

**Preliminary Remediation Goals for Use
at the U.S. Department of Energy
Oak Ridge Operations Office**

Environmental Restoration Division
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Oak Ridge, Tennessee 37831-7298

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Kevin S. Quist
Technical Information Officer
Oak Ridge K-25 Site

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PREFACE

This technical memorandum presents Preliminary Remediation Goals (PRGs) for use in human health risk assessment efforts under the United States Department of Energy, Oak Ridge Operations Office Environmental Restoration (ER) Division. This work was performed by the ER Risk Assessment Program under Work Breakdown Structure 1.4.12.2.3.04.07.01 entitled Risk Assessment Review, Planning, and Coordination and within the Activity Data Sheet 8304, Technical Integration. This document provides the ER Division with standardized PRGs which are integral to the Remedial Investigation/Feasibility Study process. They are used during project scoping (Data Quality Objectives development), in screening level risk assessments to support early action or No Further Investigation decisions, and in the baseline risk assessment where they are employed in the selection of chemicals of potential concern. The primary objective of this document is to standardize these values and eliminate any duplication of effort by providing PRGs to all contractors involved in risk activities. In addition, by managing the assumptions and systems used in PRG derivation, the ER Risk Assessment Program will be able to control the level of quality assurance associated with these risk-based guideline values.

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ACRONYMS AND INITIALISMS

ARARs	Applicable or Relevant and Applicable Requirements
CASRN	chemical abstract registration number
COPCs	contaminants of potential concern
DOE-OR/ERD	Department of Energy-Oak Ridge/Environmental Restoration Division
EPA	United States Environmental Protection Agency
HEAST	<i>Health Effects Assessment Summary Tables</i>
HQ	hazard quotient
IRIS	Integrated Risk Information System
NCP	National Contingency Plan
NPL	National Priorities List
ORR	Oak Ridge Reservation
PRGs	Preliminary Remediation Goals
RAGS	<i>Risk Assessment Guidance for Superfund</i>
RI/FS	Remedial Investigation/Feasibility Study
ROD	Record of Decision

1. INTRODUCTION

Chemical-specific preliminary remediation goals (PRGs) are concentration goals for individual chemicals for specific medium and land use combinations. The PRGs provided in this report are referred to as risk-based because they have been calculated using risk assessment procedures. Risk-based calculations set concentration limits using both carcinogenic or noncarcinogenic toxicity values under specific exposure pathways. The PRG is a concentration that is derived from a specified excess cancer risk level (carcinogenic PRG) or hazard quotient (HQ) (noncarcinogenic PRG).

Risk Assessment Guidance for Superfund: Volume I—Human Health Evaluation Manual (Part B) or RAGS, Part B [1], was prepared for risk assessors, remedial project managers, and others to assist them in developing PRGs for National Priorities List (NPL) sites. RAGS, Part B, provides guidance on using United States Environmental Protection Agency (EPA) toxicity values and exposure information to derive risk-based PRGs [1]. The Risk Assessment Program for Environmental Restoration is providing these values to all organizations involved in risk assessment activities to ensure consistent development and application of PRGs for Oak Ridge Operations.

1.1 APPLICATION

The National Contingency Plan (NCP) preamble indicates that PRGs are developed typically during the project scoping phase or concurrently with initial Remedial Investigation and Feasibility Study (RI/FS) activities (i.e., prior to completion of the baseline risk assessment). This early determination of PRGs facilitates development of appropriate detection limits and remedial alternatives.

Preliminary remediation goals can also be used as screening tools. Screening against PRGs and other limiting criteria is discussed in the Remedial Site Evaluation Report as a preliminary step in the RI/FS process. Comparisons can be used to focus concern on a specific medium or chemical of potential concern and support “no further action” recommendations. In addition, PRG screens can be used in place of most toxicity screens for baseline risk assessments. The toxicity screen is a tool used to identify contaminants of potential concern (COPCs) in baseline risk assessments. The objective is to eliminate chemicals that pose little or no risk at a site by comparing relative toxicities and identifying those chemicals contributing less than 1% of the total risk. The PRG screen is a more useful tool because each chemical is weighed on the basis of its toxicity rather than as a fraction of total risk.

The reader should note that risk-based PRGs (either during scoping or later) are initial guidelines (protective of human health and the environment) that are based on readily available information and comply with applicable or relevant and appropriate requirements (ARARs). They do not establish that cleanup to meet these goals is warranted. Preliminary remediation goals developed at the scoping phase using readily available information are generally modified based on site-specific data gathered during the RI/FS. Design staff may be able to streamline the consideration of remedial alternatives by developing PRGs early in the decision-making process (before the RI/FS and the baseline risk assessment are completed). A risk-based concentration will be considered a final remediation level only after appropriate analysis in the RI/FS and Record of Decision (ROD) [1].

*Introduction**Development*

1.2 DEVELOPMENT

The general equations used to calculate the PRGs were obtained from RAGS, Part B [1], where available; however, the remaining equations, such as concentrations for agricultural products, were developed using sources specific to the study of agricultural consumption by humans. The toxicity values used in the development of these PRGs were prepared by the Chemical Hazard Evaluation Group of the Biomedical and Environmental Information Analysis Section of the Health Sciences Research Division at the Oak Ridge National Laboratory. These values were compiled from EPA's Integrated Risk Information System (IRIS) [2] and *Health Effects Assessment Summary Tables* (HEAST) [3]. These values have been approved for use in risk assessments at all Department of Energy-Oak Ridge/Environmental Restoration Division (DOE-OR/ERD) sites.

Carcinogenic toxicity values are referred to as slope factors. Different slope factor values for ingestion, inhalation, and external exposure are provided. In addition, slope factors for dermal exposure (absorbed dose) are calculated by using the gastrointestinal absorption factor to adjust the oral slope factor [4]. In addition, skin absorption factors are used in the equations to adjust for dermal exposure. Noncarcinogenic toxicity values are referred to as reference doses (oral) and reference concentrations (inhalation). Both are subdivided into chronic and subchronic levels. For PRG calculations, only the chronic values are used because these are available for all chemicals with reference doses and are more conservative relative to human health. The inhalation reference concentration has been converted to a dose by the units conversion factor recommended in HEAST. Reference doses for dermal exposure (absorbed dose) are also calculated by using the gastrointestinal absorption factor to adjust the oral chronic reference dose.

The IRIS/HEAST databases contain toxicity values for more than 600 nonradioactive chemicals and more than 300 radioactive chemicals. However, toxicity values are not available for many chemicals. As the IRIS/HEAST databases are updated with toxicity changes and additions, this PRGs report will be updated also.

Preliminary remediation goals have been calculated for five land use scenarios that may be considered reasonable for future use of some areas of the Oak Ridge Reservation (ORR). The residential and industrial scenarios are recommended in RAGS, Part B [1]. In addition, recreation, agriculture, and excavation scenarios are included. The recreation and agriculture scenarios are mentioned in RAGS, Part A [5], for baseline risk assessments. The excavation scenario is included also because it is a likely industrial occurrence at ORR. Equation default parameters from RAGS have been used when available; others were obtained from documents pertaining to the particular land use scenario. The media evaluated are groundwater/surface water and soil/sediment.

The exposure routes considered are the same for groundwater and surface water; therefore, a single set of equations is used to represent the "water" exposure pathway. Likewise, the PRGs for soil are representative of sediment as well. For the resident, the routes of exposure are ingestion, inhalation of volatiles, and dermal contact with groundwater or surface water and ingestion, inhalation, dermal contact, and external exposure to soil or sediment. For the industrial worker, the routes of exposure are ingestion of groundwater or surface water and ingestion, inhalation, dermal contact, and external exposure to soil or sediment.

The agricultural scenario evaluates ingestion of produce, beef, and milk grown on the ORR using groundwater, surface water, soil, and sediment. The underlying assumptions for agricultural product ingestion are that the produce would be irrigated with either groundwater or surface water during the growing season and the pasture the cattle graze on would not be irrigated because of the sufficient

average amount of rainfall for the region. Both vegetation and pasture would grow on existing soil and sediment around the ORR.

The exposure routes for the recreational visitor are ingestion and dermal contact with surface water; ingestion of fish caught in surface water; and ingestion, inhalation, dermal contact, and external exposure with soil or sediment or both. The exposure routes for the excavation worker are ingestion, inhalation, dermal contact, and external exposure to soil or sediment or both. These scenarios are demonstrated in Fig. 1.

The default parameters specified in RAGS, Parts A [5] and B [1], were used to develop the PRGS in this document. Defaults not available in RAGS, Parts A and B, were obtained from land use- and pathway-specific literature searches. Media-specific information such as soil moisture content (θ and θ_m , page 2-15) has been changed due to climatic conditions indigenous to the ORR.

1.3 ORGANIZATION

The remainder of this document is organized by land use scenario. In Chapter 2, each scenario is described, and likely exposure routes are represented. Each equation is numbered sequentially with the parameters and defaults listed immediately afterwards. The tables (Chapter 3) are arranged by scenario in the following order: 1) Residential, 2) Industrial, 3) Agriculture, 4) Recreation, and 5) Excavation. Each table contains the chemical name, its corresponding chemical abstract registration number (CASRN), and the appropriate PRG for each pathway at risk levels of $1.0E-04$ and $1.0E-06$ and an HI level of 1. The tables are differentiated based on the medium (water or soil) and the chemical type (nonradionuclide or radionuclide). For each scenario, risk-based PRGs for nonradionuclides in water are followed by risk-based PRGs for radionuclides in water, nonradionuclides in soil, and radionuclides in soil.

1.4 REFERENCES

- [1] United States Environmental Protection Agency (EPA). 1991. *Risk Assessment Guidance for Superfund: Volume I - Human Health Evaluation Manual (Part B, Development of Risk-based Preliminary Remediation Goals)*. Office of Emergency and Remedial Response, U.S. Environmental Protection Agency, Washington, D.C.
- [2] United States Environmental Protection Agency (EPA). 1994. *Integrated Risk Information System (IRIS)*. Environmental Criteria and Assessment Office. Cincinnati, OH.
- [3] United States Environmental Protection Agency (EPA). 1993. *Health Effects Assessment Summary Tables. Annual FY-1993*. OERR 9200.6-303-(93-1). PB93-921199. March. And Supplement No. 1, OERR 9200.6-303 (93-2). PB93-921101. July.
- [4] United States Environmental Protection Agency (EPA). 1992. *Dermal Exposure Assessment: Principles and Application*. Interim Report. EPA/600/8-91/011B. Office of Research and Development, Washington, D.C.
- [5] United States Environmental Protection Agency (EPA). 1989. *Risk Assessment Guidance for Superfund: Volume I - Human Health Evaluation Manual*. Office of Emergency and Remedial Response, U.S. Environmental Protection Agency, Washington, D.C.

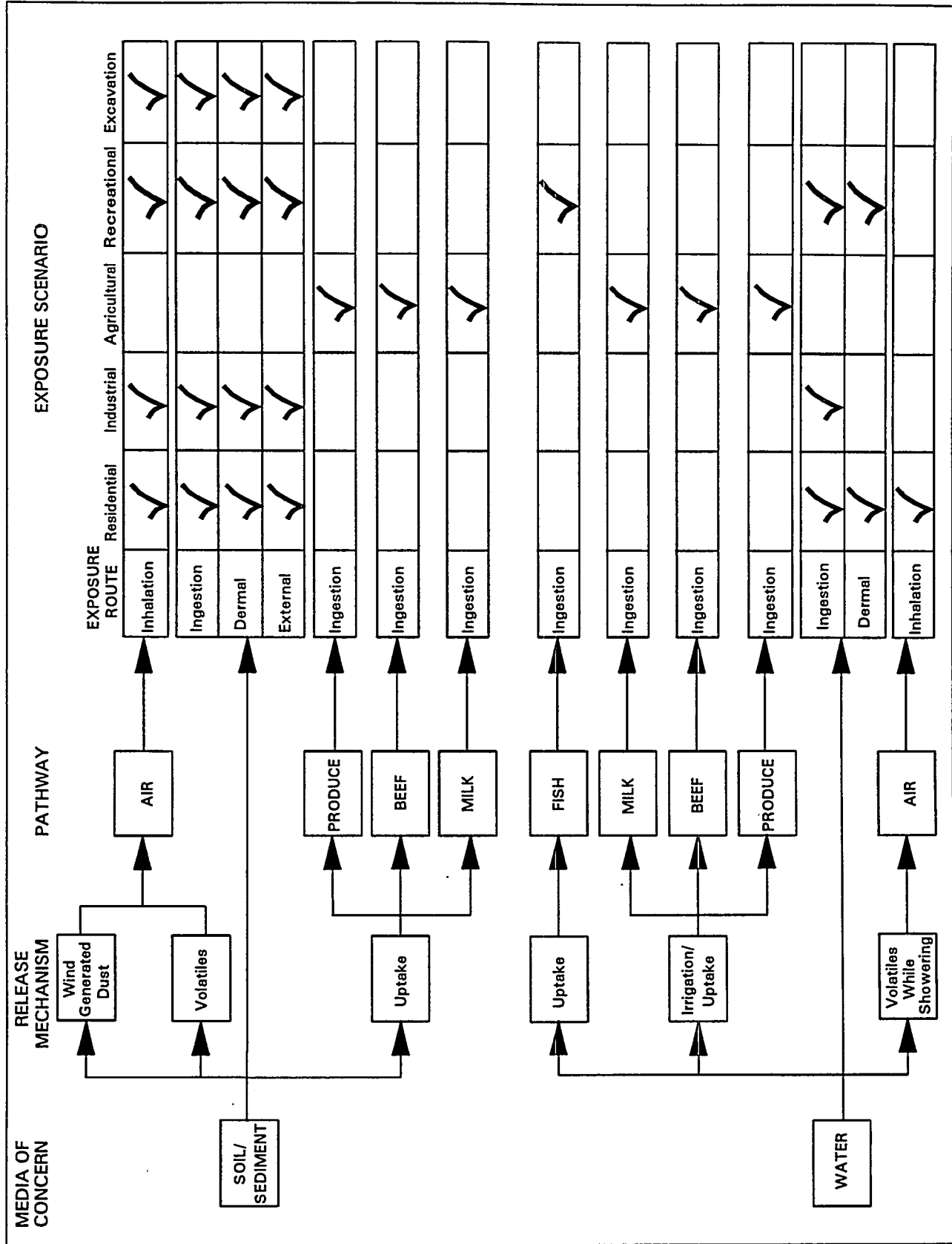


Fig. 1. Land uses and exposure routes considered in the development of PRGs.

2. EQUATIONS

The reader should note that for purposes of readability and convenience, the equations have been placed as close as possible to their respective parameters. To ensure this accessibility for the reader, the chapter has been formatted with each equation followed immediately by its parameters. Blank pages have been inserted where necessary to separate groups of equations and keep this order.

*Equations**Residential Land Use***2.1 RESIDENTIAL LAND USE—GROUNDWATER, SURFACE WATER, SOIL, OR SEDIMENT**

Under residential land use, residents are expected to be in frequent, repeated contact with contaminated media. The contamination may be on the site itself or may have migrated from it. The assumptions in this case account for daily exposure over the long term and generally result in the highest potential exposures and risk. Risk from groundwater or surface water contaminants is assumed to be primarily from direct ingestion, inhalation of volatiles from household water use, and dermal contact while showering. Risk from soil or sediment is assumed to be from direct ingestion, inhalation of dust and particulates, dermal exposure from chemicals, and external exposure from radionuclides. Risks from two or more exposure pathways are combined where available, and the risk-based concentration is derived to be protective for exposure from all included pathways.

2.1.1 Groundwater or Surface Water**2.1.1.1 Nonradionuclide contaminant**

1) Ingestion only

$$C = \frac{T \times BW \times AT}{TV_o \times IR_w \times EF \times ED} \quad (1)$$

2) Inhalation of vapor-phase chemicals (volatile organics only)

$$C = \frac{T \times BW \times AT}{TV_i \times K \times IR_a \times EF \times ED \times ET \times CF_2} \quad (2)$$

3) Dermal contact only

$$C = \frac{T \times BW \times AT}{TV_{ad} \times SA \times K_p \times ET \times EF \times ED \times CF_1} \quad (3)$$

4) Ingestion and inhalation and dermal contact

$$C = \frac{T \times BW \times AT}{EF \times ED \times [(TV_o \times IR_w) + (TV_i \times K \times IR_a \times ET \times CF_2) + (TV_{ad} \times SA \times K_p \times ET \times CF_1)]} \quad (4)$$

where

<u>Parameters</u>	<u>Definition (units)</u>	<u>Default Value</u>
AT	averaging time (yr $\times$ day/yr)	70 $\times$ 365 (carcinogen) [1] 30 $\times$ 365 (noncarcinogen) [1]
BW	adult body weight (kg)	70 [1]
C	chemical PRG in water (mg/L)	–
CF ₁	units conversion factor (L-m)/(cm-m ³)	10
CF ₂	units conversion factor (day/hr)	1/24
ED	exposure duration (yr)	30 [1]
EF	exposure frequency (day/yr)	350 [1]
ET	exposure time (hr/day)	0.25 [4]
IR _a	indoor inhalation rate (m ³ /day)	15 [1]
IR _w	water ingestion rate (L/day)	2 [1]
K	volatilization factor of Andelman (1990) (L/m ³)	0.0005 $\times$ 10 ³ [2]
K _p	permeability constant (cm/hr)	chemical-specific
RfD _{ad}	absorbed chronic reference dose (mg/kg-day)	chemical-specific [3]
RfD _i	inhalation chronic reference dose (mg/kg-day)	chemical-specific [3]
RfD _o	oral chronic reference dose (mg/kg-day)	chemical-specific [3]
SA	adult total body surface area (m ²)	1.94 [4]
SF _{ad}	absorbed dose slope factor ((mg/kg-day) ⁻¹)	chemical-specific [3]
SF _i	inhalation slope factor ((mg/kg-day) ⁻¹)	chemical-specific [3]
SF _o	oral slope factor ((mg/kg-day) ⁻¹)	chemical-specific [3]
T	target (unitless)	TR (carcinogen) THI (noncarcinogen)
THI	target hazard index (unitless)	1
TR	target excess individual lifetime cancer risk (unitless)	10 ⁻⁶ and 10 ⁻⁴
TV _{ad}	absorbed toxicity value	SF _{ad} (carcinogen) 1/RfD _{ad} (noncarcinogen)
TV _i	inhalation toxicity value	SF _i (carcinogen) 1/RfD _i (noncarcinogen)
TV _o	oral toxicity value	SF _o (carcinogen) 1/RfD _o (noncarcinogen)

EquationsResidential Land Use**2.1.1.2 Radionuclide contaminant**

Since most radionuclides are not considered to be volatile, the inhalation pathway is not usually considered for exposure through groundwater or surface water; exceptions are tritium and radon. Tritium easily volatilizes in water because it acts like hydrogen. Groundwater that is in contact with rock or soil containing radium will pick up radon-222 and release it to the atmosphere when the water comes to the surface. With a contribution of 5×10^8 Ci of radon-222 per year, groundwater is considered the second largest source of environmental radon [15].

1) Ingestion only

$$C = \frac{TR}{SF_o \times IR_w \times EF \times ED} \quad (5)$$

2) Inhalation only (tritium, radon-220, and radon-222)

$$C = \frac{TR}{SF_i \times IR_{air} \times EF \times ED \times CF \times IEF} \quad (6)$$

3) Ingestion and inhalation (volatiles only)

$$C = \frac{TR}{EF \times ED \times [(SF_o \times IR_w) + (SF_i \times IR_{air} \times CF \times IEF)]} \quad (7)$$

where

<u>Parameters</u>	<u>Definition (units)</u>	<u>Default Value</u>
C	radionuclide PRG in water (pCi/L)	–
CF	units conversion factor (day/hr)	1/24
ED	exposure duration (yr)	30 [1]
EF	exposure frequency (day/yr)	350 [1]
IEF	inhalation exposure factor (L-hr)(m ³ -day)	0.2802 (tritium) [14] 7.6030 (radon) [14]
IR _{air}	indoor inhalation rate (m ³ /day)	15 [1]
IR _w	water ingestion rate (L/day)	2 [1]
SF _i	inhalation slope factor (risk/pCi)	radionuclide-specific[3]
SF _o	oral slope factor (risk/pCi)	radionuclide-specific[3]
TR	target excess individual lifetime cancer risk (unitless)	10 ⁻⁶ and 10 ⁻⁴

*Equations**Residential Land Use***2.1.2 Soil or Sediment**

Under residential land use, risk of contamination from soil is caused by direct ingestion, inhalation of dust and particulates, dermal exposure to chemicals, and external exposure to radionuclides. Because the soil ingestion rate is different for children and adults, the carcinogenic risk due to direct ingestion of soil is calculated using an age-adjusted ingestion factor. This takes into account the differences in daily soil ingestion rates, body weights, and exposure durations for the two exposure groups. Exposure frequency is assumed to be the same for the two groups. Calculated in this manner, the factor leads to a more protective risk-based concentration compared to an adult-only assumption. Due to differences in averaging times for carcinogens and noncarcinogens, the noncarcinogenic hazard is calculated separately for adults and children. This procedure will give a more protective concentration than the adult-only assumption.

2.1.2.1 Nonradionuclide contaminant

1) Ingestion only

a) Carcinogen

$$C = \frac{T \times AT}{TV_o \times CF \times EF \times IF_{soil/adj} \times FI} \quad (8)$$

b) Noncarcinogenic (adult and child calculated separately)

$$C = \frac{T \times BW_n \times AT_n}{TV_o \times CF \times EF \times ED_n \times IR_n \times FI} \quad (9)$$

2) Inhalation only

$$C = \frac{T \times BW \times AT}{TV_i \times EF \times ED \times \left(\frac{1}{VF} + \frac{1}{PEF} \right) \times IR_{air}} \quad (10)$$

3) Dermal contact only

$$C = \frac{T \times BW \times AT}{TV_{ad} \times CF_d \times SA \times AF \times ABS \times EF \times ED} \quad (11)$$

4) Ingestion and inhalation and dermal contact (adult only)

$$C = \frac{T \times BW \times AT}{EF \times ED [(TV_o \times CF \times IR_a \times FI) + (TV_i \times (\frac{1}{VF} + \frac{1}{PEF}) \times IR_{air}) + (TV_{ad} \times CF_d \times SA \times AF \times ABS)]} \quad (12)$$

where

<u>Parameters</u>	<u>Definition (units)</u>	<u>Default Value</u>
ABS	absorption factor (unitless)	0.01 (organic) 0.001 (inorganic)
AF	adherence factor (mg/cm²)	1 [11]
AT	averaging time (yr × day/yr)	70 × 365 (carcinogen)[1] 30 × 365 (noncarcinogen)[1]
AT _n	averaging time - noncarcinogenic ingestion only (yr × day/yr)	24 × 365 (adult) [1] 6 × 365 (child) [1]
BW	adult body weight (kg)	70 [1]
BW _n	body weight - noncarcinogenic ingestion only (kg)	70 (adult) [1] 15 (child) [1]
C	chemical PRG in soil (mg/kg)	–
CF	units conversion factor (kg/mg)	10 ⁻⁶
CF _d	units conversion factor - dermal (kg-cm²)/(mg-m²))	0.01
ED	exposure duration (yr)	30 [1]
ED _n	exposure duration - noncarcinogenic ingestion only (yr)	24 (adult) [1] 6 (child) [1]
EF	exposure frequency (day/yr)	350 [1]
FI	fraction ingested (unitless)	1 [12]
IF _{soil/adj}	age-adjusted soil ingestion factor (mg-yr/kg-day)	~114 (see Eq. 16) [1]
IR _a	soil ingestion rate for adult (mg/day)	100 [9]
IR _{air}	total inhalation rate (m³/day)	20 [9]
IR _n	soil ingestion rate - noncarcinogenic (mg/day)	100 (adult) 200 (child)
PEF	particulate emission factor (m³/kg)	4.28 × 10 ⁹ (see Eq. 35)[5]
RfD _{ad}	absorbed chronic reference dose (mg/kg-day)	chemical-specific [3]
RfD _i	inhalation chronic reference dose (mg/kg-day)	chemical-specific [3]
RfD _o	oral chronic reference dose (mg/kg-day)	chemical-specific [3]
SA	adult surface area (head, hands, forearms, lower legs) (m²/day)	0.53 [4]
SF _{ad}	absorbed dose slope factor ((mg/kg-day) ⁻¹)	chemical-specific [3]
SF _i	inhalation slope factor ((mg/kg-day) ⁻¹)	chemical-specific [3]
SF _o	oral slope factor ((mg/kg-day) ⁻¹)	chemical-specific [3]
T	target (unitless)	TR (carcinogen) THI (noncarcinogen)
THI	target hazard index (unitless)	1
TR	target excess individual lifetime cancer risk (unitless)	10 ⁻⁶ and 10 ⁻⁴
TV _{ad}	absorbed toxicity value	SF _{ad} (carcinogen) 1/RfD _{ad} (noncarcinogen)
TV _i	inhalation toxicity value	SF _i (carcinogen) 1/RfD _i (noncarcinogen)
TV _o	oral toxicity value	SF _o (carcinogen) 1/RfD _o (noncarcinogen)
VF	volatilization factor (volatile organics only) (m³/kg)	chemical-specific (see Eqs. 29-34) [5]

*Equations**Residential Land Use***2.1.2.2 Radionuclide contaminant**

1) Ingestion only

$$C = \frac{TR}{SF_o \times CF \times EF \times IF_{soiladj} \times FI} \quad (13)$$

2) External radiation only

$$C = \frac{TR}{SF_x \times ED \times EF_x \times (1-S_e) \times T_e} \quad (14)$$

3) Inhalation only

$$C = \frac{TR}{SF_i \times ED \times CF_i \times EF \times \left(\frac{1}{VF} + \frac{1}{PEF}\right) \times IR_{air}} \quad (15)$$

4) Ingestion and external radiation and inhalation

$$C = \frac{TR}{(SF_o \times CF \times EF \times ED \times FI) + (SF_x \times ED \times EF_x \times (1-S_e) \times T_e) + (SF_i \times ED \times CF_i \times EF \times \left(\frac{1}{VF} + \frac{1}{PEF}\right) \times IR_{air})} \quad (16)$$

where

<u>Parameters</u>	<u>Definition (units)</u>	<u>Default Value</u>
C	radionuclide PRG in soil (pCi/g)	–
CF	units conversion factor (g/mg)	10 ⁻³
Cf _i	units conversion factor -inhalation (g/kg)	10 ³
ED	exposure duration (yr)	30 [1]
EF	exposure frequency (day/yr)	350 [1]
EF _x	exposure frequency - external (day/day)	350/365 [1]
FI	fraction ingested (unitless)	1 [12]
IF _{soil/adj}	age-adjusted soil ingestion factor (mg-yr/day)	3600 [6]
IR _a	soil ingestion rate for adult (mg/day)	100 [9]
IR _{air}	total inhalation rate (m ³ /day)	20 [9]
PEF	particulate emission factor (m ³ /kg)	4.28 × 10 ⁹ [5]
S _e	gamma shielding factor (unitless)	0.2 [1]
SF _i	inhalation slope factor (risk/pCi)	radionuclide-specific [3]
SF _o	oral slope factor (risk/pCi)	radionuclide-specific [3]
SF _x	external exposure slope factor ((risk-g)/(pCi-yr))	radionuclide-specific [3]
T _e	gamma exposure time factor (hr/hr)	24/24 [1]
TR	target excess individual lifetime cancer risk (unitless)	10 ⁻⁶ and 10 ⁻⁴
VF	volatilization factor (volatiles only) (m ³ /kg)	radionuclide-specific [5]

2.1.2.3 Supporting equations

1) Age-adjusted soil ingestion factor for nonradionuclide (carcinogenic risk only)

$$IF_{soil/adj} = \frac{IR_{soil/age\ 1-6} \times ED_{age\ 1-6}}{BW_{age\ 1-6}} + \frac{IR_{soil/age\ 7-31} \times ED_{age\ 7-31}}{BW_{age\ 7-31}} \quad (17)$$

where

<u>Parameters</u>	<u>Definition (units)</u>	<u>Default Value</u>
$BW_{age\ 1-6}$	average body weight from ages 1-6 (kg)	15 [1]
$BW_{age\ 7-31}$	average body weight from ages 7-31 (kg)	70 [1]
$ED_{age\ 1-6}$	exposure duration during ages 1-6 (yr)	6 [1]
$ED_{age\ 7-31}$	exposure duration during ages 7-31 (yr)	24 [1]
$IF_{soil/adj}$	age-adjusted soil ingestion factor (mg-yr/kg-day)	~114 [1]
$IR_{soil/age\ 1-6}$	ingestion rate of soil ages 1 to 6 (mg/day)	200 [1]
$IR_{soil/age\ 7-31}$	ingestion rate of soil ages 7 to 31 (mg/day)	100 [1]

2) Age-adjusted soil ingestion factor for radionuclide

$$IF_{soil/adj} = (IR_{soil/age\ 1-6} \times ED_{age\ 1-6}) + (IR_{soil/age\ 7-31} \times ED_{age\ 7-31}) \quad (18)$$

where

<u>Parameters</u>	<u>Definition (units)</u>	<u>Default Value</u>
$ED_{age\ 1-6}$	exposure duration during ages 1-6 (yr)	6 [1]
$ED_{age\ 7-31}$	exposure duration during ages 7-31 (yr)	24 [1]
$IF_{soil/adj}$	age-adjusted soil ingestion factor (mg-yr/day)	3600 [1]
$IR_{soil/age\ 1-6}$	ingestion rate of soil ages 1-6 (mg/day)	200 [1]
$IR_{soil/age\ 7-31}$	ingestion rate of soil ages 7-31 (mg/day)	100 [1]

*Equations**Commercial/Industrial Land Use***2.2 COMMERCIAL/INDUSTRIAL LAND USE—GROUNDWATER, SURFACE WATER, SOIL, OR SEDIMENT**

Under commercial/industrial land use, workers are exposed to contaminants within a commercial area or industrial site. Workers are expected to be routinely exposed to contaminated media. Risk of the contaminant from groundwater or surface water is assumed to be from incidental ingestion only. Risk of contamination from soil or sediment is assumed to be from direct ingestion, inhalation of dust and particulates, dermal exposure to chemicals, and external exposure from radionuclides. It is assumed that there is potential for use of heavy equipment and related traffic in and around contaminated soils and therefore a potential for soils to be disturbed and produce particulate and volatile emissions.

2.2.1 Groundwater or Surface Water**2.2.1.1 Nonradionuclide contaminant**

Ingestion only

$$C = \frac{T \times BW \times AT}{TV_o \times IR_w \times EF \times ED} \quad (19)$$

where

<u>Parameters</u>	<u>Definition (units)</u>	<u>Default Value</u>
AT	averaging time (yr × day/yr)	70 × 365 (carcinogen) [1] 25 × 365 (noncarcinogen)[1]
BW	adult body weight (kg)	70 [1]
C	chemical PRG in water (mg/L)	–
ED	exposure duration (yr)	25 [1]
EF	exposure frequency (day/yr)	250 [1]
IR _w	water ingestion rate (L/day)	1 [9]
RfD _o	oral chronic reference dose (mg/kg-day)	chemical-specific [3]
SF _o	oral slope factor ((mg/kg-day) ⁻¹)	chemical-specific [3]
T	target (unitless)	TR (carcinogen) THI (noncarcinogen)
THI	target hazard index (unitless)	1
TR	target excess individual lifetime cancer risk (unitless)	10 ⁻⁶ and 10 ⁻⁴
TV _o	oral toxicity value	SF _o (carcinogen) 1/RfD _o (noncarcinogen)

2.2.1.2 Radionuclide contaminant

Ingestion only

$$C = \frac{TR}{SF_o \times IR_w \times EF \times ED} \quad (20)$$

where

<u>Parameters</u>	<u>Definition (units)</u>	<u>Default Value</u>
C	radionuclide PRG in water (pCi/L)	–
ED	exposure duration (yr)	25 [1]
EF	exposure frequency (day/yr)	250 [1]
IR _w	water ingestion rate (L/day)	1 [9]
SF _o	oral slope factor (risk/pCi)	radionuclide-specific [3]
TR	target excess individual lifetime cancer risk (unitless)	10 ⁻⁶ and 10 ⁻⁴

*Equations**Commercial/Industrial Land Use*

2.2.2 Soil or Sediment**2.2.2.1 Nonradionuclide contaminant**

1) Ingestion only

$$C = \frac{T \times BW \times AT}{TV_o \times CF \times EF \times ED \times IR_s} \quad (21)$$

2) Inhalation only

$$C = \frac{T \times BW \times AT}{TV_i \times EF \times ED \times \left(\frac{1}{VF} + \frac{1}{PEF}\right) \times IR_a} \quad (22)$$

3) Dermal contact only

$$C = \frac{T \times BW \times AT}{TV_{ad} \times CF_d \times SA \times AF \times ABS \times EF \times ED \times ET \times CF_2} \quad (23)$$

4) Ingestion and inhalation and dermal contact

$$C = \frac{T \times BW \times AT}{EF \times ED \times [(TV_o \times CF \times IR_s) + (TV_i \times (\frac{1}{VF} + \frac{1}{PEF}) \times IR_a) + (TV_{ad} \times CF_d \times SA \times AF \times ABS \times ET \times CF_2)]} \quad (24)$$

where

<u>Parameters</u>	<u>Definition (units)</u>	<u>Default Value</u>
ABS	absorption factor (unitless)	0.01 (organic) 0.001 (inorganic)
AF	adherence factor (mg/cm ²)	1 [11]
AT	averaging time (yr × day/yr)	70 × 365 (carcinogen) [1] 25 × 365 (noncarcinogen)[1]
BW	adult body weight (kg)	70 [1]
C	chemical PRG in soil (mg/kg)	–
CF	units conversion factor (kg/mg)	10 ⁻⁶
CF ₂	units conversion factor (day/hr)	1/24
CF _d	units conversion factor - dermal (kg-cm ²)/(mg-m ²)	0.01
ED	exposure duration (yr)	25 [1]
EF	exposure frequency (day/yr)	250 [1]
ET	exposure time (hr/day)	8 [9]
IR _a	total inhalation rate (m ³ /day)	20 [1]
IR _s	soil ingestion rate (mg/day)	50 [1]
PEF	particulate emission factor (m ³ /kg)	4.28 × 10 ⁹ (see Eq. 35)[5]
RfD _{ad}	absorbed chronic reference dose (mg/kg-day)	chemical-specific [3]
RfD _i	inhalation chronic reference dose (mg/kg-day)	chemical-specific [3]
RfD _o	oral chronic reference dose (mg/kg-day)	chemical-specific [3]
SA	adult surface area (head, hands, forearms) (m ² /day)	0.316 [4]
SF _{ad}	absorbed dose slope factor ((mg/kg-day) ⁻¹)	chemical-specific [3]
SF _i	inhalation slope factor ((mg/kg-day) ⁻¹)	chemical-specific [3]
SF _o	oral slope factor ((mg/kg-day) ⁻¹)	chemical-specific [3]
T	target (unitless)	TR (carcinogen) [3] THI (noncarcinogen)
THI	target hazard index (unitless)	1
TR	target excess individual lifetime cancer risk (unitless)	10 ⁻⁶ and 10 ⁻⁴
TV _{ad}	absorbed toxicity value	SF _{ad} (carcinogen) 1/RfD _{ad} (noncarcinogen)
TV _i	inhalation toxicity value	SF _i (carcinogen) 1/RfD _i (noncarcinogen)
TV _o	oral toxicity value	SF _o (carcinogen) 1/RfD _o (noncarcinogen)
VF	volatilization factor (m ³ /kg)	chemical-specific

*Equations**Commercial/Industrial Land Use***2.2.2.2 Radionuclide contaminant**

1) Ingestion only

$$C = \frac{TR}{SF_o \times ED \times CF \times EF \times IR_s} \quad (25)$$

2) Inhalation only

$$C = \frac{TR}{SF_i \times ED \times CF_i \times EF \times \left(\frac{1}{VF} + \frac{1}{PEF}\right) \times IR_a} \quad (26)$$

3) External radiation only

$$C = \frac{TR}{SF_x \times ED \times EF_x \times (1-S_e) \times T_e} \quad (27)$$

4) Ingestion and inhalation and external radiation

$$C = \frac{TR}{ED \times [(SF_o \times CF \times EF \times IR_s) + (SF_i \times CF_i \times EF \times \left(\frac{1}{VF} + \frac{1}{PEF}\right) \times IR_a) + (SF_x \times EF_x \times (1-S_e) \times T_e)]} \quad (28)$$

where

<u>Parameters</u>	<u>Definition (units)</u>	<u>Default Value</u>
C	radionuclide PRG in soil (pCi/g)	-
CF	units conversion factor (g/mg)	10 ⁻³
Cf _i	units conversion factor - inhalation (g/kg)	10 ³
ED	exposure duration (yr)	25 [1]
EF	exposure frequency (day/yr)	250 [1]
EF _x	exposure frequency - external (day/day)	250/365 [1]
IR _a	total inhalation rate (m ³ /day)	20 [1]
IR _s	soil ingestion rate (mg/day)	50 [1]
PEF	particulate emission factor (m ³ /kg)	4.28 × 10 ⁹ [5]
S _e	gamma shielding factor (unitless)	0.2 [1]
SF _i	inhalation slope factor (risk/pCi)	radionuclide-specific [3]
SF _o	oral slope factor (risk/pCi)	radionuclide-specific [3]
SF _x	external exposure slope factor ((risk-g)/(pCi-yr))	radionuclide-specific [3]
T _e	gamma exposure factor (hr/hr)	8/24 [6]
TR	target excess individual lifetime cancer risk (unitless)	10 ⁻⁶ and 10 ⁻⁴
VF	volatilization factor (m ³ /kg)	radionuclide-specific [5]

Most radionuclides are heavy metal elements and are nonvolatile under normal, ambient conditions. However, some radionuclides are volatile under certain conditions (i.e., carbon-14, tritium, phosphorus-32, sulfur-35) and still others undergo radioactive decay to yield gaseous daughter isotopes (i.e., radium-226 and radium-224 decay to form radon-222 and radon-220,

respectively). The United States Environmental Protection Agency [1] describes how to calculate volatilization factors (VF) for these exceptions.

2.2.2.3 Supporting equations

The volatilization factor, VF, defines the relationship between the concentration of contaminants in soil and the volatilization of contaminants in air. The chemical concentration in soil (C) calculated using the VF must be compared with the soil saturation concentration (C_{sat}). If C is greater than C_{sat} , then the PRG is set equal to C_{sat} [1].

1) Soil saturation concentration

$$C_{sat} = \frac{(K_d \times C_w \times \beta) + (C_w \times P_w) + (C_w \times H' \times P_a)}{\beta} \quad (29)$$

where

<u>Parameters</u>	<u>Definition (units)</u>	<u>Default Value</u>
C_{sat}	soil saturation concentration (mg/kg)	–
C_w	upper limit of free moisture in soil (mg/L-water)	$s \times \theta_m$ [6]
H	Henry's Law constant (atm-m ³ /mol)	chemical-specific [6]
H'	Henry's Law constant (unitless)	$H \times 41$, where 41 is a conversion factor [6]
K_d	soil-water partition coefficient (L/kg)	chemical-specific, or $K_{oc} \times OC$ [6]
K_{oc}	organic carbon partition coefficient (L/kg)	chemical-specific [6]
OC	organic carbon content of soil (fraction)	site-specific, or 0.02 [6]
P_a	air-filled soil porosity (unitless)	$P_t - \theta\beta$ [6]
P_t	total soil porosity (unitless)	$1 - (\beta/\rho_s)$ [6]
P_w	water filled soil porosity (unitless)	$P_t - P_a$, or $\theta\beta$ [6]
s	solubility in water (mg/L-water)	chemical-specific [6]
β	soil bulk density (kg/l)	1.5 [6]
θ	soil moisture content (L-water/kg-soil)	site-specific, or 0.15 [6]
θ_m	soil moisture content (kg-water/kg-soil)	site-specific, or 0.15 [6]
ρ_s	true soil density or particle density (kg/L)	2.65 [6]

Please note that the equation presented here for C_{sat} is also a modification of the equation presented in RAGS, Part B [1] guidance. This equation also considers the amount of contaminant in vapor phase in the pore spaces of the soil.

2) Soil-to-air volatilization factor

The VF assumes that the contaminant concentration in the soil is homogeneous from the soil surface to the depth of concern and that the contaminated material is not covered by contaminant-free soil material. For the purpose of calculating the VF, depth of concern is defined as the depth at which a near impenetrable layer or the permanent groundwater level is reached. The following equation represents revisions to RAGS, Part B, Sect. 3.3.1 [1] incorporating the 95% upper confidence limit

*Equations**Commercial/Industrial Land Use*

of the mean normalized concentration as determined by regression analysis of the modeled data. This methodology uses the most conservative results of the three source shapes modeled (1:3 aspect ratio rectangle).

$$VF = Q/C \times \frac{(3.1416 \times \alpha \times T)^{\frac{1}{2}}}{(2 \times D_{ei} \times P_a \times K_{as})} \times 10^{-4} m^2/cm^2 \quad (30)$$

3) α

$$\alpha = \frac{(D_{ei} \times P_a)}{P_a + (\rho_s)(1-P_a)/K_{as}} \quad (31)$$

4) Q/C

$$Q/C = (\exp [\hat{Y}_h + 2.92s(\hat{Y}_h)])^{-1} \quad (32)$$

5) $s(\hat{Y}_h)$

$$s(\hat{Y}_h) = 0.02685[0.25 + \frac{(X_h - 11.0509)^2}{26.3608}] \quad (33)$$

6) $\hat{Y}_h$

$$\hat{Y}_h = 0.1004X_h - 5.3466 \quad (34)$$

where

<u>Parameters</u>	<u>Definition (units)</u>	<u>Default Value</u>
D_{ei}	effective diffusivity (cm^2/s)	$D_i(P_a^{3.3}/P_t^2)$ [5]
D_i	molecular diffusivity (cm^2/s)	chemical-specific
H	Henry's law constant ($\text{atm}\cdot\text{m}^3/\text{mol}$)	chemical-specific
K_{as}	soil/air partition coefficient ($\text{g}\cdot\text{soil}/\text{cm}^3\cdot\text{air}$)	$(H/K_d) \times 41$, where 41 is a units conversion factor [5]
K_d	soil-water partition coefficient (cm^3/g)	chemical-specific, or $K_{oc} \times \text{OC}$ [5]
K_{oc}	organic carbon partition coefficient (cm^3/g)	chemical-specific [5]
OC	organic carbon content of soil (fraction)	site-specific or 0.02 [5]
P_a	air-filled soil porosity (unitless)	$P_t - \theta\beta$ [5]
P_t	total soil porosity (unitless)	$1 - (\beta/\rho_s)$ [5]
Q/C	inverse of the normalized concentration from EQ 1993 and represents the emission flux ($\text{g}/\text{m}^2\cdot\text{s}$) per unit concentration (kg/m^3)	92.5247 [5]
$s(\hat{Y}_h)$	UCL for a 95% confidence interval on the mean response at the point $x=x_o$	0.0187 [5]
T	exposure interval (s)	7.9×10^8 [5]
VF	volatilization factor (m^3/kg)	-
X	contiguous area of contamination (m^2)	2025 [5]
X_h	natural logarithm of the contiguous area of contamination (m^2)	$\ln(X)$ [5]
$\hat{Y}_h$	linear regression line	-
β	soil bulk density (kg/L)	1.5 [5]
θ	soil moisture content ($\text{L}\cdot\text{water}/\text{kg}\cdot\text{soil}$)	site-specific or 0.15 [5]
ρ_s	true soil density or particulate density (g/cm^3)	2.65 [5]

*Equations**Commercial/Industrial Land Use*

7) Molecular diffusivity (used in calculating VF)

$$D_i = \frac{0.001T^{1.75} \sqrt{\frac{1}{MW_i} + \frac{1}{MW_a}}}{P_a[(\Sigma V_i)^{1/3} + (\Sigma V_a)^{1/3}]^2} \quad (35)$$

where

Parameters	Definition (units)	Default Value
D_i	molecular diffusivity (cm^2/s)	–
MW_a	molecular weight of air (g/mole)	28.8
MW_i	molecular weight of toxic substance (g/mole)	chemical-specific
P_a	absolute pressure (atm)	site-specific or 0.9825 (estimated)
T	average temperature for year expressed as absolute temperature ($^{\circ}\text{K}$)	site-specific or 284.82 $^{\circ}\text{K}$ = 53 $^{\circ}\text{F}$ (estimated)
ΣV_i	molecular diffusion volume of toxic substance (g/mole); This is the sum of the atomic diffusion volumes of the compound components (cm^3/mole).	chemical-specific
ΣV_a	molecular diffusion volume for air (cm^3/mole)	20.1

To estimate short-term (maximum) release rates, use a value for the temperature that reflects the expected summer maximum temperatures. Annual average temperatures are used here to estimate long-term (average) release rates.

Relevant atomic diffusion volume coefficients for use in estimating D_i are [16]:

C	=	16.5
H	=	1.98
O	=	5.48
N	=	5.69
Cl	=	19.5
Br	=	35.5
F	=	25.0* [18]
S	=	17.0
Aromatic ring	=	-20.2
Heterocyclic ring	=	-20.2

The United States Environmental Protection Agency [17] provides appropriate diffusion coefficients. The diffusion coefficient (D_i) can also be calculated by Fuller's method [16].

8) Particulate emission factor

$$PEF = Q/C \times \frac{3600 \text{ s/h}}{RSF \times (1 - G) \times (U_m/U_t)^3 \times F(x)} \quad (36)$$

where

<u>Parameters</u>	<u>Definition (units)</u>	<u>Default Value</u>
F(X)	function dependent on U_m / U_t (unitless)	0.0497 [19]
G	fraction of vegetative cover (unitless)	0 [5]
PEF	particulate emission factor (m^3/kg)	4.28×10^9 [5]
Q/C	inverse of the normalized concentration from EQ 1993 and represents the emission flux ($\text{g}/\text{m}^2\text{-s}$) per unit concentration (kg/m^3)	92.5247 [5]
RSF	respirable fraction ($\text{g}/\text{m}^2\text{-hr}$)	0.036 [5]
U_m	mean annual wind speed (m/s)	4.5 [5]
U_t	equivalent threshold value of wind speed at 10 m (m/s)	12.8 [5]

2.3 AGRICULTURAL LAND USE—PRODUCE, WHOLE MILK, AND BEEF

Miller et al. [20] state that all sites at the Oak Ridge Reservation (ORR) undergoing a remedial investigation will include a comparison of the site data to agricultural PRGs. The agricultural pathways addressed for the ORR in this document include ingestion of produce, milk, and beef. The agricultural land use scenario integrates exposure from two different exposure media (soil and water) and integrates the results into a single risk number for a given food chain pathway. This presents unique problems for the calculation of media-based PRGs since a PRG based on a risk level for a given media is not necessarily protective of the pathway. Therefore, the calculations presented here provide the slopes and y-intercepts for an algebraic equation that shows the linear relationship between the PRGs for water and soil with respect to a given risk level when contamination from both soil and water is present. Figure 2 demonstrates the use of this equation. The three graphs represent the relationship between the soil and water at different risk and HI levels. Please note that change in scale in each graph to interpret PRG level. The x- and y-intercepts show the PRGs for soil and water, respectively, in the absence of contamination in the other media. Every point on the line represents a combination of contamination levels in soil and water that yield a risk equivalent to the target risk level. If a plotted point for a site falls above this line based on the representative soil and water concentrations for a particular contaminant, then the site has exceeded the combined PRG for that contaminant and pathway at the target risk level.

Because the milk ingestion rate is different for children and adults, the carcinogenic risk due to ingestion of milk is calculated using an age-adjusted ingestion factor. This takes into account the differences in daily milk ingestion rates, body weights, and exposure durations for the two exposure groups. Exposure frequency is assumed to be the same for the two groups. Calculated in this manner, the factor leads to a more protective risk-based concentration compared to an adult-only assumption. Due to differences in averaging times for carcinogens and noncarcinogens, the noncarcinogenic hazard is calculated separately for adults and children. This procedure will give a more protective concentration than the adult-only assumption.

2.3.1 Nonradionuclide Contaminant

2.3.1.1 Ingestion of vegetable only

$$C_v = \frac{T \times BW \times AT}{TV_o \times IR_v \times FI_v \times EF \times ED} \quad (37)$$

2.3.1.2 Ingestion of whole milk only

1) Carcinogen

$$C_m = \frac{T \times AT}{TV_o \times FI \times EF \times IF_{milkadj}} \quad (38)$$

2) Noncarcinogen (adult and child calculated separately)

$$C_m = \frac{T \times BW_n \times AT_n}{TV_o \times IR_m \times FI \times EF \times ED_n} \quad (39)$$

2.3.1.3 Ingestion of beef only

$$C_b = \frac{T \times BW \times AT}{TV_o \times IR_b \times FI \times EF \times ED} \quad (40)$$

where

<u>Parameters</u>	<u>Definition (units)</u>	<u>Default Value</u>
AT	averaging time (yr × day/yr)	70 × 365 (carcinogen) [1] 30 × 365 (noncarcinogen)[1]
AT _n	averaging time - noncarcinogenic ingestion of milk only (yr × day/yr)	24 × 365 (adult) [1] 6 × 365 (child) [1]
BW	adult body weight (kg)	70 [1]
BW _n	body weight - noncarcinogenic ingestion of milk only (kg)	70 (adult) [1] 15 (child) [1]
C _b	chemical concentration in beef (mg/kg)	–
C _m	chemical concentration in milk (mg/kg)	–
C _v	chemical concentration in vegetable (mg/kg)	–
ED	exposure duration (yr)	30 [1]
ED _n	exposure duration - noncarcinogenic ingestion of milk only (yr)	24 (adult) [1] 6 (child) [1]
EF	exposure frequency (day/yr)	350 [1]
FI	fraction ingested (unitless)	1 [12]
FI _v	fraction ingested - vegetable (unitless)	0.4 [10]
IF _{milk/adj}	age-adjusted milk ingestion factor (kg-yr/kg-day)	~ 0.308 (see Eq. 58)
IR _b	ingestion rate - beef (kg/day)	0.075 [10]
IR _v	ingestion rate - vegetable (kg/day)	0.2 [10]
IR _m	ingestion rate - milk (noncarcinogenic ingestion only) (kg/day)	0.305 (adult) [10] 0.509 (child) [21]
RfD _o	oral chronic reference dose (mg/kg-day)	chemical-specific [3]
SF _o	oral slope factor ((mg/kg-day) ⁻¹)	chemical-specific [3]
T	target (unitless)	TR (carcinogen) THI (noncarcinogen)
THI	target hazard index (unitless)	1
TR	target excess individual lifetime cancer risk (unitless)	10 ⁻⁶ and 10 ⁻⁴
TV _o	oral toxicity value	SF _o (carcinogen) 1/RfD _o (noncarcinogen)

*Equations**Agricultural Land Use*

2.3.2 Radionuclide Contaminant**2.3.2.1 Ingestion of vegetables only**

$$C_v = \frac{TR}{SF_o \times IR_v \times FI_v \times EF \times ED \times CF} \quad (41)$$

2.3.2.2 Ingestion of whole milk only

$$C_m = \frac{TR}{SF_o \times IF_{milk/adj} \times FI \times EF \times CF} \quad (42)$$

2.3.2.3 Ingestion of beef only

$$C_b = \frac{TR}{SF_o \times IR_b \times FI \times EF \times ED \times CF} \quad (43)$$

where

<u>Parameters</u>	<u>Definition (units)</u>	<u>Default Value</u>
C_b	radionuclide concentration in beef (pCi/g)	–
CF	units conversion factor (g/kg)	1000
C_m	radionuclide concentration in milk (pCi/g)	–
C_v	radionuclide concentration in vegetable (pCi/g)	–
ED	exposure duration (yr)	30 [1]
EF	exposure frequency (day/yr)	350 [1]
FI	fraction ingested (unitless)	1 [12]
FI_v	fraction ingested - vegetable (unitless)	0.4 [10]
$IF_{milk/adj}$	age-adjusted milk ingestion factor (kg-yr/day)	~ 10.374 (see Eq. 59)
IR_b	ingestion rate - beef (kg/day)	0.075 [10]
IR_v	ingestion rate - vegetable (kg/day)	0.2 [10]
SF_o	oral slope factor (risk/pCi)	chemical-specific
TR	target excess individual lifetime cancer risk (unitless)	10^{-6} and 10^{-4}

2.3.3 Back-Calculated Concentrations for Groundwater and Soil

Let

$$A^* = Y_v \times \frac{[1 - \exp(-\lambda_E \times t_v)]}{\lambda_E} \quad (44_a)$$

for vegetables, or

$$A^* = Y_m \times \frac{[1 - \exp(-\lambda_E \times t_v)]}{\lambda_E} \quad (44_b)$$

for milk or meat.

$$B^* = \frac{Ir \times F \times [1 - \exp(-\lambda_B \times t_b)]}{P \times \lambda_B} \quad (45)$$

2.3.3.1 Water contamination only

1) Vegetable

$$CW = \frac{C_v}{[(A^* \times Ir) + (B_{vw} \times B^*) + (A^* \times B^* \times s_r \times s_d \times d)]} \quad (46)$$

2) Whole Milk

$$CW = \frac{C_m}{F_m \times Q_w \times CF^*} \quad (47)$$

3) Beef

$$CW = \frac{C_b}{F_b \times Q_w \times CF^*} \quad (48)$$

* This conversion factor is for radionuclides only.

2.3.3.2 Soil contamination only

1) Vegetable

$$CS = \frac{C_v}{B_{vw} + (s_r \times s_d \times d \times A^*)} \quad (49)$$

2) Whole milk

$$CS = \frac{C_m}{F_m \times [Q_p \times f_G \times (B_v + (s_r \times s_d \times d \times A^*)) + Q_s]} \quad (50)$$

3) Beef

$$CS = \frac{C_b}{F_b \times [Q_p \times f_G \times (B_v + (s_r \times s_d \times d \times A^*)) + Q_s]} \quad (51)$$

2.4.3.3 Water and soil contamination

1) Vegetable

$$INTCPT = \frac{C_v}{B_{vw} + (A^* \times s_r \times s_d \times d)} \quad (52)$$

$$SLOPE = \frac{-[(A^* \times Ir) + (B_{vw} \times B^*) + (A^* \times B^* \times s_r \times s_d \times d)]}{B_{vw} + (A^* \times s_r \times s_d \times d)} \quad (53)$$

2) Whole milk

$$INTCPT = \frac{C_m}{F_m \times [Q_p \times f_G \times (B_v + (s_r \times s_d \times d \times A^*)) + Q_s]} \quad (54)$$

$$SLOPE = \frac{-Q_w}{Q_p \times f_G \times [B_v + (s_r \times s_d \times d \times A^*)] + Q_s} \quad (55)$$

3) Beef

$$INTCPT = \frac{C_b}{F_b \times [Q_p \times f_G \times (B_v + (s_r \times s_d \times d \times A^*)) + Q_s]} \quad (56)$$

$$SLOPE = \frac{-Q_w}{Q_p \times f_G \times [B_v + (s_r \times s_d \times d \times A^*)] + Q_s} \quad (57)$$

where

Parameters	Definition (units)	Default Value
B_v	soil to plant uptake (kg/kg)	chemical-specific
B_{vw}	soil to plant uptake converted to wet weight (kg/kg)	$B_v/4$
C_b	PRG in beef (mg/kg or pCi/g)	–
CF	units conversion factor (kg/g)	1/1000
C_m	PRG in milk (mg/kg or pCi/g)	–
CS	PRG in soil (mg/kg or pCi/g)	–
C_v	PRG in vegetable (mg/kg or pCi/g)	–
CW	PRG in water (mg/L or pCi/L)	–
d	deposition velocity (m/day)	chemical-specific
F	irrigation period (unitless)	0.25 (based on 3 ms. per year)
F_b	transfer coefficient - beef (day/kg)	chemical-specific
f_G	grazing fraction (unitless)	0.4 [22]
F_m	transfer coefficient - milk (day/kg)	chemical-specific
Y_v	plant yield (wet) (m ² /kg)	2 [22]
Y_m	milk or meat yield (dry) (m ² /kg)	0.12 [8]
INTCPT	equation intercept	–
Ir	irrigation rate (L/m ² -day)	3.62 [23]
P	area density for root zone (kg/m ²)	320 [24]
Q_p	quantity of pasture ingested (kg/day)	25 [25]
Q_s	quantity of soil ingested (kg/day)	1 [26]
Q_w	quantity of water ingested (L/day)	50 (beef cattle) [22] 60 (dairy cattle) [22]
s_d	area surface soil density (kg/m ²)	16 [24]
SLOPE	equation slope	–
s_r	soil resuspension factor (1/m)	0.000001 [24]
t_b	long term deposition and buildup (day)	10950 [22]
T_R	half-life (day)	chemical-specific
t_v	above ground exposure time (day)	30 (milk, beef) [22] 60 (vegetable) [22]
t_w	weathering half-life (day)	14 [22]
λ_B	effective rate for removal (1/day)	$\lambda_i + \lambda_{HL}$ [8]

*Equations**Agricultural Land Use*

λ_E	decay for removal on produce (1/day)	$\lambda_i + (0.693/t_w)$ [8]
λ_{HL}	soil leaching rate (1/day)	0.000027 [8]
λ_i	decay (1/day)	$0.693/T_R$ [8]

2.3.4 Supporting Equations**2.3.4.1 Age-adjusted milk ingestion factor for nonradionuclides (carcinogenic risk only)**

$$IF_{milk/adj} = \frac{IR_{milk/age\ 1-6} \times ED_{age\ 1-6}}{BW_{age\ 1-6}} + \frac{IR_{milk/age\ 7-31} \times ED_{age\ 7-31}}{BW_{age\ 7-31}} \quad (58)$$

where

<u>Parameters</u>	<u>Definition (units)</u>	<u>Default Value</u>
$BW_{age\ 1-6}$	average body weight from ages 1-6 (kg)	15 [1]
$BW_{age\ 7-31}$	average body weight from ages 7-31 (kg)	70 [1]
$ED_{age\ 1-6}$	exposure duration during ages 1-6 (yr)	6 [1]
$ED_{age\ 7-31}$	exposure duration during ages 7-31 (yr)	24 [1]
$IF_{milk/adj}$	age-adjusted milk ingestion factor (kg-yr/kg-day)	~ 0.308 [10]
$IR_{milk/age\ 1-6}$	ingestion rate of milk for ages 1-6 (kg/day)	0.509 [21]
$IR_{milk/age\ 7-31}$	ingestion rate of milk for ages 7-31 (kg/day)	0.305 [10]

2.3.4.2 Age-adjusted milk ingestion factor for radionuclides

$$IF_{milk/adj} = (IR_{milk/age\ 1-6} \times ED_{age\ 1-6}) + (IR_{milk/age\ 7-31} \times ED_{age\ 7-31}) \quad (59)$$

where

<u>Parameters</u>	<u>Definition (units)</u>	<u>Default Value</u>
$ED_{age\ 1-6}$	exposure duration during ages 1-6 (yr)	6 [1]
$ED_{age\ 7-31}$	exposure duration during ages 7-31 (yr)	24 [1]
$IF_{milk/adj}$	age-adjusted milk ingestion factor (kg-yr/day)	10.374
$IR_{milk/age\ 1-6}$	ingestion rate of milk for ages 1-6 (kg/day)	0.509[21]
$IR_{milk/age\ 7-31}$	ingestion rate of milk for ages 7-31 (kg/day)	0.305 [10]

2.3.4.3 Chemical concentration in vegetables [27]

$$C_v = (C_w \times Ir \times A^*) + (C_s \times B_{vw}) + (C_w \times B^* \times B_{vw}) + (C_s \times s_r \times s_d \times d \times A^*) + (C_w \times B^* \times s_r \times s_d \times d \times A^*) \quad (60)$$

2.3.4.4 Chemical concentration in pasture (assuming no irrigation) [27]

$$C_p = (C_s \times B_v) + (C_s \times s_r \times s_d \times d \times A^*) \quad (61)$$

2.3.4.5 Chemical concentration in beef

$$C_b = F_b \times [(C_p \times Q_p) + (C_s \times Q_s) + (C_w \times CF^* \times Q_w)] \quad (62)$$

2.3.4.6 Chemical concentration in milk

$$C_m = F_m \times [(C_p \times Q_p) + (C_s \times Q_s) + (C_w \times CF^* \times Q_w)] \quad (63)$$

where

<u>Parameters</u>	<u>Definition (units)</u>	<u>Default Value</u>
B_v	soil to plant uptake (kg/kg)	chemical-specific
B_{vw}	soil to wet plant transfer (kg/kg)	$B_v/4$
C_b	concentration in beef (mg/kg or pCi/g)	–
CF	units conversion factor (kg/g)	1/1000
C_m	concentration in milk (mg/kg or pCi/g)	–
C_p	concentration in pasture (mg/kg or pCi/g)	–
C_s	concentration in soil (mg/kg or pCi/g)	–
C_v	concentration in vegetable (mg/kg or pCi/g)	–
C_w	concentration in water (mg/L or pCi/L)	–
d	deposition velocity (m/day)	chemical-specific
F_b	transfer coefficient - beef (day/kg)	chemical-specific
F_m	transfer coefficient - milk (day/kg)	chemical-specific
Ir	irrigation rate (L/m ² -day)	3.62 [23]
Q_p	quantity of pasture ingested (kg/day)	25 [25]
Q_s	quantity of soil ingested (kg/day)	1 [26]
Q_w	quantity of water ingested (L/day)	50 (beef cattle) [22] 60 (dairy cattle) [22]
s_d	area surface soil density (kg/m ²)	16 [24]
s_r	soil resuspension factor (1/m)	0.000001 [24]

* This conversion factor is for radionuclides only.

2.4 RECREATIONAL LAND USE—SURFACE WATER, SOIL, OR SEDIMENT

The recreational land use scenario addresses exposure to people who spend a limited amount of time at or near a site while playing, fishing, hunting, hiking, or engaging in other outdoor activities. This includes what is often described as the “trespasser” or “site visitor” scenario. Risk of contamination from surface water is assumed to be primarily due to ingestion and dermal contact with chemicals while swimming and ingestion of fish. Risk of contamination from soil or sediment is assumed to be from direct ingestion, inhalation of dust and particulates, dermal contact with chemicals in the soil, and external exposure from radionuclides. Because the soil ingestion rate is different for children and adults, the carcinogenic risk due to direct ingestion of soil is calculated using an age-adjusted ingestion factor. This takes into account the differences in daily soil ingestion rates, body weights, and exposure durations for the two exposure groups. Exposure frequency is assumed to be the same for the two groups. Calculated in this manner, the factor leads to a more protective risk-based concentration compared to an adult-only assumption. Due to differences in averaging times for carcinogens and noncarcinogens, the noncarcinogenic hazard is calculated separately for adults and children. This procedure will give a more protective concentration than the adult-only assumption.

2.4.1 Surface Water

2.4.1.1 Nonradionuclide contaminant

1) Ingestion only

$$C = \frac{T \times BW \times AT}{TV_o \times IR_w \times EF \times ED \times ET \times CF_2} \quad (64)$$

2) Dermal contact only

$$C = \frac{T \times BW \times AT}{TV_{ad} \times SA \times K_p \times ET \times EF \times ED \times CF_1} \quad (65)$$

3) Ingestion and dermal contact

$$C = \frac{T \times BW \times AT}{EF \times ED \times [(TV_o \times IR_w \times ET \times CF_2) + (TV_{ad} \times SA \times K_p \times ET \times CF_1)]} \quad (66)$$

4) Ingestion of fish only

$$C = \frac{T \times BW \times AT}{TV_o \times IR_f \times FI \times EF_f \times ED \times BF} \quad (67)$$

where

<u>Parameters</u>	<u>Definition (units)</u>	<u>Default Value</u>
AT	averaging time (yr × day/yr)	70 × 365 (carcinogen) [1] 30 × 365 (noncarcinogen) [1]
BF	bioaccumulation factor (L/kg)	chemical-specific
BW	adult body weight (kg)	70 [1]
C	chemical PRG in water (mg/L)	–
CF ₁	units conversion factor (L/cm - m ²)	10
CF ₂	units conversion factor (day/hr)	1/24
ED	exposure duration (yr)	30 [1]
EF	exposure frequency (day/yr)	75 [4]
Ef _f	exposure frequency fishing (day/yr)	48 [13]
ET	exposure time (hr/day)	1 [4]
FI	fraction ingested (unitless)	1 [12]
IR _f	ingestion rate - fish (kg/day)	0.054 [9]
IR _w	water ingestion rate (L/day)	2 [1]
K _p	permeability constant (cm/hr)	chemical-specific [3]
RfD _{ad}	absorbed chronic reference dose (mg/kg-day)	chemical-specific [3]
RfD _o	oral chronic reference dose (mg/kg-day)	chemical-specific [3]
SA	adult surface area (m ²)	1.94 [4]
SF _{ad}	absorbed dose slope factor ((mg/kg-day) ⁻¹)	chemical-specific [3]
SF _o	oral slope factor ((mg/kg-day) ⁻¹)	chemical-specific [3]
T	target (unitless)	TR (carcinogen) THI (noncarcinogen)
THI	target hazard index (unitless)	1
TR	target excess individual lifetime cancer risk (unitless)	10 ⁻⁶ and 10 ⁻⁴
TV _{ad}	absorbed toxicity value	SF _{ad} (carcinogen) 1/RfD _{ad} (noncarcinogen)
TV _o	oral toxicity value	SF _o (carcinogen) 1/RfD _o (noncarcinogen)

*Equations**Recreational Land Use***2.4.1.2 Radionuclide contaminant**

1) Ingestion only

$$C = \frac{TR}{SF_o \times IR_w \times EF \times ED \times ET \times CF} \quad (68)$$

2) Ingestion of fish only

$$C = \frac{TR}{SF_o \times IR_f \times EF_f \times FI \times ED \times BF} \quad (69)$$

where

<u>Parameters</u>	<u>Definition (units)</u>	<u>Default Value</u>
BF	bioaccumulation factor (L/kg)	radionuclide-specific
C	radionuclide PRG in water (pCi/L)	–
CF	units conversion factor (day/hr)	1/24
ED	exposure duration (yr)	30 [1]
EF	exposure frequency (day/yr)	75 [4]
EF _f	exposure frequency fishing (day/yr)	48 [13]
ET	exposure time (hr/day)	1 [4]
FI	fraction ingested (unitless)	1 [12]
IR _f	ingestion rate - fish (kg/day)	0.054 [9]
IR _w	water ingestion rate (L/day)	2 [1]
SF _o	oral slope factor (risk/pCi)	radionuclide-specific
TR	target excess individual lifetime cancer risk (unitless)	10 ⁻⁶ and 10 ⁻⁴

EquationsRecreational Land Use**2.4.2 Soil or Sediment****2.4.2.1 Nonradionuclide contaminant**

1) Ingestion only

a) Carcinogen

$$C = \frac{T \times AT}{TV_o \times CF \times EF \times FI \times IF_{soiladj} \times ET \times CF_2} \quad (70)$$

b) Noncarcinogen (adult and child calculated separately)

$$C = \frac{T \times BW_n \times AT_n}{TV_o \times CF \times EF \times ED_n \times IR_n \times FI \times ET \times CF_2} \quad (71)$$

2) Inhalation only

$$C = \frac{T \times BW \times AT}{TV_i \times EF \times ED \times \left(\frac{1}{VF} + \frac{1}{PEF}\right) \times IR_{air} \times ET \times CF_2} \quad (72)$$

3) Dermal contact only

$$C = \frac{T \times BW \times AT}{TV_{ad} \times CF_d \times SA \times AF \times ABS \times EF \times ED \times ET \times CF_2} \quad (73)$$

4) Ingestion and inhalation and dermal contact

$$C = \frac{T \times BW \times AT}{EF \times ED \times ET \times CF_2 [(TV_o \times CF \times FI \times IR_d) + (TV_i \times (\frac{1}{VF} + \frac{1}{PEF}) \times IR_{air}) + (TV_{ad} \times CF_d \times SA \times AF \times ABS)]} \quad (74)$$

where

<u>Parameters</u>	<u>Definition (units)</u>	<u>Default Value</u>
ABS	absorption factor (unitless)	0.01 (organic) 0.001 (inorganic)
AF	adherence factor (mg/cm²)	1 [1]
AT	averaging time (yr × day/yr)	70 × 365 (carcinogen) [1] 30 × 365 (noncarcinogen) [1]
AT _n	averaging time - noncarcinogenic ingestion only (yr × day/yr)	24 × 365 (adult) [1] 6 × 365 (child) [1]
BW	adult body weight (kg)	70 [1]
BW _n	body weight - noncarcinogenic ingestion only (kg)	70 (adult) [1] 15 (child) [1]
C	chemical PRG in soil (mg/kg)	-

CF	units conversion factor (kg/mg)	10^{-6}
CF ₂	units conversion factor (day/hr)	1/24
CF _d	units conversion factor - dermal (kg-cm²/(mg-m²))	0.01
ED	exposure duration (yr)	30 [1]
ED _n	exposure duration - noncarcinogenic ingestion only (yr)	24 (adult) [1] 6 (child) [1]
EF	exposure frequency (day/yr)	75 [4]
ET	exposure time (hr/day)	1 [4]
FI	fraction ingested (unitless)	1 [12]
IF _{soil/adj}	age-adjusted soil ingestion factor (mg-yr/kg-day)	~114 (see Eq. 79) [1]
IR _a	ingestion rate for adult (mg/day)	100 [9]
IR _{air}	total inhalation rate (m³/day)	20 [9]
IR _n	ingestion rate - noncarcinogenic ingestion only (mg/day)	100 (adult) [9] 200 (child) [9]
PEF	particulate emission factor (m³/kg)	4.28×10^9 [5]
RfD _{ad}	absorbed chronic reference dose (mg/kg-day)	chemical-specific [3]
RfD _i	inhalation chronic reference dose (mg/kg-day)	chemical-specific [3]
RfD _o	oral chronic reference dose (mg/kg-day)	chemical-specific [3]
SA	adult surface area (m²/day)	0.53 [4]
SF _{ad}	absorbed dose slope factor ((mg/kg-day)⁻¹)	chemical-specific [3]
SF _i	inhalation slope factor ((mg/kg-day)⁻¹)	chemical-specific [3]
SF _o	oral slope factor ((mg/kg-day)⁻¹)	chemical-specific [3]
T	target (unitless)	TR (carcinogen) THI (noncarcinogen)
THI	target hazard index (unitless)	1
TR	target excess individual lifetime cancer risk (unitless)	10^{-6} and 10^{-4}
TV _{ad}	absorbed toxicity value	SF _{ad} (carcinogen) 1/RfD _{ad} (noncarcinogen)
TV _i	inhalation toxicity value	SF _i (carcinogen) 1/RfD _i (noncarcinogen)
TV _o	oral toxicity value	SF _o (carcinogen) 1/RfD _o (noncarcinogen)
VF	volatilization factor (m³/kg)	chemical-specific

*Equations**Recreational Land Use*

2.4.2.2 Radionuclide contaminant

1) Ingestion only

$$C = \frac{TR}{SF_o \times CF \times EF \times IF_{soilladj} \times ET \times CF_2} \quad (75)$$

2) External radiation only

$$C = \frac{TR}{SF_x \times ED \times EF_x \times (1-S_e) \times T_e} \quad (76)$$

3) Inhalation only

$$C = \frac{TR}{SF_i \times ED \times CF_i \times EF \times \left(\frac{1}{VF} + \frac{1}{PEF}\right) \times IR_{air} \times ET \times CF_2} \quad (77)$$

4) Ingestion and external radiation and inhalation (adult only)

$$C = \frac{TR}{ED \times [(SF_o \times CF \times EF \times IR_o \times ET \times CF_2) + (SF_x \times EF_x \times (1-S_e) \times T_e) + (SF_i \times CF_i \times EF \times (\frac{1}{VF} + \frac{1}{PEF}) \times IR_{air} \times ET \times CF_2)]} \quad (78)$$

where

<u>Parameters</u>	<u>Definition (units)</u>	<u>Default Value</u>
C	radionuclide PRG in soil (pCi/g)	-
CF	units conversion factor (g/mg)	10 ⁻³
CF ₂	units conversion factor (day/hr)	1/24
CF _i	units conversion factor - inhalation (g/kg)	10 ³
ED	exposure duration (yr)	30 [1]
EF	exposure frequency (day/yr)	75 [4]
EF _x	exposure frequency - external (day/day)	75/365
ET	exposure time (hr/day)	1 [4]
IF _{soil/adj}	age-adjusted soil ingestion factor (mg-yr/day)	3600 (see Eq. 80) [6]
IR _a	adult ingestion rate (mg/day)	100 [1]
IR _{air}	total inhalation rate (m ³ /day)	20 [9]
PEF	particulate emission factor (m ³ /kg)	4.28 × 10 ⁹ [5]
S _e	gamma shielding factor (unitless)	0.2 (see EPA, 1991) [1]
SF _i	inhalation slope factor (risk/pCi)	radionuclide-specific [3]
SF _o	oral slope factor (risk/pCi)	radionuclide-specific [3]
SF _x	external exposure slope factor ((risk-g)/(pCi-yr))	radionuclide-specific [3]
T _e	gamma exposure time factor (hr/hr)	1/24
TR	target excess individual lifetime cancer risk (unitless)	10 ⁻⁶ and 10 ⁻⁴
VF	volatilization factor (m ³ /kg)	radionuclide-specific

2.4.2.3 Supporting equations

1) Age-adjusted Soil Ingestion Factor for Nonradionuclides (carcinogenic risk only)

$$IF_{soil/adj} = \frac{IR_{soil/age\ 1-6} \times ED_{age\ 1-6}}{BW_{age\ 1-6}} + \frac{IR_{soil/age\ 7-31} \times ED_{age\ 7-31}}{BW_{age\ 7-31}} \quad (79)$$

where

<u>Parameters</u>	<u>Definition (units)</u>	<u>Default Value</u>
BW _{age 1-6}	average body weight from ages 1-6 (kg)	15 [1]
BW _{age 7-31}	average body weight from ages 7-31 (kg)	70 [1]
ED _{age 1-6}	exposure duration during ages 1-6 (yr)	6 [1]
ED _{age 7-31}	exposure duration during ages 7-31 (yr)	24 [1]
IF _{soil/adj}	age-adjusted soil ingestion factor (mg-yr/kg-day)	~114 [1]
IR _{soil/age 1-6}	ingestion rate of soil for ages 1-6 (mg/day)	200 [1]
IR _{soil/age 7-31}	ingestion rate of soil for ages 7-31 (mg/day)	100 [1]

EquationsRecreational Land Use

2) Age-adjusted soil ingestion factor for radionuclides

$$IF_{soil/adj} = (IR_{soil/age\ 1-6} \times ED_{age\ 1-6}) + (IR_{soil/age\ 7-31} \times ED_{age\ 7-31}) \quad (80)$$

where

<u>Parameters</u>	<u>Definition (units)</u>	<u>Default Value</u>
$ED_{age\ 1-6}$	exposure duration during ages 1-6 (yr)	6 [1]
$ED_{age\ 7-31}$	exposure duration during ages 7-31 (yr)	24 [1]
$IF_{soil/adj}$	age-adjusted soil ingestion factor (mg-yr/day)	3600 [1]
$IR_{soil/age\ 1-6}$	ingestion rate of soil for ages 1-6 (mg/day)	200 [1]
$IR_{soil/age\ 7-31}$	ingestion rate of soil for ages 7-31 (mg/day)	100 [1]

*Equations**Excavation Land Use***2.5 EXCAVATION LAND USE—SOIL OR SEDIMENT**

The excavation land use scenario is assumed to be an infrequent and short-lived occurrence. Due to weather considerations for this scenario, exposure frequency is assumed to be one month of the worker year, or approximately 20 days per year. In addition, excavation is assumed to be a rare occurrence, so the exposure duration for any one worker is assumed to be one year. Risk of contamination is assumed to be due to direct ingestion, inhalation of dust and particulates, dermal contact with chemicals, and external exposure to radionuclides.

2.5.1 Soil or Sediment**2.5.1.1 Nonradionuclide contaminant**

1) Ingestion only

$$C = \frac{T \times BW \times AT}{TV_o \times CF \times EF \times ED \times IR_s} \quad (81)$$

2) Inhalation only

$$C = \frac{T \times BW \times AT}{TV_i \times EF \times ED \times \left(\frac{1}{VF} + \frac{1}{PEF} \right) \times IR_a} \quad (82)$$

3) Dermal contact only

$$C = \frac{T \times BW \times AT}{TV_{ad} \times CF_d \times SA \times AF \times ABS \times EF \times ED \times ET \times CF_2} \quad (83)$$

4) Ingestion and inhalation and dermal contact

$$C = \frac{T \times BW \times AT}{EF \times ED \times [(TV_o \times CF \times IR_s) + (TV_i \times (\frac{1}{VF} + \frac{1}{PEF}) \times IR_a) + (TV_{ad} \times CD_d \times SA \times AF \times ABS \times ET \times CF_2)]} \quad (84)$$

where

<u>Parameters</u>	<u>Definition (units)</u>	<u>Default Value</u>
ABS	absorption factor (unitless)	0.01 (organic) 0.001 (inorganic)
AF	adherence factor (mg/cm ²)	1 [11]
AT	averaging time (yr × day/yr)	70 × 365 (carcinogen) [1] 1 × 365 (noncarcinogen)[1]
BW	adult body weight (kg)	70 [1]
C	chemical PRG in soil (mg/kg)	–
CF	units conversion factor (kg/mg)	10 ⁻⁶
CF ₂	units conversion factor (day/hr)	1/24
CF _d	units conversion factor - dermal (kg-cm ²)/(mg-m ²)	0.01
ED	exposure duration (yr)	1
EF	exposure frequency (day/yr)	20(1/12 of worker year)
ET	exposure time (hr/day)	8
IR _a	total inhalation rate (m ³ /day)	20 [9]
IR _s	soil ingestion rate (mg/day)	480 [6]
PEF	particulate emission factor (m ³ /kg)	4.28 × 10 ⁹ [5]
RfD _{ad}	absorbed chronic reference dose (mg/kg-day)	chemical-specific [3]
RfD _i	inhalation chronic reference dose (mg/kg-day)	chemical-specific [3]
RfD _o	oral chronic reference dose (mg/kg-day)	chemical-specific [3]
SA	adult surface area (m ² /day)	0.316 [4]
SF _{ad}	absorbed dose slope factor ((mg/kg-day) ⁻¹)	chemical-specific [3]
SF _i	inhalation slope factor ((mg/kg-day) ⁻¹)	chemical-specific [3]
SF _o	oral slope factor ((mg/kg-day) ⁻¹)	chemical-specific [3]
T	target (unitless)	TR (carcinogen) THI (noncarcinogen)
THI	target hazard index (unitless)	1
TR	target excess individual lifetime cancer risk (unitless)	10 ⁻⁶ and 10 ⁻⁴
TV _{ad}	absorbed toxicity value	SF _{ad} (carcinogen) 1/RfD _{ad} (noncarcinogen)
TV _i	inhalation toxicity value	SF _i (carcinogen) 1/RfD _i (noncarcinogen)
TV _o	oral toxicity value	SF _o (carcinogen) 1/RfD _o (noncarcinogen)
VF	volatilization factor (m ³ /kg)	chemical-specific [5]

*Equations**Excavation Land Use***2.5.1.2 Radionuclide contaminant**

1) Ingestion only

$$C = \frac{TR}{SF_o \times ED \times CF \times EF \times IR_s} \quad (85)$$

2) Inhalation only

$$C = \frac{TR}{SF_i \times ED \times CF_i \times EF \times \left(\frac{1}{VF} + \frac{1}{PEF}\right) \times IR_a} \quad (86)$$

3) External radiation only

$$C = \frac{TR}{SF_x \times ED \times EF_x \times (1-S_e) \times T_e} \quad (87)$$

4) Ingestion and inhalation and external radiation

$$C = \frac{TR}{ED \times [(SF_o \times CF \times EF \times IR_s) + (SF_i \times CF_i \times EF \times \left(\frac{1}{VF} + \frac{1}{PEF}\right) \times IR_a) + (SF_x \times EF_x \times (1-S_e) \times T_e)]} \quad (88)$$

where

<u>Parameters</u>	<u>Definition (units)</u>	<u>Default Value</u>
C	radionuclide PRG in soil (pCi/g)	-
CF	units conversion factor (g/mg)	10 ⁻³
CF _i	units conversion factor - inhalation (g/kg)	10 ³
ED	exposure duration (yr)	1
EF	exposure frequency (day/yr)	20 (~ one worker month)
EF _x	exposure frequency - external (day/day)	20/365
IR _a	total inhalation rate (m ³ /day)	20 [9]
IR _s	soil ingestion rate (mg/day)	480 [6]
PEF	particulate emission factor (m ³ /kg)	4.28 × 10 ⁹ [5]
S _e	gamma shielding factor (unitless)	0.2 (see EPA, 1991) [1]
SF _i	inhalation slope factor (risk/pCi)	radionuclide-specific [3]
SF _o	oral slope factor (risk/pCi)	radionuclide-specific [3]
SF _x	external exposure slope factor ((risk-g)/(pCi-yr))	radionuclide-specific [3]
T _e	gamma exposure factor (hr/hr)	8/24 [6]
TR	target excess individual lifetime cancer risk (unitless)	10 ⁻⁶ and 10 ⁻⁴
VF	volatilization factor (m ³ /kg)	radionuclide-specific [5]

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*Equations**References*

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Equations

References

3. TABLES

The previous equations and parameters were used to generate the following 23 tables which are arranged by scenario in the following order: 1) Residential, 2) Industrial, 3) Agriculture, 4) Recreation, and 5) Excavation. Each table contains the chemical name, its corresponding chemical abstract registration number (CASRN), and the appropriate PRG for each pathway at risk levels of $1.0\text{E-}04$ and $1.0\text{E-}06$ and an HI level of 1. The tables are differentiated based on the medium (water or soil) and the chemical type (nonradionuclide or radionuclide). For each scenario, risk-based PRGs for nonradionuclides in water are followed by risk-based PRGs for radionuclides in water, nonradionuclides in soil, and radionuclides in soil.

Tables

Table 3.1a. (continued)

[illegible]

[illegible]

Table 3.1a. (continued)

Chemical	CASRN	Ingestion (mg/L)			Dermal (mg/L)			Inhalation (mg/L) [†]			Ingestion + Dermal + Inhalation (mg/L) ^{††}		
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1
BENZIDINE	000092-87-5	3.7E-05	3.7E-07	1.1E-01	9.4E-03	9.4E-05	2.8E+01				3.7E-05	3.7E-07	1.1E-01
BENZOIC ACID	000065-85-0			1.5E+02			8.2E+03						1.4E+02
BENZOTRICHLOIDE	000098-07-7	6.6E-04	6.6E-06		1.8E-02	1.8E-04					6.3E-04	6.3E-06	
BENZO[A]PYRENE	000050-32-8	1.2E-03	1.2E-05		1.2E-04	1.2E-06					1.1E-04	1.1E-06	
BENZO[B]FLUORANTHENE	000205-99-2	1.2E-02	1.2E-04		1.2E-03	1.2E-05					1.1E-03	1.1E-05	
BENZO[G,H,I]PERYLENE	000191-24-2												
BENZO[K]FLUORANTHENE	000207-08-9	1.2E-01	1.2E-03		2.5E-02	2.5E-04					2.0E-02	2.0E-04	
BENZYL ALCOHOL	000100-51-6			1.1E+01			5.0E+02						1.1E+01
BENZYL CHLORIDE	000100-44-7	5.0E-02	5.0E-04		1.5E+00	1.5E-02					4.8E-02	4.8E-04	
BENZO[A]ANTHRACENE	000056-55-3	1.2E-02	1.2E-04		1.8E-03	1.8E-05					1.6E-03	1.6E-05	
BERYLLIUM	007440-41-7	2.0E-03	2.0E-05	1.8E-01	8.2E-03	8.2E-05	7.5E-01				1.6E-03	1.6E-05	1.5E-01
BIDRIN	000141-66-2			3.7E-03									
BIPHENTHRIN	082657-04-3			5.5E-01									
BIPHENYL, 1,1'-	000092-52-4			1.8E+00									
BIS(2-CHLORO-1-METHYLETHYL)ETHER (TECHNICAL)	000108-06-1	1.2E-01	1.2E-03										
BIS(2-CHLOROETHOXY)METHANE	000111-91-1												
BIS(2-CHLOROETHYL)ETHER	000111-44-4	7.7E-03	7.7E-05		1.5E+00	1.5E-02		2.0E-01	2.0E-03		7.4E-03	7.4E-05	
BIS(2-CHLOROISOPROPYL)ETHER	039638-32-9			1.5E+00									
BIS(2-ETHYLHEXYL)PHTHALATE	000117-81-7	6.1E-01	6.1E-03	7.3E-01	2.0E+00	2.0E-02	2.4E+00				4.7E-01	4.7E-03	5.6E-01
BIS(CHLOROMETHYL)ETHER	000542-88-1	3.9E-05	3.9E-07					9.9E-04	9.9E-06		3.7E-05	3.7E-07	

[illegible]

Table 3.1a. (continued)

Chemical	CASRN	Ingestion (mg/L)			Dermal (mg/L)			Inhalation (mg/L) [†]			Ingestion + Dermal + Inhalation (mg/L) ^{††}		
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
CHLOROTHALONIL	001897-45-6	7.7E-01	7.7E-03	5.5E-01	1.3E+01	1.3E-01	9.0E+00	7.3E-01	7.3E-03		7.3E-01	7.3E-03	5.2E-01
CHLOROTOLUENE, o-	000095-49-8			7.3E-01									
CHLOROPROPHAM	000101-21-3			7.3E+00									
CHLORPYRIFOS	002921-88-2			1.1E-01									
CHLORPYRIFOS METHYL	005598-13-0			3.7E-01									
CHLORSULFURON	064902-72-3			1.8E+00									
CHLORTHIOPHOS	060238-56-4			2.9E-02									
CHROMIUM (III) (INSOLUBLE SALTS)	016065-83-1			3.7E+01			7.5E+01						2.5E+01
CHROMIUM (VI)	018540-29-9			1.8E-01			1.5E+00						1.6E-01
CHRYSENE	000218-01-9	1.2E+00	1.2E-02		1.8E-01	1.8E-03		1.6E-01	1.6E-03		1.6E-01	1.6E-03	
COKE OVEN EMISSIONS	008007-45-2												
COPPER	007440-50-8												
COPPER CYANIDE	000544-92-3			1.8E-01									
CREOSOTE	008001-58-9												
CRESOL, m-	000108-39-4			1.8E+00			5.0E+01						1.8E+00
CRESOL, o-	000095-48-7			1.8E+00			4.7E+01						1.8E+00
CRESOL, p-	000106-44-5			1.8E-01			2.7E+00						1.7E-01
CROTONALDEHYDE	000123-73-9	4.5E-03	4.5E-05										
CUMENE	000098-82-8			1.5E+00						2.4E+00			9.1E-01
CYANAZINE	021725-46-2	1.0E-02	1.0E-04	7.3E-02									
CYANIDE (CN-)	000057-12-5			7.3E-01			6.8E+00						6.6E-01

Table 3.1a. (continued)

Chemical	CASRN	Ingestion (mg/L)			Dermal (mg/L)			Inhalation (mg/L) [†]			Ingestion + Dermal + Inhalation (mg/L) ^{††}		
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
DIFLUOROETHANE, 1,1-	000075-37-6												
DIISOPROPYL METHYLPHOSPHONATE	001445-75-6			2.9E+00									
DIMETHIPIN	055290-64-7			7.3E-01									
DIMETHOATE	000060-51-5			7.3E-03									
DIMETHOXYBENZIDINE, 3,3'-	000119-90-4	6.1E-01	6.1E-03		2.5E+02	2.5E+00					6.1E-01	6.1E-03	
DIMETHYL SULFATE	000077-78-1												
DIMETHYLANILINE HCL, 2,4-	021436-96-4	1.5E-02	1.5E-04										
DIMETHYLANILINE, 2,4-	000095-68-1	1.1E-02	1.1E-04										
DIMETHYLANILINE, N,N-	000121-69-7			7.3E-02									
DIMETHYLBENZIDINE, 3,3'-	000119-93-7	9.3E-04	9.3E-06		8.7E-02	8.7E-04					9.2E-04	9.2E-06	
DIMETHYLETHYL LEAD	107584-40-7												
DIMETHYLFORMAMIDE	000068-12-2			3.7E+00									
DIMETHYLHYDRAZINE, 1,2-	000540-73-8												
DIMETHYLPHENOL, 2,4-	000105-67-9			7.3E-01			2.7E+00						5.8E-01
DIMETHYLPHENOL, 2,6-	000576-26-1			2.2E-02									
DIMETHYLPHENOL, 3,4-	000095-65-8			3.7E-02			3.8E-01						3.3E-02
DIMETHYLPHthalate	000131-11-3												
DIMETHYLTEREPHTHALATE	000120-61-6			3.7E+00									
DINITRO-O-CYCLOHEXYL PHENOL, 4,6-	000131-89-5			7.3E-02									
DINITROBENZENE, 1,2-	000528-29-0			1.5E-02									
DINITROBENZENE, 1,3-	000099-65-0			3.7E-03			6.4E-01						3.6E-03

Table 3.1a. (continued)

Chemical	CASRN	Ingestion (mg/L)			Dermal (mg/L)			Inhalation (mg/L) [†]			Ingestion + Dermal + Inhalation (mg/L) ^{††}		
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
DINITROBENZENE, 1,4-	000100-25-4			1.5E-02									
DINITROPHENOL, 2,4-	000051-28-5			7.3E-02			9.4E+00						7.2E-02
DINITROTOLUENE, 2,4-	000121-14-2	1.3E-02	1.3E-04	7.3E-02	1.2E+00	1.2E-02	6.7E+00	1.2E-02		1.2E-02	1.2E-04		7.2E-02
DINITROTOLUENE, 2,6-	000606-20-2	1.3E-02	1.3E-04	3.7E-02	1.8E+00	1.8E-02	5.1E+00	1.2E-02		1.2E-02	1.2E-04		3.6E-02
DINOSEB	000088-85-7			3.7E-02									
DIOXANE, 1,4-	000123-91-1	7.7E-01	7.7E-03		8.0E+02	8.0E+00				7.7E-01	7.7E-03		
DIPHENAMID	000957-51-7			1.1E+00									
DIPHENYLAMINE	000122-39-4			9.1E-01									
DIPHENYLHYDRAZINE, 1,2-	000122-66-7	1.1E-02	1.1E-04		2.4E-01	2.4E-03				1.0E-02	1.0E-04		
DIQUAT	000085-00-7			8.0E-02									
DIRECT BLACK 38	001937-37-7	9.9E-04	9.9E-06										
DIRECT BLUE 6	002602-46-2	1.1E-03	1.1E-05										
DIRECT BROWN 95	016071-86-6	9.2E-04	9.2E-06										
DIRECT SKY BLUE	002610-05-1												
DISULFOTON	000298-04-4			1.5E-03									
DIURON	000330-54-1			7.3E-02									
DODINE	002439-10-3			1.5E-01									
ENDOSULFAN	000115-29-7			2.2E-01									
ENDOTHALL	000145-73-3			7.3E-01									
ENDRIN	000072-20-8			1.1E-02			5.6E-03						3.7E-03
EPICHLOROHYDRIN	000106-89-8	8.6E-01	8.6E-03	7.3E-02	9.6E+02	9.6E+00	8.1E+01	5.2E+01	5.2E-01	2.7E-01	8.5E-01	8.5E-03	5.7E-02

Table 3.1a. (continued)

Chemical	CASRN	Ingestion (mg/L)			Dermal (mg/L)			Inhalation (mg/L) [†]			Ingestion + Dermal + Inhalation (mg/L) ^{††}		
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1
ISOXABEN	082558-50-7			1.8E+00									HI=1
KARATE	091465-08-6			1.8E-01									
KERB	023950-58-5			2.7E+00									
LACTOFEN	077501-63-4			7.3E-02									
LEAD ALKYL S	NA												
LEAD AND COMPOUNDS	007439-92-1												
LINURON	000330-55-2			7.3E-02									
LONDAX	083055-99-6			7.3E+00									
MALATHION	000121-75-5			7.3E-01									
MALEIC ANHYDRIDE	000108-31-6			3.7E+00									
MALEIC HYDRAZIDE	000123-33-1			1.8E+01									
MALONONITRILE	000109-77-3			7.3E-04									
MANCOZEB	008018-01-7			1.1E+00									
MANEB	012427-38-2			1.8E-01			1.6E+03						1.8E-01
MANGANESE (Water)	007439-96-5			1.8E-01			3.0E+00						1.7E-01
MCPA	000094-74-6			1.8E-02									
MCPB	000094-81-5			3.7E-01									
MCPP	000093-65-2			3.7E-02									
MEPHOSFOLAN	000950-10-7			3.3E-03									
MEPIQUAT CHLORIDE	024307-26-4			1.1E+00									
MERCURY, INORGANIC	007439-97-6			1.1E-02			3.2E-01						1.1E-02

[illegible]

Table 3.1a. (continued)

Chemical	CASRN	Ingestion (mg/L)			Dermal (mg/L)			Inhalation (mg/L) [†]			Ingestion + Dermal + Inhalation (mg/L) ^{††}		
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
METHYL-5-NITROANILINE, 2-	000099-55-8	2.6E-01	2.6E-03										
METHYLANILINE HYDROCHLORIDE, 2-	000636-21-5	4.7E-02	4.7E-04		9.3E+00	9.3E-02					4.7E-02	4.7E-04	
METHYLCYCLOHEXANE	000108-87-2									8.0E+02			
METHYLENE CHLORIDE	000075-09-2	1.1E+00	1.1E-02	2.2E+00	9.9E+01	9.9E-01	1.9E+02				1.1E+00	1.1E-02	2.2E+00
METHYLENE-BIS(2-CHLOROANILINE), 4,4'-	000101-14-4	6.6E-02	6.6E-04	2.6E-02	9.6E-01	9.6E-03	3.8E-01				6.1E-02	6.1E-04	2.4E-02
METHYLENE-BIS(N,N-DIMETHYL) ANILINE, 4,4'-	000101-61-1	1.9E-01	1.9E-03		5.9E-01	5.9E-03					1.4E-01	1.4E-03	
METHYLENEBISBENZENAMINE, 4,4'-	000101-77-9												
METHYLENEDIPHENYL ISOCYANATE, 4,4'-	000101-68-8												
METHYLSTYRENE, ALPHA-	000098-83-9			2.6E+00									
METHYLTRIETHYL LEAD	001762-28-3												
METOLACHLOR	051218-45-2			5.5E+00									
METRIBUZIN	021087-64-9			9.1E-01									
MIREX	002385-85-5			7.3E-03									
MOLINATE	002212-67-1			7.3E-02									
MOLYBDENUM	007439-98-7			1.8E-01			2.9E+01						1.8E-01
MONOCHLORAMINE	010599-90-3			3.7E+00									
MONOCHLOROBUTANES	025154-42-1			1.5E+01									
NALED	000300-76-5			7.3E-02									
NAPHTHALENE	000091-20-3												
NAPROPAMIDE	015299-99-7			3.7E+00									

Table 3.1a. (continued)

Chemical	CASRN	Ingestion (mg/L)			Dermal (mg/L)			Inhalation (mg/L) [†]			Ingestion + Dermal + Inhalation (mg/L) ^{††}		
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
Niagara Blue 4B	002429-74-5												
Nickel Carbonyl	013463-39-3												
Nickel Refinery Dust	NA												
Nickel Soluble Salts	007440-02-0			7.3E-01			8.1E+01						7.2E-01
Nickel Subsulfide	012035-72-2												
Nitrapyrin	001929-82-4												
Nitrate	014797-55-8			5.8E+01									
Nitric Oxide	010102-43-9												
Nitrite	014797-65-0			3.7E+00									
Nitroaniline, 2-	000088-74-4									5.3E-02			
Nitrobenzene	000098-95-3			1.8E-02			1.1E+00			5.3E-01			1.7E-02
Nitrofurantoin	000067-20-9			2.6E+00									
Nitrofurazone	000059-87-0	5.7E-03	5.7E-05										
Nitrogen Dioxide	010102-44-0												
Nitroguanidine	000556-88-7			3.7E+00									
Nitropropane, 2-	000079-46-9	9.0E-04	9.0E-06		3.7E-01	3.7E-03		2.3E-02	2.3E-04	5.3E+00	8.6E-04	8.6E-06	
Nitroso-DI-N-Butylamine, N-	000924-16-3	1.6E-03	1.6E-05		1.4E-01	1.4E-03		4.0E-02	4.0E-04		1.5E-03	1.5E-05	
Nitroso-DI-N-Propylamine, N-	000621-64-7	1.2E-03	1.2E-05		4.5E-02	4.5E-04					1.2E-03	1.2E-05	
Nitroso-N-Ethylurea, N-	000759-73-9	6.1E-05	6.1E-07		4.6E-02	4.6E-04					6.1E-05	6.1E-07	
Nitroso-N-Methylurea, N-	000684-93-5												
Nitrosodiethanolamine, N-	001116-54-7	3.0E-03	3.0E-05		2.5E+02	2.5E+00					3.0E-03	3.0E-05	

Table 3.1a. (continued)

Chemical	CASRN	Ingestion (mg/L)			Dermal (mg/L)			Inhalation (mg/L) [†]			Ingestion + Dermal + Inhalation (mg/L) ^{††}		
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
THRAM	000137-26-8			1.8E-01									
TIN	007440-31-5			2.2E+01			9.0E+02						2.1E+01
TOLUENE	000108-88-3			7.3E+00			5.4E+01			1.1E+02			6.1E+00
TOLUENE-2,4-DIAMINE	000095-80-7	2.7E-03	2.7E-05		1.8E+00	1.8E-02					2.7E-03	2.7E-05	
TOLUENE-2,5-DIAMINE	000095-70-5			2.2E+01									
TOLUENE-2,6-DIAMINE	000823-40-5			7.3E+00									
TOLUIDINE, o- (METHYLANILINE, 2-)	000095-53-4	3.5E-02	3.5E-04		4.0E+00	4.0E-02					3.5E-02	3.5E-04	
TOLUIDINE, p-	000106-49-0	4.5E-02	4.5E-04										
TOXAPHENE	008001-35-2	7.7E-03	7.7E-05		2.1E-01	2.1E-03					7.5E-03	7.5E-05	
TRALOMETHRIN	066841-25-6			2.7E-01									
TRIALATE	002303-17-5			4.7E-01									
TRIASULFURON	082097-50-5			3.7E-01									
TRIBROMOBENZENE, 1,2,4-	000615-54-3			1.8E-01									
TRIBROMOCHLOROMETHANE	000594-15-0												
TRIBROMODIPHENYL ETHER	049690-94-0												
TRIBUTYL TIN OXIDE	000056-35-9			1.1E-03									
TRICHLORO-1,2,2-TRIFLUOROETHANE, 1,1,2-	000076-13-1			1.1E+03						8.0E+03			9.6E+02
TRICHLORO-2'-HYDROXYDIPHENYLETHER	003380-34-5												
TRICHLOROANILINE HCL, 2,4,6-	033663-50-2	2.9E-01	2.9E-03										
TRICHLOROANILINE, 2,4,6-	000634-93-5	2.5E-01	2.5E-03										
TRICHLOROENZENE, 1,2,4-	000120-82-1			3.7E-01			1.5E+00			5.3E+01			2.9E-01

Table 3.1a. (continued)

Chemical	CASRN	Ingestion (mg/L)			Dermal (mg/L)			Inhalation (mg/L) [†]			Ingestion + Dermal + Inhalation (mg/L) ^{††}		
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1
TRINITROBENZENE, 1,3,5-	000099-35-4			1.8E-03									
TRINITROPHENYLMETHYLNITRAMINE	000479-45-8			3.7E-01									
TRINITROTOLUENE, 2,4,6-	000118-96-7	2.8E-01	2.8E-03	1.8E-02									
TRIPROPYL LEAD	006618-03-7												
URANIUM (SOLUBLE SALTS)	NA			1.1E-01			3.8E+01						1.1E-01
VANADIUM PENTOXIDE	001314-62-1			3.3E-01									
VANADIUM SULFATE	036907-42-3			7.3E-01									
VANADIUM, METALLIC	007440-62-2			2.6E-01			1.1E+00						2.1E-01
VANADYL SULFATE	027774-13-6			7.3E-01									
VERNOLATE	001929-77-7			3.7E-02									
VINCLOZOLIN	050471-44-8			9.1E-01									
VINYL ACETATE	000108-05-4			3.7E+01			8.4E+02			5.3E+01			2.1E+01
VINYL BROMIDE	000593-60-2							2.0E+00	2.0E-02	8.0E-01			
VINYL CHLORIDE	000075-01-4	4.5E-03	4.5E-05		2.5E-01	2.5E-03		7.3E-01	7.3E-03		4.4E-03	4.4E-05	
WARFARIN	000081-81-2			1.1E-02									
WHITE PHOSPHORUS	007723-14-0			7.3E-04									
XYLENE, MIXTURE	001330-20-7			7.3E+01									
XYLENE, m-	000108-38-3			7.3E+01			3.8E+02						6.1E+01
XYLENE, o-	000095-47-6			7.3E+01									
XYLENE, p-	000106-42-3												
ZINC (METALLIC)	007440-66-6			1.1E+01			9.0E+02						1.1E+01

Table 3.1a. (continued)

Chemical	CASRN	Ingestion (mg/L)			Dermal (mg/L)			Inhalation (mg/L) [†]			Ingestion + Dermal + Inhalation (mg/L) ^{††}		
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
ZINC CYANIDE	000557-21-1			1.8E+00									
ZINC PHOSPHIDE	001314-84-7			1.1E-02									
ZINEB	012122-67-7			1.8E+00									

Notes:

- † Although an inhalation RfD could be calculated or an inhalation slope factor was available, the risk from indoor inhalation of volatiles was assumed to be relevant only for chemicals that volatilize easily. The risk equation incorporates a water-air concentration relationship that is applicable only to chemicals with a Henry's Law Constant of greater than 1×10^{-3} atm-m³/mole and a molecular weight of less than 200 g/mole. These criteria were used to identify those chemicals that generally should be considered for the inhalation pathway when developing risk-based PRGs. However, chemicals that do not meet these criteria may pose significant site risks (and require risk-based goals) through volatiles inhalation. The ultimate decision regarding which contaminants should be considered in the FS must be made on a site-specific basis following completion of the baseline risk assessment.
- †† If slope factors and/or reference doses were available for only one pathway (i.e., ingestion, inhalation, OR dermal), the total for ingestion plus inhalation plus dermal was not calculated.
- (1) Same oral slope factor as used for polychlorinated biphenyls.
- (2) PRG calculated considering *New Interim Region IV Guidance* from EPA (received February 11, 1992). The slope factors for chemicals so marked indicate that a toxicity equivalency factor (TEF) method was used for carcinogenic PAHs based on each compound's relative potency to the potency of benzo(a)pyrene. The following TEFs were used to convert each PAH slope factor to an equivalent slope factor of benzo(a)pyrene (that has a new cancer slope factor of 7.3 (mg/kg/day)⁻¹, identified by EPA's CRAVE workgroup): (1) benzo(a)pyrene; TEF = 1.0 (2) benz(a)anthracene; TEF = 0.1, (3) benzo(b)fluoranthene; TEF = 0.1, (4) benzo(k)fluoranthene; TEF = 0.01, (5) chrysene; TEF = 0.001, (6) dibenz(a,h)anthracene; TEF = 1.0, and (7) indeno(1,2,3-c,d)pyrene; TEF = 0.1. TEFs were used for only the oral slope factor in the ingestion pathway.
- (3) The slope factor for trichloroethylene has been withdrawn from IRIS and HEAST; however, since this is a common contaminant, the old slope factor has been used to calculate the PRG.

Table 3.1b. Risk-based Preliminary Remediation Goals for radionuclides in groundwater (Residential scenario)

Chemical †	CASRN	Ingestion (pCi/L)		Inhalation (pCi/L)		Ingestion + Inhalation (pCi/L)††	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Ac-225	014265-85-1	3.4E+01	3.4E-01				
Ac-227	014952-40-0	1.4E+01	1.4E-01				
Ac-227+D	014952-40-0	7.6E+00	7.6E-02				
Ac-228	014331-83-0	2.9E+03	2.9E+01				
Ag-105	014928-14-4	2.9E+03	2.9E+01				
Ag-108	014391-65-2	6.9E+05	6.9E+03				
Ag-108m	014391-65-2	7.9E+02	7.9E+00				
Ag-108m+D	014391-65-2	7.9E+02	7.9E+00				
Ag-109m	014378-38-2	1.8E+07	1.8E+05				
Ag-110	014391-76-5	2.0E+06	2.0E+04				
Ag-110m	014391-76-5	5.6E+02	5.6E+00				
Ag-111	157690-04-0	7.0E+02	7.0E+00				
Am-241	014596-10-2	1.5E+01	1.5E-01				
Am-242	013981-54-9	3.2E+03	3.2E+01				
Am-242m	013981-54-9	1.6E+01	1.6E-01				
Am-243	014993-75-0	1.5E+01	1.5E-01				
Am-243+D	014993-75-0	1.4E+01	1.4E-01				
Ar-41	014163-25-8						
At-217	017239-90-6	5.3E+08	5.3E+06				

Table 3.1b. (continued)

Chemical [†]	CASRN	Ingestion (pCi/L)		Inhalation (pCi/L)		Ingestion + Inhalation (pCi/L) ^{††}	
		10 ⁻⁴	10 ⁻⁵	10 ⁻⁴	10 ⁻⁵	10 ⁻⁴	10 ⁻⁵
Au-196	014914-16-0	3.7E+03	3.7E+01				
Au-198	010043-49-0	9.0E+02	9.0E+00				
Ba-131	014914-75-1	2.8E+03	2.8E+01				
Ba-133	013981-41-4	1.8E+03	1.8E+01				
Ba-133m	013981-41-4	1.7E+03	1.7E+01				
Ba-137m	013981-97-0	2.0E+06	2.0E+04				
Ba-139	014378-25-7	1.6E+04	1.6E+02				
Ba-140	014798-08-4	4.0E+02	4.0E+00				
Be-7	013966-02-4	5.5E+04	5.5E+02				
Bi-206	015776-19-9	6.7E+02	6.7E+00				
Bi-207	013982-38-2	9.4E+02	9.4E+00				
Bi-210	014331-79-4	6.5E+02	6.5E+00				
Bi-211	015229-37-5	2.6E+05	2.6E+03				
Bi-212	014913-49-6	7.7E+03	7.7E+01				
Bi-213	015776-20-2	1.1E+04	1.1E+02				
Bi-214	014733-03-0	2.4E+04	2.4E+02				
Br-82	014686-69-2	3.4E+03	3.4E+01				
C-11	014333-33-6	1.1E+05	1.1E+03				
C-14	014762-75-5	4.6E+03	4.6E+01				

Table 3.1b. (continued)

Chemical [†]	CASRN	Ingestion (pCi/L)		Inhalation (pCi/L)		Ingestion + Inhalation (pCi/L) ^{††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
C-15	015929-23-4	7.2E+06	7.2E+04				
Ca-45	013966-05-7	2.4E+03	2.4E+01				
Ca-47	001439-99-2	7.2E+02	7.2E+00				
Cd-109	014109-32-1	5.9E+02	5.9E+00				
Cd-115	014336-68-6	6.5E+02	6.5E+00				
Cd-115m	014336-68-6	3.4E+02	3.4E+00				
Ce-141	013967-74-3	1.2E+03	1.2E+01				
Ce-143	014119-19-8	8.1E+02	8.1E+00				
Ce-144	014762-78-8	1.6E+02	1.6E+00				
Ce-144+D	014762-78-8	1.6E+02	1.6E+00				
Cl-36	013981-43-6	2.1E+03	2.1E+01				
Cl-38	014158-34-0	2.3E+04	2.3E+02				
Cm-242	015510-73-3	1.2E+02	1.2E+00				
Cm-243	015757-87-6	1.9E+01	1.9E-01				
Cm-243+D	015757-87-6	1.9E+01	1.9E-01				
Cm-244	013981-15-2	2.3E+01	2.3E-01				
Cm-245	015621-76-8	1.4E+01	1.4E-01				
Cm-246	015757-90-1	1.4E+01	1.4E-01				
Cm-247	015758-32-4	1.5E+01	1.5E-01				

Table 3.1b. (continued)

Chemical [†]	CASRN	Ingestion (pCi/L)		Inhalation (pCi/L)		Ingestion + Inhalation (pCi/L) ^{††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Cm-248	015758-33-5	3.6E+00	3.6E-02				
Co-57	013981-50-5	4.9E+03	4.9E+01				
Co-58	013981-38-9	1.7E+03	1.7E+01				
Co-58m	013981-38-9	5.0E+04	5.0E+02				
Co-60	010198-40-0	2.5E+02	2.5E+00				
Cr-51	014392-02-0	3.5E+04	3.5E+02				
Cs-131	014914-76-2	2.6E+04	2.6E+02				
Cs-134	013967-70-9	1.0E+02	1.0E+00				
Cs-134m	013967-70-9	1.0E+05	1.0E+03				
Cs-135	015726-30-4	1.1E+03	1.1E+01				
Cs-136	014234-29-8	6.2E+02	6.2E+00				
Cs-137	010045-97-3	1.5E+02	1.5E+00				
Cs-137+D	010045-97-3	1.5E+02	1.5E+00				
Cs-138	015758-29-9	2.7E+04	2.7E+02				
Cu-64	013981-25-4	9.1E+03	9.1E+01				
Dy-165	013967-64-1	1.5E+04	1.5E+02				
Dy-166	015840-01-4	5.1E+02	5.1E+00				
Er-169	015840-13-8	2.2E+03	2.2E+01				
Er-171	014391-45-8	2.9E+03	2.9E+01				

Table 3.1b. (continued)

Chemical [†]	CASRN	Ingestion (pCi/L)		Inhalation (pCi/L)		Ingestion + Inhalation (pCi/L) ^{††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Eu-152	014683-23-9	8.3E+02	8.3E+00				
Eu-154	015585-10-1	5.1E+02	5.1E+00				
Eu-155	014391-16-3	2.9E+03	2.9E+01				
Eu-156	014280-35-4	4.4E+02	4.4E+00				
F-18	013981-56-1	4.4E+04	4.4E+02				
Fe-55	014681-59-5	1.4E+04	1.4E+02				
Fe-59	014596-12-4	8.1E+02	8.1E+00				
Fr-221	015756-41-9	3.3E+04	3.3E+02				
Fr-223	015756-98-6	1.1E+04	1.1E+02				
Ga-67	014119-09-6	5.7E+03	5.7E+01				
Ga-72	013982-22-4	1.0E+03	1.0E+01				
Gd-153	014276-65-4	3.6E+03	3.6E+01				
Gd-159	014041-42-0	1.8E+03	1.8E+01				
Ge-71	014374-81-3	4.0E+05	4.0E+03				
H-3	010028-17-8	6.7E+04	6.7E+02	5.7E+05	5.7E+03	6.0E+04	6.0E+02
Hg-197	013981-51-6	4.0E+03	4.0E+01				
Hg-203	013982-78-0	1.8E+03	1.8E+01				
Ho-166	013967-65-2	6.3E+02	6.3E+00				
I-122	018287-75-7	2.2E+05	2.2E+03				

Table 3.1b. (continued)

Chemical [†]	CASRN	Ingestion (pCi/L)		Inhalation (pCi/L)		Ingestion + Inhalation (pCi/L) ^{††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
I-123	015715-08-9	8.8E+03	8.8E+01				
I-125	014158-31-7	1.8E+02	1.8E+00				
I-126	014158-32-8	9.9E+01	9.9E-01				
I-129	015046-84-1	2.6E+01	2.6E-01				
I-130	014914-02-4	9.8E+02	9.8E+00				
I-131	010043-66-0	1.3E+02	1.3E+00				
I-132	014683-16-0	7.2E+03	7.2E+01				
I-133	014834-67-4	4.5E+02	4.5E+00				
I-134	014914-27-3	2.1E+04	2.1E+02				
I-135	014834-68-5	2.1E+03	2.1E+01				
In-113m	014885-78-0	5.7E+04	5.7E+02				
In-114	013981-55-0	1.1E+06	1.1E+04				
In-114m	013981-55-0	2.3E+02	2.3E+00				
In-115	014191-71-0	1.4E+02	1.4E+00				
In-115m	014191-71-0	1.4E+04	1.4E+02				
Ir-190	014981-91-0	9.6E+02	9.6E+00				
Ir-194	014158-35-1	6.8E+02	6.8E+00				
K-40	013966-00-2	3.8E+02	3.8E+00				
K-42	014378-21-3	3.7E+03	3.7E+01				

Table 3.1b. (continued)

Chemical [†]	CASRN	Ingestion (pCi/L)		Inhalation (pCi/L)		Ingestion + Inhalation (pCi/L) ^{††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Kr-83m	013965-98-5						
Kr-85	013983-27-2						
Kr-85m	013983-27-2						
Kr-87	014809-68-8						
Kr-88	014995-61-0						
Kr-89	016316-03-3						
Kr-90	015741-13-6						
La-140	013981-28-7	5.0E+02	5.0E+00				
Lu-177	014265-75-9	1.6E+03	1.6E+01				
Mn-52	014092-99-0	7.9E+02	7.9E+00				
Mn-54	013966-31-9	2.4E+03	2.4E+01				
Mn-56	014681-52-8	5.6E+03	5.6E+01				
Mo-99	014119-15-4	2.1E+03	2.1E+01				
Na-22	013966-32-0	5.9E+02	5.9E+00				
Na-24	013982-04-2	3.5E+03	3.5E+01				
Nb-93m	007440-03-1	7.2E+03	7.2E+01				
Nb-94	014681-63-1	6.9E+02	6.9E+00				
Nb-95	013967-76-5	2.1E+03	2.1E+01				
Nb-95m	013967-76-5	1.6E+03	1.6E+01				

Table 3.1b. (continued)

Chemical [†]	CASRN	Ingestion (pCi/L)		Inhalation (pCi/L)		Ingestion + Inhalation (pCi/L) ^{††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Nb-97	018496-04-3	2.7E+04	2.7E+02				
Nb-97m	018496-04-3	1.5E+06	1.5E+04				
Nd-147	014269-74-0	8.1E+02	8.1E+00				
Nd-149	015749-81-2	1.0E+04	1.0E+02				
Ni-59	014336-70-0	2.6E+04	2.6E+02				
Ni-63	013981-37-8	8.7E+03	8.7E+01				
Ni-65	014833-49-9	8.5E+03	8.5E+01				
Np-236	015700-36-4	5.1E+03	5.1E+01				
Np-237	013994-20-2	1.6E+01	1.6E-01				
Np-237+D	013994-20-2	1.6E+01	1.6E-01				
Np-238	015766-25-3	1.0E+03	1.0E+01				
Np-239	013968-59-7	1.1E+03	1.1E+01				
Np-240	015690-84-3	2.7E+04	2.7E+02				
Np-240m	015690-84-3	2.0E+05	2.0E+03				
Os-185	015766-50-4	2.6E+03	2.6E+01				
Os-191	014119-24-5	1.6E+03	1.6E+01				
Os-191m	014119-24-5	9.6E+03	9.6E+01				
Os-193	016057-77-5	1.1E+03	1.1E+01				
P-32	014596-37-3	7.8E+02	7.8E+00				

Table 3.1b. (continued)

Chemical [†]	CASRN	Ingestion (pCi/L)		Inhalation (pCi/L)		Ingestion + Inhalation (pCi/L) ^{††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
P-33	015749-66-3	6.1E+03	6.1E+01				
Pa-231	014331-85-2	3.2E+01	3.2E-01				
Pa-233	013981-14-1	1.0E+03	1.0E+01				
Pa-234	015100-28-4	2.2E+03	2.2E+01				
Pa-234m	015100-28-4	1.0E+06	1.0E+04				
Pb-203	014687-25-3	4.6E+03	4.6E+01				
Pb-209	014119-30-3	2.3E+04	2.3E+02				
Pb-210	014255-04-0	7.1E+00	7.1E-02				
Pb-210+D	014255-04-0	4.7E+00	4.7E-02				
Pb-211	015816-77-0	1.4E+04	1.4E+02				
Pb-212	015092-94-1	2.6E+02	2.6E+00				
Pb-214	015067-28-4	1.6E+04	1.6E+02				
Pd-100	015690-69-4	1.3E+03	1.3E+01				
Pd-101	015749-54-9	1.3E+04	1.3E+02				
Pd-103	014967-68-1	4.5E+03	4.5E+01				
Pd-107	017637-99-9	2.3E+04	2.3E+02				
Pd-109	014981-64-7	1.4E+03	1.4E+01				
Pm-147	014380-75-7	3.4E+03	3.4E+01				
Pm-148	014683-19-3	3.3E+02	3.3E+00				

Table 3.1b. (continued)

Chemical [†]	CASRN	Ingestion (pCi/L)		Inhalation (pCi/L)		Ingestion + Inhalation (pCi/L) ^{††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Pm-148m	014683-19-3	4.8E+02	4.8E+00				
Pm-149	015765-31-8	8.6E+02	8.6E+00				
Po-210	013981-52-7	1.5E+01	1.5E-01				
Po-212	015389-34-1	1.1E+14	1.1E+12				
Po-213	015756-57-7	7.1E+12	7.1E+10				
Po-214	015735-67-8	2.2E+11	2.2E+09				
Po-215	015706-52-2	9.5E+09	9.5E+07				
Po-216	015756-58-8	5.4E+07	5.4E+05				
Po-218	015422-24-9	9.4E+04	9.4E+02				
Pr-142	014191-64-1	6.8E+02	6.8E+00				
Pr-143	014981-79-4	7.2E+02	7.2E+00				
Pr-144	014119-05-2	5.9E+04	5.9E+02				
Pr-144m	014119-05-2	1.5E+05	1.5E+03				
Pt-191	015706-36-2	3.2E+03	3.2E+01				
Pt-193	015735-70-3	2.9E+04	2.9E+02				
Pt-193m	015735-70-3	1.9E+03	1.9E+01				
Pt-197	015735-74-7	2.2E+03	2.2E+01				
Pt-197m	015735-74-7	1.5E+04	1.5E+02				
Pu-236	015411-92-4	6.2E+01	6.2E-01				

Table 3.1b. (continued)

Chemical [†]	CASRN	Ingestion (pCi/L)		Inhalation (pCi/L)		Ingestion + Inhalation (pCi/L) ^{††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Pu-238	013981-16-3	1.6E+01	1.6E-01				
Pu-239	015117-48-3	1.5E+01	1.5E-01				
Pu-240	014119-33-6	1.5E+01	1.5E-01				
Pu-241	014119-32-5	9.2E+02	9.2E+00				
Pu-241+D	014119-32-5	1.4E+01	1.4E-01				
Pu-242	013982-10-0	1.6E+01	1.6E-01				
Pu-243	015706-37-3	1.3E+04	1.3E+02				
Pu-244	014119-34-7	1.5E+01	1.5E-01				
Pu-244+D	014119-34-7	1.5E+01	1.5E-01				
Ra-223	015623-45-7	2.0E+01	2.0E-01				
Ra-224	013233-32-4	3.2E+01	3.2E-01				
Ra-225	013981-53-8	3.0E+01	3.0E-01				
Ra-226	013982-63-3	1.6E+01	1.6E-01				
Ra-226+D	013982-63-3	1.6E+01	1.6E-01				
Ra-228	015262-20-1	1.9E+01	1.9E-01				
Ra-228+D	015262-20-1	1.9E+01	1.9E-01				
Rb-82	014391-63-0	4.5E+05	4.5E+03				
Rb-86	014932-53-7	6.7E+02	6.7E+00				
Rb-87	013982-13-3	1.3E+03	1.3E+01				

Table 3.1b. (continued)

Chemical [†]	CASRN	Ingestion (pCi/L)		Inhalation (pCi/L)		Ingestion + Inhalation (pCi/L) ^{††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Rb-88	014928-36-0	3.3E+04	3.3E+02				
Rb-89	014191-65-2	5.5E+04	5.5E+02				
Rh-103m	007440-16-6	5.8E+05	5.8E+03				
Rh-105	014913-89-4	2.5E+03	2.5E+01				
Rh-105m	014913-89-4	4.4E+06	4.4E+04				
Rh-106	014234-34-5	1.3E+06	1.3E+04				
Rn-219	014835-02-0						
Rn-220	022481-48-7			1.0E+04	1.0E+02		
Rn-222+D	014859-67-7			2.6E+02	2.6E+00		
Ru-103	013968-53-1	1.4E+03	1.4E+01				
Ru-105	014331-95-4	4.1E+03	4.1E+01				
Ru-106	013967-48-1	1.4E+02	1.4E+00				
Ru-106+D	013967-48-1	1.4E+02	1.4E+00				
Ru-97	015758-35-7	8.1E+03	8.1E+01				
S-35	015117-53-0	1.1E+04	1.1E+02				
Sb-122	014374-79-9	5.4E+02	5.4E+00				
Sb-124	014683-10-4	4.5E+02	4.5E+00				
Sb-125	014234-35-6	1.6E+03	1.6E+01				
Sb-125+D	014234-35-6	1.3E+03	1.3E+01				

Table 3.1b. (continued)

Chemical [†]	CASRN	Ingestion (pCi/L)		Inhalation (pCi/L)		Ingestion + Inhalation (pCi/L) ^{††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Sb-126	015756-32-8	4.9E+02	4.9E+00				
Sb-126m	015756-32-8	6.5E+04	6.5E+02				
Sb-127	013968-50-8	5.6E+02	5.6E+00				
Sb-129	014331-88-5	2.6E+03	2.6E+01				
Sc-46	013967-63-0	8.3E+02	8.3E+00				
Sc-47	014391-96-9	1.6E+03	1.6E+01				
Sc-48	014391-86-7	7.2E+02	7.2E+00				
Se-75	014265-71-5	7.3E+02	7.3E+00				
Si-31	014276-49-4	9.4E+03	9.4E+01				
Sm-147	014392-33-7	1.9E+02	1.9E+00				
Sm-151	015715-94-3	1.0E+04	1.0E+02				
Sm-153	015766-00-4	1.2E+03	1.2E+01				
Sn-113	013966-06-8	1.3E+03	1.3E+01				
Sn-121	014683-06-8	3.9E+03	3.9E+01				
Sn-121m	014683-06-8	2.4E+03	2.4E+01				
Sn-125	014683-08-0	2.8E+02	2.8E+00				
Sn-126	015832-50-5	2.2E+02	2.2E+00				
Sr-82	014809-50-8	1.8E+02	1.8E+00				
Sr-85	013967-73-2	3.4E+03	3.4E+01				

Table 3.1b. (continued)

Chemical [†]	CASRN	Ingestion (pCi/L)		Inhalation (pCi/L)		Ingestion + Inhalation (pCi/L) ^{††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Sr-85m	013967-73-2	2.6E+05	2.6E+03				
Sr-89	014158-27-1	4.6E+02	4.6E+00				
Sr-90	010098-97-2	1.2E+02	1.2E+00				
Sr-90+D	010098-97-2	8.5E+01	8.5E-01				
Sr-91	014331-91-0	1.7E+03	1.7E+01				
Sr-92	014928-29-1	2.3E+03	2.3E+01				
Ta-182	013982-00-8	6.8E+02	6.8E+00				
Tb-158	015759-55-4	1.1E+03	1.1E+01				
Tb-160	013981-29-8	6.2E+02	6.2E+00				
Tc-95	014809-56-4	7.0E+04	7.0E+02				
Tc-95m	014809-56-4	3.8E+03	3.8E+01				
Tc-96	014808-44-7	2.1E+03	2.1E+01				
Tc-96m	014808-44-7	1.8E+05	1.8E+03				
Tc-97	015759-35-0	3.0E+04	3.0E+02				
Tc-97m	015759-35-0	4.0E+03	4.0E+01				
Tc-99	014133-76-7	3.4E+03	3.4E+01				
Tc-99m	014133-76-7	8.5E+04	8.5E+02				
Te-125m	014390-73-9	1.9E+03	1.9E+01				
Te-127	013981-49-2	5.6E+03	5.6E+01				

Table 3.1b. (continued)

Chemical [†]	CASRN	Ingestion (pCi/L)		Inhalation (pCi/L)		Ingestion + Inhalation (pCi/L) ^{††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Te-127m	013981-49-2	7.9E+02	7.9E+00				
Te-129	014269-71-7	3.2E+04	3.2E+02				
Te-129m	014269-71-7	4.1E+02	4.1E+00				
Te-131	014683-12-6	1.2E+04	1.2E+02				
Te-131m	014683-12-6	5.4E+02	5.4E+00				
Te-132	014234-28-7	3.9E+02	3.9E+00				
Th-227	015623-47-9	1.2E+02	1.2E+00				
Th-228	014274-82-9	7.6E+01	7.6E-01				
Th-228+D	014274-82-9	2.1E+01	2.1E-01				
Th-229	015594-54-4	8.4E+01	8.4E-01				
Th-229+D	015594-54-4	1.3E+01	1.3E-01				
Th-230	014269-63-7	1.3E+02	1.3E+00				
Th-231	014932-40-2	2.7E+03	2.7E+01				
Th-232	007440-29-1	1.5E+02	1.5E+00				
Th-234	015065-10-8	2.5E+02	2.5E+00				
Tl-202	015720-57-7	4.7E+03	4.7E+01				
Tl-204	013968-51-9	2.4E+03	2.4E+01				
Tl-208	014913-50-9	2.7E+05	2.7E+03				
Tl-209	015690-73-0	3.4E+05	3.4E+03				

Table 3.1b. (continued)

Chemical [†]	CASRN	Ingestion (pCi/L)		Inhalation (pCi/L)		Ingestion + Inhalation (pCi/L) ^{††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Tm-170	013981-30-1	6.3E+02	6.3E+00				
Tm-171	014333-45-0	8.1E+03	8.1E+01				
U-232	014158-29-3	5.9E+01	5.9E-01				
U-233	013968-55-3	1.1E+02	1.1E+00				
U-234	013966-29-5	1.1E+02	1.1E+00				
U-235	015117-96-1	1.1E+02	1.1E+00				
U-235+D	015117-96-1	1.0E+02	1.0E+00				
U-236	013982-70-2	1.1E+02	1.1E+00				
U-237	014269-75-1	1.2E+03	1.2E+01				
U-238	007440-61-1	1.1E+02	1.1E+00				
U-238+D	007440-61-1	7.7E+01	7.7E-01				
U-240	015687-53-3	8.7E+02	8.7E+00				
V-48	014331-97-6	6.3E+02	6.3E+00				
W-181	015749-46-9	1.8E+04	1.8E+02				
W-185	014932-41-3	2.3E+03	2.3E+01				
W-187	014983-48-3	1.9E+03	1.9E+01				
Xe-122	015151-09-4						
Xe-123	015700-10-4						
Xe-125	013994-18-8						

Table 3.1b. (continued)

Chemical [†]	CASRN	Ingestion (pCi/L)		Inhalation (pCi/L)		Ingestion + Inhalation (pCi/L) ^{††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Xe-127	013994-19-9						
Xe-129m	013965-99-6						
Xe-131m	014683-11-5						
Xe-133	014932-42-4						
Xe-133m	014932-42-4						
Xe-135	014995-62-1						
Xe-135m	014995-62-1						
Xe-137	014835-21-3						
Xe-138	015751-81-2						
Y-90	010098-91-6	3.2E+02	3.2E+00				
Y-91	014234-24-3	3.5E+02	3.5E+00				
Y-91m	014234-24-3	1.3E+05	1.3E+03				
Y-92	015751-59-4	2.4E+03	2.4E+01				
Y-93	014981-70-5	8.3E+02	8.3E+00				
Zn-65	013982-39-3	4.8E+02	4.8E+00				
Zn-69	013982-23-5	7.7E+04	7.7E+02				
Zn-69m	013982-23-5	3.1E+03	3.1E+01				
Zn-93	015751-77-6	9.1E+03	9.1E+01				
Zn-95	013967-71-0	1.2E+03	1.2E+01				

Table 3.1b. (continued)

Chemical †	CASRN	Ingestion (pCi/L)		Inhalation (pCi/L)		Ingestion + Inhalation (pCi/L)††	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Zr-97	014928-30-4	4.6E+02	4.6E+00				

Notes:

- † Isotopes designated with an “m” indicate that the isotope is metastable; isotopes designated with a “+D” indicate that the radionuclide slope factors include contributions from daughter products.
- †† The total PRG for ingestion plus inhalation is not equal to the sum of the individual pathway PRGs. If one of the two PRG pathways could not be calculated because there was no slope factor available for said pathway, the total PRG for ingestion plus inhalation is calculated using only the contributions that are available (this is equivalent to setting the missing slope factor equal to 0.00E+00).

Table 3.1c. Risk-based Preliminary Remediation Goals for nonradionuclides in soil (Residential scenario)

Chemical	CASRN	Ingestion (mg/kg)			Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) †		
		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	HI=1
ACENAPHTHENE	000083-32-9			4.4E+04	4.7E+03			2.6E+04					1.6E+04
ACEPHATE	030560-19-1	7.3E+03	7.3E+01	2.9E+03	3.1E+02	3.7E+04	3.7E+02	5.5E+03	1.3E+04	1.3E+02			1.9E+03
ACETALDEHYDE	000075-07-0												
ACETOCHLOR	034256-82-1			1.5E+04	1.6E+03			2.8E+04					9.5E+03
ACETONE	000067-64-1			7.3E+04	7.8E+03			1.1E+05					4.5E+04
ACETONE CYANOHYDRIN	000075-86-5			5.8E+02	6.3E+01			1.1E+03					3.8E+02
ACETONITRILE	000075-05-8			4.4E+03	4.7E+02			8.3E+03					2.9E+03
ACETOPHENONE	000098-86-2			7.3E+04	7.8E+03			1.4E+05					4.8E+04
ACROLEIN	000107-02-8			1.5E+04	1.6E+03			2.8E+04					2.8E-01
ACRYLAMIDE	000079-06-1	1.4E+01	1.4E-01	1.5E+02	1.6E+01	7.1E+01	7.1E-01	2.8E+02	8.1E+05	8.1E+03	2.5E+01	2.5E-01	9.5E+01
ACRYLIC ACID	000079-10-7			3.7E+05	3.9E+04			6.9E+05					2.3E+05
ACRYLONITRILE	000107-13-1	1.2E+02	1.2E+00	7.3E+02	7.8E+01	6.0E+02	6.0E+00	1.4E+03	1.3E+01	1.3E-01	1.2E+01	1.2E-01	7.5E+00
ALACHLOR	015972-60-8	8.0E+02	8.0E+00	7.3E+03	7.8E+02	4.0E+03	4.0E+01	1.4E+04			1.4E+03	1.4E+01	4.8E+03
ALAR	001596-84-5			1.1E+05	1.2E+04			2.1E+05					7.2E+04
ALDICARB	000116-06-3			7.3E+02	7.8E+01			1.4E+03					4.8E+02
ALDICARB SULFONE	001646-88-4			7.3E+02	7.8E+01			1.4E+03					4.8E+02
ALDRIN	000309-00-2	3.8E+00	3.8E-02	2.2E+01	2.3E+00	9.5E+00	9.5E-02	2.1E+01	2.1E+05	2.1E+03	4.9E+00	4.9E-02	1.1E+01
ALLYL	074223-64-6			1.8E+05	2.0E+04			3.4E+05					1.2E+05
ALLYL ALCOHOL	000107-18-6			3.7E+03	3.9E+02			6.9E+03					2.4E+03
ALLYL CHLORIDE	000107-05-1										1.0E+01		

Table 3.1c. (continued)

Chemical	CASRN	Ingestion (mg/kg)				Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) †		
		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
ALUMINUM PHOSPHIDE	020859-73-8			2.9E+02	3.1E+01			5.5E+03						2.8E+02
AMDRO	067485-29-4			2.2E+02	2.3E+01			4.1E+02						1.4E+02
AMETRYN	000834-12-8			6.6E+03	7.0E+02			1.2E+04						4.3E+03
AMINOPHENOL, m-	000591-27-5			5.1E+04	5.5E+03			9.6E+04						3.3E+04
AMINOPYRIDINE, 4-	000504-24-5			1.5E+01	1.6E+00			2.8E+01						9.5E+00
AMITRAZ	033089-61-1			1.8E+03	2.0E+02			3.4E+03						1.2E+03
AMMONIA	007664-41-7										4.5E+08			
AMMONIUM SULFAMATE	007773-06-0			1.5E+05	1.6E+04			2.8E+06						1.4E+05
ANILINE	000062-53-3	1.1E+04	1.1E+02			5.6E+04	5.6E+02				4.5E+06	2.0E+04	2.0E+02	
ANTHRACENE	000120-12-7			2.2E+05	2.3E+04			3.1E+05						1.3E+05
ANTIMONY (METALLIC)	007440-36-0			2.9E+02	3.1E+01			1.1E+02						8.0E+01
ANTIMONY PENTOXIDE	001314-60-9			3.7E+02	3.9E+01			6.9E+03						3.5E+02
ANTIMONY POTASSIUM TARTRATE	000304-61-0			6.6E+02	7.0E+01			1.2E+04						6.2E+02
ANTIMONY TETROXIDE	001332-81-6			2.9E+02	3.1E+01			5.5E+03						2.8E+02
ANTIMONY TRIOXIDE	001309-64-4			2.9E+02	3.1E+01			5.5E+03						2.8E+02
APOLLO	074115-24-5			9.5E+03	1.0E+03			1.8E+04						6.2E+03
ARAMITE	000140-57-8	2.6E+03	2.6E+01	3.7E+04	3.9E+03	1.3E+04	1.3E+02	6.9E+04	1.5E+08	1.5E+06		4.5E+03	4.5E+01	2.4E+04
AROCLOR 1016	012674-11-2			5.1E+01	5.5E+00			8.7E+01						3.2E+01
AROCLOR 1254	011097-69-1			1.5E+01	1.6E+00			2.5E+01						9.2E+00
AROCLOR-1221	011104-28-2	8.3E+00	8.3E-02			3.8E+01	3.8E-01					1.4E+01	1.4E-01	

Table 3.1c. (continued)

Chemical	CASRN	Ingestion (mg/kg)				Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) †		
		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
AROCLOR-1232	011141-16-5	8.3E+00	8.3E-02			3.8E+01	3.8E-01					1.4E+01	1.4E-01	
AROCLOR-1242	053469-21-9	8.3E+00	8.3E-02			3.8E+01	3.8E-01					1.4E+01	1.4E-01	
AROCLOR-1248	012672-29-6	8.3E+00	8.3E-02			3.8E+01	3.8E-01					1.4E+01	1.4E-01	
AROCLOR-1260	011096-82-5	8.3E+00	8.3E-02			3.8E+01	3.8E-01					1.4E+01	1.4E-01	
ARSENIC, INORGANIC	007440-38-2			2.2E+02	2.3E+01			1.7E+03	7.3E+04	7.3E+02				1.9E+02
ARSINE	007784-42-1										2.2E+05			
ASBESTOS	001332-21-4													
ASSURE	076578-14-8			6.6E+03	7.0E+02			1.2E+04						4.3E+03
ASULAM	003337-71-1			3.7E+04	3.9E+03			6.9E+04						2.4E+04
ATRAZINE	001912-24-9	2.9E+02	2.9E+00	2.6E+04	2.7E+03	1.4E+03	1.4E+01	4.8E+04				5.0E+02	5.0E+00	1.7E+04
AVERMECTIN B1	065195-55-3			2.9E+02	3.1E+01			5.5E+02						1.9E+02
AZOBEZENE	000103-33-3	5.8E+02	5.8E+00			2.9E+03	2.9E+01		3.3E+07	3.3E+05		1.0E+03	1.0E+01	
BARIUM	007440-39-3			5.1E+04	5.5E+03			6.7E+04			2.2E+06			2.9E+04
BARIUM CYANIDE	000542-62-1			7.3E+04	7.8E+03			1.4E+06						6.9E+04
BAYGON	000114-26-1			2.9E+03	3.1E+02			5.5E+03						1.9E+03
BAYLETON	043121-43-3			2.2E+04	2.3E+03			4.1E+04						1.4E+04
BAYTHROID	068359-37-5			1.8E+04	2.0E+03			3.4E+04						1.2E+04
BENEFIN	001861-40-1			2.2E+05	2.3E+04			4.1E+05						1.4E+05
BENOMYL	017804-35-2			3.7E+04	3.9E+03			6.9E+04						2.4E+04
BENTAZON	025057-89-0			1.8E+03	2.0E+02			3.4E+03						1.2E+03

Table 3.1c. (continued)

Chemical	CASRN	Ingestion (mg/kg)			Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) †		
		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	HI=1
BIS(2-CHLOROETHYL)ETHER	000111-44-4	5.8E+01	5.8E-01			2.9E+02	2.9E+00		1.4E+02	1.4E+00	5.8E+01	5.8E-01	
BIS(2-CHLOROISOPROPYL)ETHER	039638-32-9			2.9E+04	3.1E+03			5.5E+04					1.9E+04
BIS(2-ETHYLHEXYL)PHTHALATE	000117-81-7	4.6E+03	4.6E+01	1.5E+04	1.6E+03	4.4E+03	4.4E+01	5.2E+03			3.2E+03	3.2E+01	3.9E+03
BIS(CHLOROMETHYL)ETHER	000542-88-1	2.9E-01	2.9E-03			1.5E+00	1.5E-02		4.4E-01	4.4E-03	2.4E-01	2.4E-03	
BISPHENOL A	000080-05-7			3.7E+04	3.9E+03			6.9E+04					2.4E+04
BORON TRIFLUORIDE	007637-07-2										3.1E+06		
BORON and BORATES ONLY	007440-42-8			6.6E+04	7.0E+03			1.1E+06			8.9E+07		6.2E+04
BROMOCHLOROMETHANE	000074-97-5												
BROMODICHLOROMETHANE	000075-27-4	1.0E+03	1.0E+01	1.5E+04	1.6E+03	5.1E+03	5.1E+01	2.7E+04			1.8E+03	1.8E+01	9.5E+03
BROMODIPHENYL ETHER, p-	000101-55-3												
BROMOFORM	000075-25-2	8.1E+03	8.1E+01	1.5E+04	1.6E+03	2.4E+04	2.4E+02	1.7E+04	9.4E+08	9.4E+06	1.1E+04	1.1E+02	7.8E+03
BROMOMETHANE	000074-83-9			1.0E+03	1.1E+02			1.9E+03			1.7E+01		1.7E+01
BROMOPHOS	002104-96-3			3.7E+03	3.9E+02			6.9E+03					2.4E+03
BROMOTRICHLOROMETHANE	000075-62-7												
BROMOXYNIL	001689-84-5			1.5E+04	1.6E+03			2.8E+04					9.5E+03
BROMOXYNIL OCTANOATE	001689-99-2			1.5E+04	1.6E+03			2.8E+04					9.5E+03
BUTADIENE, 1,3-	000106-99-0								2.9E+00	2.9E-02			
BUTANOL, N-	000071-36-3			7.3E+04	7.8E+03			1.4E+05					4.8E+04
BUTYL BENZYL PHTHALATE	000085-68-7			1.5E+05	1.6E+04			1.7E+05					7.8E+04
BUTYLATE	002008-41-5			3.7E+04	3.9E+03			6.9E+04					2.4E+04

Table 3.1c. (continued)

Chemical	CASRN	Ingestion (mg/kg)			Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) †		
		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶
BUTYLCHLORIDE, T-	000507-20-0												
BUTYLPHthalYL BUTYLGLYCOLATE	000085-70-1			7.3E+05	7.8E+04			1.4E+06					4.8E+05
CACODYLIC ACID	000075-60-5			2.2E+03	2.3E+02			4.1E+03					1.4E+03
CADMIUM (Diet)	007440-43-9			7.3E+02	7.8E+01			1.4E+02	6.0E+05	6.0E+03			1.2E+02
CALCIUM CYANIDE	000592-01-8			2.9E+04	3.1E+03			5.5E+04					1.9E+04
CAPROLACTAM	000105-60-2			3.7E+05	3.9E+04			6.9E+05					2.4E+05
CAPTAFOF	002425-06-1	7.4E+03	7.4E+01	1.5E+03	1.6E+02	3.7E+04	3.7E+02	2.8E+03				1.3E+04	1.3E+02
CAPTAN	000133-06-2	1.8E+04	1.8E+02	9.5E+04	1.0E+04	9.2E+04	9.2E+02	1.8E+05				3.2E+04	3.2E+02
CARBARYL	000063-23-2			7.3E+04	7.8E+03			1.4E+05					4.8E+04
CARBAZOLE	000086-74-8	3.2E+03	3.2E+01			1.1E+04	1.1E+02					4.8E+03	4.8E+01
CARBOFURAN	001563-66-2			3.7E+03	3.9E+02			6.9E+03					2.4E+03
CARBON DISULFIDE	000075-15-0			7.3E+04	7.8E+03			8.7E+04			2.0E+02		2.0E+02
CARBON TETRACHLORIDE	000056-23-5	4.9E+02	4.9E+00	5.1E+02	5.5E+01	1.6E+03	1.6E+01	6.3E+02	3.1E+02	3.1E+00		2.1E+02	2.1E+00
CARBOSULFAN	055285-14-8			7.3E+03	7.8E+02			1.4E+04					4.8E+03
CARBOXIN	005234-68-4			7.3E+04	7.8E+03			1.4E+05					4.8E+04
CHLORAL	000075-87-6			1.5E+03	1.6E+02			2.8E+03					9.5E+02
CHLORAMBEN	000133-90-4			1.1E+04	1.2E+03			2.1E+04					7.2E+03
CHLORANIL	000118-75-2	1.6E+02	1.6E+00			8.0E+02	8.0E+00					2.8E+02	2.8E+00
CHLORDANE	000057-74-9	4.9E+01	4.9E-01	4.4E+01	4.7E+00	1.2E+02	1.2E+00	4.1E+01	2.8E+06	2.8E+04		6.4E+01	6.4E-01
CHLORMURON-ETHYL	090982-32-4			1.5E+04	1.6E+03			2.8E+04					9.5E+03

Table 3.1c. (continued)

Chemical	CASRN	Ingestion (mg/kg)				Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) †		
		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
CHLORONAPHTHALENE, BETA-	000091-58-7			5.8E+04	6.3E+03			1.1E+05						3.8E+04
CHLORONITROBENZENE, o-	000088-73-3	2.6E+03	2.6E+01			1.3E+04	1.3E+02					4.5E+03	4.5E+01	
CHLORONITROBENZENE, p-	000121-73-3	3.5E+03	3.5E+01			1.8E+04	1.8E+02					6.2E+03	6.2E+01	
CHLOROPHENOL, 2-	000095-57-8			3.7E+03	3.9E+02			6.9E+03						2.4E+03
CHLOROPHENYL METHYL SULFIDE, p-	000123-09-1													
CHLOROPHENYL METHYL SULFOXIDE	000934-73-6													
CHLOROPROPANE, 2-	000075-29-6										1.5E+03			
CHLOROTHALONIL	001897-45-6	5.8E+03	5.8E+01	1.1E+04	1.2E+03	2.9E+04	2.9E+02	2.1E+04				1.0E+04	1.0E+02	7.2E+03
CHLOROTOLUENE, o-	000095-49-8			1.5E+04	1.6E+03			2.8E+04						9.5E+03
CHLOROPROPHAM	000101-21-3			1.5E+05	1.6E+04			2.8E+05						9.5E+04
CHLORPYRIFOS	002921-88-2			2.2E+03	2.3E+02			4.1E+03						1.4E+03
CHLORPYRIFOS METHYL	005598-13-0			7.3E+03	7.8E+02			1.4E+04						4.8E+03
CHLORSULFURON	064902-72-3			3.7E+04	3.9E+03			6.9E+04						2.4E+04
CHLORTHIOPHOS	060238-56-4			5.8E+02	6.3E+01			1.1E+03						3.8E+02
CHROMIUM (III) (INSOLUBLE SALTS)	016065-83-1			7.3E+05	7.8E+04			6.9E+04						6.3E+04
CHROMIUM (VI)	018540-29-9			3.7E+03	3.9E+02			1.4E+03	8.9E+04	8.9E+02				1.0E+03
CHRYSENE	000218-01-9	8.8E+03	8.8E+01			1.4E+04	1.4E+02					8.6E+03	8.6E+01	
COKE OVEN EMISSIONS	008007-45-2								1.7E+06	1.7E+04				
COPPER	007440-50-8													
COPPER CYANIDE	000544-92-3			3.7E+03	3.9E+02			6.9E+04						3.5E+03

Table 3.1c. (continued)

Chemical	CASRN	Ingestion (mg/kg)				Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) †		
		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
CREOSOTE	008001-58-9													
CRESOL, m-	000108-39-4			3.7E+04	3.9E+03			6.9E+04						2.4E+04
CRESOL, o-	000095-48-7			3.7E+04	3.9E+03			6.9E+04						2.4E+04
CRESOL, p-	000106-44-5			3.7E+03	3.9E+02			4.5E+03						2.0E+03
CROTONALDEHYDE	000123-73-9	3.4E+01	3.4E-01			1.7E+02	1.7E+00					5.9E+01	5.9E-01	
CUMENE	000098-82-8			2.9E+04	3.1E+03			5.5E+04			3.5E+02			3.5E+02
CYANAZINE	021725-46-2	7.6E+01	7.6E-01	1.5E+03	1.6E+02	3.8E+02	3.8E+00	2.8E+03				1.3E+02	1.3E+00	9.5E+02
CYANIDE (CN-)	000057-12-5			1.5E+04	1.6E+03			4.7E+04						1.1E+04
CYANOGEN	000460-19-5			2.9E+04	3.1E+03			5.5E+04						1.9E+04
CYANOGEN BROMIDE	000506-68-3			6.6E+04	7.0E+03			1.2E+05						4.3E+04
CYANOGEN CHLORIDE	000506-77-4			3.7E+04	3.9E+03			6.9E+04						2.4E+04
CYCLOHEXANE, 1,2,3,4,5-PENTABROMO-6-CHLORO	000087-84-3	2.8E+03	2.8E+01			1.4E+04	1.4E+02					4.8E+03	4.8E+01	
CYCLOHEXANONE	000108-94-1			3.7E+06	3.9E+05			6.9E+06						2.4E+06
CYCLOHEXYLAMINE	000108-91-8			1.5E+05	1.6E+04			2.8E+05						9.5E+04
CYCLOPENTADIENE	000542-92-7													
CYHALOTHRIIN/KARATE	068085-85-8			3.7E+03	3.9E+02			6.9E+03						2.4E+03
CYPERMETHRIN	052315-07-8			7.3E+03	7.8E+02			1.4E+04						4.8E+03
CYROMAZINE	066215-27-8			5.5E+03	5.9E+02			1.0E+04						3.6E+03
DACTHAL	001861-32-1			7.3E+03	7.8E+02			1.4E+04						4.8E+03
DALAPON	000075-99-0			2.2E+04	2.3E+03			4.1E+04						1.4E+04

Table 3.1c. (continued)

Chemical	CASRN	Ingestion (mg/kg)				Dermal (mg/kg)				Inhalation (mg/kg)				Ingestion + Dermal + Inhalation (mg/kg) †		
		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
DDD	000072-54-8	2.7E+02	2.7E+00			9.4E+02	9.4E+00							4.0E+02	4.0E+00	
DDE	000072-55-9	1.9E+02	1.9E+00			6.6E+02	6.6E+00							2.9E+02	2.9E+00	
DDT	000050-29-3	1.9E+02	1.9E+00	3.7E+02	3.9E+01	6.6E+02	6.6E+00	4.8E+02	4.8E+02	1.1E+07	1.1E+05			2.9E+02	2.9E+00	2.1E+02
DECABROMODIPHENYL ETHER	001163-19-5			7.3E+03	7.8E+02			1.4E+04								4.8E+03
DEMETON	008065-48-3			2.9E+01	3.1E+00			5.5E+01								1.9E+01
DI(2-ETHYLHEXYL)ADIPATE	000103-23-1	5.3E+04	5.3E+02	4.4E+05	4.7E+04	2.7E+05	2.7E+03	8.3E+05						9.3E+04	9.3E+02	2.9E+05
DIALATE	002303-16-4	1.0E+03	1.0E+01			5.3E+03	5.3E+01							1.8E+03	1.8E+01	
DIAZINON	000333-41-5			6.6E+02	7.0E+01			1.2E+03								4.3E+02
DIBENZ[A,H]ANTHRACENE	000053-70-3	8.8E+00	8.8E-02			1.4E+01	1.4E-01							8.6E+00	8.6E-02	
DIBROMO-3-CHLOROPROPANE, 1,2-	000096-12-8	4.6E+01	4.6E-01			2.3E+02	2.3E+00			1.5E+09	1.5E+07	8.9E+05		8.0E+01	8.0E-01	
DIBROMOBENZENE, 1,4-	000106-37-6			7.3E+03	7.8E+02			1.4E+04								4.8E+03
DIBROMOCHLOROMETHANE	000124-48-1	7.6E+02	7.6E+00	1.5E+04	1.6E+03	2.3E+03	2.3E+01	1.7E+04						1.1E+03	1.1E+01	7.8E+03
DIBROMODICHLOROMETHANE	000594-18-3															
DIBROMODIPHENYL ETHER, p,p'-	002050-47-7															
DIBROMOETHANE, 1,2-	000106-93-4	7.5E-01	7.5E-03			3.8E+00	3.8E-02			1.5E+02	1.5E+00	2.8E+01		1.3E+00	1.3E-02	
DIBROMOMETHANE (METHYLENE BROMIDE)	000074-95-3			7.3E+03	7.8E+02			1.4E+04								4.8E+03
DIBUTYL PHTHALATE	000084-74-2			7.3E+04	7.8E+03			1.4E+05								4.8E+04
DICAMBA	001918-00-9			2.2E+04	2.3E+03			4.1E+04								1.4E+04
DICHLORO-2-BUTENE, 1,4-	000764-41-0									1.2E+01	1.2E-01					
DICHLOROBENZENE, 1,2-	000095-50-1			6.6E+04	7.0E+03			1.2E+05				5.1E+02				5.1E+02

Table 3.1c. (continued)

Chemical	CASRN	Ingestion (mg/kg)						Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) †		
		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
DICHLOROBENZENE, 1,3-	000541-73-1															
DICHLOROBENZENE, 1,4-	000106-46-7	2.7E+03	2.7E+01			1.2E+04	1.2E+02			3.3E+01	3.3E+01	3.3E+01			3.3E+01	
DICHLOROBENZIDINE, 3,3'-	000091-94-1	1.4E+02	1.4E+00			7.1E+02	7.1E+00				2.5E+02	2.5E+00				
DICHLORODIFLUOROMETHANE	000075-71-8			1.5E+05	1.6E+04					6.3E+04			2.3E+02			2.3E+02
DICHLOROETHANE, 1,1-	000075-34-3			7.3E+04	7.8E+03					1.4E+05			5.6E+00			5.6E+00
DICHLOROETHANE, 1,2-	000107-06-2	7.0E+02	7.0E+00			3.5E+03	3.5E+01				2.0E+02	2.0E+00		1.7E+02	1.7E+00	
DICHLOROETHYLENE, 1,1-	000075-35-4	1.1E+02	1.1E+00	6.6E+03	7.0E+02	5.4E+02	5.4E+00			1.2E+04	4.5E+00	4.5E-02		4.4E+00	4.4E-02	1.2E+03
DICHLOROETHYLENE, 1,2-, (MIXED ISOMERS)	000540-59-0			6.6E+03	7.0E+02					1.2E+04						4.3E+03
DICHLOROETHYLENE, 1,2-C-	000156-59-2			7.3E+03	7.8E+02					1.4E+04						4.8E+03
DICHLOROETHYLENE, 1,2-T-	000156-60-5			1.5E+04	1.6E+03					2.8E+04						9.5E+03
DICHLOROPHENOL, 2,4-	000120-83-2			2.2E+03	2.3E+02					3.4E+03						1.3E+03
DICHLOROPHENOXY ACETIC ACID, 2,4-	000094-75-7			7.3E+03	7.8E+02					1.4E+04						4.8E+03
DICHLOROPHENOXY BUTYRIC ACID, 4-(2,4-	000094-82-6			5.8E+03	6.3E+02					1.1E+04						3.8E+03
DICHLOROPROPANE, 1,2-	000078-87-5	9.4E+02	9.4E+00			3.5E+03	3.5E+01				4.8E+02	1.5E+01				
DICHLOROPROPANOL, 2,3-	000616-23-9			2.2E+03	2.3E+02					4.1E+03						1.4E+03
DICHLOROPROPENE, 1,3-	000542-75-6	3.5E+02	3.5E+00	2.2E+02	2.3E+01	9.8E+02	9.8E+00			2.3E+02	5.4E+02	5.4E+00	1.7E+03	2.5E+02	2.5E+00	1.0E+02
DICHLOROVOS	00062-73-7	2.2E+02	2.2E+00	3.7E+02	3.9E+01	1.1E+03	1.1E+01			6.9E+02			2.2E+06	3.8E+02	3.8E+00	2.4E+02
DICOFOL	000115-32-2															
DICYCLOPENTADIENE	000077-73-6			2.2E+04	2.3E+03					4.1E+04			3.0E+01			3.0E+01
DIELDRIN	000060-57-1	4.0E+00	4.0E-02	3.7E+01	3.9E+00	1.0E+01	1.0E-01			3.4E+01	2.3E+05	2.3E+03		5.2E+00	5.2E-02	1.8E+01

Table 3.1c. (continued)

