-08	1.587E-23	1.111E-22	3.094E-20	4.426E-20	1.213E-19	4.799E-19	2.974E-18	1.182E-17	4.685E-17	
Pa-231	Pu-239	4.954E-10	3.440E-25	2.408E-24	6.708E-22	9.595E-22	2.630E-21	1.041E-20	6.448E-20	2.563E-19	1.016E-18	
Pa-231	Pu-239	1.371E-12	9.516E-28	6.661E-27	1.857E-24	2.656E-24	7.278E-24	2.880E-23	1.785E-22	7.094E-22	2.811E-21	
Pa-231	Pu-239	9.829E-01	6.824E-16	4.777E-15	1.331E-12	1.904E-12	5.217E-12	2.064E-11	1.279E-10	5.086E-10	2.015E-09	
Pa-231	Pu-239	2.720E-03	1.889E-18	1.322E-17	3.683E-15	5.269E-15	1.444E-14	5.713E-14	3.541E-13	1.407E-12	5.577E-12	
Pa-231	Pu-239	1.375E-02	9.548E-18	6.684E-17	1.862E-14	2.664E-14	7.299E-14	2.888E-13	1.790E-12	7.116E-12	2.820E-11	
Pa-231	Pu-239	3.806E-05	2.643E-20	1.850E-19	5.154E-17	7.372E-17	2.020E-16	7.994E-16	4.954E-15	1.969E-14	7.804E-14	
Pa-231	Pu-239	8.252E-07	5.729E-22	4.010E-21	1.117E-18	1.598E-18	4.380E-18	1.733E-17	1.074E-16	4.270E-16	1.692E-15	
Pa-231	Pu-239	2.284E-09	1.586E-24	1.110E-23	3.092E-21	4.423E-21	1.212E-20	4.797E-20	2.973E-19	1.182E-18	4.683E-18	
Pa-231	U-235	9.835E-01	2.081E-06	6.242E-06	1.061E-04	1.269E-04	2.100E-04	4.177E-04	1.040E-03	2.071E-03	4.119E-03	
Pa-231	U-235	2.722E-03	5.758E-09	1.727E-08	2.936E-07	3.511E-07	5.813E-07	1.156E-06	2.877E-06	5.733E-06	1.140E-05	
Pa-231	U-235	1.376E-02	2.911E-08	8.733E-08	1.484E-06	1.775E-06	2.939E-06	5.845E-06	1.455E-05	2.898E-05	5.763E-05	

Individual Nuclide Dose Summed Over All Pathways
 Parent Nuclide and Branch Fraction Indicated

ONuclide	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	
Pa-231	U-235	3.809E-05	8.057E-11	2.417E-10	4.108E-09	4.913E-09	8.133E-09	1.618E-08	4.026E-08	8.022E-08	1.595E-07	
Pa-231	U-235	8.257E-07	1.747E-12	5.240E-12	8.906E-11	1.065E-10	1.763E-10	3.507E-10	8.728E-10	1.739E-09	3.458E-09	
Pa-231	U-235	2.285E-09	4.834E-15	1.450E-14	2.465E-13	2.948E-13	4.880E-13	9.707E-13	2.416E-12	4.813E-12	9.570E-12	
Pa-231	äDOSE(j)		2.115E-06	6.346E-06	1.079E-04	1.290E-04	2.135E-04	4.248E-04	1.057E-03	2.106E-03	4.188E-03	
0Ac-227	Pu-239	5.901E-04	1.025E-20	1.527E-19	5.652E-16	9.338E-16	3.714E-15	2.206E-14	1.898E-13	8.527E-13	3.597E-12	
Ac-227	Pu-239	9.829E-01	1.708E-17	2.544E-16	9.415E-13	1.555E-12	6.187E-12	3.674E-11	3.161E-10	1.420E-09	5.991E-09	
Ac-227	U-235	9.835E-01	6.930E-08	4.808E-07	1.058E-04	1.446E-04	3.340E-04	9.256E-04	2.878E-03	6.144E-03	1.263E-02	
Ac-227	äDOSE(j)		6.930E-08	4.808E-07	1.058E-04	1.446E-04	3.340E-04	9.256E-04	2.878E-03	6.144E-03	1.263E-02	
0Ac-227	Pu-239	1.633E-06	2.859E-23	4.260E-22	1.577E-18	2.605E-18	1.036E-17	6.152E-17	5.293E-16	2.378E-15	1.003E-14	
Ac-227	Pu-239	8.257E-06	1.235E-22	1.841E-21	6.812E-18	1.125E-17	4.476E-17	2.658E-16	2.287E-15	1.028E-14	4.335E-14	
Ac-227	Pu-239	2.720E-03	4.763E-20	7.096E-19	2.626E-15	4.339E-15	1.726E-14	1.025E-13	8.817E-13	3.962E-12	1.671E-11	
Ac-227	U-235	2.722E-03	1.933E-10	1.341E-09	2.951E-07	4.033E-07	9.317E-07	2.582E-06	8.026E-06	1.714E-05	3.522E-05	
Ac-227	äDOSE(j)		1.933E-10	1.341E-09	2.951E-07	4.033E-07	9.317E-07	2.582E-06	8.026E-06	1.714E-05	3.522E-05	
0Pu-239	Pu-239	8.257E-06	7.029E-07	7.029E-07	7.024E-07	7.023E-07	7.019E-07	7.009E-07	6.979E-07	6.929E-07	6.830E-07	
Pu-239	Pu-239	2.285E-08	1.945E-09	1.945E-09	1.944E-09	1.944E-09	1.943E-09	1.940E-09	1.932E-09	1.918E-09	1.890E-09	
Pu-239	äDOSE(j)		7.049E-07	7.049E-07	7.044E-07	7.043E-07	7.039E-07	7.029E-07	6.998E-07	6.948E-07	6.849E-07	
0Ac-227	Pu-239	2.285E-08	3.450E-25	5.141E-24	1.902E-20	3.143E-20	1.250E-19	7.423E-19	6.387E-18	2.870E-17	1.211E-16	
Ac-227	Pu-239	4.954E-10	7.968E-27	1.187E-25	4.394E-22	7.259E-22	2.887E-21	1.714E-20	1.475E-19	6.629E-19	2.796E-18	
Ac-227	Pu-239	3.806E-05	5.747E-22	8.563E-21	3.169E-17	5.235E-17	2.082E-16	1.236E-15	1.064E-14	4.781E-14	2.016E-13	
Ac-227	U-235	3.809E-05	2.333E-12	1.618E-11	3.561E-09	4.866E-09	1.124E-08	3.115E-08	9.685E-08	2.068E-07	4.249E-07	
Ac-227	äDOSE(j)		2.333E-12	1.618E-11	3.561E-09	4.866E-09	1.124E-08	3.115E-08	9.685E-08	2.068E-07	4.249E-07	
0Pu-239	Pu-239	4.954E-10	4.218E-11	4.218E-11	4.215E-11	4.214E-11	4.212E-11	4.206E-11	4.188E-11	4.158E-11	4.098E-11	
Pu-239	Pu-239	1.371E-12	1.167E-13	1.167E-13	1.167E-13	1.166E-13	1.166E-13	1.164E-13	1.159E-13	1.151E-13	1.134E-13	
Pu-239	äDOSE(j)		4.230E-11	4.229E-11	4.227E-11	4.226E-11	4.224E-11	4.217E-11	4.199E-11	4.169E-11	4.110E-11	
0Ac-227	Pu-239	1.371E-12	1.784E-29	3.313E-28	1.226E-24	2.026E-24	8.058E-24	4.785E-23	4.117E-22	1.850E-21	7.804E-21	
Ac-227	Pu-239	2.284E-09	3.704E-26	5.520E-25	2.043E-21	3.375E-21	1.342E-20	7.970E-20	6.858E-19	3.082E-18	1.300E-17	
Ac-227	U-235	2.285E-09	1.504E-16	1.043E-15	2.295E-13	3.137E-13	7.247E-13	2.008E-12	6.243E-12	1.333E-11	2.739E-11	
Ac-227	äDOSE(j)		1.504E-16	1.043E-15	2.295E-13	3.137E-13	7.247E-13	2.008E-12	6.243E-12	1.333E-11	2.739E-11	
0Pu-239	Pu-239	9.829E-01	8.368E-02	8.368E-02	8.362E-02	8.361E-02	8.356E-02	8.344E-02	8.308E-02	8.249E-02	8.131E-02	
Pu-239	Pu-239	2.720E-03	2.316E-04	2.316E-04	2.314E-04	2.314E-04	2.313E-04	2.309E-04	2.299E-04	2.283E-04	2.250E-04	
Pu-239	äDOSE(j)		8.391E-02	8.391E-02	8.385E-02	8.384E-02	8.379E-02	8.367E-02	8.331E-02	8.271E-02	8.153E-02	
0Pu-239	Pu-239	1.375E-02	1.171E-03	1.171E-03	1.170E-03	1.170E-03	1.169E-03	1.168E-03	1.162E-03	1.154E-03	1.138E-03	
Pu-239	Pu-239	3.806E-05	3.241E-06	3.240E-06	3.238E-06	3.238E-06	3.236E-06	3.231E-06	3.217E-06	3.194E-06	3.149E-06	
Pu-239	äDOSE(j)		1.174E-03	1.174E-03	1.173E-03	1.173E-03	1.172E-03	1.171E-03	1.166E-03	1.157E-03	1.141E-03	
0Ac-227	Pu-239	1.375E-02	2.058E-19	3.066E-18	1.135E-14	1.875E-14	7.456E-14	4.427E-13	3.809E-12	1.712E-11	7.220E-11	
Ac-227	U-235	1.376E-02	8.352E-10	5.794E-09	1.275E-06	1.743E-06	4.026E-06	1.116E-05	3.468E-05	7.405E-05	1.522E-04	
Ac-227	äDOSE(j)		8.352E-10	5.794E-09	1.275E-06	1.743E-06	4.026E-06	1.116E-05	3.468E-05	7.405E-05	1.522E-04	
0Pu-239	Pu-239	8.252E-07	7.026E-08	7.025E-08	7.021E-08	7.020E-08	7.016E-08	7.005E-08	6.975E-08	6.925E-08	6.826E-08	
Pu-239	Pu-239	2.284E-09	1.944E-10	1.944E-10	1.943E-10	1.943E-10	1.942E-10	1.939E-10	1.931E-10	1.917E-10	1.889E-10	
Pu-239	äDOSE(j)		7.045E-08	7.045E-08	7.040E-08	7.039E-08	7.035E-08	7.025E-08	6.995E-08	6.945E-08	6.845E-08	

Individual Nuclide Dose Summed Over All Pathways
 Parent Nuclide and Branch Fraction Indicated

ONuclide	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	
Ac-227	Pu-239	8.252E-07	1.327E-23	1.978E-22	7.319E-19	1.209E-18	4.809E-18	2.856E-17	2.457E-16	1.104E-15	4.657E-15	
Ac-227	U-235	8.257E-07	5.387E-14	3.737E-13	8.224E-11	1.124E-10	2.597E-10	7.196E-10	2.237E-09	4.776E-09	9.815E-09	
Ac-227		äDOSE(j)	5.387E-14	3.737E-13	8.224E-11	1.124E-10	2.597E-10	7.196E-10	2.237E-09	4.776E-09	9.815E-09	
ORu-106	Ru-106	1.000E+00	1.961E-01	9.959E-02	8.605E-09	2.905E-10	3.775E-16	0.000E+00	0.000E+00	0.000E+00	0.000E+00	
OSr-90	Sr-90	1.000E+00	2.022E-02	1.973E-02	1.107E-02	9.818E-03	6.066E-03	1.820E-03	4.917E-05	1.196E-07	7.073E-13	
OTc-99	Tc-99	1.000E+00	2.898E-04	2.898E-04	2.893E-04	2.892E-04	2.887E-04	2.876E-04	2.844E-04	2.790E-04	2.687E-04	
0Th-228	Th-228	1.000E+00	1.702E+00	1.185E+00	1.969E-04	3.212E-05	2.277E-08	3.045E-16	0.000E+00	0.000E+00	0.000E+00	
Th-228	Th-232	1.000E+00	1.313E-02	8.057E-02	1.889E+00	1.953E+00	2.023E+00	2.030E+00	2.030E+00	2.029E+00	2.029E+00	
Th-228		äDOSE(j)	1.716E+00	1.265E+00	1.889E+00	1.953E+00	2.023E+00	2.030E+00	2.030E+00	2.029E+00	2.029E+00	
0Th-230	Th-230	1.319E-06	9.893E-08	9.893E-08	9.891E-08	9.890E-08	9.889E-08	9.884E-08	9.871E-08	9.848E-08	9.803E-08	
Th-230	Th-230	1.899E-08	1.424E-09	1.424E-09	1.424E-09	1.424E-09	1.423E-09	1.423E-09	1.421E-09	1.417E-09	1.411E-09	
Th-230		äDOSE(j)	1.004E-07	1.004E-07	1.003E-07	1.003E-07	1.003E-07	1.003E-07	1.001E-07	9.990E-08	9.944E-08	
0Th-230	Th-230	2.100E-04	1.574E-05	1.574E-05	1.574E-05	1.574E-05	1.574E-05	1.573E-05	1.571E-05	1.567E-05	1.560E-05	
Th-230	Th-230	2.771E-10	2.078E-11	2.078E-11	2.078E-11	2.077E-11	2.077E-11	2.076E-11	2.073E-11	2.068E-11	2.059E-11	
Th-230		äDOSE(j)	1.574E-05	1.574E-05	1.574E-05	1.574E-05	1.574E-05	1.573E-05	1.571E-05	1.567E-05	1.560E-05	
0Th-230	Th-230	3.989E-12	2.991E-13	2.991E-13	2.990E-13	2.990E-13	2.990E-13	2.988E-13	2.984E-13	2.977E-13	2.964E-13	
Th-230	Th-230	1.998E-04	1.498E-05	1.498E-05	1.497E-05	1.497E-05	1.497E-05	1.496E-05	1.494E-05	1.491E-05	1.484E-05	
Th-230		äDOSE(j)	1.498E-05	1.498E-05	1.497E-05	1.497E-05	1.497E-05	1.496E-05	1.494E-05	1.491E-05	1.484E-05	
0Th-230	Th-230	2.637E-10	1.977E-11	1.977E-11	1.977E-11	1.977E-11	1.976E-11	1.975E-11	1.973E-11	1.968E-11	1.959E-11	
Th-230	Th-230	3.795E-12	2.846E-13	2.846E-13	2.845E-13	2.845E-13	2.844E-13	2.843E-13	2.839E-13	2.833E-13	2.820E-13	
Th-230		äDOSE(j)	2.006E-11	2.005E-11	2.005E-11	2.005E-11	2.005E-11	2.004E-11	2.001E-11	1.996E-11	1.987E-11	
0Th-230	Th-230	4.196E-08	3.146E-09	3.146E-09	3.145E-09	3.145E-09	3.145E-09	3.143E-09	3.139E-09	3.132E-09	3.117E-09	
Th-230	Th-230	5.538E-14	4.153E-15	4.153E-15	4.152E-15	4.152E-15	4.151E-15	4.149E-15	4.143E-15	4.134E-15	4.115E-15	
Th-230		äDOSE(j)	3.146E-09	3.146E-09	3.145E-09	3.145E-09	3.145E-09	3.143E-09	3.139E-09	3.132E-09	3.117E-09	
0Th-230	Th-230	7.972E-16	5.977E-17	5.977E-17	5.976E-17	5.976E-17	5.975E-17	5.972E-17	5.964E-17	5.950E-17	5.923E-17	
Th-230	Th-230	2.000E-07	1.500E-08	1.500E-08	1.499E-08	1.499E-08	1.499E-08	1.498E-08	1.496E-08	1.493E-08	1.486E-08	
Th-230		äDOSE(j)	1.500E-08	1.500E-08	1.499E-08	1.499E-08	1.499E-08	1.498E-08	1.496E-08	1.493E-08	1.486E-08	
0Th-230	Th-230	2.640E-13	1.979E-14	1.979E-14	1.979E-14	1.979E-14	1.979E-14	1.978E-14	1.975E-14	1.970E-14	1.961E-14	
Th-230	Th-230	3.800E-15	2.849E-16	2.849E-16	2.849E-16	2.848E-16	2.848E-16	2.847E-16	2.843E-16	2.836E-16	2.823E-16	
Th-230		äDOSE(j)	2.008E-14	2.008E-14	2.007E-14	2.007E-14	2.007E-14	2.006E-14	2.003E-14	1.999E-14	1.990E-14	
0Th-232	Th-232	1.000E+00	8.223E-02	8.223E-02	8.223E-02	8.223E-02	8.223E-02	8.223E-02	8.223E-02	8.222E-02	8.222E-02	
ORa-228	Th-232	1.000E+00	8.973E-02	2.555E-01	1.478E+00	1.510E+00	1.546E+00	1.549E+00	1.549E+00	1.549E+00	1.549E+00	
OU-234	U-234	1.319E-06	2.274E-08	2.274E-08	2.274E-08	2.274E-08	2.274E-08	2.274E-08	2.273E-08	2.271E-08	2.267E-08	
U-234	U-234	1.899E-08	3.274E-10	3.274E-10	3.273E-10	3.273E-10	3.273E-10	3.273E-10	3.271E-10	3.269E-10	3.264E-10	
U-234		äDOSE(j)	2.307E-08	2.307E-08	2.307E-08	2.307E-08	2.307E-08	2.306E-08	2.305E-08	2.304E-08	2.300E-08	

