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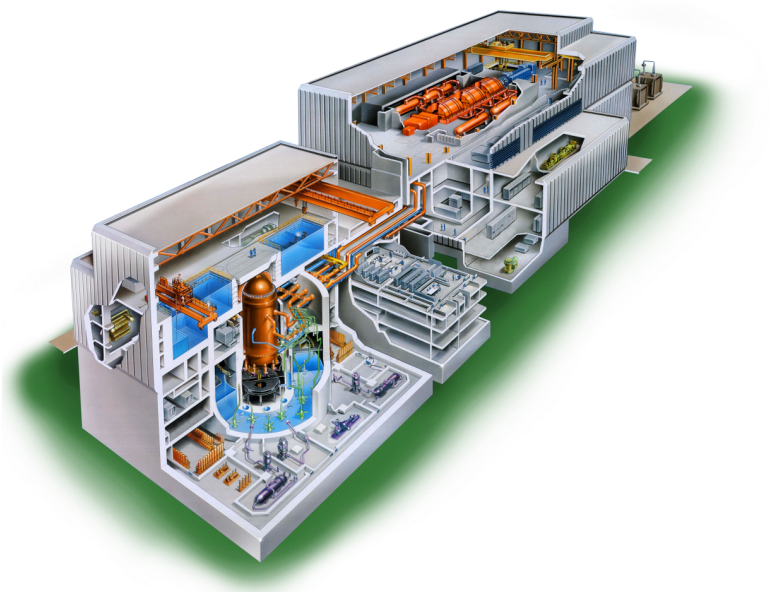
# ABWR
# Design Control Document
# Tier 2



## Chapter 2

## Site Characteristics

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# Chapter 2

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# 2.0 Site Characteristics

## 2.0.1 Summary

This section defines the envelope of site-related parameters which the ABWR Standard Plant is designed to accommodate. These parameters envelope most potential sites in the U.S. A summary of the site envelope design parameters is given in Table 2.0-1.

## Table 2.0-1
## Envelope of ABWR Standard Plant Site Design Parameters

| | | |
|---|---|---|
| **Maximum Ground Water Level:** | 61.0 cm below grade | |
| **Extreme Wind:** | Basic Wind Speed: 177 km/h[*] / 197 km/h[†] | |
| **Maximum Flood (or Tsunami) Level:[‡]** | 30.5 cm below grade | |
| **Tornado:** | – Maximum Tornado Wind Speed: | 483 km/h |
| | – Maximum Rotational Speed: | 386 km/h |
| | – Translational Velocity: | 97 km/h |
| | – Radius: | 45.7m |
| | – Maximum Pressure Drop: | 13.827 kPaD |
| | – Rate of Pressure Drop: | 8.277 kPa/s |
| | – Missile Spectra: | Spectrum I[f] |
| **Precipitation (for Roof Design):** | – Maximum Rainfall Rate: | 49.3 cm/h[**] |
| | – Maximum Snow Load: | 2.394 kPa |
| **Ambient Design Temperature:** | 1% Exceedance Values<br>– Maximum: 37.8°C dry bulb<br>25°C wet bulb (coincident)<br>26.7°C wet bulb (non-coincident)<br>– Minimum: –23.3°C<br>0% Exceedance Values (Historical limit)<br>– Maximum 46.1°C dry bulb<br>26.7°C wet bulb (coincident)<br>27.2°C wet bulb (non-coincident)<br>– Minimum: –40°C | |
| **Soil Properties:** | – Minimum Static Bearing Capacity: | 718.20 kPa[††] |
| | – Minimum Shear Wave Velocity: | 305 m/s[‡‡] |
| | – Liquification Potential: | None at plant site resulting from site specific SSE ground motion |

## Table 2.0-1
## Envelope of ABWR Standard Plant Site Design Parameters (Continued)

| | | |
|---|---|---|
| **Seismology:** | – SSE Peak Ground Acceleration:<br>– SSE Response Spectra:<br>– SSE Time History: | 0.30g[ƒƒ]<br>per RG 1.60<br>Envelope SSE Response Spectra |
| **Hazards in Site Vicinity:** | – Site Proximity Missiles and Aircraft<br>– Toxic Gases<br>– Volcanic Activity | <br>≤$10^{-7}$ per year<br>None |
| **Exclusion Area Boundary: (EAB)** | – An area whose boundary has a Chi/Q less than or equal to 1.37 x $10^{-3}$ s/$m^3$ | None |
| **Meteorological Dispersion (Chi/Q):** | – Maximum 2-hour 95% EAB<br>– Maximum 2-hour 95% LPZ<br>– Maximum annual average (8760 hour) LPZ | 1.37x$10^{-3}$ s/$m^3$<br>4.11x$10^{-4}$ s/$m^3$<br>1.17x$10^{-6}$ s/$m^3$ |

* 50–year recurrence interval; value to be utilized for design of non-safety-related structures only.

† 100–year recurrence interval; value to be utilized for design for safety-related structures only.

‡ Probable maximum flood level (PMF), as defined in ANSI/ANS-2.8, “Determining Design Basis Flooding at Power Reactor Sites.”

ƒ Spectrum I missiles consist of a massive high kinetic energy missile which deforms on impact, a rigid missile to test penetration resistance, and a small rigid missile of a size sufficient to just pass through any openings in protective barriers. These missiles consists of an 1800 kg automobile, a 125 kg, 20 cm diameter armor piercing artillery shell, and a 2.54 cm diameter solid steel sphere, all impacting at 35% of the maximum horizontal windspeed of the design basis tornado. The first two missiles are assumed to impact at normal incidence, the last to impinge upon openings in the most damaging directions.

** Maximum value for 1 hour over 2.6 $km^2$ probable maximum precipitation (PMP) with ratio of 5 minutes to 1 hour PMP of 0.32 as found in National Weather Source Publication HMR No. 52. Maximum short term rate: 15.7 cm/5 min.

†† At foundation level of the reactor and control buildings.

‡‡ This is the minimum shear wave velocity at low strains after the soil property uncertainties have been applied.

ƒƒ Free-field, at plant grade elevation.

## 2.1 Limits Imposed on SRP Section II Acceptance Criteria by ABWR Standard Plant

This section defines limits imposed on SRP Section II acceptance criteria by (1) the envelope of ABWR Standard Plant site design parameters given in Table 2.0-1 and (2) the assumptions, both implicit and explicit, related to site characteristics employed in the evaluation of the ABWR design. These limits are presented in Table 2.1-1 for the following five SRP Section II categories of site characteristics:

(1) Geography and Demography

(2) Nearby Industrial, Transportation and Military Facilities

(3) Meteorology

(4) Hydrology Engineering

(5) Geology, Seismology and Geotechnical Engineering

See Subsection 2.3.2 for COL license information.

## Table 2.1-1 Limits Imposed on SRP Section II Acceptance Criteria by ABWR Design

| SRP Section | Subject | Limits |
|---|---|---|
| **Geography and Demography** | | |
| 2.1.1 | Site Location and Description | None. |
| 2.1.2 | Exclusion Area Authority and Control | None. |
| 2.1.3 | Population Distribution | None. |
| **Nearby Industrial, Transportation and Military Facilities** | | |
| 2.2.1 - 2.2.2 | Identification of Potential Hazards in Site Vicinity | Identify potential hazards in the site vicinity that have a probability of occurrence $>10^{-7}$ per year which produce: (1) missiles more energetic than the tornado missile spectra, or (2) pressure effects in excess of the design basis tornado. |
| 2.2.3 | Evaluation of Potential Accidents | Evaluate only those potential hazards identified above. |
| **Meteorology** | | |
| 2.3.1 | Regional Climatology | Per Table 2.0-1. |
| 2.3.2 | Local Meteorology | None. |
| 2.3.3 | Onsite Meteorological Measurement Programs | None. |
| 2.3.4 | Short-Term Diffusion Estimates for Accidental Atmospheric Releases | Show that the site meteorological dispersion values as calculated in accordance with Regulatory Guide 1.145, and compared to dose values given in Chapter 15, result in doses less than stipulated in 10CFR100 and the applicable portions of SRP Sections 11 and 15. |
| 2.3.5 | Long-Term Diffusion Estimates | None. |
| **Hydrology Engineering** | | |
| 2.4.1 | Hydraulic Description | Per Table 2.0-1. |
| 2.4.2 | Floods | Per Table 2.0-1. |
| 2.4.3 | Probable Maximum Flood on Streams and Rivers | None. |
| 2.4.4 | Potential Dam Failures Seismically Induced | Demonstrate that failure of existing and potential upstream or downstream water control structures will not exceed flooding 30.5 cm below grade. |
| 2.4.5 | Probable Maximum Surge and Seiche Flooding | Probable maximum surge and seiche flooding level 30.5 cm below grade. |
| 2.4.6 | Probable Maximum Tsunami | Probable maximum tsunami flooding level 30.5 cm below grade. |

## Table 2.1-1 Limits Imposed on SRP Section II Acceptance Criteria by ABWR Design (Continued)

| SRP Section | Subject | Limits |
|---|---|---|
| 2.4.7 | Ice Effects | None. |
| 2.4.8 | Cooling Water Channels and Reservoirs | None. |
| 2.4.9 | Channel Diversion | None. |
| 2.4.10 | Flooding Protection Requirements | None. |
| 2.4.11 | Cooling Water Supply | None. |
| 2.4.12 | Groundwater | Per Table 2.0-1. |
| 2.4.13 | Accidental Releases of Liquid Effluents in Ground and Surface Waters | None. |
| 2.4.14 | Technical Specifications and Emergency Operation Requirement | None. |
| **Geology, Seismology and Geotechnical Engineering** | | |
| 2.5.1 | Basic Geology and Seismic Information | None. |
| 2.5.2 | Vibratory Ground Motion | Per Table 2.0-1. |
| 2.5.3 | Surface Faulting | No faulting at or near the ground surface is accepted. |
| 2.5.4 | Stability of Subsurface Materials and Foundations | Per Table 2.0-1. |
| 2.5.5 | Stability of Slopes | None. |

## 2.2 Requirements for Determination of ABWR Site Acceptability

This section provides the requirements for the determination of ABWR site acceptability. Acceptability is required from the standpoint of both design basis events and severe accident.

### 2.2.1 Design Basis Events

For design basis events, the site is acceptable if all of the site characteristics fall within the envelope of ABWR Standard Plant site design parameters given in Table 2.0-1. For cases where a characteristic exceeds its envelope, it will be necessary for the COL applicant to submit analyses to demonstrate that the overall set of site characteristics do not exceed the capability of the design. See Subsection 2.3.1 for COL license information requirements.

### 2.2.2 Severe Accidents

The ABWR PRA results were calculated for an average or typical site, as outlined in Subsection 19E.3. Although these results form a good basis for assessing the general ABWR capability to satisfy offsite dose-related goals, they do not form a basis for concluding that the ABWR would meet dose-related goals at a specific site whose characteristics cannot be defined at the point of ABWR certification. Consistent with the certification concept that all key technical issues be resolved before certification, it is appropriate to define the process for determining future site acceptability. This process is defined below in terms of (1) acceptance criteria, (2) data input, and (3) analysis.

**Acceptance Criteria:** Site acceptability for severe accidents will be based upon a calculation using the CRAC 2 computer code. The results of such a calculation will be compared to the goals of Table 19E.3-7 as shown in Table 2.2-1. The site will be deemed acceptable if the results fall within the given goals.

**Data Input:** The input to the CRAC 2 computer code will be a combination of ABWR and site parameters. The CRAC 2 code input is divided into specific areas. The areas defined in Table 2.2-2 as ABWR will be used as input with their specific data listed in Appendix 2A. The areas defined as GENERAL are also provided in Appendix 2A. The areas defined as UTILITY are to be supplied by the licensing utility as specified in the CRAC 2 manual (NUREG/CR-2326) and are site specific.

The basic reference case for determining individual and societal risk comparisons (Table 2.2-1)uses a 95/5 evacuation model as shown in Table 19E.3-3. For the determination of dose consequences for comparison to the dose goal shown in Table 2.2-1, no evacuation or shielding factors were assumed. If the results for a specific site using the above assumptions prove unacceptable, then site-specific evacuation and shielding parameters may be substituted in lieu of the reference values in Subgroup Evacuation. However, if the results of such an evaluation for a specific site are unacceptable, site-specific evacuation and shielding parameters may be substituted in lieu of the reference values in Subgroup Evacuation.

**Analysis:** The analysis for evaluation of a specific site will be accomplished with the CRAC 2 computer code as modified through Sandia National Laboratory Modification 46. Basic input and code characteristics are described in NUREG/CR-2326 and NUREG/CR-2552.

See Subsection 2.3.3 for COL license information requirements.

## Table 2.2-1 Dose-Related Goals

| | |
|---|---|
| Individual Risk | $<3.9 \times 10^{-7}$ (0.1% of normal risk) |
| Societal Risk | $<1.7 \times 10^{-6}$ (0.1% of normal risk) |
| Probability of 0.25 Sv Whole Body Dose at 0.80 km | $<10^{-6}$ per year |

## Table 2.2-2 CRAC 2 Data Input Listing

| CRAC Parameter Group | Defined by | Purpose |
|---|---|---|
| 1. Spatial | ABWR | Site radial mesh |
| 2. Site | ABWR | Meteorological selection |
| 3. Economic | General | Not used but required to run code |
| 4. Population | Utility | Population description |
| 5. Topography | Utility | Topography description |
| 6. Isotope | ABWR | Reactor core Inventory |
| 7. Leakage | ABWR | Release parameters |
| 8. Dispersion | ABWR | Building parameters |
| 9. Evacuation | ABWR | Evacuation modeling |
| 10. Acute | General | Health physics |
| 11. Latent | General | Health physics |
| 12. Chronic | General | Health physics |
| 13. File 20 | Not used | Same data as 4 and 5 |
| 14. File 21 | General | Health physics |
| 15. File 27 | Utility | Meteorology data |

# 2.3 COL License Information

## 2.3.1 Envelope of Standard Plant Design Parameters

### 2.3.1.1 Non-Seismic Design Parameters

Compliance with the envelope of standard plant site non-seismic design parameters of Table 2.0-1 shall be demonstrated for design bases events (Subsection 2.2.1).

### 2.3.1.2 Seismic Design Parameters

To confirm seismic design adequacy of the standard plant, COL applicants shall demonstrate that the site-specific conditions meet the following site envelope parameters considered in the standardized design.

(1) SSE Ground Motion

The site-specific SSE ground response spectra of 5% damping at plant grade in the free-field are enveloped by the design ground spectra shown in Figures 3.7-1 and 3.7-2 for the horizontal and vertical components, respectively, which are based on Regulatory Guide 1.60 anchored to 0.3g peak ground acceleration. When the site-specific control ground motion is determined to locate at the rock outcrop or a hypothetical rock outcrop according to SRP 3.7.1 guidelines (e.g., shallow soil site), the site-specific soil free-surface motion through soil layer amplification shall be calculated and the resulting ground surface response spectra shall be bounded by the design ground spectra.

(2) Bearing Capacity

The site soil static bearing capacity at the foundation level of the reactor and control building is 718.20 kPa minimum.

## 2.3.2 Standard Review Plant Site Characteristics

Identification and description of all differences from SRP Section II Acceptance Criteria for site characteristics (as augmented by Table 2.1-1) shall be provided. Where such differences exist, the evaluation shall discuss how the alternate site characteristic is acceptable. In addition, the COL applicant will provide/address the following:

### 2.3.2.1 Site Location and Description

COL applicants will provide site-specific information to site location, including political subdivisions, natural and man-made features, population, highways, railways, waterways, and other significant features of the area.

#### 2.3.2.2 Exclusion Area Authority and Control

COL applicants will provide site-specific information related to activities that may be permitted within the designated exclusion area.

#### 2.3.2.3 Population Distribution

COL applicants will provide population data for the site environs.

#### 2.3.2.4 Identification of Potential Hazards in Site Vicinity

COL applicants will provide information with respect to industrial, military, and transportation facilities and routes to establish the presence and magnitude of potential external hazards.

#### 2.3.2.5 Evaluation of Potential Accidents

COL applicants will identify potential accident situations in the vicinity of the plant and the bases for which these potential accidents were or were not accommodated in the design. If the site-dependent blast loads are larger than those of design tornado pressures, all load combinations should be changed accordingly.

#### 2.3.2.6 External Impact Hazards

COL applicants will provide a review and evaluation of the effects on the protection criteria of some external impact hazards, such as general aviation or nearby explosions.

#### 2.3.2.7 Local Meteorology

COL applicants will provide local meteorology for NRC review.

#### 2.3.2.8 Onsite Meteorological Measurements Program

COL applicants will provide the onsite meteorological measurements program.

#### 2.3.2.9 Short-Term Dispersion Estimates for Accidental Atmospheric Releases

COL applicants will provide site-specific short-term dispersion estimates for NRC review to ensure that the envelope values (Tables 15.6-3, 15.6-7, 15.6-13, 15.6-14 and 15.6-18) of relative concentrations are not exceeded.

#### 2.3.2.10 Long-Term Diffusion Estimates

COL applicants will provide annual average atmospheric dispersion values for reactive releases for NRC review.

#### 2.3.2.11 Hydrologic Description

COL applicants will provide a detailed description of all major hydrologic features on or in the vicinity of the site. They will also provide a specific description of the site and all safety-related

elevations, structures, exterior accesses, equipment, and systems from the standpoint of hydrology considerations.

#### 2.3.2.12 Floods

COL applicants will provide site-specific information related to historical flooding and the potential flooding at the plant site, including flood history, flood design considerations, and effects of local intense precipitation.

#### 2.3.2.13 Probable Maximum Flood on Streams and Rivers

COL applicants will provide site-specific information related to determining design-basis flooding at power reactor sites and the extent of flood protection required for those safety-related systems, structures, and components.

#### 2.3.2.14 Ice Effects

COL applicants will demonstrate that safety-related facilities and water supply are not affected by ice flooding or blockage.

#### 2.3.2.15 Cooling Water Channels and Reservoirs

COL applicants will provide the basis for the hydraulic design of channels and reservoirs used to transport and impound plant cooling and for protection of safety-related structures.

#### 2.3.2.16 Channel Division

COL applicants will provide site-specific information related to channel diversion.

#### 2.3.2.17 Flooding Protection Requirements

COL applicants will provide site-specific information related to flooding protection requirements.

#### 2.3.2.18 Cooling Water Supply

COL applicants will identify natural events that may reduce or limit the available cooling water supply and ensure that an adequate water supply will exist to operate or shut down the plant, as required.

#### 2.3.2.19 Accidental Release of Liquid Effluents in Ground and Surface Waters

COL applicants will provide information on the ability of the surface water environment to disperse, dilute, or concentrate accidental releases. Effects of these releases on existing and known future use of surface water resources shall also be provided.

### 2.3.2.20 Technical Specifications and Emergency Operation Requirement

COL applicants will establish the technical specifications and emergency procedures required to implement flood protection for safety-related facilities and provide assurance of an adequate water supply to shut down and cool the reactor.

### 2.3.2.21 Basic Geological and Seismic Information

COL applicants will provide site-specific information related to regional and site physiography, geomorphology, stratigraphy, lithology and tectonics.

### 2.3.2.22 Vibratory Ground Motion

COL applicants will develop site-specific geological, seismological, and geotechnical data and will compare the site-specific SSE ground response spectra to the design ground spectra according to Subsection 2.3.1.2.

### 2.3.2.23 Surface Faulting

COL applicants will develop site-specific geological data to ensure that no potential exists for surface faulting at the site.

### 2.3.2.24 Stability of Subsurface Material and Foundation

COL applicants will provide information concerning the properties and stability of site-specific soils and rocks under both static and dynamic conditions including the vibratory ground motions associated with the site-specific SSE.

### 2.3.2.25 Site and Facilities

COL applicants will provide a detailed description of the site conditions and geologic features. The description will include site topographical features and the location of various Seismic Category I structures and appurtenances (pipelines, channels, etc.) with respect to the source of normal and emergency cooling water.

### 2.3.2.26 Field Investigations

The type, quantity, extent, and purpose of all field exploration will be provided by COL applicants. Logs of all borings and test pits should be provided. Results of geophysical surveys should be presented in tables and profiles. Records of field plate load tests, field permeability tests, and other special field tests (e.g., bore-hold extensometer or pressuremeter tests) should be given.

### 2.3.2.27 Laboratory Investigations

The number and type of laboratory tests and the location of samples should be provided by the COL applicant in tabular form. The results of laboratory tests on disturbed and undisturbed soil and rock samples obtained from field investigations should also be provided.

### 2.3.2.28 Subsurface Conditions

COL applicants will investigate and define the subsurface conditions and provide the engineering classifications and descriptions of soil and rock supporting the foundations. The information should include the history of soil deposition and erosion, past and present goundwater levels, glacial or other preloading influences, rock weathering, and any rock or soil characteristics that may present a hazard to plant safety. Profiles through the Seismic Category I structures will be provided that show generalized subsurface features beneath these structures.

### 2.3.2.29 Excavation and Backfilling for Foundation Construction

COL applicants will provide site-specific thickness and properties of soil (if any) between the base of the foundation and the underlying rock. The configuration, along with detailed longitudinal sections and cross sections of other safety-related structures of the plant, including the ultimate heat sink (UHS) and Seismic Category I buried pipes and electrical ducts, should be provided. COL applicants will provide data concerning the extent (horizontally and vertically) of all Seismic Category I excavations, fills, and slopes. The locations, elevations, and grades for excavated slopes should be described and shown on plot plans and typical cross-sections. COL applicant submittals should discuss, as appropriate, excavating and dewatering methods, excavation depths below grade, field inspection and testing of excavations, protection of foundation excavations from deterioration during construction, and the foundation dental fill work. The sources, quantities, and static and dynamic engineering properties of borrowed materials will be described. The compaction requirements, results of test fills, and fill properties, such as moisture content, density, permeability, compressibility, and gradation should be provided.

### 2.3.2.30 Effect of Groundwater

COL applicants will analyze the goundwater condition for the specific site and evaluate the effect of groundwater on such site geotechnical properties as total and effective unit weights, cohesion and angle of internal friction, and dynamic soil properties.

### 2.3.2.31 Liquefaction Potential

COL applicants will demonstrate that at site-specific SSE ground motion, no liquefaction potential exists for soils under and around all Seismic Category I structures, including Category I buried pipelines and electrical ducts. COL applicants will justify the selection of the soil properties used in the liquefaction potential evaluation (e.g., laboratory tests, field tests, and published data), the magnitude and duration of the earthquake and the number of cycles of earthquakes.

### 2.3.2.32 Response of Soil and Rock to Dynamic Loading

COL applicants will determine dynamic soil properties of the site in terms of shear modulus and material damping as function of shear strain. These strain-dependent properties will be used in the determination of the site-specific SSE ground motion.

### 2.3.2.33 Minimum Soil Bearing Capacity

COL applicants will demonstrate that the site has the minimum static bearing capacity of 718.20 kPa at the foundation level of the reactor and control buildings. For other safety-related plant facilities, COL applicants will demonstrate that the foundation material has adequate bearing capacity to withstand the site-specific loads.

### 2.3.2.34 Earth Pressures

COL applicants will provide a site-specific evaluation of static and dynamic lateral earth pressures and hydrostatic groundwater pressures acting on plant safety-related facilities.

### 2.3.2.35 Soil Properties for Seismic Analysis of Buried Pipes

COL applicants will provide and justify the soil properties used for the seismic analysis of Seismic Category I buried pipes and electrical conduits.

### 2.3.2.36 Static and Dynamic Stability of Facilities

COL applicants will perform a site-specific stability evaluation of all safety-related facilities including foundation rebound, settlement, differential settlement, and bearing capacity. Assumptions made in stability analyses will be confirmed by as-built data.

### 2.3.2.37 Subsurface Instrumentation

Instrumentation, if any, proposed for the surveillance of the performance of the foundations for safety-related structures will be described by COL applicants. The type, location, and purpose of each instrument and significant details of installation methods will be provided. For example, the location and the installation procedures for permanent benchmarks and markers required for monitoring the settlement of Seismic Category I structures should be described. In the case of safety-related water-control structures (such as dams, slopes, canals), the details of installing instrumentation such as piezometers, slope indicators, and settlement plates should be described. A schedule for installing and reading all instruments and for interpreting the data will be presented. Limiting values for continued safety should be identified.

### 2.3.2.38 Stability of Slopes

COL applicants will provide information about the static and dynamic stability of all soil and rock slopes, the failure of which could adversely affect the safety of the plant. The staff will evaluate the stability of all slopes at the site, using the state-of-the-art procedures available at the time of application.

### 2.3.2.39 Embankments and Dams

COL applicants should provide information about the static and dynamic stability of all embankments and dams that impound water required for safe operation (and shutdown) of the ABWR for review by the NRC if embankments and dams are used.

### 2.3.3 CRAC 2 Computer Code Calculations

Compliance with acceptance criteria, data input and analysis of Subsection 2.2.2 for the determination of ABWR site acceptability for severe accidents shall be demonstrated.

# 2A Input to CRAC 2 Computer Code for Determination of ABWR Site Acceptability

## Table 2A-1 Spatial Subgroup (NUREG/CR-2326, pg 2–11*)

| **Spatial** | | **20** | **No** | | | | |
|---|---|---|---|---|---|---|---|
| 0.25 | 0.75 | 1.25 | 1.75 | 2.25 | 2.75 | 3.75 | 4.25 |
| 5.75 | 6.25 | 7.75 | 8.25 | 9.75 | 10.25 | 13.75 | 16.25 |
| 18.75 | 21.25 | 23.75 | 26.25 | | | | |

* This reference specifies the location for the following CRAC input parameters, their definitions and formatting instructions.