Chemical	CASRN	Ingestion (mg/kg)				Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) †	
		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶
DIMETHYLFORMAMIDE	000068-12-2			7.3E+04	7.8E+03			1.4E+05			1.3E+08		4.8E+04
DIMETHYLHYDRAZINE, 1,2-	000540-73-8												
DIMETHYLPHENOL, 2,4-	000105-67-9			1.5E+04	1.6E+03			2.8E+04					9.5E+03
DIMETHYLPHENOL, 2,6-	000576-26-1			4.4E+02	4.7E+01			8.3E+02					2.9E+02
DIMETHYLPHENOL, 3,4-	000095-65-8			7.3E+02	7.8E+01			1.4E+03					4.8E+02
DIMETHYLPHTHALATE	000131-11-3												
DIMETHYLTEREPHTHALATE	000120-61-6			7.3E+04	7.8E+03			1.4E+05					4.8E+04
DINITRO-O-CYCLOHEXYL PHENOL, 4,6-	000131-89-5			1.5E+03	1.6E+02			2.8E+03					9.5E+02
DINITROBENZENE, 1,2-	000528-29-0			2.9E+02	3.1E+01			5.1E+02					1.9E+02
DINITROBENZENE, 1,3-	000099-65-0			7.3E+01	7.8E+00			1.4E+02					4.8E+01
DINITROBENZENE, 1,4-	000100-25-4			2.9E+02	3.1E+01			5.5E+02					1.9E+02
DINITROPHENOL, 2,4-	000051-28-5			1.5E+03	1.6E+02			2.8E+03					9.5E+02
DINITROTOLUENE, 2,4-	000121-14-2	9.4E+01	9.4E-01	1.5E+03	1.6E+02	4.0E+02	4.0E+00	2.3E+03	1.5E+02	1.5E+00		1.5E+02	9.0E+02
DINITROTOLUENE, 2,6-	000606-20-2	9.4E+01	9.4E-01	7.3E+02	7.8E+01	4.0E+02	4.0E+00	1.2E+03	1.5E+02	1.5E+00		1.5E+02	4.5E+02
DINOSEB	000088-85-7			7.3E+02	7.8E+01			1.4E+03					4.8E+02
DIOXANE, 1,4-	000123-91-1	5.8E+03	5.8E+01			2.9E+04	2.9E+02		1.0E+04	1.0E+02			
DIPHENAMID	000957-51-7			2.2E+04	2.3E+03			4.1E+04					1.4E+04
DIPHENYLAMINE	000122-39-4			1.8E+04	2.0E+03			3.4E+04					1.2E+04
DIPHENYLHYDRAZINE, 1,2-	000122-66-7	8.0E+01	8.0E-01			4.0E+02	4.0E+00		4.6E+06	4.6E+04		1.4E+02	
DIQUAT	000085-00-7			1.6E+03	1.7E+02			3.0E+03					1.0E+03

Table 3.1c. (continued)

Chemical	CASRN	Ingestion (mg/kg)				Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) †	
		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶ HI=1
DIRECT BLACK 38	001937-37-7	7.4E+00	7.4E-02			3.7E+01	3.7E-01					1.3E+01	1.3E-01
DIRECT BLUE 6	002602-46-2	7.9E+00	7.9E-02			4.0E+01	4.0E-01					1.4E+01	1.4E-01
DIRECT BROWN 95	016071-86-6	6.9E+00	6.9E-02			3.5E+01	3.5E-01					1.2E+01	1.2E-01
DIRECT SKY BLUE	002610-05-1												
DISULFOTON	000298-04-4			2.9E+01	3.1E+00			5.5E+01					1.9E+01
DIURON	000330-54-1			1.5E+03	1.6E+02			2.8E+03					9.5E+02
DODINE	002439-10-3			2.9E+03	3.1E+02			5.5E+03					1.9E+03
ENDOSULFAN	000115-29-7			4.4E+03	4.7E+02			8.3E+03					2.9E+03
ENDOTHALL	000145-73-3			1.5E+04	1.6E+03			2.8E+04					9.5E+03
ENDRIN	000072-20-8			2.2E+02	2.3E+01			8.3E+00					8.0E+00
EPICHLOROHYDRIN	000106-89-8	6.5E+03	6.5E+01	1.5E+03	1.6E+02	3.2E+04	3.2E+02	2.8E+03	3.2E+03	1.9E+02	9.9E+01	3.2E+03	7.1E+01
EPOXYBUTANE, 1,2-	000106-88-7										8.9E+07		
EPTC	000759-94-4			1.8E+04	2.0E+03			3.4E+04					1.2E+04
ETHEPHON	016672-87-0			3.7E+03	3.9E+02			6.9E+03					2.4E+03
ETHION	000563-12-2			3.7E+02	3.9E+01			6.9E+02					2.4E+02
ETHOXYETHANOL ACETATE, 2-	000111-15-9			2.2E+05	2.3E+04			4.1E+05					1.4E+05
ETHOXYETHANOL, 2-	000110-80-5			2.9E+05	3.1E+04			5.5E+05			8.9E+08		1.9E+05
ETHYL ACETATE	000141-78-6			6.6E+05	7.0E+04			1.2E+06					4.3E+05
ETHYL ACRYLATE	000140-88-5	1.3E+03	1.3E+01			6.7E+03	6.7E+01					2.3E+03	2.3E+01
ETHYL CHLORIDE	000075-00-3										1.6E+02		

Table 3.1c. (continued)

Chemical	CASRN	Ingestion (mg/kg)			Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) †		
		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	HQ=1
ETHYL ETHER	000060-29-7			1.5E+05	1.6E+04			2.8E+05					
ETHYL METHACRYLATE	000097-63-2			6.6E+04	7.0E+03			1.2E+05					9.5E+04
ETHYL-p-NITROPHENYL PHOSPHONATE	002104-64-5			7.3E+00	7.8E-01			1.4E+01					4.3E+04
ETHYLBENZENE	000100-41-4			7.3E+04	7.8E+03			1.3E+05					4.8E+00
ETHYLENE CYANOHYDRIN	000109-78-4			2.2E+05	2.3E+04			4.1E+05					4.8E-01
ETHYLENE DIAMINE	000107-15-3			1.5E+04	1.6E+03			2.8E+04					1.4E+05
ETHYLENE GLYCOL	000107-21-1			1.5E+06	1.6E+05			2.8E+06					9.5E+03
ETHYLENE GLYCOL MONOBUTYL ETHER	000111-76-2												9.5E+05
ETHYLENE OXIDE	000075-21-8	6.3E+01	6.3E-01			3.2E+02	3.2E+00		4.9E+01	4.9E-01	3.4E+01	3.4E-01	
ETHYLENE THIOUREA	000096-45-7	5.8E+02	5.8E+00	5.8E+01	6.3E+00	2.9E+03	2.9E+01	1.1E+02			1.0E+03	1.0E+01	3.8E+01
ETHYLPHTHALYL ETHYL GLYCOLATE	000084-72-0			2.2E+06	2.3E+05			4.1E+06					1.4E+06
EXPRESS	101200-48-0			5.8E+03	6.3E+02			1.1E+04					3.8E+03
FENAMIPHOS	022224-92-6			1.8E+02	2.0E+01			3.4E+02					1.2E+02
FENPROFATHRIN	039515-41-8			1.8E+04	2.0E+03			3.4E+04					1.2E+04
FLUOMETURON	002164-17-2			9.5E+03	1.0E+03			1.8E+04					6.2E+03
FLUORANTHENE	000206-44-0			2.9E+04	3.1E+03			1.7E+04					1.1E+04
FLUORENE	000086-73-7			2.9E+04	3.1E+03			5.5E+04					1.9E+04
FLUORIDE	007782-41-4			4.4E+04	4.7E+03			8.0E+05					4.2E+04
FLURIDONE	059756-60-4			5.8E+04	6.3E+03			1.1E+05					3.8E+04
FLURPRIMIDOL	056425-91-3			1.5E+04	1.6E+03			2.8E+04					9.5E+03

Table 3.1c. (continued)

Chemical	CASRN	Ingestion (mg/kg)				Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) †		
		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
FLUTOLANIL	066332-96-5			4.4E+04	4.7E+03			8.3E+04						2.9E+04
FLUVALINATE	069409-94-5			7.3E+03	7.8E+02			1.4E+04						4.8E+03
FOLPET	000133-07-3	1.8E+04	1.8E+02	7.3E+04	7.8E+03	9.2E+04	9.2E+02	1.4E+05	3.2E+04	3.2E+02	4.8E+04			
FOMESAFEN	072178-02-0	3.4E+02	3.4E+00			1.7E+03	1.7E+01		5.9E+02	5.9E+00				
FONOFOS	000944-22-9			1.5E+03	1.6E+02			2.8E+03						9.5E+02
FORMALDEHYDE	000050-00-0			1.5E+05	1.6E+04			2.8E+05	8.1E+07	8.1E+05				9.5E+04
FORMIC ACID	000064-18-6			1.5E+06	1.6E+05			2.8E+06						9.5E+05
FOSETYL-AL	039148-24-8			2.2E+06	2.3E+05			4.1E+06						1.4E+06
FURAN	000110-00-9			7.3E+02	7.8E+01			1.4E+03						4.8E+02
FURAZOLIDONE	000067-45-8	1.7E+01	1.7E-01			8.5E+01	8.5E-01					2.9E+01	2.9E-01	
FURFURAL	000098-01-1			2.2E+03	2.3E+02			4.1E+03			2.2E+08			1.4E+03
FURIUM	000531-82-8	1.3E+00	1.3E-02			6.4E+00	6.4E-02		2.2E+00	2.2E-02				
FURMECYCLOX	060568-05-0	2.1E+03	2.1E+01			1.1E+04	1.1E+02		3.7E+03	3.7E+01				
GLUFOSINATE-AMMONIUM	077182-82-2			2.9E+02	3.1E+01			5.5E+02						1.9E+02
GLYCIDYL	000765-34-4			2.9E+02	3.1E+01			5.5E+02			4.5E+06			1.9E+02
GLYPHOSATE	001071-83-6			7.3E+04	7.8E+03			1.4E+05						4.8E+04
GOAL	042874-03-3			2.2E+03	2.3E+02			4.1E+03						1.4E+03
HALOXYFOP-METHYL	069806-40-2			3.7E+01	3.9E+00			6.9E+01						2.4E+01
HARMONY	079277-27-3			9.5E+03	1.0E+03			1.8E+04						6.2E+03
HEPTACHLOR	000076-44-8	1.4E+01	1.4E-01	3.7E+02	3.9E+01	5.1E+01	5.1E-01	5.0E+02	8.1E+05	8.1E+03		2.2E+01	2.2E-01	2.1E+02

Table 3.1c. (continued)

Chemical	CASRN	Ingestion (mg/kg)				Dermal (mg/kg)				Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) †		
		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
HEPTACHLOR EPOXIDE	001024-57-3	7.0E+00	7.0E-02	9.5E+00	1.0E+00	2.5E+01	2.5E-01	1.3E+01		4.0E+05	4.0E+03		1.1E+01	1.1E-01	5.5E+00
HEPTANE, N-	000142-82-5														
HEXABROMOBENZENE	000087-82-1			1.5E+03	1.6E+02			2.8E+03							9.5E+02
HEXACHLOROBENZENE	000118-74-1	4.0E+01	4.0E-01	5.8E+02	6.3E+01	2.0E+02	2.0E+00	1.1E+03		2.3E+06	2.3E+04		7.0E+01	7.0E-01	3.8E+02
HEXACHLOROBUTADIENE	000087-68-3	8.2E+02	8.2E+00	1.5E+02	1.6E+01	4.1E+03	4.1E+01	2.8E+02		4.7E+07	4.7E+05		1.4E+03	1.4E+01	9.5E+01
HEXACHLOROCYCLOHEXANE, ALPHA-	000319-84-6	1.0E+01	1.0E-01			4.9E+01	4.9E-01			5.8E+05	5.8E+03		1.7E+01	1.7E-01	
HEXACHLOROCYCLOHEXANE, BETA-	000319-85-7	3.5E+01	3.5E-01			1.6E+02	1.6E+00			2.0E+06	2.0E+04		6.0E+01	6.0E-01	
HEXACHLOROCYCLOHEXANE, DELTA-	000319-86-8														
HEXACHLOROCYCLOHEXANE, EPSILON	006108-10-7														
HEXACHLOROCYCLOHEXANE, GAMMA-	000058-89-9	4.9E+01	4.9E-01	2.2E+02	2.3E+01	2.4E+02	2.4E+00	4.0E+02					8.5E+01	8.5E-01	1.4E+02
HEXACHLOROCYCLOHEXANE, TECHNICAL	000608-73-1	3.5E+01	3.5E-01			1.8E+02	1.8E+00			2.0E+06	2.0E+04		6.2E+01	6.2E-01	
HEXACHLOROCYCLOPENTADIENE	000077-47-4			5.1E+03	5.5E+02			9.6E+03				3.1E+05			3.3E+03
HEXACHLORODIBENZO-p-DIOXIN, MIXTURE	019408-74-3	1.0E-02	1.0E-04			5.2E-02	5.2E-04						1.8E-02	1.8E-04	
HEXACHLOROETHANE	000067-72-1	4.6E+03	4.6E+01	7.3E+02	7.8E+01	2.3E+04	2.3E+02	1.4E+03		2.6E+08	2.6E+06		8.0E+03	8.0E+01	4.8E+02
HEXACHLOROPHENE	000070-30-4			2.2E+02	2.3E+01			4.1E+02							1.4E+02
HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE (RDX)	000121-82-4	5.8E+02	5.8E+00	2.2E+03	2.3E+02	2.9E+03	2.9E+01	4.1E+03					1.0E+03	1.0E+01	1.4E+03
HEXAMETHYLENE DIISOCYANATE, 1,6-	000822-06-0											4.5E+04			
HEXANE, N-	000110-54-3			4.4E+04	4.7E+03			6.6E+04							9.1E+01
HEXAZINONE	051235-04-2			2.4E+04	2.6E+03			4.5E+04							1.6E+04
HYDRAZINE	000302-01-2	2.1E+01	2.1E-01			1.1E+02	1.1E+00			2.1E+05	2.1E+03		3.7E+01	3.7E-01	

Table 3.1c. (continued)

Chemical	CASRN	Ingestion (mg/kg)				Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) †	
		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶ HI=1
HYDRAZINE SULFATE	010034-93-2	2.1E+01	2.1E-01			1.1E+02	1.1E+00		2.1E+05	2.1E+03		3.7E+01	3.7E-01
HYDROGEN CHLORIDE	007647-01-0										3.1E+07		
HYDROGEN CYANIDE	000074-90-8			1.5E+04	1.6E+03			4.7E+04			1.3E+07		1.1E+04
HYDROGEN SULFIDE	007783-06-4			2.2E+03	2.3E+02			4.1E+04			4.0E+06		2.1E+03
HYDROQUINONE	000123-31-9			2.9E+04	3.1E+03			5.5E+04					1.9E+04
IMAZALIL	035554-44-0			9.5E+03	1.0E+03			1.8E+04					6.2E+03
IMAZAQUIN	081335-37-7			1.8E+05	2.0E+04			3.4E+05					1.2E+05
INDENO[1,2,3-cd]PYRENE	000193-39-5	8.8E+01	8.8E-01			1.4E+02	1.4E+00					8.6E+01	
IPRODIONE	036734-19-7			2.9E+04	3.1E+03			5.5E+04					1.9E+04
ISOBUTYL ALCOHOL	000078-83-1			2.2E+05	2.3E+04			4.1E+05					1.4E+05
ISOPHORONE	000078-59-1	6.7E+04	6.7E+02	1.5E+05	1.6E+04	3.4E+05	3.4E+03	2.8E+05				1.2E+05	9.5E+04
ISOPROPALIN	033820-53-0			1.1E+04	1.2E+03			2.1E+04					7.2E+03
ISOPROPYL METHYL PHOSPHONIC ACID	001832-54-8			7.3E+04	7.8E+03			1.4E+05					4.8E+04
ISOXABEN	082558-50-7			3.7E+04	3.9E+03			6.9E+04					2.4E+04
KARATE	091465-08-6			3.7E+03	3.9E+02			6.9E+03					2.4E+03
KERB	023950-58-5			5.5E+04	5.9E+03			1.0E+05					3.6E+04
LACTOFEN	077501-63-4			1.5E+03	1.6E+02			2.8E+03					9.5E+02
LEAD ALKYLs	NA												
LEAD AND COMPOUNDS	007439-92-1												
LINURON	000330-55-2			1.5E+03	1.6E+02			2.8E+03					9.5E+02

Table 3.1c. (continued)

Chemical	CASRN	Ingestion (mg/kg)				Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) †		
		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
LONDAX	083055-99-6			1.5E+05	1.6E+04			2.8E+05						9.5E+04
MALATHION	000121-75-5			1.5E+04	1.6E+03			2.8E+04						9.5E+03
MALEIC ANHYDRIDE	000108-31-6			7.3E+04	7.8E+03			1.4E+05						4.8E+04
MALEIC HYDRAZIDE	000123-33-1			3.7E+05	3.9E+04			6.9E+05						2.4E+05
MALONONITRILE	000109-77-3			1.5E+01	1.6E+00			2.8E+01						9.5E+00
MANCOZEB	008018-01-7			2.2E+04	2.3E+03			4.1E+04						1.4E+04
MANEB	012427-38-2			3.7E+03	3.9E+02			6.9E+03						2.4E+03
MANGANESE (Diet)	007439-96-5			1.0E+05	1.1E+04			7.7E+04			2.2E+05			3.7E+04
MCPA	000094-74-6			3.7E+02	3.9E+01			6.9E+02						2.4E+02
MCPB	000094-81-5			7.3E+03	7.8E+02			1.4E+04						4.8E+03
MCPB	000093-65-2			7.3E+02	7.8E+01			1.4E+03						4.8E+02
MEPHOSFOLAN	000950-10-7			6.6E+01	7.0E+00			1.2E+02						4.3E+01
MEPIQUAT CHLORIDE	024307-26-4			2.2E+04	2.3E+03			4.1E+04						1.4E+04
MERCURY, INORGANIC	007439-97-6			2.2E+02	2.3E+01			2.9E+02			1.3E+06			1.2E+02
MERPHOS	000150-50-5			2.2E+01	2.3E+00			4.1E+01						1.4E+01
MERPHOS OXIDE	000078-48-8			2.2E+01	2.3E+00			4.1E+01						1.4E+01
METALAXYL	057837-19-1			4.4E+04	4.7E+03			8.3E+04						2.9E+04
METHACRYLONITRILE	000126-98-7			7.3E+01	7.8E+00			1.4E+02			8.3E+01			3.0E+01
METHAMIDOPHOS	010265-92-6			3.7E+01	3.9E+00			6.9E+01						2.4E+01
METHANOL	000067-56-1			3.7E+05	3.9E+04			6.9E+05						2.4E+05

Table 3.1c. (continued)

Chemical	CASRN	Ingestion (mg/kg)			Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) †		
		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶ HI=1
METHADATHION	000950-37-8			7.3E+02	7.8E+01			1.4E+03					4.8E+02
METHOMYL	016752-77-5			1.8E+04	2.0E+03			3.4E+04					1.2E+04
METHOXY-5-NITROANILINE, 2-	000099-59-2	1.4E+03	1.4E+01			7.0E+03	7.0E+01					2.4E+03	2.4E+01
METHOXYCHLOR	000072-43-5			3.7E+03	3.9E+02			6.9E+03					2.4E+03
METHOXYETHANOL ACETATE, 2-	000110-49-6			1.5E+03	1.6E+02			2.8E+03					9.5E+02
METHOXYETHANOL, 2-	000109-86-4			7.3E+02	7.8E+01			1.4E+03			8.9E+07		4.8E+02
METHYL ACETATE	000079-20-9			7.3E+05	7.8E+04			1.4E+06					4.8E+05
METHYL ACRYLATE	000096-33-3			2.2E+04	2.3E+03			4.1E+04					1.4E+04
METHYL ETHYL KETONE	000078-93-3			4.4E+05	4.7E+04			6.6E+05			9.3E+03		9.3E+03
METHYL ISOBUTYL KETONE	000108-10-1			5.8E+04	6.3E+03			1.1E+05			7.0E+02		7.0E+02
METHYL MERCURY	022967-92-6			2.2E+02	2.3E+01			3.7E+02					1.4E+02
METHYL METHACRYLATE	000080-62-6			5.8E+04	6.3E+03			1.1E+05					3.8E+04
METHYL PARATHION	000298-00-0			1.8E+02	2.0E+01			3.4E+02					1.2E+02
METHYL STYRENE (MIXED ISOMERS)	025013-15-4			4.4E+03	4.7E+02			8.3E+03			1.8E+08		2.9E+03
METHYL TERT-BUTYL ETHER (MTBE)	001634-04-4										1.3E+10		
METHYL-5-NITROANILINE, 2-	000099-55-8	1.9E+03	1.9E+01			9.7E+03	9.7E+01					3.4E+03	3.4E+01
METHYLANILINE HYDROCHLORIDE, 2-	000636-21-5	3.5E+02	3.5E+00			1.8E+03	1.8E+01					6.2E+02	6.2E+00
METHYLCYCLOHEXANE	000108-87-2										1.3E+10		
METHYLENE CHLORIDE	000075-09-2	8.5E+03	8.5E+01	4.4E+04	4.7E+03	4.1E+04	4.1E+02	7.9E+04			1.0E+03	1.0E+03	1.0E+03
METHYLENE-BIS(2-CHLOROANILINE), 4,4'-	000101-14-4	4.9E+02	4.9E+00	5.1E+02	5.5E+01	2.5E+03	2.5E+01	9.6E+02	2.8E+07	2.8E+05		8.6E+02	8.6E+00

Chemical	CASRN	Ingestion (mg/kg)				Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) †		
		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
METHYLENE-BIS(N,N-DIMETHYL) ANILINE, 4,4'-	000101-61-1	1.4E+03	1.4E+01			7.0E+03	7.0E+01					2.4E+03	2.4E+01	
METHYLENEBISBENZENAMINE, 4,4'-	000101-77-9													
METHYLENEDIPHENYL ISOCYANATE, 4,4'-	000101-68-8									8.9E+04				
METHYLSTYRENE, ALPHA-	000098-83-9			5.1E+04	5.5E+03			9.6E+04						3.3E+04
METHYLTRIETHYL LEAD	001762-28-3													
METOLACHLOR	051218-45-2			1.1E+05	1.2E+04			2.1E+05						7.2E+04
METRIBUZIN	021087-64-9			1.8E+04	2.0E+03			3.4E+04						1.2E+04
MIREX	002385-85-5			1.5E+02	1.6E+01			2.8E+02						9.5E+01
MOLINATE	002212-67-1			1.5E+03	1.6E+02			2.8E+03						9.5E+02
MOLYBDENUM	007439-98-7			3.7E+03	3.9E+02			2.6E+04						3.2E+03
MONOCHLORAMINE	010599-90-3			7.3E+04	7.8E+03			1.4E+05						4.8E+04
MONOCHLOROBUTANES	025154-42-1			2.9E+05	3.1E+04			5.5E+05						1.9E+05
NALED	000300-76-5			1.5E+03	1.6E+02			2.8E+03						9.5E+02
NAPHTHALENE	000091-20-3													
NAPROPAMIDE	015299-99-7			7.3E+04	7.8E+03			1.4E+05						4.8E+04
NIAGARA BLUE 4B	002429-74-5													
NICKEL CARBONYL	013463-39-3													
NICKEL REFINERY DUST	NA										4.3E+06	4.3E+04		
NICKEL SOLUBLE SALTS	007440-02-0			1.5E+04	1.6E+03			7.4E+04						1.2E+04
NICKEL SUBSULFIDE	012035-72-2										2.1E+06	2.1E+04		

Table 3.1c. (continued)

Chemical	CASRN	Ingestion (mg/kg)				Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) †		
		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
NITRAPYRIN	001929-82-4													
NITRATE	014797-55-8			1.2E+06	1.3E+05			2.2E+07						1.1E+06
NITRIC OXIDE	010102-43-9													
NITRITE	014797-65-0			7.3E+04	7.8E+03			1.4E+06						6.9E+04
NITROANILINE, 2-	000088-74-4										1.5E+01			
NITROBENZENE	000098-95-3			3.7E+02	3.9E+01			6.7E+02			8.6E+00			8.3E+00
NITROFURANTOIN	000067-20-9			5.1E+04	5.5E+03			9.6E+04						3.3E+04
NITROFURAZONE	000059-87-0	4.3E+01	4.3E-01			2.1E+02	2.1E+00					7.4E+01	7.4E-01	
NITROGEN DIOXIDE	010102-44-0													
NITROGUANIDINE	000556-88-7			7.3E+04	7.8E+03			1.4E+05						4.8E+04
NITROPROPANE, 2-	000079-46-9	6.7E+00	6.7E-02			3.4E+01	3.4E-01		8.4E+00	8.4E-02	1.9E+03	4.9E+00	4.9E-02	
NITROSO-DI-N-BUTYLAMINE, N-	000924-16-3	1.2E+01	1.2E-01			6.0E+01	6.0E-01		6.1E+01	6.1E-01		1.5E+01	1.5E-01	
NITROSO-DI-N-PROPYLAMINE, N-	000621-64-7	9.1E+00	9.1E-02			1.1E+01	1.1E-01					7.8E+00	7.8E-02	
NITROSO-N-ETHYLUREA, N-	000759-73-9	4.6E-01	4.6E-03			2.3E+00	2.3E-02					8.0E-01	8.0E-03	
NITROSO-N-METHYLUREA, N-	000684-93-5													
NITROSODIETHANOLAMINE, N-	001116-54-7	2.3E+01	2.3E-01			1.1E+02	1.1E+00					4.0E+01	4.0E-01	
NITROSODIETHYLAMINE, N-	000055-18-5	4.3E-01	4.3E-03			2.1E+00	2.1E-02		2.4E+04	2.4E+02		7.4E-01	7.4E-03	
NITROSODIMETHYLAMINE, N-	000062-75-9	1.3E+00	1.3E-02			6.3E+00	6.3E-02		7.2E+04	7.2E+02		2.2E+00	2.2E-02	
NITROSODIPHENYLAMINE, N-	000086-30-6	1.3E+04	1.3E+02			1.6E+04	1.6E+02					1.1E+04	1.1E+02	
NITROSOMETHYLETHYLAMINE, N-	010595-95-6	2.9E+00	2.9E-02			1.5E+01	1.5E-01					5.1E+00	5.1E-02	

Table 3.1c. (continued)

Chemical	CASRN	Ingestion (mg/kg)				Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) †		
		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
NITROSOMETHYL VINYLAMINE, N-	004549-40-0													
NITROSOPYRROLIDINE, N-	000930-55-2	3.0E+01	3.0E-01			1.5E+02	1.5E+00		1.7E+06	1.7E+04		5.3E+01	5.3E-01	
NITROTOLUENE, m-	000099-08-1			7.3E+03	7.8E+02			1.4E+04						4.8E+03
NITROTOLUENE, o-	000088-72-2			7.3E+03	7.8E+02			1.4E+04						4.8E+03
NITROTOLUENE, p-	000099-99-0			7.3E+03	7.8E+02			1.4E+04						4.8E+03
NORFLURAZON	027314-13-2			2.9E+04	3.1E+03			5.5E+04						1.9E+04
NUSTAR	085509-19-9			5.1E+02	5.5E+01			9.6E+02						3.3E+02
OCTABROMODIPHENYL ETHER	032536-52-0			2.2E+03	2.3E+02			4.1E+03						1.4E+03
OCTAHYDRO-1,3,5,7-TETRA-NITRO-1,3,5,7-TETRA (HNX)	002691-41-0			3.7E+04	3.9E+03			6.9E+04						2.4E+04
OCTAMETHYLPYROPHOSPHORAMIDE	000152-16-9			1.5E+03	1.6E+02			2.8E+03						9.5E+02
OCTYL PHTHALATE, DI-N-	000117-84-0			1.5E+04	1.6E+03			2.5E+04						9.2E+03
ORYZALIN	019044-88-3			3.7E+04	3.9E+03			6.9E+04						2.4E+04
OXADIAZON	019666-30-9			3.7E+03	3.9E+02			6.9E+03						2.4E+03
OXAMYL	023135-22-0			1.8E+04	2.0E+03			3.4E+04						1.2E+04
PACLOBUTRAZOL	076738-62-0			9.5E+03	1.0E+03			1.8E+04						6.2E+03
PARAQUAT	001910-42-5			3.3E+03	3.5E+02			6.2E+03						2.1E+03
PARATHION	000056-38-2			4.4E+03	4.7E+02			8.3E+03						2.9E+03
PEBULATE	001114-71-2			3.7E+04	3.9E+03			6.9E+04						2.4E+04
PENDIMETHALIN	040487-42-1			2.9E+04	3.1E+03			5.5E+04						1.9E+04

Table 3.1c. (continued)

Chemical	CASRN	Ingestion (mg/kg)				Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) †	
		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶
PENTABROMODIPHENYL ETHER	032334-81-9			1.5E+03	1.6E+02			2.8E+03					9.5E+02
PENTACHLOROBENZENE	000608-93-5			5.8E+02	6.3E+01			1.1E+03					3.8E+02
PENTACHLOROCYCLOPENTADIENE	025329-35-5												
PENTACHLORONITROBENZENE	000082-68-8	2.5E+02	2.5E+00	2.2E+03	2.3E+02	1.2E+03	1.2E+01	4.1E+03	4.3E+02	4.3E+00			1.4E+03
PENTACHLOROPHENOL	000087-86-5	5.3E+02	5.3E+00	2.2E+04	2.3E+03	2.7E+03	2.7E+01	4.1E+04	9.3E+02	9.3E+00			1.4E+04
PERMETHRIN	052645-53-1			3.7E+04	3.9E+03			6.9E+04					2.4E+04
PHENANTHRENE	000085-01-8												
PHENMEDIPHAM	013684-63-4			1.8E+05	2.0E+04			3.4E+05					1.2E+05
PHENOL	000108-95-2			4.4E+05	4.7E+04			7.4E+05					2.8E+05
PHENYLENEDIAMINE, m-	000108-45-2			4.4E+03	4.7E+02			8.3E+03					2.9E+03
PHENYLENEDIAMINE, o-	000095-54-5	1.4E+03	1.4E+01			6.8E+03	6.8E+01		2.4E+03	2.4E+01			
PHENYLENEDIAMINE, p-	000106-50-3			1.4E+05	1.5E+04			2.6E+05					9.1E+04
PHENYLMERCURIC ACETATE	000062-38-4			5.8E+01	6.3E+00			1.1E+02					3.8E+01
PHENYLPHENOL, 2-	000090-43-7	3.3E+04	3.3E+02			1.7E+05	1.7E+03		5.7E+04	5.7E+02			
PHOSPHATE	000298-02-2			1.5E+02	1.6E+01			2.8E+02					9.5E+01
PHOSMET	000732-11-6			1.5E+04	1.6E+03			2.8E+04					9.5E+03
PHOSPHINE	007803-51-2			2.2E+02	2.3E+01			4.1E+02			1.3E+05		1.4E+02
PHTHALIC ACID, p-	000100-21-0			7.3E+05	7.8E+04			1.4E+06					4.8E+05
PHTHALIC ANHYDRIDE	000085-44-9			1.5E+06	1.6E+05			2.8E+06			5.4E+08		9.5E+05
PICLORAM	001918-02-1			5.1E+04	5.5E+03			9.6E+04					3.3E+04

Table 3.1c. (continued)

Chemical	CASRN	Ingestion (mg/kg)				Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) †		
		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
PRIMPHOS-METHYL	029232-93-7			7.3E+03	7.8E+02			1.4E+04						4.8E+03
POLYBROMINATED BIPHENYLS	NA	7.2E+00	7.2E-02	5.1E+00	5.5E-01	3.4E+01	3.4E-01	9.0E+00				1.2E+01	1.2E-01	3.3E+00
POLYCHLORINATED BIPHENYLS	001336-36-3	8.3E+00	8.3E-02			3.8E+01	3.8E-01					1.4E+01	1.4E-01	
POTASSIUM CYANIDE	000151-50-8			3.7E+04	3.9E+03			6.9E+04						2.4E+04
POTASSIUM SILVER CYANIDE	000506-61-6			1.5E+05	1.6E+04			2.8E+06						1.4E+05
PROCHLORAZ	067747-09-5	4.3E+02	4.3E+00	6.6E+03	7.0E+02	2.1E+03	2.1E-01	1.2E+04				7.4E+02	7.4E+00	4.3E+03
PROFLURALIN	026399-36-0			4.4E+03	4.7E+02			8.3E+03						2.9E+03
PROMETON	001610-18-0			1.1E+04	1.2E+03			2.1E+04						7.2E+03
PROMETRYN	007287-19-6			2.9E+03	3.1E+02			5.5E+03						1.9E+03
PROPACHLOR	001918-16-7			9.5E+03	1.0E+03			1.8E+04						6.2E+03
PROPANIL	000709-98-8			3.7E+03	3.9E+02			6.9E+03						2.4E+03
PROPARGITE	002312-35-8			1.5E+04	1.6E+03			2.8E+04						9.5E+03
PROPARGYL ALCOHOL	000107-19-7			1.5E+03	1.6E+02			2.8E+03						9.5E+02
PROPABINE	000139-40-2			1.5E+04	1.6E+03			2.8E+04						9.5E+03
PROPHAM	000122-42-9			1.5E+04	1.6E+03			2.8E+04						9.5E+03
PROPICONAZOLE	060207-90-1			9.5E+03	1.0E+03			1.8E+04						6.2E+03
PROPYLENE GLYCOL	000057-55-6			1.5E+07	1.6E+06			2.8E+07						9.5E+06
PROPYLENE GLYCOL MONOETHYL ETHER	001569-02-4			5.1E+05	5.5E+04			9.6E+05						3.3E+05
PROPYLENE GLYCOL MONOMETHYL ETHER	000107-98-2			5.1E+05	5.5E+04			9.6E+05				8.9E+09		3.3E+05
PROPYLENE OXIDE	000075-56-9	2.7E+02	2.7E+00			1.3E+03	1.3E-01		4.2E+03	4.2E+01	2.0E+03	4.2E+02	4.2E+00	

Table 3.1c. (continued)

Chemical	CASRN	Ingestion (mg/kg)				Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) †		
		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
PURSUIT	081335-77-5			1.8E+05	2.0E+04			3.4E+05						1.2E+05
PYDRIN	051630-58-1			1.8E+04	2.0E+03			3.4E+04						1.2E+04
PYRENE	000129-00-0			2.2E+04	2.3E+03			1.3E+04						8.1E+03
PYRIDINE	000110-86-1			7.3E+02	7.8E+01			1.4E+03						4.8E+02
QUINALPHOS	013593-03-8			3.7E+02	3.9E+01			6.9E+02						2.4E+02
QUINOLINE	000091-22-5	5.3E+00	5.3E-02			2.7E+01	2.7E-01					9.3E+00	9.3E-02	
SYSTHANE	088671-89-0			1.8E+04	2.0E+03			3.4E+04						1.2E+04
REFRACTORY CERAMIC FIBERS	NA													
RESMETHRIN	010453-86-8			2.2E+04	2.3E+03			4.1E+04						1.4E+04
RONNEL	000299-84-3			3.7E+04	3.9E+03			6.9E+04						2.4E+04
ROTENONE	000083-79-4			2.9E+03	3.1E+02			5.5E+03						1.9E+03
SAVEY	078587-05-0			1.8E+04	2.0E+03			3.4E+04						1.2E+04
SELENIOUS ACID	007783-00-8			3.7E+03	3.9E+02			6.0E+03						2.3E+03
SELENIUM	007782-49-2			3.7E+03	3.9E+02			3.0E+04						3.3E+03
SELENIUM SULFIDE	007446-34-6													
SELENOUREA	000630-10-4			3.7E+03	3.9E+02			6.9E+03						2.4E+03
SETHOXYDIM	074051-80-2			6.6E+04	7.0E+03			1.2E+05						4.3E+04
SILVER	007440-22-4			3.7E+03	3.9E+02			1.2E+04						2.8E+03
SILVER CYANIDE	000506-64-9			7.3E+04	7.8E+03			1.4E+05						4.8E+04
SIMAZINE	000122-34-9	5.3E+02	5.3E+00	3.7E+03	3.9E+02	2.7E+03	2.7E+01	6.9E+03				9.3E+02	9.3E+00	2.4E+03

Table 3.1c. (continued)

Chemical	CASRN	Ingestion (mg/kg)				Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) †		
		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
SODIUM ACIFLUOREN	062476-59-9			9.5E+03	1.0E+03			1.8E+04						6.2E+03
SODIUM AZIDE	026628-22-8			2.9E+03	3.1E+02			5.5E+03						1.9E+03
SODIUM CYANIDE	000143-33-9			2.9E+04	3.1E+03			5.5E+05						2.8E+04
SODIUM DIETHYLDITHIOCARBAMATE	000148-18-5	2.4E+02	2.4E+00	2.2E+04	2.3E+03	1.2E+03	1.2E+01	4.1E+04	4.1E+02	4.1E+00				1.4E+04
SODIUM FLUOROACETATE	000062-74-8			1.5E+01	1.6E+00			2.8E+01						9.5E+00
SODIUM META VANADATE	013718-26-8			7.3E+02	7.8E+01			1.4E+03						4.8E+02
STROFOS (TETRACHLOROVNPHOS)	000961-11-5	2.7E+03	2.7E+01	2.2E+04	2.3E+03	1.3E+04	1.3E+02	4.1E+04	4.6E+03	4.6E+01				1.4E+04
STRONTIUM, STABLE	007440-24-6			4.4E+05	4.7E+04			8.3E+06						4.2E+05
STRYCHNINE	000057-24-9			2.2E+02	2.3E+01			4.1E+02						1.4E+02
STYRENE	000100-42-5			1.5E+05	1.6E+04			2.8E+05			6.7E+02			6.7E+02
TCDD, 2,3,7,8-	001746-01-6	4.3E-04	4.3E-06			2.1E-03	2.1E-05		2.4E+01	2.4E-01		7.4E-04	7.4E-06	
TCMTB	021564-17-0			2.2E+04	2.3E+03			4.1E+04						1.4E+04
TEBUTHIURON	034014-18-1			5.1E+04	5.5E+03			9.6E+04						3.3E+04
TEMEPHOS	003383-96-8			1.5E+04	1.6E+03			2.8E+04						9.5E+03
TERBACIL	005902-51-2			9.5E+03	1.0E+03			1.8E+04						6.2E+03
TERBUFOS	013071-79-9			1.8E+01	2.0E+00			3.4E+01						1.2E+01
TERBUTRYN	000886-50-0			7.3E+02	7.8E+01			1.4E+03						4.8E+02
TETRABUTYL LEAD	001920-90-7													
TETRACHLOROBENZENE, 1,2,4,5-	000095-94-3			2.2E+02	2.3E+01			4.1E+02						1.4E+02
TETRACHLOROETHANE, 1,1,1,2-	000630-20-6	2.5E+03	2.5E+01	2.2E+04	2.3E+03	1.2E+04	1.2E+02	4.1E+04	7.9E+02	1.7E+01		7.9E+02	1.2E+01	7.9E+02

Table 3.1 c. (continued)

Chemical	CASRN	Ingestion (mg/kg)			Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) †		
		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶
TETRACHLOROETHANE, 1,1,2,2-	000079-34-5	3.2E+02	3.2E+00			1.1E+03	1.1E+01		4.0E+02	4.0E+00		2.2E+02	2.2E+00
TETRACHLOROETHYLENE	000127-18-4			7.3E+03	7.8E+02			1.4E+04					4.8E+03
TETRACHLOROPHENOL, 2,3,4,6-	000058-90-2			2.2E+04	2.3E+03			4.1E+04					1.4E+04
TETRACHLOROTOLUENE, p- ALPHA, ALPHA, ALPHA-	005216-25-1	3.2E+00	3.2E-02			1.6E+01	1.6E-01					5.6E+00	5.6E-02
TETRAETHYL DITHIOPYRPHOSPHATE	003689-24-5			3.7E+02	3.9E+01			6.9E+02					2.4E+02
TETRAETHYL LEAD	000078-00-2												
TETRAMETHYL LEAD	000075-74-1												
TETRAPROPYL LEAD	003440-75-3												
THALLIC OXIDE	001314-32-5			5.1E+01	5.5E+00			9.6E+01					3.3E+01
THALLIUM (I) NITRATE	010102-45-1			6.6E+01	7.0E+00			1.2E+02					4.3E+01
THALLIUM (SOLUBLE SALTS)	NA												
THALLIUM ACETATE	000563-68-8			6.6E+01	7.0E+00			1.2E+02					4.3E+01
THALLIUM CARBONATE	006533-73-9			5.8E+01	6.3E+00			1.1E+02					3.8E+01
THALLIUM CHLORIDE	007791-12-0			5.8E+01	6.3E+00			1.1E+02					3.8E+01
THALLIUM SELENITE	012039-52-0												
THALLIUM SULFATE	007446-18-6			5.8E+01	6.3E+00			1.1E+02					3.8E+01
THIOBENCARB	028249-77-6			7.3E+03	7.8E+02			1.4E+04					4.8E+03
THIOFANOX	039196-18-4			2.2E+02	2.3E+01			4.1E+02					1.4E+02
THIOPHANATE-METHYL	023564-05-8			5.8E+04	6.3E+03			1.1E+05					3.8E+04

Table 3.1c. (continued)

Chemical	CASRN	Ingestion (mg/kg)				Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) †	
		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶ HI=1
THIRAM	000137-26-8			3.7E+03	3.9E+02			6.9E+03					2.4E+03
TIN	007440-31-5			4.4E+05	4.7E+04			8.3E+05					2.9E+05
TOLUENE	000108-88-3			1.5E+05	1.6E+04			2.2E+05			2.5E+02		2.5E+02
TOLUENE-2,4-DIAMINE	000095-80-7	2.0E+01	2.0E-01			1.0E+02	1.0E+00					3.5E+01	
TOLUENE-2,5-DIAMINE	000095-70-5			4.4E+05	4.7E+04			8.3E+05					2.9E+05
TOLUENE-2,6-DIAMINE	000823-40-5			1.5E+05	1.6E+04			2.8E+05					9.5E+04
TOLUIDINE, o-(METHYLANILINE, 2-)	000095-53-4	2.7E+02	2.7E+00			1.3E+03	1.3E+01					4.6E+02	4.6E+00
TOLUIDINE, p-	000106-49-0	3.4E+02	3.4E+00			1.7E+03	1.7E+01					5.9E+02	5.9E+00
TOXAPHENE	008001-35-2	5.8E+01	5.8E-01			2.9E+02	2.9E+00		3.3E+06	3.3E+04		1.0E+02	1.0E+00
TRALOMETHRIN	066841-25-6			5.5E+03	5.9E+02			1.0E+04					3.6E+03
TRIALATE	002303-17-5			9.5E+03	1.0E+03			1.8E+04					6.2E+03
TRIASULFURON	082097-50-5			7.3E+03	7.8E+02			1.4E+04					4.8E+03
TRIBROMOBENZENE, 1,2,4-	000615-54-3			3.7E+03	3.9E+02			6.9E+03					2.4E+03
TRIBROMOCHLOROMETHANE	000594-15-0												
TRIBROMODIPHENYL ETHER	049690-94-0												
TRIBUTYL TIN OXIDE	000056-35-9			2.2E+01	2.3E+00			4.1E+01					1.4E+01
TRICHLORO-1,2,2-TRIFLUOROETHANE, 1,1,2-	000076-13-1			2.2E+07	2.3E+06			4.1E+07			2.0E+02		2.0E+02
TRICHLORO-2'-HYDROXYDIPHENYLETHER	003380-34-5												
TRICHLOROANILINE HCL, 2,4,6-	033663-50-2	2.2E+03	2.2E+01			1.1E+04	1.1E+02					3.8E+03	3.8E+01
TRICHLOROANILINE, 2,4,6-	000634-93-5	1.9E+03	1.9E+01			9.5E+03	9.5E+01					3.3E+03	3.3E+01

Table 3.1c. (continued)

Chemical	CASRN	Ingestion (mg/kg)				Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) †	
		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶ HI=1
TRICHLOROBENZENE, 1,2,4-	000120-82-1			7.3E+03	7.8E+02			1.4E+04			8.3E+02		8.3E+02
TRICHLOROETHANE, 1,1,1-	000071-55-6												
TRICHLOROETHANE, 1,1,2-	000079-00-5	1.1E+03	1.1E+01	2.9E+03	3.1E+02	4.6E+03	4.6E+01	4.5E+03	5.3E+02	5.3E+00		4.1E+02	4.1E+00 8.5E+02
TRICHLOROETHYLENE	000079-01-6	5.8E+03	5.8E+01			4.4E+03	4.4E+01		4.4E+02	2.7E+01		4.4E+02	1.5E+01
TRICHLOROFLUOROMETHANE	000075-69-4				2.3E+04			9.5E+04			7.3E+02		7.3E+02
TRICHLOROPHENOL, 2,4,5-	000095-95-4			7.3E+04	7.8E+03			1.4E+05					4.8E+04
TRICHLOROPHENOL, 2,4,6-	000088-06-2	5.8E+03	5.8E+01			2.9E+04	2.9E+02		3.6E+08	3.6E+06		1.0E+04	1.0E+02
TRICHLOROPHENOXY PROPIONIC ACID, 2(2,4,5-	000093-72-1			5.8E+03	6.3E+02			1.1E+04					3.8E+03
TRICHLOROPHENOXYACETIC ACID, 2,4,5-	000093-76-5			7.3E+03	7.8E+02			1.4E+04					4.8E+03
TRICHLOROPROPANE, 1,1,2-	000598-77-6			3.7E+03	3.9E+02			6.9E+03					2.4E+03
TRICHLOROPROPANE, 1,2,3-	000096-18-4	9.1E+00	9.1E-02	4.4E+03	4.7E+02	4.6E+01	4.6E-01	8.3E+03				1.6E+01	1.6E-01 2.9E+03
TRICHLOROPROPENE, 1,2,3-	000096-19-5			3.7E+03	3.9E+02			6.9E+03					2.4E+03
TRICHLOROTOLUENE, 2,3,6-	002077-46-5												
TRICHLOROTOLUENE, ALPHA 2,6-	002014-83-7												
TRIDIPHANE	058138-08-2			2.2E+03	2.3E+02			4.1E+03					1.4E+03
TRIETHYL LEAD	005224-23-7												
TRIETHYLAMINE	000121-44-8										1.2E+03		
TRIFLURALIN	001582-09-8	8.3E+03	8.3E+01	5.5E+03	5.9E+02	4.2E+04	4.2E+02	1.0E+04				1.4E+04	1.4E+02 3.6E+03
TRIMETHYL LEAD	007442-13-9												
TRIMETHYL PHOSPHATE	000512-56-1	1.7E+03	1.7E+01			8.7E+03	8.7E+01					3.0E+03	3.0E+01

Table 3.1c. (continued)

Chemical	CASRN	Ingestion (mg/kg)				Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) †		
		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
TRIMETHYLETHYL LEAD	001762-26-1													
TRINITROBENZENE, 1,3,5-	000099-35-4			3.7E+01	3.9E+00			6.9E+01						2.4E+01
TRINITROPHENYLMETHYLNITRAMINE	000479-45-8			7.3E+03	7.8E+02			1.4E+04						4.8E+03
TRINITROTOLUENE, 2,4,6-	000118-96-7	2.1E+03	2.1E+01	3.7E+02	3.9E+01	1.1E+04	1.1E+02	6.9E+02	3.7E+03	3.7E+01				2.4E+02
TRIPROPYL LEAD	006618-03-7													
URANIUM (SOLUBLE SALTS)	NA			2.2E+03	2.3E+02			3.5E+04						2.1E+03
VANADIUM PENTOXIDE	001314-62-1			6.6E+03	7.0E+02			1.2E+05						6.2E+03
VANADIUM SULFATE	036907-42-3			1.5E+04	1.6E+03			2.8E+05						1.4E+04
VANADIUM, METALLIC	007440-62-2			5.1E+03	5.5E+02			9.6E+02						8.1E+02
VANADYL SULFATE	027774-13-6			1.5E+04	1.6E+03			2.8E+04						9.5E+03
VERNOLATE	001929-77-7			7.3E+02	7.8E+01			1.4E+03						4.8E+02
VINCLOZOLIN	050471-44-8			1.8E+04	2.0E+03			3.4E+04						1.2E+04
VINYL ACETATE	000108-05-4			7.3E+05	7.8E+04			9.0E+05			7.8E+02			7.8E+02
VINYL BROMIDE	000593-60-2								1.1E+02	1.1E+00	4.4E+01			
VINYL CHLORIDE	000075-01-4	3.4E+01	3.4E-01			1.7E+02	1.7E+00		2.5E-02	2.5E-04		2.4E-02	2.4E-04	
WARFARIN	000081-81-2			2.2E+02	2.3E+01			4.1E+02						1.4E+02
WHITE PHOSPHORUS	007723-14-0			1.5E+01	1.6E+00			2.8E+02						1.4E+01
XYLENE, MIXTURE	001330-20-7			1.5E+06	1.6E+05			2.5E+06						9.3E+05
XYLENE, m-	000108-38-3			1.5E+06	1.6E+05			2.8E+06						9.5E+05
XYLENE, o-	000095-47-6			1.5E+06	1.6E+05			2.8E+06						9.5E+05

Table 3.1c. (continued)

Chemical	CASRN	Ingestion (mg/kg)				Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) †	
		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶ HI=1
XYLENE, p-	000106-42-3												
ZINC (METALLIC)	007440-66-6			2.2E+05	2.3E+04			8.3E+05					1.7E+05
ZINC CYANIDE	000557-21-1			3.7E+04	3.9E+03			6.9E+05					3.5E+04
ZINC PHOSPHIDE	001314-84-7			2.2E+02	2.3E+01			4.1E+03					2.1E+02
ZINEB	012122-67-7			3.7E+04	3.9E+03			6.9E+04					2.4E+04

Notes:

† If slope factors and/or reference doses were available for only one pathway (i.e., ingestion, dermal, OR inhalation), the total for ingestion plus dermal plus inhalation was not calculated.

- (1) Same oral slope factor as used for polychlorinated biphenyls.
- (2) PRG calculated considering *New Interim Region IV Guidance* from EPA (received February 11, 1992). The slope factors for chemicals so marked indicate that a toxicity equivalency factor (TEF) method was used for carcinogenic PAHs based on each compound's relative potency to the potency of benzo(a)pyrene. The following TEFs were used to convert each PAH slope factor to an equivalent slope factor of benzo(a)pyrene [that has a new cancer slope factor of 7.3 (mg/kg/day)¹ identified by EPAs CRAVE workgroup]: (1) benzo(a)anthracene; TEF = 0.1, (3) benzo(b)fluoranthene; TEF = 0.1, (4) benzo(k)fluoranthene; TEF = 0.01, (5) chrysene; TEF = 0.001, (6) dibenz(a,h)anthracene; TEF = 1.0, and (7) indeno(1,2,3-c,d)pyrene; TEF = 0.1. TEFs were used for only the oral slope factor in the ingestion pathway.
- (3) The slope factor for trichloroethylene has been withdrawn from IRIS and HEAST; however, since this is a common contaminant, the old slope factor has been used to calculate the PRG.

Table 3.1d. Risk-based Preliminary Remediation Goals for radionuclides in soil (Residential scenario)

Chemical [†]	CASRN	Ingestion (pCi/g)		External Exposure (pCi/g) ^{††}		Inhalation (pCi/g)		Ingestion + External Exposure + Inhalation (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Ac-225	014265-85-1	5.6E+02	5.6E+00	5.6E+02	5.6E+00	4.9E+05	4.9E+03	3.0E+02	3.0E+00
Ac-227	014952-40-0	2.3E+02	2.3E+00	1.8E+05	1.8E+03	2.9E+04	2.9E+02	2.7E+02	2.7E+00
Ac-227+D	014952-40-0	1.3E+02	1.3E+00	7.3E+00	7.3E-02	2.6E+04	2.6E+02	6.9E+00	6.9E-02
Ac-228	014331-83-0	4.9E+04	4.9E+02	1.3E+00	1.3E-02	6.2E+07	6.2E+05	1.3E+00	1.3E-02
Ag-105	014928-14-4	4.9E+04	4.9E+02			8.8E+08	8.8E+06	5.8E+04	5.8E+02
Ag-108	014391-65-2	1.1E+07	1.1E+05	7.5E+01	7.5E-01	2.2E+11	2.2E+09	7.5E+01	7.5E-01
Ag-108m	014391-65-2	1.3E+04	1.3E+02	7.7E-01	7.7E-03	2.9E+07	2.9E+05	7.7E-01	7.7E-03
Ag-108m+D	014391-65-2	1.3E+04	1.3E+02	7.7E-01	7.7E-03	2.9E+07	2.9E+05	7.7E-01	7.7E-03
Ag-109m	014378-38-2	2.9E+08	2.9E+06	3.7E+03	3.7E+01	5.9E+12	5.9E+10	3.7E+03	3.7E+01
Ag-110	014391-76-5	3.3E+07	3.3E+05	3.8E+01	3.8E-01	6.5E+11	6.5E+09	3.8E+01	3.8E-01
Ag-110m	014391-76-5	9.4E+03	9.4E+01	4.1E-01	4.1E-03	6.4E+07	6.4E+05	4.1E-01	4.1E-03
Ag-111	157690-04-0	1.2E+04	1.2E+02	5.1E+01	5.1E-01	3.9E+08	3.9E+06	5.1E+01	5.1E-01
Am-241	014596-10-2	2.4E+02	2.4E+00	9.5E+02	9.5E+00	5.3E+04	5.3E+02	2.2E+02	2.2E+00
Am-242	013981-54-9	5.4E+04	5.4E+02	7.5E+02	7.5E+00	2.0E+08	2.0E+06	7.5E+02	7.5E+00
Am-242m	013981-54-9	2.7E+02	2.7E+00	5.0E+04	5.0E+02	5.8E+04	5.8E+02	3.2E+02	3.2E+00
Am-243	014993-75-0	2.4E+02	2.4E+00	1.8E+02	1.8E+00	5.3E+04	5.3E+02	1.1E+02	1.1E+00
Am-243+D	014993-75-0	2.4E+02	2.4E+00	1.6E+01	1.6E-01	5.3E+04	5.3E+02	1.5E+01	1.5E-01
Ar-41	014163-25-8					4.3E+12	4.3E+10		
At-217	017239-90-6	8.8E+09	8.8E+07	5.0E+03	5.0E+01	4.0E+12	4.0E+10	5.0E+03	5.0E+01

Table 3.1d. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		External Exposure (pCi/g) ^{††}		Inhalation (pCi/g)		Ingestion + External Exposure + Inhalation (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Au-196	014914-16-0	6.1E+04	6.1E+02	3.1E+00	3.1E-02	2.0E+09	2.0E+07	3.1E+00	3.1E-02
Au-198	010043-49-0	1.5E+04	1.5E+02	3.2E+00	3.2E-02	5.6E+08	5.6E+06	3.2E+00	3.2E-02
Ba-131	014914-75-1	4.7E+04	4.7E+02	3.4E+00	3.4E-02	4.3E+09	4.3E+07	3.4E+00	3.4E-02
Ba-133	013981-41-4	2.9E+04	2.9E+02	4.7E+00	4.7E-02	5.1E+08	5.1E+06	4.7E+00	4.7E-02
Ba-133m	013981-41-4	2.9E+04	2.9E+02	4.3E+01	4.3E-01	3.6E+09	3.6E+07	4.3E+01	4.3E-01
Ba-137m	013981-97-0	3.3E+07	3.3E+05	2.0E+00	2.0E-02	1.3E+12	1.3E+10	2.0E+00	2.0E-02
Ba-139	014378-25-7	2.6E+05	2.6E+03	5.2E+01	5.2E-01	1.3E+10	1.3E+08	5.2E+01	5.2E-01
Ba-140	014798-08-4	6.7E+03	6.7E+01	7.2E+00	7.2E-02	6.4E+08	6.4E+06	7.2E+00	7.2E-02
Be-7	013966-02-4	9.2E+05	9.2E+03	2.5E+01	2.5E-01	1.1E+10	1.1E+08	2.5E+01	2.5E-01
Bi-206	015776-19-9	1.1E+04	1.1E+02	3.6E-01	3.6E-03	4.0E+08	4.0E+06	3.6E-01	3.6E-03
Bi-207	013982-38-2	1.6E+04	1.6E+02	7.9E-01	7.9E-03	2.2E+08	2.2E+06	7.9E-01	7.9E-03
Bi-210	014331-79-4	1.1E+04	1.1E+02			4.0E+07	4.0E+05	1.3E+04	1.3E+02
Bi-211	015229-37-5	4.4E+06	4.4E+04	2.9E+01	2.9E-01	1.2E+09	1.2E+07	2.9E+01	2.9E-01
Bi-212	014913-49-6	1.3E+05	1.3E+03	6.5E+00	6.5E-02	5.6E+07	5.6E+05	6.5E+00	6.5E-02
Bi-213	015776-20-2	1.8E+05	1.8E+03	9.4E+00	9.4E-02	6.6E+07	6.6E+05	9.4E+00	9.4E-02
Bi-214	014733-03-0	4.1E+05	4.1E+03	7.2E-01	7.2E-03	1.4E+08	1.4E+06	7.2E-01	7.2E-03
Br-82	014686-69-2	5.6E+04	5.6E+02	4.3E-01	4.3E-03	2.6E+09	2.6E+07	4.3E-01	4.3E-03
C-11	014333-33-6	1.8E+06	1.8E+04	1.2E+00	1.2E-02	6.0E+10	6.0E+08	1.2E+00	1.2E-02
C-14	014762-75-5	7.7E+04	7.7E+02			2.9E+11	2.9E+09	9.2E+04	9.2E+02

Table 3.1d. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		External Exposure (pCi/g) ^{††}		Inhalation (pCi/g)		Ingestion + External Exposure + Inhalation (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
C-15	015929-23-4	1.2E+08	1.2E+06			2.5E+12	2.5E+10	1.4E+08	1.4E+06
Ca-45	013966-05-7	3.9E+04	3.9E+02	1.1E+12	1.1E+10	8.1E+08	8.1E+06	4.7E+04	4.7E+02
Ca-47	001439-99-2	1.2E+04	1.2E+02	1.1E+00	1.1E-02	3.9E+08	3.9E+06	1.1E+00	1.1E-02
Cd-109	014109-32-1	9.9E+03	9.9E+01	7.7E+03	7.7E+01	1.1E+08	1.1E+06	4.7E+03	4.7E+01
Cd-115	014336-68-6	1.1E+04	1.1E+02	6.2E+00	6.2E-02	4.1E+08	4.1E+06	6.2E+00	6.2E-02
Cd-115m	014336-68-6	5.6E+03	5.6E+01	5.1E+01	5.1E-01	1.2E+08	1.2E+06	5.0E+01	5.0E-01
Ce-141	013967-74-3	2.0E+04	2.0E+02	3.1E+01	3.1E-01	4.7E+08	4.7E+06	3.1E+01	3.1E-01
Ce-143	014119-19-8	1.3E+04	1.3E+02	5.9E+00	5.9E-02	5.3E+08	5.3E+06	5.9E+00	5.9E-02
Ce-144	014762-78-8	2.7E+03	2.7E+01	1.7E+02	1.7E+00	1.9E+07	1.9E+05	1.6E+02	1.6E+00
Ce-144+D	014762-78-8	2.7E+03	2.7E+01	2.8E+01	2.8E-01	1.9E+07	1.9E+05	2.8E+01	2.8E-01
Cl-36	013981-43-6	3.6E+04	3.6E+02			1.6E+09	1.6E+07	4.3E+04	4.3E+02
Cl-38	014158-34-0	3.8E+05	3.8E+03	6.7E-01	6.7E-03	1.3E+10	1.3E+08	6.7E-01	6.7E-03
Cm-242	015510-73-3	2.1E+03	2.1E+01	1.9E+05	1.9E+03	6.5E+05	6.5E+03	2.4E+03	2.4E+01
Cm-243	015757-87-6	3.2E+02	3.2E+00	2.5E+01	2.5E-01	7.1E+04	7.1E+02	2.4E+01	2.4E-01
Cm-243+D	015757-87-6	3.1E+02	3.1E+00	2.5E+01	2.5E-01	7.0E+04	7.0E+02	2.4E+01	2.4E-01
Cm-244	013981-15-2	3.8E+02	3.8E+00	2.1E+05	2.1E+03	8.4E+04	8.4E+02	4.5E+02	4.5E+00
Cm-245	015621-76-8	2.4E+02	2.4E+00	7.9E+01	7.9E-01	5.2E+04	5.2E+02	6.2E+01	6.2E-01
Cm-246	015757-90-1	2.4E+02	2.4E+00	2.4E+05	2.4E+03	5.2E+04	5.2E+02	2.8E+02	2.8E+00
Cm-247	015758-32-4	2.6E+02	2.6E+00	4.2E+00	4.2E-02	5.7E+04	5.7E+02	4.2E+00	4.2E-02

Table 3.1d. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		External Exposure (pCi/g) ^{††}		Inhalation (pCi/g)		Ingestion + External Exposure + Inhalation (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Cm-248	015758-33-5	6.1E+01	6.1E-01	3.0E+05	3.0E+03	1.4E+04	1.4E+02	7.2E+01	7.2E-01
Co-57	013981-50-5	8.2E+04	8.2E+02	2.1E+01	2.1E-01	7.1E+08	7.1E+06	2.1E+01	2.1E-01
Co-58	013981-38-9	2.8E+04	2.8E+02	1.2E+00	1.2E-02	3.9E+08	3.9E+06	1.2E+00	1.2E-02
Co-58m	013981-38-9	8.4E+05	8.4E+03	1.4E+05	1.4E+03	2.3E+10	2.3E+08	1.2E+05	1.2E+03
Co-60	010198-40-0	4.2E+03	4.2E+01	4.5E-01	4.5E-03	3.0E+07	3.0E+05	4.5E-01	4.5E-03
Cr-51	014392-02-0	5.8E+05	5.8E+03	4.3E+01	4.3E-01	1.2E+10	1.2E+08	4.3E+01	4.3E-01
Cs-131	014914-76-2	4.4E+05	4.4E+03	1.9E+03	1.9E+01	1.9E+10	1.9E+08	1.9E+03	1.9E+01
Cs-134	013967-70-9	1.7E+03	1.7E+01	7.4E-01	7.4E-03	7.1E+07	7.1E+05	7.4E-01	7.4E-03
Cs-134m	013967-70-9	1.7E+06	1.7E+04	2.2E+02	2.2E+00	6.6E+10	6.6E+08	2.2E+02	2.2E+00
Cs-135	015726-30-4	1.8E+04	1.8E+02			7.5E+08	7.5E+06	2.1E+04	2.1E+02
Cs-136	014234-29-8	1.0E+04	1.0E+02	5.3E-01	5.3E-03	4.4E+08	4.4E+06	5.3E-01	5.3E-03
Cs-137	010045-97-3	2.5E+03	2.5E+01			1.1E+08	1.1E+06	3.0E+03	3.0E+01
Cs-137+D	010045-97-3	2.5E+03	2.5E+01	2.1E+00	2.1E-02	1.1E+08	1.1E+06	2.1E+00	2.1E-02
Cs-138	015758-29-9	4.5E+05	4.5E+03	4.6E-01	4.6E-03	1.6E+10	1.6E+08	4.6E-01	4.6E-03
Cu-64	013981-25-4	1.5E+05	1.5E+03	6.5E+00	6.5E-02	4.9E+09	4.9E+07	6.5E+00	6.5E-02
Dy-165	013967-64-1	2.4E+05	2.4E+03	7.0E+01	7.0E-01	9.1E+09	9.1E+07	7.0E+01	7.0E-01
Dy-166	015840-01-4	8.4E+03	8.4E+01	1.6E+02	1.6E+00	2.6E+08	2.6E+06	1.6E+02	1.6E+00
Er-169	015840-13-8	3.7E+04	3.7E+02	6.7E+05	6.7E+03	1.4E+09	1.4E+07	4.2E+04	4.2E+02
Er-171	014391-45-8	4.9E+04	4.9E+02	4.2E+00	4.2E-02	2.7E+09	2.7E+07	4.2E+00	4.2E-02

Table 3.1d. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		External Exposure (pCi/g) ^{††}		Inhalation (pCi/g)		Ingestion + External Exposure + Inhalation (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Eu-152	014683-23-9	1.4E+04	1.4E+02	1.1E+00	1.1E-02	2.6E+07	2.6E+05	1.1E+00	1.1E-02
Eu-154	015585-10-1	8.5E+03	8.5E+01	9.3E-01	9.3E-03	2.2E+07	2.2E+05	9.3E-01	9.3E-03
Eu-155	014391-16-3	4.8E+04	4.8E+02	7.1E+01	7.1E-01	2.1E+08	2.1E+06	7.1E+01	7.1E-01
Eu-156	014280-35-4	7.3E+03	7.3E+01	8.0E-01	8.0E-03	2.2E+08	2.2E+06	8.0E-01	8.0E-03
F-18	013981-56-1	7.3E+05	7.3E+03	1.2E+00	1.2E-02	3.1E+10	3.1E+08	1.2E+00	1.2E-02
Fe-55	014681-59-5	2.3E+05	2.3E+03			3.6E+09	3.6E+07	2.7E+05	2.7E+03
Fe-59	014596-12-4	1.4E+04	1.4E+02	9.4E-01	9.4E-03	2.9E+08	2.9E+06	9.4E-01	9.4E-03
Fr-221	015756-41-9	5.5E+05	5.5E+03	6.4E+01	6.4E-01	2.5E+08	2.5E+06	6.4E+01	6.4E-01
Fr-223	015756-98-6	1.8E+05	1.8E+03	1.0E+02	1.0E+00	3.5E+09	3.5E+07	1.0E+02	1.0E+00
Ga-67	014119-09-6	9.5E+04	9.5E+02	1.2E+01	1.2E-01	4.0E+09	4.0E+07	1.2E+01	1.2E-01
Ga-72	013982-22-4	1.7E+04	1.7E+02	3.9E-01	3.9E-03	9.4E+08	9.4E+06	3.9E-01	3.9E-03
Gd-153	014276-65-4	6.0E+04	6.0E+02	6.0E+01	6.0E-01	6.4E+08	6.4E+06	6.0E+01	6.0E-01
Gd-159	014041-42-0	3.1E+04	3.1E+02	4.5E+01	4.5E-01	1.6E+09	1.6E+07	4.5E+01	4.5E-01
Ge-71	014374-81-3	6.7E+06	6.7E+04	2.8E+05	2.8E+03	3.5E+10	3.5E+08	2.7E+05	2.7E+03
H-3	010028-17-8	1.1E+06	1.1E+04			2.1E+10	2.1E+08	1.3E+06	1.3E+04
Hg-197	013981-51-6	6.7E+04	6.7E+02	7.9E+01	7.9E-01	2.9E+09	2.9E+07	7.9E+01	7.9E-01
Hg-203	013982-78-0	3.0E+04	3.0E+02	6.9E+00	6.9E-02	6.7E+08	6.7E+06	6.9E+00	6.9E-02
Ho-166	013967-65-2	1.0E+04	1.0E+02	6.2E+01	6.2E-01	5.0E+08	5.0E+06	6.2E+01	6.2E-01
I-122	018287-75-7	3.7E+06	3.7E+04	1.3E+00	1.3E-02	9.1E+10	9.1E+08	1.3E+00	1.3E-02

Table 3.1d. (continued)

Chemical ^{††}	CASRN	Ingestion (pCi/g)		External Exposure (pCi/g) ^{††}		Inhalation (pCi/g)		Ingestion + External Exposure + Inhalation (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
I-123	015715-08-9	1.5E+05	1.5E+03	1.7E+01	1.7E-01	6.9E+09	6.9E+07	1.7E+01	1.7E-01
I-125	014158-31-7	3.1E+03	3.1E+01	1.8E+03	1.8E+01	1.2E+08	1.2E+06	1.2E+03	1.2E+01
I-126	014158-32-8	1.6E+03	1.6E+01	2.9E+00	2.9E-02	6.5E+07	6.5E+05	2.9E+00	2.9E-02
I-129	015046-84-1	4.3E+02	4.3E+00	1.6E+03	1.6E+01	1.7E+07	1.7E+05	3.9E+02	3.9E+00
I-130	014914-02-4	1.6E+04	1.6E+02	5.5E-01	5.5E-03	7.8E+08	7.8E+06	5.5E-01	5.5E-03
I-131	010043-66-0	2.2E+03	2.2E+01	3.5E+00	3.5E-02	8.8E+07	8.8E+05	3.5E+00	3.5E-02
I-132	014683-16-0	1.2E+05	1.2E+03	5.0E-01	5.0E-03	5.8E+09	5.8E+07	5.0E-01	5.0E-03
I-133	014834-67-4	7.5E+03	7.5E+01	2.0E+00	2.0E-02	3.4E+08	3.4E+06	2.0E+00	2.0E-02
I-134	014914-27-3	3.4E+05	3.4E+03	4.3E-01	4.3E-03	1.5E+10	1.5E+08	4.3E-01	4.3E-03
I-135	014834-68-5	3.5E+04	3.5E+02	7.0E-01	7.0E-03	1.7E+09	1.7E+07	7.0E-01	7.0E-03
In-113m	014885-78-0	9.6E+05	9.6E+03	5.6E+00	5.6E-02	3.5E+10	3.5E+08	5.6E+00	5.6E-02
In-114	013981-55-0	1.8E+07	1.8E+05	3.8E+01	3.8E-01	3.5E+11	3.5E+09	3.8E+01	3.8E-01
In-114m	013981-55-0	3.9E+03	3.9E+01	2.2E+01	2.2E-01	8.1E+07	8.1E+05	2.2E+01	2.2E-01
In-115	014191-71-0	2.3E+03	2.3E+01			9.9E+06	9.9E+04	2.7E+03	2.7E+01
In-115m	014191-71-0	2.3E+05	2.3E+03	1.0E+01	1.0E-01	1.2E+10	1.2E+08	1.0E+01	1.0E-01
Ir-190	014981-91-0	1.6E+04	1.6E+02	9.3E-01	9.3E-03	4.5E+08	4.5E+06	9.3E-01	9.3E-03
Ir-194	014158-35-1	1.1E+04	1.1E+02	1.4E+01	1.4E-01	4.9E+08	4.9E+06	1.4E+01	1.4E-01
K-40	013966-00-2	6.3E+03	6.3E+01	7.1E+00	7.1E-02	2.7E+08	2.7E+06	7.1E+00	7.1E-02
K-42	014378-21-3	6.2E+04	6.2E+02	4.0E+00	4.0E-02	2.7E+09	2.7E+07	4.0E+00	4.0E-02

Table 3.1d. (continued)

Chemical ^t	CASRN	Ingestion (pCi/g)		External Exposure (pCi/g) ^{††}		Inhalation (pCi/g)		Ingestion + External Exposure + Inhalation (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Kr-83m	013965-98-5					5.9E+13	5.9E+11		
Kr-85	013983-27-2					7.1E+12	7.1E+10		
Kr-85m	013983-27-2					7.4E+12	7.4E+10		
Kr-87	014809-68-8					1.7E+12	1.7E+10		
Kr-88	014995-61-0					9.3E+11	9.3E+09		
Kr-89	016316-03-3					1.3E+12	1.3E+10		
Kr-90	015741-13-6					1.3E+12	1.3E+10		
La-140	013981-28-7	8.4E+03	8.4E+01	4.8E-01	4.8E-03	4.0E+08	4.0E+06	4.8E-01	4.8E-03
Lu-177	014265-75-9	2.7E+04	2.7E+02	6.0E+01	6.0E-01	9.3E+08	9.3E+06	6.0E+01	6.0E-01
Mn-52	014092-99-0	1.3E+04	1.3E+02	3.2E-01	3.2E-03	4.6E+08	4.6E+06	3.2E-01	3.2E-03
Mn-54	013966-31-9	4.0E+04	4.0E+02	1.3E+00	1.3E-02	5.5E+08	5.5E+06	1.3E+00	1.3E-02
Mn-56	014681-52-8	9.3E+04	9.3E+02	6.3E-01	6.3E-03	3.9E+09	3.9E+07	6.3E-01	6.3E-03
Mo-99	014119-15-4	3.5E+04	3.5E+02	8.0E+00	8.0E-02	4.6E+08	4.6E+06	8.0E+00	8.0E-02
Na-22	013966-32-0	9.9E+03	9.9E+01	5.3E-01	5.3E-03	4.2E+08	4.2E+06	5.3E-01	5.3E-03
Na-24	013982-04-2	5.8E+04	5.8E+02	2.5E-01	2.5E-03	2.7E+09	2.7E+07	2.5E-01	2.5E-03
Nb-93m	007440-03-1	1.2E+05	1.2E+03	1.2E+05	1.2E+03	4.7E+08	4.7E+06	6.5E+04	6.5E+02
Nb-94	014681-63-1	1.1E+04	1.1E+02	7.1E-01	7.1E-03	2.5E+07	2.5E+05	7.1E-01	7.1E-03
Nb-95	013967-76-5	3.5E+04	3.5E+02	1.5E+00	1.5E-02	6.6E+08	6.6E+06	1.5E+00	1.5E-02
Nb-95m	013967-76-5	2.6E+04	2.6E+02	5.0E+01	5.0E-01	9.1E+08	9.1E+06	5.0E+01	5.0E-01

Table 3.1d. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		External Exposure (pCi/g) ^{††}		Inhalation (pCi/g)		Ingestion + External Exposure + Inhalation (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Nb-97	018496-04-3	4.5E+05	4.5E+03	1.7E+00	1.7E-02	9.6E+09	9.6E+07	1.7E+00	1.7E-02
Nb-97m	018496-04-3	2.4E+07	2.4E+05	1.6E+00	1.6E-02	6.1E+11	6.1E+09	1.6E+00	1.6E-02
Nd-147	014269-74-0	1.3E+04	1.3E+02	1.3E+01	1.3E-01	4.2E+08	4.2E+06	1.3E+01	1.3E-01
Nd-149	015749-81-2	1.7E+05	1.7E+03	4.0E+00	4.0E-02	4.8E+09	4.8E+07	4.0E+00	4.0E-02
Ni-59	014336-70-0	4.3E+05	4.3E+03			5.1E+09	5.1E+07	5.1E+05	5.1E+03
Ni-63	013981-37-8	1.4E+05	1.4E+03			2.0E+09	2.0E+07	1.7E+05	1.7E+03
Ni-65	014833-49-9	1.4E+05	1.4E+03	2.0E+00	2.0E-02	5.7E+09	5.7E+07	2.0E+00	2.0E-02
Np-236	015700-36-4	8.5E+04	8.5E+02	4.7E+01	4.7E-01	5.3E+08	5.3E+06	4.7E+01	4.7E-01
Np-237	013994-20-2	2.7E+02	2.7E+00	5.7E+02	5.7E+00	5.9E+04	5.9E+02	2.1E+02	2.1E+00
Np-237+D	013994-20-2	2.6E+02	2.6E+00	9.4E+00	9.4E-02	5.9E+04	5.9E+02	9.1E+00	9.1E-02
Np-238	015766-25-3	1.7E+04	1.7E+02	2.2E+00	2.2E-02	4.4E+08	4.4E+06	2.2E+00	2.2E-02
Np-239	013968-59-7	1.9E+04	1.9E+02	1.8E+01	1.8E-01	8.5E+08	8.5E+06	1.8E+01	1.8E-01
Np-240	015690-84-3	4.5E+05	4.5E+03	1.2E+00	1.2E-02	1.6E+10	1.6E+08	1.2E+00	1.2E-02
Np-240m	015690-84-3	3.3E+06	3.3E+04	4.1E+00	4.1E-02	7.2E+10	7.2E+08	4.1E+00	4.1E-02
Os-185	015766-50-4	4.4E+04	4.4E+02	1.8E+00	1.8E-02	4.4E+08	4.4E+06	1.8E+00	1.8E-02
Os-191	014119-24-5	2.6E+04	2.6E+02	5.0E+01	5.0E-01	7.6E+08	7.6E+06	5.0E+01	5.0E-01
Os-191m	014119-24-5	1.6E+05	1.6E+03	1.3E+03	1.3E+01	6.1E+09	6.1E+07	1.3E+03	1.3E+01
Os-193	016057-77-5	1.8E+04	1.8E+02	2.4E+01	2.4E-01	7.6E+08	7.6E+06	2.4E+01	2.4E-01
P-32	014596-37-3	1.3E+04	1.3E+02			7.0E+08	7.0E+06	1.6E+04	1.6E+02

Table 3.1d. (continued)

Chemical ^t	CASRN	Ingestion (pCi/g)		External Exposure (pCi/g) ^{††}		Inhalation (pCi/g)		Ingestion + External Exposure + Inhalation (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
P-33	015749-66-3	1.0E+05	1.0E+03			5.2E+09	5.2E+07	1.2E+05	1.2E+03
Pa-231	014331-85-2	5.3E+02	5.3E+00	1.6E+02	1.6E+00	8.4E+04	8.4E+02	1.3E+02	1.3E+00
Pa-233	013981-14-1	1.7E+04	1.7E+02	9.6E+00	9.6E-02	4.1E+08	4.1E+06	9.6E+00	9.6E-02
Pa-234	015100-28-4	3.7E+04	3.7E+02	6.6E-01	6.6E-03	1.6E+09	1.6E+07	6.6E-01	6.6E-03
Pa-234m	015100-28-4	1.7E+07	1.7E+05	1.1E+02	1.1E+00	3.3E+11	3.3E+09	1.1E+02	1.1E+00
Pb-203	014687-25-3	7.7E+04	7.7E+02	6.8E+00	6.8E-02	6.6E+09	6.6E+07	6.8E+00	6.8E-02
Pb-209	014119-30-3	3.8E+05	3.8E+03			3.0E+10	3.0E+08	4.6E+05	4.6E+03
Pb-210	014255-04-0	1.2E+02	1.2E+00	3.9E+04	3.9E+02	1.2E+06	1.2E+04	1.4E+02	1.4E+00
Pb-210+D	014255-04-0	7.9E+01	7.9E-01	3.0E+04	3.0E+02	5.3E+05	5.3E+03	9.4E+01	9.4E-01
Pb-211	015816-77-0	2.3E+05	2.3E+03	2.3E+01	2.3E-01	2.0E+08	2.0E+06	2.3E+01	2.3E-01
Pb-212	015092-94-1	4.4E+03	4.4E+01	1.4E+01	1.4E-01	5.3E+07	5.3E+05	1.4E+01	1.4E-01
Pb-214	015067-28-4	2.7E+05	2.7E+03	6.1E+00	6.1E-02	3.3E+08	3.3E+06	6.1E+00	6.1E-02
Pd-100	015690-69-4	2.1E+04	2.1E+02			5.7E+08	5.7E+06	2.5E+04	2.5E+02
Pd-101	015749-54-9	2.1E+05	2.1E+03			8.9E+09	8.9E+07	2.5E+05	2.5E+03
Pd-103	014967-68-1	7.6E+04	7.6E+02	8.1E+03	8.1E+01	1.9E+09	1.9E+07	7.4E+03	7.4E+01
Pd-107	017637-99-9	3.8E+05	3.8E+03			1.4E+09	1.4E+07	4.6E+05	4.6E+03
Pd-109	014981-64-7	2.4E+04	2.4E+02	1.8E+03	1.8E+01	1.0E+09	1.0E+07	1.7E+03	1.7E+01
Pm-147	014380-75-7	5.6E+04	5.6E+02	6.8E+05	6.8E+03	2.7E+08	2.7E+06	6.1E+04	6.1E+02
Pm-148	014683-19-3	5.5E+03	5.5E+01	2.0E+00	2.0E-02	1.9E+08	1.9E+06	2.0E+00	2.0E-02

Table 3.1d. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		External Exposure (pCi/g) ^{††}		Inhalation (pCi/g)		Ingestion + External Exposure + Inhalation (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Pm-148m	014683-19-3	8.0E+03	8.0E+01	5.9E-01	5.9E-03	6.9E+07	6.9E+05	5.9E-01	5.9E-03
Pm-149	015765-31-8	1.4E+04	1.4E+02	1.2E+02	1.2E+00	5.7E+08	5.7E+06	1.2E+02	1.2E+00
Po-210	013981-52-7	2.4E+02	2.4E+00	1.3E+05	1.3E+03	9.5E+05	9.5E+03	2.9E+02	2.9E+00
Po-212	015389-34-1	1.8E+15	1.8E+13			3.4E+17	3.4E+15	2.1E+15	2.1E+13
Po-213	015756-57-7	1.2E+14	1.2E+12	3.7E+04	3.7E+02	2.6E+16	2.6E+14	3.7E+04	3.7E+02
Po-214	015735-67-8	3.7E+12	3.7E+10	1.3E+04	1.3E+02	7.4E+14	7.4E+12	1.3E+04	1.3E+02
Po-215	015706-52-2	1.6E+11	1.6E+09	8.5E+03	8.5E+01	4.6E+13	4.6E+11	8.5E+03	8.5E+01
Po-216	015756-58-8	9.0E+08	9.0E+06	7.7E+04	7.7E+02	6.9E+11	6.9E+09	7.7E+04	7.7E+02
Po-218	015422-24-9	1.6E+06	1.6E+04			5.5E+08	5.5E+06	1.9E+06	1.9E+04
Pr-142	014191-64-1	1.1E+04	1.1E+02	1.9E+01	1.9E-01	4.9E+08	4.9E+06	1.9E+01	1.9E-01
Pr-143	014981-79-4	1.2E+04	1.2E+02	1.3E+08	1.3E+06	3.6E+08	3.6E+06	1.4E+04	1.4E+02
Pr-144	014119-05-2	9.8E+05	9.8E+03	3.3E+01	3.3E-01	1.6E+10	1.6E+08	3.3E+01	3.3E-01
Pr-144m	014119-05-2	2.5E+06	2.5E+04	2.3E+03	2.3E+01	3.6E+10	3.6E+08	2.3E+03	2.3E+01
Pt-191	015706-36-2	5.3E+04	5.3E+02	6.4E+00	6.4E-02	4.9E+09	4.9E+07	6.4E+00	6.4E-02
Pt-193	015735-70-3	4.9E+05	4.9E+03			2.6E+10	2.6E+08	5.9E+05	5.9E+03
Pt-193m	015735-70-3	3.2E+04	3.2E+02	5.8E+02	5.8E+00	3.5E+09	3.5E+07	5.8E+02	5.8E+00
Pt-197	015735-74-7	3.7E+04	3.7E+02	1.4E+02	1.4E+00	4.5E+09	4.5E+07	1.4E+02	1.4E+00
Pt-197m	015735-74-7	2.4E+05	2.4E+03	2.6E+01	2.6E-01	2.0E+10	2.0E+08	2.6E+01	2.6E-01
Pu-236	015411-92-4	1.0E+03	1.0E+01	1.9E+05	1.9E+03	1.5E+05	1.5E+03	1.2E+03	1.2E+01

Table 3.1d. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		External Exposure (pCi/g) ^{††}		Inhalation (pCi/g)		Ingestion + External Exposure + Inhalation (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Pu-238	013981-16-3	2.7E+02	2.7E+00	2.2E+05	2.2E+03	7.4E+04	7.4E+02	3.2E+02	3.2E+00
Pu-239	015117-48-3	2.5E+02	2.5E+00	3.4E+05	3.4E+03	7.3E+04	7.3E+02	3.0E+02	3.0E+00
Pu-240	014119-33-6	2.5E+02	2.5E+00	2.3E+05	2.3E+03	7.3E+04	7.3E+02	3.0E+02	3.0E+00
Pu-241	014119-32-5	1.5E+04	1.5E+02			7.3E+06	7.3E+04	1.8E+04	1.8E+02
Pu-241+D	014119-32-5	2.4E+02	2.4E+00	9.5E+02	9.5E+00	5.3E+04	5.3E+02	2.2E+02	2.2E+00
Pu-242	013982-10-0	2.6E+02	2.6E+00	2.8E+05	2.8E+03	7.7E+04	7.7E+02	3.2E+02	3.2E+00
Pu-243	015706-37-3	2.2E+05	2.2E+03	2.3E+02	2.3E+00	7.6E+09	7.6E+07	2.3E+02	2.3E+00
Pu-244	014119-34-7	2.5E+02	2.5E+00	3.4E+05	3.4E+03	7.6E+04	7.6E+02	3.0E+02	3.0E+00
Pu-244+D	014119-34-7	2.5E+02	2.5E+00	1.2E+00	1.2E-02	7.6E+04	7.6E+02	1.2E+00	1.2E-02
Ra-223	015623-45-7	3.4E+02	3.4E+00	1.8E+01	1.8E-01	5.7E+05	5.7E+03	1.7E+01	1.7E-01
Ra-224	013233-32-4	5.3E+02	5.3E+00	1.8E+02	1.8E+00	9.1E+05	9.1E+03	1.4E+02	1.4E+00
Ra-224(2)	013233-32-4	5.3E+02	5.3E+00	1.8E+02	1.8E+00	7.9E+02	7.9E+00	1.2E+02	1.2E+00
Ra-225	013981-53-8	5.1E+02	5.1E+00	2.5E+03	2.5E+01	8.6E+05	8.6E+03	4.9E+02	4.9E+00
Ra-226	013982-63-3	2.7E+02	2.7E+00	3.3E+02	3.3E+00	7.5E+05	7.5E+03	1.6E+02	1.6E+00
Ra-226(2)	013982-63-3	2.7E+02	2.7E+00	3.3E+02	3.3E+00	4.9E-01	4.9E-03	4.9E-01	4.9E-03
Ra-226+D	013982-63-3	2.7E+02	2.7E+00	6.4E-01	6.4E-03	7.4E+05	7.4E+03	6.4E-01	6.4E-03
Ra-226+D(2)	013982-63-3	2.7E+02	2.7E+00	6.4E-01	6.4E-03	4.9E-01	4.9E-03	2.8E-01	2.8E-03
Ra-228	015262-20-1	3.2E+02	3.2E+00			2.1E+06	2.1E+04	3.9E+02	3.9E+00
Ra-228+D	015262-20-1	3.2E+02	3.2E+00	1.3E+00	1.3E-02	2.1E+06	2.1E+04	1.3E+00	1.3E-02

Table 3.1d. (continued)

Chemical ^t	CASRN	Ingestion (pCi/g)		External Exposure (pCi/g) ^{††}		Inhalation (pCi/g)		Ingestion + External Exposure + Inhalation (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Rb-82	014391-63-0	7.6E+06	7.6E+04	1.1E+00	1.1E-02	1.7E+11	1.7E+09	1.1E+00	1.1E-02
Rb-86	014932-53-7	1.1E+04	1.1E+02	1.2E+01	1.2E-01	4.8E+08	4.8E+06	1.2E+01	1.2E-01
Rb-87	013982-13-3	2.2E+04	2.2E+02			9.0E+08	9.0E+06	2.6E+04	2.6E+02
Rb-88	014928-36-0	5.4E+05	5.4E+03	1.6E+00	1.6E-02	1.5E+10	1.5E+08	1.6E+00	1.6E-02
Rb-89	014191-65-2	9.2E+05	9.2E+03	5.1E-01	5.1E-03	2.9E+10	2.9E+08	5.1E-01	5.1E-03
Rh-103m	007440-16-6	9.7E+06	9.7E+04	7.4E+04	7.4E+02	1.6E+11	1.6E+09	7.4E+04	7.4E+02
Rh-105	014913-89-4	4.1E+04	4.1E+02	1.7E+01	1.7E-01	1.7E+09	1.7E+07	1.7E+01	1.7E-01
Rh-105m	014913-89-4	7.3E+07	7.3E+05	1.9E+02	1.9E+00	2.2E+12	2.2E+10	1.9E+02	1.9E+00
Rh-106	014234-34-5	2.2E+07	2.2E+05	5.7E+00	5.7E-02	4.4E+11	4.4E+09	5.7E+00	5.7E-02
Rn-219	014835-02-0			2.5E+01	2.5E-01	3.0E+10	3.0E+08	2.5E+01	2.5E-01
Rn-220	022481-48-7			2.3E+03	2.3E+01	1.1E+10	1.1E+08	2.3E+03	2.3E+01
Rn-222+D	014859-67-7					2.7E+08	2.7E+06		
Ru-103	013968-53-1	2.4E+04	2.4E+02	2.6E+00	2.6E-02	4.4E+08	4.4E+06	2.6E+00	2.6E-02
Ru-105	014331-95-4	6.9E+04	6.9E+02	1.5E+00	1.5E-02	2.5E+09	2.5E+07	1.5E+00	1.5E-02
Ru-106	013967-48-1	2.3E+03	2.3E+01			1.8E+07	1.8E+05	2.8E+03	2.8E+01
Ru-106+D	013967-48-1	2.3E+03	2.3E+01	5.7E+00	5.7E-02	1.8E+07	1.8E+05	5.7E+00	5.7E-02
Ru-97	015758-35-7	1.3E+05	1.3E+03	9.6E+00	9.6E-02	5.0E+09	5.0E+07	9.6E+00	9.6E-02
S-35	015117-53-0	1.9E+05	1.9E+03			1.1E+10	1.1E+08	2.3E+05	2.3E+03
Sb-122	014374-79-9	9.0E+03	9.0E+01	2.7E+00	2.7E-02	3.7E+08	3.7E+06	2.7E+00	2.7E-02

Table 3.1d. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		External Exposure (pCi/g) ^{††}		Inhalation (pCi/g)		Ingestion + External Exposure + Inhalation (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Sb-124	014683-10-4	7.4E+03	7.4E+01	5.9E-01	5.9E-03	1.5E+08	1.5E+06	5.9E-01	5.9E-03
Sb-125	014234-35-6	2.7E+04	2.7E+02	3.2E+00	3.2E-02	3.9E+08	3.9E+06	3.2E+00	3.2E-02
Sb-125+D	014234-35-6	2.2E+04	2.2E+02	3.2E+00	3.2E-02	3.5E+08	3.5E+06	3.2E+00	3.2E-02
Sb-126	015756-32-8	8.2E+03	8.2E+01	4.2E-01	4.2E-03	2.4E+08	2.4E+06	4.2E-01	4.2E-03
Sb-126m	015756-32-8	1.1E+06	1.1E+04	7.5E-01	7.5E-03	3.2E+10	3.2E+08	7.5E-01	7.5E-03
Sb-127	013968-50-8	9.4E+03	9.4E+01	1.8E+00	1.8E-02	3.4E+08	3.4E+06	1.8E+00	1.8E-02
Sb-129	014331-88-5	4.3E+04	4.3E+02	7.8E-01	7.8E-03	2.4E+09	2.4E+07	7.8E-01	7.8E-03
Sc-46	013967-63-0	1.4E+04	1.4E+02	5.5E-01	5.5E-03	1.6E+08	1.6E+06	5.5E-01	5.5E-03
Sc-47	014391-96-9	2.7E+04	2.7E+02	1.7E+01	1.7E-01	1.0E+09	1.0E+07	1.7E+01	1.7E-01
Sc-48	014391-86-7	1.2E+04	1.2E+02	3.3E-01	3.3E-03	4.9E+08	4.9E+06	3.3E-01	3.3E-03
Se-75	014265-71-5	1.2E+04	1.2E+02	4.9E+00	4.9E-02	4.1E+08	4.1E+06	4.9E+00	4.9E-02
Si-31	014276-49-4	1.6E+05	1.6E+03	1.3E+03	1.3E+01	6.2E+09	6.2E+07	1.3E+03	1.3E+01
Sm-147	014392-33-7	3.2E+03	3.2E+01			2.9E+05	2.9E+03	3.7E+03	3.7E+01
Sm-151	015715-94-3	1.7E+05	1.7E+03	1.5E+07	1.5E+05	4.4E+08	4.4E+06	2.0E+05	2.0E+03
Sm-153	015766-00-4	2.0E+04	2.0E+02	9.3E+01	9.3E-01	9.4E+08	9.4E+06	9.3E+01	9.3E-01
Sn-113	013966-06-8	2.1E+04	2.1E+02	1.5E+03	1.5E+01	3.1E+08	3.1E+06	1.4E+03	1.4E+01
Sn-121	014683-06-8	6.5E+04	6.5E+02			3.3E+09	3.3E+07	7.8E+04	7.8E+02
Sn-121m	014683-06-8	4.0E+04	4.0E+02			2.7E+08	2.7E+06	4.8E+04	4.8E+02
Sn-125	014683-08-0	4.7E+03	4.7E+01	3.6E+00	3.6E-02	1.7E+08	1.7E+06	3.6E+00	3.6E-02

Table 3.1d. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		External Exposure (pCi/g) ^{††}		Inhalation (pCi/g)		Ingestion + External Exposure + Inhalation (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Sn-126	015832-50-5	3.7E+03	3.7E+01	1.3E+02	1.3E+00	4.8E+07	4.8E+05	1.3E+02	1.3E+00
Sr-82	014809-50-8	3.1E+03	3.1E+01	4.8E+04	4.8E+02	2.3E+08	2.3E+06	3.4E+03	3.4E+01
Sr-85	013967-73-2	5.7E+04	5.7E+02	2.8E+00	2.8E-02	1.8E+09	1.8E+07	2.8E+00	2.8E-02
Sr-85m	013967-73-2	4.4E+06	4.4E+04	8.3E+00	8.3E-02	2.9E+11	2.9E+09	8.3E+00	8.3E-02
Sr-89	014158-27-1	7.7E+03	7.7E+01	8.1E+03	8.1E+01	5.5E+08	5.5E+06	4.3E+03	4.3E+01
Sr-90	010098-97-2	1.9E+03	1.9E+01			3.4E+07	3.4E+05	2.3E+03	2.3E+01
Sr-90+D	010098-97-2	1.4E+03	1.4E+01			2.9E+07	2.9E+05	1.7E+03	1.7E+01
Sr-91	014331-91-0	2.8E+04	2.8E+02	1.6E+00	1.6E-02	2.6E+09	2.6E+07	1.6E+00	1.6E-02
Sr-92	014928-29-1	3.9E+04	3.9E+02	8.4E-01	8.4E-03	4.3E+09	4.3E+07	8.4E-01	8.4E-03
Ta-182	013982-00-8	1.1E+04	1.1E+02	9.3E-01	9.3E-03	1.2E+08	1.2E+06	9.3E-01	9.3E-03
Tb-158	015759-55-4	1.9E+04	1.9E+02			2.9E+07	2.9E+05	2.3E+04	2.3E+02
Tb-160	013981-29-8	1.0E+04	1.0E+02	1.1E+00	1.1E-02	1.8E+08	1.8E+06	1.1E+00	1.1E-02
Tc-95	014809-56-4	1.2E+06	1.2E+04	1.6E+00	1.6E-02	6.0E+10	6.0E+08	1.6E+00	1.6E-02
Tc-95m	014809-56-4	6.4E+04	6.4E+02	2.1E+00	2.1E-02	9.7E+08	9.7E+06	2.1E+00	2.1E-02
Tc-96	014808-44-7	3.5E+04	3.5E+02	4.6E-01	4.6E-03	1.1E+09	1.1E+07	4.6E-01	4.6E-03
Tc-96m	014808-44-7	3.0E+06	3.0E+04	5.6E+01	5.6E-01	9.0E+10	9.0E+08	5.6E+01	5.6E-01
Tc-97	015759-35-0	5.0E+05	5.0E+03	1.7E+04	1.7E+02	5.9E+09	5.9E+07	1.7E+04	1.7E+02
Tc-97m	015759-35-0	6.6E+04	6.6E+02	1.6E+04	1.6E+02	1.0E+09	1.0E+07	1.4E+04	1.4E+02
Tc-99	014133-76-7	5.7E+04	5.7E+02	7.0E+06	7.0E+04	7.1E+08	7.1E+06	6.7E+04	6.7E+02

Table 3.1d. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		External Exposure (pCi/g) ^{††}		Inhalation (pCi/g)		Ingestion + External Exposure + Inhalation (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Te-99m	014133-76-7	1.4E+06	1.4E+04	1.7E+01	1.7E-01	5.8E+10	5.8E+08	1.7E+01	1.7E-01
Te-125m	014390-73-9	3.2E+04	3.2E+02	2.0E+03	2.0E+01	7.2E+08	7.2E+06	1.9E+03	1.9E+01
Te-127	013981-49-2	9.3E+04	9.3E+02	2.7E+02	2.7E+00	4.7E+09	4.7E+07	2.7E+02	2.7E+00
Te-127m	013981-49-2	1.3E+04	1.3E+02	6.1E+03	6.1E+01	1.6E+08	1.6E+06	4.4E+03	4.4E+01
Te-129	014269-71-7	5.4E+05	5.4E+03	3.0E+01	3.0E-01	1.4E+10	1.4E+08	3.0E+01	3.0E-01
Te-129m	014269-71-7	6.8E+03	6.8E+01	6.3E+01	6.3E-01	1.5E+08	1.5E+06	6.2E+01	6.2E-01
Te-131	014683-12-6	2.0E+05	2.0E+03	3.2E+00	3.2E-02	8.2E+09	8.2E+07	3.2E+00	3.2E-02
Te-131m	014683-12-6	9.0E+03	9.0E+01	8.2E-01	8.2E-03	2.4E+08	2.4E+06	8.2E-01	8.2E-03
Te-132	014234-28-7	6.5E+03	6.5E+01	1.0E+01	1.0E-01	2.4E+08	2.4E+06	1.0E+01	1.0E-01
Th-227	015623-47-9	2.0E+03	2.0E+01	2.5E+01	2.5E-01	4.7E+05	4.7E+03	2.5E+01	2.5E-01
Th-228	014274-82-9	1.3E+03	1.3E+01	8.2E+03	8.2E+01	2.2E+04	2.2E+02	1.2E+03	1.2E+01
Th-228+D	014274-82-9	3.4E+02	3.4E+00	4.4E+00	4.4E-02	2.1E+04	2.1E+02	4.3E+00	4.3E-02
Th-229	015594-54-4	1.4E+03	1.4E+01	7.3E+01	7.3E-01	2.7E+04	2.7E+02	7.0E+01	7.0E-01
Th-229+D	015594-54-4	2.2E+02	2.2E+00	7.3E+00	7.3E-02	2.5E+04	2.5E+02	7.1E+00	7.1E-02
Th-230	014269-63-7	2.1E+03	2.1E+01	9.9E+04	9.9E+02	1.2E+05	1.2E+03	2.4E+03	2.4E+01
Th-231	014932-40-2	4.4E+04	4.4E+02	2.1E+03	2.1E+01	1.9E+09	1.9E+07	2.0E+03	2.0E+01
Th-232	007440-29-1	2.4E+03	2.4E+01	2.2E+05	2.2E+03	1.1E+05	1.1E+03	2.8E+03	2.8E+01
Th-234	015065-10-8	4.1E+03	4.1E+01	1.2E+03	1.2E+01	1.1E+08	1.1E+06	9.9E+02	9.9E+00
Tl-202	015720-57-7	7.9E+04	7.9E+02	3.1E+00	3.1E-02	3.4E+09	3.4E+07	3.1E+00	3.1E-02

Table 3.1d. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		External Exposure (pCi/g) ^{††}		Inhalation (pCi/g)		Ingestion + External Exposure + Inhalation (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
TI-204	013968-51-9	4.0E+04	4.0E+02	5.0E+03	5.0E+01	1.8E+09	1.8E+07	4.5E+03	4.5E+01
TI-208	014913-50-9	4.5E+06	4.5E+04	3.0E-01	3.0E-03	1.5E+11	1.5E+09	3.0E-01	3.0E-03
TI-209	015690-73-0	5.7E+06	5.7E+04	5.5E-01	5.5E-03	1.8E+11	1.8E+09	5.5E-01	5.5E-03
Tm-170	013981-30-1	1.1E+04	1.1E+02	1.1E+03	1.1E+01	1.9E+08	1.9E+06	1.0E+03	1.0E+01
Tm-171	014333-45-0	1.4E+05	1.4E+03	1.4E+04	1.4E+02	1.1E+09	1.1E+07	1.3E+04	1.3E+02
U-232	014158-29-3	9.8E+02	9.8E+00	1.3E+05	1.3E+03	3.9E+04	3.9E+02	1.1E+03	1.1E+01
U-233	013968-55-3	1.8E+03	1.8E+01	1.2E+05	1.2E+03	1.4E+05	1.4E+03	2.1E+03	2.1E+01
U-234	013966-29-5	1.8E+03	1.8E+01	2.0E+05	2.0E+03	1.5E+05	1.5E+03	2.1E+03	2.1E+01
U-235	015117-96-1	1.8E+03	1.8E+01	1.7E+01	1.7E-01	1.6E+05	1.6E+03	1.6E+01	1.6E-01
U-235+D	015117-96-1	1.7E+03	1.7E+01	1.6E+01	1.6E-01	1.6E+05	1.6E+03	1.6E+01	1.6E-01
U-236	013982-70-2	1.9E+03	1.9E+01	2.5E+05	2.5E+03	1.5E+05	1.5E+03	2.2E+03	2.2E+01
U-237	014269-75-1	2.0E+04	2.0E+02	3.2E+01	3.2E-01	6.5E+08	6.5E+06	3.2E+01	3.2E-01
U-238	007440-61-1	1.9E+03	1.9E+01	2.9E+05	2.9E+03	1.6E+05	1.6E+03	2.2E+03	2.2E+01
U-238+D	007440-61-1	1.3E+03	1.3E+01	8.3E+01	8.3E-01	1.6E+05	1.6E+03	7.8E+01	7.8E-01
U-240	015687-53-3	1.5E+04	1.5E+02	4.0E+04	4.0E+02	6.1E+08	6.1E+06	1.2E+04	1.2E+02
V-48	014331-97-6	1.0E+04	1.0E+02	3.9E-01	3.9E-03	3.0E+08	3.0E+06	3.9E-01	3.9E-03
W-181	015749-46-9	2.9E+05	2.9E+03	2.1E+02	2.1E+00	2.5E+10	2.5E+08	2.1E+02	2.1E+00
W-185	014932-41-3	3.9E+04	3.9E+02	8.6E+04	8.6E+02	4.8E+09	4.8E+07	3.0E+04	3.0E+02
W-187	014983-48-3	3.2E+04	3.2E+02	2.7E+00	2.7E-02	3.9E+09	3.9E+07	2.7E+00	2.7E-02

Table 3.1d. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		External Exposure (pCi/g) ^{††}		Inhalation (pCi/g)		Ingestion + External Exposure + Inhalation (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Xe-122	015151-09-4					6.6E+11	6.6E+09		
Xe-123	015700-10-4					2.3E+12	2.3E+10		
Xe-125	013994-18-8					1.7E+12	1.7E+10		
Xe-127	013994-19-9					5.0E+12	5.0E+10		
Xe-129m	013965-99-6					3.6E+12	3.6E+10		
Xe-131m	014683-11-5					4.9E+12	4.9E+10		
Xe-133	014932-42-4					4.9E+12	4.9E+10		
Xe-133m	014932-42-4					4.0E+12	4.0E+10		
Xe-135	014995-62-1					2.7E+12	2.7E+10		
Xe-135m	014995-62-1					1.1E+13	1.1E+11		
Xe-137	014835-21-3					1.5E+12	1.5E+10		
Xe-138	015751-81-2					9.9E+11	9.9E+09		
Y-90	010098-91-6	5.3E+03	5.3E+01			2.1E+08	2.1E+06	6.3E+03	6.3E+01
Y-91	014234-24-3	5.9E+03	5.9E+01	3.1E+02	3.1E+00	1.1E+08	1.1E+06	3.0E+02	3.0E+00
Y-91m	014234-24-3	2.2E+06	2.2E+04	2.3E+00	2.3E-02	6.8E+10	6.8E+08	2.3E+00	2.3E-02
Y-92	015751-59-4	4.1E+04	4.1E+02	4.4E+00	4.4E-02	1.3E+09	1.3E+07	4.4E+00	4.4E-02
Y-93	014981-70-5	1.4E+04	1.4E+02	1.3E+01	1.3E-01	5.9E+08	5.9E+06	1.3E+01	1.3E-01
Zn-65	013982-39-3	8.0E+03	8.0E+01	1.9E+00	1.9E-02	2.0E+08	2.0E+06	1.9E+00	1.9E-02
Zn-69	013982-23-5	1.3E+06	1.3E+04	2.1E+05	2.1E+03	2.0E+10	2.0E+08	1.9E+05	1.9E+03

Table 3.1d. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		External Exposure (pCi/g) ^{††}		Inhalation (pCi/g)		Ingestion + External Exposure + Inhalation (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Zn-69m	013982-23-5	5.2E+04	5.2E+02	3.0E+00	3.0E-02	1.7E+09	1.7E+07	3.0E+00	3.0E-02
Zr-93	015751-77-6	1.5E+05	1.5E+03			3.9E+08	3.9E+06	1.8E+05	1.8E+03
Zr-95	013967-71-0	2.0E+04	2.0E+02	1.5E+00	1.5E-02	3.1E+08	3.1E+06	1.5E+00	1.5E-02
Zr-97	014928-30-4	7.6E+03	7.6E+01	6.3E+00	6.3E-02	4.3E+08	4.3E+06	6.3E+00	6.3E-02

Notes:

[†] Isotopes designated with an "m" indicate that the isotope is metastable; isotopes designated with a "+D" indicate that the radionuclide slope factors include contributions from daughter products.

^{††} If no PRG for external exposure was calculated, there either was no external exposure slope factor available or the external exposure slope factor was equal to 0.00E+00 (resulting in the PRG for the external exposure pathway for soil under residential land use to be undefined).

^{†††} If slope factors and/or reference doses were available for only one pathway (i.e., ingestion, external exposure, OR inhalation), the total for ingestion plus external exposure plus inhalation was not given.

Table 3.2a. Risk-based Preliminary Remediation Goals for nonradionuclides in groundwater (Industrial scenario)

Chemical	CASRN	Ingestion (mg/L)		
		10 ⁻⁴	10 ⁻⁶	HQ=1
ACENAPHTHENE	000083-32-9			6.1E+00
ACEPHATE	030560-19-1	3.3E+00	3.3E-02	4.1E-01
ACETALDEHYDE	000075-07-0			
ACETOCHLOR	034256-82-1			2.0E+00
ACETONE	000067-64-1			1.0E+01
ACETONE CYANOHYDRIN	000075-86-5			8.2E-02
ACETONITRILE	000075-05-8			6.1E-01
ACETOPHENONE	000098-86-2			1.0E+01
ACROLEIN	000107-02-8			2.0E+00
ACRYLAMIDE	000079-06-1	6.4E-03	6.4E-05	2.0E-02
ACRYLIC ACID	000079-10-7			5.1E+01
ACRYLONITRILE	000107-13-1	5.3E-02	5.3E-04	1.0E-01
ALACHLOR	015972-60-8	3.6E-01	3.6E-03	1.0E+00
ALAR	001596-84-5			1.5E+01
ALDICARB	000116-06-3			1.0E-01
ALDICARB SULFONE	001646-88-4			1.0E-01
ALDRIN	000309-00-2	1.7E-03	1.7E-05	3.1E-03
ALLY	074223-64-6			2.6E+01
ALLYL ALCOHOL	000107-18-6			5.1E-01

Table 3.2a. (continued)

Chemical	CASRN	Ingestion (mg/L)		
		10 ⁻⁴	10 ⁻⁶	HQ=1
ALLYL CHLORIDE	000107-05-1			
ALUMINUM PHOSPHIDE	020859-73-8			4.1E-02
AMDRO	067485-29-4			3.1E-02
AMETRYN	000834-12-8			9.2E-01
AMINOPHENOL, m-	000591-27-5			7.2E+00
AMINOPYRIDINE, 4-	000504-24-5			2.0E-03
AMITRAZ	033089-61-1			2.6E-01
AMMONIA	007664-41-7			
AMMONIUM SULFAMATE	007773-06-0			2.0E+01
ANILINE	000062-53-3	5.0E+00	5.0E-02	
ANTHRACENE	000120-12-7			3.1E+01
ANTIMONY (METALLIC)	007440-36-0			4.1E-02
ANTIMONY PENTOXIDE	001314-60-9			5.1E-02
ANTIMONY POTASSIUM TARTRATE	000304-61-0			9.2E-02
ANTIMONY TETROXIDE	001332-81-6			4.1E-02
ANTIMONY TRIOXIDE	001309-64-4			4.1E-02
APOLLO	074115-24-5			1.3E+00
ARAMITE	000140-57-8	1.1E+00	1.1E-02	5.1E+00
AROCLO 1016	012674-11-2			7.2E-03

Table 3.2a. (continued)

Chemical	CASRN	Ingestion (mg/L)		
		10 ⁻⁴	10 ⁻⁶	HQ=1
AROCOR 1254	011097-69-1			2.0E-03
AROCOR-1221	011104-28-2	3.7E-03	3.7E-05	
AROCOR-1232	011141-16-5	3.7E-03	3.7E-05	
AROCOR-1242	053469-21-9	3.7E-03	3.7E-05	
AROCOR-1248	012672-29-6	3.7E-03	3.7E-05	
AROCOR-1260	011096-82-5	3.7E-03	3.7E-05	
ARSENIC, INORGANIC	007440-38-2			3.1E-02
ARSINE	007784-42-1			
ASBESTOS	001332-21-4			
ASSURE	076578-14-8			9.2E-01
ASULAM	003337-71-1			5.1E+00
ATRAZINE	001912-24-9	1.3E-01	1.3E-03	3.6E+00
AVERMECTIN B1	065195-55-3			4.1E-02
AZOBENZENE	000103-33-3	2.6E-01	2.6E-03	
BARIUM	007440-39-3			7.2E+00
BARIUM CYANIDE	000542-62-1			1.0E+01
BAYGON	000114-26-1			4.1E-01
BAYLETON	043121-43-3			3.1E+00
BAYTHROID	068359-37-5			2.6E+00

Table 3.2a. (continued)

Chemical	CASRN	Ingestion (mg/L)		
		10 ⁻⁴	10 ⁻⁶	HQ=1
BENEFIN	001861-40-1			3.1E+01
BENOMYL	017804-35-2			5.1E+00
BENTAZON	025057-89-0			2.6E-01
BENZALDEHYDE	000100-52-7			1.0E+01
BENZENE	000071-43-2	9.9E-01	9.9E-03	
BENZENETHIOL	000108-98-5			1.0E-03
BENZIDINE	000092-87-5	1.2E-04	1.2E-06	3.1E-01
BENZOIC ACID	000065-85-0			4.1E+02
BENZOTRICHLORIDE	000098-07-7	2.2E-03	2.2E-05	
BENZO[A]PYRENE	000050-32-8	3.9E-03	3.9E-05	
BENZO[B]FLUORANTHENE	000205-99-2	3.9E-02	3.9E-04	
BENZO[G,H,I]PERYLENE	000191-24-2			
BENZO[K]FLUORANTHENE	000207-08-9	3.9E-01	3.9E-03	
BENZYL ALCOHOL	000100-51-6			3.1E+01
BENZYL CHLORIDE	000100-44-7	1.7E-01	1.7E-03	
BENZI[A]ANTHRACENE	000056-55-3	3.9E-02	3.9E-04	
BERYLLIUM	007440-41-7	6.7E-03	6.7E-05	5.1E-01
BIDRIN	000141-66-2			1.0E-02
BIPHENTHRIN	082657-04-3			1.5E+00

Table 3.2a. (continued)

Chemical	CASRN	Ingestion (mg/L)		
		10 ⁻⁴	10 ⁻⁶	HQ=1
BIPHENYL, 1,1'-	000092-52-4			5.1E+00
BIS(2-CHLORO-1-METHYLETHYL)ETHER (TECHNICAL)	000108-06-1	4.1E-01	4.1E-03	
BIS(2-CHLOROETHOXY)METHANE	000111-91-1			
BIS(2-CHLOROETHYL)ETHER	000111-44-4	2.6E-02	2.6E-04	
BIS(2-CHLOROISOPROPYL)ETHER	039638-32-9			4.1E+00
BIS(2-ETHYLHEXYL)PHTHALATE	000117-81-7	2.0E+00	2.0E-02	2.0E+00
BIS(CHLOROMETHYL)ETHER	000542-88-1	1.3E-04	1.3E-06	
BISPHENOL A	000080-05-7			5.1E+00
BORON TRIFLUORIDE	007637-07-2			
BORON and BORATES ONLY	007440-42-8			9.2E+00
BROMOCHLOROMETHANE	000074-97-5			
BROMODICHLOROMETHANE	000075-27-4	4.6E-01	4.6E-03	2.0E+00
BROMODIPHENYL ETHER, p-	000101-55-3			
BROMOFORM	000075-25-2	3.6E+00	3.6E-02	2.0E+00
BROMOMETHANE	000074-83-9			1.4E-01
BROMOPHOS	002104-96-3			5.1E-01
BROMOTRICHLOROMETHANE	000075-62-7			
BROMOXYNIL	001689-84-5			2.0E+00
BROMOXYNIL OCTANOATE	001689-99-2			2.0E+00

Table 3.2a. (continued)

Chemical	CASRN	Ingestion (mg/L)		
		10 ⁻⁴	10 ⁻⁶	HQ=1
BUTADIENE, 1,3-	000106-99-0			
BUTANOL, N-	000071-36-3			1.0E+01
BUTYL BENZYL PHTHALATE	000085-68-7			2.0E+01
BUTYLATE	002008-41-5			5.1E+00
BUTYLCHLORIDE, T-	000507-20-0			
BUTYLPHthalYL BUTYLGLYCOLATE	000085-70-1			1.0E+02
CACODYLIC ACID	000075-60-5			3.1E-01
CADMIUM (Water)	007440-43-9			5.1E-02
CALCIUM CYANIDE	000592-01-8			4.1E+00
CAPROLACTAM	000105-60-2			5.1E+01
CAPTAFOL	002425-06-1	3.3E+00	3.3E-02	2.0E-01
CAPTAN	000133-06-2	8.2E+00	8.2E-02	1.3E+01
CARBARYL	000063-25-2			1.0E+01
CARBAZOLE	000086-74-8	1.4E+00	1.4E-02	
CARBOFURAN	001563-66-2			5.1E-01
CARBON DISULFIDE	000075-15-0			1.0E+01
CARBON TETRACHLORIDE	000056-23-5	2.2E-01	2.2E-03	7.2E-02
CARBOSULFAN	055285-14-8			1.0E+00
CARBOXIN	005234-68-4			1.0E+01

Table 3.2a. (continued)

Chemical	CASRN	Ingestion (mg/L)		
		10 ⁻⁴	10 ⁻⁶	HQ=1
CHLORAL	000075-87-6			2.0E-01
CHLORAMBEN	000133-90-4			1.5E+00
CHLORANIL	000118-75-2	7.1E-02	7.1E-04	
CHLORDANE	000057-74-9	2.2E-02	2.2E-04	6.1E-03
CHLORIMURON-ETHYL	090982-32-4			2.0E+00
CHLORINE	007782-50-5			1.0E+01
CHLORINE DIOXIDE	010049-04-4			
CHLORO-1,3-BUTADIENE, 2-	000126-99-8			2.0E+00
CHLORO-2-METHYLANILINE HCL, 4-	003165-93-3	6.2E-02	6.2E-04	
CHLORO-2-METHYLANILINE, 4-	000095-69-2	4.9E-02	4.9E-04	
CHLOROACETIC ACID	000079-11-8			2.0E-01
CHLOROACETOPHENONE, 2-	000532-27-4			
CHLOROANILINE, p-	000106-47-8			4.1E-01
CHLOROBENZENE	000108-90-7			2.0E+00
CHLOROBENZILATE	000510-15-6	1.1E-01	1.1E-03	2.0E+00
CHLOROBENZOIC ACID, p-	000074-11-3			2.0E+01
CHLOROBENZOTRIFLUORIDE, 4-	000098-56-6			2.0E+00
CHLOROBUTANE, 1-	000109-69-3			4.1E+01
CHLOROBUTANE, 2-	000078-86-4			

Table 3.2a. (continued)

Chemical	CASRN	Ingestion (mg/L)		
		10 ⁻⁴	10 ⁻⁶	HQ=1
CHLOROCYCLOPENTADIENE	041851-50-7			
CHLORODIBROMOETHANE	073506-94-2	3.4E-01	3.4E-03	
CHLORODIFLUOROMETHANE	000075-45-6			
CHLOROFORM	000067-66-3	4.7E+00	4.7E-02	1.0E+00
CHLOROMETHANE	000074-87-3	2.2E+00	2.2E-02	
CHLOROMETHYL METHYL ETHER	000107-30-2			
CHLORONAPHTHALENE, BETA-	000091-58-7			8.2E+00
CHLORONITROBENZENE, o-	000088-73-3	1.1E+00	1.1E-02	
CHLORONITROBENZENE, p-	000121-73-3	1.6E+00	1.6E-02	
CHLOROPHENOL, 2-	000095-57-8			5.1E-01
CHLOROPHENYL METHYL SULFIDE, p-	000123-09-1			
CHLOROPHENYL METHYL SULFOXIDE	000934-73-6			
CHLOROPROPANE, 2-	000075-29-6			
CHLOROTHALONIL	001897-45-6	2.6E+00	2.6E-02	1.5E+00
CHLOROTOLUENE, o-	000095-49-8			2.0E+00
CHLOROPROPAM	000101-21-3			2.0E+01
CHLORPYRIFOS	002921-88-2			3.1E-01
CHLORPYRIFOS METHYL	005598-13-0			1.0E+00
CHLORSULFURON	064902-72-3			5.1E+00

Table 3.2a. (continued)

Chemical	CASRN	Ingestion (mg/L)		
		10 ⁻⁴	10 ⁻⁶	HQ=1
CHLORTHIOPHOS	060238-56-4			8.2E-02
CHROMIUM (III) (INSOLUBLE SALTS)	016065-83-1			1.0E+02
CHROMIUM (VI)	018540-29-9			5.1E-01
CHRYSENE	000218-01-9	3.9E+00	3.9E-02	
COKE OVEN EMISSIONS	008007-45-2			
COPPER	007440-50-8			
COPPER CYANIDE	000544-92-3			5.1E-01
CREOSOTE	008001-58-9			
CRESOL, m-	000108-39-4			5.1E+00
CRESOL, o-	000095-48-7			5.1E+00
CRESOL, p-	000106-44-5			5.1E-01
CROTONALDEHYDE	000123-73-9	1.5E-02	1.5E-04	
CUMENE	000098-82-8			4.1E+00
CYANAZINE	021725-46-2	3.4E-02	3.4E-04	2.0E-01
CYANIDE (CN-)	000057-12-5			2.0E+00
CYANOGEN	000460-19-5			4.1E+00
CYANOGEN BROMIDE	000506-68-3			9.2E+00
CYANOGEN CHLORIDE	000506-77-4			5.1E+00
CYCLOHEXANE, 1,2,3,4,5-PENTABROMO-6-CHLORO	000087-84-3	1.2E+00	1.2E-02	

Table 3.2a. (continued)

Chemical	CASRN	Ingestion (mg/L)		
		10 ⁻⁴	10 ⁻⁶	HQ=1
CYCLOHEXANONE	000108-94-1			5.1E+02
CYCLOHEXYLAMINE	000108-91-8			2.0E+01
CYCLOPENTADIENE	000542-92-7			
CYHALOTHRIN/KARATE	068085-85-8			5.1E-01
CYPERMETHRIN	052315-07-8			1.0E+00
CYROMAZINE	066215-27-8			7.7E-01
DACTHAL	001861-32-1			1.0E+00
DALAPON	000075-99-0			3.1E+00
DDD	000072-54-8	1.2E-01	1.2E-03	
DDE	000072-55-9	8.4E-02	8.4E-04	
DDT	000050-29-3	8.4E-02	8.4E-04	5.1E-02
DECABROMODIPHENYL ETHER	001163-19-5			1.0E+00
DEMETON	008065-48-3			4.1E-03
DI(2-ETHYLHEXYL)ADIPATE	000103-23-1	2.4E+01	2.4E-01	6.1E+01
DIALATE	002303-16-4	4.7E-01	4.7E-03	
DIAZINON	000333-41-5			9.2E-02
DIBENZ[A,H]ANTHRACENE	000053-70-3	3.9E-03	3.9E-05	
DIBROMO-3-CHLOROPROPANE, 1,2-	000096-12-8	2.0E-02	2.0E-04	
DIBROMOBENZENE, 1,4-	000106-37-6			1.0E+00

Table 3.2a. (continued)

Chemical	CASRN	Ingestion (mg/L)		
		10 ⁻⁴	10 ⁻⁶	HQ=1
DIBROMOCHLOROMETHANE	000124-48-1	3.4E-01	3.4E-03	2.0E+00
DIBROMODICHLOROMETHANE	000594-18-3			
DIBROMODIPHENYL ETHER, p,p'-	002050-47-7			
DIBROMOETHANE, 1,2-	000106-93-4	3.4E-04	3.4E-06	
DIBROMOMETHANE (METHYLENE BROMIDE)	000074-95-3			1.0E+00
DIBUTYL PHTHALATE	000084-74-2			1.0E+01
DICAMBA	001918-00-9			3.1E+00
DICHLORO-2-BUTENE, 1,4-	000764-41-0			
DICHLOROBENZENE, 1,2-	000095-50-1			9.2E+00
DICHLOROBENZENE, 1,3-	000541-73-1			
DICHLOROBENZENE, 1,4-	000106-46-7	1.2E+00	1.2E-02	
DICHLOROBENZIDINE, 3,3'-	000091-94-1	6.4E-02	6.4E-04	
DICHLORODIFLUOROMETHANE	000075-71-8			2.0E+01
DICHLOROETHANE, 1,1-	000075-34-3			1.0E+01
DICHLOROETHANE, 1,2-	000107-06-2	3.1E-01	3.1E-03	
DICHLOROETHYLENE, 1,1-	000075-35-4	4.8E-02	4.8E-04	9.2E-01
DICHLOROETHYLENE, 1,2-, (MIXED ISOMERS)	000540-59-0			9.2E-01
DICHLOROETHYLENE, 1,2-C-	000156-59-2			1.0E+00
DICHLOROETHYLENE, 1,2-T-	000156-60-5			2.0E+00

Table 3.2a. (continued)

Chemical	CASRN	Ingestion (mg/L)		
		10 ⁻⁴	10 ⁻⁶	HQ=1
DICHLOROPHENOL, 2,4-	000120-83-2			3.1E-01
DICHLOROPHENOXY ACETIC ACID, 2,4-	000094-75-7			1.0E+00
DICHLOROPHENOXY)BUTYRIC ACID, 4-(2,4-	000094-82-6			8.2E-01
DICHLOROPROPANE, 1,2-	000078-87-5	4.2E-01	4.2E-03	
DICHLOROPROPANOL, 2,3-	000616-23-9		.	3.1E-01
DICHLOROPROPENE, 1,3-	000542-75-6	1.6E-01	1.6E-03	3.1E-02
DICHLORVOS	000062-73-7	9.9E-02	9.9E-04	5.1E-02
DICOFOL	000115-32-2			
DICYCLOPENTADIENE	000077-73-6			3.1E+00
DIELDRIN	000060-57-1	1.8E-03	1.8E-05	5.1E-03
DIETHYL PHTHALATE	000084-66-2			8.2E+01
DIETHYL-P-NITROPHENYLPHOSPHATE	000311-45-5			
DIETHYLENE GLYCOL DINITRATE (DEGDN)	000693-21-0			
DIETHYLENE GLYCOL MONOBUTYL ETHER	000112-34-5			
DIETHYLENE GLYCOL MONOETHYL ETHER	000111-90-0			2.0E+02
DIETHYLFORMAMIDE	000617-84-5			1.1E+00
DIETHYLSTILBESTEROL	000056-53-1	6.1E-06	6.1E-08	
DIFENZOQUAT	043222-48-6			8.2E+00
DIFLUBENZURON	035367-38-5			2.0E+00

Table 3.2a. (continued)

Chemical	CASRN	Ingestion (mg/L)		
		10 ⁻⁴	10 ⁻⁶	HQ=1
DIFLUOROETHANE, 1,1-	000075-37-6			
DIISOPROPYL METHYLPHOSPHONATE	001445-75-6			8.2E+00
DIMETHIPN	055290-64-7			2.0E+00
DIMETHOATE	000060-51-5			2.0E-02
DIMETHOXYBENZIDINE, 3,3'-	000119-90-4	2.0E+00	2.0E-02	
DIMETHYL SULFATE	000077-78-1			
DIMETHYLANILINE HCL, 2,4-	021436-96-4	4.9E-02	4.9E-04	
DIMETHYLANILINE, 2,4-	000095-68-1	3.8E-02	3.8E-04	
DIMETHYLANILINE, N,N-	000121-69-7			2.0E-01
DIMETHYLBENZIDINE, 3,3'-	000119-93-7	3.1E-03	3.1E-05	
DIMETHYLETHYL LEAD	107584-40-7			
DIMETHYLFORMAMIDE	000068-12-2			1.0E+01
DIMETHYLHYDRAZINE, 1,2-	000540-73-8			
DIMETHYLPHENOL, 2,4-	000105-67-9			2.0E+00
DIMETHYLPHENOL, 2,6-	000576-26-1			6.1E-02
DIMETHYLPHENOL, 3,4-	000095-65-8			1.0E-01
DIMETHYLPHthalate	000131-11-3			
DIMETHYLTEREPHTHALATE	000120-61-6			1.0E+01
DINITRO-O-CYCLOHEXYL PHENOL, 4,6-	000131-89-5			2.0E-01

Table 3.2a. (continued)

Chemical	CASRN	Ingestion (mg/L)		
		10 ⁻⁴	10 ⁻⁶	HQ=1
DINITROBENZENE, 1,2-	000528-29-0			4.1E-02
DINITROBENZENE, 1,3-	000099-65-0			1.0E-02
DINITROBENZENE, 1,4-	000100-25-4			4.1E-02
DINITROPHENOL, 2,4-	000051-28-5			2.0E-01
DINITROTOLUENE, 2,4-	000121-14-2	4.2E-02	4.2E-04	2.0E-01
DINITROTOLUENE, 2,6-	000606-20-2	4.2E-02	4.2E-04	1.0E-01
DINOSEB	000088-85-7			1.0E-01
DIOXANE, 1,4-	000123-91-1	2.6E+00	2.6E-02	
DIPHENAMID	000957-51-7			3.1E+00
DIPHENYLAMINE	000122-39-4			2.6E+00
DIPHENYLHYDRAZINE, 1,2-	000122-66-7	3.6E-02	3.6E-04	
DIQUAT	000085-00-7			2.2E-01
DIRECT BLACK 38	001937-37-7	3.3E-03	3.3E-05	
DIRECT BLUE 6	002602-46-2	3.5E-03	3.5E-05	
DIRECT BROWN 95	016071-86-6	3.1E-03	3.1E-05	
DIRECT SKY BLUE	002610-05-1			
DISULFOTON	000298-04-4			4.1E-03
DIURON	000330-54-1			2.0E-01
DODINE	002439-10-3			4.1E-01

Table 3.2a. (continued)

Chemical	CASRN	Ingestion (mg/L)		
		10 ⁻⁴	10 ⁻⁶	HQ=1
ENDOSULFAN	000115-29-7			6.1E-01
ENDOTHALL	000145-73-3			2.0E+00
ENDRIN	000072-20-8			3.1E-02
EPICHLOROHYDRIN	000106-89-8	2.9E+00	2.9E-02	2.0E-01
EPOXYBUTANE, 1,2-	000106-88-7			
EPTC	000759-94-4			2.6E+00
ETHEPHON	016672-87-0			5.1E-01
ETHION	000563-12-2			5.1E-02
ETHOXYETHANOL ACETATE, 2-	000111-15-9			3.1E+01
ETHOXYETHANOL, 2-	000110-80-5			4.1E+01
ETHYL ACETATE	000141-78-6			9.2E+01
ETHYL ACRYLATE	000140-88-5	6.0E-01	6.0E-03	
ETHYL CHLORIDE	000075-00-3			
ETHYL ETHER	000060-29-7			2.0E+01
ETHYL METHACRYLATE	000097-63-2			9.2E+00
ETHYL-p-NITROPHENYL PHOSPHONATE	002104-64-5			1.0E-03
ETHYLBENZENE	000100-41-4			1.0E+01
ETHYLENE CYANOHYDRIN	000109-78-4			3.1E+01
ETHYLENE DIAMINE	000107-15-3			2.0E+00

Table 3.2a. (continued)

Chemical	CASRN	Ingestion (mg/L)		
		10 ⁻⁴	10 ⁻⁶	HQ=1
ETHYLENE GLYCOL	000107-21-1			2.0E+02
ETHYLENE GLYCOL MONOBUTYL ETHER	000111-76-2			
ETHYLENE OXIDE	000075-21-8	2.8E-02	2.8E-04	
ETHYLENE THIOUREA	000096-45-7	2.6E-01	2.6E-03	8.2E-03
ETHYLPHTHALYL ETHYL GLYCOLATE	000084-72-0			3.1E+02
EXPRESS	101200-48-0			8.2E-01
FENAMIPHOS	022224-92-6			2.6E-02
FENPROPATHRIN	039515-41-8			2.6E+00
FLUOMETURON	002164-17-2			1.3E+00
FLUORANTHENE	000206-44-0			4.1E+00
FLUORENE	000086-73-7			4.1E+00
FLUORIDE	007782-41-4			6.1E+00
FLURIDONE	059756-60-4			8.2E+00
FLURPRIMIDOL	056425-91-3			2.0E+00
FLUTOLANIL	066332-96-5			6.1E+00
FLUVALINATE	069409-94-5			1.0E+00
FOLPET	000133-07-3	8.2E+00	8.2E-02	1.0E+01
FOMESAFEN	072178-02-0	1.5E-01	1.5E-03	
FONOFOS	000944-22-9			2.0E-01

Table 3.2a. (continued)

Chemical	CASRN	Ingestion (mg/L)		
		10 ⁻⁴	10 ⁻⁶	HQ=1
FORMALDEHYDE	000050-00-0			2.0E+01
FORMIC ACID	000064-18-6			2.0E+02
FOSETYL-AL	039148-24-8			3.1E+02
FURAN	000110-00-9			1.0E-01
FURAZOLIDONE	000067-45-8	7.5E-03	7.5E-05	
FURFURAL	000098-01-1			3.1E-01
FURIUM	000531-82-8	5.7E-04	5.7E-06	
FURMECYCLOX	060568-05-0	9.5E-01	9.5E-03	
GLUFOSINATE-AMMONIUM	077182-82-2			4.1E-02
GLYCIDYL	000765-34-4			4.1E-02
GLYPHOSATE	001071-83-6			1.0E+01
GOAL	042874-03-3			3.1E-01
HALOXYFOP-METHYL	069806-40-2			5.1E-03
HARMONY	079277-27-3			1.3E+00
HEPTACHLOR	000076-44-8	6.4E-03	6.4E-05	5.1E-02
HEPTACHLOR EPOXIDE	001024-57-3	3.1E-03	3.1E-05	1.3E-03
HEPTANE, N-	000142-82-5			
HEXABROMOBENZENE	000087-82-1			2.0E-01
HEXACHLOROBENZENE	000118-74-1	1.8E-02	1.8E-04	8.2E-02

Table 3.2a. (continued)

Chemical	CASRN	Ingestion (mg/L)		
		10 ⁻⁴	10 ⁻⁶	HQ=1
HEXACHLOROBUTADIENE	000087-68-3	3.7E-01	3.7E-03	2.0E-02
HEXACHLOROCYCLOHEXANE, ALPHA-	000319-84-6	4.5E-03	4.5E-05	
HEXACHLOROCYCLOHEXANE, BETA-	000319-85-7	1.6E-02	1.6E-04	
HEXACHLOROCYCLOHEXANE, DELTA-	000319-86-8			
HEXACHLOROCYCLOHEXANE, EPSILON	006108-10-7			
HEXACHLOROCYCLOHEXANE, GAMMA-	000058-89-9	2.2E-02	2.2E-04	3.1E-02
HEXACHLOROCYCLOHEXANE, TECHNICAL	000608-73-1	1.6E-02	1.6E-04	
HEXACHLOROCYCLOPENTADIENE	000077-47-4			7.2E-01
HEXACHLORODIBENZO-p-DIOXIN, MIXTURE	019408-74-3	4.6E-06	4.6E-08	
HEXACHLOROETHANE	000067-72-1	2.0E+00	2.0E-02	1.0E-01
HEXACHLOROPHENE	000070-30-4			3.1E-02
HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE (RDX)	000121-82-4	2.6E-01	2.6E-03	3.1E-01
HEXAMETHYLENE DIISOCYANATE, 1,6-	000822-06-0			
HEXANE, N-	000110-54-3			6.1E+00
HEXAZINONE	051235-04-2			3.4E+00
HYDRAZINE	000302-01-2	9.5E-03	9.5E-05	
HYDRAZINE SULFATE	010034-93-2	9.5E-03	9.5E-05	
HYDROGEN CHLORIDE	007647-01-0			
HYDROGEN CYANIDE	000074-90-8			2.0E+00

Table 3.2a. (continued)

Chemical	CASRN	Ingestion (mg/L)		
		10 ⁻⁴	10 ⁻⁵	HQ=1
HYDROGEN SULFIDE	007783-06-4			3.1E-01
HYDROQUINONE	000123-31-9			4.1E+00
IMAZALIL	035554-44-0			1.3E+00
IMAZAQUIN	081335-37-7			2.6E+01
INDENO[1,2,3-cd]PYRENE	000193-39-5	3.9E-02	3.9E-04	
IPRODIONE	036734-19-7			4.1E+00
ISOBUTYL ALCOHOL	000078-83-1			3.1E+01
ISOPHORONE	000078-59-1	3.0E+01	3.0E-01	2.0E+01
ISOPROPALIN	033820-53-0			1.5E+00
ISOPROPYL METHYL PHOSPHONIC ACID	001832-54-8			1.0E+01
ISOXABEN	082558-50-7			5.1E+00
KARATE	091465-08-6			5.1E-01
KERB	023950-58-5			7.7E+00
LACTOFEN	077501-63-4			2.0E-01
LEAD ALKYLs	NA			
LEAD AND COMPOUNDS	007439-92-1			
LNURON	000330-55-2			2.0E-01
LONDAX	083055-99-6			2.0E+01
MALATHION	000121-75-5			2.0E+00

Table 3.2a. (continued)

Chemical	CASRN	Ingestion (mg/L)		
		10 ⁻⁴	10 ⁻⁵	HQ=1
MALEIC ANHYDRIDE	000108-31-6			1.0E+01
MALEIC HYDRAZIDE	000123-33-1			5.1E+01
MALONONITRILE	000109-77-3			2.0E-03
MANCOZEB	008018-01-7			3.1E+00
MANEB	012427-38-2			5.1E-01
MANGANESE (Water)	007439-96-5			5.1E-01
MCPA	000094-74-6			5.1E-02
MCPB	000094-81-5			1.0E+00
MCPP	000093-65-2			1.0E-01
MEPHOSFOLAN	000950-10-7			9.2E-03
MEPIQUAT CHLORIDE	024307-26-4			3.1E+00
MERCURY, INORGANIC	007439-97-6			3.1E-02
MERPHOS	000150-50-5			3.1E-03
MERPHOS OXIDE	000078-48-8			3.1E-03
METALAXYL	057837-19-1			6.1E+00
METHACRYLONITRILE	000126-98-7			1.0E-02
METHAMIDOPHOS	010265-92-6			5.1E-03
METHANOL	000067-56-1			5.1E+01
METHIDATHION	000950-37-8			1.0E-01

Table 3.2a. (continued)

Chemical	CASRN	Ingestion (mg/L)		
		10 ⁻⁴	10 ⁻⁵	HQ=1
METHOMYL	016752-77-5			2.6E+00
METHOXY-5-NITROANILINE, 2-	000099-59-2	6.2E-01	6.2E-03	
METHOXYCHLOR	000072-43-5			5.1E-01
METHOXYETHANOL ACETATE, 2-	000110-49-6			2.0E-01
METHOXYETHANOL, 2-	000109-86-4			1.0E-01
METHYL ACETATE	000079-20-9			1.0E+02
METHYL ACRYLATE	000096-33-3			3.1E+00
METHYL ETHYL KETONE	000078-93-3			6.1E+01
METHYL ISOBUTYL KETONE	000108-10-1			8.2E+00
METHYL MERCURY	022967-92-6			3.1E-02
METHYL METHACRYLATE	000080-62-6			8.2E+00
METHYL PARATHION	000298-00-0			2.6E-02
METHYL STYRENE (MIXED ISOMERS)	025013-15-4			6.1E-01
METHYL TERT-BUTYL ETHER (MTBE)	001634-04-4			
METHYL-5-NITROANILINE, 2-	000099-55-8	8.7E-01	8.7E-03	
METHYLANILINE HYDROCHLORIDE, 2-	000636-21-5	1.6E-01	1.6E-03	
METHYLCYCLOHEXANE	000108-87-2			
METHYLENE CHLORIDE	000075-09-2	3.8E+00	3.8E-02	6.1E+00
METHYLENE-BIS(2-CHLOROANILINE), 4,4'-	000101-14-4	2.2E-01	2.2E-03	7.2E-02

Table 3.2a. (continued)

Chemical	CASRN	Ingestion (mg/L)		
		10 ⁻⁴	10 ⁻⁶	HQ=1
METHYLENE-BIS(N,N-DIMETHYL) ANILINE, 4,4'-	000101-61-1	6.2E-01	6.2E-03	
METHYLENEBISBENZENAMINE, 4,4'-	000101-77-9			
METHYLENEDIPHENYL ISOCYANATE, 4,4'-	000101-68-8			
METHYLSTYRENE, ALPHA-	000098-83-9			7.2E+00
METHYLTRIETHYL LEAD	001762-28-3			
METOLACHLOR	051218-45-2			1.5E+01
METRIBUZIN	021087-64-9			2.6E+00
MIREX	002385-85-5			2.0E-02
MOLINATE	002212-67-1			2.0E-01
MOLYBDENUM	007439-98-7			5.1E-01
MONOCHLORAMINE	010599-90-3			1.0E+01
MONOCHLOROBUTANES	025154-42-1			4.1E+01
NALED	000300-76-5			2.0E-01
NAPHTHALENE	000091-20-3			
NAPROPAMIDE	015299-99-7			1.0E+01
NIAGARA BLUE 4B	002429-74-5			
NICKEL CARBONYL	013463-39-3			
NICKEL REFINERY DUST	NA			
NICKEL SOLUBLE SALTS	007440-02-0			2.0E+00

Table 3.2a. (continued)

Chemical	CASRN	Ingestion (mg/L)		
		10 ⁻⁴	10 ⁻⁵	HQ=1
NICKEL SUBSULFIDE	012035-72-2			
NITRAPYRIN	001929-82-4			
NITRATE	014797-55-8			1.6E+02
NITRIC OXIDE	010102-43-9			
NITRITE	014797-65-0			1.0E+01
NITROANILINE, 2-	000088-74-4			
NITROBENZENE	000098-95-3			5.1E-02
NITROFURANTOIN	000067-20-9			7.2E+00
NITROFURAZONE	000059-87-0	1.9E-02	1.9E-04	
NITROGEN DIOXIDE	010102-44-0			
NITROGUANIDINE	000556-88-7			1.0E+01
NITROPROPANE, 2-	000079-46-9	3.0E-03	3.0E-05	
NITROSO-DI-N-BUTYLAMINE, N-	000924-16-3	5.3E-03	5.3E-05	
NITROSO-DI-N-PROPYLAMINE, N-	000621-64-7	4.1E-03	4.1E-05	
NITROSO-N-ETHYLUREA, N-	000759-73-9	2.0E-04	2.0E-06	
NITROSO-N-METHYLUREA, N-	000684-93-5			
NITROSODIETHANOLAMINE, N-	001116-54-7	1.0E-02	1.0E-04	
NITROSODIETHYLAMINE, N-	000055-18-5	1.9E-04	1.9E-06	
NITROSODIMETHYLAMINE, N-	000062-75-9	5.6E-04	5.6E-06	

Table 3.2a. (continued)

Chemical	CASRN	Ingestion (mg/L)		
		10 ⁻⁴	10 ⁻⁶	HQ=1
NITROSODIPHENYLAMINE, N-	000086-30-6	5.8E+00	5.8E-02	
NITROSOMETHYLETHYLAMINE, N-	010595-95-6	1.3E-03	1.3E-05	
NITROSOMETHYL VINYLAMINE, N-	004549-40-0			
NITROSOPYRROLIDINE, N-	000930-55-2	1.4E-02	1.4E-04	
NITROTOLUENE, m-	000099-08-1			1.0E+00
NITROTOLUENE, o-	000088-72-2			1.0E+00
NITROTOLUENE, p-	000099-99-0			1.0E+00
NORFLURAZON	027314-13-2			4.1E+00
NUSTAR	085509-19-9			7.2E-02
OCTABROMODIPHENYL ETHER	032536-52-0			3.1E-01
OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRA (HMX)	002691-41-0			5.1E+00
OCTAMETHYLPYROPHOSPHORAMIDE	000152-16-9			2.0E-01
OCTYL PHTHALATE, DI-N-	000117-84-0			2.0E+00
ORYZALIN	019044-88-3			5.1E+00
OXADIAZON	019666-30-9			5.1E-01
OXAMYL	023135-22-0			2.6E+00
PACLOBUTRAZOL	076738-62-0			1.3E+00
PARAQUAT	001910-42-5			4.6E-01
PARATHION	000056-38-2			6.1E-01

Table 3.2a. (continued)

Chemical	CASRN	Ingestion (mg/L)		
		10 ⁻⁴	10 ⁻⁶	HQ=1
PEBULATE	001114-71-2			5.1E+00
PENDIMETHALIN	040487-42-1			4.1E+00
PENTABROMODIPHENYL ETHER	032534-81-9			2.0E-01
PENTACHLOROBENZENE	000608-93-5			8.2E-02
PENTACHLOROCYCLOPENTADIENE	025329-35-5			
PENTACHLORONITROBENZENE	000082-68-8	1.1E-01	1.1E-03	3.1E-01
PENTACHLOROPHENOL	000087-86-5	2.4E-01	2.4E-03	3.1E+00
PERMETHRIN	052645-53-1			5.1E+00
PHENANTHRENE	000085-01-8			
PHENMEDIPHAM	013684-63-4			2.6E+01
PHENOL	000108-95-2			6.1E+01
PHENYLENEDIAMINE, m-	000108-45-2			6.1E-01
PHENYLENEDIAMINE, o-	000095-54-5	6.1E-01	6.1E-03	
PHENYLENEDIAMINE, p-	000106-50-3			1.9E+01
PHENYLMERCURIC ACETATE	000062-38-4			8.2E-03
PHENYLPHENOL, 2-	000090-43-7	1.5E+01	1.5E-01	
PHORATE	000298-02-2			2.0E-02
PHOSMET	000732-11-6			2.0E+00
PHOSPHINE	007803-51-2			3.1E-02

Table 3.2a. (continued)

Chemical	CASRN	Ingestion (mg/L)		
		10 ⁻⁴	10 ⁻⁶	HQ=1
PHTHALIC ACID, p-	000100-21-0			1.0E+02
PHTHALIC ANHYDRIDE	000085-44-9			2.0E+02
PICLORAM	001918-02-1			7.2E+00
PIRIMPHOS-METHYL	029232-93-7			1.0E+00
POLYBROMINATED BIPHENYLS	NA	3.2E-03	3.2E-05	7.2E-04
POLYCHLORINATED BIPHENYLS	001336-36-3	3.7E-03	3.7E-05	
POTASSIUM CYANIDE	000151-50-8			5.1E+00
POTASSIUM SILVER CYANIDE	000506-61-6			2.0E+01
PROCHLORAZ	067747-09-5	1.9E-01	1.9E-03	9.2E-01
PROFLURALIN	026399-36-0			6.1E-01
PROMETON	001610-18-0			1.5E+00
PROMETRYN	007287-19-6			4.1E-01
PROPACHLOR	001918-16-7			1.3E+00
PROPANIL	000709-98-8			5.1E-01
PROPARGITE	002312-35-8			2.0E+00
PROPARGYL ALCOHOL	000107-19-7			2.0E-01
PROPABINE	000139-40-2			2.0E+00
PROPHAM	000122-42-9			2.0E+00
PROPICONAZOLE	060207-90-1			1.3E+00

Table 3.2a. (continued)

Chemical	CASRN	Ingestion (mg/L)		
		10 ⁻⁴	10 ⁻⁶	HQ=1
PROPYLENE GLYCOL	000057-55-6			2.0E+03
PROPYLENE GLYCOL MONOETHYL ETHER	001569-02-4			7.2E+01
PROPYLENE GLYCOL MONOMETHYL ETHER	000107-98-2			7.2E+01
PROPYLENE OXIDE	000075-56-9	1.2E-01	1.2E-03	
PURSUIT	081335-77-5			2.6E+01
PYDRIN	051630-58-1			2.6E+00
PYRENE	000129-00-0			3.1E+00
PYRIDINE	000110-86-1			1.0E-01
QUINALPHOS	013593-03-8			5.1E-02
QUINOLINE	000091-22-5	2.4E-03	2.4E-05	
REFRACTORY CERAMIC FIBERS	NA			
RESMETHRIN	010453-86-8			3.1E+00
RONNEL	000299-84-3			5.1E+00
ROTENONE	000083-79-4			4.1E-01
SAVEY	078587-05-0			2.6E+00
SELENIOUS ACID	007783-00-8			5.1E-01
SELENIUM	007782-49-2			5.1E-01
SELENIUM SULFIDE	007446-34-6			
SELENOUREA	000630-10-4			5.1E-01

Table 3.2a. (continued)

Chemical	CASRN	Ingestion (mg/L)		
		10 ⁻⁴	10 ⁻⁶	HQ=1
SETHOXYDIM	074051-80-2			9.2E+00
SILVER	007440-22-4			5.1E-01
SILVER CYANIDE	000506-64-9			1.0E+01
SIMAZINE	000122-34-9	2.4E-01	2.4E-03	5.1E-01
SODIUM ACIFLUORFEN	062476-59-9			1.3E+00
SODIUM AZIDE	026628-22-8			4.1E-01
SODIUM CYANIDE	000143-33-9			4.1E+00
SODIUM DIETHYLDITHIOCARBAMATE	000148-18-5	1.1E-01	1.1E-03	3.1E+00
SODIUM FLUOROACETATE	000062-74-8			2.0E-03
SODIUM METAVANADATE	013718-26-8			1.0E-01
STIROFOS (TETRACHLOROVINPHOS)	000961-11-5	1.2E+00	1.2E-02	3.1E+00
STRONTIUM, STABLE	007440-24-6			6.1E+01
STRYCHNINE	000057-24-9			3.1E-02
STYRENE	000100-42-5			2.0E+01
SYSTHANE	088671-89-0			2.6E+00
TCDD, 2,3,7,8-	001746-01-6	1.9E-07	1.9E-09	
TCMTB	021564-17-0			3.1E+00
TEBUTHIURON	034014-18-1			7.2E+00
TEMEPHOS	003383-96-8			2.0E+00

Table 3.2a. (continued)

Chemical	CASRN	Ingestion (mg/L)		
		10 ⁻⁴	10 ⁻⁶	HQ=1
TERBACIL	005902-51-2			1.3E+00
TERBUFOS	013071-79-9			2.6E-03
TERBUTRYN	000886-50-0			1.0E-01
TETRABUTYL LEAD	001920-90-7			
TETRACHLOROBENZENE, 1,2,4,5-	000095-94-3			3.1E-02
TETRACHLOROETHANE, 1,1,1,2-	000630-20-6	1.1E+00	1.1E-02	3.1E+00
TETRACHLOROETHANE, 1,1,2,2-	000079-34-5	1.4E-01	1.4E-03	
TETRACHLOROETHYLENE	000127-18-4			1.0E+00
TETRACHLOROPHENOL, 2,3,4,6-	000058-90-2			3.1E+00
TETRACHLOROTOLUENE, p- ALPHA, ALPHA, ALPHA-	005216-25-1	1.4E-03	1.4E-05	
TETRAETHYL DITHIOPYROPHOSPHATE	003689-24-5			5.1E-02
TETRAETHYL LEAD	000078-00-2			
TETRAMETHYL LEAD	000075-74-1			
TETRAPROPYL LEAD	003440-75-3			
THALLIC OXIDE	001314-32-5			7.2E-03
THALLIUM (I) NITRATE	010102-45-1			9.2E-03
THALLIUM (SOLUBLE SALTS)	NA			
THALLIUM ACETATE	000563-68-8			9.2E-03
THALLIUM CARBONATE	006533-73-9			8.2E-03

Table 3.2a. (continued)

Chemical	CASRN	Ingestion (mg/L)		
		10 ⁻⁴	10 ⁻⁶	HQ=1
THALLIUM CHLORIDE	007791-12-0			8.2E-03
THALLIUM SELENITE	012039-52-0			
THALLIUM SULFATE	007446-18-6			8.2E-03
THIOBENCARB	028249-77-6			1.0E+00
THIOFANOX	039196-18-4			3.1E-02
THIOPHANATE-METHYL	023564-05-8			8.2E+00
THIRAM	000137-26-8			5.1E-01
TIN	007440-31-5			6.1E+01
TOLUENE	000108-88-3			2.0E+01
TOLUENE-2,4-DIAMINE	000095-80-7	8.9E-03	8.9E-05	
TOLUENE-2,5-DIAMINE	000095-70-5			6.1E+01
TOLUENE-2,6-DIAMINE	000823-40-5			2.0E+01
TOLUIDINE, o- (METHYLANILINE, 2-)	000095-53-4	1.2E-01	1.2E-03	
TOLUIDINE, p-	000106-49-0	1.5E-01	1.5E-03	
TOXAPHENE	008001-35-2	2.6E-02	2.6E-04	
TRALOMETHRIN	066841-25-6			7.7E-01
TRIALLATE	002303-17-5			1.3E+00
TRIASULFURON	082097-50-5			1.0E+00
TRIBROMOBENZENE, 1,2,4-	000615-54-3			5.1E-01

Table 3.2a. (continued)

Chemical	CASRN	Ingestion (mg/L)		
		10 ⁻⁴	10 ⁻⁶	HQ=1
TRIBROMOCHLOROMETHANE	000594-15-0			
TRIBROMODIPHENYL ETHER	049690-94-0			
TRIBUTYLTIN OXIDE	000056-35-9			3.1E-03
TRICHLORO-1,2,2-TRIFLUOROETHANE, 1,1,2-	000076-13-1			3.1E+03
TRICHLORO-2'-HYDROXYDIPHENYLETHER	003380-34-5			
TRICHLOROANILINE HCL, 2,4,6-	033663-50-2	9.9E-01	9.9E-03	
TRICHLOROANILINE, 2,4,6-	000634-93-5	8.4E-01	8.4E-03	
TRICHLOROBENZENE, 1,2,4-	000120-82-1			1.0E+00
TRICHLOROETHANE, 1,1,1-	000071-55-6			
TRICHLOROETHANE, 1,1,2-	000079-00-5	5.0E-01	5.0E-03	4.1E-01
TRICHLOROETHYLENE	000079-01-6	2.6E+00	2.6E-02	
TRICHLOROFLUOROMETHANE	000075-69-4			3.1E+01
TRICHLOROPHENOL, 2,4,5-	000095-95-4			1.0E+01
TRICHLOROPHENOL, 2,4,6-	000088-06-2	2.6E+00	2.6E-02	
TRICHLOROPHENOXY) PROPIONIC ACID, 2(2,4,5-	000093-72-1			8.2E-01
TRICHLOROPHENOXYACETIC ACID, 2,4,5-	000093-76-5			1.0E+00
TRICHLOROPROPANE, 1,1,2-	000598-77-6			5.1E-01
TRICHLOROPROPANE, 1,2,3-	000096-18-4	4.1E-03	4.1E-05	6.1E-01
TRICHLOROPROPENE, 1,2,3-	000096-19-5			5.1E-01

Table 3.2a. (continued)

Chemical	CASRN	Ingestion (mg/L)		
		10 ⁻⁴	10 ⁻⁵	HQ=1
TRICHLOROTOLUENE, 2,3,6-	002077-46-5			
TRICHLOROTOLUENE, ALPHA 2,6-	002014-83-7			
TRIDIPHANE	058138-08-2			3.1E-01
TRIETHYL LEAD	005224-23-7			
TRIETHYLAMINE	000121-44-8			
TRIFLURALIN	001582-09-8	3.7E+00	3.7E-02	7.7E-01
TRIMETHYL LEAD	007442-13-9			
TRIMETHYL PHOSPHATE	000512-56-1	7.7E-01	7.7E-03	
TRIMETHYLETHYL LEAD	001762-26-1			
TRINITROBENZENE, 1,3,5-	000099-35-4			5.1E-03
TRINITROPHENYLMETHYLNITRAMINE	000479-45-8			1.0E+00
TRINITROTOLUENE, 2,4,6-	000118-96-7	9.5E-01	9.5E-03	5.1E-02
TRIPROPYL LEAD	006618-03-7			
URANIUM (SOLUBLE SALTS)	NA			3.1E-01
VANADIUM PENTOXIDE	001314-62-1			9.2E-01
VANADIUM SULFATE	036907-42-3			2.0E+00
VANADIUM, METALLIC	007440-62-2			7.2E-01
VANADYL SULFATE	027774-13-6			2.0E+00
VERNOLATE	001929-77-7			1.0E-01

Table 3.2a. (continued)

Chemical	CASRN	Ingestion (mg/L)		
		10 ⁻⁴	10 ⁻⁶	HQ=1
VINCLOZOLIN	050471-44-8			2.6E+00
VINYL ACETATE	000108-05-4			1.0E+02
VINYL BROMIDE	000593-60-2			
VINYL CHLORIDE	000075-01-4	1.5E-02	1.5E-04	
WARFARIN	000081-81-2			3.1E-02
WHITE PHOSPHORUS	007723-14-0			2.0E-03
XYLENE, MIXTURE	001330-20-7			2.0E+02
XYLENE, m-	000108-38-3			2.0E+02
XYLENE, o-	000095-47-6			2.0E+02
XYLENE, p-	000106-42-3			
ZINC (METALLIC)	007440-66-6			3.1E+01
ZINC CYANIDE	000557-21-1			5.1E+00
ZINC PHOSPHIDE	001314-84-7			3.1E-02
ZINEB	012122-67-7			5.1E+00

Notes:

- (1) Same oral slope factor as used for polychlorinated biphenyls.
- (2) PRG calculated considering *New Interim Region IV Guidance* from EPA (received February 11, 1992). The slope factors for chemicals so marked indicate that a toxicity equivalency factor (TEF) method was used for carcinogenic PAHs based on each compound's relative potency to the potency of benzo(a)pyrene. The following TEFs were used to convert each PAH slope factor to an equivalent slope factor of benzo(e)pyrene [that has a new cancer slope factor of 7.3 (mg/kg/day)¹ identified by EPA's CRAVE workgroup]: (1) benzo(a)pyrene; TEF = 1.0 (2) benz(a)anthracene; TEF = 0.1, (3) benzo(b)fluoranthene; TEF = 0.1, (4) benzo(k)fluoranthene; TEF = 0.01, (5) chrysene; TEF = 0.001, (6) dibenz(a,h)anthracene; TEF = 1.0, and (7) indeno(1,2,3-c,d)pyrene; TEF = 0.1. TEFs were used for only the oral slope factor in the ingestion pathway.
- (3) The slope factor for trichloroethylene has been withdrawn from IRIS and HEAST; however, since this is a common contaminant, the old slope factor has been used to calculate the PRG.