Individual Nuclide Dose Summed Over All Pathways
 Parent Nuclide and Branch Fraction Indicated

ONuclide	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	
U-238	U-238	4.219E-13	7.665E-13	7.665E-13	7.665E-13	7.665E-13	7.665E-13	7.665E-13	7.665E-13	7.665E-13	7.665E-13	
U-238	U-238	6.073E-15	1.103E-14	1.103E-14	1.103E-14	1.103E-14	1.103E-14	1.103E-14	1.103E-14	1.103E-14	1.103E-14	
U-238	U-238	6.713E-11	1.220E-10	1.220E-10	1.220E-10	1.220E-10	1.220E-10	1.220E-10	1.220E-10	1.220E-10	1.220E-10	
U-238	U-238	8.862E-17	1.610E-16	1.610E-16	1.610E-16	1.610E-16	1.610E-16	1.610E-16	1.610E-16	1.610E-16	1.610E-16	
U-238	U-238	1.276E-18	2.318E-18	2.318E-18	2.318E-18	2.318E-18	2.317E-18	2.317E-18	2.317E-18	2.317E-18	2.317E-18	
U-238	U-238	3.200E-10	5.814E-10	5.814E-10	5.814E-10	5.814E-10	5.814E-10	5.814E-10	5.814E-10	5.814E-10	5.813E-10	
U-238	U-238	4.224E-16	5.814E-10	5.814E-10	5.814E-10	5.814E-10	5.814E-10	5.814E-10	5.814E-10	5.814E-10	5.813E-10	
U-238	U-238	6.080E-18	7.675E-16	7.675E-16	7.675E-16	7.675E-16	7.675E-16	7.675E-16	7.674E-16	7.674E-16	7.673E-16	
U-238	U-238	9.980E-01	1.105E-17	1.105E-17	1.105E-17	1.105E-17	1.105E-17	1.105E-17	1.105E-17	1.105E-17	1.104E-17	
U-238	U-238	1.317E-06	7.785E-16	7.785E-16	7.785E-16	7.785E-16	7.785E-16	7.785E-16	7.785E-16	7.784E-16	7.784E-16	
U-238	U-238	1.896E-08	4.881E-02	4.881E-02	4.881E-02	4.881E-02	4.881E-02	4.881E-02	4.881E-02	4.880E-02	4.880E-02	
U-238	U-238	2.096E-04	6.443E-08	6.443E-08	6.443E-08	6.443E-08	6.443E-08	6.443E-08	6.443E-08	6.442E-08	6.442E-08	
U-238	U-238	2.767E-10	4.881E-02	4.881E-02	4.881E-02	4.881E-02	4.881E-02	4.881E-02	4.881E-02	4.880E-02	4.880E-02	
U-238	U-238	3.983E-12	9.274E-10	9.274E-10	9.274E-10	9.274E-10	9.274E-10	9.274E-10	9.273E-10	9.273E-10	9.272E-10	
U-238	U-238	1.994E-04	1.025E-05	1.025E-05	1.025E-05	1.025E-05	1.025E-05	1.025E-05	1.025E-05	1.025E-05	1.025E-05	
U-238	U-238	2.633E-10	1.025E-05	1.025E-05	1.025E-05	1.025E-05	1.025E-05	1.025E-05	1.025E-05	1.025E-05	1.025E-05	
U-238	U-238	3.789E-12	1.353E-11	1.353E-11	1.353E-11	1.353E-11	1.353E-11	1.353E-11	1.353E-11	1.353E-11	1.353E-11	
U-238	U-238	4.189E-08	1.948E-13	1.948E-13	1.948E-13	1.948E-13	1.948E-13	1.948E-13	1.948E-13	1.948E-13	1.948E-13	
U-238	U-238	5.530E-14	1.373E-11	1.373E-11	1.373E-11	1.373E-11	1.373E-11	1.373E-11	1.373E-11	1.373E-11	1.372E-11	
U-238	U-238	7.959E-16	9.754E-06	9.754E-06	9.754E-06	9.754E-06	9.754E-06	9.754E-06	9.754E-06	9.753E-06	9.752E-06	
U-238	U-238	1.997E-07	1.288E-11	1.288E-11	1.288E-11	1.288E-11	1.288E-11	1.288E-11	1.287E-11	1.287E-11	1.287E-11	
U-238	U-238	2.636E-13	9.754E-06	9.754E-06	9.754E-06	9.754E-06	9.754E-06	9.754E-06	9.754E-06	9.753E-06	9.752E-06	
U-238	U-238	3.794E-15	1.853E-13	1.853E-13	1.853E-13	1.853E-13	1.853E-13	1.853E-13	1.853E-13	1.853E-13	1.853E-13	
U-238	U-238	1.997E-07	2.049E-09	2.049E-09	2.049E-09	2.049E-09	2.049E-09	2.049E-09	2.049E-09	2.049E-09	2.048E-09	
U-238	U-238	2.636E-13	2.049E-09	2.049E-09	2.049E-09	2.049E-09	2.049E-09	2.049E-09	2.049E-09	2.049E-09	2.049E-09	
U-238	U-238	3.794E-15	2.704E-15	2.704E-15	2.704E-15	2.704E-15	2.704E-15	2.704E-15	2.704E-15	2.704E-15	2.704E-15	
U-238	U-238	1.997E-07	3.893E-17	3.893E-17	3.893E-17	3.893E-17	3.893E-17	3.893E-17	3.892E-17	3.892E-17	3.892E-17	
U-238	U-238	2.636E-13	2.743E-15	2.743E-15	2.743E-15	2.743E-15	2.743E-15	2.743E-15	2.743E-15	2.743E-15	2.743E-15	
U-238	U-238	3.794E-15	9.766E-09	9.766E-09	9.766E-09	9.766E-09	9.766E-09	9.766E-09	9.766E-09	9.765E-09	9.764E-09	
U-238	U-238	1.997E-07	1.289E-14	1.289E-14	1.289E-14	1.289E-14	1.289E-14	1.289E-14	1.289E-14	1.289E-14	1.289E-14	
U-238	U-238	2.636E-13	9.766E-09	9.766E-09	9.766E-09	9.766E-09	9.766E-09	9.766E-09	9.766E-09	9.765E-09	9.764E-09	
U-238	U-238	3.794E-15	1.856E-16	1.856E-16	1.856E-16	1.856E-16	1.856E-16	1.856E-16	1.855E-16	1.855E-16	1.855E-16	
U-238	U-238	1.997E-07	1.856E-16	1.856E-16	1.856E-16	1.856E-16	1.856E-16	1.856E-16	1.855E-16	1.855E-16	1.855E-16	

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

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
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
ONp-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
OU-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
OTh-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	7.073E+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
OU-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

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
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	âS(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

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
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

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
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	âS(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
ORa-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	âS(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	
OPb-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-08	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
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	
OPu-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	
OU-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	
OTh-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	
ORa-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	
OPb-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	
OPu-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	
ORa-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	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	4.951E-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	7.345E-04	
OPb-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	
OPu-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	
ORa-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

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	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	
OPu-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	
ORa-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	
OPu-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	
ORa-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	
OPu-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	
ORa-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
OPu-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
ORa-226	Pu-238	2.640E-13	0.000E+00	4.939E-07	7.345E-23	1.256E-22	5.588E-22	4.060E-21	4.889E-20	2.733E-19	1.285E-18
OPu-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
OU-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	2.204E-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
OPa-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
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	9.071E-09	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

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
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	3.001E+00	9.003E-01	2.432E-02	5.915E-05	3.499E-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	9.999E+00	9.998E+00
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	9.999E+00	9.998E+00
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	9.999E+00
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	9.999E+00	9.998E+00
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	
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	4.219E-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	
U-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	U-238	1.276E-18	1.276E-17	1.276E-17	1.276E-17	1.276E-17	1.276E-17	1.276E-17	1.276E-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	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	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	9.978E+00	
U-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	2.767E-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	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	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	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	
U-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	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	

THF(i) is the thread fraction of the parent nuclide.
 ORESALC.EXE execution time = 60.86 seconds

Dose Conversion Factor (and Related) Parameter Summary
 Dose Library: DCFPAK3.02 Adult HTO Plus DCFPAK3.02 (Adult)

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	Pb-214 (Source: DCFPAK3.02)	1.257E+00	1.257E+00	DCF1(40)
A-1	Po-210 (Source: DCFPAK3.02)	5.641E-05	5.642E-05	DCF1(41)
A-1	Po-211 (Source: DCFPAK3.02)	4.707E-02	4.708E-02	DCF1(42)
A-1	Po-212 (Source: DCFPAK3.02)	0.000E+00	0.000E+00	DCF1(43)
A-1	Po-213 (Source: DCFPAK3.02)	2.167E-04	2.167E-04	DCF1(44)
A-1	Po-214 (Source: DCFPAK3.02)	4.801E-04	4.801E-04	DCF1(45)
A-1	Po-215 (Source: DCFPAK3.02)	9.452E-04	9.453E-04	DCF1(46)
A-1	Po-216 (Source: DCFPAK3.02)	8.873E-05	8.874E-05	DCF1(47)
A-1	Po-218 (Source: DCFPAK3.02)	9.228E-09	9.229E-09	DCF1(48)
A-1	Pu-238 (Source: DCFPAK3.02)	1.111E-04	1.112E-04	DCF1(49)

Dose Conversion Factor (and Related) Parameter Summary (continued)
 Dose Library: DCFPAK3.02 Adult HTO Plus DCFPAK3.02 (Adult)

Menu	Parameter	Current Value#	Base Case*	Parameter Name
A-1	Pu-239 (Source: DCFPAK3.02)	2.765E-04	2.765E-04	DCF1(50)
A-1	Ra-223 (Source: DCFPAK3.02)	5.791E-01	5.791E-01	DCF1(51)
A-1	Ra-224 (Source: DCFPAK3.02)	4.950E-02	4.951E-02	DCF1(52)
A-1	Ra-225 (Source: DCFPAK3.02)	8.910E-03	8.911E-03	DCF1(53)
A-1	Ra-226 (Source: DCFPAK3.02)	3.176E-02	3.176E-02	DCF1(54)
A-1	Ra-228 (Source: DCFPAK3.02)	6.575E-05	6.576E-05	DCF1(55)
A-1	Rh-106 (Source: DCFPAK3.02)	1.252E+00	1.252E+00	DCF1(56)
A-1	Rn-218 (Source: DCFPAK3.02)	4.259E-03	4.260E-03	DCF1(57)
A-1	Rn-219 (Source: DCFPAK3.02)	2.970E-01	2.970E-01	DCF1(58)
A-1	Rn-220 (Source: DCFPAK3.02)	3.474E-03	3.475E-03	DCF1(59)
A-1	Rn-222 (Source: DCFPAK3.02)	2.130E-03	2.130E-03	DCF1(60)
A-1	Ru-106 (Source: DCFPAK3.02)	0.000E+00	0.000E+00	DCF1(61)
A-1	Sm-148 (Source: DCFPAK3.02)	0.000E+00	0.000E+00	DCF1(62)
A-1	Sr-90 (Source: DCFPAK3.02)	6.463E-04	6.464E-04	DCF1(63)
A-1	Tc-99 (Source: DCFPAK3.02)	1.104E-04	1.104E-04	DCF1(64)
A-1	Th-227 (Source: DCFPAK3.02)	5.641E-01	5.642E-01	DCF1(65)
A-1	Th-228 (Source: DCFPAK3.02)	7.248E-03	7.249E-03	DCF1(66)
A-1	Th-229 (Source: DCFPAK3.02)	2.877E-01	2.877E-01	DCF1(67)
A-1	Th-230 (Source: DCFPAK3.02)	1.106E-03	1.106E-03	DCF1(68)
A-1	Th-231 (Source: DCFPAK3.02)	3.250E-02	3.251E-02	DCF1(69)
A-1	Th-232 (Source: DCFPAK3.02)	4.782E-04	4.783E-04	DCF1(70)
A-1	Th-234 (Source: DCFPAK3.02)	2.316E-02	2.317E-02	DCF1(71)
A-1	Tl-206 (Source: DCFPAK3.02)	1.278E-02	1.278E-02	DCF1(72)
A-1	Tl-207 (Source: DCFPAK3.02)	2.391E-02	2.391E-02	DCF1(73)
A-1	Tl-208 (Source: DCFPAK3.02)	2.167E+01	2.167E+01	DCF1(74)
A-1	Tl-209 (Source: DCFPAK3.02)	1.287E+01	1.287E+01	DCF1(75)
A-1	Tl-210 (Source: DCFPAK3.02)	1.677E+01	1.678E+01	DCF1(76)
A-1	U-233 (Source: DCFPAK3.02)	9.191E-04	9.192E-04	DCF1(77)
A-1	U-234 (Source: DCFPAK3.02)	3.456E-04	3.456E-04	DCF1(78)
A-1	U-235 (Source: DCFPAK3.02)	7.005E-01	7.006E-01	DCF1(79)
A-1	U-235m (Source: DCFPAK3.02)	0.000E+00	0.000E+00	DCF1(80)
A-1	U-238 (Source: DCFPAK3.02)	1.713E-04	1.713E-04	DCF1(81)
A-1	Y-90 (Source: DCFPAK3.02)	4.016E-02	4.017E-02	DCF1(82)
B-1	Dose conversion factors for inhalation, mrem/pCi:			
B-1	Ac-227+D	6.464E-01	5.760E-01	DCF2(1)
B-1	Ac-227+D1	6.464E-01	5.760E-01	DCF2(2)
B-1	Ac-227+D2	6.081E-01	5.760E-01	DCF2(3)
B-1	Ac-227+D3	6.081E-01	5.760E-01	DCF2(4)
B-1	Ac-227+D4	5.761E-01	5.760E-01	DCF2(5)
B-1	Ac-227+D5	5.761E-01	5.760E-01	DCF2(6)
B-1	Am-241	3.566E-01	3.566E-01	DCF2(7)
B-1	Co-60	1.138E-04	1.138E-04	DCF2(8)
B-1	Cs-134	7.558E-05	7.558E-05	DCF2(9)
B-1	Cs-137+D	1.457E-04	1.457E-04	DCF2(10)
B-1	Eu-152	3.452E-04	3.452E-04	DCF2(11)
B-1	Eu-154	3.947E-04	3.947E-04	DCF2(13)
B-1	Eu-155	4.599E-05	4.599E-05	DCF2(14)
B-1	Gd-152	7.037E-02	7.037E-02	DCF2(15)
B-1	H-3	6.778E-08	9.689E-07	DCF2(16)

Dose Conversion Factor (and Related) Parameter Summary (continued)
 Dose Library: DCFPAK3.02 Adult HTO Plus DCFPAK3.02 (Adult)

0	3	3	3	3	3	3	3	3
Menu	3	Parameter	3	Current	3	Base	3	Parameter
	3		3	Value#	3	Case*	3	Name
	3	AAAAA	3	AAAAA	3	AAAAA	3	AAAAA
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)
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	3	1.201E-03	3	1.191E-03	3	DCF3(6)
D-1	3	Am-241	3	7.548E-04	3	7.548E-04	3	DCF3(7)
D-1	3	Co-60	3	1.265E-05	3	1.265E-05	3	DCF3(8)
D-1	3	Cs-134	3	7.141E-05	3	7.141E-05	3	DCF3(9)
D-1	3	Cs-137+D	3	5.032E-05	3	5.032E-05	3	DCF3(10)
D-1	3	Eu-152	3	4.958E-06	3	4.958E-06	3	DCF3(11)
D-1	3	Eu-154	3	7.289E-06	3	7.289E-06	3	DCF3(13)
D-1	3	Eu-155	3	1.228E-06	3	1.228E-06	3	DCF3(14)
D-1	3	Gd-152	3	1.517E-04	3	1.517E-04	3	DCF3(15)
D-1	3	H-3	3	7.067E-08	3	1.550E-07	3	DCF3(16)

Dose Conversion Factor (and Related) Parameter Summary (continued)
 Dose Library: DCFPAK3.02 Adult HTO 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	Ac-227+D1 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-05	2.000E-05	RTF(2,2)
D-34	Ac-227+D1 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-05	2.000E-05	RTF(2,3)
D-34	Ac-227+D2 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(3,1)
D-34	Ac-227+D2 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-05	2.000E-05	RTF(3,2)
D-34	Ac-227+D2 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-05	2.000E-05	RTF(3,3)
D-34	Ac-227+D3 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(4,1)
D-34	Ac-227+D3 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-05	2.000E-05	RTF(4,2)
D-34	Ac-227+D3 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-05	2.000E-05	RTF(4,3)

Dose Conversion Factor (and Related) Parameter Summary (continued)
 Dose Library: DCFPAK3.02 Adult HTO Plus DCFPAK3.02 (Adult)