## Table 2A-2 Site Subgroup (NUREG/CR-2326, pg 2–13)

| | | |
|---|---|---|
| SITE | 1 | |
| GENERIC SITE | | 50001 |
| 29 06 | | |

## Table 2A-3 Economic Subgroup (NUREG/CR-2326, pg 2–22)

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **ECONOMIC** | | | **54** | **NO** | | | |
| 499.0 | 3349.0 | | 0.2 | 31527.0 | 4344.0 | 135.0 | 685.0 |
| MAINE | 5 | 9 | 0.077 | 0.182 | 250.0 | 485.0 | |
| N.H. | 5 | 9 | 0.097 | 0.444 | 150.0 | 802.0 | |
| VT | 5 | 9 | 0.283 | 0.791 | 177.0 | 657.0 | |
| MASS | 5 | 9 | 0.123 | 0.283 | 372.0 | 1366.0 | |
| R.I. | 5 | 9 | 0.081 | 0.220 | 476.0 | 2133.0 | |
| CONN | 5 | 9 | 0.140 | 0.313 | 500.0 | 2158.0 | |
| N.Y. | 5 | 9 | 0.315 | 0.579 | 188.0 | 642.0 | |
| N.J. | 5 | 9 | 0.197 | 0.162 | 376.0 | 2222.0 | |
| PA | 5 | 9 | 0.307 | 0.413 | 239.0 | 669.0 | |
| OHIO | 5 | 9 | 0.618 | 0.153 | 183.0 | 1516.0 | |
| IND | 5 | 9 | 0.728 | 0.067 | 206.0 | 1498.0 | |
| ILL | 5 | 9 | 0.795 | 0.041 | 213.0 | 1786.0 | |
| MICH | 5 | 9 | 0.285 | 0.238 | 197.0 | 955.0 | |
| WIS | 5 | 9 | 0.520 | 0.598 | 194.0 | 807.0 | |
| MINN | 5 | 9 | 0.563 | 0.185 | 160.0 | 854.0 | |
| IOWA | 5 | 9 | 0.944 | 0.050 | 242.0 | 1458.0 | |
| MO | 5 | 9 | 0.724 | 0.079 | 111.0 | 674.0 | |
| N.D. | 5 | 9 | 0.922 | 0.047 | 45.0 | 306.0 | |
| S.D. | 5 | 9 | 0.922 | 0.074 | 46.0 | 257.0 | |
| NEBR | 5 | 9 | 0.967 | 0.027 | 99.0 | 470.0 | |
| KANS | 5 | 9 | 0.915 | 0.034 | 92.0 | 437.0 | |
| DEL | 4 | 10 | 0.471 | 0.046 | 508.0 | 1725.0 | |
| MD | 4 | 10 | 0.414 | 0.227 | 273.0 | 1799.0 | |
| VA | 4 | 10 | 0.371 | 0.171 | 126.0 | 864.0 | |
| W.VA | 4 | 10 | 0.270 | 0.203 | 44.0 | 472.0 | |
| N.C. | 4 | 10 | 0.368 | 0.056 | 261.0 | 819.0 | |
| S.C. | 4 | 10 | 0.327 | 0.063 | 148.0 | 635.0 | |
| GA | 4 | 10 | 0.417 | 0.058 | 164.0 | 609.0 | |
| FLA | 4 | 10 | 0.368 | 0.077 | 233.0 | 930.0 | |
| KY | 4 | 10 | 0.557 | 0.117 | 141.0 | 792.0 | |
| TENN | 4 | 10 | 0.507 | 0.140 | 118.0 | 669.0 | |

## Table 2A-3 Economic Subgroup (NUREG/CR-2326, pg 2–22) (Continued)

| | | | | | | |
|---|---|---|---|---|---|---|
| ALA | 4 | 10 | 0.400 | 0.041 | 144.0 | 515.0 |
| MISS | 4 | 10 | 0.475 | 0.047 | 135.0 | 520.0 |
| ARK | 4 | 10 | 0.494 | 0.030 | 158.0 | 691.0 |
| LA | 4 | 10 | 0.332 | 0.087 | 137.0 | 763.0 |
| OKLA | 4 | 10 | 0.782 | 0.051 | 68.0 | 442.0 |
| TEXAS | 4 | 10 | 0.811 | 0.053 | 54.0 | 354.0 |
| MONTANA | 5 | 9 | 0.658 | 0.026 | 20.0 | 186.0 |
| IDAHO | 5 | 9 | 0.894 | 0.114 | 93.0 | 485.0 |
| WYOMING | 5 | 9 | 0.560 | 0.024 | 15.0 | 119.0 |
| COLORADO | 4 | 10 | 0.570 | 0.039 | 69.0 | 332.0 |
| N.MEXICO | 4 | 10 | 0.600 | 0.056 | 21.0 | 100.0 |
| ARIZONA | 4 | 10 | 0.556 | 0.069 | 36.0 | 134.0 |
| UTAH | 4 | 10 | 0.236 | 0.215 | 36.0 | 265.0 |
| NEVADA | 4 | 10 | 0.127 | 0.117 | 19.0 | 104.0 |
| WASH | 5 | 9 | 0.369 | 0.138 | 132.0 | 586.0 |
| OREGON | 5 | 9 | 0.300 | 0.093 | 68.0 | 330.0 |
| CALIF | 4 | 10 | 0.318 | 0.119 | 316.0 | 936.0 |
| NOVA SCO | 5 | 9 | 0.0 | 0.0 | 0.0 | 0.0 |
| QUEBEC | 5 | 9 | 0.0 | 0.0 | 0.0 | 0.0 |
| ONTARIO | 5 | 9 | 0.0 | 0.0 | 0.0 | 0.0 |
| BAJA CAL | 5 | 9 | 0.0 | 0.0 | 0.0 | 0.0 |
| SONORA | 5 | 9 | 0.0 | 0.0 | 0.0 | 0.0 |
| CHIHUAHU | 5 | 9 | 0.0 | 0.0 | 0.0 | 0.0 |

## Table 2A-4 Population Subgroup (NUREG/CR-2326, pg 2–26)

To be supplied by utility for specified spatial mesh above.

## Table 2A-5 Topography Subgroup, (NUREG/CR-2326, pg 2–33)

To be supplied by utility for specified spatial mesh above.

## Table 2A-6 Isotopic Subgroup (NUREG/CR-2326, pg 2–37)

| ISOTOPE | | 54 | NO | EVALUATED FOR 3926MWT CINDR SOURCE | | |
|---|---|---|---|---|---|---|
| CO-58 | 7 | 3.730E+05 | 7.130E+01 | 1.000E-02 | 1.000E-04 | 0.5 OF GESSAR |
| CO-60 | 7 | 2.247E+03 | 1.921E+03 | 1.000E-02 | 1.000E-04 | 0.5 OF GESSAR |
| KR-85 | 1 | 1.184E+06 | 3.919E+03 | 0. | 0. | |
| KR-85M | 1 | 2.644E+07 | 1.867E-01 | 0. | 0. | |
| KR-87 | 1 | 5.070E+07 | 5.278E-02 | 0. | 0. | |
| KR-88 | 1 | 7.185E+07 | 1.167E-01 | 0. | 0. | |
| RB-86 | 4 | 1.844E+05 | 1.865E+01 | 1.000E-02 | 1.000E-04 | |
| SR-89 | 6 | 9.700E+07 | 5.200E+01 | 1.000E-02 | 1.000E-04 | |
| SR-90 | 6 | 1.014E+07 | 1.026E+04 | 1.000E-02 | 1.000E-04 | |
| SR-91 | 6 | 1.242E+08 | 3.950E-01 | 1.000E-02 | 1.000E-04 | |
| Y-90 | 8 SR-90 | 1.094E+07 | 2.670E+00 | 1.000E-02 | 1.000E-04 | |
| Y-91 | 8 SR-91 | 1.263E+08 | 5.880E+01 | 1.000E-02 | 1.000E-04 | |
| ZR-95 | 8 | 1.735E+08 | 6.550E+01 | 1.000E-02 | 1.000E-04 | |
| ZR-97 | 8 | 1.781E+08 | 7.000E-01 | 1.000E-02 | 1.000E-04 | |
| NB-95 | 8 ZR-95 | 1.734E+08 | 3.510E+01 | 1.000E-02 | 1.000E-04 | |
| MO-99 | 7 | 1.966E+08 | 2.751E+00 | 1.000E-02 | 1.000E-04 | |
| TC-99M | 7 MO-99 | 1.696E+08 | 2.508E-01 | 1.000E-02 | 1.000E-04 | |
| RU-103 | 7 | 1.664E+08 | 3.959E+01 | 1.000E-02 | 1.000E-04 | |
| RU-105 | 7 | 1.174E+08 | 1.850E-01 | 1.000E-02 | 1.000E-04 | |
| RU-106 | 7 | 5.909E+07 | 3.690E+02 | 1.000E-02 | 1.000E-04 | |
| RH-105 | 7 RU-105 | 9.907E+07 | 1.479E+00 | 1.000E-02 | 1.000E-04 | |
| SB-127 | 5 | 8.969E+06 | 3.800E+00 | 1.000E-02 | 1.000E-04 | |
| SB-129 | 5 | 3.172E+07 | 1.808E-01 | 1.000E-02 | 1.000E-04 | |
| TE-127 | 5 SB-127 | 8.853E+06 | 3.896E-01 | 1.000E-02 | 1.000E-04 | |
| TE-127M | 5 | 1.339E+06 | 1.090E+02 | 1.000E-02 | 1.000E-04 | |
| TE-129 | 5 SB-129 | 2.983E+07 | 4.861E-02 | 1.000E-02 | 1.000E-04 | |
| TE-129M | 5 | 8.090E+06 | 3.340E+01 | 1.000E-02 | 1.000E-04 | |
| TE-131M | 5 | 1.464E+07 | 1.250E+00 | 1.000E-02 | 1.000E-04 | |
| TE-132 | 5 | 1.488E+08 | 3.250E+00 | 1.000E-02 | 1.000E-04 | |
| I-131 | 3 TE-131M | 1.033E+08 | 8.040E+00 | 1.000E-02 | 1.000E-04 | |
| I-132 | 3 TE-132 | 1.510E+08 | 9.521E-02 | 1.000E-02 | 1.000E-04 | |
| I-133 | 3 | 2.160E+08 | 8.667E-01 | 1.000E-02 | 1.000E-04 | |

## Table 2A-6 Isotopic Subgroup (NUREG/CR-2326, pg 2–37) (Continued)

| | | | | | |
|---|---|---|---|---|---|
| I-134 | 3 | 2.378E+08 | 3.653E-02 | 1.000E-02 | 1.000E-04 |
| I-135 | 3 | 2.039E+08 | 2.744E-01 | 1.000E-02 | 1.000E-04 |
| XE-133 | 1 I-133 | 2.170E+08 | 5.290E+00 | 0. | 0. |
| XE-135 | 1 I-135 | 3.806E+07 | 3.821E-01 | 0. | 0. |
| CS-134 | 4 | 2.103E+07 | 7.524E+02 | 1.000E-02 | 1.000E-04 |
| CS-136 | 4 | 4.630E+06 | 1.300E+01 | 1.000E-02 | 1.000E-04 |
| CS-137 | 4 | 1.305E+07 | 1.099E+04 | 1.000E-02 | 1.000E-04 |
| BA-140 | 6 | 1.863E+08 | 1.279E+01 | 1.000E-02 | 1.000E-04 |
| LA-140 | 8 BA-140 | 1.974E+08 | 1.676E+00 | 1.000E-02 | 1.000E-04 |
| CE-141 | 8 | 1.727E+08 | 3.253E+01 | 1.000E-02 | 1.000E-04 |
| CE-143 | 8 | 1.629E+08 | 1.375E+00 | 1.000E-02 | 1.000E-04 |
| CE-144 | 8 | 1.387E+08 | 2.844E+02 | 1.000E-02 | 1.000E-04 |
| PR-143 | 8 CE-143 | 1.612E+08 | 1.358E+01 | 1.000E-02 | 1.000E-04 |
| ND-147 | 8 | 7.103E+07 | 1.099E+01 | 1.000E-02 | 1.000E-04 |
| NP-239 | 8 | 2.401E+09 | 2.350E+00 | 1.000E-02 | 1.000E-04 |
| PU-238 | 8 CM-242 | 6.224E+05 | 3.251E+04 | 1.000E-02 | 1.000E-04 |
| PU-239 | 8 NP-239 | 5.364E+04 | 8.912E+06 | 1.000E-02 | 1.000E-04 |
| PU-240 | 8 CM-244 | 8.826E+04 | 2.469E+06 | 1.000E-02 | 1.000E-04 |
| PU-241 | 8 | 2.121E+07 | 5.333E+03 | 1.000E-02 | 1.000E-04 |
| AM-241 | 8 PU-241 | 1.726E+04 | 1.581E+05 | 1.000E-02 | 1.000E-04 |
| CM-242 | 8 | 1.260E+07 | 1.630E+02 | 1.000E-02 | 1.000E-04 |
| CM-244 | 8 | 2.885E+05 | 6.611E+03 | 1.000E-02 | 1.000E-04 |

## Table 2A-7 Leakage Subgroup (NUREG/CR-2326, pg 2–41)

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **(This group input as a dummy in reference deck and overwritten by individual cases.) (See Individual Cases)** | | | | | | | |
| **LEAKAGE** | **1** | **NO DUMMY INPUT-OVERLAYED IN ACTUAL RUN SEE TABLE 2A-15** | | | | | |
| ABWR CS1 | 1.0 | 31.9 | 2.78 | 1.5 | 4.0E+07 | 10. | |
| 1.0E+00 | | 0.8 | 0.8 | 1.0E-03 | 1.1E-03 | 2.6E-04 | 1.5E-07 |

## Table 2A-8 Dispersion Subgroup (NUREG/CR-2326, pg 2–45)

| | | | | |
|---|---|---|---|---|
| **DISPERSION** | | | | |
| 54.0 | 37.7 | 4 | 0 | 0 |

## Table 2A-9 Evacuation Subgroup (NUREG/CR-2326, pg 2–47)

| | | | | | | |
|---|---|---|---|---|---|---|
| **EVACUATE** | **2** | **NO** | **NO** | | | |
| 0.95 | 1.5 | 4.47 | 7.0 | 11263. | 16. 0 | 2. |
| 0.05 | 0. | 0. | 0. | 0. | 0. | 2. |
| 0.75 | 1. | 0.5 | 0.75 | 0.33 | 0.5 | 0.08 |
| 2.66E-4 | 2.66E-4 | 1.33E-4 | 2.66E-4 | | | |
| 8045. | 90. | 95. | 3. | 0 | | |

## Table 2A-10 Acute Subgroup (NUREG/CR-2326, pg 2–53)

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ACUTE | | 7 | | | | | |
| T MARROW | 320. | 400. | 510. | 615. | .03 | .5 | 1. |
| LLI WALL | 2000. | 5000. | 5000. | 5000. | 1. | 1. | 1. |
| LUNG | 5000. | 14800. | 22400. | 24000. | .24 | .73 | 1. |
| W BODY | 55. | 150. | 280. | 370. | .30 | .8 | 0. |
| LUNG | 3000. | 3000.1 | 6000. | 6000. | .05 | 1.0 | 0. |
| LLI WALL | 1000. | 1000.1 | 2500. | 2500. | .05 | 1.0 | 0. |
| THYROID | 1.E10 | 1.E10 | 1.E10 | 1.E10 | 1.0 | 1.0 | 0.0 |

## Table 2A-11 Latent Subgroup (NUREG/CR-2326, pg 2–57)

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **LATENT** | **8** | | | | | | |
| 10CENT EST | 30. | 5. | 300. | 2.5 | | | |
| T MARROW | LEUKEMIA | 2.836E-05 | 2.720E-05 | 1.872E-05 | 1.382E-05 | 9.720E-06 | 6.770E-06 |
| 4.040E-06 | 1.700E-06 | 4.900E-07 | 0.0 | 1.0 | | | |
| LUNG | LUNG | 2.749E-05 | 2.749E-05 | 2.749E-05 | 1.587E-05 | 8.130E-06 | 3.990E-06 |
| 1.500E-06 | 2.200E-07 | 0.0 | 0.0 | 0.5 | | | |
| OTHER | BREAST | 3.172E-05 | 3.172E-05 | 3.172E-05 | 1.831E-05 | 9.380E-06 | 4.600E-06 |
| 1.730E-06 | 2.500E-07 | 0.0 | 0.0 | 1.000E+09 | | | |
| SKELETON | BONE | 1.107E-05 | 1.064E-05 | 6.990E-06 | 3.020E-06 | 1.670E-06 | 9.100E-07 |
| 4.200E-07 | 1.200E-07 | 1.000E-08 | 0.0 | 1.0 | | | |
| LLI WALL | GI TRK | 1.688E-05 | 1.688E-05 | 1.688E-05 | 9.740E-06 | 4.990E-06 | 2.450E-06 |
| 9.200E-07 | 1.300E-07 | 0.0 | 0.0 | 1.0 | | | |
| OTHER | OTHER | 4.235E-05 | 3.557E-05 | 2.539E-05 | 1.466E-05 | 7.520E-06 | 3.690E-06 |
| 1.390E-06 | 2.000E-07 | 0.0 | 0.0 | 1.0 | | | |
| W BODY | W BODY | 1.579E-04 | 1.533E-04 | 1.274E-04 | 7.542E-05 | 4.141E-05 | 2.241E-05 |
| 1.000E-05 | 2.620E-06 | 5.000E-07 | 0.0 | 1.0 | | | |
| THYROID | THYROID | 3.34E-04 | | | | | |
| | | | | 1.00E 09 | | | |

## Table 2A-12 Chronic Subgroup (NUREG/CR-2326, pg 2–62)

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **CHRONIC EXPOSURE** | | | | **6** | | | |
| 10 | 1 | 1.000 | 365. | 25550. | | 3.0 | 15.0 |
| SR-90 | | 0.0525 | 0.0718 | | | | |
| RU-106 | | 0.0397 | 0.0533 | | | | |
| CS-137 | | 0.0525 | 0.105 | | | | |
| PU-238 | | 0.0529 | 0.107 | | | | |
| PU-239 | | 0.0530 | 0.108 | | | | |
| PU-240 | | 0.0530 | 0.108 | | | | |
| PU-241 | | 0.0520 | 0.101 | | | | |
| AM-241 | | 0.0530 | 0.108 | | | | |
| CM-242 | | 0.0292 | 0.0327 | | | | |
| CM-244 | | 0.0522 | 0.102 | | | | |
| 3 | 11 | 1.0 | 365. | 365. | 14.0 | 2.0 | 3.3 |
| CS-134 | | 8.44 | 4.22 | | | | |
| LUNG | | 6.47E+4 | 7.31E+4 | | | | |
| T MARROW | | 6.50E+4 | 7.34E+4 | | | | |
| SKELETON | | 6.41E+4 | 7.24E+4 | | | | |
| T E C L | | 6.41E+4 | 7.24E+4 | | | | |
| ST WALL | | 7.40E+4 | 8.34E+4 | | | | |
| SI+CONT | | 8.05E+4 | 9.09E+4 | | | | |
| ULI WALL | | 7.95E+4 | 8.96E+4 | | | | |
| LLI WALL | | 8.28E+4 | 9.33E+4 | | | | |
| THYROID | | 6.49E+4 | 7.33E+4 | | | | |
| OTHER | | 6.27E+4 | 7.08E+4 | | | | |
| W BODY | | 6.32E+4 | 7.14E+4 | | | | |
| TESTES | | 7.57E+4 | 8.55E+4 | | | | |
| OVARIES | | 6.68E+4 | 7.55E+4 | | | | |
| CS-136 | | 2.84 | 1.42 | | | | |
| LUNG | | 8.82E+3 | 8.82E+3 | | | | |
| T MARROW | | 9.29E+3 | 9.29E+3 | | | | |
| SKELETON | | 9.10E+3 | 9.10E+3 | | | | |
| T E C L | | 9.10E+3 | 9.10E+3 | | | | |
| ST WALL | | 1.15E+4 | 1.15E+4 | | | | |

## Table 2A-12 Chronic Subgroup (NUREG/CR-2326, pg 2–62) (Continued)

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| SI+CONT | | 1.19E+4 | 1.19E+4 | | | | |
| ULI WALL | | 1.20E+4 | 1.20E+4 | | | | |
| LLI WALL | | 1.35E+4 | 1.35E+4 | | | | |
| THYROID | | 9.23E+3 | 9.23E+3 | | | | |
| OTHER | | 8.88E+3 | 8.88E+3 | | | | |
| W BODY | | 8.96E+3 | 8.96E+3 | | | | |
| TESTES | | 1.03E+4 | 1.03E+4 | | | | |
| OVARIES | | 9.48E+3 | 9.48E+3 | | | | |
| CS-137 | | 8.44 | 4.22 | | | | |
| LUNG | | 4.71E+4 | 5.59E+4 | | | | |
| T MARROW | | 4.73E+4 | 5.61E+4 | | | | |
| SKELETON | | 4.68E+4 | 5.56E+4 | | | | |
| T E C L | | 4.68E+4 | 5.56E+4 | | | | |
| ST WALL | | 5.18E+4 | 6.13E+4 | | | | |
| SI+CONT | | 5.39E+4 | 6.39E+4 | | | | |
| ULI WALL | | 5.40E+4 | 6.39E+4 | | | | |
| LLI WALL | | 5.64E+4 | 6.64E+4 | | | | |
| THYROID | | 4.68E+4 | 5.55E+4 | | | | |
| OTHER | | 4.60E+4 | 5.45E+4 | | | | |
| W BODY | | 4.62E+4 | 5.49E+4 | | | | |
| TESTES | | 5.18E+4 | 6.15E+4 | | | | |
| OVARIES | | 4.81E+4 | 5.70E+4 | | | | |
| 2 | 2 | 1.0 | 365. | 365. | 14.0 | 2.0 | 3.3 |
| SR-89 | | .397 | 0.402 | | | | |
| LUNG | | 2.91E+3 | 5.81E+2 | | | | |
| T MARROW | | 2.63E+4 | 5.26E+3 | | | | |
| SKELETON | | 5.95E+4 | 1.19E+4 | | | | |
| T E C L | | 6.00E+4 | 1.20E+4 | | | | |
| ST WALL | | 1.56E+4 | 3.12E+3 | | | | |
| SI+CONT | | 2.73E+4 | 5.45E+3 | | | | |
| ULI WALL | | 1.46E+5 | 2.91E+4 | | | | |
| LLL WALL | | 4.27E+5 | 8.53E+4 | | | | |
| THYROID | | 2.91E+3 | 5.81E+2 | | | | |

## Table 2A-12 Chronic Subgroup (NUREG/CR-2326, pg 2–62) (Continued)

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| OTHER | | 2.91E+3 | 5.81E+2 | | | | |
| W BODY | | 9.55E+3 | 1.91E+3 | | | | |
| TESTES | | 2.91E+3 | 5.81E+2 | | | | |
| OVARIES | | 2.91E+3 | 5.81E+2 | | | | |
| SR-90 | | .505 | .588 | | | | |
| LUNG | | 1.59E+4 | 3.18E+3 | 5.50E+2 | 1.80E+1 | | |
| T MARROW | | 1.04E+6 | 2.08E+5 | 5.25E+4 | 1.29E+4 | 1.00E+4 | 3.10E+3 |
| SKELETON | | 3.08E+6 | 6.15E+5 | 2.57E+5 | 9.81E+4 | 1.09E+5 | 4.30E+4 |
| T E C L | | 2.64E+6 | 5.27E+5 | 1.93E+5 | 6.77E+4 | 7.20E+4 | 2.76E+4 |
| ST WALL | | 2.03E+4 | 4.05E+3 | 5.50E+1 | 1.80E+1 | | |
| SI+CONT | | 2.64E+4 | 5.28E+3 | 5.50E+1 | 1.80E+1 | | |
| ULI WALL | | 1.06E+5 | 2.11E+4 | 5.00E+1 | 2.00E+1 | | |
| LLL WALL | | 4.06E+5 | 8.12E+4 | 5.00E+1 | | | |
| THYROID | | 1.59E+4 | 3.18E+3 | 5.50E+1 | 1.80E+1 | | |
| OTHER | | 1.59E+4 | 3.18E+3 | 5.50E+1 | 1.30E+1 | | |
| W BODY | | 2.76E+5 | 5.52E+4 | 2.03E+4 | 7.44E+3 | 8.08E+3 | 3.13E+3 |
| TESTES | | 1.59E+4 | 3.18E+3 | 5.50E+1 | 1.80E+1 | | |
| OVARIES | | 1.59E+4 | 3.18E+3 | 5.50E+1 | 1.80E+1 | | |
| 2 | 9 | 1.0 | 0.0 | 365. | 14.0 | 0.0 | 10.0 |
| I-133 | | 1.00E-8 | 0.00486 | | | | |
| LUNG | | 8.53E+2 | 1.58E+2 | | | | |
| T MARROW | | 7.99E+2 | 1.48E+2 | | | | |
| SKELETON | | 7.88E+2 | 1.46E+2 | | | | |
| T E C L | | 7.88E+2 | 1.46E+2 | | | | |
| ST WALL | | 1.11E+4 | 2.06E+3 | | | | |
| SI+CONT | | 2.30E+3 | 4.25E+2 | | | | |
| ULI WALL | | 6.16E+3 | 1.14E+3 | | | | |
| LLI WALL | | 9.83E+3 | 1.82E+3 | | | | |
| THYROID | | 1.73E+6 | 3.21E+5 | | | | |
| OTHER | | 9.07E+2 | 1.68E+2 | | | | |
| W BODY | | 1.46E+3 | 2.70E+2 | | | | |
| TESTES | | 7.13E+2 | 1.32E+2 | | | | |
| OVARIES | | 9.99E+2 | 1.85E+2 | | | | |