Table 3.2b. Risk-based Preliminary Remediation Goals for radionuclides in groundwater (Industrial scenario)

Chemical [†]	CASRN	Ingestion (pCi/L)	
		10 ⁻⁴	10 ⁻⁶
Ac-225	014265-85-1	1.1E+02	1.1E+00
Ac-227	014952-40-0	4.5E+01	4.5E-01
Ac-227+D	014952-40-0	2.6E+01	2.6E-01
Ac-228	014331-83-0	9.9E+03	9.9E+01
Ag-105	014928-14-4	9.8E+03	9.8E+01
Ag-108	014391-65-2	2.3E+06	2.3E+04
Ag-108m	014391-65-2	2.6E+03	2.6E+01
Ag-108m+D	014391-65-2	2.6E+03	2.6E+01
Ag-109m	014378-38-2	5.9E+07	5.9E+05
Ag-110	014391-76-5	6.6E+06	6.6E+04
Ag-110m	014391-76-5	1.9E+03	1.9E+01
Ag-111	157690-04-0	2.3E+03	2.3E+01
Am-241	014596-10-2	4.9E+01	4.9E-01
Am-242	013981-54-9	1.1E+04	1.1E+02
Am-242m	013981-54-9	5.5E+01	5.5E-01
Am-243	014993-75-0	4.9E+01	4.9E-01
Am-243+D	014993-75-0	4.8E+01	4.8E-01

Table 3.2b. (continued)

Chemical ^r	CASRN	Ingestion (pCi/L)	
		10 ⁻⁴	10 ⁻⁶
Ar-41	014163-25-8		
At-217	017239-90-6	1.8E+09	1.8E+07
Au-196	014914-16-0	1.2E+04	1.2E+02
Au-198	010043-49-0	3.0E+03	3.0E+01
Ba-131	014914-75-1	9.4E+03	9.4E+01
Ba-133	013981-41-4	5.9E+03	5.9E+01
Ba-133m	013981-41-4	5.8E+03	5.8E+01
Ba-137m	013981-97-0	6.6E+06	6.6E+04
Ba-139	014378-25-7	5.3E+04	5.3E+02
Ba-140	014798-08-4	1.4E+03	1.4E+01
Be-7	013966-02-4	1.9E+05	1.9E+03
Bi-206	015776-19-9	2.3E+03	2.3E+01
Bi-207	013982-38-2	3.2E+03	3.2E+01
Bi-210	014331-79-4	2.2E+03	2.2E+01
Bi-211	015229-37-5	8.8E+05	8.8E+03
Bi-212	014913-49-6	2.6E+04	2.6E+02
Bi-213	015776-20-2	3.6E+04	3.6E+02
Bi-214	014733-03-0	8.2E+04	8.2E+02

Table 3.2b. (continued)

Chemical [†]	CASRN	Ingestion (pCi/L)	
		10 ⁻⁴	10 ⁻⁶
Br-82	014686-69-2	1.1E+04	1.1E+02
C-11	014333-33-6	3.6E+05	3.6E+03
C-14	014762-75-5	1.6E+04	1.6E+02
C-15	015929-23-4	2.4E+07	2.4E+05
Ca-45	013966-05-7	7.9E+03	7.9E+01
Ca-47	001439-99-2	2.4E+03	2.4E+01
Cd-109	014109-32-1	2.0E+03	2.0E+01
Cd-115	014336-68-6	2.2E+03	2.2E+01
Cd-115m	014336-68-6	1.1E+03	1.1E+01
Ce-141	013967-74-3	4.1E+03	4.1E+01
Ce-143	014119-19-8	2.7E+03	2.7E+01
Ce-144	014762-78-8	5.4E+02	5.4E+00
Ce-144+D	014762-78-8	5.4E+02	5.4E+00
Cl-36	013981-43-6	7.2E+03	7.2E+01
Cl-38	014158-34-0	7.7E+04	7.7E+02
Cm-242	015510-73-3	4.2E+02	4.2E+00
Cm-243	015757-87-6	6.4E+01	6.4E-01
Cm-243+D	015757-87-6	6.3E+01	6.3E-01

Table 3.2b. (continued)

Chemical ¹	CASRN	Ingestion (pCi/L)	
		10 ⁻⁴	10 ⁻⁶
Cm-244	013981-15-2	7.6E+01	7.6E-01
Cm-245	015621-76-8	4.8E+01	4.8E-01
Cm-246	015757-90-1	4.8E+01	4.8E-01
Cm-247	015758-32-4	5.2E+01	5.2E-01
Cm-248	015758-33-5	1.2E+01	1.2E-01
Co-57	013981-50-5	1.6E+04	1.6E+02
Co-58	013981-38-9	5.7E+03	5.7E+01
Co-58m	013981-38-9	1.7E+05	1.7E+03
Co-60	010198-40-0	8.5E+02	8.5E+00
Cr-51	014392-02-0	1.2E+05	1.2E+03
Cs-131	014914-76-2	8.9E+04	8.9E+02
Cs-134	013967-70-9	3.4E+02	3.4E+00
Cs-134m	013967-70-9	3.5E+05	3.5E+03
Cs-135	015726-30-4	3.5E+03	3.5E+01
Cs-136	014234-29-8	2.1E+03	2.1E+01
Cs-137	010045-97-3	5.1E+02	5.1E+00
Cs-137+D	010045-97-3	5.1E+02	5.1E+00
Cs-138	015758-29-9	9.1E+04	9.1E+02

Table 3.2b. (continued)

Chemical ¹	CASRN	Ingestion (pCi/L)	
		10 ⁻⁴	10 ⁻⁶
Cu-64	013981-25-4	3.0E+04	3.0E+02
Dy-165	013967-64-1	4.9E+04	4.9E+02
Dy-166	015840-01-4	1.7E+03	1.7E+01
Er-169	015840-13-8	7.5E+03	7.5E+01
Er-171	014391-45-8	9.8E+03	9.8E+01
Eu-152	014683-23-9	2.8E+03	2.8E+01
Eu-154	015585-10-1	1.7E+03	1.7E+01
Eu-155	014391-16-3	9.7E+03	9.7E+01
Eu-156	014280-35-4	1.5E+03	1.5E+01
F-18	013981-56-1	1.5E+05	1.5E+03
Fe-55	014681-59-5	4.6E+04	4.6E+02
Fe-59	014596-12-4	2.7E+03	2.7E+01
Fr-221	015756-41-9	1.1E+05	1.1E+03
Fr-223	015756-98-6	3.6E+04	3.6E+02
Ga-67	014119-09-6	1.9E+04	1.9E+02
Ga-72	013982-22-4	3.4E+03	3.4E+01
Gd-153	014276-65-4	1.2E+04	1.2E+02
Gd-159	014041-42-0	6.2E+03	6.2E+01

Table 3.2b. (continued)

Chemical ^t	CASRN	Ingestion (pCi/L)	
		10 ⁻⁴	10 ⁻⁶
Ge-71	014374-81-3	1.4E+06	1.4E+04
H-3	010028-17-8	2.2E+05	2.2E+03
Hg-197	013981-51-6	1.4E+04	1.4E+02
Hg-203	013982-78-0	6.1E+03	6.1E+01
Ho-166	013967-65-2	2.1E+03	2.1E+01
I-122	018287-75-7	7.4E+05	7.4E+03
I-123	015715-08-9	3.0E+04	3.0E+02
I-125	014158-31-7	6.2E+02	6.2E+00
I-126	014158-32-8	3.3E+02	3.3E+00
I-129	015046-84-1	8.7E+01	8.7E-01
I-130	014914-02-4	3.3E+03	3.3E+01
I-131	010043-66-0	4.4E+02	4.4E+00
I-132	014683-16-0	2.4E+04	2.4E+02
I-133	014834-67-4	1.5E+03	1.5E+01
I-134	014914-27-3	6.9E+04	6.9E+02
I-135	014834-68-5	7.0E+03	7.0E+01
In-113m	014885-78-0	1.9E+05	1.9E+03
In-114	013981-55-0	3.5E+06	3.5E+04

Table 3.2b. (continued)

Chemical ^t	CASRN	Ingestion (pCi/L)	
		10 ⁻⁴	10 ⁻⁶
In-114m	013981-55-0	7.8E+02	7.8E+00
In-115	014191-71-0	4.6E+02	4.6E+00
In-115m	014191-71-0	4.7E+04	4.7E+02
Ir-190	014981-91-0	3.2E+03	3.2E+01
Ir-194	014158-35-1	2.3E+03	2.3E+01
K-40	013966-00-2	1.3E+03	1.3E+01
K-42	014378-21-3	1.2E+04	1.2E+02
Kr-83m	013965-98-5		
Kr-85	013983-27-2		
Kr-85m	013983-27-2		
Kr-87	014809-68-8		
Kr-88	014995-61-0		
Kr-89	016316-03-3		
Kr-90	015741-13-6		
La-140	013981-28-7	1.7E+03	1.7E+01
Lu-177	014265-75-9	5.4E+03	5.4E+01
Mn-52	014092-99-0	2.7E+03	2.7E+01
Mn-54	013966-31-9	8.2E+03	8.2E+01

Table 3.2b. (continued)

Chemical ^r	CASRN	Ingestion (pCi/L)	
		10 ⁻⁴	10 ⁻⁶
Mn-56	014681-52-8	1.9E+04	1.9E+02
Mo-99	014119-15-4	7.0E+03	7.0E+01
Na-22	013966-32-0	2.0E+03	2.0E+01
Na-24	013982-04-2	1.2E+04	1.2E+02
Nb-93m	007440-03-1	2.4E+04	2.4E+02
Nb-94	014681-63-1	2.3E+03	2.3E+01
Nb-95	013967-76-5	7.1E+03	7.1E+01
Nb-95m	013967-76-5	5.2E+03	5.2E+01
Nb-97	018496-04-3	9.1E+04	9.1E+02
Nb-97m	018496-04-3	4.9E+06	4.9E+04
Nd-147	014269-74-0	2.7E+03	2.7E+01
Nd-149	015749-81-2	3.5E+04	3.5E+02
Ni-59	014336-70-0	8.6E+04	8.6E+02
Ni-63	013981-37-8	2.9E+04	2.9E+02
Ni-65	014833-49-9	2.8E+04	2.8E+02
Np-236	015700-36-4	1.7E+04	1.7E+02
Np-237	013994-20-2	5.4E+01	5.4E-01
Np-237+D	013994-20-2	5.3E+01	5.3E-01

Table 3.2b. (continued)

Chemical ^r	CASRN	Ingestion (pCi/L)	
		10 ⁻⁴	10 ⁻⁶
Np-238	015766-25-3	3.5E+03	3.5E+01
Np-239	013968-59-7	3.7E+03	3.7E+01
Np-240	015690-84-3	9.0E+04	9.0E+02
Np-240m	015690-84-3	6.6E+05	6.6E+03
Os-185	015766-50-4	8.9E+03	8.9E+01
Os-191	014119-24-5	5.3E+03	5.3E+01
Os-191m	014119-24-5	3.2E+04	3.2E+02
Os-193	016057-77-5	3.7E+03	3.7E+01
P-32	014596-37-3	2.6E+03	2.6E+01
P-33	015749-66-3	2.0E+04	2.0E+02
Pa-231	014331-85-2	1.1E+02	1.1E+00
Pa-233	013981-14-1	3.4E+03	3.4E+01
Pa-234	015100-28-4	7.5E+03	7.5E+01
Pa-234m	015100-28-4	3.4E+06	3.4E+04
Pb-203	014687-25-3	1.6E+04	1.6E+02
Pb-209	014119-30-3	7.7E+04	7.7E+02
Pb-210	014255-04-0	2.4E+01	2.4E-01
Pb-210+D	014255-04-0	1.6E+01	1.6E-01

Table 3.2b. (continued)

Chemical ^t	CASRN	Ingestion (pCi/L)	
		10 ⁻⁴	10 ⁻⁶
Pb-211	015816-77-0	4.7E+04	4.7E+02
Pb-212	015092-94-1	8.9E+02	8.9E+00
Pb-214	015067-28-4	5.4E+04	5.4E+02
Pd-100	015690-69-4	4.3E+03	4.3E+01
Pd-101	015749-54-9	4.3E+04	4.3E+02
Pd-103	014967-68-1	1.5E+04	1.5E+02
Pd-107	017637-99-9	7.7E+04	7.7E+02
Pd-109	014981-64-7	4.8E+03	4.8E+01
Pm-147	014380-75-7	1.1E+04	1.1E+02
Pm-148	014683-19-3	1.1E+03	1.1E+01
Pm-148m	014683-19-3	1.6E+03	1.6E+01
Pm-149	015765-31-8	2.9E+03	2.9E+01
Po-210	013981-52-7	4.9E+01	4.9E-01
Po-212	015389-34-1	3.5E+14	3.5E+12
Po-213	015756-57-7	2.4E+13	2.4E+11
Po-214	015735-67-8	7.5E+11	7.5E+09
Po-215	015706-52-2	3.2E+10	3.2E+08
Po-216	015756-58-8	1.8E+08	1.8E+06

Table 3.2b. (continued)

Chemical ^t	CASRN	Ingestion (pCi/L)	
		10 ⁻⁴	10 ⁻⁶
Po-218	015422-24-9	3.1E+05	3.1E+03
Pr-142	014191-64-1	2.3E+03	2.3E+01
Pr-143	014981-79-4	2.4E+03	2.4E+01
Pr-144	014119-05-2	2.0E+05	2.0E+03
Pr-144m	014119-05-2	5.0E+05	5.0E+03
Pt-191	015706-36-2	1.1E+04	1.1E+02
Pt-193	015735-70-3	9.9E+04	9.9E+02
Pt-193m	015735-70-3	6.4E+03	6.4E+01
Pt-197	015735-74-7	7.5E+03	7.5E+01
Pt-197m	015735-74-7	4.9E+04	4.9E+02
Pu-236	015411-92-4	2.1E+02	2.1E+00
Pu-238	013981-16-3	5.4E+01	5.4E-01
Pu-239	015117-48-3	5.1E+01	5.1E-01
Pu-240	014119-33-6	5.1E+01	5.1E-01
Pu-241	014119-32-5	3.1E+03	3.1E+01
Pu-241+D	014119-32-5	4.8E+01	4.8E-01
Pu-242	013982-10-0	5.3E+01	5.3E-01
Pu-243	015706-37-3	4.3E+04	4.3E+02

Table 3.2b. (continued)

Chemical ^t	CASRN	Ingestion (pCi/L)	
		10 ⁻⁴	10 ⁻⁶
Pu-244	014119-34-7	5.1E+01	5.1E-01
Pu-244+D	014119-34-7	5.0E+01	5.0E-01
Ra-223	015623-45-7	6.8E+01	6.8E-01
Ra-224	013233-32-4	1.1E+02	1.1E+00
Ra-225	013981-53-8	1.0E+02	1.0E+00
Ra-226	013982-63-3	5.4E+01	5.4E-01
Ra-226+D	013982-63-3	5.4E+01	5.4E-01
Ra-228	015262-20-1	6.5E+01	6.5E-01
Ra-228+D	015262-20-1	6.5E+01	6.5E-01
Rb-82	014391-63-0	1.5E+06	1.5E+04
Rb-86	014932-53-7	2.2E+03	2.2E+01
Rb-87	013982-13-3	4.3E+03	4.3E+01
Rb-88	014928-36-0	1.1E+05	1.1E+03
Rb-89	014191-65-2	1.8E+05	1.8E+03
Rh-103m	007440-16-6	2.0E+06	2.0E+04
Rh-105	014913-89-4	8.3E+03	8.3E+01
Rh-105m	014913-89-4	1.5E+07	1.5E+05
Rh-106	014234-34-5	4.4E+06	4.4E+04

Table 3.2b. (continued)

Chemical [†]	CASRN	Ingestion (pCi/L)	
		10 ⁻⁴	10 ⁻⁶
Rn-219	014835-02-0		
Rn-220	022481-48-7		
Rn-222+D	014859-67-7		
Ru-103	013968-53-1	4.8E+03	4.8E+01
Ru-105	014331-95-4	1.4E+04	1.4E+02
Ru-106	013967-48-1	4.6E+02	4.6E+00
Ru-106+D	013967-48-1	4.6E+02	4.6E+00
Ru-97	015758-35-7	2.7E+04	2.7E+02
S-35	015117-53-0	3.8E+04	3.8E+02
Sb-122	014374-79-9	1.8E+03	1.8E+01
Sb-124	014683-10-4	1.5E+03	1.5E+01
Sb-125	014234-35-6	5.4E+03	5.4E+01
Sb-125+D	014234-35-6	4.5E+03	4.5E+01
Sb-126	015756-32-8	1.6E+03	1.6E+01
Sb-126m	015756-32-8	2.2E+05	2.2E+03
Sb-127	013968-50-8	1.9E+03	1.9E+01
Sb-129	014331-88-5	8.6E+03	8.6E+01
Sc-46	013967-63-0	2.8E+03	2.8E+01

Table 3.2b. (continued)

Chemical ^t	CASRN	Ingestion (pCi/L)	
		10 ⁻⁴	10 ⁻⁶
Sc-47	014391-96-9	5.4E+03	5.4E+01
Sc-48	014391-86-7	2.4E+03	2.4E+01
Se-75	014265-71-5	2.5E+03	2.5E+01
Si-31	014276-49-4	3.2E+04	3.2E+02
Sm-147	014392-33-7	6.4E+02	6.4E+00
Sm-151	015715-94-3	3.5E+04	3.5E+02
Sm-153	015766-00-4	4.0E+03	4.0E+01
Sn-113	013966-06-8	4.3E+03	4.3E+01
Sn-121	014683-06-8	1.3E+04	1.3E+02
Sn-121m	014683-06-8	8.0E+03	8.0E+01
Sn-125	014683-08-0	9.5E+02	9.5E+00
Sn-126	015832-50-5	7.5E+02	7.5E+00
Sr-82	014809-50-8	6.2E+02	6.2E+00
Sr-85	013967-73-2	1.1E+04	1.1E+02
Sr-85m	013967-73-2	8.9E+05	8.9E+03
Sr-89	014158-27-1	1.6E+03	1.6E+01
Sr-90	010098-97-2	3.9E+02	3.9E+00
Sr-90+D	010098-97-2	2.9E+02	2.9E+00

Table 3.2b. (continued)

Chemical ^t	CASRN	Ingestion (pCi/L)	
		10 ⁻⁴	10 ⁻⁶
Sr-91	014331-91-0	5.7E+03	5.7E+01
Sr-92	014928-29-1	7.9E+03	7.9E+01
Ta-182	013982-00-8	2.3E+03	2.3E+01
Tb-158	015759-55-4	3.8E+03	3.8E+01
Tb-160	013981-29-8	2.1E+03	2.1E+01
Tc-95	014809-56-4	2.3E+05	2.3E+03
Tc-95m	014809-56-4	1.3E+04	1.3E+02
Tc-96	014808-44-7	7.0E+03	7.0E+01
Tc-96m	014808-44-7	6.1E+05	6.1E+03
Tc-97	015759-35-0	1.0E+05	1.0E+03
Tc-97m	015759-35-0	1.3E+04	1.3E+02
Tc-99	014133-76-7	1.1E+04	1.1E+02
Tc-99m	014133-76-7	2.9E+05	2.9E+03
Te-125m	014390-73-9	6.4E+03	6.4E+01
Te-127	013981-49-2	1.9E+04	1.9E+02
Te-127m	013981-49-2	2.7E+03	2.7E+01
Te-129	014269-71-7	1.1E+05	1.1E+03
Te-129m	014269-71-7	1.4E+03	1.4E+01

Table 3.2b. (continued)

Chemical ^t	CASRN	Ingestion (pCi/L)	
		10 ⁻⁴	10 ⁻⁶
Te-131	014683-12-6	4.1E+04	4.1E+02
Te-131m	014683-12-6	1.8E+03	1.8E+01
Te-132	014234-28-7	1.3E+03	1.3E+01
Th-227	015623-47-9	4.0E+02	4.0E+00
Th-228	014274-82-9	2.5E+02	2.5E+00
Th-228+D	014274-82-9	6.9E+01	6.9E-01
Th-229	015594-54-4	2.8E+02	2.8E+00
Th-229+D	015594-54-4	4.5E+01	4.5E-01
Th-230	014269-63-7	4.3E+02	4.3E+00
Th-231	014932-40-2	8.9E+03	8.9E+01
Th-232	007440-29-1	4.9E+02	4.9E+00
Th-234	015065-10-8	8.3E+02	8.3E+00
Tl-202	015720-57-7	1.6E+04	1.6E+02
Tl-204	013968-51-9	8.1E+03	8.1E+01
Tl-208	014913-50-9	9.1E+05	9.1E+03
Tl-209	015690-73-0	1.1E+06	1.1E+04
Tm-170	013981-30-1	2.1E+03	2.1E+01
Tm-171	014333-45-0	2.7E+04	2.7E+02

Table 3.2b. (continued)

Chemical ^t	CASRN	Ingestion (pCi/L)	
		10 ⁻⁴	10 ⁻⁶
U-232	014158-29-3	2.0E+02	2.0E+00
U-233	013968-55-3	3.6E+02	3.6E+00
U-234	013966-29-5	3.6E+02	3.6E+00
U-235	015117-96-1	3.5E+02	3.5E+00
U-235+D	015117-96-1	3.4E+02	3.4E+00
U-236	013982-70-2	3.8E+02	3.8E+00
U-237	014269-75-1	4.0E+03	4.0E+01
U-238	007440-61-1	3.7E+02	3.7E+00
U-238+D	007440-61-1	2.6E+02	2.6E+00
U-240	015687-53-3	2.9E+03	2.9E+01
V-48	014331-97-6	2.1E+03	2.1E+01
W-181	015749-46-9	5.9E+04	5.9E+02
W-185	014932-41-3	7.8E+03	7.8E+01
W-187	014983-48-3	6.5E+03	6.5E+01
Xe-122	015151-09-4		
Xe-123	015700-10-4		
Xe-125	013994-18-8		
Xe-127	013994-19-9		

Table 3.2b. (continued)

Chemical [†]	CASRN	Ingestion (pCi/L)	
		10 ⁻⁴	10 ⁻⁶
Xe-129m	013965-99-6		
Xe-131m	014683-11-5		
Xe-133	014932-42-4		
Xe-133m	014932-42-4		
Xe-135	014995-62-1		
Xe-135m	014995-62-1		
Xe-137	014835-21-3		
Xe-138	015751-81-2		
Y-90	010098-91-6	1.1E+03	1.1E+01
Y-91	014234-24-3	1.2E+03	1.2E+01
Y-91m	014234-24-3	4.3E+05	4.3E+03
Y-92	015751-59-4	8.2E+03	8.2E+01
Y-93	014981-70-5	2.8E+03	2.8E+01
Zn-65	013982-39-3	1.6E+03	1.6E+01
Zn-69	013982-23-5	2.6E+05	2.6E+03
Zn-69m	013982-23-5	1.1E+04	1.1E+02
Zr-93	015751-77-6	3.1E+04	3.1E+02
Zr-95	013967-71-0	4.1E+03	4.1E+01

Table 3.2b. (continued)

Chemical†	CASRN	Ingestion (pCi/L)	
		10 ⁻⁴	10 ⁻⁶
Zr-97	014928-30-4	1.5E+03	1.5E+01

Notes:

† Isotopes designated with an "m" indicate that the isotope is metastable; isotopes designated with a "+D" indicate that the radionuclide slope factors include contributions from daughter products.

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Table 3.2c. Risk-based Preliminary Remediation Goals for nonradionuclides in soil (Industrial scenario)

Chemical	CASRN	Ingestion (mg/kg)			Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
ACENAPHTHENE	000083-32-9			1.2E+05			1.8E+05						7.3E+04
ACEPHATE	030560-19-1	6.6E+04	6.6E+02	8.2E+03	3.1E+05	3.1E+03	3.9E+04				5.4E+04	5.4E+02	6.8E+03
ACETALDEHYDE	000075-07-0									7.9E+02			
ACETOCHLOR	034256-82-1			4.1E+04			1.9E+05						3.4E+04
ACETONE	000067-64-1			2.0E+05			8.1E+05						1.6E+05
ACETONE CYANOHYDRIN	000075-86-5			1.6E+03			7.8E+03			6.3E+07			1.4E+03
ACETONITRILE	000075-05-8			1.2E+04			5.8E+04			3.1E+08			1.0E+04
ACETOPHENONE	000098-86-2			2.0E+05			9.7E+05						1.7E+05
ACROLEIN	000107-02-8			4.1E+04			1.9E+05			3.9E-01			3.9E-01
ACRYLAMIDE	000079-06-1	1.3E+02	1.3E+00	4.1E+02	6.0E+02	6.0E+00	1.9E+03	1.4E+06	1.4E+04		1.1E+02	1.1E+00	3.4E+02
ACRYLIC ACID	000079-10-7			1.0E+06			4.9E+06			6.3E+06			7.4E+05
ACRYLONITRILE	000107-13-1	1.1E+03	1.1E+01	2.0E+03	5.0E+03	5.0E+01	9.7E+03	2.2E+01	2.2E-01	1.1E+01	2.1E+01	2.1E-01	1.1E+01
ALACHLOR	015972-60-8	7.2E+03	7.2E+01	2.0E+04	3.4E+04	3.4E+02	9.7E+04				5.9E+03	5.9E+01	1.7E+04
ALAR	001596-84-5			3.1E+05			1.5E+06						2.5E+05
ALDICARB	000116-06-3			2.0E+03			9.7E+03						1.7E+03
ALDICARB SULFONE	001646-88-4			2.0E+03			9.7E+03						1.7E+03
ALDRIN	000309-00-2	3.4E+01	3.4E-01	6.1E+01	8.0E+01	8.0E-01	1.5E+02	3.6E+05	3.6E+03		2.4E+01	2.4E-01	4.3E+01
ALLYL	074223-64-6			5.1E+05			2.4E+06						4.2E+05
ALLYL ALCOHOL	000107-18-6			1.0E+04			4.9E+04						8.4E+03
ALLYL CHLORIDE	000107-05-1									1.4E+01			
ALUMINUM PHOSPHIDE	020859-73-8			8.2E+02			3.9E+04						8.0E+02

Table 3.2c. (continued)

Chemical	CASRN	Ingestion (mg/kg)			Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1
AMDR	067485-29-4			6.1E+02			2.9E+03						5.1E+02
AMETRYN	000834-12-8			1.8E+04			8.7E+04						1.5E+04
AMINOPHENOL, m-	000591-27-5			1.4E+05			6.8E+05						1.2E+05
AMINOPYRIDINE, 4-	000504-24-5			4.1E+01			1.9E+02						3.4E+01
AMITRAZ	033089-61-1			5.1E+03			2.4E+04						4.2E+03
AMMONIA	007664-41-7									6.3E+08			
AMMONIUM SULFAMATE	007773-06-0			4.1E+05			1.9E+07						4.0E+05
ANILINE	000062-53-3	1.0E+05	1.0E+03		4.8E+05	4.8E+03				6.3E+06	8.3E+04	8.3E+02	
ANTHRACENE	000120-12-7			6.1E+05			2.2E+06						4.8E+05
ANTIMONY (METALLIC)	007440-36-0			8.2E+02			7.8E+02						4.0E+02
ANTIMONY PENTOXIDE	001314-60-9			1.0E+03			4.9E+04						1.0E+03
ANTIMONY POTASSIUM TARTRATE	000304-61-0			1.8E+03			8.7E+04						1.8E+03
ANTIMONY TETROXIDE	001332-81-6			8.2E+02			3.9E+04						8.0E+02
ANTIMONY TRIOXIDE	001309-64-4			8.2E+02			3.9E+04						8.0E+02
APOLLO	074115-24-5			2.7E+04			1.3E+05						2.2E+04
ARAMITE	000140-57-8	2.3E+04	2.3E+02	1.0E+05	1.1E+05	1.1E+03	4.9E+05	2.5E+08	2.5E+06		1.9E+04	1.9E+02	8.4E+04
AROCLOR 1016	012674-11-2			1.4E+02			6.1E+02						1.2E+02
AROCLOR 1254	011097-69-1			4.1E+01			1.7E+02						3.3E+01
AROCLOR-1221	011104-28-2	7.4E+01	7.4E-01		3.2E+02	3.2E+00					6.0E+01	6.0E-01	
AROCLOR-1232	011141-16-5	7.4E+01	7.4E-01		3.2E+02	3.2E+00					6.0E+01	6.0E-01	
AROCLOR-1242	053469-21-9	7.4E+01	7.4E-01		3.2E+02	3.2E+00					6.0E+01	6.0E-01	

Table 3.2c. (continued)

Chemical	CASRN	Ingestion (mg/kg)			Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1
AROCOR-1248	012672-29-6	7.4E+01	7.4E-01		3.2E+02	3.2E+00					6.0E+01	6.0E-01	
AROCOR-1260	011096-82-5	7.4E+01	7.4E-01		3.2E+02	3.2E+00					6.0E+01	6.0E-01	
ARSENIC, INORGANIC	007440-38-2			6.1E+02			1.2E+04	1.2E+05	1.2E+03				5.8E+02
ARSINE	007784-42-1									3.1E+05			
ASBESTOS	001332-21-4												
ASSURE	076578-14-8			1.8E+04			8.7E+04						1.5E+04
ASULAM	003337-71-1			1.0E+05			4.9E+05						8.4E+04
ATRAZINE	001912-24-9	2.6E+03	2.6E+01	7.2E+04	1.2E+04	1.2E+02	3.4E+05				2.1E+03	2.1E+01	5.9E+04
AVERMECTIN B1	065195-55-3			8.2E+02			3.9E+03						6.8E+02
AZOBEZENE	000103-33-3	5.2E+03	5.2E+01		2.5E+04	2.3E+02		5.6E+07	5.6E+05		4.3E+03	4.3E+01	
BARIUM	007440-39-3			1.4E+05			4.8E+05			3.1E+06			1.1E+05
BARIUM CYANIDE	000542-62-1			2.0E+05			9.7E+06						2.0E+05
BAYGON	000114-26-1			8.2E+03			3.9E+04						6.8E+03
BAYLETON	043121-43-3			6.1E+04			2.9E+05						5.1E+04
BAYTHROID	068359-37-5			5.1E+04			2.4E+05						4.2E+04
BENEFIN	001861-40-1			6.1E+05			2.9E+06						5.1E+05
BENOMYL	017804-35-2			1.0E+05			4.9E+05						8.4E+04
BENTAZON	025057-89-0			5.1E+03			2.4E+04						4.2E+03
BENZALDEHYDE	000100-52-7			2.0E+05			9.7E+05						1.7E+05
BENZENE	000071-43-2	2.0E+04	2.0E+02		9.1E+04	9.1E+02		4.9E+02	9.3E+00		4.9E+02	8.8E+00	
BENZENETHIOL	000108-98-5			2.0E+01			9.7E+01						1.7E+01

Table 3.2c. (continued)

Chemical	CASRN	Ingestion (mg/kg)			Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1
BENZIDINE	000092-87-5	2.5E+00	2.5E-02	6.1E+03	9.4E+00	9.4E-02	2.3E+04	2.7E+04	2.7E+02		2.0E+00	2.0E-02	4.9E+03
BENZOIC ACID	000065-85-0			8.2E+06			3.9E+07						6.8E+06
BENZOTRICHLORIDE	000098-07-7	4.4E+01	4.4E-01		2.1E+02	2.1E+00					3.6E+01	3.6E-01	
BENZO[A]PYRENE	000050-32-8	7.8E+01	7.8E-01		1.2E+02	1.2E+00					4.7E+01	4.7E-01	
BENZO[B]FLUORANTHENE	000205-99-2	7.8E+02	7.8E+00		1.2E+03	1.2E+01					4.7E+02	4.7E+00	
BENZO[G,H,I]PERYLENE	000191-24-2												
BENZO[K]FLUORANTHENE	000207-08-9	7.8E+03	7.8E+01		1.2E+04	1.2E+02					4.7E+03	4.7E+01	
BENZYL ALCOHOL	000100-51-6			6.1E+05			1.9E+06						4.6E+05
BENZYL CHLORIDE	000100-44-7	3.4E+03	3.4E+01		1.6E+04	1.6E+02					2.8E+03	2.8E+01	
BENZI[ANTHRACENE	000056-55-3	7.8E+02	7.8E+00		1.2E+03	1.2E+01					4.7E+02	4.7E+00	
BERYLLIUM	007440-41-7	1.3E+02	1.3E+00	1.0E+04	6.3E+01	6.3E-01	4.9E+03	7.3E+05	7.3E+03		4.3E+01	4.3E-01	3.3E+03
BIDRIN	000141-66-2			2.0E+02			9.7E+02						1.7E+02
BIPHENTHRIN	082657-04-3			3.1E+04			1.5E+05						2.5E+04
BIPHENYL, 1,1'-	000092-52-4			1.0E+05			4.9E+05						8.4E+04
BIS(2-CHLORO-1-METHYLETHYL)ETHER (TECHNICAL)	000108-06-1	8.2E+03	8.2E+01		3.9E+04	3.9E+02		1.8E+08	1.8E+06		6.8E+03	6.8E+01	
BIS(2-CHLOROETHOXY)METHANE	000111-91-1												
BIS(2-CHLOROETHYL)ETHER	000111-44-4	5.2E+02	5.2E+00		2.5E+03	2.5E+01		2.3E+02	2.3E+00		1.5E+02	1.5E+00	
BIS(2-CHLOROISOPROPYL)ETHER	039638-32-9			8.2E+04			3.9E+05						6.8E+04
BIS(2-ETHYLHEXYL)PHTHALATE	000117-81-7	4.1E+04	4.1E+02	4.1E+04	3.7E+04	3.7E+02	3.7E+04				1.9E+04	1.9E+02	1.9E+04
BIS(CHLOROMETHYL)ETHER	000542-88-1	2.6E+00	2.6E-02		1.2E+01	1.2E-01		7.4E-01	7.4E-03		5.5E-01	5.5E-03	

Table 3.2c. (continued)

Chemical	CASRN	Ingestion (mg/kg)			Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
BISPHENOL A	000080-05-7			1.0E+05			4.9E+05						8.4E+04
BORON TRIFLUORIDE	007637-07-2									4.4E+06			
BORON and BORATES ONLY	007440-42-8			1.8E+05			7.9E+06			1.3E+08			1.8E+05
BROMOCHLOROMETHANE	000074-97-5												
BROMODICHLOROMETHANE	000075-27-4	9.2E+03	9.2E+01	4.1E+04	4.3E+04	4.3E+02	1.9E+05				7.6E+03	7.6E+01	3.4E+04
BROMODIPHENYL ETHER, p-	000101-55-3												
BROMOFORM	000075-25-2	7.2E+04	7.2E+02	4.1E+04	2.1E+05	2.1E+03	1.2E+05	1.6E+09	1.6E+07		5.4E+04	5.4E+02	3.0E+04
BROMOMETHANE	000074-83-9			2.9E+03			1.4E+04			2.4E+01			2.4E+01
BROMOPHOS	002104-96-3			1.0E+04			4.9E+04						8.4E+03
BROMOTRICHLOROMETHANE	000075-62-7												
BROMOXYNIL	001689-84-5			4.1E+04			1.9E+05						3.4E+04
BROMOXYNIL OCTANOATE	001689-99-2			4.1E+04			1.9E+05						3.4E+04
BUTADIENE, 1,3-	000106-99-0							4.8E+00	4.8E-02				
BUTANOL, N-	000071-36-3			2.0E+05			9.7E+05						1.7E+05
BUTYL BENZYL PHTHALATE	000085-68-7			4.1E+05			1.2E+06						3.0E+05
BUTYLATE	002008-41-5			1.0E+05			4.9E+05						8.4E+04
BUTYLCHLORIDE, T-	000307-20-0												
BUTYLPHthalYL BUTYLGLYCOLATE	000085-70-1			2.0E+06			9.7E+06						1.7E+06
CACODYLIC ACID	000075-60-5			6.1E+03			2.9E+04						5.1E+03
CADMIUM (Diet)	007440-43-9			2.0E+03			9.7E+02	1.0E+06	1.0E+04				6.6E+02
CALCIUM CYANIDE	000592-01-8			8.2E+04			3.9E+05						6.8E+04

Table 3.2c. (continued)

Chemical	CASRN	Ingestion (mg/kg)			Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
CAPROLACTAM	000105-60-2			1.0E+06			4.9E+06						8.4E+05
CAPTAFOL	002425-06-1	6.7E+04	6.7E+02	4.1E+03	3.2E+05	3.2E+03	1.9E+04				5.5E+04	5.5E+02	3.4E+03
CAPTAN	000133-06-2	1.6E+05	1.6E+03	2.7E+05	7.8E+05	7.8E+03	1.3E+06				1.4E+05	1.4E+03	2.2E+05
CARBARYL	000063-25-2			2.0E+05			9.7E+05						1.7E+05
CARBAZOLE	000086-74-8	2.9E+04	2.9E+02		9.5E+04	9.5E+02					2.2E+04	2.2E+02	
CARBOFURAN	001563-66-2			1.0E+04			4.9E+04						8.4E+03
CARBON DISULFIDE	000075-15-0			2.0E+05			6.1E+05			2.9E+02			2.8E+02
CARBON TETRACHLORIDE	000056-23-5	4.4E+03	4.4E+01	1.4E+03	1.4E+04	1.4E+02	4.4E+03	5.1E+02	5.1E+00		4.4E+02	4.4E+00	1.0E+03
CARBOSULFAN	055285-14-8			2.0E+04			9.7E+04						1.7E+04
CARBOXIN	005234-68-4			2.0E+05			9.7E+05						1.7E+05
CHLORAL	000075-87-6			4.1E+03			1.9E+04						3.4E+03
CHLORAMBEN	000133-90-4			3.1E+04			1.5E+05						2.5E+04
CHLORANIL	000118-75-2	1.4E+03	1.4E+01		6.7E+03	6.7E+01					1.2E+03	1.2E+01	
CHLORDANE	000057-74-9	4.4E+02	4.4E+00	1.2E+02	1.0E+03	1.0E+01	2.9E+02	4.7E+06	4.7E+04		3.1E+02	3.1E+00	8.6E+01
CHLORMURON-ETHYL	090982-32-4			4.1E+04			1.9E+05						3.4E+04
CHLORNE	007782-50-5			2.0E+05			9.7E+06						2.0E+05
CHLORINE DIOXIDE	010049-04-4									1.3E+06			
CHLORO-1,3-BUTADIENE, 2-	000126-99-8			4.1E+04			1.9E+05			4.4E+02			4.3E+02
CHLORO-2-METHYLANILINE HCL, 4-	003165-93-3	1.2E+03	1.2E+01		5.9E+03	5.9E+01					1.0E+03	1.0E+01	
CHLORO-2-METHYLANILINE, 4-	000095-69-2	9.9E+02	9.9E+00		4.7E+03	4.7E+01					8.2E+02	8.2E+00	
CHLOROACETIC ACID	000079-11-8			4.1E+03			1.9E+04						3.4E+03

Table 3.2c. (continued)

Chemical	CASRN	Ingestion (mg/kg)			Dermal (mg/kg)			Inhalation (mg/kg)				Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
CHLOROACETOPHENONE, 2-	000532-27-4									1.9E+05				
CHLOROANILINE, p-	000106-47-8			8.2E+03			3.9E+04							6.8E+03
CHLOROBENZENE	000108-90-7			4.1E+04			6.0E+04			5.1E+02				5.1E+02
CHLOROBENZILATE	000510-15-6	2.1E+03	2.1E+01	4.1E+04	1.0E+04	1.0E+02	1.9E+05	2.3E+07	2.3E+05			1.8E+03		3.4E+04
CHLOROBENZOIC ACID, p-	000074-11-3			4.1E+05			1.9E+06							3.4E+05
CHLOROBENZOTRIFLUORIDE, 4-	000098-56-6			4.1E+04			1.9E+05							3.4E+04
CHLOROBUTANE, 1-	000109-69-3			8.2E+05			3.9E+06							6.8E+05
CHLOROBUTANE, 2-	000078-86-4													
CHLOROCYCLOPENTADIENE	041851-50-7													
CHLORODIBROMOETHANE	073506-94-2	6.8E+03	6.8E+01		3.2E+04	3.2E+02						5.6E+03	5.6E+01	
CHLORODIFLUOROMETHANE	000075-45-6									3.1E+11				
CHLOROFORM	000067-66-3	9.4E+04	9.4E+02	2.0E+04	8.9E+04	8.9E+02	1.9E+04	3.1E+02	3.1E+00			3.1E+02	3.1E+00	1.5E+03
CHLOROMETHANE	000074-87-3	4.4E+04	4.4E+02		2.1E+05	2.1E+03		7.4E+02	7.4E+00			7.2E+02	7.2E+00	
CHLOROMETHYL METHYL ETHER	000107-30-2													
CHLORONAPHTHALENE, BETA-	000091-58-7			1.6E+05			7.8E+05							1.4E+05
CHLORONITROBENZENE, o-	000088-73-3	2.3E+04	2.3E+02		1.1E+05	1.1E+03						1.9E+04	1.9E+02	
CHLORONITROBENZENE, p-	000121-73-3	3.2E+04	3.2E+02		1.5E+05	1.5E+03						2.6E+04	2.6E+02	
CHLOROPHENOL, 2-	000095-57-8			1.0E+04			4.9E+04							8.4E+03
CHLOROPHENYL METHYL SULFIDE, p-	000123-09-1													
CHLOROPHENYL METHYL SULFOXIDE	000934-73-6													
CHLOROPROPANE, 2-	000075-29-6									1.8E+03				

Table 3.2c. (continued)

Chemical	CASRN	Ingestion (mg/kg)			Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) ¹		
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
CHLOROTHALONIL	001897-45-6	5.2E+04	5.2E+02	3.1E+04	2.5E+05	2.5E+03	1.5E+05				4.3E+04	4.3E+02	2.5E+04
CHLOROTOLUENE, o-	000095-49-8			4.1E+04			1.9E+05						3.4E+04
CHLOROPROPAM	000101-21-3			4.1E+05			1.9E+06						3.4E+05
CHLORPYRIFOS	002921-88-2			6.1E+03			2.9E+04						5.1E+03
CHLORPYRIFOS METHYL	005598-13-0			2.0E+04			9.7E+04						1.7E+04
CHLORSULFURON	064902-72-3			1.0E+05			4.9E+05						8.4E+04
CHLORTHIOPHOS	060238-56-4			1.6E+03			7.8E+03						1.4E+03
CHROMIUM (III) (INSOLUBLE SALTS)	016065-83-1			2.0E+06			4.9E+05						3.9E+05
CHROMIUM (VI)	018540-29-9			1.0E+04			9.7E+03	1.5E+05	1.5E+03				5.0E+03
CHRYSENE	000218-01-9	7.8E+04	7.8E+02		1.2E+05	1.2E+03					4.7E+04	4.7E+02	
COKE OVEN EMISSIONS	008007-45-2							2.8E+06	2.8E+04				
COPPER	007440-50-8												
COPPER CYANIDE	000544-92-3			1.0E+04			4.9E+05						1.0E+04
CREOSOTE	008001-58-9												
CRESOL, m-	000108-39-4			1.0E+05			4.9E+05						8.4E+04
CRESOL, o-	000095-48-7			1.0E+05			4.9E+05						8.4E+04
CRESOL, p-	000106-44-5			1.0E+04			3.2E+04						7.7E+03
CROTONALDEHYDE	000123-73-9	3.0E+02	3.0E+00		1.4E+03	1.4E+01					2.5E+02	2.5E+00	
CUMENE	000098-82-8			8.2E+04			3.9E+05			3.5E+02			3.5E+02
CYANAZINE	021725-46-2	6.8E+02	6.8E+00	4.1E+03	3.2E+03	3.2E+01	1.9E+04				5.6E+02	5.6E+00	3.4E+03
CYANIDE (CN-)	000057-12-5			4.1E+04			3.3E+05						3.6E+04

Table 3.2c. (continued)

Chemical	CASRN	Ingestion (mg/kg)			Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
CYANOGEN	000460-19-5			8.2E+04			3.9E+05						6.8E+04
CYANOGEN BROMIDE	000506-68-3			1.8E+05			8.7E+05						1.5E+05
CYANOGEN CHLORIDE	000506-77-4			1.0E+05			4.9E+05						8.4E+04
CYCLOHEXANE, 1,2,3,4,5-PENTABROMO-6-CHLORO	000087-84-3	2.5E+04	2.5E+02		1.2E+05	1.2E+03					2.1E+04	2.1E+02	
CYCLOHEXANONE	000108-94-1			1.0E+07			4.9E+07						8.4E+06
CYCLOHEXYLAMINE	000108-91-8			4.1E+05			1.9E+06						3.4E+05
CYCLOPENTADIENE	000542-92-7												
CYHALOTHIRIN/KARATE	068085-85-8			1.0E+04			4.9E+04						8.4E+03
CYPERMETHRIN	052315-07-8			2.0E+04			9.7E+04						1.7E+04
CYROMAZINE	066215-27-8			1.5E+04			7.3E+04						1.3E+04
DACTHAL	001861-32-1			2.0E+04			9.7E+04						1.7E+04
DALAPON	000075-99-0			6.1E+04			2.9E+05						5.1E+04
DDD	000072-54-8	2.4E+03	2.4E+01		7.9E+03	7.9E+01					1.8E+03	1.8E+01	
DDE	000072-55-9	1.7E+03	1.7E+01		5.6E+03	5.6E+01					1.3E+03	1.3E+01	
DDT	000050-29-3	1.7E+03	1.7E+01	1.0E+03	5.6E+03	5.6E+01	3.4E+03	1.8E+07	1.8E+05		1.3E+03	1.3E+01	7.9E+02
DECABROMODIPHENYL ETHER	001163-19-5			2.0E+04			9.7E+04						1.7E+04
DEMETON	008065-48-3			8.2E+01			3.9E+02						6.8E+01
DI(2-ETHYLHEXYL)ADIPATE	000103-23-1	4.8E+05	4.8E+03	1.2E+06	2.3E+06	2.3E+04	5.8E+06				3.9E+05	3.9E+03	1.0E+06
DIALATE	002303-16-4	9.4E+03	9.4E+01		4.5E+04	4.5E+02					7.7E+03	7.7E+01	
DIAZINON	000333-41-5			1.8E+03			8.7E+03						1.5E+03
DIBENZ[A,H]ANTHRACENE	000053-70-3	7.8E+01	7.8E-01		1.2E+02	1.2E+00					4.7E+01	4.7E-01	

Table 3.2c. (continued)

Chemical	CASRN	Ingestion (mg/kg)			Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1
DIBROMO-3-CHLOROPROPANE, 1,2-	000096-12-8	4.1E+02	4.1E+00		1.9E+03	1.9E+01		2.6E+09	2.6E+07	1.3E+06	3.4E+02	3.4E+00	
DIBROMOBENZENE, 1,4-	000106-37-6			2.0E+04			9.7E+04						1.7E+04
DIBROMOCHLOROMETHANE	000124-48-1	6.8E+03	6.8E+01	4.1E+04	1.9E+04	1.9E+02	1.2E+05				5.0E+03	5.0E+01	3.0E+04
DIBROMODICHLOROMETHANE	000594-18-3												
DIBROMODIPHENYL ETHER, p,p'-	002050-47-7												
DIBROMOETHANE, 1,2-	000106-93-4	6.7E+00	6.7E-02		3.2E+01	3.2E-01		2.5E+02	2.5E+00	3.9E+01	5.4E+00	5.4E-02	
DIBROMOMETHANE (METHYLENE BROMIDE)	000074-95-3			2.0E+04			9.7E+04						1.7E+04
DIBUTYL PHTHALATE	000084-74-2			2.0E+05			9.7E+05						1.7E+05
DICAMBA	001918-00-9			6.1E+04			2.9E+05						5.1E+04
DICHLORO-2-BUTENE, 1,4-	000764-41-0							2.0E+01	2.0E-01				
DICHLOROBENZENE, 1,2-	000095-50-1			1.8E+05			8.7E+05			5.1E+02			5.1E+02
DICHLOROBENZENE, 1,3-	000541-73-1												
DICHLOROBENZENE, 1,4-	000106-46-7	2.4E+04	2.4E+02		1.0E+05	1.0E+03				3.3E+01	3.3E+01	3.3E+01	
DICHLOROBENZIDINE, 3,3'-	000091-94-1	1.3E+03	1.3E+01		6.0E+03	6.0E+01					1.1E+03	1.1E+01	
DICHLORODIFLUOROMETHANE	000075-71-8			4.1E+05			4.5E+05			3.2E+02			3.2E+02
DICHLOROETHANE, 1,1-	000075-34-3			2.0E+05			9.7E+05			7.8E+00			7.8E+00
DICHLOROETHANE, 1,2-	000107-06-2	6.3E+03	6.3E+01		3.0E+04	3.0E+02		3.4E+02	3.4E+00		3.2E+02	3.2E+00	
DICHLOROETHYLENE, 1,1-	000075-35-4	9.5E+02	9.5E+00	1.8E+04	4.5E+03	4.5E+01	8.7E+04	7.5E+00	7.5E-02		7.5E+00	7.5E-02	1.2E+03
DICHLOROETHYLENE, 1,2-, (MIXED ISOMERS)	000540-59-0			1.8E+04			8.7E+04						1.5E+04
DICHLOROETHYLENE, 1,2-C-	000156-59-2			2.0E+04			9.7E+04						1.7E+04
DICHLOROETHYLENE, 1,2-T-	000156-60-5			4.1E+04			1.9E+05						3.4E+04

Table 3.2c. (continued)

Chemical	CASRN	Ingestion (mg/kg)			Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
DICHLOROPHENOL, 2,4-	000120-83-2			6.1E+03			2.4E+04						4.9E+03
DICHLOROPHENOXY ACETIC ACID, 2,4-	000094-75-7			2.0E+04			9.7E+04						1.7E+04
DICHLOROPHENOXYBUTYRIC ACID, 4-(2,4-	000094-82-6			1.6E+04			7.8E+04						1.4E+04
DICHLOROPROPANE, 1,2-	000078-87-5	8.4E+03	8.4E+01		3.0E+04	3.0E+02				1.4E+02	4.8E+02	6.6E+01	
DICHLOROPROPANOL, 2,3-	000616-23-9			6.1E+03			2.9E+04						5.1E+03
DICHLOROPROPENE, 1,3-	000542-75-6	3.2E+03	3.2E+01	6.1E+02	8.3E+03	8.3E+01	1.6E+03	9.0E+02	9.0E+00	2.4E+03	6.5E+02	6.5E+00	3.7E+02
DICHLORVOS	000062-73-7	2.0E+03	2.0E+01	1.0E+03	9.4E+03	9.4E+01	4.9E+03			3.1E+06	1.6E+03	1.6E+01	8.4E+02
DICOFOL	000115-32-2												
DICYCLOPENTADIENE	000077-73-6			6.1E+04			2.9E+05			4.2E+01			4.2E+01
DIELDRIN	000060-57-1	3.6E+01	3.6E-01	1.0E+02	8.5E+01	8.5E-01	2.4E+02	3.8E+05	3.8E+03		2.5E+01	2.5E-01	7.2E+01
DIETHYL PHTHALATE	000084-66-2			1.6E+06			7.0E+06						1.3E+06
DIETHYL-P-NITROPHENYLPHOSPHATE	000311-45-5												
DIETHYLENE GLYCOL DINITRATE (DEGDN)	000693-21-0												
DIETHYLENE GLYCOL MONOBUTYL ETHER	000112-34-5									1.3E+08			
DIETHYLENE GLYCOL MONOETHYL ETHER	000111-90-0			4.1E+06			1.9E+07						3.4E+06
DIETHYLFORMAMIDE	000617-84-5			2.2E+04			1.1E+05						1.9E+04
DIETHYLSTILBESTEROL	000056-53-1	1.2E-01	1.2E-03		5.8E-01	5.8E-03		1.3E+04	1.3E+02		1.0E-01	1.0E-03	
DIFENZOQUAT	043222-48-6			1.6E+05			7.8E+05						1.4E+05
DIFLUBENZURON	035367-38-5			4.1E+04			1.9E+05						3.4E+04
DIFLUOROETHANE, 1,1-	000075-37-6									2.5E+11			
DIISOPROPYL METHYLPHOSPHONATE	001445-75-6			1.6E+05			7.8E+05						1.4E+05

Table 3.2c. (continued)

Chemical	CASRN	Ingestion (mg/kg)			Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
DIMETHIPIN	055290-64-7			4.1E+04			1.9E+05						3.4E+04
DIMETHOATE	000060-51-5			4.1E+02			1.9E+03						3.4E+02
DIMETHOXYBENZIDINE, 3,3'-	000119-90-4	4.1E+04	4.1E+02		1.9E+05	1.9E+03					3.4E+04	3.4E+02	
DIMETHYL SULFATE	000077-78-1												
DIMETHYLANILINE HCL, 2,4-	021436-96-4	9.9E+02	9.9E+00		4.7E+03	4.7E+01					8.2E+02	8.2E+00	
DIMETHYLANILINE, 2,4-	000095-68-1	7.6E+02	7.6E+00		3.6E+03	3.6E+01					6.3E+02	6.3E+00	
DIMETHYLANILINE, N,N-	000121-69-7			4.1E+03			1.9E+04						3.4E+03
DIMETHYLBENZIDINE, 3,3'-	000119-93-7	6.2E+01	6.2E-01		3.0E+02	3.0E+00					5.1E+01	5.1E-01	
DIMETHYLETHYL LEAD	107584-40-7												
DIMETHYLFORMAMIDE	000068-12-2			2.0E+05			9.7E+05			1.9E+08			1.7E+05
DIMETHYLHYDRAZINE, 1,2-	000540-73-8												
DIMETHYLPHENOL, 2,4-	000105-67-9			4.1E+04			1.9E+05						3.4E+04
DIMETHYLPHENOL, 2,6-	000576-26-1			1.2E+03			5.8E+03						1.0E+03
DIMETHYLPHENOL, 3,4-	000095-65-8			2.0E+03			9.7E+03						1.7E+03
DIMETHYLPHTHALATE	000131-11-3												
DIMETHYLTETREPHTHALATE	000120-61-6			2.0E+05			9.7E+05						1.7E+05
DINITRO-O-CYCLOHEXYL PHENOL, 4,6-	000131-89-5			4.1E+03			1.9E+04						3.4E+03
DINITROBENZENE, 1,2-	000528-29-0			8.2E+02			3.6E+03						6.7E+02
DINITROBENZENE, 1,3-	000099-65-0			2.0E+02			9.7E+02						1.7E+02
DINITROBENZENE, 1,4-	000100-25-4			8.2E+02			3.9E+03						6.8E+02
DINITROPHENOL, 2,4-	000051-28-5			4.1E+03			1.9E+04						3.4E+03

Table 3.2c. (continued)

Chemical	CASRN	Ingestion (mg/kg)			Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1
DINITROTOLUENE, 2,4-	000121-14-2	8.4E+02	8.4E+00	4.1E+03	3.4E+03	3.4E+01	1.6E+04				6.7E+02	6.7E+00	3.3E+03
DINITROTOLUENE, 2,6-	000606-20-2	8.4E+02	8.4E+00	2.0E+03	3.4E+03	3.4E+01	8.2E+03				6.7E+02	6.7E+00	1.6E+03
DINOSEB	000088-85-7			2.0E+03			9.7E+03						1.7E+03
DIOXANE, 1,4-	000123-91-1	5.2E+04	5.2E+02		2.5E+05	2.5E+03					4.3E+04	4.3E+02	
DIPHENAMID	000957-51-7			6.1E+04			2.9E+05						5.1E+04
DIPHENYLAMINE	000122-39-4			5.1E+04			2.4E+05						4.2E+04
DIPHENYLHYDRAZINE, 1,2-	000122-66-7	7.2E+02	7.2E+00		3.4E+03	3.4E+01		7.7E+06	7.7E+04		5.9E+02	5.9E+00	
DIQUAT	000085-00-7			4.5E+03			2.1E+04						3.7E+03
DIRECT BLACK 38	001937-37-7	6.7E+01	6.7E-01		3.2E+02	3.2E+00					5.5E+01	5.5E-01	
DIRECT BLUE 6	002602-46-2	7.1E+01	7.1E-01		3.4E+02	3.4E+00					5.8E+01	5.8E-01	
DIRECT BROWN 95	016071-86-6	6.2E+01	6.2E-01		2.9E+02	2.9E+00					5.1E+01	5.1E-01	
DIRECT SKY BLUE	002610-05-1												
DISULFOTON	000298-04-4			8.2E+01			3.9E+02						6.8E+01
DIURON	000330-54-1			4.1E+03			1.9E+04						3.4E+03
DODINE	002439-10-3			8.2E+03			3.9E+04						6.8E+03
ENDOSULFAN	000115-29-7			1.2E+04			5.8E+04						1.0E+04
ENDOTHALL	000145-73-3			4.1E+04			1.9E+05						3.4E+04
ENDRIN	000072-20-8			6.1E+02			5.8E+01						5.3E+01
EPICHLOROHYDRIN	000106-89-8	5.8E+04	5.8E+02	4.1E+03	2.7E+05	2.7E+03	1.9E+04	3.2E+03	3.2E+02	1.4E+02	3.2E+03	1.9E+02	1.3E+02
EPOXYBUTANE, 1,2-	000106-88-7									1.3E+08			
EPTC	000759-94-4			5.1E+04			2.4E+05						4.2E+04

Table 3.2c. (continued)

Chemical	CASRN	Ingestion (mg/kg)			Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
ETHEPHON	016672-87-0			1.0E+04			4.9E+04						8.4E+03
ETHION	000563-12-2			1.0E+03			4.9E+03						8.4E+02
ETHOXYETHANOL ACETATE, 2-	000111-15-9			6.1E+05			2.9E+06						5.1E+05
ETHOXYETHANOL, 2-	000110-80-5			8.2E+05			3.9E+06			1.3E+09			6.7E+05
ETHYL ACETATE	000141-78-6			1.8E+06			8.7E+06						1.5E+06
ETHYL ACRYLATE	000140-88-5	1.2E+04	1.2E+02		5.7E+04	5.7E+02					9.8E+03	9.8E+01	
ETHYL CHLORIDE	000075-00-3									1.6E+02			
ETHYL ETHER	000060-29-7			4.1E+05			1.9E+06						3.4E+05
ETHYL METHACRYLATE	000097-63-2			1.8E+05			8.7E+05						1.5E+05
ETHYL-p-NITROPHENYL PHOSPHONATE	002104-64-5			2.0E+01			9.7E+01						1.7E+01
ETHYLBENZENE	000100-41-4			2.0E+05			9.4E+05			4.8E-01			4.8E-01
ETHYLENE CYANOHYDRIN	000109-78-4			6.1E+05			2.9E+06						5.1E+05
ETHYLENE DIAMINE	000107-15-3			4.1E+04			1.9E+05						3.4E+04
ETHYLENE GLYCOL	000107-21-1			4.1E+06			1.9E+07						3.4E+06
ETHYLENE GLYCOL MONOBUTYL ETHER	000111-76-2									1.3E+08			
ETHYLENE OXIDE	000075-21-8	5.6E+02	5.6E+00		2.7E+03	2.7E+01		8.2E+01	8.2E-01		6.9E+01	6.9E-01	
ETHYLENE THIOUREA	000096-45-7	5.2E+03	5.2E+01	1.6E+02	2.5E+04	2.5E+02	7.8E+02				4.3E+03	4.3E+01	1.4E+02
ETHYLPHthalYL ETHYL GLYCOLATE	000084-72-0			6.1E+06			2.9E+07						5.1E+06
EXPRESS	101200-48-0			1.6E+04			7.8E+04						1.4E+04
FENAMIPHOS	022224-92-6			5.1E+02			2.4E+03						4.2E+02
FENPROPATHRIN	039515-41-8			5.1E+04			2.4E+05						4.2E+04

Table 3.2c. (continued)

Chemical	CASRN	Ingestion (mg/kg)			Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
FLUOMETURON	002164-17-2			2.7E+04			1.3E+05						2.2E+04
FLUORANTHENE	000206-44-0			8.2E+04			1.2E+05						4.9E+04
FLUORENE	000086-73-7			8.2E+04			3.9E+05						6.8E+04
FLUORIDE	007782-41-4			1.2E+05			5.6E+06						1.2E+05
FLURIDONE	059756-60-4			1.6E+05			7.8E+05						1.4E+05
FLURPRIMIDOL	056425-91-3			4.1E+04			1.9E+05						3.4E+04
FLUTOLANIL	066332-96-5			1.2E+05			5.8E+05						1.0E+05
FLUVALINATE	069409-94-5			2.0E+04			9.7E+04						1.7E+04
FOLPET	000133-07-3	1.6E+05	1.6E+03	2.0E+05	7.8E+05	7.8E+03	9.7E+05				1.4E+05	1.4E+03	1.7E+05
FOMESAFEN	072178-02-0	3.0E+03	3.0E+01		1.4E+04	1.4E+02					2.5E+03	2.5E+01	
FONOFOS	000944-22-9			4.1E+03			1.9E+04						3.4E+03
FORMALDEHYDE	000050-00-0			4.1E+05			1.9E+06	1.4E+08	1.4E+06				3.4E+05
FORMIC ACID	000064-18-6			4.1E+06			1.9E+07						3.4E+06
FOSETYL-AL	039148-24-8			6.1E+06			2.9E+07						5.1E+06
FURAN	000110-00-9			2.0E+03			9.7E+03						1.7E+03
FURAZOLIDONE	000067-45-8	1.5E+02	1.5E+00		7.1E+02	7.1E+00					1.2E+02	1.2E+00	
FURFURAL	000098-01-1			6.1E+03			2.9E+04			3.1E+08			5.1E+03
FURIUM	000531-82-8	1.1E+01	1.1E-01		5.4E+01	5.4E-01					9.5E+00	9.5E-02	
FURMECYCLOX	060568-05-0	1.9E+04	1.9E+02		9.1E+04	9.1E+02					1.6E+04	1.6E+02	
GLUFOSINATE-AMMONIUM	077182-82-2			8.2E+02			3.9E+03						6.8E+02
GLYCIDYL	000765-34-4			8.2E+02			3.9E+03			6.3E+06			6.8E+02

Table 3.2c. (continued)

Chemical	CASRN	Ingestion (mg/kg)			Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
GLYPHOSATE	001071-83-6			2.0E+05			9.7E+05						1.7E+05
GOAL	042874-03-3			6.1E+03			2.9E+04						5.1E+03
HALOXYFOP-METHYL	069806-40-2			1.0E+02			4.9E+02						8.4E+01
HARMONY	079277-27-3			2.7E+04			1.3E+05						2.2E+04
HEPTACHLOR	000076-44-8	1.3E+02	1.3E+00	1.0E+03	4.3E+02	4.3E+00	3.5E+03	1.4E+06	1.4E+04		9.8E+01	9.8E-01	7.9E+02
HEPTACHLOR EPOXIDE	001024-57-3	6.3E+01	6.3E-01	2.7E+01	2.1E+02	2.1E+00	9.1E+01	6.7E+05	6.7E+03		4.9E+01	4.9E-01	2.1E+01
HEPTANE, N-	000142-82-5												
HEXABROMOBENZENE	000087-82-1			4.1E+03			1.9E+04						3.4E+03
HEXACHLOROBENZENE	000118-74-1	3.6E+02	3.6E+00	1.6E+03	1.7E+03	1.7E+01	7.8E+03	3.8E+06	3.8E+04		3.0E+02	3.0E+00	1.4E+03
HEXACHLOROBUTADIENE	000087-68-3	7.3E+03	7.3E+01	4.1E+02	3.5E+04	3.5E+02	1.9E+03	7.9E+07	7.9E+05		6.1E+03	6.1E+01	3.4E+02
HEXACHLOROCYCLOHEXANE, ALPHA-	000319-84-6	9.1E+01	9.1E-01		4.2E+02	4.2E+00		9.7E+05	9.7E+03		7.5E+01	7.5E-01	
HEXACHLOROCYCLOHEXANE, BETA-	000319-85-7	3.2E+02	3.2E+00		1.4E+03	1.4E+01		3.4E+06	3.4E+04		2.6E+02	2.6E+00	
HEXACHLOROCYCLOHEXANE, DELTA-	000319-86-8												
HEXACHLOROCYCLOHEXANE, EPSILON	006108-10-7												
HEXACHLOROCYCLOHEXANE, GAMMA-	000038-89-9	4.4E+02	4.4E+00	6.1E+02	2.0E+03	2.0E+01	2.8E+03				3.6E+02	3.6E+00	5.0E+02
HEXACHLOROCYCLOHEXANE, TECHNICAL	000608-73-1	3.2E+02	3.2E+00		1.5E+03	1.5E+01		3.4E+06	3.4E+04		2.6E+02	2.6E+00	
HEXACHLOROCYCLOPENTADIENE	000077-47-4			1.4E+04			6.8E+04			4.4E+05			1.2E+04
HEXACHLORODIBENZO-p-DIOXIN, MIXTURE	019408-74-3	9.2E-02	9.2E-04		4.4E-01	4.4E-03					7.6E-02	7.6E-04	
HEXACHLOROETHANE	000067-72-1	4.1E+04	4.1E+02	2.0E+03	1.9E+05	1.9E+03	9.7E+03	4.4E+08	4.4E+06		3.4E+04	3.4E+02	1.7E+03
HEXACHLOROPHENE	000070-30-4			6.1E+02			2.9E+03						5.1E+02
HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE (RDX)	000121-82-4	5.2E+03	5.2E+01	6.1E+03	2.5E+04	2.5E+02	2.9E+04				4.3E+03	4.3E+01	5.1E+03

Table 3.2c. (continued)

Chemical	CASRN	Ingestion (mg/kg)			Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
HEXAMETHYLENE DIISOCYANATE, 1,6-	000822-06-0									6.3E+04			
HEXANE, N-	000110-54-3			1.2E+05			4.7E+05			9.1E+01			9.1E+01
HEXAZINONE	051235-04-2			6.7E+04			3.2E+05						5.6E+04
HYDRAZINE	000302-01-2	1.9E+02	1.9E+00		9.1E+02	9.1E+00		3.6E+05	3.6E+03		1.6E+02	1.6E+00	
HYDRAZINE SULFATE	010034-93-2	1.9E+02	1.9E+00		9.1E+02	9.1E+00		3.6E+05	3.6E+03		1.6E+02	1.6E+00	
HYDROGEN CHLORIDE	007647-01-0									4.4E+07			
HYDROGEN CYANIDE	000074-90-8			4.1E+04			3.3E+05			1.9E+07			3.6E+04
HYDROGEN SULFIDE	007783-06-4			6.1E+03			2.9E+05			5.6E+06			6.0E+03
HYDROQUINONE	000123-31-9			8.2E+04			3.9E+05						6.8E+04
IMAZALIL	035554-44-0			2.7E+04			1.3E+05						2.2E+04
IMAZAQUIN	081335-37-7			5.1E+05			2.4E+06						4.2E+05
INDENO[1,2,3-cd]PYRENE	000193-39-5	7.8E+02	7.8E+00		1.2E+03	1.2E+01					4.7E+02	4.7E+00	
IPRODIONE	036734-19-7			8.2E+04			3.9E+05						6.8E+04
ISOBUTYL ALCOHOL	000078-83-1			6.1E+05			2.9E+06						5.1E+05
ISOPHORONE	000078-59-1	6.0E+05	6.0E+03	4.1E+05	2.9E+06	2.9E+04	1.9E+06				5.0E+05	5.0E+03	3.4E+05
ISOPROPALIN	033820-53-0			3.1E+04			1.5E+05						2.5E+04
ISOPROPYL METHYL PHOSPHONIC ACID	001832-54-8			2.0E+05			9.7E+05						1.7E+05
ISOXABEN	082558-50-7			1.0E+05			4.9E+05						8.4E+04
KARATE	091465-08-6			1.0E+04			4.9E+04						8.4E+03
KERB	023950-58-5			1.5E+05			7.3E+05						1.3E+05
LACTOFEN	077501-63-4			4.1E+03			1.9E+04						3.4E+03

Table 3.2c. (continued)

Chemical	CASRN	Ingestion (mg/kg)			Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
LEAD ALKYLs	NA												
LEAD AND COMPOUNDS	007439-92-1												
LINURON	000330-55-2			4.1E+03			1.9E+04						3.4E+03
LONDAX	083055-99-6			4.1E+05			1.9E+06						3.4E+05
MALATHION	000121-75-5			4.1E+04			1.9E+05						3.4E+04
MALEIC ANHYDRIDE	000108-31-6			2.0E+05			9.7E+05						1.7E+05
MALEIC HYDRAZIDE	000123-33-1			1.0E+06			4.9E+06						8.4E+05
MALONONITRILE	000109-77-3			4.1E+01			1.9E+02						3.4E+01
MANCOZEB	008018-01-7			6.1E+04			2.9E+05						5.1E+04
MANEB	012427-38-2			1.0E+04			4.9E+04						8.4E+03
MANGANESE (Diet)	007439-96-5			2.9E+05			5.4E+05			3.1E+05			1.2E+05
MCPA	000094-74-6			1.0E+03			4.9E+03						8.4E+02
MCPB	000094-81-5			2.0E+04			9.7E+04						1.7E+04
MCPP	000093-65-2			2.0E+03			9.7E+03						1.7E+03
MEPHOSFOLAN	000950-10-7			1.8E+02			8.7E+02						1.5E+02
MEPIQUAT CHLORIDE	024307-26-4			6.1E+04			2.9E+05						5.1E+04
MERCURY, INORGANIC	007439-97-6			6.1E+02			2.0E+03			1.9E+06			4.7E+02
MERPHOS	000150-50-5			6.1E+01			2.9E+02						5.1E+01
MERPHOS OXIDE	000078-48-8			6.1E+01			2.9E+02						5.1E+01
METALAXYL	057837-19-1			1.2E+05			5.8E+05						1.0E+05
METHACRYLONITRILE	000126-98-7			2.0E+02			9.7E+02			1.2E+02			6.9E+01

Table 3.2c. (continued)

Chemical	CASRN	Ingestion (mg/kg)			Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1
METHAMPHOS	010265-92-6			1.0E+02			4.9E+02						8.4E+01
METHANOL	000067-56-1			1.0E+06			4.9E+06						8.4E+05
METHIDATHION	000950-37-8			2.0E+03			9.7E+03						1.7E+03
METHOMYL	016752-77-5			5.1E+04			2.4E+05						4.2E+04
METHOXY-5-NITROANILINE, 2-	000099-59-2	1.2E+04	1.2E+02		5.9E+04	5.9E+02		1.0E+04	1.0E+02				
METHOXYCHLOR	000072-43-5			1.0E+04			4.9E+04						8.4E+03
METHOXYETHANOL ACETATE, 2-	000110-49-6			4.1E+03			1.9E+04						3.4E+03
METHOXYETHANOL, 2-	000109-86-4			2.0E+03			9.7E+03			1.3E+08			1.7E+03
METHYL ACETATE	000079-20-9			2.0E+06			9.7E+06						1.7E+06
METHYL ACRYLATE	000096-33-3			6.1E+04			2.9E+05						5.1E+04
METHYL ETHYL KETONE	000078-93-3			1.2E+06			4.7E+06			9.3E+03			9.3E+03
METHYL ISOBUTYL KETONE	000108-10-1			1.6E+05			7.8E+05			7.0E+02			7.0E+02
METHYL MERCURY	022967-92-6			6.1E+02			2.6E+03						5.0E+02
METHYL METHACRYLATE	000080-62-6			1.6E+05			7.8E+05						1.4E+05
METHYL PARATHION	000298-00-0			5.1E+02			2.4E+03						4.2E+02
METHYL STYRENE (MIXED ISOMERS)	025013-15-4			1.2E+04			5.8E+04			2.5E+08			1.0E+04
METHYL TERT-BUTYL ETHER (MTBE)	001634-04-4									1.9E+10			
METHYL-5-NITROANILINE, 2-	000099-55-8	1.7E+04	1.7E+02		8.2E+04	8.2E+02					1.4E+04	1.4E+02	
METHYLANILINE HYDROCHLORIDE, 2-	000636-21-5	3.2E+03	3.2E+01		1.5E+04	1.5E+02					2.6E+03	2.6E+01	
METHYLCYCLOHEXANE	000108-87-2									1.9E+10			
METHYLENE CHLORIDE	000075-09-2	7.6E+04	7.6E+02	1.2E+05	3.4E+05	3.4E+03	5.5E+05			1.0E+03	1.0E+03	6.2E+02	1.0E+03

Table 3.2c. (continued)

Chemical	CASRN	Ingestion (mg/kg)			Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
METHYLENE-BIS(2-CHLOROANILINE), 4,4'-	000101-14-4	4.4E+03	4.4E+01	1.4E+03	2.1E+04	2.1E+02	6.8E+03	4.7E+07	4.7E+05		3.6E+03	3.6E+01	1.2E+03
METHYLENE-BIS(N,N-DIMETHYL) ANILINE, 4,4'-	000101-61-1	1.2E+04	1.2E+02		5.9E+04	5.9E+02					1.0E+04	1.0E+02	
METHYLENEBISBENZENAMINE, 4,4'-	000101-77-9												
METHYLENEDIPHENYL ISOCYANATE, 4,4'-	000101-68-8									1.3E+05			
METHYLSTYRENE, ALPHA-	000098-83-9			1.4E+05			6.8E+05						1.2E+05
METHYLTRIETHYL LEAD	001762-28-3												
METOLACHLOR	051218-45-2			3.1E+05			1.5E+06						2.5E+05
METRIBUZIN	021087-64-9			5.1E+04			2.4E+05						4.2E+04
MIREX	002385-85-5			4.1E+02			1.9E+03						3.4E+02
MOLINATE	002212-67-1			4.1E+03			1.9E+04						3.4E+03
MOLYBDENUM	007439-98-7			1.0E+04			1.8E+05						9.7E+03
MONOCHLORAMINE	010599-90-3			2.0E+05			9.7E+05						1.7E+05
MONOCHLOROBUTANES	025154-42-1			8.2E+05			3.9E+06						6.8E+05
NALED	000300-76-5			4.1E+03			1.9E+04						3.4E+03
NAPHTHALENE	000091-20-3												
NAPROPAMIDE	015299-99-7			2.0E+05			9.7E+05						1.7E+05
NIAGARA BLUE 4B	002429-74-5												
NICKEL CARBONYL	013463-39-3												
NICKEL REFINERY DUST	NA							7.3E+06	7.3E+04				
NICKEL SOLUBLE SALTS	007440-02-0			4.1E+04			5.2E+05						3.8E+04
NICKEL SUBSULFIDE	012035-72-2							3.6E+06	3.6E+04				

Table 3.2c. (continued)

Chemical	CASRN	Ingestion (mg/kg)			Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
NITROSOPYRROLIDINE, N-	000930-55-2	2.7E+02	2.7E+00		1.3E+03	1.3E+01		2.9E+06	2.9E+04		2.3E+02	2.3E+00	
NITROTOLUENE, m-	000099-08-1			2.0E+04			9.7E+04						1.7E+04
NITROTOLUENE, o-	000088-72-2			2.0E+04			9.7E+04						1.7E+04
NITROTOLUENE, p-	000099-99-0			2.0E+04			9.7E+04						1.7E+04
NORFLURAZON	027314-13-2			8.2E+04			3.9E+05						6.8E+04
NUSTAR	085509-19-9			1.4E+03			6.8E+03						1.2E+03
OCTABROMODIPHENYL ETHER	032536-52-0			6.1E+03			2.9E+04						5.1E+03
OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRA (HMX)	002691-41-0			1.0E+05			4.9E+05						8.4E+04
OCTAMETHYLPYROPHOSPHORAMIDE	000152-16-9			4.1E+03			1.9E+04						3.4E+03
OCTYL PHTHALATE, Di-N-	000117-84-0			4.1E+04			1.7E+05						3.3E+04
ORYZALIN	019044-88-3			1.0E+05			4.9E+05						8.4E+04
OXADIAZON	019666-30-9			1.0E+04			4.9E+04						8.4E+03
OXAMYL	023135-22-0			5.1E+04			2.4E+05						4.2E+04
PACLOBUTRAZOL	076738-62-0			2.7E+04			1.3E+05						2.2E+04
PARAQUAT	001910-42-5			9.2E+03			4.4E+04						7.6E+03
PARATHION	000056-38-2			1.2E+04			5.8E+04						1.0E+04
PEBULATE	001114-71-2			1.0E+05			4.9E+05						8.4E+04
PENDIMETHALIN	040487-42-1			8.2E+04			3.9E+05						6.8E+04
PENTABROMODIPHENYL ETHER	032534-81-9			4.1E+03			1.9E+04						3.4E+03
PENTACHLOROBENZENE	000608-93-5			1.6E+03			7.8E+03						1.4E+03

Table 3.2c. (continued)

Chemical	CASRN	Ingestion (mg/kg)			Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
PENTACHLOROCYCLOPENTADIENE	025329-35-5												
PENTACHLORONITROBENZENE	000082-68-8	2.2E+03	2.2E+01	6.1E+03	1.0E+04	1.0E+02	2.9E+04				1.8E+03	1.8E+01	5.1E+03
PENTACHLOROPHENOL	000087-86-5	4.8E+03	4.8E+01	6.1E+04	2.3E+04	2.3E+02	2.9E+05				3.9E+03	3.9E+01	5.1E+04
PERMETHRIN	052645-53-1			1.0E+05			4.9E+05						8.4E+04
PHENANTHRENE	000085-01-8												
PHENMEDPHAM	013684-63-4			5.1E+05			2.4E+06						4.2E+05
PHENOL	000108-95-2			1.2E+06			5.2E+06						9.9E+05
PHENYLENEDIAMINE, m-	000108-45-2			1.2E+04			5.8E+04						1.0E+04
PHENYLENEDIAMINE, o-	000095-54-5	1.2E+04	1.2E+02		5.8E+04	5.8E+02					1.0E+04	1.0E+02	
PHENYLENEDIAMINE, p-	000106-50-3			3.9E+05			1.8E+06						3.2E+05
PHENYLMERCURIC ACETATE	000062-38-4			1.6E+02			7.8E+02						1.4E+02
PHENYLPHENOL, 2-	000090-43-7	3.0E+05	3.0E+03		1.4E+06	1.4E+04					2.4E+05	2.4E+03	
PHORATE	000298-02-2			4.1E+02			1.9E+03						3.4E+02
PHOSMET	000732-11-6			4.1E+04			1.9E+05						3.4E+04
PHOSPHINE	007803-51-2			6.1E+02			2.9E+03			1.9E+05			5.1E+02
PHTHALIC ACID, p-	000100-21-0			2.0E+06			9.7E+06						1.7E+06
PHTHALIC ANHYDRIDE	000085-44-9			4.1E+06			1.9E+07			7.5E+08			3.4E+06
PICLORAM	001918-02-1			1.4E+05			6.8E+05						1.2E+05
PIRIMIPHOS-METHYL	029232-93-7			2.0E+04			9.7E+04						1.7E+04
POLYBROMINATED BIPHENYLS	NA	6.4E+01	6.4E-01	1.4E+01	2.8E+02	2.8E+00	6.3E+01				5.2E+01	5.2E-01	1.2E+01
POLYCHLORINATED BIPHENYLS	001336-36-3	7.4E+01	7.4E-01		3.2E+02	3.2E+00					6.0E+01	6.0E-01	

Table 3.2c. (continued)

Chemical	CASRN	Ingestion (mg/kg)			Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
POTASSIUM CYANIDE	000151-50-8			1.0E+05			4.9E+05						8.4E+04
POTASSIUM SILVER CYANIDE	000506-61-6			4.1E+05			1.9E+07						4.0E+05
PROCHLORAZ	067747-09-5	3.8E+03	3.8E+01	1.8E+04	1.8E+04	1.8E+02	8.7E+04				3.2E+03	3.2E+01	1.5E+04
PROFLURALIN	026399-36-0			1.2E+04			5.8E+04						1.0E+04
PROMETON	001610-18-0			3.1E+04			1.5E+05						2.5E+04
PROMETRYN	007287-19-6			8.2E+03			3.9E+04						6.8E+03
PROPACHLOR	001918-16-7			2.7E+04			1.3E+05						2.2E+04
PROPANIL	000709-98-8			1.0E+04			4.9E+04						8.4E+03
PROPARGITE	002312-35-8			4.1E+04			1.9E+05						3.4E+04
PROPARGYL ALCOHOL	000107-19-7			4.1E+03			1.9E+04						3.4E+03
PROPABINE	000139-40-2			4.1E+04			1.9E+05						3.4E+04
PROPHAM	000122-42-9			4.1E+04			1.9E+05						3.4E+04
PROPICONAZOLE	060207-90-1			2.7E+04			1.3E+05						2.2E+04
PROPYLENE GLYCOL	000057-55-6			4.1E+07			1.9E+08						3.4E+07
PROPYLENE GLYCOL MONOETHYL ETHER	001569-02-4			1.4E+06			6.8E+06						1.2E+06
PROPYLENE GLYCOL MONOMETHYL ETHER	000107-98-2			1.4E+06			6.8E+06			1.3E+10			1.2E+06
PROPYLENE OXIDE	000075-56-9	2.4E+03	2.4E+01		1.1E+04	1.1E+02		7.0E+03	7.0E+01	2.8E+03	1.5E+03	1.5E+01	
PURSUIT	081335-77-5			5.1E+05			2.4E+06						4.2E+05
PYDRIN	051630-58-1			5.1E+04			2.4E+05						4.2E+04
PYRENE	000129-00-0			6.1E+04			9.0E+04						3.7E+04
PYRIDINE	000110-86-1			2.0E+03			9.7E+03						1.7E+03

Table 3.2c. (continued)

Chemical	CASRN	Ingestion (mg/kg)			Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
QUINALPHOS	013593-03-8			1.0E+03			4.9E+03						8.4E+02
QUINOLINE	000091-22-5	4.8E+01	4.8E-01		2.3E+02	2.3E+00					3.9E+01	3.9E-01	
SYSTHANE	088671-89-0			5.1E+04			2.4E+05						4.2E+04
REFRACTORY CERAMIC FIBERS	NA												
RESMETHRIN	010453-86-8			6.1E+04			2.9E+05						5.1E+04
RONNEL	000299-84-3			1.0E+05			4.9E+05						8.4E+04
ROTENONE	000083-79-4			8.2E+03			3.9E+04						6.8E+03
SAVEY	078587-05-0			5.1E+04			2.4E+05						4.2E+04
SELENIUS ACID	007783-00-8			1.0E+04			4.2E+04						8.2E+03
SELENIUM	007782-49-2			1.0E+04			2.1E+05						9.8E+03
SELENIUM SULFIDE	007446-34-6												
SELENOUREA	000630-10-4			1.0E+04			4.9E+04						8.4E+03
SETHOXYDIM	074051-80-2			1.8E+05			8.7E+05						1.5E+05
SILVER	007440-22-4			1.0E+04			8.7E+04						9.1E+03
SILVER CYANIDE	000506-64-9			2.0E+05			9.7E+05						1.7E+05
SIMAZINE	000122-34-9	4.8E+03	4.8E+01	1.0E+04	2.3E+04	2.3E+02	4.9E+04				3.9E+03	3.9E+01	8.4E+03
SODIUM ACIFLUORFEN	062476-59-9			2.7E+04			1.3E+05						2.2E+04
SODIUM AZIDE	026628-22-8			8.2E+03			3.9E+04						6.8E+03
SODIUM CYANIDE	000143-33-9			8.2E+04			3.9E+06						8.0E+04
SODIUM DIETHYLTHIOCARBAMATE	000148-18-5	2.1E+03	2.1E+01	6.1E+04	1.0E+04	1.0E+02	2.9E+05				1.8E+03	1.8E+01	5.1E+04
SODIUM FLUOROACETATE	000062-74-8			4.1E+01			1.9E+02						3.4E+01

Table 3.2c. (continued)

Chemical	CASRN	Ingestion (mg/kg)			Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
SODIUM METAVANADATE	013718-26-8			2.0E+03			9.7E+03						1.7E+03
STIROFOS (TETRACHLOROVINPHOS)	000961-11-5	2.4E+04	2.4E+02	6.1E+04	1.1E+05	1.1E+03	2.9E+05				2.0E+04	2.0E+02	5.1E+04
STRONTIUM, STABLE	007440-24-6			1.2E+06			5.8E+07						1.2E+06
STRYCHNINE	000057-24-9			6.1E+02			2.9E+03						5.1E+02
STYRENE	000100-42-5			4.1E+05			1.9E+06			6.7E+02			6.7E+02
TCDD, 2,3,7,8-	001746-01-6	3.8E-03	3.8E-05		1.8E-02	1.8E-04		4.1E+01	4.1E-01		3.2E-03	3.2E-05	
TCMTB	021564-17-0			6.1E+04			2.9E+05						5.1E+04
TEBUTHURON	034014-18-1			1.4E+05			6.8E+05						1.2E+05
TEMPEFOS	003383-96-8			4.1E+04			1.9E+05						3.4E+04
TERBACIL	005902-51-2			2.7E+04			1.3E+05						2.2E+04
TERBUFOS	013071-79-9			5.1E+01			2.4E+02						4.2E+01
TERBUTRYN	000886-50-0			2.0E+03			9.7E+03						1.7E+03
TETRABUTYL LEAD	001920-90-7												
TETRACHLOROBENZENE, 1,2,4,5-	000095-94-3			6.1E+02			2.9E+03						5.1E+02
TETRACHLOROETHANE, 1,1,1,2-	000630-20-6	2.2E+04	2.2E+02	6.1E+04	1.0E+05	1.0E+03	2.9E+05	7.9E+02	2.9E+01		7.9E+02	2.5E+01	7.9E+02
TETRACHLOROETHANE, 1,1,2,2-	000079-34-5	2.9E+03	2.9E+01		9.5E+03	9.5E+01		6.8E+02	6.8E+00		5.2E+02	5.2E+00	
TETRACHLOROETHYLENE	000127-18-4			2.0E+04			9.7E+04						1.7E+04
TETRACHLOROPHENOL, 2,3,4,6-	000058-90-2			6.1E+04			2.9E+05						5.1E+04
TETRACHLOROTOLUENE, p- ALPHA, ALPHA-	005216-25-1	2.9E+01	2.9E-01		1.4E+02	1.4E+00					2.4E+01	2.4E-01	
TETRAETHYL DITHIOPYROPHOSPHATE	003689-24-5			1.0E+03			4.9E+03						8.4E+02

Table 3.2c. (continued)

Chemical	CASRN	Ingestion (mg/kg)			Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
TETRAETHYL LEAD	000078-00-2												
TETRAMETHYL LEAD	000075-74-1												
TETRAPROPYL LEAD	003440-75-3												
THALLIC OXIDE	001314-32-5			1.4E+02			6.8E+02						1.2E+02
THALLIUM (I) NITRATE	010102-45-1			1.8E+02			8.7E+02						1.5E+02
THALLIUM (SOLUBLE SALTS)	NA												
THALLIUM ACETATE	000563-68-8			1.8E+02			8.7E+02						1.5E+02
THALLIUM CARBONATE	006533-73-9			1.6E+02			7.8E+02						1.4E+02
THALLIUM CHLORIDE	007791-12-0			1.6E+02			7.8E+02						1.4E+02
THALLIUM SELENITE	012039-52-0												
THALLIUM SULFATE	007446-18-6			1.6E+02			7.8E+02						1.4E+02
THIOBENCARB	028249-77-6			2.0E+04			9.7E+04						1.7E+04
THIOFANOX	039196-18-4			6.1E+02			2.9E+03						5.1E+02
THIOPHANATE-METHYL	023564-05-8			1.6E+05			7.8E+05						1.4E+05
THIRAM	000137-26-8			1.0E+04			4.9E+04						8.4E+03
TIN	007440-31-5			1.2E+06			5.8E+06						1.0E+06
TOLUENE	000108-88-3			4.1E+05			1.6E+06			2.5E+02			2.5E+02
TOLUENE-2,4-DIAMINE	000095-80-7	1.8E+02	1.8E+00		8.5E+02	8.5E+00					1.5E+02	1.5E+00	
TOLUENE-2,5-DIAMINE	000095-70-5			1.2E+06			5.8E+06						1.0E+06
TOLUENE-2,6-DIAMINE	000823-40-5			4.1E+05			1.9E+06						3.4E+05
TOLUIDINE, o- (METHYLANILINE, 2-)	000095-53-4	2.4E+03	2.4E+01		1.1E+04	1.1E+02					2.0E+03	2.0E+01	

Table 3.2c. (continued)

Chemical	CASRN	Ingestion (mg/kg)			Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1
TOLUIDINE, p-	000106-49-0	3.0E+03	3.0E+01		1.4E+04	1.4E+02					2.5E+03	2.5E+01	
TOXAPHENE	008001-35-2	5.2E+02	5.2E+00		2.5E+03	2.5E+01		5.6E+06	5.6E+04		4.3E+02	4.3E+00	
TRALOMETHRIN	066841-25-6			1.5E+04			7.3E+04						1.3E+04
TRIALATE	002203-17-5			2.7E+04			1.3E+05						2.2E+04
TRIASULFURON	082097-50-5			2.0E+04			9.7E+04						1.7E+04
TRIBROMOBENZENE, 1,2,4-	000615-54-3			1.0E+04			4.9E+04						8.4E+03
TRIBROMOCHLOROMETHANE	000594-15-0												
TRIBROMODIPHENYL ETHER	049690-94-0												
TRIBUTYL TIN OXIDE	000056-35-9			6.1E+01			2.9E+02						5.1E+01
TRICHLORO-1,2,2-TRIFLUOROETHANE, 1,1,2-	000076-13-1			6.1E+07			2.9E+08			2.0E+02			2.0E+02
TRICHLORO-2'-HYDROXYDIPHENYLETHYR	003380-34-5												
TRICHLOROANILINE HCL, 2,4,6-	033663-50-2	2.0E+04	2.0E+02		9.4E+04	9.4E+02					1.6E+04	1.6E+02	
TRICHLOROANILINE, 2,4,6-	000634-93-5	1.7E+04	1.7E+02		8.0E+04	8.0E+02					1.4E+04	1.4E+02	
TRICHLOROBENZENE, 1,2,4-	000120-82-1			2.0E+04			9.7E+04			8.3E+02			8.3E+02
TRICHLOROETHANE, 1,1,1-	000071-55-6												
TRICHLOROETHANE, 1,1,2-	000079-00-5	1.0E+04	1.0E+02	8.2E+03	3.9E+04	3.9E+02	3.1E+04	8.5E+02	8.8E+00		8.0E+02	8.0E+00	8.5E+02
TRICHLOROETHYLENE	000079-01-6	5.2E+04	5.2E+02		3.7E+04	3.7E+02		4.4E+02	4.5E+01		4.4E+02	3.7E+01	
TRICHLOROFLUOROMETHANE	000075-69-4			6.1E+05			6.7E+05			7.3E+02			7.3E+02
TRICHLOROPHENOL, 2,4,5-	000095-95-4			2.0E+05			9.7E+05						1.7E+05
TRICHLOROPHENOL, 2,4,6-	000088-06-2	5.2E+04	5.2E+02		2.5E+05	2.5E+03		6.1E+08	6.1E+06		4.3E+04	4.3E+02	
TRICHLOROPHENOXY PROPIONIC ACID, 2(2,4,5-	000093-72-1			1.6E+04			7.8E+04						1.4E+04

Table 3.2c. (continued)

Chemical	CASRN	Ingestion (mg/kg)			Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
TRICHLOROPHENOXYACETIC ACID, 2,4,5-	000093-76-5			2.0E+04			9.7E+04						1.7E+04
TRICHLOROPROPANE, 1,1,2-	000598-77-6			1.0E+04			4.9E+04						8.4E+03
TRICHLOROPROPANE, 1,2,3-	000096-18-4	8.2E+01	8.2E-01	1.2E+04	3.9E+02	3.9E+00	5.8E+04				6.8E+01	6.8E-01	1.0E+04
TRICHLOROPROPENE, 1,2,3-	000096-19-5			1.0E+04			4.9E+04						8.4E+03
TRICHLOROTOLUENE, 2,3,6-	002077-46-5												
TRICHLOROTOLUENE, ALPHA 2,6-	002014-83-7												
TRIDIPHANE	058138-08-2			6.1E+03			2.9E+04						5.1E+03
TRIETHYL LEAD	005224-23-7												
TRIETHYLAMINE	000121-44-8									1.7E+03			
TRIFLURALIN	001582-09-8	7.4E+04	7.4E+02	1.5E+04	3.5E+05	3.5E+03	7.3E+04				6.1E+04	6.1E+02	1.3E+04
TRIMETHYL LEAD	007442-13-9												
TRIMETHYL PHOSPHATE	000512-56-1	1.5E+04	1.5E+02		7.3E+04	7.3E+02					1.3E+04	1.3E+02	
TRIMETHYLETHYL LEAD	001762-26-1												
TRINITROBENZENE, 1,3,5-	000099-35-4			1.0E+02			4.9E+02						8.4E+01
TRINITROPHENYLMETHYLNITRAMINE	000479-45-8			2.0E+04			9.7E+04						1.7E+04
TRINITROTOLUENE, 2,4,6-	000118-96-7	1.9E+04	1.9E+02	1.0E+03	9.1E+04	9.1E+02	4.9E+03				1.6E+04	1.6E+02	8.4E+02
TRIPROPYL LEAD	006618-03-7												
URANIUM (SOLUBLE SALTS)	NA			6.1E+03			2.5E+05						6.0E+03
VANADIUM PENTOXIDE	001314-62-1			1.8E+04			8.7E+05						1.8E+04
VANADIUM SULFATE	036907-42-3			4.1E+04			1.9E+06						4.0E+04
VANADIUM, METALLIC	007440-62-2			1.4E+04			6.8E+03						4.6E+03

Table 3.2c. (continued)

Chemical	CASRN	Ingestion (mg/kg)			Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
VANADYL SULFATE	027774-13-6			4.1E+04			1.9E+05						3.4E+04
VERNOLATE	001929-77-7			2.0E+03			9.7E+03						1.7E+03
VINCLOZOLIN	050471-44-8			5.1E+04			2.4E+05						4.2E+04
VINYL ACETATE	000108-05-4			2.0E+06			6.3E+06			7.8E+02			7.8E+02
VINYL BROMIDE	000593-60-2							1.8E+02	1.8E+00	6.2E+01			
VINYL CHLORIDE	000075-01-4	3.0E+02	3.0E+00		1.4E+03	1.4E+01		4.1E-02	4.1E-04		4.1E-02	4.1E-04	
WARFARIN	000081-81-2			6.1E+02			2.9E+03						5.1E+02
WHITE PHOSPHORUS	007723-14-0			4.1E+01			1.9E+03						4.0E+01
XYLENE, MIXTURE	001330-20-7			4.1E+06			1.8E+07						3.3E+06
XYLENE, m-	000108-38-3			4.1E+06			1.9E+07						3.4E+06
XYLENE, o-	000095-47-6			4.1E+06			1.9E+07						3.4E+06
XYLENE, p-	000106-42-3												
ZINC (METALLIC)	007440-66-6			6.1E+05			5.8E+06						5.5E+05
ZINC CYANIDE	000557-21-1			1.0E+05			4.9E+06						1.0E+05
ZINC PHOSPHIDE	001314-84-7			6.1E+02			2.9E+04						6.0E+02
ZINEB	012122-67-7			1.0E+05			4.9E+05						8.4E+04

Notes:

† If slope factors or reference doses were available for only one pathway (i.e., ingestion, dermal, OR inhalation), the total for ingestion plus dermal plus inhalation was not calculated.

(1) Same oral slope factor as used for polychlorinated biphenyls.

(2) PRG calculated considering *New Interim Region IV Guidance* from EPA (received February 11, 1992). The slope factors for chemicals so marked indicate that a toxicity equivalency factor (TEF) method was used for carcinogenic PAHs based on each compound's relative potency to the potency of benzo(a)pyrene. The following TEFs were used to convert each PAH slope factor to an equivalent slope factor of benzo(a)pyrene [that has a new cancer slope factor of 7.3 (mg/kg/day)¹ identified by EPA's CRAVE workgroup]: (1) benzo(a)pyrene; TEF = 1.0 (2) benz(a)anthracene; TEF = 0.1, (3) benzo(b)fluoranthene; TEF = 0.01, (4) benzo(k)fluoranthene; TEF = 0.01, (5) chrysene; TEF = 0.001, (6) dibenz(a,h)anthracene; TEF = 1.0, and (7) indeno(1,2,3-c,d)pyrene; TEF = 0.1. TEFs were used for only the oral slope factor in the ingestion pathway.

(3) The slope factor for trichloroethylene has been withdrawn from IRIS and HEAST; however, since this is a common contaminant, the old slope factor has been used to calculate the PRG.

Table 3.2d. Risk-based Preliminary Remediation Goals for radionuclides in soil (Industrial scenario)

Chemical [†]	CASRN	Ingestion (pCi/g)		External Exposure (pCi/g) ^{††}		Inhalation (pCi/g)		Ingestion + External Exposure + Inhalation (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Ac-225	014265-85-1	2.3E+03	2.3E+01	2.8E+03	2.8E+01	8.2E+05	8.2E+03	1.2E+03	1.2E+01
Ac-227	014952-40-0	9.1E+02	9.1E+00	9.3E+05	9.3E+03	4.8E+04	4.8E+02	8.9E+02	8.9E+00
Ac-227+D	014952-40-0	5.1E+02	5.1E+00	3.7E+01	3.7E-01	4.4E+04	4.4E+02	3.4E+01	3.4E-01
Ac-228	014331-83-0	2.0E+05	2.0E+03	6.7E+00	6.7E-02	1.0E+08	1.0E+06	6.7E+00	6.7E-02
Ag-105	014928-14-4	2.0E+05	2.0E+03			1.5E+09	1.5E+07	2.0E+05	2.0E+03
Ag-108	014391-65-2	4.6E+07	4.6E+05	3.8E+02	3.8E+00	3.6E+11	3.6E+09	3.8E+02	3.8E+00
Ag-108m	014391-65-2	5.3E+04	5.3E+02	3.9E+00	3.9E-02	4.9E+07	4.9E+05	3.9E+00	3.9E-02
Ag-108m+D	014391-65-2	5.3E+04	5.3E+02	3.9E+00	3.9E-02	4.9E+07	4.9E+05	3.9E+00	3.9E-02
Ag-109m	014378-38-2	1.2E+09	1.2E+07	1.9E+04	1.9E+02	9.9E+12	9.9E+10	1.9E+04	1.9E+02
Ag-110	014391-76-5	1.3E+08	1.3E+06	1.9E+02	1.9E+00	1.1E+12	1.1E+10	1.9E+02	1.9E+00
Ag-110m	014391-76-5	3.8E+04	3.8E+02	2.1E+00	2.1E-02	1.1E+08	1.1E+06	2.1E+00	2.1E-02
Ag-111	157690-04-0	4.7E+04	4.7E+02	2.6E+02	2.6E+00	6.5E+08	6.5E+06	2.6E+02	2.6E+00
Am-241	014596-10-2	9.8E+02	9.8E+00	4.8E+03	4.8E+01	8.9E+04	8.9E+02	8.0E+02	8.0E+00
Am-242	013981-54-9	2.2E+05	2.2E+03	3.8E+03	3.8E+01	3.3E+08	3.3E+06	3.7E+03	3.7E+01
Am-242m	013981-54-9	1.1E+03	1.1E+01	2.5E+05	2.5E+03	9.8E+04	9.8E+02	1.1E+03	1.1E+01
Am-243	014993-75-0	9.8E+02	9.8E+00	9.0E+02	9.0E+00	9.0E+04	9.0E+02	4.7E+02	4.7E+00
Am-243+D	014993-75-0	9.7E+02	9.7E+00	8.2E+01	8.2E-01	9.0E+04	9.0E+02	7.6E+01	7.6E-01
At-41	014163-25-8					7.3E+12	7.3E+10		
At-217	017239-90-6	3.6E+10	3.6E+08	2.5E+04	2.5E+02	6.7E+12	6.7E+10	2.5E+04	2.5E+02

Table 3.2d. (continued)

Chemical †	CASRN	Ingestion (pCi/g)		External Exposure (pCi/g) ^{††}		Inhalation (pCi/g)		Ingestion + External Exposure + Inhalation (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Au-196	014914-16-0	2.5E+05	2.5E+03	1.6E+01	1.6E-01	3.3E+09	3.3E+07	1.6E+01	1.6E-01
Au-198	010043-49-0	6.1E+04	6.1E+02	1.6E+01	1.6E-01	9.4E+08	9.4E+06	1.6E+01	1.6E-01
Ba-131	014914-75-1	1.9E+05	1.9E+03	1.7E+01	1.7E-01	7.2E+09	7.2E+07	1.7E+01	1.7E-01
Ba-133	013981-41-4	1.2E+05	1.2E+03	2.4E+01	2.4E-01	8.5E+08	8.5E+06	2.4E+01	2.4E-01
Ba-133m	013981-41-4	1.2E+05	1.2E+03	2.2E+02	2.2E+00	6.1E+09	6.1E+07	2.2E+02	2.2E+00
Ba-137m	013981-97-0	1.3E+08	1.3E+06	9.9E+00	9.9E-02	2.2E+12	2.2E+10	9.9E+00	9.9E-02
Ba-139	014378-25-7	1.1E+06	1.1E+04	2.6E+02	2.6E+00	2.2E+10	2.2E+08	2.6E+02	2.6E+00
Ba-140	014798-08-4	2.7E+04	2.7E+02	3.7E+01	3.7E-01	1.1E+09	1.1E+07	3.6E+01	3.6E-01
Be-7	013966-02-4	3.7E+06	3.7E+04	1.3E+02	1.3E+00	1.9E+10	1.9E+08	1.3E+02	1.3E+00
Bi-206	015776-19-9	4.5E+04	4.5E+02	1.8E+00	1.8E-02	6.8E+08	6.8E+06	1.8E+00	1.8E-02
Bi-207	013982-38-2	6.3E+04	6.3E+02	4.0E+00	4.0E-02	3.6E+08	3.6E+06	4.0E+00	4.0E-02
Bi-210	014331-79-4	4.4E+04	4.4E+02			6.7E+07	6.7E+05	4.4E+04	4.4E+02
Bi-211	015229-37-5	1.8E+07	1.8E+05	1.5E+02	1.5E+00	2.0E+09	2.0E+07	1.5E+02	1.5E+00
Bi-212	014913-49-6	5.2E+05	5.2E+03	3.3E+01	3.3E-01	9.4E+07	9.4E+05	3.3E+01	3.3E-01
Bi-213	015776-20-2	7.3E+05	7.3E+03	4.7E+01	4.7E-01	1.1E+08	1.1E+06	4.7E+01	4.7E-01
Bi-214	014733-03-0	1.6E+06	1.6E+04	3.6E+00	3.6E-02	2.3E+08	2.3E+06	3.6E+00	3.6E-02
Br-82	014686-69-2	2.3E+05	2.3E+03	2.2E+00	2.2E-02	4.4E+09	4.4E+07	2.2E+00	2.2E-02
C-11	014333-33-6	7.1E+06	7.1E+04	6.1E+00	6.1E-02	1.0E+11	1.0E+09	6.1E+00	6.1E-02
C-14	014762-75-5	3.1E+05	3.1E+03			4.9E+11	4.9E+09	3.1E+05	3.1E+03

Table 3.2d. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		External Exposure (pCi/g) ^{††}		Inhalation (pCi/g)		Ingestion + External Exposure + Inhalation (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
C-15	015929-23-4	4.8E+08	4.8E+06			4.3E+12	4.3E+10	4.8E+08	4.8E+06
Ca-45	013966-05-7	1.6E+05	1.6E+03	5.6E+12	5.6E+10	1.4E+09	1.4E+07	1.6E+05	1.6E+03
Ca-47	001439-99-2	4.8E+04	4.8E+02	5.3E+00	5.3E-02	6.6E+08	6.6E+06	5.3E+00	5.3E-02
Cd-109	014109-32-1	4.0E+04	4.0E+02	3.9E+04	3.9E+02	1.9E+08	1.9E+06	2.0E+04	2.0E+02
Cd-115	014336-68-6	4.4E+04	4.4E+02	3.1E+01	3.1E-01	7.0E+08	7.0E+06	3.1E+01	3.1E-01
Cd-115m	014336-68-6	2.3E+04	2.3E+02	2.6E+02	2.6E+00	2.0E+08	2.0E+06	2.5E+02	2.5E+00
Ce-141	013967-74-3	8.2E+04	8.2E+02	1.6E+02	1.6E+00	7.9E+08	7.9E+06	1.6E+02	1.6E+00
Ce-143	014119-19-8	5.4E+04	5.4E+02	3.0E+01	3.0E-01	8.9E+08	8.9E+06	3.0E+01	3.0E-01
Ce-144	014762-78-8	1.1E+04	1.1E+02	8.5E+02	8.5E+00	3.2E+07	3.2E+05	7.9E+02	7.9E+00
Ce-144+D	014762-78-8	1.1E+04	1.1E+02	1.4E+02	1.4E+00	3.2E+07	3.2E+05	1.4E+02	1.4E+00
Cl-36	013981-43-6	1.4E+05	1.4E+03			2.6E+09	2.6E+07	1.4E+05	1.4E+03
Cl-38	014158-34-0	1.5E+06	1.5E+04	3.4E+00	3.4E-02	2.1E+10	2.1E+08	3.4E+00	3.4E-02
Cm-242	015510-73-3	8.4E+03	8.4E+01	9.4E+05	9.4E+03	1.1E+06	1.1E+04	8.2E+03	8.2E+01
Cm-243	015757-87-6	1.3E+03	1.3E+01	1.3E+02	1.3E+00	1.2E+05	1.2E+03	1.2E+02	1.2E+00
Cm-243+D	015757-87-6	1.3E+03	1.3E+01	1.3E+02	1.3E+00	1.2E+05	1.2E+03	1.2E+02	1.2E+00
Cm-244	013981-15-2	1.5E+03	1.5E+01	1.1E+06	1.1E+04	1.4E+05	1.4E+03	1.5E+03	1.5E+01
Cm-245	015621-76-8	9.6E+02	9.6E+00	4.0E+02	4.0E+00	8.7E+04	8.7E+02	2.8E+02	2.8E+00
Cm-246	015757-90-1	9.6E+02	9.6E+00	1.2E+06	1.2E+04	8.8E+04	8.8E+02	9.5E+02	9.5E+00
Cm-247	015758-32-4	1.0E+03	1.0E+01	2.1E+01	2.1E-01	9.6E+04	9.6E+02	2.1E+01	2.1E-01

Table 3.2d. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		External Exposure (pCi/g) ^{††}		Inhalation (pCi/g)		Ingestion + External Exposure + Inhalation (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Cm-248	015758-33-5	2.4E+02	2.4E+00	1.5E+06	1.5E+04	2.3E+04	2.3E+02	2.4E+02	2.4E+00
Co-57	013981-50-5	3.3E+05	3.3E+03	1.1E+02	1.1E+00	1.2E+09	1.2E+07	1.1E+02	1.1E+00
Co-58	013981-38-9	1.1E+05	1.1E+03	5.9E+00	5.9E-02	6.6E+08	6.6E+06	5.9E+00	5.9E-02
Co-58m	013981-38-9	3.4E+06	3.4E+04	6.8E+05	6.8E+03	3.9E+10	3.9E+08	5.7E+05	5.7E+03
Co-60	010198-40-0	1.7E+04	1.7E+02	2.2E+00	2.2E-02	5.0E+07	5.0E+05	2.2E+00	2.2E-02
Cr-51	014392-02-0	2.3E+06	2.3E+04	2.1E+02	2.1E+00	2.0E+10	2.0E+08	2.1E+02	2.1E+00
Cs-131	014914-76-2	1.8E+06	1.8E+04	9.4E+03	9.4E+01	3.2E+10	3.2E+08	9.3E+03	9.3E+01
Cs-134	013967-70-9	6.8E+03	6.8E+01	3.7E+00	3.7E-02	1.2E+08	1.2E+06	3.7E+00	3.7E-02
Cs-134m	013967-70-9	7.0E+06	7.0E+04	1.1E+03	1.1E+01	1.1E+11	1.1E+09	1.1E+03	1.1E+01
Cs-135	015726-30-4	7.1E+04	7.1E+02			1.3E+09	1.3E+07	7.1E+04	7.1E+02
Cs-136	014234-29-8	4.1E+04	4.1E+02	2.7E+00	2.7E-02	7.4E+08	7.4E+06	2.7E+00	2.7E-02
Cs-137	010045-97-3	1.0E+04	1.0E+02			1.8E+08	1.8E+06	1.0E+04	1.0E+02
Cs-137+D	010045-97-3	1.0E+04	1.0E+02	1.0E+01	1.0E-01	1.8E+08	1.8E+06	1.0E+01	1.0E-01
Cs-138	015758-29-9	1.8E+06	1.8E+04	2.3E+00	2.3E-02	2.6E+10	2.6E+08	2.3E+00	2.3E-02
Cu-64	013981-25-4	6.1E+05	6.1E+03	3.3E+01	3.3E-01	8.2E+09	8.2E+07	3.3E+01	3.3E-01
Dy-165	013967-64-1	9.8E+05	9.8E+03	3.5E+02	3.5E+00	1.5E+10	1.5E+08	3.5E+02	3.5E+00
Dy-166	015840-01-4	3.4E+04	3.4E+02	8.1E+02	8.1E+00	4.4E+08	4.4E+06	7.9E+02	7.9E+00
Er-169	015840-13-8	1.5E+05	1.5E+03	3.4E+06	3.4E+04	2.3E+09	2.3E+07	1.4E+05	1.4E+03
Er-171	014391-45-8	2.0E+05	2.0E+03	2.1E+01	2.1E-01	4.6E+09	4.6E+07	2.1E+01	2.1E-01

Table 3.2d. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		External Exposure (pCi/g) ^{††}		Inhalation (pCi/g)		Ingestion + External Exposure + Inhalation (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Eu-152	014683-23-9	5.6E+04	5.6E+02	5.4E+00	5.4E-02	4.3E+07	4.3E+05	5.4E+00	5.4E-02
Eu-154	015585-10-1	3.4E+04	3.4E+02	4.7E+00	4.7E-02	3.7E+07	3.7E+05	4.7E+00	4.7E-02
Eu-155	014391-16-3	1.9E+05	1.9E+03	3.6E+02	3.6E+00	3.6E+08	3.6E+06	3.6E+02	3.6E+00
Eu-156	014280-35-4	2.9E+04	2.9E+02	4.1E+00	4.1E-02	3.7E+08	3.7E+06	4.1E+00	4.1E-02
F-18	013981-56-1	2.9E+06	2.9E+04	6.3E+00	6.3E-02	5.2E+10	5.2E+08	6.3E+00	6.3E-02
Fe-55	014681-59-5	9.1E+05	9.1E+03			6.1E+09	6.1E+07	9.1E+05	9.1E+03
Fe-59	014596-12-4	5.5E+04	5.5E+02	4.7E+00	4.7E-02	4.8E+08	4.8E+06	4.7E+00	4.7E-02
Fr-221	015756-41-9	2.2E+06	2.2E+04	3.2E+02	3.2E+00	4.3E+08	4.3E+06	3.2E+02	3.2E+00
Fr-223	015756-98-6	7.2E+05	7.2E+03	5.3E+02	5.3E+00	5.8E+09	5.8E+07	5.2E+02	5.2E+00
Ga-67	014119-09-6	3.8E+05	3.8E+03	6.1E+01	6.1E-01	6.7E+09	6.7E+07	6.1E+01	6.1E-01
Ga-72	013982-22-4	6.7E+04	6.7E+02	2.0E+00	2.0E-02	1.6E+09	1.6E+07	2.0E+00	2.0E-02
Gd-153	014276-65-4	2.4E+05	2.4E+03	3.0E+02	3.0E+00	1.1E+09	1.1E+07	3.0E+02	3.0E+00
Gd-159	014041-42-0	1.2E+05	1.2E+03	2.3E+02	2.3E+00	2.8E+09	2.8E+07	2.3E+02	2.3E+00
Ge-71	014374-81-3	2.7E+07	2.7E+05	1.4E+06	1.4E+04	5.9E+10	5.9E+08	1.3E+06	1.3E+04
H-3	010028-17-8	4.5E+06	4.5E+04			3.6E+10	3.6E+08	4.5E+06	4.5E+04
Hg-197	013981-51-6	2.7E+05	2.7E+03	4.0E+02	4.0E+00	4.9E+09	4.9E+07	4.0E+02	4.0E+00
Hg-203	013982-78-0	1.2E+05	1.2E+03	3.5E+01	3.5E-01	1.1E+09	1.1E+07	3.5E+01	3.5E-01
Ho-166	013967-65-2	4.2E+04	4.2E+02	3.1E+02	3.1E+00	8.4E+08	8.4E+06	3.1E+02	3.1E+00
I-122	018287-75-7	1.5E+07	1.5E+05	6.4E+00	6.4E-02	1.5E+11	1.5E+09	6.4E+00	6.4E-02

Table 3.2d. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		External Exposure (pCi/g) ^{††}		Inhalation (pCi/g)		Ingestion + External Exposure + Inhalation (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
I-123	015715-08-9	5.9E+05	5.9E+03	8.7E+01	8.7E-01	1.2E+10	1.2E+08	8.7E+01	8.7E-01
I-125	014158-31-7	1.2E+04	1.2E+02	9.2E+03	9.2E+01	2.0E+08	2.0E+06	5.3E+03	5.3E+01
I-126	014158-32-8	6.6E+03	6.6E+01	1.5E+01	1.5E-01	1.1E+08	1.1E+06	1.5E+01	1.5E-01
I-129	015046-84-1	1.7E+03	1.7E+01	8.1E+03	8.1E+01	2.8E+07	2.8E+05	1.4E+03	1.4E+01
I-130	014914-02-4	6.6E+04	6.6E+02	2.8E+00	2.8E-02	1.3E+09	1.3E+07	2.8E+00	2.8E-02
I-131	010043-66-0	8.8E+03	8.8E+01	1.8E+01	1.8E-01	1.5E+08	1.5E+06	1.7E+01	1.7E-01
I-132	014683-16-0	4.8E+05	4.8E+03	2.5E+00	2.5E-02	9.7E+09	9.7E+07	2.5E+00	2.5E-02
I-133	014834-67-4	3.0E+04	3.0E+02	1.0E+01	1.0E-01	5.7E+08	5.7E+06	1.0E+01	1.0E-01
I-134	014914-27-3	1.4E+06	1.4E+04	2.1E+00	2.1E-02	2.5E+10	2.5E+08	2.1E+00	2.1E-02
I-135	014834-68-5	1.4E+05	1.4E+03	3.5E+00	3.5E-02	2.9E+09	2.9E+07	3.5E+00	3.5E-02
In-113m	014885-78-0	3.9E+06	3.9E+04	2.8E+01	2.8E-01	5.9E+10	5.9E+08	2.8E+01	2.8E-01
In-114	013981-55-0	7.1E+07	7.1E+05	1.9E+02	1.9E+00	5.9E+11	5.9E+09	1.9E+02	1.9E+00
In-114m	013981-55-0	1.6E+04	1.6E+02	1.1E+02	1.1E+00	1.4E+08	1.4E+06	1.1E+02	1.1E+00
In-115	014191-71-0	9.2E+03	9.2E+01			1.7E+07	1.7E+05	9.2E+03	9.2E+01
In-115m	014191-71-0	9.4E+05	9.4E+03	5.1E+01	5.1E-01	2.0E+10	2.0E+08	5.1E+01	5.1E-01
Ir-190	014981-91-0	6.5E+04	6.5E+02	4.7E+00	4.7E-02	7.6E+08	7.6E+06	4.7E+00	4.7E-02
Ir-194	014158-35-1	4.6E+04	4.6E+02	6.9E+01	6.9E-01	8.2E+08	8.2E+06	6.9E+01	6.9E-01
K-40	013966-00-2	2.6E+04	2.6E+02	3.6E+01	3.6E-01	4.6E+08	4.6E+06	3.6E+01	3.6E-01
K-42	014378-21-3	2.5E+05	2.5E+03	2.0E+01	2.0E-01	4.5E+09	4.5E+07	2.0E+01	2.0E-01

Table 3.2d. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		External Exposure (pCi/g) ^{††}		Inhalation (pCi/g)		Ingestion + External Exposure + Inhalation (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Kr-83m	013965-98-5					9.8E+13	9.8E+11		
Kr-85	013983-27-2					1.2E+13	1.2E+11		
Kr-85m	013983-27-2					1.2E+13	1.2E+11		
Kr-87	014809-68-8					2.9E+12	2.9E+10		
Kr-88	014995-61-0					1.6E+12	1.6E+10		
Kr-89	016316-03-3					2.1E+12	2.1E+10		
Kr-90	015741-13-6					2.1E+12	2.1E+10		
La-140	013981-28-7	3.4E+04	3.4E+02	2.4E+00	2.4E-02	6.7E+08	6.7E+06	2.4E+00	2.4E-02
Lu-177	014265-75-9	1.1E+05	1.1E+03	3.0E+02	3.0E+00	1.6E+09	1.6E+07	3.0E+02	3.0E+00
Mn-52	014092-99-0	5.3E+04	5.3E+02	1.6E+00	1.6E-02	7.8E+08	7.8E+06	1.6E+00	1.6E-02
Mn-54	013966-31-9	1.6E+05	1.6E+03	6.7E+00	6.7E-02	9.3E+08	9.3E+06	6.7E+00	6.7E-02
Mn-56	014681-52-8	3.7E+05	3.7E+03	3.2E+00	3.2E-02	6.6E+09	6.6E+07	3.2E+00	3.2E-02
Mo-99	014119-15-4	1.4E+05	1.4E+03	4.0E+01	4.0E-01	7.7E+08	7.7E+06	4.0E+01	4.0E-01
Na-22	013966-32-0	4.0E+04	4.0E+02	2.7E+00	2.7E-02	7.0E+08	7.0E+06	2.7E+00	2.7E-02
Na-24	013982-04-2	2.3E+05	2.3E+03	1.2E+00	1.2E-02	4.6E+09	4.6E+07	1.2E+00	1.2E-02
Nb-93m	007440-03-1	4.8E+05	4.8E+03	6.0E+05	6.0E+03	7.9E+08	7.9E+06	2.7E+05	2.7E+03
Nb-94	014681-63-1	4.6E+04	4.6E+02	3.6E+00	3.6E-02	4.2E+07	4.2E+05	3.6E+00	3.6E-02
Nb-95	013967-76-5	1.4E+05	1.4E+03	7.4E+00	7.4E-02	1.1E+09	1.1E+07	7.4E+00	7.4E-02
Nb-95m	013967-76-5	1.0E+05	1.0E+03	2.5E+02	2.5E+00	1.5E+09	1.5E+07	2.5E+02	2.5E+00

Table 3.2d. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		External Exposure (pCi/g) ^{††}		Inhalation (pCi/g)		Ingestion + External Exposure + Inhalation (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Nb-97	018496-04-3	1.8E+06	1.8E+04	8.8E+00	8.8E-02	1.6E+10	1.6E+08	8.8E+00	8.8E-02
Nb-97m	018496-04-3	9.8E+07	9.8E+05	7.9E+00	7.9E-02	1.0E+12	1.0E+10	7.9E+00	7.9E-02
Nd-147	014269-74-0	5.4E+04	5.4E+02	6.8E+01	6.8E-01	7.1E+08	7.1E+06	6.8E+01	6.8E-01
Nd-149	015749-81-2	7.0E+05	7.0E+03	2.0E+01	2.0E-01	8.1E+09	8.1E+07	2.0E+01	2.0E-01
Ni-59	014336-70-0	1.7E+06	1.7E+04			8.5E+09	8.5E+07	1.7E+06	1.7E+04
Ni-63	013981-37-8	5.8E+05	5.8E+03			3.4E+09	3.4E+07	5.8E+05	5.8E+03
Ni-65	014833-49-9	5.7E+05	5.7E+03	1.0E+01	1.0E-01	9.5E+09	9.5E+07	1.0E+01	1.0E-01
Np-236	015700-36-4	3.4E+05	3.4E+03	2.4E+02	2.4E+00	8.9E+08	8.9E+06	2.4E+02	2.4E+00
Np-237	013994-20-2	1.1E+03	1.1E+01	2.9E+03	2.9E+01	9.9E+04	9.9E+02	7.8E+02	7.8E+00
Np-237+D	013994-20-2	1.1E+03	1.1E+01	4.7E+01	4.7E-01	9.9E+04	9.9E+02	4.5E+01	4.5E-01
Np-238	015766-25-3	7.0E+04	7.0E+02	1.1E+01	1.1E-01	7.3E+08	7.3E+06	1.1E+01	1.1E-01
Np-239	013968-59-7	7.5E+04	7.5E+02	9.0E+01	9.0E-01	1.4E+09	1.4E+07	9.0E+01	9.0E-01
Np-240	015690-84-3	1.8E+06	1.8E+04	6.0E+00	6.0E-02	2.6E+10	2.6E+08	6.0E+00	6.0E-02
Np-240m	015690-84-3	1.3E+07	1.3E+05	2.1E+01	2.1E-01	1.2E+11	1.2E+09	2.1E+01	2.1E-01
Os-185	015766-50-4	1.8E+05	1.8E+03	8.9E+00	8.9E-02	7.4E+08	7.4E+06	8.9E+00	8.9E-02
Os-191	014119-24-5	1.1E+05	1.1E+03	2.5E+02	2.5E+00	1.3E+09	1.3E+07	2.5E+02	2.5E+00
Os-191m	014119-24-5	6.5E+05	6.5E+03	6.8E+03	6.8E+01	1.0E+10	1.0E+08	6.7E+03	6.7E+01
Os-193	016057-77-5	7.3E+04	7.3E+02	1.2E+02	1.2E+00	1.3E+09	1.3E+07	1.2E+02	1.2E+00
P-32	014596-37-3	5.2E+04	5.2E+02			1.2E+09	1.2E+07	5.2E+04	5.2E+02

Table 3.2d. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		External Exposure (pCi/g) ^{††}		Inhalation (pCi/g)		Ingestion + External Exposure + Inhalation (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
P-33									
	015749-66-3	4.1E+05	4.1E+03			8.7E+09	8.7E+07	4.1E+05	4.1E+03
Pa-231									
	014331-85-2	2.1E+03	2.1E+01	8.1E+02	8.1E+00	1.4E+05	1.4E+03	5.8E+02	5.8E+00
Pa-233									
	013981-14-1	6.8E+04	6.8E+02	4.8E+01	4.8E-01	7.0E+08	7.0E+06	4.8E+01	4.8E-01
Pa-234									
	015100-28-4	1.5E+05	1.5E+03	3.3E+00	3.3E-02	2.6E+09	2.6E+07	3.3E+00	3.3E-02
Pa-234m									
	015100-28-4	6.7E+07	6.7E+05	5.4E+02	5.4E+00	5.5E+11	5.5E+09	5.4E+02	5.4E+00
Pb-203									
	014687-25-3	3.1E+05	3.1E+03	3.4E+01	3.4E-01	1.1E+10	1.1E+08	3.4E+01	3.4E-01
Pb-209									
	014119-30-3	1.5E+06	1.5E+04			5.0E+10	5.0E+08	1.5E+06	1.5E+04
Pb-210									
	014255-04-0	4.7E+02	4.7E+00	2.0E+05	2.0E+03	2.1E+06	2.1E+04	4.7E+02	4.7E+00
Pb-210+D									
	014255-04-0	3.2E+02	3.2E+00	1.5E+05	1.5E+03	8.9E+05	8.9E+03	3.2E+02	3.2E+00
Pb-211									
	015816-77-0	9.5E+05	9.5E+03	1.2E+02	1.2E+00	3.3E+08	3.3E+06	1.2E+02	1.2E+00
Pb-212									
	015092-94-1	1.8E+04	1.8E+02	7.3E+01	7.3E-01	8.9E+07	8.9E+05	7.3E+01	7.3E-01
Pb-214									
	015067-28-4	1.1E+06	1.1E+04	3.1E+01	3.1E-01	5.5E+08	5.5E+06	3.1E+01	3.1E-01
Pd-100									
	015690-69-4	8.6E+04	8.6E+02			9.7E+08	9.7E+06	8.6E+04	8.6E+02
Pd-101									
	015749-54-9	8.6E+05	8.6E+03			1.5E+10	1.5E+08	8.6E+05	8.6E+03
Pd-103									
	014967-68-1	3.0E+05	3.0E+03	4.1E+04	4.1E+02	3.2E+09	3.2E+07	3.6E+04	3.6E+02
Pd-107									
	017637-99-9	1.5E+06	1.5E+04			2.3E+09	2.3E+07	1.5E+06	1.5E+04
Pd-109									
	014981-64-7	9.6E+04	9.6E+02	9.0E+03	9.0E+01	1.7E+09	1.7E+07	8.2E+03	8.2E+01
Pm-147									
	014380-75-7	2.3E+05	2.3E+03	3.4E+06	3.4E+04	4.6E+08	4.6E+06	2.1E+05	2.1E+03
Pm-148									
	014683-19-3	2.2E+04	2.2E+02	9.9E+00	9.9E-02	3.3E+08	3.3E+06	9.9E+00	9.9E-02

Table 3.2d. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		External Exposure (pCi/g) ^{††}		Inhalation (pCi/g)		Ingestion + External Exposure + Inhalation (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Pm-148m	014683-19-3	3.2E+04	3.2E+02	3.0E+00	3.0E-02	1.2E+08	1.2E+06	3.0E+00	3.0E-02
Pm-149	015765-31-8	5.8E+04	5.8E+02	6.0E+02	6.0E+00	9.6E+08	9.6E+06	5.9E+02	5.9E+00
Po-210	013981-52-7	9.8E+02	9.8E+00	6.6E+05	6.6E+03	1.6E+06	1.6E+04	9.8E+02	9.8E+00
Po-212	015389-34-1	7.1E+15	7.1E+13			5.8E+17	5.8E+15	7.0E+15	7.0E+13
Po-213	015756-57-7	4.8E+14	4.8E+12	1.9E+05	1.9E+03	4.4E+16	4.4E+14	1.9E+05	1.9E+03
Po-214	015735-67-8	1.5E+13	1.5E+11	6.8E+04	6.8E+02	1.2E+15	1.2E+13	6.8E+04	6.8E+02
Po-215	015706-52-2	6.4E+11	6.4E+09	4.3E+04	4.3E+02	7.7E+13	7.7E+11	4.3E+04	4.3E+02
Po-216	015756-58-8	3.6E+09	3.6E+07	3.9E+05	3.9E+03	1.2E+12	1.2E+10	3.9E+05	3.9E+03
Po-218	015422-24-9	6.3E+06	6.3E+04			9.3E+08	9.3E+06	6.3E+06	6.3E+04
Pr-142	014191-64-1	4.6E+04	4.6E+02	9.4E+01	9.4E-01	8.2E+08	8.2E+06	9.3E+01	9.3E-01
Pr-143	014981-79-4	4.8E+04	4.8E+02	6.4E+08	6.4E+06	6.1E+08	6.1E+06	4.8E+04	4.8E+02
Pr-144	014119-05-2	4.0E+06	4.0E+04	1.6E+02	1.6E+00	2.6E+10	2.6E+08	1.6E+02	1.6E+00
Pr-144m	014119-05-2	9.9E+06	9.9E+04	1.2E+04	1.2E+02	6.1E+10	6.1E+08	1.2E+04	1.2E+02
Pt-191	015706-36-2	2.1E+05	2.1E+03	3.2E+01	3.2E-01	8.3E+09	8.3E+07	3.2E+01	3.2E-01
Pt-193	015735-70-3	2.0E+06	2.0E+04			4.3E+10	4.3E+08	2.0E+06	2.0E+04
Pt-193m	015735-70-3	1.3E+05	1.3E+03	2.9E+03	2.9E+01	6.0E+09	6.0E+07	2.9E+03	2.9E+01
Pt-197	015735-74-7	1.5E+05	1.5E+03	7.0E+02	7.0E+00	7.5E+09	7.5E+07	6.9E+02	6.9E+00
Pt-197m	015735-74-7	9.8E+05	9.8E+03	1.3E+02	1.3E+00	3.4E+10	3.4E+08	1.3E+02	1.3E+00
Pu-236	015411-92-4	4.2E+03	4.2E+01	9.4E+05	9.4E+03	2.6E+05	2.6E+03	4.1E+03	4.1E+01

Table 3.2d. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		External Exposure (pCi/g) ^{††}		Inhalation (pCi/g)		Ingestion + External Exposure + Inhalation (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Pu-238	013981-16-3	1.1E+03	1.1E+01	1.1E+06	1.1E+04	1.3E+05	1.3E+03	1.1E+03	1.1E+01
Pu-239	015117-48-3	1.0E+03	1.0E+01	1.7E+06	1.7E+04	1.2E+05	1.2E+03	1.0E+03	1.0E+01
Pu-240	014119-33-6	1.0E+03	1.0E+01	1.2E+06	1.2E+04	1.2E+05	1.2E+03	1.0E+03	1.0E+01
Pu-241	014119-32-5	6.2E+04	6.2E+02			1.2E+07	1.2E+05	6.1E+04	6.1E+02
Pu-241+D	014119-32-5	9.6E+02	9.6E+00	4.8E+03	4.8E+01	8.8E+04	8.8E+02	7.9E+02	7.9E+00
Pu-242	013982-10-0	1.1E+03	1.1E+01	1.4E+06	1.4E+04	1.3E+05	1.3E+03	1.1E+03	1.1E+01
Pu-243	015706-37-3	8.7E+05	8.7E+03	1.2E+03	1.2E+01	1.3E+10	1.3E+08	1.2E+03	1.2E+01
Pu-244	014119-34-7	1.0E+03	1.0E+01	1.7E+06	1.7E+04	1.3E+05	1.3E+03	1.0E+03	1.0E+01
Pu-244+D	014119-34-7	1.0E+03	1.0E+01	6.0E+00	6.0E-02	1.3E+05	1.3E+03	6.0E+00	6.0E-02
Ra-223	015623-45-7	1.4E+03	1.4E+01	9.0E+01	9.0E-01	9.5E+05	9.5E+03	8.4E+01	8.4E-01
Ra-224	013233-32-4	2.1E+03	2.1E+01	8.8E+02	8.8E+00	1.5E+06	1.5E+04	6.3E+02	6.3E+00
Ra-224(2)	013233-32-4	2.1E+03	2.1E+01	8.8E+02	8.8E+00	1.3E+03	1.3E+01	4.3E+02	4.3E+00
Ra-225	013981-53-8	2.0E+03	2.0E+01	1.3E+04	1.3E+02	1.4E+06	1.4E+04	1.8E+03	1.8E+01
Ra-226	013982-63-3	1.1E+03	1.1E+01	1.7E+03	1.7E+01	1.3E+06	1.3E+04	6.6E+02	6.6E+00
Ra-226(2)	013982-63-3	1.1E+03	1.1E+01	1.7E+03	1.7E+01	8.3E-01	8.3E-03	8.3E-01	8.3E-03
Ra-226+D	013982-63-3	1.1E+03	1.1E+01	3.2E+00	3.2E-02	1.2E+06	1.2E+04	3.2E+00	3.2E-02
Ra-226+D(2)	013982-63-3	1.1E+03	1.1E+01	3.2E+00	3.2E-02	8.3E-01	8.3E-03	6.6E-01	6.6E-03
Ra-228	015262-20-1	1.3E+03	1.3E+01			3.6E+06	3.6E+04	1.3E+03	1.3E+01
Ra-228+D	015262-20-1	1.3E+03	1.3E+01	6.7E+00	6.7E-02	3.4E+06	3.4E+04	6.6E+00	6.6E-02

Table 3.2d. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		External Exposure (pCi/g) ^{††}		Inhalation (pCi/g)		Ingestion + External Exposure + Inhalation (pCi/g) ^{††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Rb-82									
	014391-63-0	3.0E+07	3.0E+05	5.6E+00	5.6E-02	2.9E+11	2.9E+09	5.6E+00	5.6E-02
Rb-86									
	014932-53-7	4.5E+04	4.5E+02	5.9E+01	5.9E-01	8.1E+08	8.1E+06	5.9E+01	5.9E-01
Rb-87									
	013982-13-3	8.7E+04	8.7E+02			1.5E+09	1.5E+07	8.7E+04	8.7E+02
Rb-88									
	014928-36-0	2.2E+06	2.2E+04	8.2E+00	8.2E-02	2.5E+10	2.5E+08	8.2E+00	8.2E-02
Rb-89									
	014191-65-2	3.7E+06	3.7E+04	2.6E+00	2.6E-02	5.0E+10	5.0E+08	2.6E+00	2.6E-02
Rh-103m									
	007440-16-6	3.9E+07	3.9E+05	3.7E+05	3.7E+03	2.7E+11	2.7E+09	3.7E+05	3.7E+03
Rh-105									
	014913-89-4	1.7E+05	1.7E+03	8.8E+01	8.8E-01	2.8E+09	2.8E+07	8.8E+01	8.8E-01
Rh-105m									
	014913-89-4	3.0E+08	3.0E+06	9.6E+02	9.6E+00	3.7E+12	3.7E+10	9.6E+02	9.6E+00
Rh-106									
	014234-34-5	8.8E+07	8.8E+05	2.9E+01	2.9E-01	7.4E+11	7.4E+09	2.9E+01	2.9E-01
Rn-219									
	014835-02-0			1.3E+02	1.3E+00	5.0E+10	5.0E+08	1.3E+02	1.3E+00
Rn-220									
	022481-48-7			1.2E+04	1.2E+02	1.8E+10	1.8E+08	1.2E+04	1.2E+02
Rn-222+D									
	014859-67-7					4.5E+08	4.5E+06		
Ru-103									
	013968-53-1	9.6E+04	9.6E+02	1.3E+01	1.3E-01	7.5E+08	7.5E+06	1.3E+01	1.3E-01
Ru-105									
	014331-95-4	2.8E+05	2.8E+03	7.6E+00	7.6E-02	4.3E+09	4.3E+07	7.6E+00	7.6E-02
Ru-106									
	013967-48-1	9.3E+03	9.3E+01			3.0E+07	3.0E+05	9.3E+03	9.3E+01
Ru-106+D									
	013967-48-1	9.3E+03	9.3E+01	2.9E+01	2.9E-01	3.0E+07	3.0E+05	2.9E+01	2.9E-01
Ru-97									
	015758-35-7	5.4E+05	5.4E+03	4.8E+01	4.8E-01	8.4E+09	8.4E+07	4.8E+01	4.8E-01
S-35									
	015117-53-0	7.7E+05	7.7E+03			1.9E+10	1.9E+08	7.7E+05	7.7E+03
Sb-122									
	014374-79-9	3.6E+04	3.6E+02	1.4E+01	1.4E-01	6.3E+08	6.3E+06	1.4E+01	1.4E-01

Table 3.2d. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		External Exposure (pCi/g) ^{††}		Inhalation (pCi/g)		Ingestion + External Exposure + Inhalation (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Sb-124	014683-10-4	3.0E+04	3.0E+02	3.0E+00	3.0E-02	2.6E+08	2.6E+06	3.0E+00	3.0E-02
Sb-125	014234-35-6	1.1E+05	1.1E+03	1.6E+01	1.6E-01	6.6E+08	6.6E+06	1.6E+01	1.6E-01
Sb-125+D	014234-35-6	9.0E+04	9.0E+02	1.6E+01	1.6E-01	5.9E+08	5.9E+06	1.6E+01	1.6E-01
Sb-126	015756-32-8	3.3E+04	3.3E+02	2.1E+00	2.1E-02	4.1E+08	4.1E+06	2.1E+00	2.1E-02
Sb-126m	015756-32-8	4.4E+06	4.4E+04	3.8E+00	3.8E-02	5.3E+10	5.3E+08	3.8E+00	3.8E-02
Sb-127	013968-50-8	3.8E+04	3.8E+02	9.1E+00	9.1E-02	5.7E+08	5.7E+06	9.1E+00	9.1E-02
Sb-129	014331-88-5	1.7E+05	1.7E+03	3.9E+00	3.9E-02	4.0E+09	4.0E+07	3.9E+00	3.9E-02
Se-46	013967-63-0	5.6E+04	5.6E+02	2.8E+00	2.8E-02	2.6E+08	2.6E+06	2.8E+00	2.8E-02
Se-47	014391-96-9	1.1E+05	1.1E+03	8.8E+01	8.8E-01	1.7E+09	1.7E+07	8.8E+01	8.8E-01
Se-48	014391-86-7	4.8E+04	4.8E+02	1.7E+00	1.7E-02	8.2E+08	8.2E+06	1.7E+00	1.7E-02
Se-75	014265-71-5	4.9E+04	4.9E+02	2.5E+01	2.5E-01	7.0E+08	7.0E+06	2.5E+01	2.5E-01
Si-31	014276-49-4	6.3E+05	6.3E+03	6.3E+03	6.3E+01	1.0E+10	1.0E+08	6.3E+03	6.3E+01
Sm-147	014392-33-7	1.3E+04	1.3E+02			4.9E+05	4.9E+03	1.2E+04	1.2E+02
Sm-151	015715-94-3	7.0E+05	7.0E+03	7.5E+07	7.5E+05	7.4E+08	7.4E+06	6.9E+05	6.9E+03
Sm-153	015766-00-4	8.0E+04	8.0E+02	4.7E+02	4.7E+00	1.6E+09	1.6E+07	4.7E+02	4.7E+00
Sn-113	013966-06-8	8.6E+04	8.6E+02	7.4E+03	7.4E+01	5.2E+08	5.2E+06	6.8E+03	6.8E+01
Sn-121	014683-06-8	2.6E+05	2.6E+03			5.6E+09	5.6E+07	2.6E+05	2.6E+03
Sn-121m	014683-06-8	1.6E+05	1.6E+03			4.6E+08	4.6E+06	1.6E+05	1.6E+03
Sn-125	014683-08-0	1.9E+04	1.9E+02	1.8E+01	1.8E-01	2.9E+08	2.9E+06	1.8E+01	1.8E-01

Table 3.2d. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		External Exposure (pCi/g) ^{††}		Inhalation (pCi/g)		Ingestion + External Exposure + Inhalation (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Sn-126	015832-50-5	1.5E+04	1.5E+02	6.6E+02	6.6E+00	8.0E+07	8.0E+05	6.3E+02	6.3E+00
Sr-82	014809-50-8	1.2E+04	1.2E+02	2.4E+05	2.4E+03	3.9E+08	3.9E+06	1.2E+04	1.2E+02
Sr-85	013967-73-2	2.3E+05	2.3E+03	1.4E+01	1.4E-01	3.0E+09	3.0E+07	1.4E+01	1.4E-01
Sr-85m	013967-73-2	1.8E+07	1.8E+05	4.2E+01	4.2E-01	4.8E+11	4.8E+09	4.2E+01	4.2E-01
Sr-89	014158-27-1	3.1E+04	3.1E+02	4.1E+04	4.1E+02	9.3E+08	9.3E+06	1.8E+04	1.8E+02
Sr-90	010098-97-2	7.8E+03	7.8E+01			5.8E+07	5.8E+05	7.8E+03	7.8E+01
Sr-90+D	010098-97-2	5.7E+03	5.7E+01			4.9E+07	4.9E+05	5.7E+03	5.7E+01
Sr-91	014331-91-0	1.1E+05	1.1E+03	8.2E+00	8.2E-02	4.4E+09	4.4E+07	8.2E+00	8.2E-02
Sr-92	014928-29-1	1.6E+05	1.6E+03	4.2E+00	4.2E-02	7.3E+09	7.3E+07	4.2E+00	4.2E-02
Ta-182	013982-00-8	4.6E+04	4.6E+02	4.7E+00	4.7E-02	2.1E+08	2.1E+06	4.7E+00	4.7E-02
Tb-158	015759-55-4	7.6E+04	7.6E+02			4.9E+07	4.9E+05	7.6E+04	7.6E+02
Tb-160	013981-29-8	4.2E+04	4.2E+02	5.4E+00	5.4E-02	3.0E+08	3.0E+06	5.4E+00	5.4E-02
Tc-95	014809-56-4	4.7E+06	4.7E+04	8.1E+00	8.1E-02	1.0E+11	1.0E+09	8.1E+00	8.1E-02
Tc-95m	014809-56-4	2.6E+05	2.6E+03	1.1E+01	1.1E-01	1.6E+09	1.6E+07	1.1E+01	1.1E-01
Tc-96	014808-44-7	1.4E+05	1.4E+03	2.3E+00	2.3E-02	1.8E+09	1.8E+07	2.3E+00	2.3E-02
Tc-96m	014808-44-7	1.2E+07	1.2E+05	2.8E+02	2.8E+00	1.5E+11	1.5E+09	2.8E+02	2.8E+00
Tc-97	015759-35-0	2.0E+06	2.0E+04	8.8E+04	8.8E+02	1.0E+10	1.0E+08	8.4E+04	8.4E+02
Tc-97m	015759-35-0	2.7E+05	2.7E+03	8.2E+04	8.2E+02	1.7E+09	1.7E+07	6.3E+04	6.3E+02
Tc-99	014133-76-7	2.3E+05	2.3E+03	3.5E+07	3.5E+05	1.2E+09	1.2E+07	2.3E+05	2.3E+03

Table 3.2d. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		External Exposure (pCi/g) ^{††}		Inhalation (pCi/g)		Ingestion + External Exposure + Inhalation (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Te-99m	014133-76-7	5.7E+06	5.7E+04	8.7E+01	8.7E-01	9.8E+10	9.8E+08	8.7E+01	8.7E-01
Te-125m	014390-73-9	1.3E+05	1.3E+03	1.0E+04	1.0E+02	1.2E+09	1.2E+07	9.4E+03	9.4E+01
Te-127	013981-49-2	3.7E+05	3.7E+03	1.4E+03	1.4E+01	7.9E+09	7.9E+07	1.3E+03	1.3E+01
Te-127m	013981-49-2	5.3E+04	5.3E+02	3.1E+04	3.1E+02	2.6E+08	2.6E+06	2.0E+04	2.0E+02
Te-129	014269-71-7	2.2E+06	2.2E+04	1.5E+02	1.5E+00	2.3E+10	2.3E+08	1.5E+02	1.5E+00
Te-129m	014269-71-7	2.7E+04	2.7E+02	3.2E+02	3.2E+00	2.6E+08	2.6E+06	3.1E+02	3.1E+00
Te-131	014683-12-6	8.2E+05	8.2E+03	1.6E+01	1.6E-01	1.4E+10	1.4E+08	1.6E+01	1.6E-01
Te-131m	014683-12-6	3.6E+04	3.6E+02	4.1E+00	4.1E-02	4.1E+08	4.1E+06	4.1E+00	4.1E-02
Te-132	014234-28-7	2.6E+04	2.6E+02	5.1E+01	5.1E-01	4.1E+08	4.1E+06	5.1E+01	5.1E-01
Th-227	015623-47-9	7.9E+03	7.9E+01	1.3E+02	1.3E+00	8.0E+05	8.0E+03	1.2E+02	1.2E+00
Th-228	014274-82-9	5.1E+03	5.1E+01	4.1E+04	4.1E+02	3.6E+04	3.6E+02	4.0E+03	4.0E+01
Th-228+D	014274-82-9	1.4E+03	1.4E+01	2.2E+01	2.2E-01	3.5E+04	3.5E+02	2.2E+01	2.2E-01
Th-229	015594-54-4	5.7E+03	5.7E+01	3.7E+02	3.7E+00	4.5E+04	4.5E+02	3.4E+02	3.4E+00
Th-229+D	015594-54-4	9.0E+02	9.0E+00	3.7E+01	3.7E-01	4.1E+04	4.1E+02	3.5E+01	3.5E-01
Th-230	014269-63-7	8.5E+03	8.5E+01	5.0E+05	5.0E+03	2.0E+05	2.0E+03	8.1E+03	8.1E+01
Th-231	014932-40-2	1.8E+05	1.8E+03	1.0E+04	1.0E+02	3.1E+09	3.1E+07	9.9E+03	9.9E+01
Th-232	007440-29-1	9.8E+03	9.8E+01	1.1E+06	1.1E+04	1.8E+05	1.8E+03	9.2E+03	9.2E+01
Th-234	015065-10-8	1.7E+04	1.7E+02	6.3E+03	6.3E+01	1.8E+08	1.8E+06	4.5E+03	4.5E+01
Tl-202	015720-57-7	3.2E+05	3.2E+03	1.5E+01	1.5E-01	5.6E+09	5.6E+07	1.5E+01	1.5E-01

Table 3.2d. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		External Exposure (pCi/g) ^{††}		Inhalation (pCi/g)		Ingestion + External Exposure + Inhalation (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Tl-204	013968-51-9	1.6E+05	1.6E+03	2.5E+04	2.5E+02	3.0E+09	3.0E+07	2.2E+04	2.2E+02
Tl-208	014913-50-9	1.8E+07	1.8E+05	1.5E+00	1.5E-02	2.5E+11	2.5E+09	1.5E+00	1.5E-02
Tl-209	015690-73-0	2.3E+07	2.3E+05	2.8E+00	2.8E-02	3.1E+11	3.1E+09	2.8E+00	2.8E-02
Tm-170	013981-30-1	4.3E+04	4.3E+02	5.7E+03	5.7E+01	3.1E+08	3.1E+06	5.0E+03	5.0E+01
Tm-171	014333-45-0	5.5E+05	5.5E+03	7.0E+04	7.0E+02	1.9E+09	1.9E+07	6.2E+04	6.2E+02
U-232	014158-29-3	3.9E+03	3.9E+01	6.4E+05	6.4E+03	6.5E+04	6.5E+02	3.7E+03	3.7E+01
U-233	013968-55-3	7.1E+03	7.1E+01	6.2E+05	6.2E+03	2.4E+05	2.4E+03	6.9E+03	6.9E+01
U-234	013966-29-5	7.2E+03	7.2E+01	1.0E+06	1.0E+04	2.4E+05	2.4E+03	7.0E+03	7.0E+01
U-235	015117-96-1	7.1E+03	7.1E+01	8.3E+01	8.3E-01	2.6E+05	2.6E+03	8.2E+01	8.2E-01
U-235+D	015117-96-1	6.8E+03	6.8E+01	8.3E+01	8.3E-01	2.6E+05	2.6E+03	8.2E+01	8.2E-01
U-236	013982-70-2	7.6E+03	7.6E+01	1.3E+06	1.3E+04	2.6E+05	2.6E+03	7.3E+03	7.3E+01
U-237	014269-75-1	8.0E+04	8.0E+02	1.6E+02	1.6E+00	1.1E+09	1.1E+07	1.6E+02	1.6E+00
U-238	007440-61-1	7.5E+03	7.5E+01	1.5E+06	1.5E+04	2.8E+05	2.8E+03	7.3E+03	7.3E+01
U-238+D	007440-61-1	5.2E+03	5.2E+01	4.2E+02	4.2E+00	2.8E+05	2.8E+03	3.9E+02	3.9E+00
U-240	015687-53-3	5.9E+04	5.9E+02	2.0E+05	2.0E+03	1.0E+09	1.0E+07	4.5E+04	4.5E+02
V-48	014331-97-6	4.2E+04	4.2E+02	2.0E+00	2.0E-02	5.0E+08	5.0E+06	2.0E+00	2.0E-02
W-181	015749-46-9	1.2E+06	1.2E+04	1.0E+03	1.0E+01	4.3E+10	4.3E+08	1.0E+03	1.0E+01
W-185	014932-41-3	1.6E+05	1.6E+03	4.4E+05	4.4E+03	8.0E+09	8.0E+07	1.2E+05	1.2E+03
W-187	014983-48-3	1.3E+05	1.3E+03	1.3E+01	1.3E-01	6.5E+09	6.5E+07	1.3E+01	1.3E-01

Table 3.2d. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		External Exposure (pCi/g) ^{††}		Inhalation (pCi/g)		Ingestion + External Exposure + Inhalation (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Xe-122	015151-09-4					1.1E+12	1.1E+10		
Xe-123	015700-10-4					3.8E+12	3.8E+10		
Xe-125	013994-18-8					2.9E+12	2.9E+10		
Xe-127	013994-19-9					8.4E+12	8.4E+10		
Xe-129m	013965-99-6					6.0E+12	6.0E+10		
Xe-131m	014683-11-5					8.3E+12	8.3E+10		
Xe-133	014932-42-4					8.3E+12	8.3E+10		
Xe-133m	014932-42-4					6.7E+12	6.7E+10		
Xe-135	014995-62-1					4.6E+12	4.6E+10		
Xe-135m	014995-62-1					1.8E+13	1.8E+11		
Xe-137	014835-21-3					2.5E+12	2.5E+10		
Xe-138	015751-81-2					1.7E+12	1.7E+10		
Y-90	010098-91-6	2.1E+04	2.1E+02			3.5E+08	3.5E+06	2.1E+04	2.1E+02
Y-91	014234-24-3	2.4E+04	2.4E+02	1.6E+03	1.6E+01	1.9E+08	1.9E+06	1.5E+03	1.5E+01
Y-91m	014234-24-3	8.7E+06	8.7E+04	1.2E+01	1.2E-01	1.1E+11	1.1E+09	1.2E+01	1.2E-01
Y-92	015751-59-4	1.6E+05	1.6E+03	2.2E+01	2.2E-01	2.1E+09	2.1E+07	2.2E+01	2.2E-01
Y-93	014981-70-5	5.6E+04	5.6E+02	6.4E+01	6.4E-01	9.8E+08	9.8E+06	6.4E+01	6.4E-01
Zn-65	013982-39-3	3.2E+04	3.2E+02	9.6E+00	9.6E-02	3.4E+08	3.4E+06	9.6E+00	9.6E-02
Zn-69	013982-23-5	5.2E+06	5.2E+04	1.1E+06	1.1E+04	3.3E+10	3.3E+08	8.9E+05	8.9E+03

Table 3.2d. (continued)

Chemical †	CASRN	Ingestion (pCi/g)		External Exposure (pCi/g) ^{††}		Inhalation (pCi/g)		Ingestion + External Exposure + Inhalation (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Zn-69m	013982-23-5	2.1E+05	2.1E+03	1.5E+01	1.5E-01	2.9E+09	2.9E+07	1.5E+01	1.5E-01
Zr-93	015751-77-6	6.1E+05	6.1E+03			6.5E+08	6.5E+06	6.1E+05	6.1E+03
Zr-95	013967-71-0	8.2E+04	8.2E+02	7.8E+00	7.8E-02	5.3E+08	5.3E+06	7.8E+00	7.8E-02
Zr-97	014928-30-4	3.1E+04	3.1E+02	3.2E+01	3.2E-01	7.2E+08	7.2E+06	3.2E+01	3.2E-01

Notes:

† Isotopes designated with an "m" indicate that the isotope is metastable; isotopes designated with a "+" indicate that the radionuclide slope factors include contributions from daughter products.

†† If no PRG for external exposure was calculated, there either was no external exposure slope factor available or the external exposure slope factor was equal to 0.00E+00 (resulting in the PRG for the external exposure pathway for soil under industrial land use to be undefined).

††† If slope factors and/or reference doses were available for only one pathway (i.e., ingestion, external exposure, OR inhalation), the total for ingestion plus external exposure plus inhalation was not given.