Menu	Parameter	Current Value#	Base Case*	Parameter Name
D-34	Ac-227+D4 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(5,1)
D-34	Ac-227+D4 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-05	2.000E-05	RTF(5,2)
D-34	Ac-227+D4 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-05	2.000E-05	RTF(5,3)
D-34	Ac-227+D5 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(6,1)
D-34	Ac-227+D5 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-05	2.000E-05	RTF(6,2)
D-34	Ac-227+D5 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-05	2.000E-05	RTF(6,3)
D-34	Am-241 , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(7,1)
D-34	Am-241 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	5.000E-05	5.000E-05	RTF(7,2)
D-34	Am-241 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-06	2.000E-06	RTF(7,3)
D-34	Co-60 , plant/soil concentration ratio, dimensionless	8.000E-02	8.000E-02	RTF(8,1)
D-34	Co-60 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-02	2.000E-02	RTF(8,2)
D-34	Co-60 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-03	2.000E-03	RTF(8,3)
D-34	Cs-134 , plant/soil concentration ratio, dimensionless	4.000E-02	4.000E-02	RTF(9,1)
D-34	Cs-134 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.000E-02	3.000E-02	RTF(9,2)
D-34	Cs-134 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	8.000E-03	8.000E-03	RTF(9,3)
D-34	Cs-137+D , plant/soil concentration ratio, dimensionless	4.000E-02	4.000E-02	RTF(10,1)
D-34	Cs-137+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.000E-02	3.000E-02	RTF(10,2)
D-34	Cs-137+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	8.000E-03	8.000E-03	RTF(10,3)
D-34	Eu-152 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(11,1)
D-34	Eu-152 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-03	2.000E-03	RTF(11,2)
D-34	Eu-152 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-05	5.000E-05	RTF(11,3)
D-34	Eu-154 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(13,1)
D-34	Eu-154 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-03	2.000E-03	RTF(13,2)
D-34	Eu-154 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-05	5.000E-05	RTF(13,3)
D-34	Eu-155 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(14,1)
D-34	Eu-155 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-03	2.000E-03	RTF(14,2)
D-34	Eu-155 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-05	5.000E-05	RTF(14,3)
D-34	Gd-152 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(15,1)
D-34	Gd-152 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-03	2.000E-03	RTF(15,2)
D-34	Gd-152 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-05	2.000E-05	RTF(15,3)
D-34	H-3 , plant/soil concentration ratio, dimensionless	4.800E+00	4.800E+00	RTF(16,1)
D-34	H-3 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.200E-02	1.200E-02	RTF(16,2)
D-34	H-3 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-02	1.000E-02	RTF(16,3)
D-34	I-129 , plant/soil concentration ratio, dimensionless	2.000E-02	2.000E-02	RTF(17,1)
D-34	I-129 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	7.000E-03	7.000E-03	RTF(17,2)
D-34	I-129 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-02	1.000E-02	RTF(17,3)

Dose Conversion Factor (and Related) Parameter Summary (continued)
 Dose Library: DCFPAK3.02 Adult HTO Plus DCFPAK3.02 (Adult)

Menu	Parameter	Current Value#	Base Case*	Parameter Name
D-34	Mn-54 , plant/soil concentration ratio, dimensionless	3.000E-01	3.000E-01	RTF(18,1)
D-34	Mn-54 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	5.000E-04	5.000E-04	RTF(18,2)
D-34	Mn-54 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3.000E-04	3.000E-04	RTF(18,3)
D-34	Na-22 , plant/soil concentration ratio, dimensionless	5.000E-02	5.000E-02	RTF(19,1)
D-34	Na-22 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	8.000E-02	8.000E-02	RTF(19,2)
D-34	Na-22 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	4.000E-02	4.000E-02	RTF(19,3)
D-34	Nd-144 , plant/soil concentration ratio, dimensionless	2.400E-03	2.400E-03	RTF(20,1)
D-34	Nd-144 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-03	2.000E-03	RTF(20,2)
D-34	Nd-144 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-05	2.000E-05	RTF(20,3)
D-34	Ni-63 , plant/soil concentration ratio, dimensionless	5.000E-02	5.000E-02	RTF(21,1)
D-34	Ni-63 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	5.000E-03	5.000E-03	RTF(21,2)
D-34	Ni-63 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-02	2.000E-02	RTF(21,3)
D-34	Np-237+D , plant/soil concentration ratio, dimensionless	2.000E-02	2.000E-02	RTF(22,1)
D-34	Np-237+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-03	1.000E-03	RTF(22,2)
D-34	Np-237+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-06	5.000E-06	RTF(22,3)
D-34	Pa-231 , plant/soil concentration ratio, dimensionless	1.000E-02	1.000E-02	RTF(23,1)
D-34	Pa-231 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	5.000E-03	5.000E-03	RTF(23,2)
D-34	Pa-231 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-06	5.000E-06	RTF(23,3)
D-34	Pb-210+D , plant/soil concentration ratio, dimensionless	1.000E-02	1.000E-02	RTF(29,1)
D-34	Pb-210+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	8.000E-04	8.000E-04	RTF(29,2)
D-34	Pb-210+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3.000E-04	3.000E-04	RTF(29,3)
D-34	Pb-210+D1 , plant/soil concentration ratio, dimensionless	1.000E-02	1.000E-02	RTF(30,1)
D-34	Pb-210+D1 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	8.000E-04	8.000E-04	RTF(30,2)
D-34	Pb-210+D1 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3.000E-04	3.000E-04	RTF(30,3)
D-34	Pb-210+D2 , plant/soil concentration ratio, dimensionless	1.000E-02	1.000E-02	RTF(31,1)
D-34	Pb-210+D2 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	8.000E-04	8.000E-04	RTF(31,2)
D-34	Pb-210+D2 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3.000E-04	3.000E-04	RTF(31,3)
D-34	Pu-238 , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(32,1)
D-34	Pu-238 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-04	1.000E-04	RTF(32,2)
D-34	Pu-238 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-06	1.000E-06	RTF(32,3)
D-34	Pu-239 , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(48,1)
D-34	Pu-239 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-04	1.000E-04	RTF(48,2)
D-34	Pu-239 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-06	1.000E-06	RTF(48,3)
D-34	Pu-239+D , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(54,1)
D-34	Pu-239+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-04	1.000E-04	RTF(54,2)
D-34	Pu-239+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-06	1.000E-06	RTF(54,3)

Dose Conversion Factor (and Related) Parameter Summary (continued)
 Dose Library: DCFPAK3.02 Adult HTO Plus DCFPAK3.02 (Adult)

Menu	Parameter	Current Value#	Base Case*	Parameter Name
D-34	Ra-226+D , plant/soil concentration ratio, dimensionless	4.000E-02	4.000E-02	RTF(60,1)
D-34	Ra-226+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-03	1.000E-03	RTF(60,2)
D-34	Ra-226+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-03	1.000E-03	RTF(60,3)
D-34	Ra-226+D1 , plant/soil concentration ratio, dimensionless	4.000E-02	4.000E-02	RTF(63,1)
D-34	Ra-226+D1 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-03	1.000E-03	RTF(63,2)
D-34	Ra-226+D1 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-03	1.000E-03	RTF(63,3)
D-34	Ra-226+D2 , plant/soil concentration ratio, dimensionless	4.000E-02	4.000E-02	RTF(66,1)
D-34	Ra-226+D2 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-03	1.000E-03	RTF(66,2)
D-34	Ra-226+D2 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-03	1.000E-03	RTF(66,3)
D-34	Ra-226+D3 , plant/soil concentration ratio, dimensionless	4.000E-02	4.000E-02	RTF(69,1)
D-34	Ra-226+D3 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-03	1.000E-03	RTF(69,2)
D-34	Ra-226+D3 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-03	1.000E-03	RTF(69,3)
D-34	Ra-226+D4 , plant/soil concentration ratio, dimensionless	4.000E-02	4.000E-02	RTF(72,1)
D-34	Ra-226+D4 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-03	1.000E-03	RTF(72,2)
D-34	Ra-226+D4 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-03	1.000E-03	RTF(72,3)
D-34	Ra-228+D , plant/soil concentration ratio, dimensionless	4.000E-02	4.000E-02	RTF(75,1)
D-34	Ra-228+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-03	1.000E-03	RTF(75,2)
D-34	Ra-228+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-03	1.000E-03	RTF(75,3)
D-34	Ru-106+D , plant/soil concentration ratio, dimensionless	3.000E-02	3.000E-02	RTF(76,1)
D-34	Ru-106+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-03	2.000E-03	RTF(76,2)
D-34	Ru-106+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3.300E-06	3.300E-06	RTF(76,3)
D-34	Sm-148 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(77,1)
D-34	Sm-148 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-03	2.000E-03	RTF(77,2)
D-34	Sm-148 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-05	2.000E-05	RTF(77,3)
D-34	Sr-90+D , plant/soil concentration ratio, dimensionless	3.000E-01	3.000E-01	RTF(78,1)
D-34	Sr-90+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	8.000E-03	8.000E-03	RTF(78,2)
D-34	Sr-90+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-03	2.000E-03	RTF(78,3)
D-34	Tc-99 , plant/soil concentration ratio, dimensionless	5.000E+00	5.000E+00	RTF(79,1)
D-34	Tc-99 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-04	1.000E-04	RTF(79,2)
D-34	Tc-99 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-03	1.000E-03	RTF(79,3)
D-34	Th-228+D , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(80,1)
D-34	Th-228+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-04	1.000E-04	RTF(80,2)
D-34	Th-228+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-06	5.000E-06	RTF(80,3)
D-34	Th-229+D , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(81,1)
D-34	Th-229+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-04	1.000E-04	RTF(81,2)
D-34	Th-229+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-06	5.000E-06	RTF(81,3)

Dose Conversion Factor (and Related) Parameter Summary (continued)
 Dose Library: DCFPAK3.02 Adult HTO 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	Ac-227+D2 , fish	1.500E+01	1.500E+01	BIOFAC(3,1)
D-5	Ac-227+D2 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(3,2)
D-5	Ac-227+D3 , fish	1.500E+01	1.500E+01	BIOFAC(4,1)
D-5	Ac-227+D3 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(4,2)
D-5	Ac-227+D4 , fish	1.500E+01	1.500E+01	BIOFAC(5,1)
D-5	Ac-227+D4 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(5,2)

Dose Conversion Factor (and Related) Parameter Summary (continued)
 Dose Library: DCFPAK3.02 Adult HTO Plus DCFPAK3.02 (Adult)

Menu	Parameter	Current Value#	Base Case*	Parameter Name
D-5	Ac-227+D5 , fish	1.500E+01	1.500E+01	BIOFAC(6,1)
D-5	Ac-227+D5 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(6,2)
D-5	Am-241 , fish	3.000E+01	3.000E+01	BIOFAC(7,1)
D-5	Am-241 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(7,2)
D-5	Co-60 , fish	3.000E+02	3.000E+02	BIOFAC(8,1)
D-5	Co-60 , crustacea and mollusks	2.000E+02	2.000E+02	BIOFAC(8,2)
D-5	Cs-134 , fish	2.000E+03	2.000E+03	BIOFAC(9,1)
D-5	Cs-134 , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(9,2)
D-5	Cs-137+D , fish	2.000E+03	2.000E+03	BIOFAC(10,1)
D-5	Cs-137+D , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(10,2)
D-5	Eu-152 , fish	5.000E+01	5.000E+01	BIOFAC(11,1)
D-5	Eu-152 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(11,2)
D-5	Eu-154 , fish	5.000E+01	5.000E+01	BIOFAC(13,1)
D-5	Eu-154 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(13,2)
D-5	Eu-155 , fish	5.000E+01	5.000E+01	BIOFAC(14,1)
D-5	Eu-155 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(14,2)
D-5	Gd-152 , fish	2.500E+01	2.500E+01	BIOFAC(15,1)
D-5	Gd-152 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(15,2)
D-5	H-3 , fish	1.000E+00	1.000E+00	BIOFAC(16,1)
D-5	H-3 , crustacea and mollusks	1.000E+00	1.000E+00	BIOFAC(16,2)
D-5	I-129 , fish	4.000E+01	4.000E+01	BIOFAC(17,1)
D-5	I-129 , crustacea and mollusks	5.000E+00	5.000E+00	BIOFAC(17,2)
D-5	Mn-54 , fish	4.000E+02	4.000E+02	BIOFAC(18,1)
D-5	Mn-54 , crustacea and mollusks	9.000E+04	9.000E+04	BIOFAC(18,2)
D-5	Na-22 , fish	2.000E+01	2.000E+01	BIOFAC(19,1)
D-5	Na-22 , crustacea and mollusks	2.000E+02	2.000E+02	BIOFAC(19,2)
D-5	Nd-144 , fish	1.000E+02	1.000E+02	BIOFAC(20,1)
D-5	Nd-144 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(20,2)
D-5	Ni-63 , fish	1.000E+02	1.000E+02	BIOFAC(21,1)
D-5	Ni-63 , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(21,2)
D-5	Np-237+D , fish	3.000E+01	3.000E+01	BIOFAC(22,1)
D-5	Np-237+D , crustacea and mollusks	4.000E+02	4.000E+02	BIOFAC(22,2)
D-5	Pa-231 , fish	1.000E+01	1.000E+01	BIOFAC(23,1)
D-5	Pa-231 , crustacea and mollusks	1.100E+02	1.100E+02	BIOFAC(23,2)

Dose Conversion Factor (and Related) Parameter Summary (continued)
 Dose Library: DCFPAK3.02 Adult HTO 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	Sm-148 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(77,2)
D-5	Sr-90+D , fish	6.000E+01	6.000E+01	BIOFAC(78,1)
D-5	Sr-90+D , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(78,2)
D-5	Tc-99 , fish	2.000E+01	2.000E+01	BIOFAC(79,1)
D-5	Tc-99 , crustacea and mollusks	5.000E+00	5.000E+00	BIOFAC(79,2)
D-5	Th-228+D , fish	1.000E+02	1.000E+02	BIOFAC(80,1)
D-5	Th-228+D , crustacea and mollusks	5.000E+02	5.000E+02	BIOFAC(80,2)

Dose Conversion Factor (and Related) Parameter Summary (continued)
 Dose Library: DCFPAK3.02 Adult HTO Plus DCFPAK3.02 (Adult)

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

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

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

Site-Specific Parameter Summary (continued)

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

Site-Specific Parameter Summary (continued)

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

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD	Parameter Name
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 not used	³ -1.000E+00	---	³ DCNUCU(14,1)
R016	Saturated zone (cm**3/g)	³ not used	³ -1.000E+00	---	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 not used	³ 0.000E+00	---	³ DCNUCU(16,1)
R016	Saturated zone (cm**3/g)	³ not used	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 not used	³ 1.000E-01	---	³ DCNUCU(17,1)
R016	Saturated zone (cm**3/g)	³ not used	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 not used	³ 2.000E+02	---	³ DCNUCU(18,1)
R016	Saturated zone (cm**3/g)	³ not used	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 not used	³ 1.000E+01	---	³ DCNUCU(19,1)
R016	Saturated zone (cm**3/g)	³ not used	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 not used	³ 1.000E+03	---	³ DCNUCU(21,1)
R016	Saturated zone (cm**3/g)	³ not used	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)
R016	Distribution coefficients for Np-237				
R016	Contaminated zone (cm**3/g)	³ -1.000E+00	³ -1.000E+00	2.574E+02	³ DCNUCC(22)
R016	Unsaturated zone 1 (cm**3/g)	³ not used	³ -1.000E+00	---	³ DCNUCU(22,1)
R016	Saturated zone (cm**3/g)	³ not used	³ -1.000E+00	---	³ DCNUCS(22)
R016	Leach rate (/yr)	³ 0.000E+00	³ 0.000E+00	3.753E-08	³ ALEACH(22)
R016	Solubility constant	³ 0.000E+00	³ 0.000E+00	not used	³ SOLUBK(22)

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
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 Th-230				
R016	Contaminated zone (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCC (82)
R016	Unsaturated zone 1 (cm**3/g)	not used	6.000E+04	---	DCNUCU (82,1)
R016	Saturated zone (cm**3/g)	not used	6.000E+04	---	DCNUCS (82)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.611E-10	ALEACH (82)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK (82)

Site-Specific Parameter Summary (continued)

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

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
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	Distribution coefficients for daughter U-233				
R016	Contaminated zone (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCC(98)
R016	Unsaturated zone 1 (cm**3/g)	not used	5.000E+01	---	DCNUCU(98,1)
R016	Saturated zone (cm**3/g)	not used	5.000E+01	---	DCNUCS(98)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.928E-07	ALEACH(98)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(98)
R017	Inhalation rate (m**3/yr)	7.780E+03	8.400E+03	---	INHALR

Site-Specific Parameter Summary (continued)