## Table 2A-12 Chronic Subgroup (NUREG/CR-2326, pg 2–62) (Continued)

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| I-131 | | 1.00E-8 | 0.692 | | | | |
| LUNG | | 1.92E+3 | 3.56E+2 | | | | |
| T MARROW | | 1.55E+3 | 2.87E+2 | | | | |
| SKELETON | | 1.67E+3 | 3.10E+2 | | | | |
| T E C L | | 1.67E+3 | 3.10E+2 | | | | |
| ST WALL | | 6.16E+3 | 1.14E+3 | | | | |
| SI+CONT | | 1.79E+3 | 3.32E+2 | | | | |
| ULI WALL | | 4.49E+3 | 8.32E+2 | | | | |
| LLI WALL | | 1.03E+4 | 1.91E+3 | | | | |
| THYROID | | 9.07E+6 | 1.68E+6 | | | | |
| OTHER | | 2.20E+3 | 4.07E+2 | | | | |
| W BODY | | 4.75E+3 | 8.79E+2 | | | | |
| TESTES | | 7.51E+3 | 1.39E+2 | | | | |
| OVARIES | | 1.15E+3 | 2.21E+2 | | | | |
| 4 | 2 | 1.000 | 3650. | 3650. | 2400. | 5.0 | 5.0 |
| CS-134 | | .164 | .0547 | | | | |
| LUNG | | 7.31E+4 | | | | | |
| T MARROW | | 7.34E+4 | | | | | |
| SKELETON | | 7.24E+4 | | | | | |
| T E C L | | 7.24E+4 | | | | | |
| ST WALL | | 8.34E+4 | | | | | |
| SI+CONT | | 9.09E+4 | | | | | |
| ULI WALL | | 8.96E+4 | | | | | |
| LLI WALL | | 9.33E+4 | | | | | |
| THYROID | | 7.33E+4 | | | | | |
| OTHER | | 7.08E+4 | | | | | |
| W BODY | | 7.14E+4 | | | | | |
| TESTES | | 8.55E+4 | | | | | |
| OVARIES | | 7.55E+4 | | | | | |
| CS-137 | | .250 | .0835 | | | | |
| LUNG | | 5.59E+4 | | | | | |
| T MARROW | | 5.61E+4 | | | | | |
| SKELETON | | 5.56E+4 | | | | | |

## Table 2A-12 Chronic Subgroup (NUREG/CR-2326, pg 2–62) (Continued)

| | | | | | | |
|---|---|---|---|---|---|---|
| T E C L | 5.56E+4 | | | | | |
| ST WALL | 6.13E+4 | | | | | |
| SI+CONT | 6.39E+4 | | | | | |
| ULI WALL | 6.39E+4 | | | | | |
| LLI WALL | 6.64E+4 | | | | | |
| THYROID | 5.55E+4 | | | | | |
| OTHER | 5.45E+4 | | | | | |
| W BODY | 5.49E+4 | | | | | |
| TESTES | 6.15E+4 | | | | | |
| OVARIES | 5.70E+4 | | | | | |
| SR-89 | .0136 | .0068 | | | | |
| LUNG | 5.81E+2 | | | | | |
| T MARROW | 5.26E+3 | | | | | |
| SKELETON | 1.19E+4 | | | | | |
| T E C L | 1.20E+4 | | | | | |
| ST WALL | 3.12E+3 | | | | | |
| SI+CONT | 5.45E+3 | | | | | |
| ULI WALL | 2.91E+4 | | | | | |
| LLL WALL | 8.53E+4 | | | | | |
| THYROID | 5.81E+2 | | | | | |
| OTHER | 5.81E+2 | | | | | |
| W BODY | 1.91E+3 | | | | | |
| TESTES | 5.81E+2 | | | | | |
| OVARIES | 5.81E+2 | | | | | |
| SR-90 | 1.340 | 0.669 | | | | |
| LUNG | 3.18E+3 | 5.50E+2 | 1.80E+1 | | | |
| T MARROW | 2.08E+5 | 5.25E+4 | 1.29E+4 | 1.00E+4 | 3.10E+3 | 3.103+3 |
| SKELETON | 6.15E+5 | 2.57E+5 | 9.81E+4 | 1.09E+5 | 4.30E+4 | 4.30E+4 |
| T E C L | 5.27E+5 | 1.93E+5 | 6.77E+4 | 7.20E+4 | 2.76E+4 | 2.76E+4 |
| ST WALL | 4.05E+3 | 5.50E+1 | 1.80E+1 | | | |
| SI+CONT | 5.28E+3 | 5.50E+1 | 1.80E+1 | | | |
| ULI WALL | 2.11E+4 | 5.00E+1 | 2.00E+1 | | | |
| LLL WALL | 8.12E+4 | 5.00E+1 | | | | |

## Table 2A-12 Chronic Subgroup (NUREG/CR-2326, pg 2–62) (Continued)

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| THYROID | | 3.18E+3 | 5.50E+1 | 1.80E+1 | | | |
| OTHER | | 3.18E+3 | 5.50E+1 | 1.30E+1 | | | |
| W BODY | | 5.52E+4 | 2.03E+4 | 7.44E+3 | 8.08E+3 | 3.13E+3 | 3.13E+3 |
| TESTES | | 3.18E+3 | 5.50E+1 | 1.80E+1 | | | |
| OVARIES | | 3.18E+3 | 5.50E+1 | 1.80E+1 | | | |
| 10 | 11 | 0.333 | 365. | 10950. | 3285. | 5.0 | 25.0 |
| CO-58 | | | | | | | |
| CO-60 | | | | | | | |
| NB-95 | | | | | | | |
| ZR-95 | | | | | | | |
| RU-103 | | | | | | | |
| RU-106 | | | | | | | |
| I-131 | | | | | | | |
| CS-134 | | | | | | | |
| CS-136 | | | | | | | |
| CS-137 | | | | | | | |

## Table 2A-13 Scale Subgroup (NUREG/CR-2326, pg 2–72)

| **SCALE** | | | **36** | **NO** | | | | |
|---|---|---|---|---|---|---|---|---|
| 1 | E02 | E03 | E05 | E07 | E01 | E12 | E13 | E1 |
| 5 | E17 | E11 | E22 | E23 | E25 | E27 | E21 | E3 |
| 2 | E33 | E35 | E37 | E31 | E42 | E43 | E45 | E4 |
| 7 | E41 | E52 | E53 | E55 | E57 | E51 | E62 | E6 |
| 3 | E65 | E67 | E61 | E7 | | | | |

## Table 2A-14 Results Subgroup (NUREG/CCR-2326, pg 2–72)

| | | |
|---|---|---|
| **RESULT** | **28** | **NO** |
| ACUTE FATALITIES | | |
| ACUTE INJURIES | | |
| POP W/BMR DS>200 | | |
| RSK OF FAT-INT 2 | | 1.0E-06 |
| RSK OF FAT-INT 4 | | 1.0E-06 |
| RSK OF FAT-INT10 | | 1.0E-06 |
| RSK OF FAT-INT14 | | 1.0E-06 |
| FATAL RADIUS(MI) | | |
| RSK OF INJ-INT 2 | | 1.0E-06 |
| RSK OF INJ-INT14 | | 1.0E-06 |
| RSK OF INJ-INT18 | | 1.0E-06 |
| INJUR RADIUS(MI) | | |
| ACU BMR DS-INT 2 | | 1.0E-02 |
| ACU BMR DS-INT10 | | 1.0E-02 |
| ACU BMR DS-INT14 | | 1.0E-02 |
| ACU BMR DS-INT18 | | 1.0E-02 |
| ACU THY DS-INT 2 | | 1.0E-02 |
| ACU THY DS-INT10 | | 1.0E-02 |
| ACU THY DS-INT14 | | 1.0E-02 |
| ACU THY DS-INT18 | | 1.0E-02 |
| TOT LAT/INITIAL | | |
| TOT LAT/TOTAL | | |
| CANCER RSK-INT 2 | | 1.0E-06 |
| CANCER RSK-INT14 | | 1.0E-06 |
| CANCER RSK-INT18 | | 1.0E-06 |
| DECON AREA | | |
| DECON DIST | | |
| TOT WBODY MANREM | | 1.0E-02 |

## Table 2A-15 Individual Accident Event Groups Leakage Subgroup (NUREG/CR-2326, pg 2–41)

**The following are input after the basis reference deck setup as individual cases.**

**LEAKAGE**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| CASE0 | | 1.0 | 2.7 | 10.0 | 1.7 | 3.3E+05 | 37.0 | |
| | 0.0054 | | 3.8E–06 | 5.1E–06 | 1.0E–08 | 1.0E–08 | 1.0E–08 | 1.0E–08 |
| CASE1 | | 1.0 | 20.0 | 1.0 | 19.2 | 3.3E+05 | 37.0 | |
| | 1.00 | | 1.5E–07 | 1.3E–05 | 1.0E–08 | 1.0E–08 | 1.0E–08 | 1.0E–08 |
| CASE2 | | 1.0 | 19.0 | 1.0 | 18.2 | 3.3E+05 | 37.0 | |
| | 1.00 | | 5.6E–06 | 5.6E–06 | 1.0E–08 | 1.0E–08 | 1.0E–08 | 1.0E–08 |
| CASE3 | | 1.0 | 50.0 | 10.0 | 49.2 | 3.3E+05 | 37.0 | |
| | 1.00 | | 2.8E–04 | 2.2E–03 | 1.0E–08 | 1.0E–08 | 1.0E–08 | 1.0E–08 |
| CASE4 | | 1.0 | 20.0 | 1.0 | 19.2 | 3.3E+05 | 37.0 | |
| | 1.00 | | 1.6E–03 | 1.6E–03 | 1.0E–03 | 1.0E–08 | 1.0E–08 | 1.0E–08 |
| CASE5 | | 1.0 | 19.0 | 1.0 | 18.2 | 3.3E+05 | 37.0 | |
| | 1.00 | | 6.0E–03 | 5.3E–04 | 1.0E–08 | 1.0E–08 | 1.0E–08 | 1.0E–08 |
| CASE6 | | 1.0 | 19.0 | 10.0 | 18.2 | 3.3E+05 | 37.0 | |
| | 1.00 | | 3.1E–02 | 7.7E–02 | 1.0E–08 | 1.0E–08 | 1.0E–08 | 1.0E–08 |
| CASE7 | | 1.0 | 20.0 | 10.0 | 19.2 | 3.3E+05 | 37.0 | |
| | 1.00 | | 8.9E–03 | 9.9E–02 | 1.0E–08 | 1.0E–08 | 1.0E–08 | 1.0E–08 |
| CASE8 | | 1.0 | 2.0 | 10.0 | 1.2 | 1.0E+06 | 37.0 | |
| | 1.00 | | 1.9E–01 | 2.5E–01 | 1.0E–08 | 1.0E–08 | 1.0E–08 | 1.0E–08 |
| CASE9 | | 1.0 | 23.6 | 10.0 | 12.2 | 3.3E+05 | 37.0 | |
| | 1.00 | | 3.7E–01 | 3.6E–01 | 1.0E–08 | 1.0E–08 | 1.0E–08 | 1.0E–08 |

## Table 2A-16 File 21 Dose Conversion File (NUREG/CR-2326, pg 4–3)

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| CO-58 | CO-60 | KR-85 | KR-85M | KR-87 | KR-88 | RB-86 | SR-89 | SR-90 | SR-91 |
| Y-90 | Y-91 | ZR-95 | ZR-97 | NB-95 | MO-99 | TC-99M | RU-103 | RU-105 | RU-106 |
| RH-105 | TE-127 | TE-127m | TE-129 | TE-129m | TE-131m | TE-132 | SB-127 | SB-129 | I-131 |
| I-132 | I-133 | I-134 | I-135 | XE-133 | XE-135 | CS-134 | CS-136 | CS-137 | BA-140 |
| LA-140 | CE-141 | CE-143 | CE-144 | PR-143 | ND-147 | NP-239 | PU-238 | PU-239 | PU-240 |
| PU-241 | AM-241 | CM-242 | CM-244 | | | | | | |
| LUNG | | | | | | | | | |
| .5900e+05 | .5900e+05 | .2000e+04 | 0. | 0. | 0. | 0. | | | |
| .1030e+03 | .2100e+04 | .1130e+06 | .2010e+00 | | | | | | |
| .4600e+06 | .4600e+06 | .7400e+06 | 0. | .1000e+06 | 0. | 0. | | | |
| .2660e+03 | .5580e+04 | .2920e+06 | .5670e+00 | | | | | | |
| .1800e+00 | .1800e+00 | 0. | 0. | 0. | 0. | 0. | | | |
| .2300e+00 | .4820e+01 | .2510e+03 | .4470e-03 | | | | | | |
| .2100e+00 | .2100e+00 | 0. | 0. | 0. | 0. | 0. | | | |
| .9220e+01 | .1300e+02 | .1760e+05 | .3220e-01 | | | | | | |
| .9600e+00 | .9600e+00 | 0. | 0. | 0. | 0. | 0. | | | |
| .1730e+02 | .1750e+02 | .8400e+05 | .1720e+00 | | | | | | |
| .2000e+01 | .2000e+01 | 0. | 0. | 0. | 0. | 0. | | | |
| .1110e+03 | .1300e+03 | .2090e+06 | .4470e+00 | | | | | | |
| .1400e+05 | .1400e+05 | 0. | 0. | 0. | 0. | 0. | | | |
| .9270e+01 | .1730e+03 | .1020e+05 | .1940e-01 | | | | | | |
| .7800e+04 | .7800e+04 | 0. | 0. | 0. | 0. | 0. | | | |
| 0. | 0. | 0. | 0. | | | | | | |
| .1600e+05 | .1600e+05 | .2000e+04 | 0. | 0. | 0. | 0. | | | |

## Table 2A-16 File 21 Dose Conversion File (NUREG/CR-2326, pg 4–3) (Continued)

| | | | | | | |
|---|---|---|---|---|---|---|
| 0. | 0. | 0. | 0. | | | |
| .4300e+04 | .4300e+04 | 0. | 0. | 0. | 0. | 0. |
| .8250e+02 | .1930e+03 | .8580e+05 | .1600e+00 | | | |
| .3300e+05 | .3300e+05 | 0. | 0. | 0. | 0. | 0. |
| 0. | 0. | 0. | 0. | | | |
| .2000e+06 | .2000e+06 | 0. | 0. | 0. | 0. | 0. |
| .2810e+00 | .5660e+01 | .3080e+03 | .5940e-03 | | | |
| .1300e+06 | .1300e+06 | 0. | 0. | 0. | 0. | 0. |
| .7720e+02 | .1670e+04 | .8440e+05 | .1520e+00 | | | |
| .1500e+05 | .1500e+05 | 0. | 0. | 0. | 0. | 0. |
| .1310e+03 | .5100e+03 | .2120e+05 | .4000e-01 | | | |
| .3100e+05 | .3100e+05 | 0. | 0. | 0. | 0. | 0. |
| .7820e+02 | .1540e+04 | .8590e+05 | .1560e+00 | | | |
| .1600e+05 | .1600e+05 | 0. | 0. | 0. | 0. | 0. |
| .2180e+02 | .2910e+03 | .2080e+05 | .3420e-01 | | | |
| .8900e+02 | .8900e+02 | 0. | 0. | 0. | 0. | 0. |
| .8120e+01 | .1350e+02 | .1360e+05 | .2540e-01 | | | |
| .5400e+05 | .5400e+05 | 0. | 0. | 0. | 0. | 0. |
| .5520e+02 | .1090e+04 | .6050e+05 | .1050e+00 | | | |
| .2200e+04 | .2200e+04 | 0. | 0. | 0. | 0. | 0. |
| .4850e+02 | .7370e+02 | .9200e+05 | .1670e+00 | | | |
| .2500e+07 | .2500e+07 | .1400e+07 | 0. | 0. | 0. | 0. |
| .2060e+02 | .4300e+03 | .2250e+05 | .4060e-01 | | | |
| .3600e+04 | .3600e+04 | 0. | 0. | 0. | 0. | 0. |
| .7530e+01 | .5010e+02 | .8940e+04 | .1610e-01 | | | |

## Table 2A-16 File 21 Dose Conversion File (NUREG/CR-2326, pg 4–3) (Continued)

| | | | | | | |
|---|---|---|---|---|---|---|
| .1600e+04 | .1600e+04 | 0. | 0. | 0. | 0. | 0. |
| .3430e+00 | .7670e+00 | .4980e+03 | .8780e-03 | | | |
| .1200e+06 | .1200e+06 | 0. | 0. | 0. | 0. | 0. |
| .1340e+01 | .3370e+02 | .1350e+04 | .5610e-03 | | | |
| .5600e+03 | .5600e+03 | 0. | 0. | 0. | 0. | 0. |
| .1810e+01 | .1830e+01 | .9550e+04 | .1350e-01 | | | |
| .1500e+06 | .1500e+06 | 0. | 0. | 0. | 0. | 0. |
| .1020e+02 | .2220e+03 | .6480e+04 | .6970e-02 | | | |
| .1100e+05 | .1100e+05 | 0. | 0. | 0. | 0. | 0. |
| .1390e+03 | .8900e+03 | .1590e+06 | .2940e+00 | | | |
| .3000e+05 | .3000e+05 | 0. | 0. | 0. | 0. | 0. |
| .1690e+03 | .2880e+04 | .2230e+05 | .4190e-01 | | | |
| .2500e+05 | .2500e+05 | 0. | 0. | 0. | 0. | 0. |
| .7050e+02 | .8650e+03 | .7950e+05 | .1430e+00 | | | |
| .3200e+04 | .3200e+04 | 0. | 0. | 0. | 0. | 0. |
| .6990e+02 | .9780e+02 | .1360e+06 | .2530e+00 | | | |
| .2400e+04 | .2400e+04 | 0. | 0. | 0. | 0. | 0. |
| .4150e+02 | .6630e+03 | .4610e+05 | .8220e-01 | | | |
| .1000e+04 | .1000e+04 | 0. | 0. | 0. | 0. | 0. |
| .9230e+02 | .1010e+03 | .2700e+06 | .4830e+00 | | | |
| .3100e+04 | .3100e+04 | 0. | 0. | 0. | 0. | 0. |
| .6500e+02 | .2910e+03 | .8090e+05 | .1460e+00 | | | |
| .5600e+03 | .5600e+03 | 0. | 0. | 0. | 0. | 0. |
| .3870e+02 | .3880e+02 | .2690e+06 | .5000e+00 | | | |
| .2500e+04 | .2500e+04 | 0. | 0. | 0. | 0. | 0. |

## Table 2A-16 File 21 Dose Conversion File (NUREG/CR-2326, pg 4–3) (Continued)

| | | | | | | |
|---|---|---|---|---|---|---|
| .1400e+03 | .2690e+03 | .2040e+06 | .4000e+00 | | | |
| .4100e+00 | .4100e+00 | 0. | 0. | 0. | 0. | 0. |
| .5750e+01 | .8080e+02 | .6440e+04 | .6970e-02 | | | |
| .9400e+00 | .9400e+00 | 0. | 0. | 0. | 0. | 0. |
| .1890e+02 | .4160e+02 | .2750e+05 | .5060e-01 | | | |
| .4500e+05 | .4500e+05 | .6000e+04 | 0. | 0. | 0. | 0. |
| .1660e+03 | .3470e+04 | .1810e+06 | .3280e+00 | | | |
| .8200e+04 | .8200e+04 | 0. | 0. | 0. | 0. | 0. |
| .2160e+03 | .3820e+04 | .2380e+06 | .4440e+00 | | | |
| .3400e+05 | .3400e+05 | .6000e+04 | 0. | 0. | 0. | 0. |
| .5840e+02 | .1240e+04 | .6450e+05 | .1150e+00 | | | |
| .6300e+04 | .6300e+04 | 0. | 0. | 0. | 0. | 0. |
| .3970e+02 | .3460e+04 | .2580e+05 | .4140e-01 | | | |
| .1600e+05 | .1600e+05 | 0. | 0. | 0. | 0. | 0. |
| .2330e+03 | .1710e+04 | .2730e+06 | .5390e+00 | | | |
| .6200e+05 | .6200e+05 | 0. | 0. | 0. | 0. | 0. |
| .7640e+01 | .1500e+03 | .8400e+04 | .1500e-01 | | | |
| .1300e+05 | .1300e+05 | 0. | 0. | 0. | 0. | 0. |
| .3140e+02 | .2000e+03 | .3720e+05 | .6080e-01 | | | |
| .2100e+07 | .2100e+07 | .8000e+06 | 0. | 0. | 0. | 0. |
| .4980e+01 | .1070e+03 | .2250e+04 | .3440e-02 | | | |
| .4900e+05 | .4900e+05 | 0. | 0. | 0. | 0. | 0. |
| 0. | 0. | 0. | 0. | | | |
| .3700e+05 | .3700e+05 | .1000e+04 | 0. | 0. | 0. | 0. |
| .1570e+02 | .2700e+03 | .1740e+05 | .2780e-01 | | | |

## Table 2A-16 File 21 Dose Conversion File (NUREG/CR-2326, pg 4–3) (Continued)

| | | | | | | |
|---|---|---|---|---|---|---|
| .9200e+04 | .9200e+04 | .1000e+03 | 0. | 0. | 0. | 0. |
| .1870e+02 | .1740e+03 | .2150e+05 | .2650e-01 | | | |
| .1200e+09 | .1200e+09 | .1900e+09 | 0. | 0. | 0. | 0. |
| .5410e-01 | .1140e+01 | .5920e+02 | .9580e-05 | | | |
| .1200e+09 | .1200e+09 | .1700e+09 | 0. | 0. | 0. | 0. |
| .2960e-01 | .6220e+00 | .3240e+02 | .5420e-05 | | | |
| .1200e+09 | .1200e+09 | .1700e+09 | .1000e+08 | 0. | 0. | 0. |
| .5150e-01 | .1080e+01 | .5640e+02 | .9170e-05 | | | |
| .6400e+05 | .6400e+05 | .4660e+06 | .3000e+05 | .1000e+05 | .1000e+05 | .1000e+05 |
| .3530e-05 | .1560e-02 | .7740e-02 | .2940e-09 | | | |
| .1300e+09 | .1300e+09 | .1800e+09 | 0. | 0. | 0. | .1000e+08 |
| .4840e+01 | .1020e+03 | .5300e+04 | .3220e-02 | | | |
| .7600e+08 | .7600e+08 | .1100e+08 | 0. | 0. | 0. | 0. |
| .4370e-01 | .9050e+00 | .4790e+02 | .8310e-05 | | | |
| .1300e+09 | .1300e+09 | .1800e+09 | 0. | 0. | 0. | 0. |
| .1240e+01 | .2610e+02 | .1360e+04 | .1070e-02 | | | |
| t marrow | | | | | | |
| .7950e+03 | .3000e+04 | .1000e+03 | 0. | 0. | 0. | 0. |
| .1230e+03 | .2500e+04 | .1350e+06 | .2400e+00 | | | |
| .2000e+04 | .2100e+05 | .3500e+05 | .1000e+04 | .1000e+04 | 0. | 0. |
| .2960e+03 | .6220e+04 | .3250e+06 | .6310e+00 | | | |
| .6100e+00 | .6100e+00 | 0. | 0. | 0. | 0. | 0. |
| .2970e+00 | .6220e+01 | .3250e+03 | .5780e-03 | | | |
| .3900e+00 | .3900e+00 | 0. | 0. | 0. | 0. | 0. |
| .1570e+02 | .2210e+02 | .3000e+05 | .5500e-01 | | | |

## Table 2A-16 File 21 Dose Conversion File (NUREG/CR-2326, pg 4–3) (Continued)

| | | | | | | |
|---|---|---|---|---|---|---|
| .1300e+01 | .1300e+01 | 0. | 0. | 0. | 0. | 0. |
| .1930e+02 | .1960e+02 | .9370e+05 | .1920e+00 | | | |
| .3100e+01 | .3100e+01 | 0. | 0. | 0. | 0. | 0. |
| .1190e+03 | .1390e+03 | .2250e+06 | .4830e+00 | | | |
| .3250e+04 | .6500e+04 | 0. | 0. | 0. | 0. | 0. |
| .1090e+02 | .2020e+03 | .1200e+05 | .2270e-01 | | | |
| .3350e+04 | .1300e+05 | 0. | 0. | 0. | 0. | 0. |
| 0. | 0. | 0. | 0. | | | |
| .6100e+04 | .1100e+06 | .4200e+06 | .1300e+06 | .3000e+05 | .3000e+05 | .1000e+05 |
| 0. | 0. | 0. | 0. | | | |
| .2150e+03 | .3100e+03 | .1000e+02 | 0. | 0. | 0. | 0. |
| .1020e+03 | .2390e+03 | .1030e+06 | .1930e+00 | | | |
| .4700e+03 | .5100e+03 | 0. | 0. | 0. | 0. | 0. |
| 0. | 0. | 0. | 0. | | | |
| .1430e+04 | .9200e+04 | .1000e+03 | 0. | 0. | 0. | 0. |
| .3010e+00 | .6060e+01 | .3300e+03 | .6390e-03 | | | |
| .6700e+03 | .3500e+04 | .1000e+03 | 0. | 0. | 0. | 0. |
| .9460e+02 | .2040e+04 | .1030e+06 | .1870e+00 | | | |
| .1900e+03 | .1900e+03 | 0. | 0. | 0. | 0. | 0. |
| .1670e+03 | .6520e+03 | .2510e+05 | .4720e-01 | | | |
| .5750e+03 | .1400e+04 | 0. | 0. | 0. | 0. | 0. |
| .9170e+02 | .1800e+04 | .1010e+06 | .1830e+00 | | | |
| .1250e+03 | .1300e+03 | 0. | 0. | 0. | 0. | 0. |
| .3130e+02 | .4650e+03 | .2700e+05 | .4440e-01 | | | |
| .1100e+02 | .1100e+02 | 0. | 0. | 0. | 0. | 0. |

