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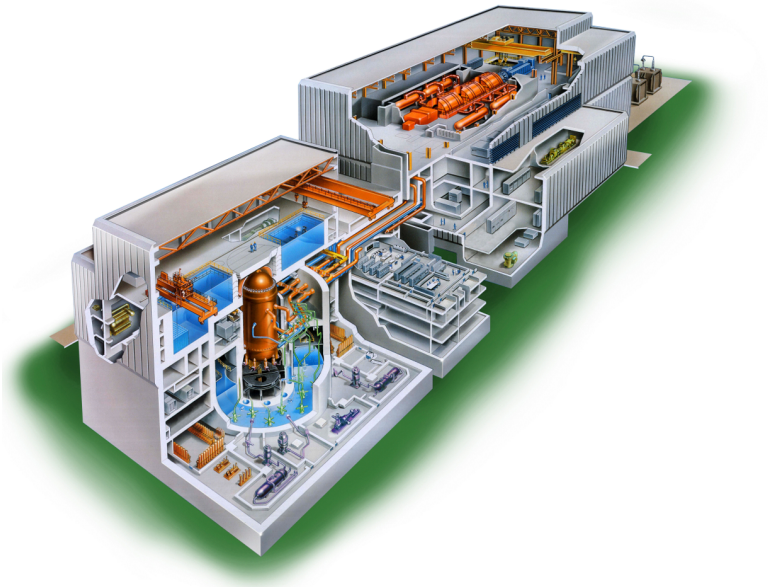
Tier 2



Chapter 2

Site Characteristics

Chapter 2
Table of Contents

Chapter 2
List of Tables

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.

2.0.2 References

2.0-1 Electric Power Research Institute, “Advanced Light Water Reactor Utility Requirements Document,” Revision 8, March 1999

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

Maximum Ground Water Level:‡	61.0 cm below grade	
Severe Wind:	Basic Wind Speed: 177 km/h* / 197 km/h†	
Maximum Flood (or Tsunami) Level:‡	30.5 cm below grade	
Extreme Wind:		
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
Hurricane:	– Maximum Hurricane Wind Speed:	257 km/h***
	– 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 – Maximum: 37.8°C dry bulb 25°C wet bulb (coincident) 26.7°C wet bulb (non-coincident) – Minimum: –23.3°C 0% Exceedance Values (Historical limit) – Maximum 46.1°C dry bulb 26.7°C wet bulb (coincident) 27.2°C wet bulb (non-coincident) – 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:	0.30g^{ƒƒ}
	– SSE Response Spectra:	per RG 1.60
	– SSE Time History:	Envelope SSE Response Spectra
	– Minimum Dynamic Bearing Capacity:	2700kPa
	– Maximum Settlement:	75mm†††
	– Maximum Foundation Angular Distortion:	1/750‡‡‡
Hazards in Site Vicinity:	– Site Proximity Missiles and Aircraft	
	– Toxic Gases	≤10^{-7} per year
	– Volcanic Activity	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	1.37x10^{-3} s/m^3
	– Maximum 2-hour 95% LPZ	4.11x10^{-4} s/m^3
	– Maximum annual average (8760 hour) LPZ	1.17x10^{-6} s/m^3

* Fastest-mile (203 km/h 3-second gust); 50–year recurrence interval; value to be utilized for design of non-safety-related structures only.

† Fastest-mile (224 km/h 3-second gust); 100–year recurrence interval; value to be utilized for design for safety-related structures only.

‡ As defined in Table 1.2-6 of Volume II of Reference 2.0-1.

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 1810 kg automobile, a 130 kg, 20 cm diameter armor piercing artillery shell, and a 2.54 cm diameter solid steel sphere. These missiles have a horizontal tornado missile velocity of 35% of the maximum tornado wind speed and a horizontal hurricane missile velocity of 59% of the maximum hurricane wind speed. These missiles have a vertical tornado missile velocity of 70% of the horizontal tornado missile velocity (with the exception of the solid steel sphere) and a vertical hurricane missile velocity of 26 m/s. The solid steel sphere has a vertical tornado missile velocity of 35% of the maximum tornado wind speed. The automobile missile is considered to impact at all altitudes less than 9.14 m (30 feet) above all plant grade levels within 0.8 km (0.5 mile) of the plant structures. The armor piercing artillery shell and solid steel sphere are considered to impact the full height of the structure. 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.

*** Fastest-mile wind speed. This corresponds to 286.5 km/h nominal 3-second gust wind speed per RG 1.221 measured at 10 m above ground over open terrain.

††† Settlement are long-term (post-construction) values.

‡‡‡ Angular distortion is defined as the slope between two adjacent columns. Angular distortion is long term (post construction) value.

**** Maximum tornado wind speed is in fastest 1/4-mile. The corresponding 3-second gust wind speed is 483 km/h.

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 an appropriate severe accident consequence code, such as MACCS2. 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 severe accident consequence computer code will be a combination of ABWR and site parameters. In order to describe appropriate input to the severe accident consequence code, input required for the CRAC 2 computer code is provided as an example. 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 an appropriate severe accident consequence computer code, such as MACCS2, modified through Sandia National Laboratory. Basic input and code characteristics for MACCS2 are described in NUREG/CR-6613.

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.

The maximum static bearing demand is compared with the site-specific allowable static bearing pressure, which is obtained by dividing the ultimate soil bearing capacity by a factor of safety appropriate for the design load combination. The maximum dynamic bearing demand is compared with the site-specific allowable dynamic bearing pressure, which is obtained by dividing the ultimate soil bearing capacity by a factor of safety appropriate for the design load combination.

The site soil dynamic bearing capacity at the foundation level of the reactor and control building is 2700 kPa minimum.

(3) Settlement

The maximum settlement of the reactor and control building foundations is 75mm. The maximum angular distortion of the reactor and control building is 1/750.

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 Severe Accident Consequence 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			