Menu	Parameter	User	Input	Default	Used by RESRAD	Parameter Name
R017	Mass loading for inhalation (g/m**3)	3	1.510E-07	3 1.000E-04	---	3 MLINH
R017	Exposure duration	3	2.500E+01	3 3.000E+01	---	3 ED
R017	Shielding factor, inhalation	3	1.000E+00	3 4.000E-01	---	3 SHF3
R017	Shielding factor, external gamma	3	7.000E-01	3 7.000E-01	---	3 SHF1
R017	Fraction of time spent indoors	3	0.000E+00	3 5.000E-01	---	3 FIND
R017	Fraction of time spent outdoors (on site)	3	2.053E-01	3 2.500E-01	---	3 FOTD
R017	Shape factor flag, external gamma	3	1.000E+00	3 1.000E+00	>0 shows circular AREA.	3 FS
R017	Radii of shape factor array (used if FS = -1):	3		3		3
R017	Outer annular radius (m), ring 1:	3	not used	3 5.000E+01	---	3 RAD_SHAPE(1)
R017	Outer annular radius (m), ring 2:	3	not used	3 7.071E+01	---	3 RAD_SHAPE(2)
R017	Outer annular radius (m), ring 3:	3	not used	3 0.000E+00	---	3 RAD_SHAPE(3)
R017	Outer annular radius (m), ring 4:	3	not used	3 0.000E+00	---	3 RAD_SHAPE(4)
R017	Outer annular radius (m), ring 5:	3	not used	3 0.000E+00	---	3 RAD_SHAPE(5)
R017	Outer annular radius (m), ring 6:	3	not used	3 0.000E+00	---	3 RAD_SHAPE(6)
R017	Outer annular radius (m), ring 7:	3	not used	3 0.000E+00	---	3 RAD_SHAPE(7)
R017	Outer annular radius (m), ring 8:	3	not used	3 0.000E+00	---	3 RAD_SHAPE(8)
R017	Outer annular radius (m), ring 9:	3	not used	3 0.000E+00	---	3 RAD_SHAPE(9)
R017	Outer annular radius (m), ring 10:	3	not used	3 0.000E+00	---	3 RAD_SHAPE(10)
R017	Outer annular radius (m), ring 11:	3	not used	3 0.000E+00	---	3 RAD_SHAPE(11)
R017	Outer annular radius (m), ring 12:	3	not used	3 0.000E+00	---	3 RAD_SHAPE(12)
R017	Fractions of annular areas within AREA:	3		3		3
R017	Ring 1	3	not used	3 1.000E+00	---	3 FRACA(1)
R017	Ring 2	3	not used	3 2.732E-01	---	3 FRACA(2)
R017	Ring 3	3	not used	3 0.000E+00	---	3 FRACA(3)
R017	Ring 4	3	not used	3 0.000E+00	---	3 FRACA(4)
R017	Ring 5	3	not used	3 0.000E+00	---	3 FRACA(5)
R017	Ring 6	3	not used	3 0.000E+00	---	3 FRACA(6)
R017	Ring 7	3	not used	3 0.000E+00	---	3 FRACA(7)
R017	Ring 8	3	not used	3 0.000E+00	---	3 FRACA(8)
R017	Ring 9	3	not used	3 0.000E+00	---	3 FRACA(9)
R017	Ring 10	3	not used	3 0.000E+00	---	3 FRACA(10)
R017	Ring 11	3	not used	3 0.000E+00	---	3 FRACA(11)
R017	Ring 12	3	not used	3 0.000E+00	---	3 FRACA(12)
R018	Fruits, vegetables and grain consumption (kg/yr)	3	not used	3 1.600E+02	---	3 DIET(1)
R018	Leafy vegetable consumption (kg/yr)	3	not used	3 1.400E+01	---	3 DIET(2)
R018	Milk consumption (L/yr)	3	not used	3 9.200E+01	---	3 DIET(3)
R018	Meat and poultry consumption (kg/yr)	3	not used	3 6.300E+01	---	3 DIET(4)
R018	Fish consumption (kg/yr)	3	not used	3 5.400E+00	---	3 DIET(5)
R018	Other seafood consumption (kg/yr)	3	not used	3 9.000E-01	---	3 DIET(6)
R018	Soil ingestion rate (g/yr)	3	1.096E+02	3 3.650E+01	---	3 SOIL
R018	Drinking water intake (L/yr)	3	not used	3 5.100E+02	---	3 DWI
R018	Contamination fraction of drinking water	3	not used	3 1.000E+00	---	3 FDW
R018	Contamination fraction of household water	3	not used	3 1.000E+00	---	3 FHHW
R018	Contamination fraction of livestock water	3	not used	3 1.000E+00	---	3 FLW
R018	Contamination fraction of irrigation water	3	not used	3 1.000E+00	---	3 FIRW
R018	Contamination fraction of aquatic food	3	not used	3 5.000E-01	---	3 FR9
R018	Contamination fraction of plant food	3	not used	3 -1	---	3 FPLANT
R018	Contamination fraction of meat	3	not used	3 -1	---	3 FMEAT

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD	Parameter Name
R018	Contamination fraction of milk	not used	-1	---	F MILK
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	---	DROOT
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
STOR	Storage times of contaminated foodstuffs (days):				
STOR	Fruits, non-leafy vegetables, and grain	1.000E+00	1.400E+01	---	STOR_T(1)
STOR	Leafy vegetables	1.000E+00	1.000E+00	---	STOR_T(2)
STOR	Milk	1.000E+00	1.000E+00	---	STOR_T(3)
STOR	Meat and poultry	2.000E+01	2.000E+01	---	STOR_T(4)
STOR	Fish	7.000E+00	7.000E+00	---	STOR_T(5)
STOR	Crustacea and mollusks	7.000E+00	7.000E+00	---	STOR_T(6)
STOR	Well water	1.000E+00	1.000E+00	---	STOR_T(7)

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD	Parameter Name
STOR	Surface water	1.000E+00	1.000E+00	---	STOR_T(8)
STOR	Livestock fodder	4.500E+01	4.500E+01	---	STOR_T(9)
R021	Thickness of building foundation (m)	not used	1.500E-01	---	FLOOR1
R021	Bulk density of building foundation (g/cm**3)	not used	2.400E+00	---	DENSFL
R021	Total porosity of the cover material	not used	4.000E-01	---	TPCV
R021	Total porosity of the building foundation	not used	1.000E-01	---	TPFL
R021	Volumetric water content of the cover material	not used	5.000E-02	---	PH2OCV
R021	Volumetric water content of the foundation	not used	3.000E-02	---	PH2OFL
R021	Diffusion coefficient for radon gas (m/sec):				
R021	in cover material	not used	2.000E-06	---	DIFCV
R021	in foundation material	not used	3.000E-07	---	DIFFL
R021	in contaminated zone soil	not used	2.000E-06	---	DIFCZ
R021	Radon vertical dimension of mixing (m)	not used	2.000E+00	---	HMIX
R021	Average building air exchange rate (1/hr)	not used	5.000E-01	---	REXG
R021	Height of the building (room) (m)	not used	2.500E+00	---	HRM
R021	Building interior area factor	not used	0.000E+00	---	FAI
R021	Building depth below ground surface (m)	not used	-1.000E+00	---	DMFL
R021	Emanating power of Rn-222 gas	not used	2.500E-01	---	EMANA(1)
R021	Emanating power of Rn-220 gas	not used	1.500E-01	---	EMANA(2)
TITL	Number of graphical time points	32	---	---	NPTS
TITL	Maximum number of integration points for dose	17	---	---	LYMAX
TITL	Maximum number of integration points for risk	257	---	---	KYMAX

Summary of Pathway Selections

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

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)

	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
Radio-	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
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

Radio- Nuclide	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
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)

	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
Radio- Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
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																
		Water		Fish		Radon		Plant		Meat		Milk		All Pathways*				
Radio-	Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.			
Am-241	0.000E+00	0.0000	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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
Total	0.000E+00	0.0000	0.0000	0.000E+00	0.0000	0.000E+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

Radio- Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
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													
	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
Radio-	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
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
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	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
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	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
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	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
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
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
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	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
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	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
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
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
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
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*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

Radio- Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
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*			
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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	3.540E-01	0.0088	
	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	4.007E+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

Radio- Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
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																
		Water		Fish		Radon		Plant		Meat		Milk		All Pathways*				
Radio-	Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.			
Am-241	0.000E+00	0.0000	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	0.000E+00	0.0000	0.0000	0.000E+00	0.0000	0.000E+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	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.
	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	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.
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	0.0060
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	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	0.000E+00	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	0.000E+00	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	0.000E+00	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
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	0.000E+00	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	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
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	0.0638
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	0.000E+00	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	0.000E+00	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	0.000E+00	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	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
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	0.0316
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	0.000E+00	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	0.000E+00	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	0.0427
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	0.000E+00	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	0.000E+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 = 2.500E+02 years

Water Independent Pathways (Inhalation excludes radon)

	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
Radio- Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
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-	Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
0	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
Am-241	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	0.0047
Co-60	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	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	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	0.0006
Eu-152	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
Eu-154	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	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	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	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	0.0031
Mn-54	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	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	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
Np-237	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	0.0628
Pu-238	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	0.0007
Pu-239	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	0.0059
Ru-106	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	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
Tc-99	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
Th-228	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	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	0.0687
Th-232	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	0.7998
U-234	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	0.0013
U-235	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	0.0425
U-238	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	0.0100
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	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	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 Dependent Pathways																
		Water		Fish		Radon		Plant		Meat		Milk		All Pathways*				
Radio-	Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.			
Am-241	0.000E+00	0.0000	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	0.000E+00	0.0000	0.0000	0.000E+00	0.0000	0.000E+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.

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
	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	äDSR(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	äDSR(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	2.212E-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	äDSR(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	äDSR(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)								
	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	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	7.092E-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

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	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
	0Th-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
	0Th-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
	0Th-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
	0Th-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
	0Th-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
	0Th-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
	0Th-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
	0Th-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
	0Th-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

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

ONuclide	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
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
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)	(pCi/g)	(pCi/g)
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

Individual Nuclide Dose Summed Over All Pathways
 Parent Nuclide and Branch Fraction Indicated

ONuclide	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
ONp-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
OU-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
OTTh-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
OU-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

ONuclide	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
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

ONuclide	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
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	2.904E-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

ONuclide	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
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
ORa-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
OPb-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

ONuclide	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	
OPu-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	
OU-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	
OTh-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	
ORa-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	
OPb-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	1.160E-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	4.319E-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	
OPu-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	
ORa-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	

Individual Nuclide Dose Summed Over All Pathways
 Parent Nuclide and Branch Fraction Indicated

ONuclide	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
Ra-226	Th-230	2.100E-04	2.398E-06	7.191E-06	1.216E-04	1.453E-04	2.395E-04	4.714E-04	1.137E-03	2.153E-03	3.874E-03
Ra-226	Th-230	2.771E-10	3.165E-12	9.493E-12	1.605E-10	1.918E-10	3.162E-10	6.223E-10	1.501E-09	2.842E-09	5.114E-09
Ra-226	Th-230	3.989E-12	4.555E-14	1.366E-13	2.311E-12	2.761E-12	4.551E-12	8.957E-12	2.161E-11	4.090E-11	7.361E-11
Ra-226	U-234	2.100E-04	7.349E-12	5.144E-11	1.429E-08	2.042E-08	5.582E-08	2.194E-07	1.334E-06	5.134E-06	1.912E-05
Ra-226	U-234	2.771E-10	9.701E-18	6.790E-17	1.886E-14	2.696E-14	7.368E-14	2.896E-13	1.760E-12	6.777E-12	2.524E-11
Ra-226	U-234	3.989E-12	1.396E-19	9.773E-19	2.714E-16	3.880E-16	1.061E-15	4.169E-15	2.534E-14	9.755E-14	3.633E-13
Ra-226	U-238	3.359E-07	8.300E-21	1.245E-19	5.492E-16	9.391E-16	4.253E-15	3.333E-14	5.077E-13	3.940E-12	2.985E-11
Ra-226	U-238	4.434E-13	1.096E-26	1.643E-25	7.250E-22	1.240E-21	5.614E-21	4.400E-20	6.701E-19	5.201E-18	3.940E-17
Ra-226	U-238	6.383E-15	1.570E-28	2.365E-27	1.044E-23	1.784E-23	8.080E-23	6.333E-22	9.646E-21	7.487E-20	5.671E-19
Ra-226	U-238	2.096E-04	5.179E-18	7.768E-17	3.427E-13	5.860E-13	2.654E-12	2.080E-11	3.168E-10	2.459E-09	1.812E-08
Ra-226	U-238	2.767E-10	6.837E-24	1.025E-22	4.524E-19	7.735E-19	3.503E-18	2.745E-17	4.182E-16	3.246E-15	2.458E-14
Ra-226	U-238	3.983E-12	9.841E-26	1.476E-24	6.511E-21	1.113E-20	5.042E-20	3.952E-19	6.019E-18	4.672E-17	3.539E-16
Ra-226	äDOSE(j)		2.398E-06	7.192E-06	1.216E-04	1.453E-04	2.396E-04	4.716E-04	1.138E-03	2.158E-03	3.894E-03
OPb-210	Pu-238	2.771E-10	4.997E-28	1.538E-26	8.760E-22	1.728E-21	1.128E-20	1.286E-19	2.329E-18	1.535E-17	7.824E-17
Pb-210	Pu-238	2.637E-10	4.754E-28	1.464E-26	8.335E-22	1.645E-21	1.074E-20	1.224E-19	2.215E-18	1.460E-17	7.444E-17
Pb-210	Pu-238	5.538E-14	0.000E+00	0.000E+00	1.751E-25	3.454E-25	2.255E-24	2.571E-23	4.653E-22	3.067E-21	1.544E-20
Pb-210	Pu-238	2.640E-13	0.000E+00	1.372E-29	8.345E-25	1.646E-24	1.075E-23	1.225E-22	2.218E-21	1.462E-20	7.453E-20
Pb-210	Th-230	1.319E-06	1.830E-12	1.269E-11	2.795E-09	3.820E-09	8.819E-09	2.432E-08	7.373E-08	1.499E-07	2.789E-07
Pb-210	Th-230	2.771E-10	3.843E-16	2.666E-15	5.872E-13	8.024E-13	1.852E-12	5.109E-12	1.549E-11	3.148E-11	5.859E-11
Pb-210	Th-230	2.637E-10	3.657E-16	2.537E-15	5.586E-13	7.634E-13	1.762E-12	4.861E-12	1.473E-11	2.995E-11	5.574E-11
Pb-210	Th-230	5.538E-14	7.681E-20	5.328E-19	1.173E-16	1.604E-16	3.702E-16	1.021E-15	3.095E-15	6.291E-15	1.171E-14
Pb-210	Th-230	2.640E-13	3.661E-19	2.540E-18	5.593E-16	7.643E-16	1.765E-15	4.867E-15	1.475E-14	2.999E-14	5.581E-14
Pb-210	U-234	1.319E-06	4.213E-18	6.277E-17	2.325E-13	3.841E-13	1.528E-12	9.053E-12	7.684E-11	3.353E-10	1.331E-09
Pb-210	U-234	2.771E-10	8.849E-22	1.319E-20	4.883E-17	8.068E-17	3.209E-16	1.901E-15	1.614E-14	7.043E-14	2.795E-13
Pb-210	U-234	2.637E-10	8.420E-22	1.254E-20	4.646E-17	7.676E-17	3.053E-16	1.809E-15	1.536E-14	6.701E-14	2.660E-13
Pb-210	U-234	5.538E-14	1.768E-25	2.635E-24	9.758E-21	1.612E-20	6.412E-20	3.800E-19	3.225E-18	1.408E-17	5.587E-17
Pb-210	U-234	2.640E-13	8.430E-25	1.256E-23	4.651E-20	7.686E-20	3.057E-19	1.811E-18	1.537E-17	6.709E-17	2.663E-16
Pb-210	U-238	2.111E-09	3.811E-27	1.175E-25	6.951E-21	1.383E-20	9.325E-20	1.153E-18	2.640E-17	2.427E-16	2.013E-15
Pb-210	U-238	4.434E-13	0.000E+00	2.311E-29	1.460E-24	2.904E-24	1.959E-23	2.423E-22	5.545E-21	5.097E-20	4.228E-19
Pb-210	U-238	4.219E-13	0.000E+00	2.198E-29	1.389E-24	2.763E-24	1.863E-23	2.305E-22	5.276E-21	4.850E-20	4.023E-19
Pb-210	U-238	8.862E-17	0.000E+00	0.000E+00	2.918E-28	5.803E-28	3.914E-27	4.841E-26	1.108E-24	1.019E-23	8.450E-23
Pb-210	U-238	4.224E-16	0.000E+00	0.000E+00	1.391E-27	2.766E-27	1.866E-26	2.308E-25	5.282E-24	4.856E-23	4.028E-22
Pb-210	U-238	1.317E-06	2.378E-24	7.332E-23	4.337E-18	8.627E-18	5.819E-17	7.197E-16	1.647E-14	1.514E-13	1.256E-12
Pb-210	U-238	2.767E-10	4.995E-28	1.540E-26	9.111E-22	1.812E-21	1.222E-20	1.512E-19	3.460E-18	3.181E-17	2.638E-16
Pb-210	U-238	2.633E-10	4.752E-28	1.465E-26	8.668E-22	1.724E-21	1.163E-20	1.438E-19	3.292E-18	3.026E-17	2.510E-16
Pb-210	U-238	5.530E-14	0.000E+00	0.000E+00	1.821E-25	3.621E-25	2.442E-24	3.021E-23	6.915E-22	6.357E-21	5.273E-20
Pb-210	U-238	2.636E-13	0.000E+00	1.374E-29	8.678E-25	1.726E-24	1.164E-23	1.440E-22	3.296E-21	3.030E-20	2.513E-19
Pb-210	äDOSE(j)		1.831E-12	1.270E-11	2.797E-09	3.822E-09	8.824E-09	2.434E-08	7.384E-08	1.503E-07	2.804E-07
OPu-238	Pu-238	3.989E-12	7.557E-13	7.498E-13	6.202E-13	5.962E-13	5.090E-13	3.428E-13	1.048E-13	1.452E-14	2.792E-16
Pu-238	Pu-238	1.998E-04	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
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
ORa-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

Individual Nuclide Dose Summed Over All Pathways
 Parent Nuclide and Branch Fraction Indicated