## Table 2A-16 File 21 Dose Conversion File (NUREG/CR-2326, pg 4–3) (Continued)

| | | | | | | |
|---|---|---|---|---|---|---|
| .1740e+02 | .2880e+02 | .2910e+05 | .5420e-01 | | | |
| .4050e+03 | .1100e+04 | 0. | 0. | 0. | 0. | 0. |
| .7160e+02 | .1420e+04 | .7830e+05 | .1360e+00 | | | |
| .2400e+02 | .2400e+02 | 0. | 0. | 0. | 0. | 0. |
| .6440e+02 | .9990e+02 | .1220e+06 | .2210e+00 | | | |
| .4400e+03 | .3600e+04 | .2600e+04 | 0. | 0. | 0. | 0. |
| .2650e+02 | .5540e+03 | .2910e+05 | .5220e-01 | | | |
| .2300e+02 | .2300e+02 | 0. | 0. | 0. | 0. | 0. |
| .1280e+02 | .8550e+02 | .1520e+05 | .2740e-01 | | | |
| .3900e+01 | .3900e+01 | 0. | 0. | 0. | 0. | 0. |
| .4540e+00 | .1010e+01 | .6590e+03 | .1160e-02 | | | |
| .1820e+03 | .7500e+03 | .5000e+02 | 0. | 0. | 0. | 0. |
| .4080e+01 | .9200e+02 | .4310e+04 | .1790e-02 | | | |
| .1100e+01 | .1100e+01 | 0. | 0. | 0. | 0. | 0. |
| .2420e+01 | .2440e+01 | .1270e+05 | .1810e-01 | | | |
| .3750e+03 | .8300e+03 | .1000e+02 | 0. | 0. | 0. | 0. |
| .1420e+02 | .3070e+03 | .9200e+04 | .9920e-02 | | | |
| .3000e+03 | .3100e+03 | 0. | 0. | 0. | 0. | 0. |
| .1710e+03 | .1100e+04 | .1920e+06 | .3560e+00 | | | |
| .9400e+03 | .1000e+04 | 0. | 0. | 0. | 0. | 0. |
| .2170e+03 | .3630e+04 | .3880e+05 | .7310e-01 | | | |
| .3100e+03 | .3300e+03 | 0. | 0. | 0. | 0. | 0. |
| .9070e+02 | .1110e+04 | .1020e+06 | .1840e+00 | | | |
| .4600e+02 | .4600e+02 | 0. | 0. | 0. | 0. | 0. |
| .8250e+02 | .1160e+03 | .1600e+06 | .2970e+00 | | | |

## Table 2A-16 File 21 Dose Conversion File (NUREG/CR-2326, pg 4–3) (Continued)

| | | | | | | |
|---|---|---|---|---|---|---|
| .1500e+03 | .1900e+03 | 0. | 0. | 0. | 0. | 0. |
| .5450e+02 | .8730e+03 | .6060e+05 | .1080e+00 | | | |
| .5000e+02 | .5000e+02 | 0. | 0. | 0. | 0. | 0. |
| .1130e+03 | .1230e+03 | .3290e+06 | .5890e+00 | | | |
| .9350e+02 | .9400e+02 | 0. | 0. | 0. | 0. | 0. |
| .8130e+02 | .3750e+03 | .1010e+06 | .1830e+00 | | | |
| .2000e+02 | .2000e+02 | 0. | 0. | 0. | 0. | 0. |
| .4550e+02 | .4560e+02 | .3160e+06 | .5890e+00 | | | |
| .9100e+02 | .9100e+02 | 0. | 0. | 0. | 0. | 0. |
| .1600e+03 | .3180e+03 | .2260e+06 | .4420e+00 | | | |
| .1600e+01 | .1600e+01 | 0. | 0. | 0. | 0. | 0. |
| .1310e+02 | .1840e+03 | .1470e+05 | .1590e-01 | | | |
| .2100e+01 | .2100e+01 | 0. | 0. | 0. | 0. | 0. |
| .3160e+02 | .6980e+02 | .4620e+05 | .8470e-01 | | | |
| .4950e+04 | .4300e+05 | .5000e+04 | 0. | 0. | 0. | 0. |
| .2030e+03 | .4260e+04 | .2230e+06 | .4030e+00 | | | |
| .3550e+04 | .6000e+04 | 0. | 0. | 0. | 0. | 0. |
| .2640e+03 | .4680e+04 | .2930e+06 | .5420e+00 | | | |
| .3250e+04 | .3100e+05 | .6000e+04 | 0. | 0. | 0. | 0. |
| .7560e+02 | .1600e+04 | .8340e+05 | .1490e+00 | | | |
| .2100e+04 | .3400e+04 | 0. | 0. | 0. | 0. | 0. |
| .5000e+02 | .3980e+04 | .3500e+05 | .5610e-01 | | | |
| .6700e+03 | .6800e+03 | 0. | 0. | 0. | 0. | 0. |
| .2610e+03 | .1920e+04 | .3070e+06 | .6060e+00 | | | |
| .1130e+03 | .2700e+03 | 0. | 0. | 0. | 0. | 0. |

## Table 2A-16 File 21 Dose Conversion File (NUREG/CR-2326, pg 4–3) (Continued)

| | | | | | | |
|---|---|---|---|---|---|---|
| .1650e+02 | .3240e+03 | .1810e+05 | .3220e-01 | | | |
| .9550e+02 | .1100e+03 | 0. | 0. | 0. | 0. | 0. |
| .4830e+02 | .3080e+03 | .5740e+05 | .9360e-01 | | | |
| .2350e+03 | .3600e+04 | .5600e+04 | 0. | 0. | 0. | 0. |
| .7840e+01 | .1670e+03 | .4980e+04 | .7610e-02 | | | |
| .1780e+02 | .3400e+02 | 0. | 0. | 0. | 0. | 0. |
| 0. | 0. | 0. | 0. | | | |
| .1400e+03 | .1900e+03 | .1000e+02 | 0. | 0. | 0. | 0. |
| .2480e+02 | .4260e+03 | .2740e+05 | .4390e-01 | | | |
| .6200e+02 | .6400e+02 | 0. | 0. | 0. | 0. | 0. |
| .3490e+02 | .3260e+03 | .4020e+05 | .4970e-01 | | | |
| .1710e+03 | .6000e+04 | .2240e+06 | .3400e+06 | .3000e+06 | .2300e+06 | .2000e+06 |
| .2390e+00 | .5020e+01 | .2620e+03 | .4250e-04 | | | |
| .1590e+03 | .5600e+04 | .2240e+06 | .3500e+06 | .3400e+06 | .2800e+06 | .3000e+06 |
| .1190e+00 | .2490e+01 | .1300e+03 | .2170e-04 | | | |
| .1640e+03 | .5600e+04 | .2240e+06 | .3500e+06 | .3500e+06 | .2700e+06 | .3000e+06 |
| .2180e+00 | .4570e+01 | .2380e+03 | .3890e-04 | | | |
| .4200e-01 | .6100e+01 | .1790e+04 | .5700e+04 | .7500e+04 | .8000e+04 | .9000e+04 |
| .1030e-04 | .4520e-02 | .2240e-01 | .8530e-09 | | | |
| .2650e+03 | .7200e+04 | .2430e+06 | .3800e+06 | .3600e+06 | .3100e+06 | .3000e+06 |
| .1400e+02 | .2950e+03 | .1530e+05 | .9330e-02 | | | |
| .2030e+03 | .3200e+04 | .2900e+04 | .1200e+04 | .1200e+04 | .1000e+04 | .5000e+03 |
| .2050e+00 | .4250e+01 | .2240e+03 | .3890e-04 | | | |
| .2010e+03 | .6600e+04 | .2030e+06 | .2200e+06 | .1500e+06 | .1000e+06 | .6000e+05 |
| .3240e+01 | .6810e+02 | .3560e+04 | .2810e-02 | | | |

## Table 2A-16 File 21 Dose Conversion File (NUREG/CR-2326, pg 4–3) (Continued)

| | | | | | | |
|---|---|---|---|---|---|---|
| skelton | | | | | | |
| .3300e+03 | .2500e+04 | .1000e+03 | 0. | 0. | 0. | 0. |
| .1230e+03 | .2500e+04 | .1350e+06 | .2410e+00 | | | |
| .8000e+03 | .1800e+05 | .3000e+05 | .2000e+04 | 0. | 0. | 0. |
| .3010e+03 | .6270e+04 | .3290e+06 | .6390e+00 | | | |
| .1500e+00 | .1500e+00 | 0. | 0. | 0. | 0. | 0. |
| .2960e+00 | .6240e+01 | .3250e+03 | .5780e-03 | | | |
| .1900e+00 | .1900e+00 | 0. | 0. | 0. | 0. | 0. |
| .1580e+02 | .2220e+02 | .3000e+05 | .5500e-01 | | | |
| .8300e+00 | .8300e+00 | 0. | 0. | 0. | 0. | 0. |
| .1980e+02 | .2000e+02 | .9640e+05 | .1970e+00 | | | |
| .1800e+01 | .1800e+01 | 0. | 0. | 0. | 0. | 0. |
| .1230e+03 | .1440e+03 | .2310e+06 | .4940e+00 | | | |
| .1700e+04 | .6500e+04 | 0. | 0. | 0. | 0. | 0. |
| .1080e+02 | .2020e+03 | .1190e+05 | .2270e-01 | | | |
| .3000e+04 | .3000e+05 | 0. | 0. | 0. | 0. | 0. |
| 0. | 0. | 0. | 0. | | | |
| .3800e+04 | .2600e+06 | .1340e+07 | .6000e+06 | .2000e+06 | .3000e+06 | .1000e+06 |
| 0. | 0. | 0. | 0. | | | |
| .2000e+03 | .3400e+03 | 0. | 0. | 0. | 0. | 0. |
| .1020e+03 | .2390e+03 | .1040e+06 | .1940e+00 | | | |
| .8600e+03 | .1000e+04 | 0. | 0. | 0. | 0. | 0. |
| 0. | 0. | 0. | 0. | | | |
| .1200e+04 | .1900e+05 | 0. | 0. | 0. | 0. | 0. |
| .3080e+00 | .6240e+01 | .3380e+03 | .6530e-03 | | | |

## Table 2A-16 File 21 Dose Conversion File (NUREG/CR-2326, pg 4–3) (Continued)

| | | | | | | |
|---|---|---|---|---|---|---|
| .2800e+03 | .3300e+04 | .1000e+03 | 0. | 0. | 0. | 0. |
| .9440e+02 | .2030e+04 | .1040e+06 | .1880e+00 | | | |
| .1300e+03 | .1300e+03 | 0. | 0. | 0. | 0. | 0. |
| .1680e+03 | .6510e+03 | .2530e+05 | .4750e-01 | | | |
| .2600e+03 | .1200e+04 | 0. | 0. | 0. | 0. | 0. |
| .9150e+02 | .1800e+04 | .1010e+06 | .1830e+00 | | | |
| .1000e+03 | .1100e+03 | 0. | 0. | 0. | 0. | 0. |
| .3130e+02 | .4650e+03 | .2690e+05 | .4440e-01 | | | |
| .1000e+02 | .1000e+02 | 0. | 0. | 0. | 0. | 0. |
| .1740e+02 | .2880e+02 | .2910e+05 | .5420e-01 | | | |
| .1800e+03 | .8800e+03 | 0. | 0. | 0. | 0. | 0. |
| .7160e+02 | .1420e+04 | .7810e+05 | .1360e+00 | | | |
| .1700e+02 | .1700e+02 | 0. | 0. | 0. | 0. | 0. |
| .6450e+02 | .9960e+02 | .1220e+06 | .2220e+00 | | | |
| .1900e+03 | .3400e+04 | .2500e+04 | 0. | 0. | 0. | 0. |
| .2660e+02 | .5550e+03 | .2900e+05 | .5220e-01 | | | |
| .1600e+02 | .1600e+02 | 0. | 0. | 0. | 0. | 0. |
| .1280e+02 | .8500e+02 | .1520e+05 | .2740e-01 | | | |
| .5200e+01 | .5200e+01 | 0. | 0. | 0. | 0. | 0. |
| .4530e+00 | .1010e+01 | .6600e+03 | .1160e-02 | | | |
| .1300e+03 | .1800e+04 | .2000e+03 | 0. | 0. | 0. | 0. |
| .3810e+01 | .8680e+02 | .4020e+04 | .1670e-02 | | | |
| .1200e+01 | .1200e+01 | 0. | 0. | 0. | 0. | 0. |
| .2410e+01 | .2440e+01 | .1270e+05 | .1810e-01 | | | |
| .2600e+03 | .1400e+04 | 0. | 0. | 0. | 0. | 0. |

## Table 2A-16 File 21 Dose Conversion File (NUREG/CR-2326, pg 4–3) (Continued)

| | | | | | | |
|---|---|---|---|---|---|---|
| .1410e+02 | .3050e+03 | .9150e+04 | .9830e-02 | | | |
| .2300e+03 | .2500e+03 | 0. | 0. | 0. | 0. | 0. |
| .1720e+03 | .1100e+04 | .1940e+06 | .3580e+00 | | | |
| .8000e+03 | .9100e+03 | 0. | 0. | 0. | 0. | 0. |
| .2170e+03 | .3640e+04 | .3870e+05 | .7280e-01 | | | |
| .2100e+03 | .2600e+03 | 0. | 0. | 0. | 0. | 0. |
| .9100e+02 | .1110e+04 | .1020e+06 | .1840e+00 | | | |
| .3800e+02 | .3900e+02 | 0. | 0. | 0. | 0. | 0. |
| .8300e+02 | .1160e+03 | .1600e+06 | .2990e+00 | | | |
| .1200e+03 | .2100e+03 | 0. | 0. | 0. | 0. | 0. |
| .5450e+02 | .8750e+03 | .6030e+05 | .1080e+00 | | | |
| .4700e+02 | .4700e+02 | 0. | 0. | 0. | 0. | 0. |
| .1130e+03 | .1230e+03 | .3290e+06 | .5890e+00 | | | |
| .9200e+02 | .9200e+02 | 0. | 0. | 0. | 0. | 0. |
| .8130e+02 | .3750e+03 | .1010e+06 | .1830e+00 | | | |
| .1900e+02 | .1900e+02 | 0. | 0. | 0. | 0. | 0. |
| .4570e+02 | .4570e+02 | .3160e+06 | .5890e+00 | | | |
| .8700e+02 | .8700e+02 | 0. | 0. | 0. | 0. | 0. |
| .1620e+03 | .3220e+03 | .2300e+06 | .4500e+00 | | | |
| .3600e+00 | .3600e+00 | 0. | 0. | 0. | 0. | 0. |
| .1300e+02 | .1820e+03 | .1450e+05 | .1570e-01 | | | |
| .7200e+00 | .7200e+00 | 0. | 0. | 0. | 0. | 0. |
| .3170e+02 | .6990e+02 | .4620e+05 | .8470e-01 | | | |
| .2000e+04 | .4200e+05 | .5000e+04 | 0. | 0. | 0. | 0. |
| .2030e+03 | .4260e+04 | .2230e+06 | .4030e+00 | | | |

## Table 2A-16 File 21 Dose Conversion File (NUREG/CR-2326, pg 4–3) (Continued)

| | | | | | | |
|---|---|---|---|---|---|---|
| .2000e+04 | .5900e+04 | 0. | 0. | 0. | 0. | 0. |
| .2650e+03 | .4690e+04 | .2930e+06 | .5440e+00 | | | |
| .1300e+04 | .3100e+05 | .5000e+04 | 0. | 0. | 0. | 0. |
| .7590e+02 | .1600e+04 | .8370e+05 | .1490e+00 | | | |
| .2000e+04 | .5200e+04 | 0. | 0. | 0. | 0. | 0. |
| .5030e+02 | .4040e+04 | .3500e+05 | .5610e-01 | | | |
| .6700e+03 | .7000e+03 | 0. | 0. | 0. | 0. | 0. |
| .2660e+03 | .1950e+04 | .3120e+06 | .6140e+00 | | | |
| .6100e+02 | .3200e+03 | 0. | 0. | 0. | 0. | 0. |
| .1650e+02 | .3220e+03 | .1810e+05 | .3220e-01 | | | |
| .7100e+02 | .1100e+03 | 0. | 0. | 0. | 0. | 0. |
| .4790e+02 | .3060e+03 | .5700e+05 | .9310e-01 | | | |
| .2000e+03 | .7200e+04 | .1180e+05 | 0. | 0. | 0. | 0. |
| .7820e+01 | .1670e+03 | .4950e+04 | .7550e-02 | | | |
| .2400e+02 | .8600e+02 | 0. | 0. | 0. | 0. | 0. |
| 0. | 0. | 0. | 0. | | | |
| .8500e+02 | .1900e+03 | .4000e+02 | .1000e+02 | 0. | 0. | 0. |
| .2460e+02 | .4230e+03 | .2720e+05 | .4340e-01 | | | |
| .4900e+02 | .5400e+02 | .2600e+02 | .4000e+02 | .4000e+02 | .3000e+02 | .4000e+02 |
| .3490e+02 | .3250e+03 | .4010e+05 | .4950e-01 | | | |
| .3500e+05 | .3400e+07 | .1270e+09 | .1900e+09 | .1700e+09 | .1400e+09 | .1300e+09 |
| .2260e+00 | .4740e+01 | .2480e+03 | .4020e-04 | | | |
| .3300e+05 | .3100e+07 | .1270e+09 | .2000e+09 | .1900e+09 | .1800e+09 | .1700e+09 |
| .1110e+00 | .2340e+01 | .1220e+03 | .2030e-04 | | | |
| .3300e+05 | .3200e+07 | .1270e+09 | .2000e+09 | .1900e+09 | .1800e+09 | .1700e+09 |

## Table 2A-16 File 21 Dose Conversion File (NUREG/CR-2326, pg 4–3) (Continued)

| | | | | | | |
|---|---|---|---|---|---|---|
| .2050e+00 | .4320e+01 | .2250e+03 | .3660e-04 | | | |
| .1200e+01 | .2700e+04 | .9770e+06 | .3120e+07 | .4200e+07 | .4700e+07 | .4000e+07 |
| .9460e-05 | .4170e-02 | .2070e-01 | .7860e-09 | | | |
| .3900e+05 | .3600e+07 | .1360e+09 | .2100e+09 | .2000e+09 | .1800e+09 | .1700e+09 |
| .1300e+02 | .2720e+03 | .1420e+05 | .8620e-02 | | | |
| .4300e+05 | .1800e+07 | .1600e+07 | .7000e+06 | .7000e+06 | .6000e+06 | .4000e+06 |
| .1930e+00 | .4000e+01 | .2120e+03 | .3680e-04 | | | |
| .4100e+05 | .3700e+07 | .1160e+09 | .1300e+09 | .8000e+08 | .5000e+08 | .4000e+08 |
| .3070e+01 | .6440e+02 | .3360e+04 | .2670e-02 | | | |
| tecl | | | | | | |
| .3300e+03 | .2500e+04 | .1000e+03 | 0. | 0. | 0. | 0. |
| .1300e+03 | .2640e+04 | .1430e+06 | .2530e+00 | | | |
| .8000e+03 | .1800e+05 | .3000e+05 | .2000e+04 | 0. | 0. | 0. |
| .3120e+03 | .6540e+04 | .3420e+06 | .6640e+00 | | | |
| .3700e+00 | .3700e+00 | 0. | 0. | 0. | 0. | 0. |
| .3110e+00 | .6540e+01 | .3410e+03 | .6080e-03 | | | |
| .2800e+00 | .2800e+00 | 0. | 0. | 0. | 0. | 0. |
| .1670e+02 | .2360e+02 | .3190e+05 | .5860e-01 | | | |
| .1000e+01 | .1000e+01 | 0. | 0. | 0. | 0. | 0. |
| .2050e+02 | .2080e+02 | .9990e+05 | .2040e+00 | | | |
| .2400e+01 | .2400e+01 | 0. | 0. | 0. | 0. | 0. |
| .1270e+03 | .1480e+03 | .2400e+06 | .5140e+00 | | | |
| .1700e+04 | .6500e+04 | 0. | 0. | 0. | 0. | 0. |
| .1150e+02 | .2140e+03 | .1270e+05 | .2400e-01 | | | |
| .3200e+04 | .3000e+05 | 0. | 0. | 0. | 0. | 0. |

## Table 2A-16 File 21 Dose Conversion File (NUREG/CR-2326, pg 4–3) (Continued)

| | | | | | | |
|---|---|---|---|---|---|---|
| 0. | 0. | 0. | 0. | | | |
| .3800e+04 | .2400e+06 | .1060e+07 | .5000e+06 | .2000e+06 | .2000e+06 | 0. |
| 0. | 0. | 0. | 0. | | | |
| .2200e+03 | .3700e+03 | 0. | 0. | 0. | 0. | 0. |
| .1070e+03 | .2510e+03 | .1100e+06 | .2030e+00 | | | |
| .8000e+03 | .9700e+03 | 0. | 0. | 0. | 0. | 0. |
| 0. | 0. | 0. | 0. | | | |
| .1200e+04 | .2000e+05 | 0. | 0. | 0. | 0. | 0. |
| .3140e+00 | .6330e+01 | .3440e+03 | .6670e-03 | | | |
| .2800e+03 | .3300e+04 | 0. | 0. | 0. | 0. | 0. |
| .9980e+02 | .2150e+04 | .1100e+06 | .1970e+00 | | | |
| .1300e+03 | .1300e+03 | 0. | 0. | 0. | 0. | 0. |
| .1750e+03 | .6850e+03 | .2640e+05 | .4970e-01 | | | |
| .2600e+03 | .1200e+04 | 0. | 0. | 0. | 0. | 0. |
| .9710e+02 | .1910e+04 | .1070e+06 | .1940e+00 | | | |
| .1000e+03 | .1100e+03 | 0. | 0. | 0. | 0. | 0. |
| .3320e+02 | .4960e+03 | .2850e+05 | .4690e-01 | | | |
| .1000e+02 | .1000e+02 | 0. | 0. | 0. | 0. | 0. |
| .1870e+02 | .3110e+02 | .3140e+05 | .5830e-01 | | | |
| .1800e+03 | .8800e+03 | 0. | 0. | 0. | 0. | 0. |
| .7530e+02 | .1490e+04 | .8230e+05 | .1430e+00 | | | |
| .1700e+02 | .1700e+02 | 0. | 0. | 0. | 0. | 0. |
| .6780e+02 | .1050e+03 | .1290e+06 | .2330e+00 | | | |
| .1900e+03 | .3400e+04 | .2500e+04 | 0. | 0. | 0. | 0. |
| .2790e+02 | .5820e+03 | .3060e+05 | .5470e-01 | | | |

## Table 2A-16 File 21 Dose Conversion File (NUREG/CR-2326, pg 4–3) (Continued)

| | | | | | | |
|---|---|---|---|---|---|---|
| .1600e+02 | .1600e+02 | 0. | 0. | 0. | 0. | 0. |
| .1370e+02 | .9090e+02 | .1610e+05 | .2920e-01 | | | |
| .5400e+01 | .5400e+01 | 0. | 0. | 0. | 0. | 0. |
| .4770e+00 | .1070e+01 | .6930e+03 | .1220e-02 | | | |
| .1300e+03 | .1900e+04 | .1000e+03 | 0. | 0. | 0. | 0. |
| .4670e+01 | .1050e+03 | .4950e+04 | .2060e-02 | | | |
| .1200e+01 | .1200e+01 | 0. | 0. | 0. | 0. | 0. |
| .2560e+01 | .2580e+01 | .1350e+05 | .1910e-01 | | | |
| .2600e+03 | .1400e+04 | 0. | 0. | 0. | 0. | 0. |
| .1510e+02 | .3260e+03 | .9810e+04 | .1060e-01 | | | |
| .2300e+03 | .2500e+03 | 0. | 0. | 0. | 0. | 0. |
| .1810e+03 | .1160e+04 | .2030e+06 | .3780e+00 | | | |
| .8000e+03 | .9100e+03 | 0. | 0. | 0. | 0. | 0. |
| .2290e+03 | .3830e+04 | .4130e+05 | .7780e-01 | | | |
| .2100e+03 | .2600e+03 | 0. | 0. | 0. | 0. | 0. |
| .9540e+02 | .1170e+04 | .1080e+06 | .1930e+00 | | | |
| .3800e+02 | .3900e+02 | 0. | 0. | 0. | 0. | 0. |
| .8710e+02 | .1220e+03 | .1690e+06 | .3140e+00 | | | |
| .1200e+03 | .2100e+03 | 0. | 0. | 0. | 0. | 0. |
| .5730e+02 | .9170e+03 | .6370e+05 | .1140e+00 | | | |
| .4700e+02 | .4700e+02 | 0. | 0. | 0. | 0. | 0. |
| .1190e+03 | .1300e+03 | .3460e+06 | .6190e+00 | | | |
| .9200e+02 | .9200e+02 | 0. | 0. | 0. | 0. | 0. |
| .8540e+02 | .3950e+03 | .1060e+06 | .1920e+00 | | | |
| .1900e+02 | .1900e+02 | 0. | 0. | 0. | 0. | 0. |