Table 3.3a. (continued)

Chemical	CASRN	Ingestion of Vegetables (mg/L)			Ingestion of Beef (mg/L)			Ingestion of Milk (mg/L)			
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1 (Adult)	HQ=1 (Child)
AMDRO	067485-29-4										
AMETRYN	000834-12-8			5.0E-02			1.2E+05			7.9E+04	1.0E+04
AMINOPHENOL, m-	000591-27-5			1.9E-01			3.3E+07			2.2E+07	2.8E+06
AMINOPYRIDINE, 4-	000504-24-5			5.7E-05			8.1E+03			5.3E+03	6.8E+02
AMITRAZ	033089-61-1										
AMMONIA	007664-41-7										
AMMONIUM SULFAMATE	007773-06-0										
ANILINE	000062-53-3	1.8E-01	1.8E-03		3.6E+06	3.6E+04		1.0E+06	1.0E+04		
ANTHRACENE	000120-12-7			2.0E+00			8.2E+03			5.3E+03	6.9E+02
ANTIMONY (METALLIC)	007440-36-0			2.6E-03			1.9E+02			6.4E+01	8.2E+00
ANTIMONY PENTOXIDE	001314-60-9										
ANTIMONY POTASSIUM TARTRATE	000304-61-0										
ANTIMONY TETROXIDE	001332-81-6										
ANTIMONY TRIOXIDE	001309-64-4										
APOLLO	074115-24-5										
ARAMITE	000140-57-8										
AROCLOR 1016	012674-11-2			4.6E-04			1.4E-01			9.3E-02	1.2E-02
AROCLOR 1254	011097-69-1			1.3E-04			7.4E-03			7.1E-03	9.1E-04
AROCLOR-1221	011104-28-2	2.0E-04	2.0E-06		2.0E+00	2.0E-02		5.4E-01	5.4E-03		
AROCLOR-1232	011141-16-5	1.9E-04	1.9E-06		1.5E+01	1.5E-01		4.1E+00	4.1E-02		
AROCLOR-1242	053469-21-9	2.0E-04	2.0E-06		1.8E+00	1.8E-02		5.0E-01	5.0E-03		

Table 3.3a. (continued)

Chemical	CASRN	Ingestion of Vegetables (mg/L)			Ingestion of Beef (mg/L)			Ingestion of Milk (mg/L)		
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1 (Child)
AROCOR-1248	012672-29-6	2.0E-04	2.0E-06		4.1E-02	4.1E-04		1.1E-02	1.1E-04	
AROCOR-1260	011096-82-5	2.0E-04	2.0E-06		1.7E-03	1.7E-05		4.6E-04	4.6E-06	
ARSENIC, INORGANIC	007440-38-2			2.0E-03			2.9E+00			2.6E+00
ARSINE	007784-42-1									
ASBESTOS	001332-21-4									
ASSURE	076578-14-8									
ASULAM	003337-71-1									
ATRAZINE	001912-24-9	6.5E-03	6.5E-05	2.2E-01	1.7E+03	1.7E+01	5.7E+04	4.7E+02	4.7E+00	4.7E+03
AVERMECTIN B1	065195-55-3									
AZOBENZENE	000103-33-3	1.4E-02	1.4E-04		2.5E+02	2.5E+00		6.8E+01	6.8E-01	
BARIUM	007440-39-3			4.6E-01			5.9E+03			7.5E+01
BARIUM CYANIDE	000542-62-1									
BAYGON	000114-26-1			2.1E-02			8.2E+04			6.8E+03
BAYLETON	043121-43-3			1.8E-01			1.1E+05			9.3E+03
BAYTHROID	068359-37-5									
BENEFIN	001861-40-1									
BENOMYL	017804-35-2			3.0E-01			1.9E+05			1.6E+04
BENTAZON	025057-89-0			1.1E-02			1.5E+05			1.3E+04
BENZALDEHYDE	000100-52-7			6.0E-01			3.5E+05			2.9E+04
BENZENE	000071-43-2	4.8E-02	4.8E-04		4.7E+04	4.7E+02		1.3E+04	1.3E+02	
BENZENETHIOL	000108-98-5			6.1E-05			2.3E+01			1.9E+00

Table 3.3a. (continued)

Chemical	CASRN	Ingestion of Vegetables (mg/L)			Ingestion of Beef (mg/L)			Ingestion of Milk (mg/L)			
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1 (Adult)	HQ=1 (Child)
BENZIDINE	000092-87-5	5.0E-06	5.0E-08	1.5E-02	3.9E+01	3.9E-01	1.2E+05	1.1E+01	1.1E-01	7.5E+04	9.7E+03
BENZOIC ACID	000065-85-0			2.3E+01			4.2E+07			2.7E+07	3.5E+06
BENZOTRICHLORIDE	000098-07-7	1.1E-04	1.1E-06		1.7E+01	1.7E-01		4.6E+00	4.6E-02		
BENZO[A]PYRENE	000050-32-8	2.1E-04	2.1E-06		2.2E-02	2.2E-04		5.9E-03	5.9E-05		
BENZO[B]FLUORANTHENE	000205-99-2	2.1E-03	2.1E-05		2.2E-01	2.2E-03		5.9E-02	5.9E-04		
BENZO[G,H,I]PERYLENE	000191-24-2										
BENZO[K]FLUORANTHENE	000207-08-9	2.1E-02	2.1E-04		2.2E+00	2.2E-02		5.9E-01	5.9E-03		
BENZYL ALCOHOL	000100-51-6			1.4E+00			1.8E+07			1.2E+07	1.5E+06
BENZYL CHLORIDE	000100-44-7	8.2E-03	8.2E-05		5.3E+03	5.3E+01		1.5E+03	1.5E+01		
BENZO[A]ANTHRACENE	000056-55-3	2.1E-03	2.1E-05		6.2E-01	6.2E-03		1.7E-01	1.7E-03		
BERYLLIUM	007440-41-7	3.6E-04	3.6E-06	3.3E-02	1.3E+00	1.3E-02	1.2E+02	4.6E+01	4.6E-01	1.0E+04	1.3E+03
BIDRIN	000141-66-2			1.2E-04			3.7E+05			2.4E+05	3.1E+04
BIPHENTHRIN	082657-04-3										
BIPHENYL, 1,1'-	000092-52-4			3.2E-01			3.5E+03			2.3E+03	2.9E+02
BIS(2-CHLORO-1-METHYLETHYL)ETHER (TECHNICAL)	000108-06-1										
BIS(2-CHLOROETHOXY)METHANE	000111-91-1										
BIS(2-CHLOROETHYL)ETHER	000111-44-4	1.1E-03	1.1E-05		5.2E+03	5.2E+01		1.4E+03	1.4E+01		
BIS(2-CHLOROISOPROPYL)ETHER	039638-32-9			2.4E-01			2.5E+05			1.6E+05	2.0E+04
BIS(2-ETHYLHEXYL)PHTHALATE	000117-81-7	6.0E-02	6.0E-04	7.2E-02	3.2E+06	3.2E+04	3.8E+06	8.7E+05	8.7E+03	2.4E+06	3.1E+05
BIS(CHLOROMETHYL)ETHER	000542-88-1				3.4E+02	3.4E+00		9.4E+01	9.4E-01		

Table 3.3a. (continued)

Chemical	CASRN	Ingestion of Vegetables (mg/L)			Ingestion of Beef (mg/L)			Ingestion of Milk (mg/L)			
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1 (Adult)	HQ=1 (Child)
CAPROLACTAM	000105-60-2			9.6E-01			6.0E+08			3.9E+08	5.0E+07
CAPTAFOL	002425-06-1										
CAPTAN	000133-06-2	4.0E-01	4.0E-03	7.8E-01	2.3E+05	2.3E+03	4.5E+05	6.3E+04	6.3E+02	2.9E+05	3.7E+04
CARBARYL	000063-25-2			6.0E-01			3.4E+05			2.2E+05	2.8E+04
CARBAZOLE	000086-74-8	7.5E-02	7.5E-04		1.6E+03	1.6E+01		4.3E+02	4.3E+00		
CARBOFURAN	001563-66-2			3.1E-02			1.1E+04			7.1E+03	9.1E+02
CARBON DISULFIDE	000075-15-0			5.8E-01			7.7E+05			5.0E+05	6.4E+04
CARBON TETRACHLORIDE	000056-23-5	1.1E-02	1.1E-04	4.4E-03	3.2E+03	3.2E+01	1.2E+03	8.8E+02	8.8E+00	8.1E+02	1.0E+02
CARBOSULFAN	05285-14-8										
CARBOXIN	005234-68-4			5.9E-01			5.6E+05			3.6E+05	4.7E+04
CHLORAL	000075-87-6										
CHLORAMBEN	000133-90-4										
CHLORANIL	000118-75-2										
CHLORDANE	000057-74-9	1.2E-03	1.2E-05	3.9E-04	4.7E-01	4.7E-03	1.6E-01	8.2E-01	8.2E-03	6.4E-01	8.3E-02
CHLORIMURON-ETHYL	090982-32-4										
CHLORINE	007782-50-5			1.5E-01			1.1E+02			2.3E+01	3.0E+00
CHLORINE DIOXIDE	010049-04-4										
CHLORO-1,3-BUTADIENE, 2-	000126-99-8			1.1E-01			2.6E+05			1.7E+05	2.1E+04
CHLORO-2-METHYLANILINE HCL, 4-	003165-93-3										
CHLORO-2-METHYLANILINE, 4-	000095-69-2										
CHLOROACETIC ACID	000079-11-8			9.3E-03			1.1E+05			7.1E+04	9.1E+03

Table 3.3a. (continued)

Chemical	CASRN	Ingestion of Vegetables (mg/L)			Ingestion of Beef (mg/L)			Ingestion of Milk (mg/L)		
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1 (Child)
CHLOROTHALONIL	001897-45-6	1.4E-01	1.4E-03	9.7E-02	2.3E+03	2.3E+01	1.6E+03	6.2E+02	6.2E+00	1.3E+02
CHLOROTOLUENE, o-	000095-49-8			1.3E-01			5.9E+03			4.9E+02
CHLOROPHAPHAM	000101-21-3			1.3E+00			1.7E+05			1.4E+04
CHLORPYRIFOS	002921-88-2			1.9E-02			1.8E+01			1.5E+00
CHLORPYRIFOS METHYL	005598-13-0			6.5E-02			3.8E+02			3.2E+01
CHLORSULFURON	064902-72-3									
CHLORTHIOPHOS	060238-56-4									
CHROMIUM (III) (INSOLUBLE SALTS)	016065-83-1			6.6E+00			2.2E+03			5.1E+04
CHROMIUM (VI)	018540-29-9			3.3E-02			1.1E+01			2.6E+02
CHRYSENE	000218-01-9	2.1E-01	2.1E-03		6.1E+01	6.1E-01		1.7E+01	1.7E-01	
COKE OVEN EMISSIONS	008007-45-2									
COPPER	007440-50-8									
COPPER CYANIDE	000544-92-3									
CREOSOTE	008001-58-9									
CRESOL, m-	000108-39-4			2.9E-01			4.1E+05			3.4E+04
CRESOL, o-	000095-48-7			2.9E-01			4.2E+05			3.5E+04
CRESOL, p-	000106-44-5			2.9E-02			4.6E+04			3.8E+03
CROTONALDEHYDE	000123-73-9	6.8E-04	6.8E-06		1.7E+03	1.7E+01		4.5E+02	4.5E+00	
CUMENE	000098-82-8						6.8E+03			5.6E+02
CYANAZINE	021725-46-2									
CYANIDE (CN-)	000057-12-5			3.6E-02			2.8E+07			2.3E+06

Table 3.3a. (continued)

Chemical	CASRN	Ingestion of Vegetables (mg/L)			Ingestion of Beef (mg/L)			Ingestion of Milk (mg/L)			
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1 (Adult)	HQ=1 (Child)
CYANOGEN	000460-19-5										
CYANOGEN BROMIDE	000506-68-3										
CYANOGEN CHLORIDE	000506-77-4			1.3E-01			2.4E+07			1.6E+07	2.0E+06
CYCLOHEXANE, 1,2,3,4,5-PENTABROMO-6-CHLORO	000087-84-3										
CYCLOHEXANONE	000108-94-1			2.0E+01			6.0E+08			3.9E+08	5.0E+07
CYCLOHEXYLAMINE	000108-91-8			1.0E+00			5.0E+06			3.3E+06	4.2E+05
CYCLOPENTADIENE	000542-92-7										
CYHALOTHRIIN/KARATE	068085-85-8										
CYPERMETHRIN	052315-07-8										
CYROMAZINE	066215-27-8										
DACTHAL	001861-32-1										
DALAPON	000075-99-0										
DDD	000072-54-8	6.4E-03	6.4E-05		1.5E+00	1.5E-02		5.4E-01	5.4E-03		
DDE	000072-55-9	4.5E-03	4.5E-05		2.7E-01	2.7E-03		1.2E-01	1.2E-03		
DDT	000050-29-3	4.5E-03	4.5E-05	3.3E-03	4.7E-01	4.7E-03	3.5E-01	1.1E-01	1.1E-03	1.9E-01	2.4E-02
DECABROMODIPHENYL ETHER	001163-19-5										
DEMETON	008065-48-3										
DI(2-ETHYLHEXYL)ADIPATE	000103-23-1	1.3E+00	1.3E-02	3.9E+00	2.4E+00	2.4E-02	7.5E+00	6.7E-01	6.7E-03	4.8E+00	6.2E-01
DIALATE	002303-16-4	1.5E-02	1.5E-04		5.5E+05	5.5E-03		1.5E+05	1.5E+03		
DIAZINON	000333-41-5			5.8E-03			1.1E+02			7.0E+01	9.0E+00
DIBENZ[A,H]ANTHRACENE	000053-70-3	2.1E-04	2.1E-06		6.1E-02	6.1E-04		1.7E-02	1.7E-04		

Table 3.3a. (continued)

Chemical	CASRN	Ingestion of Vegetables (mg/L)			Ingestion of Beef (mg/L)			Ingestion of Milk (mg/L)			
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1 (Adult)	HQ=1 (Child)
DIBROMO-3-CHLOROPROPANE, 1,2-	000096-12-8	1.0E-03	1.0E-05		6.6E+02	6.6E+00		1.8E+02	1.8E+00		
DIBROMOBENZENE, 1,4-	000106-37-6			6.4E-02			1.4E+03			8.9E+02	1.1E+02
DIBROMOCHLOROMETHANE	000124-48-1	1.6E-02	1.6E-04	1.2E-01	1.8E+04	1.8E+02	1.3E+05	4.8E+03	4.8E+01	8.2E+04	1.0E+04
DIBROMODICHLOROMETHANE	000594-18-3										
DIBROMODIPHENYL ETHER, p,p'-	002050-47-7										
DIBROMOETHANE, 1,2-	000106-93-4										
DIBROMOMETHANE (METHYLENE BROMIDE)	000074-95-3			4.8E-02			4.7E+05			3.0E+05	3.9E+04
DIBUTYL PHTHALATE	000084-74-2			6.6E-01			1.9E+02			1.3E+02	1.6E+01
DICAMBA	001918-00-9			1.9E-01			2.3E+04			1.5E+04	1.9E+03
DICHLORO-2-BUTENE, 1,4-	000764-41-0										
DICHLOROBENZENE, 1,2-	000095-50-1			5.8E-01			1.7E+04			1.1E+04	1.5E+03
DICHLOROBENZENE, 1,3-	000541-73-1										
DICHLOROBENZENE, 1,4-	000106-46-7	6.3E-02	6.3E-04		1.9E+03	1.9E+01		5.2E+02	5.2E+00		
DICHLOROBENZIDINE, 3,3'-	000091-94-1	3.4E-03	3.4E-05		1.3E+02	1.3E+00		3.5E+01	3.5E-01		
DICHLORODIFLUOROMETHANE	000075-71-8			1.2E+00			1.1E+06			6.9E+05	8.9E+04
DICHLOROETHANE, 1,1-	000075-34-3			5.6E-01			1.3E+06			8.1E+05	1.0E+05
DICHLOROETHANE, 1,2-	000107-06-2	1.3E-02	1.3E-04		6.6E+04	6.6E+02		1.8E+04	1.8E+02		
DICHLOROETHYLENE, 1,1-	000075-35-4	2.2E-03	2.2E-05	5.1E-02	4.4E+03	4.4E+01	1.0E+05	1.2E+03	1.2E+01	6.5E+04	8.4E+03
DICHLOROETHYLENE, 1,2-, (MIXED ISOMERS)	000540-59-0			3.0E-02			2.3E+06			1.5E+06	1.9E+05
DICHLOROETHYLENE, 1,2-C-	000156-59-2			3.8E-02			1.5E+06			1.0E+06	1.3E+05
DICHLOROETHYLENE, 1,2-T-	000156-60-5			6.6E-02			5.1E+06			3.3E+06	4.3E+05

Table 3.3a. (continued)

Chemical	CASRN	Ingestion of Vegetables (mg/L)			Ingestion of Beef (mg/L)			Ingestion of Milk (mg/L)			
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1 (Adult)	HQ=1 (Child)
DIMETHIPN	055290-64-7										
DIMETHOATE	000060-51-5			1.2E-03			3.0E+02			2.0E+02	2.5E+01
DIMETHOXYBENZIDINE, 3,3'-	000119-90-4	8.2E-02	8.2E-04		6.8E+05	6.8E+03		1.9E+05	1.9E+03		
DIMETHYL SULFATE	000077-78-1										
DIMETHYLANILINE HCL, 2,4-	021436-96-4										
DIMETHYLANILINE, 2,4-	000095-68-1										
DIMETHYLANILINE, N,N-	000121-69-7			1.2E-02			3.7E+03			2.4E+03	3.1E+02
DIMETHYLBENZIDINE, 3,3'-	000119-93-7	1.5E-04	1.5E-06		1.7E+02	1.7E+00		4.5E+01	4.5E-01		
DIMETHYLETHYL LEAD	107584-40-7										
DIMETHYLFORMAMIDE	000068-12-2			8.1E-02			7.7E+08			5.0E+08	6.4E+07
DIMETHYLHYDRAZINE, 1,2-	000540-73-8										
DIMETHYLPHENOL, 2,4-	000105-67-9			1.3E-01			2.4E+04			1.6E+04	2.0E+03
DIMETHYLPHENOL, 2,6-	000576-26-1										
DIMETHYLPHENOL, 3,4-	000095-65-8			5.9E-03			4.6E+03			3.0E+03	3.8E+02
DIMETHYLPHTHALATE	000131-11-3										
DIMETHYLTEREPHTHALATE	000120-61-6			6.3E-01			7.7E+04			5.0E+04	6.4E+03
DINITRO-O-CYCLOHEXYL PHENOL, 4,6-	000131-89-5			1.9E-04			7.7E+08			5.0E+08	6.4E+07
DINITROBENZENE, 1,2-	000528-29-0										
DINITROBENZENE, 1,3-	000099-65-0			5.4E-04			1.9E+03			1.2E+03	1.5E+02
DINITROBENZENE, 1,4-	000100-25-4										
DINITROPHENOL, 2,4-	000051-28-5			1.0E-02			4.9E+04			3.2E+04	4.1E+03

Table 3.3a. (continued)

Chemical	CASRN	Ingestion of Vegetables (mg/L)			Ingestion of Beef (mg/L)			Ingestion of Milk (mg/L)			
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1 (Adult)	HQ=1 (Child)
GLYPHOSATE	001071-83-6			6.4E-03			7.7E+10			5.0E+10	6.4E+09
GOAL	042874-03-3										
HALOXYFOP-METHYL	069806-40-2										
HARMONY	079277-27-3										
HEPTACHLOR	000076-44-8	3.4E-04	3.4E-06	3.3E-03	6.5E-02	6.5E-04	6.3E-01	2.7E-02	2.7E-04	6.2E-01	7.9E-02
HEPTACHLOR EPOXIDE	001024-57-3	1.6E-04	1.6E-06	8.1E-05	6.3E-03	6.3E-05	3.2E-03	1.2E-03	1.2E-05	1.5E-03	1.9E-04
HEPTANE, N-	000142-82-5										
HEXABROMOBENZENE	000087-82-1										
HEXACHLOROBENZENE	000118-74-1	9.6E-04	9.6E-06	5.3E-03	6.4E-02	6.4E-04	3.5E-01	2.9E-02	2.9E-04	3.8E-01	4.8E-02
HEXACHLOROBUTADIENE	000087-68-3	2.0E-02	2.0E-04	1.3E-03	3.8E+01	3.8E-01	2.6E+00	1.1E+01	1.1E-01	1.7E+00	2.1E-01
HEXACHLOROCYCLOHEXANE, ALPHA-	000319-84-6	2.4E-04	2.4E-06		4.3E-02	4.3E-04		2.5E-02	2.5E-04		
HEXACHLOROCYCLOHEXANE, BETA-	000319-85-7	8.4E-04	8.4E-06		1.3E+01	1.3E-01		3.5E+00	3.5E-02		
HEXACHLOROCYCLOHEXANE, DELTA-	000319-86-8										
HEXACHLOROCYCLOHEXANE, EPSILON	006108-10-7										
HEXACHLOROCYCLOHEXANE, GAMMA-	000058-89-9	1.2E-03	1.2E-05	2.0E-03	2.1E-01	2.1E-03	3.5E-01	1.2E-01	1.2E-03	4.8E-01	6.1E-02
HEXACHLOROCYCLOHEXANE, TECHNICAL	000608-73-1										
HEXACHLOROCYCLOPENTADIENE	000077-47-4			4.6E-02			5.4E+02			3.5E+02	4.5E+01
HEXACHLORODIBENZO-p-DIOXIN, MIXTURE	019408-74-3	2.5E-07	2.5E-09		5.6E-06	5.6E-08		1.5E-06	1.5E-08		
HEXACHLOROETHANE	000067-72-1	1.1E-01	1.1E-03	6.5E-03	3.2E+02	3.2E+00	1.9E+01	8.9E+01	8.9E-01	1.3E+01	1.6E+00
HEXACHLOROPHENE	000070-30-4			2.0E-03			6.7E-03			4.3E-03	5.6E-04
HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE (RDX)	000121-82-4	1.4E-02	1.4E-04	1.9E-02	8.6E+02	8.6E+00	1.2E+03	2.4E+02	2.4E+00	7.9E+02	1.0E+02

Table 3.3a. (continued)

Chemical	CASRN	Ingestion of Vegetables (mg/L)			Ingestion of Beef (mg/L)			Ingestion of Milk (mg/L)			
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1 (Adult)	HQ=1 (Child)
LEAD ALKYLs	NA										
LEAD AND COMPOUNDS	007439-92-1										
LINURON	000330-55-2										
LONDAX	083055-99-6										
MALATHION	000121-75-5			1.3E-01			2.0E+04			1.3E+04	1.7E+03
MALEIC ANHYDRIDE	000108-31-6										
MALEIC HYDRAZIDE	000123-33-1			7.8E-01			9.7E+08			6.3E+08	8.1E+07
MALONONITRILE	000109-77-3			4.7E-05			1.4E+04			9.2E+03	1.2E+03
MANCOZEB	008018-01-7										
MANEB	012427-38-2			1.1E-02			3.9E+06			2.5E+06	3.2E+05
MANGANESE (Water)	007439-96-5			3.1E-02			1.9E+02			6.6E+02	8.5E+01
MCPA	000094-74-6			3.0E-03			1.9E+03			1.2E+03	1.6E+02
MCPB	000094-81-5										
MCPP	000093-65-2			6.1E-03			2.1E+03			1.4E+03	1.7E+02
MEPHOSFOLAN	000950-10-7										
MEPIQUAT CHLORIDE	024307-26-4										
MERCURY, INORGANIC	007439-97-6			1.9E-03			5.8E-01			2.5E+00	3.3E-01
MERPHOS	000150-50-5										
MERPHOS OXIDE	000078-48-8										
METALAXYL	057837-19-1										
METHACRYLONITRILE	000126-98-7			3.4E-04			2.2E+04			1.4E+04	1.9E+03

Table 3.3a. (continued)

Chemical	CASRN	Ingestion of Vegetables (mg/L)				Ingestion of Beef (mg/L)				Ingestion of Milk (mg/L)			
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	HQ=1 (Adult)	HQ=1 (Child)
METHAMIDOPHOS	010265-92-6			6.0E-05			1.8E+05					1.1E+05	1.5E+04
METHANOL	000067-56-1			5.3E-01			2.3E+09					1.5E+09	1.9E+08
METHIDATHION	000950-37-8												
METHOMYL	016752-77-5												
METHOXY-S-NITROANILINE, 2-	000099-59-2												
METHOXYCHLOR	000072-43-5			3.3E-02			1.9E+02					1.3E+02	1.7E+01
METHOXYETHANOL ACETATE, 2-	000110-49-6												
METHOXYETHANOL, 2-	000109-86-4			1.1E-03			4.6E+06					3.0E+06	3.8E+05
METHYL ACETATE	000079-20-9			3.5E+00			2.0E+08					1.3E+08	1.7E+07
METHYL ACRYLATE	000096-33-3			1.2E-01			3.2E+06					2.1E+06	2.7E+05
METHYL ETHYL KETONE	000078-93-3			1.7E+00			2.5E+08					1.6E+08	2.1E+07
METHYL ISOBUTYL KETONE	000108-10-1			3.1E-01			1.2E+07					7.7E+06	9.8E+05
METHYL MERCURY	022967-92-6												
METHYL METHACRYLATE	000080-62-6			4.0E-01			2.6E+06					1.7E+06	2.2E+05
METHYL PARATHION	000298-00-0			1.4E-03			2.4E+03					1.5E+03	2.0E+02
METHYL STYRENE (MIXED ISOMERS)	025013-15-4												
METHYL TERT-BUTYL ETHER (MTBE)	001634-04-4												
METHYL-S-NITROANILINE, 2-	000099-55-8	4.1E-02	4.1E-04		6.0E+04	6.0E+02		1.7E+04	1.7E+02				
METHYLANILINE HYDROCHLORIDE, 2-	000636-21-5												
METHYLCYCLOHEXANE	000108-87-2												
METHYLENE CHLORIDE	000075-09-2	1.5E-01	1.5E-03	3.0E-01	1.2E+06	1.2E+04	2.3E+06	3.3E+05	3.3E+03			1.5E+06	1.9E+05

Table 3.3a. (continued)

Chemical	CASRN	Ingestion of Vegetables (mg/L)			Ingestion of Beef (mg/L)			Ingestion of Milk (mg/L)			
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1 (Adult)	HQ=1 (Child)
NITROSOPYRROLIDINE, N-	000930-55-2	8.4E-05	8.4E-07		9.9E+05	9.9E+03		2.7E+05	2.7E+03		
NITROTOLUENE, m-	000099-08-1			6.1E-02			2.7E+04			1.8E+04	2.3E+03
NITROTOLUENE, o-	000088-72-2			6.0E-02			3.9E+04			2.5E+04	3.2E+03
NITROTOLUENE, p-	000099-99-0			6.1E-02			2.9E+04			1.9E+04	2.5E+03
NORFLURAZON	027314-13-2										
NUSTAR	085509-19-9										
OCTABROMODIPHENYL ETHER	032536-52-0										
OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRA (HMX)	002691-41-0			1.8E-01			9.9E+06			6.4E+06	8.3E+05
OCTAMETHYLPYROPHOSPHORAMIDE	000152-16-9										
OCTYL PHTHALATE, DI-N-	000117-84-0			1.3E-01			2.1E-03			1.4E-03	1.7E-04
ORYZALIN	019044-88-3										
OXADIAZON	019666-30-9										
OXAMYL	023135-22-0										
PACLOBUTRAZOL	076738-62-0										
PARAQUAT	001910-42-5										
PARATHION	000056-38-2			3.9E-02			7.2E+02			4.7E+02	6.0E+01
PEBULATE	001114-71-2										
PENDIMETHALIN	040487-42-1										
PENTABROMODIPHENYL ETHER	032534-81-9										
PENTACHLOROBENZENE	000608-93-5			5.3E-03			4.0E+00			2.6E+00	3.3E-01

Table 3.3a. (continued)

Chemical	CASRN	Ingestion of Vegetables (mg/L)			Ingestion of Beef (mg/L)			Ingestion of Milk (mg/L)			
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1 (Adult)	HQ=1 (Child)
PENTACHLOROCYCLOPENTADIENE	025329-35-5										
PENTACHLORONITROBENZENE	000082-68-8	5.9E-03	5.9E-05	2.0E-02	2.5E+00	2.5E-02	8.2E+00	6.8E-01	6.8E-03	5.3E+00	6.9E-01
PENTACHLOROPHENOL	000087-86-5	1.3E-02	1.3E-04	2.0E-01	1.5E+01	1.5E-01	2.3E+02	4.1E+00	4.1E-02	1.5E+02	1.9E+01
PERMETHRIN	052645-53-1			3.2E-01			1.3E+04			8.3E+03	1.1E+03
PHENANTHRENE	000085-01-8										
PHENMEDIPHAM	013684-63-4			1.4E-01			4.0E+09			2.6E+09	3.3E+08
PHENOL	000108-95-2			3.1E+00			1.6E+07			1.0E+07	1.3E+06
PHENYLENEDIAMINE, m-	000108-45-2			6.5E-03			2.6E+07			1.7E+07	2.2E+06
PHENYLENEDIAMINE, o-	000095-54-5	1.6E-02	1.6E-04		1.4E+06	1.4E-04		3.8E+05	3.8E+03		
PHENYLENEDIAMINE, p-	000106-50-3			1.3E-01			2.2E+09			1.4E+09	1.8E+08
PHENYLMERCURIC ACETATE	000062-38-4										
PHENYLPHENOL, 2-	000090-43-7	7.6E-01	7.6E-03		7.6E+04	7.6E+02		2.1E+04	2.1E+02		
PHORATE	000298-02-2			1.1E-03			3.2E+03			2.1E+03	2.6E+02
PHOSMET	000732-11-6			1.2E-01			2.3E+04			1.5E+04	1.9E+03
PHOSPHINE	007803-51-2										
PHTHALIC ACID, p-	000100-21-0			5.4E+00			1.7E+07			1.1E+07	1.4E+06
PHTHALIC ANHYDRIDE	000085-44-9			2.5E+00			6.5E+09			4.2E+09	5.4E+08
PICLORAM	001918-02-1			4.3E-01			2.4E+05			1.5E+05	2.0E+04
PRIMIPHOS-METHYL	029232-93-7										
POLYBROMINATED BIPHENYLS	NA										
POLYCHLORINATED BIPHENYLS	001336-36-3	2.0E-04	2.0E-06		2.1E-02	2.1E-04		5.9E-03	5.9E-05		

Table 3.3a. (continued)

Chemical	CASRN	Ingestion of Vegetables (mg/L)			Ingestion of Beef (mg/L)			Ingestion of Milk (mg/L)		
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1 (Child)
POTASSIUM CYANIDE	000151-50-8									
POTASSIUM SILVER CYANIDE	000506-61-6									
PROCHLORAZ	067747-09-5									
PROFLURALIN	026399-36-0									
PROMETON	001610-18-0			8.9E-02			6.4E+04			5.3E+03
PROMETRYN	007287-19-6			2.4E-02			1.1E+04			9.2E+02
PROPACHLOR	001918-16-7									
PROPANIL	000709-98-8									
PROPARGITE	002312-35-8									
PROPARGYL ALCOHOL	000107-19-7									
PROPABINE	000139-40-2			1.2E-01			5.8E+04			4.8E+03
PROPHAM	000122-42-9			1.3E-01			1.0E+04			8.7E+02
PROPICONAZOLE	060207-90-1									
PROPYLENE GLYCOL	000057-55-6			6.6E+00			8.5E+11			7.1E+10
PROPYLENE GLYCOL MONOETHYL ETHER	001569-02-4									
PROPYLENE GLYCOL MONOMETHYL ETHER	000107-98-2			1.4E+00			8.2E+08			6.8E+07
PROPYLENE OXIDE	000075-56-9				7.0E+05	7.0E+03		1.9E+05	1.9E+03	
PURSUIT	081335-77-5									
PYDRIN	051630-58-1									
PYRENE	000129-00-0			2.0E-01			1.1E+02			9.3E+00
PYRIDINE	000110-86-1			3.7E-03			1.7E+05			1.4E+04

Table 3.3a. (continued)

Chemical	CASRN	Ingestion of Vegetables (mg/L)			Ingestion of Beef (mg/L)			Ingestion of Milk (mg/L)		
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1 (Child)
STROFOS (TETRACHLOROVINPHOS)	000961-11-5									
STRONTIUM, STABLE	007440-24-6			3.7E+00			1.5E+03			1.1E+02
STRYCHNINE	000057-24-9			1.7E-03			2.7E+03			2.3E+02
STYRENE	000100-42-5			1.3E+00			1.7E+05			1.4E+04
SYSTHANE	088671-89-0									
TCDD, 2,3,7,8-	001746-01-6	1.0E-08	1.0E-10		5.5E-07	5.5E-09		2.6E-07	2.6E-09	
TCMTB	021564-17-0									
TEBUTHIURON	034014-18-1			1.8E-01			3.8E+07			3.2E+06
TEMEPHOS	003383-96-8									
TERBACIL	005902-51-2									
TERBUFOS	013071-79-9									
TERBUTRYN	000886-50-0									
TETRABUTYL LEAD	001920-90-7									
TETRACHLOROBENZENE, 1,2,4,5-	000095-94-3			2.0E-03			5.0E+00			4.1E-01
TETRACHLOROETHANE, 1,1,1,2-	000630-20-6	5.7E-02	5.7E-04	1.9E-01	6.5E+03	6.5E+01	2.2E+04	1.8E+03	1.8E+01	1.8E+03
TETRACHLOROETHANE, 1,1,2,2-	000079-34-5	7.1E-03	7.1E-05		3.7E+03	3.7E+01		1.0E+03	1.0E+01	
TETRACHLOROETHYLENE	000127-18-4			6.2E-02			1.9E+04			1.6E+03
TETRACHLOROPHENOL, 2,3,4,6-	000058-90-2			2.0E-01			1.8E+03			1.5E+02
TETRACHLOROTOLUENE, p- ALPHA, ALPHA, ALPHA-	005216-25-1									
TETRAETHYL DITHIOPHOSPHATE	003689-24-5			3.3E-03			4.4E+01			3.6E+00

Table 3.3a. (continued)

Chemical	CASRN	Ingestion of Vegetables (mg/L)				Ingestion of Beef (mg/L)			Ingestion of Milk (mg/L)		
		10 ⁻⁴	10 ⁻⁶	HQ=1		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1 (Child)
TETRAETHYL LEAD	000078-00-2										
TETRAMETHYL LEAD	000075-74-1										
TETRAPROPYL LEAD	003440-75-3										
THALLIC OXIDE	001314-32-5										
THALLIUM (I) NITRATE	010102-45-1			5.9E-04				4.4E-02			2.3E-02
THALLIUM (SOLUBLE SALTS)	NA										
THALLIUM ACETATE	000563-68-8			5.9E-04				4.4E-02			2.3E-02
THALLIUM CARBONATE	006533-73-9			5.3E-04				3.9E-02			2.0E-02
THALLIUM CHLORIDE	007791-12-0			5.3E-04				3.9E-02			2.0E-02
THALLIUM SELENITE	012039-52-0										
THALLIUM SULFATE	007446-18-6			5.3E-04				3.9E-02			2.0E-02
THIOBENCARB	028249-77-6										
THIOFANOX	039196-18-4										
THIOPHANATE-METHYL	023564-05-8										
THIRAM	000137-26-8										
TIN	007440-31-5			3.7E+00				1.2E+03			3.1E+02
TOLUENE	000108-88-3			1.3E+00				2.9E+05			2.4E+04
TOLUENE-2,4-DIAMINE	000095-80-7	2.2E-04	2.2E-06			2.6E+04	2.6E+02		7.1E+03	7.1E+01	
TOLUENE-2,5-DIAMINE	000095-70-5										
TOLUENE-2,6-DIAMINE	000823-40-5										
TOLUIDINE, o- (METHYLANILINE, 2-)	000095-53-4	5.1E-03	5.1E-05			2.2E+04	2.2E+02		6.1E+03	6.1E+01	

Table 3.3a. (continued)

Chemical	CASRN	Ingestion of Vegetables (mg/L)				Ingestion of Beef (mg/L)				Ingestion of Milk (mg/L)			
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	HQ=1 (Adult)	HQ=1 (Child)
TOLUIDINE, p-	000106-49-0	7.1E-03	7.1E-05		9.7E+03	9.7E+01		2.7E+03	2.7E+01				
TOXAPHENE	008001-35-2	1.4E-03	1.4E-05		2.5E+00	2.5E-02		5.7E-01	5.7E-03				
TRALOMETHRIN	066841-25-6												
TRIALATE	002303-17-5												
TRIASULFURON	082097-50-5												
TRIBROMOBENZENE, 1,2,4-	000615-54-3												
TRIBROMOCHLOROMETHANE	000594-15-0												
TRIBROMODIPHENYL ETHER	049690-94-0												
TRIBUTYL TIN OXIDE	000056-35-9												
TRICHLORO-1,2,2-TRIFLUOROETHANE, 1,1,2-	000076-13-1			1.9E+02			1.2E+07					7.5E+06	9.7E+05
TRICHLORO-2-HYDROXYDIPHENYLETHER	003380-34-5												
TRICHLOROANILINE HCL, 2,4,6-	033663-50-2												
TRICHLOROANILINE, 2,4,6-	000634-93-5												
TRICHLOROBENZENE, 1,2,4-	000120-82-1			6.5E-02			3.9E+02					2.5E+02	3.2E+01
TRICHLOROETHANE, 1,1,1-	000071-55-6												
TRICHLOROETHANE, 1,1,2-	000079-00-5	2.5E-02	2.5E-04	2.5E-02	1.1E+04	1.1E+02	1.1E+04	3.0E+03	3.0E+01			6.8E+03	8.7E+02
TRICHLOROETHYLENE	000079-01-6	1.3E-01	1.3E-03		6.8E+04	6.8E+02		1.9E+04	1.9E+02				
TRICHLOROFLUOROMETHANE	000075-69-4			1.9E+00			6.9E+05					4.4E+05	5.7E+04
TRICHLOROPHENOL, 2,4,5-	000095-95-4			6.5E-01			1.5E+04					9.6E+03	1.2E+03
TRICHLOROPHENOL, 2,4,6-	000088-06-2	1.4E-01	1.4E-03		2.2E+03	2.2E+01		6.1E+02	6.1E+00				
TRICHLOROPHENOL, 2,4,5- TRICHLOROPHENOL, 2,4,6-	000093-72-1			5.2E-02			7.3E+02					4.7E+02	6.1E+01

Table 3.3a. (continued)

Chemical	CASRN	Ingestion of Vegetables (mg/L)			Ingestion of Beef (mg/L)			Ingestion of Milk (mg/L)			
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1 (Adult)	HQ=1 (Child)
TRICHLOROPHENOXYACETIC ACID, 2,4,5-	000093-76-5										
TRICHLOROPROPANE, 1,1,2-	000598-77-6										
TRICHLOROPROPANE, 1,2,3-	000096-18-4	2.2E-04	2.2E-06	3.9E-02	6.9E-01	6.9E-03	1.2E+02	1.9E-01	1.9E-03	8.1E+01	1.0E+01
TRICHLOROPROPENE, 1,2,3-	000096-19-5										
TRICHLOROTOLUENE, 2,3,6-	002077-46-5										
TRICHLOROTOLUENE, ALPHA 2,6-	002014-83-7										
TRIDIPHANE	058138-08-2										
TRIETHYL LEAD	005224-23-7										
TRIETHYLAMINE	000121-44-8										
TRIFLURALIN	001582-09-8	1.1E-01	1.1E-03	2.7E-02	9.8E+01	9.8E-01	2.4E+01	2.7E+01	2.7E-01	1.6E+01	2.0E+00
TRIMETHYL LEAD	007442-13-9										
TRIMETHYL PHOSPHATE	000512-56-1										
TRIMETHYLETHYL LEAD	001762-26-1										
TRINITROBENZENE, 1,3,5-	000099-35-4			2.3E-04			2.6E+03			1.7E+03	2.1E+02
TRINITROPHENYLMETHYLNITRAMINE	000479-45-8										
TRINITROTOLUENE, 2,4,6-	000118-96-7	4.4E-02	4.4E-04	2.9E-03	7.8E+04	7.8E+02	5.0E+03	2.1E+04	2.1E+02	3.2E+03	4.2E+02
TRIPROPYL LEAD	006618-03-7										
URANIUM (SOLUBLE SALTS)	NA			2.0E-02			1.7E+02			3.0E+01	3.8E+00
VANADIUM PENTOXIDE	001314-62-1										
VANADIUM SULFATE	036907-42-3										
VANADIUM, METALLIC	007440-62-2			4.6E-02			5.9E+01			2.8E+01	3.6E+00

Table 3.3a. (continued)

Chemical	CASRN	Ingestion of Vegetables (mg/L)			Ingestion of Beef (mg/L)			Ingestion of Milk (mg/L)			
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1 (Adult)	HQ=1 (Child)
VANADYL SULFATE	027774-13-6										
VERNOLATE	001929-77-7										
VINCLOZOLIN	050471-44-8										
VINYL ACETATE	000108-05-4			3.3E+00			2.6E+08			1.7E+08	2.2E+07
VINYL BROMIDE	000593-60-2										
VINYL CHLORIDE	000075-01-4	6.2E-04	6.2E-06		4.0E+03	4.0E+01		1.1E+03	1.1E+01		
WARFARIN	000081-81-2			1.8E-03			7.0E+02			4.5E+02	5.8E+01
WHITE PHOSPHORUS	007723-14-0										
XYLENE, MIXTURE	001330-20-7			1.3E+01			8.5E+05			5.5E+05	7.1E+04
XYLENE, m-	000108-38-3			1.3E+01			8.5E+05			5.5E+05	7.1E+04
XYLENE, o-	000095-47-6			1.3E+01			1.7E+06			1.1E+06	1.4E+05
XYLENE, p-	000106-42-3										
ZINC (METALLIC)	007440-56-6			1.8E+00			5.8E+01			1.2E+02	1.5E+01
ZINC CYANIDE	000557-21-1			3.2E-01			9.7E+00			2.0E+01	2.6E+00
ZINC PHOSPHIDE	001314-84-7			1.9E-03			5.8E-02			1.2E-01	1.5E-02
ZINEB	012122-67-7										

Notes:

- (1) Same oral slope factor as used for polychlorinated biphenyls.
- (2) PRG calculated considering *New Interim Region IV Guidance* from EPA (received February 11, 1992). The slope factors for chemicals so marked indicate that a toxicity equivalency factor (TEF) method was used for carcinogenic PAHs based on each compound's relative potency to the potency of benzo(a)pyrene. The following TEFs were used to convert each PAH slope factor to an equivalent slope factor of benzo(a)pyrene [that has a new cancer slope factor of 7.3 (mg/kg/day)⁻¹ identified by EPA's CRAVE workgroup]: (1) benzo(a)pyrene; TEF = 1.0 (2) benzo(a)anthracene; TEF = 0.1, (3) benzo(b)fluoranthene; TEF = 0.1, (4) benzo(k)fluoranthene; TEF = 0.01, (5) chrysene; TEF = 0.001, (6) dibenz(a,h)anthracene; TEF = 1.0, and (7) indeno(1,2,3-c,d)pyrene; TEF = 0.1. TEFs were used for only the oral slope factor in the ingestion pathway.
- (3) The slope factor for trichloroethylene has been withdrawn from IRIS and HEAST; however, since this is a common contaminant, the old slope factor has been used to calculate the PRG.

Table 3.3b. Agricultural land use scenario for contamination of water (radionuclides)

Chemical [†]	CASRN	Ingestion of Vegetables (pCi/L)		Ingestion of Beef (pCi/L)		Ingestion of Milk (pCi/L)	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Ac-225	014265-85-1	1.4E-02	1.4E-04	7.2E+05	7.2E+03	1.6E+05	1.6E+03
Ac-227	014952-40-0	2.4E-03	2.4E-05	2.9E+05	2.9E+03	6.5E+04	6.5E+02
Ac-227+D	014952-40-0	1.4E-03	1.4E-05	8.8E+01	8.8E-01	2.1E+02	2.1E+00
Ac-228	014331-83-0	2.8E+01	2.8E-01	6.3E+07	6.3E+05	1.4E+07	1.4E+05
Ag-105	014928-14-4	6.8E-01	6.8E-03	5.2E+05	5.2E+03	5.6E+06	5.6E+04
Ag-108	014391-65-2	1.0E+06	1.0E+04	1.2E+08	1.2E+06	1.3E+09	1.3E+07
Ag-108m	014391-65-2	1.4E-01	1.4E-03	1.4E+05	1.4E+03	1.5E+06	1.5E+04
Ag-108m+D	014391-65-2	1.4E-01	1.4E-03	1.4E+05	1.4E+03	1.5E+06	1.5E+04
Ag-109m	014378-38-2	9.2E+07	9.2E+05	3.1E+09	3.1E+07	3.4E+10	3.4E+08
Ag-110	014391-76-5	1.6E+07	1.6E+05	3.5E+08	3.5E+06	3.8E+09	3.8E+07
Ag-110m	014391-76-5	1.1E-01	1.1E-03	1.0E+05	1.0E+03	1.1E+06	1.1E+04
Ag-111	157690-04-0	3.4E-01	3.4E-03	1.2E+05	1.2E+03	1.3E+06	1.3E+04
Am-241	014596-10-2	2.6E-03	2.6E-05	1.9E+05	1.9E+03	9.3E+05	9.3E+03
Am-242	013981-54-9	1.2E+01	1.2E-01	4.3E+07	4.3E+05	2.1E+08	2.1E+06
Am-242m	013981-54-9	2.9E-03	2.9E-05	2.2E+05	2.2E+03	1.0E+06	1.0E+04
Am-243	014993-75-0	2.6E-03	2.6E-05	1.9E+05	1.9E+03	9.4E+05	9.4E+03
Am-243+D	014993-75-0	2.6E-03	2.6E-05	7.4E+03	7.4E+01	2.1E+05	2.1E+03
Ar-41	014163-25-8						

Table 3.3b. (continued)

Chemical [†]	CASRN	Ingestion of Vegetables (pCi/L)		Ingestion of Beef (pCi/L)		Ingestion of Milk (pCi/L)	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
At-217	017239-90-6	3.4E+12	3.4E+10	2.8E+10	2.8E+08	5.1E+09	5.1E+07
Au-196	014914-16-0	2.0E+00	2.0E-02	3.9E+05	3.9E+03	3.5E+07	3.5E+05
Au-198	010043-49-0	9.5E-01	9.5E-03	9.6E+04	9.6E+02	8.7E+06	8.7E+04
Ba-131	014914-75-1	1.0E+00	1.0E-02	6.5E+06	6.5E+04	5.6E+05	5.6E+03
Ba-133	013981-41-4	3.2E-01	3.2E-03	4.1E+06	4.1E+04	3.5E+05	3.5E+03
Ba-133m	013981-41-4	2.8E+00	2.8E-02	4.0E+06	4.0E+04	3.5E+05	3.5E+03
Ba-137m	013981-97-0	2.6E+06	2.6E+04	4.5E+09	4.5E+07	3.9E+08	3.9E+06
Ba-139	014378-25-7	6.5E+02	6.5E+00	3.6E+07	3.6E+05	3.1E+06	3.1E+04
Ba-140	014798-08-4	1.4E-01	1.4E-03	9.4E+05	9.4E+03	8.1E+04	8.1E+02
Be-7	013966-02-4	1.2E+01	1.2E-01	2.9E+07	2.9E+05	5.9E+09	5.9E+07
Bi-206	015776-19-9	3.7E-01	3.7E-03	8.9E+05	8.9E+03	1.3E+05	1.3E+03
Bi-207	013982-38-2	1.7E-01	1.7E-03	1.3E+06	1.3E+04	1.8E+05	1.8E+03
Bi-210	014331-79-4	4.2E-01	4.2E-03	8.7E+05	8.7E+03	1.3E+05	1.3E+03
Bi-211	015229-37-5	4.2E+05	4.2E+03	3.5E+08	3.5E+06	5.0E+07	5.0E+05
Bi-212	014913-49-6	4.4E+02	4.4E+00	1.0E+07	1.0E+05	1.5E+06	1.5E+04
Bi-213	015776-20-2	8.2E+02	8.2E+00	1.4E+07	1.4E+05	2.1E+06	2.1E+04
Bi-214	014733-03-0	4.2E+03	4.2E+01	3.3E+07	3.3E+05	4.7E+06	4.7E+04
Br-82	014686-69-2						

Table 3.3b. (continued)

Chemical ^t	CASRN	Ingestion of Vegetables (pCi/L)		Ingestion of Beef (pCi/L)		Ingestion of Milk (pCi/L)	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
C-11	014333-33-6						
C-14	014762-75-5						
C-15	015929-23-4						
Ca-45	013966-05-7	4.6E-01	4.6E-03	6.3E+05	6.3E+03	7.6E+04	7.6E+02
Ca-47	001439-99-2	5.0E-01	5.0E-03	1.9E+05	1.9E+03	2.3E+04	2.3E+02
Cd-109	014109-32-1	1.1E-01	1.1E-03	7.9E+05	7.9E+03	5.7E+04	5.7E+02
Cd-115	014336-68-6	8.1E-01	8.1E-03	8.7E+05	8.7E+03	6.3E+04	6.3E+02
Cd-115m	014336-68-6	7.7E-02	7.7E-04	4.5E+05	4.5E+03	3.2E+04	3.2E+02
Ce-141	013967-74-3	3.0E-01	3.0E-03	3.2E+07	3.2E+05	3.9E+06	3.9E+04
Ce-143	014119-19-8	1.5E+00	1.5E-02	2.1E+07	2.1E+05	2.6E+06	2.6E+04
Ce-144	014762-78-8	3.0E-02	3.0E-04	4.3E+06	4.3E+04	5.2E+05	5.2E+03
Ce-144+D	014762-78-8	3.0E-02	3.0E-04	4.3E+06	4.3E+04	5.2E+05	5.2E+03
Cl-36	013981-43-6	8.8E-02	8.8E-04	6.7E+04	6.7E+02	1.2E+04	1.2E+02
Cl-38	014158-34-0	2.1E+03	2.1E+01	7.2E+05	7.2E+03	1.3E+05	1.3E+03
Cm-242	015510-73-3	2.4E-02	2.4E-04	1.7E+06	1.7E+04	8.0E+06	8.0E+04
Cm-243	015757-87-6	3.4E-03	3.4E-05	2.5E+05	2.5E+03	1.2E+06	1.2E+04
Cm-243+D	015757-87-6	3.4E-03	3.4E-05	2.5E+05	2.5E+03	1.2E+06	1.2E+04
Cm-244	013981-15-2	4.1E-03	4.1E-05	3.0E+05	3.0E+03	1.5E+06	1.5E+04

Table 3.3b. (continued)

Chemical ⁱ	CASRN	Ingestion of Vegetables (pCi/L)		Ingestion of Beef (pCi/L)		Ingestion of Milk (pCi/L)	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Cm-245	015621-76-8	2.6E-03	2.6E-05	1.9E+05	1.9E+03	9.1E+05	9.1E+03
Cm-246	015757-90-1	2.6E-03	2.6E-05	1.9E+05	1.9E+03	9.2E+05	9.2E+03
Cm-247	015758-32-4	2.8E-03	2.8E-05	2.1E+05	2.1E+03	9.9E+05	9.9E+03
Cm-248	015758-33-5	6.5E-04	6.5E-06	4.8E+04	4.8E+02	2.3E+05	2.3E+03
Co-57	013981-50-5	9.2E-01	9.2E-03	2.6E+07	2.6E+05	6.8E+06	6.8E+04
Co-58	013981-38-9	3.6E-01	3.6E-03	9.0E+06	9.0E+04	2.3E+06	2.3E+04
Co-58m	013981-38-9	3.2E+02	3.2E+00	2.7E+08	2.7E+06	6.9E+07	6.9E+05
Co-60	010198-40-0	4.6E-02	4.6E-04	1.3E+06	1.3E+04	3.5E+05	3.5E+03
Cr-51	014392-02-0	9.0E+00	9.0E-02	2.0E+06	2.0E+04	3.3E+08	3.3E+06
Cs-131	014914-76-2	1.1E+01	1.1E-01	2.8E+05	2.8E+03	3.2E+05	3.2E+03
Cs-134	013967-70-9	1.8E-02	1.8E-04	1.1E+03	1.1E+01	1.2E+03	1.2E+01
Cs-134m	013967-70-9	2.1E+03	2.1E+01	1.1E+06	1.1E+04	1.3E+06	1.3E+04
Cs-135	015726-30-4	1.9E-01	1.9E-03	1.1E+04	1.1E+02	1.3E+04	1.3E+02
Cs-136	014234-29-8	2.2E-01	2.2E-03	6.4E+03	6.4E+01	7.5E+03	7.5E+01
Cs-137	010045-97-3	2.7E-02	2.7E-04	1.6E+03	1.6E+01	1.8E+03	1.8E+01
Cs-137+D	010045-97-3	2.7E-02	2.7E-04	1.6E+03	1.6E+01	1.7E+03	1.7E+01
Cs-138	015758-29-9	2.9E+03	2.9E+01	2.8E+05	2.8E+03	3.3E+05	3.3E+03
Cu-64	013981-25-4	4.3E+01	4.3E-01	5.4E+05	5.4E+03	5.8E+05	5.8E+03

Table 3.3b. (continued)

Chemical ^t	CASRN	Ingestion of Vegetables (pCi/L)		Ingestion of Beef (pCi/L)		Ingestion of Milk (pCi/L)	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Dy-165	013967-64-1						
Dy-166	015840-01-4						
Er-169	015840-13-8						
Er-171	014391-45-8						
Eu-152	014683-23-9	1.5E-01	1.5E-03	2.2E+05	2.2E+03	1.3E+06	1.3E+04
Eu-154	015585-10-1	9.2E-02	9.2E-04	1.4E+05	1.4E+03	8.2E+05	8.2E+03
Eu-155	014391-16-3	5.2E-01	5.2E-03	7.7E+05	7.7E+03	4.6E+06	4.6E+04
Eu-156	014280-35-4	1.4E-01	1.4E-03	1.2E+05	1.2E+03	7.0E+05	7.0E+03
F-18	013981-56-1						
Fe-55	014681-59-5	2.5E+00	2.5E-02	3.6E+05	3.6E+03	4.4E+07	4.4E+05
Fe-59	014596-12-4	1.9E-01	1.9E-03	2.2E+04	2.2E+02	2.6E+06	2.6E+04
Fr-221	015756-41-9	2.4E+04	2.4E+02	7.0E+06	7.0E+04	1.6E+05	1.6E+03
Fr-223	015756-98-6	1.7E+04	1.7E+02	2.3E+06	2.3E+04	5.1E+04	5.1E+02
Ga-67	014119-09-6	5.2E+00	5.2E-02	1.0E+07	1.0E+05	5.5E+07	5.5E+05
Ga-72	013982-22-4	4.2E+00	4.2E-02	1.8E+06	1.8E+04	9.6E+06	9.6E+04
Gd-153	014276-65-4	6.8E-01	6.8E-03	9.6E+05	9.6E+03	5.8E+06	5.8E+04
Gd-159	014041-42-0	6.0E+00	6.0E-02	4.9E+05	4.9E+03	2.9E+06	2.9E+04
Ge-71	014374-81-3						

Table 3.3b. (continued)

Chemical [†]	CASRN	Ingestion of Vegetables (pCi/L)		Ingestion of Beef (pCi/L)		Ingestion of Milk (pCi/L)	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
H-3	010028-17-8					4.3E+05	4.3E+03
Hg-197	013981-51-6	4.3E+00	4.3E-02	2.2E+05	2.2E+03	8.3E+05	8.3E+03
Hg-203	013982-78-0	4.1E-01	4.1E-03	9.6E+04	9.6E+02	3.7E+05	3.7E+03
Ho-166	013967-65-2						
I-122	018287-75-7	2.1E+05	2.1E+03	3.1E+06	3.1E+04	2.1E+06	2.1E+04
I-123	015715-08-9	4.0E+01	4.0E-01	1.2E+05	1.2E+03	8.5E+04	8.5E+02
I-125	014158-31-7	4.0E-02	4.0E-04	2.6E+03	2.6E+01	1.8E+03	1.8E+01
I-126	014158-32-8	3.5E-02	3.5E-04	1.4E+03	1.4E+01	9.5E+02	9.5E+00
I-129	015046-84-1	4.6E-03	4.6E-05	3.6E+02	3.6E+00	2.5E+02	2.5E+00
I-130	014914-02-4	4.7E+00	4.7E-02	1.4E+04	1.4E+02	9.5E+03	9.5E+01
I-131	010043-66-0	6.2E-02	6.2E-04	1.8E+03	1.8E+01	1.3E+03	1.3E+01
I-132	014683-16-0	1.8E+02	1.8E+00	1.0E+05	1.0E+03	6.9E+04	6.9E+02
I-133	014834-67-4	1.3E+00	1.3E-02	6.3E+03	6.3E+01	4.3E+03	4.3E+01
I-134	014914-27-3	1.4E+03	1.4E+01	2.9E+05	2.9E+03	2.0E+05	2.0E+03
I-135	014834-68-5	1.9E+01	1.9E-01	2.9E+04	2.9E+02	2.0E+04	2.0E+02
In-113m	014885-78-0	2.0E+03	2.0E+01	7.6E+06	7.6E+04	2.8E+07	2.8E+05
In-114	013981-55-0	3.0E+06	3.0E+04	1.4E+08	1.4E+06	5.1E+08	5.1E+06
In-114m	013981-55-0	5.2E-02	5.2E-04	3.1E+04	3.1E+02	1.1E+05	1.1E+03

Table 3.3b. (continued)

Chemical ^t	CASRN	Ingestion of Vegetables (pCi/L)		Ingestion of Beef (pCi/L)		Ingestion of Milk (pCi/L)	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
In-115	014191-71-0	2.4E-02	2.4E-04	1.8E+04	1.8E+02	6.6E+04	6.6E+02
In-115m	014191-71-0	1.9E+02	1.9E+00	1.9E+06	1.9E+04	6.7E+06	6.7E+04
Ir-190	014981-91-0	3.6E-01	3.6E-03	2.6E+05	2.6E+03	4.6E+07	4.6E+05
Ir-194	014158-35-1	2.2E+00	2.2E-02	1.8E+05	1.8E+03	3.3E+07	3.3E+05
K-40	013966-00-2	6.5E-02	6.5E-04	1.1E+04	1.1E+02	5.1E+03	5.1E+01
K-42	014378-21-3	1.8E+01	1.8E-01	1.1E+05	1.1E+03	4.9E+04	4.9E+02
Kr-83m	013965-98-5						
Kr-85	013983-27-2						
Kr-85m	013983-27-2						
Kr-87	014809-68-8						
Kr-88	014995-61-0						
Kr-89	016316-03-3						
Kr-90	015741-13-6						
La-140	013981-28-7						
Lu-177	014265-75-9						
Mn-52	014092-99-0	4.7E-01	4.7E-03	8.5E+05	8.5E+03	2.5E+06	2.5E+04
Mn-54	013966-31-9	4.5E-01	4.5E-03	2.6E+06	2.6E+04	7.8E+06	7.8E+04
Mn-56	014681-52-8	1.2E+02	1.2E+00	5.9E+06	5.9E+04	1.8E+07	1.8E+05

Table 3.3b. (continued)

Chemical ¹	CASRN	Ingestion of Vegetables (pCi/L)		Ingestion of Beef (pCi/L)		Ingestion of Milk (pCi/L)	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Mo-99	014119-15-4	2.2E+00	2.2E-02	1.1E+06	1.1E+04	1.2E+05	1.2E+03
Na-22	013966-32-0	1.1E-01	1.1E-03	4.0E+03	4.0E+01	3.6E+03	3.6E+01
Na-24	013982-04-2	1.4E+01	1.4E-01	2.3E+04	2.3E+02	2.1E+04	2.1E+02
Nb-93m	007440-03-1	1.3E+00	1.3E-02	1.3E+10	1.3E+08	1.7E+09	1.7E+07
Nb-94	014681-63-1	1.2E-01	1.2E-03	1.2E+09	1.2E+07	1.6E+08	1.6E+06
Nb-95	013967-76-5	5.1E-01	5.1E-03	3.8E+09	3.8E+07	5.0E+08	5.0E+06
Nb-95m	013967-76-5	1.3E+00	1.3E-02	2.8E+09	2.8E+07	3.7E+08	3.7E+06
Nb-97	018496-04-3	1.3E+03	1.3E+01	4.8E+10	4.8E+08	6.4E+09	6.4E+07
Nb-97m	018496-04-3	5.0E+06	5.0E+04	2.6E+12	2.6E+10	3.4E+11	3.4E+09
Nd-147	014269-74-0						
Nd-149	015749-81-2						
Ni-59	014336-70-0	4.6E+00	4.6E-02	2.6E+06	2.6E+04	1.6E+05	1.6E+03
Ni-63	013981-37-8	1.5E+00	1.5E-02	8.9E+05	8.9E+03	5.2E+04	5.2E+02
Ni-65	014833-49-9	1.9E+02	1.9E+00	8.7E+05	8.7E+03	5.1E+04	5.1E+02
Np-236	015700-36-4	9.1E-01	9.1E-03	2.7E+06	2.7E+04	9.9E+07	9.9E+05
Np-237	013994-20-2	2.9E-03	2.9E-05	8.6E+03	8.6E+01	3.1E+05	3.1E+03
Np-237+D	013994-20-2	2.8E-03	2.8E-05	8.4E+03	8.4E+01	1.5E+05	1.5E+03
Np-238	015766-25-3	1.4E+00	1.4E-02	5.6E+05	5.6E+03	2.0E+07	2.0E+05

Table 3.3b. (continued)

Chemical [†]	CASRN	Ingestion of Vegetables (pCi/L)		Ingestion of Beef (pCi/L)		Ingestion of Milk (pCi/L)	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Np-239	013968-59-7	1.3E+00	1.3E-02	5.9E+05	5.9E+03	2.1E+07	2.1E+05
Np-240	015690-84-3	1.4E+03	1.4E+01	1.4E+07	1.4E+05	5.2E+08	5.2E+06
Np-240m	015690-84-3	9.2E+04	9.2E+02	1.0E+08	1.0E+06	3.8E+09	3.8E+07
Os-185	015766-50-4						
Os-191	014119-24-5						
Os-191m	014119-24-5						
Os-193	016057-77-5						
P-32	014596-37-3	2.6E-01	2.6E-03	8.3E+03	8.3E+01	4.7E+03	4.7E+01
P-33	015749-66-3	1.6E+00	1.6E-02	6.5E+04	6.5E+02	3.7E+04	3.7E+02
Pa-231	014331-85-2	5.8E-03	5.8E-05	1.7E+06	1.7E+04	6.2E+05	6.2E+03
Pa-233	013981-14-1	2.7E-01	2.7E-03	5.4E+07	5.4E+05	2.0E+07	2.0E+05
Pa-234	015100-28-4	2.0E+01	2.0E-01	1.2E+08	1.2E+06	4.3E+07	4.3E+05
Pa-234m	015100-28-4	2.9E+06	2.9E+04	5.3E+10	5.3E+08	1.9E+10	1.9E+08
Pb-203	014687-25-3	5.9E+00	5.9E-02	6.2E+06	6.2E+04	1.5E+06	1.5E+04
Pb-209	014119-30-3	4.1E+02	4.1E+00	3.0E+07	3.0E+05	7.3E+06	7.3E+04
Pb-210	014255-04-0	1.3E-03	1.3E-05	9.4E+03	9.4E+01	2.3E+03	2.3E+01
Pb-210+D	014255-04-0	8.5E-04	8.5E-06	4.3E+02	4.3E+00	4.0E+02	4.0E+00
Pb-211	015816-77-0	1.3E+03	1.3E+01	1.9E+07	1.9E+05	4.5E+06	4.5E+04

Table 3.3b. (continued)

Chemical [†]	CASRN	Ingestion of Vegetables (pCi/L)		Ingestion of Beef (pCi/L)		Ingestion of Milk (pCi/L)	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Pb-212	015092-94-1	1.5E+00	1.5E-02	3.5E+05	3.5E+03	8.5E+04	8.5E+02
Pb-214	015067-28-4	2.1E+03	2.1E+01	2.2E+07	2.2E+05	5.2E+06	5.2E+04
Pd-100	015690-69-4	1.1E+00	1.1E-02	1.7E+05	1.7E+03	1.2E+04	1.2E+02
Pd-101	015749-54-9	8.8E+01	8.8E-01	1.7E+06	1.7E+04	1.2E+05	1.2E+03
Pd-103	014967-68-1	1.4E+00	1.4E-02	6.0E+05	6.0E+03	4.4E+04	4.4E+02
Pd-107	017637-99-9	4.1E+00	4.1E-02	3.0E+06	3.0E+04	2.2E+05	2.2E+03
Pd-109	014981-64-7	6.3E+00	6.3E-02	1.9E+05	1.9E+03	1.4E+04	1.4E+02
Pm-147	014380-75-7						
Pm-148	014683-19-3						
Pm-148m	014683-19-3						
Pm-149	015765-31-8						
Po-210	013981-52-7	2.9E-03	2.9E-05	1.6E+03	1.6E+01	4.1E+03	4.1E+01
Po-212	015389-34-1	7.3E+22	7.3E+20	1.1E+16	1.1E+14	3.0E+16	3.0E+14
Po-213	015756-57-7	3.5E+20	3.5E+18	7.6E+14	7.6E+12	2.0E+15	2.0E+13
Po-214	015735-67-8	2.8E+17	2.8E+15	2.4E+13	2.4E+11	6.4E+13	6.4E+11
Po-215	015706-52-2	1.1E+15	1.1E+13	1.0E+12	1.0E+10	2.7E+12	2.7E+10
Po-216	015756-58-8	7.7E+10	7.7E+08	5.8E+09	5.8E+07	1.5E+10	1.5E+08
Po-218	015422-24-9	1.1E+05	1.1E+03	1.0E+07	1.0E+05	2.7E+07	2.7E+05

Table 3.3b. (continued)

Chemical [†]	CASRN	Ingestion of Vegetables (pCi/L)		Ingestion of Beef (pCi/L)		Ingestion of Milk (pCi/L)	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Pr-142	014191-64-1						
Pr-143	014981-79-4						
Pr-144	014119-05-2						
Pr-144m	014119-05-2						
Pt-191	015706-36-2						
Pt-193	015735-70-3						
Pt-193m	015735-70-3						
Pt-197	015735-74-7						
Pt-197m	015735-74-7						
Pu-236	015411-92-4	1.1E-02	1.1E-04	1.8E+06	1.8E+04	5.4E+06	5.4E+04
Pu-238	013981-16-3	2.9E-03	2.9E-05	4.8E+05	4.8E+03	1.4E+06	1.4E+04
Pu-239	015117-48-3	2.7E-03	2.7E-05	4.5E+05	4.5E+03	1.3E+06	1.3E+04
Pu-240	014119-33-6	2.7E-03	2.7E-05	4.5E+05	4.5E+03	1.3E+06	1.3E+04
Pu-241	014119-32-5	1.7E-01	1.7E-03	2.7E+07	2.7E+05	8.0E+07	8.0E+05
Pu-241+D	014119-32-5	2.6E-03	2.6E-05	4.2E+05	4.2E+03	1.3E+06	1.3E+04
Pu-242	013982-10-0	2.9E-03	2.9E-05	4.7E+05	4.7E+03	1.4E+06	1.4E+04
Pu-243	015706-37-3	1.5E+02	1.5E+00	3.8E+08	3.8E+06	1.1E+09	1.1E+07
Pu-244	014119-34-7	2.7E-03	2.7E-05	4.5E+05	4.5E+03	1.3E+06	1.3E+04

Table 3.3b. (continued)

Chemical [†]	CASRN	Ingestion of Vegetables (pCi/L)		Ingestion of Beef (pCi/L)		Ingestion of Milk (pCi/L)	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Pu-244+D	014119-34-7	2.7E-03	2.7E-05	4.4E+05	4.4E+03	1.3E+06	1.3E+04
Ra-223	015623-45-7	7.8E-03	7.8E-05	1.2E+04	1.2E+02	1.5E+03	1.5E+01
Ra-224	013233-32-4	2.7E-02	2.7E-04	1.9E+04	1.9E+02	2.4E+03	2.4E+01
Ra-225	013981-53-8	1.0E-02	1.0E-04	1.8E+04	1.8E+02	2.2E+03	2.2E+01
Ra-226	013982-63-3	2.9E-03	2.9E-05	9.6E+03	9.6E+01	1.2E+03	1.2E+01
Ra-226+D	013982-63-3	2.9E-03	2.9E-05	7.2E+02	7.2E+00	5.1E+02	5.1E+00
Ra-228	015262-20-1	3.5E-03	3.5E-05	1.1E+04	1.1E+02	1.4E+03	1.4E+01
Ra-228+D	015262-20-1	3.5E-03	3.5E-05	1.1E+04	1.1E+02	1.4E+03	1.4E+01
Rb-82	014391-63-0			2.4E+07	2.4E+05	3.6E+06	3.6E+04
Rb-86	014932-53-7			3.6E+04	3.6E+02	5.4E+03	5.4E+01
Rb-87	013982-13-3			6.9E+04	6.9E+02	1.0E+04	1.0E+02
Rb-88	014928-36-0			1.7E+06	1.7E+04	2.6E+05	2.6E+03
Rb-89	014191-65-2			2.9E+06	2.9E+04	4.4E+05	4.4E+03
Rh-103m	007440-16-6						
Rh-105	014913-89-4						
Rh-105m	014913-89-4						
Rh-106	014234-34-5						
Rn-219	014835-02-0						

Table 3.3b. (continued)

Chemical ^t	CASRN	Ingestion of Vegetables (pCi/L)		Ingestion of Beef (pCi/L)		Ingestion of Milk (pCi/L)	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Rn-220	022481-48-7						
Rn-222+D	014859-67-7						
Ru-103	013968-53-1	3.4E-01	3.4E-03	1.5E+04	1.5E+02	4.2E+07	4.2E+05
Ru-105	014331-95-4	5.4E+01	5.4E-01	4.3E+04	4.3E+02	1.2E+08	1.2E+06
Ru-106	013967-48-1	2.6E-02	2.6E-04	1.4E+03	1.4E+01	4.0E+06	4.0E+04
Ru-106+D	013967-48-1	2.6E-02	2.6E-04	1.4E+03	1.4E+01	4.0E+06	4.0E+04
Ru-97	015758-35-7	8.1E+00	8.1E-02	8.5E+04	8.5E+02	2.4E+08	2.4E+06
S-35	015117-53-0	2.3E+00	2.3E-02	3.1E+04	3.1E+02	6.9E+04	6.9E+02
Sb-122	014374-79-9	5.7E-01	5.7E-03	7.2E+06	7.2E+04	2.1E+06	2.1E+04
Sb-124	014683-10-4	9.6E-02	9.6E-04	5.9E+06	5.9E+04	1.7E+06	1.7E+04
Sb-125	014234-35-6	2.9E-01	2.9E-03	2.1E+07	2.1E+05	6.2E+06	6.2E+04
Sb-125+D	014234-35-6	2.5E-01	2.5E-03	1.8E+07	1.8E+05	5.2E+06	5.2E+04
Sb-126	015756-32-8	1.8E-01	1.8E-03	6.5E+06	6.5E+04	1.9E+06	1.9E+04
Sb-126m	015756-32-8	1.2E+04	1.2E+02	8.7E+08	8.7E+06	2.5E+08	2.5E+06
Sb-127	013968-50-8	4.5E-01	4.5E-03	7.5E+06	7.5E+04	2.2E+06	2.2E+04
Sb-129	014331-88-5	3.4E+01	3.4E-01	3.4E+07	3.4E+05	9.9E+06	9.9E+04
Sc-46	013967-63-0	1.7E-01	1.7E-03	2.2E+05	2.2E+03	1.3E+06	1.3E+04
Sc-47	014391-96-9	1.4E+00	1.4E-02	4.3E+05	4.3E+03	2.6E+06	2.6E+04

Table 3.3b. (continued)

Chemical ^t	CASRN	Ingestion of Vegetables (pCi/L)		Ingestion of Beef (pCi/L)		Ingestion of Milk (pCi/L)	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Sc-48	014391-86-7	1.1E+00	1.1E-02	1.9E+05	1.9E+03	1.2E+06	1.2E+04
Se-75	014265-71-5	1.4E-01	1.4E-03	3.9E+03	3.9E+01	7.0E+03	7.0E+01
Si-31	014276-49-4						
Sm-147	014392-33-7	3.4E-02	3.4E-04	2.0E+04	2.0E+02	9.1E+05	9.1E+03
Sm-151	015715-94-3	1.9E+00	1.9E-02	1.1E+06	1.1E+04	5.0E+07	5.0E+05
Sm-153	015766-00-4	1.7E+00	1.7E-02	1.3E+05	1.3E+03	5.7E+06	5.7E+04
Sn-113	013966-06-8	2.5E-01	2.5E-03	6.8E+04	6.8E+02	1.2E+05	1.2E+03
Sn-121	014683-06-8	8.9E+00	8.9E-02	2.1E+05	2.1E+03	3.8E+05	3.8E+03
Sn-121m	014683-06-8	4.1E-01	4.1E-03	1.3E+05	1.3E+03	2.3E+05	2.3E+03
Sn-125	014683-08-0	1.2E-01	1.2E-03	1.5E+04	1.5E+02	2.7E+04	2.7E+02
Sn-126	015832-50-5	3.8E-02	3.8E-04	1.2E+04	1.2E+02	2.2E+04	2.2E+02
Sr-82	014809-50-8	5.0E-02	5.0E-04	1.2E+04	1.2E+02	6.4E+03	6.4E+01
Sr-85	013967-73-2	7.3E-01	7.3E-03	2.3E+05	2.3E+03	1.2E+05	1.2E+03
Sr-85m	013967-73-2	1.4E+04	1.4E+02	1.8E+07	1.8E+05	9.1E+06	9.1E+04
Sr-89	014158-27-1	1.0E-01	1.0E-03	3.1E+04	3.1E+02	1.6E+04	1.6E+02
Sr-90	010098-97-2	2.0E-02	2.0E-04	7.8E+03	7.8E+01	4.0E+03	4.0E+01
Sr-90+D	010098-97-2	1.5E-02	1.5E-04	5.0E+03	5.0E+01	2.9E+03	2.9E+01
Sr-91	014331-91-0	1.0E+01	1.0E-01	1.1E+05	1.1E+03	5.8E+04	5.8E+02

Table 3.3b. (continued)

Chemical ^t	CASRN	Ingestion of Vegetables (pCi/L)		Ingestion of Beef (pCi/L)		Ingestion of Milk (pCi/L)	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Sr-92	014928-29-1	5.0E+01	5.0E-01	1.6E+05	1.6E+03	8.1E+04	8.1E+02
Ta-182	013982-00-8						
Tb-158	015759-55-4						
Tb-160	013981-29-8						
Tc-95	014809-56-4	2.1E+02	2.1E+00	3.7E+08	3.7E+06	4.8E+07	4.8E+05
Tc-95m	014809-56-4	8.2E-01	8.2E-03	2.0E+07	2.0E+05	2.6E+06	2.6E+04
Tc-96	014808-44-7	1.5E+00	1.5E-02	1.1E+07	1.1E+05	1.4E+06	1.4E+04
Tc-96m	014808-44-7	1.2E+04	1.2E+02	9.7E+08	9.7E+06	1.3E+08	1.3E+06
Tc-97	015759-35-0	2.8E+00	2.8E-02	1.6E+08	1.6E+06	2.1E+07	2.1E+05
Tc-97m	015759-35-0	8.0E-01	8.0E-03	2.1E+07	2.1E+05	2.7E+06	2.7E+04
Tc-99	014133-76-7	3.1E-01	3.1E-03	1.8E+07	1.8E+05	2.3E+06	2.3E+04
Tc-99m	014133-76-7	8.3E+02	8.3E+00	4.6E+08	4.6E+06	5.9E+07	5.9E+05
Te-125m	014390-73-9			1.4E+05	1.4E+03		
Te-127	013981-49-2			4.2E+05	4.2E+03		
Te-127m	013981-49-2			6.0E+04	6.0E+02		
Te-129	014269-71-7			2.5E+06	2.5E+04		
Te-129m	014269-71-7			3.1E+04	3.1E+02		
Te-131	014683-12-6			9.3E+05	9.3E+03		

Table 3.3b. (continued)

Chemical [†]	CASRN	Ingestion of Vegetables (pCi/L)		Ingestion of Beef (pCi/L)		Ingestion of Milk (pCi/L)	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Te-131m	014683-12-6			4.1E+04	4.1E+02		
Te-132	014234-28-7			3.0E+04	3.0E+02		
Th-227	015623-47-9	3.5E-02	3.5E-04	6.3E+05	6.3E+03	2.3E+06	2.3E+04
Th-228	014274-82-9	1.4E-02	1.4E-04	4.0E+05	4.0E+03	1.5E+06	1.5E+04
Th-228+D	014274-82-9	3.8E-03	3.8E-05	2.1E+02	2.1E+00	3.9E+02	3.9E+00
Th-229	015594-54-4	1.5E-02	1.5E-04	4.5E+05	4.5E+03	1.6E+06	1.6E+04
Th-229+D	015594-54-4	2.0E-03	2.0E-05	1.2E+02	1.2E+00	3.8E+01	3.8E-01
Th-230	014269-63-7	2.3E-02	2.3E-04	6.8E+05	6.8E+03	2.4E+06	2.4E+04
Th-231	014932-40-2	6.4E+00	6.4E-02	1.4E+07	1.4E+05	5.1E+07	5.1E+05
Th-232	007440-29-1	2.6E-02	2.6E-04	7.7E+05	7.7E+03	2.8E+06	2.8E+04
Th-234	015065-10-8	6.7E-02	6.7E-04	1.3E+06	1.3E+04	4.8E+06	4.8E+04
Tl-202	015720-57-7	1.7E+00	1.7E-02	6.3E+04	6.3E+02	2.3E+05	2.3E+03
Tl-204	013968-51-9	4.4E-01	4.4E-03	3.2E+04	3.2E+02	1.2E+05	1.2E+03
Tl-208	014913-50-9	3.1E+05	3.1E+03	3.6E+06	3.6E+04	1.3E+07	1.3E+05
Tl-209	015690-73-0	5.3E+05	5.3E+03	4.5E+06	4.5E+04	1.6E+07	1.6E+05
Tm-170	013981-30-1						
Tm-171	014333-45-0						
U-232	014158-29-3	1.1E-02	1.1E-04	9.2E+04	9.2E+02	1.4E+04	1.4E+02

Table 3.3b. (continued)

Chemical ^r	CASRN	Ingestion of Vegetables (pCi/L)		Ingestion of Beef (pCi/L)		Ingestion of Milk (pCi/L)	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
U-233	013968-55-3	1.9E-02	1.9E-04	1.7E+05	1.7E+03	2.6E+04	2.6E+02
U-234	013966-29-5	1.9E-02	1.9E-04	1.7E+05	1.7E+03	2.6E+04	2.6E+02
U-235	015117-96-1	1.9E-02	1.9E-04	1.7E+05	1.7E+03	2.5E+04	2.5E+02
U-235+D	015117-96-1	1.8E-02	1.8E-04	1.2E+05	1.2E+03	2.4E+04	2.4E+02
U-236	013982-70-2	2.0E-02	2.0E-04	1.8E+05	1.8E+03	2.7E+04	2.7E+02
U-237	014269-75-1	6.3E-01	6.3E-03	1.9E+06	1.9E+04	2.9E+05	2.9E+03
U-238	007440-61-1	2.0E-02	2.0E-04	1.7E+05	1.7E+03	2.7E+04	2.7E+02
U-238+D	007440-61-1	1.4E-02	1.4E-04	9.1E+04	9.1E+02	1.8E+04	1.8E+02
U-240	015687-53-3	3.7E+00	3.7E-02	1.4E+06	1.4E+04	2.1E+05	2.1E+03
V-48	014331-97-6	2.0E-01	2.0E-03	1.5E+05	1.5E+03	6.1E+04	6.1E+02
W-181	015749-46-9	3.5E+00	3.5E-02	2.3E+05	2.3E+03	5.6E+06	5.6E+04
W-185	014932-41-3	4.9E-01	4.9E-03	3.1E+04	3.1E+02	7.5E+05	7.5E+03
W-187	014983-48-3	5.0E+00	5.0E-02	2.6E+04	2.6E+02	6.2E+05	6.2E+03
Xe-122	015151-09-4						
Xe-123	015700-10-4						
Xe-125	013994-18-8						
Xe-127	013994-19-9						
Xe-129m	013965-99-6						

Table 3.3b. (continued)

Chemical [†]	CASRN	Ingestion of Vegetables (pCi/L)		Ingestion of Beef (pCi/L)		Ingestion of Milk (pCi/L)	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Xe-131m	014683-11-5						
Xe-133	014932-42-4						
Xe-133m	014932-42-4						
Xe-135	014995-62-1						
Xe-135m	014995-62-1						
Xe-137	014835-21-3						
Xe-138	015751-81-2						
Y-90	010098-91-6	3.4E-01	3.4E-03	1.7E+05	1.7E+03	1.5E+06	1.5E+04
Y-91	014234-24-3	7.7E-02	7.7E-04	1.9E+05	1.9E+03	1.7E+06	1.7E+04
Y-91m	014234-24-3	9.0E+03	9.0E+01	6.9E+07	6.9E+05	6.2E+08	6.2E+06
Y-92	015751-59-4	4.0E+01	4.0E-01	1.3E+06	1.3E+04	1.2E+07	1.2E+05
Y-93	014981-70-5	4.9E+00	4.9E-02	4.4E+05	4.4E+03	4.0E+06	4.0E+04
Zn-65	013982-39-3	9.0E-02	9.0E-04	2.6E+03	2.6E+01	4.6E+03	4.6E+01
Zn-69	013982-23-5	4.8E+03	4.8E+01	4.1E+05	4.1E+03	7.4E+05	7.4E+03
Zn-69m	013982-23-5	1.4E+01	1.4E-01	1.7E+04	1.7E+02	3.0E+04	3.0E+02
Zr-93	015751-77-6	1.6E+00	1.6E-02	4.9E+09	4.9E+07	1.6E+09	1.6E+07
Zr-95	013967-71-0	2.6E-01	2.6E-03	6.5E+08	6.5E+06	2.1E+08	2.1E+06
Zr-97	014928-30-4	1.6E+00	1.6E-02	2.4E+08	2.4E+06	8.0E+07	8.0E+05

Table 3.3b. (continued)

Notes:

† Isotopes designated with an “m” indicate that the isotope is metastable; isotopes designated with a “+D” indicate that the radionuclide slope factors include contributions from daughter products.

Table 3.3c. (continued)

Chemical	CASRN	Ingestion of Vegetables (mg/kg)			Ingestion of Beef (mg/kg)			Ingestion of Milk (mg/kg)		
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1 (Child)
AMDRO	067485-29-4									
AMETRYN	000834-12-8			8.4E+00			1.6E+05			1.6E+04
AMINOPHENOL, m-	000591-27-5			8.7E+00			5.7E+06			5.7E+05
AMINOPYRIDINE, 4-	000504-24-5			2.7E-03			1.5E+03			1.5E+02
AMITRAZ	033089-61-1									
AMMONIA	007664-41-7									
AMMONIUM SULFAMATE	007773-06-0									
ANILINE	000062-53-3	1.3E+01	1.3E-01		1.6E+06	1.6E+04		5.4E+05	5.4E+03	
ANTHRACENE	000120-12-7			1.1E+04			2.0E+05			2.0E+04
ANTIMONY (METALLIC)	007440-36-0			3.6E+01			6.5E+03			3.3E+02
ANTIMONY PENTOXIDE	001314-60-9									
ANTIMONY POTASSIUM TARTRATE	000304-61-0									
ANTIMONY TETROXIDE	001332-81-6									
ANTIMONY TRIOXIDE	001309-64-4									
APOLLO	074115-24-5									
ARAMITE	000140-57-8									
AROCOR 1016	012674-11-2			1.1E+01			5.8E+00			5.8E-01
AROCOR 1254	011097-69-1			5.9E+00			3.3E-01			4.9E-02
AROCOR-1221	011104-28-2	6.5E-01	6.5E-03		3.6E+01	3.6E-01		1.2E+01	1.2E-01	
AROCOR-1232	011141-16-5	2.0E-01	2.0E-03		1.1E+02	1.1E+00		3.8E+01	3.8E-01	
AROCOR-1242	053469-21-9	6.8E-01	6.8E-03		3.5E+01	3.5E-01		1.1E+01	1.1E-01	

Table 3.3c. (continued)

Chemical	CASRN	Ingestion of Vegetables (mg/kg)			Ingestion of Beef (mg/kg)			Ingestion of Milk (mg/kg)			
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1 (Adult)	HQ=1 (Child)
AROCLOP-1248	012672-29-6	6.1E+00	6.1E-02		1.7E+00	1.7E-02		5.7E-01	5.7E-03		
AROCLOP-1260	011096-82-5	3.9E+01	3.9E-01		8.1E-02	8.1E-04		2.7E-02	2.7E-04		
ARSENIC, INORGANIC	007440-38-2			1.8E+02			1.4E+02			1.1E+03	1.4E+02
ARSINE	007784-42-1										
ASBESTOS	001332-21-4										
ASSURE	076578-14-8										
ASULAM	003337-71-1										
ATRAZINE	001912-24-9	2.9E+00	2.9E-02	9.8E+01	7.1E+03	7.1E+01	2.4E+05	2.3E+03	2.3E+01	1.8E+05	2.4E+04
AVERMECTIN B1	065195-55-3										
AZOBEZENE	000103-33-3	1.7E+01	1.7E-01		3.6E+03	3.6E+01		1.2E+03	1.2E+01		
BARIUM	007440-39-3			6.4E+03			1.5E+05			1.7E+04	2.2E+03
BARIUM CYANIDE	000542-62-1										
BAYGON	000114-26-1			3.0E+00			8.4E+04			6.6E+04	8.4E+03
BAYLETON	043121-43-3			5.5E+01			3.0E+05			2.3E+05	3.0E+04
BAYTHROID	068359-37-5										
BENEFIN	001861-40-1										
BENOMYL	017804-35-2			1.0E+02			5.1E+05			3.9E+05	5.1E+04
BENTAZON	025057-89-0			9.9E-01			8.5E+04			6.6E+04	8.5E+03
BENZALDEHYDE	000100-52-7			1.9E+02			9.6E+05			7.5E+05	9.6E+04
BENZENE	000071-43-2	1.3E+01	1.3E-01		9.8E+04	9.8E+02		3.2E+04	3.2E+02		
BENZENETHIOL	000108-98-5			2.3E-02			8.0E+01			6.2E+01	8.0E+00

Table 3.3c. (continued)

Chemical	CASRN	Ingestion of Vegetables (mg/kg)				Ingestion of Beef (mg/kg)			Ingestion of Milk (mg/kg)			
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	HQ=1 (Adult)	HQ=1 (Child)
CAPROLACTAM	000105-60-2			3.6E+01			6.0E+07				4.7E+07	6.0E+06
CAPTAFOI	002425-06-1											
CAPTAN	000133-06-2	1.3E+02	1.3E+00	2.5E+02	6.4E+05	6.4E+03	1.3E+06	2.1E+03	2.1E+05	2.1E+03	9.7E+05	1.2E+05
CARBARYL	000063-25-2			1.9E+02			9.5E+05				7.4E+05	9.5E+04
CARBAZOLE	000086-74-8	9.0E+01	9.0E-01		2.2E+04	2.2E+02		7.1E+03	7.1E+01			
CARBOFURAN	001563-66-2			1.2E+01			3.9E+04				3.0E+04	3.9E+03
CARBON DISULFIDE	000075-15-0			1.3E+02			1.4E+06				1.1E+06	1.4E+05
CARBON TETRACHLORIDE	000056-23-5	5.7E+00	5.7E-02	2.2E+00	1.3E+04	1.3E+02	5.0E+03	4.2E+01	4.2E+03	4.2E+01	3.9E+03	5.0E+02
CARBOSULFAN	055285-14-8											
CARBOXIN	005234-68-4			1.5E+02			1.2E+06				9.3E+05	1.2E+05
CHLORAL	000075-87-6											
CHLORAMBEN	000133-90-4											
CHLORANIL	000118-75-2											
CHLORDANE	000057-74-9	9.8E+00	9.8E-02	3.3E+00	1.4E+01	1.4E-01	4.7E+00	2.9E-01	2.9E+01	2.9E-01	2.3E+01	3.0E+00
CHLORIMURON-ETHYL	090982-32-4											
CHLORINE	007782-50-5			5.2E+00			8.2E+00				2.0E+00	2.6E-01
CHLORINE DIOXIDE	010049-04-4											
CHLORO-1,3-BUTADIENE, 2-	000126-99-8			2.0E+01			3.5E+05				2.7E+05	3.4E+04
CHLORO-2-METHYLANILINE HCL, 4-	003165-93-3											
CHLORO-2-METHYLANILINE, 4-	000095-69-2											
CHLOROACETIC ACID	000079-11-8			8.5E-01			6.5E+04				5.0E+04	6.5E+03

Table 3.3c. (continued)

[illegible]

Table 3.3c. (continued)

Chemical	CASRN	Ingestion of Vegetables (mg/kg)			Ingestion of Beef (mg/kg)			Ingestion of Milk (mg/kg)			
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1 (Adult)	HQ=1 (Child)
CHLOROTHALONIL	001897-45-6	1.8E+02	1.8E+00	1.2E+02	3.4E+04	3.4E+02	2.4E+04	1.1E+04	1.1E+02	1.9E+04	2.4E+03
CHLOROTOLUENE, o-	000095-49-8			1.2E+02			5.8E+04			4.5E+04	5.8E+03
CHLORPROPHAM	000101-21-3			7.5E+02			1.0E+06			7.8E+05	1.0E+05
CHLORPYRIFOS	002921-88-2			4.3E+01			6.2E+02			4.8E+02	6.2E+01
CHLORPYRIFOS METHYL	005598-13-0			1.1E+02			8.3E+03			6.5E+03	8.3E+02
CHLORSULFURON	064902-72-3										
CHLORTHIOPHOS	060238-56-4										
CHROMIUM (III) (INSOLUBLE SALTS)	016065-83-1			9.1E+04			7.7E+04			1.7E+07	2.2E+06
CHROMIUM (VI)	018540-29-9			4.6E+02			3.9E+02			8.5E+04	1.1E+04
CHRYSENE	000218-01-9	5.3E+03	5.3E+01		2.5E+03	2.5E+01		8.2E+02	8.2E+00		
COKE OVEN EMISSIONS	008007-45-2										
COPPER	007440-50-8										
COPPER CYANIDE	000544-92-3										
CREOSOTE	008001-58-9										
CRESOL, m-	000108-39-4			6.1E+01			7.0E+05			5.5E+05	7.0E+04
CRESOL, o-	000095-48-7			6.5E+01			7.1E+05			5.5E+05	7.1E+04
CRESOL, p-	000106-44-5			6.1E+00			7.4E+04			5.8E+04	7.4E+03
CROTONALDEHYDE	000123-73-9	1.1E-01	1.1E-03		2.2E+03	2.2E+01		7.1E+02	7.1E+00		
CUMENE	000098-82-8										
CYANAZINE	021725-46-2										
CYANIDE (CN-)	000057-12-5			1.3E+00			2.6E+06			2.0E+06	2.5E+05

Table 3.3c. (continued)

Chemical	CASRN	Ingestion of Vegetables (mg/kg)			Ingestion of Beef (mg/kg)			Ingestion of Milk (mg/kg)			
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1 (Adult)	HQ=1 (Child)
CYANOGEN	000460-19-5										
CYANOGEN BROMIDE	000506-68-3										
CYANOGEN CHLORIDE	000506-77-4			6.1E+00			4.1E+06			3.2E+06	4.1E+05
CYCLOHEXANE, 1,2,3,4,5-PENTABROMO-6-CHLORO	000087-84-3										
CYCLOHEXANONE	000108-94-1			1.4E+03			2.3E+08			1.8E+08	2.3E+07
CYCLOHEXYLAMINE	000108-91-8			1.3E+02			4.6E+06			3.6E+06	4.6E+05
CYCLOPENTADIENE	000542-92-7										
CYHALOTHIRIN/KARATE	068085-85-8										
CYPERMETHRIN	052315-07-8										
CYROMAZINE	066215-27-8										
DACTHAL	001861-32-1										
DALAPON	000075-99-0										
DDD	000072-54-8	3.5E+02	3.5E+00		6.8E+01	6.8E-01		3.0E+01	3.0E-01		
DDE	000072-55-9	7.2E+02	7.2E+00		1.3E+01	1.3E-01		7.0E+00	7.0E-02		
DDT	000050-29-3	2.4E+02	2.4E+00	1.8E+02	2.1E+01	2.1E-01	1.6E+01	5.9E+00	5.9E-02	1.0E+01	1.3E+00
DECABROMODIPHENYL ETHER	001163-19-5										
DEMETON	008065-48-3										
D(2-ETHYLHEXYL)ADIPATE	000103-23-1	5.8E+05	5.8E+03	1.8E+06	1.2E+02	1.2E+00	3.7E+02	3.9E+01	3.9E-01	2.9E+02	3.7E+01
DIALATE	002303-16-4	9.4E-01	9.4E-03		1.9E+05	1.9E+03		6.2E+04	6.2E+02		
DIAZINON	000333-41-5			1.4E+01			1.6E+03			1.2E+03	1.6E+02
DIBENZ[A,H]ANTHRACENE	000033-70-3	5.3E+00	5.3E-02		2.5E+00	2.5E-02		8.2E-01	8.2E-03		

Table 3.3c. (continued)

Chemical	CASRN	Ingestion of Vegetables (mg/kg)			Ingestion of Beef (mg/kg)			Ingestion of Milk (mg/kg)			
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1 (Adult)	HQ=1 (Child)
DIBROMO-3-CHLOROPROPANE, 1,2-	000096-12-8	3.3E-01	3.3E-03		1.7E+03	1.7E+01		5.6E+02	5.6E+00		
DIBROMOBENZENE, 1,4-	000106-37-6			7.7E+01			1.9E+04			1.5E+04	1.9E+03
DIBROMOCHLOROMETHANE	000124-48-1	4.2E+00	4.2E-02	3.0E+01	3.5E+04	3.5E+02	2.5E+05	1.2E+04	1.2E+02	2.0E+05	2.5E+04
DIBROMODICHLOROMETHANE	000594-18-3										
DIBROMODIPHENYL ETHER, p,p'-	002050-47-7										
DIBROMOETHANE, 1,2-	000106-93-4										
DIBROMOMETHANE (METHYLENE BROMIDE)	000074-95-3			4.8E+00			3.0E+05			2.3E+05	3.0E+04
DIBUTYL PHTHALATE	000084-74-2			1.6E+04			7.9E+03			6.2E+03	7.9E+02
DICAMBA	001918-00-9			1.5E+02			1.4E+05			1.1E+05	1.4E+04
DICHLORO-2-BUTENE, 1,4-	000764-41-0										
DICHLOROBENZENE, 1,2-	000095-50-1			1.0E+03			2.1E+05			1.6E+05	2.1E+04
DICHLOROBENZENE, 1,3-	000541-73-1										
DICHLOROBENZENE, 1,4-	000106-46-7	1.1E+02	1.1E+00		2.2E+04	2.2E+02		7.4E+03	7.4E+01		
DICHLOROBENZIDINE, 3,3'-	000091-94-1	5.2E+00	5.2E-02		1.4E+03	1.4E+01		4.5E+02	4.5E+00		
DICHLORODIFLUOROMETHANE	000075-71-8			3.3E+02			2.3E+06			1.8E+06	2.3E+05
DICHLOROETHANE, 1,1-	000075-34-3			1.0E+02			1.7E+06			1.3E+06	1.7E+05
DICHLOROETHANE, 1,2-	000107-06-2	1.7E+00	1.7E-02		6.0E+04	6.0E+02		2.0E+04	2.0E+02		
DICHLOROETHYLENE, 1,1-	000075-35-4	4.2E-01	4.2E-03	9.8E+00	6.3E+03	6.3E+01	1.5E+05	2.1E+03	2.1E+01	1.1E+05	1.5E+04
DICHLOROETHYLENE, 1,2-, (MIXED ISOMERS)	000540-59-0			1.6E+00			5.6E+05			4.4E+05	5.6E+04
DICHLOROETHYLENE, 1,2-C-	000156-59-2			2.4E+00			5.0E+05			3.9E+05	5.0E+04
DICHLOROETHYLENE, 1,2-T-	000156-60-5			3.6E+00			1.2E+06			9.7E+05	1.2E+05

Table 3.3c. (continued)

Chemical	CASRN	Ingestion of Vegetables (mg/kg)			Ingestion of Beef (mg/kg)			Ingestion of Milk (mg/kg)			
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1 (Adult)	HQ=1 (Child)
DIMETHIPIN	055290-64-7										
DIMETHOATE	000060-51-5			5.8E-01			1.3E+03			1.0E+03	1.3E+02
DIMETHOXYBENZIDINE, 3,3'-	000119-90-4	8.6E+00	8.6E-02		4.7E+05	4.7E+03		1.6E+05	1.6E+03		
DIMETHYL SULFATE	000077-78-1										
DIMETHYLANILINE HCL, 2,4-	021436-96-4										
DIMETHYLANILINE, 2,4-	000095-68-1										
DIMETHYLANILINE, N,N-	000121-69-7			5.2E+00			1.4E+04			1.1E+04	1.4E+03
DIMETHYLBENZIDINE, 3,3'-	000119-93-7	3.8E-02	3.8E-04		3.2E+02	3.2E+00		1.1E+02	1.1E+00		
DIMETHYLETHYL LEAD	107584-40-7										
DIMETHYLFORMAMIDE	000068-12-2			2.5E+00			2.6E+07			2.1E+07	2.6E+06
DIMETHYLHYDRAZINE, 1,2-	000540-73-8										
DIMETHYLPHENOL, 2,4-	000105-67-9			7.9E+01			1.2E+05			9.1E+04	1.2E+04
DIMETHYLPHENOL, 2,6-	000576-26-1										
DIMETHYLPHENOL, 3,4-	000095-65-8			1.7E+00			1.1E+04			8.5E+03	1.1E+03
DIMETHYLPHTHALATE	000131-11-3										
DIMETHYLTEREPHTHALATE	000120-61-6			3.9E+02			4.7E+05			3.7E+05	4.7E+04
DINITRO-O-CYCLOHEXYL PHENOL, 4,6-	000131-89-5			5.2E-03			2.8E+06			2.1E+06	2.8E+05
DINITROBENZENE, 1,2-	000528-29-0										
DINITROBENZENE, 1,3-	000099-65-0			8.1E-02			2.0E+03			1.6E+03	2.0E+02
DINITROBENZENE, 1,4-	000100-25-4										
DINITROPHENOL, 2,4-	000051-28-5			1.4E+00			4.6E+04			3.6E+04	4.6E+03

Table 3.3c. (continued)

Chemical	CASRN	Ingestion of Vegetables (mg/kg)			Ingestion of Beef (mg/kg)			Ingestion of Milk (mg/kg)			
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1 (Adult)	HQ=1 (Child)
GLYPHOSATE	001071-83-6			1.7E-01			1.8E+08			1.4E+08	1.8E+07
GOAL	042874-03-3										
HALOXYFOP-METHYL	069806-40-2										
HARMONY	079277-27-3										
HEPTACHLOR	000076-44-8	1.7E+00	1.7E-02	1.6E+01	1.5E+00	1.5E-02	1.5E+01	7.7E-01	7.7E-03	1.8E+01	2.2E+00
HEPTACHLOR EPOXIDE	001024-57-3	8.9E-02	8.9E-04	4.5E-02	2.7E-02	2.7E-04	1.4E-02	6.4E-03	6.4E-05	7.6E-03	9.7E-04
HEPTANE, N-	000142-82-5										
HEXABROMOBENZENE	000087-82-1										
HEXACHLOROBENZENE	000118-74-1	1.4E+01	1.4E-01	8.0E+01	2.3E+00	2.3E-02	1.3E+01	1.3E+00	1.3E-02	1.6E+01	2.1E+00
HEXACHLOROBUTADIENE	000087-68-3	1.6E+02	1.6E+00	1.1E+01	1.2E+03	1.2E+01	7.7E+01	3.8E+02	3.8E+00	6.0E+01	7.7E+00
HEXACHLOROCYCLOHEXANE, ALPHA-	000319-84-6	6.3E-01	6.3E-03		6.9E-01	6.9E-03		4.7E-01	4.7E-03		
HEXACHLOROCYCLOHEXANE, BETA-	000319-85-7	2.2E+00	2.2E-02		2.0E+02	2.0E+00		6.6E+01	6.6E-01		
HEXACHLOROCYCLOHEXANE, DELTA-	000319-86-8										
HEXACHLOROCYCLOHEXANE, EPSILON	006108-10-7										
HEXACHLOROCYCLOHEXANE, GAMMA-	000038-89-9	3.0E+00	3.0E-02	5.1E+00	3.3E+00	3.3E-02	5.6E+00	2.3E+00	2.3E-02	9.1E+00	1.2E+00
HEXACHLOROCYCLOHEXANE, TECHNICAL	000608-73-1										
HEXACHLOROCYCLOPENTADIENE	000077-47-4			1.4E+02			9.4E+03			7.3E+03	9.4E+02
HEXACHLORODIBENZO-p-DIOXIN, MIXTURE	019408-74-3	2.7E-02	2.7E-04		2.6E-04	2.6E-06		8.7E-05	8.7E-07		
HEXACHLOROETHANE	000067-72-1	7.2E+02	7.2E+00	4.3E+01	8.8E+03	8.8E+01	5.3E+02	2.9E+03	2.9E+01	4.1E+02	5.3E+01
HEXACHLOROPHENE	000070-30-4			6.5E+02			3.3E-01			2.6E-01	3.3E-02
HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE (RDX)	000121-82-4	1.6E+01	1.6E-01	2.2E+01	7.3E+03	7.3E+01	1.0E+04	2.4E+03	2.4E+01	8.0E+03	1.0E+03

Table 3.3c. (continued)

Chemical	CASRN	Ingestion of Vegetables (mg/kg)			Ingestion of Beef (mg/kg)			Ingestion of Milk (mg/kg)			
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1 (Adult)	HQ=1 (Child)
LEAD ALKYLs	NA										
LEAD AND COMPOUNDS	007439-92-1										
LINURON	000330-55-2										
LONDAX	083055-99-6										
MALATHION	000121-75-5			7.0E+01			1.1E+05			8.3E+04	1.1E+04
MALEIC ANHYDRIDE	000108-31-6										
MALEIC HYDRAZIDE	000123-33-1			2.8E+01			7.4E+07			5.7E+07	7.4E+06
MALONONITRILE	000109-77-3			2.0E-03			1.9E+03			1.5E+03	1.9E+02
MANCOZEB	008018-01-7										
MANEB	012427-38-2			4.7E-01			5.0E+05			3.9E+05	5.0E+04
MANGANESE (Diet)	007439-96-5			3.2E+02			8.8E+03			3.6E+04	4.6E+03
MCPA	000094-74-6			9.1E-01			5.0E+03			3.9E+03	5.0E+02
MCPB	000094-81-5										
MCPp	000093-65-2			2.5E+00			7.6E+03			5.9E+03	7.6E+02
MEPHOSFOLAN	000950-10-7										
MEPIQUAT CHLORIDE	024307-26-4										
MERCURY, INORGANIC	007439-97-6			9.1E-01			2.7E+00			1.4E+01	1.8E+00
MERPHOS	000150-50-5										
MERPHOS OXIDE	000078-48-8										
METALAXYL	057837-19-1										
METHACRYLONITRILE	000126-98-7			1.9E-02			5.9E+03			4.6E+03	5.9E+02

Table 3.3c. (continued)

Chemical	CASRN	Ingestion of Vegetables (mg/kg)			Ingestion of Beef (mg/kg)			Ingestion of Milk (mg/kg)		
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1 (Child)
METHAMIDOPHOS	010265-92-6			2.0E-03			9.5E+03			9.5E+02
METHANOL	000067-56-1			1.7E+01			1.1E+08			1.1E+07
METHIDATHION	000950-37-8									
METHOMYL	016752-77-5									
METHOXY-5-NITROANILINE, 2-	000099-59-2									
METHOXYCHLOR	000072-43-5			1.4E+02			4.3E+03			4.6E+02
METHOXYETHANOL ACETATE, 2-	000110-49-6									
METHOXYETHANOL, 2-	000109-86-4			3.4E-02			2.1E+05			2.1E+04
METHYL ACETATE	000079-20-9			2.0E+02			5.7E+07			5.7E+06
METHYL ACRYLATE	000096-33-3			8.7E+00			1.3E+06			1.3E+05
METHYL ETHYL KETONE	000078-93-3			8.1E+01			4.6E+07			4.6E+06
METHYL ISOBUTYL KETONE	000108-10-1			2.0E+01			3.9E+06			3.9E+05
METHYL MERCURY	022967-92-6									
METHYL METHACRYLATE	000080-62-6			4.6E+01			2.1E+06			2.1E+05
METHYL PARATHION	000298-00-0			2.8E-01			3.8E+03			3.8E+02
METHYL STYRENE (MIXED ISOMERS)	025013-15-4									
METHYL TERT-BUTYL ETHER (MTBE)	001634-04-4									
METHYL-5-NITROANILINE, 2-	000099-55-8	9.0E+00	9.0E-02		1.0E+05	1.0E+03		3.4E+04	3.4E+02	
METHYLANILINE HYDROCHLORIDE, 2-	000636-21-5									
METHYLCYCLOHEXANE	000108-87-2									
METHYLENE CHLORIDE	000075-09-2	1.7E+01	1.7E-01	3.2E+01	8.7E+05	8.7E+03	1.7E+06	2.9E+05	2.9E+03	1.7E+05

Table 3.3c. (continued)

Chemical	CASRN	Ingestion of Vegetables (mg/kg)			Ingestion of Beef (mg/kg)			Ingestion of Milk (mg/kg)			
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1 (Adult)	HQ=1 (Child)
NITROSOPYRROLIDINE, N-	000930-55-2	2.6E-03	2.6E-05		3.1E+04	3.1E+02		1.0E+04	1.0E+02		
NITROTOLUENE, m-	000099-08-1			2.1E+01			8.7E+04			6.7E+04	8.6E+03
NITROTOLUENE, o-	000088-72-2			1.8E+01			1.0E+05			7.9E+04	1.0E+04
NITROTOLUENE, p-	000099-99-0			2.1E+01			8.9E+04			6.9E+04	8.9E+03
NORFLURAZON	027314-13-2										
NUSTAR	085509-19-9										
OCTABROMODIPHENYL ETHER	032536-52-0										
OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRA (HMX)	002691-41-0			1.0E+01			2.8E+06			2.2E+06	2.8E+05
OCTAMETHYLPYROPHOSPHORAMIDE	000152-16-9										
OCTYL PHTHALATE, DiN-	000117-84-0			9.6E+05			1.0E-01			8.1E-02	1.0E-02
ORYZALIN	019044-88-3										
OXADIAZON	019666-30-9										
OXAMYL	023135-22-0										
PACLOBUTRAZOL	076738-62-0										
PARAQUAT	001910-42-5										
PARATHION	000056-38-2			9.0E+01			1.0E+04			8.2E+03	1.0E+03
PEBULATE	001114-71-2										
PENDIMETHALIN	040487-42-1										
PENTABROMODIPHENYL ETHER	032534-81-9										
PENTACHLOROBENZENE	000608-93-5			7.5E+01			1.4E+02			1.1E+02	1.4E+01

Table 3.3c. (continued)

Chemical	CASRN	Ingestion of Vegetables (mg/kg)			Ingestion of Beef (mg/kg)			Ingestion of Milk (mg/kg)			
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1 (Adult)	HQ=1 (Child)
PENTACHLOROCYCLOPENTADIENE	025329-35-5										
PENTACHLORONITROBENZENE	000082-68-8	1.2E+02	1.2E+00	4.0E+02	9.7E+01	9.7E-01	3.2E+02	3.2E+01	3.2E-01	2.5E+02	3.2E+01
PENTACHLOROPHENOL	000087-86-5	1.4E+02	1.4E+00	2.2E+03	5.0E+02	5.0E+00	7.8E+03	1.7E+02	1.7E+00	6.0E+03	7.7E+02
PERMETHRIN	052645-53-1			3.1E+02			1.3E+05			1.0E+05	1.3E+04
PHENANTHRENE	000085-01-8										
PHENMEDIPHAM	013684-63-4			4.1E+00			8.9E+07			6.9E+07	8.9E+06
PHENOL	000108-95-2			3.9E+02			1.4E+07			1.1E+07	1.4E+06
PHENYLENEDIAMINE, m-	000108-45-2			2.1E-01			1.2E+06			9.7E+05	1.2E+05
PHENYLENEDIAMINE, o-	000095-54-5	8.3E-01	8.3E-03		3.2E+05	3.2E+03		1.1E+05	1.1E+03		
PHENYLENEDIAMINE, p-	000106-50-3			3.8E+00			5.9E+07			4.6E+07	5.9E+06
PHENYLMERCURIC ACETATE	000062-38-4										
PHENYLPHENOL, 2-	000090-43-7	5.2E+02	5.2E+00		5.1E+05	5.1E+03		1.7E+05	1.7E+03		
PHORATE	000298-02-2			1.7E-01			3.8E+03			2.9E+03	3.8E+02
PHOSMET	000732-11-6			6.6E+01			1.1E+05			8.9E+04	1.1E+04
PHOSPHINE	007803-51-2										
PHTHALIC ACID, p-	000100-21-0			8.2E+02			1.9E+07			1.5E+07	1.9E+06
PHTHALIC ANHYDRIDE	000085-44-9			8.2E+01			3.7E+08			2.8E+08	3.6E+07
PICLORAM	001918-02-1			1.5E+02			6.7E+05			5.2E+05	6.7E+04
PIRIMPHOS-METHYL	029232-93-7										
POLYBROMINATED BIPHENYLS	NA										
POLYCHLORINATED BIPHENYLS	001336-36-3	8.9E+00	8.9E-02		9.5E-01	9.5E-03		3.1E-01	3.1E-03		

Table 3.3c. (continued)

Chemical	CASRN	Ingestion of Vegetables (mg/kg)			Ingestion of Beef (mg/kg)			Ingestion of Milk (mg/kg)		
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1 (Child)
POTASSIUM CYANIDE	000151-50-8									
POTASSIUM SILVER CYANIDE	000506-61-6									
PROCHLORAZ	067747-09-5									
PROFLURALIN	026399-36-0									
PROMETON	001610-18-0			2.6E+01			1.6E+05			1.6E+04
PROMETRYN	007287-19-6			8.6E+00			3.5E+04			3.5E+03
PROPACHLOR	001918-16-7									
PROPANIL	000709-98-8									
PROPARGITE	002312-35-8									
PROPARGYL ALCOHOL	000107-19-7									
PROPAZINE	000139-40-2			4.2E+01			1.8E+05			1.8E+04
PROPHAM	000122-42-9			9.3E+01			7.8E+04			7.8E+03
PROPICONAZOLE	060207-90-1									
PROPYLENE GLYCOL	000057-55-6			1.9E+02			1.1E+10			1.1E+09
PROPYLENE GLYCOL MONOETHYL ETHER	001569-02-4									
PROPYLENE GLYCOL MONOMETHYL ETHER	000107-98-2			5.2E+01			8.3E+07			8.3E+06
PROPYLENE OXIDE	000075-56-9									
PURSUIT	081335-77-5									
PYDRIN	051630-58-1									
PYRENE	000129-00-0			3.4E+03			4.2E+03			4.2E+02
PYRIDINE	000110-86-1			2.3E+01			5.2E+04			5.2E+03

Table 3.3c. (continued)

Chemical	CASRN	Ingestion of Vegetables (mg/kg)			Ingestion of Beef (mg/kg)			Ingestion of Milk (mg/kg)			
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1 (Adult)	HQ=1 (Child)
STROFOS (TETRACHLOROVINPHOS)	000961-11-5										
STRONTIUM, STABLE	007440-24-6			1.6E+03			1.8E+03			1.3E+03	1.6E+02
STRYCHNINE	000057-24-9			3.4E-01			4.4E+03			3.5E+03	4.4E+02
STYRENE	000100-42-5			9.6E+02			1.0E+06			7.8E+05	1.0E+05
SYSTHANE	088671-89-0										
TCDD, 2,3,7,8-	001746-01-6	1.1E-03	1.1E-05		2.6E-05	2.6E-07		1.5E-05	1.5E-07		
TCMTB	021564-17-0										
TEBUTHIURON	034014-18-1			8.0E+00			6.0E+06			4.7E+06	6.0E+05
TEMEPHOS	003383-96-8										
TERBACIL	005902-51-2										
TERBUFOS	013071-79-9										
TERBUTRYN	000886-50-0										
TETRABUTYL LEAD	001920-90-7										
TETRACHLOROBENZENE, 1,2,4,5-	000095-94-3			1.4E+01			1.4E+02			1.1E+02	1.4E+01
TETRACHLOROETHANE, 1,1,1,2-	000630-20-6	4.8E+01	4.8E-01	1.6E+02	4.1E+04	4.1E+02	1.4E+05	1.4E+04	1.4E+02	1.1E+05	1.4E+04
TETRACHLOROETHANE, 1,1,2,2-	000079-34-5	2.6E+00	2.6E-02		1.1E+04	1.1E+02		3.6E+03	3.6E+01		
TETRACHLOROETHYLENE	000127-18-4			3.0E+01			7.4E+04			5.7E+04	7.4E+03
TETRACHLOROPHENOL, 2,3,4,6-	000058-90-2			6.6E+02			3.5E+04			2.7E+04	3.5E+03
TETRACHLOROTOLUENE, p- ALPHA, ALPHA-	005216-25-1										
TETRAETHYL DITHIOPHOSPHATE	003689-24-5			9.0E+00			7.2E+02			5.6E+02	7.2E+01

Table 3.3c. (continued)

Chemical	CASRN	Ingestion of Vegetables (mg/kg)				Ingestion of Beef (mg/kg)				Ingestion of Milk (mg/kg)			
		10 ⁻⁴	10 ⁻⁵	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	HQ=1 (Adult)	HQ=1 (Child)
TETRAETHYL LEAD	000078-00-2												
TETRAMETHYL LEAD	000075-74-1												
TETRAPROPYL LEAD	003440-75-3												
THALLIC OXIDE	001314-32-5												
THALLIUM (I) NITRATE	010102-45-1			8.2E+02			2.2E+00					1.1E+01	1.4E+00
THALLIUM (SOLUBLE SALTS)	NA												
THALLIUM ACETATE	000563-68-8			8.2E+02			2.2E+00					1.1E+01	1.4E+00
THALLIUM CARBONATE	006533-73-9			7.3E+02			1.9E+00					9.5E+00	1.2E+00
THALLIUM CHLORIDE	007791-12-0			7.3E+02			1.9E+00					9.5E+00	1.2E+00
THALLIUM SELENITE	012039-52-0												
THALLIUM SULFATE	007446-18-6			7.3E+02			1.9E+00					9.5E+00	1.2E+00
THIOBENCARB	028249-77-6												
THIOFANOX	039196-18-4												
THIOPHANATE-METHYL	023564-05-8												
THIRAM	000137-26-8												
TIN	007440-31-5			1.8E+03			5.3E+03					1.3E+04	1.7E+03
TOLUENE	000108-88-3			7.1E+02			1.3E+06					1.0E+06	1.3E+05
TOLUENE-2,4-DIAMINE	000095-80-7	1.1E-02	1.1E-04		5.2E+03	5.2E+01				1.7E+03	1.7E+01		
TOLUENE-2,5-DIAMINE	000095-70-5												
TOLUENE-2,6-DIAMINE	000823-40-5												
TOLUIDINE, o- (METHYLANILINE, 2-)	000095-53-4	6.7E-01	6.7E-03		2.2E+04	2.2E+02				7.1E+03	7.1E+01		

Table 3.3c. (continued)

Chemical	CASRN	Ingestion of Vegetables (mg/kg)			Ingestion of Beef (mg/kg)			Ingestion of Milk (mg/kg)			
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1 (Adult)	HQ=1 (Child)
TOLUIDINE, p-	000106-49-0	1.5E+00	1.5E-02		1.7E+04	1.7E+02		5.6E+03	5.6E+01		
TOXAPHENE	008001-35-2	1.6E+00	1.6E-02		2.2E+01	2.2E-01		5.9E+00	5.9E-02		
TRALOMETHRIN	066841-25-6										
TRIALATE	002303-17-5										
TRIASULFURON	082097-50-5										
TRIBROMOBENZENE, 1,2,4-	000615-54-3										
TRIBROMOCHLOROMETHANE	000594-15-0										
TRIBROMODIPHENYL ETHER	049690-94-0										
TRIBUTYL TIN OXIDE	000056-35-9										
TRICHLORO-1,2,2-TRIFLUOROETHANE, 1,1,2-	000076-13-1			2.3E+05			1.0E+08			7.8E+07	1.0E+07
TRICHLORO-2'-HYDROXYDIPHENYLETHER	003380-34-5										
TRICHLOROANILINE HCL, 2,4,6-	033663-50-2										
TRICHLOROANILINE, 2,4,6-	000634-93-5										
TRICHLOROBENZENE, 1,2,4-	000120-82-1			2.9E+02			8.6E+03			6.7E+03	8.5E+02
TRICHLOROETHANE, 1,1,1-	000071-55-6										
TRICHLOROETHANE, 1,1,2-	000079-00-5	1.0E+01	1.0E-01	1.0E+01	3.5E+04	3.5E+02	3.4E+04	1.1E+04	1.1E+02	2.6E+04	3.4E+03
TRICHLOROETHYLENE	000079-01-6	4.7E+01	4.7E-01		2.0E+05	2.0E+03		6.5E+04	6.5E+02		
TRICHLOROFLUOROMETHANE	000075-69-4			8.2E+02			2.4E+06			1.9E+06	2.4E+05
TRICHLOROPHENOL, 2,4,5-	000095-95-4			1.3E+03			2.0E+05			1.5E+05	2.0E+04
TRICHLOROPHENOL, 2,4,6-	000088-06-2	3.4E+02	3.4E+00		3.4E+04	3.4E+02		1.1E+04	1.1E+02		
TRICHLOROPHENOXY) PROPIONIC ACID, 2(2,4,5-	000093-72-1			1.4E+02			1.2E+04			9.2E+03	1.2E+03

Table 3.3c. (continued)

Chemical	CASRN	Ingestion of Vegetables (mg/kg)			Ingestion of Beef (mg/kg)			Ingestion of Milk (mg/kg)		
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1 (Child)
TRICHLOROPHOXYACETIC ACID, 2,4,5-	000093-76-5									
TRICHLOROPROPANE, 1,1,2-	000598-77-6									
TRICHLOROPROPANE, 1,2,3-	000096-18-4	1.4E+00	1.4E-02	2.5E+02	1.8E+01	1.8E-01	3.3E+03	6.1E+00	6.1E-02	3.3E+02
TRICHLOROPROPENE, 1,2,3-	000096-19-5									
TRICHLOROTOLUENE, 2,3,6-	002077-46-5									
TRICHLOROTOLUENE, ALPHA 2,6-	002014-83-7									
TRIDIPHANE	058138-08-2									
TRIETHYL LEAD	005224-23-7									
TRIETHYLAMINE	000121-44-8									
TRIFLURALIN	001582-09-8	6.5E+00	6.5E-02	1.6E+00	2.8E+01	2.8E-01	7.0E+00	9.4E+00	9.4E-02	7.0E-01
TRIMETHYL LEAD	007442-13-9									
TRIMETHYL PHOSPHATE	000512-56-1									
TRIMETHYLETHYL LEAD	001762-26-1									
TRINITROBENZENE, 1,3,5-	000099-35-4			2.2E-02			1.6E+03			1.6E+02
TRINITROPHENYLMETHYLNITRAMINE	000479-45-8									
TRINITROTOLUENE, 2,4,6-	000118-96-7	9.1E+00	9.1E-02	5.8E-01	1.2E+05	1.2E+03	7.7E+03	4.0E+04	4.0E+02	7.7E+02
TRIPROPYL LEAD	006618-03-7									
URANIUM (SOLUBLE SALTS)	NA			1.4E+03			7.8E+03			2.1E+02
VANADIUM PENTOXIDE	001314-62-1									
VANADIUM SULFATE	036907-42-3									
VANADIUM, METALLIC	007440-62-2			4.9E+03			2.8E+03			2.0E+02

Table 3.3c. (continued)

Chemical	CASRN	Ingestion of Vegetables (mg/kg)			Ingestion of Beef (mg/kg)			Ingestion of Milk (mg/kg)			
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1 (Adult)	HQ=1 (Child)
VANADYL SULFATE	027774-13-6										
VERNOLATE	001929-77-7										
VINCLOZOLIN	050471-44-8										
VINYL ACETATE	000108-03-4			1.8E+02			6.3E+07			4.9E+07	6.3E+06
VINYL BROMIDE	000593-60-2										
VINYL CHLORIDE	000075-01-4	7.3E-02	7.3E-04		3.2E+03	3.2E+01		1.0E+03	1.0E+01		
WARFARIN	000081-81-2			7.0E-01			2.4E+03			1.9E+03	2.4E+02
WHITE PHOSPHORUS	007723-14-0										
XYLENE, MIXTURE	001330-20-7			1.4E+04			7.0E+06			5.5E+06	7.0E+05
XYLENE, m-	000108-38-3			1.4E+04			7.0E+06			5.5E+06	7.0E+05
XYLENE, o-	000095-47-6			9.6E+03			1.0E+07			7.8E+06	1.0E+06
XYLENE, p-	000106-42-3										
ZINC (METALLIC)	007440-66-6			6.8E+02			2.7E+02			6.5E+02	8.4E+01
ZINC CYANIDE	000557-21-1			3.1E+02			7.0E+01			1.7E+02	2.2E+01
ZINC PHOSPHIDE	001314-84-7			1.8E+00			4.2E-01			1.0E+00	1.3E-01
ZINEB	012122-67-7										

Notes:

- (1) Same oral slope factor as used for polychlorinated biphenyls.
- (2) PRG calculated considering *New Interim Region IV Guidance* from EPA (received February 11, 1992). The slope factors for chemicals so marked indicate that a toxicity equivalency factor (TEF) method was used for carcinogenic PAHs based on each compound's relative potency to the potency of benzo(a)pyrene. The following TEFs were used to convert each PAH slope factor to an equivalent slope factor of benzo(a)pyrene [that has a new cancer slope factor of 7.3 (mg/kg/day)]¹ identified by EPA's CRAVE workgroup: (1) benzo(a)anthracene; TEF = 1.0 (2) benz(a)anthracene; TEF = 0.1, (3) benzo(b)fluoranthene; TEF = 0.1, (4) benzo(k)fluoranthene; TEF = 0.01, (5) chrysene; TEF = 0.001, (6) dibenz(a,h)anthracene; TEF = 1.0, and (7) indeno(1,2,3-c,d)pyrene; TEF = 0.1. TEFs were used for only the oral slope factor in the ingestion pathway.
- (3) The slope factor for trichloroethylene has been withdrawn from IRIS and HEAST; however, since this is a common contaminant, the old slope factor has been used to calculate the PRG.

Table 3.3d. Agricultural land use scenario for contamination in soil or sediment (radionuclides)

Chemical ^t	CASRN	Ingestion of Vegetables (pCi/g)		Ingestion of Beef (pCi/g)		Ingestion of Milk (pCi/g)	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Ac-225	014265-85-1	9.6E+03	9.6E+01	3.6E+04	3.6E+02	9.7E+03	9.7E+01
Ac-227	014952-40-0	3.8E+03	3.8E+01	1.4E+04	1.4E+02	3.9E+03	3.9E+01
Ac-227+D	014952-40-0	3.7E+00	3.7E-02	1.2E+00	1.2E-02	3.6E+00	3.6E-02
Ac-228	014331-83-0	8.4E+05	8.4E+03	3.1E+06	3.1E+04	8.5E+05	8.5E+03
Ag-105	014928-14-4	3.0E+02	3.0E+00	2.4E+03	2.4E+01	3.1E+04	3.1E+02
Ag-108	014391-65-2	8.6E+04	8.6E+02	5.5E+05	5.5E+03	7.2E+06	7.2E+04
Ag-108m	014391-65-2	7.8E+01	7.8E-01	6.3E+02	6.3E+00	8.3E+03	8.3E+01
Ag-108m+D	014391-65-2	7.8E+01	7.8E-01	6.3E+02	6.3E+00	8.3E+03	8.3E+01
Ag-109m	014378-38-2	2.2E+06	2.2E+04	1.4E+07	1.4E+05	1.8E+08	1.8E+06
Ag-110	014391-76-5	2.4E+05	2.4E+03	1.6E+06	1.6E+04	2.1E+07	2.1E+05
Ag-110m	014391-76-5	5.6E+01	5.6E-01	4.6E+02	4.6E+00	5.9E+03	5.9E+01
Ag-111	157690-04-0	7.9E+01	7.9E-01	5.6E+02	5.6E+00	7.3E+03	7.3E+01
Am-241	014596-10-2	3.6E+02	3.6E+00	9.3E+03	9.3E+01	5.4E+04	5.4E+02
Am-242	013981-54-9	8.1E+04	8.1E+02	2.1E+06	2.1E+04	1.2E+07	1.2E+05
Am-242m	013981-54-9	4.1E+02	4.1E+00	1.0E+04	1.0E+02	6.0E+04	6.0E+02
Am-243	014993-75-0	3.6E+02	3.6E+00	9.3E+03	9.3E+01	5.4E+04	5.4E+02
Am-243+D	014993-75-0	8.8E+00	8.8E-02	1.8E+02	1.8E+00	6.3E+03	6.3E+01
Ar-41	014163-25-8						
At-217	017239-90-6	1.3E+07	1.3E+05	3.4E+07	3.4E+05	7.5E+06	7.5E+04

Table 3.3d. (continued)

Chemical [†]	CASRN	Ingestion of Vegetables (pCi/g)		Ingestion of Beef (pCi/g)		Ingestion of Milk (pCi/g)	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Au-196	014914-16-0	7.8E+02	7.8E+00	3.9E+03	3.9E+01	4.2E+05	4.2E+03
Au-198	010043-49-0	2.1E+02	2.1E+00	9.6E+02	9.6E+00	1.0E+05	1.0E+03
Ba-131	014914-75-1	2.0E+03	2.0E+01	1.6E+05	1.6E+03	1.7E+04	1.7E+02
Ba-133	013981-41-4	7.0E+02	7.0E+00	1.0E+05	1.0E+03	1.0E+04	1.0E+02
Ba-133m	013981-41-4	2.7E+03	2.7E+01	1.0E+05	1.0E+03	1.0E+04	1.0E+02
Ba-137m	013981-97-0	4.9E+06	4.9E+04	1.1E+08	1.1E+06	1.2E+07	1.2E+05
Ba-139	014378-25-7	3.8E+04	3.8E+02	9.1E+05	9.1E+03	9.4E+04	9.4E+02
Ba-140	014798-08-4	2.8E+02	2.8E+00	2.3E+04	2.3E+02	2.4E+03	2.4E+01
Be-7	013966-02-4	3.7E+06	3.7E+04	1.4E+06	1.4E+04	3.5E+08	3.5E+06
Bi-206	015776-19-9	3.2E+02	3.2E+00	1.9E+04	1.9E+02	3.2E+03	3.2E+01
Bi-207	013982-38-2	2.7E+02	2.7E+00	2.6E+04	2.6E+02	4.5E+03	4.5E+01
Bi-210	014331-79-4	3.3E+02	3.3E+00	1.8E+04	1.8E+02	3.1E+03	3.1E+01
Bi-211	015229-37-5	1.9E+05	1.9E+03	7.3E+06	7.3E+04	1.3E+06	1.3E+04
Bi-212	014913-49-6	5.5E+03	5.5E+01	2.1E+05	2.1E+03	3.7E+04	3.7E+02
Bi-213	015776-20-2	7.7E+03	7.7E+01	3.0E+05	3.0E+03	5.2E+04	5.2E+02
Bi-214	014733-03-0	1.7E+04	1.7E+02	6.8E+05	6.8E+03	1.2E+05	1.2E+03
Br-82	014686-69-2						
C-11	014333-33-6						
C-14	014762-75-5						

Table 3.3d. (continued)

Chemical [†]	CASRN	Ingestion of Vegetables (pCi/g)		Ingestion of Beef (pCi/g)		Ingestion of Milk (pCi/g)	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
C-15	015929-23-4						
Ca-45	013966-05-7	6.7E+02	6.7E+00	7.0E+03	7.0E+01	1.0E+03	1.0E+01
Ca-47	001439-99-2	2.0E+02	2.0E+00	2.1E+03	2.1E+01	3.1E+02	3.1E+00
Cd-109	014109-32-1	1.7E+02	1.7E+00	1.6E+04	1.6E+02	1.4E+03	1.4E+01
Cd-115	014336-68-6	3.6E+02	3.6E+00	1.7E+04	1.7E+02	1.5E+03	1.5E+01
Cd-115m	014336-68-6	1.1E+02	1.1E+00	8.9E+03	8.9E+01	7.7E+02	7.7E+00
Ce-141	013967-74-3	1.5E+04	1.5E+02	1.1E+06	1.1E+04	1.6E+05	1.6E+03
Ce-143	014119-19-8	1.0E+04	1.0E+02	7.2E+05	7.2E+03	1.0E+05	1.0E+03
Ce-144	014762-78-8	2.0E+03	2.0E+01	1.4E+05	1.4E+03	2.1E+04	2.1E+02
Ce-144+D	014762-78-8	2.0E+03	2.0E+01	1.4E+05	1.4E+03	2.1E+04	2.1E+02
Cl-36	013981-43-6	3.1E+00	3.1E-02	4.8E+00	4.8E-02	1.0E+00	1.0E-02
Cl-38	014158-34-0	3.3E+01	3.3E-01	5.1E+01	5.1E-01	1.1E+01	1.1E-01
Cm-242	015510-73-3	3.1E+03	3.1E+01	8.0E+04	8.0E+02	4.6E+05	4.6E+03
Cm-243	015757-87-6	4.7E+02	4.7E+00	1.2E+04	1.2E+02	7.0E+04	7.0E+02
Cm-243+D	015757-87-6	4.7E+02	4.7E+00	1.2E+04	1.2E+02	7.0E+04	7.0E+02
Cm-244	013981-15-2	5.6E+02	5.6E+00	1.4E+04	1.4E+02	8.4E+04	8.4E+02
Cm-245	015621-76-8	3.6E+02	3.6E+00	9.1E+03	9.1E+01	5.3E+04	5.3E+02
Cm-246	015757-90-1	3.6E+02	3.6E+00	9.2E+03	9.2E+01	5.3E+04	5.3E+02
Cm-247	015758-32-4	3.9E+02	3.9E+00	9.9E+03	9.9E+01	5.7E+04	5.7E+02

Table 3.3d. (continued)

Chemical ¹	CASRN	Ingestion of Vegetables (pCi/g)		Ingestion of Beef (pCi/g)		Ingestion of Milk (pCi/g)	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Cm-248	015758-33-5	9.1E+01	9.1E-01	2.3E+03	2.3E+01	1.3E+04	1.3E+02
Co-57	013981-50-5	4.1E+03	4.1E+01	2.6E+05	2.6E+03	8.1E+04	8.1E+02
Co-58	013981-38-9	1.4E+03	1.4E+01	9.0E+04	9.0E+02	2.8E+04	2.8E+02
Co-58m	013981-38-9	4.2E+04	4.2E+02	2.7E+06	2.7E+04	8.3E+05	8.3E+03
Co-60	010198-40-0	2.1E+02	2.1E+00	1.3E+04	1.3E+02	4.2E+03	4.2E+01
Cr-51	014392-02-0	1.8E+04	1.8E+02	7.2E+04	7.2E+02	1.4E+07	1.4E+05
Cs-131	014914-76-2	2.2E+04	2.2E+02	6.9E+03	6.9E+01	9.7E+03	9.7E+01
Cs-134	013967-70-9	8.4E+01	8.4E-01	2.6E+01	2.6E-01	3.7E+01	3.7E-01
Cs-134m	013967-70-9	8.7E+04	8.7E+02	2.7E+04	2.7E+02	3.8E+04	3.8E+02
Cs-135	015726-30-4	8.8E+02	8.8E+00	2.7E+02	2.7E+00	3.8E+02	3.8E+00
Cs-136	014234-29-8	5.1E+02	5.1E+00	1.6E+02	1.6E+00	2.3E+02	2.3E+00
Cs-137	010045-97-3	1.3E+02	1.3E+00	3.9E+01	3.9E-01	5.5E+01	5.5E-01
Cs-137+D	010045-97-3	9.4E+01	9.4E-01	2.6E+01	2.6E-01	3.5E+01	3.5E-01
Cs-138	015758-29-9	2.3E+04	2.3E+02	7.1E+03	7.1E+01	9.9E+03	9.9E+01
Cu-64	013981-25-4	3.5E+03	3.5E+01	7.7E+03	7.7E+01	1.0E+04	1.0E+02
Dy-165	013967-64-1						
Dy-166	015840-01-4						
Er-169	015840-13-8						
Er-171	014391-45-8						

Table 3.3d. (continued)

Chemical ^a	CASRN	Ingestion of Vegetables (pCi/g)		Ingestion of Beef (pCi/g)		Ingestion of Milk (pCi/g)	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Eu-152	014683-23-9	1.0E+04	1.0E+02	7.4E+03	7.4E+01	5.3E+04	5.3E+02
Eu-154	015585-10-1	6.4E+03	6.4E+01	4.5E+03	4.5E+01	3.3E+04	3.3E+02
Eu-155	014391-16-3	3.6E+04	3.6E+02	2.6E+04	2.6E+02	1.9E+05	1.9E+03
Eu-156	014280-35-4	5.5E+03	5.5E+01	3.9E+03	3.9E+01	2.8E+04	2.8E+02
F-18	013981-56-1						
Fe-55	014681-59-5	6.4E+03	6.4E+01	1.6E+04	1.6E+02	2.3E+06	2.3E+04
Fe-59	014596-12-4	4.8E+02	4.8E+00	9.6E+02	9.6E+00	1.4E+05	1.4E+03
Fr-221	015756-41-9	2.7E+04	2.7E+02	1.6E+05	1.6E+03	4.3E+03	4.3E+01
Fr-223	015756-98-6	8.9E+03	8.9E+01	5.2E+04	5.2E+02	1.4E+03	1.4E+01
Ga-67	014119-09-6	1.1E+04	1.1E+02	4.6E+05	4.6E+03	3.0E+06	3.0E+04
Ga-72	013982-22-4	4.8E+03	4.8E+01	8.1E+04	8.1E+02	5.2E+05	5.2E+03
Gd-153	014276-65-4	1.7E+03	1.7E+01	3.2E+04	3.2E+02	2.3E+05	2.3E+03
Gd-159	014041-42-0	9.3E+03	9.3E+01	1.6E+04	1.6E+02	1.2E+05	1.2E+03
Ge-71	014374-81-3						
H-3	010028-17-8					2.6E+04	2.6E+02
Hg-197	013981-51-6	3.3E+02	3.3E+00	9.8E+02	9.8E+00	4.5E+03	4.5E+01
Hg-203	013982-78-0	1.3E+02	1.3E+00	4.4E+02	4.4E+00	2.0E+03	2.0E+01
Ho-166	013967-65-2						
I-122	018287-75-7	2.8E+05	2.8E+03	3.1E+04	3.1E+02	2.6E+04	2.6E+02

Table 3.3d. (continued)

Chemical [†]	CASRN	Ingestion of Vegetables (pCi/g)		Ingestion of Beef (pCi/g)		Ingestion of Milk (pCi/g)	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
I-123	015715-08-9	1.1E+04	1.1E+02	1.2E+03	1.2E+01	1.0E+03	1.0E+01
I-125	014158-31-7	2.3E+02	2.3E+00	2.6E+01	2.6E-01	2.1E+01	2.1E-01
I-126	014158-32-8	1.2E+02	1.2E+00	1.4E+01	1.4E-01	1.1E+01	1.1E-01
I-129	015046-84-1	3.2E+01	3.2E-01	3.6E+00	3.6E-02	3.0E+00	3.0E-02
I-130	014914-02-4	1.2E+03	1.2E+01	1.4E+02	1.4E+00	1.1E+02	1.1E+00
I-131	010043-66-0	1.6E+02	1.6E+00	1.8E+01	1.8E-01	1.5E+01	1.5E-01
I-132	014683-16-0	9.0E+03	9.0E+01	1.0E+03	1.0E+01	8.3E+02	8.3E+00
I-133	014834-67-4	5.6E+02	5.6E+00	6.3E+01	6.3E-01	5.2E+01	5.2E-01
I-134	014914-27-3	2.6E+04	2.6E+02	2.9E+03	2.9E+01	2.4E+03	2.4E+01
I-135	014834-68-5	2.6E+03	2.6E+01	2.9E+02	2.9E+00	2.4E+02	2.4E+00
In-113m	014885-78-0	4.4E+05	4.4E+03	3.5E+05	3.5E+03	1.5E+06	1.5E+04
In-114	013981-55-0	8.8E+06	8.8E+04	6.4E+06	6.4E+04	2.8E+07	2.8E+05
In-114m	013981-55-0	1.3E+02	1.3E+00	1.4E+03	1.4E+01	6.0E+03	6.0E+01
In-115	014191-71-0	6.1E+01	6.1E-01	8.1E+02	8.1E+00	3.5E+03	3.5E+01
In-115m	014191-71-0	9.4E+04	9.4E+02	8.4E+04	8.4E+02	3.7E+05	3.7E+03
Ir-190	014981-91-0	4.3E+02	4.3E+00	4.3E+03	4.3E+01	9.2E+05	9.2E+03
Ir-194	014158-35-1	5.2E+02	5.2E+00	3.0E+03	3.0E+01	6.6E+05	6.6E+03
K-40	013966-00-2	3.2E+01	3.2E-01	1.8E+01	1.8E-01	9.9E+00	9.9E-02
K-42	014378-21-3	3.1E+02	3.1E+00	1.8E+02	1.8E+00	9.6E+01	9.6E-01

Table 3.3d. (continued)

Chemical ^t	CASRN	Ingestion of Vegetables (pCi/g)		Ingestion of Beef (pCi/g)		Ingestion of Milk (pCi/g)	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Kr-83m	013965-98-5						
Kr-85	013983-27-2						
Kr-85m	013983-27-2						
Kr-87	014809-68-8						
Kr-88	014995-61-0						
Kr-89	016316-03-3						
Kr-90	015741-13-6						
La-140	013981-28-7						
Lu-177	014265-75-9						
Mn-52	014092-99-0	5.0E+01	5.0E-01	1.4E+03	1.4E+01	4.9E+03	4.9E+01
Mn-54	013966-31-9	1.5E+02	1.5E+00	4.2E+03	4.2E+01	1.5E+04	1.5E+02
Mn-56	014681-52-8	3.5E+02	3.5E+00	9.6E+03	9.6E+01	3.5E+04	3.5E+02
Mo-99	014119-15-4	4.8E+02	4.8E+00	1.1E+04	1.1E+02	1.4E+03	1.4E+01
Na-22	013966-32-0	3.0E+02	3.0E+00	6.6E+01	6.6E-01	7.2E+01	7.2E-01
Na-24	013982-04-2	1.7E+03	1.7E+01	3.8E+02	3.8E+00	4.2E+02	4.2E+00
Nb-93m	007440-03-1	6.0E+03	6.0E+01	3.2E+08	3.2E+06	5.1E+07	5.1E+05
Nb-94	014681-63-1	5.7E+02	5.7E+00	3.1E+07	3.1E+05	4.9E+06	4.9E+04
Nb-95	013967-76-5	1.8E+03	1.8E+01	9.4E+07	9.4E+05	1.5E+07	1.5E+05
Nb-95m	013967-76-5	1.3E+03	1.3E+01	6.9E+07	6.9E+05	1.1E+07	1.1E+05

Table 3.3d. (continued)

Chemical [†]	CASRN	Ingestion of Vegetables (pCi/g)		Ingestion of Beef (pCi/g)		Ingestion of Milk (pCi/g)	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Nb-97	018496-04-3	2.3E+04	2.3E+02	1.2E+09	1.2E+07	1.9E+08	1.9E+06
Nb-97m	018496-04-3	1.2E+06	1.2E+04	6.5E+10	6.5E+08	1.0E+10	1.0E+08
Nd-147	014269-74-0						
Nd-149	015749-81-2						
Ni-59	014336-70-0	1.3E+04	1.3E+02	4.4E+04	4.4E+02	3.1E+03	3.1E+01
Ni-63	013981-37-8	4.3E+03	4.3E+01	1.5E+04	1.5E+02	1.0E+03	1.0E+01
Ni-65	014833-49-9	4.2E+03	4.2E+01	1.4E+04	1.4E+02	1.0E+03	1.0E+01
Np-236	015700-36-4	3.2E+03	3.2E+01	6.8E+04	6.8E+02	3.0E+06	3.0E+04
Np-237	013994-20-2	1.0E+01	1.0E-01	2.2E+02	2.2E+00	9.3E+03	9.3E+01
Np-237+D	013994-20-2	9.9E+00	9.9E-02	2.1E+02	2.1E+00	4.6E+03	4.6E+01
Np-238	015766-25-3	6.5E+02	6.5E+00	1.4E+04	1.4E+02	6.0E+05	6.0E+03
Np-239	013968-59-7	7.0E+02	7.0E+00	1.5E+04	1.5E+02	6.4E+05	6.4E+03
Np-240	015690-84-3	1.7E+04	1.7E+02	3.6E+05	3.6E+03	1.6E+07	1.6E+05
Np-240m	015690-84-3	1.2E+05	1.2E+03	2.6E+06	2.6E+04	1.1E+08	1.1E+06
Os-185	015766-50-4						
Os-191	014119-24-5						
Os-191m	014119-24-5						
Os-193	016057-77-5						
P-32	014596-37-3	1.9E+01	1.9E-01	1.3E+01	1.3E-01	9.1E+00	9.1E-02

Table 3.3d. (continued)

Chemical ¹	CASRN	Ingestion of Vegetables (pCi/g)		Ingestion of Beef (pCi/g)		Ingestion of Milk (pCi/g)	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
P-33							
	015749-66-3	1.5E+02	1.5E+00	1.0E+02	1.0E+00	7.1E+01	7.1E-01
Pa-231							
	014331-85-2	1.3E+04	1.3E+02	8.5E+04	8.5E+02	3.7E+04	3.7E+02
Pa-233							
	013981-14-1	4.0E+05	4.0E+03	2.7E+06	2.7E+04	1.2E+06	1.2E+04
Pa-234							
	015100-28-4	8.9E+05	8.9E+03	5.9E+06	5.9E+04	2.6E+06	2.6E+04
Pa-234m							
	015100-28-4	4.0E+08	4.0E+06	2.7E+09	2.7E+07	1.2E+09	1.2E+07
Pb-203							
	014687-25-3	1.2E+04	1.2E+02	1.6E+05	1.6E+03	4.7E+04	4.7E+02
Pb-209							
	014119-30-3	5.7E+04	5.7E+02	8.0E+05	8.0E+03	2.3E+05	2.3E+03
Pb-210							
	014255-04-0	1.8E+01	1.8E-01	2.5E+02	2.5E+00	7.2E+01	7.2E-01
Pb-210+D							
	014255-04-0	2.6E+00	2.6E-02	6.4E+00	6.4E-02	7.0E+00	7.0E-02
Pb-211							
	015816-77-0	3.5E+04	3.5E+02	4.9E+05	4.9E+03	1.4E+05	1.4E+03
Pb-212							
	015092-94-1	6.6E+02	6.6E+00	9.3E+03	9.3E+01	2.7E+03	2.7E+01
Pb-214							
	015067-28-4	4.0E+04	4.0E+02	5.7E+05	5.7E+03	1.6E+05	1.6E+03
Pd-100							
	015690-69-4	3.2E+03	3.2E+01	6.1E+03	6.1E+01	5.3E+02	5.3E+00
Pd-101							
	015749-54-9	3.2E+04	3.2E+02	6.1E+04	6.1E+02	5.3E+03	5.3E+01
Pd-103							
	014967-68-1	1.1E+04	1.1E+02	2.2E+04	2.2E+02	1.9E+03	1.9E+01
Pd-107							
	017637-99-9	5.7E+04	5.7E+02	1.1E+05	1.1E+03	9.4E+03	9.4E+01
Pd-109							
	014981-64-7	3.6E+03	3.6E+01	6.8E+03	6.8E+01	5.9E+02	5.9E+00
Pm-147							
	014380-75-7						
Pm-148							
	014683-19-3						

Table 3.3d. (continued)

Chemical [†]	CASRN	Ingestion of Vegetables (pCi/g)		Ingestion of Beef (pCi/g)		Ingestion of Milk (pCi/g)	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Pm-148m	014683-19-3						
Pm-149	015765-31-8						
Po-210	013981-52-7	3.6E+02	3.6E+00	7.1E+01	7.1E-01	2.3E+02	2.3E+00
Po-212	015389-34-1	2.6E+15	2.6E+13	5.1E+14	5.1E+12	1.6E+15	1.6E+13
Po-213	015756-57-7	1.8E+14	1.8E+12	3.4E+13	3.4E+11	1.1E+14	1.1E+12
Po-214	015735-67-8	5.6E+12	5.6E+10	1.1E+12	1.1E+10	3.5E+12	3.5E+10
Po-215	015706-52-2	2.4E+11	2.4E+09	4.6E+10	4.6E+08	1.5E+11	1.5E+09
Po-216	015756-58-8	1.4E+09	1.4E+07	2.6E+08	2.6E+06	8.4E+08	8.4E+06
Po-218	015422-24-9	2.3E+06	2.3E+04	4.5E+05	4.5E+03	1.4E+06	1.4E+04
Pr-142	014191-64-1						
Pr-143	014981-79-4						
Pr-144	014119-05-2						
Pr-144m	014119-05-2						
Pt-191	015706-36-2						
Pt-193	015735-70-3						
Pt-193m	015735-70-3						
Pt-197	015735-74-7						
Pt-197m	015735-74-7						
Pu-236	015411-92-4	3.1E+03	3.1E+01	9.1E+04	9.1E+02	3.2E+05	3.2E+03

Table 3.3d. (continued)

Chemical [†]	CASRN	Ingestion of Vegetables (pCi/g)		Ingestion of Beef (pCi/g)		Ingestion of Milk (pCi/g)	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Pu-238	013981-16-3	8.1E+02	8.1E+00	2.4E+04	2.4E+02	8.4E+04	8.4E+02
Pu-239	015117-48-3	7.5E+02	7.5E+00	2.2E+04	2.2E+02	7.8E+04	7.8E+02
Pu-240	014119-33-6	7.5E+02	7.5E+00	2.2E+04	2.2E+02	7.9E+04	7.9E+02
Pu-241	014119-32-5	4.6E+04	4.6E+02	1.3E+06	1.3E+04	4.8E+06	4.8E+04
Pu-241+D	014119-32-5	7.1E+02	7.1E+00	2.1E+04	2.1E+02	7.4E+04	7.4E+02
Pu-242	013982-10-0	7.9E+02	7.9E+00	2.3E+04	2.3E+02	8.3E+04	8.3E+02
Pu-243	015706-37-3	6.5E+05	6.5E+03	1.9E+07	1.9E+05	6.7E+07	6.7E+05
Pu-244	014119-34-7	7.6E+02	7.6E+00	2.2E+04	2.2E+02	7.9E+04	7.9E+02
Pu-244+D	014119-34-7	7.5E+02	7.5E+00	2.2E+04	2.2E+02	7.8E+04	7.8E+02
Ra-223	015623-45-7	1.3E+01	1.3E-01	2.0E+02	2.0E+00	3.0E+01	3.0E-01
Ra-224	013233-32-4	2.0E+01	2.0E-01	3.2E+02	3.2E+00	4.7E+01	4.7E-01
Ra-225	013981-53-8	1.9E+01	1.9E-01	3.0E+02	3.0E+00	4.5E+01	4.5E-01
Ra-226	013982-63-3	1.0E+01	1.0E-01	1.6E+02	1.6E+00	2.4E+01	2.4E-01
Ra-226+D	013982-63-3	4.6E+00	4.6E-02	6.5E+00	6.5E-02	5.6E+00	5.6E-02
Ra-228	015262-20-1	1.2E+01	1.2E-01	1.9E+02	1.9E+00	2.9E+01	2.9E-01
Ra-228+D	015262-20-1	1.2E+01	1.2E-01	1.8E+02	1.8E+00	2.8E+01	2.8E-01
Rb-82	014391-63-0						
Rb-86	014932-53-7						
Rb-87	013982-13-3						

Table 3.3d. (continued)

Chemical ^t	CASRN	Ingestion of Vegetables (pCi/g)		Ingestion of Beef (pCi/g)		Ingestion of Milk (pCi/g)	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Rb-88	014928-36-0						
Rb-89	014191-65-2						
Rh-103m	007440-16-6						
Rh-105	014913-89-4						
Rh-105m	014913-89-4						
Rh-106	014234-34-5						
Rn-219	014835-02-0						
Rn-220	022481-48-7						
Rn-222+D	014859-67-7						
Ru-103	013968-53-1	1.2E+03	1.2E+01	2.5E+02	2.5E+00	8.4E+05	8.4E+03
Ru-105	014331-95-4	3.5E+03	3.5E+01	7.2E+02	7.2E+00	2.4E+06	2.4E+04
Ru-106	013967-48-1	1.2E+02	1.2E+00	2.4E+01	2.4E-01	8.1E+04	8.1E+02
Ru-106+D	013967-48-1	1.2E+02	1.2E+00	2.4E+01	2.4E-01	8.1E+04	8.1E+02
Ru-97	015758-35-7	6.7E+03	6.7E+01	1.4E+03	1.4E+01	4.7E+06	4.7E+04
S-35	015117-53-0	4.8E+02	4.8E+00	7.3E+01	7.3E-01	2.0E+02	2.0E+00
Sb-122	014374-79-9	1.4E+03	1.4E+01	2.4E+05	2.4E+03	8.3E+04	8.3E+02
Sb-124	014683-10-4	1.1E+03	1.1E+01	2.0E+05	2.0E+03	6.9E+04	6.9E+02
Sb-125	014234-35-6	4.0E+03	4.0E+01	7.1E+05	7.1E+03	2.5E+05	2.5E+03
Sb-125+D	014234-35-6	3.4E+03	3.4E+01	6.0E+05	6.0E+03	2.1E+05	2.1E+03

Table 3.3d. (continued)

Chemical [†]	CASRN	Ingestion of Vegetables (pCi/g)		Ingestion of Beef (pCi/g)		Ingestion of Milk (pCi/g)	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Sb-126	015756-32-8	1.2E+03	1.2E+01	2.2E+05	2.2E+03	7.5E+04	7.5E+02
Sb-126m	015756-32-8	1.6E+05	1.6E+03	2.9E+07	2.9E+05	1.0E+07	1.0E+05
Sb-127	013968-50-8	1.4E+03	1.4E+01	2.5E+05	2.5E+03	8.7E+04	8.7E+02
Sb-129	014331-88-5	6.4E+03	6.4E+01	1.1E+06	1.1E+04	3.9E+05	3.9E+03
Se-46	013967-63-0	4.3E+02	4.3E+00	9.9E+03	9.9E+01	7.1E+04	7.1E+02
Se-47	014391-96-9	3.1E+03	3.1E+01	1.9E+04	1.9E+02	1.4E+05	1.4E+03
Se-48	014391-86-7	2.1E+03	2.1E+01	8.6E+03	8.6E+01	6.3E+04	6.3E+02
Se-75	014265-71-5	1.8E+02	1.8E+00	3.2E+01	3.2E-01	7.0E+01	7.0E-01
Si-31	014276-49-4						
Sm-147	014392-33-7	4.7E+03	4.7E+01	9.7E+02	9.7E+00	5.3E+04	5.3E+02
Sm-151	015715-94-3	2.6E+05	2.6E+03	5.3E+04	5.3E+02	2.9E+06	2.9E+04
Sm-153	015766-00-4	3.0E+04	3.0E+02	6.1E+03	6.1E+01	3.3E+05	3.3E+03
Sn-113	013966-06-8	1.1E+02	1.1E+00	3.1E+02	3.1E+00	6.7E+02	6.7E+00
Sn-121	014683-06-8	3.3E+02	3.3E+00	9.5E+02	9.5E+00	2.1E+03	2.1E+01
Sn-121m	014683-06-8	2.0E+02	2.0E+00	5.8E+02	5.8E+00	1.3E+03	1.3E+01
Sn-125	014683-08-0	2.4E+01	2.4E-01	6.9E+01	6.9E-01	1.5E+02	1.5E+00
Sn-126	015832-50-5	1.9E+01	1.9E-01	5.4E+01	5.4E-01	1.2E+02	1.2E+00
Sr-82	014809-50-8	1.5E+01	1.5E-01	1.5E+01	1.5E-01	9.3E+00	9.3E-02
Sr-85	013967-73-2	2.8E+02	2.8E+00	2.8E+02	2.8E+00	1.7E+02	1.7E+00

Table 3.3d. (continued)

Chemical [†]	CASRN	Ingestion of Vegetables (pCi/g)		Ingestion of Beef (pCi/g)		Ingestion of Milk (pCi/g)	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Sr-85m	013967-73-2	2.2E+04	2.2E+02	2.2E+04	2.2E+02	1.3E+04	1.3E+02
Sr-89	014158-27-1	3.9E+01	3.9E-01	3.8E+01	3.8E-01	2.3E+01	2.3E-01
Sr-90	010098-97-2	9.7E+00	9.7E-02	9.5E+00	9.5E-02	5.9E+00	5.9E-02
Sr-90+D	010098-97-2	7.1E+00	7.1E-02	6.1E+00	6.1E-02	4.3E+00	4.3E-02
Sr-91	014331-91-0	1.4E+02	1.4E+00	1.4E+02	1.4E+00	8.5E+01	8.5E-01
Sr-92	014928-29-1	2.0E+02	2.0E+00	1.9E+02	1.9E+00	1.2E+02	1.2E+00
Ta-182	013982-00-8						
Tb-158	015759-35-4						
Tb-160	013981-29-8						
Tc-95	014809-36-4	3.5E+02	3.5E+00	3.7E+06	3.7E+04	5.8E+05	5.8E+03
Tc-95m	014809-36-4	1.9E+01	1.9E-01	2.0E+05	2.0E+03	3.2E+04	3.2E+02
Tc-96	014808-44-7	1.0E+01	1.0E-01	1.1E+05	1.1E+03	1.7E+04	1.7E+02
Tc-96m	014808-44-7	9.1E+02	9.1E+00	9.7E+06	9.7E+04	1.5E+06	1.5E+04
Tc-97	015759-35-0	1.5E+02	1.5E+00	1.6E+06	1.6E+04	2.5E+05	2.5E+03
Tc-97m	015759-35-0	2.0E+01	2.0E-01	2.1E+05	2.1E+03	3.3E+04	3.3E+02
Tc-99	014133-76-7	1.7E+01	1.7E-01	1.8E+05	1.8E+03	2.8E+04	2.8E+02
Tc-99m	014133-76-7	4.3E+02	4.3E+00	4.6E+06	4.6E+04	7.1E+05	7.1E+03
Te-125m	014390-73-9						
Te-127	013981-49-2						

Table 3.3d. (continued)

Chemical ^t	CASRN	Ingestion of Vegetables (pCi/g)		Ingestion of Beef (pCi/g)		Ingestion of Milk (pCi/g)	
		10 ⁻⁴	10 ⁻⁵	10 ⁻⁴	10 ⁻⁵	10 ⁻⁴	10 ⁻⁵
Te-127m	013981-49-2						
Te-129	014269-71-7						
Te-129m	014269-71-7						
Te-131	014683-12-6						
Te-131m	014683-12-6						
Te-132	014234-28-7						
Th-227	015623-47-9	5.9E+03	5.9E+01	3.1E+04	3.1E+02	1.3E+05	1.3E+03
Th-228	014274-82-9	3.8E+03	3.8E+01	2.0E+04	2.0E+02	8.7E+04	8.7E+02
Th-228+D	014274-82-9	5.6E+00	5.6E-02	1.9E+00	1.9E-02	4.2E+00	4.2E-02
Th-229	015594-54-4	4.2E+03	4.2E+01	2.2E+04	2.2E+02	9.7E+04	9.7E+02
Th-229+D	015594-54-4	3.0E-01	3.0E-03	1.3E-01	1.3E-03	4.9E-02	4.9E-04
Th-230	014269-63-7	6.3E+03	6.3E+01	3.4E+04	3.4E+02	1.5E+05	1.5E+03
Th-231	014932-40-2	1.3E+05	1.3E+03	7.0E+05	7.0E+03	3.0E+06	3.0E+04
Th-232	007440-29-1	7.3E+03	7.3E+01	3.8E+04	3.8E+02	1.7E+05	1.7E+03
Th-234	015065-10-8	1.2E+04	1.2E+02	6.5E+04	6.5E+02	2.8E+05	2.8E+03
Tl-202	015720-57-7	3.9E+03	3.9E+01	2.7E+03	2.7E+01	1.2E+04	1.2E+02
Tl-204	013968-51-9	1.1E+03	1.1E+01	1.4E+03	1.4E+01	5.9E+03	5.9E+01
Tl-208	014913-50-9	1.7E+06	1.7E+04	1.6E+05	1.6E+03	6.8E+05	6.8E+03
Tl-209	015690-73-0	2.1E+06	2.1E+04	2.0E+05	2.0E+03	8.5E+05	8.5E+03

Table 3.3d. (continued)

Chemical [†]	CASRN	Ingestion of Vegetables (pCi/g)		Ingestion of Beef (pCi/g)		Ingestion of Milk (pCi/g)	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Tm-170	013981-30-1						
Tm-171	014333-45-0						
U-232	014158-29-3	7.3E+02	7.3E+00	4.2E+03	4.2E+01	7.7E+02	7.7E+00
U-233	013968-55-3	1.3E+03	1.3E+01	7.6E+03	7.6E+01	1.4E+03	1.4E+01
U-234	013966-29-5	1.3E+03	1.3E+01	7.6E+03	7.6E+01	1.4E+03	1.4E+01
U-235	015117-96-1	1.3E+03	1.3E+01	7.5E+03	7.5E+01	1.4E+03	1.4E+01
U-235+D	015117-96-1	1.0E+03	1.0E+01	5.5E+03	5.5E+01	1.3E+03	1.3E+01
U-236	013982-70-2	1.4E+03	1.4E+01	8.1E+03	8.1E+01	1.5E+03	1.5E+01
U-237	014269-75-1	1.5E+04	1.5E+02	8.5E+04	8.5E+02	1.6E+04	1.6E+02
U-238	007440-61-1	1.4E+03	1.4E+01	8.0E+03	8.0E+01	1.5E+03	1.5E+01
U-238+D	007440-61-1	7.5E+02	7.5E+00	4.1E+03	4.1E+01	9.7E+02	9.7E+00
U-240	015687-53-3	1.1E+04	1.1E+02	6.2E+04	6.2E+02	1.1E+04	1.1E+02
V-48	014331-97-6	5.1E+02	5.1E+00	6.8E+03	6.8E+01	3.4E+03	3.4E+01
W-181	015749-46-9	5.2E+02	5.2E+00	3.8E+02	3.8E+00	1.1E+04	1.1E+02
W-185	014932-41-3	6.9E+01	6.9E-01	5.0E+01	5.0E-01	1.5E+03	1.5E+01
W-187	014983-48-3	6.0E+01	6.0E-01	4.2E+01	4.2E-01	1.2E+03	1.2E+01
Xe-122	015151-09-4						
Xe-123	015700-10-4						
Xe-125	013994-18-8						

Table 3.3d. (continued)

Chemical [†]	CASRN	Ingestion of Vegetables (pCi/g)		Ingestion of Beef (pCi/g)		Ingestion of Milk (pCi/g)	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Xe-127	013994-19-9						
Xe-129m	013965-99-6						
Xe-131m	014683-11-5						
Xe-133	014932-42-4						
Xe-133m	014932-42-4						
Xe-135	014995-62-1						
Xe-135m	014995-62-1						
Xe-137	014835-21-3						
Xe-138	015751-81-2						
Y-90	010098-91-6	5.3E+03	5.3E+01	8.0E+03	8.0E+01	8.7E+04	8.7E+02
Y-91	014234-24-3	5.9E+03	5.9E+01	8.9E+03	8.9E+01	9.6E+04	9.6E+02
Y-91m	014234-24-3	2.2E+06	2.2E+04	3.2E+06	3.2E+04	3.5E+07	3.5E+05
Y-92	015751-59-4	4.1E+04	4.1E+02	6.1E+04	6.1E+02	6.7E+05	6.7E+03
Y-93	014981-70-5	1.4E+04	1.4E+02	2.1E+04	2.1E+02	2.3E+05	2.3E+03
Zn-65	013982-39-3	3.0E+01	3.0E-01	1.2E+01	1.2E-01	2.5E+01	2.5E-01
Zn-69	013982-23-5	4.8E+03	4.8E+01	1.9E+03	1.9E+01	4.0E+03	4.0E+01
Zn-69m	013982-23-5	2.0E+02	2.0E+00	7.6E+01	7.6E-01	1.6E+02	1.6E+00
Zr-93	015751-77-6	1.8E+06	1.8E+04	2.4E+08	2.4E+06	9.6E+07	9.6E+05
Zr-95	013967-71-0	2.4E+05	2.4E+03	3.2E+07	3.2E+05	1.3E+07	1.3E+05

Table 3.3d. (continued)

Chemical†	CASRN	Ingestion of Vegetables (pCi/g)		Ingestion of Beef (pCi/g)		Ingestion of Milk (pCi/g)	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Zr-97	014928-30-4	9.2E+04	9.2E+02	1.2E+07	1.2E+05	4.8E+06	4.8E+04

Notes:

† Isotopes designated with an “m” indicate that the isotope is metastable; isotopes designated with a “+D” indicate that the radionuclide slope factors include contributions from daughter products.