ONuclide	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
Ra-226	U-234	1.998E-04	2.380E-12	1.666E-11	4.627E-09	6.614E-09	1.808E-08	7.106E-08	4.319E-07	1.663E-06	6.192E-06
Ra-226	U-234	2.637E-10	3.142E-18	2.199E-17	6.107E-15	8.730E-15	2.386E-14	9.380E-14	5.701E-13	2.195E-12	8.173E-12
Ra-226	U-234	3.795E-12	4.522E-20	3.165E-19	8.791E-17	1.257E-16	3.435E-16	1.350E-15	8.206E-15	3.159E-14	1.176E-13
Ra-226	U-238	3.196E-07	2.688E-21	4.032E-20	1.779E-16	3.041E-16	1.377E-15	1.079E-14	1.644E-13	1.276E-12	9.666E-12
Ra-226	U-238	4.219E-13	3.548E-27	5.322E-26	2.348E-22	4.015E-22	1.818E-21	1.425E-20	2.170E-19	1.685E-18	1.276E-17
Ra-226	U-238	6.073E-15	5.041E-29	7.561E-28	3.379E-24	5.779E-24	2.617E-23	2.051E-22	3.124E-21	2.425E-20	1.837E-19
Ra-226	U-238	1.994E-04	1.677E-18	2.516E-17	1.110E-13	1.898E-13	8.594E-13	6.736E-12	1.026E-10	7.963E-10	6.031E-09
Ra-226	U-238	2.633E-10	2.214E-24	3.321E-23	1.465E-19	2.505E-19	1.134E-18	8.891E-18	1.354E-16	1.051E-15	7.962E-15
Ra-226	U-238	3.789E-12	3.187E-26	4.780E-25	2.109E-21	3.606E-21	1.633E-20	1.280E-19	1.949E-18	1.513E-17	1.146E-16
Ra-226	äDOSE(j)		7.765E-07	2.329E-06	3.939E-05	4.706E-05	7.759E-05	1.527E-04	3.687E-04	6.989E-04	1.261E-03
OPu-238	Pu-238	2.637E-10	4.995E-11	4.956E-11	4.100E-11	3.941E-11	3.364E-11	2.266E-11	6.925E-12	9.601E-13	1.845E-14
Pu-238	Pu-238	3.795E-12	7.190E-13	7.133E-13	5.901E-13	5.672E-13	4.843E-13	3.262E-13	9.968E-14	1.382E-14	2.656E-16
Pu-238	äDOSE(j)		5.067E-11	5.027E-11	4.159E-11	3.997E-11	3.413E-11	2.299E-11	7.025E-12	9.739E-13	1.872E-14
ORa-226	Pu-238	2.637E-10	2.214E-24	3.315E-23	1.396E-19	2.365E-19	1.031E-18	7.382E-18	8.809E-17	4.911E-16	2.305E-15
OPu-238	Pu-238	4.196E-08	7.948E-09	7.886E-09	6.523E-09	6.271E-09	5.354E-09	3.606E-09	1.102E-09	1.528E-10	2.936E-12
Pu-238	Pu-238	5.538E-14	1.049E-14	1.041E-14	8.611E-15	8.277E-15	7.067E-15	4.760E-15	1.455E-15	2.017E-16	3.876E-18
Pu-238	äDOSE(j)		7.948E-09	7.886E-09	6.523E-09	6.271E-09	5.354E-09	3.606E-09	1.102E-09	1.528E-10	2.936E-12
ORa-226	Pu-238	4.196E-08	9.869E-22	1.478E-20	6.224E-17	1.054E-16	4.597E-16	3.290E-15	3.927E-14	2.189E-13	1.028E-12
Ra-226	Pu-238	5.538E-14	1.297E-27	1.951E-26	8.215E-23	1.391E-22	6.067E-22	4.343E-21	5.183E-20	2.889E-19	1.356E-18
Ra-226	Pu-238	7.972E-16	1.866E-29	2.795E-28	1.183E-24	2.003E-24	8.733E-24	6.251E-23	7.461E-22	4.159E-21	1.953E-20
Ra-226	Th-230	4.196E-08	4.569E-10	1.370E-09	2.317E-08	2.769E-08	4.564E-08	8.983E-08	2.167E-07	4.102E-07	7.383E-07
Ra-226	Th-230	5.538E-14	6.031E-16	1.809E-15	3.059E-14	3.654E-14	6.024E-14	1.186E-13	2.860E-13	5.415E-13	9.745E-13
Ra-226	Th-230	7.972E-16	8.680E-18	2.604E-17	4.403E-16	5.260E-16	8.671E-16	1.707E-15	4.117E-15	7.794E-15	1.403E-14
Ra-226	U-234	4.196E-08	1.400E-15	9.801E-15	2.722E-12	3.891E-12	1.064E-11	4.181E-11	2.541E-10	9.783E-10	3.643E-09
Ra-226	U-234	5.538E-14	1.849E-21	1.294E-20	3.593E-18	5.136E-18	1.404E-17	5.519E-17	3.354E-16	1.291E-15	4.809E-15
Ra-226	U-234	7.972E-16	2.661E-23	1.862E-22	5.172E-20	7.393E-20	2.021E-19	7.944E-19	4.828E-18	1.859E-17	6.922E-17
Ra-226	U-238	6.713E-11	1.582E-24	2.372E-23	1.047E-19	1.790E-19	8.103E-19	6.351E-18	9.674E-17	7.508E-16	5.687E-15
Ra-226	U-238	8.862E-17	0.000E+00	3.117E-29	1.381E-25	2.362E-25	1.070E-24	8.384E-24	1.277E-22	9.911E-22	7.507E-21
Ra-226	U-238	1.276E-18	0.000E+00	0.000E+00	1.979E-27	3.400E-27	1.540E-26	1.207E-25	1.838E-24	1.427E-23	1.081E-22
Ra-226	U-238	4.189E-08	9.869E-22	1.480E-20	6.530E-17	1.117E-16	5.057E-16	3.963E-15	6.036E-14	4.685E-13	3.549E-12
Ra-226	U-238	5.530E-14	1.297E-27	1.954E-26	8.620E-23	1.474E-22	6.675E-22	5.231E-21	7.968E-20	6.185E-19	4.684E-18
Ra-226	U-238	7.959E-16	1.866E-29	2.799E-28	1.241E-24	2.122E-24	9.607E-24	7.530E-23	1.147E-21	8.902E-21	6.743E-20
Ra-226	äDOSE(j)		4.569E-10	1.370E-09	2.318E-08	2.769E-08	4.565E-08	8.987E-08	2.169E-07	4.112E-07	7.419E-07
OPu-238	Pu-238	7.972E-16	1.510E-16	1.498E-16	1.239E-16	1.191E-16	1.017E-16	6.851E-17	2.094E-17	2.903E-18	5.579E-20
Pu-238	Pu-238	2.000E-07	3.789E-08	3.759E-08	3.109E-08	2.989E-08	2.552E-08	1.719E-08	5.253E-09	7.282E-10	1.400E-11
Pu-238	äDOSE(j)		3.789E-08	3.759E-08	3.109E-08	2.989E-08	2.552E-08	1.719E-08	5.253E-09	7.282E-10	1.400E-11
ORa-226	Pu-238	2.000E-07	2.887E-23	4.322E-22	1.820E-18	3.083E-18	1.344E-17	9.624E-17	1.149E-15	6.403E-15	3.006E-14
Ra-226	Pu-238	3.800E-15	0.000E+00	0.000E+00	3.459E-26	5.858E-26	2.555E-25	1.829E-24	2.182E-23	1.216E-22	5.711E-22
Ra-226	Th-230	2.000E-07	1.336E-11	4.008E-11	6.778E-10	8.098E-10	1.335E-09	2.627E-09	6.338E-09	1.200E-08	2.159E-08
Ra-226	Th-230	2.640E-13	1.764E-17	5.291E-17	8.947E-16	1.069E-15	1.762E-15	3.468E-15	8.366E-15	1.584E-14	2.850E-14
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

Individual Nuclide Dose Summed Over All Pathways
 Parent Nuclide and Branch Fraction Indicated

ONuclide	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
AAAAAAAA	AAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA
Ra-226	U-234	3.800E-15	7.783E-25	5.447E-24	1.513E-21	2.163E-21	5.911E-21	2.324E-20	1.412E-19	5.437E-19	2.025E-18
Ra-226	U-238	3.200E-10	4.626E-26	6.938E-25	3.061E-21	5.234E-21	2.370E-20	1.858E-19	2.829E-18	2.196E-17	1.663E-16
Ra-226	U-238	4.224E-16	0.000E+00	0.000E+00	4.040E-27	6.909E-27	3.129E-26	2.452E-25	3.735E-24	2.899E-23	2.196E-22
Ra-226	U-238	6.080E-18	0.000E+00	0.000E+00	5.816E-29	9.945E-29	4.503E-28	3.529E-27	5.376E-26	4.173E-25	3.161E-24
Ra-226	U-238	1.997E-07	2.887E-23	4.330E-22	1.910E-18	3.266E-18	1.479E-17	1.159E-16	1.766E-15	1.370E-14	1.038E-13
Ra-226	U-238	2.636E-13	2.879E-29	5.715E-28	2.521E-24	4.311E-24	1.952E-23	1.530E-22	2.331E-21	1.809E-20	1.370E-19
Ra-226	U-238	3.794E-15	0.000E+00	0.000E+00	3.629E-26	6.205E-26	2.810E-25	2.202E-24	3.355E-23	2.604E-22	1.972E-21
Ra-226	äDOSE(j)		1.336E-11	4.008E-11	6.779E-10	8.099E-10	1.335E-09	2.629E-09	6.345E-09	1.203E-08	2.170E-08
OPu-238	Pu-238	2.640E-13	5.001E-14	4.962E-14	4.104E-14	3.945E-14	3.369E-14	2.269E-14	6.933E-15	9.612E-16	1.847E-17
Pu-238	Pu-238	3.800E-15	7.199E-16	7.142E-16	5.908E-16	5.679E-16	4.849E-16	3.266E-16	9.980E-17	1.384E-17	2.659E-19
Pu-238	äDOSE(j)		5.073E-14	5.033E-14	4.164E-14	4.002E-14	3.417E-14	2.302E-14	7.033E-15	9.751E-16	1.874E-17
ORa-226	Pu-238	2.640E-13	2.879E-29	5.705E-28	2.403E-24	4.070E-24	1.775E-23	1.270E-22	1.516E-21	8.451E-21	3.968E-20
OPu-239	Pu-239	5.901E-04	1.237E-04	1.237E-04	1.236E-04	1.236E-04	1.235E-04	1.234E-04	1.228E-04	1.220E-04	1.202E-04
Pu-239	Pu-239	1.633E-06	3.424E-07	3.424E-07	3.422E-07	3.421E-07	3.419E-07	3.414E-07	3.400E-07	3.375E-07	3.327E-07
Pu-239	äDOSE(j)		1.241E-04	1.241E-04	1.240E-04	1.240E-04	1.239E-04	1.237E-04	1.232E-04	1.223E-04	1.205E-04
OU-235	Pu-239	5.901E-04	4.285E-13	1.285E-12	2.184E-11	2.613E-11	4.325E-11	8.600E-11	2.139E-10	4.258E-10	8.451E-10
U-235	Pu-239	1.633E-06	1.186E-15	3.558E-15	6.046E-14	7.231E-14	1.197E-13	2.380E-13	5.920E-13	1.179E-12	2.339E-12
U-235	Pu-239	8.257E-06	5.995E-15	1.799E-14	3.057E-13	3.656E-13	6.051E-13	1.203E-12	2.993E-12	5.958E-12	1.182E-11
U-235	Pu-239	2.285E-08	1.659E-17	4.978E-17	8.459E-16	1.012E-15	1.675E-15	3.330E-15	8.283E-15	1.649E-14	3.273E-14
U-235	Pu-239	4.954E-10	3.597E-19	1.079E-18	1.834E-17	2.193E-17	3.631E-17	7.220E-17	1.796E-16	3.575E-16	7.095E-16
U-235	Pu-239	1.371E-12	9.956E-22	2.987E-21	5.076E-20	6.071E-20	1.005E-19	1.998E-19	4.970E-19	9.895E-19	1.964E-18
U-235	Pu-239	9.829E-01	7.137E-10	2.141E-09	3.639E-08	4.352E-08	7.203E-08	1.432E-07	3.563E-07	7.093E-07	1.408E-06
U-235	Pu-239	2.720E-03	1.975E-12	5.926E-12	1.007E-10	1.204E-10	1.994E-10	3.965E-10	9.860E-10	1.963E-09	3.896E-09
U-235	Pu-239	1.375E-02	9.986E-12	2.996E-11	5.091E-10	6.089E-10	1.008E-09	2.004E-09	4.985E-09	9.924E-09	1.970E-08
U-235	Pu-239	3.806E-05	2.764E-14	8.291E-14	1.409E-12	1.685E-12	2.789E-12	5.547E-12	1.380E-11	2.747E-11	5.451E-11
U-235	Pu-239	8.252E-07	5.992E-16	1.798E-15	3.055E-14	3.654E-14	6.048E-14	1.203E-13	2.991E-13	5.955E-13	1.182E-12
U-235	Pu-239	2.284E-09	1.658E-18	4.975E-18	8.455E-17	1.011E-16	1.674E-16	3.329E-16	8.279E-16	1.648E-15	3.271E-15
U-235	U-235	9.835E-01	1.451E+00	1.451E+00	1.451E+00	1.451E+00	1.451E+00	1.451E+00	1.451E+00	1.451E+00	1.450E+00
U-235	äDOSE(j)		1.451E+00	1.451E+00	1.451E+00	1.451E+00	1.451E+00	1.451E+00	1.451E+00	1.451E+00	1.450E+00
OPa-231	Pu-239	5.901E-04	1.460E-18	1.022E-17	2.848E-15	4.074E-15	1.116E-14	4.417E-14	2.737E-13	1.088E-12	4.312E-12
Pa-231	Pu-239	1.633E-06	4.041E-21	8.29E-20	7.882E-18	1.127E-17	3.090E-17	1.223E-16	7.576E-16	3.012E-15	1.193E-14
Pa-231	Pu-239	8.257E-06	2.043E-20	1.430E-19	3.985E-17	5.700E-17	1.562E-16	6.181E-16	3.830E-15	1.523E-14	6.034E-14
Pa-231	Pu-239	2.285E-08	5.655E-23	3.958E-22	1.103E-19	1.578E-19	4.323E-19	1.711E-18	1.060E-17	4.214E-17	1.670E-16
Pa-231	Pu-239	4.954E-10	1.226E-24	8.582E-24	2.391E-21	3.420E-21	9.372E-21	3.709E-20	2.298E-19	9.137E-19	3.621E-18
Pa-231	Pu-239	1.371E-12	3.392E-27	2.375E-26	6.617E-24	9.466E-24	2.594E-23	1.026E-22	6.361E-22	2.529E-21	1.002E-20
Pa-231	Pu-239	9.829E-01	2.432E-15	1.703E-14	4.743E-12	6.785E-12	1.859E-11	7.358E-11	4.560E-10	1.813E-09	7.183E-09
Pa-231	Pu-239	2.720E-03	6.732E-18	4.712E-17	1.313E-14	1.878E-14	5.146E-14	2.036E-13	1.262E-12	5.017E-12	1.988E-11
Pa-231	Pu-239	1.375E-02	3.403E-17	2.382E-16	6.637E-14	9.494E-14	2.602E-13	1.030E-12	6.380E-12	2.536E-11	1.005E-10
Pa-231	Pu-239	3.806E-05	9.419E-20	6.593E-19	1.837E-16	2.628E-16	7.201E-16	2.849E-15	1.766E-14	7.020E-14	2.782E-13
Pa-231	Pu-239	8.252E-07	2.042E-21	1.429E-20	3.983E-18	5.697E-18	1.561E-17	6.178E-17	3.828E-16	1.522E-15	6.031E-15
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

ONuclide	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
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

ONuclide	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
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

ONuclide	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	
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	
OU-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	
OU-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	
OU-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	
OU-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	
OU-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	
OU-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	
OU-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	
OU-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	
OU-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	
OU-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	
OU-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	
OU-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

ONuclide	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	
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	9.865E-14	9.864E-14	
U-238	U-238	6.713E-11	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	
U-238	U-238	8.862E-17	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	1.276E-18	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	U-238	3.200E-10	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	4.224E-16	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	6.080E-18	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	U-238	9.980E-01	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	U-238	1.317E-06	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	1.896E-08	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	U-238	2.096E-04	6.962E-15	6.962E-15	6.962E-15	6.962E-15	6.962E-15	6.961E-15	6.961E-15	6.961E-15	6.960E-15	
U-238	U-238	2.767E-10	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	3.983E-12	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	U-238	1.994E-04	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	2.633E-10	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	3.789E-12	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	U-238	5.530E-14	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	
U-238	U-238	7.959E-16	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	1.997E-07	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	U-238	2.636E-13	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	
U-238	U-238	3.794E-15	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	5.530E-14	8.650E-11	8.650E-11	8.650E-11	8.650E-11	8.650E-11	8.649E-11	8.649E-11	8.649E-11	8.648E-11	
U-238	U-238	7.959E-16	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	
U-238	U-238	1.997E-07	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	2.636E-13	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	U-238	3.794E-15	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	
U-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	
U-238	U-238	1.997E-07	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	
U-238	U-238	2.636E-13	6.561E-08	6.561E-08	6.561E-08	6.561E-08	6.561E-08	6.561E-08	6.560E-08	6.560E-08	6.559E-08	
U-238	U-238	3.794E-15	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	U-238	5.530E-14	6.561E-08	6.561E-08	6.561E-08	6.561E-08	6.561E-08	6.561E-08	6.560E-08	6.560E-08	6.559E-08	
U-238	U-238	7.959E-16	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	

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

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
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	âS(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

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
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