## Table 2A-16 File 21 Dose Conversion File (NUREG/CR-2326, pg 4–3) (Continued)

| | | | | | | |
|---|---|---|---|---|---|---|
| .4810e+02 | .4820e+02 | .3340e+06 | .6190e+00 | | | |
| .8700e+02 | .8700e+02 | 0. | 0. | 0. | 0. | 0. |
| .1680e+03 | .3340e+03 | .2370e+06 | .4640e+00 | | | |
| .9200e+00 | .9200e+00 | 0. | 0. | 0. | 0. | 0. |
| .1430e+02 | .2010e+03 | .1600e+05 | .1740e-01 | | | |
| .1300e+01 | .1300e+01 | 0. | 0. | 0. | 0. | 0. |
| .3370e+02 | .7420e+02 | .4910e+05 | .9030e-01 | | | |
| .2000e+04 | .4200e+05 | .5000e+04 | 0. | 0. | 0. | 0. |
| .2140e+03 | .4490e+04 | .2350e+06 | .4250e+00 | | | |
| .2000e+04 | .5900e+04 | 0. | 0. | 0. | 0. | 0. |
| .2800e+03 | .4950e+04 | .3090e+06 | .5750e+00 | | | |
| .1300e+04 | .3100e+05 | .5000e+04 | 0. | 0. | 0. | 0. |
| .7940e+02 | .1680e+04 | .8760e+05 | .1560e+00 | | | |
| .2100e+04 | .5500e+04 | 0. | 0. | 0. | 0. | 0. |
| .5260e+02 | .4180e+04 | .3690e+05 | .5920e-01 | | | |
| .6800e+03 | .7100e+03 | 0. | 0. | 0. | 0. | 0. |
| .2740e+03 | .2010e+04 | .3210e+06 | .6330e+00 | | | |
| .6100e+02 | .3200e+03 | 0. | 0. | 0. | 0. | 0. |
| .1790e+02 | .3500e+03 | .1960e+05 | .3500e-01 | | | |
| .7200e+02 | .1100e+03 | 0. | 0. | 0. | 0. | 0. |
| .5140e+02 | .3280e+03 | .6110e+05 | .9940e-01 | | | |
| .1900e+03 | .6700e+04 | .1130e+05 | 0. | 0. | 0. | 0. |
| .8410e+01 | .1790e+03 | .5400e+04 | .8250e-02 | | | |
| .2600e+02 | .9300e+02 | 0. | 0. | 0. | 0. | 0. |
| 0. | 0. | 0. | 0. | | | |

## Table 2A-16 File 21 Dose Conversion File (NUREG/CR-2326, pg 4–3) (Continued)

| | | | | | | |
|---|---|---|---|---|---|---|
| .8600e+02 | .1900e+03 | .4000e+02 | 0. | 0. | 0. | 0. |
| .2640e+02 | .4540e+03 | .2930e+05 | .4670e-01 | | | |
| .4800e+02 | .5200e+02 | 0. | 0. | 0. | 0. | 0. |
| .3740e+02 | .3490e+03 | .4300e+05 | .5310e-01 | | | |
| .6300e+02 | .6000e+04 | .2240e+06 | .3400e+06 | .3000e+06 | .2300e+06 | .3000e+06 |
| .2790e+00 | .5870e+01 | .3060e+03 | .4940e-04 | | | |
| .5900e+02 | .5600e+04 | .2240e+06 | .3500e+06 | .3400e+06 | .2800e+06 | .3000e+06 |
| .1370e+00 | .2880e+01 | .1500e+03 | .2500e-04 | | | |
| .5900e+02 | .5700e+04 | .2240e+06 | .3600e+06 | .3400e+06 | .3700e+06 | .3000e+06 |
| .2530e+00 | .5320e+01 | .2780e+03 | .4500e-04 | | | |
| .5900e-01 | .1100e+02 | .1990e+04 | .6000e+04 | .8000e+04 | .8000e+04 | .9000e+04 |
| .1110e-04 | .4880e-02 | .2430e-01 | .9220e-09 | | | |
| .9900e+02 | .7300e+04 | .2530e+06 | .3900e+06 | .3500e+06 | .4000e+06 | .3000e+06 |
| .1520e+02 | .3190e+03 | .1660e+05 | .1010e-01 | | | |
| .7600e+02 | .3200e+04 | .2900e+04 | .1300e+04 | .1100e+04 | .1000e+04 | .5000e+03 |
| .2410e+00 | .4990e+01 | .2640e+03 | .4580e-04 | | | |
| .7400e+02 | .6600e+04 | .2030e+06 | .2300e+06 | .1500e+06 | .9000e+05 | .6000e+05 |
| .3500e+01 | .7350e+02 | .3830e+04 | .3030e-02 | | | |
| st wall | | | | | | |
| .9600e+03 | .5100e+04 | .1000e+03 | 0. | 0. | 0. | 0. |
| .9530e+02 | .1940e+04 | .1040e+06 | .1860e+00 | | | |
| .2300e+04 | .3700e+05 | .6000e+05 | .3000e+04 | 0. | 0. | 0. |
| .2510e+03 | .5260e+04 | .2750e+06 | .5330e+00 | | | |
| .1800e+00 | .1800e+00 | 0. | 0. | 0. | 0. | 0. |
| .2430e+00 | .5100e+01 | .2660e+03 | .4750e-03 | | | |

## Table 2A-16 File 21 Dose Conversion File (NUREG/CR-2326, pg 4–3) (Continued)

| | | | | | | |
|---|---|---|---|---|---|---|
| .2200e+00 | .2200e+00 | 0. | 0. | 0. | 0. | 0. |
| .6800e+01 | .9580e+01 | .1300e+05 | .2380e-01 | | | |
| .1000e+01 | .1000e+01 | 0. | 0. | 0. | 0. | 0. |
| .1690e+02 | .1710e+02 | .8200e+05 | .1680e+00 | | | |
| .2100e+01 | .2100e+01 | 0. | 0. | 0. | 0. | 0. |
| .1060e+03 | .1230e+03 | .1990e+06 | .4250e+00 | | | |
| .2200e+04 | .7000e+04 | 0. | 0. | 0. | 0. | 0. |
| .8310e+01 | .1550e+03 | .9200e+04 | .1740e-01 | | | |
| .8700e+03 | .1800e+04 | 0. | 0. | 0. | 0. | 0. |
| 0. | 0. | 0. | 0. | | | |
| .8900e+03 | .6100e+04 | .2100e+04 | .2000e+03 | 0. | 0. | 0. |
| 0. | 0. | 0. | 0. | | | |
| .6200e+03 | .6800e+03 | 0. | 0. | 0. | 0. | 0. |
| .8240e+02 | .1940e+03 | .8380e+05 | .1560e+00 | | | |
| .1400e+04 | .1400e+04 | 0. | 0. | 0. | 0. | 0. |
| 0. | 0. | 0. | 0. | | | |
| .1100e+04 | .1600e+04 | 0. | 0. | 0. | 0. | 0. |
| .2740e+00 | .5520e+01 | .3000e+03 | .5810e-03 | | | |
| .9300e+03 | .5700e+04 | .1000e+03 | 0. | 0. | 0. | 0. |
| .7480e+02 | .1610e+04 | .8170e+05 | .1480e+00 | | | |
| .1800e+04 | .1800e+04 | 0. | 0. | 0. | 0. | 0. |
| .1370e+03 | .5340e+03 | .2060e+05 | .3890e-01 | | | |
| .7600e+03 | .2300e+04 | 0. | 0. | 0. | 0. | 0. |
| .7010e+02 | .1380e+04 | .7700e+05 | .1400e+00 | | | |
| .8500e+03 | .8600e+03 | 0. | 0. | 0. | 0. | 0. |

## Table 2A-16 File 21 Dose Conversion File (NUREG/CR-2326, pg 4–3) (Continued)

| | | | | | | |
|---|---|---|---|---|---|---|
| .2090e+02 | .2660e+03 | .2070e+05 | .3420e-01 | | | |
| .2700e+02 | .2700e+02 | 0. | 0. | 0. | 0. | 0. |
| .6250e+01 | .1040e+02 | .1050e+05 | .1960e-01 | | | |
| .6600e+03 | .1900e+04 | 0. | 0. | 0. | 0. | 0. |
| .5830e+02 | .1160e+04 | .6400e+05 | .1110e+00 | | | |
| .3200e+03 | .3200e+03 | 0. | 0. | 0. | 0. | 0. |
| .4920e+02 | .7320e+02 | .9370e+05 | .1700e+00 | | | |
| .3200e+04 | .7600e+04 | .3400e+04 | 0. | 0. | 0. | 0. |
| .2150e+02 | .4500e+03 | .2360e+05 | .4250e-01 | | | |
| .2700e+03 | .2700e+03 | 0. | 0. | 0. | 0. | 0. |
| .5560e+01 | .3700e+02 | .6580e+04 | .1190e-01 | | | |
| .1600e+03 | .1600e+03 | 0. | 0. | 0. | 0. | 0. |
| .3570e+00 | .7980e+00 | .5180e+03 | .9140e-03 | | | |
| .5200e+03 | .1500e+04 | 0. | 0. | 0. | 0. | 0. |
| .1070e+01 | .2850e+02 | .1050e+04 | .4390e-03 | | | |
| .5700e+02 | .5700e+02 | 0. | 0. | 0. | 0. | 0. |
| .1820e+01 | .1840e+01 | .9550e+04 | .1360e-01 | | | |
| .1200e+04 | .1800e+04 | 0. | 0. | 0. | 0. | 0. |
| .1040e+02 | .2260e+03 | .6680e+04 | .7190e-02 | | | |
| .1000e+04 | .1000e+04 | 0. | 0. | 0. | 0. | 0. |
| .1260e+03 | .8170e+03 | .1440e+06 | .2660e+00 | | | |
| .2200e+04 | .2400e+04 | 0. | 0. | 0. | 0. | 0. |
| .1610e+03 | .2780e+04 | .1660e+05 | .3110e-01 | | | |
| .1100e+04 | .1200e+04 | 0. | 0. | 0. | 0. | 0. |
| .7150e+02 | .8780e+03 | .8060e+05 | .1450e+00 | | | |

## Table 2A-16 File 21 Dose Conversion File (NUREG/CR-2326, pg 4–3) (Continued)

| | | | | | | |
|---|---|---|---|---|---|---|
| .4300e+03 | .4300e+03 | 0. | 0. | 0. | 0. | 0. |
| .6530e+02 | .9150e+02 | .1270e+06 | .2360e+00 | | | |
| .2400e+03 | .2800e+03 | 0. | 0. | 0. | 0. | 0. |
| .4330e+02 | .6920e+03 | .4800e+05 | .8580e-01 | | | |
| .3700e+03 | .3700e+03 | 0. | 0. | 0. | 0. | 0. |
| .9060e+02 | .9940e+02 | .2650e+06 | .4750e+00 | | | |
| .3900e+03 | .3900e+03 | 0. | 0. | 0. | 0. | 0. |
| .6680e+02 | .2960e+03 | .8310e+05 | .1510e+00 | | | |
| .2700e+03 | .2700e+03 | 0. | 0. | 0. | 0. | 0. |
| .3580e+02 | .3580e+02 | .2480e+06 | .4610e+00 | | | |
| .4200e+03 | .4200e+03 | 0. | 0. | 0. | 0. | 0. |
| .1340e+03 | .2520e+03 | .1940e+06 | .3810e+00 | | | |
| .4000e+00 | .4000e+00 | 0. | 0. | 0. | 0. | 0. |
| .4440e+01 | .6240e+02 | .4970e+04 | .5390e-02 | | | |
| .1000e+01 | .1000e+01 | 0. | 0. | 0. | 0. | 0. |
| .1440e+02 | .3170e+02 | .2090e+05 | .3860e-01 | | | |
| .2500e+04 | .4800e+05 | .6000e+04 | 0. | 0. | 0. | 0. |
| .1620e+03 | .3390e+04 | .1770e+06 | .3220e+00 | | | |
| .2500e+04 | .6900e+04 | 0. | 0. | 0. | 0. | 0. |
| .1920e+03 | .3400e+04 | .2120e+06 | .3940e+00 | | | |
| .1600e+04 | .3300e+05 | .7000e+04 | 0. | 0. | 0. | 0. |
| .6180e+02 | .1310e+04 | .6820e+05 | .1220e+00 | | | |
| .9600e+03 | .1500e+04 | 0. | 0. | 0. | 0. | 0. |
| .3950e+02 | .3360e+04 | .2630e+05 | .4190e-01 | | | |
| .1700e+04 | .1700e+04 | 0. | 0. | 0. | 0. | 0. |

## Table 2A-16 File 21 Dose Conversion File (NUREG/CR-2326, pg 4–3) (Continued)

| | | | | | | |
|---|---|---|---|---|---|---|
| .2250e+03 | .1650e+04 | .2640e+06 | .5190e+00 | | | |
| .4200e+03 | .5900e+03 | 0. | 0. | 0. | 0. | 0. |
| .5890e+01 | .1150e+03 | .6470e+04 | .1150e-01 | | | |
| .7800e+03 | .7900e+03 | 0. | 0. | 0. | 0. | 0. |
| .2700e+02 | .1720e+03 | .3210e+05 | .5220e-01 | | | |
| .2600e+04 | .4000e+04 | .8000e+03 | 0. | 0. | 0. | 0. |
| .4500e+01 | .9690e+02 | .1740e+04 | .2650e-02 | | | |
| .6100e+03 | .6200e+03 | 0. | 0. | 0. | 0. | 0. |
| 0. | 0. | 0. | 0. | | | |
| .6500e+03 | .7300e+03 | 0. | 0. | 0. | 0. | 0. |
| .1520e+02 | .2620e+03 | .1690e+05 | .2690e-01 | | | |
| .5200e+03 | .5300e+03 | 0. | 0. | 0. | 0. | 0. |
| .1400e+02 | .1310e+03 | .1610e+05 | .1990e-01 | | | |
| .1200e+04 | .7200e+04 | .2230e+06 | .3400e+06 | .3000e+06 | .2300e+06 | .2000e+06 |
| .3520e-01 | .7380e+00 | .3850e+02 | .6220e-05 | | | |
| .1100e+04 | .6700e+04 | .2230e+06 | .3500e+06 | .3400e+06 | .2800e+06 | .3000e+06 |
| .2110e-01 | .4420e+00 | .2300e+02 | .3860e-05 | | | |
| .1100e+04 | .6800e+04 | .2230e+06 | .3500e+06 | .3500e+06 | .2700e+06 | .3000e+06 |
| .3440e-01 | .7230e+00 | .3780e+02 | .6140e-05 | | | |
| .1100e+02 | .1700e+02 | .1780e+04 | .5600e+04 | .7600e+04 | .8000e+04 | .8000e+04 |
| .3050e-05 | .1350e-02 | .6680e-02 | .2540e-09 | | | |
| .1300e+04 | .8200e+04 | .2420e+06 | .3700e+06 | .3600e+06 | .3200e+06 | .3000e+06 |
| .4180e+01 | .8780e+02 | .4570e+04 | .2780e-02 | | | |
| .1300e+04 | .4500e+04 | .2900e+04 | .1300e+04 | .1100e+04 | .1200e+04 | .1000e+04 |
| .2760e-01 | .5710e+00 | .3020e+02 | .5250e-05 | | | |

## Table 2A-16 File 21 Dose Conversion File (NUREG/CR-2326, pg 4–3) (Continued)

| | | | | | | |
|---|---|---|---|---|---|---|
| .1300e+04 | .7900e+04 | .2020e+06 | .2300e+06 | .1400e+06 | .1000e+06 | .6000e+05 |
| .1030e+01 | .2160e+02 | .1130e+04 | .8920e-03 | | | |
| si+cont | | | | | | |
| .1900e+04 | .2800e+04 | 0. | 0. | 0. | 0. | 0. |
| .8430e+02 | .1710e+04 | .9290e+05 | .1640e+00 | | | |
| .4700e+04 | .1200e+05 | .1300e+05 | .1000e+04 | 0. | 0. | 0. |
| .2170e+03 | .4560e+04 | .2380e+06 | .4640e+00 | | | |
| .1800e+00 | .1800e+00 | 0. | 0. | 0. | 0. | 0. |
| .1760e+00 | .3680e+01 | .1920e+03 | .3420e-03 | | | |
| .2300e+00 | .2300e+00 | 0. | 0. | 0. | 0. | 0. |
| .7330e+01 | .1030e+02 | .1400e+05 | .2570e-01 | | | |
| .1000e+01 | .1000e+01 | 0. | 0. | 0. | 0. | 0. |
| .1410e+02 | .1420e+02 | .6820e+05 | .1400e+00 | | | |
| .2200e+01 | .2200e+01 | 0. | 0. | 0. | 0. | 0. |
| .9180e+02 | .1070e+03 | .1720e+06 | .3670e+00 | | | |
| .1800e+04 | .6600e+04 | 0. | 0. | 0. | 0. | 0. |
| .7670e+01 | .1430e+03 | .8450e+04 | .1600e-01 | | | |
| .1200e+04 | .2200e+04 | 0. | 0. | 0. | 0. | 0. |
| 0. | 0. | 0. | 0. | | | |
| .1200e+04 | .6400e+04 | .2100e+04 | .1000e+03 | .1000e+03 | 0. | 0. |
| 0. | 0. | 0. | 0. | | | |
| .9600e+03 | .1000e+04 | 0. | 0. | 0. | 0. | 0. |
| .6510e+02 | .1520e+03 | .6860e+05 | .1270e+00 | | | |
| .3200e+04 | .3300e+04 | 0. | 0. | 0. | 0. | 0. |
| 0. | 0. | 0. | 0. | | | |

## Table 2A-16 File 21 Dose Conversion File (NUREG/CR-2326, pg 4–3) (Continued)

| | | | | | | |
|---|---|---|---|---|---|---|
| .2700e+04 | .3300e+04 | .1000e+03 | 0. | 0. | 0. | 0. |
| .2270e+00 | .4580e+01 | .2490e+03 | .4810e-03 | | | |
| .2000e+04 | .3200e+04 | 0. | 0. | 0. | 0. | 0. |
| .6170e+02 | .1330e+04 | .6750e+05 | .1220e+00 | | | |
| .3900e+04 | .3900e+04 | 0. | 0. | 0. | 0. | 0. |
| .1010e+03 | .3930e+03 | .1700e+05 | .3190e-01 | | | |
| .1600e+04 | .1900e+04 | 0. | 0. | 0. | 0. | 0. |
| .6470e+02 | .1270e+04 | .7110e+05 | .1290e+00 | | | |
| .1900e+04 | .1900e+04 | 0. | 0. | 0. | 0. | 0. |
| .1700e+02 | .2260e+03 | .1620e+05 | .2670e-01 | | | |
| .1100e+02 | .1100e+02 | 0. | 0. | 0. | 0. | 0. |
| .6250e+01 | .1040e+02 | .1050e+05 | .1950e-01 | | | |
| .1400e+04 | .1700e+04 | 0. | 0. | 0. | 0. | 0. |
| .4220e+02 | .8360e+03 | .4630e+05 | .8030e-01 | | | |
| .4900e+03 | .4900e+03 | 0. | 0. | 0. | 0. | 0. |
| .3750e+02 | .5710e+02 | .7120e+05 | .1290e+00 | | | |
| .7400e+04 | .1000e+05 | .3000e+04 | 0. | 0. | 0. | 0. |
| .1580e+02 | .3300e+03 | .1730e+05 | .3110e-01 | | | |
| .5900e+03 | .5900e+03 | 0. | 0. | 0. | 0. | 0. |
| .5990e+01 | .3990e+02 | .7090e+04 | .1280e-01 | | | |
| .2400e+03 | .2400e+03 | 0. | 0. | 0. | 0. | 0. |
| .2630e+00 | .5870e+00 | .3810e+03 | .6720e-03 | | | |
| .9500e+03 | .2400e+04 | 0. | 0. | 0. | 0. | 0. |
| .5160e+00 | .1530e+02 | .4740e+03 | .1970e-03 | | | |
| .3800e+02 | .3800e+02 | 0. | 0. | 0. | 0. | 0. |

## Table 2A-16 File 21 Dose Conversion File (NUREG/CR-2326, pg 4–3) (Continued)

| | | | | | | |
|---|---|---|---|---|---|---|
| .1390e+01 | .1410e+01 | .7320e+04 | .1040e-01 | | | |
| .2200e+04 | .2700e+04 | 0. | 0. | 0. | 0. | 0. |
| .7700e+01 | .1670e+03 | .4780e+04 | .5140e-02 | | | |
| .1700e+04 | .1700e+04 | 0. | 0. | 0. | 0. | 0. |
| .1140e+03 | .7230e+03 | .1300e+06 | .2400e+00 | | | |
| .1500e+04 | .1500e+04 | 0. | 0. | 0. | 0. | 0. |
| .1340e+03 | .2290e+04 | .1760e+05 | .3310e-01 | | | |
| .2400e+04 | .2500e+04 | 0. | 0. | 0. | 0. | 0. |
| .5480e+02 | .6730e+03 | .6180e+05 | .1110e+00 | | | |
| .6500e+03 | .6500e+03 | 0. | 0. | 0. | 0. | 0. |
| .5690e+02 | .7960e+02 | .1100e+06 | .2060e+00 | | | |
| .9600e+02 | .1300e+03 | 0. | 0. | 0. | 0. | 0. |
| .3170e+02 | .5080e+03 | .3530e+05 | .6280e-01 | | | |
| .8700e+02 | .8700e+02 | 0. | 0. | 0. | 0. | 0. |
| .7340e+02 | .8040e+02 | .2140e+06 | .3830e+00 | | | |
| .1200e+03 | .1200e+03 | 0. | 0. | 0. | 0. | 0. |
| .5060e+02 | .2250e+03 | .6300e+05 | .1140e+00 | | | |
| .4600e+02 | .4600e+02 | 0. | 0. | 0. | 0. | 0. |
| .3170e+02 | .3170e+02 | .2200e+06 | .4080e+00 | | | |
| .1300e+03 | .1300e+03 | 0. | 0. | 0. | 0. | 0. |
| .1140e+03 | .2170e+03 | .1660e+06 | .3250e+00 | | | |
| .4200e+00 | .4200e+00 | 0. | 0. | 0. | 0. | 0. |
| .4090e+01 | .5750e+02 | .4580e+04 | .4970e-02 | | | |
| .1000e+01 | .1000e+01 | 0. | 0. | 0. | 0. | 0. |
| .1500e+02 | .3300e+02 | .2180e+05 | .4000e-01 | | | |

## Table 2A-16 File 21 Dose Conversion File (NUREG/CR-2326, pg 4–3) (Continued)

| | | | | | | |
|---|---|---|---|---|---|---|
| .2500e+04 | .5200e+05 | .7000e+04 | 0. | 0. | 0. | 0. |
| .1320e+03 | .2770e+04 | .1450e+06 | .2620e+00 | | | |
| .2600e+04 | .7500e+04 | 0. | 0. | 0. | 0. | 0. |
| .1770e+03 | .3140e+04 | .1960e+06 | .3640e+00 | | | |
| .1500e+04 | .3500e+05 | .7000e+04 | 0. | 0. | 0. | 0. |
| .4470e+02 | .9440e+03 | .4920e+05 | .8780e-01 | | | |
| .1600e+04 | .2300e+04 | 0. | 0. | 0. | 0. | 0. |
| .3100e+02 | .2770e+04 | .1980e+05 | .3170e-01 | | | |
| .3600e+04 | .3600e+04 | 0. | 0. | 0. | 0. | 0. |
| .1880e+03 | .1380e+04 | .2210e+06 | .4360e+00 | | | |
| .1000e+04 | .1100e+04 | 0. | 0. | 0. | 0. | 0. |
| .5800e+01 | .1140e+03 | .6380e+04 | .1140e-01 | | | |
| .1800e+04 | .1800e+04 | 0. | 0. | 0. | 0. | 0. |
| .2450e+02 | .1560e+03 | .2910e+05 | .4750e-01 | | | |
| .6700e+04 | .7400e+04 | .4000e+03 | 0. | 0. | 0. | 0. |
| .3870e+01 | .8310e+02 | .1670e+04 | .2550e-02 | | | |
| .1500e+04 | .1500e+04 | 0. | 0. | 0. | 0. | 0. |
| 0. | 0. | 0. | 0. | | | |
| .1600e+04 | .1600e+04 | 0. | 0. | 0. | 0. | 0. |
| .1180e+02 | .2030e+03 | .1310e+05 | .2090e-01 | | | |
| .1200e+04 | .1200e+04 | 0. | 0. | 0. | 0. | 0. |
| .1460e+02 | .1360e+03 | .1680e+05 | .2080e-01 | | | |
| .2900e+04 | .9000e+04 | .2310e+06 | .3300e+06 | .3000e+06 | .2300e+06 | .2000e+06 |
| .1540e-01 | .3230e+00 | .1680e+02 | .2730e-05 | | | |
| .2700e+04 | .8400e+04 | .2220e+06 | .3500e+06 | .3400e+06 | .2800e+06 | .3000e+06 |