Table 3.3e. (continued)

Chemical	CASRN	Intercept (Vegetables)			Slope	Intercept (Beef)			Slope	Intercept (Milk)				Slope
		10 ⁻⁴	10 ⁻⁶	HQ=1		10 ⁻⁴	10 ⁻⁶	HQ=1		10 ⁻⁴	10 ⁻⁶	HQ=1 (Adult)	HQ=1 (Child)	
AMDRO	067485-29-4													
AMETRYN	000834-12-8			8.4E+00	-1.7E+02			1.6E+05	-1.3E+00		1.2E+05	1.6E+04	-1.6E+00	
AMINOPHENOL, m-	000591-27-5			8.7E+00	-4.6E+01			5.7E+06	-1.7E-01		4.4E+06	5.7E+05	-2.0E-01	
AMINOPYRIDINE, 4-	000504-24-5			2.7E-03	-4.7E+01			1.5E+03	-1.9E-01		1.2E+03	1.5E+02	-2.2E-01	
AMITRAZ	033089-61-1													
AMMONIA	007664-41-7													
AMMONIUM SULFAMATE	007773-06-0													
ANILINE	000062-53-3	1.3E+01	1.3E-01		-7.7E+01	1.6E+06	1.6E+04		-4.5E-01	5.4E+05	5.4E+03		-5.4E-01	
ANTHRACENE	000120-12-7			1.1E+04	-5.4E+03			2.0E+05	-2.5E-01		1.6E+05	2.0E+04	-2.9E+01	
ANTIMONY (METALLIC)	007440-36-0			3.6E+01	-1.4E+04			6.5E+03	-3.3E+01		2.6E+03	3.3E+02	-4.0E+01	
ANTIMONY PENTOXIDE	001314-60-9													
ANTIMONY POTASSIUM TARTRATE	000304-61-0													
ANTIMONY TETROXIDE	001332-81-6													
ANTIMONY TRIOXIDE	001309-64-4													
APOLLO	074115-24-5													
ARAMITE	000140-57-8													
AROCLOR 1016	012674-11-2			1.1E+01	-2.4E+04			5.8E+00	-4.1E+01		4.5E+00	5.8E-01	-4.9E+01	
AROCLOR 1254	011097-69-1			5.9E+00	-4.5E+04			3.3E-01	-4.4E+01		3.8E-01	4.9E-02	-5.3E+01	
AROCLOR-1221	011104-28-2	6.5E-01	6.5E-03		-3.3E+03	3.6E+01	3.6E-01		-1.9E+01	1.2E+01	1.2E-01		-2.2E+01	
AROCLOR-1232	011141-16-5	2.0E-01	2.0E-03		-1.0E+03	1.1E+02	1.1E+00		-7.7E+00	3.8E+01	3.8E-01		-9.3E+00	
AROCLOR-1242	053469-21-9	6.8E-01	6.8E-03		-3.4E+03	3.5E+01	3.5E-01		-1.9E+01	1.1E+01	1.1E-01		-2.3E+01	

Table 3.3e. (continued)

Chemical	CASRN	Intercept (Vegetables)			Slope	Intercept (Beef)			Slope	Intercept (Milk)				Slope
		10 ⁻⁴	10 ⁻⁶	HQ=1		10 ⁻⁴	10 ⁻⁶	HQ=1		10 ⁻⁴	10 ⁻⁶	HQ=1 (Adult)	HQ=1 (Child)	
AROCOR-1248	012672-29-6	6.1E+00	6.1E-02		-3.1E+04	1.7E+00	1.7E-02		-4.2E+01	5.7E-01	5.7E-03			-5.1E+01
AROCOR-1260	011096-82-5	3.9E+01	3.9E-01		-1.9E+05	8.1E-02	8.1E-04		-4.9E+01	2.7E-02	2.7E-04			-5.8E+01
ARSENIC, INORGANIC	007440-38-2			1.8E+02	-9.2E+04			1.4E+02	-4.7E+01			1.1E+03	1.4E+02	-5.7E+01
ARSINE	007784-42-1													
ASBESTOS	001332-21-4													
ASSURE	076578-14-8													
ASULAM	003337-71-1													
ATRAZINE	001912-24-9	2.9E+00	2.9E-02	9.8E+01	-4.5E+02	7.1E+03	7.1E+01	2.4E+05	-4.2E+00	2.3E+03	2.3E+01	1.8E+05	2.4E+04	-5.0E+00
AVERMECTIN B1	065195-55-3													
AZOBENZENE	000103-33-3	1.7E+01	1.7E-01		-1.3E+03	3.6E+03	3.6E+01		-1.5E+01	1.2E+03	1.2E+01			-1.8E+01
BARUM	007440-39-3			6.4E+03	-1.4E+04			1.5E+05	-2.5E+01			1.7E+04	2.2E+03	-3.0E+01
BARUM CYANIDE	000542-62-1													
BAYGON	000114-26-1			3.0E+00	-1.4E+02			8.4E+04	-1.0E+00			6.6E+04	8.4E+03	-1.2E+00
BAYLETON	043121-43-3			5.5E+01	-3.1E+02			3.0E+05	-2.7E+00			2.3E+05	3.0E+04	-3.2E+00
BAYTHROID	068359-37-5													
BENEFIN	001861-40-1													
BENOMYL	017804-35-2			1.0E+02	-3.3E+02			5.1E+05	-2.6E+00			3.9E+05	5.1E+04	-3.1E+00
BENTAZON	025057-89-0			9.9E-01	-8.7E+01			8.5E+04	-5.5E-01			6.6E+04	8.5E+03	-6.6E-01
BENZALDEHYDE	000100-52-7			1.9E+02	-3.2E+02			9.6E+05	-2.8E+00			7.5E+05	9.6E+04	-3.3E+00
BENZENE	000071-43-2	1.3E+01	1.3E-01		-2.7E+02	9.8E+04	9.8E+02		-2.1E+00	3.2E+04	3.2E+02			-2.5E+00
BENZENETHIOL	000108-98-5			2.3E-02	-3.8E+02			8.0E+01	-3.4E+00			6.2E+01	8.0E+00	-4.1E+00

Table 3.3e. (continued)

Chemical	CASRN	Intercept (Vegetables)			Slope	Intercept (Beef)			Slope	Intercept (Milk)				Slope
		10 ⁻⁴	10 ⁻⁶	HQ=1		10 ⁻⁴	10 ⁻⁶	HQ=1		10 ⁻⁴	10 ⁻⁶	HQ=1 (Adult)	HQ=1 (Child)	
BIPHENOL A	000080-05-7			3.4E+02	-1.1E+03			1.2E+05	-1.2E+01			9.2E+04	1.2E+04	-1.4E+01
BORON TRIFLUORIDE	007637-07-2													
BORON and BORATES ONLY	007440-42-8			6.8E+02	-1.2E+03			1.9E+04	-8.6E+00			1.4E+03	1.8E+02	-1.0E+01
BROMOCHLOROMETHANE	000074-97-5													
BROMODICHLOROMETHANE	000075-27-4	7.0E+00	7.0E-02	3.7E+01	-3.1E+02	4.1E+04	4.1E+02	2.2E+05	-2.4E+00	1.3E+04	1.3E+02	1.7E+05	2.2E+04	-2.9E+00
BROMODIPHENYL ETHER, p-	000101-55-3													
BROMOFORM	000075-25-2	6.8E+01	6.8E-01	4.6E+01	-3.8E+02	2.7E+05	2.7E+03	1.8E+05	-3.0E+00	8.9E+04	8.9E+02	1.4E+05	1.8E+04	-3.6E+00
BROMOMETHANE	000074-83-9			6.4E-01	-9.7E+01			4.4E+04	-6.2E-01			3.4E+04	4.3E+03	-7.5E-01
BROMOPHOS	002104-96-3													
BROMOTRICHLOROMETHANE	000075-62-7													
BROMOXNYL	001689-84-5			3.6E+00	-5.4E+01			1.2E+06	-2.5E-01			9.6E+05	1.2E+05	-3.0E-01
BROMOXNYL OCTANOATE	001689-99-2													
BUTADIENE, 1,3-	000106-99-0													
BUTANOL, N-	000071-36-3			2.6E+01	-6.6E+01			4.8E+06	-3.5E-01			3.7E+06	4.8E+05	-4.2E-01
BUTYL BENZYL PHTHALATE	000085-68-7													
BUTYLATE	002008-41-5													
BUTYLCHLORIDE, T-	000507-20-0													
BUTYLPHthalYL BUTYLGLYCOLATE	000085-70-1													
CACODYLIC ACID	000075-60-5			2.8E-01	-4.1E+01			3.0E+05	-1.3E-01			2.3E+05	3.0E+04	-1.5E-01
CADMIUM (Diet)	007440-43-9			2.4E+01	-3.7E+03			9.7E+02	-2.0E+01			9.6E+01	1.2E+01	-2.4E+01
CADMIUM (Water)	007440-43-9			1.2E+01	-3.7E+03			4.9E+02	-2.0E+01			4.8E+01	6.1E+00	-2.4E+01

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Table 3.3e. (continued)

Chemical	CASRN	Intercept (Vegetables)			Slope	Intercept (Beef)			Slope	Intercept (Milk)				Slope
		10 ⁻⁴	10 ⁻⁶	HQ=1		10 ⁻⁴	10 ⁻⁶	HQ=1		10 ⁻⁴	10 ⁻⁶	HQ=1 (Adult)	HQ=1 (Child)	
CYANIDE (CN ⁻)	000057-12-5			1.3E+00	-3.7E+01			2.6E+06	-9.2E-02			2.0E+06	2.5E+05	-1.1E-01
CYANOGEN	000460-19-5													
CYANOGEN BROMIDE	000506-68-3													
CYANOGEN CHLORIDE	000506-77-4			6.1E+00	-4.5E+01			4.1E+06	-1.7E-01			3.2E+06	4.1E+05	-2.0E-01
CYCLOHEXANE, 1,2,3,4,5-PENTABROMO-6-CHLORO	000087-84-3													
CYCLOHEXANONE	000108-94-1			1.4E+03	-6.9E+01			2.3E+08	-3.8E-01			1.8E+08	2.3E+07	-4.5E-01
CYCLOHEXYLAMINE	000108-91-8			1.3E+02	-1.3E+02			4.6E+06	-9.2E-01			3.6E+06	4.6E+05	-1.1E+00
CYCLOPENTADIENE	000542-92-7													
CYHALOTHRIX/KARATE	068085-85-8													
CYPERMETHRIN	052315-07-8													
CYROMAZINE	066215-27-8													
DACTHAL	001861-32-1													
DALAPON	000075-99-0													
DDD	000072-54-8	3.5E+02	3.5E+00		-5.5E+04	6.8E+01	6.8E-01		-4.5E+01	3.0E+01	3.0E-01			-5.4E+01
DDE	000072-55-9	7.2E+02	7.2E+00		-1.6E+05	1.3E+01	1.3E-01		-4.8E+01	7.0E+00	7.0E-02			-5.8E+01
DDT	000050-29-3	2.4E+02	2.4E+00	1.8E+02	-5.4E+04	2.1E+01	2.1E-01	1.6E+01	-4.5E+01	5.9E+00	5.9E-02	1.0E+01	1.3E+00	-5.4E+01
DECABROMODIPHENYL ETHER	001163-19-5													
DEMETON	008065-48-3													
D[(2-ETHYLHEXYL)ADIPATE	000103-23-1	5.8E+05	5.8E+03	1.8E+06	-4.6E+05	1.2E+02	1.2E+00	3.7E+02	-4.9E+01	3.9E+01	3.9E-01	2.9E+02	3.7E+01	-5.9E+01
DIALATE	002303-16-4	9.4E-01	9.4E-03		-6.4E+01	1.9E+05	1.9E+03		-3.4E-01	6.2E+04	6.2E+02			-4.1E-01

Table 3.3e. (continued)

Chemical	CASRN	Intercept (Vegetables)			Slope	Intercept (Beef)			Slope	Intercept (Milk)				Slope
		10 ⁻⁴	10 ⁻⁶	HQ=1		10 ⁻⁴	10 ⁻⁶	HQ=1		10 ⁻⁴	10 ⁻⁶	HQ=1 (Adult)	HQ=1 (Child)	
DIAZINON	000333-41-5			1.4E+01	-2.3E+03			1.6E+03	-1.5E+01			1.2E+03	1.6E+02	-1.7E+01
DIBENZ[A,H]ANTHRACENE	000053-70-3	5.3E+00	5.3E-02		-2.5E+04	2.5E+00	2.5E-02		-4.1E+01	8.2E-01	8.2E-03			-4.9E+01
DIBROMO-3-CHLOROPROPANE, 1,2-	000096-12-8	3.3E-01	3.3E-03		-3.3E+02	1.7E+03	1.7E+01		-2.6E+00	5.6E+02	5.6E+00			-3.1E+00
DIBROMOBENZENE, 1,4-	000106-37-6			7.7E+01	-1.2E+03			1.9E+04	-1.4E+01			1.5E+04	1.9E+03	-1.6E+01
DIBROMOCHLOROMETHANE	000124-48-1	4.2E+00	4.2E-02	3.0E+01	-2.6E+02	3.5E+04	3.5E+02	2.5E+05	-2.0E+00	1.2E+04	1.2E+02	2.0E+05	2.5E+04	-2.4E+00
DIBROMODICHLOROMETHANE	000594-18-3													
DIBROMODIPHENYL ETHER, p,p'-	002050-47-7													
DIBROMOETHANE, 1,2-	000106-93-4													
DIBROMOMETHANE (METHYLENE BROMIDE)	000074-95-3			4.8E+00	-1.0E+02			3.0E+05	-6.5E-01			2.3E+05	3.0E+04	-7.8E-01
DIBUTYL PHTHALATE	000084-74-2			1.6E+04	-2.5E+04			7.9E+03	-4.1E+01			6.2E+03	7.9E+02	-4.9E+01
DICAMBA	001918-00-9			1.5E+02	-8.1E+02			1.4E+05	-6.2E+00			1.1E+05	1.4E+04	-7.4E+00
DICHLORO-2-BUTENE, 1,4-	000764-41-0													
DICHLOROBENZENE, 1,2-	000095-50-1			1.0E+03	-1.8E+03			2.1E+05	-1.2E+01			1.6E+05	2.1E+04	-1.4E+01
DICHLOROBENZENE, 1,3-	000541-73-1				-1.8E+03				-1.2E+01					-1.4E+01
DICHLOROBENZENE, 1,4-	000106-46-7	1.1E+02	1.1E+00		-1.8E+03	2.2E+04	2.2E+02		-1.2E+01	7.4E+03	7.4E+01			-1.4E+01
DICHLOROBENZIDINE, 3,3'-	000091-94-1	5.2E+00	5.2E-02		-1.5E+03	1.4E+03	1.4E+01		-1.1E+01	4.5E+02	4.5E+00			-1.3E+01
DICHLORODIFLUOROMETHANE	000075-71-8			3.3E+02	-2.8E+02			2.3E+06	-2.2E+00			1.8E+06	2.3E+05	-2.6E+00
DICHLOROETHANE, 1,1-	000075-34-3			1.0E+02	-1.8E+02			1.7E+06	-1.4E+00			1.3E+06	1.7E+05	-1.6E+00
DICHLOROETHANE, 1,2-	000107-06-2	1.7E+00	1.7E-02		-1.3E+02	6.0E+04	6.0E+02		-9.1E-01	2.0E+04	2.0E+02			-1.1E+00
DICHLOROETHYLENE, 1,1-	000075-35-4	4.2E-01	4.2E-03	9.8E+00	-1.9E+02	6.3E+03	6.3E+01	1.5E+05	-1.5E+00	2.1E+03	2.1E+01	1.1E+05	1.5E+04	-1.7E+00
DICHLOROETHYLENE, 1,2-, (MIXED ISOMERS)	000540-59-0			1.6E+00	-5.4E+01			5.6E+05	-2.4E-01			4.4E+05	5.6E+04	-2.9E-01

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Table 3.3e. (continued)

Chemical	CASRN	Intercept (Vegetables)			Slope	Intercept (Beef)			Slope	Intercept (Milk)				Slope
		10 ⁻⁴	10 ⁻⁶	HQ=1		10 ⁻⁴	10 ⁻⁶	HQ=1		10 ⁻⁴	10 ⁻⁶	HQ=1 (Adult)	HQ=1 (Child)	
DIFLUOROETHANE, 1,1-	000075-37-6													
DIISOPROPYL METHYLPHOSPHONATE	001445-75-6													
DIMETHIPIN	055290-64-7													
DIMETHOATE	000060-51-5			5.8E-01	-4.7E+02			1.3E+03	-4.3E+00			1.0E+03	1.3E+02	-5.2E+00
DIMETHOXYBENZIDINE, 3,3'-	000119-90-4	8.6E+00	8.6E-02		-1.1E+02	4.7E+05	4.7E+03		-7.0E-01	1.6E+05	1.6E+03			-8.4E-01
DIMETHYL SULFATE	000077-78-1													
DIMETHYLANILINE HCL, 2,4-	021436-96-4													
DIMETHYLANILINE, 2,4-	000095-68-1													
DIMETHYLANILINE, N,N-	000121-69-7			5.2E+00	-4.2E+02			1.4E+04	-3.9E+00			1.1E+04	1.4E+03	-4.7E+00
DIMETHYLBENZIDINE, 3,3'-	000119-93-7	3.8E-02	3.8E-04		-2.5E+02	3.2E+02	3.2E+00		-2.0E+00	1.1E+02	1.1E+00			-2.4E+00
DIMETHYLETHYL LEAD	107584-40-7													
DIMETHYLFORMAMIDE	000068-12-2			2.5E+00	-3.1E+01			2.6E+07	-3.4E-02			2.1E+07	2.6E+06	-4.1E-02
DIMETHYLHYDRAZINE, 1,2-	000540-73-8													
DIMETHYLPHENOL, 2,4-	000105-67-9			7.9E+01	-6.3E+02			1.2E+05	-4.9E+00			9.1E+04	1.2E+04	-5.9E+00
DIMETHYLPHENOL, 2,6-	000576-26-1													
DIMETHYLPHENOL, 3,4-	000095-65-8			1.7E+00	-2.8E+02			1.1E+04	-2.4E+00			8.5E+03	1.1E+03	-2.9E+00
DIMETHYLPHthalate	000131-11-3				-1.4E+02				-1.0E+00					-1.2E+00
DIMETHYLTEREPHTHALATE	000120-61-6			3.9E+02	-6.3E+02			4.7E+05	-6.1E+00			3.7E+05	4.7E+04	-7.3E+00
DINITRO-O-CYCLOHEXYL PHENOL, 4,6-	000131-89-5			5.2E-03	-2.7E+01			2.8E+06	-3.6E-03			2.1E+06	2.8E+05	-4.3E-03
DINITROBENZENE, 1,2-	000528-29-0													
DINITROBENZENE, 1,3-	000099-65-0			8.1E-02	-1.5E+02			2.0E+03	-1.1E+00			1.6E+03	2.0E+02	-1.3E+00

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Table 3.3e. (continued)

Chemical	CASRN	Intercept (Vegetables)			Slope	Intercept (Beef)			Slope	Intercept (Milk)				Slope
		10 ⁻⁴	10 ⁻⁶	HQ=1		10 ⁻⁴	10 ⁻⁶	HQ=1		10 ⁻⁴	10 ⁻⁶	HQ=1 (Adult)	HQ=1 (Child)	
GLUFOSINATE-AMMONIUM	077182-82-2													
GLYCIDYL	000765-34-4													
GLYPHOSATE	001071-83-6			1.7E-01	-2.7E+01			1.8E+08	-2.4E-03			1.4E+08	1.8E+07	-2.9E-03
GOAL	042874-03-3													
HALOXYFOP-METHYL	069806-40-2													
HARMONY	079277-27-3													
HEPTACHLOR	000076-44-8	1.7E+00	1.7E-02	1.6E+01	-5.0E+03	1.5E+00	1.5E-02	1.5E+01	-2.4E+01	7.7E-01	7.7E-03	1.8E+01	2.2E+00	-2.8E+01
HEPTACHLOR EPOXIDE	001024-57-3	8.9E-02	8.9E-04	4.5E-02	-5.5E+02	2.7E-02	2.7E-04	1.4E-02	-4.3E+00	6.4E-03	6.4E-05	7.6E-03	9.7E-04	-5.2E+00
HEPTANE, N-	000142-82-5				-5.0E+03				-2.4E+01					-2.8E+01
HEXABROMOBENZENE	000087-82-1													
HEXACHLOROBENZENE	000118-74-1	1.4E+01	1.4E-01	8.0E+01	-1.5E+04	2.3E+00	2.3E-02	1.3E+01	-3.7E+01	1.3E+00	1.3E-02	1.6E+01	2.1E+00	-4.4E+01
HEXACHLOROBUTADIENE	000087-68-3	1.6E+02	1.6E+00	1.1E+01	-8.3E+03	1.2E+03	1.2E+01	7.7E+01	-3.0E+01	3.8E+02	3.8E+00	6.0E+01	7.7E+00	-3.6E+01
HEXACHLOROCYCLOHEXANE, ALPHA-	000319-84-6	6.3E-01	6.3E-03		-2.6E+03	6.9E-01	6.9E-03		-1.6E+01	4.7E-01	4.7E-03			-1.9E+01
HEXACHLOROCYCLOHEXANE, BETA-	000319-85-7	2.2E+00	2.2E-02		-2.6E+03	2.0E+02	2.0E+00		-1.6E+01	6.6E+01	6.6E-01			-1.9E+01
HEXACHLOROCYCLOHEXANE, DELTA-	000319-86-8				-3.4E+03				-1.9E+01					-2.3E+01
HEXACHLOROCYCLOHEXANE, EPSILON	006108-10-7													
HEXACHLOROCYCLOHEXANE, GAMMA-	000058-89-9	3.0E+00	3.0E-02	5.1E+00	-2.6E+03	3.3E+00	3.3E-02	5.6E+00	-1.6E+01	2.3E+00	2.3E-02	9.1E+00	1.2E+00	-1.9E+01
HEXACHLOROCYCLOHEXANE, TECHNICAL	000608-73-1													
HEXACHLOROCYCLOPENTADIENE	000077-47-4			1.4E+02	-3.0E+03				-1.7E+01			7.3E+03	9.4E+02	-2.1E+01
HEXACHLORODIBENZO-p-DIOXIN, MIXTURE	019408-74-3	2.7E-02	2.7E-04		-1.1E+05	2.6E-04	2.6E-06		-4.8E+01	8.7E-05	8.7E-07			-5.7E+01
HEXACHLOROETHANE	000067-72-1	7.2E+02	7.2E+00	4.3E+01	-6.6E+03	8.8E+03	8.8E+01	5.3E+02	-2.7E+01	2.9E+03	2.9E+01	4.1E+02	5.3E+01	-3.2E+01

Table 3.3e. (continued)

Chemical	CASRN	Intercept (Vegetables)			Slope	Intercept (Beef)			Slope	Intercept (Milk)				Slope
		10 ⁻⁴	10 ⁻⁶	HQ=1		10 ⁻⁴	10 ⁻⁶	HQ=1		10 ⁻⁴	10 ⁻⁶	HQ=1 (Adult)	HQ=1 (Child)	
KARATE	091465-08-6													
KERB	023950-58-5													
LACTOFEN	077501-63-4													
LEAD ALKYL S	NA													
LEAD AND COMPOUNDS	007439-92-1				-1.7E+05				-4.8E+01					-5.8E+01
LINURON	000330-55-2													
LONDAX	083055-99-6													
MALATHION	000121-75-5			7.0E+01	-5.6E+02			1.1E+05	-5.4E+00			8.3E+04	1.1E+04	-6.5E+00
MALEIC ANHYDRIDE	000108-31-6													
MALEIC HYDRAZIDE	000123-33-1			2.8E+01	-3.5E+01			7.4E+07	-7.6E-02			5.7E+07	7.4E+06	-9.1E-02
MALONONITRILE	000109-77-3			2.0E-03	-4.2E+01			1.9E+03	-1.4E-01			1.5E+03	1.9E+02	-1.6E-01
MANCOZEB	008018-01-7													
MANEB	012427-38-2			4.7E-01	-4.1E+01			5.0E+05	-1.3E-01			3.9E+05	5.0E+04	-1.5E-01
MANGANESE (Diet)	007439-96-5			3.2E+02	-3.7E+02			8.8E+03	-1.6E+00			3.6E+04	4.6E+03	-1.9E+00
MANGANESE (Water)	007439-96-5			1.1E+01	-3.7E+02			3.1E+02	-1.6E+00			1.3E+03	1.7E+02	-1.9E+00
MCPA	000094-74-6			9.1E-01	-3.0E+02			5.0E+03	-2.6E+00			3.9E+03	5.0E+02	-3.2E+00
MCPB	000094-81-5													
MCPP	000093-65-2			2.5E+00	-4.0E+02			7.6E+03	-3.7E+00			5.9E+03	7.6E+02	-4.4E+00
MEPHOSFOLAN	000950-10-7													
MEPQUAT CHLORIDE	024307-26-4													
MERCURY, INORGANIC	007439-97-6			9.1E-01	-4.9E+02			2.7E+00	-4.5E+00			1.4E+01	1.8E+00	-5.5E+00

Table 3.3e. (continued)

Chemical	CASRN	Intercept (Vegetables)			Slope	Intercept (Beef)			Slope	Intercept (Milk)				Slope
		10 ⁻⁴	10 ⁻⁶	HQ=1		10 ⁻⁴	10 ⁻⁶	HQ=1		10 ⁻⁴	10 ⁻⁶	HQ=1 (Adult)	HQ=1 (Child)	
METHYL-5-NITROANILINE, 2-	000099-55-8	9.0E+00	9.0E-02		-2.2E+02	1.0E+05	1.0E+03		-1.7E+00	3.4E+04	3.4E+02			-2.0E+00
METHYLANILINE HYDROCHLORIDE, 2-	000636-21-5													
METHYLCYCLOHEXANE	000108-87-2				-2.5E+03				-1.5E+01					-1.8E+01
METHYLENE CHLORIDE	000075-09-2	1.7E+01	1.7E-01	3.2E+01	-1.1E+02	8.7E+05	8.7E+03	1.7E+06	-7.2E-01	2.9E+05	2.9E+03	1.3E+06	1.7E+05	-8.6E-01
METHYLENE-BIS(2-CHLOROANILINE), 4,4'-	000101-14-4	3.2E+01	3.2E-01	1.2E+01	-2.7E+03	2.6E+03	2.6E+01	1.0E+03	-1.6E+01	8.6E+02	8.6E+00	8.0E+02	1.0E+02	-2.0E+01
METHYLENE-BIS(N,N-DIMETHYL) ANILINE, 4,4'-	000101-61-1	6.6E+01	6.6E-01		-2.0E+03	2.0E+03	2.0E+01		-2.9E+01	6.7E+02	6.7E+00			-3.5E+01
METHYLENEBISBENZENAMINE, 4,4'-	000101-77-9													
METHYLENEDIPHENYL ISOCYANATE, 4,4'-	000101-68-8													
METHYLSTYRENE, ALPHA-	000098-83-9													
METHYLTRIETHYL LEAD	001762-28-3													
METOLACHLOR	051218-45-2													
METRIBUZIN	021087-64-9			2.2E+01	-1.6E+02			4.7E+05	-1.2E+00			3.6E+05	4.7E+04	-1.5E+00
MIREX	002385-85-5													
MOLINATE	002212-67-1													
MOLYBDENUM	007439-98-7			4.6E+01	-1.4E+03			9.7E+02	-1.0E+01			1.4E+02	1.8E+01	-1.2E+01
MONOCHLORAMINE	010599-90-3													
MONOCHLOROBUTANES	025154-42-1													
NALED	000300-76-5			6.5E+00	-5.2E+02			1.2E+04	-4.9E+00			9.0E+03	1.2E+03	-5.9E+00
NAPHTHALENE	000091-20-3				-1.1E+03				-8.0E+00					-9.6E+00
NAPROPAMIDE	015299-99-7			2.2E+01	-6.1E+01			5.2E+06	-3.1E-01			4.1E+06	5.2E+05	-3.7E-01

Table 3.3e. (continued)

Chemical	CASRN	Intercept (Vegetables)			Slope	Intercept (Beef)			Slope	Intercept (Milk)				Slope
		10 ⁻⁴	10 ⁻⁶	HQ=1		10 ⁻⁴	10 ⁻⁶	HQ=1		10 ⁻⁴	10 ⁻⁶	HQ=1 (Adult)	HQ=1 (Child)	
NIAGARA BLUE 4B	002429-74-5													
NICKEL CARBONYL	013463-39-3													
NICKEL REFINERY DUST	NA													
NICKEL SOLUBLE SALTS	007440-02-0			3.6E+02	-2.8E+03			1.2E+03	-1.7E+01			1.0E+02	1.3E+01	-2.0E+01
NICKEL SUBSULFIDE	012035-72-2													
NITRAPYRIN	001929-82-4													
NITRATE	014797-55-8			1.9E+02	-4.5E+01			6.9E+01	-1.7E-01			5.1E+01	6.5E+00	-2.0E-01
NITRIC OXIDE	010102-43-9													
NITRITE	014797-65-0													
NITROANILINE, 2-	000088-74-4				-1.8E+02				-1.4E+00					-1.6E+00
NITROBENZENE	000098-95-3			5.5E-01	-1.9E+02			8.0E+03	-1.5E+00			6.3E+03	8.0E+02	-1.8E+00
NITROFURANTOIN	000067-20-9													
NITROFURAZONE	000059-87-0													
NITROGEN DIOXIDE	010102-44-0													
NITROGUANIDINE	000556-88-7													
NITROPROPANE, 2-	000079-46-9													
NITROSO-DI-N-BUTYLAMINE, N-	000924-16-3	5.2E-02	5.2E-04		-2.1E+02	6.5E+02	6.5E+00		-1.6E+00	2.1E+02	2.1E+00			-1.9E+00
NITROSO-DI-N-PROPYLAMINE, N-	000621-64-7	2.3E-02	2.3E-04		-1.3E+02	7.7E+02	7.7E+00		-9.2E-01	2.5E+02	2.5E+00			-1.1E+00
NITROSO-N-ETHYLUREA, N-	000759-73-9	2.1E-04	2.1E-06		-4.6E+01	1.3E+02	1.3E+00		-1.7E-01	4.4E+01	4.4E-01			-2.1E-01
NITROSO-N-METHYLUREA, N-	000684-93-5													
NITROSODIETHANOLAMINE, N-	001116-54-7	9.6E-04	9.6E-06		-2.9E+01	3.9E+04	3.9E+02		-1.6E-02	1.3E+04	1.3E+02			-1.9E-02

Table 3.3e. (continued)

Chemical	CASRN	Intercept (Vegetables)			Slope	Intercept (Beef)			Slope	Intercept (Milk)				Slope
		10 ⁻⁴	10 ⁻⁶	HQ=1		10 ⁻⁴	10 ⁻⁶	HQ=1		10 ⁻⁴	10 ⁻⁶	HQ=1 (Adult)	HQ=1 (Child)	
PARATHION	000056-38-2			9.0E+01	-2.3E+03			1.0E+04	-1.5E+01			8.2E+03	1.0E+03	-1.7E+01
PEBULATE	001114-71-2													
PENDIMETHALIN	040487-42-1													
PENTABROMODIPHENYL ETHER	032534-81-9													
PENTACHLOROBENZENE	000608-93-5			7.5E+01	-1.4E+04			1.4E+02	-3.6E+01			1.1E+02	1.4E+01	-4.3E+01
PENTACHLOROCYCLOPENTADIENE	025329-35-5													
PENTACHLORONITROBENZENE	000082-68-8	1.2E+02	1.2E+00	4.0E+02	-2.0E+04	9.7E+01	9.7E-01	3.2E+02	-3.9E+01	3.2E+01	3.2E-01	2.5E+02	3.2E+01	-4.7E+01
PENTACHLOROPHENOL	000087-86-5	1.4E+02	1.4E+00	2.2E+03	-1.1E+04	5.0E+02	5.0E+00	7.8E+03	-3.3E+01	1.7E+02	1.7E+00	6.0E+03	7.7E+02	-4.0E+01
PERMETHRIN	052645-53-1			3.1E+02	-9.7E+02			1.3E+05	-1.0E+01			1.0E+05	1.3E+04	-1.3E+01
PHENANTHRENE	000085-01-8				-5.4E+03				-2.5E+01					-3.0E+01
PHENMEDIPHAM	013684-63-4			4.1E+00	-2.9E+01			8.9E+07	-2.3E-02			6.9E+07	8.9E+06	-2.7E-02
PHENOL	000108-95-2			3.9E+02	-1.3E+02			1.4E+07	-8.8E-01			1.1E+07	1.4E+06	-1.1E+00
PHENYLENEDIAMINE, m-	000108-45-2			2.1E-01	-3.2E+01			1.2E+06	-4.8E-02			9.7E+05	1.2E+05	-5.7E-02
PHENYLENEDIAMINE, o-	000095-54-5	8.3E-01	8.3E-03		-5.2E+01	3.2E+05	3.2E+03		-2.3E-01	1.1E+05	1.1E+03			-2.8E-01
PHENYLENEDIAMINE, p-	000106-50-3			3.8E+00	-3.0E+01			5.9E+07	-2.7E-02			4.6E+07	5.9E+06	-3.3E-02
PHENYLMERCURIC ACETATE	000062-38-4													
PHENYLPHENOL, 2-	000090-43-7	5.2E+02	5.2E+00		-6.8E+02	5.1E+05	5.1E+03		-6.8E+00	1.7E+05	1.7E+03			-8.1E+00
PHORATE	000298-02-2			1.7E-01	-1.6E+02			3.8E+03	-1.2E+00			2.9E+03	3.8E+02	-1.4E+00
PHOSMET	000732-11-6			6.6E+01	-5.3E+02			1.1E+05	-5.0E+00			8.9E+04	1.1E+04	-6.0E+00
PHOSPHINE	007803-51-2													
PHTHALIC ACID, p-	000100-21-0			8.2E+02	-1.5E+02			1.9E+07	-1.1E+00			1.5E+07	1.9E+06	-1.4E+00

Table 3.3e. (continued)

Chemical	CASRN	Intercept (Vegetables)			Intercept (Beef)			Intercept (Milk)				Slope
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1 (Adult)	HQ=1 (Child)	
PHTHALIC ANHYDRIDE	000085-44-9			8.2E+01			3.7E+08			2.8E+08	3.6E+07	-6.8E-02
PICLORAM	001918-02-1			1.5E+02			6.7E+05			5.2E+05	6.7E+04	-3.4E+00
PIRIMPHOS-METHYL	029232-93-7											
POLYBROMINATED BIPHENYLS	NA											
POLYCHLORINATED BIPHENYLS	001336-36-3	8.9E+00	8.9E-02		9.5E-01	9.5E-03		3.1E-01	3.1E-03			-5.3E+01
POTASSIUM CYANIDE	000151-50-8											
POTASSIUM SILVER CYANIDE	000506-61-6											
PROCHLORAZ	067747-09-5											
PROFLURALIN	026399-36-0											
PROMETON	001610-18-0			2.6E+01			1.6E+05			1.2E+05	1.6E+04	-3.0E+00
PROMETRYN	007287-19-6			8.6E+00			3.5E+04			2.7E+04	3.5E+03	-3.8E+00
PROPACHLOR	001918-16-7											
PROPANIL	000709-98-8											
PROPARGITE	002312-35-8											
PROPARGYL ALCOHOL	000107-19-7											
PROPABINE	000139-40-2			4.2E+01			1.8E+05			1.4E+05	1.8E+04	-3.7E+00
PROPHAM	000122-42-9			9.3E+01			7.8E+04			6.1E+04	7.8E+03	-8.9E+00
PROPICONAZOLE	060207-90-1											
PROPYLENE GLYCOL	000057-55-6			1.9E+02			1.1E+10			8.4E+09	1.1E+09	-1.5E-02
PROPYLENE GLYCOL MONOETHYL ETHER	001569-02-4											
PROPYLENE GLYCOL MONOMETHYL ETHER	000107-98-2			5.2E+01			8.3E+07			6.5E+07	8.3E+06	-1.2E-01

Table 3.3e. (continued)

Chemical	CASRN	Intercept (Vegetables)			Slope	Intercept (Beef)			Slope	Intercept (Milk)				Slope
		10 ⁻⁴	10 ⁻⁶	HQ=1		10 ⁻⁴	10 ⁻⁶	HQ=1		10 ⁻⁴	10 ⁻⁶	HQ=1 (Adult)	HQ=1 (Child)	
SODIUM AZIDE	026628-22-8													
SODIUM CYANIDE	000143-33-9			1.3E+00	-3.2E+01			8.9E+06	-4.3E-02			6.9E+06	8.9E+05	-5.2E-02
SODIUM DIETHYLDITHIOCARBAMATE	000148-18-5													
SODIUM FLUOROACETATE	000062-74-8													
SODIUM METAVANADATE	013718-26-8													
STROFOS (TETRACHLOROVINPHOS)	000961-11-5													
STRONTIUM, STABLE	007440-24-6			1.6E+03	-4.2E+02			1.8E+03	-1.2E+00			1.3E+03	1.6E+02	-1.5E+00
STRYCHNINE	000057-24-9			3.4E-01	-2.0E+02			4.4E+03	-1.6E+00			3.5E+03	4.4E+02	-2.0E+00
STYRENE	000100-42-5			9.6E+02	-7.5E+02			1.0E+06	-5.8E+00			7.8E+05	1.0E+05	-6.9E+00
SYSTHANE	088671-89-0													
TCDD, 2,3,7,8-	001746-01-6	1.1E-03	1.1E-05		-1.1E+05	2.6E-05	2.6E-07		-4.8E+01	1.5E-05	1.5E-07			-5.7E+01
TCMTB	021564-17-0													
TEBUTHURON	034014-18-1			8.0E+00	-4.4E+01			6.0E+06	-1.6E-01			4.7E+06	6.0E+05	-1.9E-01
TEMEPHOS	003383-96-8													
TERBACIL	005902-51-2													
TERBUFOS	013071-79-9													
TERBUTRYN	000886-50-0													
TETRABUTYL LEAD	001920-90-7													
TETRACHLOROBENZENE, 1,2,4,5-	000095-94-3			1.4E+01	-7.2E+03			1.4E+02	-2.8E+01			1.1E+02	1.4E+01	-3.4E+01
TETRACHLOROETHANE, 1,1,1,2-	000630-20-6	4.8E+01	4.8E-01	1.6E+02	-8.3E+02	4.1E+04	4.1E+02	1.4E+05	-6.4E+00	1.4E+04	1.4E+02	1.1E+05	1.4E+04	-7.6E+00
TETRACHLOROETHANE, 1,1,2,2-	000079-34-5	2.6E+00	2.6E-02		-3.7E+02	1.1E+04	1.1E+02		-2.9E+00	3.6E+03	3.6E+01			-3.5E+00

Table 3.3e. (continued)

Chemical	CASRN	Intercept (Vegetables)			Slope	Intercept (Beef)			Slope	Intercept (Milk)				Slope
		10 ⁻⁴	10 ⁻⁶	HQ=1		10 ⁻⁴	10 ⁻⁶	HQ=1		10 ⁻⁴	10 ⁻⁶	HQ=1 (Adult)	HQ=1 (Child)	
TETRACHLOROETHYLENE	000127-18-4			3.0E+01	-4.8E+02			7.4E+04	-3.8E+00			5.7E+04	7.4E+03	-4.6E+00
TETRACHLOROPHENOL, 2,3,4,6-	000058-90-2			6.6E+02	-3.4E+03			3.5E+04	-1.9E+01			2.7E+04	3.5E+03	-2.3E+01
TETRACHLOROTOLUENE, p- ALPHA, ALPHA, ALPHA-	005216-25-1													
TETRAETHYL DITHIOPYROPHOSPHATE	003689-24-5			9.0E+00	-2.8E+03			7.2E+02	-1.7E+01			5.6E+02	7.2E+01	-2.0E+01
TETRAETHYL LEAD	000078-00-2													
TETRAMETHYL LEAD	000075-74-1													
TETRAPROPYL LEAD	003440-75-3													
THALLIC OXIDE	001314-32-5													
THALLIUM (I) NITRATE	010102-45-1			8.2E+02	-1.4E+06			2.2E+00	-5.0E+01			1.1E+01	1.4E+00	-6.0E+01
THALLIUM (SOLUBLE SALTS)	007440-28-0				-1.4E+06				-5.0E+01					-6.0E+01
THALLIUM ACETATE	000563-68-8			8.2E+02	-1.4E+06			2.2E+00	-5.0E+01			1.1E+01	1.4E+00	-6.0E+01
THALLIUM CARBONATE	006533-73-9			7.3E+02	-1.4E+06			1.9E+00	-5.0E+01			9.5E+00	1.2E+00	-6.0E+01
THALLIUM CHLORIDE	007791-12-0			7.3E+02	-1.4E+06			1.9E+00	-5.0E+01			9.5E+00	1.2E+00	-6.0E+01
THALLIUM SELENITE	012039-52-0				-1.4E+06				-5.0E+01					-6.0E+01
THALLIUM SULFATE	007446-18-6			7.3E+02	-1.4E+06			1.9E+00	-5.0E+01			9.5E+00	1.2E+00	-6.0E+01
THIOBENCARB	028249-77-6													
THIOFANOX	039196-18-4													
THIOPHANATE-METHYL	023564-05-8													
THIRAM	000137-26-8													
TIN	007440-31-5			1.8E+03	-4.9E+02			5.3E+03	-4.5E+00			1.3E+04	1.7E+03	-5.5E+00

Table 3.3e. (continued)

Chemical	CASRN	Intercept (Vegetables)			Slope	Intercept (Beef)			Slope	Intercept (Milk)				Slope
		10 ⁻⁴	10 ⁻⁶	HQ=1		10 ⁻⁴	10 ⁻⁶	HQ=1		10 ⁻⁴	10 ⁻⁶	HQ=1 (Adult)	HQ=1 (Child)	
TOLUENE	000108-88-3			7.1E+02	-5.7E+02			1.3E+06	-4.4E+00			1.0E+06	1.3E+05	-5.3E+00
TOLUENE-2,4-DIAMINE	000095-80-7	1.1E-02	1.1E-04		-4.9E+01	5.2E+03	5.2E+01		-2.0E-01	1.7E+03	1.7E+01			-2.4E-01
TOLUENE-2,5-DIAMINE	000095-70-5													
TOLUENE-2,6-DIAMINE	000823-40-5													
TOLUIDINE, o- (METHYLANILINE, 2-)	000095-53-4	6.7E-01	6.7E-03		-1.3E+02	2.2E+04	2.2E+02		-9.7E-01	7.1E+03	7.1E+01			-1.2E+00
TOLUIDINE, p-	000106-49-0	1.5E+00	1.5E-02		-2.1E+02	1.7E+04	1.7E+02		-1.8E+00	5.6E+03	5.6E+01			-2.1E+00
TOXAPHENE	008001-35-2	1.6E+00	1.6E-02		-1.2E+03	2.2E+01	2.2E-01		-8.6E+00	5.9E+00	5.9E-02			-1.0E+01
TRALOMETHRIN	066841-25-6													
TRIALATE	002303-17-5													
TRIASULFURON	082097-50-5													
TRIBROMOBENZENE, 1,2,4-	000615-54-3													
TRIBROMOCHLOROMETHANE	000594-15-0													
TRIBROMODIPHENYL ETHER	049690-94-0													
TRIBUTYL TIN OXIDE	000056-35-9													
TRICHLORO-1,2,2-TRIFLUOROETHANE, 1,1,2-	000076-13-1			2.3E+05	-1.2E+03			1.0E+08	-8.6E+00			7.8E+07	1.0E+07	-1.0E+01
TRICHLORO-2-HYDROXYDIPHENYLETHER	003380-34-5													
TRICHLOROANILINE HCL, 2,4,6-	033663-50-2													
TRICHLOROANILINE, 2,4,6-	000634-93-5													
TRICHLOROBENZENE, 1,2,4-	000120-82-1			2.9E+02	-4.4E+03			8.6E+03	-2.2E+01			6.7E+03	8.5E+02	-2.6E+01
TRICHLOROETHANE, 1,1,1-	000071-55-6				-4.3E+02				-3.4E+00					-4.0E+00
TRICHLOROETHANE, 1,1,2-	000079-00-5	1.0E+01	1.0E-01	1.0E+01	-4.1E+02	3.5E+04	3.5E+02	3.4E+04	-3.2E+00	1.1E+04	1.1E+02	2.6E+04	3.4E+03	-3.9E+00

Table 3.3c. (continued)

Chemical	CASRN	Intercept (Vegetables)			Slope	Intercept (Beef)			Slope	Intercept (Milk)				Slope
		10 ⁻⁴	10 ⁻⁶	HQ=1		10 ⁻⁴	10 ⁻⁶	HQ=1		10 ⁻⁴	10 ⁻⁶	HQ=1 (Adult)	HQ=1 (Child)	
TRINITROTOLUENE, 2,4,6-	000118-96-7	9.1E+00	9.1E-02	5.8E-01	-2.0E+02	1.2E+05	1.2E+03	7.7E+03	-1.5E+00	4.0E+04	4.0E+02	6.0E+03	7.7E+02	-1.9E+00
TRIPROPYL LEAD	006618-03-7													
URANIUM (SOLUBLE SALTS)	NA			1.4E+03	-6.9E+04			7.8E+03	-4.5E+01			1.6E+03	2.1E+02	-5.5E+01
VANADIUM PENTOXIDE	001314-62-1													
VANADIUM SULFATE	036907-42-3													
VANADIUM, METALLIC	007440-62-2			4.9E+03	-1.1E+05			2.8E+03	-4.8E+01			1.6E+03	2.0E+02	-5.7E+01
VANADYL SULFATE	027774-13-6													
VERNOLATE	001929-77-7													
VINCLOZOLIN	050471-44-8													
VINYL ACETATE	000108-05-4			1.8E+02	-5.4E+01			6.3E+07	-2.4E-01			4.9E+07	6.3E+06	-2.9E-01
VINYL BROMIDE	000593-60-2													
VINYL CHLORIDE	000075-01-4	7.3E-02	7.3E-04		-1.2E+02	3.2E+03	3.2E+01		-8.0E-01	1.0E+03	1.0E+01			-9.6E-01
WARFARIN	000081-81-2			7.0E-01	-3.8E+02			2.4E+03	-3.4E+00			1.9E+03	2.4E+02	-4.1E+00
WHITE PHOSPHORUS	007723-14-0													
XYLENE, MIXTURE	001330-20-7			1.4E+04	-1.1E+03			7.0E+06	-8.3E+00			5.5E+06	7.0E+05	-9.9E+00
XYLENE, m-	000108-38-3			1.4E+04	-1.1E+03			7.0E+06	-8.3E+00			5.5E+06	7.0E+05	-9.9E+00
XYLENE, o-	000095-47-6			9.6E+03	-7.5E+02			1.0E+07	-5.8E+00			7.8E+06	1.0E+06	-6.9E+00
XYLENE, p-	000106-42-3				-9.7E+02				-7.3E+00					-8.7E+00
ZINC (METALLIC)	007440-66-6			6.8E+02	-3.7E+02			2.7E+02	-4.5E+00			6.5E+02	8.4E+01	-5.5E+00
ZINC CYANIDE	000557-21-1			3.1E+02	-9.6E+02			7.0E+01	-7.2E+00			1.7E+02	2.2E+01	-8.7E+00
ZINC PHOSPHIDE	001314-84-7			1.8E+00	-9.6E+02			4.2E-01	-7.2E+00			1.0E+00	1.3E-01	-8.7E+00

Table 3.3e. (continued)

Chemical	CASRN	Intercept (Vegetables)			Slope	Intercept (Beef)			Slope	Intercept (Milk)				Slope
		10 ⁻⁴	10 ⁻⁶	HQ=1		10 ⁻⁴	10 ⁻⁶	HQ=1		10 ⁻⁴	10 ⁻⁶	HQ=1 (Adult)	HQ=1 (Child)	
ZINEB	012122-67-7													

Notes:

- (1) Same oral slope factor as used for polychlorinated biphenyls.
- (2) PRG calculated considering *New Interim Region IV Guidance* from EPA (received February 11, 1992). The slope factors for chemicals so marked indicate that a toxicity equivalency factor (TEF) method was used for carcinogenic PAHs based on each compound's relative potency to the potency of benzo(a)pyrene. The following TEFs were used to convert each PAH slope factor to an equivalent slope factor of benzo(a)pyrene [that has a new cancer slope factor of 7.3 (mg/kg/day)¹ identified by EPA's CRA VE workgroup]: (1) benzo(a)pyrene; TEF = 1.0 (2) benz(a)anthracene; TEF = 0.1, (3) benzo(b)fluoranthene; TEF = 0.1, (4) benzo(k)fluoranthene; TEF = 0.01, (5) chrysene; TEF = 0.001, (6) dibenz(a,h)anthracene; TEF = 1.0, and (7) indeno(1,2,3-c,d)pyrene; TEF = 0.1. TEFs were used for only the oral slope factor in the ingestion pathway.
- (3) The slope factor for trichloroethylene has been withdrawn from IRIS and HEAST; however, since this is a common contaminant, the old slope factor has been used to calculate the PRG.

Table 3.3f. Agricultural land use scenario for contamination in water and soil (radionuclides)

Chemical †	CASRN	Intercept (Vegetables)		Slope	Intercept (Beef)		Slope	Intercept (Milk)		
		10 ⁻⁴	10 ⁻⁶		10 ⁻⁴	10 ⁻⁶		10 ⁻⁴	10 ⁻⁶	Slope
Ac-225	014265-85-1	9.6E+03	9.6E+01	-6.9E+05	3.6E+04	3.6E+02	-5.0E+01	9.7E+03	9.7E+01	-6.0E+01
Ac-227	014952-40-0	3.8E+03	3.8E+01	-1.6E+06	1.4E+04	1.4E+02	-5.0E+01	3.9E+03	3.9E+01	-6.0E+01
Ac-227+D	014952-40-0	3.7E+00	3.7E-02	-2.7E+03	1.2E+00	1.2E-02	-1.4E+01	3.6E+00	3.6E-02	-1.7E+01
Ac-228	014331-83-0	8.4E+05	8.4E+03	-3.0E+04	3.1E+06	3.1E+04	-5.0E+01	8.5E+05	8.5E+03	-6.0E+01
Ag-105	014928-14-4	3.0E+02	3.0E+00	-4.5E+02	2.4E+03	2.4E+01	-4.5E+00	3.1E+04	3.1E+02	-5.4E+00
Ag-108	014391-65-2	8.6E+04	8.6E+02	-8.6E-02	5.5E+05	5.5E+03	-4.5E+00	7.2E+06	7.2E+04	-5.5E+00
Ag-108m	014391-65-2	7.8E+01	7.8E-01	-5.7E+02	6.3E+02	6.3E+00	-4.5E+00	8.3E+03	8.3E+01	-5.4E+00
Ag-108m+D	014391-65-2	7.8E+01	7.8E-01	-5.7E+02	6.3E+02	6.3E+00	-4.5E+00	8.3E+03	8.3E+01	-5.4E+00
Ag-109m	014378-38-2	2.2E+06	2.2E+04	-2.4E-02	1.4E+07	1.4E+05	-4.5E+00	1.8E+08	1.8E+06	-5.5E+00
Ag-110	014391-76-5	2.4E+05	2.4E+03	-1.3E-02	1.6E+06	1.6E+04	-4.5E+00	2.1E+07	2.1E+05	-5.5E+00
Ag-110m	014391-76-5	5.6E+01	5.6E-01	-5.3E+02	4.6E+02	4.6E+00	-4.5E+00	5.9E+03	5.9E+01	-5.4E+00
Ag-111	157690-04-0	7.9E+01	7.9E-01	-2.3E+02	5.6E+02	5.6E+00	-4.5E+00	7.3E+03	7.3E+01	-5.4E+00
Am-241	014596-10-2	3.6E+02	3.6E+00	-1.4E+05	9.3E+03	9.3E+01	-4.8E+01	5.4E+04	5.4E+02	-5.8E+01
Am-242	013981-54-9	8.1E+04	8.1E+02	-6.6E+03	2.1E+06	2.1E+04	-4.8E+01	1.2E+07	1.2E+05	-5.8E+01
Am-242m	013981-54-9	4.1E+02	4.1E+00	-1.4E+05	1.0E+04	1.0E+02	-4.8E+01	6.0E+04	6.0E+02	-5.8E+01
Am-243	014993-75-0	3.6E+02	3.6E+00	-1.4E+05	9.3E+03	9.3E+01	-4.8E+01	5.4E+04	5.4E+02	-5.8E+01
Am-243+D	014993-75-0	8.8E+00	8.8E-02	-3.4E+03	1.8E+02	1.8E+00	-2.5E+01	6.3E+03	6.3E+01	-2.9E+01
Ar-41	014163-25-8									
At-217	017239-90-6	1.3E+07	1.3E+05	-3.9E-06	3.4E+07	3.4E+05	-1.2E+00	7.5E+06	7.5E+04	-1.5E+00
Au-196	014914-16-0	7.8E+02	7.8E+00	-3.8E+02	3.9E+03	3.9E+01	-1.0E+01	4.2E+05	4.2E+03	-1.2E+01
Au-198	010043-49-0	2.1E+02	2.1E+00	-2.2E+02	9.6E+02	9.6E+00	-1.0E+01	1.0E+05	1.0E+03	-1.2E+01

Table 3.3f. (continued)

Chemical †	CASRN	Intercept (Vegetables)		Slope	Intercept (Beef)		Slope	Intercept (Milk)		Slope
		10 ⁻⁴	10 ⁻⁶		10 ⁻⁴	10 ⁻⁶		10 ⁻⁴	10 ⁻⁶	
Ba-131	014914-75-1	2.0E+03	2.0E+01	-1.9E+03	1.6E+05	1.6E+03	-2.5E+01	1.7E+04	1.7E+02	-3.0E+01
Ba-133	013981-41-4	7.0E+02	7.0E+00	-2.2E+03	1.0E+05	1.0E+03	-2.5E+01	1.0E+04	1.0E+02	-3.0E+01
Ba-133m	013981-41-4	2.7E+03	2.7E+01	-9.6E+02	1.0E+05	1.0E+03	-2.5E+01	1.0E+04	1.0E+02	-3.0E+01
Ba-137m	013981-97-0	4.9E+06	4.9E+04	-1.8E+00	1.1E+08	1.1E+06	-2.5E+01	1.2E+07	1.2E+05	-3.0E+01
Ba-139	014378-25-7	3.8E+04	3.8E+02	-5.9E+01	9.1E+05	9.1E+03	-2.5E+01	9.4E+04	9.4E+02	-3.0E+01
Ba-140	014798-08-4	2.8E+02	2.8E+00	-1.9E+03	2.3E+04	2.3E+02	-2.5E+01	2.4E+03	2.4E+01	-3.0E+01
Be-7	013966-02-4	3.7E+06	3.7E+04	-3.0E+05	1.4E+06	1.4E+04	-4.9E+01	3.5E+08	3.5E+06	-5.9E+01
Bi-206	015776-19-9	3.2E+02	3.2E+00	-8.6E+02	1.9E+04	1.9E+02	-2.1E+01	3.2E+03	3.2E+01	-2.5E+01
Bi-207	013982-38-2	2.7E+02	2.7E+00	-1.6E+03	2.6E+04	2.6E+02	-2.1E+01	4.5E+03	4.5E+01	-2.5E+01
Bi-210	014331-79-4	3.3E+02	3.3E+00	-7.8E+02	1.8E+04	1.8E+02	-2.1E+01	3.1E+03	3.1E+01	-2.5E+01
Bi-211	015229-37-5	1.9E+05	1.9E+03	-4.4E-01	7.3E+06	7.3E+04	-2.1E+01	1.3E+06	1.3E+04	-2.5E+01
Bi-212	014913-49-6	5.5E+03	5.5E+01	-1.2E+01	2.1E+05	2.1E+03	-2.1E+01	3.7E+04	3.7E+02	-2.5E+01
Bi-213	015776-20-2	7.7E+03	7.7E+01	-9.4E+00	3.0E+05	3.0E+03	-2.1E+01	5.2E+04	5.2E+02	-2.5E+01
Bi-214	014733-03-0	1.7E+04	1.7E+02	-4.1E+00	6.8E+05	6.8E+03	-2.1E+01	1.2E+05	1.2E+03	-2.5E+01
Br-82	014686-69-2									
C-11	014333-33-6									
C-14	014762-75-5									
C-15	015929-23-4									
Ca-45	013966-05-7	6.7E+02	6.7E+00	-1.5E+03	7.0E+03	7.0E+01	-1.1E+01	1.0E+03	1.0E+01	-1.3E+01
Ca-47	001439-99-2	2.0E+02	2.0E+00	-4.1E+02	2.1E+03	2.1E+01	-1.1E+01	3.1E+02	3.1E+00	-1.3E+01
Cd-109	014109-32-1	1.7E+02	1.7E+00	-1.5E+03	1.6E+04	1.6E+02	-2.0E+01	1.4E+03	1.4E+01	-2.4E+01

Table 3.3f. (continued)

Chemical [†]	CASRN	Intercept (Vegetables)		Slope	Intercept (Beef)		Slope	Intercept (Milk)		Slope
		10 ⁻⁴	10 ⁻⁶		10 ⁻⁴	10 ⁻⁶		10 ⁻⁴	10 ⁻⁶	
Cd-115	014336-68-6	3.6E+02	3.6E+00	-4.4E+02	1.7E+04	1.7E+02	-2.0E+01	1.5E+03	1.5E+01	-2.4E+01
Cd-115m	014336-68-6	1.1E+02	1.1E+00	-1.4E+03	8.9E+03	8.9E+01	-2.0E+01	7.7E+02	7.7E+00	-2.4E+01
Ce-141	013967-74-3	1.5E+04	1.5E+02	-5.0E+04	1.1E+06	1.1E+04	-3.3E+01	1.6E+05	1.6E+03	-4.0E+01
Ce-143	014119-19-8	1.0E+04	1.0E+02	-6.5E+03	7.2E+05	7.2E+03	-3.3E+01	1.0E+05	1.0E+03	-4.0E+01
Ce-144	014762-78-8	2.0E+03	2.0E+01	-6.7E+04	1.4E+05	1.4E+03	-3.3E+01	2.1E+04	2.1E+02	-4.0E+01
Ce-144+D	014762-78-8	2.0E+03	2.0E+01	-6.7E+04	1.4E+05	1.4E+03	-3.3E+01	2.1E+04	2.1E+02	-4.0E+01
Cl-36	013981-43-6	3.1E+00	3.1E-02	-3.5E+01	4.8E+00	4.8E-02	-7.1E-02	1.0E+00	1.0E-02	-8.6E-02
Cl-38	014158-34-0	3.3E+01	3.3E-01	-1.5E-02	5.1E+01	5.1E-01	-7.1E-02	1.1E+01	1.1E-01	-8.6E-02
Cm-242	015510-73-3	3.1E+03	3.1E+01	-1.3E+05	8.0E+04	8.0E+02	-4.8E+01	4.6E+05	4.6E+03	-5.8E+01
Cm-243	015757-87-6	4.7E+02	4.7E+00	-1.4E+05	1.2E+04	1.2E+02	-4.8E+01	7.0E+04	7.0E+02	-5.8E+01
Cm-243+D	015757-87-6	4.7E+02	4.7E+00	-1.4E+05	1.2E+04	1.2E+02	-4.8E+01	7.0E+04	7.0E+02	-5.8E+01
Cm-244	013981-15-2	5.6E+02	5.6E+00	-1.4E+05	1.4E+04	1.4E+02	-4.8E+01	8.4E+04	8.4E+02	-5.8E+01
Cm-245	015621-76-8	3.6E+02	3.6E+00	-1.4E+05	9.1E+03	9.1E+01	-4.8E+01	5.3E+04	5.3E+02	-5.8E+01
Cm-246	015757-90-1	3.6E+02	3.6E+00	-1.4E+05	9.2E+03	9.2E+01	-4.8E+01	5.3E+04	5.3E+02	-5.8E+01
Cm-247	015758-32-4	3.9E+02	3.9E+00	-1.4E+05	9.9E+03	9.9E+01	-4.8E+01	5.7E+04	5.7E+02	-5.8E+01
Cm-248	015758-33-5	9.1E+01	9.1E-01	-1.4E+05	2.3E+03	2.3E+01	-4.8E+01	1.3E+04	1.3E+02	-5.8E+01
Co-57	013981-50-5	4.1E+03	4.1E+01	-4.4E+03	2.6E+05	2.6E+03	-1.0E+01	8.1E+04	8.1E+02	-1.2E+01
Co-58	013981-38-9	1.4E+03	1.4E+01	-4.0E+03	9.0E+04	9.0E+02	-1.0E+01	2.8E+04	2.8E+02	-1.2E+01
Co-58m	013981-38-9	4.2E+04	4.2E+02	-1.3E+02	2.7E+06	2.7E+04	-1.0E+01	8.3E+05	8.3E+03	-1.2E+01
Co-60	010198-40-0	2.1E+02	2.1E+00	-4.6E+03	1.3E+04	1.3E+02	-1.0E+01	4.2E+03	4.2E+01	-1.2E+01
Cr-51	014392-02-0	1.8E+04	1.8E+02	-2.1E+03	7.2E+04	7.2E+02	-3.5E+01	1.4E+07	1.4E+05	-4.2E+01

Table 3.3f. (continued)

Chemical [†]	CASRN	Intercept (Vegetables)		Slope	Intercept (Beef)		Slope	Intercept (Milk)		Slope
		10 ⁻⁴	10 ⁻⁶		10 ⁻⁴	10 ⁻⁶		10 ⁻⁴	10 ⁻⁶	
Cs-131	014914-76-2	2.2E+04	2.2E+02	-2.0E+03	6.9E+03	6.9E+01	-2.5E+01	9.7E+03	9.7E+01	-3.0E+01
Cs-134	013967-70-9	8.4E+01	8.4E-01	-4.6E+03	2.6E+01	2.6E-01	-2.5E+01	3.7E+01	3.7E-01	-3.0E+01
Cs-134m	013967-70-9	8.7E+04	8.7E+02	-4.2E+01	2.7E+04	2.7E+02	-2.5E+01	3.8E+04	3.8E+02	-3.0E+01
Cs-135	015726-30-4	8.8E+02	8.8E+00	-4.7E+03	2.7E+02	2.7E+00	-2.5E+01	3.8E+02	3.8E+00	-3.0E+01
Cs-136	014234-29-8	5.1E+02	5.1E+00	-2.4E+03	1.6E+02	1.6E+00	-2.5E+01	2.3E+02	2.3E+00	-3.0E+01
Cs-137	010045-97-3	1.3E+02	1.3E+00	-4.6E+03	3.9E+01	3.9E-01	-2.5E+01	5.5E+01	5.5E-01	-3.0E+01
Cs-137+D	010045-97-3	9.4E+01	9.4E-01	-3.5E+03	2.6E+01	2.6E-01	-1.7E+01	3.5E+01	3.5E-01	-2.0E+01
Cs-138	015758-29-9	2.3E+04	2.3E+02	-7.8E+00	7.1E+03	7.1E+01	-2.5E+01	9.9E+03	9.9E+01	-3.0E+01
Cu-64	013981-25-4	3.5E+03	3.5E+01	-8.3E+01	7.7E+03	7.7E+01	-1.4E+01	1.0E+04	1.0E+02	-1.7E+01
Dy-165	013967-64-1									
Dy-166	015840-01-4									
Er-169	015840-13-8									
Er-171	014391-45-8									
Eu-152	014683-23-9	1.0E+04	1.0E+02	-6.9E+04	7.4E+03	7.4E+01	-3.3E+01	5.3E+04	5.3E+02	-4.0E+01
Eu-154	015585-10-1	6.4E+03	6.4E+01	-6.9E+04	4.5E+03	4.5E+01	-3.3E+01	3.3E+04	3.3E+02	-4.0E+01
Eu-155	014391-16-3	3.6E+04	3.6E+02	-6.9E+04	2.6E+04	2.6E+02	-3.3E+01	1.9E+05	1.9E+03	-4.0E+01
Eu-156	014280-35-4	5.5E+03	5.5E+01	-3.8E+04	3.9E+03	3.9E+01	-3.3E+01	2.8E+04	2.8E+02	-4.0E+01
F-18	013981-56-1									
Fe-55	014681-59-5	6.4E+03	6.4E+01	-2.6E+03	1.6E+04	1.6E+02	-4.4E+01	2.3E+06	2.3E+04	-5.3E+01
Fe-59	014596-12-4	4.8E+02	4.8E+00	-2.6E+03	9.6E+02	9.6E+00	-4.5E+01	1.4E+05	1.4E+03	-5.3E+01
Fr-221	015756-41-9	2.7E+04	2.7E+02	-1.2E+00	1.6E+05	1.6E+03	-2.3E+01	4.3E+03	4.3E+01	-2.7E+01

Table 3.3f. (continued)

Chemical [†]	CASRN	Intercept (Vegetables)		Slope	Intercept (Beef)		Slope	Intercept (Milk)		
		10 ⁻⁴	10 ⁻⁶		10 ⁻⁴	10 ⁻⁶		10 ⁻⁴	10 ⁻⁶	Slope
Fr-223	015756-98-6	8.9E+03	8.9E+01	-5.3E-01	5.2E+04	5.2E+02	-2.3E+01	1.4E+03	1.4E+01	-2.7E+01
Ga-67	014119-09-6	1.1E+04	1.1E+02	-2.0E+03	4.6E+05	4.6E+03	-4.5E+01	3.0E+06	3.0E+04	-5.4E+01
Ga-72	013982-22-4	4.8E+03	4.8E+01	-1.1E+03	8.1E+04	8.1E+02	-4.5E+01	5.2E+05	5.2E+03	-5.4E+01
Gd-153	014276-65-4	1.7E+03	1.7E+01	-2.5E+03	3.2E+04	3.2E+02	-3.3E+01	2.3E+05	2.3E+03	-3.9E+01
Gd-159	014041-42-0	9.3E+03	9.3E+01	-1.6E+03	1.6E+04	1.6E+02	-3.3E+01	1.2E+05	1.2E+03	-4.0E+01
Ge-71	014374-81-3									
H-3	010028-17-8							2.6E+04	2.6E+02	-6.0E+01
Hg-197	013981-51-6	3.3E+02	3.3E+00	-7.6E+01	9.8E+02	9.8E+00	-4.5E+00	4.5E+03	4.5E+01	-5.5E+00
Hg-203	013982-78-0	1.3E+02	1.3E+00	-3.2E+02	4.4E+02	4.4E+00	-4.5E+00	2.0E+03	2.0E+01	-5.4E+00
Ho-166	013967-65-2									
I-122	018287-75-7	2.8E+05	2.8E+03	-1.3E+00	3.1E+04	3.1E+02	-1.0E+01	2.6E+04	2.6E+02	-1.2E+01
I-123	015715-08-9	1.1E+04	1.1E+02	-2.7E+02	1.2E+03	1.2E+01	-1.0E+01	1.0E+03	1.0E+01	-1.2E+01
I-125	014158-31-7	2.3E+02	2.3E+00	-5.8E+03	2.6E+01	2.6E-01	-1.0E+01	2.1E+01	2.1E-01	-1.2E+01
I-126	014158-32-8	1.2E+02	1.2E+00	-3.5E+03	1.4E+01	1.4E-01	-1.0E+01	1.1E+01	1.1E-01	-1.2E+01
I-129	015046-84-1	3.2E+01	3.2E-01	-7.0E+03	3.6E+00	3.6E-02	-1.0E+01	3.0E+00	3.0E-02	-1.2E+01
I-130	014914-02-4	1.2E+03	1.2E+01	-2.6E+02	1.4E+02	1.4E+00	-1.0E+01	1.1E+02	1.1E+00	-1.2E+01
I-131	010043-66-0	1.6E+02	1.6E+00	-2.7E+03	1.8E+01	1.8E-01	-1.0E+01	1.5E+01	1.5E-01	-1.2E+01
I-132	014683-16-0	9.0E+03	9.0E+01	-5.0E+01	1.0E+03	1.0E+01	-1.0E+01	8.3E+02	8.3E+00	-1.2E+01
I-133	014834-67-4	5.6E+02	5.6E+00	-4.3E+02	6.3E+01	6.3E-01	-1.0E+01	5.2E+01	5.2E-01	-1.2E+01
I-134	014914-27-3	2.6E+04	2.6E+02	-1.9E+01	2.9E+03	2.9E+01	-1.0E+01	2.4E+03	2.4E+01	-1.2E+01
I-135	014834-68-5	2.6E+03	2.6E+01	-1.4E+02	2.9E+02	2.9E+00	-1.0E+01	2.4E+02	2.4E+00	-1.2E+01

Table 3.3f. (continued)

Chemical [†]	CASRN	Intercept (Vegetables)		Slope	Intercept (Beef)		Slope	Intercept (Milk)	
		10 ⁻⁴	10 ⁻⁶		10 ⁻⁴	10 ⁻⁶		10 ⁻⁴	10 ⁻⁶
In-113m	014885-78-0	4.4E+05	4.4E+03	-2.2E+02	3.5E+05	3.5E+03	-4.5E+01	1.5E+06	1.5E+04
In-114	013981-55-0	8.8E+06	8.8E+04	-2.9E+00	6.4E+06	6.4E+04	-4.5E+01	2.8E+07	2.8E+05
In-114m	013981-55-0	1.3E+02	1.3E+00	-2.4E+03	1.4E+03	1.4E+01	-4.5E+01	6.0E+03	6.0E+01
In-115	014191-71-0	6.1E+01	6.1E-01	-2.5E+03	8.1E+02	8.1E+00	-4.4E+01	3.5E+03	3.5E+01
In-115m	014191-71-0	9.4E+04	9.4E+02	-5.0E+02	8.4E+04	8.4E+02	-4.5E+01	3.7E+05	3.7E+03
In-190	014981-91-0	4.3E+02	4.3E+00	-1.2E+03	4.3E+03	4.3E+01	-1.7E+01	9.2E+05	9.2E+03
In-194	014158-35-1	5.2E+02	5.2E+00	-2.4E+02	3.0E+03	3.0E+01	-1.7E+01	6.6E+05	6.6E+03
K-40	013966-00-2	3.2E+01	3.2E-01	-4.9E+02	1.8E+01	1.8E-01	-1.6E+00	9.9E+00	9.9E-02
K-42	014378-21-3	3.1E+02	3.1E+00	-1.7E+01	1.8E+02	1.8E+00	-1.6E+00	9.6E+01	9.6E-01
Kr-83m	013965-98-5								
Kr-85	013983-27-2								
Kr-85m	013983-27-2								
Kr-87	014809-68-8								
Kr-88	014995-61-0								
Kr-89	016316-03-3								
Kr-90	015741-13-6								
La-140	013981-28-7								
Lu-177	014265-75-9								
Mn-52	014092-99-0	5.0E+01	5.0E-01	-1.0E+02	1.4E+03	1.4E+01	-1.6E+00	4.9E+03	4.9E+01
Mn-54	013966-31-9	1.5E+02	1.5E+00	-3.4E+02	4.2E+03	4.2E+01	-1.6E+00	1.5E+04	1.5E+02
Mn-56	014681-52-8	3.5E+02	3.5E+00	-2.8E+00	9.6E+03	9.6E+01	-1.6E+00	3.5E+04	3.5E+02

Table 3.3f. (continued)

Chemical †	CASRN	Intercept (Vegetables)		Slope	Intercept (Beef)		Slope	Intercept (Milk)		Slope
		10 ⁻⁴	10 ⁻⁶		10 ⁻⁴	10 ⁻⁶		10 ⁻⁴	10 ⁻⁶	
Mo-99	014119-15-4	4.8E+02	4.8E+00	-2.2E+02	1.1E+04	1.1E+02	-1.0E+01	1.4E+03	1.4E+01	-1.2E+01
Na-22	013966-32-0	3.0E+02	3.0E+00	-2.7E+03	6.6E+01	6.6E-01	-1.7E+01	7.2E+01	7.2E-01	-2.0E+01
Na-24	013982-04-2	1.7E+03	1.7E+01	-1.3E+02	3.8E+02	3.8E+00	-1.7E+01	4.2E+02	4.2E+00	-2.0E+01
Nb-93m	007440-03-1	6.0E+03	6.0E+01	-4.6E+03	3.2E+08	3.2E+06	-2.5E+01	5.1E+07	5.1E+05	-3.0E+01
Nb-94	014681-63-1	5.7E+02	5.7E+00	-4.7E+03	3.1E+07	3.1E+05	-2.5E+01	4.9E+06	4.9E+04	-3.0E+01
Nb-95	013967-76-5	1.8E+03	1.8E+01	-3.4E+03	9.4E+07	9.4E+05	-2.5E+01	1.5E+07	1.5E+05	-3.0E+01
Nb-95m	013967-76-5	1.3E+03	1.3E+01	-1.0E+03	6.9E+07	6.9E+05	-2.5E+01	1.1E+07	1.1E+05	-3.0E+01
Nb-97	018496-04-3	2.3E+04	2.3E+02	-1.7E+01	1.2E+09	1.2E+07	-2.5E+01	1.9E+08	1.9E+06	-3.0E+01
Nb-97m	018496-04-3	1.2E+06	1.2E+04	-2.4E-01	6.5E+10	6.5E+08	-2.5E+01	1.0E+10	1.0E+08	-3.0E+01
Nd-147	014269-74-0									
Nd-149	015749-81-2									
Ni-59	014336-70-0	1.3E+04	1.3E+02	-2.8E+03	4.4E+04	4.4E+02	-1.7E+01	3.1E+03	3.1E+01	-2.0E+01
Ni-63	013981-37-8	4.3E+03	4.3E+01	-2.8E+03	1.5E+04	1.5E+02	-1.7E+01	1.0E+03	1.0E+01	-2.0E+01
Ni-65	014833-49-9	4.2E+03	4.2E+01	-2.2E+01	1.4E+04	1.4E+02	-1.7E+01	1.0E+03	1.0E+01	-2.0E+01
Np-236	015700-36-4	3.2E+03	3.2E+01	-3.5E+03	6.8E+04	6.8E+02	-2.5E+01	3.0E+06	3.0E+04	-3.0E+01
Np-237	013994-20-2	1.0E+01	1.0E-01	-3.5E+03	2.2E+02	2.2E+00	-2.5E+01	9.3E+03	9.3E+01	-3.0E+01
Np-237+D	013994-20-2	9.9E+00	9.9E-02	-3.5E+03	2.1E+02	2.1E+00	-2.5E+01	4.6E+03	4.6E+01	-3.0E+01
Np-238	015766-25-3	6.5E+02	6.5E+00	-4.8E+02	1.4E+04	1.4E+02	-2.5E+01	6.0E+05	6.0E+03	-3.0E+01
Np-239	013968-59-7	7.0E+02	7.0E+00	-5.3E+02	1.5E+04	1.5E+02	-2.5E+01	6.4E+05	6.4E+03	-3.0E+01
Np-240	015690-84-3	1.7E+04	1.7E+02	-1.2E+01	3.6E+05	3.6E+03	-2.5E+01	1.6E+07	1.6E+05	-3.0E+01
Np-240m	015690-84-3	1.2E+05	1.2E+03	-1.3E+00	2.6E+06	2.6E+04	-2.5E+01	1.1E+08	1.1E+06	-3.0E+01

Table 3.3f. (continued)

Chemical [†]	CASRN	Intercept (Vegetables)		Slope	Intercept (Beef)		Slope	Intercept (Milk)		Slope
		10 ⁻⁴	10 ⁻⁶		10 ⁻⁴	10 ⁻⁶		10 ⁻⁴	10 ⁻⁶	
Os-185	015766-50-4									
Os-191	014119-24-5									
Os-191m	014119-24-5									
Os-193	016057-77-5									
P-32	014596-37-3	1.9E+01	1.9E-01	-7.4E+01	1.3E+01	1.3E-01	-1.6E+00	9.1E+00	9.1E-02	-1.9E+00
P-33	015749-66-3	1.5E+02	1.5E+00	-9.3E+01	1.0E+02	1.0E+00	-1.6E+00	7.1E+01	7.1E-01	-1.9E+00
Pa-231	014331-85-2	1.3E+04	1.3E+02	-2.2E+06	8.5E+04	8.5E+02	-5.0E+01	3.7E+04	3.7E+02	-6.0E+01
Pa-233	013981-14-1	4.0E+05	4.0E+03	-1.5E+06	2.7E+06	2.7E+04	-5.0E+01	1.2E+06	1.2E+04	-6.0E+01
Pa-234	015100-28-4	8.9E+05	8.9E+03	-4.6E+04	5.9E+06	5.9E+04	-5.0E+01	2.6E+06	2.6E+04	-6.0E+01
Pa-234m	015100-28-4	4.0E+08	4.0E+06	-1.4E+02	2.7E+09	2.7E+07	-5.0E+01	1.2E+09	1.2E+07	-6.0E+01
Pb-203	014687-25-3	1.2E+04	1.2E+02	-2.0E+03	1.6E+05	1.6E+03	-2.6E+01	4.7E+04	4.7E+02	-3.2E+01
Pb-209	014119-30-3	5.7E+04	5.7E+02	-1.4E+02	8.0E+05	8.0E+03	-2.6E+01	2.3E+05	2.3E+03	-3.2E+01
Pb-210	014255-04-0	1.8E+01	1.8E-01	-1.4E+04	2.5E+02	2.5E+00	-2.6E+01	7.2E+01	7.2E-01	-3.2E+01
Pb-210+D	014255-04-0	2.6E+00	2.6E-02	-3.0E+03	6.4E+00	6.4E-02	-1.5E+01	7.0E+00	7.0E-02	-1.8E+01
Pb-211	015816-77-0	3.5E+04	3.5E+02	-2.6E+01	4.9E+05	4.9E+03	-2.6E+01	1.4E+05	1.4E+03	-3.2E+01
Pb-212	015092-94-1	6.0E+02	6.6E+00	-4.5E+02	9.3E+03	9.3E+01	-2.6E+01	2.7E+03	2.7E+01	-3.2E+01
Pb-214	015067-28-4	4.0E+04	4.0E+02	-1.9E+01	5.7E+05	5.7E+03	-2.6E+01	1.6E+05	1.6E+03	-3.2E+01
Pd-100	015690-69-4	3.2E+03	3.2E+01	-3.0E+03	6.1E+03	6.1E+01	-3.6E+01	5.3E+02	5.3E+00	-4.3E+01
Pd-101	015749-54-9	3.2E+04	3.2E+02	-3.6E+02	6.1E+04	6.1E+02	-3.6E+01	5.3E+03	5.3E+01	-4.3E+01
Pd-103	014967-68-1	1.1E+04	1.1E+02	-8.0E+03	2.2E+04	2.2E+02	-3.6E+01	1.9E+03	1.9E+01	-4.3E+01
Pd-107	017637-99-9	5.7E+04	5.7E+02	-1.4E+04	1.1E+05	1.1E+03	-3.6E+01	9.4E+03	9.4E+01	-4.3E+01

Table 3.3f. (continued)

Chemical [†]	CASRN	Intercept (Vegetables)		Slope	Intercept (Beef)		Slope	Intercept (Milk)		Slope
		10 ⁻⁴	10 ⁻⁶		10 ⁻⁴	10 ⁻⁶		10 ⁻⁴	10 ⁻⁶	
Rb-89	014191-65-2									
Rh-103m	007440-16-6									
Rh-105	014913-89-4									
Rh-105m	014913-89-4									
Rh-106	014234-34-5									
Rn-219	014835-02-0			-6.0E-01			-4.8E+01			-5.8E+01
Rn-220	022481-48-7			-8.4E+00			-4.8E+01			-5.8E+01
Rn-222+D	014859-67-7			-6.6E+02			-1.4E+01			-1.7E+01
Ru-103	013968-53-1	1.2E+03	1.2E+01	-3.5E+03	2.5E+02	2.5E+00	-1.7E+01	8.4E+05	8.4E+03	-2.0E+01
Ru-105	014331-95-4	3.5E+03	3.5E+01	-6.4E+01	7.2E+02	7.2E+00	-1.7E+01	2.4E+06	2.4E+04	-2.0E+01
Ru-106	013967-48-1	1.2E+02	1.2E+00	-4.5E+03	2.4E+01	2.4E-01	-1.7E+01	8.1E+04	8.1E+02	-2.0E+01
Ru-106+D	013967-48-1	1.2E+02	1.2E+00	-4.5E+03	2.4E+01	2.4E-01	-1.7E+01	8.1E+04	8.1E+02	-2.0E+01
Ru-97	015758-35-7	6.7E+03	6.7E+01	-8.4E+02	1.4E+03	1.4E+01	-1.7E+01	4.7E+06	4.7E+04	-2.0E+01
S-35	015117-53-0	4.8E+02	4.8E+00	-2.0E+02	7.3E+01	7.3E-01	-2.4E+00	2.0E+02	2.0E+00	-2.9E+00
Sb-122	014374-79-9	1.4E+03	1.4E+01	-2.4E+03	2.4E+05	2.4E+03	-3.3E+01	8.3E+04	8.3E+02	-4.0E+01
Sb-124	014683-10-4	1.1E+03	1.1E+01	-1.2E+04	2.0E+05	2.0E+03	-3.3E+01	6.9E+04	6.9E+02	-4.0E+01
Sb-125	014234-35-6	4.0E+03	4.0E+01	-1.4E+04	7.1E+05	7.1E+03	-3.3E+01	2.5E+05	2.5E+03	-4.0E+01
Sb-125+D	014234-35-6	3.4E+03	3.4E+01	-1.4E+04	6.0E+05	6.0E+03	-3.3E+01	2.1E+05	2.1E+03	-4.0E+01
Sb-126	015756-32-8	1.2E+03	1.2E+01	-6.9E+03	2.2E+05	2.2E+03	-3.3E+01	7.5E+04	7.5E+02	-4.0E+01
Sb-126m	015756-32-8	1.6E+05	1.6E+03	-1.4E+01	2.9E+07	2.9E+05	-3.3E+01	1.0E+07	1.0E+05	-4.0E+01
Sb-127	013968-50-8	1.4E+03	1.4E+01	-3.2E+03	2.5E+05	2.5E+03	-3.3E+01	8.7E+04	8.7E+02	-4.0E+01

Table 3.3f. (continued)

Chemical †	CASRN	Intercept (Vegetables)		Slope	Intercept (Beef)		Slope	Intercept (Milk)		Slope
		10 ⁻⁴	10 ⁻⁶		10 ⁻⁴	10 ⁻⁶		10 ⁻⁴	10 ⁻⁶	
Sb-129	014331-88-5	6.4E+03	6.4E+01	-1.9E+02	1.1E+06	1.1E+04	-3.3E+01	3.9E+05	3.9E+03	-4.0E+01
Se-46	013967-63-0	4.3E+02	4.3E+00	-2.5E+03	9.9E+03	9.9E+01	-4.4E+01	7.1E+04	7.1E+02	-5.3E+01
Se-47	014391-96-9	3.1E+03	3.1E+01	-2.2E+03	1.9E+04	1.9E+02	-4.5E+01	1.4E+05	1.4E+03	-5.4E+01
Se-48	014391-86-7	2.1E+03	2.1E+01	-2.0E+03	8.6E+03	8.6E+01	-4.5E+01	6.3E+04	6.3E+02	-5.4E+01
Se-75	014265-71-5	1.8E+02	1.8E+00	-1.3E+03	3.2E+01	3.2E-01	-8.3E+00	7.0E+01	7.0E-01	-1.0E+01
Si-31	014276-49-4									
Sm-147	014392-33-7	4.7E+03	4.7E+01	-1.4E+05	9.7E+02	9.7E+00	-4.8E+01	5.3E+04	5.3E+02	-5.8E+01
Sm-151	015715-94-3	2.6E+05	2.6E+03	-1.4E+05	5.3E+04	5.3E+02	-4.8E+01	2.9E+06	2.9E+04	-5.8E+01
Sm-153	015766-00-4	3.0E+04	3.0E+02	-1.8E+04	6.1E+03	6.1E+01	-4.8E+01	3.3E+05	3.3E+03	-5.8E+01
Sn-113	013966-06-8	1.1E+02	1.1E+00	-4.2E+02	3.1E+02	3.1E+00	-4.5E+00	6.7E+02	6.7E+00	-5.5E+00
Sn-121	014683-06-8	3.3E+02	3.3E+00	-3.6E+01	9.5E+02	9.5E+00	-4.5E+00	2.1E+03	2.1E+01	-5.5E+00
Sn-121m	014683-06-8	2.0E+02	2.0E+00	-4.8E+02	5.8E+02	5.8E+00	-4.5E+00	1.3E+03	1.3E+01	-5.5E+00
Sn-125	014683-08-0	2.4E+01	2.4E-01	-2.0E+02	6.9E+01	6.9E-01	-4.5E+00	1.5E+02	1.5E+00	-5.5E+00
Sn-126	015832-50-5	1.9E+01	1.9E-01	-4.9E+02	5.4E+01	5.4E-01	-4.5E+00	1.2E+02	1.2E+00	-5.5E+00
Sr-82	014809-50-8	1.5E+01	1.5E-01	-3.1E+02	1.5E+01	1.5E-01	-1.2E+00	9.3E+00	9.3E-02	-1.5E+00
Sr-85	013967-73-2	2.8E+02	2.8E+00	-3.9E+02	2.8E+02	2.8E+00	-1.2E+00	1.7E+02	1.7E+00	-1.5E+00
Sr-85m	013967-73-2	2.2E+04	2.2E+02	-1.6E+00	2.2E+04	2.2E+02	-1.2E+00	1.3E+04	1.3E+02	-1.5E+00
Sr-89	014158-27-1	3.9E+01	3.9E-01	-3.7E+02	3.8E+01	3.8E-01	-1.2E+00	2.3E+01	2.3E-01	-1.5E+00
Sr-90	010098-97-2	9.7E+00	9.7E-02	-4.8E+02	9.5E+00	9.5E-02	-1.2E+00	5.9E+00	5.9E-02	-1.5E+00
Sr-90+D	010098-97-2	7.1E+00	7.1E-02	-4.8E+02	6.1E+00	6.1E-02	-1.2E+00	4.3E+00	4.3E-02	-1.5E+00
Sr-91	014331-91-0	1.4E+02	1.4E+00	-1.3E+01	1.4E+02	1.4E+00	-1.2E+00	8.5E+01	8.5E-01	-1.5E+00

Table 3.3f. (continued)

Chemical [†]	CASRN	Intercept (Vegetables)			Slope	Intercept (Beef)			Slope	Intercept (Milk)		
		10 ⁻⁴	10 ⁻⁵	10 ⁻⁶		10 ⁻⁴	10 ⁻⁵	10 ⁻⁶		10 ⁻⁴	10 ⁻⁵	Slope
Si-92	014928-29-1	2.0E+02	2.0E+00	2.0E+00	-3.9E+00	1.9E+02	1.9E+00	1.9E+00	-1.2E+00	1.2E+02	1.2E+00	-1.5E+00
Ta-182	013982-00-8											
Tb-158	015759-55-4											
Tb-160	013981-29-8											
Tc-95	014809-56-4	3.5E+02	3.5E+00	3.5E+00	-1.6E+00	3.7E+06	3.7E+04	3.7E+04	-1.0E+01	5.8E+05	5.8E+03	-1.2E+01
Tc-95m	014809-56-4	1.9E+01	1.9E-01	1.9E-01	-2.3E+01	2.0E+05	2.0E+03	2.0E+03	-1.0E+01	3.2E+04	3.2E+02	-1.2E+01
Tc-96	014808-44-7	1.0E+01	1.0E-01	1.0E-01	-6.9E+00	1.1E+05	1.1E+03	1.1E+03	-1.0E+01	1.7E+04	1.7E+02	-1.2E+01
Tc-96m	014808-44-7	9.1E+02	9.1E+00	9.1E+00	-7.5E-02	9.7E+06	9.7E+04	9.7E+04	-1.0E+01	1.5E+06	1.5E+04	-1.2E+01
Tc-97	015759-35-0	1.5E+02	1.5E+00	1.5E+00	-5.5E+01	1.6E+06	1.6E+04	1.6E+04	-1.0E+01	2.5E+05	2.5E+03	-1.2E+01
Tc-97m	015759-35-0	2.0E+01	2.0E-01	2.0E-01	-2.5E+01	2.1E+05	2.1E+03	2.1E+03	-1.0E+01	3.3E+04	3.3E+02	-1.2E+01
Tc-99	014133-76-7	1.7E+01	1.7E-01	1.7E-01	-5.5E+01	1.8E+05	1.8E+03	1.8E+03	-1.0E+01	2.8E+04	2.8E+02	-1.2E+01
Tc-99m	014133-76-7	4.3E+02	4.3E+00	4.3E+00	-5.2E-01	4.6E+06	4.6E+04	4.6E+04	-1.0E+01	7.1E+05	7.1E+03	-1.2E+01
Te-125m	014390-73-9											
Te-127	013981-49-2											
Te-127m	013981-49-2											
Te-129	014269-71-7											
Te-129m	014269-71-7											
Te-131	014683-12-6											
Te-131m	014683-12-6											
Te-132	014234-28-7											
Th-227	015623-47-9	5.9E+03	5.9E+01	5.9E+01	-1.7E+05	3.1E+04	3.1E+02	3.1E+02	-5.0E+01	1.3E+05	1.3E+03	-5.9E+01

Table 3.3f. (continued)

Chemical [†]	CASRN	Intercept (Vegetables)		Slope	Intercept (Beef)		Slope	Intercept (Milk)		
		10 ⁻⁴	10 ⁻⁶		10 ⁻⁴	10 ⁻⁶		10 ⁻⁴	10 ⁻⁶	Slope
Th-228	014274-82-9	3.8E+03	3.8E+01	-2.7E+05	2.0E+04	2.0E+02	-5.0E+01	8.7E+04	8.7E+02	-5.9E+01
Th-228+D	014274-82-9	5.6E+00	5.6E-02	-1.5E+03	1.9E+00	1.9E-02	-8.8E+00	4.2E+00	4.2E-02	-1.1E+01
Th-229	015594-54-4	4.2E+03	4.2E+01	-2.8E+05	2.2E+04	2.2E+02	-5.0E+01	9.7E+04	9.7E+02	-5.9E+01
Th-229+D	015594-54-4	3.0E-01	3.0E-03	-1.5E+02	1.3E-01	1.3E-03	-1.1E+00	4.9E-02	4.9E-04	-1.3E+00
Th-230	014269-63-7	6.3E+03	6.3E+01	-2.8E+05	3.4E+04	3.4E+02	-5.0E+01	1.5E+05	1.5E+03	-5.9E+01
Th-231	014932-40-2	1.3E+05	1.3E+03	-2.1E+04	7.0E+05	7.0E+03	-5.0E+01	3.0E+06	3.0E+04	-5.9E+01
Th-232	007440-29-1	7.3E+03	7.3E+01	-2.8E+05	3.8E+04	3.8E+02	-5.0E+01	1.7E+05	1.7E+03	-5.9E+01
Th-234	015065-10-8	1.2E+04	1.2E+02	-1.8E+05	6.5E+04	6.5E+02	-5.0E+01	2.8E+05	2.8E+03	-5.9E+01
Tl-202	015720-57-7	3.9E+03	3.9E+01	-2.3E+03	2.7E+03	2.7E+01	-4.3E+01	1.2E+04	1.2E+02	-5.1E+01
Tl-204	013968-51-9	1.1E+03	1.1E+01	-2.4E+03	1.4E+03	1.4E+01	-4.2E+01	5.9E+03	5.9E+01	-5.1E+01
Tl-208	014913-50-9	1.7E+06	1.7E+04	-5.5E+00	1.6E+05	1.6E+03	-4.3E+01	6.8E+05	6.8E+03	-5.2E+01
Tl-209	015690-73-0	2.1E+06	2.1E+04	-4.0E+00	2.0E+05	2.0E+03	-4.3E+01	8.5E+05	8.5E+03	-5.2E+01
Tm-170	013981-30-1									
Tm-171	014333-45-0									
U-232	014158-29-3	7.3E+02	7.3E+00	-6.9E+04	4.2E+03	4.2E+01	-4.5E+01	7.7E+02	7.7E+00	-5.5E+01
U-233	013968-55-3	1.3E+03	1.3E+01	-6.9E+04	7.6E+03	7.6E+01	-4.5E+01	1.4E+03	1.4E+01	-5.5E+01
U-234	013966-29-5	1.3E+03	1.3E+01	-6.9E+04	7.6E+03	7.6E+01	-4.5E+01	1.4E+03	1.4E+01	-5.5E+01
U-235	015117-96-1	1.3E+03	1.3E+01	-6.9E+04	7.5E+03	7.5E+01	-4.5E+01	1.4E+03	1.4E+01	-5.5E+01
U-235+D	015117-96-1	1.0E+03	1.0E+01	-5.6E+04	5.5E+03	5.5E+01	-4.5E+01	1.3E+03	1.3E+01	-5.4E+01
U-236	013982-70-2	1.4E+03	1.4E+01	-6.9E+04	8.1E+03	8.1E+01	-4.5E+01	1.5E+03	1.5E+01	-5.5E+01
U-237	014269-75-1	1.5E+04	1.5E+02	-2.4E+04	8.5E+04	8.5E+02	-4.5E+01	1.6E+04	1.6E+02	-5.5E+01

Table 3.3f. (continued)

Chemical †	CASRN	Intercept (Vegetables)		Slope	Intercept (Beef)		Slope	Intercept (Milk)		Slope
		10 ⁻⁴	10 ⁻⁶		10 ⁻⁴	10 ⁻⁶		10 ⁻⁴	10 ⁻⁶	
U-238	007440-61-1	1.4E+03	1.4E+01	-6.9E+04	8.0E+03	8.0E+01	-4.5E+01	1.5E+03	1.5E+01	-5.5E+01
U-238+D	007440-61-1	7.5E+02	7.5E+00	-5.4E+04	4.1E+03	4.1E+01	-4.5E+01	9.7E+02	9.7E+00	-5.4E+01
U-240	015687-53-3	1.1E+04	1.1E+02	-2.9E+03	6.2E+04	6.2E+02	-4.5E+01	1.1E+04	1.1E+02	-5.5E+01
V-48	014331-97-6	5.1E+02	5.1E+00	-2.5E+03	6.8E+03	6.8E+01	-4.7E+01	3.4E+03	3.4E+01	-5.6E+01
W-181	015749-46-9	5.2E+02	5.2E+00	-1.5E+02	3.8E+02	3.8E+00	-1.6E+00	1.1E+04	1.1E+02	-1.9E+00
W-185	014932-41-3	6.9E+01	6.9E-01	-1.4E+02	5.0E+01	5.0E-01	-1.6E+00	1.5E+03	1.5E+01	-1.9E+00
W-187	014983-48-3	6.0E+01	6.0E-01	-1.2E+01	4.2E+01	4.2E-01	-1.6E+00	1.2E+03	1.2E+01	-1.9E+00
Xe-122	015151-09-4									
Xe-123	015700-10-4									
Xe-125	013994-18-8									
Xe-127	013994-19-9									
Xe-129m	013965-99-6									
Xe-131m	014683-11-5									
Xe-133	014932-42-4									
Xe-133m	014932-42-4									
Xe-135	014995-62-1									
Xe-135m	014995-62-1									
Xe-137	014835-21-3									
Xe-138	015751-81-2									
Y-90	010098-91-6	5.3E+03	5.3E+01	-1.6E+04	8.0E+03	8.0E+01	-4.7E+01	8.7E+04	8.7E+02	-5.7E+01
Y-91	014234-24-3	5.9E+03	5.9E+01	-7.7E+04	8.9E+03	8.9E+01	-4.7E+01	9.6E+04	9.6E+02	-5.7E+01

Table 3.3f. (continued)

Chemical [†]	CASRN	Intercept (Vegetables)		Slope	Intercept (Beef)		Slope	Intercept (Milk)		Slope
		10 ⁻⁴	10 ⁻⁶		10 ⁻⁴	10 ⁻⁶		10 ⁻⁴	10 ⁻⁶	
Y-91m	014234-24-3	2.2E+06	2.2E+04	-2.4E+02	3.2E+06	3.2E+04	-4.7E+01	3.5E+07	3.5E+05	-5.7E+01
Y-92	015751-59-4	4.1E+04	4.1E+02	-1.0E+03	6.1E+04	6.1E+02	-4.7E+01	6.7E+05	6.7E+03	-5.7E+01
Y-93	014981-70-5	1.4E+04	1.4E+02	-2.8E+03	2.1E+04	2.1E+02	-4.7E+01	2.3E+05	2.3E+03	-5.7E+01
Zn-65	013982-39-3	3.0E+01	3.0E-01	-3.3E+02	1.2E+01	1.2E-01	-4.5E+00	2.5E+01	2.5E-01	-5.5E+00
Zn-69	013982-23-5	4.8E+03	4.8E+01	-1.0E+00	1.9E+03	1.9E+01	-4.5E+00	4.0E+03	4.0E+01	-5.5E+00
Zn-69m	013982-23-5	2.0E+02	2.0E+00	-1.4E+01	7.6E+01	7.6E-01	-4.5E+00	1.6E+02	1.6E+00	-5.5E+00
Zr-93	015751-77-6	1.8E+06	1.8E+04	-1.1E+06	2.4E+08	2.4E+06	-5.0E+01	9.6E+07	9.6E+05	-6.0E+01
Zr-95	013967-71-0	2.4E+05	2.4E+03	-9.3E+05	3.2E+07	3.2E+05	-5.0E+01	1.3E+07	1.3E+05	-6.0E+01
Zr-97	014928-30-4	9.2E+04	9.2E+02	-5.6E+04	1.2E+07	1.2E+05	-5.0E+01	4.8E+06	4.8E+04	-6.0E+01

Notes:

[†] Isotopes designated with an "m" indicate that the isotope is metastable; isotopes designated with a "+D" indicate that the radionuclide slope factors include contributions from daughter products.

Table 3.4a. (continued)

Chemical	CASRN	Ingestion (mg/L)			Dermal (mg/L)			Ingestion + Dermal [†] (mg/L)			Ingestion of Fish (mg/L)		
		10-4	10-6	HQ=1	10-4	10-6	HQ=1	10-4	10-6	HI=1	10-4	10-6	HI=1
AMDRO	067485-29-4			1.2E+00									
AMETRYN	000834-12-8			3.7E+01									6.9E+00
AMINOPHENOL, m-	000591-27-5			2.9E+02									8.1E+02
AMINOPYRIDINE, 4-	000504-24-5			8.2E-02									2.1E-01
AMITRAZ	033089-61-1			1.0E+01									
AMMONIA	007664-41-7												
AMMONIUM SULFAMATE	007773-06-0			8.2E+02									
ANILINE	000062-53-3	1.7E+02	1.7E+00		1.8E+01	1.8E-01		1.6E+01	1.6E-01		1.3E+02	1.3E+00	
ANTHRACENE	000120-12-7			1.2E+03			1.8E+01			1.8E+01			2.1E+00
ANTIMONY (METALLIC)	007440-36-0			1.6E+00			1.4E-01			1.3E-01			3.9E-02
ANTIMONY PENTOXIDE	001314-60-9			2.0E+00									
ANTIMONY POTASSIUM TARTRATE	000304-61-0			3.7E+00									
ANTIMONY TRIOXIDE	001332-81-6			1.6E+00									
ANTIMONY TRIOXIDE	001309-64-4			1.6E+00									
APOLLO	074115-24-5			5.3E+01									
ARAMITE	000140-57-8	3.8E+01	3.8E-01	2.0E+02									
AROCOR 1016	012674-11-2			2.9E-01									4.1E-05
AROCOR 1254	011097-69-1			8.2E-02									8.6E-06
AROCOR-1221	011104-28-2	1.2E-01	1.2E-03								4.0E-04	4.0E-06	
AROCOR-1232	011141-16-5	1.2E-01	1.2E-03								1.9E-03	1.9E-05	
AROCOR-1242	053469-21-9	1.2E-01	1.2E-03								3.8E-04	3.8E-06	

Table 3.4a. (continued)

Chemical	CASRN	Ingestion (mg/L)			Dermal (mg/L)			Ingestion + Dermal ¹ (mg/L)			Ingestion of Fish (mg/L)		
		10-4	10-6	HQ=1	10-4	10-6	HQ=1	10-4	10-6	HI=1	10-4	10-6	HI=1
CHLOROANILINE, p-	000106-47-8			1.6E+01									2.7E+00
CHLOROBENZENE	000108-90-7			8.2E+01			2.7E+00			2.6E+00			3.1E-01
CHLOROBENZILATE	000510-15-6	3.5E+00	3.5E-02	8.2E+01						5.4E-03	5.4E-05		1.2E-01
CHLOROBENZOIC ACID, p-	000074-11-3			8.2E+02									3.2E+01
CHLOROBENZOTRIFLUORIDE, 4-	000098-56-6			8.2E+01									
CHLOROBUTANE, 1-	000109-69-3			1.6E+03									6.6E+01
CHLOROBUTANE, 2-	000078-86-4												
CHLOROCYCLOPENTADIENE	041851-50-7												
CHLORODIBROMOETHANE	073506-94-2	1.1E+01	1.1E-01										
CHLORODIFLUOROMETHANE	000075-45-6												
CHLOROFORM	000067-66-3	1.6E+02	1.6E+00	4.1E+01	1.5E+01	1.5E-01	3.9E+00	1.4E+01	1.4E-01	3.6E+00	2.0E+01	2.0E-01	5.3E+00
CHLOROMETHANE	000074-87-3	7.3E+01	7.3E-01		7.5E+01	7.5E-01		3.7E+01	3.7E-01		5.7E+01	5.7E-01	
CHLOROMETHYL METHYL ETHER	000107-30-2												
CHLORONAPHTHALENE, BETA-	000091-58-7			3.3E+02									1.2E+00
CHLORONITROBENZENE, o-	000088-73-3	3.8E+01	3.8E-01								3.1E+00	3.1E-02	
CHLORONITROBENZENE, p-	000121-73-3	5.3E+01	5.3E-01								3.2E+00	3.2E-02	
CHLOROPHENOL, 2-	000095-57-8			2.0E+01			2.7E+00			2.4E+00			7.7E+00
CHLOROPHENYL METHYL SULFIDE, p-	000123-09-1												
CHLOROPHENYL METHYL SULFOXIDE	000934-73-6												
CHLOROPROPANE, 2-	000075-29-6												
CHLOROTHALONIL	001897-45-6	8.7E+01	8.7E-01	6.1E+01	1.5E+01	1.5E-01	1.1E+01	1.3E+01	1.3E-01	9.0E+00	4.1E-01	4.1E-03	2.9E-01

Table 3.4a. (continued)

Chemical	CASRN	Ingestion (mg/L)			Dermal (mg/L)			Ingestion + Dermal [†] (mg/L)			Ingestion of Fish (mg/L)		
		10-4	10-6	HQ=1	10-4	10-6	HQ=1	10-4	10-6	HQ=1	10-4	10-6	HQ=1
CYANOGEN BROMIDE	000506-68-3			3.7E+02									
CYANOGEN CHLORIDE	000506-77-4			2.0E+02									5.9E+02
CYCLOHEXANE, 1,2,3,4,5-PENTABROMO-6-CHLORO	000087-84-3	4.1E+01	4.1E-01										
CYCLOHEXANONE	000108-94-1			2.0E+04									2.0E+04
CYCLOHEXYLAMINE	000108-91-8			8.2E+02									2.5E+02
CYCLOPENTADIENE	000542-92-7												
CYHALOTHRIN/KARATE	068085-85-8			2.0E+01									
CYPERMETHRIN	052315-07-8			4.1E+01									
CYROMAZINE	066215-27-8			3.1E+01									
DACTHAL	001861-32-1			4.1E+01									
DALAPON	000075-99-0			1.2E+02									
DDD	000072-54-8	4.0E+00	4.0E-02		4.3E-02	4.3E-04		4.2E-02	4.2E-04		3.5E-03	3.5E-05	
DDE	000072-55-9	2.8E+00	2.8E-02		3.5E-02	3.5E-04		3.5E-02	3.5E-04		8.0E-04	8.0E-06	
DDT	000050-29-3	2.8E+00	2.8E-02	2.0E+00	2.0E-02	2.0E-04	1.4E-02	1.9E-02	1.9E-04	1.4E-02	2.3E-04	2.3E-06	1.7E-04
DECABROMODIPHENYL ETHER	001163-19-5			4.1E+01									
DEMETON	008065-48-3			1.6E-01									
DI(2-ETHYLHEXYL)ADIPATE	000103-23-1	7.9E+02	7.9E+00	2.5E+03							3.9E-03	3.9E-05	1.2E-02
DIALATE	002303-16-4	1.6E+01	1.6E-01								1.8E+01	1.8E-01	
DIAZINON	000333-41-5			3.7E+00									1.9E-02
DIBENZ[A,H]ANTHRACENE	000053-70-3	1.3E-01	1.3E-03		6.4E-05	6.4E-07		6.4E-05	6.4E-07		2.8E-06	2.8E-08	
DIBROMO-3-CHLOROPROPANE, 1,2-	000096-12-8	6.8E-01	6.8E-03								5.1E-02	5.1E-04	

Table 3.4a. (continued)

Chemical	CASRN	Ingestion (mg/L)			Dermal (mg/L)			Ingestion + Dermal ^t (mg/L)			Ingestion of Fish (mg/L)		
		10-4	10-6	HQ=1	10-4	10-6	HQ=1	10-4	10-6	HQ=1	10-4	10-6	HQ=1
DIBROMOBENZENE, 1,4-	000106-37-6			4.1E+01									2.4E-01
DIBROMOCHLOROMETHANE	000124-48-1	1.1E+01	1.1E-01	8.2E+01	7.5E+00	7.5E-02	5.4E+01	4.5E+00	4.5E-02	3.3E+01	1.2E+00	1.2E-02	8.6E+00
DIBROMODICHLOROMETHANE	000594-18-3												
DIBROMODIPHENYL ETHER, p,p'-	002050-47-7												
DIBROMOETHANE, 1,2-	000106-93-4	1.1E-02	1.1E-04		1.5E-02	1.5E-04		6.3E-03	6.3E-05				
DIBROMOMETHANE (METHYLENE BROMIDE)	000074-95-3			4.1E+01									2.0E+01
DIBUTYL PHTHALATE	000084-74-2			4.1E+02			1.5E+01			1.5E+01			9.3E-02
DICAMBA	001918-00-9			1.2E+02									2.6E+00
DICHLORO-2-BUTENE, 1,4-	000764-41-0												
DICHLOROBENZENE, 1,2-	000095-50-1			3.7E+02			2.6E+01			2.4E+01			1.0E+01
DICHLOROBENZENE, 1,3-	000541-73-1												
DICHLOROBENZENE, 1,4-	000106-46-7	4.0E+01	4.0E-01		2.5E+00	2.5E-02		2.3E+00	2.3E-02		1.6E+00	1.6E-02	
DICHLOROBENZIDINE, 3,3'-	000091-94-1	2.1E+00	2.1E-02		5.4E-01	5.4E-03		4.3E-01	4.3E-03		1.9E-02	1.9E-04	
DICHLORODIFLUOROMETHANE	000075-71-8			8.2E+02			6.7E+01			6.2E+01			7.6E+01
DICHLOROETHANE, 1,1-	000075-34-3			4.1E+02			2.0E+02			1.3E+02			7.3E+01
DICHLOROETHANE, 1,2-	000107-06-2	1.0E+01	1.0E-01		8.5E+00	8.5E-02		4.7E+00	4.7E-02		1.3E+01	1.3E-01	
DICHLOROETHYLENE, 1,1-	000075-35-4	1.6E+00	1.6E-02	3.7E+01	7.7E-01	7.7E-03	1.8E+01	5.2E-01	5.2E-03	1.2E+01	2.6E-01	2.6E-03	6.0E+00
DICHLOROETHYLENE, 1,2-, (MIXED ISOMERS)	000540-59-0			3.7E+01									6.5E+01
DICHLOROETHYLENE, 1,2-C-	000156-59-2			4.1E+01			1.8E+01			1.2E+01			4.9E+01
DICHLOROETHYLENE, 1,2-T-	000156-60-5			8.2E+01									6.8E+01
DICHLOROPHENOL, 2,4-	000120-83-2			1.2E+01			7.2E-01			6.8E-01			8.7E-01

Table 3.4a. (continued)

Chemical	CASRN	Ingestion (mg/L)			Dermal (mg/L)			Ingestion + Dermal ¹ (mg/L)			Ingestion of Fish (mg/L)		
		10-4	10-6	HQ=1	10-4	10-6	HQ=1	10-4	10-6	HI=1	10-4	10-6	HI=1
DIMETHOATE	000060-51-5			8.2E-01									2.9E-02
DIMETHOXYBENZIDINE, 3,3'-	000119-90-4	6.8E+01	6.8E-01		2.9E+02	2.9E+00		5.5E+01	5.5E-01		3.0E+01	3.0E-01	
DIMETHYL SULFATE	000077-78-1												
DIMETHYLANILINE HCL, 2,4-	021436-96-4	1.6E+00	1.6E-02										
DIMETHYLANILINE, 2,4-	000095-68-1	1.3E+00	1.3E-02										
DIMETHYLANILINE, N,N-	000121-69-7			8.2E+00									3.4E-01
DIMETHYLBENZIDINE, 3,3'-	000119-93-7	1.0E-01	1.0E-03		1.0E-01	1.0E-03		5.1E-02	5.1E-04		1.1E-02	1.1E-04	
DIMETHYLETHYL LEAD	107584-40-7												
DIMETHYLFORMAMIDE	000068-12-2			4.1E+02									9.6E+03
DIMETHYLHYDRAZINE, 1,2-	000540-73-8												
DIMETHYLPHENOL, 2,4-	000105-67-9			8.2E+01				3.2E+00		3.1E+00			1.3E+00
DIMETHYLPHENOL, 2,6-	000576-26-1			2.5E+00									
DIMETHYLPHENOL, 3,4-	000095-65-8			4.1E+00				4.4E-01		4.0E-01			3.4E-01
DIMETHYLPHTHALATE	000131-11-3												
DIMETHYLTEREPHTHALATE	000120-61-6			4.1E+02									8.8E+00
DINITRO-O-CYCLOHEXYL PHENOL, 4,6-	000131-89-5			8.2E+00									3.8E+03
DINITROBENZENE, 1,2-	000528-29-0			1.6E+00									
DINITROBENZENE, 1,3-	000099-65-0			4.1E-01				7.4E-01		2.6E-01			9.8E-02
DINITROBENZENE, 1,4-	000100-25-4			1.6E+00									
DINITROPHENOL, 2,4-	000051-28-5			8.2E+00				1.1E+01		4.7E+00			2.4E+00
DINITROTOLUENE, 2,4-	000121-14-2	1.4E+00	1.4E-02	8.2E+00	1.3E+00	1.3E-02	7.9E+00	6.9E-01	6.9E-03	4.0E+00	1.7E-01	1.7E-03	1.0E+00

[illegible]

Table 3.4a. (continued)

Chemical	CASRN	Ingestion (mg/L)			Dermal (mg/L)			Ingestion + Dermal [†] (mg/L)			Ingestion of Fish (mg/L)		
		10-4	10-6	HQ=1	10-4	10-6	HQ=1	10-4	10-6	HI=1	10-4	10-6	HI=1
METHANOL	000067-56-1			2.0E+03			5.5E+03			1.5E+03			3.2E+04
METHIDATHION	000950-37-8			4.1E+00									
METHOMYL	016752-77-5			1.0E+02									
METHOXY-5-NITROANILINE, 2-	000099-59-2	2.1E+01	2.1E-01		3.6E+01	3.6E-01		1.3E+01	1.3E-01				
METHOXYCHLOR	000072-43-5			2.0E+01									5.9E-03
METHOXYETHANOL ACETATE, 2-	000110-49-6			8.2E+00									
METHOXYETHANOL, 2-	000109-86-4			4.1E+00			9.2E+01			3.9E+00			6.4E+01
METHYL ACETATE	000079-20-9			4.1E+03									6.1E+03
METHYL ACRYLATE	000096-33-3			1.2E+02									1.1E+02
METHYL ETHYL KETONE	000078-93-3			2.5E+03			7.7E+03			1.9E+03			6.2E+03
METHYL ISOBUTYL KETONE	000108-10-1			3.3E+02			4.3E+02			1.8E+02			3.8E+02
METHYL MERCURY	022967-92-6			1.2E+00									
METHYL METHACRYLATE	000080-52-6			3.3E+02									1.2E+02
METHYL PARATHION	000298-00-0			1.0E+00									1.5E-01
METHYL STYRENE (MIXED ISOMERS)	025013-15-4			2.5E+01									
METHYL TERT-BUTYL ETHER (MTBE)	001634-04-4												
METHYL-5-NITROANILINE, 2-	000099-55-8	2.9E+01	2.9E-01								3.8E+00	3.8E-02	
METHYLANILINE HYDROCHLORIDE, 2-	000636-21-5	5.3E+00	5.3E-02		1.1E+01	1.1E-01		3.6E+00	3.6E-02				
METHYLCYCLOHEXANE	000108-87-2												
METHYLENE CHLORIDE	000075-09-2	1.3E+02	1.3E+00	2.5E+02	1.2E+02	1.2E+00	2.2E+02	6.0E+01	6.0E-01	1.2E+02	5.3E+01	5.3E-01	1.0E+02
METHYLENE-BIS(2-CHLOROANILINE), 4,4'-	000101-14-4	7.3E+00	7.3E-02	2.9E+00	1.1E+00	1.1E-02	4.4E-01	9.8E-01	9.8E-03	3.8E-01	3.0E-02	3.0E-04	1.2E-02

Table 3.4a. (continued)

Chemical	CASRN	Ingestion (mg/L)			Dermal (mg/L)			Ingestion + Dermal [†] (mg/L)			Ingestion of Fish (mg/L)		
		10-4	10-6	HQ=1	10-4	10-6	HQ=1	10-4	10-6	HI=1	10-4	10-6	HI=1
NITRATE	014797-55-8			6.5E+03									1.1E-01
NITRIC OXIDE	010102-43-9												
NITRITE	014797-65-0			4.1E+02									
NITROANILINE, 2-	000088-74-4												
NITROBENZENE	000098-95-3			2.0E+00			1.2E+00			7.7E-01			3.3E-01
NITROFURANTOIN	000067-20-9			2.9E+02									
NITROFURAZONE	000059-87-0	6.4E-01	6.4E-03										
NITROGEN DIOXIDE	010102-44-0												
NITROGUANIDINE	000556-88-7			4.1E+02									
NITROPROPANE, 2-	000079-46-9	1.0E-01	1.0E-03		4.3E-01	4.3E-03		8.1E-02	8.1E-04		1.6E-01	1.6E-03	
NITROSO-DI-N-BUTYLAMINE, N-	000924-16-3	1.8E-01	1.8E-03		1.6E-01	1.6E-03		8.3E-02	8.3E-04		2.5E-02	2.5E-04	
NITROSO-DI-N-PROPYLAMINE, N-	000621-64-7	1.4E-01	1.4E-03		5.2E-02	5.2E-04		3.8E-02	3.8E-04		4.1E-02	4.1E-04	
NITROSO-N-ETHYLUREA, N-	000759-73-9	6.8E-03	6.8E-05		5.4E-02	5.4E-04		6.1E-03	6.1E-05		1.9E-02	1.9E-04	
NITROSO-N-METHYLUREA, N-	000684-93-5												
NITROSODIETHANOLAMINE, N-	001116-54-7	3.4E-01	3.4E-03		2.9E+02	2.9E+00		3.4E-01	3.4E-03		2.2E+01	2.2E-01	
NITROSODIETHYLAMINE, N-	000055-18-5	6.4E-03	6.4E-05		2.3E-02	2.3E-04		5.0E-03	5.0E-05		1.1E-02	1.1E-04	
NITROSODIMETHYLAMINE, N-	000062-75-9	1.9E-02	1.9E-04		3.0E-01	3.0E-03		1.8E-02	1.8E-04		5.3E-01	5.3E-03	
NITROSODIPHENYLAMINE, N-	000086-30-6	1.9E+02	1.9E+00		1.1E+01	1.1E-01		1.0E+01	1.0E-01		3.3E+00	3.3E-02	
NITROSOMETHYLETHYLAMINE, N-	010595-95-6	4.3E-02	4.3E-04										
NITROSOMETHYL VINYLAMINE, N-	004549-40-0												
NITROSOPYRROLIDINE, N-	000930-55-2	4.5E-01	4.5E-03								1.2E+01	1.2E-01	

Table 3.4a. (continued)

Chemical	CASRN	Ingestion (mg/L)			Dermal (mg/L)			Ingestion + Dermal [†] (mg/L)			Ingestion of Fish (mg/L)		
		10-4	10-6	HQ=1	10-4	10-6	HQ=1	10-4	10-6	HQ=1	10-4	10-6	HQ=1
NITROTOLUENE, m-	000099-08-1			4.1E+01									2.3E+00
NITROTOLUENE, o-	000088-72-2			4.1E+01									3.0E+00
NITROTOLUENE, p-	000099-99-0			4.1E+01									2.4E+00
NORELURAZON	027314-13-2			1.6E+02									
NUSTAR	085509-19-9			2.9E+00									
OCTABROMODIPHENYL ETHER	032536-52-0			1.2E+01									
OCTAHYDRO-1,3,5,7-TETRA-NITRO-1,3,5,7-TETRA (HMX)	002691-41-0			2.0E+02									3.0E+02
OCTAMETHYLPYROPHOSPHORAMIDE	000152-16-9			8.2E+00									
OCTYL PHTHALATE, DiN-	000117-84-0			8.2E+01									1.1E-05
ORYZALIN	019044-88-3			2.0E+02									
OXADIAZON	019666-30-9			2.0E+01									
OXAMYL	023135-22-0			1.0E+02									
PACLOBUTRAZOL	076738-62-0			5.3E+01									
PARAQUAT	001910-42-5			1.8E+01									
PARATHION	000056-38-2			2.5E+01			6.2E+00			4.9E+00			1.3E-01
PEBULATE	001114-71-2			2.0E+02									
PENDIMETHALIN	040487-42-1			1.6E+02									
PENTABROMODIPHENYL ETHER	032534-81-9			8.2E+00									
PENTACHLOROBENZENE	000608-93-5			3.3E+00									2.3E-03
PENTACHLOROCYCLOPENTADIENE	025329-35-5												
PENTACHLORONITROBENZENE	000082-68-8	3.7E+00	3.7E-02	1.2E+01	2.7E-01	2.7E-03	8.9E-01	2.5E-01	2.5E-03	8.3E-01	1.1E-03	1.1E-05	3.6E-03

Table 3.4a. (continued)

Chemical	CASRN	Ingestion (mg/L)			Dermal (mg/L)			Ingestion + Dermal [†] (mg/L)			Ingestion of Fish (mg/L)		
		10-4	10-6	HQ=1	10-4	10-6	HQ=1	10-4	10-6	HI=1	10-4	10-6	HI=1
PROCHLORAZ	067747-09-5	6.4E+00	6.4E-02	3.7E+01									
PROFLURALIN	026399-36-0			2.5E+01									
PROMETON	001610-18-0			6.1E+01									4.8E+00
PROMETRYN	007287-19-6			1.6E+01									9.2E-01
PROPACHLOR	001918-16-7			5.3E+01									
PROPANIL	000709-98-8			2.0E+01									
PROPARGITE	002312-35-8			8.2E+01									
PROPARGYL ALCOHOL	000107-19-7			8.2E+00									
PROPABINE	000139-40-2			8.2E+01									4.8E+00
PROPHAM	000122-42-9			8.2E+01									1.3E+00
PROPCONAZOLE	060207-90-1			5.3E+01									
PROPYLENE GLYCOL	000057-55-6			8.2E+04									7.0E+06
PROPYLENE GLYCOL MONOETHYL ETHER	001569-02-4			2.9E+03									
PROPYLENE GLYCOL MONOMETHYL ETHER	000107-98-2			2.9E+03			3.1E+04			2.6E+03			1.6E+04
PROPYLENE OXIDE	000075-56-9	4.0E+00	4.0E-02		1.9E+01	1.9E-01		3.3E+00	3.3E-02		1.5E+01	1.5E-01	
PURSUIT	081335-77-5			1.0E+03									
PYDRIN	051630-58-1			1.0E+02									
PYRENE	000129-00-0			1.2E+02			5.0E-01			5.0E-01			1.1E-01
PYRIDINE	000110-86-1			4.1E+00									5.3E+00
QUINALPHOS	013593-03-8			2.0E+00									
QUINOLINE	000091-22-5	7.9E-02	7.9E-04								8.9E-03	8.9E-05	

Table 3.4a. (continued)

Chemical	CASRN	Ingestion (mg/L)			Dermal (mg/L)			Ingestion + Dermal [†] (mg/L)			Ingestion of Fish (mg/L)		
		10-4	10-6	HQ=1	10-4	10-6	HQ=1	10-4	10-6	HI=1	10-4	10-6	HI=1
TRIALLATE	002303-17-5			5.3E+01									
TRIASULFURON	082097-50-5			4.1E+01									
TRIBROMOBENZENE, 1,2,4-	000615-54-3			2.0E+01									
TRIBROMOCHLOROMETHANE	000594-15-0												
TRIBROMODIPHENYL ETHER	049690-94-0												
TRIBUTYL TIN OXIDE	000056-35-9			1.2E-01									
TRICHLORO-1,2,2-TRIFLUOROETHANE, 1,1,2-	000076-13-1			1.2E+05									1.6E+03
TRICHLORO-2'-HYDROXYDIPHENYLETHER	003380-34-5												
TRICHLOROANILINE HCL, 2,4,6-	033663-50-2	3.3E+01	3.3E-01										
TRICHLOROANILINE, 2,4,6-	000634-93-5	2.8E+01	2.8E-01										
TRICHLOROBENZENE, 1,2,4-	000120-82-1			4.1E+01			1.8E+00			1.7E+00			9.0E-02
TRICHLOROETHANE, 1,1,1-	000071-55-6												
TRICHLOROETHANE, 1,1,2-	000079-00-5	1.7E+01	1.7E-01	1.6E+01	6.9E+00	6.9E-02	6.8E+00	4.9E+00	4.9E-02	4.8E+00	1.0E+00	1.0E-02	1.0E+00
TRICHLOROETHYLENE	000079-01-6	8.7E+01	8.7E-01		3.5E+00	3.5E-02		3.4E+00	3.4E-02		1.9E+01	1.9E-01	
TRICHLOROFLUOROMETHANE	000075-69-4			1.2E+03			7.1E+01			6.7E+01			6.0E+01
TRICHLOROPHENOL, 2,4,5-	000095-95-4			4.1E+02									5.2E-01
TRICHLOROPHENOL, 2,4,6-	000088-06-2	8.7E+01	8.7E-01		6.3E+00	6.3E-02		5.9E+00	5.9E-02		1.0E+01	1.0E-01	
TRICHLOROPHENOXY PROPIONIC ACID, 2(2,4,5-	000093-72-1			3.3E+01									1.4E-01
TRICHLOROPHENOXY ACETIC ACID, 2,4,5-	000093-76-5			4.1E+01									
TRICHLOROPROPANE, 1,1,2-	000598-77-6			2.0E+01									
TRICHLOROPROPANE, 1,2,3-	000096-18-4	1.4E-01	1.4E-03	2.5E+01							1.9E-04	1.9E-06	3.4E-02

Table 3.4a. (continued)

Chemical	CASRN	Ingestion (mg/L)			Dermal (mg/L)			Ingestion + Dermal† (mg/L)			Ingestion of Fish (mg/L)		
		10-4	10-6	HQ=1	10-4	10-6	HQ=1	10-4	10-6	10-4	10-4	10-6	HI=1
VINYL ACETATE	000108-05-4			4.1E+03			9.8E+02						7.4E+03
VINYL BROMIDE	000593-60-2												
VINYL CHLORIDE	000075-01-4	5.0E-01	5.0E-03		3.0E-01	3.0E-03		1.9E-01	1.9E-03	1.8E-01	1.8E-03		
WARFARIN	000081-81-2			1.2E+00									6.1E-02
WHITE PHOSPHORUS	007723-14-0			8.2E-02									
XYLENE, MIXTURE	001330-20-7			8.2E+03									1.1E+02
XYLENE, m-	000108-38-3			8.2E+03			4.4E+02			4.2E+02			1.1E+02
XYLENE, o-	000095-47-6			8.2E+03									1.9E+02
XYLENE, p-	000106-42-3												
ZINC (METALLIC)	007440-66-6			1.2E+03			1.1E+03			5.7E+02			3.0E+00
ZINC CYANIDE	000557-21-1			2.0E+02									2.0E-01
ZINC PHOSPHIDE	001314-84-7			1.2E+00									1.2E-03
ZINEB	012122-67-7			2.0E+02									

Notes:

† If slope factors or reference doses were available for only one pathway (i.e., ingestion OR dermal), the total for ingestion plus dermal was not calculated.

- (1) Same oral slope factor as used for polychlorinated biphenyls.
 (2) PRG calculated considering *New Interim Region IV Guidance* from EPA (received February 11, 1992). The slope factors for chemicals so marked indicate that a toxicity equivalency factor (TEF) method was used for carcinogenic PAHs based on each compound's relative potency to the potency of benzo(a)pyrene. The following TEFs were used to convert each PAH slope factor to an equivalent slope factor of benzo(a)pyrene [that has a new cancer slope factor of 7.3 (mg/kg/day)]: identified by EPA's CRAVE workgroup: (1) benzo(e)pyrene; TEF = 1.0 (2) benzo(a)anthracene; TEF = 0.1, (3) benzo(b)fluoranthene; TEF = 0.1, (4) benzo(k)fluoranthene; TEF = 0.01, (5) chrysene; TEF = 0.001, (6) dibenz(a,h)anthracene; TEF = 1.0, and (7) indeno(1,2,3-c,d)pyrene; TEF = 0.1. TEFs were used for only the oral slope factor in the ingestion pathway.
 (3) The slope factor for trichloroethylene has been withdrawn from IRIS and HEAST; however, since this is a common contaminant, the old slope factor has been used to calculate the PRG.

Table 3.4b. Risk-based Preliminary Remediation Goals for radionuclides in groundwater (Recreation scenario)

Chemical [†]	CASRN	Ingestion (pCi/L)		Ingestion of fish (pCi/L)	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Ac-225	014265-85-1	3.8E+03	3.8E+01	3.6E+02	3.6E+00
Ac-227	014952-40-0	1.5E+03	1.5E+01	1.5E+02	1.5E+00
Ac-227+D	014952-40-0	8.5E+02	8.5E+00	3.5E+00	3.5E-02
Ac-228	014331-83-0	3.3E+05	3.3E+03	3.2E+04	3.2E+02
Ag-105	014928-14-4	3.3E+05	3.3E+03	1.6E+05	1.6E+03
Ag-108	014391-65-2	7.7E+07	7.7E+05	3.7E+07	3.7E+05
Ag-108m	014391-65-2	8.8E+04	8.8E+02	4.3E+04	4.3E+02
Ag-108m+D	014391-65-2	8.8E+04	8.8E+02	4.3E+04	4.3E+02
Ag-109m	014378-38-2	2.0E+09	2.0E+07	9.5E+08	9.5E+06
Ag-110	014391-76-5	2.2E+08	2.2E+06	1.1E+08	1.1E+06
Ag-110m	014391-76-5	6.3E+04	6.3E+02	3.1E+04	3.1E+02
Ag-111	157690-04-0	7.8E+04	7.8E+02	3.8E+04	3.8E+02
Am-241	014596-10-2	1.6E+03	1.6E+01	1.3E+02	1.3E+00
Am-242	013981-54-9	3.6E+05	3.6E+03	2.9E+04	2.9E+02
Am-242m	013981-54-9	1.8E+03	1.8E+01	1.5E+02	1.5E+00
Am-243	014993-75-0	1.6E+03	1.6E+01	1.3E+02	1.3E+00
Am-243+D	014993-75-0	1.6E+03	1.6E+01	6.5E+01	6.5E-01
Ar-41	014163-25-8				

Table 3.4b. (continued)

Chemical [†]	CASRN	Ingestion (pCi/L)		Ingestion of fish (pCi/L)	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
At-217	017239-90-6	5.9E+10	5.9E+08		
Au-196	014914-16-0	4.1E+05	4.1E+03		
Au-198	010043-49-0	1.0E+05	1.0E+03		
Ba-131	014914-75-1	3.1E+05	3.1E+03	1.9E+05	1.9E+03
Ba-133	013981-41-4	2.0E+05	2.0E+03	1.2E+05	1.2E+03
Ba-133m	013981-41-4	1.9E+05	1.9E+03	1.2E+05	1.2E+03
Ba-137m	013981-97-0	2.2E+08	2.2E+06	1.3E+08	1.3E+06
Ba-139	014378-25-7	1.8E+06	1.8E+04	1.1E+06	1.1E+04
Ba-140	014798-08-4	4.5E+04	4.5E+02	2.7E+04	2.7E+02
Be-7	013966-02-4	6.2E+06	6.2E+04	1.5E+05	1.5E+03
Bi-206	015776-19-9	7.5E+04	7.5E+02	1.8E+04	1.8E+02
Bi-207	013982-38-2	1.1E+05	1.1E+03	2.5E+04	2.5E+02
Bi-210	014331-79-4	7.3E+04	7.3E+02	1.8E+04	1.8E+02
Bi-211	015229-37-5	2.9E+07	2.9E+05	7.1E+06	7.1E+04
Bi-212	014913-49-6	8.6E+05	8.6E+03	2.1E+05	2.1E+03
Bi-213	015776-20-2	1.2E+06	1.2E+04	2.9E+05	2.9E+03
Bi-214	014733-03-0	2.7E+06	2.7E+04	6.6E+05	6.6E+03
Br-82	014686-69-2	3.8E+05	3.8E+03	2.3E+03	2.3E+01

Table 3.4b. (continued)

Chemical [†]	CASRN	Ingestion (pCi/L)		Ingestion of fish (pCi/L)	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
C-11	014333-33-6	1.2E+07	1.2E+05	5.7E+02	5.7E+00
C-14	014762-75-5	5.2E+05	5.2E+03	2.5E+01	2.5E-01
C-15	015929-23-4	8.1E+08	8.1E+06	3.9E+04	3.9E+02
Ca-45	013966-05-7	2.6E+05	2.6E+03	1.6E+04	1.6E+02
Ca-47	001439-99-2	8.0E+04	8.0E+02	4.8E+03	4.8E+01
Cd-109	014109-32-1	6.7E+04	6.7E+02	8.0E+02	8.0E+00
Cd-115	014336-68-6	7.3E+04	7.3E+02	8.8E+02	8.8E+00
Cd-115m	014336-68-6	3.8E+04	3.8E+02	4.5E+02	4.5E+00
Ce-141	013967-74-3	1.4E+05	1.4E+03	1.1E+04	1.1E+02
Ce-143	014119-19-8	9.0E+04	9.0E+02	7.3E+03	7.3E+01
Ce-144	014762-78-8	1.8E+04	1.8E+02	1.4E+03	1.4E+01
Ce-144+D	014762-78-8	1.8E+04	1.8E+02	1.4E+03	1.4E+01
Cl-36	013981-43-6	2.4E+05	2.4E+03	1.2E+04	1.2E+02
Cl-38	014158-34-0	2.6E+06	2.6E+04	1.2E+05	1.2E+03
Cm-242	015510-73-3	1.4E+04	1.4E+02	1.1E+03	1.1E+01
Cm-243	015757-87-6	2.1E+03	2.1E+01	1.7E+02	1.7E+00
Cm-243+D	015757-87-6	2.1E+03	2.1E+01	1.7E+02	1.7E+00
Cm-244	013981-15-2	2.5E+03	2.5E+01	2.0E+02	2.0E+00

Table 3.4b. (continued)

Chemical [†]	CASRN	Ingestion (pCi/L)		Ingestion of fish (pCi/L)	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Cm-245	015621-76-8	1.6E+03	1.6E+01	1.3E+02	1.3E+00
Cm-246	015757-90-1	1.6E+03	1.6E+01	1.3E+02	1.3E+00
Cm-247	015758-32-4	1.7E+03	1.7E+01	1.4E+02	1.4E+00
Cm-248	015758-33-5	4.1E+02	4.1E+00	3.3E+01	3.3E-01
Co-57	013981-50-5	5.5E+05	5.5E+03	4.4E+03	4.4E+01
Co-58	013981-38-9	1.9E+05	1.9E+03	1.5E+03	1.5E+01
Co-58m	013981-38-9	5.6E+06	5.6E+04	4.5E+04	4.5E+02
Co-60	010198-40-0	2.8E+04	2.8E+02	2.3E+02	2.3E+00
Cr-51	014392-02-0	3.9E+06	3.9E+04	4.7E+04	4.7E+02
Cs-131	014914-76-2	3.0E+06	3.0E+04	3.6E+03	3.6E+01
Cs-134	013967-70-9	1.1E+04	1.1E+02	1.4E+01	1.4E-01
Cs-134m	013967-70-9	1.2E+07	1.2E+05	1.4E+04	1.4E+02
Cs-135	015726-30-4	1.2E+05	1.2E+03	1.4E+02	1.4E+00
Cs-136	014234-29-8	6.9E+04	6.9E+02	8.3E+01	8.3E-01
Cs-137	010045-97-3	1.7E+04	1.7E+02	2.0E+01	2.0E-01
Cs-137+D	010045-97-3	1.7E+04	1.7E+02	2.0E+01	2.0E-01
Cs-138	015758-29-9	3.0E+06	3.0E+04	3.7E+03	3.7E+01
Cu-64	013981-25-4	1.0E+06	1.0E+04	1.2E+04	1.2E+02

Table 3.4b. (continued)

Chemical [†]	CASRN	Ingestion (pCi/L)		Ingestion of fish (pCi/L)	
		10 ⁻⁴	10 ⁻⁵	10 ⁻⁴	10 ⁻⁵
Dy-165	013967-64-1	1.6E+06	1.6E+04		
Dy-166	015840-01-4	5.7E+04	5.7E+02		
Er-169	015840-13-8	2.5E+05	2.5E+03		
Er-171	014391-45-8	3.3E+05	3.3E+03		
Eu-152	014683-23-9	9.3E+04	9.3E+02	4.5E+03	4.5E+01
Eu-154	015585-10-1	5.7E+04	5.7E+02	2.7E+03	2.7E+01
Eu-155	014391-16-3	3.2E+05	3.2E+03	1.6E+04	1.6E+02
Eu-156	014280-35-4	4.9E+04	4.9E+02	2.4E+03	2.4E+01
F-18	013981-56-1	4.9E+06	4.9E+04		
Fe-55	014681-59-5	1.5E+06	1.5E+04	1.8E+04	1.8E+02
Fe-59	014596-12-4	9.1E+04	9.1E+02	1.1E+03	1.1E+01
Fr-221	015756-41-9	3.7E+06	3.7E+04		
Fr-223	015756-98-6	1.2E+06	1.2E+04		
Ga-67	014119-09-6	6.4E+05	6.4E+03		
Ga-72	013982-22-4	1.1E+05	1.1E+03		
Gd-153	014276-65-4	4.0E+05	4.0E+03		
Gd-159	014041-42-0	2.1E+05	2.1E+03		
Ge-71	014374-81-3	4.5E+07	4.5E+05		

Table 3.4b. (continued)

Chemical [†]	CASRN	Ingestion (pCi/L)		Ingestion of fish (pCi/L)	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
H-3	010028-17-8	7.5E+06	7.5E+04	1.8E+07	1.8E+05
Hg-197	013981-51-6	4.5E+05	4.5E+03	1.1E+03	1.1E+01
Hg-203	013982-78-0	2.0E+05	2.0E+03	4.9E+02	4.9E+00
Ho-166	013967-65-2	7.0E+04	7.0E+02		
I-122	018287-75-7	2.5E+07	2.5E+05	1.5E+06	1.5E+04
I-123	015715-08-9	9.8E+05	9.8E+03	5.9E+04	5.9E+02
I-125	014158-31-7	2.1E+04	2.1E+02	1.2E+03	1.2E+01
I-126	014158-32-8	1.1E+04	1.1E+02	6.7E+02	6.7E+00
I-129	015046-84-1	2.9E+03	2.9E+01	1.7E+02	1.7E+00
I-130	014914-02-4	1.1E+05	1.1E+03	6.6E+03	6.6E+01
I-131	010043-66-0	1.5E+04	1.5E+02	8.9E+02	8.9E+00
I-132	014683-16-0	8.1E+05	8.1E+03	4.9E+04	4.9E+02
I-133	014834-67-4	5.0E+04	5.0E+02	3.0E+03	3.0E+01
I-134	014914-27-3	2.3E+06	2.3E+04	1.4E+05	1.4E+03
I-135	014834-68-5	2.3E+05	2.3E+03	1.4E+04	1.4E+02
In-113m	014885-78-0	6.4E+06	6.4E+04		
In-114	013981-55-0	1.2E+08	1.2E+06		
In-114m	013981-55-0	2.6E+04	2.6E+02		

Table 3.4b. (continued)

Chemical [†]	CASRN	Ingestion (pCi/L)		Ingestion of fish (pCi/L)	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
In-115	014191-71-0	1.5E+04	1.5E+02		
In-115m	014191-71-0	1.6E+06	1.6E+04		
Ir-190	014981-91-0	1.1E+05	1.1E+03		
Ir-194	014158-35-1	7.6E+04	7.6E+02		
K-40	013966-00-2	4.3E+04	4.3E+02	1.0E+02	1.0E+00
K-42	014378-21-3	4.1E+05	4.1E+03	1.0E+03	1.0E+01
Kr-83m	013965-98-5				
Kr-85	013983-27-2				
Kr-85m	013983-27-2				
Kr-87	014809-68-8				
Kr-88	014995-61-0				
Kr-89	016316-03-3				
Kr-90	015741-13-6				
La-140	013981-28-7	5.6E+04	5.6E+02	4.5E+03	4.5E+01
Lu-177	014265-75-9	1.8E+05	1.8E+03		
Mn-52	014092-99-0	8.9E+04	8.9E+02	5.3E+02	5.3E+00
Mn-54	013966-31-9	2.7E+05	2.7E+03	1.6E+03	1.6E+01
Mn-56	014681-52-8	6.2E+05	6.2E+03	3.8E+03	3.8E+01

Table 3.4b. (continued)

Chemical [†]	CASRN	Ingestion (pCi/L)		Ingestion of fish (pCi/L)	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Mo-99	014119-15-4	2.3E+05	2.3E+03	5.7E+04	5.7E+02
Na-22	013966-32-0	6.7E+04	6.7E+02	8.0E+03	8.0E+01
Na-24	013982-04-2	3.9E+05	3.9E+03	4.7E+04	4.7E+02
Nb-93m	007440-03-1	8.0E+05	8.0E+03	6.5E+03	6.5E+01
Nb-94	014681-63-1	7.7E+04	7.7E+02	6.2E+02	6.2E+00
Nb-95	013967-76-5	2.4E+05	2.4E+03	1.9E+03	1.9E+01
Nb-95m	013967-76-5	1.7E+05	1.7E+03	1.4E+03	1.4E+01
Nb-97	018496-04-3	3.0E+06	3.0E+04	2.4E+04	2.4E+02
Nb-97m	018496-04-3	1.6E+08	1.6E+06	1.3E+06	1.3E+04
Nd-147	014269-74-0	9.1E+04	9.1E+02	2.2E+03	2.2E+01
Nd-149	015749-81-2	1.2E+06	1.2E+04	2.8E+04	2.8E+02
Ni-59	014336-70-0	2.9E+06	2.9E+04	7.0E+04	7.0E+02
Ni-63	013981-37-8	9.7E+05	9.7E+03	2.3E+04	2.3E+02
Ni-65	014833-49-9	9.5E+05	9.5E+03	2.3E+04	2.3E+02
Np-236	015700-36-4	5.7E+05	5.7E+03	4.6E+04	4.6E+02
Np-237	013994-20-2	1.8E+03	1.8E+01	1.5E+02	1.5E+00
Np-237+D	013994-20-2	1.8E+03	1.8E+01	1.1E+02	1.1E+00
Np-238	015766-25-3	1.2E+05	1.2E+03	9.4E+03	9.4E+01

Table 3.4b. (continued)

Chemical [†]	CASRN	Ingestion (pCi/L)		Ingestion of fish (pCi/L)	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Np-239	013968-59-7	1.2E+05	1.2E+03	1.0E+04	1.0E+02
Np-240	015690-84-3	3.0E+06	3.0E+04	2.4E+05	2.4E+03
Np-240m	015690-84-3	2.2E+07	2.2E+05	1.8E+06	1.8E+04
Os-185	015766-50-4	3.0E+05	3.0E+03		
Os-191	014119-24-5	1.8E+05	1.8E+03		
Os-191m	014119-24-5	1.1E+06	1.1E+04		
Os-193	016057-77-5	1.2E+05	1.2E+03		
P-32	014596-37-3	8.7E+04	8.7E+02	4.2E+00	4.2E-02
P-33	015749-66-3	6.8E+05	6.8E+03	3.3E+01	3.3E-01
Pa-231	014331-85-2	3.6E+03	3.6E+01	8.6E+02	8.6E+00
Pa-233	013981-14-1	1.1E+05	1.1E+03	2.7E+04	2.7E+02
Pa-234	015100-28-4	2.5E+05	2.5E+03	6.0E+04	6.0E+02
Pa-234m	015100-28-4	1.1E+08	1.1E+06	2.7E+07	2.7E+05
Pb-203	014687-25-3	5.2E+05	5.2E+03	4.2E+03	4.2E+01
Pb-209	014119-30-3	2.6E+06	2.6E+04	2.1E+04	2.1E+02
Pb-210	014255-04-0	7.9E+02	7.9E+00	6.4E+00	6.4E-02
Pb-210+D	014255-04-0	5.3E+02	5.3E+00	3.5E+00	3.5E-02
Pb-211	015816-77-0	1.6E+06	1.6E+04	1.3E+04	1.3E+02

Table 3.4b. (continued)

Chemical [†]	CASRN	Ingestion (pCi/L)		Ingestion of fish (pCi/L)	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Pb-212	015092-94-1	3.0E+04	3.0E+02	2.4E+02	2.4E+00
Pb-214	015067-28-4	1.8E+06	1.8E+04	1.5E+04	1.5E+02
Pd-100	015690-69-4	1.4E+05	1.4E+03	3.4E+04	3.4E+02
Pd-101	015749-54-9	1.4E+06	1.4E+04	3.4E+05	3.4E+03
Pd-103	014967-68-1	5.1E+05	5.1E+03	1.2E+05	1.2E+03
Pd-107	017637-99-9	2.6E+06	2.6E+04	6.2E+05	6.2E+03
Pd-109	014981-64-7	1.6E+05	1.6E+03	3.9E+04	3.9E+02
Pm-147	014380-75-7	3.8E+05	3.8E+03	3.0E+04	3.0E+02
Pm-148	014683-19-3	3.7E+04	3.7E+02	3.0E+03	3.0E+01
Pm-148m	014683-19-3	5.4E+04	5.4E+02	4.3E+03	4.3E+01
Pm-149	015765-31-8	9.7E+04	9.7E+02	7.8E+03	7.8E+01
Po-210	013981-52-7	1.6E+03	1.6E+01	7.9E+01	7.9E-01
Po-212	015389-34-1	1.2E+16	1.2E+14	5.7E+14	5.7E+12
Po-213	015756-57-7	8.0E+14	8.0E+12	3.8E+13	3.8E+11
Po-214	015735-67-8	2.5E+13	2.5E+11	1.2E+12	1.2E+10
Po-215	015706-52-2	1.1E+12	1.1E+10	5.2E+10	5.2E+08
Po-216	015756-58-8	6.1E+09	6.1E+07	2.9E+08	2.9E+06
Po-218	015422-24-9	1.0E+07	1.0E+05	5.1E+05	5.1E+03

Table 3.4b. (continued)

Chemical [†]	CASRN	Ingestion (pCi/L)		Ingestion of fish (pCi/L)	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Pr-142	014191-64-1	7.6E+04	7.6E+02	1.8E+03	1.8E+01
Pr-143	014981-79-4	8.1E+04	8.1E+02	1.9E+03	1.9E+01
Pr-144	014119-05-2	6.6E+06	6.6E+04	1.6E+05	1.6E+03
Pr-144m	014119-05-2	1.7E+07	1.7E+05	4.0E+05	4.0E+03
Pt-191	015706-36-2	3.6E+05	3.6E+03		
Pt-193	015735-70-3	3.3E+06	3.3E+04		
Pt-193m	015735-70-3	2.1E+05	2.1E+03		
Pt-197	015735-74-7	2.5E+05	2.5E+03		
Pt-197m	015735-74-7	1.6E+06	1.6E+04		
Pu-236	015411-92-4	6.9E+03	6.9E+01	5.6E+02	5.6E+00
Pu-238	013981-16-3	1.8E+03	1.8E+01	1.5E+02	1.5E+00
Pu-239	015117-48-3	1.7E+03	1.7E+01	1.4E+02	1.4E+00
Pu-240	014119-33-6	1.7E+03	1.7E+01	1.4E+02	1.4E+00
Pu-241	014119-32-5	1.0E+05	1.0E+03	8.2E+03	8.2E+01
Pu-241+D	014119-32-5	1.6E+03	1.6E+01	1.3E+02	1.3E+00
Pu-242	013982-10-0	1.8E+03	1.8E+01	1.4E+02	1.4E+00
Pu-243	015706-37-3	1.4E+06	1.4E+04	1.2E+05	1.2E+03
Pu-244	014119-34-7	1.7E+03	1.7E+01	1.4E+02	1.4E+00

Table 3.4b. (continued)

Chemical [†]	CASRN	Ingestion (pCi/L)		Ingestion of fish (pCi/L)	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Pu-244+D	014119-34-7	1.7E+03	1.7E+01	1.3E+02	1.3E+00
Ra-223	015623-45-7	2.3E+03	2.3E+01	1.1E+02	1.1E+00
Ra-224	013233-32-4	3.6E+03	3.6E+01	1.7E+02	1.7E+00
Ra-225	013981-53-8	3.4E+03	3.4E+01	1.6E+02	1.6E+00
Ra-226	013982-63-3	1.8E+03	1.8E+01	8.7E+01	8.7E-01
Ra-226+D	013982-63-3	1.8E+03	1.8E+01	7.8E+00	7.8E-02
Ra-228	015262-20-1	2.2E+03	2.2E+01	1.0E+02	1.0E+00
Ra-228+D	015262-20-1	2.2E+03	2.2E+01	6.9E+01	6.9E-01
Rb-82	014391-63-0	5.1E+07	5.1E+05	6.1E+04	6.1E+02
Rb-86	014932-53-7	7.5E+04	7.5E+02	9.0E+01	9.0E-01
Rb-87	013982-13-3	1.4E+05	1.4E+03	1.7E+02	1.7E+00
Rb-88	014928-36-0	3.7E+06	3.7E+04	4.4E+03	4.4E+01
Rb-89	014191-65-2	6.2E+06	6.2E+04	7.4E+03	7.4E+01
Rh-103m	007440-16-6	6.5E+07	6.5E+05	1.6E+07	1.6E+05
Rh-105	014913-89-4	2.8E+05	2.8E+03	6.7E+04	6.7E+02
Rh-105m	014913-89-4	4.9E+08	4.9E+06	1.2E+08	1.2E+06
Rh-106	014234-34-5	1.5E+08	1.5E+06	3.5E+07	3.5E+05
Rn-219	014835-02-0				

Table 3.4b. (continued)

Chemical [†]	CASRN	Ingestion (pCi/L)		Ingestion of fish (pCi/L)	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Rn-220	022481-48-7				
Rn-222+D	014859-67-7				
Ru-103	013968-53-1	1.6E+05	1.6E+03	3.9E+04	3.9E+02
Ru-105	014331-95-4	4.6E+05	4.6E+03	1.1E+05	1.1E+03
Ru-106	013967-48-1	1.5E+04	1.5E+02	3.7E+03	3.7E+01
Ru-106+D	013967-48-1	1.5E+04	1.5E+02	3.7E+03	3.7E+01
Ru-97	015758-35-7	9.1E+05	9.1E+03	2.2E+05	2.2E+03
S-35	015117-53-0	1.3E+06	1.3E+04	3.9E+03	3.9E+01
Sb-122	014374-79-9	6.1E+04	6.1E+02	1.5E+03	1.5E+01
Sb-124	014683-10-4	5.0E+04	5.0E+02	1.2E+03	1.2E+01
Sb-125	014234-35-6	1.8E+05	1.8E+03	4.3E+03	4.3E+01
Sb-125+D	014234-35-6	1.5E+05	1.5E+03	3.6E+03	3.6E+01
Sb-126	015756-32-8	5.5E+04	5.5E+02	1.3E+03	1.3E+01
Sb-126m	015756-32-8	7.3E+06	7.3E+04	1.8E+05	1.8E+03
Sb-127	013968-50-8	6.3E+04	6.3E+02	1.5E+03	1.5E+01
Sb-129	014331-88-5	2.9E+05	2.9E+03	6.9E+03	6.9E+01
Sc-46	013967-63-0	9.3E+04	9.3E+02	2.2E+03	2.2E+01
Sc-47	014391-96-9	1.8E+05	1.8E+03	4.4E+03	4.4E+01

Table 3.4b. (continued)

Chemical [†]	CASRN	Ingestion (pCi/L)		Ingestion of fish (pCi/L)	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Sc-48	014391-86-7	8.0E+04	8.0E+02	1.9E+03	1.9E+01
Se-75	014265-71-5	8.2E+04	8.2E+02	1.2E+03	1.2E+01
Si-31	014276-49-4	1.1E+06	1.1E+04		
Sm-147	014392-33-7	2.1E+04	2.1E+02	2.0E+03	2.0E+01
Sm-151	015715-94-3	1.2E+06	1.2E+04	1.1E+05	1.1E+03
Sm-153	015766-00-4	1.3E+05	1.3E+03	1.3E+04	1.3E+02
Sn-113	013966-06-8	1.4E+05	1.4E+03	1.2E+02	1.2E+00
Sn-121	014683-06-8	4.4E+05	4.4E+03	3.5E+02	3.5E+00
Sn-121m	014683-06-8	2.7E+05	2.7E+03	2.1E+02	2.1E+00
Sn-125	014683-08-0	3.2E+04	3.2E+02	2.6E+01	2.6E-01
Sn-126	015832-50-5	2.5E+04	2.5E+02	2.0E+01	2.0E-01
Sr-82	014809-50-8	2.1E+04	2.1E+02	8.3E+02	8.3E+00
Sr-85	013967-73-2	3.8E+05	3.8E+03	1.5E+04	1.5E+02
Sr-85m	013967-73-2	3.0E+07	3.0E+05	1.2E+06	1.2E+04
Sr-89	014158-27-1	5.2E+04	5.2E+02	2.1E+03	2.1E+01
Sr-90	010098-97-2	1.3E+04	1.3E+02	5.2E+02	5.2E+00
Sr-90+D	010098-97-2	9.5E+03	9.5E+01	2.6E+02	2.6E+00
Sr-91	014331-91-0	1.9E+05	1.9E+03	7.6E+03	7.6E+01

Table 3.4b. (continued)

Chemical [†]	CASRN	Ingestion (pCi/L)			Ingestion of fish (pCi/L)		
		10 ⁻⁴	10 ⁻⁵	10 ⁻⁶	10 ⁻⁴	10 ⁻⁵	10 ⁻⁶
Sr-92	014928-29-1	2.6E+05	2.6E+03		1.1E+04		1.1E+02
Ta-182	013982-00-8	7.6E+04	7.6E+02		1.8E+03		1.8E+01
Tb-158	015759-55-4	1.3E+05	1.3E+03				
Tb-160	013981-29-8	7.0E+04	7.0E+02				
Tc-95	014809-56-4	7.8E+06	7.8E+04		9.4E+05		9.4E+03
Tc-95m	014809-56-4	4.3E+05	4.3E+03		5.2E+04		5.2E+02
Tc-96	014808-44-7	2.3E+05	2.3E+03		2.8E+04		2.8E+02
Tc-96m	014808-44-7	2.0E+07	2.0E+05		2.5E+06		2.5E+04
Tc-97	015759-35-0	3.4E+06	3.4E+04		4.1E+05		4.1E+03
Tc-97m	015759-35-0	4.4E+05	4.4E+03		5.4E+04		5.4E+02
Tc-99	014133-76-7	3.8E+05	3.8E+03		4.6E+04		4.6E+02
Tc-99m	014133-76-7	9.6E+06	9.6E+04		1.2E+06		1.2E+04
Te-125m	014390-73-9	2.1E+05	2.1E+03		1.3E+03		1.3E+01
Te-127	013981-49-2	6.2E+05	6.2E+03		3.8E+03		3.8E+01
Te-127m	013981-49-2	8.9E+04	8.9E+02		5.3E+02		5.3E+00
Te-129	014269-71-7	3.6E+06	3.6E+04		2.2E+04		2.2E+02
Te-129m	014269-71-7	4.6E+04	4.6E+02		2.7E+02		2.7E+00
Te-131	014683-12-6	1.4E+06	1.4E+04		8.2E+03		8.2E+01

Table 3.4b. (continued)

Chemical [†]	CASRN	Ingestion (pCi/L)		Ingestion of fish (pCi/L)	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Te-131m	014683-12-6	6.1E+04	6.1E+02	3.6E+02	3.6E+00
Te-132	014234-28-7	4.4E+04	4.4E+02	2.6E+02	2.6E+00
Th-227	015623-47-9	1.3E+04	1.3E+02	3.2E+02	3.2E+00
Th-228	014274-82-9	8.5E+03	8.5E+01	2.0E+02	2.0E+00
Th-228+D	014274-82-9	2.3E+03	2.3E+01	8.4E+00	8.4E-02
Th-229	015594-54-4	9.4E+03	9.4E+01	2.3E+02	2.3E+00
Th-229+D	015594-54-4	1.5E+03	1.5E+01	1.5E+01	1.5E-01
Th-230	014269-63-7	1.4E+04	1.4E+02	3.4E+02	3.4E+00
Th-231	014932-40-2	3.0E+05	3.0E+03	7.2E+03	7.2E+01
Th-232	007440-29-1	1.6E+04	1.6E+02	3.9E+02	3.9E+00
Th-234	015065-10-8	2.8E+04	2.8E+02	6.7E+02	6.7E+00
Tl-202	015720-57-7	5.3E+05	5.3E+03		
Tl-204	013968-51-9	2.7E+05	2.7E+03		
Tl-208	014913-50-9	3.0E+07	3.0E+05		
Tl-209	015690-73-0	3.8E+07	3.8E+05		
Tm-170	013981-30-1	7.1E+04	7.1E+02		
Tm-171	014333-45-0	9.1E+05	9.1E+03		
U-232	014158-29-3	6.6E+03	6.6E+01	1.6E+03	1.6E+01

Table 3.4b. (continued)

Chemical [†]	CASRN	Ingestion (pCi/L)		Ingestion of fish (pCi/L)	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
U-233	013968-55-3	1.2E+04	1.2E+02	2.9E+03	2.9E+01
U-234	013966-29-5	1.2E+04	1.2E+02	2.9E+03	2.9E+01
U-235	015117-96-1	1.2E+04	1.2E+02	2.8E+03	2.8E+01
U-235+D	015117-96-1	1.1E+04	1.1E+02	2.5E+02	2.5E+00
U-236	013982-70-2	1.3E+04	1.3E+02	3.1E+03	3.1E+01
U-237	014269-75-1	1.3E+05	1.3E+03	3.2E+04	3.2E+02
U-238	007440-61-1	1.2E+04	1.2E+02	3.0E+03	3.0E+01
U-238+D	007440-61-1	8.6E+03	8.6E+01	1.7E+02	1.7E+00
U-240	015687-53-3	9.8E+04	9.8E+02	2.4E+04	2.4E+02
V-48	014331-97-6	7.1E+04	7.1E+02	1.7E+04	1.7E+02
W-181	015749-46-9	2.0E+06	2.0E+04	4.7E+05	4.7E+03
W-185	014932-41-3	2.6E+05	2.6E+03	6.3E+04	6.3E+02
W-187	014983-48-3	2.2E+05	2.2E+03	5.2E+04	5.2E+02
Xe-122	015151-09-4				
Xe-123	015700-10-4				
Xe-125	013994-18-8				
Xe-127	013994-19-9				
Xe-129m	013965-99-6				

Table 3.4b. (continued)

Chemical [†]	CASRN	Ingestion (pCi/L)		Ingestion of fish (pCi/L)	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Xe-131m	014683-11-5				
Xe-133	014932-42-4				
Xe-133m	014932-42-4				
Xe-135	014995-62-1				
Xe-135m	014995-62-1				
Xe-137	014835-21-3				
Xe-138	015751-81-2				
Y-90	010098-91-6	3.6E+04	3.6E+02	2.9E+03	2.9E+01
Y-91	014234-24-3	4.0E+04	4.0E+02	3.2E+03	3.2E+01
Y-91m	014234-24-3	1.4E+07	1.4E+05	1.2E+06	1.2E+04
Y-92	015751-59-4	2.7E+05	2.7E+03	2.2E+04	2.2E+02
Y-93	014981-70-5	9.3E+04	9.3E+02	7.5E+03	7.5E+01
Zn-65	013982-39-3	5.4E+04	5.4E+02	1.3E+02	1.3E+00
Zn-69	013982-23-5	8.6E+06	8.6E+04	2.1E+04	2.1E+02
Zn-69m	013982-23-5	3.5E+05	3.5E+03	8.5E+02	8.5E+00
Zr-93	015751-77-6	1.0E+06	1.0E+04	8.2E+03	8.2E+01
Zr-95	013967-71-0	1.4E+05	1.4E+03	1.1E+03	1.1E+01
Zr-97	014928-30-4	5.1E+04	5.1E+02	4.1E+02	4.1E+00

Table 3.4b. (continued)

Notes:

† Isotopes designated with an “m” indicate that the isotope is metastable; isotopes designated with a “+D” indicate that the radionuclide slope factors include contributions from daughter products.