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
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
ORa-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	5.277E-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	
OPb-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-08	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	8.900E-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	
OPu-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	
OU-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	
OTh-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	
ORa-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	
OPb-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	6.474E-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	
OPu-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	
ORa-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 (j)	THF(i)	S(j,t), pCi/g									
			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 AAAAAAAA AAAAAAAA AAAAAAAA AAAAAAAA AAAAAAAA AAAAAAAA AAAAAAAA AAAAAAAA AAAAAAAA AAAAAAAA												
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	4.951E-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	7.345E-04	
OPb-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	
OPu-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	
ORa-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

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	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	6.647E-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	
OPu-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	
ORa-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	
OPu-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	
ORa-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	
OPu-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	
ORa-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
OPu-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
ORa-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
OPu-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
OU-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	2.210E-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
OPa-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

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
AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA
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	
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	4.219E-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	6.071E-14	
U-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	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	
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	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	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	9.978E+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	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	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	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	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	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	
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	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	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	

THF(i) is the thread fraction of the parent nuclide.
 ORESALC.EXE execution time = 56.19 seconds

Dose Conversion Factor (and Related) Parameter Summary
 Dose Library: DCFPAK3.02 Adult HTO Plus DCFPAK3.02 (Adult)

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	Pb-214 (Source: DCFPAK3.02)	1.257E+00	1.257E+00	DCF1(40)
A-1	Po-210 (Source: DCFPAK3.02)	5.641E-05	5.642E-05	DCF1(41)
A-1	Po-211 (Source: DCFPAK3.02)	4.707E-02	4.708E-02	DCF1(42)
A-1	Po-212 (Source: DCFPAK3.02)	0.000E+00	0.000E+00	DCF1(43)
A-1	Po-213 (Source: DCFPAK3.02)	2.167E-04	2.167E-04	DCF1(44)
A-1	Po-214 (Source: DCFPAK3.02)	4.801E-04	4.801E-04	DCF1(45)
A-1	Po-215 (Source: DCFPAK3.02)	9.452E-04	9.453E-04	DCF1(46)
A-1	Po-216 (Source: DCFPAK3.02)	8.873E-05	8.874E-05	DCF1(47)
A-1	Po-218 (Source: DCFPAK3.02)	9.228E-09	9.229E-09	DCF1(48)
A-1	Pu-238 (Source: DCFPAK3.02)	1.111E-04	1.112E-04	DCF1(49)

Dose Conversion Factor (and Related) Parameter Summary (continued)
 Dose Library: DCFPAK3.02 Adult HTO Plus DCFPAK3.02 (Adult)

Menu	Parameter	Current Value#	Base Case*	Parameter Name
A-1	Pu-239 (Source: DCFPAK3.02)	2.765E-04	2.765E-04	DCF1(50)
A-1	Ra-223 (Source: DCFPAK3.02)	5.791E-01	5.791E-01	DCF1(51)
A-1	Ra-224 (Source: DCFPAK3.02)	4.950E-02	4.951E-02	DCF1(52)
A-1	Ra-225 (Source: DCFPAK3.02)	8.910E-03	8.911E-03	DCF1(53)
A-1	Ra-226 (Source: DCFPAK3.02)	3.176E-02	3.176E-02	DCF1(54)
A-1	Ra-228 (Source: DCFPAK3.02)	6.575E-05	6.576E-05	DCF1(55)
A-1	Rh-106 (Source: DCFPAK3.02)	1.252E+00	1.252E+00	DCF1(56)
A-1	Rn-218 (Source: DCFPAK3.02)	4.259E-03	4.260E-03	DCF1(57)
A-1	Rn-219 (Source: DCFPAK3.02)	2.970E-01	2.970E-01	DCF1(58)
A-1	Rn-220 (Source: DCFPAK3.02)	3.474E-03	3.475E-03	DCF1(59)
A-1	Rn-222 (Source: DCFPAK3.02)	2.130E-03	2.130E-03	DCF1(60)
A-1	Ru-106 (Source: DCFPAK3.02)	0.000E+00	0.000E+00	DCF1(61)
A-1	Sm-148 (Source: DCFPAK3.02)	0.000E+00	0.000E+00	DCF1(62)
A-1	Sr-90 (Source: DCFPAK3.02)	6.463E-04	6.464E-04	DCF1(63)
A-1	Tc-99 (Source: DCFPAK3.02)	1.104E-04	1.104E-04	DCF1(64)
A-1	Th-227 (Source: DCFPAK3.02)	5.641E-01	5.642E-01	DCF1(65)
A-1	Th-228 (Source: DCFPAK3.02)	7.248E-03	7.249E-03	DCF1(66)
A-1	Th-229 (Source: DCFPAK3.02)	2.877E-01	2.877E-01	DCF1(67)
A-1	Th-230 (Source: DCFPAK3.02)	1.106E-03	1.106E-03	DCF1(68)
A-1	Th-231 (Source: DCFPAK3.02)	3.250E-02	3.251E-02	DCF1(69)
A-1	Th-232 (Source: DCFPAK3.02)	4.782E-04	4.783E-04	DCF1(70)
A-1	Th-234 (Source: DCFPAK3.02)	2.316E-02	2.317E-02	DCF1(71)
A-1	Tl-206 (Source: DCFPAK3.02)	1.278E-02	1.278E-02	DCF1(72)
A-1	Tl-207 (Source: DCFPAK3.02)	2.391E-02	2.391E-02	DCF1(73)
A-1	Tl-208 (Source: DCFPAK3.02)	2.167E+01	2.167E+01	DCF1(74)
A-1	Tl-209 (Source: DCFPAK3.02)	1.287E+01	1.287E+01	DCF1(75)
A-1	Tl-210 (Source: DCFPAK3.02)	1.677E+01	1.678E+01	DCF1(76)
A-1	U-233 (Source: DCFPAK3.02)	9.191E-04	9.192E-04	DCF1(77)
A-1	U-234 (Source: DCFPAK3.02)	3.456E-04	3.456E-04	DCF1(78)
A-1	U-235 (Source: DCFPAK3.02)	7.005E-01	7.006E-01	DCF1(79)
A-1	U-235m (Source: DCFPAK3.02)	0.000E+00	0.000E+00	DCF1(80)
A-1	U-238 (Source: DCFPAK3.02)	1.713E-04	1.713E-04	DCF1(81)
A-1	Y-90 (Source: DCFPAK3.02)	4.016E-02	4.017E-02	DCF1(82)
B-1	Dose conversion factors for inhalation, mrem/pCi:			
B-1	Ac-227+D	6.464E-01	5.760E-01	DCF2(1)
B-1	Ac-227+D1	6.464E-01	5.760E-01	DCF2(2)
B-1	Ac-227+D2	6.081E-01	5.760E-01	DCF2(3)
B-1	Ac-227+D3	6.081E-01	5.760E-01	DCF2(4)
B-1	Ac-227+D4	5.761E-01	5.760E-01	DCF2(5)
B-1	Ac-227+D5	5.761E-01	5.760E-01	DCF2(6)
B-1	Am-241	3.566E-01	3.566E-01	DCF2(7)
B-1	Co-60	1.138E-04	1.138E-04	DCF2(8)
B-1	Cs-134	7.558E-05	7.558E-05	DCF2(9)
B-1	Cs-137+D	1.457E-04	1.457E-04	DCF2(10)
B-1	Eu-152	3.452E-04	3.452E-04	DCF2(11)
B-1	Eu-154	3.947E-04	3.947E-04	DCF2(13)
B-1	Eu-155	4.599E-05	4.599E-05	DCF2(14)
B-1	Gd-152	7.037E-02	7.037E-02	DCF2(15)
B-1	H-3	6.778E-08	9.689E-07	DCF2(16)

Dose Conversion Factor (and Related) Parameter Summary (continued)
 Dose Library: DCFPAK3.02 Adult HTO 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	Ac-227+D5	1.201E-03	1.191E-03	DCF3(6)
D-1	Am-241	7.548E-04	7.548E-04	DCF3(7)
D-1	Co-60	1.265E-05	1.265E-05	DCF3(8)
D-1	Cs-134	7.141E-05	7.141E-05	DCF3(9)
D-1	Cs-137+D	5.032E-05	5.032E-05	DCF3(10)
D-1	Eu-152	4.958E-06	4.958E-06	DCF3(11)
D-1	Eu-154	7.289E-06	7.289E-06	DCF3(13)
D-1	Eu-155	1.228E-06	1.228E-06	DCF3(14)
D-1	Gd-152	1.517E-04	1.517E-04	DCF3(15)
D-1	H-3	7.067E-08	1.550E-07	DCF3(16)

Dose Conversion Factor (and Related) Parameter Summary (continued)
 Dose Library: DCFPAK3.02 Adult HTO 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	Ac-227+D1 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-05	2.000E-05	RTF(2,2)
D-34	Ac-227+D1 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-05	2.000E-05	RTF(2,3)
D-34	Ac-227+D2 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(3,1)
D-34	Ac-227+D2 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-05	2.000E-05	RTF(3,2)
D-34	Ac-227+D2 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-05	2.000E-05	RTF(3,3)
D-34	Ac-227+D3 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(4,1)
D-34	Ac-227+D3 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-05	2.000E-05	RTF(4,2)
D-34	Ac-227+D3 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-05	2.000E-05	RTF(4,3)

Dose Conversion Factor (and Related) Parameter Summary (continued)
 Dose Library: DCFPAK3.02 Adult HTO Plus DCFPAK3.02 (Adult)

Menu	Parameter	Current Value#	Base Case*	Parameter Name
D-34	Ac-227+D4 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(5,1)
D-34	Ac-227+D4 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-05	2.000E-05	RTF(5,2)
D-34	Ac-227+D4 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-05	2.000E-05	RTF(5,3)
D-34	Ac-227+D5 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(6,1)
D-34	Ac-227+D5 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-05	2.000E-05	RTF(6,2)
D-34	Ac-227+D5 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-05	2.000E-05	RTF(6,3)
D-34	Am-241 , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(7,1)
D-34	Am-241 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	5.000E-05	5.000E-05	RTF(7,2)
D-34	Am-241 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-06	2.000E-06	RTF(7,3)
D-34	Co-60 , plant/soil concentration ratio, dimensionless	8.000E-02	8.000E-02	RTF(8,1)
D-34	Co-60 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-02	2.000E-02	RTF(8,2)
D-34	Co-60 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-03	2.000E-03	RTF(8,3)
D-34	Cs-134 , plant/soil concentration ratio, dimensionless	4.000E-02	4.000E-02	RTF(9,1)
D-34	Cs-134 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.000E-02	3.000E-02	RTF(9,2)
D-34	Cs-134 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	8.000E-03	8.000E-03	RTF(9,3)
D-34	Cs-137+D , plant/soil concentration ratio, dimensionless	4.000E-02	4.000E-02	RTF(10,1)
D-34	Cs-137+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.000E-02	3.000E-02	RTF(10,2)
D-34	Cs-137+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	8.000E-03	8.000E-03	RTF(10,3)
D-34	Eu-152 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(11,1)
D-34	Eu-152 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-03	2.000E-03	RTF(11,2)
D-34	Eu-152 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-05	5.000E-05	RTF(11,3)
D-34	Eu-154 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(13,1)
D-34	Eu-154 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-03	2.000E-03	RTF(13,2)
D-34	Eu-154 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-05	5.000E-05	RTF(13,3)
D-34	Eu-155 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(14,1)
D-34	Eu-155 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-03	2.000E-03	RTF(14,2)
D-34	Eu-155 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-05	5.000E-05	RTF(14,3)
D-34	Gd-152 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(15,1)
D-34	Gd-152 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-03	2.000E-03	RTF(15,2)
D-34	Gd-152 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-05	2.000E-05	RTF(15,3)
D-34	H-3 , plant/soil concentration ratio, dimensionless	4.800E+00	4.800E+00	RTF(16,1)
D-34	H-3 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.200E-02	1.200E-02	RTF(16,2)
D-34	H-3 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-02	1.000E-02	RTF(16,3)
D-34	I-129 , plant/soil concentration ratio, dimensionless	2.000E-02	2.000E-02	RTF(17,1)
D-34	I-129 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	7.000E-03	7.000E-03	RTF(17,2)
D-34	I-129 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-02	1.000E-02	RTF(17,3)

Dose Conversion Factor (and Related) Parameter Summary (continued)
 Dose Library: DCFPAK3.02 Adult HTO Plus DCFPAK3.02 (Adult)

Menu	Parameter	Current Value#	Base Case*	Parameter Name
D-34	Mn-54 , plant/soil concentration ratio, dimensionless	3.000E-01	3.000E-01	RTF(18,1)
D-34	Mn-54 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	5.000E-04	5.000E-04	RTF(18,2)
D-34	Mn-54 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3.000E-04	3.000E-04	RTF(18,3)
D-34	Na-22 , plant/soil concentration ratio, dimensionless	5.000E-02	5.000E-02	RTF(19,1)
D-34	Na-22 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	8.000E-02	8.000E-02	RTF(19,2)
D-34	Na-22 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	4.000E-02	4.000E-02	RTF(19,3)
D-34	Nd-144 , plant/soil concentration ratio, dimensionless	2.400E-03	2.400E-03	RTF(20,1)
D-34	Nd-144 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-03	2.000E-03	RTF(20,2)
D-34	Nd-144 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-05	2.000E-05	RTF(20,3)
D-34	Ni-63 , plant/soil concentration ratio, dimensionless	5.000E-02	5.000E-02	RTF(21,1)
D-34	Ni-63 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	5.000E-03	5.000E-03	RTF(21,2)
D-34	Ni-63 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-02	2.000E-02	RTF(21,3)
D-34	Np-237+D , plant/soil concentration ratio, dimensionless	2.000E-02	2.000E-02	RTF(22,1)
D-34	Np-237+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-03	1.000E-03	RTF(22,2)
D-34	Np-237+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-06	5.000E-06	RTF(22,3)
D-34	Pa-231 , plant/soil concentration ratio, dimensionless	1.000E-02	1.000E-02	RTF(23,1)
D-34	Pa-231 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	5.000E-03	5.000E-03	RTF(23,2)
D-34	Pa-231 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-06	5.000E-06	RTF(23,3)
D-34	Pb-210+D , plant/soil concentration ratio, dimensionless	1.000E-02	1.000E-02	RTF(29,1)
D-34	Pb-210+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	8.000E-04	8.000E-04	RTF(29,2)
D-34	Pb-210+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3.000E-04	3.000E-04	RTF(29,3)
D-34	Pb-210+D1 , plant/soil concentration ratio, dimensionless	1.000E-02	1.000E-02	RTF(30,1)
D-34	Pb-210+D1 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	8.000E-04	8.000E-04	RTF(30,2)
D-34	Pb-210+D1 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3.000E-04	3.000E-04	RTF(30,3)
D-34	Pb-210+D2 , plant/soil concentration ratio, dimensionless	1.000E-02	1.000E-02	RTF(31,1)
D-34	Pb-210+D2 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	8.000E-04	8.000E-04	RTF(31,2)
D-34	Pb-210+D2 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3.000E-04	3.000E-04	RTF(31,3)
D-34	Pu-238 , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(32,1)
D-34	Pu-238 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-04	1.000E-04	RTF(32,2)
D-34	Pu-238 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-06	1.000E-06	RTF(32,3)
D-34	Pu-239 , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(48,1)
D-34	Pu-239 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-04	1.000E-04	RTF(48,2)
D-34	Pu-239 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-06	1.000E-06	RTF(48,3)
D-34	Pu-239+D , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(54,1)
D-34	Pu-239+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-04	1.000E-04	RTF(54,2)
D-34	Pu-239+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-06	1.000E-06	RTF(54,3)

Dose Conversion Factor (and Related) Parameter Summary (continued)
 Dose Library: DCFPAK3.02 Adult HTO Plus DCFPAK3.02 (Adult)

Menu	Parameter	Current Value#	Base Case*	Parameter Name
D-34	Ra-226+D , plant/soil concentration ratio, dimensionless	4.000E-02	4.000E-02	RTF(60,1)
D-34	Ra-226+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-03	1.000E-03	RTF(60,2)
D-34	Ra-226+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-03	1.000E-03	RTF(60,3)
D-34	Ra-226+D1 , plant/soil concentration ratio, dimensionless	4.000E-02	4.000E-02	RTF(63,1)
D-34	Ra-226+D1 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-03	1.000E-03	RTF(63,2)
D-34	Ra-226+D1 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-03	1.000E-03	RTF(63,3)
D-34	Ra-226+D2 , plant/soil concentration ratio, dimensionless	4.000E-02	4.000E-02	RTF(66,1)
D-34	Ra-226+D2 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-03	1.000E-03	RTF(66,2)
D-34	Ra-226+D2 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-03	1.000E-03	RTF(66,3)
D-34	Ra-226+D3 , plant/soil concentration ratio, dimensionless	4.000E-02	4.000E-02	RTF(69,1)
D-34	Ra-226+D3 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-03	1.000E-03	RTF(69,2)
D-34	Ra-226+D3 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-03	1.000E-03	RTF(69,3)
D-34	Ra-226+D4 , plant/soil concentration ratio, dimensionless	4.000E-02	4.000E-02	RTF(72,1)
D-34	Ra-226+D4 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-03	1.000E-03	RTF(72,2)
D-34	Ra-226+D4 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-03	1.000E-03	RTF(72,3)
D-34	Ra-228+D , plant/soil concentration ratio, dimensionless	4.000E-02	4.000E-02	RTF(75,1)
D-34	Ra-228+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-03	1.000E-03	RTF(75,2)
D-34	Ra-228+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-03	1.000E-03	RTF(75,3)
D-34	Ru-106+D , plant/soil concentration ratio, dimensionless	3.000E-02	3.000E-02	RTF(76,1)
D-34	Ru-106+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-03	2.000E-03	RTF(76,2)
D-34	Ru-106+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3.300E-06	3.300E-06	RTF(76,3)
D-34	Sm-148 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(77,1)
D-34	Sm-148 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-03	2.000E-03	RTF(77,2)
D-34	Sm-148 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-05	2.000E-05	RTF(77,3)
D-34	Sr-90+D , plant/soil concentration ratio, dimensionless	3.000E-01	3.000E-01	RTF(78,1)
D-34	Sr-90+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	8.000E-03	8.000E-03	RTF(78,2)
D-34	Sr-90+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-03	2.000E-03	RTF(78,3)
D-34	Tc-99 , plant/soil concentration ratio, dimensionless	5.000E+00	5.000E+00	RTF(79,1)
D-34	Tc-99 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-04	1.000E-04	RTF(79,2)
D-34	Tc-99 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-03	1.000E-03	RTF(79,3)
D-34	Th-228+D , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(80,1)
D-34	Th-228+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-04	1.000E-04	RTF(80,2)
D-34	Th-228+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-06	5.000E-06	RTF(80,3)
D-34	Th-229+D , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(81,1)
D-34	Th-229+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-04	1.000E-04	RTF(81,2)
D-34	Th-229+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-06	5.000E-06	RTF(81,3)