## Table 2A-16 File 21 Dose Conversion File (NUREG/CR-2326, pg 4–3) (Continued)

| | | | | | | |
|---|---|---|---|---|---|---|
| .9990e-02 | .2100e+00 | .1090e+02 | .1830e-05 | | | |
| .2700e+04 | .8500e+04 | .2210e+06 | .3600e+06 | .3400e+06 | .2700e+06 | .3000e+06 |
| .1680e-01 | .3520e+00 | .1840e+02 | .3000e-05 | | | |
| .2700e+02 | .3500e+02 | .1760e+04 | .5600e+04 | .7600e+04 | .8000e+04 | .8000e+04 |
| .2110e-05 | .9280e-03 | .4620e-02 | .1750e-09 | | | |
| .3100e+04 | .9700e+04 | .2400e+06 | .3700e+06 | .3600e+06 | .3200e+06 | .3000e+06 |
| .2880e+01 | .6060e+02 | .3150e+04 | .1920e-02 | | | |
| .3200e+04 | .6500e+04 | .2800e+04 | .1700e+04 | .1000e+04 | .1000e+04 | .1000e+04 |
| .9920e-02 | .2050e+00 | .1090e+02 | .1880e-05 | | | |
| .3100e+04 | .9800e+04 | .2000e+06 | .2300e+06 | .1500e+06 | .9000e+05 | .6000e+05 |
| .8240e+00 | .1730e+02 | .9020e+03 | .7140e-03 | | | |
| uli wall | | | | | | |
| .3400e+04 | .4500e+04 | 0. | 0. | 0. | 0. | 0. |
| .9730e+02 | .1980e+04 | .1070e+06 | .1900e+00 | | | |
| .8500e+04 | .1800e+05 | .1700e+05 | .1000e+04 | 0. | 0. | 0. |
| .2730e+03 | .5730e+04 | .3000e+06 | .5830e+00 | | | |
| .1800e+00 | .1800e+00 | 0. | 0. | 0. | 0. | 0. |
| .1890e+00 | .3960e+01 | .2070e+03 | .3690e-03 | | | |
| .2300e+00 | .2300e+00 | 0. | 0. | 0. | 0. | 0. |
| .7540e+01 | .1060e+02 | .1440e+05 | .2640e-01 | | | |
| .1000e+01 | .1000e+01 | 0. | 0. | 0. | 0. | 0. |
| .1900e+02 | .1930e+02 | .9200e+05 | .1890e+00 | | | |
| .2200e+01 | .2200e+01 | 0. | 0. | 0. | 0. | 0. |
| .1330e+03 | .1550e+03 | .2510e+06 | .5360e+00 | | | |
| .2100e+04 | .6900e+04 | 0. | 0. | 0. | 0. | 0. |

## Table 2A-16 File 21 Dose Conversion File (NUREG/CR-2326, pg 4–3) (Continued)

| | | | | | | |
|---|---|---|---|---|---|---|
| .8950e+01 | .1670e+03 | .9900e+04 | .1870e-01 | | | |
| .4900e+04 | .5800e+04 | 0. | 0. | 0. | 0. | 0. |
| 0. | 0. | 0. | 0. | | | |
| .4200e+04 | .9400e+04 | .2600e+04 | 0. | 0. | 0. | 0. |
| 0. | 0. | 0. | 0. | | | |
| .2400e+04 | .2400e+04 | 0. | 0. | 0. | 0. | 0. |
| .7380e+02 | .1730e+03 | .7920e+05 | .1470e+00 | | | |
| .1700e+05 | .1700e+05 | 0. | 0. | 0. | 0. | 0. |
| 0. | 0. | 0. | 0. | | | |
| .1600e+05 | .1800e+05 | 0. | 0. | 0. | 0. | 0. |
| .3010e+00 | .6060e+01 | .3300e+03 | .6390e-03 | | | |
| .5500e+04 | .7400e+04 | 0. | 0. | 0. | 0. | 0. |
| .6960e+02 | .1510e+04 | .7600e+05 | .1370e+00 | | | |
| .1300e+05 | .1300e+05 | 0. | 0. | 0. | 0. | 0. |
| .1100e+03 | .4290e+03 | .2050e+05 | .3860e-01 | | | |
| .3200e+04 | .3600e+04 | 0. | 0. | 0. | 0. | 0. |
| .7550e+02 | .1490e+04 | .8300e+05 | .1510e+00 | | | |
| .8600e+04 | .8600e+04 | 0. | 0. | 0. | 0. | 0. |
| .1830e+02 | .2380e+03 | .1780e+05 | .2920e-01 | | | |
| .1300e+02 | .1300e+02 | 0. | 0. | 0. | 0. | 0. |
| .6120e+01 | .1020e+02 | .1020e+05 | .1910e-01 | | | |
| .4100e+04 | .4500e+04 | 0. | 0. | 0. | 0. | 0. |
| .4540e+02 | .9000e+03 | .4980e+05 | .8640e-01 | | | |
| .1100e+04 | .1100e+04 | 0. | 0. | 0. | 0. | 0. |
| .4050e+02 | .6140e+02 | .7690e+05 | .1390e+00 | | | |

## Table 2A-16 File 21 Dose Conversion File (NUREG/CR-2326, pg 4–3) (Continued)

| | | | | | | |
|---|---|---|---|---|---|---|
| .4200e+05 | .4700e+05 | .3000e+04 | 0. | 0. | 0. | 0. |
| .1710e+02 | .3580e+03 | .1880e+05 | .3390e-01 | | | |
| .2500e+04 | .2500e+04 | 0. | 0. | 0. | 0. | 0. |
| .6160e+01 | .4100e+02 | .7290e+04 | .1320e-01 | | | |
| .7300e+03 | .7300e+03 | 0. | 0. | 0. | 0. | 0. |
| .2820e+00 | .6300e+00 | .4090e+03 | .7220e-03 | | | |
| .5500e+04 | .9900e+04 | 0. | 0. | 0. | 0. | 0. |
| .6880e+00 | .1920e+02 | .6560e+03 | .2730e-03 | | | |
| .2600e+02 | .2600e+02 | 0. | 0. | 0. | 0. | 0. |
| .1530e+01 | .1540e+01 | .8020e+04 | .1140e-01 | | | |
| .1200e+05 | .1300e+05 | 0. | 0. | 0. | 0. | 0. |
| .8410e+01 | .1830e+03 | .5220e+04 | .5610e-02 | | | |
| .4900e+04 | .5000e+04 | 0. | 0. | 0. | 0. | 0. |
| .1350e+03 | .8530e+03 | .1550e+06 | .2860e+00 | | | |
| .3100e+04 | .3200e+04 | 0. | 0. | 0. | 0. | 0. |
| .1530e+03 | .2620e+04 | .1810e+05 | .3420e-01 | | | |
| .1000e+05 | .1000e+05 | 0. | 0. | 0. | 0. | 0. |
| .6000e+02 | .7360e+03 | .6760e+05 | .1210e+00 | | | |
| .1300e+04 | .1300e+04 | 0. | 0. | 0. | 0. | 0. |
| .6700e+02 | .9370e+02 | .1310e+06 | .2420e+00 | | | |
| .1700e+03 | .2000e+03 | 0. | 0. | 0. | 0. | 0. |
| .3410e+02 | .5450e+03 | .3780e+05 | .6750e-01 | | | |
| .9800e+02 | .9800e+02 | 0. | 0. | 0. | 0. | 0. |
| .8450e+02 | .9260e+02 | .2470e+06 | .4420e+00 | | | |
| .2300e+03 | .2300e+03 | 0. | 0. | 0. | 0. | 0. |

## Table 2A-16 File 21 Dose Conversion File (NUREG/CR-2326, pg 4–3) (Continued)

| | | | | | | |
|---|---|---|---|---|---|---|
| .5670e+02 | .2520e+03 | .7060e+05 | .1280e+00 | | | |
| .3700e+02 | .3700e+02 | 0. | 0. | 0. | 0. | 0. |
| .3720e+02 | .3730e+02 | .2580e+06 | .4810e+00 | | | |
| .2100e+03 | .2100e+03 | 0. | 0. | 0. | 0. | 0. |
| .1420e+03 | .2680e+03 | .2110e+06 | .4140e+00 | | | |
| .4200e+00 | .4200e+00 | 0. | 0. | 0. | 0. | 0. |
| .4120e+01 | .5790e+02 | .4620e+04 | .5000e-02 | | | |
| .1000e+01 | .1000e+01 | 0. | 0. | 0. | 0. | 0. |
| .1540e+02 | .3410e+02 | .2250e+05 | .4140e-01 | | | |
| .2500e+04 | .5200e+05 | .6000e+04 | 0. | 0. | 0. | 0. |
| .1500e+03 | .3130e+04 | .1640e+06 | .2970e+00 | | | |
| .2500e+04 | .7300e+04 | 0. | 0. | 0. | 0. | 0. |
| .2080e+03 | .3670e+04 | .2300e+06 | .4250e+00 | | | |
| .1600e+04 | .3500e+05 | .6000e+04 | 0. | 0. | 0. | 0. |
| .4810e+02 | .1020e+04 | .5300e+05 | .9440e-01 | | | |
| .4900e+04 | .5500e+04 | 0. | 0. | 0. | 0. | 0. |
| .3600e+02 | .3490e+04 | .2120e+05 | .3390e-01 | | | |
| .1100e+05 | .1100e+05 | 0. | 0. | 0. | 0. | 0. |
| .2410e+03 | .1770e+04 | .2820e+06 | .5580e+00 | | | |
| .5200e+04 | .5300e+04 | 0. | 0. | 0. | 0. | 0. |
| .5710e+01 | .1120e+03 | .6270e+04 | .1120e-01 | | | |
| .7600e+04 | .7600e+04 | 0. | 0. | 0. | 0. | 0. |
| .2650e+02 | .1690e+03 | .3140e+05 | .5110e-01 | | | |
| .3900e+05 | .4200e+05 | .1000e+04 | 0. | 0. | 0. | 0. |
| .4680e+01 | .1010e+03 | .1660e+04 | .2530e-02 | | | |

## Table 2A-16 File 21 Dose Conversion File (NUREG/CR-2326, pg 4–3) (Continued)

| | | | | | | |
|---|---|---|---|---|---|---|
| .8700e+04 | .8800e+04 | 0. | 0. | 0. | 0. | 0. |
| 0. | 0. | 0. | 0. | | | |
| .7800e+04 | .7800e+04 | 0. | 0. | 0. | 0. | 0. |
| .1250e+02 | .2150e+03 | .1380e+05 | .2210e-01 | | | |
| .5600e+04 | .5600e+04 | 0. | 0. | 0. | 0. | 0. |
| .1480e+02 | .1380e+03 | .1700e+05 | .2100e-01 | | | |
| .1700e+05 | .2400e+05 | .2260e+06 | .3400e+06 | .2900e+06 | .2200e+06 | .3000e+06 |
| .1630e-01 | .3430e+00 | .1790e+02 | .2890e-05 | | | |
| .1600e+05 | .2200e+05 | .2280e+06 | .3500e+06 | .3300e+06 | .3700e+06 | .2000e+06 |
| .1150e-01 | .2410e+00 | .1250e+02 | .2100e-05 | | | |
| .1600e+05 | .2300e+05 | .2270e+06 | .3500e+06 | .3400e+06 | .3600e+06 | .3000e+06 |
| .1770e-01 | .3730e+00 | .1940e+02 | .3170e-05 | | | |
| .1600e+03 | .1800e+03 | .1820e+04 | .5600e+04 | .7400e+04 | .8000e+04 | .8000e+04 |
| .2340e-05 | .1030e-02 | .5120e-02 | .1940e-09 | | | |
| .1800e+05 | .2600e+05 | .2440e+06 | .3700e+06 | .3600e+06 | .3000e+06 | .3000e+06 |
| .3200e+01 | .6730e+02 | .3500e+04 | .2130e-02 | | | |
| .1900e+05 | .2300e+05 | .2000e+04 | .2000e+04 | .1000e+04 | .1000e+04 | .1000e+04 |
| .1080e-01 | .2230e+00 | .1180e+02 | .2040e-05 | | | |
| .1800e+05 | .2600e+05 | .2040e+06 | .2300e+06 | .1400e+06 | .1000e+06 | .6000e+05 |
| .8670e+00 | .1820e+02 | .9460e+03 | .7500e-03 | | | |
| lli wall | | | | | | |
| .4280e+04 | .4650e+04 | 0. | 0. | 0. | 0. | 0. |
| .7270e+02 | .1480e+04 | .7970e+05 | .1420e+00 | | | |
| .1010e+05 | .1230e+05 | .3920e+04 | 0. | 0. | 0. | 0. |
| .2170e+03 | .4540e+04 | .2370e+06 | .4610e+00 | | | |

## Table 2A-16 File 21 Dose Conversion File (NUREG/CR-2326, pg 4–3) (Continued)

| | | | | | | |
|---|---|---|---|---|---|---|
| .6120e-01 | .6120e-010 | 0. | 0. | 0. | 0. | 0. |
| .1760e+00 | .3680e+01 | .1920e+03 | .3420e-03 | | | |
| .9460e-01 | .9460e-010 | 0. | 0. | 0. | 0. | 0. |
| .5760e+01 | .8110e+01 | .1100e+05 | .2020e-01 | | | |
| .8100e+00 | .8100e+00 | 0. | 0. | 0. | 0. | 0. |
| .1440e+02 | .1460e+02 | .6990e+05 | .1430e+00 | | | |
| .2070e+01 | .2070e+01 | 0. | 0. | 0. | 0. | 0. |
| .9500e+02 | .1110e+03 | .1790e+06 | .3830e+00 | | | |
| .1400e+04 | .3900e+04 | 0. | 0. | 0. | 0. | 0. |
| .6390e+01 | .1190e+03 | .7040e+04 | .1330e-01 | | | |
| .6860e+04 | .6860e+04 | 0. | 0. | 0. | 0. | 0. |
| 0. | 0. | 0. | 0. | | | |
| .9100e+04 | .1300e+05 | .1300e+04 | 0. | 0. | 0. | 0. |
| 0. | 0. | 0. | 0. | | | |
| .1430e+04 | .1480e+04 | 0. | 0. | 0. | 0. | 0. |
| .6240e+02 | .1470e+03 | .6470e+05 | .1210e+00 | | | |
| .2600e+05 | .2600e+05 | 0. | 0. | 0. | 0. | 0. |
| 0. | 0. | 0. | 0. | | | |
| .2300e+05 | .2600e+05 | 0. | 0. | 0. | 0. | 0. |
| .2540e+00 | .5120e+01 | .2790e+03 | .5390e-03 | | | |
| .3920e+04 | .4480e+04 | 0. | 0. | 0. | 0. | 0. |
| .5580e+02 | .1200e+04 | .6110e+05 | .1100e+00 | | | |
| .1100e+05 | .1100e+05 | 0. | 0. | 0. | 0. | 0. |
| .1010e+03 | .3920e+03 | .1680e+05 | .3170e-01 | | | |
| .3110e+04 | .3240e+04 | 0. | 0. | 0. | 0. | 0. |

## Table 2A-16 File 21 Dose Conversion File (NUREG/CR-2326, pg 4–3) (Continued)

| | | | | | | |
|---|---|---|---|---|---|---|
| .5390e+02 | .1060e+04 | .5920e+05 | .1070e+00 | | | |
| .7400e+04 | .7770e+04 | 0. | 0. | 0. | 0. | 0. |
| .1560e+02 | .2020e+03 | .1520e+05 | .2520e-01 | | | |
| .6930e+01 | .6930e+01 | 0. | 0. | 0. | 0. | 0. |
| .5060e+01 | .8400e+01 | .8470e+04 | .1580e-01 | | | |
| .2000e+04 | .2200e+04 | 0. | 0. | 0. | 0. | 0. |
| .4220e+02 | .8360e+03 | .4630e+05 | .8030e-01 | | | |
| .4920e+03 | .4920e+03 | 0. | 0. | 0. | 0. | 0. |
| .3620e+02 | .5430e+02 | .6890e+05 | .1250e+00 | | | |
| .8880e+05 | .9620e+05 | .7400e+04 | 0. | 0. | 0. | 0. |
| .1570e+02 | .3280e+03 | .1720e+05 | .3080e-01 | | | |
| .4080e+03 | .4080e+03 | 0. | 0. | 0. | 0. | 0. |
| .4710e+01 | .3130e+02 | .5570e+04 | .1010e-01 | | | |
| .1790e+03 | .1790e+03 | 0. | 0. | 0. | 0. | 0. |
| .2590e+00 | .5800e+00 | .3770e+03 | .6640e-03 | | | |
| .3570e+04 | .5040e+04 | 0. | 0. | 0. | 0. | 0. |
| .3860e+00 | .1260e+02 | .3330e+03 | .1380e-03 | | | |
| .2560e+01 | .2560e+01 | 0. | 0. | 0. | 0. | 0. |
| .1330e+01 | .1340e+01 | .6980e+04 | .9920e-02 | | | |
| .1500e+05 | .1670e+05 | 0. | 0. | 0. | 0. | 0. |
| .7460e+01 | .1620e+03 | .4700e+04 | .5060e-02 | | | |
| .5350e+04 | .5350e+04 | 0. | 0. | 0. | 0. | 0. |
| .1010e+03 | .6490e+03 | .1160e+06 | .2140e+00 | | | |
| .3300e+04 | .3350e+04 | 0. | 0. | 0. | 0. | 0. |
| .1250e+03 | .2140e+04 | .1380e+05 | .2610e-01 | | | |

## Table 2A-16 File 21 Dose Conversion File (NUREG/CR-2326, pg 4–3) (Continued)

| | | | | | | |
|---|---|---|---|---|---|---|
| .9100e+04 | .9100e+04 | 0. | 0. | 0. | 0. | 0. |
| .5260e+02 | .6460e+03 | .5930e+05 | .1060e+00 | | | |
| .4860e+03 | .4860e+03 | 0. | 0. | 0. | 0. | 0. |
| .5120e+02 | .7170e+02 | .9990e+05 | .1850e+00 | | | |
| .7260e+02 | .7920e+02 | 0. | 0. | 0. | 0. | 0. |
| .3140e+02 | .5030e+03 | .3490e+05 | .6220e-01 | | | |
| .4440e+02 | .4440e+02 | 0. | 0. | 0. | 0. | 0. |
| .6930e+02 | .7600e+02 | .2020e+06 | .3640e+00 | | | |
| .1520e+03 | .1520e+03 | 0. | 0. | 0. | 0. | 0. |
| .5030e+02 | .2220e+03 | .6250e+05 | .1130e+00 | | | |
| .1720e+02 | .1720e+02 | 0. | 0. | 0. | 0. | 0. |
| .2800e+02 | .2800e+02 | .1940e+06 | .3610e+00 | | | |
| .1080e+03 | .1080e+03 | 0. | 0. | 0. | 0. | 0. |
| .1160e+03 | .2170e+03 | .1710e+06 | .3330e+00 | | | |
| .1300e+00 | .1300e+00 | 0. | 0. | 0. | 0. | 0. |
| .3280e+01 | .4610e+02 | .3670e+04 | .3970e-02 | | | |
| .4850e+00 | .4850e+00 | 0. | 0. | 0. | 0. | 0. |
| .1200e+02 | .2640e+02 | .1740e+05 | .3190e-01 | | | |
| .2100e+04 | .3970e+05 | .5250e+04 | 0. | 0. | 0. | 0. |
| .1220e+03 | .2550e+04 | .1330e+06 | .2410e+00 | | | |
| .2320e+04 | .6390e+04 | 0. | 0. | 0. | 0. | 0. |
| .1530e+03 | .2710e+04 | .1690e+06 | .3140e+00 | | | |
| .9120e+03 | .1730e+05 | .2880e+04 | 0. | 0. | 0. | 0. |
| .4460e+02 | .9440e+03 | .4920e+05 | .8780e-01 | | | |
| .7840e+04 | .7840e+04 | 0. | 0. | 0. | 0. | 0. |

## Table 2A-16 File 21 Dose Conversion File (NUREG/CR-2326, pg 4–3) (Continued)

| | | | | | | |
|---|---|---|---|---|---|---|
| .3130e+02 | .2900e+04 | .1920e+05 | .3080e-01 | | | |
| .1070e+05 | .1070e+05 | 0. | 0. | 0. | 0. | 0. |
| .1980e+03 | .1460e+04 | .2320e+06 | .4580e+00 | | | |
| .1200e+04 | .1200e+04 | 0. | 0. | 0. | 0. | 0. |
| .4680e+01 | .9170e+02 | .5140e+04 | .9170e-02 | | | |
| .5760e+04 | .5760e+04 | 0. | 0. | 0. | 0. | 0. |
| .2090e+02 | .1330e+03 | .2480e+05 | .4060e-01 | | | |
| .8520e+05 | .8520e+05 | .7100e+04 | 0. | 0. | 0. | 0. |
| .3690e+01 | .7960e+02 | .1350e+04 | .2060e-02 | | | |
| .6750e+04 | .6750e+04 | 0. | 0. | 0. | 0. | 0. |
| 0. | 0. | 0. | 0. | | | |
| .3990e+04 | .4180e+04 | 0. | 0. | 0. | 0. | 0. |
| .1110e+02 | .1910e+03 | .1240e+05 | .1970e-01 | | | |
| .1040e+04 | .1040e+04 | 0. | 0. | 0. | 0. | 0. |
| .1170e+02 | .1090e+03 | .1340e+05 | .1660e-01 | | | |
| .5000e+04 | .6100e+04 | .2290e+05 | .3400e+05 | .3000e+05 | .2700e+05 | .2000e+05 |
| .7960e-01 | .1670e+01 | .8710e+02 | .1410e-04 | | | |
| .4600e+04 | .5600e+04 | .2240e+05 | .3500e+05 | .3400e+05 | .3300e+05 | .3000e+05 |
| .3290e-01 | .6910e+00 | .3600e+02 | .6030e-05 | | | |
| .4700e+04 | .5700e+04 | .2330e+05 | .3500e+05 | .3400e+05 | .3200e+05 | .3000e+05 |
| .7110e-01 | .1490e+01 | .7790e+02 | .1270e-04 | | | |
| 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| .1980e-05 | .8720e-03 | .4330e-02 | .1640e-09 | | | |
| .5200e+04 | .6400e+04 | .2460e+05 | .3700e+05 | .3200e+05 | .4000e+05 | .3000e+05 |
| .2710e+01 | .5690e+02 | .2960e+04 | .1800e-02 | | | |

## Table 2A-16 File 21 Dose Conversion File (NUREG/CR-2326, pg 4–3) (Continued)

| | | | | | | |
|---|---|---|---|---|---|---|
| .5500e+04 | .6100e+04 | .3000e+03 | .2000e+03 | .1000e+03 | .1000e+03 | .1000e+03 |
| .6920e-01 | .1430e+01 | .7590e+02 | .1310e-04 | | | |
| .5200e+04 | .6400e+04 | .2060e+05 | .2300e+05 | .1500e+05 | .9000e+04 | .6000e+04 |
| .7270e+00 | .1530e+02 | .7950e+03 | .6280e-03 | | | |
| thyroid | | | | | | |
| .1100e+03 | .3200e+04 | .1000e+03 | 0. | 0. | 0. | 0. |
| .8700e+02 | .1780e+04 | .9640e+05 | .1710e+00 | | | |
| .2400e+03 | .2100e+05 | .3700e+05 | .1000e+04 | .1000e+04 | 0. | 0. |
| .2510e+03 | .5280e+04 | .2730e+06 | .5330e+00 | | | |
| .1800e+00 | .1800e+00 | 0. | 0. | 0. | 0. | 0. |
| .2550e+00 | .5380e+01 | .2800e+03 | .5000e-03 | | | |
| .2000e+00 | .2000e+00 | 0. | 0. | 0. | 0. | 0. |
| .1000e+02 | .1400e+02 | .1890e+05 | .3500e-01 | | | |
| .9700e+00 | .9700e+00 | 0. | 0. | 0. | 0. | 0. |
| .1770e+02 | .1790e+02 | .8580e+05 | .1740e+00 | | | |
| .2000e+01 | .2000e+01 | 0. | 0. | 0. | 0. | 0. |
| .1080e+03 | .1260e+03 | .2020e+06 | .4310e+00 | | | |
| .5000e+03 | .6500e+04 | 0. | 0. | 0. | 0. | 0. |
| .7300e+01 | .1370e+03 | .8060e+04 | .1540e-01 | | | |
| .2600e+03 | .1500e+04 | 0. | 0. | 0. | 0. | 0. |
| 0. | 0. | 0. | 0. | | | |
| .1800e+03 | .5900e+04 | .2100e+04 | .2000e+03 | 0. | 0. | 0. |
| 0. | 0. | 0. | 0. | | | |
| .1300e+03 | .2000e+03 | 0. | 0. | 0. | 0. | 0. |
| .8300e+02 | .1950e+03 | .8320e+05 | .1540e+00 | | | |

## Table 2A-16 File 21 Dose Conversion File (NUREG/CR-2326, pg 4–3) (Continued)

| | | | | | | |
|---|---|---|---|---|---|---|
| .8200e+01 | .2100e+02 | 0. | 0. | 0. | 0. | 0. |
| 0. | 0. | 0. | 0. | | | |
| .7100e+01 | .3900e+03 | 0. | 0. | 0. | 0. | 0. |
| .2930e+00 | .5940e+01 | .3220e+03 | .6220e-03 | | | |
| .7900e+02 | .3500e+04 | .1000e+03 | 0. | 0. | 0. | 0. |
| .7240e+02 | .1540e+04 | .7880e+05 | .1430e+00 | | | |
| .7700e+02 | .8600e+02 | 0. | 0. | 0. | 0. | 0. |
| .1440e+03 | .5580e+03 | .2110e+05 | .3940e-01 | | | |
| .8100e+02 | .1300e+04 | 0. | 0. | 0. | 0. | 0. |
| .6230e+02 | .1220e+04 | .6830e+05 | .1220e+00 | | | |
| .9400e+02 | .1500e+03 | 0. | 0. | 0. | 0. | 0. |
| .2420e+02 | .3460e+03 | .2150e+05 | .3560e-01 | | | |
| .4600e+02 | .4600e+02 | 0. | 0. | 0. | 0. | 0. |
| .1180e+02 | .1970e+02 | .1990e+05 | .3720e-01 | | | |
| .5200e+02 | .9600e+03 | 0. | 0. | 0. | 0. | 0. |
| .6140e+02 | .1220e+04 | .6710e+05 | .1170e+00 | | | |
| .1400e+02 | .1500e+02 | 0. | 0. | 0. | 0. | 0. |
| .5260e+02 | .8010e+02 | .1010e+06 | .1820e+00 | | | |
| .4800e+02 | .3600e+04 | .2700e+04 | 0. | 0. | 0. | 0. |
| .2270e+02 | .4760e+03 | .2480e+05 | .4470e-01 | | | |
| .6400e+01 | .9900e+01 | 0. | 0. | 0. | 0. | 0. |
| .8200e+01 | .5450e+02 | .9640e+04 | .1730e-01 | | | |
| .2900e+01 | .3000e+01 | 0. | 0. | 0. | 0. | 0. |
| .3830e+00 | .8600e+00 | .5590e+03 | .9810e-03 | | | |
| .1600e+02 | .2100e+03 | 0. | 0. | 0. | 0. | 0. |