Table 3.4c. Risk-based Preliminary Remediation Goals for nonradionuclides in soil (Recreation scenario)

Chemical	CASRN	Ingestion (mg/kg)			Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁴	HQ=1 Adult	HQ=1 Child	10 ⁻⁴	10 ⁻⁴	10 ⁻⁴	HQ=1	10 ⁻⁴	10 ⁻⁴	10 ⁻⁴	HI=1
ACENAPHTHENE	000083-32-9			4.9E+06	5.3E+05				2.9E+06				1.8E+06
ACEPHATE	030560-19-1	8.2E+05	8.2E+03	3.3E+05	3.5E+04	4.1E+06	4.1E+04		6.2E+05	1.4E+06	1.4E+04		2.1E+05
ACETALDEHYDE	000075-07-0									4.9E+04			
ACETOCHLOR	034256-82-1			1.6E+06	1.8E+05				3.1E+06				1.1E+06
ACETONE	000067-64-1			8.2E+06	8.8E+05				1.3E+07				5.0E+06
ACETONE CYANOHYDRIN	000075-86-5			6.5E+04	7.0E+03				1.2E+05	5.0E+09			4.3E+04
ACETONITRILE	000075-05-8			4.9E+05	5.3E+04				9.3E+05	2.5E+10			3.2E+05
ACETOPHENONE	000098-86-2			8.2E+06	8.8E+05				1.5E+07				5.3E+06
ACROLEIN	000107-02-8			1.6E+06	1.8E+05				3.1E+06				2.5E+01
ACRYLAMIDE	000079-06-1	1.6E+03	1.6E+01	1.6E+04	1.8E+03	8.0E+03	8.0E+01	9.1E+07	3.1E+04	2.8E+03	2.8E+01	1.1E+04	
ACRYLIC ACID	000079-10-7			4.1E+07	4.4E+06				7.7E+07				2.5E+07
ACRYLONITRILE	000107-13-1	1.3E+04	1.3E+02	8.2E+04	8.8E+03	6.7E+04	6.7E+02	1.4E+03	1.5E+05	1.4E+03	1.4E+01	6.7E+02	
ALACHLOR	015972-60-8	8.9E+04	8.9E+02	8.2E+05	8.8E+04	4.5E+05	4.5E+03		1.5E+06	1.6E+05	1.6E+03	5.3E+05	
ALAR	001596-84-5			1.2E+07	1.3E+06				2.3E+07				8.0E+06
ALDICARB	000116-06-3			8.2E+04	8.8E+03				1.5E+05				5.3E+04
ALDICARB SULFONE	001646-88-4			8.2E+04	8.8E+03				1.5E+05				5.3E+04
ALDRIN	000309-00-2	4.2E+02	4.2E+00	2.5E+03	2.6E+02	1.1E+03	1.1E+01	2.4E+07	2.3E+03	5.4E+02	5.4E+00	1.2E+03	
ALLY	074223-64-6			2.0E+07	2.2E+06				3.9E+07				1.3E+07
ALLYL ALCOHOL	000107-18-6			4.1E+05	4.4E+04				7.7E+05				2.7E+05

Table 3.4c. (continued)

Chemical	CASRN	Ingestion (mg/kg)				Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
ALLYL CHLORIDE	000107-05-1										6.3E+02			
ALUMINUM PHOSPHIDE	020859-73-8			3.3E+04	3.5E+03			6.2E+05						3.1E+04
AMDRO	067485-29-4			2.5E+04	2.6E+03			4.6E+04						1.6E+04
AMETRYN	000834-12-8			7.4E+05	7.9E+04			1.4E+06						4.8E+05
AMINOPHENOL, m-	000591-27-5			5.7E+06	6.1E+05			1.1E+07						3.7E+06
AMINOPYRIDINE, 4-	000504-24-5			1.6E+03	1.8E+02			3.1E+03						1.1E+03
AMITRAZ	033089-61-1			2.0E+05	2.2E+04			3.9E+05						1.3E+05
AMMONIA	007664-41-7										5.0E+10			
AMMONIUM SULFAMATE	007773-06-0			1.6E+07	1.8E+06			3.1E+08						1.6E+07
ANILINE	000062-53-3	1.3E+06	1.3E+04			6.3E+06	6.3E+04				5.0E+08	2.2E+06	2.2E+04	
ANTHRACENE	000120-12-7			2.5E+07	2.6E+06			3.5E+07						1.4E+07
ANTIMONY (METALLIC)	007440-36-0			3.3E+04	3.5E+03			1.2E+04						9.0E+03
ANTIMONY PENTOXIDE	001314-60-9			4.1E+04	4.4E+03			7.7E+05						3.9E+04
ANTIMONY POTASSIUM TARTRATE	000304-61-0			7.4E+04	7.9E+03			1.4E+06						7.0E+04
ANTIMONY TETROXIDE	001332-81-6			3.3E+04	3.5E+03			6.2E+05						3.1E+04
ANTIMONY TRIOXIDE	001309-64-4			3.3E+04	3.5E+03			6.2E+05						3.1E+04
APOLLO	074115-24-5			1.1E+06	1.1E+05			2.0E+06						6.9E+05
ARAMITE	000140-57-8	2.9E+05	2.9E+03	4.1E+06	4.4E+05	1.4E+06	1.4E+04	7.7E+06	1.6E+10	1.6E+08		5.0E+05	5.0E+03	2.7E+06
AROCLOR 1016	012674-11-2			5.7E+03	6.1E+02			9.7E+03						3.6E+03

Table 3.4c. (continued)

Chemical	CASRN	Ingestion (mg/kg)				Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1
AROCLOR 1254	011097-69-1			1.6E+03	1.8E+02			2.8E+03						1.0E+03
AROCLOR-1221	011104-28-2	9.3E+02	9.3E+00			4.2E+03	4.2E+01					1.6E+03	1.6E+01	
AROCLOR-1232	011141-16-5	9.3E+02	9.3E+00			4.2E+03	4.2E+01					1.6E+03	1.6E+01	
AROCLOR-1242	053469-21-9	9.3E+02	9.3E+00			4.2E+03	4.2E+01					1.6E+03	1.6E+01	
AROCLOR-1248	012672-29-6	9.3E+02	9.3E+00			4.2E+03	4.2E+01					1.6E+03	1.6E+01	
AROCLOR-1260	011096-82-5	9.3E+02	9.3E+00			4.2E+03	4.2E+01					1.6E+03	1.6E+01	
ARSENIC, INORGANIC	007440-38-2			2.5E+04	2.6E+03			1.9E+05	8.2E+06	8.2E+04				2.2E+04
ARSINE	007784-42-1										2.5E+07			
ASBESTOS	001332-21-4													
ASSURE	076578-14-8			7.4E+05	7.9E+04			1.4E+06						4.8E+05
ASULAM	003337-71-1			4.1E+06	4.4E+05			7.7E+06						2.7E+06
ATRAZINE	001912-24-9	3.2E+04	3.2E+02	2.9E+06	3.1E+05	1.6E+05	1.6E+03	5.4E+06				5.6E+04	5.6E+02	1.9E+06
AVERMECTIN B1	065195-55-3			3.3E+04	3.5E+03			6.2E+04						2.1E+04
AZOBENZENE	000103-33-3	6.5E+04	6.5E+02			3.3E+05	3.3E+03		3.7E+09	3.7E+07		1.1E+05	1.1E+03	
BARIUM	007440-39-3			5.7E+06	6.1E+05			7.6E+06			2.5E+08			3.2E+06
BARIUM CYANIDE	000542-62-1			8.2E+06	8.8E+05			1.5E+08						7.8E+06
BAYGON	000114-26-1			3.3E+05	3.5E+04			6.2E+05						2.1E+05
BAYLETON	043121-43-3			2.5E+06	2.6E+05			4.6E+06						1.6E+06
BAYTHROID	068359-37-5			2.0E+06	2.2E+05			3.9E+06						1.3E+06

Table 3.4c. (continued)

Chemical	CASRN	Ingestion (mg/kg)				Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
BENEFIN	001861-40-1			2.5E+07	2.6E+06			4.6E+07						1.6E+07
BENOMYL	017804-35-2			4.1E+06	4.4E+05			7.7E+06						2.7E+06
BENTAZON	025057-89-0			2.0E+05	2.2E+04			3.9E+05						1.3E+05
BENZALDEHYDE	000100-52-7			8.2E+06	8.8E+05			1.5E+07						5.3E+06
BENZENE	000071-43-2	2.5E+05	2.5E+03			1.2E+06	1.2E+04		4.9E+02	4.9E+02		4.9E+02	4.9E+02	
BENZENETHIOL	000108-98-5			8.2E+02	8.8E+01			1.5E+03						5.3E+02
BENZIDINE	000092-87-5	3.1E+01	3.1E-01	2.5E+05	2.6E+04	1.3E+02	1.3E+00	3.7E+05	1.8E+06	1.8E+04		5.0E+01	5.0E-01	1.5E+05
BENZOIC ACID	000065-85-0			3.3E+08	3.5E+07			6.2E+08						2.1E+08
BENZOTRICHLORIDE	000098-07-7	5.5E+02	5.5E+00			2.8E+03	2.8E+01					9.6E+02	9.6E+00	
BENZO[A]PYRENE	000050-32-8	9.8E+02	9.8E+00			1.5E+03	1.5E+01					9.6E+02	9.6E+00	
BENZO[B]FLUORANTHENE	000205-99-2	9.8E+03	9.8E+01			1.5E+04	1.5E+02					9.6E+03	9.6E+01	
BENZO[G,H,I]PERYLENE	000191-24-2													
BENZO[K]FLUORANTHENE	000207-08-9	9.8E+04	9.8E+02			1.5E+05	1.5E+03					9.6E+04	9.6E+02	
BENZYL ALCOHOL	000100-51-6			2.5E+07	2.6E+06			3.1E+07						1.4E+07
BENZYL CHLORIDE	000100-44-7	4.2E+04	4.2E+02			2.1E+05	2.1E+03					7.3E+04	7.3E+02	
BENZ[A]ANTHRACENE	000056-55-3	9.8E+03	9.8E+01			1.5E+04	1.5E+02					9.6E+03	9.6E+01	
BERYLLIUM	007440-41-7	1.7E+03	1.7E+01	4.1E+05	4.4E+04	8.4E+02	8.4E+00	7.7E+04	4.9E+07	4.9E+05		7.0E+02	7.0E+00	6.5E+04
BIDRIN	000141-66-2			8.2E+03	8.8E+02			1.5E+04						5.3E+03
BIPHENTHRIN	082657-04-3			1.2E+06	1.3E+05			2.3E+06						8.0E+05

Table 3.4c. (continued)

Chemical	CASRN	Ingestion (mg/kg)				Dermal (mg/kg)				Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
BROMOXYNIL	001689-84-5			1.6E+06	1.8E+05			3.1E+06							1.1E+06
BROMOXYNIL OCTANOATE	001689-99-2			1.6E+06	1.8E+05			3.1E+06							1.1E+06
BUTADIENE, 1,3-	000106-99-0									3.2E+02	3.2E+00				
BUTANOL, N-	000071-36-3			8.2E+06	8.8E+05			1.5E+07							5.3E+06
BUTYL BENZYL PHTHALATE	000085-68-7			1.6E+07	1.8E+06			1.9E+07							8.7E+06
BUTYLATE	002008-41-5			4.1E+06	4.4E+05			7.7E+06							2.7E+06
BUTYLCHLORIDE, T-	000507-20-0														
BUTYL PHTHALYL BUTYLGLYCOLATE	000085-70-1			8.2E+07	8.8E+06			1.5E+08							5.3E+07
CACODYLIC ACID	000075-60-5			2.5E+05	2.6E+04			4.6E+05							1.6E+05
CADMIUM (Diet)	007440-43-9			8.2E+04	8.8E+03			1.5E+04		6.7E+07	6.7E+05				1.3E+04
CALCIUM CYANIDE	000592-01-8			3.3E+06	3.5E+05			6.2E+06							2.1E+06
CAPROLACTAM	000105-60-2			4.1E+07	4.4E+06			7.7E+07							2.7E+07
CAPTAFOL	002425-06-1	8.3E+05	8.3E+03	1.6E+05	1.8E+04	4.2E+06	4.2E+04	3.1E+05					1.4E+06	1.4E+04	1.1E+05
CAPTAN	000133-06-2	2.0E+06	2.0E+04	1.1E+07	1.1E+06	1.0E+07	1.0E+05	2.0E+07					3.6E+06	3.6E+04	6.9E+06
CARBARYL	000063-25-2			8.2E+06	8.8E+05			1.5E+07							5.3E+06
CARBAZOLE	000086-74-8	3.6E+05	3.6E+03			1.3E+06	1.3E+04						5.4E+05	5.4E+03	
CARBOFURAN	001563-66-2			4.1E+05	4.4E+04			7.7E+05							2.7E+05
CARBON DISULFIDE	000075-15-0			8.2E+06	8.8E+05			9.7E+06				1.7E+03			1.7E+03
CARBON TETRACHLORIDE	000056-23-5	5.5E+04	5.5E+02	5.7E+04	6.1E+03	1.8E+05	1.8E+03	7.0E+04		1.0E+03	3.4E+02		1.0E+03	2.4E+02	1.0E+03

Table 3.4c. (continued)

Chemical	CASRN	Ingestion (mg/kg)				Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1
CARBOSULFAN	055285-14-8			8.2E+05	8.8E+04			1.5E+06						5.3E+05
CARBOXIN	005234-68-4			8.2E+06	8.8E+05			1.5E+07						5.3E+06
CHLORAL	000075-87-6			1.6E+05	1.8E+04			3.1E+05						1.1E+05
CHLORAMBEN	000133-90-4			1.2E+06	1.3E+05			2.3E+06						8.0E+05
CHLORANIL	000118-75-2	1.8E+04	1.8E+02			8.9E+04	8.9E+02					3.1E+04	3.1E+02	
CHLORDANE	000057-74-9	5.5E+03	5.5E+01	4.9E+03	5.3E+02	1.4E+04	1.4E+02	4.6E+03	3.1E+08	3.1E+06		7.1E+03	7.1E+01	2.4E+03
CHLORIMURON-ETHYL	090982-32-4			1.6E+06	1.8E+05			3.1E+06						1.1E+06
CHLORINE	007782-50-5			8.2E+06	8.8E+05			1.5E+08						7.8E+06
CHLORINE DIOXIDE	010049-04-4										1.0E+08			
CHLORO-1,3-BUTADIENE, 2-	000126-99-8			1.6E+06	1.8E+05			3.1E+06			1.6E+03			1.6E+03
CHLORO-2-METHYLANILINE HCL, 4-	003165-93-3	1.6E+04	1.6E+02			7.8E+04	7.8E+02					2.7E+04	2.7E+02	
CHLORO-2-METHYLANILINE, 4-	000095-69-2	1.2E+04	1.2E+02			6.2E+04	6.2E+02					2.1E+04	2.1E+02	
CHLOROACETIC ACID	000079-11-8			1.6E+05	1.8E+04			3.1E+05						1.1E+05
CHLOROACETOPHENONE, 2-	000532-27-4										1.5E+07			
CHLOROANILINE, p-	000106-47-8			3.3E+05	3.5E+04			6.2E+05						2.1E+05
CHLOROBENZENE	000108-90-7			1.6E+06	1.8E+05			9.6E+05			5.1E+02			5.1E+02
CHLOROBENZILATE	000510-15-6	2.6E+04	2.6E+02	1.6E+06	1.8E+05	1.3E+05	1.3E+03	3.1E+06	1.5E+09	1.5E+07		4.6E+04	4.6E+02	1.1E+06
CHLOROBENZOIC ACID, p-	000074-11-3			1.6E+07	1.8E+06			3.1E+07						1.1E+07

Table 3.4c. (continued)

Chemical	CASRN	Ingestion (mg/kg)				Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
CHLOROBENZOTRIFLUORIDE, 4-	000098-56-6			1.6E+06	1.8E+05			3.1E+06						1.1E+06
CHLOROBUTANE, 1-	000109-69-3			3.3E+07	3.5E+06			6.2E+07						2.1E+07
CHLOROBUTANE, 2-	000078-86-4													
CHLOROCYCLOPENTADIENE	041851-50-7													
CHLORODIBROMOETHANE	073506-94-2	8.5E+04	8.5E+02			4.3E+05	4.3E+03					1.5E+05	1.5E+03	
CHLORODIFLUOROMETHANE	000075-45-6										2.5E+13			
CHLOROFORM	000067-66-3	1.2E+06	1.2E+04	8.2E+05	8.8E+04	1.2E+06	1.2E+04	3.1E+05	1.5E+03	2.1E+02		1.5E+03	2.0E+02	1.5E+03
CHLOROMETHANE	000074-87-3	5.5E+05	5.5E+03			2.8E+06	2.8E+04		1.2E+03	4.9E+02		1.2E+03	4.7E+02	
CHLOROMETHYL METHYL ETHER	000107-30-2													
CHLORONAPHTHALENE, BETA-	000091-58-7			6.5E+06	7.0E+05			1.2E+07						4.3E+06
CHLORONITROBENZENE, o-	000088-73-3	2.9E+05	2.9E+03			1.4E+06	1.4E+04					5.0E+05	5.0E+03	
CHLORONITROBENZENE, p-	000121-73-3	4.0E+05	4.0E+03			2.0E+06	2.0E+04					6.9E+05	6.9E+03	
CHLOROPHENOL, 2-	000095-57-8			4.1E+05	4.4E+04			7.7E+05						2.7E+05
CHLOROPHENYL METHYL SULFIDE, p-	000123-09-1													
CHLOROPHENYL METHYL SULFOXIDE	000934-73-6													
CHLOROPROPANE, 2-	000075-29-6										1.8E+03			
CHLOROTHALONIL	001897-45-6	6.5E+05	6.5E+03	1.2E+06	1.3E+05	3.3E+06	3.3E+04	2.3E+06				1.1E+06	1.1E+04	8.0E+05

Table 3.4c. (continued)

Chemical	CASRN	Ingestion (mg/kg)				Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
CHLOROTOLUENE, o-	000095-49-8			1.6E+06	1.8E+05			3.1E+06						1.1E+06
CHLOROPROPAM	000101-21-3			1.6E+07	1.8E+06			3.1E+07						1.1E+07
CHLORPYRIFOS	002921-88-2			2.5E+05	2.6E+04			4.6E+05						1.6E+05
CHLORPYRIFOS METHYL	005598-13-0			8.2E+05	8.8E+04			1.5E+06						5.3E+05
CHLORSULFURON	064902-72-3			4.1E+06	4.4E+05			7.7E+06						2.7E+06
CHLORTHIOPHOS	060238-56-4			6.5E+04	7.0E+03			1.2E+05						4.3E+04
CHROMIUM (III) (INSOLUBLE SALTS)	016065-83-1			8.2E+07	8.8E+06			7.7E+06						7.0E+06
CHROMIUM (VI)	018540-29-9			4.1E+05	4.4E+04			1.5E+05	1.0E+07	1.0E+05				1.1E+05
CHRYSENE	000218-01-9	9.8E+05	9.8E+03			1.5E+06	1.5E+04					9.6E+05	9.6E+03	
COKE OVEN EMISSIONS	008007-45-2								1.9E+08	1.9E+06				
COPPER	007440-50-8													
COPPER CYANIDE	000544-92-3			4.1E+05	4.4E+04			7.7E+06						3.9E+05
CREOSOTE	008001-58-9													
CRESOL, m-	000108-39-4			4.1E+06	4.4E+05			7.7E+06						2.7E+06
CRESOL, o-	000095-48-7			4.1E+06	4.4E+05			7.7E+06						2.7E+06
CRESOL, p-	000106-44-5			4.1E+05	4.4E+04			5.0E+05						2.3E+05
CROTONALDEHYDE	000123-73-9	3.8E+03	3.8E+01			1.9E+04	1.9E+02					6.6E+03	6.6E+01	
CUMENE	000098-82-8			3.3E+06	3.5E+05			6.2E+06			3.5E+02			3.5E+02
CYANAZINE	021725-46-2	8.5E+03	8.5E+01	1.6E+05	1.8E+04	4.3E+04	4.3E+02	3.1E+05				1.5E+04	1.5E+02	1.1E+05

Table 3.4c. (continued)

Chemical	CASRN	Ingestion (mg/kg)				Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1
CYANIDE (CN ⁻)	000057-12-5			1.6E+06	1.8E+05			5.2E+06						1.2E+06
CYANOGEN	000460-19-5			3.3E+06	3.5E+05			6.2E+06						2.1E+06
CYANOGEN BROMIDE	000506-68-3			7.4E+06	7.9E+05			1.4E+07						4.8E+06
CYANOGEN CHLORIDE	000506-77-4			4.1E+06	4.4E+05			7.7E+06						2.7E+06
CYCLOHEXANE, 1,2,3,4,5-PENTABROMO-6-CHLORO	000087-84-3	3.1E+05	3.1E+03			1.6E+06	1.6E+04					5.4E+05	5.4E+03	
CYCLOHEXANONE	000108-94-1			4.1E+08	4.4E+07			7.7E+08						2.7E+08
CYCLOHEXYLAMINE	000108-91-8			1.6E+07	1.8E+06			3.1E+07						1.1E+07
CYCLOPENTADIENE	000542-92-7													
CYHALOTHRIN/KARATE	068085-85-8			4.1E+05	4.4E+04			7.7E+05						2.7E+05
CYPERMETHRIN	052315-07-8			8.2E+05	8.8E+04			1.5E+06						5.3E+05
CYROMAZINE	066215-27-8			6.1E+05	6.6E+04			1.2E+06						4.0E+05
DACTHAL	001861-32-1			8.2E+05	8.8E+04			1.5E+06						5.3E+05
DALAPON	000075-99-0			2.5E+06	2.6E+05			4.6E+06						1.6E+06
DDD	000072-54-8	3.0E+04	3.0E+02			1.0E+05	1.0E+03					4.5E+04	4.5E+02	
DDE	000072-55-9	2.1E+04	2.1E+02			7.4E+04	7.4E+02					3.2E+04	3.2E+02	
DDT	000050-29-3	2.1E+04	2.1E+02	4.1E+04	4.4E+03	7.4E+04	7.4E+02	5.4E+04	1.2E+09	1.2E+07		3.2E+04	3.2E+02	2.3E+04
DECABROMODIPHENYL ETHER	001163-19-5			8.2E+05	8.8E+04			1.5E+06						5.3E+05
DEMETON	008065-48-3			3.3E+03	3.5E+02			6.2E+03						2.1E+03

Table 3.4c. (continued)

Chemical	CASRN	Ingestion (mg/kg)				Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁵	HQ=1 Adult	HQ=1 Child	10 ⁻⁴	10 ⁻⁵	HQ=1	10 ⁻⁴	10 ⁻⁵	HQ=1	10 ⁻⁴	10 ⁻⁵	HQ=1
DI(2-ETHYLHEXYL)ADIPATE	000103-23-1	6.0E+06	6.0E+04	4.9E+07	5.3E+06	3.0E+07	3.0E+05	9.3E+07				1.0E+07	1.0E+05	3.2E+07
DIALATE	002303-16-4	1.2E+05	1.2E+03			5.9E+05	5.9E+03					2.0E+05	2.0E+03	
DIAZINON	000333-41-5			7.4E+04	7.9E+03			1.4E+05						4.8E+04
DIBENZ[A,H]ANTHRACENE	000053-70-3	9.8E+02	9.8E+00			1.5E+03	1.5E+01					9.6E+02	9.6E+00	
DIBROMO-3-CHLOROPROPANE, 1,2-	000096-12-8	5.1E+03	5.1E+01			2.6E+04	2.6E+02		1.7E+11	1.7E+09	1.0E+08	8.9E+03	8.9E+01	
DIBROMOBENZENE, 1,4-	000106-37-6			8.2E+05	8.8E+04			1.5E+06						5.3E+05
DIBROMOCHLOROMETHANE	000124-48-1	8.5E+04	8.5E+02	1.6E+06	1.8E+05	2.6E+05	2.6E+03	1.9E+06				1.2E+05	1.2E+03	8.7E+05
DIBROMODICHLOROMETHANE	000594-18-3													
DIBROMODIPHENYL ETHER, P,p'-	002050-47-7													
DIBROMOETHANE, 1,2-	000106-93-4	8.4E+01	8.4E-01			4.2E+02	4.2E+00		5.5E+03	1.7E+02	3.1E+03	1.5E+02	1.5E+00	
DIBROMOMETHANE (METHYLENE BROMIDE)	000074-95-3			8.2E+05	8.8E+04			1.5E+06						5.3E+05
DIBUTYL PHTHALATE	000084-74-2			8.2E+06	8.8E+05			1.5E+07						5.3E+06
DICAMBA	001918-00-9			2.5E+06	2.6E+05			4.6E+06						1.6E+06
DICHLORO-2-BUTENE, 1,4-	000764-41-0								1.4E+03	1.4E+01				
DICHLOROBENZENE, 1,2-	000095-50-1			7.4E+06	7.9E+05			1.4E+07			5.1E+02			5.1E+02
DICHLOROBENZENE, 1,3-	000541-73-1													
DICHLOROBENZENE, 1,4-	000106-46-7	3.0E+05	3.0E+03			1.3E+06	1.3E+04					3.3E+01	3.3E+01	
DICHLOROBENZIDINE, 3,3'-	000091-94-1	1.6E+04	1.6E+02			8.0E+04	8.0E+02					2.8E+04	2.8E+02	

Table 3.4c. (continued)

Chemical	CASRN	Ingestion (mg/kg)				Dermal (mg/kg)				Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
DICHLORODIFLUOROMETHANE	000075-71-8			1.6E+07	1.8E+06				7.1E+06			1.0E+03			1.0E+03
DICHLOROETHANE, 1,1-	000075-34-3			8.2E+06	8.8E+05				1.5E+07			6.3E+02			5.0E+02
DICHLOROETHANE, 1,2-	000107-06-2	7.9E+04	7.9E+02			4.0E+05	4.0E+03			6.7E+02	2.2E+02		6.7E+02	1.9E+02	
DICHLOROETHYLENE, 1,1-	000075-35-4	1.2E+04	1.2E+02	7.4E+05	7.9E+04	6.0E+04	6.0E+02	1.4E+06		5.0E+02	5.0E+00		4.9E+02	4.9E+00	1.2E+03
DICHLOROETHYLENE, 1,2-, (MIXED ISOMERS)	000540-59-0			7.4E+05	7.9E+04			1.4E+06							4.8E+05
DICHLOROETHYLENE, 1,2-C-	000156-59-2			8.2E+05	8.8E+04			1.5E+06							5.3E+05
DICHLOROETHYLENE, 1,2-T-	000156-60-5			1.6E+06	1.8E+05			3.1E+06							1.1E+06
DICHLOROPHENOL, 2,4-	000120-83-2			2.5E+05	2.6E+04			3.8E+05							1.5E+05
DICHLOROPHENOXY ACETIC ACID, 2,4-	000094-75-7			8.2E+05	8.8E+04			1.5E+06							5.3E+05
DICHLOROPHENOXYBUTYRIC ACID, 4-(2,4-	000094-82-6			6.5E+05	7.0E+04			1.2E+06							4.3E+05
DICHLOROPROPANE, 1,2-	000078-87-5	1.1E+05	1.1E+03			3.9E+05	3.9E+03					4.8E+02	4.8E+02	4.8E+02	
DICHLOROPROPANOL, 2,3-	000616-23-9			2.5E+05	2.6E+04			4.6E+05							1.6E+05
DICHLOROPROPENE, 1,3-	000542-75-6	4.0E+04	4.0E+02	2.5E+04	2.6E+03	1.1E+05	1.1E+03	2.5E+04		3.7E+03	6.0E+02	3.7E+03	3.7E+03	2.8E+02	3.7E+03
DICHLORVOS	000062-73-7	2.5E+04	2.5E+02	4.1E+04	4.4E+03	1.2E+05	1.2E+03	7.7E+04				2.5E+08	4.3E+04	4.3E+02	2.7E+04
DICOFOL	000115-32-2														
DICYCLOPENTADIENE	000077-73-6			2.5E+06	2.6E+05			4.6E+06				7.6E+02			7.6E+02
DIELDRIN	000060-57-1	4.5E+02	4.5E+00	4.1E+03	4.4E+02	1.1E+03	1.1E+01	3.9E+03		2.6E+07	2.6E+05		5.8E+02	5.8E+00	2.0E+03
DIETHYL PHTHALATE	000084-66-2			6.5E+07	7.0E+06			1.1E+08							4.1E+07

Table 3.4c. (continued)

Chemical	CASRN	Ingestion (mg/kg)				Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1
DIETHYL-P-NITROPHENYL-PHOSPHATE	000311-45-5													
DIETHYLENE GLYCOL DINITRATE (DEGDN)	000693-21-0													
DIETHYLENE GLYCOL MONOBUTYL ETHER	000112-34-5										1.0E+10			
DIETHYLENE GLYCOL MONOETHYL ETHER	000111-90-0			1.6E+08	1.8E+07			3.1E+08						1.1E+08
DIETHYLFORMAMIDE	000617-84-5			9.0E+05	9.6E+04			1.7E+06						5.9E+05
DIETHYLSTILBESTEROL	000056-53-1	1.5E+00	1.5E-02			7.7E+00	7.7E-02		8.3E+05	8.3E+03		2.7E+00	2.7E-02	
DIFENZOQUAT	043222-48-6			6.5E+06	7.0E+05			1.2E+07						4.3E+06
DIFLUBENZURON	035367-38-5			1.6E+06	1.8E+05			3.1E+06						1.1E+06
DIFLUOROETHANE, 1,1-	000075-37-6										2.0E+13			
DIISOPROPYL METHYLPHOSPHONATE	001445-75-6			6.5E+06	7.0E+05			1.2E+07						4.3E+06
DIMETHIPIN	055290-64-7			1.6E+06	1.8E+05			3.1E+06						1.1E+06
DIMETHOATE	000060-51-5			1.6E+04	1.8E+03			3.1E+04						1.1E+04
DIMETHOXYBENZIDINE, 3,3'-	000119-90-4	5.1E+05	5.1E+03			2.6E+06	2.6E+04					8.9E+05	8.9E+03	
DIMETHYL SULFATE	000077-78-1													
DIMETHYLANILINE HCL, 2,4-	021436-96-4	1.2E+04	1.2E+02			6.2E+04	6.2E+02					2.1E+04	2.1E+02	
DIMETHYLANILINE, 2,4-	000095-68-1	9.5E+03	9.5E+01			4.8E+04	4.8E+02					1.7E+04	1.7E+02	
DIMETHYLANILINE, N,N-	000121-69-7			1.6E+05	1.8E+04			3.1E+05						1.1E+05

Table 3.4c. (continued)

Chemical	CASRN	Ingestion (mg/kg)				Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
DIMETHYLBENZIDINE, 3,3'-	000119-93-7	7.8E+02	7.8E+00			3.9E+03	3.9E+01					1.4E+03	1.4E+01	
DIMETHYLETHYL LEAD	107584-40-7													
DIMETHYLFORMAMIDE	000068-12-2			8.2E+06	8.8E+05			1.5E+07			1.5E+10			5.3E+06
DIMETHYLHYDRAZINE, 1,2-	000540-73-8													
DIMETHYLPHENOL, 2,4-	000105-67-9			1.6E+06	1.8E+05			3.1E+06						1.1E+06
DIMETHYLPHENOL, 2,6-	000576-26-1			4.9E+04	5.3E+03			9.3E+04						3.2E+04
DIMETHYLPHENOL, 3,4-	000095-65-8			8.2E+04	8.8E+03			1.5E+05						5.3E+04
DIMETHYLPHthalate	000131-11-3													
DIMETHYLTEREPHTHALATE	000120-61-6			8.2E+06	8.8E+05			1.5E+07						5.3E+06
DINITRO-O-CYCLOHEXYL PHENOL, 4,6-	000131-89-5			1.6E+05	1.8E+04			3.1E+05						1.1E+05
DINITROBENZENE, 1,2-	000528-29-0			3.3E+04	3.5E+03			5.7E+04						2.1E+04
DINITROBENZENE, 1,3-	000099-65-0			8.2E+03	8.8E+02			1.5E+04						5.3E+03
DINITROBENZENE, 1,4-	000100-25-4			3.3E+04	3.5E+03			6.2E+04						2.1E+04
DINITROPHENOL, 2,4-	000051-28-5			1.6E+05	1.8E+04			3.1E+05						1.1E+05
DINITROTOLUENE, 2,4-	000121-14-2	1.1E+04	1.1E+02	1.6E+05	1.8E+04	4.5E+04	4.5E+02	2.6E+05				1.7E+04	1.7E+02	1.0E+05
DINITROTOLUENE, 2,6-	000606-20-2	1.1E+04	1.1E+02	8.2E+04	8.8E+03	4.5E+04	4.5E+02	1.3E+05				1.7E+04	1.7E+02	5.0E+04
DINOSEB	000088-85-7			8.2E+04	8.8E+03			1.5E+05						5.3E+04
DIOXANE, 1,4-	000123-91-1	6.5E+05	6.5E+03			3.3E+06	3.3E+04					1.1E+06	1.1E+04	
DIPHENAMID	000957-51-7			2.5E+06	2.6E+05			4.6E+06						1.6E+06

Table 3.4c. (continued)

Chemical	CASRN	Ingestion (mg/kg)				Dermal (mg/kg)				Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) ¹		
		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
DIPHENYLAMINE	000122-39-4			2.0E+06	2.2E+05			3.9E+06							1.3E+06
DIPHENYLHYDRAZINE, 1,2-	000122-66-7	8.9E+03	8.9E+01			4.5E+04	4.5E+02			5.1E+08	5.1E+06		1.6E+04	1.6E+02	
DIQUAT	000085-00-7			1.8E+05	1.9E+04			3.4E+05							1.2E+05
DIRECT BLACK 38	001937-37-7	8.3E+02	8.3E+00			4.2E+03	4.2E+01						1.4E+03	1.4E+01	
DIRECT BLUE 6	002602-46-2	8.8E+02	8.8E+00			4.4E+03	4.4E+01						1.5E+03	1.5E+01	
DIRECT BROWN 95	016071-86-6	7.7E+02	7.7E+00			3.9E+03	3.9E+01						1.3E+03	1.3E+01	
DIRECT SKY BLUE	002610-05-1														
DISULFOTON	000298-04-4			3.3E+03	3.5E+02			6.2E+03							2.1E+03
DIURON	000330-54-1			1.6E+05	1.8E+04			3.1E+05							1.1E+05
DODINE	002439-10-3			3.3E+05	3.5E+04			6.2E+05							2.1E+05
ENDOSULFAN	000115-29-7			4.9E+05	5.3E+04			9.3E+05							3.2E+05
ENDOTHALL	000145-73-3			1.6E+06	1.8E+05			3.1E+06							1.1E+06
ENDRIN	000072-20-8			2.5E+04	2.6E+03			9.3E+02							8.9E+02
EPICHLOROHYDRIN	000106-89-8	7.2E+05	7.2E+03	1.6E+05	1.8E+04	3.6E+06	3.6E+04	3.1E+05	3.1E+05	3.2E+03	3.2E+03	3.2E+03	3.2E+03	3.2E+03	3.2E+03
EPOXYBUTANE, 1,2-	000106-88-7											1.0E+10			
EPTC	000759-94-4			2.0E+06	2.2E+05			3.9E+06							1.3E+06
ETHEPHON	016672-87-0			4.1E+05	4.4E+04			7.7E+05							2.7E+05
ETHION	000563-12-2			4.1E+04	4.4E+03			7.7E+04							2.7E+04
ETHOXYETHANOL ACETATE, 2-	000111-15-9			2.5E+07	2.6E+06			4.6E+07							1.6E+07

Table 3.4c. (continued)

Chemical	CASRN	Ingestion (mg/kg)				Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
ETHOXYETHANOL, 2-	000110-80-5			3.3E+07	3.5E+06			6.2E+07			1.0E+11			2.1E+07
ETHYL ACETATE	000141-78-6			7.4E+07	7.9E+06			1.4E+08						4.8E+07
ETHYL ACRYLATE	000140-88-5	1.5E+05	1.5E+03			7.5E+05	7.5E+03					2.6E+05	2.6E+03	
ETHYL CHLORIDE	000075-00-3										1.6E+02			
ETHYL ETHER	000060-29-7			1.6E+07	1.8E+06			3.1E+07						1.1E+07
ETHYL METHACRYLATE	000097-63-2			7.4E+06	7.9E+05			1.4E+07						4.8E+06
ETHYL-P-NITROPHENYL PHOSPHONATE	002104-64-5			8.2E+02	8.8E+01			1.5E+03						5.3E+02
ETHYLBENZENE	000100-41-4			8.2E+06	8.8E+05			1.5E+07			4.8E-01			4.8E-01
ETHYLENE CYANOHYDRIN	000109-78-4			2.5E+07	2.6E+06			4.6E+07						1.6E+07
ETHYLENE DIAMINE	000107-15-3			1.6E+06	1.8E+05			3.1E+06						1.1E+06
ETHYLENE GLYCOL	000107-21-1			1.6E+08	1.8E+07			3.1E+08						1.1E+08
ETHYLENE GLYCOL MONOBUTYL ETHER	000111-76-2										1.0E+10			
ETHYLENE OXIDE	000075-21-8	7.0E+03	7.0E+01			3.5E+04	3.5E+02		5.4E+03	5.4E+01		3.8E+03	3.8E+01	
ETHYLENE THIOUREA	000096-45-7	6.5E+04	6.5E+02	6.5E+03	7.0E+02	3.3E+05	3.3E+03	1.2E+04				1.1E+05	1.1E+03	4.3E+03
ETHYLPHTHALYL ETHYL GLYCOLATE	000084-72-0			2.5E+08	2.6E+07			4.6E+08						1.6E+08
EXPRESS	101200-48-0			6.5E+05	7.0E+04			1.2E+06						4.3E+05
FENAMIPHOS	022224-92-6			2.0E+04	2.2E+03			3.9E+04						1.3E+04
FENPROPATHRIN	039515-41-8			2.0E+06	2.2E+05			3.9E+06						1.3E+06

Table 3.4c. (continued)

Chemical	CASRN	Ingestion (mg/kg)				Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁴	HQ=1 Adult	HQ=1 Child	10 ⁻⁴	10 ⁻⁴	10 ⁻⁴	10 ⁻⁴	10 ⁻⁴	HQ=1	10 ⁻⁴	10 ⁻⁴	HI=1
FLUOMETURON	002164-17-2			1.1E+06	1.1E+05						2.0E+06			6.9E+05
FLUORANTHENE	000206-44-0			3.3E+06	3.5E+05						1.9E+06			1.2E+06
FLUORENE	000086-73-7			3.3E+06	3.5E+05						6.2E+06			2.1E+06
FLUORIDE	007782-41-4			4.9E+06	5.3E+05						9.0E+07			4.7E+06
FLURIDONE	059756-60-4			6.5E+06	7.0E+05						1.2E+07			4.3E+06
FLURPRIMIDOL	056425-91-3			1.6E+06	1.8E+05						3.1E+06			1.1E+06
FLUTOLANIL	066332-96-5			4.9E+06	5.3E+05						9.3E+06			3.2E+06
FLUVALINATE	069409-94-5			8.2E+05	8.8E+04						1.5E+06			5.3E+05
FOLPET	000133-07-3	2.0E+06	2.0E+04	8.2E+06	8.8E+05	1.0E+07	1.0E+07	1.0E+05			1.5E+07	3.6E+06	3.6E+04	5.3E+06
FOMESAFEN	072178-02-0	3.8E+04	3.8E+02			1.9E+05	1.9E+05	1.9E+03				6.6E+04	6.6E+02	
FONOFOS	000944-22-9			1.6E+05	1.8E+04						3.1E+05			1.1E+05
FORMALDEHYDE	000050-00-0			1.6E+07	1.8E+06				9.1E+09	9.1E+07				1.1E+07
FORMIC ACID	000064-18-6			1.6E+08	1.8E+07						3.1E+08			1.1E+08
FOSETYL-AL	039148-24-8			2.5E+08	2.6E+07						4.6E+08			1.6E+08
FURAN	000110-00-9			8.2E+04	8.8E+03						1.5E+05			5.3E+04
FURAZOLIDONE	000067-45-8	1.9E+03	1.9E+01			9.5E+03	9.5E+03	9.5E+01				3.3E+03	3.3E+01	
FURFURAL	000098-01-1			2.5E+05	2.6E+04						4.6E+05			1.6E+05
FURUM	000531-82-8	1.4E+02	1.4E+00			7.2E+02	7.2E+02	7.2E+00				2.5E+02	2.5E+00	
FURMECYCLOX	060568-05-0	2.4E+05	2.4E+03			1.2E+06	1.2E+06	1.2E+04				4.2E+05	4.2E+03	

Table 3.4c. (continued)

Chemical	CASRN	Ingestion (mg/kg)				Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
GLUFOSINATE-AMMONIUM	077182-82-2			3.3E+04	3.5E+03			6.2E+04						2.1E+04
GLYCIDYL	000765-34-4			3.3E+04	3.5E+03			6.2E+04			5.0E+08			2.1E+04
GLYPHOSATE	001071-83-6			8.2E+06	8.8E+05			1.5E+07						5.3E+06
GOAL	042874-03-3			2.5E+05	2.6E+04			4.6E+05						1.6E+05
HALOXYFOP-METHYL	069806-40-2			4.1E+03	4.4E+02			7.7E+03						2.7E+03
HARMONY	079277-27-3			1.1E+06	1.1E+05			2.0E+06						6.9E+05
HEPTACHLOR	000076-44-8	1.6E+03	1.6E+01	4.1E+04	4.4E+03	5.8E+03	5.8E+01	5.6E+04	9.1E+07	9.1E+05		2.4E+03	2.4E+01	2.4E+04
HEPTACHLOR EPOXIDE	001024-57-3	7.9E+02	7.9E+00	1.1E+03	1.1E+02	2.8E+03	2.8E+01	1.4E+03	4.5E+07	4.5E+05		1.2E+03	1.2E+01	6.1E+02
HEPTANE, N-	000142-82-5													
HEXABROMOBENZENE	000087-82-1			1.6E+05	1.8E+04			3.1E+05						1.1E+05
HEXACHLOROBENZENE	000118-74-1	4.5E+03	4.5E+01	6.5E+04	7.0E+03	2.2E+04	2.2E+02	1.2E+05	2.6E+08	2.6E+06		7.8E+03	7.8E+01	4.3E+04
HEXACHLOROBUTADIENE	000087-68-3	9.2E+04	9.2E+02	1.6E+04	1.8E+03	4.6E+05	4.6E+03	3.1E+04	5.2E+09	5.2E+07		1.6E+05	1.6E+03	1.1E+04
HEXACHLOROCYCLOHEXANE, ALPHA-	000319-84-6	1.1E+03	1.1E+01			5.5E+03	5.5E+01		6.5E+07	6.5E+05		2.0E+03	2.0E+01	
HEXACHLOROCYCLOHEXANE, BETA-	000319-85-7	4.0E+03	4.0E+01			1.8E+04	1.8E+02		2.3E+08	2.3E+06		6.7E+03	6.7E+01	
HEXACHLOROCYCLOHEXANE, DELTA-	000319-86-8													
HEXACHLOROCYCLOHEXANE, EPSILON	006108-10-7													
HEXACHLOROCYCLOHEXANE, GAMMA-	000058-89-9	5.5E+03	5.5E+01	2.5E+04	2.6E+03	2.7E+04	2.7E+02	4.5E+04				9.5E+03	9.5E+01	1.6E+04

Table 3.4c. (continued)

Chemical	CASRN	Ingestion (mg/kg)				Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
HEXACHLOROCYCLOHEXANE, TECHNICAL	000608-73-1	4.0E+03	4.0E+01			2.0E+04	2.0E+02		2.3E+08	2.3E+06		6.9E+03	6.9E+01	
HEXACHLOROCYCLOPENTA-DIENE	000077-47-4			5.7E+05	6.1E+04			1.1E+06			3.5E+07			3.7E+05
HEXACHLORODIBENZO-p-DIOXIN, MIXTURE	019408-74-3	1.2E+00	1.2E-02			5.8E+00	5.8E-02					2.0E+00	2.0E-02	
HEXACHLOROETHANE	000067-72-1	5.1E+05	5.1E+03	8.2E+04	8.8E+03	2.6E+06	2.6E+04	1.5E+05	2.9E+10	2.9E+08		8.9E+05	8.9E+03	5.3E+04
HEXACHLOROPHENE	000070-30-4			2.5E+04	2.6E+03			4.6E+04						1.6E+04
HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE (RDX)	000121-82-4	6.5E+04	6.5E+02	2.5E+05	2.6E+04	3.3E+05	3.3E+03	4.6E+05				1.1E+05	1.1E+03	1.6E+05
HEXAMETHYLENE DIISOCYANATE, 1,6-	000822-06-0										5.0E+06			
HEXANE, N-	000110-54-3			4.9E+06	5.3E+05			7.4E+06			9.1E+01			9.1E+01
HEXAZINONE	051235-04-2			2.7E+06	2.9E+05			5.1E+06						1.8E+06
HYDRAZINE	000302-01-2	2.4E+03	2.4E+01			1.2E+04	1.2E+02		2.4E+07	2.4E+05		4.2E+03	4.2E+01	
HYDRAZINE SULFATE	010034-93-2	2.4E+03	2.4E+01			1.2E+04	1.2E+02		2.4E+07	2.4E+05		4.2E+03	4.2E+01	
HYDROGEN CHLORIDE	007647-01-0										3.5E+09			
HYDROGEN CYANIDE	000074-90-8			1.6E+06	1.8E+05			5.2E+06			1.5E+09			1.2E+06
HYDROGEN SULFIDE	007783-06-4			2.5E+05	2.6E+04			4.6E+06			4.5E+08			2.3E+05
HYDROQUINONE	000123-31-9			3.3E+06	3.5E+05			6.2E+06						2.1E+06
IMAZALIL	035554-44-0			1.1E+06	1.1E+05			2.0E+06						6.9E+05
IMAZAQUIN	081335-37-7			2.0E+07	2.2E+06			3.9E+07						1.3E+07

Table 3.4c. (continued)

Chemical	CASRN	Ingestion (mg/kg)				Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1
INDENO[1,2,3-cd]PYRENE	000193-39-5	9.8E+03	9.8E+01			1.5E+04	1.5E+02					9.6E+03	9.6E+01	
IPRODIONE	036734-19-7			3.3E+06	3.5E+05			6.2E+06						2.1E+06
ISOBUTYL ALCOHOL	000078-83-1			2.5E+07	2.6E+06			4.6E+07						1.6E+07
ISOPHORONE	000078-59-1	7.5E+06	7.5E+04	1.6E+07	1.8E+06	3.8E+07	3.8E+05	3.1E+07				1.3E+07	1.3E+05	1.1E+07
ISOPROPALIN	033820-53-0			1.2E+06	1.3E+05			2.3E+06						8.0E+05
ISOPROPYL METHYL PHOSPHONIC ACID	001832-54-8			8.2E+06	8.8E+05			1.5E+07						5.3E+06
ISOXABEN	082558-50-7			4.1E+06	4.4E+05			7.7E+06						2.7E+06
KARATE	091465-08-6			4.1E+05	4.4E+04			7.7E+05						2.7E+05
KERB	023950-58-5			6.1E+06	6.6E+05			1.2E+07						4.0E+06
LACTOFEN	077501-63-4			1.6E+05	1.8E+04			3.1E+05						1.1E+05
LEAD ALKYLs	NA													
LEAD AND COMPOUNDS	007439-92-1													
LINURON	000330-55-2			1.6E+05	1.8E+04			3.1E+05						1.1E+05
LONDAX	083055-99-6			1.6E+07	1.8E+06			3.1E+07						1.1E+07
MALATHION	000121-75-5			1.6E+06	1.8E+05			3.1E+06						1.1E+06
MALEIC ANHYDRIDE	000108-31-6			8.2E+06	8.8E+05			1.5E+07						5.3E+06
MALEIC HYDRAZIDE	000123-33-1			4.1E+07	4.4E+06			7.7E+07						2.7E+07
MALONONITRILE	000109-77-3			1.6E+03	1.8E+02			3.1E+03						1.1E+03
MANCOZEB	008018-01-7			2.5E+06	2.6E+05			4.6E+06						1.6E+06

Table 3.4c. (continued)

Chemical	CASRN	Ingestion (mg/kg)				Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
METHOXYETHANOL, 2-	000109-86-4			8.2E+04	8.8E+03			1.5E+05			1.0E+10			5.3E+04
METHYL ACETATE	000079-20-9			8.2E+07	8.8E+06			1.5E+08						5.3E+07
METHYL ACRYLATE	000096-33-3			2.5E+06	2.6E+05			4.6E+06						1.6E+06
METHYL ETHYL KETONE	000078-93-3			4.9E+07	5.3E+06			7.4E+07			9.3E+03			9.3E+03
METHYL ISOBUTYL KETONE	000108-10-1			6.5E+06	7.0E+05			1.2E+07			7.0E+02			7.0E+02
METHYL MERCURY	022967-92-6			2.5E+04	2.6E+03			4.2E+04						1.5E+04
METHYL METHACRYLATE	000080-62-6			6.5E+06	7.0E+05			1.2E+07						4.3E+06
METHYL PARATHION	000298-00-0			2.0E+04	2.2E+03			3.9E+04						1.3E+04
METHYL STYRENE (MIXED ISOMERS)	025013-15-4			4.9E+05	5.3E+04			9.3E+05			2.0E+10			3.2E+05
METHYL TERT-BUTYL ETHER (MTBE)	001634-04-4										1.5E+12			
METHYL-5-NITROANILINE, 2-	000099-55-8	2.2E+05	2.2E+03			1.1E+06	1.1E+04					3.8E+05	3.8E+03	
METHYLANILINE HYDROCHLORIDE, 2-	000636-21-5	4.0E+04	4.0E+02			2.0E+05	2.0E+03					6.9E+04	6.9E+02	
METHYLCYCLOHEXANE	000108-87-2										1.5E+12			
METHYLENE CHLORIDE	000075-09-2	9.5E+05	9.5E+03	4.9E+06	5.3E+05	4.6E+06	4.6E+04	8.8E+06	1.0E+03		1.0E+03	1.0E+03	1.0E+03	
METHYLENE-BIS(2-CHLOROANI LINE), 4,4'-	000101-14-4	5.5E+04	5.5E+02	5.7E+04	6.1E+03	2.8E+05	2.8E+03	1.1E+05	3.1E+09	3.1E+07		9.6E+04	9.6E+02	3.7E+04
METHYLENE-BIS(N,N-DIMETHYL) ANILINE, 4,4'-	000101-61-1	1.6E+05	1.6E+03			7.8E+05	7.8E+03					2.7E+05	2.7E+03	

Table 3.4c. (continued)

Chemical	CASRN	Ingestion (mg/kg)				Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
METHYLENEBISBENZENAMINE, 4,4'-	000101-77-9													
METHYLENEDIPHENYL ISOCYANATE, 4,4'-	000101-68-8										1.0E+07			
METHYLSTYRENE, ALPHA-	000098-83-9			5.7E+06	6.1E+05			1.1E+07						3.7E+06
METHYLTRIETHYL LEAD	001762-28-3													
METOLACHLOR	051218-45-2			1.2E+07	1.3E+06			2.3E+07						8.0E+06
METRIBUZIN	021087-64-9			2.0E+06	2.2E+05			3.9E+06						1.3E+06
MIREX	002385-85-5			1.6E+04	1.8E+03			3.1E+04						1.1E+04
MOLINATE	002212-67-1			1.6E+05	1.8E+04			3.1E+05						1.1E+05
MOLYBDENUM	007439-98-7			4.1E+05	4.4E+04			2.9E+06						3.6E+05
MONOCHLORAMINE	010599-90-3			8.2E+06	8.8E+05			1.5E+07						5.3E+06
MONOCHLOROBUTANES	025154-42-1			3.3E+07	3.5E+06			6.2E+07						2.1E+07
NALED	000300-76-5			1.6E+05	1.8E+04			3.1E+05						1.1E+05
NAPHTHALENE	000091-20-3													
NAPROPAMIDE	015299-99-7			8.2E+06	8.8E+05			1.5E+07						5.3E+06
NIAGARA BLUE 4B	002429-74-5													
NICKEL CARBONYL	013463-39-3													
NICKEL REFINERY DUST	NA								4.9E+08	4.9E+06				
NICKEL SOLUBLE SALTS	007440-02-0			1.6E+06	1.8E+05			8.3E+06						1.4E+06

Table 3.4c. (continued)

Chemical	CASRN	Ingestion (mg/kg)				Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1
NICKEL SUBSULFIDE	012035-72-2								2.4E+08	2.4E+06				
NITRAPYRIN	001929-82-4													
NITRATE	014797-55-8			1.3E+08	1.4E+07			2.5E+09						1.2E+08
NITRIC OXIDE	010102-43-9													
NITRITE	014797-65-0			8.2E+06	8.8E+05			1.5E+08						7.8E+06
NITROANILINE, 2-	000088-74-4										9.3E+01			
NITROBENZENE	000098-95-3			4.1E+04	4.4E+03			7.5E+04			3.2E+02			3.2E+02
NITROFURANTOIN	000067-20-9			5.7E+06	6.1E+05			1.1E+07						3.7E+06
NITROFURAZONE	000059-87-0	4.8E+03	4.8E+01			2.4E+04	2.4E+02					8.3E+03	8.3E+01	
NITROGEN DIOXIDE	010102-44-0													
NITROGUANIDINE	000556-88-7			8.2E+06	8.8E+05			1.5E+07						5.3E+06
NITROPROPANE, 2-	000079-46-9	7.5E+02	7.5E+00			3.8E+03	3.8E+01		9.4E+02	9.4E+00	1.6E+04	5.5E+02	5.5E+00	
NITROSO-DI-N-BUTYLAMINE, N-	000924-16-3	1.3E+03	1.3E+01			6.7E+03	6.7E+01		1.5E+03	6.9E+01		1.5E+03	1.7E+01	
NITROSO-DI-N-PROPYLAMINE, N-	000621-64-7	1.0E+03	1.0E+01			1.3E+03	1.3E+01					8.7E+02	8.7E+00	
NITROSO-N-ETHYLUREA, N-	000759-73-9	5.1E+01	5.1E-01			2.6E+02	2.6E+00					8.9E+01	8.9E-01	
NITROSO-N-METHYLUREA, N-	000684-93-5													
NITROSODIETHANOLAMINE, N-	001116-54-7	2.6E+03	2.6E+01			1.3E+04	1.3E+02					4.5E+03	4.5E+01	
NITROSODIETHYLAMINE, N-	000055-18-5	4.8E+01	4.8E-01			2.4E+02	2.4E+00		2.7E+06	2.7E+04		8.3E+01	8.3E-01	
NITROSODIMETHYLAMINE, N-	000062-75-9	1.4E+02	1.4E+00			7.1E+02	7.1E+00		8.0E+06	8.0E+04		2.4E+02	2.4E+00	

Table 3.4c. (continued)

Chemical	CASRN	Ingestion (mg/kg)				Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) ¹		
		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
PARAQUAT	001910-42-5			3.7E+05	3.9E+04						6.9E+05			2.4E+05
PARATHION	000056-38-2			4.9E+05	5.3E+04						9.3E+05			3.2E+05
PEBULATE	001114-71-2			4.1E+06	4.4E+05						7.7E+06			2.7E+06
PENDIMETHALIN	040487-42-1			3.3E+06	3.5E+05						6.2E+06			2.1E+06
PENTABROMODIPHENYL ETHER	032534-81-9			1.6E+05	1.8E+04						3.1E+05			1.1E+05
PENTACHLOROBENZENE	000608-93-5			6.5E+04	7.0E+03						1.2E+05			4.3E+04
PENTACHLOROCYCLO-PENTADIENE	025329-35-5													
PENTACHLORONITROBENZENE	000082-68-8	2.8E+04	2.8E+02	2.5E+05	2.6E+04	1.4E+05	1.4E+03	4.6E+05				4.8E+04	4.8E+02	1.6E+05
PENTACHLOROPHENOL	000087-86-5	6.0E+04	6.0E+02	2.5E+06	2.6E+05	3.0E+05	3.0E+03	4.6E+06				1.0E+05	1.0E+03	1.6E+06
PERMETHRIN	052645-53-1			4.1E+06	4.4E+05			7.7E+06						2.7E+06
PHENANTHRENE	000085-01-8													
PHENMEDIPHAM	013684-63-4			2.0E+07	2.2E+06			3.9E+07						1.3E+07
PHENOL	000108-95-2			4.9E+07	5.3E+06			8.3E+07						3.1E+07
PHENYLENEDIAMINE, m-	000108-45-2			4.9E+05	5.3E+04			9.3E+05						3.2E+05
PHENYLENEDIAMINE, o-	000095-54-5	1.5E+05	1.5E+03			7.7E+05	7.7E+03					2.7E+05	2.7E+03	
PHENYLENEDIAMINE, p-	000106-50-3			1.6E+07	1.7E+06			2.9E+07						1.0E+07
PHENYLMERCURIC ACETATE	000062-38-4			6.5E+03	7.0E+02			1.2E+04						4.3E+03
PHENYLPHENOL, 2-	000090-43-7	3.7E+06	3.7E+04			1.9E+07	1.9E+05					6.4E+06	6.4E+04	

Table 3.4c. (continued)

Chemical	CASRN	Ingestion (mg/kg)				Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
PHORATE	000298-02-2			1.6E+04	1.8E+03			3.1E+04						1.1E+04
PHOSMET	000732-11-6			1.6E+06	1.8E+05			3.1E+06						1.1E+06
PHOSPHINE	007803-51-2			2.5E+04	2.6E+03			4.6E+04			1.5E+07			1.6E+04
PHTHALIC ACID, p-	000100-21-0			8.2E+07	8.8E+06			1.5E+08						5.3E+07
PHTHALIC ANHYDRIDE	000085-44-9			1.6E+08	1.8E+07			3.1E+08			6.0E+10			1.1E+08
PICLORAM	001918-02-1			5.7E+06	6.1E+05			1.1E+07						3.7E+06
PIRIMIPHOS-METHYL	029232-93-7			8.2E+05	8.8E+04			1.5E+06						5.3E+05
POLYBROMINATED BIPHENYLS	NA	8.0E+02	8.0E+00	5.7E+02	6.1E+01	3.8E+03	3.8E+01	1.0E+03	1.4E+03	1.4E+01		1.6E+03	1.6E+01	3.6E+02
POLYCHLORINATED BIPHENYLS	001336-36-3	9.3E+02	9.3E+00			4.2E+03	4.2E+01							
POTASSIUM CYANIDE	000151-50-8			4.1E+06	4.4E+05			7.7E+06						2.7E+06
POTASSIUM SILVER CYANIDE	000506-61-6			1.6E+07	1.8E+06			3.1E+08						1.6E+07
PROCHLORAZ	067747-09-5	4.8E+04	4.8E+02	7.4E+05	7.9E+04	2.4E+05	2.4E+03	1.4E+06	8.3E+04	8.3E+02				4.8E+05
PROFLURALIN	026399-36-0			4.9E+05	5.3E+04			9.3E+05						3.2E+05
PROMETON	001610-18-0			1.2E+06	1.3E+05			2.3E+06						8.0E+05
PROMETRYN	007287-19-6			3.3E+05	3.5E+04			6.2E+05						2.1E+05
PROPACHLOR	001918-16-7			1.1E+06	1.1E+05			2.0E+06						6.9E+05
PROPANIL	000709-98-8			4.1E+05	4.4E+04			7.7E+05						2.7E+05
PROPARGITE	002312-35-8			1.6E+06	1.8E+05			3.1E+06						1.1E+06
PROPARGYL ALCOHOL	000107-19-7			1.6E+05	1.8E+04			3.1E+05						1.1E+05

Table 3.4c. (continued)

Chemical	CASRN	Ingestion (mg/kg)				Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁵	HQ=1 Adult	HQ=1 Child	10 ⁻⁴	10 ⁻⁵	HQ=1	10 ⁻⁴	10 ⁻⁵	HQ=1	10 ⁻⁴	10 ⁻⁵	HI=1
PROPABINE	000139-40-2			1.6E+06	1.8E+05			3.1E+06						1.1E+06
PROPHAM	000122-42-9			1.6E+06	1.8E+05			3.1E+06						1.1E+06
PROPICONAZOLE	060207-90-1			1.1E+06	1.1E+05			2.0E+06						6.9E+05
PROPYLENE GLYCOL	000057-55-6			1.6E+09	1.8E+08			3.1E+09						1.1E+09
PROPYLENE GLYCOL MONOETHYL ETHER	001569-02-4			5.7E+07	6.1E+06			1.1E+08						3.7E+07
PROPYLENE GLYCOL MONOMETHYL ETHER	000107-98-2			5.7E+07	6.1E+06			1.1E+08			1.0E+12			3.7E+07
PROPYLENE OXIDE	000075-56-9	3.0E+04	3.0E+02			1.5E+05	1.5E+03		2.8E+04	4.7E+03	2.8E+04	4.7E+02		
PURSUIT	081335-77-5			2.0E+07	2.2E+06			3.9E+07						1.3E+07
PYDRIN	051630-58-1			2.0E+06	2.2E+05			3.9E+06						1.3E+06
PYRENE	000129-00-0			2.5E+06	2.6E+05			1.4E+06						9.1E+05
PYRIDINE	000110-86-1			8.2E+04	8.8E+03			1.5E+05						5.3E+04
QUINALPHOS	013593-03-8			4.1E+04	4.4E+03			7.7E+04						2.7E+04
QUINOLINE	000091-22-5	6.0E+02	6.0E+00			3.0E+03	3.0E+01					1.0E+03	1.0E+01	
SYSTHANE	088671-89-0			2.0E+06	2.2E+05			3.9E+06						1.3E+06
REFRACTORY CERAMIC FIBERS	NA													
RESMETHRIN	010453-86-8			2.5E+06	2.6E+05			4.6E+06						1.6E+06
RONNEL	000299-84-3			4.1E+06	4.4E+05			7.7E+06						2.7E+06
ROTENONE	000083-79-4			3.3E+05	3.5E+04			6.2E+05						2.1E+05

Table 3.4c. (continued)

Chemical	CASRN	Ingestion (mg/kg)				Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]	
		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶
SAVEY	078587-05-0			2.0E+06	2.2E+05			3.9E+06					1.3E+06
SELENIOUS ACID	007783-00-8			4.1E+05	4.4E+04			6.7E+05					2.5E+05
SELENIUM	007782-49-2			4.1E+05	4.4E+04			3.4E+06					3.6E+05
SELENIUM SULFIDE	007446-34-6												
SELENOUREA	000630-10-4			4.1E+05	4.4E+04			7.7E+05					2.7E+05
SETHOXYDIM	074051-80-2			7.4E+06	7.9E+05			1.4E+07					4.8E+06
SILVER	007440-22-4			4.1E+05	4.4E+04			1.4E+06					3.2E+05
SILVER CYANIDE	000506-64-9			8.2E+06	8.8E+05			1.5E+07					5.3E+06
SIMAZINE	000122-34-9	6.0E+04	6.0E+02	4.1E+05	4.4E+04	3.0E+05	3.0E+03	7.7E+05	1.0E+05	1.0E+03			2.7E+05
SODIUM ACIFLUORFEN	062476-59-9			1.1E+06	1.1E+05			2.0E+06					6.9E+05
SODIUM AZIDE	026628-22-8			3.3E+05	3.5E+04			6.2E+05					2.1E+05
SODIUM CYANIDE	000143-33-9			3.3E+06	3.5E+05			6.2E+07					3.1E+06
SODIUM DIETHYLDITHIOCARBAMATE	000148-18-5	2.6E+04	2.6E+02	2.5E+06	2.6E+05	1.3E+05	1.3E+03	4.6E+06	4.6E+04	4.6E+02			1.6E+06
SODIUM FLUOROACETATE	000062-74-8			1.6E+03	1.8E+02			3.1E+03					1.1E+03
SODIUM METAVANADATE	013718-26-8			8.2E+04	8.8E+03			1.5E+05					5.3E+04
STIROFOS (TETRACHLOROVINPHOS)	000961-11-5	3.0E+05	3.0E+03	2.5E+06	2.6E+05	1.5E+06	1.5E+04	4.6E+06	5.2E+05	5.2E+03			1.6E+06
STRONTIUM, STABLE	007440-24-6			4.9E+07	5.3E+06			9.3E+08					4.7E+07
STRYCHNINE	000057-24-9			2.5E+04	2.6E+03			4.6E+04					1.6E+04

Table 3.4c. (continued)

Chemical	CASRN	Ingestion (mg/kg)				Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1
TETRAPROPYL LEAD	003440-75-3													HI=1
THALLIC OXIDE	001314-32-5			5.7E+03	6.1E+02			1.1E+04						3.7E+03
THALLIUM (I) NITRATE	010102-45-1			7.4E+03	7.9E+02			1.4E+04						4.8E+03
THALLIUM (SOLUBLE SALTS)	NA													
THALLIUM ACETATE	000563-68-8			7.4E+03	7.9E+02			1.4E+04						4.8E+03
THALLIUM CARBONATE	006533-73-9			6.5E+03	7.0E+02			1.2E+04						4.3E+03
THALLIUM CHLORIDE	007791-12-0			6.5E+03	7.0E+02			1.2E+04						4.3E+03
THALLIUM SELENITE	012039-52-0													
THALLIUM SULFATE	007446-18-6			6.5E+03	7.0E+02			1.2E+04						4.3E+03
THIOBENCARB	028249-77-6			8.2E+05	8.8E+04			1.5E+06						5.3E+05
THIOFANOX	039196-18-4			2.5E+04	2.6E+03			4.6E+04						1.6E+04
THIOPHANATE-METHYL	023564-05-8			6.5E+06	7.0E+05			1.2E+07						4.3E+06
THIRAM	000137-26-8			4.1E+05	4.4E+04			7.7E+05						2.7E+05
TIN	007440-31-5			4.9E+07	5.3E+06			9.3E+07						3.2E+07
TOLUENE	000108-88-3			1.6E+07	1.8E+06			2.5E+07			2.5E+02			2.5E+02
TOLUENE-2,4-DIAMINE	000095-80-7	2.2E+03	2.2E+01			1.1E+04	1.1E+02					3.9E+03	3.9E+01	
TOLUENE-2,5-DIAMINE	000095-70-5			4.9E+07	5.3E+06			9.3E+07						3.2E+07
TOLUENE-2,6-DIAMINE	000823-40-5			1.6E+07	1.8E+06			3.1E+07						1.1E+07
TOLUIDINE, o- (METHYLANILINE, 2-)	000095-53-4	3.0E+04	3.0E+02			1.5E+05	1.5E+03					5.2E+04	5.2E+02	

Table 3.4c. (continued)

Chemical	CASRN	Ingestion (mg/kg)				Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
TOLUIDINE, p-	000106-49-0	3.8E+04	3.8E+02			1.9E+05	1.9E+03					6.6E+04	6.6E+02	
TOXAPHENE	008001-35-2	6.5E+03	6.5E+01			3.3E+04	3.3E+02		3.7E+08	3.7E+06		1.1E+04	1.1E+02	
TRALOMETHRIN	066841-25-6			6.1E+05	6.6E+04			1.2E+06						4.0E+05
TRIALLATE	002303-17-5			1.1E+06	1.1E+05			2.0E+06						6.9E+05
TRIASULFURON	082097-50-5			8.2E+05	8.8E+04			1.5E+06						5.3E+05
TRIBROMOBENZENE, 1,2,4-	000615-54-3			4.1E+05	4.4E+04			7.7E+05						2.7E+05
TRIBROMOCHLOROMETHANE	000594-15-0													
TRIBROMODIPHENYL ETHER	049690-94-0													
TRIBUTYL TIN OXIDE	000056-35-9			2.5E+03	2.6E+02			4.6E+03						1.6E+03
TRICHLORO-1,2,2-TRIFLUORO-ETHANE, 1,1,2-	000076-13-1			2.5E+09	2.6E+08			4.6E+09			2.0E+02			2.0E+02
TRICHLORO-2'-HYDROXY-DIPHENYLETHER	003380-34-5													
TRICHLOROANILINE HCL, 2,4,6-	033663-50-2	2.5E+05	2.5E+03			1.2E+06	1.2E+04					4.3E+05	4.3E+03	
TRICHLOROANILINE, 2,4,6-	000634-93-5	2.1E+05	2.1E+03			1.1E+06	1.1E+04					3.7E+05	3.7E+03	
TRICHLOROBENZENE, 1,2,4-	000120-82-1			8.2E+05	8.8E+04			1.5E+06			8.3E+02			8.3E+02
TRICHLOROETHANE, 1,1,1-	000071-55-6													
TRICHLOROETHANE, 1,1,2-	000079-00-5	1.3E+05	1.3E+03	3.3E+05	3.5E+04	5.1E+05	5.1E+03	5.0E+05	8.5E+02	5.9E+02		8.5E+02	4.6E+02	8.5E+02
TRICHLOROETHYLENE	000079-01-6	6.5E+05	6.5E+03			4.9E+05	4.9E+03		4.4E+02	4.4E+02		4.4E+02	4.4E+02	
TRICHLOROFLUOROMETHANE	000075-69-4			2.5E+07	2.6E+06			1.1E+07			7.3E+02			7.3E+02

Table 3.4c. (continued)

Chemical	CASRN	Ingestion (mg/kg)				Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
TRICHLOROPHENOL, 2,4,5-	000095-95-4			8.2E+06	8.8E+05			1.5E+07						5.3E+06
TRICHLOROPHENOL, 2,4,6-	000088-06-2	6.5E+05	6.5E+03			3.3E+06	3.3E+04		4.1E+10	4.1E+08		1.1E+06	1.1E+04	
TRICHLOROPHENOL, 2,4,5- PROPIONIC ACID, 2(2,4,5-	000093-72-1			6.5E+05	7.0E+04			1.2E+06						4.3E+05
TRICHLOROPHENOL, 2,4,5- ACID, 2,4,5-	000093-76-5			8.2E+05	8.8E+04			1.5E+06						5.3E+05
TRICHLOROPROPANE, 1,1,2-	000598-77-6			4.1E+05	4.4E+04			7.7E+05						2.7E+05
TRICHLOROPROPANE, 1,2,3-	000096-18-4	1.0E+03	1.0E+01	4.9E+05	5.3E+04	5.1E+03	5.1E+01	9.3E+05				1.8E+03	1.8E+01	3.2E+05
TRICHLOROPROPENE, 1,2,3-	000096-19-5			4.1E+05	4.4E+04			7.7E+05						2.7E+05
TRICHLOROTOLUENE, 2,3,6-	002077-46-5													
TRICHLOROTOLUENE, ALPHA 2,6-	002014-83-7													
TRIDIPHANE	058138-08-2			2.5E+05	2.6E+04			4.6E+05						1.6E+05
TRIETHYL LEAD	005224-23-7													
TRIETHYLAMINE	000121-44-8										2.2E+04			
TRIFLURALIN	001582-09-8	9.3E+05	9.3E+03	6.1E+05	6.6E+04	4.7E+06	4.7E+04	1.2E+06				1.6E+06	1.6E+04	4.0E+05
TRIMETHYL LEAD	007442-13-9													
TRIMETHYL PHOSPHATE	000512-56-1	1.9E+05	1.9E+03			9.7E+05	9.7E+03					3.4E+05	3.4E+03	
TRIMETHYLETHYL LEAD	001762-26-1													
TRINITROBENZENE, 1,3,5-	000099-35-4			4.1E+03	4.4E+02			7.7E+03						2.7E+03

Table 3.4c. (continued)

Chemical	CASRN	Ingestion (mg/kg)				Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
ZINC (METALLIC)	007440-66-6			2.5E+07	2.6E+06			9.3E+07						1.9E+07
ZINC CYANIDE	000557-21-1			4.1E+06	4.4E+05			7.7E+07						3.9E+06
ZINC PHOSPHIDE	001314-84-7			2.5E+04	2.6E+03			4.6E+05						2.3E+04
ZINEB	012122-67-7			4.1E+06	4.4E+05			7.7E+06						2.7E+06

Notes:

† If slope factors or reference doses were available for only one pathway (i.e., ingestion, dermal, OR inhalation), the total for ingestion plus dermal plus inhalation was not calculated.

(1) Same oral slope factor as used for polychlorinated biphenyls.

(2) PRG calculated considering *New Interim Region IV Guidance* from EPA (received February 11, 1992). The slope factors for chemicals so marked indicate that a toxicity equivalency factor (TEF) method was used for carcinogenic PAHs based on each compound's relative potency to the potency of benzo(a)pyrene. The following TEFs were used to convert each PAH slope factor to an equivalent slope factor of benzo(a)pyrene [that has a new cancer slope factor of 7.3 (mg/kg/day)⁻¹ identified by EPA's CRAVE workgroup]: (1) benzo(a)pyrene; TEF = 1.0 (2) benz(a)anthracene; TEF = 0.1, (3) benzo(b)fluoranthene; TEF = 0.01, (5) chrysene; TEF = 0.001, (6) dibenz(a,h)anthracene; TEF = 1.0, and (7) indeno(1,2,3-c,d)pyrene; TEF = 0.1. TEFs were used for only the oral slope factor in the ingestion pathway.

(3) The slope factor for trichloroethylene has been withdrawn from IRIS and HEAST; however, since this is a common contaminant, the old slope factor has been used to calculate the PRG.

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Table 3.4d. Risk-based Preliminary Remediation Goals for radionuclides in soil (Recreation scenario)

Chemical [†]	CASRN	Ingestion (pCi/g)		External Exposure (pCi/g) ^{††}		Inhalation (pCi/g)		Ingestion + Inhalation + External Exposure (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Ac-225	014265-85-1	6.3E+04	6.3E+02	6.2E+04	6.2E+02	5.5E+07	5.5E+05	3.4E+04	3.4E+02
Ac-227	014952-40-0	2.5E+04	2.5E+02	2.1E+07	2.1E+05	3.2E+06	3.2E+04	3.0E+04	3.0E+02
Ac-227+D	014952-40-0	1.4E+04	1.4E+02	8.2E+02	8.2E+00	2.9E+06	2.9E+04	7.8E+02	7.8E+00
Ac-228	014331-83-0	5.5E+06	5.5E+04	1.5E+02	1.5E+00	7.0E+09	7.0E+07	1.5E+02	1.5E+00
Ag-105	014928-14-4	5.5E+06	5.5E+04			9.8E+10	9.8E+08	6.5E+06	6.5E+04
Ag-108	014391-65-2	1.3E+09	1.3E+07	8.4E+03	8.4E+01	2.4E+13	2.4E+11	8.4E+03	8.4E+01
Ag-108m	014391-65-2	1.5E+06	1.5E+04	8.7E+01	8.7E-01	3.3E+09	3.3E+07	8.7E+01	8.7E-01
Ag-108m+D	014391-65-2	1.5E+06	1.5E+04	8.7E+01	8.7E-01	3.3E+09	3.3E+07	8.7E+01	8.7E-01
Ag-109m	014378-38-2	3.3E+10	3.3E+08	4.2E+05	4.2E+03	6.6E+14	6.6E+12	4.2E+05	4.2E+03
Ag-110	014391-76-5	3.6E+09	3.6E+07	4.3E+03	4.3E+01	7.2E+13	7.2E+11	4.3E+03	4.3E+01
Ag-110m	014391-76-5	1.1E+06	1.1E+04	4.6E+01	4.6E-01	7.1E+09	7.1E+07	4.6E+01	4.6E-01
Ag-111	157690-04-0	1.3E+06	1.3E+04	5.7E+03	5.7E+01	4.4E+10	4.4E+08	5.7E+03	5.7E+01
Am-241	014596-10-2	2.7E+04	2.7E+02	1.1E+05	1.1E+03	5.9E+06	5.9E+04	2.5E+04	2.5E+02
Am-242	013981-54-9	6.0E+06	6.0E+04	8.4E+04	8.4E+02	2.2E+10	2.2E+08	8.4E+04	8.4E+02
Am-242m	013981-54-9	3.0E+04	3.0E+02	5.6E+06	5.6E+04	6.5E+06	6.5E+04	3.6E+04	3.6E+02
Am-243	014993-75-0	2.7E+04	2.7E+02	2.0E+04	2.0E+02	6.0E+06	6.0E+04	1.2E+04	1.2E+02
Am-243+D	014993-75-0	2.7E+04	2.7E+02	1.8E+03	1.8E+01	6.0E+06	6.0E+04	1.7E+03	1.7E+01
Ar-41	014163-25-8					4.9E+14	4.9E+12		
At-217	017239-90-6	9.9E+11	9.9E+09	5.6E+05	5.6E+03	4.4E+14	4.4E+12	5.6E+05	5.6E+03
Au-196	014914-16-0	6.8E+06	6.8E+04	3.5E+02	3.5E+00	2.2E+11	2.2E+09	3.5E+02	3.5E+00

Table 3.4d. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		External Exposure (pCi/g) ^{††}		Inhalation (pCi/g)		Ingestion + Inhalation + External Exposure (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Au-198	010043-49-0	1.7E+06	1.7E+04	3.6E+02	3.6E+00	6.3E+10	6.3E+08	3.6E+02	3.6E+00
Ba-131	014914-75-1	5.2E+06	5.2E+04	3.8E+02	3.8E+00	4.8E+11	4.8E+09	3.8E+02	3.8E+00
Ba-133	013981-41-4	3.3E+06	3.3E+04	5.3E+02	5.3E+00	5.7E+10	5.7E+08	5.3E+02	5.3E+00
Ba-133m	013981-41-4	3.2E+06	3.2E+04	4.9E+03	4.9E+01	4.1E+11	4.1E+09	4.9E+03	4.9E+01
Ba-137m	013981-97-0	3.7E+09	3.7E+07	2.2E+02	2.2E+00	1.5E+14	1.5E+12	2.2E+02	2.2E+00
Ba-139	014378-25-7	2.9E+07	2.9E+05	5.8E+03	5.8E+01	1.5E+12	1.5E+10	5.8E+03	5.8E+01
Ba-140	014798-08-4	7.5E+05	7.5E+03	8.1E+02	8.1E+00	7.2E+10	7.2E+08	8.1E+02	8.1E+00
Be-7	013966-02-4	1.0E+08	1.0E+06	2.8E+03	2.8E+01	1.3E+12	1.3E+10	2.8E+03	2.8E+01
Bi-206	015776-19-9	1.3E+06	1.3E+04	4.1E+01	4.1E-01	4.5E+10	4.5E+08	4.1E+01	4.1E-01
Bi-207	013982-38-2	1.8E+06	1.8E+04	8.9E+01	8.9E-01	2.4E+10	2.4E+08	8.9E+01	8.9E-01
Bi-210	014331-79-4	1.2E+06	1.2E+04			4.5E+09	4.5E+07	1.5E+06	1.5E+04
Bi-211	015229-37-5	4.9E+08	4.9E+06	3.3E+03	3.3E+01	1.3E+11	1.3E+09	3.3E+03	3.3E+01
Bi-212	014913-49-6	1.4E+07	1.4E+05	7.3E+02	7.3E+00	6.3E+09	6.3E+07	7.3E+02	7.3E+00
Bi-213	015776-20-2	2.0E+07	2.0E+05	1.1E+03	1.1E+01	7.4E+09	7.4E+07	1.1E+03	1.1E+01
Bi-214	014733-03-0	4.6E+07	4.6E+05	8.1E+01	8.1E-01	1.6E+10	1.6E+08	8.1E+01	8.1E-01
Br-82	014686-69-2	6.3E+06	6.3E+04	4.8E+01	4.8E-01	2.9E+11	2.9E+09	4.8E+01	4.8E-01
C-11	014333-33-6	2.0E+08	2.0E+06	1.3E+02	1.3E+00	6.8E+12	6.8E+10	1.3E+02	1.3E+00
C-14	014762-75-5	8.6E+06	8.6E+04			3.3E+13	3.3E+11	1.0E+07	1.0E+05
C-15	015929-23-4	1.3E+10	1.3E+08			2.8E+14	2.8E+12	1.6E+10	1.6E+08
Ca-45	013966-05-7	4.4E+06	4.4E+04	1.3E+14	1.3E+12	9.1E+10	9.1E+08	5.3E+06	5.3E+04

Table 3.4d. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		External Exposure (pCi/g) ^{††}		Inhalation (pCi/g)		Ingestion + Inhalation + External Exposure (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Ca-47	001439-99-2	1.3E+06	1.3E+04	1.2E+02	1.2E+00	4.4E+10	4.4E+08	1.2E+02	1.2E+00
Cd-109	014109-32-1	1.1E+06	1.1E+04	8.7E+05	8.7E+03	1.2E+10	1.2E+08	5.2E+05	5.2E+03
Cd-115	014336-68-6	1.2E+06	1.2E+04	6.9E+02	6.9E+00	4.6E+10	4.6E+08	6.9E+02	6.9E+00
Cd-115m	014336-68-6	6.3E+05	6.3E+03	5.7E+03	5.7E+01	1.3E+10	1.3E+08	5.6E+03	5.6E+01
Ce-141	013967-74-3	2.3E+06	2.3E+04	3.5E+03	3.5E+01	5.3E+10	5.3E+08	3.4E+03	3.4E+01
Ce-143	014119-19-8	1.5E+06	1.5E+04	6.6E+02	6.6E+00	6.0E+10	6.0E+08	6.6E+02	6.6E+00
Ce-144	014762-78-8	3.0E+05	3.0E+03	1.9E+04	1.9E+02	2.1E+09	2.1E+07	1.8E+04	1.8E+02
Ce-144+D	014762-78-8	3.0E+05	3.0E+03	3.1E+03	3.1E+01	2.1E+09	2.1E+07	3.1E+03	3.1E+01
Cl-36	013981-43-6	4.0E+06	4.0E+04			1.8E+11	1.8E+09	4.8E+06	4.8E+04
Cl-38	014158-34-0	4.3E+07	4.3E+05	7.5E+01	7.5E-01	1.4E+12	1.4E+10	7.5E+01	7.5E-01
Cm-242	015510-73-3	2.3E+05	2.3E+03	2.1E+07	2.1E+05	7.2E+07	7.2E+05	2.7E+05	2.7E+03
Cm-243	015757-87-6	3.5E+04	3.5E+02	2.8E+03	2.8E+01	7.9E+06	7.9E+04	2.7E+03	2.7E+01
Cm-243+D	015757-87-6	3.5E+04	3.5E+02	2.8E+03	2.8E+01	7.9E+06	7.9E+04	2.7E+03	2.7E+01
Cm-244	013981-15-2	4.2E+04	4.2E+02	2.4E+07	2.4E+05	9.4E+06	9.4E+04	5.0E+04	5.0E+02
Cm-245	015621-76-8	2.7E+04	2.7E+02	8.8E+03	8.8E+01	5.8E+06	5.8E+04	6.9E+03	6.9E+01
Cm-246	015757-90-1	2.7E+04	2.7E+02	2.7E+07	2.7E+05	5.9E+06	5.9E+04	3.2E+04	3.2E+02
Cm-247	015758-32-4	2.9E+04	2.9E+02	4.7E+02	4.7E+00	6.4E+06	6.4E+04	4.7E+02	4.7E+00
Cm-248	015758-33-5	6.8E+03	6.8E+01	3.3E+07	3.3E+05	1.6E+06	1.6E+04	8.1E+03	8.1E+01
Co-57	013981-50-5	9.2E+06	9.2E+04	2.4E+03	2.4E+01	7.9E+10	7.9E+08	2.4E+03	2.4E+01
Co-58	013981-38-9	3.2E+06	3.2E+04	1.3E+02	1.3E+00	4.4E+10	4.4E+08	1.3E+02	1.3E+00

Table 3.4d. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		External Exposure (pCi/g) ^{††}		Inhalation (pCi/g)		Ingestion + Inhalation + External Exposure (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Co-58m	013981-38-9	9.4E+07	9.4E+05	1.5E+07	1.5E+05	2.6E+12	2.6E+10	1.3E+07	1.3E+05
Co-60	010198-40-0	4.7E+05	4.7E+03	5.0E+01	5.0E-01	3.3E+09	3.3E+07	5.0E+01	5.0E-01
Cr-51	014392-02-0	6.4E+07	6.4E+05	4.8E+03	4.8E+01	1.3E+12	1.3E+10	4.8E+03	4.8E+01
Cs-131	014914-76-2	4.9E+07	4.9E+05	2.1E+05	2.1E+03	2.2E+12	2.2E+10	2.1E+05	2.1E+03
Cs-134	013967-70-9	1.9E+05	1.9E+03	8.3E+01	8.3E-01	7.9E+09	7.9E+07	8.3E+01	8.3E-01
Cs-134m	013967-70-9	2.0E+08	2.0E+06	2.5E+04	2.5E+02	7.4E+12	7.4E+10	2.5E+04	2.5E+02
Cs-135	015726-30-4	2.0E+06	2.0E+04			8.4E+10	8.4E+08	2.4E+06	2.4E+04
Cs-136	014234-29-8	1.1E+06	1.1E+04	6.0E+01	6.0E-01	4.9E+10	4.9E+08	6.0E+01	6.0E-01
Cs-137	010045-97-3	2.8E+05	2.8E+03			1.2E+10	1.2E+08	3.4E+05	3.4E+03
Cs-137+D	010045-97-3	2.8E+05	2.8E+03	2.3E+02	2.3E+00	1.2E+10	1.2E+08	2.3E+02	2.3E+00
Cs-138	015758-29-9	5.1E+07	5.1E+05	5.1E+01	5.1E-01	1.8E+12	1.8E+10	5.1E+01	5.1E-01
Cu-64	013981-25-4	1.7E+07	1.7E+05	7.2E+02	7.2E+00	5.5E+11	5.5E+09	7.2E+02	7.2E+00
Dy-165	013967-64-1	2.7E+07	2.7E+05	7.9E+03	7.9E+01	1.0E+12	1.0E+10	7.9E+03	7.9E+01
Dy-166	015840-01-4	9.4E+05	9.4E+03	1.8E+04	1.8E+02	2.9E+10	2.9E+08	1.8E+04	1.8E+02
Er-169	015840-13-8	4.2E+06	4.2E+04	7.5E+07	7.5E+05	1.5E+11	1.5E+09	4.7E+06	4.7E+04
Er-171	014391-45-8	5.5E+06	5.5E+04	4.7E+02	4.7E+00	3.0E+11	3.0E+09	4.7E+02	4.7E+00
Eu-152	014683-23-9	1.6E+06	1.6E+04	1.2E+02	1.2E+00	2.9E+09	2.9E+07	1.2E+02	1.2E+00
Eu-154	015585-10-1	9.5E+05	9.5E+03	1.0E+02	1.0E+00	2.5E+09	2.5E+07	1.0E+02	1.0E+00
Eu-155	014391-16-3	5.4E+06	5.4E+04	8.0E+03	8.0E+01	2.4E+10	2.4E+08	8.0E+03	8.0E+01
Eu-156	014280-35-4	8.2E+05	8.2E+03	9.0E+01	9.0E-01	2.5E+10	2.5E+08	9.0E+01	9.0E-01

Table 3.4d. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		External Exposure (pCi/g) ^{††}		Inhalation (pCi/g)		Ingestion + Inhalation + External Exposure (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
F-18	013981-56-1	8.2E+07	8.2E+05	1.4E+02	1.4E+00	3.5E+12	3.5E+10	1.4E+02	1.4E+00
Fe-55	014681-59-5	2.5E+07	2.5E+05			4.1E+11	4.1E+09	3.0E+07	3.0E+05
Fe-59	014596-12-4	1.5E+06	1.5E+04	1.1E+02	1.1E+00	3.2E+10	3.2E+08	1.1E+02	1.1E+00
Fr-221	015756-41-9	6.1E+07	6.1E+05	7.2E+03	7.2E+01	2.8E+10	2.8E+08	7.2E+03	7.2E+01
Fr-223	015756-98-6	2.0E+07	2.0E+05	1.2E+04	1.2E+02	3.9E+11	3.9E+09	1.2E+04	1.2E+02
Ga-67	014119-09-6	1.1E+07	1.1E+05	1.3E+03	1.3E+01	4.4E+11	4.4E+09	1.3E+03	1.3E+01
Ga-72	013982-22-4	1.9E+06	1.9E+04	4.3E+01	4.3E-01	1.1E+11	1.1E+09	4.3E+01	4.3E-01
Gd-153	014276-65-4	6.7E+06	6.7E+04	6.7E+03	6.7E+01	7.1E+10	7.1E+08	6.7E+03	6.7E+01
Gd-159	014041-42-0	3.4E+06	3.4E+04	5.1E+03	5.1E+01	1.8E+11	1.8E+09	5.1E+03	5.1E+01
Ge-71	014374-81-3	7.5E+08	7.5E+06	3.1E+07	3.1E+05	3.9E+12	3.9E+10	3.0E+07	3.0E+05
H-3	010028-17-8	1.2E+08	1.2E+06			2.4E+12	2.4E+10	1.5E+08	1.5E+06
Hg-197	013981-51-6	7.5E+06	7.5E+04	8.9E+03	8.9E+01	3.3E+11	3.3E+09	8.9E+03	8.9E+01
Hg-203	013982-78-0	3.4E+06	3.4E+04	7.8E+02	7.8E+00	7.5E+10	7.5E+08	7.8E+02	7.8E+00
Ho-166	013967-65-2	1.2E+06	1.2E+04	7.0E+03	7.0E+01	5.6E+10	5.6E+08	7.0E+03	7.0E+01
I-122	018287-75-7	4.1E+08	4.1E+06	1.4E+02	1.4E+00	1.0E+13	1.0E+11	1.4E+02	1.4E+00
I-123	015715-08-9	1.6E+07	1.6E+05	1.9E+03	1.9E+01	7.8E+11	7.8E+09	1.9E+03	1.9E+01
I-125	014158-31-7	3.4E+05	3.4E+03	2.0E+05	2.0E+03	1.3E+10	1.3E+08	1.4E+05	1.4E+03
I-126	014158-32-8	1.8E+05	1.8E+03	3.3E+02	3.3E+00	7.3E+09	7.3E+07	3.3E+02	3.3E+00
I-129	015046-84-1	4.8E+04	4.8E+02	1.8E+05	1.8E+03	1.9E+09	1.9E+07	4.4E+04	4.4E+02
I-130	014914-02-4	1.8E+06	1.8E+04	6.1E+01	6.1E-01	8.8E+10	8.8E+08	6.1E+01	6.1E-01

Table 3.4d. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		External Exposure (pCi/g) ^{††}		Inhalation (pCi/g)		Ingestion + Inhalation + External Exposure (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
I-131	010043-66-0	2.5E+05	2.5E+03	3.9E+02	3.9E+00	9.8E+09	9.8E+07	3.9E+02	3.9E+00
I-132	014683-16-0	1.3E+07	1.3E+05	5.6E+01	5.6E-01	6.5E+11	6.5E+09	5.6E+01	5.6E-01
I-133	014834-67-4	8.4E+05	8.4E+03	2.2E+02	2.2E+00	3.8E+10	3.8E+08	2.2E+02	2.2E+00
I-134	014914-27-3	3.8E+07	3.8E+05	4.8E+01	4.8E-01	1.7E+12	1.7E+10	4.8E+01	4.8E-01
I-135	014834-68-5	3.9E+06	3.9E+04	7.8E+01	7.8E-01	1.9E+11	1.9E+09	7.8E+01	7.8E-01
In-113m	014885-78-0	1.1E+08	1.1E+06	6.2E+02	6.2E+00	4.0E+12	4.0E+10	6.2E+02	6.2E+00
In-114	013981-55-0	2.0E+09	2.0E+07	4.3E+03	4.3E+01	3.9E+13	3.9E+11	4.3E+03	4.3E+01
In-114m	013981-55-0	4.3E+05	4.3E+03	2.4E+03	2.4E+01	9.0E+09	9.0E+07	2.4E+03	2.4E+01
In-115	014191-71-0	2.5E+05	2.5E+03			1.1E+09	1.1E+07	3.1E+05	3.1E+03
In-115m	014191-71-0	2.6E+07	2.6E+05	1.1E+03	1.1E+01	1.3E+12	1.3E+10	1.1E+03	1.1E+01
Ir-190	014981-91-0	1.8E+06	1.8E+04	1.0E+02	1.0E+00	5.1E+10	5.1E+08	1.0E+02	1.0E+00
Ir-194	014158-35-1	1.3E+06	1.3E+04	1.5E+03	1.5E+01	5.5E+10	5.5E+08	1.5E+03	1.5E+01
K-40	013966-00-2	7.1E+05	7.1E+03	8.0E+02	8.0E+00	3.1E+10	3.1E+08	8.0E+02	8.0E+00
K-42	014378-21-3	6.9E+06	6.9E+04	4.5E+02	4.5E+00	3.0E+11	3.0E+09	4.5E+02	4.5E+00
Kr-83m	013965-98-5					6.6E+15	6.6E+13		
Kr-85	013983-27-2					8.0E+14	8.0E+12		
Kr-85m	013983-27-2					8.3E+14	8.3E+12		
Kr-87	014809-68-8					1.9E+14	1.9E+12		
Kr-88	014995-61-0					1.0E+14	1.0E+12		
Kr-89	016316-03-3					1.4E+14	1.4E+12		

Table 3.4d. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		External Exposure (pCi/g) ^{††}		Inhalation (pCi/g)		Ingestion + Inhalation + External Exposure (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Kr-90	015741-13-6					1.4E+14	1.4E+12		
La-140	013981-28-7	9.4E+05	9.4E+03	5.3E+01	5.3E-01	4.5E+10	4.5E+08	5.3E+01	5.3E-01
Lu-177	014265-75-9	3.0E+06	3.0E+04	6.7E+03	6.7E+01	1.0E+11	1.0E+09	6.7E+03	6.7E+01
Mn-52	014092-99-0	1.5E+06	1.5E+04	3.6E+01	3.6E-01	5.2E+10	5.2E+08	3.6E+01	3.6E-01
Mn-54	013966-31-9	4.5E+06	4.5E+04	1.5E+02	1.5E+00	6.2E+10	6.2E+08	1.5E+02	1.5E+00
Mn-56	014681-52-8	1.0E+07	1.0E+05	7.0E+01	7.0E-01	4.4E+11	4.4E+09	7.0E+01	7.0E-01
Mo-99	014119-15-4	3.9E+06	3.9E+04	8.9E+02	8.9E+00	5.1E+10	5.1E+08	8.9E+02	8.9E+00
Na-22	013966-32-0	1.1E+06	1.1E+04	5.9E+01	5.9E-01	4.7E+10	4.7E+08	5.9E+01	5.9E-01
Na-24	013982-04-2	6.4E+06	6.4E+04	2.7E+01	2.7E-01	3.0E+11	3.0E+09	2.7E+01	2.7E-01
Nb-93m	007440-03-1	1.3E+07	1.3E+05	1.3E+07	1.3E+05	5.3E+10	5.3E+08	7.3E+06	7.3E+04
Nb-94	014681-63-1	1.3E+06	1.3E+04	8.0E+01	8.0E-01	2.8E+09	2.8E+07	8.0E+01	8.0E-01
Nb-95	013967-76-5	4.0E+06	4.0E+04	1.7E+02	1.7E+00	7.3E+10	7.3E+08	1.7E+02	1.7E+00
Nb-95m	013967-76-5	2.9E+06	2.9E+04	5.6E+03	5.6E+01	1.0E+11	1.0E+09	5.6E+03	5.6E+01
Nb-97	018496-04-3	5.1E+07	5.1E+05	2.0E+02	2.0E+00	1.1E+12	1.1E+10	2.0E+02	2.0E+00
Nb-97m	018496-04-3	2.7E+09	2.7E+07	1.8E+02	1.8E+00	6.8E+13	6.8E+11	1.8E+02	1.8E+00
Nd-147	014269-74-0	1.5E+06	1.5E+04	1.5E+03	1.5E+01	4.7E+10	4.7E+08	1.5E+03	1.5E+01
Nd-149	015749-81-2	2.0E+07	2.0E+05	4.5E+02	4.5E+00	5.4E+11	5.4E+09	4.5E+02	4.5E+00
Ni-59	014336-70-0	4.8E+07	4.8E+05			5.7E+11	5.7E+09	5.8E+07	5.8E+05
Ni-63	013981-37-8	1.6E+07	1.6E+05			2.3E+11	2.3E+09	1.9E+07	1.9E+05
Ni-65	014833-49-9	1.6E+07	1.6E+05	2.3E+02	2.3E+00	6.4E+11	6.4E+09	2.3E+02	2.3E+00

Table 3.4d. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		External Exposure (pCi/g) ^{††}		Inhalation (pCi/g)		Ingestion + Inhalation + External Exposure (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Np-236	015700-36-4	9.5E+06	9.5E+04	5.3E+03	5.3E+01	5.9E+10	5.9E+08	5.3E+03	5.3E+01
Np-237	013994-20-2	3.0E+04	3.0E+02	6.4E+04	6.4E+02	6.6E+06	6.6E+04	2.3E+04	2.3E+02
Np-237+D	013994-20-2	3.0E+04	3.0E+02	1.1E+03	1.1E+01	6.6E+06	6.6E+04	1.0E+03	1.0E+01
Np-238	015766-25-3	1.9E+06	1.9E+04	2.5E+02	2.5E+00	4.9E+10	4.9E+08	2.5E+02	2.5E+00
Np-239	013968-59-7	2.1E+06	2.1E+04	2.0E+03	2.0E+01	9.5E+10	9.5E+08	2.0E+03	2.0E+01
Np-240	015690-84-3	5.0E+07	5.0E+05	1.3E+02	1.3E+00	1.7E+12	1.7E+10	1.3E+02	1.3E+00
Np-240m	015690-84-3	3.7E+08	3.7E+06	4.6E+02	4.6E+00	8.1E+12	8.1E+10	4.6E+02	4.6E+00
Os-185	015766-50-4	4.9E+06	4.9E+04	2.0E+02	2.0E+00	4.9E+10	4.9E+08	2.0E+02	2.0E+00
Os-191	014119-24-5	2.9E+06	2.9E+04	5.6E+03	5.6E+01	8.5E+10	8.5E+08	5.6E+03	5.6E+01
Os-191m	014119-24-5	1.8E+07	1.8E+05	1.5E+05	1.5E+03	6.9E+11	6.9E+09	1.5E+05	1.5E+03
Os-193	016057-77-5	2.0E+06	2.0E+04	2.7E+03	2.7E+01	8.5E+10	8.5E+08	2.7E+03	2.7E+01
P-32	014596-37-3	1.5E+06	1.5E+04			7.8E+10	7.8E+08	1.7E+06	1.7E+04
P-33	015749-66-3	1.1E+07	1.1E+05			5.8E+11	5.8E+09	1.4E+07	1.4E+05
Pa-231	014331-85-2	6.0E+04	6.0E+02	1.8E+04	1.8E+02	9.4E+06	9.4E+04	1.4E+04	1.4E+02
Pa-233	013981-14-1	1.9E+06	1.9E+04	1.1E+03	1.1E+01	4.6E+10	4.6E+08	1.1E+03	1.1E+01
Pa-234	015100-28-4	4.2E+06	4.2E+04	7.4E+01	7.4E-01	1.8E+11	1.8E+09	7.4E+01	7.4E-01
Pa-234m	015100-28-4	1.9E+09	1.9E+07	1.2E+04	1.2E+02	3.6E+13	3.6E+11	1.2E+04	1.2E+02
Pb-203	014687-25-3	8.6E+06	8.6E+04	7.6E+02	7.6E+00	7.4E+11	7.4E+09	7.6E+02	7.6E+00
Pb-209	014119-30-3	4.3E+07	4.3E+05			3.3E+12	3.3E+10	5.1E+07	5.1E+05
Pb-210	014255-04-0	1.3E+04	1.3E+02	4.3E+06	4.3E+04	1.4E+08	1.4E+06	1.6E+04	1.6E+02

Table 3.4d. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		External Exposure (pCi/g) ^{††}		Inhalation (pCi/g)		Ingestion + Inhalation + External Exposure (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Pb-210+D									
	014255-04-0	8.8E+03	8.8E+01	3.4E+06	3.4E+04	5.9E+07	5.9E+05	1.1E+04	1.1E+02
Pb-211									
	015816-77-0	2.6E+07	2.6E+05	2.6E+03	2.6E+01	2.2E+10	2.2E+08	2.6E+03	2.6E+01
Pb-212									
	015092-94-1	4.9E+05	4.9E+03	1.6E+03	1.6E+01	5.9E+09	5.9E+07	1.6E+03	1.6E+01
Pb-214									
	015067-28-4	3.0E+07	3.0E+05	6.9E+02	6.9E+00	3.7E+10	3.7E+08	6.9E+02	6.9E+00
Pd-100									
	015690-69-4	2.4E+06	2.4E+04			6.4E+10	6.4E+08	2.9E+06	2.9E+04
Pd-101									
	015749-54-9	2.4E+07	2.4E+05			1.0E+12	1.0E+10	2.9E+07	2.9E+05
Pd-103									
	014967-68-1	8.5E+06	8.5E+04	9.0E+05	9.0E+03	2.1E+11	2.1E+09	8.3E+05	8.3E+03
Pd-107									
	017637-99-9	4.3E+07	4.3E+05			1.6E+11	1.6E+09	5.1E+07	5.1E+05
Pd-109									
	014981-64-7	2.7E+06	2.7E+04	2.0E+05	2.0E+03	1.1E+11	1.1E+09	1.9E+05	1.9E+03
Pm-147									
	014380-75-7	6.3E+06	6.3E+04	7.7E+07	7.7E+05	3.1E+10	3.1E+08	6.9E+06	6.9E+04
Pm-148									
	014683-19-3	6.2E+05	6.2E+03	2.2E+02	2.2E+00	2.2E+10	2.2E+08	2.2E+02	2.2E+00
Pm-148m									
	014683-19-3	9.0E+05	9.0E+03	6.6E+01	6.6E-01	7.7E+09	7.7E+07	6.6E+01	6.6E-01
Pm-149									
	015765-31-8	1.6E+06	1.6E+04	1.3E+04	1.3E+02	6.4E+10	6.4E+08	1.3E+04	1.3E+02
Po-210									
	013981-52-7	2.7E+04	2.7E+02	1.5E+07	1.5E+05	1.1E+08	1.1E+06	3.3E+04	3.3E+02
Po-212									
	015389-34-1	2.0E+17	2.0E+15			3.9E+19	3.9E+17	2.4E+17	2.4E+15
Po-213									
	015756-57-7	1.3E+16	1.3E+14	4.1E+06	4.1E+04	2.9E+18	2.9E+16	4.1E+06	4.1E+04
Po-214									
	015735-67-8	4.2E+14	4.2E+12	1.5E+06	1.5E+04	8.2E+16	8.2E+14	1.5E+06	1.5E+04
Po-215									
	015706-52-2	1.8E+13	1.8E+11	9.5E+05	9.5E+03	5.1E+15	5.1E+13	9.5E+05	9.5E+03
Po-216									
	015756-58-8	1.0E+11	1.0E+09	8.7E+06	8.7E+04	7.7E+13	7.7E+11	8.7E+06	8.7E+04
Po-218									
	015422-24-9	1.7E+08	1.7E+06			6.2E+10	6.2E+08	2.1E+08	2.1E+06

Table 3.4d. (continued)

Chemical ^{††}	CASRN	Ingestion (pCi/g)		External Exposure (pCi/g) ^{††}		Inhalation (pCi/g)		Ingestion + Inhalation + External Exposure (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Pt-142	014191-64-1	1.3E+06	1.3E+04	2.1E+03	2.1E+01	5.5E+10	5.5E+08	2.1E+03	2.1E+01
Pt-143	014981-79-4	1.3E+06	1.3E+04	1.4E+10	1.4E+08	4.1E+10	4.1E+08	1.6E+06	1.6E+04
Pt-144	014119-05-2	1.1E+08	1.1E+06	3.7E+03	3.7E+01	1.7E+12	1.7E+10	3.7E+03	3.7E+01
Pt-144m	014119-05-2	2.8E+08	2.8E+06	2.6E+05	2.6E+03	4.1E+12	4.1E+10	2.6E+05	2.6E+03
Pt-191	015706-36-2	5.9E+06	5.9E+04	7.2E+02	7.2E+00	5.5E+11	5.5E+09	7.2E+02	7.2E+00
Pt-193	015735-70-3	5.5E+07	5.5E+05			2.9E+12	2.9E+10	6.6E+07	6.6E+05
Pt-193m	015735-70-3	3.5E+06	3.5E+04	6.5E+04	6.5E+02	4.0E+11	4.0E+09	6.4E+04	6.4E+02
Pt-197	015735-74-7	4.2E+06	4.2E+04	1.5E+04	1.5E+02	5.0E+11	5.0E+09	1.5E+04	1.5E+02
Pt-197m	015735-74-7	2.7E+07	2.7E+05	2.9E+03	2.9E+01	2.3E+12	2.3E+10	2.9E+03	2.9E+01
Pu-236	015411-92-4	1.2E+05	1.2E+03	2.1E+07	2.1E+05	1.7E+07	1.7E+05	1.4E+05	1.4E+03
Pu-238	013981-16-3	3.0E+04	3.0E+02	2.5E+07	2.5E+05	8.3E+06	8.3E+04	3.6E+04	3.6E+02
Pu-239	015117-48-3	2.8E+04	2.8E+02	3.9E+07	3.9E+05	8.2E+06	8.2E+04	3.4E+04	3.4E+02
Pu-240	014119-33-6	2.8E+04	2.8E+02	2.6E+07	2.6E+05	8.2E+06	8.2E+04	3.4E+04	3.4E+02
Pu-241	014119-32-5	1.7E+06	1.7E+04			8.1E+08	8.1E+06	2.0E+06	2.0E+04
Pu-241+D	014119-32-5	2.7E+04	2.7E+02	1.1E+05	1.1E+03	5.9E+06	5.9E+04	2.4E+04	2.4E+02
Pu-242	013982-10-0	3.0E+04	3.0E+02	3.1E+07	3.1E+05	8.7E+06	8.7E+04	3.5E+04	3.5E+02
Pu-243	015706-37-3	2.4E+07	2.4E+05	2.6E+04	2.6E+02	8.6E+11	8.6E+09	2.6E+04	2.6E+02
Pu-244	014119-34-7	2.8E+04	2.8E+02	3.8E+07	3.8E+05	8.6E+06	8.6E+04	3.4E+04	3.4E+02
Pu-244+D	014119-34-7	2.8E+04	2.8E+02	1.3E+02	1.3E+00	8.6E+06	8.6E+04	1.3E+02	1.3E+00
Ra-223	015623-45-7	3.8E+04	3.8E+02	2.0E+03	2.0E+01	6.3E+07	6.3E+05	1.9E+03	1.9E+01

Table 3.4d. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		External Exposure (pCi/g) ^{††}		Inhalation (pCi/g)		Ingestion + Inhalation + External Exposure (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Ra-224	013233-32-4	6.0E+04	6.0E+02	2.0E+04	2.0E+02	1.0E+08	1.0E+06	1.5E+04	1.5E+02
Ra-224(2)	013233-32-4	6.0E+04	6.0E+02	2.0E+04	2.0E+02	8.9E+04	8.9E+02	1.3E+04	1.3E+02
Ra-225	013981-53-8	5.7E+04	5.7E+02	2.8E+05	2.8E+03	9.6E+07	9.6E+05	5.5E+04	5.5E+02
Ra-226	013982-63-3	3.0E+04	3.0E+02	3.7E+04	3.7E+02	8.4E+07	8.4E+05	1.8E+04	1.8E+02
Ra-226(2)	013982-63-3	3.0E+04	3.0E+02	3.7E+04	3.7E+02	5.5E+01	5.5E-01	5.5E+01	5.5E-01
Ra-226+D	013982-63-3	3.0E+04	3.0E+02	7.2E+01	7.2E-01	8.3E+07	8.3E+05	7.2E+01	7.2E-01
Ra-226+D(2)	013982-63-3	3.0E+04	3.0E+02	7.2E+01	7.2E-01	5.5E+01	5.5E-01	3.1E+01	3.1E-01
Ra-228	015262-20-1	3.6E+04	3.6E+02			2.4E+08	2.4E+06	4.3E+04	4.3E+02
Ra-228+D	015262-20-1	3.6E+04	3.6E+02	1.5E+02	1.5E+00	2.3E+08	2.3E+06	1.5E+02	1.5E+00
Rb-82	014391-63-0	8.5E+08	8.5E+06	1.3E+02	1.3E+00	2.0E+13	2.0E+11	1.3E+02	1.3E+00
Rb-86	014932-53-7	1.2E+06	1.2E+04	1.3E+03	1.3E+01	5.4E+10	5.4E+08	1.3E+03	1.3E+01
Rb-87	013982-13-3	2.4E+06	2.4E+04			1.0E+11	1.0E+09	2.9E+06	2.9E+04
Rb-88	014928-36-0	6.1E+07	6.1E+05	1.8E+02	1.8E+00	1.7E+12	1.7E+10	1.8E+02	1.8E+00
Rb-89	014191-65-2	1.0E+08	1.0E+06	5.7E+01	5.7E-01	3.3E+12	3.3E+10	5.7E+01	5.7E-01
Rh-103m	007440-16-6	1.1E+09	1.1E+07	8.3E+06	8.3E+04	1.8E+13	1.8E+11	8.3E+06	8.3E+04
Rh-105	014913-89-4	4.6E+06	4.6E+04	2.0E+03	2.0E+01	1.9E+11	1.9E+09	2.0E+03	2.0E+01
Rh-105m	014913-89-4	8.2E+09	8.2E+07	2.1E+04	2.1E+02	2.5E+14	2.5E+12	2.1E+04	2.1E+02
Rh-106	014234-34-5	2.4E+09	2.4E+07	6.4E+02	6.4E+00	4.9E+13	4.9E+11	6.4E+02	6.4E+00
Rn-219	014835-02-0			2.8E+03	2.8E+01	3.3E+12	3.3E+10	2.8E+03	2.8E+01
Rn-220	022481-48-7			2.6E+05	2.6E+03	1.2E+12	1.2E+10	2.6E+05	2.6E+03

Table 3.4d. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		External Exposure (pCi/g) ^{††}		Inhalation (pCi/g)		Ingestion + Inhalation + External Exposure (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Ru-222+D	014859-67-7					3.0E+10	3.0E+08		
Ru-103	013968-53-1	2.7E+06	2.7E+04	2.9E+02	2.9E+00	5.0E+10	5.0E+08	2.9E+02	2.9E+00
Ru-105	014331-95-4	7.7E+06	7.7E+04	1.7E+02	1.7E+00	2.8E+11	2.8E+09	1.7E+02	1.7E+00
Ru-106	013967-48-1	2.6E+05	2.6E+03			2.0E+09	2.0E+07	3.1E+05	3.1E+03
Ru-106+D	013967-48-1	2.6E+05	2.6E+03	6.4E+02	6.4E+00	2.0E+09	2.0E+07	6.4E+02	6.4E+00
Ru-97	015758-35-7	1.5E+07	1.5E+05	1.1E+03	1.1E+01	5.6E+11	5.6E+09	1.1E+03	1.1E+01
S-35	015117-53-0	2.1E+07	2.1E+05			1.2E+12	1.2E+10	2.6E+07	2.6E+05
Sb-122	014374-79-9	1.0E+06	1.0E+04	3.0E+02	3.0E+00	4.2E+10	4.2E+08	3.0E+02	3.0E+00
Sb-124	014683-10-4	8.3E+05	8.3E+03	6.6E+01	6.6E-01	1.7E+10	1.7E+08	6.6E+01	6.6E-01
Sb-125	014234-35-6	3.0E+06	3.0E+04	3.6E+02	3.6E+00	4.4E+10	4.4E+08	3.6E+02	3.6E+00
Sb-125+D	014234-35-6	2.5E+06	2.5E+04	3.6E+02	3.6E+00	3.9E+10	3.9E+08	3.6E+02	3.6E+00
Sb-126	015756-32-8	9.1E+05	9.1E+03	4.7E+01	4.7E-01	2.7E+10	2.7E+08	4.7E+01	4.7E-01
Sb-126m	015756-32-8	1.2E+08	1.2E+06	8.4E+01	8.4E-01	3.6E+12	3.6E+10	8.4E+01	8.4E-01
Sb-127	013968-50-8	1.0E+06	1.0E+04	2.0E+02	2.0E+00	3.8E+10	3.8E+08	2.0E+02	2.0E+00
Sb-129	014331-88-5	4.8E+06	4.8E+04	8.8E+01	8.8E-01	2.7E+11	2.7E+09	8.8E+01	8.8E-01
Sc-46	013967-63-0	1.6E+06	1.6E+04	6.2E+01	6.2E-01	1.7E+10	1.7E+08	6.2E+01	6.2E-01
Sc-47	014391-96-9	3.0E+06	3.0E+04	1.9E+03	1.9E+01	1.1E+11	1.1E+09	1.9E+03	1.9E+01
Sc-48	014391-86-7	1.3E+06	1.3E+04	3.7E+01	3.7E-01	5.4E+10	5.4E+08	3.7E+01	3.7E-01
Se-75	014265-71-5	1.4E+06	1.4E+04	5.5E+02	5.5E+00	4.6E+10	4.6E+08	5.5E+02	5.5E+00
Si-31	014276-49-4	1.8E+07	1.8E+05	1.4E+05	1.4E+03	6.9E+11	6.9E+09	1.4E+05	1.4E+03

Table 3.4d. (continued)

Chemical ^t	CASRN	Ingestion (pCi/g)		External Exposure (pCi/g) ^{††}		Inhalation (pCi/g)		Ingestion + Inhalation + External Exposure (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Sm-147	014392-33-7	3.5E+05	3.5E+03			3.3E+07	3.3E+05	4.2E+05	4.2E+03
Sm-151	015715-94-3	1.9E+07	1.9E+05	1.7E+09	1.7E+07	4.9E+10	4.9E+08	2.3E+07	2.3E+05
Sm-153	015766-00-4	2.2E+06	2.2E+04	1.0E+04	1.0E+02	1.0E+11	1.0E+09	1.0E+04	1.0E+02
Sn-113	013966-06-8	2.4E+06	2.4E+04	1.6E+05	1.6E+03	3.5E+10	3.5E+08	1.6E+05	1.6E+03
Sn-121	014683-06-8	7.3E+06	7.3E+04			3.7E+11	3.7E+09	8.7E+06	8.7E+04
Sn-121m	014683-06-8	4.4E+06	4.4E+04			3.1E+10	3.1E+08	5.3E+06	5.3E+04
Sn-125	014683-08-0	5.3E+05	5.3E+03	4.0E+02	4.0E+00	1.9E+10	1.9E+08	4.0E+02	4.0E+00
Sn-126	015832-50-5	4.2E+05	4.2E+03	1.5E+04	1.5E+02	5.4E+09	5.4E+07	1.4E+04	1.4E+02
Sr-82	014809-50-8	3.4E+05	3.4E+03	5.4E+06	5.4E+04	2.6E+10	2.6E+08	3.8E+05	3.8E+03
Sr-85	013967-73-2	6.3E+06	6.3E+04	3.2E+02	3.2E+00	2.0E+11	2.0E+09	3.2E+02	3.2E+00
Sr-85m	013967-73-2	4.9E+08	4.9E+06	9.3E+02	9.3E+00	3.2E+13	3.2E+11	9.3E+02	9.3E+00
Sr-89	014158-27-1	8.6E+05	8.6E+03	9.0E+05	9.0E+03	6.2E+10	6.2E+08	4.8E+05	4.8E+03
Sr-90	010098-97-2	2.2E+05	2.2E+03			3.8E+09	3.8E+07	2.6E+05	2.6E+03
Sr-90+D	010098-97-2	1.6E+05	1.6E+03			3.3E+09	3.3E+07	1.9E+05	1.9E+03
Sr-91	014331-91-0	3.2E+06	3.2E+04	1.8E+02	1.8E+00	2.9E+11	2.9E+09	1.8E+02	1.8E+00
Sr-92	014928-29-1	4.4E+06	4.4E+04	9.4E+01	9.4E-01	4.9E+11	4.9E+09	9.4E+01	9.4E-01
Ta-182	013982-00-8	1.3E+06	1.3E+04	1.0E+02	1.0E+00	1.4E+10	1.4E+08	1.0E+02	1.0E+00
Tb-158	015759-55-4	2.1E+06	2.1E+04			3.2E+09	3.2E+07	2.5E+06	2.5E+04
Tb-160	013981-29-8	1.2E+06	1.2E+04	1.2E+02	1.2E+00	2.0E+10	2.0E+08	1.2E+02	1.2E+00
Tc-95	014809-56-4	1.3E+08	1.3E+06	1.8E+02	1.8E+00	6.8E+12	6.8E+10	1.8E+02	1.8E+00

Table 3.4d. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		External Exposure (pCi/g) ^{††}		Inhalation (pCi/g)		Ingestion + Inhalation + External Exposure (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Tc-95m	014809-56-4	7.2E+06	7.2E+04	2.3E+02	2.3E+00	1.1E+11	1.1E+09	2.3E+02	2.3E+00
Tc-96	014808-44-7	3.9E+06	3.9E+04	5.2E+01	5.2E-01	1.2E+11	1.2E+09	5.2E+01	5.2E-01
Tc-96m	014808-44-7	3.4E+08	3.4E+06	6.3E+03	6.3E+01	1.0E+13	1.0E+11	6.3E+03	6.3E+01
Tc-97	015759-35-0	5.6E+07	5.6E+05	2.0E+06	2.0E+04	6.6E+11	6.6E+09	1.9E+06	1.9E+04
Tc-97m	015759-35-0	7.4E+06	7.4E+04	1.8E+06	1.8E+04	1.2E+11	1.2E+09	1.5E+06	1.5E+04
Tc-99	014133-76-7	6.3E+06	6.3E+04	7.9E+08	7.9E+06	7.9E+10	7.9E+08	7.5E+06	7.5E+04
Tc-99m	014133-76-7	1.6E+08	1.6E+06	1.9E+03	1.9E+01	6.5E+12	6.5E+10	1.9E+03	1.9E+01
Te-125m	014390-73-9	3.5E+06	3.5E+04	2.3E+05	2.3E+03	8.0E+10	8.0E+08	2.1E+05	2.1E+03
Te-127	013981-49-2	1.0E+07	1.0E+05	3.0E+04	3.0E+02	5.3E+11	5.3E+09	3.0E+04	3.0E+02
Te-127m	013981-49-2	1.5E+06	1.5E+04	6.9E+05	6.9E+03	1.7E+10	1.7E+08	4.9E+05	4.9E+03
Te-129	014269-71-7	6.0E+07	6.0E+05	3.3E+03	3.3E+01	1.6E+12	1.6E+10	3.3E+03	3.3E+01
Te-129m	014269-71-7	7.6E+05	7.6E+03	7.0E+03	7.0E+01	1.7E+10	1.7E+08	7.0E+03	7.0E+01
Te-131	014683-12-6	2.3E+07	2.3E+05	3.6E+02	3.6E+00	9.2E+11	9.2E+09	3.6E+02	3.6E+00
Te-131m	014683-12-6	1.0E+06	1.0E+04	9.2E+01	9.2E-01	2.7E+10	2.7E+08	9.2E+01	9.2E-01
Te-132	014234-28-7	7.3E+05	7.3E+03	1.1E+03	1.1E+01	2.7E+10	2.7E+08	1.1E+03	1.1E+01
Th-227	015623-47-9	2.2E+05	2.2E+03	2.8E+03	2.8E+01	5.3E+07	5.3E+05	2.8E+03	2.8E+01
Th-228	014274-82-9	1.4E+05	1.4E+03	9.2E+05	9.2E+03	2.4E+06	2.4E+04	1.4E+05	1.4E+03
Th-228+D	014274-82-9	3.8E+04	3.8E+02	4.9E+02	4.9E+00	2.4E+06	2.4E+04	4.8E+02	4.8E+00
Th-229	015594-54-4	1.6E+05	1.6E+03	8.2E+03	8.2E+01	3.0E+06	3.0E+04	7.8E+03	7.8E+01
Th-229+D	015594-54-4	2.5E+04	2.5E+02	8.1E+02	8.1E+00	2.8E+06	2.8E+04	7.9E+02	7.9E+00

Table 3.4d. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		External Exposure (pCi/g) ^{††}		Inhalation (pCi/g)		Ingestion + Inhalation + External Exposure (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Th-230	014269-63-7	2.4E+05	2.4E+03	1.1E+07	1.1E+05	1.3E+07	1.3E+05	2.7E+05	2.7E+03
Th-231	014932-40-2	5.0E+06	5.0E+04	2.3E+05	2.3E+03	2.1E+11	2.1E+09	2.2E+05	2.2E+03
Th-232	007440-29-1	2.7E+05	2.7E+03	2.5E+07	2.5E+05	1.2E+07	1.2E+05	3.1E+05	3.1E+03
Th-234	015065-10-8	4.6E+05	4.6E+03	1.4E+05	1.4E+03	1.2E+10	1.2E+08	1.1E+05	1.1E+03
Tl-202	015720-57-7	8.8E+06	8.8E+04	3.4E+02	3.4E+00	3.8E+11	3.8E+09	3.4E+02	3.4E+00
Tl-204	013968-51-9	4.5E+06	4.5E+04	5.6E+05	5.6E+03	2.0E+11	2.0E+09	5.1E+05	5.1E+03
Tl-208	014913-50-9	5.1E+08	5.1E+06	3.4E+01	3.4E-01	1.7E+13	1.7E+11	3.4E+01	3.4E-01
Tl-209	015690-73-0	6.3E+08	6.3E+06	6.2E+01	6.2E-01	2.0E+13	2.0E+11	6.2E+01	6.2E-01
Tm-170	013981-30-1	1.2E+06	1.2E+04	1.3E+05	1.3E+03	2.1E+10	2.1E+08	1.2E+05	1.2E+03
Tm-171	014333-45-0	1.5E+07	1.5E+05	1.5E+06	1.5E+04	1.2E+11	1.2E+09	1.4E+06	1.4E+04
U-232	014158-29-3	1.1E+05	1.1E+03	1.4E+07	1.4E+05	4.3E+06	4.3E+04	1.3E+05	1.3E+03
U-233	013968-55-3	2.0E+05	2.0E+03	1.4E+07	1.4E+05	1.6E+07	1.6E+05	2.3E+05	2.3E+03
U-234	013966-29-5	2.0E+05	2.0E+03	2.3E+07	2.3E+05	1.6E+07	1.6E+05	2.3E+05	2.3E+03
U-235	015117-96-1	2.0E+05	2.0E+03	1.9E+03	1.9E+01	1.8E+07	1.8E+05	1.8E+03	1.8E+01
U-235+D	015117-96-1	1.9E+05	1.9E+03	1.8E+03	1.8E+01	1.8E+07	1.8E+05	1.8E+03	1.8E+01
U-236	013982-70-2	2.1E+05	2.1E+03	2.8E+07	2.8E+05	1.7E+07	1.7E+05	2.5E+05	2.5E+03
U-237	014269-75-1	2.2E+06	2.2E+04	3.6E+03	3.6E+01	7.3E+10	7.3E+08	3.5E+03	3.5E+01
U-238	007440-61-1	2.1E+05	2.1E+03	3.2E+07	3.2E+05	1.8E+07	1.8E+05	2.4E+05	2.4E+03
U-238+D	007440-61-1	1.4E+05	1.4E+03	9.3E+03	9.3E+01	1.8E+07	1.8E+05	8.8E+03	8.8E+01
U-240	015687-53-3	1.6E+06	1.6E+04	4.5E+06	4.5E+04	6.8E+10	6.8E+08	1.4E+06	1.4E+04

Table 3.4d. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		External Exposure (pCi/g) ^{††}		Inhalation (pCi/g)		Ingestion + Inhalation + External Exposure (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
V-48	014331-97-6	1.2E+06	1.2E+04	4.3E+01	4.3E-01	3.3E+10	3.3E+08	4.3E+01	4.3E-01
W-181	015749-46-9	3.3E+07	3.3E+05	2.3E+04	2.3E+02	2.8E+12	2.8E+10	2.3E+04	2.3E+02
W-185	014932-41-3	4.4E+06	4.4E+04	9.7E+06	9.7E+04	5.4E+11	5.4E+09	3.4E+06	3.4E+04
W-187	014983-48-3	3.6E+06	3.6E+04	3.0E+02	3.0E+00	4.3E+11	4.3E+09	3.0E+02	3.0E+00
Xe-122	015151-09-4					7.4E+13	7.4E+11		
Xe-123	015700-10-4					2.6E+14	2.6E+12		
Xe-125	013994-18-8					1.9E+14	1.9E+12		
Xe-127	013994-19-9					5.6E+14	5.6E+12		
Xe-129m	013965-99-6					4.0E+14	4.0E+12		
Xe-131m	014683-11-5					5.5E+14	5.5E+12		
Xe-133	014932-42-4					5.5E+14	5.5E+12		
Xe-133m	014932-42-4					4.5E+14	4.5E+12		
Xe-135	014995-62-1					3.1E+14	3.1E+12		
Xe-135m	014995-62-1					1.2E+15	1.2E+13		
Xe-137	014835-21-3					1.6E+14	1.6E+12		
Xe-138	015751-81-2					1.1E+14	1.1E+12		
Y-90	010098-91-6	5.9E+05	5.9E+03			2.3E+10	2.3E+08	7.1E+05	7.1E+03
Y-91	014234-24-3	6.6E+05	6.6E+03	3.5E+04	3.5E+02	1.2E+10	1.2E+08	3.3E+04	3.3E+02
Y-91m	014234-24-3	2.4E+08	2.4E+06	2.6E+02	2.6E+00	7.6E+12	7.6E+10	2.6E+02	2.6E+00
Y-92	015751-59-4	4.6E+06	4.6E+04	5.0E+02	5.0E+00	1.4E+11	1.4E+09	5.0E+02	5.0E+00

Table 3.4d. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		External Exposure (pCi/g) ^{††}		Inhalation (pCi/g)		Ingestion + Inhalation + External Exposure (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Y-93	014981-70-5	1.5E+06	1.5E+04	1.4E+03	1.4E+01	6.6E+10	6.6E+08	1.4E+03	1.4E+01
Zn-65	013982-39-3	9.0E+05	9.0E+03	2.1E+02	2.1E+00	2.3E+10	2.3E+08	2.1E+02	2.1E+00
Zn-69	013982-23-5	1.4E+08	1.4E+06	2.4E+07	2.4E+05	2.2E+12	2.2E+10	2.1E+07	2.1E+05
Zn-69m	013982-23-5	5.8E+06	5.8E+04	3.4E+02	3.4E+00	2.0E+11	2.0E+09	3.4E+02	3.4E+00
Zr-93	015751-77-6	1.7E+07	1.7E+05			4.3E+10	4.3E+08	2.0E+07	2.0E+05
Zr-95	013967-71-0	2.3E+06	2.3E+04	1.7E+02	1.7E+00	3.5E+10	3.5E+08	1.7E+02	1.7E+00
Zr-97	014928-30-4	8.5E+05	8.5E+03	7.1E+02	7.1E+00	4.8E+10	4.8E+08	7.1E+02	7.1E+00

Notes:

† Isotopes designated with an "m" indicate that the isotope is metastable; isotopes designated with a "+D" indicate that the radionuclide slope factors include contributions from daughter products.
 †† If no PRG for external exposure was calculated, there either was no external exposure slope factor available or the external exposure slope factor was equal to 0.00E+00 (resulting in the PRG for the external exposure pathway for soil under recreational land use to be undefined).

††† If slope factors and/or reference doses were available for only one pathway (i.e., ingestion, external exposure, OR inhalation), the total for ingestion plus external exposure plus inhalation was not calculated.