Dose Conversion Factor (and Related) Parameter Summary (continued)
 Dose Library: DCFPAK3.02 Adult HTO 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	Ac-227+D2 , fish	1.500E+01	1.500E+01	BIOFAC(3,1)
D-5	Ac-227+D2 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(3,2)
D-5	Ac-227+D3 , fish	1.500E+01	1.500E+01	BIOFAC(4,1)
D-5	Ac-227+D3 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(4,2)
D-5	Ac-227+D4 , fish	1.500E+01	1.500E+01	BIOFAC(5,1)
D-5	Ac-227+D4 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(5,2)

Dose Conversion Factor (and Related) Parameter Summary (continued)
 Dose Library: DCFPAK3.02 Adult HTO Plus DCFPAK3.02 (Adult)

Menu	Parameter	Current Value#	Base Case*	Parameter Name
D-5	Ac-227+D5 , fish	1.500E+01	1.500E+01	BIOFAC(6,1)
D-5	Ac-227+D5 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(6,2)
D-5	Am-241 , fish	3.000E+01	3.000E+01	BIOFAC(7,1)
D-5	Am-241 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(7,2)
D-5	Co-60 , fish	3.000E+02	3.000E+02	BIOFAC(8,1)
D-5	Co-60 , crustacea and mollusks	2.000E+02	2.000E+02	BIOFAC(8,2)
D-5	Cs-134 , fish	2.000E+03	2.000E+03	BIOFAC(9,1)
D-5	Cs-134 , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(9,2)
D-5	Cs-137+D , fish	2.000E+03	2.000E+03	BIOFAC(10,1)
D-5	Cs-137+D , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(10,2)
D-5	Eu-152 , fish	5.000E+01	5.000E+01	BIOFAC(11,1)
D-5	Eu-152 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(11,2)
D-5	Eu-154 , fish	5.000E+01	5.000E+01	BIOFAC(13,1)
D-5	Eu-154 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(13,2)
D-5	Eu-155 , fish	5.000E+01	5.000E+01	BIOFAC(14,1)
D-5	Eu-155 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(14,2)
D-5	Gd-152 , fish	2.500E+01	2.500E+01	BIOFAC(15,1)
D-5	Gd-152 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(15,2)
D-5	H-3 , fish	1.000E+00	1.000E+00	BIOFAC(16,1)
D-5	H-3 , crustacea and mollusks	1.000E+00	1.000E+00	BIOFAC(16,2)
D-5	I-129 , fish	4.000E+01	4.000E+01	BIOFAC(17,1)
D-5	I-129 , crustacea and mollusks	5.000E+00	5.000E+00	BIOFAC(17,2)
D-5	Mn-54 , fish	4.000E+02	4.000E+02	BIOFAC(18,1)
D-5	Mn-54 , crustacea and mollusks	9.000E+04	9.000E+04	BIOFAC(18,2)
D-5	Na-22 , fish	2.000E+01	2.000E+01	BIOFAC(19,1)
D-5	Na-22 , crustacea and mollusks	2.000E+02	2.000E+02	BIOFAC(19,2)
D-5	Nd-144 , fish	1.000E+02	1.000E+02	BIOFAC(20,1)
D-5	Nd-144 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(20,2)
D-5	Ni-63 , fish	1.000E+02	1.000E+02	BIOFAC(21,1)
D-5	Ni-63 , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(21,2)
D-5	Np-237+D , fish	3.000E+01	3.000E+01	BIOFAC(22,1)
D-5	Np-237+D , crustacea and mollusks	4.000E+02	4.000E+02	BIOFAC(22,2)
D-5	Pa-231 , fish	1.000E+01	1.000E+01	BIOFAC(23,1)
D-5	Pa-231 , crustacea and mollusks	1.100E+02	1.100E+02	BIOFAC(23,2)

Dose Conversion Factor (and Related) Parameter Summary (continued)
 Dose Library: DCFPAK3.02 Adult HTO 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	Sm-148 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(77,2)
D-5	Sr-90+D , fish	6.000E+01	6.000E+01	BIOFAC(78,1)
D-5	Sr-90+D , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(78,2)
D-5	Tc-99 , fish	2.000E+01	2.000E+01	BIOFAC(79,1)
D-5	Tc-99 , crustacea and mollusks	5.000E+00	5.000E+00	BIOFAC(79,2)
D-5	Th-228+D , fish	1.000E+02	1.000E+02	BIOFAC(80,1)
D-5	Th-228+D , crustacea and mollusks	5.000E+02	5.000E+02	BIOFAC(80,2)

Dose Conversion Factor (and Related) Parameter Summary (continued)
 Dose Library: DCFPAK3.02 Adult HTO Plus DCFPAK3.02 (Adult)

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

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

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

Site-Specific Parameter Summary (continued)

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

Site-Specific Parameter Summary (continued)

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

Site-Specific Parameter Summary (continued)

Menu	Parameter	User	Default	Used by RESRAD	Parameter Name
R016	Distribution coefficients for Eu-155				
R016	Contaminated zone (cm**3/g)	-1.000E+00	-1.000E+00	8.249E+02	DCNUCC(14)
R016	Unsaturated zone 1 (cm**3/g)	not used	-1.000E+00	---	DCNUCU(14,1)
R016	Saturated zone (cm**3/g)	not used	-1.000E+00	---	DCNUCS(14)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.172E-08	ALEACH(14)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(14)
R016	Distribution coefficients for H-3				
R016	Contaminated zone (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCC(16)
R016	Unsaturated zone 1 (cm**3/g)	not used	0.000E+00	---	DCNUCU(16,1)
R016	Saturated zone (cm**3/g)	not used	0.000E+00	---	DCNUCS(16)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	7.250E-05	ALEACH(16)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(16)
R016	Distribution coefficients for I-129				
R016	Contaminated zone (cm**3/g)	1.000E-01	1.000E-01	---	DCNUCC(17)
R016	Unsaturated zone 1 (cm**3/g)	not used	1.000E-01	---	DCNUCU(17,1)
R016	Saturated zone (cm**3/g)	not used	1.000E-01	---	DCNUCS(17)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	4.143E-05	ALEACH(17)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(17)
R016	Distribution coefficients for Mn-54				
R016	Contaminated zone (cm**3/g)	2.000E+02	2.000E+02	---	DCNUCC(18)
R016	Unsaturated zone 1 (cm**3/g)	not used	2.000E+02	---	DCNUCU(18,1)
R016	Saturated zone (cm**3/g)	not used	2.000E+02	---	DCNUCS(18)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	4.830E-08	ALEACH(18)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(18)
R016	Distribution coefficients for Na-22				
R016	Contaminated zone (cm**3/g)	1.000E+01	1.000E+01	---	DCNUCC(19)
R016	Unsaturated zone 1 (cm**3/g)	not used	1.000E+01	---	DCNUCU(19,1)
R016	Saturated zone (cm**3/g)	not used	1.000E+01	---	DCNUCS(19)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	9.539E-07	ALEACH(19)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(19)
R016	Distribution coefficients for Ni-63				
R016	Contaminated zone (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCC(21)
R016	Unsaturated zone 1 (cm**3/g)	not used	1.000E+03	---	DCNUCU(21,1)
R016	Saturated zone (cm**3/g)	not used	1.000E+03	---	DCNUCS(21)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	9.665E-09	ALEACH(21)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(21)
R016	Distribution coefficients for Np-237				
R016	Contaminated zone (cm**3/g)	-1.000E+00	-1.000E+00	2.574E+02	DCNUCC(22)
R016	Unsaturated zone 1 (cm**3/g)	not used	-1.000E+00	---	DCNUCU(22,1)
R016	Saturated zone (cm**3/g)	not used	-1.000E+00	---	DCNUCS(22)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	3.753E-08	ALEACH(22)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(22)

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
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 Th-230				
R016	Contaminated zone (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCC (82)
R016	Unsaturated zone 1 (cm**3/g)	not used	6.000E+04	---	DCNUCU (82,1)
R016	Saturated zone (cm**3/g)	not used	6.000E+04	---	DCNUCS (82)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.611E-10	ALEACH (82)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK (82)

Site-Specific Parameter Summary (continued)

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

Site-Specific Parameter Summary (continued)

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

Site-Specific Parameter Summary (continued)

Menu	Parameter	User	Input	Default	Used by RESRAD	Parameter Name
R017	Mass loading for inhalation (g/m**3)	3	4.000E-04	3 1.000E-04	---	3 MLINH
R017	Exposure duration	3	1.000E+00	3 3.000E+01	---	3 ED
R017	Shielding factor, inhalation	3	1.000E+00	3 4.000E-01	---	3 SHF3
R017	Shielding factor, external gamma	3	7.000E-01	3 7.000E-01	---	3 SHF1
R017	Fraction of time spent indoors	3	0.000E+00	3 5.000E-01	---	3 FIND
R017	Fraction of time spent outdoors (on site)	3	2.282E-01	3 2.500E-01	---	3 FOTD
R017	Shape factor flag, external gamma	3	1.000E+00	3 1.000E+00	>0 shows circular AREA.	3 FS
R017	Radii of shape factor array (used if FS = -1):	3		3		3
R017	Outer annular radius (m), ring 1:	3	not used	3 5.000E+01	---	3 RAD_SHAPE(1)
R017	Outer annular radius (m), ring 2:	3	not used	3 7.071E+01	---	3 RAD_SHAPE(2)
R017	Outer annular radius (m), ring 3:	3	not used	3 0.000E+00	---	3 RAD_SHAPE(3)
R017	Outer annular radius (m), ring 4:	3	not used	3 0.000E+00	---	3 RAD_SHAPE(4)
R017	Outer annular radius (m), ring 5:	3	not used	3 0.000E+00	---	3 RAD_SHAPE(5)
R017	Outer annular radius (m), ring 6:	3	not used	3 0.000E+00	---	3 RAD_SHAPE(6)
R017	Outer annular radius (m), ring 7:	3	not used	3 0.000E+00	---	3 RAD_SHAPE(7)
R017	Outer annular radius (m), ring 8:	3	not used	3 0.000E+00	---	3 RAD_SHAPE(8)
R017	Outer annular radius (m), ring 9:	3	not used	3 0.000E+00	---	3 RAD_SHAPE(9)
R017	Outer annular radius (m), ring 10:	3	not used	3 0.000E+00	---	3 RAD_SHAPE(10)
R017	Outer annular radius (m), ring 11:	3	not used	3 0.000E+00	---	3 RAD_SHAPE(11)
R017	Outer annular radius (m), ring 12:	3	not used	3 0.000E+00	---	3 RAD_SHAPE(12)
R017	Fractions of annular areas within AREA:	3		3		3
R017	Ring 1	3	not used	3 1.000E+00	---	3 FRACA(1)
R017	Ring 2	3	not used	3 2.732E-01	---	3 FRACA(2)
R017	Ring 3	3	not used	3 0.000E+00	---	3 FRACA(3)
R017	Ring 4	3	not used	3 0.000E+00	---	3 FRACA(4)
R017	Ring 5	3	not used	3 0.000E+00	---	3 FRACA(5)
R017	Ring 6	3	not used	3 0.000E+00	---	3 FRACA(6)
R017	Ring 7	3	not used	3 0.000E+00	---	3 FRACA(7)
R017	Ring 8	3	not used	3 0.000E+00	---	3 FRACA(8)
R017	Ring 9	3	not used	3 0.000E+00	---	3 FRACA(9)
R017	Ring 10	3	not used	3 0.000E+00	---	3 FRACA(10)
R017	Ring 11	3	not used	3 0.000E+00	---	3 FRACA(11)
R017	Ring 12	3	not used	3 0.000E+00	---	3 FRACA(12)
R018	Fruits, vegetables and grain consumption (kg/yr)	3	not used	3 1.600E+02	---	3 DIET(1)
R018	Leafy vegetable consumption (kg/yr)	3	not used	3 1.400E+01	---	3 DIET(2)
R018	Milk consumption (L/yr)	3	not used	3 9.200E+01	---	3 DIET(3)
R018	Meat and poultry consumption (kg/yr)	3	not used	3 6.300E+01	---	3 DIET(4)
R018	Fish consumption (kg/yr)	3	not used	3 5.400E+00	---	3 DIET(5)
R018	Other seafood consumption (kg/yr)	3	not used	3 9.000E-01	---	3 DIET(6)
R018	Soil ingestion rate (g/yr)	3	3.620E+02	3 3.650E+01	---	3 SOIL
R018	Drinking water intake (L/yr)	3	not used	3 5.100E+02	---	3 DWI
R018	Contamination fraction of drinking water	3	not used	3 1.000E+00	---	3 FDW
R018	Contamination fraction of household water	3	not used	3 1.000E+00	---	3 FHHW
R018	Contamination fraction of livestock water	3	not used	3 1.000E+00	---	3 FLW
R018	Contamination fraction of irrigation water	3	not used	3 1.000E+00	---	3 FIRW
R018	Contamination fraction of aquatic food	3	not used	3 5.000E-01	---	3 FR9
R018	Contamination fraction of plant food	3	not used	3 -1	---	3 FPLANT
R018	Contamination fraction of meat	3	not used	3 -1	---	3 FMEAT

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD	Parameter Name
R018	Contamination fraction of milk	not used	-1	---	F MILK
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	---	DROOT
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
STOR	Storage times of contaminated foodstuffs (days):				
STOR	Fruits, non-leafy vegetables, and grain	1.000E+00	1.400E+01	---	STOR_T(1)
STOR	Leafy vegetables	1.000E+00	1.000E+00	---	STOR_T(2)
STOR	Milk	1.000E+00	1.000E+00	---	STOR_T(3)
STOR	Meat and poultry	2.000E+01	2.000E+01	---	STOR_T(4)
STOR	Fish	7.000E+00	7.000E+00	---	STOR_T(5)
STOR	Crustacea and mollusks	7.000E+00	7.000E+00	---	STOR_T(6)
STOR	Well water	1.000E+00	1.000E+00	---	STOR_T(7)

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD	Parameter Name
STOR	Surface water	1.000E+00	1.000E+00	---	STOR_T(8)
STOR	Livestock fodder	4.500E+01	4.500E+01	---	STOR_T(9)
R021	Thickness of building foundation (m)	not used	1.500E-01	---	FLOOR1
R021	Bulk density of building foundation (g/cm**3)	not used	2.400E+00	---	DENSFL
R021	Total porosity of the cover material	not used	4.000E-01	---	TPCV
R021	Total porosity of the building foundation	not used	1.000E-01	---	TPFL
R021	Volumetric water content of the cover material	not used	5.000E-02	---	PH2OCV
R021	Volumetric water content of the foundation	not used	3.000E-02	---	PH2OFL
R021	Diffusion coefficient for radon gas (m/sec):				
R021	in cover material	not used	2.000E-06	---	DIFCV
R021	in foundation material	not used	3.000E-07	---	DIFFL
R021	in contaminated zone soil	not used	2.000E-06	---	DIFCZ
R021	Radon vertical dimension of mixing (m)	not used	2.000E+00	---	HMIX
R021	Average building air exchange rate (1/hr)	not used	5.000E-01	---	REXG
R021	Height of the building (room) (m)	not used	2.500E+00	---	HRM
R021	Building interior area factor	not used	0.000E+00	---	FAI
R021	Building depth below ground surface (m)	not used	-1.000E+00	---	DMFL
R021	Emanating power of Rn-222 gas	not used	2.500E-01	---	EMANA(1)
R021	Emanating power of Rn-220 gas	not used	1.500E-01	---	EMANA(2)
TITL	Number of graphical time points	32	---	---	NPTS
TITL	Maximum number of integration points for dose	17	---	---	LYMAX
TITL	Maximum number of integration points for risk	257	---	---	KYMAX

Summary of Pathway Selections

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

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)

	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
Radio-	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
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	0.000E+00	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

Radio- Nuclide	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
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	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.
	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	1.467E-01	0.0012
	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	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

Radio- Nuclide	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
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

Radio- Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil			
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.		
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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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													
		Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
Radio-	Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
Am-241	0.000E+00	0.0000	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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	0.0000	0.000E+00	0.0000	0.000E+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
Total	0.000E+00	0.0000	0.0000	0.000E+00	0.0000	0.000E+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 = 3.000E+01 years

Water Independent Pathways (Inhalation excludes radon)

	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
Radio- Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	1.467E-01	0.0028
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	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													
	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
Radio-	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
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
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	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
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	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
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	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
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
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
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	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
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	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
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
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
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
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*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

Radio- Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
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	0.000E+00	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

		Water Dependent Pathways													
0		Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
Radio-	Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
0	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
Am-241	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	0.0207
Co-60	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	0.0009
Cs-134	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	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	0.0447
Eu-152	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	0.0226
Eu-154	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	0.0055
Eu-155	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	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	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	0.0073
Mn-54	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	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	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
Np-237	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	0.0599
Pu-238	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	0.0156
Pu-239	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	0.0255
Ru-106	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	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	0.0011
Tc-99	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
Th-228	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	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	0.0336
Th-232	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	0.7106
U-234	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	0.0039
U-235	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	0.0370
U-238	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	0.0110
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	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	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.
	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

Radio- Nuclide	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
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)

	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
Radio-	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
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	0.000E+00	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													
0		Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
Radio-	Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
0	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
Am-241	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
Co-60	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	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	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
Eu-152	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
Eu-154	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	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	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	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
Mn-54	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	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	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
Np-237	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
Pu-238	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
Pu-239	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
Ru-106	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	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
Tc-99	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
Th-228	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	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
Th-232	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
U-234	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
U-235	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
U-238	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
iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii	iiiiiii
Total	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*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)

	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
Radio- Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
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													
	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
Radio-	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
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
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	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
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	0.000E+00	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	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	0.0594
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	0.000E+00	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	0.000E+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	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
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	0.000E+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	0.000E+00	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	0.000E+00	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	0.000E+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	0.000E+00	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	0.000E+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	
	Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
	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	0.0024
	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
	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

		Water Dependent Pathways															
0		Water		Fish		Radon		Plant		Meat		Milk		All Pathways*			
Radio-	Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.		
0	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		
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		
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	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		
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	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		
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	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		
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		
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		
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	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		
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	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		
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		
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		
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		
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*Sum of all water independent and dependent pathways.