## Table 2A-16 File 21 Dose Conversion File (NUREG/CR-2326, pg 4–3) (Continued)

| | | | | | | |
|---|---|---|---|---|---|---|
| .2660e+01 | .6200e+02 | .2790e+04 | .1150e-02 | | | |
| .8100e+00 | .8100e+00 | 0. | 0. | 0. | 0. | 0. |
| .1960e+01 | .1980e+01 | .1020e+05 | .1470e-01 | | | |
| .4300e+02 | .3900e+03 | 0. | 0. | 0. | 0. | 0. |
| .1160e+02 | .2500e+03 | .7620e+04 | .8170e-02 | | | |
| .4500e+04 | .9500e+05 | 0. | 0. | 0. | 0. | 0. |
| .1240e+03 | .8100e+03 | .1410e+06 | .2610e+00 | | | |
| .4800e+05 | .9700e+05 | 0. | 0. | 0. | 0. | 0. |
| .1680e+03 | .2850e+04 | .2440e+05 | .4580e-01 | | | |
| .1000e+03 | .2200e+03 | 0. | 0. | 0. | 0. | 0. |
| .7430e+02 | .9200e+03 | .8320e+05 | .1500e+00 | | | |
| .3700e+02 | .3800e+02 | 0. | 0. | 0. | 0. | 0. |
| .6150e+02 | .8700e+02 | .1200e+06 | .2250e+00 | | | |
| .1300e+06 | .1100e+07 | 0. | 0. | 0. | 0. | 0. |
| .4650e+02 | .7370e+03 | .5150e+05 | .9170e-01 | | | |
| .6600e+04 | .6600e+04 | 0. | 0. | 0. | 0. | 0. |
| .9000e+02 | .9900e+02 | .2640e+06 | .4720e+00 | | | |
| .1200e+06 | .1800e+06 | 0. | 0. | 0. | 0. | 0. |
| .6970e+02 | .3150e+03 | .8670e+05 | .1560e+00 | | | |
| .1100e+04 | .1100e+04 | 0. | 0. | 0. | 0. | 0. |
| .3330e+02 | .3340e+02 | .2300e+06 | .4280e+00 | | | |
| .4300e+05 | .4400e+05 | 0. | 0. | 0. | 0. | 0. |
| .1380e+03 | .2660e+03 | .1980e+06 | .3890e+00 | | | |
| .3900e+00 | .4000e+00 | 0. | 0. | 0. | 0. | 0. |
| .8900e+01 | .1250e+03 | .9900e+04 | .1070e-01 | | | |

## Table 2A-16 File 21 Dose Conversion File (NUREG/CR-2326, pg 4–3) (Continued)

| | | | | | | |
|---|---|---|---|---|---|---|
| .9100e+00 | .9100e+00 | 0. | 0. | 0. | 0. | 0. |
| .2050e+02 | .4520e+02 | .2980e+05 | .5470e-01 | | | |
| .5800e+03 | .4300e+05 | .5000e+04 | 0. | 0. | 0. | 0. |
| .1590e+03 | .3310e+04 | .1730e+06 | .3140e+00 | | | |
| .6900e+03 | .6000e+04 | 0. | 0. | 0. | 0. | 0. |
| .1860e+03 | .3280e+04 | .2050e+06 | .3810e+00 | | | |
| .3600e+03 | .3100e+05 | .5000e+04 | 0. | 0. | 0. | 0. |
| .6540e+02 | .1380e+04 | .7170e+05 | .1280e+00 | | | |
| .2200e+03 | .1200e+04 | 0. | 0. | 0. | 0. | 0. |
| .4270e+02 | .3550e+04 | .2880e+05 | .4610e-01 | | | |
| .1500e+03 | .2300e+03 | 0. | 0. | 0. | 0. | 0. |
| .2370e+03 | .1740e+04 | .2770e+06 | .5470e+00 | | | |
| .6000e+01 | .9200e+02 | 0. | 0. | 0. | 0. | 0. |
| .1130e+02 | .2200e+03 | .1240e+05 | .2220e-01 | | | |
| .1800e+02 | .2500e+02 | 0. | 0. | 0. | 0. | 0. |
| .3290e+02 | .2100e+03 | .3900e+05 | .6360e-01 | | | |
| .5100e+01 | .3500e+03 | .2600e+03 | 0. | 0. | 0. | 0. |
| .6060e+01 | .1300e+03 | .3370e+04 | .5140e-02 | | | |
| .9300e-01 | .1000e+01 | 0. | 0. | 0. | 0. | 0. |
| 0. | 0. | 0. | 0. | | | |
| .1200e+02 | .6900e+02 | .1000e+01 | 0. | 0. | 0. | 0. |
| .1910e+02 | .3280e+03 | .2110e+05 | .3360e-01 | | | |
| .8200e+01 | .1500e+02 | 0. | 0. | 0. | 0. | 0. |
| .2270e+02 | .2110e+03 | .2600e+05 | .3220e-01 | | | |
| .1800e+02 | .5900e+04 | .2240e+06 | .3400e+06 | .2900e+06 | .2400e+06 | .2000e+06 |

## Table 2A-16 File 21 Dose Conversion File (NUREG/CR-2326, pg 4–3) (Continued)

| | | | | | | |
|---|---|---|---|---|---|---|
| .4400e-01 | .9200e+00 | .4820e+02 | .7780e-05 | | | |
| .1600e+02 | .5600e+04 | .2240e+06 | .3500e+06 | .3400e+06 | .2800e+06 | .3000e+06 |
| .3200e-01 | .6900e+00 | .3590e+02 | .6000e-05 | | | |
| .1600e+02 | .5600e+04 | .2240e+06 | .3500e+06 | .3400e+06 | .2800e+06 | .3000e+06 |
| .4500e-01 | .9500e+00 | .4910e+02 | .7780e-05 | | | |
| .1700e-02 | .5300e+01 | .1690e+04 | .5700e+04 | .7600e+04 | .8000e+04 | .8000e+04 |
| .4800e-05 | .2120e-02 | .1060e-01 | .4000e-09 | | | |
| .2000e+02 | .6500e+04 | .2430e+06 | .3700e+06 | .3500e+06 | .3300e+06 | .3000e+06 |
| .6600e+01 | .1380e+03 | .7270e+04 | .4390e-02 | | | |
| .2100e+02 | .3200e+04 | .2800e+04 | .1300e+04 | .1200e+04 | .1000e+04 | .5000e+03 |
| .3200e-01 | .6600e+00 | .3590e+02 | .6110e-05 | | | |
| .2000e+02 | .6600e+04 | .2030e+06 | .2200e+06 | .1500e+06 | .1000e+06 | .6000e+05 |
| .1740e+01 | .3590e+02 | .1890e+04 | .1500e-02 | | | |
| other | | | | | | |
| .2400e+03 | .3400e+04 | 0. | 0. | 0. | 0. | 0. |
| .1400e+03 | .2860e+04 | .1540e+06 | .2750e+00 | | | |
| .5800e+03 | .2400e+05 | .4000e+05 | .2000e+04 | .1000e+04 | 0. | 0. |
| .3310e+03 | .6960e+04 | .3630e+06 | .7060e+00 | | | |
| .3100e+00 | .3100e+00 | 0. | 0. | 0. | 0. | 0. |
| .2960e+00 | .6230e+01 | .3250e+03 | .5810e-03 | | | |
| .2600e+00 | .2600e+00 | 0. | 0. | 0. | 0. | 0. |
| .1260e+02 | .1780e+02 | .2410e+05 | .4430e-01 | | | |
| .1000e+01 | .1000e+01 | 0. | 0. | 0. | 0. | 0. |
| .2200e+02 | .2220e+02 | .1070e+06 | .2180e+00 | | | |
| .2300e+01 | .2300e+01 | 0. | 0. | 0. | 0. | 0. |

## Table 2A-16 File 21 Dose Conversion File (NUREG/CR-2326, pg 4–3) (Continued)

| | | | | | | |
|---|---|---|---|---|---|---|
| .1410e+03 | .1640e+03 | .2640e+06 | .5640e+00 | | | |
| .5000e+03 | .6500e+04 | 0. | 0. | 0. | 0. | 0. |
| .1280e+02 | .2380e+03 | .1410e+05 | .2670e-01 | | | |
| .2600e+03 | .1500e+04 | 0. | 0. | 0. | 0. | 0. |
| 0. | 0. | 0. | 0. | | | |
| .1800e+03 | .5900e+04 | .2100e+04 | .2000e+03 | 0. | 0. | 0. |
| 0. | 0. | 0. | 0. | | | |
| .1500e+03 | .2200e+03 | 0. | 0. | 0. | 0. | 0. |
| .1080e+03 | .2520e+03 | .1120e+06 | .2100e+00 | | | |
| .2000e+02 | .5200e+02 | 0. | 0. | 0. | 0. | 0. |
| 0. | 0. | 0. | 0. | | | |
| .1800e+02 | .9700e+03 | .1000e+02 | 0. | 0. | 0. | 0. |
| .3210e+00 | .6480e+01 | .3520e+03 | .6810e-03 | | | |
| .1900e+03 | .3700e+04 | .1000e+03 | 0. | 0. | 0. | 0. |
| .1030e+03 | .2240e+04 | .1130e+06 | .2040e+00 | | | |
| .1700e+03 | .1800e+03 | 0. | 0. | 0. | 0. | 0. |
| .1680e+03 | .6580e+03 | .2690e+05 | .5060e-01 | | | |
| .1900e+03 | .1500e+04 | 0. | 0. | 0. | 0. | 0. |
| .1080e+03 | .2120e+04 | .1190e+06 | .2150e+00 | | | |
| .6200e+02 | .1100e+03 | 0. | 0. | 0. | 0. | 0. |
| .2930e+02 | .3950e+03 | .2780e+05 | .4570e-01 | | | |
| .8200e+01 | .8200e+01 | 0. | 0. | 0. | 0. | 0. |
| .1130e+02 | .1880e+02 | .1890e+05 | .3530e-01 | | | |
| .1200e+03 | .1100e+04 | 0. | 0. | 0. | 0. | 0. |
| .7280e+02 | .1450e+04 | .7810e+05 | .1360e+00 | | | |

## Table 2A-16 File 21 Dose Conversion File (NUREG/CR-2326, pg 4–3) (Continued)

| | | | | | | |
|---|---|---|---|---|---|---|
| .2400e+02 | .2500e+02 | 0. | 0. | 0. | 0. | 0. |
| .6330e+02 | .9670e+02 | .1200e+06 | .2170e+00 | | | |
| .7700e+02 | .3700e+04 | .2800e+04 | 0. | 0. | 0. | 0. |
| .2660e+02 | .5560e+03 | .2920e+05 | .5250e-01 | | | |
| .1500e+02 | .2100e+02 | 0. | 0. | 0. | 0. | 0. |
| .1030e+02 | .6850e+02 | .1210e+05 | .2190e-01 | | | |
| .4900e+01 | .5100e+01 | 0. | 0. | 0. | 0. | 0. |
| .4480e+00 | .1000e+01 | .6480e+03 | .1140e-02 | | | |
| .3100e+02 | .4700e+03 | 0. | 0. | 0. | 0. | 0. |
| .5750e+01 | .1260e+03 | .6160e+04 | .2560e-02 | | | |
| .1300e+01 | .1300e+01 | 0. | 0. | 0. | 0. | 0. |
| .2520e+01 | .2540e+01 | .1320e+05 | .1870e-01 | | | |
| .7900e+02 | .7400e+03 | 0. | 0. | 0. | 0. | 0. |
| .1500e+02 | .3240e+03 | .9850e+04 | .1060e-01 | | | |
| .2200e+03 | .3300e+03 | 0. | 0. | 0. | 0. | 0. |
| .1870e+03 | .1190e+04 | .2120e+06 | .3950e+00 | | | |
| .5000e+03 | .1000e+04 | 0. | 0. | 0. | 0. | 0. |
| .2240e+03 | .3810e+04 | .3070e+05 | .5770e-01 | | | |
| .1700e+03 | .3300e+03 | 0. | 0. | 0. | 0. | 0. |
| .9240e+02 | .1130e+04 | .1050e+06 | .1880e+00 | | | |
| .4900e+02 | .5000e+02 | 0. | 0. | 0. | 0. | 0. |
| .9280e+02 | .1300e+03 | .1800e+06 | .3370e+00 | | | |
| .8500e+02 | .2700e+03 | 0. | 0. | 0. | 0. | 0. |
| .5390e+02 | .8570e+03 | .5970e+05 | .1070e+00 | | | |
| .5400e+02 | .5400e+02 | 0. | 0. | 0. | 0. | 0. |

## Table 2A-16 File 21 Dose Conversion File (NUREG/CR-2326, pg 4–3) (Continued)

| | | | | | | |
|---|---|---|---|---|---|---|
| .1220e+03 | .1330e+03 | .3560e+06 | .6360e+00 | | | |
| .9700e+02 | .1000e+03 | 0. | 0. | 0. | 0. | 0. |
| .8370e+02 | .3800e+03 | .1040e+06 | .1870e+00 | | | |
| .2200e+02 | .2200e+02 | 0. | 0. | 0. | 0. | 0. |
| .5200e+02 | .5210e+02 | .3600e+06 | .6720e+00 | | | |
| .1000e+03 | .1000e+03 | 0. | 0. | 0. | 0. | 0. |
| .1720e+03 | .3340e+03 | .2490e+06 | .4890e+00 | | | |
| .6600e+00 | .6900e+00 | 0. | 0. | 0. | 0. | 0. |
| .1040e+02 | .1460e+03 | .1170e+05 | .1260e-01 | | | |
| .1200e+01 | .1200e+01 | 0. | 0. | 0. | 0. | 0. |
| .2570e+02 | .5680e+02 | .3770e+05 | .6920e-01 | | | |
| .5700e+03 | .4100e+05 | .5000e+04 | 0. | 0. | 0. | 0. |
| .2200e+03 | .4610e+04 | .2420e+06 | .4370e+00 | | | |
| .6700e+03 | .5800e+04 | 0. | 0. | 0. | 0. | 0. |
| .2920e+03 | .5160e+04 | .3220e+06 | .6000e+00 | | | |
| .3600e+03 | .3000e+05 | .6000e+04 | 0. | 0. | 0. | 0. |
| .7540e+02 | .1610e+04 | .8390e+05 | .1490e+00 | | | |
| .3200e+03 | .1400e+04 | 0. | 0. | 0. | 0. | 0. |
| .5060e+02 | .4210e+04 | .3430e+05 | .5500e-01 | | | |
| .3900e+03 | .5800e+03 | 0. | 0. | 0. | 0. | 0. |
| .2800e+03 | .2050e+04 | .3290e+06 | .6470e+00 | | | |
| .2200e+02 | .1800e+03 | 0. | 0. | 0. | 0. | 0. |
| .1110e+02 | .2180e+03 | .1230e+05 | .2190e-01 | | | |
| .5400e+02 | .7800e+02 | 0. | 0. | 0. | 0. | 0. |
| .4470e+02 | .2850e+03 | .5310e+05 | .8640e-01 | | | |

## Table 2A-16 File 21 Dose Conversion File (NUREG/CR-2326, pg 4–3) (Continued)

| | | | | | | |
|---|---|---|---|---|---|---|
| .2700e+02 | .1500e+04 | .1900e+04 | 0. | 0. | 0. | 0. |
| .6910e+01 | .1480e+03 | .3570e+04 | .5440e-02 | | | |
| .1200e+01 | .1300e+02 | 0. | 0. | 0. | 0. | 0. |
| 0. | 0. | 0. | 0. | | | |
| .3900e+02 | .1400e+03 | .1000e+02 | 0. | 0. | 0. | 0. |
| .2250e+02 | .3870e+03 | .2490e+05 | .3980e-01 | | | |
| .2900e+02 | .4700e+02 | .1000e+01 | .1000e+01. | .1000e+01 | 0. | 0. |
| .2710e+02 | .2530e+03 | .3120e+05 | .3840e-01 | | | |
| .1900e+03 | .1900e+06 | .4610e+07 | .4100e+07 | .3100e+07 | .3000e+07 | .2000e+07 |
| .2380e+01 | .5000e+02 | .2610e+04 | .4220e-03 | | | |
| .1800e+03 | .1800e+06 | .4520e+07 | .4300e+07 | .4000e+07 | .3000e+07 | .3000e+07 |
| .9040e+00 | .1900e+02 | .9890e+03 | .1650e-03 | | | |
| .1800e+03 | .1800e+06 | .4520e+07 | .4400e+07 | .3900e+07 | .3000e+07 | .3000e+07 |
| .2040e+01 | .4290e+02 | .2230e+04 | .3620e-03 | | | |
| .1800e-01 | .1600e+03 | .3080e+05 | .6300e+05 | .7600e+05 | .7000e+05 | .6000e+05 |
| .8010e-05 | .3530e-02 | .1760e-01 | .6660e-09 | | | |
| .2200e+03 | .2000e+06 | .4800e+07 | .4600e+07 | .3400e+07 | .4000e+07 | .2000e+07 |
| .1100e+02 | .2300e+03 | .1200e+05 | .7280e-02 | | | |
| .2300e+03 | .9200e+05 | .7800e+05 | .2000e+05 | .1000e+05 | .1000e+05 | .1000e+05 |
| .2170e+01 | .4490e+02 | .2380e+04 | .4120e-03 | | | |
| .2200e+03 | .2100e+06 | .4190e+07 | .2800e+07 | .1600e+07 | .9000e+06 | .3000e+06 |
| .2330e+01 | .4890e+02 | .2550e+04 | .2020e-02 | | | |
| w body | | | | | | |
| .2800e+03 | .4100e+04 | .1000e+03 | 0. | 0. | 0. | 0. |
| .1100e+03 | .2240e+04 | .1200e+06 | .2160e+00 | | | |

## Table 2A-16 File 21 Dose Conversion File (NUREG/CR-2326, pg 4–3) (Continued)

| | | | | | | |
|---|---|---|---|---|---|---|
| .6800e+03 | .3000e+05 | .4900e+05 | .2000e+04 | .1000e+04 | 0. | 0. |
| .2820e+03 | .5880e+04 | .3070e+06 | .6000e+00 | | | |
| .3100e+00 | .3100e+00 | 0. | 0. | 0. | 0. | 0. |
| .2420e+00 | .5050e+01 | .2660e+03 | .4750e-03 | | | |
| .2600e+00 | .2600e+00 | 0. | 0. | 0. | 0. | 0. |
| .1040e+02 | .1470e+02 | .1980e+05 | .3640e-01 | | | |
| .1000e+01 | .1000e+01 | 0. | 0. | 0. | 0. | 0. |
| .1810e+02 | .1830e+02 | .8760e+05 | .1810e+00 | | | |
| .2300e+01 | .2300e+01 | 0. | 0. | 0. | 0. | 0. |
| .1170e+03 | .1350e+03 | .2180e+06 | .4670e+00 | | | |
| .6000e+03 | .6600e+04 | 0. | 0. | 0. | 0. | 0. |
| .9890e+01 | .1850e+03 | .1090e+05 | .2070e-01 | | | |
| .4200e+03 | .4100e+04 | 0. | 0. | 0. | 0. | 0. |
| 0. | 0. | 0. | 0. | | | |
| .3100e+03 | .2800e+05 | .1120e+06 | .5000e+05 | .2000e+05 | .2000e+05 | .1000e+05 |
| 0. | 0. | 0. | 0. | | | |
| .2200e+03 | .3100e+03 | 0. | 0. | 0. | 0. | 0. |
| .8730e+02 | .2050e+03 | .9110e+05 | .1690e+00 | | | |
| .4100e+03 | .7800e+03 | 0. | 0. | 0. | 0. | 0. |
| 0. | 0. | 0. | 0. | | | |
| .3400e+03 | .5600e+04 | 0. | 0. | 0. | 0. | 0. |
| .2940e+00 | .5910e+01 | .3220e+03 | .6250e-03 | | | |
| .2700e+03 | .5500e+04 | .1000e+03 | 0. | 0. | 0. | 0. |
| .8180e+02 | .1770e+04 | .9020e+05 | .1620e+00 | | | |
| .4600e+03 | .5200e+03 | 0. | 0. | 0. | 0. | 0. |

## Table 2A-16 File 21 Dose Conversion File (NUREG/CR-2326, pg 4–3) (Continued)

| | | | | | | |
|---|---|---|---|---|---|---|
| .1390e+03 | .5380e+03 | .2240e+05 | .4220e-01 | | | |
| .2300e+03 | .1900e+04 | 0. | 0. | 0. | 0. | 0. |
| .8340e+02 | .1640e+04 | .9200e+05 | .1660e+00 | | | |
| .2400e+03 | .4200e+03 | 0. | 0. | 0. | 0. | 0. |
| .2380e+02 | .3250e+03 | .2230e+05 | .3640e-01 | | | |
| .9800e+01 | .9800e+01 | 0. | 0. | 0. | 0. | 0. |
| .9700e+01 | .1620e+02 | .1640e+05 | .3060e-01 | | | |
| .1900e+03 | .1900e+04 | 0. | 0. | 0. | 0. | 0. |
| .5860e+02 | .1160e+04 | .6450e+05 | .1110e+00 | | | |
| .6300e+02 | .6600e+02 | 0. | 0. | 0. | 0. | 0. |
| .5190e+02 | .7940e+02 | .9900e+05 | .1790e+00 | | | |
| .8300e+03 | .4000e+05 | .2200e+05 | 0. | 0. | 0. | 0. |
| .2180e+02 | .4560e+03 | .2390e+05 | .4310e-01 | | | |
| .6900e+02 | .9600e+02 | 0. | 0. | 0. | 0. | 0. |
| .8500e+01 | .5670e+02 | .9990e+04 | .1820e-01 | | | |
| .3300e+02 | .3400e+02 | 0. | 0. | 0. | 0. | 0. |
| .3660e+00 | .8130e+00 | .5280e+03 | .9360e-03 | | | |
| .1400e+03 | .2300e+04 | .1000e+03 | 0. | 0. | 0. | 0. |
| .2530e+01 | .5840e+02 | .2640e+04 | .1100e-02 | | | |
| .9800e+01 | .9800e+01 | 0. | 0. | 0. | 0. | 0. |
| .1970e+01 | .1980e+01 | .1020e+05 | .1470e-01 | | | |
| .3400e+03 | .3000e+04 | 0. | 0. | 0. | 0. | 0. |
| .1140e+02 | .2460e+03 | .7310e+04 | .7830e-02 | | | |
| .3500e+03 | .5500e+03 | 0. | 0. | 0. | 0. | 0. |
| .1500e+03 | .9600e+03 | .1700e+06 | .3140e+00 | | | |

## Table 2A-16 File 21 Dose Conversion File (NUREG/CR-2326, pg 4–3) (Continued)

| | | | | | | |
|---|---|---|---|---|---|---|
| .7000e+03 | .1500e+04 | 0. | 0. | 0. | 0. | 0. |
| .1810e+03 | .3080e+04 | .2520e+05 | .4750e-01 | | | |
| .3600e+03 | .7900e+03 | 0. | 0. | 0. | 0. | 0. |
| .7510e+02 | .9200e+03 | .8500e+05 | .1510e+00 | | | |
| .1000e+03 | .1100e+03 | 0. | 0. | 0. | 0. | 0. |
| .7460e+02 | .1040e+03 | .1450e+06 | .2680e+00 | | | |
| .1500e+03 | .6000e+03 | 0. | 0. | 0. | 0. | 0. |
| .4410e+02 | .7080e+03 | .4910e+05 | .8720e-01 | | | |
| .7000e+02 | .7000e+02 | 0. | 0. | 0. | 0. | 0. |
| .9800e+02 | .1070e+03 | .2860e+06 | .5110e+00 | | | |
| .1800e+03 | .2000e+03 | 0. | 0. | 0. | 0. | 0. |
| .6870e+02 | .3110e+03 | .8500e+05 | .1540e+00 | | | |
| .3000e+02 | .3000e+02 | 0. | 0. | 0. | 0. | 0. |
| .4120e+02 | .4140e+02 | .2860e+06 | .5330e+00 | | | |
| .1500e+03 | .1500e+03 | 0. | 0. | 0. | 0. | 0. |
| .1490e+03 | .2850e+03 | .2150e+06 | .4190e+00 | | | |
| .6600e+00 | .7000e+00 | 0. | 0. | 0. | 0. | 0. |
| .7500e+01 | .1050e+03 | .8410e+04 | .9060e-02 | | | |
| .1200e+01 | .1200e+01 | 0. | 0. | 0. | 0. | 0. |
| .2120e+02 | .4620e+02 | .3090e+05 | .5670e-01 | | | |
| .6100e+03 | .4100e+05 | .6000e+04 | 0. | 0. | 0. | 0. |
| .1760e+03 | .3690e+04 | .1930e+06 | .3500e+00 | | | |
| .7100e+03 | .5900e+04 | 0. | 0. | 0. | 0. | 0. |
| .2320e+03 | .4100e+04 | .2570e+06 | .4780e+00 | | | |
| .4000e+03 | .3000e+05 | .6000e+04 | 0. | 0. | 0. | 0. |