Table 3.5a. Risk-based Preliminary Remediation Goals for nonradionuclides in soil (Excavation scenario)

Chemical	CASRN	Ingestion (mg/kg)			Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
ACENAPHTHENE	000083-32-9			1.6E+05			2.3E+06						1.5E+05
ACEPHATE	030560-19-1	2.1E+06	2.1E+04	1.1E+04	9.8E+07	9.8E+05	4.9E+05				2.1E+06	2.1E+04	1.0E+04
ACETALDEHYDE	000075-07-0									9.8E+03			
ACETOCHLOR	034256-82-1			5.3E+04			2.4E+06						5.2E+04
ACETONE	000067-64-1			2.7E+05			1.0E+07						2.6E+05
ACETONE CYANOHYDRIN	000075-86-5			2.1E+03			9.7E+04			7.8E+08			2.1E+03
ACETONITRILE	000075-05-8			1.6E+04			7.3E+05			3.9E+09			1.6E+04
ACETOPHENONE	000098-86-2			2.7E+05			1.2E+07						2.6E+05
ACROLEIN	000107-02-8			5.3E+04			2.4E+06			4.9E+00			4.9E+00
ACRYLAMIDE	000079-06-1	4.1E+03	4.1E+01	5.3E+02	1.9E+05	1.9E+03	2.4E+04	4.3E+08	4.3E+06		4.1E+03	4.1E+01	5.2E+02
ACRYLIC ACID	000079-10-7			1.3E+06			6.1E+07			7.8E+07			1.3E+06
ACRYLONITRILE	000107-13-1	3.5E+04	3.5E+02	2.7E+03	1.6E+06	1.6E+04	1.2E+05	1.8E+03	6.8E+01	1.3E+02	1.8E+03	5.6E+01	1.3E+02
ALACHLOR	015972-60-8	2.3E+05	2.3E+03	2.7E+04	1.1E+07	1.1E+05	1.2E+06				2.3E+05	2.3E+03	2.6E+04
ALAR	001596-84-5			4.0E+05			1.8E+07						3.9E+05
ALDICARB	000116-06-3			2.7E+03			1.2E+05						2.6E+03
ALDICARB SULFONE	001646-88-4			2.7E+03			1.2E+05						2.6E+03
ALDRIN	000309-00-2	1.1E+03	1.1E+01	8.0E+01	2.5E+04	2.5E+02	1.8E+03	1.1E+08	1.1E+06		1.0E+03	1.0E+01	7.6E+01
ALLYL	074223-64-6			6.7E+05			3.0E+07						6.5E+05
ALLYL ALCOHOL	000107-18-6			1.3E+04			6.1E+05						1.3E+04
ALLYL CHLORIDE	000107-05-1									1.8E+02			
ALUMINUM PHOSPHIDE	020859-73-8			1.1E+03			4.9E+05						1.1E+03

Table 3.5a. (continued)

Chemical	CASRN	Ingestion (mg/kg)			Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
AMDRO	067485-29-4			8.0E+02			3.6E+04						7.8E+02
AMETRYN	000834-12-8			2.4E+04			1.1E+06						2.3E+04
AMINOPHENOL, m-	000591-27-5			1.9E+05			8.5E+06						1.8E+05
AMINOPYRIDINE, 4-	000504-24-5			5.3E+01			2.4E+03						5.2E+01
AMITRAZ	033089-61-1			6.7E+03			3.0E+05						6.5E+03
AMMONIA	007664-41-7									7.8E+09			
AMMONIUM SULFAMATE	007773-06-0			5.3E+05			2.4E+08						5.3E+05
ANILINE	000062-53-3	3.3E+06	3.3E+04		1.5E+08	1.5E+06				7.8E+07	3.2E+06	3.2E+04	
ANTHRACENE	000120-12-7			8.0E+05			2.8E+07						7.8E+05
ANTIMONY (METALLIC)	007440-36-0			1.1E+03			9.7E+03						9.6E+02
ANTIMONY PENTOXIDE	001314-60-9			1.3E+03			6.1E+05						1.3E+03
ANTIMONY POTASSIUM TARTRATE	000304-61-0			2.4E+03			1.1E+06						2.4E+03
ANTIMONY TETROXIDE	001332-81-6			1.1E+03			4.9E+05						1.1E+03
ANTIMONY TRIOXIDE	001309-64-4			1.1E+03			4.9E+05						1.1E+03
APOLLO	074115-24-5			3.5E+04			1.6E+06						3.4E+04
ARAMITE	000140-57-8	7.5E+05	7.5E+03	1.3E+05	3.4E+07	3.4E+05	6.1E+06	7.7E+10	7.7E+08		7.3E+05	7.3E+03	1.3E+05
AROCLOR 1016	012674-11-2			1.9E+02			7.6E+03						1.8E+02
AROCLOR 1254	011097-69-1			5.3E+01			2.2E+03						5.2E+01
AROCLOR-1221	011104-28-2	2.4E+03	2.4E+01		9.9E+04	9.9E+02					2.4E+03	2.4E+01	
AROCLOR-1232	011141-16-5	2.4E+03	2.4E+01		9.9E+04	9.9E+02					2.4E+03	2.4E+01	
AROCLOR-1242	053469-21-9	2.4E+03	2.4E+01		9.9E+04	9.9E+02					2.4E+03	2.4E+01	

Table 3.5a. (continued)

Chemical	CASRN	Ingestion (mg/kg)			Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
AROCLOR-1248	012672-29-6	2.4E+03	2.4E+01		9.9E+04	9.9E+02					2.4E+03	2.4E+01	
AROCLOR-1260	011096-82-5	2.4E+03	2.4E+01		9.9E+04	9.9E+02					2.4E+03	2.4E+01	
ARSENIC, INORGANIC	007440-38-2			8.0E+02			1.5E+05	3.8E+07	3.8E+05				7.9E+02
ARSINE	007784-42-1									3.9E+06			
ASBESTOS	001332-21-4												
ASSURE	076578-14-8			2.4E+04			1.1E+06						2.3E+04
ASULAM	003337-71-1			1.3E+05			6.1E+06						1.3E+05
ATRAZINE	001912-24-9	8.4E+04	8.4E+02	9.3E+04	3.8E+06	3.8E+04	4.2E+06				8.2E+04	8.2E+02	9.1E+04
AVERMECTIN B1	065195-55-3			1.1E+03			4.9E+04						1.0E+03
AZOBEZENE	000103-33-3	1.7E+05	1.7E+03		7.7E+06	7.7E+04		1.7E+10	1.7E+08		1.7E+05	1.7E+03	
BARIUM	007440-39-3			1.9E+05			5.9E+06			3.9E+07			1.8E+05
BARIUM CYANIDE	000542-62-1			2.7E+05			1.2E+08						2.7E+05
BAYGON	000114-26-1			1.1E+04			4.9E+05						1.0E+04
BAYLETON	043121-43-3			8.0E+04			3.6E+06						7.8E+04
BAYTHROID	068359-37-5			6.7E+04			3.0E+06						6.5E+04
BENEFIN	001861-40-1			8.0E+05			3.6E+07						7.8E+05
BENOMYL	017804-35-2			1.3E+05			6.1E+06						1.3E+05
BENTAZON	025057-89-0			6.7E+03			3.0E+05						6.5E+03
BENZALDEHYDE	000100-52-7			2.7E+05			1.2E+07						2.6E+05
BENZENE	000071-43-2	6.4E+05	6.4E+03		2.8E+07	2.8E+05		4.9E+02	4.9E+02		4.9E+02	4.9E+02	
BENZENETHIOL	000108-98-5			2.7E+01			1.2E+03						2.6E+01

Table 3.5a. (continued)

Chemical	CASRN	Ingestion (mg/kg)			Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
BENZIDINE	000092-87-5	8.1E+01	8.1E-01	8.0E+03	3.0E+03	3.0E+01	2.9E+05	8.3E+06	8.3E+04		7.9E+01	7.9E-01	7.8E+03
BENZOIC ACID	000065-85-0			1.1E+07			4.9E+08						1.0E+07
BENZOTRICHLORIDE	000098-07-7	1.4E+03	1.4E+01		6.5E+04	6.5E+02					1.4E+03	1.4E+01	
BENZO[A]PYRENE	000050-32-8	2.6E+03	2.6E+01		3.6E+04	3.6E+02					2.4E+03	2.4E+01	
BENZO[B]FLUORANTHENE	000205-99-2	2.6E+04	2.6E+02		3.6E+05	3.6E+03					2.4E+04	2.4E+02	
BENZO[G,H,I]PERYLENE	000191-24-2												
BENZO[K]FLUORANTHENE	000207-08-9	2.6E+05	2.6E+03		3.6E+06	3.6E+04					2.4E+05	2.4E+03	
BENZYL ALCOHOL	000100-51-6			8.0E+05			2.4E+07						7.7E+05
BENZYL CHLORIDE	000100-44-7	1.1E+05	1.1E+03		5.0E+06	5.0E+04					1.1E+05	1.1E+03	
BENZ[A]ANTHRACENE	000056-55-3	2.6E+04	2.6E+02		3.6E+05	3.6E+03					2.4E+04	2.4E+02	
BERYLLIUM	007440-41-7	4.3E+03	4.3E+01	1.3E+04	2.0E+04	2.0E+02	6.1E+04	2.3E+08	2.3E+06		3.6E+03	3.6E+01	1.1E+04
BIDRIN	000141-66-2			2.7E+02			1.2E+04						2.6E+02
BIPHENTHRIN	082657-04-3			4.0E+04			1.8E+06						3.9E+04
BIPHENYL, 1,1'-	000092-52-4			1.3E+05			6.1E+06						1.3E+05
BIS(2-CHLORO-1-METHYLETHYL)ETHER (TECHNICAL)	000108-06-1	2.7E+05	2.7E+03		1.2E+07	1.2E+05		5.5E+10	5.5E+08		2.6E+05	2.6E+03	
BIS(2-CHLOROETHOXY)METHANE	000111-91-1												
BIS(2-CHLOROETHYL)ETHER	000111-44-4	1.7E+04	1.7E+02		7.7E+05	7.7E+03		6.5E+02	6.5E+02		6.5E+02	1.3E+02	
BIS(2-CHLOROISOPROPYL)ETHER	039638-32-9			1.1E+05			4.9E+06						1.0E+05
BIS(2-ETHYLHEXYL)PHTHALATE	000117-81-7	1.3E+06	1.3E+04	5.3E+04	1.2E+07	1.2E+05	4.6E+05				1.2E+06	1.2E+04	4.8E+04
BIS(CHLOROMETHYL)ETHER	000542-88-1	8.5E+01	8.5E-01		3.9E+03	3.9E+01		2.3E+02	2.3E+00		6.1E+01	6.1E-01	

Table 3.5a. (continued)

Chemical	CASRN	Ingestion (mg/kg)			Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
BIPHENOL A	000080-05-7			1.3E+05			6.1E+06						1.3E+05
BORON TRIFLUORIDE	007637-07-2									5.5E+07			
BORON and BORATES ONLY	007440-42-8			2.4E+05			9.8E+07			1.6E+09			2.4E+05
BROMOCHLOROMETHANE	000074-97-5												
BROMODICHLOROMETHANE	000075-27-4	3.0E+05	3.0E+03	5.3E+04	1.3E+07	1.3E+05	2.4E+06				2.9E+05	2.9E+03	5.2E+04
BROMODIPHENYL ETHER, p-	000101-55-3												
BROMOFORM	000075-25-2	2.4E+06	2.4E+04	5.3E+04	6.4E+07	6.4E+05	1.5E+06	4.9E+11	4.9E+09		2.3E+06	2.3E+04	5.1E+04
BROMOMETHANE	000074-83-9			3.7E+03			1.7E+05			3.0E+02			2.8E+02
BROMOPHOS	002104-96-3			1.3E+04			6.1E+05						1.3E+04
BROMOTRICHLOROMETHANE	000075-62-7												
BROMOXYNIL	001689-84-5			5.3E+04			2.4E+06						5.2E+04
BROMOXYNIL OCTANOATE	001689-99-2			5.3E+04			2.4E+06						5.2E+04
BUTADIENE, 1,3-	000106-99-0							3.2E+02	1.5E+01				
BUTANOL, N-	000071-36-3			2.7E+05			1.2E+07						2.6E+05
BUTYL BENZYL PHTHLATE	000085-68-7			5.3E+05			1.5E+07						5.1E+05
BUTYLATE	002008-41-5			1.3E+05			6.1E+06						1.3E+05
BUTYLCHLORIDE, T-	000507-20-0												
BUTYLPHTHALYL BUTYLGlyCOLATE	000085-70-1			2.7E+06			1.2E+08						2.6E+06
CACODYLIC ACID	000075-60-5			8.0E+03			3.6E+05						7.8E+03
CADMIUM (Diet)	007440-43-9			2.7E+03			1.2E+04	3.1E+08	3.1E+06				2.2E+03
CALCIUM CYANIDE	000592-01-8			1.1E+05			4.9E+06						1.0E+05

Table 3.5a. (continued)

Chemical	CASRN	Ingestion (mg/kg)			Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
CAPROLACTAM	000105-60-2			1.3E+06			6.1E+07						1.3E+06
CAPTAFOL	002425-06-1	2.2E+06	2.2E+04	5.3E+03	9.9E+07	9.9E+05	2.4E+05				2.1E+06	2.1E+04	5.2E+03
CAPTAN	000133-06-2	5.3E+06	5.3E+04	3.5E+05	2.4E+08	2.4E+06	1.6E+07				5.2E+06	5.2E+04	3.4E+05
CARBARYL	000063-25-2			2.7E+05			1.2E+07						2.6E+05
CARBAZOLE	000086-74-8	9.3E+05	9.3E+03		3.0E+07	3.0E+05					9.0E+05	9.0E+03	
CARBOFURAN	001563-66-2			1.3E+04			6.1E+05						1.3E+04
CARBON DISULFIDE	000075-15-0			2.7E+05			7.6E+06			1.7E+03			1.7E+03
CARBON TETRACHLORIDE	000056-23-5	1.4E+05	1.4E+03	1.9E+03	4.2E+06	4.2E+04	5.5E+04	1.0E+03	1.0E+03		1.0E+03	7.4E+02	1.0E+03
CARBOSULFAN	055285-14-8			2.7E+04			1.2E+06						2.6E+04
CARBOXIN	005234-68-4			2.7E+05			1.2E+07						2.6E+05
CHLORAL	000075-87-6			5.3E+03			2.4E+05						5.2E+03
CHLORAMBEN	000133-90-4			4.0E+04			1.8E+06						3.9E+04
CHLORANIL	000118-75-2	4.6E+04	4.6E+02		2.1E+06	2.1E+04					4.5E+04	4.5E+02	
CHLORDANE	000057-74-9	1.4E+04	1.4E+02	1.6E+02	3.3E+05	3.3E+03	3.6E+03	1.5E+09	1.5E+07		1.4E+04	1.4E+02	1.5E+02
CHLORMURON-ETHYL	090982-32-4			5.3E+04			2.4E+06						5.2E+04
CHLORINE	007782-50-5			2.7E+05			1.2E+08						2.7E+05
CHLORINE DIOXIDE	010049-04-4									1.6E+07			
CHLORO-1,3-BUTADIENE, 2-	000126-99-8			5.3E+04			2.4E+06			1.6E+03			1.6E+03
CHLORO-2-METHYLANILINE HCL, 4-	003165-93-3	4.1E+04	4.1E+02		1.8E+06	1.8E+04					4.0E+04	4.0E+02	
CHLORO-2-METHYLANILINE, 4-	000095-69-2	3.2E+04	3.2E+02		1.5E+06	1.5E+04					3.1E+04	3.1E+02	
CHLOROACETIC ACID	000079-11-8			5.3E+03			2.4E+05						5.2E+03

Table 3.5a. (continued)

Chemical	CASRN	Ingestion (mg/kg)			Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
CHLOROACETOPHENONE, 2-	000532-27-4									2.3E+06			
CHLOROANILINE, p-	000106-47-8			1.1E+04			4.9E+05						1.0E+04
CHLOROBENZENE	000108-90-7			5.3E+04			7.5E+05			5.1E+02			5.1E+02
CHLOROBENZILATE	000510-15-6	6.9E+04	6.9E+02	5.3E+04	3.1E+06	3.1E+04	2.4E+06	7.1E+09	7.1E+07		6.8E+04	6.8E+02	5.2E+04
CHLOROBENZOIC ACID, p-	000074-11-3			5.3E+05			2.4E+07						5.2E+05
CHLOROBENZOTRIFLUORIDE, 4-	000098-56-6			5.3E+04			2.4E+06						5.2E+04
CHLOROBUTANE, 1-	000109-69-3			1.1E+06			4.9E+07						1.0E+06
CHLOROBUTANE, 2-	000078-86-4												
CHLOROCYCLOPENTADIENE	041851-50-7												
CHLORODIBROMOMETHANE	073506-94-2	2.2E+05	2.2E+03		1.0E+07	1.0E+05					2.2E+05	2.2E+03	
CHLORODIFLUOROMETHANE	000075-45-6									3.9E+12			
CHLOROFORM	000067-66-3	3.1E+06	3.1E+04	2.7E+04	2.8E+07	2.8E+05	2.4E+05	1.5E+03	9.8E+02		1.5E+03	9.5E+02	1.5E+03
CHLOROMETHANE	000074-87-3	1.4E+06	1.4E+04		6.5E+07	6.5E+05		1.2E+03	1.2E+03		1.2E+03	1.2E+03	
CHLOROMETHYL METHYL ETHER	000107-30-2												
CHLORONAPHTHALENE, BETA-	000091-58-7			2.1E+05			9.7E+06						2.1E+05
CHLORONITROBENZENE, o-	000088-73-3	7.5E+05	7.5E+03		3.4E+07	3.4E+05					7.3E+05	7.3E+03	
CHLORONITROBENZENE, p-	000121-73-3	1.0E+06	1.0E+04		4.7E+07	4.7E+05					1.0E+06	1.0E+04	
CHLOROPHENOL, 2-	000095-57-8			1.3E+04			6.1E+05						1.3E+04
CHLOROPHENYL METHYL SULFIDE, p-	000123-09-1												
CHLOROPHENYL METHYL SULFOXIDE	000934-73-6												
CHLOROPROPANE, 2-	000075-29-6									1.8E+03			

Table 3.5a. (continued)

Chemical	CASRN	Ingestion (mg/kg)			Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
CHLOROTHALONIL	001897-45-6	1.7E+06	1.7E+04	4.0E+04	7.7E+07	7.7E+05	1.8E+06				1.7E+06	1.7E+04	3.9E+04
CHLOROTOLUENE, o-	000095-49-8			5.3E+04			2.4E+06						5.2E+04
CHLOROPROPAM	000101-21-3			5.3E+05			2.4E+07						5.2E+05
CHLORPYRIFOS	002921-88-2			8.0E+03			3.6E+05						7.8E+03
CHLORPYRIFOS METHYL	005598-13-0			2.7E+04			1.2E+06						2.6E+04
CHLORSULFURON	064902-72-3			1.3E+05			6.1E+06						1.3E+05
CHLORTHIOPHOS	060238-56-4			2.1E+03			9.7E+04						2.1E+03
CHROMIUM (III) (INSOLUBLE SALTS)	016065-83-1			2.7E+06			6.1E+06						1.8E+06
CHROMIUM (VI)	018540-29-9			1.3E+04			1.2E+05	4.7E+07	4.7E+05				1.2E+04
CHRYSENE	000218-01-9	2.6E+06	2.6E+04		3.6E+07	3.6E+05					2.4E+06	2.4E+04	
COKE OVEN EMISSIONS	008007-45-2							8.7E+08	8.7E+06				
COPPER	007440-50-8												
COPPER CYANIDE	000544-92-3			1.3E+04			6.1E+06						1.3E+04
CREOSOTE	008001-58-9												
CRESOL, m-	000108-39-4			1.3E+05			6.1E+06						1.3E+05
CRESOL, o-	000095-48-7			1.3E+05			6.1E+06						1.3E+05
CRESOL, p-	000106-44-5			1.3E+04			3.9E+05						1.3E+04
CROTONALDEHYDE	000123-73-9	9.8E+03	9.8E+01		4.5E+05	4.5E+03					9.6E+03	9.6E+01	
CUMENE	000098-82-8			1.1E+05			4.9E+06			3.5E+02			3.5E+02
CYANAZINE	021725-46-2	2.2E+04	2.2E+02	5.3E+03	1.0E+06	1.0E+04	2.4E+05				2.2E+04	2.2E+02	5.2E+03
CYANIDE (CN-)	000057-12-5			5.3E+04			4.1E+06						5.3E+04

Table 3.5a. (continued)

Chemical	CASRN	Ingestion (mg/kg)			Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1
CYANOGEN	000460-19-5			1.1E+05			4.9E+06						1.0E+05
CYANOGEN BROMIDE	000506-68-3			2.4E+05			1.1E+07						1.1E+05
CYANOGEN CHLORIDE	000506-77-4			1.3E+05			6.1E+06						1.3E+05
CYCLOHEXANE, 1,2,3,4,5-PENTABROMO-6-CHLORO	000087-84-3	8.1E+05	8.1E+03		3.7E+07	3.7E+05					7.9E+05	7.9E+03	
CYCLOHEXANONE	000108-94-1			1.3E+07			6.1E+08						1.3E+07
CYCLOHEXYLAMINE	000108-91-8			5.3E+05			2.4E+07						5.2E+05
CYCLOPENTADIENE	000542-92-7												
CYHALOTHIRIN/KARATE	068085-85-8			1.3E+04			6.1E+05						1.3E+04
CYPERMETHRIN	052315-07-8			2.7E+04			1.2E+06						2.6E+04
CYROMAZINE	066215-27-8			2.0E+04			9.1E+05						2.0E+04
DACTHAL	001861-32-1			2.7E+04			1.2E+06						2.6E+04
DALAPON	000075-99-0			8.0E+04			3.6E+06						7.8E+04
DDD	000072-54-8	7.8E+04	7.8E+02		2.5E+06	2.5E+04					7.5E+04	7.5E+02	
DDE	000072-55-9	5.5E+04	5.5E+02		1.7E+06	1.7E+04					5.3E+04	5.3E+02	
DDT	000050-29-3	5.5E+04	5.5E+02	1.3E+03	1.7E+06	1.7E+04	4.2E+04	5.6E+09	5.6E+07		5.3E+04	5.3E+02	1.3E+03
DECABROMODIPHENYL ETHER	001163-19-5			2.7E+04			1.2E+06						2.6E+04
DEMETON	008065-48-3			1.1E+02			4.9E+03						1.0E+02
DI(2-ETHYLHEXYL)ADIPATE	000103-23-1	1.6E+07	1.6E+05	1.6E+06	7.1E+08	7.1E+06	7.3E+07				1.5E+07	1.5E+05	1.6E+06
DIALATE	002303-16-4	3.1E+05	3.1E+03		1.4E+07	1.4E+05					3.0E+05	3.0E+03	
DIAZINON	000333-41-5			2.4E+03			1.1E+05						2.3E+03
DIBENZ[A,H]ANTHRACENE	000053-70-3	2.6E+03	2.6E+01		3.6E+04	3.6E+02					2.4E+03	2.4E+01	

Table 3.5a. (continued)

Chemical	CASRN	Ingestion (mg/kg)			Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1
DIBROMO-3-CHLOROPROPANE, 1,2-	000096-12-8	1.3E+04	1.3E+02		6.1E+05	6.1E+03		8.0E+11	8.0E+09	1.6E+07	1.3E+04	1.3E+02	
DIBROMOBENZENE, 1,4-	000106-37-6			2.7E+04			1.2E+06						2.6E+04
DIBROMOCHLOROMETHANE	000124-48-1	2.2E+05	2.2E+03	5.3E+04	6.1E+06	6.1E+04	1.5E+06				2.1E+05	2.1E+03	5.1E+04
DIBROMODICHLOROMETHANE	000594-18-3												
DIBROMODIPHENYL ETHER, p,p'-	002050-47-7												
DIBROMOETHANE, 1,2-	000106-93-4	2.2E+02	2.2E+00		1.0E+04	1.0E+02		5.5E+03	7.8E+02	4.8E+02	2.1E+02	2.1E+00	
DIBROMOMETHANE (METHYLENE BROMIDE)	000074-95-3			2.7E+04			1.2E+06						2.6E+04
DIBUTYL PHTHALATE	000084-74-2			2.7E+05			1.2E+07						2.6E+05
DICAMBA	001918-00-9			8.0E+04			3.6E+06						7.8E+04
DICHLORO-2-BUTENE, 1,4-	000764-41-0							4.8E+03	6.3E+01				
DICHLOROBENZENE, 1,2-	000095-50-1			2.4E+05			1.1E+07			5.1E+02			5.1E+02
DICHLOROBENZENE, 1,3-	000541-73-1												
DICHLOROBENZENE, 1,4-	000106-46-7	7.8E+05	7.8E+03		3.2E+07	3.2E+05				3.3E+01	3.3E+01	3.3E+01	
DICHLOROBENZIDINE, 3,3'-	000091-94-1	4.1E+04	4.1E+02		1.9E+06	1.9E+04					4.1E+04	4.1E+02	
DICHLORODIFLUOROMETHANE	000075-71-8			5.3E+05			5.6E+06			1.0E+03			1.0E+03
DICHLOROETHANE, 1,1-	000075-34-3			2.7E+05			1.2E+07			9.8E+01			9.8E+01
DICHLOROETHANE, 1,2-	000107-06-2	2.0E+05	2.0E+03		9.3E+06	9.3E+04		6.7E+02	6.7E+02		6.7E+02	6.7E+02	
DICHLOROETHYLENE, 1,1-	000075-35-4	3.1E+04	3.1E+02	2.4E+04	1.4E+06	1.4E+04	1.1E+06	1.2E+03	2.4E+01		1.2E+03	2.2E+01	1.2E+03
DICHLOROETHYLENE, 1,2-, (MIXED ISOMERS)	000540-59-0			2.4E+04			1.1E+06						2.3E+04
DICHLOROETHYLENE, 1,2-C-	000156-59-2			2.7E+04			1.2E+06						2.6E+04
DICHLOROETHYLENE, 1,2-T-	000156-60-5			5.3E+04			2.4E+06						5.2E+04

Table 3.5a. (continued)

Chemical	CASRN	Ingestion (mg/kg)			Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1
DICHLOROPHENOL, 2,4-	000120-83-2			8.0E+03			3.0E+05						7.8E+03
DICHLOROPHENOXY ACETIC ACID, 2,4-	000094-75-7			2.7E+04			1.2E+06						2.6E+04
DICHLOROPHENOXYBUTYRIC ACID, 4-(2,4-	000094-82-6			2.1E+04			9.7E+05						2.1E+04
DICHLOROPROPANE, 1,2-	000078-87-5	2.7E+05	2.7E+03		9.2E+06	9.2E+04				4.8E+02	4.8E+02		
DICHLOROPROPANOL, 2,3-	000616-23-9			8.0E+03			3.6E+05						7.8E+03
DICHLOROPROPENE, 1,3-	000542-75-6	1.0E+05	1.0E+03	8.0E+02	2.6E+06	2.6E+04	2.0E+04	3.7E+03	2.8E+03	3.7E+03	3.7E+03	7.4E+02	7.5E+02
DICHLOROVOS	000062-73-7	6.4E+04	6.4E+02	1.3E+03	2.9E+06	2.9E+04	6.1E+04			3.9E+07	6.3E+04	6.3E+02	1.3E+03
DICOFOL	000115-32-2												
DICYCLOPENTADIENE	000077-73-6			8.0E+04			3.6E+06			5.3E+02			5.3E+02
DIELDRIN	000060-57-1	1.2E+03	1.2E+01	1.3E+02	2.7E+04	2.7E+02	3.0E+03	1.2E+08	1.2E+06		1.1E+03	1.1E+01	1.3E+02
DIETHYL PHTHALATE	000084-66-2			2.1E+06			8.7E+07						2.1E+06
DIETHYL-P-NITROPHENYLPHOSPHATE	000311-45-5												
DIETHYLENE GLYCOL DINITRATE (DEGDN)	000693-21-0												
DIETHYLENE GLYCOL MONOBUTYL ETHER	000112-34-5									1.6E+09			
DIETHYLENE GLYCOL MONOETHYL ETHER	000111-90-0			5.3E+06			2.4E+08						5.2E+06
DIETHYLFORMAMIDE	000617-84-5			2.9E+04			1.3E+06						2.9E+04
DIETHYLSTILBESTEROL	000056-53-1	4.0E+00	4.0E-02		1.8E+02	1.8E+00		3.9E+06	3.9E+04		3.9E+00	3.9E-02	
DIFENZOQUAT	043222-48-6			2.1E+05			9.7E+06						2.1E+05
DIFLUBENZURON	035367-38-5			5.3E+04			2.4E+06						5.2E+04
DIFLUOROETHANE, 1,1-	000075-37-6									3.1E+12			
DIISOPROPYL METHYLPHOSPHONATE	001445-75-6			2.1E+05			9.7E+06						2.1E+05

Table 3.5a. (continued)

Chemical	CASRN	Ingestion (mg/kg)			Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
DIMETHPIN	055290-64-7			5.3E+04			2.4E+06						5.2E+04
DIMETHOATE	000060-51-5			5.3E+02			2.4E+04						5.2E+02
DIMETHOXYBENZIDINE, 3,3'-	000119-90-4	1.3E+06	1.3E+04		6.1E+07	6.1E+05					1.3E+06	1.3E+04	
DIMETHYL SULFATE	000077-78-1												
DIMETHYLANILINE HCL, 2,4-	021436-96-4	3.2E+04	3.2E+02		1.5E+06	1.5E+04					3.1E+04	3.1E+02	
DIMETHYLANILINE, 2,4-	000095-68-1	2.5E+04	2.5E+02		1.1E+06	1.1E+04					2.4E+04	2.4E+02	
DIMETHYLANILINE, N,N-	000121-69-7			5.3E+03			2.4E+05						5.2E+03
DIMETHYLBENZIDINE, 3,3'-	000119-93-7	2.0E+03	2.0E+01		9.2E+04	9.2E+02					2.0E+03	2.0E+01	
DIMETHYLETHYL LEAD	107584-40-7												
DIMETHYLFORMAMIDE	000068-12-2			2.7E+05			1.2E+07			2.3E+09			2.6E+05
DIMETHYLHYDRAZINE, 1,2-	000540-73-8												
DIMETHYLPHENOL, 2,4-	000105-67-9			5.3E+04			2.4E+06						5.2E+04
DIMETHYLPHENOL, 2,6-	000576-26-1			1.6E+03			7.3E+04						1.6E+03
DIMETHYLPHENOL, 3,4-	000095-65-8			2.7E+03			1.2E+05						2.6E+03
DIMETHYLPHthalate	000131-11-3												
DIMETHYLTEREPHTHALATE	000120-61-6			2.7E+05			1.2E+07						2.6E+05
DINITRO-O-CYCLOHEXYL PHENOL, 4,6-	000131-89-5			5.3E+03			2.4E+05						5.2E+03
DINITROBENZENE, 1,2-	000528-29-0			1.1E+03			4.5E+04						1.0E+03
DINITROBENZENE, 1,3-	000099-65-0			2.7E+02			1.2E+04						2.6E+02
DINITROBENZENE, 1,4-	000100-25-4			1.1E+03			4.9E+04						1.0E+03
DINITROPHENOL, 2,4-	000051-28-5			5.3E+03			2.4E+05						5.2E+03

Table 3.5a. (continued)

Chemical	CASRN	Ingestion (mg/kg)			Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
DINITROTOLUENE, 2,4-	000121-14-2	2.7E+04	2.7E+02	5.3E+03	1.1E+06	1.1E+04	2.1E+05				2.7E+04	2.7E+02	5.2E+03
DINITROTOLUENE, 2,6-	000606-20-2	2.7E+04	2.7E+02	2.7E+03	1.1E+06	1.1E+04	1.0E+05				2.7E+04	2.7E+02	2.6E+03
DINOSEB	000088-85-7			2.7E+03			1.2E+05						2.6E+03
DIOXANE, 1,4-	000123-91-1	1.7E+06	1.7E+04		7.7E+07	7.7E+05					1.7E+06	1.7E+04	
DIPHENAMID	000957-51-7			8.0E+04			3.6E+06						7.8E+04
DIPHENYLAMINE	000122-39-4			6.7E+04			3.0E+06						6.5E+04
DIPHENYLHYDRAZINE, 1,2-	000122-66-7	2.3E+04	2.3E+02		1.1E+06	1.1E+04		2.4E+09	2.4E+07		2.3E+04	2.3E+02	
DIQUAT	000085-00-7			5.9E+03			2.7E+05						5.7E+03
DIRECT BLACK 38	001937-37-7	2.2E+03	2.2E+01		9.9E+04	9.9E+02					2.1E+03	2.1E+01	
DIRECT BLUE 6	002602-46-2	2.3E+03	2.3E+01		1.0E+05	1.0E+03					2.3E+03	2.3E+01	
DIRECT BROWN 95	016071-86-6	2.0E+03	2.0E+01		9.1E+04	9.1E+02					2.0E+03	2.0E+01	
DIRECT SKY BLUE	002610-05-1												
DISULFOTON	000298-04-4			1.1E+02			4.9E+03						1.0E+02
DIURON	000330-54-1			5.3E+03			2.4E+05						5.2E+03
DODINE	002439-10-3			1.1E+04			4.9E+05						1.0E+04
ENDOSULFAN	000115-29-7			1.6E+04			7.3E+05						1.6E+04
ENDOTHALL	000145-73-3			5.3E+04			2.4E+06						5.2E+04
ENDRIN	000072-20-8			8.0E+02			7.3E+02						3.8E+02
EPICHLOROHYDRIN	000106-89-8	1.9E+06	1.9E+04	5.3E+03	8.6E+07	8.6E+05	2.4E+05	3.2E+03	3.2E+03	1.7E+03	3.2E+03	3.2E+03	1.3E+03
EPOXYBUTANE, 1,2-	000106-88-7									1.6E+09			
EPTC	000759-94-4			6.7E+04			3.0E+06						6.5E+04

Table 3.5a. (continued)

Chemical	CASRN	Ingestion (mg/kg)			Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
ETHEPHON	016672-87-0			1.3E+04			6.1E+05						1.3E+04
ETHION	000563-12-2			1.3E+03			6.1E+04						1.3E+03
ETHOXYETHANOL ACETATE, 2-	000111-15-9			8.0E+05			3.6E+07						7.8E+05
ETHOXYETHANOL, 2-	000110-80-5			1.1E+06			4.9E+07			1.6E+10			1.0E+06
ETHYL ACETATE	000141-78-6			2.4E+06			1.1E+08						2.3E+06
ETHYL ACRYLATE	000140-88-5	3.9E+05	3.9E+03		1.8E+07	1.8E+05					3.8E+05	3.8E+03	
ETHYL CHLORIDE	000075-00-3									1.6E+02			
ETHYL ETHER	000060-29-7			5.3E+05			2.4E+07						5.2E+05
ETHYL METHACRYLATE	000097-63-2			2.4E+05			1.1E+07						2.3E+05
ETHYL-p-NITROPHENYL PHOSPHONATE	002104-64-5			2.7E+01			1.2E+03						2.6E+01
ETHYLBENZENE	000100-41-4			2.7E+05			1.2E+07			4.8E-01			4.8E-01
ETHYLENE CYANOHYDRIN	000109-78-4			8.0E+05			3.6E+07						7.8E+05
ETHYLENE DIAMINE	000107-15-3			5.3E+04			2.4E+06						5.2E+04
ETHYLENE GLYCOL	000107-21-1			5.3E+06			2.4E+08						5.2E+06
ETHYLENE GLYCOL MONOBUTYL ETHER	000111-76-2									1.6E+09			
ETHYLENE OXIDE	000075-21-8	1.8E+04	1.8E+02		8.3E+05	8.3E+03		2.5E+04	2.5E+02		1.1E+04	1.1E+02	
ETHYLENE THIOUREA	000096-45-7	1.7E+05	1.7E+03	2.1E+02	7.7E+06	7.7E+04	9.7E+03				1.7E+05	1.7E+03	2.1E+02
ETHYLPHTHALYL ETHYL GLYCOLATE	000084-72-0			8.0E+06			3.6E+08						7.8E+06
EXPRESS	101200-48-0			2.1E+04			9.7E+05						2.1E+04
FENAMIPHOS	022224-92-6			6.7E+02			3.0E+04						6.5E+02
FENPROPATHRIN	039515-41-8			6.7E+04			3.0E+06						6.5E+04

Table 3.5a. (continued)

Chemical	CASRN	Ingestion (mg/kg)			Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
FLUOMETURON	002164-17-2			3.5E+04			1.6E+06						3.4E+04
FLUORANTHENE	000206-44-0			1.1E+05			1.5E+06						9.9E+04
FLUORENE	000086-73-7			1.1E+05			4.9E+06						1.0E+05
FLUORIDE	007782-41-4			1.6E+05			7.1E+07						1.6E+05
FLURIDONE	039756-60-4			2.1E+05			9.7E+06						2.1E+05
FLURPRIMIDOL	056425-91-3			5.3E+04			2.4E+06						5.2E+04
FLUTOLANIL	066332-96-5			1.6E+05			7.3E+06						1.6E+05
FLUVALINATE	069409-94-5			2.7E+04			1.2E+06						2.6E+04
FOLPET	000133-07-3	5.3E+06	5.3E+04	2.7E+05	2.4E+08	2.4E+06	1.2E+07				5.2E+06	5.2E+04	2.6E+05
FOMESAFEN	072178-02-0	9.8E+04	9.8E+02		4.5E+06	4.5E+04					9.6E+04	9.6E+02	
FONOFOS	000944-22-9			5.3E+03			2.4E+05						5.2E+03
FORMALDEHYDE	000050-00-0			5.3E+05			2.4E+07	4.3E+10	4.3E+08				5.2E+05
FORMIC ACID	000064-18-6			5.3E+06			2.4E+08						5.2E+06
FOSETYL-AL	039148-24-8			8.0E+06			3.6E+08						7.8E+06
FURAN	000110-00-9			2.7E+03			1.2E+05						2.6E+03
FURAZOLIDONE	000067-45-8	4.9E+03	4.9E+01		2.2E+05	2.2E+03					4.8E+03	4.8E+01	
FURFURAL	000098-01-1			8.0E+03			3.6E+05			3.9E+09			7.8E+03
FURIUM	000331-82-8	3.7E+02	3.7E+00		1.7E+04	1.7E+02					3.6E+02	3.6E+00	
FURMECYCLOX	060568-05-0	6.2E+05	6.2E+03		2.8E+07	2.8E+05					6.1E+05	6.1E+03	
GLUFOSINATE-AMMONIUM	077182-82-2			1.1E+03			4.9E+04						1.0E+03
GLYCIDYL	000765-34-4			1.1E+03			4.9E+04			7.8E+07			1.0E+03

Table 3.5a. (continued)

Chemical	CASRN	Ingestion (mg/kg)			Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
GLYPHOSATE	001071-83-6			2.7E+05			1.2E+07						2.6E+05
GOAL	042874-03-3			8.0E+03			3.6E+05						7.8E+03
HALOXYTOP-METHYL	069806-40-2			1.3E+02			6.1E+03						1.3E+02
HARMONY	079277-27-3			3.5E+04			1.6E+06						3.4E+04
HEPTACHLOR	000076-44-8	4.1E+03	4.1E+01	1.3E+03	1.4E+05	1.4E+03	4.4E+04	4.3E+08	4.3E+06		4.0E+03	4.0E+01	1.3E+03
HEPTACHLOR EPOXIDE	001024-57-3	2.0E+03	2.0E+01	3.5E+01	6.7E+04	6.7E+02	1.1E+03	2.1E+08	2.1E+06		2.0E+03	2.0E+01	3.4E+01
HEPTANE, N-	000142-82-5												
HEXABROMOBENZENE	000087-82-1			5.3E+03			2.4E+05						5.2E+03
HEXACHLOROBENZENE	000118-74-1	1.2E+04	1.2E+02	2.1E+03	5.3E+05	5.3E+03	9.7E+04	1.2E+09	1.2E+07		1.1E+04	1.1E+02	2.1E+03
HEXACHLOROBUTADIENE	000087-68-3	2.4E+05	2.4E+03	5.3E+02	1.1E+07	1.1E+05	2.4E+04	2.5E+10	2.5E+08		2.3E+05	2.3E+03	5.2E+02
HEXACHLOROCYCLOHEXANE, ALPHA-	000319-84-6	3.0E+03	3.0E+01		1.3E+05	1.3E+03		3.0E+08	3.0E+06		2.9E+03	2.9E+01	
HEXACHLOROCYCLOHEXANE, BETA-	000319-85-7	1.0E+04	1.0E+02		4.3E+05	4.3E+03		1.1E+09	1.1E+07		1.0E+04	1.0E+02	
HEXACHLOROCYCLOHEXANE, DELTA-	000319-86-8												
HEXACHLOROCYCLOHEXANE, EPSILON	006108-10-7												
HEXACHLOROCYCLOHEXANE, GAMMA-	000058-89-9	1.4E+04	1.4E+02	8.0E+02	6.3E+05	6.3E+03	3.5E+04				1.4E+04	1.4E+02	7.8E+02
HEXACHLOROCYCLOHEXANE, TECHNICAL	000608-73-1	1.0E+04	1.0E+02		4.7E+05	4.7E+03		1.1E+09	1.1E+07		1.0E+04	1.0E+02	
HEXACHLOROCYCLOPENTADIENE	000077-47-4			1.9E+04			8.5E+05			5.5E+06			1.8E+04
HEXACHLORODIBENZO-P-DIOXIN, MIXTURE	019408-74-3	3.0E+00	3.0E-02		1.4E+02	1.4E+00					2.9E+00	2.9E-02	
HEXACHLOROETHANE	000067-72-1	1.3E+06	1.3E+04	2.7E+03	6.1E+07	6.1E+05	1.2E+05	1.4E+11	1.4E+09		1.3E+06	1.3E+04	2.6E+03
HEXACHLOROPHENE	000070-30-4			8.0E+02			3.6E+04						7.8E+02
HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE (RDX)	000121-82-4	1.7E+05	1.7E+03	8.0E+03	7.7E+06	7.7E+04	3.6E+05				1.7E+05	1.7E+03	7.8E+03

Table 3.5a. (continued)

Chemical	CASRN	Ingestion (mg/kg)			Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1
HEXAMETHYLENE DIISOCYANATE, 1,6-	000822-06-0									7.8E+05			
HEXANE, N-	000110-54-3			1.6E+05			5.8E+06			9.1E+01			9.1E+01
HEXAZINONE	051235-04-2			8.8E+04			4.0E+06						8.6E+04
HYDRAZINE	000302-01-2	6.2E+03	6.2E+01		2.8E+05	2.8E+03		1.1E+08	1.1E+06		6.1E+03	6.1E+01	
HYDRAZINE SULFATE	010034-93-2	6.2E+03	6.2E+01		2.8E+05	2.8E+03		1.1E+08	1.1E+06		6.1E+03	6.1E+01	
HYDROGEN CHLORIDE	007647-01-0									5.5E+08			
HYDROGEN CYANIDE	000074-90-8			5.3E+04			4.1E+06			2.3E+08			5.3E+04
HYDROGEN SULFIDE	007783-06-4			8.0E+03			3.6E+06			7.0E+07			8.0E+03
HYDROQUINONE	000123-31-9			1.1E+05			4.9E+06						1.0E+05
IMAZALIL	035554-44-0			3.5E+04			1.6E+06						3.4E+04
IMAZAQUIN	081335-37-7			6.7E+05			3.0E+07						6.5E+05
INDENO[1,2,3-cd]PYRENE	000193-39-5	2.6E+04	2.6E+02		3.6E+05	3.6E+03					2.4E+04	2.4E+02	
IPIRONE	036734-19-7			1.1E+05			4.9E+06						1.0E+05
ISOBUTYL ALCOHOL	000078-83-1			8.0E+05			3.6E+07						7.8E+05
ISOPHORONE	000078-59-1	2.0E+07	2.0E+05	5.3E+05	8.9E+08	8.9E+06	2.4E+07				1.9E+07	1.9E+05	5.2E+05
ISOPROPALIN	033820-53-0			4.0E+04			1.8E+06						3.9E+04
ISOPROPYL METHYL PHOSPHONIC ACID	001832-54-8			2.7E+05			1.2E+07						2.6E+05
ISOXABEN	082558-50-7			1.3E+05			6.1E+06						1.3E+05
KARATE	091465-08-6			1.3E+04			6.1E+05						1.3E+04
KERB	023950-58-5			2.0E+05			9.1E+06						2.0E+05
LACTOFEN	077501-63-4			5.3E+03			2.4E+05						5.2E+03

Table 3.5a. (continued)

Chemical	CASRN	Ingestion (mg/kg)			Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
LEAD ALKYLs	NA												
LEAD AND COMPOUNDS	007439-92-1												
LINURON	000330-55-2			5.3E+03			2.4E+05						5.2E+03
LONDAX	083055-99-6			5.3E+05			2.4E+07						5.2E+05
MALATHION	000121-75-5			5.3E+04			2.4E+06						5.2E+04
MALEIC ANHYDRIDE	000108-31-6			2.7E+05			1.2E+07						2.6E+05
MALEIC HYDRAZIDE	000123-33-1			1.3E+06			6.1E+07						1.3E+06
MALONONITRILE	000109-77-3			5.3E+01			2.4E+03						5.2E+01
MANCOZEB	008018-01-7			8.0E+04			3.6E+06						7.8E+04
MANEB	012427-38-2			1.3E+04			6.1E+05						1.3E+04
MANGANESE (Diet)	007439-96-5			3.7E+05			6.8E+06			3.9E+06			3.2E+05
MCPA	000094-74-6			1.3E+03			6.1E+04						1.3E+03
MCPB	000094-81-5			2.7E+04			1.2E+06						2.6E+04
MCPP	000093-65-2			2.7E+03			1.2E+05						2.6E+03
MEPHOSFOLAN	000950-10-7			2.4E+02			1.1E+04						2.3E+02
MEPIQUAT CHLORIDE	024307-26-4			8.0E+04			3.6E+06						7.8E+04
MERCURY, INORGANIC	007439-97-6			8.0E+02			2.5E+04			2.3E+07			7.7E+02
MERPHOS	000150-50-5			8.0E+01			3.6E+03						7.8E+01
MERPHOS OXIDE	000078-48-8			8.0E+01			3.6E+03						7.8E+01
METALAXYL	057837-19-1			1.6E+05			7.3E+06						1.6E+05
METHACRYLONITRILE	000126-98-7			2.7E+02			1.2E+04			1.5E+03			2.2E+02

Table 3.5a. (continued)

Chemical	CASRN	Ingestion (mg/kg)			Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
METHAMIDOPHOS	010265-92-6			1.3E+02			6.1E+03						1.3E+02
METHANOL	000067-56-1			1.3E+06			6.1E+07						1.3E+06
METHIDATHION	000950-37-8			2.7E+03			1.2E+05						2.6E+03
METHOMYL	016752-77-5			6.7E+04			3.0E+06						6.5E+04
METHOXY-5-NITROANILINE, 2-	000099-59-2	4.1E+05	4.1E+03		1.8E+07	1.8E+05					4.0E+05	4.0E+03	
METHOXYCHLOR	000072-43-5			1.3E+04			6.1E+05						1.3E+04
METHOXYETHANOL ACETATE, 2-	000110-49-6			5.3E+03			2.4E+05						5.2E+03
METHOXYETHANOL, 2-	000109-86-4			2.7E+03			1.2E+05			1.6E+09			2.6E+03
METHYL ACETATE	000079-20-9			2.7E+06			1.2E+08						2.6E+06
METHYL ACRYLATE	000096-33-3			8.0E+04			3.6E+06						7.8E+04
METHYL ETHYL KETONE	000078-93-3			1.6E+06			5.8E+07			9.3E+03			9.3E+03
METHYL ISOBUTYL KETONE	000108-10-1			2.1E+05			9.7E+06			7.0E+02			7.0E+02
METHYL MERCURY	022967-92-6			8.0E+02			3.3E+04						7.8E+02
METHYL METHACRYLATE	000080-62-6			2.1E+05			9.7E+06						2.1E+05
METHYL PARATHION	000298-00-0			6.7E+02			3.0E+04						6.5E+02
METHYL STYRENE (MIXED ISOMERS)	025013-15-4			1.6E+04			7.3E+05			3.1E+09			1.6E+04
METHYL TERT-BUTYL ETHER (MTBE)	001634-04-4									2.3E+11			
METHYL-5-NITROANILINE, 2-	000099-55-8	5.6E+05	5.6E+03		2.6E+07	2.6E+05					5.5E+05	5.5E+03	
METHYLANILINE HYDROCHLORIDE, 2-	000636-21-5	1.0E+05	1.0E+03		4.7E+06	4.7E+04					1.0E+05	1.0E+03	
METHYLCYCLOHEXANE	000108-87-2									2.3E+11			
METHYLENE CHLORIDE	000075-09-2	2.5E+06	2.5E+04	1.6E+05	1.1E+08	1.1E+06	6.9E+06			1.0E+03	1.0E+03		1.0E+03

Table 3.5a. (continued)

Chemical	CASRN	Ingestion (mg/kg)			Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1
METHYLENE-BIS(2-CHLOROANILINE), 4,4'-	000101-14-4	1.4E+05	1.4E+03	1.9E+03	6.5E+06	6.5E+04	8.5E+04	1.5E+10	1.5E+08		1.4E+05	1.4E+03	1.8E+03
METHYLENE-BIS(N,N-DIMETHYL) ANILINE, 4,4'-	000101-61-1	4.1E+05	4.1E+03		1.8E+07	1.8E+05					4.0E+05	4.0E+03	
METHYLENEBISBENZENAMINE, 4,4'-	000101-77-9												
METHYLENEDIPHENYL ISOCYANATE, 4,4'-	000101-68-8									1.6E+06			
METHYLSTYRENE, ALPHA-	000098-83-9			1.9E+05			8.5E+06						1.8E+05
METHYLTRIETHYL LEAD	001762-28-3												
METOLACHLOR	051218-45-2			4.0E+05			1.8E+07						3.9E+05
METRIBUZIN	021087-64-9			6.7E+04			3.0E+06						6.5E+04
MIREX	002385-85-5			5.3E+02			2.4E+04						5.2E+02
MOLINATE	002212-67-1			5.3E+03			2.4E+05						5.2E+03
MOLYBDENUM	007439-98-7			1.3E+04			2.3E+06						1.3E+04
MONOCHLORAMINE	010599-90-3			2.7E+05			1.2E+07						2.6E+05
MONOCHLOROBUTANES	025154-42-1			1.1E+06			4.9E+07						1.0E+06
NALED	000300-76-5			5.3E+03			2.4E+05						5.2E+03
NAPHTHALENE	000091-20-3												
NAPROPAMIDE	015299-99-7			2.7E+05			1.2E+07						2.6E+05
NIAGARA BLUE 4B	002429-74-5												
NICKEL CARBONYL	013463-39-3												
NICKEL REFINERY DUST	NA							2.3E+09	2.3E+07				
NICKEL SOLUBLE SALTS	007440-02-0			5.3E+04			6.5E+06						5.3E+04
NICKEL SUBSULFIDE	012035-72-2							1.1E+09	1.1E+07				

Table 3.5a. (continued)

Chemical	CASRN	Ingestion (mg/kg)			Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
NITROSOPYRROLIDINE, N-	000930-55-2	8.9E+03	8.9E+01		4.0E+05	4.0E+03		9.1E+08	9.1E+06		8.7E+03	8.7E+01	
NITROTOLUENE, m-	000099-08-1			2.7E+04			1.2E+06						2.6E+04
NITROTOLUENE, o-	000088-72-2			2.7E+04			1.2E+06						2.6E+04
NITROTOLUENE, p-	000099-99-0			2.7E+04			1.2E+06						2.6E+04
NORFLURAZON	027314-13-2			1.1E+05			4.9E+06						1.0E+05
NUSTAR	085509-19-9			1.9E+03			8.5E+04						1.8E+03
OCTABROMODIPHENYL ETHER	032536-52-0			8.0E+03			3.6E+05						7.8E+03
OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRA (HMX)	002691-41-0			1.3E+05			6.1E+06						1.3E+05
OCTAMETHYLPYROPHOSPHORAMIDE	000152-16-9			5.3E+03			2.4E+05						5.2E+03
OCTYL PHTHALATE, DI-N-	000117-84-0			5.3E+04			2.2E+06						5.2E+04
ORYZALIN	019044-88-3			1.3E+05			6.1E+06						1.3E+05
OXADIAZON	019666-30-9			1.3E+04			6.1E+05						1.3E+04
OXAMYL	023135-22-0			6.7E+04			3.0E+06						6.5E+04
PACLOBUTRAZOL	076738-62-0			3.5E+04			1.6E+06						3.4E+04
PARAQUAT	001910-42-5			1.2E+04			5.5E+05						1.2E+04
PARATHION	000056-38-2			1.6E+04			7.3E+05						1.6E+04
PEBULATE	001114-71-2			1.3E+05			6.1E+06						1.3E+05
PENDIMETHALIN	040487-42-1			1.1E+05			4.9E+06						1.0E+05
PENTABROMODIPHENYL ETHER	032534-81-9			5.3E+03			2.4E+05						5.2E+03
PENTACHLOROBENZENE	000608-93-5			2.1E+03			9.7E+04						2.1E+03

Table 3.5a. (continued)

Chemical	CASRN	Ingestion (mg/kg)			Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1
PENTACHLOROCYCLOPENTADIENE	025329-35-5												
PENTACHLORONITROBENZENE	000082-68-8	7.2E+04	7.2E+02	8.0E+03	3.3E+06	3.3E+04	3.6E+05				7.0E+04	7.0E+02	7.8E+03
PENTACHLOROPHENOL	000087-86-5	1.6E+05	1.6E+03	8.0E+04	7.1E+06	7.1E+04	3.6E+06				1.5E+05	1.5E+03	7.8E+04
PERMETHRIN	052645-53-1			1.3E+05			6.1E+06						1.3E+05
PHENANTHRENE	000085-01-8												
PHENMEDIPHAM	013684-63-4			6.7E+05			3.0E+07						6.5E+05
PHENOL	000108-95-2			1.6E+06			6.5E+07						1.6E+06
PHENYLENEDIAMINE, m-	000108-45-2			1.6E+04			7.3E+05						1.6E+04
PHENYLENEDIAMINE, o-	000095-54-5	4.0E+05	4.0E+03		1.8E+07	1.8E+05					3.9E+05	3.9E+03	
PHENYLENEDIAMINE, p-	000106-50-3			5.1E+05			2.3E+07						4.9E+05
PHENYLMERCURIC ACETATE	000062-38-4			2.1E+02			9.7E+03						2.1E+02
PHENYLPHENOL, 2-	000090-43-7	9.6E+06	9.6E+04		4.4E+08	4.4E+06					9.4E+06	9.4E+04	
PHORATE	000298-02-2			5.3E+02			2.4E+04						5.2E+02
PHOSMET	000732-11-6			5.3E+04			2.4E+06						5.2E+04
PHOSPHINE	007803-51-2			8.0E+02			3.6E+04			2.3E+06			7.8E+02
PHTHALIC ACID, p-	000100-21-0			2.7E+06			1.2E+08						2.6E+06
PHTHALIC ANHYDRIDE	000085-44-9			5.3E+06			2.4E+08			9.4E+09			5.2E+06
PICLORAM	001918-02-1			1.9E+05			8.5E+06						1.8E+05
PRIMIPHOS-METHYL	029232-93-7			2.7E+04			1.2E+06						2.6E+04
POLYBROMINATED BIPHENYLS	NA	2.1E+03	2.1E+01	1.9E+01	8.9E+04	8.9E+02	7.9E+02				2.0E+03	2.0E+01	1.8E+01
POLYCHLORINATED BIPHENYLS	001336-36-3	2.4E+03	2.4E+01		9.9E+04	9.9E+02					2.4E+03	2.4E+01	

Table 3.5a. (continued)

Chemical	CASRN	Ingestion (mg/kg)			Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1
POTASSIUM CYANIDE	000151-50-8			1.3E+05			6.1E+06						1.3E+05
POTASSIUM SILVER CYANIDE	000506-61-6			5.3E+05			2.4E+08						5.3E+05
PROCHLORAZ	067747-09-5	1.2E+05	1.2E+03	2.4E+04	5.7E+06	5.7E+04	1.1E+06				1.2E+05	1.2E+03	2.3E+04
PROFLURALIN	026399-36-0			1.6E+04			7.3E+05						1.6E+04
PROMETON	001610-18-0			4.0E+04			1.8E+06						3.9E+04
PROMETRYN	007287-19-6			1.1E+04			4.9E+05						1.0E+04
PROPACHLOR	001918-16-7			3.5E+04			1.6E+06						3.4E+04
PROPANIL	000709-98-8			1.3E+04			6.1E+05						1.3E+04
PROPARGITE	002312-35-8			5.3E+04			2.4E+06						5.2E+04
PROPARGYL ALCOHOL	000107-19-7			5.3E+03			2.4E+05						5.2E+03
PROPAZINE	000139-40-2			5.3E+04			2.4E+06						5.2E+04
PROPHAM	000122-42-9			5.3E+04			2.4E+06						5.2E+04
PROPICONAZOLE	060207-90-1			3.5E+04			1.6E+06						3.4E+04
PROPYLENE GLYCOL	000057-55-6			5.3E+07			2.4E+09						5.2E+07
PROPYLENE GLYCOL MONOETHYL ETHER	001569-02-4			1.9E+06			8.5E+07						1.8E+06
PROPYLENE GLYCOL MONOMETHYL ETHER	000107-98-2			1.9E+06			8.5E+07			1.6E+11			1.8E+06
PROPYLENE OXIDE	000075-56-9	7.8E+04	7.8E+02		3.5E+06	3.5E+04		2.8E+04	2.2E+04	2.8E+04	2.8E+04	7.3E+02	
PURSUIT	081335-77-5			6.7E+05			3.0E+07						6.5E+05
PYDRIN	051630-58-1			6.7E+04			3.0E+06						6.5E+04
PYRENE	000129-00-0			8.0E+04			1.1E+06						7.5E+04
PYRIDINE	000110-86-1			2.7E+03			1.2E+05						2.6E+03

Table 3.5a. (continued)

Chemical	CASRN	Ingestion (mg/kg)			Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
QUINALPHOS	013593-03-8			1.3E+03			6.1E+04						1.3E+03
QUINOLINE	000091-22-5	1.6E+03	1.6E+01		7.1E+04	7.1E+02					1.5E+03	1.5E+01	
SYSTHANE	088671-89-0			6.7E+04			3.0E+06						6.5E+04
REFRACTORY CERAMIC FIBERS	NA												
RESMETHRIN	010453-86-8			8.0E+04			3.6E+06						7.8E+04
RONNEL	000299-84-3			1.3E+05			6.1E+06						1.3E+05
ROTENONE	000083-79-4			1.1E+04			4.9E+05						1.0E+04
SAVEY	078587-05-0			6.7E+04			3.0E+06						6.5E+04
SELENIUS ACID	007783-00-8			1.3E+04			5.3E+05						1.3E+04
SELENIUM	007782-49-2			1.3E+04			2.7E+06						1.3E+04
SELENIUM SULFIDE	007446-34-6												
SELENOUREA	000630-10-4			1.3E+04			6.1E+05						1.3E+04
SETHOXYDIM	074051-80-2			2.4E+05			1.1E+07						2.3E+05
SILVER	007440-22-4			1.3E+04			1.1E+06						1.3E+04
SILVER CYANIDE	000506-64-9			2.7E+05			1.2E+07						2.6E+05
SIMAZINE	000122-34-9	1.6E+05	1.6E+03	1.3E+04	7.1E+06	7.1E+04	6.1E+05				1.5E+05	1.5E+03	1.3E+04
SODIUM ACIFLUORFEN	062476-59-9			3.5E+04			1.6E+06						3.4E+04
SODIUM AZIDE	026628-22-8			1.1E+04			4.9E+05						1.0E+04
SODIUM CYANIDE	000143-33-9			1.1E+05			4.9E+07						1.1E+05
SODIUM DIETHYLDITHIOCARBAMATE	000148-18-5	6.9E+04	6.9E+02	8.0E+04	3.1E+06	3.1E+04	3.6E+06				6.8E+04	6.8E+02	7.8E+04
SODIUM FLUOROACETATE	000062-74-8			5.3E+01			2.4E+03						5.2E+01

Table 3.5a. (continued)

Chemical	CASRN	Ingestion (mg/kg)			Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1
SODIUM METAVANADATE	013718-26-8			2.7E+03			1.2E+05						2.6E+03
STROFOS (TETRACHLOROVINPHOS)	000961-11-5	7.8E+05	7.8E+03	8.0E+04	3.5E+07	3.5E+05	3.6E+06				7.6E+05	7.6E+03	7.8E+04
STRONTIUM, STABLE	007440-24-6			1.6E+06			7.3E+08						1.6E+06
STRYCHNINE	000057-24-9			8.0E+02			3.6E+04						7.8E+02
STYRENE	000100-42-5			5.3E+05			2.4E+07			6.7E+02			6.7E+02
TCDD, 2,3,7,8-	001746-01-6	1.2E-01	1.2E-03		5.7E+00	5.7E-02		1.3E+04	1.3E+02		1.2E-01	1.2E-03	
TCMTB	021564-17-0			8.0E+04			3.6E+06						7.8E+04
TEBUTHIURON	034014-18-1			1.9E+05			8.5E+06						1.8E+05
TEMPEPHOS	003383-96-8			5.3E+04			2.4E+06						5.2E+04
TERBACIL	005902-51-2			3.5E+04			1.6E+06						3.4E+04
TERBUFOS	013071-79-9			6.7E+01			3.0E+03						6.5E+01
TERBUTRYN	000886-50-0			2.7E+03			1.2E+05						2.6E+03
TETRABUTYL LEAD	001920-90-7												
TETRACHLOROBENZENE, 1,2,4,5-	000095-94-3			8.0E+02			3.6E+04						7.8E+02
TETRACHLOROETHANE, 1,1,1,2-	000630-20-6	7.2E+05	7.2E+03	8.0E+04	3.3E+07	3.3E+05	3.6E+06	7.9E+02	7.9E+02		7.9E+02	7.9E+02	7.9E+02
TETRACHLOROETHANE, 1,1,2,2-	000079-34-5	9.3E+04	9.3E+02		3.0E+06	3.0E+04		1.1E+03	1.1E+03		1.1E+03	6.3E+02	
TETRACHLOROETHYLENE	000127-18-4			2.7E+04			1.2E+06						2.6E+04
TETRACHLOROPHENOL, 2,3,4,6-	000058-90-2			8.0E+04			3.6E+06						7.8E+04
TETRACHLOROTOLUENE, p- ALPHA, ALPHA, ALPHA-	005216-25-1	9.3E+02	9.3E+00		4.2E+04	4.2E+02					9.1E+02	9.1E+00	
TETRAETHYL DITHIOPYROPHOSPHATE	003689-24-5			1.3E+03			6.1E+04						1.3E+03

Table 3.5a. (continued)

Chemical	CASRN	Ingestion (mg/kg)			Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
TETRAETHYL LEAD	000078-00-2												
TETRAMETHYL LEAD	000075-74-1												
TETRAPROPYL LEAD	003440-75-3												
THALLIC OXIDE	001314-32-5			1.9E+02			8.5E+03						1.8E+02
THALLIUM (I) NITRATE	010102-45-1			2.4E+02			1.1E+04						2.3E+02
THALLIUM (SOLUBLE SALTS)	NA												
THALLIUM ACETATE	000563-68-8			2.4E+02			1.1E+04						2.3E+02
THALLIUM CARBONATE	006533-73-9			2.1E+02			9.7E+03						2.1E+02
THALLIUM CHLORIDE	007791-12-0			2.1E+02			9.7E+03						2.1E+02
THALLIUM SELENITE	012039-52-0												
THALLIUM SULFATE	007446-18-6			2.1E+02			9.7E+03						2.1E+02
THIOBENCARB	028249-77-6			2.7E+04			1.2E+06						2.6E+04
THIOFANOX	039196-18-4			8.0E+02			3.6E+04						7.8E+02
THIOPHANATE-METHYL	023564-05-8			2.1E+05			9.7E+06						2.1E+05
THIRAM	000137-26-8			1.3E+04			6.1E+05						1.3E+04
TIN	007440-31-5			1.6E+06			7.3E+07						1.6E+06
TOLUENE	000108-88-3			5.3E+05			1.9E+07			2.5E+02			2.5E+02
TOLUENE-2,4-DIAMINE	000095-80-7	5.8E+03	5.8E+01		2.7E+05	2.7E+03					5.7E+03	5.7E+01	
TOLUENE-2,5-DIAMINE	000095-70-5			1.6E+06			7.3E+07						1.6E+06
TOLUENE-2,6-DIAMINE	000823-40-5			5.3E+05			2.4E+07						5.2E+05
TOLUIDINE, o- (METHYLANILINE, 2-)	000095-53-4	7.8E+04	7.8E+02		3.5E+06	3.5E+04					7.6E+04	7.6E+02	

Table 3.5a. (continued)

Chemical	CASRN	Ingestion (mg/kg)			Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1
TOLUIDINE, p-	000106-49-0	9.8E+04	9.8E+02		4.5E+06	4.5E+04					9.6E+04	9.6E+02	
TOXAPHENE	008001-35-2	1.7E+04	1.7E+02		7.7E+05	7.7E+03		1.7E+09	1.7E+07		1.7E+04	1.7E+02	
TRALOMETHRIN	066841-25-6			2.0E+04			9.1E+05						2.0E+04
TRIALLATE	002303-17-5			3.5E+04			1.6E+06						3.4E+04
TRIASULFURON	082007-50-5			2.7E+04			1.2E+06						2.6E+04
TRIBROMOBENZENE, 1,2,4-	000615-54-3			1.3E+04			6.1E+05						1.3E+04
TRIBROMOCHLOROMETHANE	000594-15-0												
TRIBROMODIPHENYL ETHER	049690-94-0												
TRIBUTYL TIN OXIDE	000056-35-9			8.0E+01			3.6E+03						7.8E+01
TRICHLORO-1,2,2-TRIFLUOROETHANE, 1,1,2-	000076-13-1			8.0E+07			3.6E+09			2.0E+02			2.0E+02
TRICHLORO-2-HYDROXYDIPHENYLETHER	003380-34-5												
TRICHLOROANILINE HCL, 2,4,6-	033663-50-2	6.4E+05	6.4E+03		2.9E+07	2.9E+05					6.3E+05	6.3E+03	
TRICHLOROANILINE, 2,4,6-	000634-93-5	5.5E+05	5.5E+03		2.5E+07	2.5E+05					5.4E+05	5.4E+03	
TRICHLOROBENZENE, 1,2,4-	000120-82-1			2.7E+04			1.2E+06			8.3E+02			8.3E+02
TRICHLOROETHANE, 1,1,1-	000071-55-6												
TRICHLOROETHANE, 1,1,2-	000079-00-5	3.3E+05	3.3E+03	1.1E+04	1.2E+07	1.2E+05	3.9E+05	8.5E+02	8.5E+02		8.5E+02	8.5E+02	8.5E+02
TRICHLOROETHYLENE	000079-01-6	1.7E+06	1.7E+04		1.2E+07	1.2E+05		4.4E+02	4.4E+02		4.4E+02	4.4E+02	
TRICHLOROFLUOROMETHANE	000075-69-4			8.0E+05			8.4E+06			7.3E+02			7.3E+02
TRICHLOROPHENOL, 2,4,5-	000095-95-4			2.7E+05			1.2E+07						2.6E+05
TRICHLOROPHENOL, 2,4,6-	000088-06-2	1.7E+06	1.7E+04		7.7E+07	7.7E+05		1.9E+11	1.9E+09		1.7E+06	1.7E+04	
TRICHLOROPHENOL, 2,4,5-PROPIONIC ACID, 2(2,4,5-	000093-72-1			2.1E+04			9.7E+05						2.1E+04

Table 3.5a. (continued)

Chemical	CASRN	Ingestion (mg/kg)			Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
TRICHLOROPHENOXYACETIC ACID, 2,4,5-	000093-76-5			2.7E+04			1.2E+06						2.6E+04
TRICHLOROPROPANE, 1,1,2-	000598-77-6			1.3E+04			6.1E+05						1.3E+04
TRICHLOROPROPANE, 1,2,3-	000096-18-4	2.7E+03	2.7E+01	1.6E+04	1.2E+05	1.2E+03	7.3E+05				2.6E+03	2.6E+01	1.6E+04
TRICHLOROPROPENE, 1,2,3-	000096-19-5			1.3E+04			6.1E+05						1.3E+04
TRICHLOROTOLUENE, 2,3,6-	002077-46-5												
TRICHLOROTOLUENE, ALPHA 2,6-	002014-83-7												
TRIDIPHANE	058138-08-2			8.0E+03			3.6E+05						7.8E+03
TRIETHYL LEAD	005224-23-7												
TRIETHYLAMINE	000121-44-8									2.1E+04			
TRIFLURALIN	001582-09-8	2.4E+06	2.4E+04	2.0E+04	1.1E+08	1.1E+06	9.1E+05				2.4E+06	2.4E+04	2.0E+04
TRIMETHYL LEAD	007442-13-9												
TRIMETHYL PHOSPHATE	000512-56-1	5.0E+05	5.0E+03		2.3E+07	2.3E+05					4.9E+05	4.9E+03	
TRIMETHYLETHYL LEAD	001762-26-1												
TRINITROBENZENE, 1,3,5-	000099-35-4			1.3E+02			6.1E+03						1.3E+02
TRINITROPHENYLMETHYLNITRAMINE	000479-45-8			2.7E+04			1.2E+06						2.6E+04
TRINITROTOLUENE, 2,4,6-	000118-96-7	6.2E+05	6.2E+03	1.3E+03	2.8E+07	2.8E+05	6.1E+04				6.1E+05	6.1E+03	1.3E+03
TRIPROPYL LEAD	006618-03-7												
URANIUM (SOLUBLE SALTS)	NA			8.0E+03			3.1E+06						8.0E+03
VANADIUM PENTOXIDE	001314-62-1			2.4E+04			1.1E+07						2.4E+04
VANADIUM SULFATE	036907-42-3			5.3E+04			2.4E+07						5.3E+04
VANADIUM, METALLIC	007440-62-2			1.9E+04			8.5E+04						1.5E+04

Table 3.5a. (continued)

Chemical	CASRN	Ingestion (mg/kg)			Dermal (mg/kg)			Inhalation (mg/kg)			Ingestion + Dermal + Inhalation (mg/kg) [†]		
		10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HQ=1	10 ⁻⁴	10 ⁻⁶	HI=1
VANADYL SULFATE	027774-13-6			5.3E+04			2.4E+06						5.2E+04
VERNOLATE	001929-77-7			2.7E+03			1.2E+05						2.6E+03
VINCLOZOLIN	050471-44-8			6.7E+04			3.0E+06						6.5E+04
VINYL ACETATE	000108-05-4			2.7E+06			7.9E+07			7.8E+02			7.8E+02
VINYL BROMIDE	000593-60-2												
VINYL CHLORIDE	000075-01-4	9.8E+03	9.8E+01		4.5E+05	4.5E+03		4.2E+03	5.7E+02	7.7E+02	1.3E+01	1.3E-01	
WARFARIN	000081-81-2			8.0E+02			3.6E+04						7.8E+02
WHITE PHOSPHORUS	007723-14-0			5.3E+01			2.4E+04						5.3E+01
XYLENE, MIXTURE	001330-20-7			5.3E+06			2.2E+08						5.2E+06
XYLENE, m-	000108-38-3			5.3E+06			2.4E+08						5.2E+06
XYLENE, o-	000095-47-6			5.3E+06			2.4E+08						5.2E+06
XYLENE, p-	000106-42-3												
ZINC (METALLIC)	007440-66-6			8.0E+05			7.3E+07						7.9E+05
ZINC CYANIDE	000557-21-1			1.3E+05			6.1E+07						1.3E+05
ZINC PHOSPHIDE	001314-84-7			8.0E+02			3.6E+05						8.0E+02
ZINEB	012122-67-7			1.3E+05			6.1E+06						1.3E+05

Notes:

† If slope factors and/or reference doses were available for only one pathway (i.e., ingestion, dermal, OR inhalation), the total for ingestion plus dermal plus inhalation was not calculated.

(1) Same oral slope factor as used for polychlorinated biphenyls.

(2) PRG calculated considering *New Interim Region IV Guidance* from EPA (received February 11, 1992). The slope factors for chemicals so marked indicate that a toxicity equivalency factor (TEF) method was used for carcinogenic PAHs based on each compound's relative potency to the potency of benzo(a)pyrene. The following TEFs were used to convert each PAH slope factor to an equivalent slope factor of benzo(a)pyrene [that has a new cancer slope factor of 7.3 (mg/kg/day)¹ identified by EPA's CRAVE workgroup]: (1) benzo(a)pyrene; TEF = 1.0 (2) benz(a)anthracene; TEF = 0.1, (3) benzo(b)fluoranthene; TEF = 0.01, (4) benzo(k)fluoranthene; TEF = 0.01, (5) chrysene; TEF = 0.001, (6) dibenz(a,h)anthracene; TEF = 1.0, and (7) indeno(1,2,3-c,d)pyrene; TEF = 0.1. TEFs were used for only the oral slope factor in the ingestion pathway.

(3) The slope factor for trichloroethylene has been withdrawn from IRIS and HEAST; however, since this is a common contaminant, the old slope factor has been used to calculate the PRG.

Table 3.5b. Risk-based Preliminary Remediation Goals for radionuclides in soil (Excavation scenario)

Chemical [†]	CASRN	Ingestion (pCi/g)		External Exposure (pCi/g) ^{††}		Inhalation (pCi/g)		Ingestion + External Exposure + Inhalation (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Ac-225	014265-85-1	7.3E+04	7.3E+02	8.8E+05	8.8E+03	2.6E+08	2.6E+06	6.8E+04	6.8E+02
Ac-227	014952-40-0	3.0E+04	3.0E+02	2.9E+08	2.9E+06	1.5E+07	1.5E+05	3.0E+04	3.0E+02
Ac-227+D	014952-40-0	1.7E+04	1.7E+02	1.1E+04	1.1E+02	1.4E+07	1.4E+05	6.8E+03	6.8E+01
Ac-228	014331-83-0	6.4E+06	6.4E+04	2.1E+03	2.1E+01	3.3E+10	3.3E+08	2.1E+03	2.1E+01
Ag-105	014928-14-4	6.4E+06	6.4E+04			4.6E+11	4.6E+09	6.4E+06	6.4E+04
Ag-108	014391-65-2	1.5E+09	1.5E+07	1.2E+05	1.2E+03	1.1E+14	1.1E+12	1.2E+05	1.2E+03
Ag-108m	014391-65-2	1.7E+06	1.7E+04	1.2E+03	1.2E+01	1.5E+10	1.5E+08	1.2E+03	1.2E+01
Ag-108m+D	014391-65-2	1.7E+06	1.7E+04	1.2E+03	1.2E+01	1.5E+10	1.5E+08	1.2E+03	1.2E+01
Ag-109m	014378-38-2	3.8E+10	3.8E+08	5.9E+06	5.9E+04	3.1E+15	3.1E+13	5.9E+06	5.9E+04
Ag-110	014391-76-5	4.3E+09	4.3E+07	6.1E+04	6.1E+02	3.4E+14	3.4E+12	6.1E+04	6.1E+02
Ag-110m	014391-76-5	1.2E+06	1.2E+04	6.5E+02	6.5E+00	3.3E+10	3.3E+08	6.5E+02	6.5E+00
Ag-111	157690-04-0	1.5E+06	1.5E+04	8.0E+04	8.0E+02	2.0E+11	2.0E+09	7.6E+04	7.6E+02
Am-241	014596-10-2	3.2E+04	3.2E+02	1.5E+06	1.5E+04	2.8E+07	2.8E+05	3.1E+04	3.1E+02
Am-242	013981-54-9	7.1E+06	7.1E+04	1.2E+06	1.2E+04	1.0E+11	1.0E+09	1.0E+06	1.0E+04
Am-242m	013981-54-9	3.6E+04	3.6E+02	7.8E+07	7.8E+05	3.1E+07	3.1E+05	3.6E+04	3.6E+02
Am-243	014993-75-0	3.2E+04	3.2E+02	2.8E+05	2.8E+03	2.8E+07	2.8E+05	2.9E+04	2.9E+02
Am-243+D	014993-75-0	3.1E+04	3.1E+02	2.6E+04	2.6E+02	2.8E+07	2.8E+05	1.4E+04	1.4E+02
Ar-41	014163-25-8					2.3E+15	2.3E+13		
At-217	017239-90-6	1.2E+12	1.2E+10	7.9E+06	7.9E+04	2.1E+15	2.1E+13	7.9E+06	7.9E+04

Table 3.5b. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		External Exposure (pCi/g) ^{††}		Inhalation (pCi/g)		Ingestion + External Exposure + Inhalation (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Au-196	014914-16-0	8.0E+06	8.0E+04	4.9E+03	4.9E+01	1.0E+12	1.0E+10	4.9E+03	4.9E+01
Au-198	010043-49-0	2.0E+06	2.0E+04	5.0E+03	5.0E+01	2.9E+11	2.9E+09	5.0E+03	5.0E+01
Ba-131	014914-75-1	6.1E+06	6.1E+04	5.4E+03	5.4E+01	2.2E+12	2.2E+10	5.4E+03	5.4E+01
Ba-133	013981-41-4	3.9E+06	3.9E+04	7.5E+03	7.5E+01	2.7E+11	2.7E+09	7.5E+03	7.5E+01
Ba-133m	013981-41-4	3.8E+06	3.8E+04	6.8E+04	6.8E+02	1.9E+12	1.9E+10	6.7E+04	6.7E+02
Ba-137m	013981-97-0	4.3E+09	4.3E+07	3.1E+03	3.1E+01	6.8E+14	6.8E+12	3.1E+03	3.1E+01
Ba-139	014378-25-7	3.4E+07	3.4E+05	8.2E+04	8.2E+02	7.0E+12	7.0E+10	8.2E+04	8.2E+02
Ba-140	014798-08-4	8.8E+05	8.8E+03	1.1E+04	1.1E+02	3.4E+11	3.4E+09	1.1E+04	1.1E+02
Be-7	013966-02-4	1.2E+08	1.2E+06	4.0E+04	4.0E+02	6.0E+12	6.0E+10	4.0E+04	4.0E+02
Bi-206	015776-19-9	1.5E+06	1.5E+04	5.7E+02	5.7E+00	2.1E+11	2.1E+09	5.7E+02	5.7E+00
Bi-207	013982-38-2	2.1E+06	2.1E+04	1.2E+03	1.2E+01	1.1E+11	1.1E+09	1.2E+03	1.2E+01
Bi-210	014331-79-4	1.4E+06	1.4E+04			2.1E+10	2.1E+08	1.4E+06	1.4E+04
Bi-211	015229-37-5	5.7E+08	5.7E+06	4.6E+04	4.6E+02	6.2E+11	6.2E+09	4.6E+04	4.6E+02
Bi-212	014913-49-6	1.7E+07	1.7E+05	1.0E+04	1.0E+02	2.9E+10	2.9E+08	1.0E+04	1.0E+02
Bi-213	015776-20-2	2.4E+07	2.4E+05	1.5E+04	1.5E+02	3.5E+10	3.5E+08	1.5E+04	1.5E+02
Bi-214	014733-03-0	5.3E+07	5.3E+05	1.1E+03	1.1E+01	7.3E+10	7.3E+08	1.1E+03	1.1E+01
Br-82	014686-69-2	7.3E+06	7.3E+04	6.8E+02	6.8E+00	1.4E+12	1.4E+10	6.8E+02	6.8E+00
C-11	014333-33-6	2.3E+08	2.3E+06	1.9E+03	1.9E+01	3.2E+13	3.2E+11	1.9E+03	1.9E+01
C-14	014762-75-5	1.0E+07	1.0E+05			1.5E+14	1.5E+12	1.0E+07	1.0E+05

Table 3.5b. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		External Exposure (pCi/g) ^{††}		Inhalation (pCi/g)		Ingestion + External Exposure + Inhalation (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
C-15	015929-23-4	1.6E+10	1.6E+08			1.3E+15	1.3E+13	1.6E+10	1.6E+08
Ca-45	013966-05-7	5.2E+06	5.2E+04	1.8E+15	1.8E+13	4.3E+11	4.3E+09	5.2E+06	5.2E+04
Ca-47	001439-99-2	1.6E+06	1.6E+04	1.7E+03	1.7E+01	2.1E+11	2.1E+09	1.7E+03	1.7E+01
Cd-109	014109-32-1	1.3E+06	1.3E+04	1.2E+07	1.2E+05	5.8E+10	5.8E+08	1.2E+06	1.2E+04
Cd-115	014336-68-6	1.4E+06	1.4E+04	9.7E+03	9.7E+01	2.2E+11	2.2E+09	9.7E+03	9.7E+01
Cd-115m	014336-68-6	7.3E+05	7.3E+03	8.0E+04	8.0E+02	6.3E+10	6.3E+08	7.2E+04	7.2E+02
Ce-141	013967-74-3	2.7E+06	2.7E+04	4.9E+04	4.9E+02	2.5E+11	2.5E+09	4.8E+04	4.8E+02
Ce-143	014119-19-8	1.8E+06	1.8E+04	9.3E+03	9.3E+01	2.8E+11	2.8E+09	9.3E+03	9.3E+01
Ce-144	014762-78-8	3.5E+05	3.5E+03	2.7E+05	2.7E+03	9.9E+09	9.9E+07	1.5E+05	1.5E+03
Ce-144+D	014762-78-8	3.5E+05	3.5E+03	4.4E+04	4.4E+02	9.9E+09	9.9E+07	3.9E+04	3.9E+02
Cl-36	013981-43-6	4.7E+06	4.7E+04			8.2E+11	8.2E+09	4.7E+06	4.7E+04
Cl-38	014158-34-0	5.0E+07	5.0E+05	1.1E+03	1.1E+01	6.6E+12	6.6E+10	1.1E+03	1.1E+01
Cm-242	015510-73-3	2.7E+05	2.7E+03	2.9E+08	2.9E+06	3.4E+08	3.4E+06	2.7E+05	2.7E+03
Cm-243	015757-87-6	4.2E+04	4.2E+02	4.0E+04	4.0E+02	3.7E+07	3.7E+05	2.0E+04	2.0E+02
Cm-243+D	015757-87-6	4.1E+04	4.1E+02	4.0E+04	4.0E+02	3.7E+07	3.7E+05	2.0E+04	2.0E+02
Cm-244	013981-15-2	4.9E+04	4.9E+02	3.3E+08	3.3E+06	4.4E+07	4.4E+05	4.9E+04	4.9E+02
Cm-245	015621-76-8	3.1E+04	3.1E+02	1.2E+05	1.2E+03	2.7E+07	2.7E+05	2.5E+04	2.5E+02
Cm-246	015757-90-1	3.1E+04	3.1E+02	3.8E+08	3.8E+06	2.7E+07	2.7E+05	3.1E+04	3.1E+02
Cm-247	015758-32-4	3.4E+04	3.4E+02	6.6E+03	6.6E+01	3.0E+07	3.0E+05	5.5E+03	5.5E+01

Table 3.5b. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		External Exposure (pCi/g) ^{††}		Inhalation (pCi/g)		Ingestion + External Exposure + Inhalation (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Cm-248	015758-33-5	8.0E+03	8.0E+01	4.7E+08	4.7E+06	7.3E+06	7.3E+04	7.9E+03	7.9E+01
Co-57	013981-50-5	1.1E+07	1.1E+05	3.3E+04	3.3E+02	3.7E+11	3.7E+09	3.3E+04	3.3E+02
Co-58	013981-38-9	3.7E+06	3.7E+04	1.8E+03	1.8E+01	2.1E+11	2.1E+09	1.8E+03	1.8E+01
Co-58m	013981-38-9	1.1E+08	1.1E+06	2.1E+08	2.1E+06	1.2E+13	1.2E+11	7.3E+07	7.3E+05
Co-60	010198-40-0	5.5E+05	5.5E+03	7.0E+02	7.0E+00	1.6E+10	1.6E+08	7.0E+02	7.0E+00
Cr-51	014392-02-0	7.5E+07	7.5E+05	6.7E+04	6.7E+02	6.2E+12	6.2E+10	6.7E+04	6.7E+02
Cs-131	014914-76-2	5.8E+07	5.8E+05	2.9E+06	2.9E+04	1.0E+13	1.0E+11	2.8E+06	2.8E+04
Cs-134	013967-70-9	2.2E+05	2.2E+03	1.2E+03	1.2E+01	3.7E+10	3.7E+08	1.2E+03	1.2E+01
Cs-134m	013967-70-9	2.3E+08	2.3E+06	3.5E+05	3.5E+03	3.5E+13	3.5E+11	3.5E+05	3.5E+03
Cs-135	015726-30-4	2.3E+06	2.3E+04			4.0E+11	4.0E+09	2.3E+06	2.3E+04
Cs-136	014234-29-8	1.3E+06	1.3E+04	8.4E+02	8.4E+00	2.3E+11	2.3E+09	8.4E+02	8.4E+00
Cs-137	010045-97-3	3.3E+05	3.3E+03			5.6E+10	5.6E+08	3.3E+05	3.3E+03
Cs-137+D	010045-97-3	3.3E+05	3.3E+03	3.3E+03	3.3E+01	5.6E+10	5.6E+08	3.2E+03	3.2E+01
Cs-138	015758-29-9	5.9E+07	5.9E+05	7.2E+02	7.2E+00	8.2E+12	8.2E+10	7.2E+02	7.2E+00
Cu-64	013981-25-4	2.0E+07	2.0E+05	1.0E+04	1.0E+02	2.6E+12	2.6E+10	1.0E+04	1.0E+02
Dy-165	013967-64-1	3.2E+07	3.2E+05	1.1E+05	1.1E+03	4.8E+12	4.8E+10	1.1E+05	1.1E+03
Dy-166	015840-01-4	1.1E+06	1.1E+04	2.5E+05	2.5E+03	1.4E+11	1.4E+09	2.0E+05	2.0E+03
Er-169	015840-13-8	4.9E+06	4.9E+04	1.0E+09	1.0E+07	7.1E+11	7.1E+09	4.9E+06	4.9E+04
Er-171	014391-45-8	6.4E+06	6.4E+04	6.6E+03	6.6E+01	1.4E+12	1.4E+10	6.6E+03	6.6E+01

Table 3.5b. (continued)

Chemical ^t	CASRN	Ingestion (pCi/g)		External Exposure (pCi/g) ^{tt}		Inhalation (pCi/g)		Ingestion + External Exposure + Inhalation (pCi/g) ^{ttt}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Eu-152	014683-23-9	1.8E+06	1.8E+04	1.7E+03	1.7E+01	1.4E+10	1.4E+08	1.7E+03	1.7E+01
Eu-154	015585-10-1	1.1E+06	1.1E+04	1.5E+03	1.5E+01	1.2E+10	1.2E+08	1.5E+03	1.5E+01
Eu-155	014391-16-3	6.3E+06	6.3E+04	1.1E+05	1.1E+03	1.1E+11	1.1E+09	1.1E+05	1.1E+03
Eu-156	014280-35-4	9.6E+05	9.6E+03	1.3E+03	1.3E+01	1.2E+11	1.2E+09	1.3E+03	1.3E+01
F-18	013981-56-1	9.6E+07	9.6E+05	2.0E+03	2.0E+01	1.6E+13	1.6E+11	2.0E+03	2.0E+01
Fe-55	014681-59-5	3.0E+07	3.0E+05			1.9E+12	1.9E+10	3.0E+07	3.0E+05
Fe-59	014596-12-4	1.8E+06	1.8E+04	1.5E+03	1.5E+01	1.5E+11	1.5E+09	1.5E+03	1.5E+01
Fr-221	015756-41-9	7.2E+07	7.2E+05	1.0E+05	1.0E+03	1.3E+11	1.3E+09	1.0E+05	1.0E+03
Fr-223	015756-98-6	2.3E+07	2.3E+05	1.6E+05	1.6E+03	1.8E+12	1.8E+10	1.6E+05	1.6E+03
Ga-67	014119-09-6	1.2E+07	1.2E+05	1.9E+04	1.9E+02	2.1E+12	2.1E+10	1.9E+04	1.9E+02
Ga-72	013982-22-4	2.2E+06	2.2E+04	6.1E+02	6.1E+00	4.9E+11	4.9E+09	6.1E+02	6.1E+00
Gd-153	014276-65-4	7.9E+06	7.9E+04	9.5E+04	9.5E+02	3.3E+11	3.3E+09	9.4E+04	9.4E+02
Gd-159	014041-42-0	4.0E+06	4.0E+04	7.1E+04	7.1E+02	8.6E+11	8.6E+09	7.0E+04	7.0E+02
Ge-71	014374-81-3	8.8E+08	8.8E+06	4.4E+08	4.4E+06	1.8E+13	1.8E+11	2.9E+08	2.9E+06
H-3	010028-17-8	1.5E+08	1.5E+06			1.1E+13	1.1E+11	1.5E+08	1.5E+06
Hg-197	013981-51-6	8.8E+06	8.8E+04	1.3E+05	1.3E+03	1.5E+12	1.5E+10	1.2E+05	1.2E+03
Hg-203	013982-78-0	3.9E+06	3.9E+04	1.1E+04	1.1E+02	3.5E+11	3.5E+09	1.1E+04	1.1E+02
Ho-166	013967-65-2	1.4E+06	1.4E+04	9.8E+04	9.8E+02	2.6E+11	2.6E+09	9.2E+04	9.2E+02
I-122	018287-75-7	4.8E+08	4.8E+06	2.0E+03	2.0E+01	4.8E+13	4.8E+11	2.0E+03	2.0E+01

Table 3.5b. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		External Exposure (pCi/g) ^{††}		Inhalation (pCi/g)		Ingestion + External Exposure + Inhalation (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
I-123	015715-08-9	1.9E+07	1.9E+05	2.7E+04	2.7E+02	3.6E+12	3.6E+10	2.7E+04	2.7E+02
I-125	014158-31-7	4.0E+05	4.0E+03	2.9E+06	2.9E+04	6.3E+10	6.3E+08	3.5E+05	3.5E+03
I-126	014158-32-8	2.2E+05	2.2E+03	4.6E+03	4.6E+01	3.4E+10	3.4E+08	4.5E+03	4.5E+01
I-129	015046-84-1	5.7E+04	5.7E+02	2.5E+06	2.5E+04	8.8E+09	8.8E+07	5.5E+04	5.5E+02
I-130	014914-02-4	2.1E+06	2.1E+04	8.6E+02	8.6E+00	4.1E+11	4.1E+09	8.6E+02	8.6E+00
I-131	010043-66-0	2.9E+05	2.9E+03	5.5E+03	5.5E+01	4.6E+10	4.6E+08	5.4E+03	5.4E+01
I-132	014683-16-0	1.6E+07	1.6E+05	7.8E+02	7.8E+00	3.0E+12	3.0E+10	7.8E+02	7.8E+00
I-133	014834-67-4	9.8E+05	9.8E+03	3.1E+03	3.1E+01	1.8E+11	1.8E+09	3.1E+03	3.1E+01
I-134	014914-27-3	4.5E+07	4.5E+05	6.7E+02	6.7E+00	7.8E+12	7.8E+10	6.7E+02	6.7E+00
I-135	014834-68-5	4.6E+06	4.6E+04	1.1E+03	1.1E+01	9.1E+11	9.1E+09	1.1E+03	1.1E+01
In-113m	014885-78-0	1.3E+08	1.3E+06	8.8E+03	8.8E+01	1.9E+13	1.9E+11	8.8E+03	8.8E+01
In-114	013981-55-0	2.3E+09	2.3E+07	6.1E+04	6.1E+02	1.8E+14	1.8E+12	6.1E+04	6.1E+02
In-114m	013981-55-0	5.1E+05	5.1E+03	3.4E+04	3.4E+02	4.2E+10	4.2E+08	3.2E+04	3.2E+02
In-115	014191-71-0	3.0E+05	3.0E+03			5.2E+09	5.2E+07	3.0E+05	3.0E+03
In-115m	014191-71-0	3.0E+07	3.0E+05	1.6E+04	1.6E+02	6.1E+12	6.1E+10	1.6E+04	1.6E+02
Ir-190	014981-91-0	2.1E+06	2.1E+04	1.5E+03	1.5E+01	2.4E+11	2.4E+09	1.5E+03	1.5E+01
Ir-194	014158-35-1	1.5E+06	1.5E+04	2.2E+04	2.2E+02	2.6E+11	2.6E+09	2.1E+04	2.1E+02
K-40	013966-00-2	8.3E+05	8.3E+03	1.1E+04	1.1E+02	1.4E+11	1.4E+09	1.1E+04	1.1E+02
K-42	014378-21-3	8.1E+06	8.1E+04	6.3E+03	6.3E+01	1.4E+12	1.4E+10	6.3E+03	6.3E+01

Table 3.5b. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		External Exposure (pCi/g) ^{††}		Inhalation (pCi/g)		Ingestion + External Exposure + Inhalation (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Kr-83m	013965-98-5					3.1E+16	3.1E+14		
Kr-85	013983-27-2					3.7E+15	3.7E+13		
Kr-85m	013983-27-2					3.9E+15	3.9E+13		
Kr-87	014809-68-8					8.9E+14	8.9E+12		
Kr-88	014995-61-0					4.9E+14	4.9E+12		
Kr-89	016316-03-3					6.7E+14	6.7E+12		
Kr-90	015741-13-6					6.7E+14	6.7E+12		
La-140	013981-28-7	1.1E+06	1.1E+04	7.5E+02	7.5E+00	2.1E+11	2.1E+09	7.5E+02	7.5E+00
Lu-177	014265-75-9	3.5E+06	3.5E+04	9.5E+04	9.5E+02	4.9E+11	4.9E+09	9.2E+04	9.2E+02
Mn-52	014092-99-0	1.7E+06	1.7E+04	5.1E+02	5.1E+00	2.4E+11	2.4E+09	5.1E+02	5.1E+00
Mn-54	013966-31-9	5.3E+06	5.3E+04	2.1E+03	2.1E+01	2.9E+11	2.9E+09	2.1E+03	2.1E+01
Mn-56	014681-52-8	1.2E+07	1.2E+05	9.8E+02	9.8E+00	2.1E+12	2.1E+10	9.8E+02	9.8E+00
Mo-99	014119-15-4	4.6E+06	4.6E+04	1.3E+04	1.3E+02	2.4E+11	2.4E+09	1.3E+04	1.3E+02
Na-22	013966-32-0	1.3E+06	1.3E+04	8.4E+02	8.4E+00	2.2E+11	2.2E+09	8.4E+02	8.4E+00
Na-24	013982-04-2	7.5E+06	7.5E+04	3.9E+02	3.9E+00	1.4E+12	1.4E+10	3.9E+02	3.9E+00
Nb-93m	007440-03-1	1.6E+07	1.6E+05	1.9E+08	1.9E+06	2.5E+11	2.5E+09	1.4E+07	1.4E+05
Nb-94	014681-63-1	1.5E+06	1.5E+04	1.1E+03	1.1E+01	1.3E+10	1.3E+08	1.1E+03	1.1E+01
Nb-95	013967-76-5	4.6E+06	4.6E+04	2.3E+03	2.3E+01	3.4E+11	3.4E+09	2.3E+03	2.3E+01
Nb-95m	013967-76-5	3.4E+06	3.4E+04	7.9E+04	7.9E+02	4.8E+11	4.8E+09	7.7E+04	7.7E+02

Table 3.5b. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		External Exposure (pCi/g) ^{††}		Inhalation (pCi/g)		Ingestion + External Exposure + Inhalation (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Nb-97	018496-04-3	6.0E+07	6.0E+05	2.7E+03	2.7E+01	5.0E+12	5.0E+10	2.7E+03	2.7E+01
Nb-97m	018496-04-3	3.2E+09	3.2E+07	2.5E+03	2.5E+01	3.2E+14	3.2E+12	2.5E+03	2.5E+01
Nd-147	014269-74-0	1.8E+06	1.8E+04	2.1E+04	2.1E+02	2.2E+11	2.2E+09	2.1E+04	2.1E+02
Nd-149	015749-81-2	2.3E+07	2.3E+05	6.3E+03	6.3E+01	2.5E+12	2.5E+10	6.3E+03	6.3E+01
Ni-59	014336-70-0	5.6E+07	5.6E+05			2.7E+12	2.7E+10	5.6E+07	5.6E+05
Ni-63	013981-37-8	1.9E+07	1.9E+05			1.1E+12	1.1E+10	1.9E+07	1.9E+05
Ni-65	014833-49-9	1.9E+07	1.9E+05	3.2E+03	3.2E+01	3.0E+12	3.0E+10	3.2E+03	3.2E+01
Np-236	015700-36-4	1.1E+07	1.1E+05	7.4E+04	7.4E+02	2.8E+11	2.8E+09	7.4E+04	7.4E+02
Np-237	013994-20-2	3.5E+04	3.5E+02	9.1E+05	9.1E+03	3.1E+07	3.1E+05	3.4E+04	3.4E+02
Np-237+D	013994-20-2	3.5E+04	3.5E+02	1.5E+04	1.5E+02	3.1E+07	3.1E+05	1.0E+04	1.0E+02
Np-238	015766-25-3	2.3E+06	2.3E+04	3.5E+03	3.5E+01	2.3E+11	2.3E+09	3.5E+03	3.5E+01
Np-239	013968-59-7	2.4E+06	2.4E+04	2.8E+04	2.8E+02	4.4E+11	4.4E+09	2.8E+04	2.8E+02
Np-240	015690-84-3	5.9E+07	5.9E+05	1.9E+03	1.9E+01	8.2E+12	8.2E+10	1.9E+03	1.9E+01
Np-240m	015690-84-3	4.3E+08	4.3E+06	6.5E+03	6.5E+01	3.8E+13	3.8E+11	6.5E+03	6.5E+01
Os-185	015766-50-4	5.8E+06	5.8E+04	2.8E+03	2.8E+01	2.3E+11	2.3E+09	2.8E+03	2.8E+01
Os-191	014119-24-5	3.4E+06	3.4E+04	7.8E+04	7.8E+02	4.0E+11	4.0E+09	7.7E+04	7.7E+02
Os-191m	014119-24-5	2.1E+07	2.1E+05	2.1E+06	2.1E+04	3.2E+12	3.2E+10	1.9E+06	1.9E+04
Os-193	016057-77-5	2.4E+06	2.4E+04	3.8E+04	3.8E+02	4.0E+11	4.0E+09	3.7E+04	3.7E+02
P-32	014596-37-3	1.7E+06	1.7E+04			3.7E+11	3.7E+09	1.7E+06	1.7E+04

Table 3.5b. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		External Exposure (pCi/g) ^{††}		Inhalation (pCi/g)		Ingestion + External Exposure + Inhalation (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
P-33	015749-66-3	1.3E+07	1.3E+05			2.7E+12	2.7E+10	1.3E+07	1.3E+05
Pa-231	014331-85-2	7.0E+04	7.0E+02	2.5E+05	2.5E+03	4.4E+07	4.4E+05	5.5E+04	5.5E+02
Pa-233	013981-14-1	2.2E+06	2.2E+04	1.5E+04	1.5E+02	2.2E+11	2.2E+09	1.5E+04	1.5E+02
Pa-234	015100-28-4	4.9E+06	4.9E+04	1.0E+03	1.0E+01	8.2E+11	8.2E+09	1.0E+03	1.0E+01
Pa-234m	015100-28-4	2.2E+09	2.2E+07	1.7E+05	1.7E+03	1.7E+14	1.7E+12	1.7E+05	1.7E+03
Pb-203	014687-25-3	1.0E+07	1.0E+05	1.1E+04	1.1E+02	3.5E+12	3.5E+10	1.1E+04	1.1E+02
Pb-209	014119-30-3	5.0E+07	5.0E+05			1.6E+13	1.6E+11	5.0E+07	5.0E+05
Pb-210	014255-04-0	1.5E+04	1.5E+02	6.1E+07	6.1E+05	6.4E+08	6.4E+06	1.5E+04	1.5E+02
Pb-210+D	014255-04-0	1.0E+04	1.0E+02	4.7E+07	4.7E+05	2.8E+08	2.8E+06	1.0E+04	1.0E+02
Pb-211	015816-77-0	3.1E+07	3.1E+05	3.7E+04	3.7E+02	1.0E+11	1.0E+09	3.7E+04	3.7E+02
Pb-212	015092-94-1	5.8E+05	5.8E+03	2.3E+04	2.3E+02	2.8E+10	2.8E+08	2.2E+04	2.2E+02
Pb-214	015067-28-4	3.5E+07	3.5E+05	9.7E+03	9.7E+01	1.7E+11	1.7E+09	9.7E+03	9.7E+01
Pd-100	015690-69-4	2.8E+06	2.8E+04			3.0E+11	3.0E+09	2.8E+06	2.8E+04
Pd-101	015749-54-9	2.8E+07	2.8E+05			4.7E+12	4.7E+10	2.8E+07	2.8E+05
Pd-103	014967-68-1	9.9E+06	9.9E+04	1.3E+07	1.3E+05	9.9E+11	9.9E+09	5.6E+06	5.6E+04
Pd-107	017637-99-9	5.0E+07	5.0E+05			7.3E+11	7.3E+09	5.0E+07	5.0E+05
Pd-109	014981-64-7	3.1E+06	3.1E+04	2.8E+06	2.8E+04	5.4E+11	5.4E+09	1.5E+06	1.5E+04
Pm-147	014380-75-7	7.4E+06	7.4E+04	1.1E+09	1.1E+07	1.4E+11	1.4E+09	7.3E+06	7.3E+04
Pm-148	014683-19-3	7.2E+05	7.2E+03	3.1E+03	3.1E+01	1.0E+11	1.0E+09	3.1E+03	3.1E+01

Table 3.5b. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		External Exposure (pCi/g) ^{††}		Inhalation (pCi/g)		Ingestion + External Exposure + Inhalation (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Pm-148m	014683-19-3	1.0E+06	1.0E+04	9.3E+02	9.3E+00	3.6E+10	3.6E+08	9.3E+02	9.3E+00
Pm-149	015765-31-8	1.9E+06	1.9E+04	1.9E+05	1.9E+03	3.0E+11	3.0E+09	1.7E+05	1.7E+03
Po-210	013981-52-7	3.2E+04	3.2E+02	2.1E+08	2.1E+06	5.0E+08	5.0E+06	3.2E+04	3.2E+02
Po-212	015389-34-1	2.3E+17	2.3E+15			1.8E+20	1.8E+18	2.3E+17	2.3E+15
Po-213	015756-57-7	1.6E+16	1.6E+14	5.8E+07	5.8E+05	1.4E+19	1.4E+17	5.8E+07	5.8E+05
Po-214	015735-67-8	4.9E+14	4.9E+12	2.1E+07	2.1E+05	3.9E+17	3.9E+15	2.1E+07	2.1E+05
Po-215	015706-52-2	2.1E+13	2.1E+11	1.3E+07	1.3E+05	2.4E+16	2.4E+14	1.3E+07	1.3E+05
Po-216	015756-58-8	1.2E+11	1.2E+09	1.2E+08	1.2E+06	3.6E+14	3.6E+12	1.2E+08	1.2E+06
Po-218	015422-24-9	2.1E+08	2.1E+06			2.9E+11	2.9E+09	2.0E+08	2.0E+06
Pr-142	014191-64-1	1.5E+06	1.5E+04	2.9E+04	2.9E+02	2.6E+11	2.6E+09	2.9E+04	2.9E+02
Pr-143	014981-79-4	1.6E+06	1.6E+04	2.0E+11	2.0E+09	1.9E+11	1.9E+09	1.6E+06	1.6E+04
Pr-144	014119-05-2	1.3E+08	1.3E+06	5.1E+04	5.1E+02	8.2E+12	8.2E+10	5.1E+04	5.1E+02
Pr-144m	014119-05-2	3.2E+08	3.2E+06	3.7E+06	3.7E+04	1.9E+13	1.9E+11	3.7E+06	3.7E+04
Pt-191	015706-36-2	6.9E+06	6.9E+04	1.0E+04	1.0E+02	2.6E+12	2.6E+10	1.0E+04	1.0E+02
Pt-193	015735-70-3	6.4E+07	6.4E+05			1.4E+13	1.4E+11	6.4E+07	6.4E+05
Pt-193m	015735-70-3	4.2E+06	4.2E+04	9.2E+05	9.2E+03	1.9E+12	1.9E+10	7.5E+05	7.5E+03
Pt-197	015735-74-7	4.9E+06	4.9E+04	2.2E+05	2.2E+03	2.4E+12	2.4E+10	2.1E+05	2.1E+03
Pt-197m	015735-74-7	3.2E+07	3.2E+05	4.1E+04	4.1E+02	1.1E+13	1.1E+11	4.1E+04	4.1E+02
Pu-236	015411-92-4	1.4E+05	1.4E+03	2.9E+08	2.9E+06	8.0E+07	8.0E+05	1.4E+05	1.4E+03

Table 3.5b. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		External Exposure (pCi/g) ^{††}		Inhalation (pCi/g)		Ingestion + External Exposure + Inhalation (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Pu-238	013981-16-3	3.5E+04	3.5E+02	3.5E+08	3.5E+06	3.9E+07	3.9E+05	3.5E+04	3.5E+02
Pu-239	015117-48-3	3.3E+04	3.3E+02	5.4E+08	5.4E+06	3.9E+07	3.9E+05	3.3E+04	3.3E+02
Pu-240	014119-33-6	3.3E+04	3.3E+02	3.7E+08	3.7E+06	3.9E+07	3.9E+05	3.3E+04	3.3E+02
Pu-241	014119-32-5	2.0E+06	2.0E+04			3.8E+09	3.8E+07	2.0E+06	2.0E+04
Pu-241+D	014119-32-5	3.1E+04	3.1E+02	1.5E+06	1.5E+04	2.8E+07	2.8E+05	3.1E+04	3.1E+02
Pu-242	013982-10-0	3.5E+04	3.5E+02	4.4E+08	4.4E+06	4.1E+07	4.1E+05	3.5E+04	3.5E+02
Pu-243	015706-37-3	2.8E+07	2.8E+05	3.6E+05	3.6E+03	4.0E+12	4.0E+10	3.6E+05	3.6E+03
Pu-244	014119-34-7	3.3E+04	3.3E+02	5.3E+08	5.3E+06	4.0E+07	4.0E+05	3.3E+04	3.3E+02
Pu-244+D	014119-34-7	3.3E+04	3.3E+02	1.9E+03	1.9E+01	4.0E+07	4.0E+05	1.8E+03	1.8E+01
Ra-223	015623-45-7	4.5E+04	4.5E+02	2.8E+04	2.8E+02	3.0E+08	3.0E+06	1.7E+04	1.7E+02
Ra-224	013233-32-4	7.0E+04	7.0E+02	2.8E+05	2.8E+03	4.8E+08	4.8E+06	5.6E+04	5.6E+02
Ra-224(2)	013233-32-4	7.0E+04	7.0E+02	2.8E+05	2.8E+03	4.2E+05	4.2E+03	4.9E+04	4.9E+02
Ra-225	013981-53-8	6.6E+04	6.6E+02	4.0E+06	4.0E+04	4.5E+08	4.5E+06	6.5E+04	6.5E+02
Ra-226	013982-63-3	3.5E+04	3.5E+02	5.2E+05	5.2E+03	3.9E+08	3.9E+06	3.3E+04	3.3E+02
Ra-226(2)	013982-63-3	3.5E+04	3.5E+02	5.2E+05	5.2E+03	2.6E+02	2.6E+00	2.6E+02	2.6E+00
Ra-226+D	013982-63-3	3.5E+04	3.5E+02	1.0E+03	1.0E+01	3.9E+08	3.9E+06	9.9E+02	9.9E+00
Ra-226+D(2)	013982-63-3	3.5E+04	3.5E+02	1.0E+03	1.0E+01	2.6E+02	2.6E+00	2.1E+02	2.1E+00
Ra-228	015262-20-1	4.2E+04	4.2E+02			1.1E+09	1.1E+07	4.2E+04	4.2E+02
Ra-228+D	015262-20-1	4.2E+04	4.2E+02	2.1E+03	2.1E+01	1.1E+09	1.1E+07	2.0E+03	2.0E+01

Table 3.5b. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		External Exposure (pCi/g) ^{††}		Inhalation (pCi/g)		Ingestion + External Exposure + Inhalation (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Rb-82	014391-63-0	9.9E+08	9.9E+06	1.8E+03	1.8E+01	9.2E+13	9.2E+11	1.8E+03	1.8E+01
Rb-86	014932-53-7	1.5E+06	1.5E+04	1.8E+04	1.8E+02	2.5E+11	2.5E+09	1.8E+04	1.8E+02
Rb-87	013982-13-3	2.8E+06	2.8E+04			4.7E+11	4.7E+09	2.8E+06	2.8E+04
Rb-88	014928-36-0	7.1E+07	7.1E+05	2.6E+03	2.6E+01	7.9E+12	7.9E+10	2.6E+03	2.6E+01
Rb-89	014191-65-2	1.2E+08	1.2E+06	8.1E+02	8.1E+00	1.5E+13	1.5E+11	8.1E+02	8.1E+00
Rh-103m	007440-16-6	1.3E+09	1.3E+07	1.2E+08	1.2E+06	8.4E+13	8.4E+11	1.1E+08	1.1E+06
Rh-105	014913-89-4	5.4E+06	5.4E+04	2.7E+04	2.7E+02	8.8E+11	8.8E+09	2.7E+04	2.7E+02
Rh-105m	014913-89-4	9.6E+09	9.6E+07	3.0E+05	3.0E+03	1.2E+15	1.2E+13	3.0E+05	3.0E+03
Rh-106	014234-34-5	2.9E+09	2.9E+07	9.0E+03	9.0E+01	2.3E+14	2.3E+12	9.0E+03	9.0E+01
Rn-219	014835-02-0			4.0E+04	4.0E+02	1.6E+13	1.6E+11	4.0E+04	4.0E+02
Rn-220	022481-48-7			3.6E+06	3.6E+04	5.6E+12	5.6E+10	3.6E+06	3.6E+04
Rn-222+D	014859-67-7					1.4E+11	1.4E+09		
Ru-103	013968-53-1	3.1E+06	3.1E+04	4.0E+03	4.0E+01	2.3E+11	2.3E+09	4.0E+03	4.0E+01
Ru-105	014331-95-4	9.1E+06	9.1E+04	2.4E+03	2.4E+01	1.3E+12	1.3E+10	2.4E+03	2.4E+01
Ru-106	013967-48-1	3.0E+05	3.0E+03			9.3E+09	9.3E+07	3.0E+05	3.0E+03
Ru-106+D	013967-48-1	3.0E+05	3.0E+03	9.0E+03	9.0E+01	9.3E+09	9.3E+07	8.8E+03	8.8E+01
Ru-97	015758-35-7	1.8E+07	1.8E+05	1.5E+04	1.5E+02	2.6E+12	2.6E+10	1.5E+04	1.5E+02
S-35	015117-53-0	2.5E+07	2.5E+05			5.8E+12	5.8E+10	2.5E+07	2.5E+05
Sb-122	014374-79-9	1.2E+06	1.2E+04	4.3E+03	4.3E+01	2.0E+11	2.0E+09	4.2E+03	4.2E+01

Table 3.5b. (continued)

Chemical ^{††}	CASRN	Ingestion (pCi/g)		External Exposure (pCi/g) ^{††}		Inhalation (pCi/g)		Ingestion + External Exposure + Inhalation (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Sb-124	014683-10-4	9.7E+05	9.7E+03	9.3E+02	9.3E+00	8.1E+10	8.1E+08	9.3E+02	9.3E+00
Sb-125	014234-35-6	3.5E+06	3.5E+04	5.1E+03	5.1E+01	2.1E+11	2.1E+09	5.1E+03	5.1E+01
Sb-125+D	014234-35-6	2.9E+06	2.9E+04	5.1E+03	5.1E+01	1.8E+11	1.8E+09	5.1E+03	5.1E+01
Sb-126	015756-32-8	1.1E+06	1.1E+04	6.6E+02	6.6E+00	1.3E+11	1.3E+09	6.6E+02	6.6E+00
Sb-126m	015756-32-8	1.4E+08	1.4E+06	1.2E+03	1.2E+01	1.7E+13	1.7E+11	1.2E+03	1.2E+01
Sb-127	013968-50-8	1.2E+06	1.2E+04	2.9E+03	2.9E+01	1.8E+11	1.8E+09	2.8E+03	2.8E+01
Sb-129	014331-88-5	5.6E+06	5.6E+04	1.2E+03	1.2E+01	1.2E+12	1.2E+10	1.2E+03	1.2E+01
Sc-46	013967-63-0	1.8E+06	1.8E+04	8.7E+02	8.7E+00	8.2E+10	8.2E+08	8.7E+02	8.7E+00
Sc-47	014391-96-9	3.5E+06	3.5E+04	2.7E+04	2.7E+02	5.3E+11	5.3E+09	2.7E+04	2.7E+02
Sc-48	014391-86-7	1.6E+06	1.6E+04	5.2E+02	5.2E+00	2.6E+11	2.6E+09	5.2E+02	5.2E+00
Se-75	014265-71-5	1.6E+06	1.6E+04	7.7E+03	7.7E+01	2.2E+11	2.2E+09	7.7E+03	7.7E+01
Si-31	014276-49-4	2.1E+07	2.1E+05	2.0E+06	2.0E+04	3.3E+12	3.3E+10	1.8E+06	1.8E+04
Sm-147	014392-33-7	4.2E+05	4.2E+03			1.5E+08	1.5E+06	4.1E+05	4.1E+03
Sm-151	015715-94-3	2.3E+07	2.3E+05	2.3E+10	2.3E+08	2.3E+11	2.3E+09	2.3E+07	2.3E+05
Sm-153	015766-00-4	2.6E+06	2.6E+04	1.5E+05	1.5E+03	4.9E+11	4.9E+09	1.4E+05	1.4E+03
Sn-113	013966-06-8	2.8E+06	2.8E+04	2.3E+06	2.3E+04	1.6E+11	1.6E+09	1.3E+06	1.3E+04
Sn-121	014683-06-8	8.5E+06	8.5E+04			1.7E+12	1.7E+10	8.5E+06	8.5E+04
Sn-121m	014683-06-8	5.2E+06	5.2E+04			1.4E+11	1.4E+09	5.2E+06	5.2E+04
Sn-125	014683-08-0	6.2E+05	6.2E+03	5.7E+03	5.7E+01	9.0E+10	9.0E+08	5.6E+03	5.6E+01

Table 3.5b. (continued)

Chemical ^t	CASRN	Ingestion (pCi/g)		External Exposure (pCi/g) ^{††}		Inhalation (pCi/g)		Ingestion + External Exposure + Inhalation (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Sn-126	015832-50-5	4.9E+05	4.9E+03	2.1E+05	2.1E+03	2.5E+10	2.5E+08	1.5E+05	1.5E+03
Sr-82	014809-50-8	4.0E+05	4.0E+03	7.6E+07	7.6E+05	1.2E+11	1.2E+09	4.0E+05	4.0E+03
Sr-85	013967-73-2	7.4E+06	7.4E+04	4.4E+03	4.4E+01	9.4E+11	9.4E+09	4.4E+03	4.4E+01
Sr-85m	013967-73-2	5.8E+08	5.8E+06	1.3E+04	1.3E+02	1.5E+14	1.5E+12	1.3E+04	1.3E+02
Sr-89	014158-27-1	1.0E+06	1.0E+04	1.3E+07	1.3E+05	2.9E+11	2.9E+09	9.4E+05	9.4E+03
Sr-90	010098-97-2	2.5E+05	2.5E+03			1.8E+10	1.8E+08	2.5E+05	2.5E+03
Sr-90+D	010098-97-2	1.9E+05	1.9E+03			1.5E+10	1.5E+08	1.9E+05	1.9E+03
Sr-91	014331-91-0	3.7E+06	3.7E+04	2.6E+03	2.6E+01	1.4E+12	1.4E+10	2.6E+03	2.6E+01
Sr-92	014928-29-1	5.1E+06	5.1E+04	1.3E+03	1.3E+01	2.3E+12	2.3E+10	1.3E+03	1.3E+01
Ta-182	013982-00-8	1.5E+06	1.5E+04	1.5E+03	1.5E+01	6.5E+10	6.5E+08	1.5E+03	1.5E+01
Tb-158	015759-55-4	2.5E+06	2.5E+04			1.5E+10	1.5E+08	2.5E+06	2.5E+04
Tb-160	013981-29-8	1.4E+06	1.4E+04	1.7E+03	1.7E+01	9.4E+10	9.4E+08	1.7E+03	1.7E+01
Tc-95	014809-56-4	1.5E+08	1.5E+06	2.5E+03	2.5E+01	3.2E+13	3.2E+11	2.5E+03	2.5E+01
Tc-95m	014809-56-4	8.4E+06	8.4E+04	3.3E+03	3.3E+01	5.1E+11	5.1E+09	3.3E+03	3.3E+01
Tc-96	014808-44-7	4.6E+06	4.6E+04	7.3E+02	7.3E+00	5.5E+11	5.5E+09	7.3E+02	7.3E+00
Tc-96m	014808-44-7	4.0E+08	4.0E+06	8.9E+04	8.9E+02	4.7E+13	4.7E+11	8.9E+04	8.9E+02
Tc-97	015759-35-0	6.6E+07	6.6E+05	2.7E+07	2.7E+05	3.1E+12	3.1E+10	1.9E+07	1.9E+05
Tc-97m	015759-35-0	8.7E+06	8.7E+04	2.6E+07	2.6E+05	5.5E+11	5.5E+09	6.5E+06	6.5E+04
Tc-99	014133-76-7	7.4E+06	7.4E+04	1.1E+10	1.1E+08	3.7E+11	3.7E+09	7.4E+06	7.4E+04

Table 3.5b. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		External Exposure (pCi/g) ^{††}		Inhalation (pCi/g)		Ingestion + External Exposure + Inhalation (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Te-99m	014133-76-7	1.9E+08	1.9E+06	2.7E+04	2.7E+02	3.1E+13	3.1E+11	2.7E+04	2.7E+02
Te-125m	014390-73-9	4.2E+06	4.2E+04	3.2E+06	3.2E+04	3.8E+11	3.8E+09	1.8E+06	1.8E+04
Te-127	013981-49-2	1.2E+07	1.2E+05	4.2E+05	4.2E+03	2.5E+12	2.5E+10	4.1E+05	4.1E+03
Te-127m	013981-49-2	1.7E+06	1.7E+04	9.6E+06	9.6E+04	8.2E+10	8.2E+08	1.5E+06	1.5E+04
Te-129	014269-71-7	7.0E+07	7.0E+05	4.7E+04	4.7E+02	7.3E+12	7.3E+10	4.7E+04	4.7E+02
Te-129m	014269-71-7	8.9E+05	8.9E+03	9.9E+04	9.9E+02	8.1E+10	8.1E+08	8.9E+04	8.9E+02
Te-131	014683-12-6	2.7E+07	2.7E+05	5.1E+03	5.1E+01	4.3E+12	4.3E+10	5.1E+03	5.1E+01
Te-131m	014683-12-6	1.2E+06	1.2E+04	1.3E+03	1.3E+01	1.3E+11	1.3E+09	1.3E+03	1.3E+01
Te-132	014234-28-7	8.5E+05	8.5E+03	1.6E+04	1.6E+02	1.3E+11	1.3E+09	1.6E+04	1.6E+02
Th-227	015623-47-9	2.6E+05	2.6E+03	3.9E+04	3.9E+02	2.5E+08	2.5E+06	3.4E+04	3.4E+02
Th-228	014274-82-9	1.7E+05	1.7E+03	1.3E+07	1.3E+05	1.1E+07	1.1E+05	1.6E+05	1.6E+03
Th-228+D	014274-82-9	4.5E+04	4.5E+02	6.9E+03	6.9E+01	1.1E+07	1.1E+05	6.0E+03	6.0E+01
Th-229	015594-54-4	1.8E+05	1.8E+03	1.2E+05	1.2E+03	1.4E+07	1.4E+05	7.1E+04	7.1E+02
Th-229+D	015594-54-4	2.9E+04	2.9E+02	1.1E+04	1.1E+02	1.3E+07	1.3E+05	8.2E+03	8.2E+01
Th-230	014269-63-7	2.8E+05	2.8E+03	1.6E+08	1.6E+06	6.2E+07	6.2E+05	2.8E+05	2.8E+03
Th-231	014932-40-2	5.8E+06	5.8E+04	3.3E+06	3.3E+04	9.7E+11	9.7E+09	2.1E+06	2.1E+04
Th-232	007440-29-1	3.2E+05	3.2E+03	3.5E+08	3.5E+06	5.5E+07	5.5E+05	3.2E+05	3.2E+03
Th-234	015065-10-8	5.4E+05	5.4E+03	2.0E+06	2.0E+04	5.6E+10	5.6E+08	4.2E+05	4.2E+03
Tl-202	015720-57-7	1.0E+07	1.0E+05	4.8E+03	4.8E+01	1.8E+12	1.8E+10	4.8E+03	4.8E+01

Table 3.5b. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		External Exposure (pCi/g) ^{††}		Inhalation (pCi/g)		Ingestion + External Exposure + Inhalation (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Tl-204	013968-51-9	5.3E+06	5.3E+04	7.8E+06	7.8E+04	9.3E+11	9.3E+09	3.2E+06	3.2E+04
Tl-208	014913-50-9	6.0E+08	6.0E+06	4.7E+02	4.7E+00	7.9E+13	7.9E+11	4.7E+02	4.7E+00
Tl-209	015690-73-0	7.4E+08	7.4E+06	8.7E+02	8.7E+00	9.6E+13	9.6E+11	8.7E+02	8.7E+00
Tm-170	013981-30-1	1.4E+06	1.4E+04	1.8E+06	1.8E+04	9.7E+10	9.7E+08	7.8E+05	7.8E+03
Tm-171	014333-45-0	1.8E+07	1.8E+05	2.2E+07	2.2E+05	5.8E+11	5.8E+09	9.8E+06	9.8E+04
U-232	014158-29-3	1.3E+05	1.3E+03	2.0E+08	2.0E+06	2.0E+07	2.0E+05	1.3E+05	1.3E+03
U-233	013968-55-3	2.3E+05	2.3E+03	1.9E+08	1.9E+06	7.6E+07	7.6E+05	2.3E+05	2.3E+03
U-234	013966-29-5	2.3E+05	2.3E+03	3.2E+08	3.2E+06	7.7E+07	7.7E+05	2.3E+05	2.3E+03
U-235	015117-96-1	2.3E+05	2.3E+03	2.6E+04	2.6E+02	8.2E+07	8.2E+05	2.3E+04	2.3E+02
U-235+D	015117-96-1	2.2E+05	2.2E+03	2.6E+04	2.6E+02	8.2E+07	8.2E+05	2.3E+04	2.3E+02
U-236	013982-70-2	2.5E+05	2.5E+03	4.0E+08	4.0E+06	8.1E+07	8.1E+05	2.5E+05	2.5E+03
U-237	014269-75-1	2.6E+06	2.6E+04	5.0E+04	5.0E+02	3.4E+11	3.4E+09	4.9E+04	4.9E+02
U-238	007440-61-1	2.4E+05	2.4E+03	4.6E+08	4.6E+06	8.6E+07	8.6E+05	2.4E+05	2.4E+03
U-238+D	007440-61-1	1.7E+05	1.7E+03	1.3E+05	1.3E+03	8.6E+07	8.6E+05	7.3E+04	7.3E+02
U-240	015687-53-3	1.9E+06	1.9E+04	6.3E+07	6.3E+05	3.2E+11	3.2E+09	1.8E+06	1.8E+04
V-48	014331-97-6	1.4E+06	1.4E+04	6.1E+02	6.1E+00	1.6E+11	1.6E+09	6.1E+02	6.1E+00
W-181	015749-46-9	3.8E+07	3.8E+05	3.2E+05	3.2E+03	1.3E+13	1.3E+11	3.2E+05	3.2E+03
W-185	014932-41-3	5.1E+06	5.1E+04	1.4E+08	1.4E+06	2.5E+12	2.5E+10	4.9E+06	4.9E+04
W-187	014983-48-3	4.2E+06	4.2E+04	4.2E+03	4.2E+01	2.0E+12	2.0E+10	4.2E+03	4.2E+01

Table 3.5b. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		External Exposure (pCi/g) ^{††}		Inhalation (pCi/g)		Ingestion + External Exposure + Inhalation (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Xe-122	015151-09-4					3.5E+14	3.5E+12		
Xe-123	015700-10-4					1.2E+15	1.2E+13		
Xe-125	013994-18-8					8.9E+14	8.9E+12		
Xe-127	013994-19-9					2.6E+15	2.6E+13		
Xe-129m	013965-99-6					1.9E+15	1.9E+13		
Xe-131m	014683-11-5					2.6E+15	2.6E+13		
Xe-133	014932-42-4					2.6E+15	2.6E+13		
Xe-133m	014932-42-4					2.1E+15	2.1E+13		
Xe-135	014995-62-1					1.4E+15	1.4E+13		
Xe-135m	014995-62-1					5.7E+15	5.7E+13		
Xe-137	014835-21-3					7.7E+14	7.7E+12		
Xe-138	015751-81-2					5.2E+14	5.2E+12		
Y-90	010098-91-6	6.9E+05	6.9E+03			1.1E+11	1.1E+09	6.9E+05	6.9E+03
Y-91	014234-24-3	7.7E+05	7.7E+03	4.9E+05	4.9E+03	5.8E+10	5.8E+08	3.0E+05	3.0E+03
Y-91m	014234-24-3	2.8E+08	2.8E+06	3.6E+03	3.6E+01	3.6E+13	3.6E+11	3.6E+03	3.6E+01
Y-92	015751-59-4	5.3E+06	5.3E+04	7.0E+03	7.0E+01	6.7E+11	6.7E+09	7.0E+03	7.0E+01
Y-93	014981-70-5	1.8E+06	1.8E+04	2.0E+04	2.0E+02	3.1E+11	3.1E+09	2.0E+04	2.0E+02
Zn-65	013982-39-3	1.0E+06	1.0E+04	3.0E+03	3.0E+01	1.1E+11	1.1E+09	3.0E+03	3.0E+01
Zn-69	013982-23-5	1.7E+08	1.7E+06	3.4E+08	3.4E+06	1.0E+13	1.0E+11	1.1E+08	1.1E+06

Table 3.5b. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		External Exposure (pCi/g) ^{††}		Inhalation (pCi/g)		Ingestion + External Exposure + Inhalation (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Zn-69m	013982-23-5	6.9E+06	6.9E+04	4.8E+03	4.8E+01	9.2E+11	9.2E+09	4.8E+03	4.8E+01
Zr-93	015751-77-6	2.0E+07	2.0E+05			2.0E+11	2.0E+09	2.0E+07	2.0E+05
Zr-95	013967-71-0	2.7E+06	2.7E+04	2.4E+03	2.4E+01	1.7E+11	1.7E+09	2.4E+03	2.4E+01
Zr-97	014928-30-4	1.0E+06	1.0E+04	1.0E+04	1.0E+02	2.3E+11	2.3E+09	9.9E+03	9.9E+01

Notes:

- † Isotopes designated with an "m" indicate that the isotope is metastable; isotopes designated with a "+D" indicate that the radionuclide slope factors include contributions from daughter products.
- †† If no PRG for external exposure was calculated, there either was no external exposure slope factor available or the external exposure slope factor was equal to 0.00E+00 (resulting in the PRG for the external exposure pathway for soil under excavation land use to be undefined).
- ††† If slope factors and/or reference doses were available for only one pathway (i.e., ingestion, external exposure, OR inhalation), the total for ingestion plus external exposure plus inhalation was not calculated.

Table 3.6a. Chemical-specific parameters used in calculating risk-based Preliminary Remediation Goals (nonradionuclides)

Chemical	CASRN	Oral RfD (mg/kg-day)	AD Chronic RfD (mg/kg-day)	Inhalation RfD (mg/kg-day)	Oral SF (mg/kg-day) ¹	Inhalation SF (mg/kg-day) ¹	Absorbed SF (mg/kg-day) ¹	GI ABS	Permeability constant (cm/hr) [Kp]	Volatilization Factor (m ³ /kg) [VF]	Soil Saturation Conc. (mg/kg) [CSAT]	Deposition Velocity (m/day) [d]	Soil-to-Plant Uptake (B ₁)	Soil-to-Wet Plant Uptake (B _w)	Bioacc. factor for fish (L/kg) [BF]	Transfer coeff. for milk (day/kg) [F _{ml}]	Transfer coeff. for beef (day/kg) [F _b]
ACENAPHTHENE	000083-32-9	6.0E-02	1.9E-02					0.3100				0.0E+00	1.9E-01	4.7E-02	6.5E+02	7.9E-05	2.5E-04
ACEPHATE	030560-19-1	4.0E-03	4.0E-03		8.7E-03		8.7E-03	1.0000				1.0E-03	1.2E+02	3.0E+01	1.3E-01	1.1E-09	3.5E-09
ACETALDEHYDE	000075-07-0			2.6E-03				1.0000	7.2E-04	6.0E+04	4.9E+04						
ACETOCHLOR	034256-82-1	2.0E-02	2.0E-02					1.0000				8.6E+01					
ACETONE	000067-64-1	1.0E-01	8.3E-02					0.8300	5.7E-04			0.0E+00	5.3E+01	1.3E+01	3.9E-01	4.6E-09	1.5E-08
ACETONE CYANOHYDRIN	000075-86-5	8.0E-04	8.0E-04	2.9E-03				1.0000				8.6E+01					
ACETONITRILE	000075-05-8	6.0E-03	6.0E-03	1.4E-02				1.0000				0.0E+00	6.1E+01	1.5E+01	3.3E-01	3.7E-09	1.2E-08
ACETOPHENONE	000098-86-2	1.0E-01	1.0E-01					1.0000		6.7E+05		0.0E+00	4.1E+00	1.0E+00	1.1E+01	3.8E-07	1.2E-06
ACROLEIN	000107-02-8	2.0E-02	2.0E-02	5.7E-06				1.0000	7.4E-04	1.3E+04	4.8E+03	0.0E+00	3.8E+01	9.6E+00	3.4E+02	8.1E-09	2.6E-08
ACRYLAMIDE	000079-06-1	2.0E-04	2.0E-04		4.5E+00	4.5E+00	4.5E+00	1.0000	2.4E-04			0.0E+00	9.5E+01	2.4E+01	1.8E-01	1.7E-09	5.3E-09
ACRYLIC ACID	000079-10-7	5.0E-01	5.0E-01	2.9E-04				1.0000				8.6E+01	3.1E+01	7.8E+00	7.8E-01	1.1E-08	3.6E-08
ACRYLONITRILE	000107-13-1	1.0E-03	1.0E-03	5.7E-04	5.4E-01	2.4E-01	5.4E-01	1.0000	1.4E-03	3.6E+03	1.8E+03	0.0E+00	2.8E+01	6.9E+00	4.8E+01	1.4E-08	4.5E-08
ALACHLOR	015972-60-8	1.0E-02	1.0E-02		8.0E-02		8.0E-02	1.0000				8.6E+01	7.9E-01	2.0E-01	9.8E+01	6.6E-06	2.1E-05
ALAR	001596-84-5	1.5E-01	1.5E-01					1.0000				8.6E+01					
ALDICARB	000116-06-3	1.0E-03	1.0E-03					1.0000				8.6E+01					
ALDICARB SULFONE	001646-88-4	1.0E-03	1.0E-03					1.0000				8.6E+01					
ALDRIN	000309-00-2	3.0E-05	1.5E-05		1.7E+01	1.7E+01	3.4E+01	0.5000	1.6E-03			0.0E+00	3.3E-02	8.4E-03	3.1E+03	2.4E-02	8.5E-02
ALLYL	074223-64-6	2.3E-01	2.3E-01					1.0000				8.6E+01					
ALLYL ALCOHOL	000107-18-6	5.0E-03	5.0E-03					1.0000				0.0E+00	5.2E+01	1.3E+01	4.0E-01	4.8E-09	1.5E-08
ALLYL CHLORIDE	000107-05-1			2.9E-04				1.0000	7.0E-03	9.8E+03	6.3E+02	0.0E+00	1.3E+01	3.3E+00	2.5E+00	5.3E-08	1.7E-07
ALUMINUM PHOSPHIDE	020859-73-8	4.0E-04	4.0E-04					1.0000				8.6E+01					

Table 3.6a. (continued)

Chemical	CASRN	Oral RfD (mg/kg-day)	AD Chronic RfD (mg/kg-day)	Inhalation RfD (mg/kg-day)	Oral SF (mg/kg-day) ¹	Inhalation SF (mg/kg-day) ¹	Absorbed SF (mg/kg-day) ¹	GI ABS	Permeability constant (cm/hr) [Kp]	Volatilization Factor (m ³ /kg) [VF]	Soil Saturation Conc. (mg/kg) [CSAT]	Deposition Velocity (m/day) [d]	Soil-to-Plant Uptake (B _c)	Soil-to-Wet Plant Uptake (B _w)	Bioacc. factor for fish (L/kg) [BF]	Transfer coeff. for milk (day/kg) [F _{ml}]	Transfer coeff. for beef (day/kg) [F _b]
AMDRO	067485-29-4	3.0E-04	3.0E-04					1.0000				8.6E+01					
AMETRYN	000834-12-8	9.0E-03	9.0E-03					1.0000				8.6E+01	3.7E+00	9.3E-01	1.3E+01	4.6E-07	1.4E-06
AMINOPHENOL, m-	000591-27-5	7.0E-02	7.0E-02					1.0000				8.6E+01	2.9E+01	7.3E+00	8.5E-01	1.3E-08	4.1E-08
AMINOPYRIDINE, 4-	000504-24-5	2.0E-05	2.0E-05					1.0000				8.6E+01	2.7E+01	6.7E+00	9.6E-01	1.5E-08	4.8E-08
AMITRAZ	033089-61-1	2.5E-03	2.5E-03					1.0000				8.6E+01					
AMMONIA	007664-41-7			2.9E-02				1.0000				1.0E-03	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
AMMONIUM SULFAMATE	007773-06-0	2.0E-01	2.0E-01					1.0000				8.6E+01					
ANILINE	000062-53-3			2.9E-04	5.7E-03		5.7E-03	1.0000	4.1E-02			0.0E+00	1.1E+01	2.8E+00	3.1E+00	6.9E-08	2.2E-07
ANTHRACENE	000120-12-7	3.0E-01	2.3E-01					0.7600	2.2E-01			0.0E+00	1.0E-01	2.6E-02	1.4E+03	2.2E-04	7.1E-04
ANTIMONY (METALLIC)	007440-36-0	4.0E-04	8.0E-06					0.0200	1.0E-03			1.0E-03	5.0E-02	1.0E-02	1.0E+02	2.5E-05	4.0E-05
ANTIMONY PENTOXIDE	001314-60-9	5.0E-04	5.0E-04					1.0000				8.6E+01					
ANTIMONY POTASSIUM TARTRATE	000304-61-0	9.0E-04	9.0E-04					1.0000				8.6E+01					
ANTIMONY TETROXIDE	001332-81-6	4.0E-04	4.0E-04					1.0000				8.6E+01					
ANTIMONY TRIOXIDE	001309-64-4	4.0E-04	4.0E-04					1.0000				8.6E+01					
APOLLO	074115-24-5	1.3E-02	1.3E-02					1.0000				8.6E+01					
ARAMITE	000140-57-8	5.0E-02	5.0E-02		2.5E-02	2.5E-02	2.5E-02	1.0000				8.6E+01					
AROCOR 1016	012674-11-2	7.0E-05	6.3E-05					0.9000				0.0E+00	2.3E-02	5.8E-03	1.7E+04	3.0E-03	9.5E-03
AROCOR 1254	011097-69-1	2.0E-05	1.8E-05					0.9000				0.0E+00	1.2E-02	3.1E-03	2.3E+04	1.1E-02	5.3E-02
AROCOR-1221	011104-28-2				7.7E+00		8.6E+00	0.9000				0.0E+00	1.7E-01	4.2E-02	7.4E+02	9.5E-05	3.0E-04
AROCOR-1232	011141-16-5				7.7E+00		8.6E+00	0.9000				0.0E+00	5.5E-01	1.4E-01	1.6E+02	1.3E-05	4.0E-05

Table 3.6a. (continued)

Chemical	CASRN	Oral RD (mg/kg-day)	AD Chronic RfD (mg/kg-day)	Inhalation RD ¹ (mg/kg-day)	Oral SF (mg/kg-day) ⁻¹	Inhalation SF (mg/kg-day) ⁻¹	Absorbed SF (mg/kg-day) ⁻¹	GI ABS	Permeability constant (cm/hr) [Kp]	Volatization Factor (m ² /kg) [VF]	Soil Saturation Conc. (mg/kg) [CSAT]	Deposition Velocity (m/day) [d]	Soil-to-Plant Uptake (B _s)	Soil-to-Wet Plant Uptake (B _w)	Bioacc. factor for fish (L/kg) [BF]	Transfer coeff. for milk (day/kg) [F _m]	Transfer coeff. for beef (day/kg) [F _b]
AROCOR-1242	053469-21-9				7.7E+00		8.6E+00	0.9000				0.0E+00	1.6E-01	4.1E-02	7.8E+02	1.0E-04	3.2E-04
AROCOR-1248	012672-29-6				7.7E+00		8.6E+00	0.9000				0.0E+00	1.8E-02	4.5E-03	1.4E+04	4.6E-03	1.4E-02
AROCOR-1260	011096-82-5				7.7E+00		8.6E+00	0.9000				0.0E+00	2.9E-03	7.1E-04	1.6E+05	1.1E-01	3.5E-01
ARSENIC, INORGANIC	007440-38-2	3.0E-04	1.2E-04			5.0E+01		0.4100	1.0E-03			1.0E-03	6.0E-03	1.5E-03	1.0E+02	6.0E-05	2.0E-03
ARSINE	007784-42-1			1.4E-05				1.0000				8.6E+01					
ASBESTOS	001312-21-4							1.0000				1.0E-03	0.0E+00	0.0E+00	1.0E+00	0.0E+00	0.0E+00
ASSURE	076578-14-8	9.0E-03	9.0E-03					1.0000				8.6E+01					
ASULAM	003337-71-1	5.0E-02	5.0E-02					1.0000				8.6E+01					
ATRAZINE	001912-24-9	3.5E-02	3.5E-02		2.2E-01		2.2E-01	1.0000				8.6E+01	1.1E+00	2.7E-01	6.4E+01	3.8E-06	1.2E-05
AVERMECTIN B1	065195-55-3	4.0E-04	4.0E-04					1.0000				8.6E+01					
AZOBIENZENE	000103-33-3				1.1E-01	1.1E-01	1.1E-01	1.0000				8.6E+01	2.4E-01	6.0E-02	4.7E+02	5.2E-05	1.7E-04
BARIUM	007440-39-3	7.0E-02	4.9E-03	1.4E-04				0.0700	1.0E-03			1.0E-03	1.0E-01	1.0E-02	4.0E+00	4.8E-04	2.3E-04
BARIUM CYANIDE	000542-62-1	1.0E-01	1.0E-01					1.0000				8.6E+01					
BAYGON	000114-26-1	4.0E-03	4.0E-03					1.0000				8.6E+01	4.7E+00	1.2E+00	9.3E+00	3.0E-07	9.5E-07
BAYLETON	043121-43-3	3.0E-02	3.0E-02					1.0000				8.6E+01	1.8E+00	4.4E-01	3.4E+01	1.7E-06	5.2E-06
BAYTHROID	068359-37-5	2.5E-02	2.5E-02					1.0000				8.6E+01					
BENEFIN	001861-40-1	3.0E-01	3.0E-01					1.0000				8.6E+01					
BENOMYL	017804-35-2	5.0E-02	5.0E-02					1.0000				0.0E+00	1.8E+00	4.5E-01	3.3E+01	1.6E-06	5.0E-06
BENTAZON	025057-89-0	2.5E-03	2.5E-03					1.0000				8.6E+01	9.0E+00	2.2E+00	4.0E+00	1.0E-07	3.2E-07
BENZALDEHYDE	000100-52-7	1.0E-01	1.0E-01					1.0000				8.6E+01	1.7E+00	4.2E-01	3.6E+01	1.8E-06	5.6E-06
BENZENE	000071-43-2				2.9E-02	2.9E-02	3.0E-02	0.9700	2.1E-02	1.9E+04	4.9E+02	0.0E+00	2.3E+00	5.8E-01	2.4E+01	1.0E-06	3.3E-06
BENZENETHIOL	000108-98-5	1.0E-05	1.0E-05					1.0000				8.6E+01	1.4E+00	3.4E-01	4.8E+01	2.6E-06	8.3E-06

Table 3.6a. (continued)

Chemical	CASRN	Oral RID (mg/kg-day)	AD Chronic RID (mg/kg-day)	Inhalation RID ¹ (mg/kg-day)	Oral SF (mg/kg-day) ⁻¹	Inhalation SF (mg/kg-day) ⁻¹	Absorb- ed SF (mg/kg-day) ⁻¹	GI ABS	Perme- ability constant (cm/hr) [Kp]	Volatiza- tion Factor (m ³ /kg) [VF]	Soil Satura- tion Conc. (mg/kg) [CSAT]	Deposi- tion Velocity (m/day) [d]	Soil-to- Plant Uptake (B _p)	Soil-to- Vet Plant Uptake (B _v)	Bioacc. factor for fish (L/kg) [BF]	Transfer coeff. for milk (day/kg) [F _{ml}]	Transfer coeff. for beef (day/kg) [F _b]
BENZIDINE	000092-87-5	3.0E-03	2.4E-03		2.3E+02	2.3E+02	2.9E+02	0.8000	1.3E-03			0.0E+00	6.9E+00	1.7E+00	1.1E+02	1.6E-07	5.0E-07
BENZOIC ACID	000065-85-0	4.0E+00	4.0E+00					1.0000	7.3E-03			0.0E+00	3.2E+00	8.0E-01	1.6E+01	5.9E-07	1.9E-06
BENZOTRICHORIDE	000098-07-7				1.3E+01		1.3E+01	1.0000	1.5E-02			8.6E+01	7.9E-01	2.0E-01	9.8E+01	6.6E-06	2.1E-05
BENZO(A)PYRENE	000050-32-8				7.3E+00		2.4E+01	0.3100	1.2E+00			0.0E+00	1.2E-02	3.0E-03	2.4E+04	9.1E-03	2.9E-02
BENZO(B)FLUOR- ANTHENE	000205-99-2				7.3E-01		2.4E+00	0.3100	1.2E+00			0.0E+00	1.2E-02	3.0E-03	2.4E+04	9.1E-03	2.9E-02
BENZO(G,H,I)- PERYLENE	000191-24-2							0.3100	1.8E+00			8.6E+01					
BENZO(K)FLUOR- ANTHENE	000207-08-9				7.3E-02		2.4E-01	0.3100	6.0E-01			0.0E+00	1.2E-02	3.0E-03	2.4E+04	9.1E-03	2.9E-02
BENZYL ALCOHOL	000100-51-6	3.0E-01	2.0E-01					0.6600	6.0E-03			8.6E+01	9.0E+00	2.2E+00	4.0E+00	1.0E-07	3.2E-07
BENZYL CHLORIDE	000100-44-7				1.7E-01		1.7E-01	1.0000	1.4E-02			8.6E+01	1.8E+00	4.5E-01	3.3E+01	1.6E-06	5.0E-06
BENZ(A)ANTHRA- CENE	000056-55-3				7.3E-01		2.4E+00	0.3100	8.1E-01			0.0E+00	2.2E-02	5.6E-03	1.2E+04	3.2E-03	1.0E-02
BERYLLIUM	007440-41-7	5.0E-03	5.0E-05		4.3E+00	8.4E+00	4.3E+02	0.0100	1.0E-03			1.0E-03	1.9E-03	4.7E-04	1.0E+02	2.0E-06	8.0E-04
BIDRIN	000141-66-2	1.0E-04	1.0E-04					1.0000				8.6E+01	9.6E+01	2.4E+01	1.8E-01	1.7E-09	5.2E-09
BIPHENTHRIN	082657-04-3	1.5E-02	1.5E-02					1.0000				8.6E+01					
BIPHENYL, 1,1'-	000092-52-4	5.0E-02	5.0E-02					1.0000				8.6E+01	1.8E-01	4.5E-02	6.9E+02	8.7E-05	2.8E-04
BIS(2-CHLORO-1- METHYLETHYL)- ETHER (TECHNICAL)	000108-06-1				7.0E-02	3.5E-02	7.0E-02	1.0000				8.6E+01					
BIS(2-CHLORO- ETHOXY)METHANE	000111-91-1							1.0000				8.6E+01					
BIS(2-CHLOROETHYL) ETHER	000111-44-4				1.1E+00	1.1E+00	1.1E+00	1.0000	2.1E-03	1.8E+05	6.5E+02	0.0E+00	5.3E+00	1.3E+00	1.1E+01	2.5E-07	7.9E-07
BIS(2-CHLORO- ISOPROPYL)ETHER	039638-32-9	4.0E-02	4.0E-02					1.0000				0.0E+00	2.4E+00	5.9E-01	2.3E+01	1.0E-06	3.2E-06

Table 3.6a. (continued)

Chemical	CASRN	Oral RID (mg/kg-day)	AD Chronic RID (mg/kg-day)	Inhalation RID ¹ (mg/kg-day)	Oral SF (mg/kg-day) ⁻¹	Inhalation SF (mg/kg-day) ⁻¹	Absorbed SF (mg/kg-day) ⁻¹	GI ABS	Permeability constant (cm/hr) [Kp]	Volatilization Factor (m ² /kg) [VF]	Soil Saturation Conc. (mg/kg) [CSAT]	Deposition Velocity (m/day) [d]	Soil-to-Plant Uptake (B ₁)	Soil-to-Wet Plant Uptake (B _w)	Bioacc. factor for fish (L/kg) [BFI]	Transfer coeff. for milk (day/kg) [F _d]	Transfer coeff. for beef (day/kg) [F _b]
BIS(2-ETHYLHEXYL)- PHTHALATE	000117-81-7	2.0E-02	3.8E-03		1.4E-02		7.4E-02	0.1900	2.3E-02			0.0E+00	1.7E+01	4.3E+00	1.7E+00	3.3E-08	1.0E-07
BIS(CHLOROMETHYL) ETHER	000542-88-1				2.2E+02	2.2E+02	2.2E+02	1.0000		1.1E+05	9.5E+03		2.3E+01	5.8E+00	1.1E+00	1.9E-08	6.0E-08
BISPHENOL A	000080-05-7	5.0E-02	5.0E-02					1.0000				8.6E+01	3.3E-01	8.3E-02	3.1E+02	3.0E-05	9.5E-05
BORON TRIFLUORIDE	007637-07-2			2.0E-04				1.0000				8.6E+01					
BORON and BORATES ONLY	007440-42-8	9.0E-02	8.1E-02	5.7E-03				0.9000				1.0E-03	4.8E-01	1.2E-01	2.2E-01	2.7E-03	8.0E-04
BROMOCHLORO- METHANE	000074-97-5							1.0000				8.6E+01					
BROMODICHLORO- METHANE	000075-27-4	2.0E-02	2.0E-02		6.2E-02		6.3E-02	0.9800	5.8E-03			0.0E+00	2.0E+00	4.9E-01	3.0E+01	1.4E-06	4.4E-06
BROMODIPHENYL ETHER, p-	000101-55-3							1.0000				8.6E+01					
BROMOFORM	000075-25-2	2.0E-02	1.2E-02		7.9E-03	3.9E-03	1.3E-02	0.6000	2.6E-03			0.0E+00	1.6E+00	4.0E-01	3.9E+01	2.0E-06	6.3E-06
BROMOMETHANE	000074-83-9	1.4E-03	1.4E-03	1.4E-03				1.0000	3.5E-03	3.3E+03	3.4E+02	0.0E+00	7.9E+00	2.0E+00	4.7E+00	1.2E-07	3.9E-07
BROMOPHOS	002104-96-3	5.0E-03	5.0E-03					1.0000				8.6E+01					
BROMOTRICHLORO- METHANE	000075-62-7							1.0000				8.6E+01					
BROMOXYNIL	001689-84-5	2.0E-02	2.0E-02					1.0000				8.6E+01	2.0E+01	5.0E+00	1.4E+00	2.5E-08	7.8E-08
BROMOXYNIL OCTANOATE	001689-99-2	2.0E-02	2.0E-02					1.0000				8.6E+01					
BUTADIENE, 1,3-	000106-99-0					1.8E+00		1.0000	2.3E-02	6.1E+03	3.2E+02						
BUTANOL, n-	000071-36-3	1.0E-01	1.0E-01					1.0000	2.5E-03			0.0E+00	1.4E+01	3.6E+00	2.2E+00	4.5E-08	1.4E-07
BUTYL BENZYL PHTHALATE	000085-68-7	2.0E-01	1.2E-01					0.6100				8.6E+01					
BUTYLATE	002008-41-5	5.0E-02	5.0E-02					1.0000				8.6E+01					

Table 3.6a. (continued)

Chemical	CASRN	Oral RD (mg/kg-day)	AD Chronic RD (mg/kg-day)	Inhalation RD (mg/kg-day)	Oral SF (mg/kg-day) ¹	Inhalation SF (mg/kg-day) ¹	Absorbed SF (mg/kg-day) ¹	GI ABS	Permeability constant (cm/hr) [Kpl]	Volatilization Factor (m ² /kg) [VF]	Soil Saturation Conc. (mg/kg) [CSAT]	Deposition Velocity (m/day) [d]	Soil-to-Plant Uptake (B _s)	Soil-to-Wet Plant Uptake (B _w)	Bioacc. factor for fish (L/kg) [BF]	Transfer coeff. for milk (day/kg) [F _M]	Transfer coeff. for beef (day/kg) [F _B]
BUTYLCHLORIDE, T-	000507-20-0							1.000				8.6E+01					
BUTYLPHTHALYL BUTYLGlyCOLATE	000085-70-1	1.0E+00	1.0E+00					1.000				8.6E+01					
CACODYLIC ACID	000075-60-5	3.0E-03	3.0E-03					1.000				8.6E+01	3.9E+01	9.7E+00	5.9E-01	7.9E-09	2.5E-08
CADMIUM (Diet)	007440-43-9	1.0E-03	1.0E-05			6.1E+00		0.010	1.0E-03			1.0E-03	1.5E-01	3.8E-02	2.0E+02	1.0E-03	4.0E-04
CADMIUM (Water)	007440-43-9	5.0E-04	5.0E-06			6.1E+00		0.010	1.0E-03			1.0E-03	1.5E-01	3.8E-02	2.0E+02	1.0E-03	4.0E-04
CALCIUM CYANIDE	000592-01-8	4.0E-02	4.0E-02					1.000				8.6E+01					
CAPROLACTAM	000105-60-2	5.0E-01	5.0E-01					1.000				8.6E+01	5.0E+01	1.2E+01	4.2E-01	5.1E-09	1.6E-08
CAPTAFOL	002425-06-1	2.0E-03	2.0E-03		8.6E-03		8.6E-03	1.000				8.6E+01					
CAPTAN	000133-06-2	1.3E-01	1.3E-01		3.5E-03		3.5E-03	1.000	1.3E-03			8.6E+01	1.7E+00	4.2E-01	3.6E+01	1.8E-06	5.6E-06
CARBARYL	000062-25-2	1.0E-01	1.0E-01					1.000				8.6E+01	1.7E+00	4.2E-01	3.7E+01	1.8E-06	5.8E-06
CARBAZOLE	000086-74-8				2.0E-02		2.9E-02	0.700				8.6E+01	2.6E-01	6.5E-02	4.2E+02	4.6E-05	1.4E-04
CARBOFURAN	001563-66-2	5.0E-03	5.0E-03					1.000				8.6E+01	1.3E+00	3.3E-01	5.1E+01	2.8E-06	8.9E-06
CARBON DISULFIDE	000075-15-0	1.0E-01	6.3E-02	2.9E-03				0.6300	2.4E-02	2.0E+04	1.7E+03	0.0E+00	2.7E+00	6.8E-01	1.9E+01	7.9E-07	2.5E-06
CARBON TETRACHLORIDE	000056-23-5	7.0E-04	4.6E-04		1.3E-01	5.3E-02	2.0E-01	0.6500	2.2E-02	1.9E+04	1.0E+03	0.0E+00	1.2E+00	2.9E-01	1.5E+02	3.5E-06	1.1E-05
CARBOSULFAN	055285-14-8	1.0E-02	1.0E-02					1.000				8.6E+01					
CARBOXIN	005234-68-4	1.0E-01	1.0E-01					1.000				8.6E+01	2.2E+00	5.6E-01	2.5E+01	1.1E-06	3.5E-06
CHLORAL	000075-87-6	2.0E-03	2.0E-03					1.000				8.6E+01					
CHLORAMBEN	000133-90-4	1.5E-02	1.5E-02					1.000				8.6E+01					
CHLORANIL	000118-75-2				4.0E-01		4.0E-01	1.000				8.6E+01					
CHLORDANE	000057-74-9	6.0E-05	3.0E-05		1.3E+00		2.6E+00	0.5000	5.2E-02			0.0E+00	6.7E-02	1.7E-02	3.2E+02	3.7E-04	7.4E-03
CHLORIMURON-ETHYL	090982-32-4	2.0E-02	2.0E-02					1.000				8.6E+01					

Table 3.6a. (continued)

Chemical	CASRN	Oral RD (mg/kg-day)	AD Chronic RD (mg/kg-day)	Inhalation RD (mg/kg-day)	Oral SF (mg/kg-day) ¹	Inhalation SF (mg/kg-day) ¹	Absorbed SF (mg/kg-day) ²	GI ABS	Permeability constant (cm/hr) [K _p]	Volatization Factor (m ² /kg) [VF]	Soil Saturation Conc. (mg/kg) [CSAT]	Deposition Velocity (m/day) [d]	Soil-to-Plant Uptake (B _v)	Soil-to-Wet Plant Uptake (B _w)	Bioacc. factor for fish (L/kg) [BF]	Transfer coeff. for milk (day/kg) [F _{ml}]	Transfer coeff. for beef (day/kg) [F _b]
CHLORINE	007782-50-5	1.0E-01	1.0E-01					1.0000				1.0E-02	7.0E+01	1.8E+01	5.0E+01	1.7E-02	1.7E-02
CHLORINE DIOXIDE	010049-04-4			5.7E-05				1.0000				8.6E+01					
CHLORO-1,1,3-BUTADIENE, 2-	000126-99-8	2.0E-02	2.0E-02	2.0E-03				1.0000		4.3E+04	1.6E+03	0.0E+00	3.6E+00	9.1E-01	1.3E+01	4.8E-07	1.5E-06
CHLORO-2-METHYLANILINE HCL, 4-	003165-93-3				4.6E-01		4.6E-01	1.0000				8.6E+01					
CHLORO-2-METHYLANILINE, 4-	000095-69-2				5.8E-01		5.8E-01	1.0000				8.6E+01					
CHLOROACETIC ACID	000079-11-8	2.0E-03	2.0E-03					1.0000				8.6E+01	8.4E+00	2.1E+00	4.4E+00	1.1E-07	3.5E-07
CHLOROACETO-PHENONE, 2-	000532-27-4			8.6E-06				1.0000				8.6E+01					
CHLOROANILINE, p-	000106-47-8	4.0E-03	4.0E-03					1.0000				0.0E+00	3.4E+00	8.5E-01	1.4E+01	5.4E-07	1.7E-06
CHLOROBENZENE	000108-90-7	2.0E-02	6.2E-03	5.7E-03				0.3100	4.1E-02	4.9E+04	5.1E+02	0.0E+00	8.8E-01	2.2E-01	6.5E+02	5.5E-06	1.7E-05
CHLOROBENZILATE	000510-15-6	2.0E-02	2.0E-02		2.7E-01	2.7E-01	2.7E-01	1.0000				0.0E+00	9.0E-02	2.4E-02	1.6E+03	2.6E-04	8.1E-04
CHLOROBENZOIC ACID, p-	000074-11-3	2.0E-01	2.0E-01					1.0000				8.6E+01	1.1E+00	2.8E-01	6.1E+01	3.5E-06	1.1E-05
CHLOROBENZOTRI-FLUORIDE, 4-	000098-56-6	2.0E-02	2.0E-02					1.0000				8.6E+01					
CHLOROBUTANE, 1-	000109-69-3	4.0E-01	4.0E-01					1.0000				8.6E+01					
CHLOROBUTANE, 2-	000078-86-4							1.0000				8.6E+01					
CHLOROCYCLO-PENTADIENE	041851-50-7							1.0000				8.6E+01					
CHLORODIBROMO-ETHANE	073506-94-2				8.4E-02		8.4E-02	1.0000				8.6E+01	1.2E+00	2.9E-01	6.0E+01	3.5E-06	1.1E-05
CHLORODIFLUORO-METHANE	000075-45-6			1.4E+01				1.0000				8.6E+01					
CHLOROFORM	000067-66-3	1.0E-02	2.0E-03		6.1E-03	8.1E-02	3.1E-02	0.2000	8.9E-03	1.8E+04	1.5E+03	0.0E+00	2.8E+00	7.0E-01	1.8E+01	7.4E-07	2.3E-06

Table 3.6a. (continued)

Chemical	CASRN	Oral R ₁₀ (mg/kg-day)	AD Chronic R ₁₀ (mg/kg-day)	Inhalation R ₁₀ (mg/kg-day)	Oral SF (mg/kg-day) ⁻¹	Inhalation SF (mg/kg-day) ⁻¹	Absorbed SF (mg/kg-day) ⁻¹	GI ABS	Permeability constant (cm/hr)	Volatilization Factor (m ³ /kg) [VF]	Soil Saturation Conc. (mg/kg) [CSAT]	Deposition Velocity (m/day) [d]	Soil-to-Plant Uptake (B ₁)	Soil-to-Wet Plant Uptake (B _w)	Bioacc. factor for fish (L/kg) [BF]	Transfer coeff. for milk (day/kg) [F _M]	Transfer coeff. for beef (day/kg) [F _B]
CHLOROMETHANE	000074-87-3				1.3E-02	6.3E-03	1.3E-02	1.0000	4.2E-03	3.3E+03	1.2E+03	0.0E+00	1.1E+01	2.7E+00	3.1E+00	7.1E-08	2.2E-07
CHLOROMETHYL METHYL ETHER	000107-30-2							1.0000				8.6E+01					
CHLORO-NAPHTHALENE, BETA-	000091-58-7	8.0E-02	8.0E-02					1.0000				0.0E+00	1.9E-01	4.7E-02	6.5E+02	7.9E-05	2.5E-04
CHLORONITRO-BENZENE, o-	000088-73-3				2.5E-02		2.5E-02	1.0000				8.6E+01	2.0E+00	4.9E-01	3.0E+01	1.4E-06	4.4E-06
CHLORONITRO-BENZENE, p-	000121-73-3				1.8E-02		1.8E-02	1.0000				8.6E+01	1.6E+00	3.9E-01	4.0E+01	2.0E-06	6.5E-06
CHLOROPHENOL, 2-	000095-57-8	5.0E-03	5.0E-03					1.0000	3.3E-02			0.0E+00	2.1E+00	5.3E-01	6.4E+00	1.2E-06	3.8E-06
CHLOROPHENYL METHYL SULFIDE, p-	000123-09-1							1.0000				8.6E+01					
CHLOROPHENYL METHYL SULFOXIDE	000934-73-6							1.0000				8.6E+01					
CHLOROPROPANE, 2-	000075-29-6			2.9E-02				1.0000		1.5E+04	1.8E+03	8.6E+01					
CHLOROTHALONIL	001897-45-6	1.5E-02	1.5E-02		1.1E-02		1.1E-02	1.0000	2.5E-02			8.6E+01	2.3E-01	5.7E-02	5.1E+02	5.8E-05	1.8E-04
CHLOROTOLUENE, o-	000095-49-8	2.0E-02	2.0E-02					1.0000				8.6E+01	4.1E-01	1.0E-01	2.3E+02	2.1E-05	6.6E-05
CHLOROPROPAM	000101-21-3	2.0E-01	2.0E-01					1.0000				8.6E+01	7.6E-01	1.9E-01	1.0E+02	7.1E-06	2.2E-05
CHLOROPYRIFOS	002921-88-2	3.0E-03	3.0E-03					1.0000				8.6E+01	4.3E-02	1.1E-02	4.5E+03	1.0E-03	3.2E-03
CHLOROPYRIFOS METHYL	005598-13-0	1.0E-02	1.0E-02					1.0000				8.6E+01	1.2E-01	3.1E-02	1.1E+03	1.6E-04	5.1E-04
CHLORSULFURON	064902-72-3	5.0E-02	5.0E-02					1.0000				8.6E+01					
CHLORTHIOPHOS	060238-56-4	8.0E-04	8.0E-04					1.0000				8.6E+01					
CHROMIUM (III) (INSOLUBLE SALTS)	016065-83-1	1.0E+00	5.0E-03					0.0050	1.0E-03			1.0E-03	4.0E-02	1.0E-02	2.0E+02	1.0E-05	9.0E-03
CHROMIUM (VI)	018540-29-9	5.0E-03	1.0E-04			4.1E+01		0.0200	1.0E-03			1.0E-03	4.0E-02	1.0E-02	2.0E+02	1.0E-05	9.0E-03

Table 3.6a. (continued)

Chemical	CASRN	Oral RfD (mg/kg-day)	AD Chronic RfD (mg/kg-day)	Inhalation RfD (mg/kg-day)	Oral SF (mg/kg-day) ¹	Inhalation SF (mg/kg-day) ¹	Absorbed SF (mg/kg-day) ¹	GI ABS	Permeability constant (cm/hr) [Kp]	Volatilization Factor (m ² /kg) [VF]	Soil Saturation Conc. (mg/kg) [CSAT]	Deposition Velocity (m/day) [d]	Soil-to-Plant Uptake (B _s)	Soil-to-Wet Plant Uptake (B _w)	Bioacc. factor for fish (L/kg) [BF]	Transfer coeff. for milk (day/kg) [F _m]	Transfer coeff. for beef (day/kg) [F _b]
CHRYSENE	000218-01-9				7.3E-03		2.4E-02	0.3100	8.1E-01			0.0E+00	2.2E-02	5.5E-03	1.1E+04	3.2E-03	1.0E-02
COKE OVEN EMISSIONS	008007-45-2					2.2E+00		1.0000				0.0E+00	6.8E-03	1.7E-03	5.1E+04	2.5E-02	7.9E-02
COPPER	007440-50-8							0.3000	1.0E-03			1.0E-03	2.5E-01	6.3E-02	2.0E+02	1.5E-03	9.0E-03
COPPER CYANIDE	000544-92-3	5.0E-03	5.0E-03					1.0000				8.6E+01					
CREOSOTE	008001-58-9							1.0000				8.6E+01					
CRESOL, m-	000108-39-4	5.0E-02	5.0E-02					1.0000	1.5E-02			8.6E+01	2.8E+00	6.9E-01	1.9E+01	7.6E-07	2.4E-06
CRESOL, o-	000095-48-7	5.0E-02	5.0E-02					1.0000	1.6E-02			0.0E+00	2.8E+00	7.0E-01	1.8E+01	7.4E-07	2.3E-06
CRESOL, p-	000106-44-5	5.0E-03	3.3E-03					0.6500	1.8E-02			0.0E+00	3.0E+00	7.4E-01	1.7E+01	6.8E-07	2.1E-06
CROTONALDEHYDE	000123-71-9				1.9E+00		1.9E+00	1.0000				8.6E+01	3.7E+00	9.3E-01	1.3E+01	4.6E-07	1.4E-06
CUMENE	000098-82-8	4.0E-02	4.0E-02	2.6E-03				1.0000		7.0E+04	3.5E+02		3.0E-01	7.4E-02	3.6E+02	3.6E-05	1.1E-04
CYANAZINE	021725-46-2	2.0E-03	2.0E-03		8.4E-01		8.4E-01	1.0000				8.6E+01					
CYANIDE (CN-)	000037-12-5	2.0E-02	3.4E-03					0.1700	7.5E-03			1.0E-03	5.4E+01	1.4E+01	3.8E-01	4.4E-09	1.4E-08
CYANOGEN	000460-19-5	4.0E-02	4.0E-02					1.0000				8.6E+01					
CYANOGEN BROMIDE	000506-68-3	9.0E-02	9.0E-02					1.0000				8.6E+01					
CYANOGEN CHLORIDE	000506-77-4	5.0E-02	5.0E-02					1.0000				8.6E+01	3.0E+01	7.4E+00	8.4E-01	1.3E-08	4.0E-08
CYCLOHEXANE, 1,2,3,4,5-PENTA-BROMO-6-CHLORO	000087-84-3				2.3E-02		2.3E-02	1.0000				8.6E+01					
CYCLOHEXANONE	000108-94-1	5.0E+00	5.0E+00					1.0000				0.0E+00	1.3E+01	3.3E+00	2.4E+00	5.1E-08	1.6E-07
CYCLOHEXYLAMINE	000108-91-8	2.0E-01	2.0E-01					1.0000				8.6E+01	5.3E+00	1.3E+00	8.0E+00	2.5E-07	7.8E-07
CYCLOPENTADIENE	000542-92-7							1.0000				8.6E+01					
CYHALOTHRIN/KARATE	068085-85-8	5.0E-03	5.0E-03					1.0000				8.6E+01					

Table 3.6a. (continued)

Chemical	CASRN	Oral RfD (mg/kg-day)	AD Chronic RfD (mg/kg-day)	Inhalation RfD (mg/kg-day)	Oral SF (mg/kg-day) ⁻¹	Inhalation SF (mg/kg-day) ⁻¹	Absorbed SF (mg/kg-day) ⁻¹	GI ABS	Permeability constant (cm/hr) [Kp]	Volatilization Factor (m ³ /kg) [VF]	Soil Saturation Conc. (mg/kg) [CSAT]	Deposition Velocity (m/day) [d]	Soil-to-Plant Uptake (B _s)	Soil-to-Wet Plant Uptake (B _w)	Bioacc. factor for fish (L/kg) [BF]	Transfer coeff. for milk (day/kg) [F _{ml}]	Transfer coeff. for beef (day/kg) [F _b]
CYPERMETHRIN	052315-07-8	1.0E-02	1.0E-02					1.0000				8.6E+01					
CYROMAZINE	066215-27-8	7.5E-03	7.5E-03					1.0000				8.6E+01					
DACTHAL	001861-32-1	1.0E-02	1.0E-02					1.0000				8.6E+01					
DALAPON	000075-99-0	3.0E-02	3.0E-02					1.0000				8.6E+01					
DDD	000072-54-8				2.4E-01		3.4E-01	0.7000	2.8E-01			0.0E+00	1.0E-02	2.5E-03	2.7E+03	3.0E-03	1.3E-02
DDE	000072-55-9				3.4E-01		4.9E-01	0.7000	2.4E-01			0.0E+00	3.5E-03	8.7E-04	8.5E+03	9.6E-03	4.9E-02
DDT	000050-29-3	5.0E-04	3.5E-04		3.4E-01	3.4E-01	4.9E-01	0.7000	4.3E-01			0.0E+00	1.0E-02	2.6E-03	3.0E+04	1.1E-02	2.8E-02
DECABROMODIPHENYL ETHER	001163-19-5	1.0E-02	1.0E-02					1.0000				8.6E+01					
DEMETON	008065-48-3	4.0E-05	4.0E-05					1.0000				8.6E+01					
DI(2-ETHYLHEXYL)-ADIPATE	000103-23-1	6.0E-01	6.0E-01		1.2E-03		1.2E-03	1.0000				1.0E-03	1.2E-03	3.0E-04	4.9E+05	4.9E-01	1.6E+00
DIALATE	002303-16-4				6.1E-02		6.1E-02	1.0000				8.6E+01	1.5E+01	3.7E+00	2.1E+00	4.3E-08	1.3E-07
DIAZINON	000333-41-5	9.0E-04	9.0E-04					1.0000				0.0E+00	2.4E-01	6.1E-02	4.6E+02	5.1E-05	1.6E-04
DIBENZ(A,H)-ANTHRACENE	000053-70-3				7.3E+00		2.4E+01	0.3100	2.7E+00			0.0E+00	2.2E-02	5.5E-03	1.1E+05	3.2E-03	1.0E-02
DIBROMO-3-CHLORO-PROPANE, 1,2-	000096-12-8			5.7E-05	1.4E+00	2.4E-03	1.4E+00	1.0000				0.0E+00	1.8E+00	4.6E-01	3.2E+01	1.5E-06	4.9E-06
DIBROMOBENZENE, 1,4-	000106-37-6	1.0E-02	1.0E-02					1.0000				8.6E+01	2.6E-01	6.6E-02	4.2E+02	4.5E-05	1.4E-04
DIBROMOCHLORO-METHANE	000124-48-1	2.0E-02	1.2E-02		8.4E-02		1.4E-01	0.6000	3.9E-03			0.0E+00	2.4E+00	6.0E-01	2.3E+01	9.8E-07	3.1E-06
DIBROMODICHLORO-METHANE	000594-18-3							1.0000				8.6E+01					
DIBROMODIPHENYL ETHER, p,p'-	002050-47-7							1.0000				8.6E+01					

Table 3.6a. (continued)

Chemical	CASRN	Oral RD (mg/kg-day)	AD Chronic RD (mg/kg-day)	Inhalation RD (mg/kg-day)	Oral SF (mg/kg-day) ⁻¹	Inhalation SF (mg/kg-day) ⁻¹	Absorbed SF (mg/kg-day) ⁻¹	GI ABS	Permeability constant (cm/hr) [Kp]	Volatization Factor (m ² /kg) [VF]	Soil Saturation Conc. (mg/kg) [CSAT]	Deposition Velocity (m/day) [d]	Soil-to-Plant Uptake (B _s)	Soil-to-Wet Plant Uptake (B _w)	Bioacc. factor for fish (L/kg) [BF]	Transfer coeff. for milk (day/kg) [F _m]	Transfer coeff. for beef (day/kg) [F _b]
DIBROMOETHANE, 1,2-	000106-93-4			5.7E-05	8.3E-01	7.6E-01	8.5E+01	1.0000	3.3E-03	1.3E+05	5.5E+03						
DIBROMOMETHANE (METHYLENE BROMIDE)	000074-95-3	1.0E-02	1.0E-02					1.0000				0.0E+00	7.6E+00	1.9E+00	5.0E+00	1.3E-07	4.2E-07
DIBUTYL PHTHALATE	000084-74-2	1.0E-01	1.0E-01					1.0000	1.2E-01			0.0E+00	2.2E-02	5.6E-03	1.1E+04	3.2E-03	1.0E-02
DICAMBA	001918-00-9	3.0E-02	3.0E-02					1.0000				0.0E+00	7.1E-01	1.8E-01	1.1E+02	8.1E-06	2.6E-05
DICHLORO-2-BUTENE, 1,4-	000764-41-0					9.3E+00		1.0000		1.3E+05	4.8E+03	8.6E+01					
DICHLOROBENZENE, 1,2-	000095-50-1	9.0E-02	9.0E-02	5.7E-02				1.0000	6.1E-02	1.6E+05	5.1E+02	0.0E+00	3.2E-01	8.0E-02	8.9E+01	3.2E-05	1.0E-04
DICHLOROBENZENE, 1,3-	000541-73-1							1.0000	8.7E-02			0.0E+00	3.2E-01	8.0E-02	6.6E+01	3.2E-05	1.0E-04
DICHLOROBENZENE, 1,4-	000106-46-7			2.3E-01	2.4E-02		2.7E-02	0.9000	6.2E-02	4.0E+04	3.3E+01	0.0E+00	3.2E-01	8.0E-02	6.0E+01	3.2E-05	1.0E-04
DICHLOROBENZIDINE, 3,3'-	000091-94-1				4.3E-01		4.5E-01	1.0000	1.7E-02			0.0E+00	3.7E-01	9.2E-02	2.7E+02	2.5E-05	7.9E-05
DICHLORODIFLUOROMETHANE	000075-71-8	2.0E-01	4.6E-02	5.7E-02				0.2300	1.2E-02	1.1E+03	1.0E+03	0.0E+00	2.2E+00	5.5E-01	2.6E+01	1.2E-06	3.6E-06
DICHLOROETHANE, 1,1-	000075-34-3	1.0E-01	1.0E-01	1.4E-01				1.0000	8.9E-03	1.1E+01	1.4E+05	0.0E+00	3.6E+00	8.9E-01	1.4E+01	4.9E-07	1.5E-06
DICHLOROETHANE, 1,2-	000107-06-2				9.1E-02	9.1E-02	9.1E-02	1.0000	5.3E-03	2.1E+04	6.7E+02	0.0E+00	5.4E+00	1.4E+00	2.0E+00	2.4E-07	7.6E-07
DICHLOROETHYLENE, 1,1-	000075-35-4	9.0E-03	9.0E-03		6.0E-01	1.2E+00	6.0E-01	1.0000	8.9E-03	6.3E+03	1.2E+03	0.0E+00	3.3E+00	8.4E-01	1.5E+01	5.5E-07	1.7E-06
DICHLOROETHYLENE, 1,2-, (MIXED ISOMERS)	000540-59-0	9.0E-03	9.0E-03					1.0000				8.6E+01	2.0E+01	5.1E+00	1.4E+00	2.4E-08	7.6E-08
DICHLOROETHYLENE, 1,2-C-	000156-59-2	1.0E-02	1.0E-02					1.0000	1.0E-02			8.6E+01	1.5E+01	3.8E+00	2.0E+00	4.0E-08	1.3E-07
DICHLOROETHYLENE, 1,2-T-	000156-60-5	2.0E-02	2.0E-02					1.0000				0.0E+00	2.0E+01	5.1E+00	2.9E+00	2.4E-08	7.6E-08