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
	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	2.881E-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)								
	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-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	
	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	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	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	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	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	2.100E-04	2.204E-05	2.204E-05	2.203E-05	2.203E-05	2.202E-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	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	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	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	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 (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	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												
	0Th-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	0Th-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												
	0Th-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	0Th-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												
	0Th-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	8.319E-17	0Th-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												
	0Th-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	0Th-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												
	0Th-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	0Th-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												
	0Th-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	0Th-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												
	0Th-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	0Th-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	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											
	0U-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	0U-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 (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	
U-234	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	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	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	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)	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	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	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	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	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)	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	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	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	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	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)	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	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	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	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	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)	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	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	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	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	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)	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	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	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	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	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)	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	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	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	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)	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	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	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	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)	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)								
	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
U-238+D1	U-238+D1			9.944E-06	9.944E-06	9.944E-06	9.944E-06	9.944E-06	9.944E-06	9.944E-06	9.943E-06	9.942E-06
U-238+D1	U-234			1.994E-04	5.306E-12	1.592E-11	2.706E-10	3.237E-10	5.359E-10	1.066E-09	2.657E-09	5.307E-09
U-238+D1	Th-230			1.994E-04	9.058E-17	6.340E-16	1.767E-13	2.528E-13	6.929E-13	2.743E-12	1.703E-11	6.793E-11
U-238+D1	Ra-226+D2			1.994E-04	1.924E-19	2.885E-18	1.273E-14	2.177E-14	9.856E-14	7.725E-13	1.177E-11	9.133E-11
U-238+D1	Pb-210+D			1.994E-04	3.417E-22	1.054E-20	6.233E-16	1.240E-15	8.361E-15	1.034E-13	2.367E-12	2.176E-11
U-238+D1	äDSR(j)			9.944E-06	9.944E-06	9.944E-06	9.944E-06	9.944E-06	9.944E-06	9.945E-06	9.946E-06	9.948E-06
OU-238+D1	U-238+D1			2.633E-10	1.313E-11	1.313E-11	1.313E-11	1.313E-11	1.313E-11	1.313E-11	1.313E-11	1.312E-11
U-238+D1	U-234			2.633E-10	7.004E-18	2.101E-17	3.572E-16	4.272E-16	7.074E-16	1.408E-15	3.508E-15	7.006E-15
U-238+D1	Th-230			2.633E-10	1.196E-22	8.369E-22	2.332E-19	3.337E-19	9.146E-19	3.621E-18	2.248E-17	8.967E-17
U-238+D1	Ra-226+D2			2.633E-10	2.539E-25	3.809E-24	1.680E-20	2.873E-20	1.301E-19	1.020E-18	1.553E-17	1.206E-16
U-238+D1	Pb-210+D1			2.633E-10	1.684E-28	5.193E-27	3.072E-22	6.110E-22	4.121E-21	5.097E-20	1.167E-18	1.073E-17
U-238+D1	äDSR(j)			1.313E-11	1.313E-11	1.313E-11	1.313E-11	1.313E-11	1.313E-11	1.313E-11	1.313E-11	1.314E-11
OU-238+D1	U-238+D1			3.789E-12	1.889E-13	1.889E-13	1.889E-13	1.889E-13	1.889E-13	1.889E-13	1.889E-13	1.889E-13
U-238+D1	U-234			3.789E-12	1.008E-19	3.025E-19	5.141E-18	6.150E-18	1.018E-17	2.026E-17	5.049E-17	1.008E-16
U-238+D1	Th-230			3.789E-12	1.721E-24	1.205E-23	3.357E-21	4.803E-21	1.316E-20	5.213E-20	3.236E-19	1.291E-18
U-238+D1	Ra-226+D2			3.789E-12	3.655E-27	5.482E-26	2.418E-22	4.136E-22	1.873E-21	1.468E-20	2.236E-19	1.735E-18
U-238+D1	Pb-210+D2			3.789E-12	3.872E-30	1.194E-28	7.062E-24	1.405E-23	9.473E-23	1.172E-21	2.682E-20	2.466E-19
U-238+D1	äDSR(j)			1.889E-13	1.889E-13	1.889E-13	1.889E-13	1.889E-13	1.889E-13	1.890E-13	1.890E-13	1.891E-13
OU-238+D1	U-238+D1			4.189E-08	2.089E-09	2.089E-09	2.089E-09	2.089E-09	2.089E-09	2.089E-09	2.089E-09	2.088E-09
U-238+D1	U-234			4.189E-08	1.115E-15	3.344E-15	5.684E-14	6.798E-14	1.126E-13	2.240E-13	5.582E-13	1.115E-12
U-238+D1	Th-230			4.189E-08	1.903E-20	1.332E-19	3.711E-17	5.309E-17	1.455E-16	5.762E-16	3.578E-15	1.427E-14
U-238+D1	Ra-226+D3			4.189E-08	1.109E-22	1.664E-21	7.341E-18	1.255E-17	5.684E-17	4.455E-16	6.786E-15	5.267E-14
U-238+D1	Pb-210+D			4.189E-08	7.178E-26	2.213E-24	1.309E-19	2.604E-19	1.756E-18	2.172E-17	4.972E-16	4.571E-15
U-238+D1	äDSR(j)			2.089E-09	2.089E-09	2.089E-09	2.089E-09	2.089E-09	2.089E-09	2.089E-09	2.089E-09	2.090E-09
OU-238+D1	U-238+D1			5.530E-14	2.757E-15	2.757E-15	2.757E-15	2.757E-15	2.757E-15	2.757E-15	2.757E-15	2.756E-15
U-238+D1	U-234			5.530E-14	1.471E-21	4.414E-21	7.503E-20	8.974E-20	1.486E-19	2.957E-19	7.368E-19	1.471E-18
U-238+D1	Th-230			5.530E-14	2.511E-26	1.758E-25	4.899E-23	7.008E-23	1.921E-22	7.606E-22	4.723E-21	1.883E-20
U-238+D1	Ra-226+D3			5.530E-14	1.464E-28	2.196E-27	9.690E-24	1.657E-23	7.503E-23	5.881E-22	8.957E-21	6.952E-20
U-238+D1	Pb-210+D1			5.530E-14	3.538E-32	1.091E-30	6.453E-26	1.283E-25	8.656E-25	1.071E-23	2.451E-22	2.253E-21
U-238+D1	äDSR(j)			2.757E-15	2.757E-15	2.757E-15	2.757E-15	2.757E-15	2.757E-15	2.758E-15	2.758E-15	2.760E-15
OU-238+D1	U-238+D1			7.959E-16	3.968E-17	3.968E-17	3.968E-17	3.968E-17	3.968E-17	3.968E-17	3.968E-17	3.968E-17
U-238+D1	U-234			7.959E-16	2.118E-23	6.353E-23	1.080E-21	1.292E-21	2.139E-21	4.256E-21	1.060E-20	2.118E-20
U-238+D1	Th-230			7.959E-16	3.615E-28	2.530E-27	7.052E-25	1.009E-24	2.765E-24	1.095E-23	6.798E-23	2.711E-22
U-238+D1	Ra-226+D3			7.959E-16	2.108E-30	3.162E-29	1.395E-25	2.385E-25	1.080E-24	8.465E-24	1.289E-22	1.001E-21
U-238+D1	Pb-210+D2			7.959E-16	8.133E-34	2.507E-32	1.483E-27	2.950E-27	1.990E-26	2.461E-25	5.633E-24	5.179E-23
U-238+D1	äDSR(j)			3.968E-17	3.968E-17	3.969E-17	3.969E-17	3.969E-17	3.969E-17	3.969E-17	3.970E-17	3.973E-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	U-238+D1	1.997E-07	9.956E-09	9.956E-09	9.956E-09	9.956E-09	9.956E-09	9.956E-09	9.956E-09	9.955E-09	9.955E-09	9.954E-09
U-238+D1	U-234	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	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	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	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)	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	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	1.314E-14
U-238+D1	U-234	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	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	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	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)	äDSR(j)		1.314E-14	1.314E-14	1.314E-14	1.314E-14	1.314E-14	1.314E-14	1.314E-14	1.314E-14	1.315E-14	
0U-238+D1	U-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	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	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	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	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)	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	
	iiiiiiii	iiiiiiii	iiiiiiii	iiiiiiii	iiiiiiii	iiiiiiii	iiiiiiii	iiiiiiii	iiiiiiii	iiiiiiii	iiiiiiii	iiiiiiii	iiiiiiii

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

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

ONuclide	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
AAAAAAA	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	8.677E+01	8.677E+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	4.744E+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)	(pCi/g)	(pCi/g)
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

Individual Nuclide Dose Summed Over All Pathways
 Parent Nuclide and Branch Fraction Indicated

ONuclide	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
ONp-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
OU-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
OTTh-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
OU-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

ONuclide	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
AAAAAAAA	AAAAAA	AAAAAA	AAAAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA
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	2.351E-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

ONuclide	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
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	1.048E+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	9.945E-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	5.524E-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

ONuclide	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	AAAAAA	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	
ORa-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	1.135E-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	
OPb-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

ONuclide	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
OPu-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
OU-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
OTh-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
ORa-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
OPb-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
OPu-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
ORa-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

ONuclide	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	AAAAAA	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	8.478E-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
OPb-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	6.656E-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
OPu-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
ORa-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

ONuclide	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
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
OPu-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	1.099E-13
ORa-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
OPu-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
ORa-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	1.545E-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
OPu-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
ORa-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

ONuclide	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
AAAAAAAA	AAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA
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
OPu-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
ORa-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
OPu-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
OU-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	2.126E-15	2.012E-15	4.002E-15	9.954E-15	1.982E-14	3.932E-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
OPa-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

ONuclide	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	4.689E-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

ONuclide	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	
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

ONuclide	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	
U-234	U-234	2.100E-04	3.957E-05	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	1.501E-16	1.499E-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		äDOSE(j)	6.897E-05	6.897E-05	6.897E-05	6.897E-05	6.897E-05	6.897E-05	6.897E-05	6.896E-05	6.896E-05	
OU-235	U-235	2.285E-09	4.051E-09	4.051E-09	4.051E-09	4.051E-09	4.051E-09	4.051E-09	4.050E-09	4.050E-09	4.050E-09	
OU-238	U-238	5.450E-07	9.144E-08	9.144E-08	9.144E-08	9.144E-08	9.144E-08	9.144E-08	9.144E-08	9.144E-08	9.143E-08	
U-238	U-238	1.599E-03	2.910E-02	2.910E-02	2.910E-02	2.910E-02	2.910E-02	2.910E-02	2.910E-02	2.910E-02	2.909E-02	
U-238		äDOSE(j)	2.910E-02	2.910E-02	2.910E-02	2.910E-02	2.910E-02	2.910E-02	2.910E-02	2.910E-02	2.909E-02	
OU-238	U-238	2.111E-09	3.841E-08	3.841E-08	3.841E-08	3.841E-08	3.841E-08	3.841E-08	3.841E-08	3.841E-08	3.840E-08	
U-238	U-238	3.039E-11	5.529E-10	5.529E-10	5.529E-10	5.529E-10	5.529E-10	5.529E-10	5.528E-10	5.528E-10	5.528E-10	
U-238		äDOSE(j)	3.896E-08	3.896E-08	3.896E-08	3.896E-08	3.896E-08	3.896E-08	3.896E-08	3.896E-08	3.895E-08	
OU-238	U-238	3.359E-07	6.112E-06	6.112E-06	6.112E-06	6.112E-06	6.112E-06	6.112E-06	6.112E-06	6.111E-06	6.111E-06	
U-238	U-238	4.434E-13	8.068E-12	8.068E-12	8.068E-12	8.068E-12	8.068E-12	8.067E-12	8.067E-12	8.067E-12	8.066E-12	
U-238		äDOSE(j)	6.112E-06	6.112E-06	6.112E-06	6.112E-06	6.112E-06	6.112E-06	6.112E-06	6.111E-06	6.111E-06	
OU-238	U-238	6.383E-15	1.161E-13	1.161E-13	1.161E-13	1.161E-13	1.161E-13	1.161E-13	1.161E-13	1.161E-13	1.161E-13	
U-238	U-238	3.196E-07	5.815E-06	5.815E-06	5.815E-06	5.815E-06	5.815E-06	5.815E-06	5.815E-06	5.814E-06	5.814E-06	
U-238		äDOSE(j)	5.815E-06	5.815E-06	5.815E-06	5.815E-06	5.815E-06	5.815E-06	5.815E-06	5.814E-06	5.814E-06	

Individual Nuclide Dose Summed Over All Pathways
 Parent Nuclide and Branch Fraction Indicated

ONuclide	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	
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	7.676E-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	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	U-238	1.276E-18	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	3.200E-10	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	4.224E-16	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	U-238	6.080E-18	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	U-238	9.980E-01	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	1.317E-06	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	U-238	1.896E-08	7.796E-15	7.796E-15	7.796E-15	7.796E-15	7.796E-15	7.796E-15	7.796E-15	7.795E-15	7.794E-15	
U-238	U-238	2.096E-04	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	2.767E-10	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	U-238	3.983E-12	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	1.994E-04	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	2.633E-10	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	U-238	3.789E-12	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	U-238	4.189E-08	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	5.530E-14	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	U-238	7.959E-16	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	
U-238	U-238	1.997E-07	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	2.636E-13	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	U-238	3.794E-15	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	1.892E-15	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	5.530E-14	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	
U-238	U-238	7.959E-16	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	
U-238	U-238	1.997E-07	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	2.636E-13	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	U-238	3.794E-15	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	
U-238	U-238	1.892E-15	9.956E-08	9.956E-08	9.956E-08	9.956E-08	9.956E-08	9.956E-08	9.956E-08	9.955E-08	9.954E-08	
U-238	U-238	5.530E-14	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	U-238	7.959E-16	9.956E-08	9.956E-08	9.956E-08	9.956E-08	9.956E-08	9.956E-08	9.956E-08	9.955E-08	9.954E-08	
U-238	U-238	1.892E-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	

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

Individual Nuclide Soil Concentration
 Parent Nuclide and Branch Fraction Indicated

ONuclide	Parent (j)	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	
ONp-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	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	1.000E+01	9.999E+00	9.998E+00
OU-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	
OTTh-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	
OU-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

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
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	âS(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

ONuclide	Parent (j)	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
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

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
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
ORa-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	
OPb-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-08	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	
OPu-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	
OU-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	
OTh-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	
ORa-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	
OPb-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	6.474E-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	
OPu-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	
ORa-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	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	4.451E-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	7.345E-04	
OPb-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	
OPu-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	
ORa-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

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	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	
OPu-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	
ORa-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	
OPu-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	
ORa-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	
OPu-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	
ORa-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
OPu-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
ORa-226	Pu-238	2.640E-13	0.000E+00	4.939E-07	7.345E-23	1.256E-22	5.588E-22	4.060E-21	4.889E-20	2.733E-19	1.285E-18
OPu-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
OU-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	2.210E-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
OPa-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	9.071E-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

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
AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA
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	
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	4.219E-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	
U-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	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	
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	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	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	9.978E+00	
U-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	2.767E-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	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	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	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	
U-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	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	

THF(i) is the thread fraction of the parent nuclide.
 ORESALC.EXE execution time = 28.72 seconds