## Table 2A-16 File 21 Dose Conversion File (NUREG/CR-2326, pg 4–3) (Continued)

| | | | | | | |
|---|---|---|---|---|---|---|
| .6170e+02 | .1310e+04 | .6830e+05 | .1220e+00 | | | |
| .4400e+03 | .1900e+04 | 0. | 0. | 0. | 0. | 0. |
| .4230e+02 | .3650e+04 | .2770e+05 | .4440e-01 | | | |
| .6200e+03 | .9200e+03 | 0. | 0. | 0. | 0. | 0. |
| .2450e+03 | .1800e+04 | .2870e+06 | .5670e+00 | | | |
| .1200e+03 | .1100e+04 | 0. | 0. | 0. | 0. | 0. |
| .9300e+01 | .1820e+03 | .1020e+05 | .1830e-01 | | | |
| .2100e+03 | .3400e+03 | 0. | 0. | 0. | 0. | 0. |
| .3510e+02 | .2240e+03 | .4160e+05 | .6810e-01 | | | |
| .7200e+03 | .3200e+05 | .1500e+05 | 0. | 0. | 0. | 0. |
| .5630e+01 | .1200e+03 | .2810e+04 | .4310e-02 | | | |
| .1600e+03 | .8200e+03 | 0. | 0. | 0. | 0. | 0. |
| 0. | 0. | 0. | 0. | | | |
| .1800e+03 | .7600e+03 | .3000e+02 | 0. | 0. | 0. | 0. |
| .1770e+02 | .3050e+03 | .1960e+05 | .3140e-01 | | | |
| .1400e+03 | .2400e+03 | 0. | .1000e+02 | 0. | 0. | 0. |
| .2170e+02 | .2020e+03 | .2490e+05 | .3080e-01 | | | |
| .2000e+05 | .2200e+07 | .1580e+08 | .1700e+08 | .1500e+08 | .1200e+08 | .1100e+08 |
| .2970e+00 | .6200e+01 | .3250e+03 | .5250e-04 | | | |
| .1800e+05 | .2000e+07 | .1500e+08 | .1800e+08 | .1700e+08 | .1600e+08 | .1400e+08 |
| .1260e+00 | .2630e+01 | .1370e+03 | .2300e-04 | | | |
| .1800e+05 | .2100e+07 | .1590e+08 | .1800e+08 | .1600e+08 | .1600e+08 | .1500e+08 |
| .2600e+00 | .5470e+01 | .2860e+03 | .4640e-04 | | | |
| .2900e+01 | .1200e+04 | .9880e+05 | .2800e+06 | .3700e+06 | .3500e+06 | .4000e+06 |
| .4960e-05 | .2210e-02 | .1090e-01 | .4170e-09 | | | |

## Table 2A-16 File 21 Dose Conversion File (NUREG/CR-2326, pg 4–3) (Continued)

| | | | | | | |
|---|---|---|---|---|---|---|
| .2000e+05 | .2200e+07 | .1680e+08 | .1900e+08 | .1700e+08 | .1600e+08 | .1500e+08 |
| .6900e+01 | .1430e+03 | .7530e+04 | .4560e-02 | | | |
| .2200e+05 | .1300e+07 | .3000e+06 | .1000e+06 | .1000e+06 | 0. | .1000e+06 |
| .2640e+00 | .5460e+01 | .2890e+03 | .5000e-04 | | | |
| .2100e+05 | .2300e+07 | .1470e+08 | .1100e+08 | .8000e+07 | .4000e+07 | .3000e+07 |
| .1650e+01 | .3460e+02 | .1800e+04 | .1420e-02 | | | |
| testes | | | | | | |
| .9100e+02 | .3900e+03 | .1000e+02 | 0. | 0. | 0. | 0. |
| .1030e+03 | .2090e+04 | .1130e+06 | .2010e+00 | | | |
| .2000e+03 | .2100e+04 | .4000e+04 | .2000e+03 | .1000e+03 | 0. | 0. |
| .2300e+03 | .4800e+04 | .2510e+06 | .4890e+00 | | | |
| .1800e+00 | .1800e+00 | 0. | 0. | 0. | 0. | 0. |
| .2690e+00 | .5660e+01 | .2960e+03 | .5280e-03 | | | |
| .2000e+00 | .2000e+00 | 0. | 0. | 0. | 0. | 0. |
| .1350e+02 | .1910e+02 | .2590e+05 | .4780e-01 | | | |
| .9900e+00 | .9900e+00 | 0. | 0. | 0. | 0. | 0. |
| .1320e+02 | .1340e+02 | .6450e+05 | .1320e+00 | | | |
| .2100e+01 | .2100e+01 | 0. | 0. | 0. | 0. | 0. |
| .7000e+02 | .8100e+02 | .1320e+06 | .2830e+00 | | | |
| .5000e+03 | .6500e+04 | 0. | 0. | 0. | 0. | 0. |
| .8990e+01 | .1660e+03 | .9810e+04 | .1870e-01 | | | |
| .2600e+03 | .1500e+04 | 0. | 0. | 0. | 0. | 0. |
| 0. | 0. | 0. | 0. | | | |
| .1800e+03 | .5900e+04 | .2100e+04 | .2000e+03 | 0. | 0. | 0. |
| 0. | 0. | 0. | 0. | | | |

## Table 2A-16 File 21 Dose Conversion File (NUREG/CR-2326, pg 4–3) (Continued)

| | | | | | | |
|---|---|---|---|---|---|---|
| .1300e+03 | .2000e+03 | 0. | 0. | 0. | 0. | 0. |
| .8790e+02 | .2070e+03 | .8840e+05 | .1640e+00 | | | |
| .8200e+01 | .2100e+02 | 0. | 0. | 0. | 0. | 0. |
| 0. | 0. | 0. | 0. | | | |
| .7100e+01 | .3800e+03 | .1000e+02 | 0. | 0. | 0. | 0. |
| .2210e+00 | .4440e+01 | .2420e+03 | .4670e-03 | | | |
| .6900e+02 | .3300e+03 | 0. | 0. | 0. | 0. | 0. |
| .8130e+02 | .1760e+04 | .8960e+05 | .1610e+00 | | | |
| .5500e+02 | .6400e+02 | 0. | 0. | 0. | 0. | 0. |
| .1500e+03 | .5890e+03 | .2040e+05 | .3860e-01 | | | |
| .7100e+02 | .2500e+03 | 0. | 0. | 0. | 0. | 0. |
| .7590e+02 | .1490e+04 | .8330e+05 | .1520e+00 | | | |
| .2500e+02 | .4200e+02 | 0. | 0. | 0. | 0. | 0. |
| .2490e+02 | .3320e+03 | .2390e+05 | .3920e-01 | | | |
| .5300e+01 | .5300e+01 | 0. | 0. | 0. | 0. | 0. |
| .9110e+01 | .1510e+02 | .1520e+05 | .2840e-01 | | | |
| .5100e+02 | .2400e+03 | 0. | 0. | 0. | 0. | 0. |
| .6530e+02 | .1300e+04 | .7100e+05 | .1240e+00 | | | |
| .5000e+01 | .5500e+01 | 0. | 0. | 0. | 0. | 0. |
| .5720e+02 | .8910e+02 | .1090e+06 | .1970e+00 | | | |
| .4700e+02 | .2300e+04 | .1900e+04 | 0. | 0. | 0. | 0. |
| .2380e+02 | .4970e+03 | .2610e+05 | .4690e-01 | | | |
| .6300e+01 | .9800e+01 | 0. | 0. | 0. | 0. | 0. |
| .1110e+02 | .7370e+02 | .1320e+05 | .2360e-01 | | | |
| .2800e+01 | .2900e+01 | 0. | 0. | 0. | 0. | 0. |

## Table 2A-16 File 21 Dose Conversion File (NUREG/CR-2326, pg 4–3) (Continued)

| | | | | | | |
|---|---|---|---|---|---|---|
| .4100e+00 | .9140e+00 | .5950e+03 | .1050e-02 | | | |
| .1600e+02 | .2000e+03 | 0. | 0. | 0. | 0. | 0. |
| .3420e+01 | .7770e+02 | .3600e+04 | .1500e-02 | | | |
| .5800e+00 | .5800e+00 | 0. | 0. | 0. | 0. | 0. |
| .2150e+01 | .2170e+01 | .1130e+05 | .1610e-01 | | | |
| .4100e+02 | .3300e+03 | 0. | 0. | 0. | 0. | 0. |
| .1260e+02 | .2740e+03 | .8270e+04 | .8860e-02 | | | |
| .8300e+02 | .1200e+03 | 0. | 0. | 0. | 0. | 0. |
| .1360e+03 | .8860e+03 | .1530e+06 | .2850e+00 | | | |
| .3100e+03 | .5900e+03 | 0. | 0. | 0. | 0. | 0. |
| .1840e+03 | .3080e+04 | .3250e+05 | .6140e-01 | | | |
| .8900e+02 | .1700e+03 | 0. | 0. | 0. | 0. | 0. |
| .8070e+02 | .9950e+03 | .9090e+05 | .1630e+00 | | | |
| .2200e+02 | .2200e+02 | 0. | 0. | 0. | 0. | 0. |
| .6760e+02 | .9570e+02 | .1320e+06 | .2470e+00 | | | |
| .5000e+02 | .8600e+02 | 0. | 0. | 0. | 0. | 0. |
| .4940e+02 | .7850e+03 | .5490e+05 | .9750e-01 | | | |
| .3700e+02 | .3700e+02 | 0. | 0. | 0. | 0. | 0. |
| .9600e+02 | .1050e+03 | .2800e+06 | .5030e+00 | | | |
| .7000e+02 | .7200e+02 | 0. | 0. | 0. | 0. | 0. |
| .7150e+02 | .3220e+03 | .8880e+05 | .1620e+00 | | | |
| .1400e+02 | .1400e+02 | 0. | 0. | 0. | 0. | 0. |
| .3750e+02 | .3760e+02 | .2600e+06 | .4830e+00 | | | |
| .6600e+02 | .6600e+02 | 0. | 0. | 0. | 0. | 0. |
| .1250e+03 | .2520e+03 | .1730e+06 | .3390e+00 | | | |

## Table 2A-16 File 21 Dose Conversion File (NUREG/CR-2326, pg 4–3) (Continued)

| | | | | | | |
|---|---|---|---|---|---|---|
| .3800e+00 | .3800e+00 | 0. | 0. | 0. | 0. | 0. |
| .7620e+01 | .1080e+03 | .8520e+04 | .9280e-02 | | | |
| .9000e+00 | .9000e+00 | 0. | 0. | 0. | 0. | 0. |
| .2740e+02 | .6040e+02 | .4000e+05 | .7360e-01 | | | |
| .6100e+03 | .5000e+05 | .6000e+04 | 0. | 0. | 0. | 0. |
| .1760e+03 | .3670e+04 | .1930e+06 | .3500e+00 | | | |
| .6700e+03 | .6600e+04 | 0. | 0. | 0. | 0. | 0. |
| .2160e+03 | .3820e+04 | .2380e+06 | .4440e+00 | | | |
| .3700e+03 | .3400e+05 | .6000e+04 | 0. | 0. | 0. | 0. |
| .6850e+02 | .1460e+04 | .7630e+05 | .1350e+00 | | | |
| .2400e+03 | .1200e+04 | 0. | 0. | 0. | 0. | 0. |
| .4250e+02 | .3110e+04 | .3150e+05 | .5060e-01 | | | |
| .1200e+03 | .1900e+03 | 0. | 0. | 0. | 0. | 0. |
| .1990e+03 | .1460e+04 | .2330e+06 | .4580e+00 | | | |
| .6500e+01 | .1700e+02 | 0. | 0. | 0. | 0. | 0. |
| .8860e+01 | .1730e+03 | .9670e+04 | .1740e-01 | | | |
| .1600e+02 | .2300e+02 | 0. | 0. | 0. | 0. | 0. |
| .4070e+02 | .2590e+03 | .4840e+05 | .7890e-01 | | | |
| .5500e+01 | .1100e+03 | .1600e+03 | 0. | 0. | 0. | 0. |
| .4790e+01 | .1030e+03 | .2730e+04 | .4170e-02 | | | |
| .9300e-01 | .1000e+01 | 0. | 0. | 0. | 0. | 0. |
| 0. | 0. | 0. | 0. | | | |
| .1200e+02 | .2600e+02 | 0. | 0. | 0. | 0. | 0. |
| .1940e+02 | .3340e+03 | .2150e+05 | .3420e-01 | | | |
| .8500e+01 | .1400e+02 | 0. | | .1000e+01 | 0. | 0. |

## Table 2A-16 File 21 Dose Conversion File (NUREG/CR-2326, pg 4–3) (Continued)

| | | | | | | |
|---|---|---|---|---|---|---|
| .2520e+02 | .2350e+03 | .2900e+05 | .3580e-01 | | | |
| .6300e+02 | .2100e+05 | .8090e+06 | .1170e+07 | .1100e+07 | .9000e+06 | .8000e+06 |
| .2360e+00 | .4970e+01 | .2600e+03 | .4190e-04 | | | |
| .5900e+02 | .2000e+05 | .7900e+06 | .1290e+07 | .1200e+07 | .1100e+07 | .1100e+07 |
| .1060e+00 | .2230e+01 | .1160e+03 | .1940e-04 | | | |
| .5900e+02 | .2000e+05 | .8000e+06 | .1280e+07 | .1200e+07 | .1200e+07 | .1000e+07 |
| .2080e+00 | .4380e+01 | .2290e+03 | .3700e-04 | | | |
| .6200e-02 | .1900e+02 | .6280e+04 | .1970e+05 | .2700e+05 | .2900e+05 | .2800e+05 |
| .4380e-05 | .1940e-02 | .9610e-02 | .3650e-09 | | | |
| .7000e+02 | .2300e+05 | .8570e+06 | .1320e+07 | .1300e+07 | .1200e+07 | .1000e+07 |
| .6000e+01 | .1260e+03 | .6610e+04 | .3980e-02 | | | |
| .7500e+02 | .1200e+05 | .1000e+05 | .4000e+04 | .4000e+04 | .4000e+04 | .3000e+04 |
| .2100e+00 | .4350e+01 | .2300e+03 | .3990e-04 | | | |
| .7100e+02 | .2400e+05 | .7260e+06 | .8500e+06 | .5000e+06 | .3000e+06 | .3000e+06 |
| .1470e+01 | .3080e+02 | .1610e+04 | .1270e-02 | | | |
| ovaries | | | | | | |
| .9700e+03 | .2300e+04 | 0. | 0. | 0. | 0. | 0. |
| .6370e+02 | .1290e+04 | .7010e+05 | .1220e+00 | | | |
| .2100e+04 | .8500e+04 | .8500e+04 | .1000e+04 | 0. | 0. | 0. |
| .2240e+03 | .4700e+04 | .2440e+06 | .4780e+00 | | | |
| .1800e+00 | .1800e+00 | 0. | 0. | 0. | 0. | 0. |
| .8900e-01 | .1860e+01 | .9720e+02 | .1720e-03 | | | |
| .2300e+00 | .2300e+00 | 0. | 0. | 0. | 0. | 0. |
| .5700e+01 | .8020e+01 | .1080e+05 | .1980e-01 | | | |
| .1000e+01 | .1000e+01 | 0. | 0. | 0. | 0. | 0. |

## Table 2A-16 File 21 Dose Conversion File (NUREG/CR-2326, pg 4–3) (Continued)

| | | | | | | |
|---|---|---|---|---|---|---|
| .1490e+02 | .1510e+02 | .7220e+05 | .1490e+00 | | | |
| .2300e+01 | .2300e+01 | 0. | 0. | 0. | 0. | 0. |
| .1140e+03 | .1340e+03 | .2160e+06 | .4640e+00 | | | |
| .5000e+03 | .6500e+04 | 0. | 0. | 0. | 0. | 0. |
| .6090e+01 | .1130e+03 | .6660e+04 | .1260e-01 | | | |
| .2600e+03 | .1500e+04 | 0. | 0. | 0. | 0. | 0. |
| 0. | 0. | 0. | 0. | | | |
| .1800e+03 | .5900e+04 | .2100e+04 | .2000e+03 | 0. | 0. | 0. |
| 0. | 0. | 0. | 0. | | | |
| .2300e+03 | .3000e+03 | 0. | 0. | 0. | 0. | 0. |
| .4460e+02 | .1020e+03 | .5110e+05 | .9440e-01 | | | |
| .8200e+01 | .2100e+02 | 0. | 0. | 0. | 0. | 0. |
| 0. | 0. | 0. | 0. | | | |
| .9500e+01 | .3900e+03 | .1000e+02 | 0. | 0. | 0. | 0. |
| .2740e+00 | .5480e+01 | .3000e+03 | .5830e-03 | | | |
| .7800e+03 | .2300e+04 | 0. | 0. | 0. | 0. | 0. |
| .4120e+02 | .9000e+03 | .4530e+05 | .8170e-01 | | | |
| .6100e+03 | .6900e+03 | 0. | 0. | 0. | 0. | 0. |
| .5600e+02 | .2180e+03 | .1490e+05 | .2780e-01 | | | |
| .7800e+03 | .1600e+04 | 0. | 0. | 0. | 0. | 0. |
| .5090e+02 | .1010e+04 | .5620e+05 | .1020e+00 | | | |
| .2100e+03 | .3400e+03 | 0. | 0. | 0. | 0. | 0. |
| .1030e+02 | .1410e+03 | .9720e+04 | .1580e-01 | | | |
| .8600e+01 | .8600e+01 | 0. | 0. | 0. | 0. | 0. |
| .4150e+01 | .6800e+01 | .6920e+04 | .1290e-01 | | | |

## Table 2A-16 File 21 Dose Conversion File (NUREG/CR-2326, pg 4–3) (Continued)

| | | | | | | |
|---|---|---|---|---|---|---|
| .5300e+03 | .1200e+04 | 0. | 0. | 0. | 0. | 0. |
| .2150e+02 | .4200e+03 | .2350e+05 | .4080e-01 | | | |
| .5600e+02 | .5900e+02 | 0. | 0. | 0. | 0. | 0. |
| .2100e+02 | .3280e+02 | .3940e+05 | .7190e-01 | | | |
| .2400e+03 | .2800e+04 | .2000e+04 | 0. | 0. | 0. | 0. |
| .8500e+01 | .1770e+03 | .9290e+04 | .1670e-01 | | | |
| .5900e+02 | .7900e+02 | 0. | 0. | 0. | 0. | 0. |
| .4640e+01 | .3080e+02 | .5510e+04 | .9860e-02 | | | |
| .3400e+01 | .3500e+01 | 0. | 0. | 0. | 0. | 0. |
| .1380e+00 | .3120e+00 | .2010e+03 | .3530e-03 | | | |
| .3400e+02 | .2500e+03 | 0. | 0. | 0. | 0. | 0. |
| .9100e+00 | .2100e+02 | .9460e+03 | .3920e-03 | | | |
| .7900e+00 | .7900e+00 | 0. | 0. | 0. | 0. | 0. |
| .8400e+00 | .8400e+00 | .4380e+04 | .6190e-02 | | | |
| .1000e+03 | .4600e+03 | 0. | 0. | 0. | 0. | 0. |
| .4500e+01 | .9800e+02 | .2700e+04 | .2940e-02 | | | |
| .5800e+03 | .7600e+03 | 0. | 0. | 0. | 0. | 0. |
| .9800e+02 | .6030e+03 | .1120e+06 | .2090e+00 | | | |
| .5400e+03 | .9700e+03 | 0. | 0. | 0. | 0. | 0. |
| .9900e+02 | .1660e+04 | .1380e+05 | .2580e-01 | | | |
| .5300e+03 | .8800e+03 | 0. | 0. | 0. | 0. | 0. |
| .3150e+02 | .3920e+03 | .3590e+05 | .6440e-01 | | | |
| .7800e+02 | .7900e+02 | 0. | 0. | 0. | 0. | 0. |
| .4570e+02 | .6450e+02 | .8940e+05 | .1670e+00 | | | |
| .6300e+02 | .1000e+03 | 0. | 0. | 0. | 0. | 0. |

## Table 2A-16 File 21 Dose Conversion File (NUREG/CR-2326, pg 4–3) (Continued)

| | | | | | | |
|---|---|---|---|---|---|---|
| .1640e+02 | .2640e+03 | .1840e+05 | .3250e-01 | | | |
| .4300e+02 | .4300e+02 | 0. | 0. | 0. | 0. | 0. |
| .5340e+02 | .5860e+02 | .1550e+06 | .2780e+00 | | | |
| .7700e+02 | .8000e+02 | 0. | 0. | 0. | 0. | 0. |
| .3230e+02 | .1440e+03 | .4040e+05 | .7250e-01 | | | |
| .1700e+02 | .1700e+02 | 0. | 0. | 0. | 0. | 0. |
| .2560e+02 | .2570e+02 | .1780e+06 | .3310e+00 | | | |
| .8300e+02 | .8300e+02 | 0. | 0. | 0. | 0. | 0. |
| .1160e+03 | .2170e+03 | .1770e+06 | .3470e+00 | | | |
| .4200e+00 | .4300e+00 | 0. | 0. | 0. | 0. | 0. |
| .3080e+01 | .4360e+02 | .3450e+04 | .3720e-02 | | | |
| .1000e+01 | .1000e+01 | 0. | 0. | 0. | 0. | 0. |
| .1130e+02 | .2480e+02 | .1650e+05 | .3000e-01 | | | |
| .5800e+03 | .4400e+05 | .5000e+04 | 0. | 0. | 0. | 0. |
| .8900e+02 | .1870e+04 | .9810e+05 | .1750e+00 | | | |
| .6500e+03 | .5900e+04 | 0. | 0. | 0. | 0. | 0. |
| .1490e+03 | .2640e+04 | .1650e+06 | .3060e+00 | | | |
| .3600e+03 | .3100e+05 | .6000e+04 | 0. | 0. | 0. | 0. |
| .2270e+02 | .4800e+03 | .2470e+05 | .4440e-01 | | | |
| .6000e+03 | .1900e+04 | 0. | 0. | 0. | 0. | 0. |
| .2400e+02 | .2830e+04 | .1080e+05 | .1750e-01 | | | |
| .1100e+04 | .1600e+04 | 0. | 0. | 0. | 0. | 0. |
| .2030e+03 | .1490e+04 | .2370e+06 | .4690e+00 | | | |
| .1100e+03 | .2000e+03 | 0. | 0. | 0. | 0. | 0. |
| .3920e+01 | .7700e+02 | .4300e+04 | .7670e-02 | | | |

## Table 2A-16 File 21 Dose Conversion File (NUREG/CR-2326, pg 4–3) (Continued)

| | | | | | | |
|---|---|---|---|---|---|---|
| .2300e+03 | .3000e+03 | 0. | 0. | 0. | 0. | 0. |
| .1800e+02 | .1150e+03 | .2140e+05 | .3500e-01 | | | |
| .6000e+02 | .2400e+03 | .1800e+03 | 0. | 0. | 0. | 0. |
| .3540e+01 | .7610e+02 | .1170e+04 | .1790e-02 | | | |
| .9300e-01 | .1000e+01 | 0. | 0. | 0. | 0. | 0. |
| 0. | 0. | 0. | 0. | | | |
| .1800e+03 | .3100e+03 | 0. | 0. | 0. | 0. | 0. |
| .7100e+01 | .1200e+03 | .7710e+04 | .1250e-01 | | | |
| .1300e+03 | .1900e+03 | 0. | 0. | 0. | 0. | 0. |
| .1080e+02 | .1000e+03 | .1240e+05 | .1540e-01 | | | |
| .2200e+02 | .6800e+04 | .2630e+06 | .3800e+06 | .3400e+06 | .3100e+06 | .2000e+06 |
| .3320e-01 | .7020e+00 | .3640e+02 | .5920e-05 | | | |
| .1900e+02 | .6400e+04 | .2540e+06 | .4000e+06 | .3400e+06 | .4000e+06 | .3000e+06 |
| .2020e-01 | .4250e+00 | .2220e+02 | .3690e-05 | | | |
| .2100e+02 | .6400e+04 | .2540e+06 | .4100e+06 | .4300e+06 | .3000e+06 | .4000e+06 |
| .3220e-01 | .6770e+00 | .3510e+02 | .5720e-05 | | | |
| .2200e-02 | .6000e+01 | .1990e+04 | .6400e+04 | .8600e+04 | .9000e+04 | .9000e+04 |
| .2970e-05 | .1300e-02 | .6460e-02 | .2460e-09 | | | |
| .7300e+02 | .7400e+04 | .2730e+06 | .4300e+06 | .3900e+06 | .4000e+06 | .3000e+06 |
| .4060e+01 | .8520e+02 | .4450e+04 | .2690e-02 | | | |
| .2600e+02 | .3700e+04 | .3200e+04 | .1500e+04 | .1300e+04 | .1300e+04 | .1000e+04 |
| .2690e-01 | .5590e+00 | .2950e+02 | .5110e-05 | | | |
| .2500e+02 | .7500e+04 | .2320e+06 | .2600e+06 | .1700e+06 | .1100e+06 | .6000e+05 |
| .8900e+00 | .1870e+02 | .9720e+03 | .7720e-03 | | | |