Table 3.6a. (continued)

Chemical	CASRN	Oral RfD (mg/kg- day)	AD Chronic RfD (mg/kg- day)	Inhalation RfD (mg/kg- day)	Oral SF (mg/kg- day) ⁻¹	Inhalation SF (mg/kg- day) ⁻¹	Absorbed SF (mg/kg- day) ⁻¹	GI ABS	Permeability constant (cm/hr) [Kp]	Volatilization Factor (m ³ /kg) [VF]	Soil Saturation Conc. (mg/kg) [CSAT]	Deposition Velocity (m/day) [d]	Soil-to-Plant Uptake (B _s)	Soil-to-Wet Plant Uptake (B _w)	Bioacc. factor for fish (L/kg) [BF]	Transfer coeff. for milk (day/kg) [F _M]	Transfer coeff. for beef (day/kg) [F _B]
DICHLOROPHENOL, 2,4-	000120-83-2	3.0E-03	2.5E-03					0.8200	6.0E-02			0.0E+00	8.2E-01	2.0E-01	3.4E+01	6.3E-06	2.0E-05
DICHLOROPHENOXY ACETIC ACID, 2,4-	000094-75-7	1.0E-02	1.0E-02					1.0000				0.0E+00	9.2E-01	2.3E-01	8.0E+01	7.6E-06	4.8E-06
DICHLOROPHENOXY BUTYRIC ACID, 4-(2,4-	000094-82-6	8.0E-03	8.0E-03					1.0000				8.6E+01					
DICHLOROPROPANE, 1,2-	000078-87-5			1.1E-03	6.8E-02			0.7400	1.0E-02	2.4E+04	4.8E+02	0.0E+00	2.7E+00	6.8E-01	1.9E+01	7.9E-07	2.5E-06
DICHLOROPROPANOL, 2,3-	000616-23-9	3.0E-03	3.0E-03					1.0000				8.6E+01					
DICHLOROPROPENE, 1,3-	000542-75-6	3.0E-04	1.7E-04	5.7E-03	1.8E-01	1.3E-01	9.2E-02	0.5500	5.5E-03	8.2E+04	3.7E+03	0.0E+00	2.7E+00	6.8E-01	1.9E+01	7.9E-07	2.5E-06
DICHLOROVOS	000062-73-7	5.0E-04	5.0E-04	1.4E-04	2.9E-01		2.9E-01	1.0000	9.5E-04			1.0E-03	1.5E+01	3.8E+00	2.0E+00	4.1E-08	1.3E-07
DICOFOL	000115-32-2							1.0000				0.0E+00	1.2E-02	3.1E-03	2.3E+04	9.0E-03	2.8E-02
DICYCLOPENTADIENE	000077-73-6	3.0E-02	3.0E-02	5.7E-05				1.0000		1.4E+05	7.6E+02	8.6E+01					
DIELDRIN	000060-57-1	5.0E-05	2.5E-05		1.6E+01	1.6E+01	3.2E+01	0.5000	1.6E-02			0.0E+00	3.7E-01	9.2E-02	4.9E+03	1.1E-02	7.9E-03
DIETHYL PHTHALATE	000084-66-2	8.0E-01	7.2E-01					0.9000	4.8E-03			0.0E+00	1.5E+00	3.7E-01	4.4E+01	2.3E-06	7.2E-06
DIETHYL-P-NITRO- PHENYLPHOSPHATE	000311-45-5							1.0000				8.6E+01					
DIETHYLENE GLYCOL DINITRATE (DEGDN)	000693-21-0							1.0000				8.6E+01					
DIETHYLENE GLYCOL MONOBUTYL ETHER	000112-34-5			5.7E-03				1.0000	4.4E-05			8.6E+01					
DIETHYLENE GLYCOL MONOETHYL ETHER	000111-90-0	2.0E+00	2.0E+00					1.0000	2.5E-04			8.6E+01	1.9E+02	4.7E+01	7.3E-02	5.1E-10	1.6E-09
DIETHYLFORMAMIDE	000617-84-5	1.1E-02	1.1E-02					1.0000				8.6E+01					
DIETHYLSTILBESTER- OL	000056-53-1				4.7E+03	4.9E+02	4.7E+03	1.0000				8.6E+01	2.7E-02	6.8E-03	8.3E+03	2.3E-03	7.2E-03

Table 3.6a. (continued)

Chemical	CASRN	Oral RfD (mg/kg-day)	AD Chronic RfD (mg/kg-day)	Inhalation RfD ¹ (mg/kg-day)	Oral SF (mg/kg-day) ¹	Inhalation SF (mg/kg-day) ¹	Absorbed SF (mg/kg-day) ¹	GI ABS	Permeability constant (cm/hr) [Kp]	Volatilization Factor (m ² /kg) [VF]	Soil Saturation Conc. (mg/kg) [CSAT]	Deposition Velocity (m/day) [d]	Soil-to-Plant Uptake (B _s)	Soil-to-Wet Plant Uptake (B _w)	Bioacc. factor for fish (L/kg) [BF]	Transfer coeff. for milk (day/kg) [F _M]	Transfer coeff. for beef (day/kg) [F _B]
DIFENZOQUAT	043222-48-6	8.0E-02	8.0E-02					1.0000				8.6E+01					
DIFLUBENZURON	035367-38-5	2.0E-02	2.0E-02					1.0000				8.6E+01					
DIFLUOROETHANE, 1,1-	000075-37-6			1.1E+01				1.0000				8.6E+01					
DIISOPROPYL METHYLPHOSPHONATE	001445-75-6	8.0E-02	8.0E-02					1.0000				8.6E+01					
DIMETHIPIN	055290-64-7	2.0E-02	2.0E-02					1.0000				8.6E+01					
DIMETHOATE	000060-51-5	2.0E-04	2.0E-04					1.0000				8.6E+01	1.1E+00	2.6E-01	6.8E+01	4.1E-06	1.3E-05
DIMETHOXY-BENZIDINE, 3,3'-	000119-90-4				1.4E-02		1.4E-02	1.0000	1.0E-03			0.0E+00	7.0E+00	1.8E+00	5.5E+00	1.5E-07	4.8E-07
DIMETHYL SULFATE	000077-78-1							1.0000	2.2E-03			8.6E+01					
DIMETHYLANILINE HCL, 2,4-	021436-96-4				5.8E-01		5.8E-01	1.0000				8.6E+01					
DIMETHYLANILINE, 2,4-	000095-68-1				7.5E-01		7.5E-01	1.0000				8.6E+01					
DIMETHYLANILINE, N,N-	000121-69-7	2.0E-03	2.0E-03					1.0000				8.6E+01	1.2E+00	3.0E-01	5.8E+01	3.3E-06	1.0E-05
DIMETHYL-BENZIDINE, 3,3'-	000119-93-7				9.2E+00		9.2E+00	1.0000	4.4E-03			0.0E+00	2.4E+00	6.1E-01	2.2E+01	9.5E-07	3.0E-06
DIMETHYLETHYL LEAD	107584-40-7							1.0000				8.6E+01					
DIMETHYLFORMAMIDE	000068-12-2	1.0E-01	1.0E-01	8.6E-03				1.0000				0.0E+00	1.5E+02	3.7E+01	1.0E-01	7.9E-10	2.5E-09
DIMETHYLHYDRAZINE, 1,2-	000540-73-8							1.0000				8.6E+01					
DIMETHYLPHENOL, 2,4-	000105-67-9	2.0E-02	2.0E-02					1.0000	1.1E-01			0.0E+00	9.2E-01	2.3E-01	1.5E+02	5.1E-06	1.6E-05
DIMETHYLPHENOL, 2,6-	000576-26-1	6.0E-04	6.0E-04					1.0000				8.6E+01					

Table 3.6a. (continued)

Chemical	CASRN	Oral RfD (mg/kg- day)	AD Chronic RfD (mg/kg- day)	Inhalation RfD (mg/kg- day)	Oral SF (mg/kg- day) ⁻¹	Inhalation SF (mg/kg- day) ⁻¹	Absorbed SF (mg/kg- day) ⁻¹	GI ABS	Permeability constant (cm/hr) [Kp]	Volatilization Factor (m ² /kg) [VF]	Soil Saturation Conc. (mg/kg) [CSAT]	Deposition Velocity (m/day) [d]	Soil-to-Plant Uptake (B _s)	Soil-to-Wet Plant Uptake (B _w)	Bioacc. factor for fish (L/kg) [BF]	Transfer coeff. for milk (day/kg) [F _m]	Transfer coeff. for beef (day/kg) [F _b]
DIMETHYLPHENOL, 3,4-	000095-65-8	1.0E-03	1.0E-03					1.0000	4.0E-02			8.6E+01	2.0E+00	5.0E-01	2.9E+01	1.3E-06	4.3E-06
DIMETHYLPHTHALATE	000131-11-3							0.9000	1.6E-03			0.0E+00	4.9E+00	1.2E+00	5.7E+01	2.9E-07	9.1E-07
DIMETHYLTEREPHTHALATE	000120-61-6	1.0E-01	1.0E-01					1.0000				8.6E+01	7.1E-01	1.8E-01	1.1E+02	7.9E-06	2.5E-05
DINITRO-O-CYCLO- HEXYL PHENOL, 4,6-	000131-89-5	2.0E-03	2.0E-03					1.0000				8.6E+01	1.4E+03	3.5E+02	5.2E-03	1.6E-11	5.0E-11
DINITROBENZENE, 1,2-	000528-29-0	4.0E-04	3.7E-04					0.9300				8.6E+01					
DINITROBENZENE, 1,3-	000099-65-0	1.0E-04	1.0E-04					1.0000	2.4E-03			0.0E+00	4.5E+00	1.1E+00	1.0E+01	3.3E-07	1.0E-06
DINITROBENZENE, 1,4-	000100-25-4	4.0E-04	4.0E-04					1.0000				8.6E+01					
DINITROPHENOL, 2,4-	000051-28-5	2.0E-03	2.0E-03					1.0000	3.2E-03			0.0E+00	5.3E+00	1.3E+00	8.1E+00	2.5E-07	7.9E-07
DINITROTOLUENE, 2,4-	000121-14-2	2.0E-03	1.7E-03		6.8E-01		8.0E-01	0.8500	3.8E-03			0.0E+00	2.7E+00	6.8E-01	1.9E+01	7.9E-07	2.5E-06
DINITROTOLUENE, 2,6-	000606-20-2	1.0E-03	8.5E-04		6.8E-01		8.0E-01	0.8500	2.5E-03			8.6E+01	2.7E+00	6.8E-01	1.9E+01	7.9E-07	2.5E-06
DIOXEB	000088-85-7	1.0E-03	1.0E-03					1.0000				0.0E+00	3.0E-01	7.4E-02	3.6E+02	3.6E-05	1.1E-04
DIOXANE, 1,4-	000123-91-1				1.1E-02		1.1E-02	1.0000	4.0E-04			0.0E+00	3.8E+01	9.6E+00	6.0E-01	8.1E-09	2.6E-08
DIPHENAMID	000957-51-7	3.0E-02	3.0E-02					1.0000				8.6E+01					
DIPHENYLAMINE	000122-39-4	2.5E-02	2.5E-02					1.0000				0.0E+00	3.7E-01	9.2E-02	2.7E+02	2.5E-05	7.9E-05
DIPHENYLHYDRAZINE, 1,2-	000122-66-7				8.0E-01	8.0E-01	8.0E-01	1.0000	1.8E-02			0.0E+00	8.2E-01	2.0E-01	9.4E+01	6.3E-06	2.0E-05
DIQUAT	000085-00-7	2.2E-03	2.2E-03					1.0000				8.6E+01					
DIRECT BLACK 38	001937-37-7				8.6E+00		8.6E+00	1.0000				8.6E+01					
DIRECT BLUE 6	002602-46-2				8.1E+00		8.1E+00	1.0000				8.6E+01					

Table 3.6a. (continued)

Chemical	CASRN	Oral RfD (mg/kg-day)	AD Chronic RfD (mg/kg-day)	Inhalation RfD ¹ (mg/kg-day)	Oral SF (mg/kg-day) ²	Inhalation SF (mg/kg-day) ²	Absorbed SF (mg/kg-day) ²	GI ABS	Permeability constant (cm/hr) [Kp]	Volatilization Factor (m ³ /kg) [VF]	Soil Saturation Conc. (mg/kg) [CSAT]	Deposition Velocity (m/day) [d]	Soil-to-Plant Uptake (B _s)	Soil-to-Wet Plant Uptake (B _w)	Bioacc. factor for fish (L/kg) [BF]	Transfer coeff. for milk (day/kg) [F _M]	Transfer coeff. for beef (day/kg) [F _B]
DIRECT BROWN 95	016071-86-6				9.3E+00		9.3E+00	1.0000				8.6E+01					
DIRECT SKY BLUE	002610-05-1							1.0000				8.6E+01					
DISULFOTON	000298-04-4	4.0E-05	4.0E-05					1.0000				0.0E+00	1.8E-01	4.6E-02	6.7E+02	8.3E-05	2.6E-04
DIURON	000330-54-1	2.0E-03	2.0E-03					1.0000				0.0E+00	9.3E-01	2.3E-01	7.9E+01	5.0E-06	1.6E-05
DODINE	002439-10-3	4.0E-03	4.0E-03					1.0000				8.6E+01					
ENDOSULFAN	000115-29-7	6.0E-03	6.0E-03					1.0000				8.6E+01					
ENDOTHALL	000145-73-3	2.0E-02	2.0E-02					1.0000				8.6E+01					
ENDRIN	000072-20-8	3.0E-04	6.0E-06					0.0200	1.6E-02			0.0E+00	2.2E-02	5.6E-03	1.5E+03	1.7E-03	1.2E-02
EPICHLOROHYDRIN	000106-59-8	2.0E-03	2.0E-03	2.9E-04	9.9E-03	4.2E-03	9.9E-03	1.0000	3.7E-04	9.5E+04	3.2E+03		2.6E+01	6.5E+00	1.0E+00	1.6E-08	5.0E-08
EPOXYBUTANE, 1,2-	000106-88-7			5.7E-03				1.0000				8.6E+01					
EPTC	000759-94-4	2.5E-02	2.5E-02					1.0000				8.6E+01					
ETHEPHON	016672-87-0	5.0E-03	5.0E-03					1.0000				8.6E+01					
ETHION	000563-12-2	5.0E-04	5.0E-04					1.0000				8.6E+01					
ETHOXYETHANOL ACETATE, 2-	000111-15-9	3.0E-01	3.0E-01					1.0000	8.6E-04			8.6E+01	1.6E+01	4.1E+00	1.8E+00	3.5E-08	1.1E-07
ETHOXYETHANOL, 2-	000110-80-5	4.0E-01	4.0E-01	5.7E-02				1.0000	3.0E-04			8.6E+01	4.4E+01	1.1E+01	4.9E-01	6.3E-09	2.0E-08
ETHYL ACETATE	000141-78-6	9.0E-01	9.0E-01					1.0000				0.0E+00	1.3E+01	3.7E+00	2.1E+00	4.3E-08	1.3E-07
ETHYL ACRYLATE	000140-88-5				4.8E-02		4.8E-02	1.0000	4.0E-03			8.6E+01	6.7E+00	1.7E+00	5.9E+00	1.7E-07	5.2E-07
ETHYL CHLORIDE	000075-00-3			2.9E+00				1.0000	8.0E-03	1.9E+03	1.6E+02	0.0E+00	5.9E+00	1.4E+00	7.2E+00	2.1E-07	6.8E-07
ETHYL ETHER	000060-29-7	2.0E-01	2.0E-01					1.0000	1.7E-02			0.0E+00	1.2E+01	3.0E+00	2.8E+00	6.2E-08	1.9E-07
ETHYL METHACRYLATE	000097-63-2	9.0E-02	9.0E-02					1.0000				0.0E+00	2.9E+00	7.3E-01	1.8E+01	6.9E-07	2.2E-06
ETHYL-p-NITRO-PHENYL PHOSPHONATE	002104-64-5	1.0E-05	1.0E-05					1.0000				8.6E+01					

Table 3.6a. (continued)

Chemical	CASRN	Oral RfD (mg/kg-day)	AD Chronic RfD (mg/kg-day)	Inhalation RfD (mg/kg-day)	Oral SF (mg/kg-day) ⁻¹	Inhalation SF (mg/kg-day) ⁻¹	Absorbed SF (mg/kg-day) ⁻¹	GI ABS	Permeability constant (cm/hr) [Kp]	Volatilization Factor (m ³ /kg) [VF]	Soil Saturation Conc. (mg/kg) [CSAT]	Deposition Velocity (m/day) [d]	Soil-to-Plant Uptake (B _s)	Soil-to-Wet Plant Uptake (B _w)	Bioacc. factor for fish (L/kg) [BF]	Transfer coeff. for milk (day/kg) [F _{ml}]	Transfer coeff. for beef (day/kg) [F _b]
ETHYLBENZENE	000100-41-4	1.0E-01	9.7E-02	2.9E-01				0.9700	7.4E-02	2.1E+04	4.8E-01	0.0E+00	5.9E-01	1.5E-01	1.5E+02	1.1E-05	3.5E-05
ETHYLENE CYANOHYDRIN	000109-78-4	3.0E-01	3.0E-01					1.0000				8.6E+01	3.0E+02	7.6E+01	3.9E-02	2.2E-10	7.1E-10
ETHYLENE DIAMINE	000107-15-3	2.0E-02	2.0E-02					1.0000				8.6E+01					
ETHYLENE GLYCOL	000107-21-1	2.0E+00	2.0E+00					1.0000	1.2E-02			0.0E+00	5.1E+02	1.3E+02	2.0E-02	9.3E-11	2.9E-10
ETHYLENE GLYCOL MONOBUTYL ETHER	000111-76-2			5.7E-03				1.0000				8.6E+01					
ETHYLENE OXIDE	000075-21-8				1.0E+00	3.5E-01	1.0E+00	1.0000	6.3E-04	2.0E+04	2.9E+04		5.8E+01	1.4E+01	3.5E-01	4.0E-09	1.3E-08
ETHYLENE THIOUREA	000096-45-7	8.0E-05	8.0E-05		1.1E-01		1.1E-01	1.0000	1.7E-04			8.6E+01	9.3E+01	2.3E+01	1.9E-01	1.7E-09	5.5E-09
ETHYLPHTHALYL ETHYL GLYCOLATE	000084-72-0	3.0E+00	3.0E+00					1.0000				8.6E+01					
EXPRESS	101200-48-0	8.0E-03	8.0E-03					1.0000				8.6E+01					
FENAMIPHOS	022224-92-6	2.5E-04	2.5E-04					1.0000				8.6E+01					
FENPROPATHRIN	039515-41-8	2.5E-02	2.5E-02					1.0000				8.6E+01					
FLUOMETURON	002164-17-2	1.3E-02	1.3E-02					1.0000				8.6E+01	1.7E+00	4.2E-01	3.7E+01	1.8E-06	5.8E-06
FLUORANTHENE	000206-44-0	4.0E-02	1.2E-02					0.3100	3.6E-01			0.0E+00	5.7E-02	1.4E-02	3.1E+03	6.3E-04	2.0E-03
FLUORENE	000086-73-7	4.0E-02	4.0E-02					1.0000				0.0E+00	1.4E-01	3.6E-02	7.1E+02	1.3E-04	4.0E-04
FLUORIDE	007782-41-4	6.0E-02	5.8E-02					0.9700	1.0E-03			1.0E-03	8.0E-02	2.0E-02	1.0E+01	7.0E-03	2.0E-02
FLURIDONE	059756-60-4	8.0E-02	8.0E-02					1.0000				8.6E+01					
FLURPRIMIDOL	056425-91-3	2.0E-02	2.0E-02					1.0000				8.6E+01					
FLUTOLANIL	066332-96-5	6.0E-02	6.0E-02					1.0000				8.6E+01					
FLUVALINATE	069409-94-5	1.0E-02	1.0E-02					1.0000				8.6E+01					
FOLPET	000133-07-3	1.0E-01	1.0E-01		3.5E-03		3.5E-03	1.0000				8.6E+01		1.5E-01	1.4E+02	1.1E-05	3.4E-05
FOMESAFEN	072178-02-0				1.9E-01		1.9E-01	1.0000				8.6E+01					

Table 3.6a. (continued)

Chemical	CASRN	Oral RfD (mg/kg-day)	AD Chronic RfD (mg/kg-day)	Inhalation RfD ¹ (mg/kg-day)	Oral SF (mg/kg-day) ¹	Inhalation SF (mg/kg-day) ¹	Absorb- ed SF (mg/kg-day) ¹	GI ABS	Perme- ability constant (cm/hr) [Kp]	Volatiza- tion Factor (m ³ /kg) [VF]	Soil Satura- tion Conc. (mg/kg) [CSAT]	Deposi- tion Velocity (m/day) [d]	Soil-to- Plant Uptake (B _s)	Soil-to- Wet Plant Uptake (B _w)	Bioacc. factor for fish (L/kg) [BF]	Transfer coeff. for milk (day/kg) [F _m]	Transfer coeff. for beef (day/kg) [F _b]
FONOFOS	000944-22-9	2.0E-03	2.0E-03					1.0000				8.6E+01					
FORMALDEHYDE	000050-00-0	2.0E-01	2.0E-01			4.5E-02		1.0000	2.2E-03			0.0E+00	2.4E+01	6.1E+00	1.1E+00	1.8E-08	5.6E-08
FORMIC ACID	000064-18-6	2.0E+00	2.0E+00					1.0000				8.6E+01	7.9E+01	2.0E+01	2.3E-01	2.3E-09	7.2E-09
FOSETYL-AL	039148-24-8	3.0E+00	3.0E+00					1.0000				8.6E+01					
FURAN	000110-00-9	1.0E-03	1.0E-03					1.0000				0.0E+00	6.5E+00	1.6E+00	6.1E+00	1.7E-07	5.5E-07
FURAZOLIDONE	000067-45-8							1.0000				8.6E+01	1.6E+01	3.9E+00	1.9E+00	3.8E-08	1.2E-07
FURFURAL	000098-01-1	3.0E-03	3.0E-03	1.4E-02	3.8E+00		3.8E+00	1.0000				8.6E+01	2.9E+01	7.1E+00	8.8E-01	1.3E-08	4.3E-08
FURIUM	000531-82-8				5.0E+01		5.0E+01	1.0000				8.6E+01					
FURMECYCLOX	060568-05-0				3.0E-02		3.0E-02	1.0000				8.6E+01					
GLUFOSINATE-AMMONIUM	077182-82-2	4.0E-04	4.0E-04					1.0000				8.6E+01					
GLYCIDYL	000765-34-4	4.0E-04	4.0E-04	2.9E-04				1.0000				8.6E+01					
GLYPHOSATE	001071-83-6	1.0E-01	1.0E-01					1.0000				0.0E+00	2.1E+03	5.2E+02	3.1E-03	7.9E-12	2.8E-11
GOAL	042874-03-3	3.0E-03	3.0E-03					1.0000				8.6E+01					
HALOXYFOP-METHYL	069806-40-2	5.0E-05	5.0E-05					1.0000				8.6E+01					
HARMONY	079277-27-3	1.3E-02	1.3E-02					1.0000				8.6E+01					
HEPTACHLOR	000076-44-8	5.0E-04	3.6E-04		4.5E+00	4.5E+00	6.3E+00	0.7200	1.1E-02			0.0E+00	1.1E-01	2.8E-02	1.3E+03	3.2E-03	1.6E-02
HEPTACHLOR EPOXIDE	001024-57-3	1.3E-05	9.4E-06		9.1E+00	9.1E+00	1.3E+01	0.7200				0.0E+00	1.1E+00	2.6E-01	6.7E+01	3.6E-02	7.9E-02
HEPTANE, N-	000142-82-5							1.0000				0.0E+00	1.1E-01	2.8E-02	1.3E+03	2.0E-04	6.3E-04
HEXABROMO-BENZENE	000087-82-1	2.0E-03	2.0E-03					1.0000				8.6E+01					
HEXACHLORO-BENZENE	000118-74-1	8.0E-04	8.0E-04		1.6E+00	1.6E+00	1.6E+00	1.0000	2.1E-01			0.0E+00	3.7E-02	9.2E-03	5.6E+03	8.5E-03	4.5E-02

Table 3.6a. (continued)

Chemical	CASRN	Oral RD (mg/kg-day)	AD Chronic RD (mg/kg-day)	Inhalation RD (mg/kg-day)	Oral SF (mg/kg-day) ¹	Inhalation SF (mg/kg-day) ¹	Absorbed SF (mg/kg-day) ¹	GI ABS	Permeability constant (cm/hr) [Kp]	Volatilization Factor (m ² /kg) [VF]	Soil Saturation Conc. (mg/kg) [CSAT]	Deposition Velocity (m/day) [d]	Soil-to-Plant Uptake (B _p)	Soil-to-Wet Plant Uptake (B _w)	Bioacc. factor for fish (L/kg) [BF]	Transfer coeff. for milk (day/kg) [F _{ml}]	Transfer coeff. for beef (day/kg) [F _b]
HEXACHLORO-BUTADIENE	000087-68-3	2.0E-04	2.0E-04		7.8E-02	7.8E-02	7.8E-02	1.0000	1.2E-01			0.0E+00	6.7E-02	1.7E-02	2.5E+03	4.8E-04	1.5E-03
HEXACHLORO-CYCLOHEXANE, ALPHA-	000319-84-6				6.3E+00	6.3E+00	6.5E+00	0.9700				0.0E+00	2.2E-01	5.4E-02	5.0E+02	2.5E-03	1.7E-02
HEXACHLORO-CYCLOHEXANE, BETA-	000319-85-7				1.8E+00	1.8E+00	2.0E+00	0.9100				0.0E+00	2.2E-01	5.4E-02	5.4E+02	6.3E-05	2.0E-04
HEXACHLORO-CYCLOHEXANE, DELTA-	000319-86-8							1.0000				0.0E+00	1.7E-01	4.1E-02	7.7E+02	2.5E-03	1.7E-02
HEXACHLORO-CYCLOHEXANE, EPSILON	006108-10-7							1.0000				8.6E+01					
HEXACHLORO-CYCLOHEXANE, GAMMA-	000058-89-9	3.0E-04	2.9E-04		1.3E+00		1.3E+00	0.9700	1.4E-02			0.0E+00	2.2E-01	5.4E-02	1.8E+02	2.5E-03	1.7E-02
HEXACHLORO-CYCLOHEXANE, TECHNICAL	000608-73-1				1.8E+00	1.8E+00	1.8E+00	1.0000				8.6E+01					
HEXACHLORO-CYCLOPENTADIENE	000077-47-4	7.0E-03	7.0E-03	2.0E-05				1.0000				0.0E+00	1.9E-01	4.7E-02	2.9E+01	7.9E-05	2.5E-04
HEXACHLORO-DIBENZO-P-DIOXIN, MIXTURE	019408-74-3				6.2E+03		6.2E+03	1.0000				0.0E+00	5.1E-03	1.3E-03	7.5E+04	4.2E-02	1.3E-01
HEXACHLORO-ETHANE	000067-72-1	1.0E-03	1.0E-03		1.4E-02	1.4E-02	1.4E-02	1.0000	4.2E-02			0.0E+00	8.5E-02	2.1E-02	1.8E+03	3.2E-04	1.0E-03
HEXACHLOROPHENE	000070-30-4	3.0E-04	3.0E-04					1.0000				0.0E+00	1.7E-03	4.2E-04	3.2E+05	2.8E-01	8.7E-01
HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE (RDX)	000121-82-4	3.0E-03	3.0E-03		1.1E-01		1.1E-01	1.0000				0.0E+00	4.9E-01	1.2E-01	1.8E+02	1.5E-05	4.8E-05
HEXAMETHYLENE DIISOCYANATE, 1,6-	000822-06-0			2.9E-06				1.0000				8.6E+01					

Table 3.6a. (continued)

Chemical	CASRN	Oral RfD (mg/kg- day)	AD Chronic RfD (mg/kg- day)	Inhalation RfD (mg/kg- day) ⁻¹	Oral SF (mg/kg- day) ⁻¹	Inhalation SF (mg/kg- day) ⁻¹	Absorbed SF (mg/kg- day) ⁻¹	GI ABS	Permeability constant (cm/hr) [Kp]	Volatilization Factor (m ² /kg) [VF]	Soil Saturation Conc. (mg/kg) [CSAT]	Deposition Velocity (m/day) [d]	Soil-to-Plant Uptake (B _p)	Soil-to-Wet Plant Uptake (B _w)	Bioacc. factor for fish (L/kg) [BF]	Transfer coeff. for milk (day/kg) [F _{ml}]	Transfer coeff. for beef (day/kg) [F _f]
HEXANE, N-	000110-54-3	6.0E-02	4.8E-02	5.7E-02				0.8000		6.1E+03	9.1E+01	0.0E+00	2.4E-01	5.9E-02	4.8E+02	5.4E-05	1.7E-04
HEXAZINONE	051235-04-2	3.3E-02	3.3E-02					1.0000				8.6E+01					
HYDRAZINE	000302-01-2				3.0E+00	1.7E+01	3.0E+00	1.0000	4.1E-05			0.0E+00	6.1E+02	1.5E+02	1.6E-02	6.8E-11	2.1E-10
HYDRAZINE SULFATE	010034-93-2				3.0E+00	1.7E+01	3.0E+00	1.0000	4.1E-05			8.6E+01	6.1E+02	1.5E+02	1.6E-02	6.8E-11	2.1E-10
HYDROGEN CHLORIDE	007647-01-0			2.0E-03				1.0000				8.6E+01					
HYDROGEN CYANIDE	000074-90-8	2.0E-02	3.4E-03	8.6E-04				0.1700				8.6E+01	2.3E+01	5.8E+00	1.1E+00	1.9E-08	6.0E-08
HYDROGEN SULFIDE	007783-06-4	3.0E-03	3.0E-03	2.6E-04				1.0000				8.6E+01	1.1E+01	2.7E+00	3.1E+00	7.1E-08	2.2E-07
HYDROQUINONE	000123-31-9	4.0E-02	4.0E-02					1.0000				8.6E+01	1.3E+01	3.3E+00	2.5E+00	5.2E-08	1.7E-07
IMAZALIL	035554-44-0	1.3E-02	1.3E-02					1.0000				8.6E+01					
IMAZAQUIN	081335-37-7	2.5E-01	2.5E-01					1.0000				8.6E+01					
INDENO[1,2,3-cd]- PYRENE	000193-39-5				7.3E-01		2.4E+00	0.3100	1.9E+00			0.0E+00	6.8E-03	1.7E-03	5.1E+04	2.5E-02	7.9E-02
IPRODIONE	036734-19-7	4.0E-02	4.0E-02					1.0000				8.6E+01					
ISOBUTYL ALCOHOL	000078-83-1	3.0E-01	3.0E-01					1.0000				0.0E+00	1.4E+01	3.3E+00	2.2E+00	4.6E-08	1.4E-07
ISOPHORONE	000078-59-1	2.0E-01	2.0E-01		9.5E-04		9.5E-04	1.0000	4.4E-03			0.0E+00	1.9E+00	4.8E-01	3.1E+01	1.4E-06	4.6E-06
ISOPROPALIN	033820-53-0	1.5E-02	1.5E-02					1.0000				8.6E+01					
ISOPROPYL METHYL PHOSPHONIC ACID	001832-54-8	1.0E-01	1.0E-01					1.0000				8.6E+01					
ISOXABEN	082558-50-7	5.0E-02	5.0E-02					1.0000				8.6E+01					
KARATE	091465-08-6	5.0E-03	5.0E-03					1.0000				8.6E+01					
KERB	023950-58-5	7.5E-02	7.5E-02					1.0000				8.6E+01					
LACTOFEN	077501-63-4	2.0E-03	2.0E-03					1.0000				8.6E+01					
LEAD ALKYLs	NA							1.0000				8.6E+01					

Table 3.6a. (continued)

Chemical	CASRN	Oral RfD (mg/kg-day)	AD Chronic RfD (mg/kg-day)	Inhalation RfD (mg/kg-day)	Oral SF (mg/kg-day) ¹	Inhalation SF (mg/kg-day) ¹	Absorbed SF (mg/kg-day) ¹	GI ABS	Permeability constant (cm/hr) [K _{pl}]	Volatilization Factor (m ² /kg) [VF]	Soil Saturation Conc. (mg/kg) [CSAT]	Deposition Velocity (m/day) [d]	Soil-to-Plant Uptake (B _s)	Soil-to-Wet Plant Uptake (B _w)	Bioacc. factor for fish (L/kg) [BF]	Transfer coeff. for milk (day/kg) [F _m]	Transfer coeff. for beef (day/kg) [F _b]
LEAD AND COMPOUNDS	007439-92-1							0.1500	1.0E-03			1.0E-03	3.2E-03	8.0E-04	3.0E+02	2.5E-04	4.0E-04
LINURON	000330-55-2	2.0E-03	2.0E-03					1.0000				8.6E+01					
LONDAX	003055-99-6	2.0E-01	2.0E-01					1.0000				8.6E+01					
MALATHION	000121-75-5	2.0E-02	2.0E-02					1.0000				8.6E+01	8.3E-01	2.1E-01	9.3E+01	6.2E-06	1.9E-05
MALEIC ANHYDRIDE	000108-31-6	1.0E-01	1.0E-01					1.0000				8.6E+01					
MALEIC HYDRAZIDE	000123-33-1	5.0E-01	5.0E-01					1.0000				8.6E+01	6.6E+01	1.6E+01	2.9E-01	3.2E-09	1.0E-08
MALONONITRILE	000109-77-3	2.0E-05	2.0E-05					1.0000				8.6E+01	3.7E+01	9.2E+00	6.3E-01	8.7E-09	2.8E-08
MANCOZEB	008018-01-7	3.0E-02	3.0E-02					1.0000				8.6E+01					
MANEB	012427-38-2	5.0E-03	5.0E-03					1.0000	4.6E-05			8.6E+01	3.9E+01	9.7E+00	5.9E-01	7.9E-09	2.5E-08
MANGANESE (Diet)	007439-96-5	1.4E-01	5.6E-03	1.4E-05				0.0400	1.0E-03			1.0E-03	3.0E+00	4.0E-01	4.0E+02	3.0E-05	5.0E-04
MANGANESE (Water)	007439-96-5	5.0E-03	2.0E-04	1.4E-05				0.0400	1.0E-03			1.0E-03	3.0E+00	4.0E-01	4.0E+02	3.0E-05	5.0E-04
MCPA	000094-74-6	5.0E-04	5.0E-04					1.0000				8.6E+01	1.8E+00	4.5E-01	3.4E+01	1.6E-06	5.1E-06
MCPB	000094-81-5	1.0E-02	1.0E-02					1.0000				8.6E+01					
MCPP	000093-65-2	1.0E-03	1.0E-03					1.0000				8.6E+01	1.3E+00	3.2E-01	5.3E+01	3.0E-06	9.3E-06
MEPHOSFOLAN	000950-10-7	9.0E-05	9.0E-05					1.0000				8.6E+01					
MEPIQUAT CHLORIDE	024307-26-4	3.0E-02	3.0E-02					1.0000				8.6E+01					
MERCURY, INORGANIC	007439-97-6	3.0E-04	2.1E-05	8.6E-05				0.0700	1.0E-03			1.0E-03	1.0E+00	3.0E-01	1.0E+03	4.7E-04	1.0E-02
MERPHOS	000150-50-5	3.0E-05	3.0E-05					1.0000				8.6E+01					
MERPHOS OXIDE	000078-48-8	3.0E-05	3.0E-05					1.0000				8.6E+01					
METALAXYL	057837-19-1	6.0E-02	6.0E-02					1.0000				8.6E+01					
METHACRYLO-NITRILE	000126-98-7	1.0E-04	1.0E-04	2.0E-04				1.0000		1.1E+05	2.2E+04	0.0E+00	1.9E+01	4.7E+00	1.5E+00	2.8E-08	8.7E-08

Table 3.6a. (continued)

Chemical	CASRN	Oral RfD (mg/kg-day)	AD Chronic RfD (mg/kg-day)	Inhalation RfD (mg/kg-day)	Oral SF (mg/kg-day) ⁻¹	Inhalation SF (mg/kg-day) ⁻¹	Absorbed SF (mg/kg-day) ⁻¹	GI ABS	Permeability constant (cm/hr) [Kp]	Volatilization Factor (m ² /kg) [VF]	Soil Saturation Conc. (mg/kg) [CSAT]	Deposition Velocity (m/day) [d]	Soil-to-Plant Uptake (B _s)	Soil-to-Wet Plant Uptake (B _w)	Bioacc. factor for fish (L/kg) [BF]	Transfer coeff. for milk (day/kg) [F _{ml}]	Transfer coeff. for beef (day/kg) [F _b]
METHAMIDPHOS	010265-92-6	5.0E-05	5.0E-05					1.0000				8.6E+01	9.3E+01	2.3E+01	1.9E-01	1.7E-09	5.5E-09
METHANOL	000067-56-1	5.0E-01	5.0E-01					1.0000	1.6E-03			0.0E+00	1.1E+02	2.7E+01	1.5E-01	1.4E-09	4.3E-09
METHIDATHION	000950-37-8	1.0E-03	1.0E-03					1.0000				8.6E+01					
METHOMYL	016752-77-5	2.5E-02	2.5E-02					1.0000				8.6E+01					
METHOXY-5-NITRO-ANILINE, 2-	000099-59-2				4.6E-02		4.6E-02	1.0000	2.5E-03			8.6E+01					
METHOXYCHLOR	000072-43-5	5.0E-03	5.0E-03					1.0000				0.0E+00	1.3E-01	3.2E-02	8.3E+03	1.5E-04	5.0E-04
METHOXYETHANOL ACETATE, 2-	000110-49-6	2.0E-03	2.0E-03					1.0000				8.6E+01					
METHOXYETHANOL, 2-	000109-86-4	1.0E-03	1.0E-03	5.7E-03				1.0000	1.9E-04			8.6E+01	1.1E+02	2.7E+01	1.5E-01	1.3E-09	4.3E-09
METHYL ACETATE	000079-20-9	1.0E+00	1.0E+00					1.0000				8.6E+01					
METHYL ACRYLATE	000096-33-3	3.0E-02	3.0E-02					1.0000				8.6E+01	1.8E+01	4.5E+00	1.6E+00	3.0E-08	9.5E-08
METHYL ETHYL KETONE	000078-93-3	6.0E-01	4.8E-01	2.9E-01				0.8000	1.1E-03	2.5E+04	9.3E+03	0.0E+00	2.7E+01	6.7E+00	2.7E+00	5.8E-08	1.8E-07
METHYL ISOBUTYL KETONE	000108-10-1	8.0E-02	8.0E-02	2.3E-02				1.0000	3.3E-03	6.5E+04	7.0E+02	0.0E+00	1.3E+01	3.7E+00	2.1E+00	4.2E-08	1.3E-07
METHYL MERCURY	022967-92-6	3.0E-04	2.7E-04					0.9000				8.6E+01					
METHYL METHACRYLATE	000080-62-6	8.0E-02	8.0E-02					1.0000				8.6E+01	6.2E+00	1.5E+00	6.6E+00	1.9E-07	6.0E-07
METHYL PARATHION	000298-00-0	2.5E-04	2.5E-04					1.0000				8.6E+01	3.0E+00	7.6E-01	1.7E+01	6.5E-07	2.0E-06
METHYL STYRENE (MIXED ISOMERS)	025013-15-4	6.0E-03	6.0E-03	1.1E-02				1.0000				8.6E+01					
METHYL TERT-BUTYL ETHER (MTBE)	001634-04-4			8.6E-01				1.0000				8.6E+01					
METHYL-5-NITRO-ANILINE, 2-	000099-55-8				3.3E-02		3.3E-02	1.0000				0.0E+00	2.9E+00	7.1E-01	1.8E+01	7.2E-07	2.3E-06

Table 3.6a. (continued)

Chemical	CASRN	Oral RD (mg/kg-day)	AD Chronic RD (mg/kg-day)	Inhalation RD (mg/kg-day)	Oral SF (mg/kg-day) ¹	Inhalation SF (mg/kg-day) ¹	Absorbed SF (mg/kg-day) ¹	GI ABS	Permeability constant (cm/hr) [Kp]	Volatilization Factor (m ³ /kg) [VF]	Soil Saturation Conc. (mg/kg) [CSAT]	Deposition Velocity (m/day) [d]	Soil-to-Plant Uptake (B _p)	Soil-to-Wet Plant Uptake (B _w)	Bioacc. factor for fish (L/kg) [BF]	Transfer coeff. for milk (day/kg) [F _m]	Transfer coeff. for beef (day/kg) [F _b]
METHYLANILINE HYDROCHLORIDE, 2-	000636-21-5				1.8E-01		1.8E-01	1.000	2.1E-03			8.6E+01					
METHYLCYCLO-HEXANE	000108-87-2			8.6E-01				1.000				0.0E+00	2.2E-01	5.6E-02	5.1E+02	5.9E-05	1.9E-04
METHYLENE CHLORIDE	000075-09-2	6.0E-02	5.7E-02	8.6E-01	7.5E-03		7.9E-03	0.950	4.5E-03	9.3E+03	1.0E+03	0.0E+00	6.9E+00	1.7E+00	5.7E+00	1.6E-07	5.0E-07
METHYLENE-BIS(2-CHLOROANILINE), 4,4'-	000101-14-4	7.0E-04	7.0E-04		1.3E-01	1.3E-01	1.3E-01	1.000	2.8E-02			0.0E+00	2.0E-01	5.1E-02	5.8E+02	6.9E-05	2.2E-04
METHYLENE-BIS(N,N-DIMETHYL)ANILINE, 4,4'-	000101-61-1				4.6E-02		4.6E-02	1.000	1.3E-01			8.6E+01	7.0E-02	1.7E-02	2.4E+03	4.5E-04	1.4E-03
METHYLENEBIS-BENZENAMINE, 4,4'-	000101-77-9							1.000	1.6E-03			8.6E+01					
METHYLENEDI-PHENYLISOCYANATE, 4,4'-	000101-68-8			5.7E-06				1.000				8.6E+01					
METHYLSTYRENE, ALPHA-	000098-83-9	7.0E-02	7.0E-02					1.000				8.6E+01					
METHYLTRIETHYL LEAD	001762-28-3							1.000				8.6E+01					
METOLACHLOR	051218-45-2	1.5E-01	1.5E-01					1.000				8.6E+01					
METRIBUZIN	021087-64-9	2.5E-02	2.5E-02					1.000				8.6E+01	4.0E+00	1.0E+00	1.2E+01	4.0E-07	1.3E-06
MIREX	002385-85-5	2.0E-04	2.0E-04					1.000				8.6E+01					
MOLINATE	002212-67-1	2.0E-03	2.0E-03					1.000				8.6E+01					
MOLYBDENUM	007439-98-7	5.0E-03	1.9E-03					0.3800	1.0E-03			1.0E-03	4.0E-01	1.0E-01	1.0E+01	1.7E-03	1.0E-03
MONOCHLORAMINE	010599-90-3	1.0E-01	1.0E-01					1.000				8.6E+01					
MONOCHLORO-BUTANES	025154-42-1	4.0E-01	4.0E-01					1.000				8.6E+01					
NALED	000300-76-5	2.0E-03	2.0E-03					1.000				8.6E+01	9.1E-01	2.3E-01	8.2E+01	5.2E-06	1.7E-05

Table 3.6a. (continued)

Chemical	CASRN	Oral RfD (mg/kg-day)	AD Chronic RfD (mg/kg-day)	Inhalation RfD (mg/kg-day)	Oral SF (mg/kg-day) ¹	Inhalation SF (mg/kg-day) ¹	Absorbed SF (mg/kg-day) ¹	GI ABS	Permeability constant (cm/hr) [Kp]	Volatization Factor (m ² /kg) [VF]	Soil Saturation Conc. (mg/kg) [CSAT]	Deposition Velocity (m/day) [d]	Soil-to-Plant Uptake (R _s)	Soil-to-Wet Plant Uptake (R _w)	Bioacc. factor for fish (L/kg) [BF]	Transfer coeff. for milk (day/kg) [F _m]	Transfer coeff. for beef (day/kg) [F _b]
NAPHTHALENE	000091-20-3							0.8000	6.9E-02			0.0E+00	5.3E-01	1.3E-01	1.7E+02	2.0E-04	4.3E-05
NAPROPAMIDE	015299-99-7	1.0E-01	1.0E-01					1.0000				8.6E+01	1.6E+01	4.0E+00	1.9E+00	3.6E-08	1.1E-07
NIAGARA BLUE 4B	002429-74-5							1.0000				8.6E+01					
NICKEL CARBONYL	013463-39-3							1.0000				8.6E+01					
NICKEL REFINERY DUST	NA					8.4E-01		1.0000				8.6E+01					
NICKEL SOLUBLE SALTS	007440-02-0	2.0E-02	5.4E-03					0.2700	1.0E-03			1.0E-03	2.0E-01	5.0E-02	1.0E+02	1.6E-02	5.2E-03
NICKEL SUBSULFIDE	012035-72-2					1.7E+00		1.0000				8.6E+01					
NITRAPYRIN	001929-82-4							1.0000				8.6E+01					
NITRATE	014797-55-8	1.6E+00	1.6E+00					1.0000				1.0E-03	3.0E+01	7.5E+00	1.5E+05	2.5E-02	7.5E-02
NITRIC OXIDE	010102-43-9							1.0000				8.6E+01					
NITRITE	014797-65-0	1.0E-01	1.0E-01					1.0000				8.6E+01					
NITROANILINE, 2-	000088-74-4			5.7E-05				1.0000		7.0E+04	9.3E+01	0.0E+00	3.6E+00	8.9E-01	1.4E+01	4.9E-07	1.5E-06
NITROBENZENE	000098-95-3	5.0E-04	4.9E-04	5.7E-04				0.9700	6.9E-03	4.1E+03	3.2E+02	0.0E+00	3.3E+00	8.3E-01	1.5E+01	5.6E-07	1.8E-06
NITROFURANTOIN	000067-20-9	7.0E-02	7.0E-02					1.0000				8.6E+01					
NITROFURAZONE	000059-87-0				1.5E+00			1.0000				8.6E+01					
NITROGEN DIOXIDE	010102-44-0							1.0000				1.0E-03	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
NITROGUANIDINE	000556-88-7	1.0E-01	1.0E-01					1.0000				8.6E+01					
NITROPROPANE, 2-	000079-46-9			5.7E-03	9.5E+00	9.4E+00	9.5E+00	1.0000	1.0E-03	9.2E+04	1.6E+04		1.9E+01	4.7E+00	1.5E+00	2.8E-08	8.9E-08
NITROSO-DI-N-BUTYLAMINE, N-	000924-16-3				5.4E+00	5.4E+00	5.4E+00	1.0000	4.8E-03	3.9E+05	1.5E+03	0.0E+00	3.0E+00	7.5E-01	1.7E+01	6.6E-07	2.1E-06
NITROSO-DI-N-PROPYLAMINE, N-	000621-64-7				7.0E+00		2.8E+01	0.2500	2.8E-03			0.0E+00	5.3E+00	1.3E+00	8.0E+00	2.5E-07	7.8E-07

Table 3.6a. (continued)

Chemical	CASRN	Oral RfD (mg/kg-day)	AD Chronic RfD (mg/kg-day)	Inhalation RfD' (mg/kg-day)	Oral SF (mg/kg-day) ¹	Inhalation SF (mg/kg-day) ¹	Absorbed SF (mg/kg-day) ¹	GI ABS	Permeability constant (cm/hr) [Kp]	Volatilization Factor (m ³ /kg) [VF]	Soil Saturation Conc. (mg/kg) [CSAT]	Deposition Velocity (m/day) [d]	Soil-to-Plant Uptake (B _v)	Soil-to-Wet Plant Uptake (B _w)	Bioacc. factor for fish (L/kg) [BF]	Transfer coeff. for milk (day/kg) [F _m]	Transfer coeff. for beef (day/kg) [F _b]
NITROSO-N-ETHYLUREA, N-	000759-73-9				1.4E+02		1.4E+02	1.0000	5.4E-04			8.6E+01	2.9E+01	7.1E+00	8.8E-01	1.3E-08	4.3E-08
NITROSO-N-METHYLUREA, N-	000684-93-5							1.0000	4.3E-04			8.6E+01					
NITROSODIETHANOLAMINE, N-	001116-54-7				2.8E+00		2.8E+00	1.0000	5.0E-06			8.6E+01	3.2E+02	7.9E+01	3.7E-02	2.1E-10	6.6E-10
NITROSODIETHYLAMINE, N-	000055-18-5				1.5E+02	1.5E+02	1.5E+02	1.0000	1.2E-03			0.0E+00	2.0E+01	5.1E+00	1.4E+00	2.4E-08	7.6E-08
NITROSODIMETHYLAMINE, N-	000062-75-9				5.1E+01	5.1E+01	5.1E+01	1.0000	2.7E-04			0.0E+00	9.6E+01	2.4E+01	8.5E-02	1.7E-09	5.2E-09
NITROSODIPHENYLAMINE, N-	000086-30-6				4.9E-03		2.0E-02	0.2500	2.0E-02			0.0E+00	6.0E-01	1.5E-01	1.4E+02	1.1E-05	3.4E-05
NITROSOMETHYLETHYLAMINE, N-	010595-95-6				2.2E+01		2.2E+01	1.0000				8.6E+01					
NITROSOMETHYL VINYLAMINE, N-	004549-40-0							1.0000	5.7E-04			8.6E+01					
NITROSOPYRROLIDINE, N-	000930-55-2				2.1E+00	2.1E+00	2.1E+00	1.0000				0.0E+00	1.6E+02	4.0E+01	9.2E-02	6.9E-10	2.2E-09
NITROTOLUENE, m-	000099-08-1	1.0E-02	1.0E-02					1.0000				8.6E+01	1.5E+00	3.7E-01	4.3E+01	2.2E-06	7.1E-06
NITROTOLUENE, o-	000088-72-2	1.0E-02	1.0E-02					1.0000				8.6E+01	1.8E+00	4.5E-01	3.3E+01	1.6E-06	5.0E-06
NITROTOLUENE, p-	000099-99-0	1.0E-02	1.0E-02					1.0000				8.6E+01	1.5E+00	3.9E-01	4.1E+01	2.1E-06	6.6E-06
NORFLURAZON	027314-13-2	4.0E-02	4.0E-02					1.0000				8.6E+01					
NUSTAR	085509-19-9	7.0E-04	7.0E-04					1.0000				8.6E+01					
OCTABROMODIPHENYL ETHER	032536-52-0	3.0E-03	3.0E-03					1.0000				8.6E+01					
OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRA (HMX)	002691-41-0	5.0E-02	5.0E-02					1.0000				0.0E+00	1.8E+01	4.4E+00	1.7E+00	3.1E-08	9.8E-08
OCTAMETHYL PYROPHOSPHORAMIDE	000152-16-9	2.0E-03	2.0E-03					1.0000				8.6E+01					

Table 3.6a. (continued)

Chemical	CASRN	Oral RfD (mg/kg- day)	AD Chronic RfD (mg/kg- day)	Inhalation RfD ¹ (mg/kg- day)	Oral SF (mg/kg- day) ⁻¹	Inhalation SF (mg/kg- day) ⁻¹	Absorb- ed SF (mg/kg- day) ⁻¹	GI ABS	Perme- ability constant (cm/hr) [Kp]	Volatiza- tion Factor (m ³ /kg) [VF]	Soil Satura- tion Conc. (mg/kg) [CSAT]	Deposi- tion Velocity (m/day) [d]	Soil-to- Plant Uptake (B _s)	Soil-to- Wet Plant Uptake (B _w)	Bioacc- factor for fish (L/kg) [BF]	Transfer coeff. for milk (day/kg) [F _m]	Transfer coeff. for beef (day/kg) [F _b]
OCTYL PHTHALATE, Di-N-	000117-84-0	2.0E-02	1.8E-02					0.9000				0.0E+00	7.6E-05	1.9E-05	1.9E+07	5.9E+01	1.9E+02
ORYZALIN	019044-88-3	5.0E-02	5.0E-02					1.0000				8.6E+01					
OXADIAZON	019666-30-9	5.0E-03	5.0E-03					1.0000				8.6E+01					
OXAMYL	023135-22-0	2.5E-02	2.5E-02					1.0000				8.6E+01					
PACLOBUTRAZOL	076738-62-0	1.3E-02	1.3E-02					1.0000				8.6E+01					
PARAQUAT	001910-42-5	4.5E-03	4.5E-03					1.0000				8.6E+01					
PARATHION	000056-38-2	6.0E-03	6.0E-03					1.0000	1.7E-02			0.0E+00	2.4E-01	6.1E-02	4.6E+02	5.1E-05	1.6E-04
PERBULATE	001114-71-2	5.0E-02	5.0E-02					1.0000				8.6E+01					
PENDIMETHALIN	040487-42-1	4.0E-02	4.0E-02					1.0000				8.6E+01					
PENTABROMODI- PHENYL ETHER	032534-81-9	2.0E-03	2.0E-03					1.0000				8.6E+01					
PENTACHLORO- BENZENE	000608-93-5	8.0E-04	8.0E-04					1.0000				0.0E+00	3.9E-02	9.7E-03	3.4E+03	1.2E-03	3.9E-03
PENTACHLORO- CYCLOPENTADIENE	025329-35-5							1.0000				8.6E+01					
PENTACHLORO- NITROBENZENE	000082-68-8	3.0E-03	3.0E-03		2.6E-01		2.6E-01	1.0000	5.9E-02			0.0E+00	2.7E-02	6.9E-03	8.2E+03	2.2E-03	7.1E-03
PENTACHLORO- PHENOL	000087-86-5	3.0E-02	3.0E-02		1.2E-01		1.2E-01	1.0000	6.5E-01			0.0E+00	5.0E-02	1.2E-02	3.7E+03	7.9E-04	2.5E-03
PERMETHRIN	052645-53-1	5.0E-02	5.0E-02					1.0000				8.6E+01	3.8E-01	9.4E-02	2.6E+02	2.4E-05	7.6E-05
PHENANTHRENE	000085-01-8							0.7300	2.7E-01			0.0E+00	1.0E-01	2.6E-02	1.4E+03	2.3E-04	7.2E-04
PHENMEDIPHAM	013684-63-4	2.5E-01	2.5E-01					1.0000				8.6E+01	2.2E+02	5.5E+01	6.0E-02	3.9E-10	1.2E-09
PHENOL	000108-95-2	6.0E-01	5.4E-01					0.9000	5.5E-03			0.0E+00	5.6E+00	1.4E+00	7.6E+00	2.3E-07	7.2E-07
PHENYLENEDIAMINE, m-	000108-45-2	6.0E-03	6.0E-03					1.0000				8.6E+01	1.1E+02	2.6E+01	1.6E-01	1.4E-09	4.5E-09

Table 3.6a. (continued)

Chemical	CASRN	Oral RD (mg/kg-day)	AD Chronic RD (mg/kg-day)	Inhalation RD' (mg/kg-day)	Oral SF (mg/kg-day) ¹	Inhalation SF (mg/kg-day) ¹	Absorbed SF (mg/kg-day) ¹	GI ABS	Permeability constant (cm/hr) [Kp]	Volatilization Factor (m ² /kg) [VF]	Soil Saturation Conc. (mg/kg) [CSAT]	Deposition Velocity (m/day) [d]	Soil-to-Plant Uptake (B _c)	Soil-to-Wet Plant Uptake (B _w)	Bioacc. factor for fish (L/kg) [BF]	Transfer coeff. for milk (day/kg) [F _m]	Transfer coeff. for beef (day/kg) [F _b]
PHENYLENEDIAMINE, o-	000095-54-5				4.7E-02		4.7E-02	1.0000				8.6E+01	2.2E+01	5.4E+00	1.3E+00	2.2E-08	6.9E-08
PHENYLENEDIAMINE, p-	000106-50-3	1.9E-01	1.9E-01					1.0000				8.6E+01	1.8E+02	4.6E+01	7.6E-02	5.4E-10	1.7E-09
PHENYLMERCURIC ACETATE	000062-38-4	8.0E-05	8.0E-05					1.0000				8.6E+01					
PHENYLPHENOL, 2-	000090-43-7				1.9E-03		1.9E-03	1.0000				8.6E+01	6.3E-01	1.6E-01	1.3E+02	9.8E-06	3.1E-05
PHORATE	000298-02-2	2.0E-04	2.0E-04					1.0000				8.6E+01	4.1E+00	1.0E+00	1.1E+01	3.9E-07	1.2E-06
PHOSMET	000732-11-6	2.0E-02	2.0E-02					1.0000				8.6E+01	9.0E-01	2.2E-01	8.3E+01	5.4E-06	1.7E-05
PHOSPHINE	007803-51-2	3.0E-04	3.0E-04	8.6E-06				1.0000				8.6E+01					
PHTHALIC ACID, p-	000100-21-0	1.0E+00	1.0E+00					1.0000				8.6E+01	4.3E+00	1.1E+00	1.1E+01	3.6E-07	1.1E-06
PHTHALIC ANHYDRIDE	000085-44-9	2.0E+00	2.0E+00	3.4E-02				1.0000				8.6E+01	8.8E+01	2.2E+01	2.0E-01	1.9E-09	6.0E-09
PICLORAM	001918-02-1	7.0E-02	7.0E-02					1.0000				0.0E+00	1.7E+00	4.2E-01	3.6E+01	1.8E-06	5.7E-06
PIRIMIPHOS-METHYL	029232-93-7	1.0E-02	1.0E-02					1.0000				8.6E+01					
POLYBROMINATED BIPHENYLS	NA	7.0E-06	6.5E-06		8.9E+00		9.6E+00	0.9300				8.6E+01					
POLYCHLORINATED BIPHENYLS	001336-36-3				7.7E+00		8.6E+00	0.9000				0.0E+00	1.2E-02	3.1E-03	1.8E+05	8.7E-03	2.8E-02
POTASSIUM CYANIDE	000151-50-8	5.0E-02	5.0E-02					1.0000				8.6E+01					
POTASSIUM SILVER CYANIDE	000506-61-6	2.0E-01	2.0E-01					1.0000				8.6E+01					
PROCHLORAZ	067747-09-5	9.0E-03	9.0E-03		1.5E-01		1.5E-01	1.0000				8.6E+01					
PROFLURALIN	026399-36-0	6.0E-03	6.0E-03					1.0000				8.6E+01					
PROMETON	001610-18-0	1.5E-02	1.5E-02					1.0000				8.6E+01	1.9E+00	4.8E-01	3.1E+01	1.4E-06	4.6E-06
PROMETRYN	007287-19-6	4.0E-03	4.0E-03					1.0000				8.6E+01	1.5E+00	3.7E-01	4.3E+01	2.2E-06	7.1E-06

Table 3.6a. (continued)

Chemical	CASRN	Oral RID (mg/kg-day)	AD Chronic RID (mg/kg-day)	Inhalation RID ¹ (mg/kg-day)	Oral SF (mg/kg-day) ⁻¹	Inhalation SF (mg/kg-day) ⁻¹	Absorb- ed SF (mg/kg-day) ⁻¹	GI ABS	Perme- ability constant (cm/hr) [Kp]	Volatiza- tion Factor (m ² /kg) [VF]	Soil Satura- tion Conc. (mg/kg) [CSAT]	Deposi- tion Velocity (m/day) [d]	Soil-to- Plant Uptake (B _p)	Soil-to- Wet Plant Uptake (B _w)	Bioacc. factor for fish (L/kg) [BF]	Transfer coeff. for milk (day/kg) [F _M]	Transfer coeff. for beef (day/kg) [F _B]
PROPACHLOR	0001918-16-7	1.3E-02	1.3E-02					1.0000				8.6E+01					
PROPANIL	000709-98-8	5.0E-03	5.0E-03					1.0000				8.6E+01					
PROPARGITE	00212-35-8	2.0E-02	2.0E-02					1.0000				8.6E+01					
PROPARGYL ALCOHOL	000107-19-7	2.0E-03	2.0E-03					1.0000				8.6E+01					
PROPAGINE	000139-40-2	2.0E-02	2.0E-02					1.0000				8.6E+01	1.5E+00	3.8E-01	4.1E+01	2.1E-06	6.8E-06
PROPHAM	000122-42-9	2.0E-02	2.0E-02					1.0000				8.6E+01	5.7E-01	1.4E-01	1.5E+02	1.2E-05	3.7E-05
PROPICONAZOLE	060207-90-1	1.3E-02	1.3E-02					1.0000				8.6E+01					
PROPYLENE GLYCOL	000057-55-6	2.0E+01	2.0E+01					1.0000				8.6E+01	3.9E+02	9.8E+01	2.8E-02	1.4E-10	4.6E-10
PROPYLENE GLYCOL MONOETHYL ETHER	001569-02-4	7.0E-01	7.0E-01					1.0000				8.6E+01					
PROPYLENE GLYCOL MONOMETHYL ETHER	000107-98-2	7.0E-01	7.0E-01	5.7E-01				1.0000	4.0E-04			0.0E+00	4.9E+01	1.2E+01	4.3E-01	5.3E-09	1.7E-08
PROPYLENE OXIDE	000075-56-9			8.6E-03	2.4E-01	1.3E-02	2.4E-01	1.0000	8.9E-04	6.4E-+04	2.8E+04		3.7E+01	9.3E+00	6.2E-01	8.5E-09	2.7E-08
PURSUIT	081335-77-5	2.5E-01	2.5E-01					1.0000				8.6E+01					
PYDRIN	051630-58-1	2.5E-02	2.5E-02					1.0000				8.6E+01					
PYRENE	000129-00-0	3.0E-02	9.3E-03					0.3100	3.2E-01			0.0E+00	3.3E-02	8.1E-03	2.8E+03	1.7E-03	5.2E-03
PYRIDINE	000110-86-1	1.0E-03	1.0E-03					1.0000				0.0E+00	1.6E+01	4.0E+00	1.9E+00	3.6E-08	1.1E-07
QUINALPHOS	013593-03-8	5.0E-04	5.0E-04					1.0000				8.6E+01					
QUINOLINE	000091-22-5				1.2E+01		1.2E+01	1.0000				8.6E+01	2.5E+00	6.2E-01	2.2E+01	9.1E-07	2.9E-06
REFRACTORY CERAMIC FIBERS	NA							1.0000				8.6E+01					
RESMETHRIN	010453-86-8	3.0E-02	3.0E-02					1.0000				8.6E+01					
RONNEL	000299-84-3	5.0E-02	5.0E-02					1.0000				8.6E+01	5.9E-02	1.5E-02	3.0E+03	6.0E-04	1.9E-03
ROTENONE	000083-79-4	4.0E-03	4.0E-03					1.0000				8.6E+01					

Table 3.6a. (continued)

Chemical	CASRN	Oral RID (mg/kg-day)	AD Chronic RID (mg/kg-day)	Inhalation RID (mg/kg-day)	Oral SF (mg/kg-day) ⁻¹	Inhalation SF (mg/kg-day) ⁻¹	Absorb- ed SF (mg/kg-day) ⁻¹	GI ABS	Perme- ability constant (cm/hr) [Kp]	Volatiza- tion Factor (m ² /kg) [VF]	Soil Satura- tion Conc. (mg/kg) [CSAT]	Deposi- tion Velocity (m/day) [d]	Soil-to- Plant Uptake (B _s)	Soil-to- Wet Plant Uptake (B _w)	Bioacc. factor for fish (L/kg) [BF]	Transfer coeff. for milk (day/kg) [F _m]	Transfer coeff. for beef (day/kg) [F _b]
SAVEY	078587-05-0	2.5E-02	2.5E-02					1.0000				8.6E+01					
SELENIUM ACID	007783-00-8	5.0E-03	4.4E-03					0.8700				8.6E+01					
SELENIUM	007782-49-2	5.0E-03	2.2E-03					0.4400	1.0E-03			1.0E-03	5.0E-01	1.0E-01	1.7E+02	1.0E-02	1.0E-01
SELENIUM SULFIDE	007446-34-6							1.0000				8.6E+01					
SELENOUREA	000630-10-4	5.0E-03	5.0E-03					1.0000				8.6E+01					
SETHOXYDIM	074051-80-2	9.0E-02	9.0E-02					1.0000				8.6E+01					
SILVER	007440-22-4	5.0E-03	9.0E-04					0.1800	1.0E-03			1.0E-03	1.0E+00	2.0E-01	5.0E+00	5.0E-05	3.0E-03
SILVER CYANIDE	000506-64-9	1.0E-01	1.0E-01					1.0000				8.6E+01					
SIMAZINE	000122-34-9	5.0E-03	5.0E-03		1.2E-01		1.2E-01	1.0000				0.0E+00	6.6E+00	1.7E+00	2.7E+01	1.2E-06	3.8E-06
SODIUM ACIFLUOREN	062476-59-9	1.3E-02	1.3E-02					1.0000				8.6E+01					
SODIUM AZIDE	026628-22-8	4.0E-03	4.0E-03					1.0000				8.6E+01					
SODIUM CYANIDE	000143-33-9	4.0E-02	4.0E-02					1.0000				8.6E+01	1.2E+02	2.9E+01	1.4E-01	1.2E-09	3.8E-09
SODIUM DIETHYLTHIO-CARBAMATE	000148-18-5	3.0E-02	3.0E-02		2.7E-01		2.7E-01	1.0000				8.6E+01					
SODIUM FLUOROACETATE	000062-74-8	2.0E-05	2.0E-05					1.0000				8.6E+01					
SODIUM METAVANADATE	013718-26-8	1.0E-03	1.0E-03					1.0000				8.6E+01					
STIROFOS (TETRACHLORO-VINPHOS)	000961-11-5	3.0E-02	3.0E-02		2.4E-02		2.4E-02	1.0000				8.6E+01					
STRONTIUM, STABLE	007440-24-6	6.0E-01	6.0E-01					1.0000				8.6E+01	4.0E+00	3.0E-01	6.0E+01	2.8E-03	8.0E-03
STRYCHNINE	000057-24-9	3.0E-04	3.0E-04					1.0000				8.6E+01	3.0E+00	7.4E-01	1.7E+01	6.8E-07	2.1E-06
STYRENE	000100-42-5	2.0E-01	2.0E-01	2.9E-01				1.0000	6.7E-01	6.8E+04	6.7E+02	0.0E+00	7.6E-01	1.9E-01	1.0E+02	7.1E-06	2.2E-05

Table 3.6a. (continued)

Chemical	CASRN	Oral RfD (mg/kg-day)	AD Chronic RfD (mg/kg-day)	Inhalation RfD ¹ (mg/kg-day)	Oral SF (mg/kg-day) ¹	Inhalation SF (mg/kg-day) ¹	Absorbed SF (mg/kg-day) ¹	GI ABS	Permeability constant (cm/hr) [Kp]	Volatilization Factor (m ³ /kg) [VF]	Soil Saturation Conc. (mg/kg) [CSAT]	Deposition Velocity (m/day) [d]	Soil-to-Plant Uptake (B _s)	Soil-to-Wet Plant Uptake (B _w)	Bioacc. factor for fish (L/kg) [BF]	Transfer coeff. for milk (day/kg) [F _M]	Transfer coeff. for beef (day/kg) [F _B]
SYSTHANE	088671-89-0	2.5E-02	2.5E-02					1.0000				8.6E+01					
TCDD, 2,3,7,8-	001746-01-6				1.5E+05	1.5E+05	1.5E+05	1.0000	1.4E+00			0.0E+00	5.1E-03	1.3E-03	7.5E+04	1.0E-02	5.5E-02
TCMTB	021564-17-0	3.0E-02	3.0E-02					1.0000				8.6E+01					
TEBUTHIURON	034014-18-1	7.0E-02	7.0E-02					1.0000				0.0E+00	3.2E+01	7.9E+00	7.6E-01	1.1E-08	3.5E-08
TEMEPHOS	003383-96-8	2.0E-02	2.0E-02					1.0000				8.6E+01					
TERBACIL	005902-51-2	1.3E-02	1.3E-02					1.0000				8.6E+01					
TERBUFOS	013071-79-9	2.5E-05	2.5E-05					1.0000				8.6E+01					
TERBUTRYN	000886-50-0	1.0E-03	1.0E-03					1.0000				8.6E+01					
TETRABUTYL LEAD	001920-90-7							1.0000				8.6E+01					
TETRACHLORO-BENZENE, 1,2,4,5-	000095-94-3	3.0E-04	3.0E-04					1.0000				0.0E+00	7.7E-02	1.9E-02	1.8E+03	3.7E-04	1.2E-03
TETRACHLORO-ETHANE, 1,1,1,2-	000630-20-6	3.0E-02	3.0E-02		2.6E-02	2.6E-02	2.6E-02	1.0000		5.3E+04	7.9E+02	0.0E+00	6.9E-01	1.7E-01	1.2E+02	8.5E-06	2.7E-05
TETRACHLORO-ETHANE, 1,1,2,2-	000079-34-5				2.0E-01	2.0E-01	2.9E-01	0.7000	9.0E-03	9.4E+04	1.1E+03	0.0E+00	1.6E+00	4.0E-01	3.9E+01	1.9E-06	6.2E-06
TETRACHLORO-ETHYLENE	000127-18-4	1.0E-02	1.0E-02					1.0000	3.7E-01			0.0E+00	1.2E+00	3.0E-01	1.0E+02	3.2E-06	1.0E-05
TETRACHLORO-PHENOL, 2,3,4,6-	000658-90-2	3.0E-02	3.0E-02					1.0000				0.0E+00	1.7E-01	4.1E-02	7.7E+02	1.0E-04	3.2E-04
TETRACHLORO-TOLUENE, P-ALPHA, ALPHA, ALPHA-	005216-25-1				2.0E+01		2.0E+01	1.0000				8.6E+01					
TETRAETHYL DITHIOPYROPHOSPHATE	003689-24-5	5.0E-04	5.0E-04					1.0000				0.0E+00	2.0E-01	5.0E-02	5.9E+02	7.1E-05	2.2E-04
TETRAETHYL LEAD	000078-00-2							1.0000				8.6E+01					
TETRAMETHYL LEAD	000075-74-1							1.0000				8.6E+01					

Table 3.6a. (continued)

Chemical	CASRN	Oral RfD (mg/kg- day)	AD Chronic RfD (mg/kg- day)	Inhalation RfD (mg/kg- day)	Oral SF (mg/kg- day) ⁻¹	Inhalation SF (mg/kg- day) ⁻¹	Absorbed SF (mg/kg- day) ⁻¹	GI ABS	Permeability constant (cm/hr) [Kp]	Volatilization Factor (m ³ /kg) [VF]	Soil Saturation Conc. (mg/kg) [CSAT]	Deposition Velocity (m/day) [d]	Soil-to-Plant Uptake (B _p)	Soil-to-Wet Plant Uptake (B _w)	Bioacc. factor for fish (L/kg) [BF]	Transfer coeff. for milk (day/kg) [F _{ml}]	Transfer coeff. for beef (day/kg) [F _f]
TETRAPROPYL LEAD	003440-75-3							1.0000				8.6E+01					
THALLIC OXIDE	001314-32-5	7.0E-05	7.0E-05					1.0000				8.6E+01					
THALLIUM (I) NITRATE	010102-45-1	9.0E-05	9.0E-05					1.0000				1.0E-03	4.0E-04	1.0E-04	1.0E+04	2.0E-03	4.0E-02
THALLIUM (SOLUBLE SALTS)	NA							0.1500				1.0E-03	4.0E-04	1.0E-04	1.0E+04	2.0E-03	4.0E-02
THALLIUM ACETATE	000563-68-8	9.0E-05	9.0E-05					1.0000				1.0E-03	4.0E-04	1.0E-04	1.0E+04	2.0E-03	4.0E-02
THALLIUM CARBONATE	006533-73-9	8.0E-05	8.0E-05					1.0000				1.0E-03	4.0E-04	1.0E-04	1.0E+04	2.0E-03	4.0E-02
THALLIUM CHLORIDE	007791-12-0	8.0E-05	8.0E-05					1.0000				1.0E-03	4.0E-04	1.0E-04	1.0E+04	2.0E-03	4.0E-02
THALLIUM SELENITE	012039-52-0							1.0000				1.0E-03	4.0E-04	1.0E-04	1.0E+04	2.0E-03	4.0E-02
THALLIUM SULFATE	007446-18-6	8.0E-05	8.0E-05					1.0000				1.0E-03	4.0E-04	1.0E-04	1.0E+04	2.0E-03	4.0E-02
THIOBENCARB	028249-77-6	1.0E-02	1.0E-02					1.0000				8.6E+01					
THIOFANOX	039196-18-4	3.0E-04	3.0E-04					1.0000				8.6E+01					
THIOPHANATE- METHYL	023564-05-8	8.0E-02	8.0E-02					1.0000				8.6E+01					
THIRAM	000137-26-8	5.0E-03	5.0E-03					1.0000				8.6E+01					
TIN	007440-31-5	6.0E-01	6.0E-02					0.1000	1.0E-03			1.0E-03	1.0E+00	3.0E-01	3.0E+03	1.0E-03	1.0E-02
TOLUENE	000108-88-3	2.0E-01	1.6E-01	1.1E-01				0.8000	4.5E-02	2.5E+04	2.5E+02	0.0E+00	1.0E+00	2.6E-01	7.0E+01	4.3E-06	1.3E-05
TOLUENE-2,4- DIAMINE	000095-80-7				3.2E+00			1.0000	6.0E-04			8.6E+01	2.5E+01	6.2E+00	1.1E+00	1.7E-08	5.5E-08
TOLUENE-2,5- DIAMINE	000095-70-5	6.0E-01	6.0E-01					1.0000				8.6E+01					
TOLUENE-2,6- DIAMINE	000823-40-5	2.0E-01	2.0E-01					1.0000				8.6E+01					
TOLUIDINE, o- (NETHYLANILINE, 2-)	000095-53-4				2.4E-01			1.0000	3.7E-03			8.6E+01	5.1E+00	1.3E+00	8.6E+00	2.7E-07	8.5E-07

Table 3.6a. (continued)

Chemical	CASRN	Oral RD (mg/kg-day)	AD Chronic RD (mg/kg-day)	Inhalation RD ¹ (mg/kg-day)	Oral SF (mg/kg-day) ¹	Inhalation SF (mg/kg-day) ¹	Absorbed SF (mg/kg-day) ¹	GI ABS	Permeability constant (cm/hr) [Kp]	Volatilization Factor (m ² /kg) [VF]	Soil Saturation Conc. (mg/kg) [CSAT]	Deposition Velocity (m/day) [d]	Soil-to-Plant Uptake (B _s)	Soil-to-Wet Plant Uptake (B _w)	Bioacc. factor for fish (L/kg) [BF]	Transfer coeff. for milk (day/kg) [F _M]	Transfer coeff. for beef (day/kg) [F _B]
TOLUIDINE, p-	000106-49-0				1.9E-01		1.9E-01	1.0000				8.6E+01	2.7E+00	6.9E-01	1.9E+01	7.8E-07	2.5E-06
TOXAPHENE	008001-35-2				1.1E+00	1.1E+00	1.1E+00	1.0000	1.5E-02			0.0E+00	4.8E-01	1.2E-01	1.9E+02	6.3E-04	1.6E-03
TRALOMETHRIN	066841-25-6	7.5E-03	7.5E-03					1.0000				8.6E+01					
TRIALATE	002303-17-5	1.3E-02	1.3E-02					1.0000				8.6E+01					
TRIASULFURON	082097-50-5	1.0E-02	1.0E-02					1.0000				8.6E+01					
TRIBROMOBENZENE, 1,2,4-	000615-54-3	5.0E-03	5.0E-03					1.0000				8.6E+01					
TRIBROMOCHLORO-METHANE	000594-15-0							1.0000				8.6E+01					
TRIBROMODIPHENYL ETHER	049690-94-0							1.0000				8.6E+01					
TRIBUTYL TIN OXIDE	000056-35-9	3.0E-05	3.0E-05					1.0000				8.6E+01					
TRICHLORO-1,2,2-TRIFLUOROETHANE, 1,1,2-	000076-13-1	3.0E+01	3.0E+01	8.6E+00				1.0000		5.8E+03	2.0E+02	0.0E+00	4.8E-01	1.2E-01	1.9E+02	1.6E-05	5.0E-05
TRICHLORO-2'-HYDROXYDIPHENYL ETHER	003380-34-5							1.0000				8.6E+01					
TRICHLOROANILINE HCL, 2,4,6-	033663-50-2				2.9E-02		2.9E-02	1.0000				8.6E+01					
TRICHLOROANILINE, 2,4,6-	000634-93-5				3.4E-02		3.4E-02	1.0000				8.6E+01					
TRICHLOROBENZENE, 1,2,4-	000120-82-1	1.0E-02	1.0E-02	5.7E-02				1.0000	1.0E-01	3.6E+05	8.3E+02	0.0E+00	1.3E-01	3.2E-02	1.1E+03	1.6E-04	5.0E-04
TRICHLOROETHANE, 1,1,1-	000071-55-6							0.9000	1.7E-02	1.7E+04		0.0E+00	1.4E+00	3.5E-01	5.2E+01	2.5E-06	7.9E-06
TRICHLOROETHANE, 1,1,2-	000079-00-5	4.0E-03	3.2E-03		5.7E-02	5.7E-02	7.0E-02	0.8100	8.4E-03	3.5E+04	8.5E+02	0.0E+00	1.4E+00	3.6E-01	3.9E+01	2.3E-06	7.4E-06
TRICHLORO-ETHYLENE	000079-01-6				1.1E-02	6.0E-03	7.3E-02	0.1500	1.6E-02	1.9E+04	4.4E+02	0.0E+00	1.6E+00	4.1E-01	1.1E+01	1.9E-06	6.0E-06

Table 3.6a. (continued)

Chemical	CASRN	Oral RD (mg/kg-day)	AD Chronic RD (mg/kg-day)	Inhalation RID (mg/kg-day)	Oral SF (mg/kg-day) ^a	Inhalation SF (mg/kg-day) ^a	Absorbed SF (mg/kg-day) ^a	GI ABS	Permeability constant (cm/hr) [Kp]	Volatilization Factor (m ² /kg) [VF]	Soil Saturation Conc. (mg/kg) [CSAT]	Deposition Velocity (m/day) [d]	Soil-to-Plant Uptake (B _s)	Soil-to-Wet Plant Uptake (B _w)	Bioacc. factor for fish (L/kg) [BF]	Transfer coeff. for milk (day/kg) [F _m]	Transfer coeff. for beef (day/kg) [F _b]
TRICHLOROFLUOROMETHANE	000075-69-4	3.0E-01	6.9E-02	2.0E-01				0.2300	1.7E-02	5.8E+03	7.3E+02	0.0E+00	1.3E+00	3.3E-01	4.9E+01	2.7E-06	8.5E-06
TRICHLOROPHENOL, 2,4,5-	000095-95-4	1.0E-01	1.0E-01					1.0000				0.0E+00	2.7E-01	6.9E-02	1.9E+03	4.2E-05	1.3E-04
TRICHLOROPHENOL, 2,4,6-	000088-06-2				1.1E-02	1.0E-02	1.1E-02	1.0000	5.9E-02			0.0E+00	2.2E-01	5.6E-02	2.0E+01	5.9E-05	1.9E-04
TRICHLOROPHENOXYPROPIONIC ACID, 2(2,4,5-	000093-72-1							1.0000				0.0E+00	2.1E-01	5.2E-02	5.7E+02	6.8E-05	2.1E-04
TRICHLOROPHENOXYPROPIONIC ACID, 2,4,5-	000093-76-5	1.0E-02	1.0E-02					1.0000				8.6E+01					
TRICHLOROPROPANE, 1,1,2-	000598-77-6	5.0E-03	5.0E-03					1.0000				8.6E+01					
TRICHLOROPROPANE, 1,2,3-	000096-18-4	6.0E-03	6.0E-03		7.0E+00		7.0E+00	1.0000				0.0E+00	8.8E-02	2.2E-02	1.8E+03	3.0E-04	9.3E-04
TRICHLOROPROPENE, 1,2,3-	000096-19-5	5.0E-03	5.0E-03					1.0000				8.6E+01					
TRICHLOROTOLUENE, 2,3,6-	002077-46-5							1.0000				8.6E+01					
TRICHLOROTOLUENE, ALPHA 2,6-	002014-83-7							1.0000				8.6E+01					
TRIDIPHANE	058138-08-2	3.0E-03	3.0E-03					1.0000				8.6E+01					
TRIETHYL LEAD	005224-23-7							1.0000				8.6E+01					
TRIETHYLAMINE	000121-44-8			2.0E-03				1.0000		1.7E+05	2.2E+04						
TRIFLURALIN	001582-09-8	7.5E-03	7.5E-03		7.7E-03		7.7E-03	1.0000				0.0E+00	1.7E+01	4.3E+00	7.2E+03	1.9E-03	6.0E-03
TRIMETHYL LEAD	007442-13-9							1.0000				8.6E+01					
TRIMETHYL PHOSPHATE	000512-56-1				3.7E-02		3.7E-02	1.0000				8.6E+01					
TRIMETHYLETHYL LEAD	001762-26-1							1.0000				8.6E+01					

Table 3.6a. (continued)

Chemical	CASRN	Oral RD (mg/kg-day)	AD Chronic RD (mg/kg-day)	Inhalation RD ¹ (mg/kg-day)	Oral SF (mg/kg-day) ¹	Inhalation SF (mg/kg-day) ¹	Absorbed SF (mg/kg-day) ¹	GI ABS	Permeability constant (cm/hr) [Kp]	Volatilization Factor (m ² /kg) [VF]	Soil Saturation Conc. (mg/kg) [CSAT]	Deposition Velocity (m/day) [d]	Soil-to-Plant Uptake (B _s)	Soil-to-Wet Plant Uptake (B _w)	Bioacc. factor for fish (L/kg) [BF]	Transfer coeff. for milk (day/kg) [F _d]	Transfer coeff. for beef (day/kg) [F _b]
TRINITROBENZENE, 1,3,5-	000099-35-4	5.0E-05	5.0E-05					1.0000				8.6E+01	8.1E+00	2.0E+00	4.6E+00	1.2E-07	3.8E-07
TRINITROPHENYLME THYLNITRAMINE	000479-45-8	1.0E-02	1.0E-02					1.0000				8.6E+01					
TRINITROTOLUENE, 2,4,6-	000118-96-7	5.0E-04	5.0E-04		3.0E-02		3.0E-02	1.0000				0.0E+00	3.1E+00	7.8E-01	1.6E+01	6.2E-07	1.9E-06
TRIPROPYL LEAD	006618-03-7							1.0000				8.6E+01					
URANIUM (SOLUBLE SALTS)	NA	3.0E-03	2.6E-03					0.8500	1.0E-03			1.0E-03	1.0E-02	2.0E-03	1.0E+01	4.0E-04	3.4E-04
VANADIUM PENTOXIDE	001314-62-1	9.0E-03	9.0E-03					1.0000				8.6E+01					
VANADIUM SULFATE	036907-42-3	2.0E-02	2.0E-02					1.0000				8.6E+01					
VANADIUM, METALLIC	007440-62-2	7.0E-03	7.0E-05					0.0100	1.0E-03			1.0E-03	5.2E-03	1.3E-03	1.0E+01	1.0E-03	2.3E-03
VANADYL SULFATE	027774-13-6	2.0E-02	2.0E-02					1.0000				8.6E+01					
VERNOLATE	001929-77-7	1.0E-03	1.0E-03					1.0000				8.6E+01					
VINCLOZOLIN	050471-44-8	2.5E-02	2.5E-02					1.0000				8.6E+01					
VINYL ACETATE	000108-05-4	1.0E+00	6.5E-01	5.7E-02				0.6500	1.2E-02	1.3E+04	7.8E+02	0.0E+00	2.1E+01	5.2E+00	1.3E+00	2.3E-08	7.4E-08
VINYL BROMIDE	000593-60-2			8.6E-04		1.1E-01		1.0000	5.5E-03	1.4E+04	4.2E+03						
VINYL CHLORIDE	000075-01-4				1.9E+00	3.0E-01	1.9E+00	1.0000	7.3E-03	8.6E+00	2.7E+03	0.0E+00	6.2E+00	1.5E+00	6.6E+00	1.9E-07	6.0E-07
WARFARIN	000081-81-2	3.0E-04	3.0E-04					1.0000				8.6E+01	1.4E+00	3.4E-01	4.8E+01	2.6E-06	8.3E-06
WHITE PHOSPHORUS	007723-14-0	2.0E-05	2.0E-05					1.0000				8.6E+01					
XYLENE, MIXTURE	001330-20-7	2.0E+00	1.8E+00					0.9200				0.0E+00	5.1E-01	1.3E-01	1.8E+02	1.4E-05	4.6E-05
XYLENE, m-	000108-38-3	2.0E+00	2.0E+00					1.0000	8.0E-02			0.0E+00	5.1E-01	1.3E-01	1.8E+02	1.4E-05	4.6E-05
XYLENE, o-	000095-47-6	2.0E+00	2.0E+00					1.0000				0.0E+00	7.6E-01	1.9E-01	1.0E+02	7.1E-06	2.2E-05
XYLENE, p-	000106-42-3							1.0000				0.0E+00	5.9E-01	1.5E-01	1.5E+02	1.1E-05	3.5E-05

Table 3.6a. (continued)

Chemical	CASRN	Oral RfD (mg/kg-day)	AD Chronic RfD (mg/kg-day)	Inhalation RfD (mg/kg-day)	Oral SF (mg/kg-day) ⁻¹	Inhalation SF (mg/kg-day) ⁻¹	Absorbed SF (mg/kg-day) ⁻¹	GI ABS	Permeability constant (cm/hr) [Kp]	Volatilization Factor (m ³ /kg) [VF]	Soil Saturation Conc. (mg/kg) [CSAT]	Deposition Velocity (m/day) [d]	Soil-to-Plant Uptake (B _s)	Soil-to-Wet Plant Uptake (B _w)	Bioacc. factor for fish (L/kg) [BF]	Transfer coeff. for milk (day/kg) [F _m]	Transfer coeff. for beef (day/kg) [F _b]
ZINC (METALLIC)	007440-66-6	3.0E-01	6.0E-02					0.2000	1.0E-03			1.0E-03	1.0E+00	4.0E-01	1.0E+03	1.0E-02	1.0E-01
ZINC CYANIDE	000557-21-1	5.0E-02	5.0E-02					1.0000				1.0E-03	5.9E-01	1.5E-01	2.5E+03	1.0E-02	1.0E-01
ZINC PHOSPHIDE	001314-84-7	3.0E-04	3.0E-04					1.0000				1.0E-03	5.9E-01	1.5E-01	2.5E+03	1.0E-02	1.0E-01
ZINEB	012122-67-7	5.0E-02	5.0E-02					1.0000				8.6E+01					

Notes:

† The RfD value for inhalation exposure is generally reported as a concentration in air (RIC) in mg/m³ for continuous, 24-hour/day exposure. A human body weight of 70 kg and an inhalation rate of 20 m³/day are used to convert to an inhaled intake expressed in units of mg/kg × day (Risk Assessment Guidance for Superfund, Volume 1: Human Health Evaluation Manual (Part A), Interim Final, EPA/540/P-99/002, December 1989).

- (1) Same oral slope factor as used for polychlorinated biphenyls.
- (2) PRG calculated considering New Interim Region IV Guidance from EPA (received February 11, 1992). The slope factors for chemicals so marked indicate that a toxicity equivalency factor (TEF) method was used for carcinogenic PAHs based on each compound's relative potency to the potency of benzo(a)pyrene. The following TEFs were used to convert each PAH slope factor to an equivalent slope factor of benzo(a)pyrene [that has a new cancer slope factor of 7.3 (mg/kg/day)⁻¹ identified by EPA's CRAVE workgroup]: (1) benzo(a)pyrene, TEF = 1.0 (2) benz(a)anthracene, TEF = 0.1, (3) benzo(b)fluoranthene, TEF = 0.1, (4) benzo(k)fluoranthene, TEF = 0.01, (5) chrysene, TEF = 0.001, (6) dibenz(a,h)anthracene, TEF = 1.0, and (7) indeno(1,2,3-c,d)pyrene, TEF = 0.1. TEFs were used for only the oral slope factor in the ingestion pathway.
- (3) The slope factor for trichloroethylene has been withdrawn from IRIS and HEAST; however, since this is a common contaminant, the old slope factor has been used to calculate the PRG.

Table 3.6b. Chemical-specific parameters used in calculating risk-based Preliminary Remediation Goals (radionuclides)

Chemical [†]	CASRN	Oral SF (mg/kg-day) ⁻¹	Inhalation SF (mg/kg-day) ⁻¹	External Exp. SF (mg/kg-day) ⁻¹	Half- life [T _R]	Deposition Velocity (m/day) [d]	Soil-to- Plant Uptake (B _p)	Soil-to- Wet Plant uptake (B _w)	Bioacc. factor for fish (L/kg) [BF]	Transfer coeff. for milk (day/kg) [F _M]	Transfer coeff. for beef (day/kg) [F _B]
Ac-225	014265-85-1	1.4E-10	4.2E-09	7.8E-09	1.0E+01	1.0E-03	3.5E-04	8.8E-05	2.5E+01	2.0E-05	2.5E-05
Ac-227	014952-40-0	3.5E-10	7.1E-08	2.4E-11	8.0E+03	1.0E-03	3.5E-04	8.8E-05	2.5E+01	2.0E-05	2.5E-05
Ac-227+D	014952-40-0	6.3E-10	7.9E-08	6.0E-07	8.0E+03	1.0E-03	2.6E-01	5.1E-02	5.9E+02	3.4E-03	4.6E-02
Ac-228	014331-83-0	1.6E-12	3.3E-11	3.3E-06	2.6E-01	1.0E-03	3.5E-04	8.8E-05	2.5E+01	2.0E-05	2.5E-05
Ag-105	014928-14-4	1.6E-12	2.3E-12		4.1E+01	8.6E+01	1.0E+00	2.0E-01	5.0E+00	5.0E-05	3.0E-03
Ag-108	014391-65-2	6.9E-15	9.4E-15	5.8E-08	1.6E-03	8.6E+01	1.0E+00	2.0E-01	5.0E+00	5.0E-05	3.0E-03
Ag-108m	014391-65-2	6.1E-12	7.0E-11	5.6E-06	4.6E+04	8.6E+01	1.0E+00	2.0E-01	5.0E+00	5.0E-05	3.0E-03
Ag-108m+D	014391-65-2	6.1E-12	7.0E-11	5.6E-06	4.6E+04	8.6E+01	1.0E+00	2.0E-01	5.0E+00	5.0E-05	3.0E-03
Ag-109m	014378-38-2	2.7E-16	3.5E-16	1.2E-09	4.6E-04	8.6E+01	1.0E+00	2.0E-01	5.0E+00	5.0E-05	3.0E-03
Ag-110	014391-76-5	2.4E-15	3.2E-15	1.1E-07	2.8E-04	8.6E+01	1.0E+00	2.0E-01	5.0E+00	5.0E-05	3.0E-03
Ag-110m	014391-76-5	8.4E-12	3.2E-11	1.1E-05	2.5E+02	8.6E+01	1.0E+00	2.0E-01	5.0E+00	5.0E-05	3.0E-03
Ag-111	157690-04-0	6.8E-12	5.2E-12	8.5E-08	7.5E+00	8.6E+01	1.0E+00	2.0E-01	5.0E+00	5.0E-05	3.0E-03
Am-241	014596-10-2	3.3E-10	3.9E-08	4.6E-09	1.6E+05	1.0E-03	4.0E-03	1.0E-03	3.0E+01	1.5E-06	4.0E-05
Am-242	013981-54-9	1.5E-12	1.0E-11	5.8E-09	6.7E-01	1.0E-03	4.0E-03	1.0E-03	3.0E+01	1.5E-06	4.0E-05
Am-242m	013981-54-9	2.9E-10	3.5E-08	8.8E-11	5.5E+04	1.0E-03	4.0E-03	1.0E-03	3.0E+01	1.5E-06	4.0E-05
Am-243	014993-75-0	3.3E-10	3.8E-08	2.4E-08	2.7E+06	1.0E-03	4.0E-03	1.0E-03	3.0E+01	1.5E-06	4.0E-05
Am-243+D	014993-75-0	3.3E-10	3.8E-08	2.7E-07	2.7E+06	1.0E-03	1.0E-01	4.1E-02	6.0E+01	6.5E-06	1.0E-03
Ar-41	014163-25-8		4.7E-16		7.6E-02	8.6E+01	0.0E+00	0.0E+00		0.0E+00	0.0E+00
At-217	017239-90-6	9.0E-18	5.1E-16	8.7E-10	3.7E-07	8.6E+01	4.0E+00	1.0E+00		1.0E-02	1.0E-02
Au-196	014914-16-0	1.3E-12	1.0E-12	1.4E-06	6.2E+00	8.6E+01	4.0E-01	1.0E-01		1.0E-05	5.0E-03

Table 3.6b. (continued)

Chemical [†]	CASRN	Oral SF (mg/kg-day) ⁻¹	Inhalation SF (mg/kg-day) ⁻¹	External Exp. SF (mg/kg-day) ⁻¹	Half- life [T _R]	Deposition Velocity (m/day) [d]	Soil-to- Plant Uptake (B _v)	Soil-to- Wet Plant uptake (B _{wv})	Bioacc. factor for fish (L/kg) [BF]	Transfer coeff. for milk (day/kg) [F _M]	Transfer coeff. for beef (day/kg) [F _B]
Au-198	010043-49-0	5.3E-12	3.6E-12	1.4E-06	2.7E+00	8.6E+01	4.0E-01	1.0E-01		1.0E-05	5.0E-03
Ba-131	014914-75-1	1.7E-12	4.8E-13	1.3E-06	1.2E+01	8.6E+01	1.0E-01	1.0E-02	4.0E+00	4.8E-04	2.3E-04
Ba-133	013981-41-4	2.7E-12	4.0E-12	9.2E-07	3.8E+03	8.6E+01	1.0E-01	1.0E-02	4.0E+00	4.8E-04	2.3E-04
Ba-133m	013981-41-4	2.8E-12	5.6E-13	1.0E-07	1.6E+00	8.6E+01	1.0E-01	1.0E-02	4.0E+00	4.8E-04	2.3E-04
Ba-137m	013981-97-0	2.4E-15	1.6E-15	2.2E-06	1.8E-03	8.6E+01	1.0E-01	1.0E-02	4.0E+00	4.8E-04	2.3E-04
Ba-139	014378-25-7	3.0E-13	1.5E-13	8.4E-08	5.8E-02	8.6E+01	1.0E-01	1.0E-02	4.0E+00	4.8E-04	2.3E-04
Ba-140	014798-08-4	1.2E-11	3.2E-12	6.0E-07	1.3E+01	8.6E+01	1.0E-01	1.0E-02	4.0E+00	4.8E-04	2.3E-04
Be-7	013966-02-4	8.6E-14	1.8E-13	1.7E-07	5.3E+01	1.0E-03	1.5E-03	3.8E-04	1.0E+02	9.0E-07	1.0E-03
Bi-206	015776-19-9	7.1E-12	5.1E-12	1.2E-05	6.2E+00	8.6E+01	1.4E-01	3.5E-02	1.0E+01	5.0E-04	4.0E-04
Bi-207	013982-38-2	5.1E-12	9.4E-12	5.5E-06	1.2E+04	8.6E+01	1.4E-01	3.5E-02	1.0E+01	5.0E-04	4.0E-04
Bi-210	014331-79-4	7.3E-12	5.1E-11	0.0E+00	5.0E+00	8.6E+01	1.4E-01	3.5E-02	1.0E+01	5.0E-04	4.0E-04
Bi-211	015229-37-5	1.8E-14	1.7E-12	1.5E-07	1.5E-03	8.6E+01	1.4E-01	3.5E-02	1.0E+01	5.0E-04	4.0E-04
Bi-212	014913-49-6	6.2E-13	3.7E-11	6.7E-07	4.2E-02	8.6E+01	1.4E-01	3.5E-02	1.0E+01	5.0E-04	4.0E-04
Bi-213	015776-70-2	4.4E-13	3.1E-11	4.6E-07	3.2E-02	8.6E+01	1.4E-01	3.5E-02	1.0E+01	5.0E-04	4.0E-04
Bi-214	014733-03-0	2.0E-13	1.5E-11	6.0E-06	1.4E-02	8.6E+01	1.4E-01	3.5E-02	1.0E+01	5.0E-04	4.0E-04
Br-82	014686-69-2	1.4E-12	7.9E-13	1.0E-05	1.5E+00	8.6E+01			4.0E+02		
C-11	014333-33-6	4.5E-14	3.4E-14	3.6E-06	1.4E-02	1.0E-03	0.0E+00	0.0E+00	5.0E+04	0.0E+00	0.0E+00
C-14	014762-75-5	1.0E-12	7.0E-15	0.0E+00	2.1E+06	1.0E-03	0.0E+00	0.0E+00	5.0E+04	0.0E+00	0.0E+00
C-15	015929-23-4	6.6E-16	8.1E-16		2.8E-05	1.0E-03	0.0E+00	0.0E+00	5.0E+04	0.0E+00	0.0E+00
Ca-45	013966-05-7	2.0E-12	2.5E-12	3.9E-18	1.6E+02	1.0E-03	3.5E-01	8.8E-02	4.0E+01	3.0E-03	2.0E-03

Table 3.6b. (continued)

Chemical [†]	CASRN	Oral SF (mg/kg-day) [†]	Inhalation SF (mg/kg-day) [†]	External Exp. SF (mg/kg-day) [†]	Half- life [T _R]	Deposition Velocity (m/day) [d]	Soil-to- Plant Uptake (B _v)	Soil-to- Wet Plant uptake (B _{wv})	Bioacc. factor for fish (L/kg) [BF]	Transfer coeff. for milk (day/kg) [F _M]	Transfer coeff. for beef (day/kg) [F _B]
Ca-47	001439-99-2	6.7E-12	5.2E-12	4.1E-06	4.5E+00	1.0E-03	3.5E-01	8.8E-02	4.0E+01	3.0E-03	2.0E-03
Cd-109	014109-32-1	8.0E-12	1.9E-11	5.6E-10	4.6E+02	8.6E+01	1.5E-01	3.8E-02	2.0E+02	1.0E-03	4.0E-04
Cd-115	014336-68-6	7.3E-12	4.9E-12	7.0E-07	2.2E+00	8.6E+01	1.5E-01	3.8E-02	2.0E+02	1.0E-03	4.0E-04
Cd-115m	014336-68-6	1.4E-11	1.7E-11	8.6E-08	4.5E+01	8.6E+01	1.5E-01	3.8E-02	2.0E+02	1.0E-03	4.0E-04
Ce-141	013967-74-3	3.9E-12	4.3E-12	1.4E-07	3.3E+01	1.0E-03	5.0E-02	2.0E-03	3.0E+01	3.0E-05	2.0E-05
Ce-143	014119-19-8	5.9E-12	3.8E-12	7.3E-07	1.4E+00	1.0E-03	5.0E-02	2.0E-03	3.0E+01	3.0E-05	2.0E-05
Ce-144	014762-78-8	3.0E-11	1.1E-10	2.6E-08	2.8E+02	1.0E-03	5.0E-02	2.0E-03	3.0E+01	3.0E-05	2.0E-05
Ce-144+D	014762-78-8	3.0E-11	1.1E-10	1.6E-07	2.8E+02	1.0E-03	5.0E-02	2.0E-03	3.0E+01	3.0E-05	2.0E-05
Cl-36	013981-43-6	2.2E-12	1.3E-12	0.0E+00	1.1E+08	1.0E-03	7.0E+01	1.8E+01	5.0E+01	1.7E-02	1.7E-02
Cl-38	014158-34-0	2.1E-13	1.6E-13	6.5E-06	2.6E-02	1.0E-03	7.0E+01	1.8E+01	5.0E+01	1.7E-02	1.7E-02
Cm-242	015510-73-3	3.8E-11	3.2E-09	2.3E-11	1.6E+02	1.0E-03	4.0E-03	1.0E-03	3.0E+01	1.5E-06	4.0E-05
Cm-243	015757-87-6	2.5E-10	2.9E-08	1.7E-07	1.0E+04	1.0E-03	4.0E-03	1.0E-03	3.0E+01	1.5E-06	4.0E-05
Cm-243+D	015757-87-6	2.5E-10	2.9E-08	1.7E-07	1.0E+04	1.0E-03	4.0E-03	1.0E-03	3.0E+01	1.5E-06	4.0E-05
Cm-244	013981-15-2	2.1E-10	2.4E-08	2.1E-11	6.6E+03	1.0E-03	4.0E-03	1.0E-03	3.0E+01	1.5E-06	4.0E-05
Cm-245	015621-76-8	3.4E-10	3.9E-08	5.5E-08	3.1E+06	1.0E-03	4.0E-03	1.0E-03	3.0E+01	1.5E-06	4.0E-05
Cm-246	015757-90-1	3.3E-10	3.9E-08	1.8E-11	1.7E+06	1.0E-03	4.0E-03	1.0E-03	3.0E+01	1.5E-06	4.0E-05
Cm-247	015758-32-4	3.1E-10	3.6E-08	1.0E-06	5.7E+09	1.0E-03	4.0E-03	1.0E-03	3.0E+01	1.5E-06	4.0E-05
Cm-248	015758-33-5	1.3E-09	1.5E-07	1.5E-11	1.2E+08	1.0E-03	4.0E-03	1.0E-03	3.0E+01	1.5E-06	4.0E-05
Co-57	013981-50-5	9.7E-13	2.9E-12	2.1E-07	2.7E+02	1.0E-03	4.0E-01	3.0E-02	3.0E+02	7.0E-05	1.0E-04
Co-58	013981-38-9	2.8E-12	5.2E-12	3.7E-06	7.1E+01	1.0E-03	4.0E-01	3.0E-02	3.0E+02	7.0E-05	1.0E-04

Table 3.6b. (continued)

Chemical [†]	CASRN	Oral SF (mg/kg- day) ⁻¹	Inhalation SF (mg/kg- day) ⁻¹	External Exp. SF (mg/kg- day) ⁻¹	Half- life [T _R]	Deposition Velocity (m/day) [d]	Soil-to- Plant Uptake (B _p)	Soil-to- Wet Plant uptake (B _w)	Bioacc. factor for fish (L/kg) [BF]	Transfer coeff. for milk (day/kg) [F _M]	Transfer coeff. for beef (day/kg) [F _B]
Co-58m	013981-38-9	9.5E-14	8.9E-14	3.2E-11	3.8E-01	1.0E-03	4.0E-01	3.0E-02	3.0E+02	7.0E-05	1.0E-04
Co-60	010198-40-0	1.9E-11	6.9E-11	9.8E-06	1.9E+03	1.0E-03	4.0E-01	3.0E-02	3.0E+02	7.0E-05	1.0E-04
Cr-51	014392-02-0	1.4E-13	1.7E-13	1.0E-07	2.8E+01	8.6E+01	4.0E-02	1.0E-02	2.0E+02	1.0E-05	9.0E-03
Cs-131	014914-76-2	1.8E-13	1.1E-13	2.3E-09	9.7E+00	1.0E-03	1.0E-01	3.0E-02	2.0E+03	7.9E-03	5.1E-02
Cs-134	013967-70-9	4.7E-11	2.9E-11	5.9E-06	7.5E+02	1.0E-03	1.0E-01	3.0E-02	2.0E+03	7.9E-03	5.1E-02
Cs-134m	013967-70-9	4.5E-14	3.1E-14	2.0E-08	1.2E-01	1.0E-03	1.0E-01	3.0E-02	2.0E+03	7.9E-03	5.1E-02
Cs-135	015726-30-4	4.5E-12	2.7E-12	0.0E+00	8.4E+08	1.0E-03	1.0E-01	3.0E-02	2.0E+03	7.9E-03	5.1E-02
Cs-136	014234-29-8	7.7E-12	4.7E-12	8.1E-06	1.3E+01	1.0E-03	1.0E-01	3.0E-02	2.0E+03	7.9E-03	5.1E-02
Cs-137	010045-97-3	3.2E-11	1.9E-11	0.0E+00	1.1E+04	1.0E-03	1.0E-01	3.0E-02	2.0E+03	7.9E-03	5.1E-02
Cs-137+D	010045-97-3	3.2E-11	1.9E-11	2.1E-06	1.1E+04	1.0E-03	2.0E-01	4.0E-02	2.0E+03	8.4E-03	5.1E-02
Cs-138	015758-29-9	1.8E-13	1.3E-13	9.5E-06	2.2E-02	1.0E-03	1.0E-01	3.0E-02	2.0E+03	7.9E-03	5.1E-02
Cu-64	013981-25-4	5.3E-13	4.2E-13	6.7E-07	5.3E-01	8.6E+01	2.5E-01	6.3E-02	2.0E+02	1.5E-03	9.0E-03
Dy-165	013967-64-1	3.3E-13	2.2E-13	6.2E-08	9.7E-02	8.6E+01					
Dy-166	015840-01-4	9.4E-12	7.8E-12	2.7E-08	3.4E+00	8.6E+01					
Er-169	015840-13-8	2.1E-12	1.5E-12	6.5E-12	9.4E+00	8.6E+01					
Er-171	014391-45-8	1.6E-12	7.5E-13	1.0E-06	3.1E-01	8.6E+01					
Eu-152	014683-23-9	5.7E-12	7.9E-11	4.1E-06	5.0E+03	1.0E-03	5.0E-02	2.0E-03	5.0E+01	6.0E-05	2.0E-03
Eu-154	015585-10-1	9.4E-12	9.2E-11	4.7E-06	3.2E+03	1.0E-03	5.0E-02	2.0E-03	5.0E+01	6.0E-05	2.0E-03
Eu-155	014391-16-3	1.7E-12	9.6E-12	6.1E-08	1.8E+03	1.0E-03	5.0E-02	2.0E-03	5.0E+01	6.0E-05	2.0E-03
Eu-156	014280-35-4	1.1E-11	9.3E-12	5.4E-06	1.5E+01	1.0E-03	5.0E-02	2.0E-03	5.0E+01	6.0E-05	2.0E-03

Table 3.6b. (continued)

Chemical [†]	CASRN	Oral SF (mg/kg-day) ⁻¹	Inhalation SF (mg/kg-day) ⁻¹	External Exp. SF (mg/kg-day) ⁻¹	Half- life [T _R]	Deposition Velocity (m/day) [d]	Soil-to- Plant Uptake (B _v)	Soil-to- Wet Plant uptake (B _w)	Bioacc. factor for fish (L/kg) [BF]	Transfer coeff. for milk (day/kg) [F _M]	Transfer coeff. for beef (day/kg) [F _B]
F-18	013981-56-1	1.1E-13	6.5E-14	3.5E-06	7.6E-02	8.6E+01					
Fe-55	014681-59-5	3.5E-13	5.6E-13	0.0E+00	9.9E+02	8.6E+01	1.0E-02	1.0E-03	2.0E+02	3.0E-05	2.0E-02
Fe-59	014596-12-4	5.9E-12	7.1E-12	4.6E-06	4.5E+01	8.6E+01	1.0E-02	1.0E-03	2.0E+02	3.0E-05	2.0E-02
Fr-221	015756-41-9	1.5E-13	8.0E-12	6.7E-08	3.3E-03	8.6E+01	1.2E-01	3.0E-02		2.0E-02	2.5E-03
Fr-223	015756-98-6	4.5E-13	5.9E-13	4.2E-08	1.5E-03	8.6E+01	1.2E-01	3.0E-02		2.0E-02	2.5E-03
Ga-67	014119-09-6	8.4E-13	5.1E-13	3.6E-07	3.3E+00	8.6E+01	1.0E-02	3.0E-03		1.0E-05	3.0E-04
Ga-72	013982-22-4	4.8E-12	2.2E-12	1.1E-05	5.9E-01	8.6E+01	1.0E-02	3.0E-03		1.0E-05	3.0E-04
Gd-153	014276-65-4	1.3E-12	3.2E-12	7.2E-08	2.4E+02	8.6E+01	5.0E-02	2.0E-03		6.0E-05	2.0E-03
Gd-159	014041-42-0	2.6E-12	1.2E-12	9.6E-08	7.8E-01	8.6E+01	5.0E-02	2.0E-03		6.0E-05	2.0E-03
Ge-71	014374-81-3	1.2E-14	5.8E-14	1.6E-11	1.2E+01	8.6E+01					
H-3	010028-17-8	7.2E-14	9.6E-14	0.0E+00	4.5E+03	0.0E+00	0.0E+00	0.0E+00	1.0E+00	1.5E-02	0.0E+00
Hg-197	013981-51-6	1.2E-12	7.0E-13	5.5E-08	2.7E+00	8.6E+01	1.0E+00	3.0E-01	1.0E+03	4.7E-04	1.0E-02
Hg-203	013982-78-0	2.6E-12	3.0E-12	6.3E-07	4.7E+01	8.6E+01	1.0E+00	3.0E-01	1.0E+03	4.7E-04	1.0E-02
Ho-166	013967-65-2	7.6E-12	4.1E-12	7.0E-08	1.1E+00	8.6E+01					
I-122	018287-75-7	2.2E-14	2.2E-14	3.4E-06	2.5E-03	1.0E-02	4.0E-01	2.0E-02	4.0E+01	1.0E-02	3.8E-02
I-123	015715-08-9	5.4E-13	2.9E-13	2.5E-07	5.5E-01	1.0E-02	4.0E-01	2.0E-02	4.0E+01	1.0E-02	3.8E-02
I-125	014158-31-7	2.6E-11	1.7E-11	2.4E-09	6.0E+01	1.0E-03	4.0E-01	2.0E-02	4.0E+01	1.0E-02	3.8E-02
I-126	014158-32-8	4.8E-11	3.2E-11	1.5E-06	1.3E+01	1.0E-02	4.0E-01	2.0E-02	4.0E+01	1.0E-02	3.8E-02
I-129	015046-84-1	1.8E-10	1.2E-10	2.7E-09	5.7E+09	1.0E-02	4.0E-01	2.0E-02	4.0E+01	1.0E-02	3.8E-02
I-130	014914-02-4	4.9E-12	2.6E-12	7.9E-06	5.2E-01	1.0E-03	4.0E-01	2.0E-02	4.0E+01	1.0E-02	3.8E-02

Table 3.6b. (continued)

Chemical †	CASRN	Oral SF (mg/kg- day) ‡	Inhalation SF (mg/kg- day) ‡	External Exp. SF (mg/kg- day) ‡	Half- life [T _R]	Deposition Velocity (m/day)	Soil-to- Plant Uptake (B _v)	Soil-to- Wet Plant uptake (B _w)	Bioacc. factor for fish (L/kg) [BF]	Transfer coeff. for milk (day/kg) [F _M]	Transfer coeff. for beef (day/kg) [F _B]
I-131	010043-66-0	3.6E-11	2.3E-11	1.3E-06	8.0E+00	1.0E-02	4.0E-01	2.0E-02	4.0E+01	1.0E-02	3.8E-02
I-132	014683-16-0	6.6E-13	3.5E-13	8.8E-06	9.6E-02	1.0E-02	4.0E-01	2.0E-02	4.0E+01	1.0E-02	3.8E-02
I-133	014834-67-4	1.1E-11	6.0E-12	2.2E-06	8.7E-01	1.0E-03	4.0E-01	2.0E-02	4.0E+01	1.0E-02	3.8E-02
I-134	014914-27-3	2.3E-13	1.4E-13	1.0E-05	3.7E-02	1.0E-02	4.0E-01	2.0E-02	4.0E+01	1.0E-02	3.8E-02
I-135	014834-68-5	2.3E-12	1.2E-12	6.2E-06	2.8E-01	1.0E-03	4.0E-01	2.0E-02	4.0E+01	1.0E-02	3.8E-02
In-113m	014885-78-0	8.3E-14	5.8E-14	7.8E-07	6.9E-02	8.6E+01	1.0E-02	3.0E-03		2.0E-04	4.0E-03
In-114	013981-55-0	4.5E-15	5.8E-15	1.1E-07	8.3E-04	8.6E+01	1.0E-02	3.0E-03		2.0E-04	4.0E-03
In-114m	013981-55-0	2.1E-11	2.5E-11	2.0E-07	5.0E+01	8.6E+01	1.0E-02	3.0E-03		2.0E-04	4.0E-03
In-115	014191-71-0	3.5E-11	2.1E-10	0.0E+00	1.7E+18	8.6E+01	1.0E-02	3.0E-03		2.0E-04	4.0E-03
In-115m	014191-71-0	3.4E-13	1.8E-13	4.3E-07	1.8E-01	8.6E+01	1.0E-02	3.0E-03		2.0E-04	4.0E-03
Ir-190	014981-91-0	5.0E-12	4.5E-12	4.7E-06	1.2E+01	8.6E+01	2.0E-01	3.0E-02		2.0E-06	2.0E-03
Ir-194	014158-35-1	7.0E-12	4.2E-12	3.2E-07	8.0E-01	8.6E+01	2.0E-01	3.0E-02		2.0E-06	2.0E-03
K-40	013966-00-2	1.3E-11	7.5E-12	6.1E-07	4.7E+11	1.0E-03	3.0E+00	3.0E-01	1.0E+03	7.2E-03	1.8E-02
K-42	014378-21-3	1.3E-12	7.6E-13	1.1E-06	5.2E-01	1.0E-03	3.0E+00	3.0E-01	1.0E+03	7.2E-03	1.8E-02
K-83m	013965-98-5		3.5E-17		7.6E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
K-85	013983-27-2		2.9E-16		3.9E+03	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
K-85m	013983-27-2		2.8E-16		1.9E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
K-87	014809-68-8		1.2E-15		5.3E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
K-88	014995-61-0		2.2E-15		1.2E-01	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
K-89	016316-03-3		1.6E-15		2.2E-03	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00

Table 3.6b. (continued)

Chemical ^{1†}	CASRN	Oral SF (mg/kg-day) ⁻¹	Inhalation SF (mg/kg-day) ⁻¹	External Exp. SF (mg/kg-day) ⁻¹	Half- life [T _R]	Deposition Velocity (m/day) [d]	Soil-to- Plant Uptake (B _v)	Soil-to- Wet Plant uptake (B _{wv})	Bioacc. factor for fish (L/kg) [BF]	Transfer coeff. for milk (day/kg) [F _M]	Transfer coeff. for beef (day/kg) [F _B]
Kr-90	015741-13-6		1.6E-15		3.7E-04	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
La-140	013981-28-7	9.5E-12	5.1E-12	9.1E-06	1.7E+00	8.6E+01			3.0E+01		
Lu-177	014265-75-9	3.0E-12	2.2E-12	7.2E-08	6.7E+00	8.6E+01					
Mn-52	014092-99-0	6.0E-12	4.4E-12	1.3E-05	5.6E+00	1.0E-03	3.0E+00	4.0E-01	4.0E+02	3.0E-05	5.0E-04
Mn-54	013966-31-9	2.0E-12	3.7E-12	3.3E-06	3.1E+02	1.0E-03	3.0E+00	4.0E-01	4.0E+02	3.0E-05	5.0E-04
Mn-56	014681-52-8	8.6E-13	5.2E-13	7.0E-06	1.1E-01	1.0E-03	3.0E+00	4.0E-01	4.0E+02	3.0E-05	5.0E-04
Mo-99	014119-15-4	2.3E-12	4.5E-12	5.5E-07	2.8E+00	8.6E+01	4.0E-01	1.0E-01	1.0E+01	1.7E-03	1.0E-03
Na-22	013966-32-0	8.0E-12	4.9E-12	8.2E-06	9.5E+02	1.0E-03	2.0E-01	5.0E-02	2.0E+01	1.6E-02	8.0E-02
Na-24	013982-04-2	1.4E-12	7.5E-13	1.8E-05	6.3E-01	1.0E-03	2.0E-01	5.0E-02	2.0E+01	1.6E-02	8.0E-02
Nb-93m	007440-03-1	6.6E-13	4.3E-12	3.6E-11	5.3E+03	1.0E-03	1.0E-01	3.0E-02	3.0E+02	4.1E-07	3.0E-07
Nb-94	014681-63-1	6.9E-12	8.2E-11	6.1E-06	7.4E+06	1.0E-03	1.0E-01	3.0E-02	3.0E+02	4.1E-07	3.0E-07
Nb-95	013967-76-5	2.3E-12	3.1E-12	2.9E-06	3.5E+01	1.0E-03	1.0E-01	3.0E-02	3.0E+02	4.1E-07	3.0E-07
Nb-95m	013967-76-5	3.1E-12	2.3E-12	8.7E-08	3.6E+00	1.0E-03	1.0E-01	3.0E-02	3.0E+02	4.1E-07	3.0E-07
Nb-97	018496-04-3	1.8E-13	2.1E-13	2.5E-06	5.0E-02	1.0E-03	1.0E-01	3.0E-02	3.0E+02	4.1E-07	3.0E-07
Nb-97m	018496-04-3	3.3E-15	3.3E-15	2.8E-06	6.9E-04	1.0E-03	1.0E-01	3.0E-02	3.0E+02	4.1E-07	3.0E-07
Nd-147	014269-74-0	5.9E-12	4.8E-12	3.2E-07	1.1E+01	8.6E+01			1.0E+02		
Nd-149	015749-81-2	4.6E-13	4.2E-13	1.1E-06	7.2E-02	8.6E+01			1.0E+02		
Ni-59	014336-70-0	1.9E-13	4.0E-13	0.0E+00	2.7E+07	1.0E-03	2.0E-01	5.0E-02	1.0E+02	1.6E-02	5.2E-03
Ni-63	013981-37-8	5.5E-13	1.0E-12	0.0E+00	3.7E+04	1.0E-03	2.0E-01	5.0E-02	1.0E+02	1.6E-02	5.2E-03
Ni-65	014833-49-9	5.6E-13	3.6E-13	2.1E-06	1.1E-01	1.0E-03	2.0E-01	5.0E-02	1.0E+02	1.6E-02	5.2E-03

Table 3.6b. (continued)

Chemical [†]	CASRN	Oral SF (mg/kg-day) ⁻¹	Inhalation SF (mg/kg-day) ⁻¹	External Exp. SF (mg/kg-day) ⁻¹	Half- life [T _R]	Deposition Velocity (m/day) [d]	Soil-to- Plant Uptake (B _v)	Soil-to- Wet Plant uptake (B _{vw})	Bioacc. factor for fish (L/kg) [BF]	Transfer coeff. for milk (day/kg) [F _M]	Transfer coeff. for beef (day/kg) [F _B]
Np-236	015700-36-4	9.3E-13	3.9E-12	9.2E-08	4.2E+07	1.0E-03	1.0E-01	4.0E-02	3.0E+01	5.0E-06	1.0E-03
Np-237	013994-20-2	3.0E-10	3.5E-08	7.6E-09	7.8E+08	1.0E-03	1.0E-01	4.0E-02	3.0E+01	5.0E-06	1.0E-03
Np-237+D	013994-20-2	3.0E-10	3.5E-08	4.6E-07	7.8E+08	1.0E-03	1.0E-01	4.0E-02	4.0E+01	1.0E-05	1.0E-03
Np-238	015766-25-3	4.6E-12	4.7E-12	2.0E-06	2.1E+00	1.0E-03	1.0E-01	4.0E-02	3.0E+01	5.0E-06	1.0E-03
Np-239	013968-59-7	4.3E-12	2.4E-12	2.4E-07	2.4E+00	1.0E-03	1.0E-01	4.0E-02	3.0E+01	5.0E-06	1.0E-03
Np-240	015690-84-3	1.8E-13	1.3E-13	3.7E-06	4.5E-02	1.0E-03	1.0E-01	4.0E-02	3.0E+01	5.0E-06	1.0E-03
Np-240m	015690-84-3	2.4E-14	2.8E-14	1.1E-06	5.1E-03	1.0E-03	1.0E-01	4.0E-02	3.0E+01	5.0E-06	1.0E-03
Os-185	015766-50-4	1.8E-12	4.6E-12	2.5E-06	9.4E+01	8.6E+01					
Os-191	014119-24-5	3.0E-12	2.7E-12	8.7E-08	1.5E+01	8.6E+01					
Os-191m	014119-24-5	5.0E-13	3.3E-13	3.2E-09	5.4E-01	8.6E+01					
Os-193	016057-77-5	4.4E-12	2.7E-12	1.8E-07	1.3E+00	8.6E+01					
P-32	014596-37-3	6.1E-12	2.9E-12	0.0E+00	1.4E+01	1.0E-03	3.0E+00	1.0E+00	5.0E+04	1.6E-02	5.0E-02
P-33	015749-66-3	7.8E-13	4.0E-13	0.0E+00	2.5E+01	1.0E-03	3.0E+00	1.0E+00	5.0E+04	1.6E-02	5.0E-02
Pa-231	014331-85-2	1.5E-10	2.4E-08	2.7E-08	1.4E+07	1.0E-03	2.5E-04	6.3E-05	1.0E+01	5.0E-06	1.0E-05
Pa-233	013981-14-1	4.7E-12	4.9E-12	4.5E-07	2.7E+01	1.0E-03	2.5E-04	6.3E-05	1.0E+01	5.0E-06	1.0E-05
Pa-234	015100-28-4	2.1E-12	1.3E-12	6.6E-06	2.8E-01	1.0E-03	2.5E-04	6.3E-05	1.0E+01	5.0E-06	1.0E-05
Pa-234m	015100-28-4	4.8E-15	6.3E-15	4.1E-08	8.1E-04	1.0E-03	2.5E-04	6.3E-05	1.0E+01	5.0E-06	1.0E-05
Pb-203	014687-25-3	1.0E-12	3.1E-13	6.4E-07	2.2E+00	1.0E-03	9.0E-02	1.0E-02	3.0E+02	3.0E-04	4.0E-04
Pb-209	014119-30-3	2.1E-13	6.9E-14	0.0E+00	1.4E-01	1.0E-03	9.0E-02	1.0E-02	3.0E+02	3.0E-04	4.0E-04
Pb-210	014255-04-0	6.8E-10	1.7E-09	1.1E-10	8.1E+03	1.0E-03	9.0E-02	1.0E-02	3.0E+02	3.0E-04	4.0E-04

Table 3.6b. (continued)

Chemical [†]	CASRN	Oral SF (mg/kg-day) ⁻¹	Inhalation SF (mg/kg-day) ⁻¹	External Exp. SF (mg/kg-day) ⁻¹	Half- life [T _R]	Deposition Velocity (m/day) [d]	Soil-to- Plant Uptake (B _V)	Soil-to- Wet Plant uptake (B _{VW})	Bioacc. factor for fish (L/kg) [BF]	Transfer coeff. for milk (day/kg) [F _M]	Transfer coeff. for beef (day/kg) [F _B]
Pb-210+D	014255-04-0	1.0E-09	3.9E-09	1.5E-10	8.1E+03	1.0E-03	2.4E-01	4.6E-02	3.6E+02	1.1E-03	5.8E-03
Pb-211	015816-77-0	3.4E-13	1.0E-11	1.9E-07	2.5E-02	1.0E-03	9.0E-02	1.0E-02	3.0E+02	3.0E-04	4.0E-04
Pb-212	015092-94-1	1.8E-11	3.9E-11	3.0E-07	4.4E-01	1.0E-03	9.0E-02	1.0E-02	3.0E+02	3.0E-04	4.0E-04
Pb-214	015067-28-4	2.9E-13	6.2E-12	7.1E-07	1.9E-02	1.0E-03	9.0E-02	1.0E-02	3.0E+02	3.0E-04	4.0E-04
Pd-100	015690-69-4	3.7E-12	3.6E-12		3.6E+00	1.0E-03	4.0E-02	1.0E-02	1.0E+01	1.0E-02	4.0E-03
Pd-101	015749-54-9	3.7E-13	2.3E-13		3.5E-01	1.0E-03	4.0E-02	1.0E-02	1.0E+01	1.0E-02	4.0E-03
Pd-103	014967-68-1	1.1E-12	1.1E-12	5.4E-10	1.7E+01	1.0E-03	4.0E-02	1.0E-02	1.0E+01	1.0E-02	4.0E-03
Pd-107	017637-99-9	2.1E-13	1.5E-12	0.0E+00	2.4E+09	1.0E-03	4.0E-02	1.0E-02	1.0E+01	1.0E-02	4.0E-03
Pd-109	014981-64-7	3.3E-12	2.0E-12	2.4E-09	5.6E-01	1.0E-03	4.0E-02	1.0E-02	1.0E+01	1.0E-02	4.0E-03
Pm-147	014380-75-7	1.4E-12	7.5E-12	6.4E-12	9.6E+02	8.6E+01			3.0E+01		
Pm-148	014683-19-3	1.4E-11	1.1E-11	2.2E-06	5.4E+00	8.6E+01			3.0E+01		
Pm-148m	014683-19-3	9.9E-12	3.0E-11	7.3E-06	4.1E+01	8.6E+01			3.0E+01		
Pm-149	015765-31-8	5.5E-12	3.6E-12	3.7E-08	2.2E+00	8.6E+01			3.0E+01		
Po-210	013981-52-7	3.3E-10	2.1E-09	3.3E-11	1.4E+02	1.0E-03	1.0E-02	1.0E-03	5.0E+01	3.4E-04	5.0E-03
Po-212	015389-34-1	4.5E-23	5.9E-21	0.0E+00	3.4E-12	1.0E-03	1.0E-02	1.0E-03	5.0E+01	3.4E-04	5.0E-03
Po-213	015756-57-7	6.7E-22	7.8E-20	1.2E-10	4.9E-11	1.0E-03	1.0E-02	1.0E-03	5.0E+01	3.4E-04	5.0E-03
Po-214	015735-67-8	2.1E-20	2.8E-18	3.2E-10	1.9E-09	1.0E-03	1.0E-02	1.0E-03	5.0E+01	3.4E-04	5.0E-03
Po-215	015706-52-2	5.0E-19	4.5E-17	5.1E-10	2.1E-08	1.0E-03	1.0E-02	1.0E-03	5.0E+01	3.4E-04	5.0E-03
Po-216	015756-58-8	8.8E-17	3.0E-15	5.6E-11	1.7E-06	1.0E-03	1.0E-02	1.0E-03	5.0E+01	3.4E-04	5.0E-03
Po-218	015422-24-9	5.1E-14	3.7E-12	0.0E+00	2.1E-03	1.0E-03	1.0E-02	1.0E-03	5.0E+01	3.4E-04	5.0E-03

Table 3.6b. (continued)

Chemical †	CASRN	Oral SF (mg/kg-day) ⁻¹	Inhalation SF (mg/kg-day) ⁻¹	External Exp. SF (mg/kg-day) ⁻¹	Half- life [T _R]	Deposition Velocity (m/day) [d]	Soil-to- Plant Uptake (B _v)	Soil-to- Wet Plant uptake (B _{wv})	Bioacc. factor for fish (L/kg) [BF]	Transfer coeff. for milk (day/kg) [F _M]	Transfer coeff. for beef (day/kg) [F _B]
Pt-142	014191-64-1	7.0E-12	4.2E-12	2.3E-07	8.0E-01	8.6E+01			1.0E+02		
Pt-143	014981-79-4	6.6E-12	5.6E-12	3.4E-14	1.4E+01	8.6E+01			1.0E+02		
Pt-144	014119-05-2	8.1E-14	1.3E-13	1.3E-07	1.2E-02	8.6E+01			1.0E+02		
Pt-144m	014119-05-2	3.2E-14	5.6E-14	1.9E-09	5.0E-03	8.6E+01			1.0E+02		
Pt-191	015706-36-2	1.5E-12	4.1E-13	6.7E-07	2.7E+00	8.6E+01					
Pt-193	015735-70-3	1.6E-13	7.9E-14	0.0E+00	1.8E+04	8.6E+01					
Pt-193m	015735-70-3	2.5E-12	5.8E-13	7.4E-09	4.3E+00	8.6E+01					
Pt-197	015735-74-7	2.1E-12	4.5E-13	3.2E-08	7.6E-01	8.6E+01					
Pt-197m	015735-74-7	3.3E-13	1.0E-13	1.7E-07	6.6E-02	8.6E+01					
Pu-236	015411-92-4	7.7E-11	1.3E-08	2.3E-11	1.0E+03	1.0E-03	1.0E-03	5.0E-04	3.0E+01	1.1E-06	1.8E-05
Pu-238	013981-16-3	3.0E-10	2.7E-08	1.9E-11	3.2E+04	1.0E-03	1.0E-03	5.0E-04	3.0E+01	1.1E-06	1.8E-05
Pu-239	015117-48-3	3.2E-10	2.8E-08	1.3E-11	8.8E+06	1.0E-03	1.0E-03	5.0E-04	3.0E+01	1.1E-06	1.8E-05
Pu-240	014119-33-6	3.2E-10	2.8E-08	1.9E-11	2.4E+06	1.0E-03	1.0E-03	5.0E-04	3.0E+01	1.1E-06	1.8E-05
Pu-241	014119-32-5	5.2E-12	2.8E-10	0.0E+00	5.3E+03	1.0E-03	1.0E-03	5.0E-04	3.0E+01	1.1E-06	1.8E-05
Pu-241+D	014119-32-5	3.3E-10	3.9E-08	4.6E-09	5.3E+03	1.0E-03	1.0E-03	5.0E-04	3.0E+01	1.1E-06	1.8E-05
Pu-242	013982-10-0	3.0E-10	2.6E-08	1.6E-11	1.4E+08	1.0E-03	1.0E-03	5.0E-04	3.0E+01	1.1E-06	1.8E-05
Pu-243	015706-37-3	3.7E-13	2.7E-13	1.9E-08	2.1E-01	1.0E-03	1.0E-03	5.0E-04	3.0E+01	1.1E-06	1.8E-05
Pu-244	014119-34-7	3.1E-10	2.7E-08	1.3E-11	3.0E+10	1.0E-03	1.0E-03	5.0E-04	3.0E+01	1.1E-06	1.8E-05
Pu-244+D	014119-34-7	3.2E-10	2.7E-08	3.7E-06	3.0E+10	1.0E-03	1.0E-03	5.0E-04	3.0E+01	1.1E-06	1.8E-05
Ra-223	015623-45-7	2.3E-10	3.6E-09	2.4E-07	1.1E+01	1.0E-03	2.0E-01	4.0E-02	5.0E+01	1.3E-03	9.0E-04

Table 3.6b. (continued)

Chemical [†]	CASRN	Oral SF (mg/kg-day) ⁻¹	Inhalation SF (mg/kg-day) ⁻¹	External Exp. SF (mg/kg-day) ⁻¹	Half- life [T _R]	Deposition Velocity (m/day) [d]	Soil-to- Plant Uptake (B _V)	Soil-to- Wet Plant uptake (B _{WV})	Bioacc. factor for fish (L/kg) [BF]	Transfer coeff. for milk (day/kg) [F _M]	Transfer coeff. for beef (day/kg) [F _B]
Ra-224	013233-32-4	1.5E-10	2.3E-09	2.5E-08	3.6E+00	1.0E-03	2.0E-01	4.0E-02	5.0E+01	1.3E-03	9.0E-04
Ra-225	013981-53-8	1.6E-10	2.4E-09	1.7E-09	1.5E+01	1.0E-03	2.0E-01	4.0E-02	5.0E+01	1.3E-03	9.0E-04
Ra-226	013982-63-3	3.0E-10	2.7E-09	1.3E-08	5.8E+05	1.0E-03	2.0E-01	4.0E-02	5.0E+01	1.3E-03	9.0E-04
Ra-226+D	013982-63-3	3.0E-10	2.8E-09	6.7E-06	5.8E+05	1.0E-03	4.5E-01	8.8E-02	5.6E+02	3.0E-03	1.2E-02
Ra-228	015262-20-1	2.5E-10	9.6E-10	0.0E+00	2.1E+03	1.0E-03	2.0E-01	4.0E-02	5.0E+01	1.3E-03	9.0E-04
Ra-228+D	015262-20-1	2.5E-10	9.9E-10	3.3E-06	2.1E+03	1.0E-03	2.0E-01	4.0E-02	7.5E+01	1.3E-03	9.3E-04
Rb-82	014391-63-0	1.1E-14	1.2E-14	3.9E-06	8.7E-04	8.6E+01			2.0E+03	1.2E-02	1.0E-02
Rb-86	014932-53-7	7.1E-12	4.2E-12	3.7E-07	1.9E+01	8.6E+01			2.0E+03	1.2E-02	1.0E-02
Rb-87	013982-13-3	3.7E-12	2.3E-12	0.0E+00	1.7E+13	8.6E+01			2.0E+03	1.2E-02	1.0E-02
Rb-88	014928-56-0	1.5E-13	1.4E-13	2.7E-06	1.2E-02	8.6E+01			2.0E+03	1.2E-02	1.0E-02
Rb-89	014191-65-2	8.7E-14	6.9E-14	8.5E-06	1.1E-02	8.6E+01			2.0E+03	1.2E-02	1.0E-02
Rh-103m	007440-16-6	8.2E-15	1.3E-14	5.9E-11	3.9E-02	8.6E+01			1.0E+01		
Rh-105	014913-89-4	1.9E-12	1.2E-12	2.5E-07	1.5E+00	8.6E+01			1.0E+01		
Rh-105m	014913-89-4	1.1E-15	9.3E-16	2.3E-08	5.2E-04	8.6E+01			1.0E+01		
Rh-106	014234-34-5	3.6E-15	4.6E-15	7.6E-07	3.5E-04	8.6E+01			1.0E+01		
Rn-219	014835-02-0		6.9E-14	1.7E-07	4.6E-05	1.0E-03	3.2E-03	8.0E-04	1.0E+02	2.5E-04	3.0E-04
Rn-220	022481-48-7		1.9E-13	1.9E-09	6.4E-04	1.0E-03	3.2E-03	8.0E-04	1.0E+02	2.5E-04	3.0E-04
Rn-222+D	014859-67-7		7.6E-12		3.8E+00	1.0E-03	2.5E-01	4.8E-02	5.1E+02	1.7E-03	1.1E-02
Ru-103	013968-53-1	3.3E-12	4.6E-12	1.7E-06	3.9E+01	1.0E-03	2.0E-01	3.0E-02	1.0E+01	3.3E-06	5.1E-02
Ru-105	014331-95-4	1.2E-12	8.0E-13	2.9E-06	1.9E-01	1.0E-03	2.0E-01	3.0E-02	1.0E+01	3.3E-06	5.1E-02

Table 3.6b. (continued)

Chemical [†]	CASRN	Oral SF (mg/kg- day) ⁻¹	Inhalation SF (mg/kg- day) ⁻¹	External Exp. SF (mg/kg- day) ⁻¹	Half- life [T _R]	Deposition Velocity (m/day) [d]	Soil-to- Plant Uptake (B _p)	Soil-to- Wet Plant uptake (B _{wv})	Bioacc. factor for fish (L/kg) [BF]	Transfer coeff. for milk (day/kg) [F _M]	Transfer coeff. for beef (day/kg) [F _B]
Ru-106	013967-48-1	3.5E-11	1.2E-10	0.0E+00	3.7E+02	1.0E-03	2.0E-01	3.0E-02	1.0E+01	3.3E-06	5.1E-02
Ru-106+D	013967-48-1	3.5E-11	1.2E-10	7.6E-07	3.7E+02	1.0E-03	2.0E-01	3.0E-02	1.0E+01	3.3E-06	5.1E-02
Ru-97	015758-35-7	5.9E-13	4.1E-13	4.5E-07	2.9E+00	1.0E-03	2.0E-01	3.0E-02	1.0E+01	3.3E-06	5.1E-02
S-35	015117-53-0	4.2E-13	1.9E-13	0.0E+00	8.7E+01	1.0E-03	2.0E+00	6.0E-01	8.0E+02	1.6E-02	2.0E-01
Sb-122	014374-79-9	8.8E-12	5.5E-12	1.6E-06	2.7E+00	1.0E-03	5.0E-02	1.0E-02	1.0E+02	2.5E-05	4.0E-05
Sb-124	014683-10-4	1.1E-11	1.3E-11	7.4E-06	6.0E+01	1.0E-03	5.0E-02	1.0E-02	1.0E+02	2.5E-05	4.0E-05
Sb-125	014234-35-6	3.0E-12	5.2E-12	1.3E-06	1.0E+03	1.0E-03	5.0E-02	1.0E-02	1.0E+02	2.5E-05	4.0E-05
Sb-125+D	014234-35-6	3.5E-12	5.9E-12	1.3E-06	1.0E+03	1.0E-03	5.0E-02	1.0E-02	1.0E+02	2.5E-05	4.0E-05
Sb-126	015756-32-8	9.7E-12	8.4E-12	1.0E-05	1.2E+01	1.0E-03	5.0E-02	1.0E-02	1.0E+02	2.5E-05	4.0E-05
Sb-126m	015756-32-8	7.3E-14	6.4E-14	5.8E-06	1.3E-02	1.0E-03	5.0E-02	1.0E-02	1.0E+02	2.5E-05	4.0E-05
Sb-127	013968-50-8	8.5E-12	6.1E-12	2.4E-06	3.9E+00	1.0E-03	5.0E-02	1.0E-02	1.0E+02	2.5E-05	4.0E-05
Sb-129	014331-88-5	1.9E-12	8.6E-13	5.6E-06	1.8E-01	1.0E-03	5.0E-02	1.0E-02	1.0E+02	2.5E-05	4.0E-05
Sc-46	013967-63-0	5.7E-12	1.3E-11	7.9E-06	8.4E+01	8.6E+01	1.0E-02	2.0E-03	1.0E+02	6.0E-05	2.0E-03
Sc-47	014391-96-9	3.0E-12	2.0E-12	2.5E-07	3.4E+00	8.6E+01	1.0E-02	2.0E-03	1.0E+02	6.0E-05	2.0E-03
Sc-48	014391-86-7	6.7E-12	4.2E-12	1.3E-05	1.8E+00	8.6E+01	1.0E-02	2.0E-03	1.0E+02	6.0E-05	2.0E-03
Se-75	014265-71-5	6.5E-12	4.9E-12	8.9E-07	1.2E+02	1.0E-03	5.0E-01	1.0E-01	1.7E+02	1.0E-02	1.0E-01
Si-31	014276-49-4	5.0E-13	3.3E-13	3.5E-09	1.1E-01	8.6E+01					
Sm-147	014392-33-7	2.5E-11	6.9E-09	0.0E+00	3.9E+13	1.0E-03	4.0E-03	1.0E-03	2.5E+01	2.0E-05	5.0E-03
Sm-151	015715-94-3	4.6E-13	4.6E-12	2.9E-13	3.3E+04	1.0E-03	4.0E-03	1.0E-03	2.5E+01	2.0E-05	5.0E-03
Sm-153	015766-00-4	4.0E-12	2.2E-12	4.7E-08	1.9E+00	1.0E-03	4.0E-03	1.0E-03	2.5E+01	2.0E-05	5.0E-03

Table 3.6b. (continued)

Chemical [†]	CASRN	Oral SF (mg/kg-day) ⁻¹	Inhalation SF (mg/kg-day) ⁻¹	External Exp. SF (mg/kg-day) ⁻¹	Half- life [T _R]	Deposition Velocity (m/day) [d]	Soil-to- Plant Uptake (B _V)	Soil-to- Wet Plant uptake (B _{VW})	Bioacc. factor for fish (L/kg) [BF]	Transfer coeff. for milk (day/kg) [F _M]	Transfer coeff. for beef (day/kg) [F _B]
Sn-113	013966-06-8	3.7E-12	6.6E-12	3.0E-09	1.2E+02	1.0E-03	1.0E+00	3.0E-01	3.0E+03	1.0E-03	1.0E-02
Sn-121	014683-06-8	1.2E-12	6.1E-13		1.1E+00	1.0E-03	1.0E+00	3.0E-01	3.0E+03	1.0E-03	1.0E-02
Sn-121m	014683-06-8	2.0E-12	7.5E-12		2.0E+04	1.0E-03	1.0E+00	3.0E-01	3.0E+03	1.0E-03	1.0E-02
Sn-125	014683-08-0	1.7E-11	1.2E-11	1.2E-06	9.6E+00	1.0E-03	1.0E+00	3.0E-01	3.0E+03	1.0E-03	1.0E-02
Sn-126	015832-50-5	2.1E-11	4.3E-11	3.3E-08	3.7E+07	1.0E-03	1.0E+00	3.0E-01	3.0E+03	1.0E-03	1.0E-02
Sr-82	014809-50-8	2.6E-11	8.9E-12	9.0E-11	2.5E+01	1.0E-03	4.0E+00	3.0E-01	6.0E+01	2.8E-03	8.0E-03
Sr-85	013967-73-2	1.4E-12	1.1E-12	1.5E-06	6.5E+01	1.0E-03	4.0E+00	3.0E-01	6.0E+01	2.8E-03	8.0E-03
Sr-85m	013967-73-2	1.8E-14	7.1E-15	5.2E-07	4.7E-02	1.0E-03	4.0E+00	3.0E-01	6.0E+01	2.8E-03	8.0E-03
Sr-89	014158-27-1	1.0E-11	3.7E-12	5.4E-10	5.1E+01	1.0E-03	4.0E+00	3.0E-01	6.0E+01	2.8E-03	8.0E-03
Sr-90	010098-97-2	4.1E-11	5.9E-11	0.0E+00	1.0E+04	1.0E-03	4.0E+00	3.0E-01	6.0E+01	2.8E-03	8.0E-03
Sr-90+D	010098-97-2	5.6E-11	6.9E-11	0.0E+00	1.0E+04	1.0E-03	4.0E+00	3.0E-01	6.0E+01	2.8E-03	8.0E-03
Sr-91	014331-91-0	2.8E-12	7.8E-13	2.7E-06	4.0E-01	1.0E-03	4.0E+00	3.0E-01	6.0E+01	2.8E-03	8.0E-03
Sr-92	014928-29-1	2.0E-12	4.7E-13	5.2E-06	1.1E-01	1.0E-03	4.0E+00	3.0E-01	6.0E+01	2.8E-03	8.0E-03
Ta-182	013982-00-8	7.0E-12	1.7E-11	4.7E-06	1.2E+02	8.6E+01			1.0E+02		
Tb-158	015759-55-4	4.2E-12	7.0E-11		5.5E+04	8.6E+01					
Tb-160	013981-29-8	7.6E-12	1.1E-11	4.0E-06	7.2E+01	8.6E+01					
Tc-95	014809-56-4	6.8E-14	3.4E-14	2.7E-06	8.3E-01	1.0E-03	4.0E-01	5.0E+00	2.0E+01	1.4E-04	1.0E-04
Tc-95m	014809-56-4	1.2E-12	2.1E-12	2.1E-06	6.1E+01	1.0E-03	4.0E-01	5.0E+00	2.0E+01	1.4E-04	1.0E-04
Tc-96	014808-44-7	2.3E-12	1.9E-12	9.4E-06	4.3E+00	1.0E-03	4.0E-01	5.0E+00	2.0E+01	1.4E-04	1.0E-04
Tc-96m	014808-44-7	2.6E-14	2.3E-14	7.7E-08	3.6E-02	1.0E-03	4.0E-01	5.0E+00	2.0E+01	1.4E-04	1.0E-04

Table 3.6b. (continued)

Chemical [†]	CASRN	Oral SF (mg/kg- day) ⁻¹	Inhalation SF (mg/kg- day) ⁻¹	External Exp. SF (mg/kg- day) ⁻¹	Half- life [T _R]	Deposition Velocity (m/day) [d]	Soil-to- Plant Uptake (B _v)	Soil-to- Wet Plant uptake (B _{wv})	Bioacc. factor for fish (L/kg) [BF]	Transfer coeff. for milk (day/kg) [F _M]	Transfer coeff. for beef (day/kg) [F _B]
Te-97	015759-35-0	1.6E-13	3.4E-13	2.5E-10	9.5E+08	1.0E-03	4.0E-01	5.0E+00	2.0E+01	1.4E-04	1.0E-04
Te-97m	015759-35-0	1.2E-12	2.0E-12	2.7E-10	8.9E+01	1.0E-03	4.0E-01	5.0E+00	2.0E+01	1.4E-04	1.0E-04
Te-99	014133-76-7	1.4E-12	2.9E-12	6.2E-13	7.8E+07	1.0E-03	4.0E-01	5.0E+00	2.0E+01	1.4E-04	1.0E-04
Te-99m	014133-76-7	5.6E-14	3.5E-14	2.5E-07	2.5E-01	1.0E-03	4.0E-01	5.0E+00	2.0E+01	1.4E-04	1.0E-04
Te-125m	014390-73-9	2.5E-12	2.9E-12	2.2E-09	5.8E+01	8.6E+01			4.0E+02		7.0E-03
Te-127	013981-49-2	8.6E-13	4.3E-13	1.6E-08	3.9E-01	8.6E+01			4.0E+02		7.0E-03
Te-127m	013981-49-2	6.0E-12	1.3E-11	7.1E-10	1.1E+02	8.6E+01			4.0E+02		7.0E-03
Te-129	014269-71-7	1.5E-13	1.5E-13	1.5E-07	4.8E-02	8.6E+01			4.0E+02		7.0E-03
Te-129m	014269-71-7	1.2E-11	1.3E-11	6.9E-08	3.4E+01	8.6E+01			4.0E+02		7.0E-03
Te-131	014683-12-6	3.9E-13	2.5E-13	1.4E-06	1.7E-02	8.6E+01			4.0E+02		7.0E-03
Te-131m	014683-12-6	8.8E-12	8.4E-12	5.3E-06	1.3E+00	8.6E+01			4.0E+02		7.0E-03
Te-132	014234-28-7	1.2E-11	8.4E-12	4.3E-07	3.3E+00	8.6E+01			4.0E+02		7.0E-03
Th-227	015623-47-9	4.0E-11	4.3E-09	1.7E-07	1.9E+01	1.0E-03	1.0E-03	5.0E-04	1.0E+02	5.0E-06	1.0E-04
Th-228	014274-82-9	6.3E-11	9.5E-08	5.3E-10	7.0E+02	1.0E-03	1.0E-03	5.0E-04	1.0E+02	5.0E-06	1.0E-04
Th-228+D	014274-82-9	2.3E-10	9.7E-08	9.9E-07	7.0E+02	1.0E-03	4.7E-01	9.2E-02	6.6E+02	5.0E-03	5.2E-02
Th-229	015594-54-4	5.7E-11	7.6E-08	5.9E-08	2.7E+06	1.0E-03	1.0E-03	5.0E-04	1.0E+02	5.0E-06	1.0E-04
Th-229+D	015594-54-4	3.6E-10	8.3E-08	6.0E-07	2.7E+06	1.0E-03	4.5E+00	1.1E+00	2.4E+02	3.4E-02	5.9E-02
Th-230	014269-63-7	3.8E-11	1.7E-08	4.4E-11	2.8E+07	1.0E-03	1.0E-03	5.0E-04	1.0E+02	5.0E-06	1.0E-04
Th-231	014932-40-2	1.8E-12	1.1E-12	2.1E-09	1.1E+00	1.0E-03	1.0E-03	5.0E-04	1.0E+02	5.0E-06	1.0E-04
Th-232	007440-29-1	3.3E-11	1.9E-08	2.0E-11	5.1E+12	1.0E-03	1.0E-03	5.0E-04	1.0E+02	5.0E-06	1.0E-04

Table 3.6b. (continued)

Chemical [†]	CASRN	Oral SF (mg/kg- day) [‡]	Inhalation SF (mg/kg- day) [‡]	External Exp. SF (mg/kg- day) [‡]	Half- life [T _R]	Deposition Velocity (m/day) [d]	Soil-to- Plant Uptake (B _v)	Soil-to- Wet Plant uptake (B _{vw})	Bioacc. factor for fish (L/kg) [BF]	Transfer coeff. for milk (day/kg) [F _M]	Transfer coeff. for beef (day/kg) [F _B]
Th-234	015065-10-8	1.9E-11	1.9E-11	3.5E-09	2.4E+01	1.0E-03	1.0E-03	5.0E-04	1.0E+02	5.0E-06	1.0E-04
Tl-202	015720-57-7	1.0E-12	6.1E-13	1.4E-06	1.2E+01	8.6E+01	1.6E-02	4.0E-03		2.0E-03	4.0E-02
Tl-204	013968-51-9	2.0E-12	1.2E-12	8.7E-10	1.4E+03	8.6E+01	1.6E-02	4.0E-03		2.0E-03	4.0E-02
Tl-208	014913-50-9	1.8E-14	1.4E-14	1.5E-05	2.1E-03	8.6E+01	1.6E-02	4.0E-03		2.0E-03	4.0E-02
Tl-209	015690-73-0	1.4E-14	1.1E-14	7.8E-06	1.5E-03	8.6E+01	1.6E-02	4.0E-03		2.0E-03	4.0E-02
Tm-170	013981-30-1	7.5E-12	1.1E-11	3.8E-09	1.3E+02	8.6E+01					
Tm-171	014333-45-0	5.9E-13	1.8E-12	3.2E-10	7.0E+02	8.6E+01					
U-232	014158-29-3	8.1E-11	5.3E-08	3.4E-11	2.6E+04	1.0E-03	1.0E-02	2.0E-03	1.0E+01	4.0E-04	3.4E-04
U-233	013968-55-3	4.5E-11	1.4E-08	3.5E-11	5.8E+07	1.0E-03	1.0E-02	2.0E-03	1.0E+01	4.0E-04	3.4E-04
U-234	013966-29-5	4.4E-11	1.4E-08	2.1E-11	8.9E+07	1.0E-03	1.0E-02	2.0E-03	1.0E+01	4.0E-04	3.4E-04
U-235	015117-96-1	4.5E-11	1.3E-08	2.6E-07	2.6E+11	1.0E-03	1.0E-02	2.0E-03	1.0E+01	4.0E-04	3.4E-04
U-235+D	015117-96-1	4.7E-11	1.3E-08	2.7E-07	2.6E+11	1.0E-03	1.1E-02	2.5E-03	1.1E+02	4.1E-04	4.4E-04
U-236	013982-70-2	4.2E-11	1.3E-08	1.7E-11	8.5E+09	1.0E-03	1.0E-02	2.0E-03	1.0E+01	4.0E-04	3.4E-04
U-237	014269-75-1	4.0E-12	3.1E-12	1.4E-07	6.8E+00	1.0E-03	1.0E-02	2.0E-03	1.0E+01	4.0E-04	3.4E-04
U-238	007440-61-1	4.3E-11	1.2E-08	1.5E-11	1.6E+12	1.0E-03	1.0E-02	2.0E-03	1.0E+01	4.0E-04	3.4E-04
U-238+D	007440-61-1	6.2E-11	1.2E-08	5.3E-08	1.6E+12	1.0E-03	1.1E-02	2.6E-03	1.2E+02	4.1E-04	4.5E-04
U-240	015687-53-3	5.5E-12	3.4E-12	1.1E-10	5.9E-01	1.0E-03	1.0E-02	2.0E-03	1.0E+01	4.0E-04	3.4E-04
V-48	014331-97-6	7.6E-12	6.8E-12	1.1E-05	1.6E+01	8.6E+01	5.2E-03	1.3E-03	1.0E+01	1.0E-03	2.3E-03
W-181	015749-46-9	2.7E-13	8.0E-14	2.1E-08	1.2E+02	8.6E+01	3.0E+00	8.0E-01	1.0E+01	3.0E-04	4.0E-02
W-185	014932-41-3	2.0E-12	4.3E-13	5.0E-11	7.5E+01	8.6E+01	3.0E+00	8.0E-01	1.0E+01	3.0E-04	4.0E-02

Table 3.6b. (continued)

Chemical [†]	CASRN	Oral SF (mg/kg-day) ⁻¹	Inhalation SF (mg/kg-day) ⁻¹	External Exp. SF (mg/kg-day) ⁻¹	Half- life [T _{1/2}]	Deposition Velocity (m/day) [d]	Soil-to- Plant Uptake (B _v)	Soil-to- Wet Plant uptake (B _w)	Bioacc. factor for fish (L/kg) [BF]	Transfer coeff. for milk (day/kg) [F _m]	Transfer coeff. for beef (day/kg) [F _b]
W-187	014983-48-3	2.5E-12	5.3E-13	1.6E-06	9.9E-01	8.6E+01	3.0E+00	8.0E-01	1.0E+01	3.0E-04	4.0E-02
Xe-122	015151-09-4		3.1E-15		8.4E-01	8.6E+01	0.0E+00	0.0E+00		0.0E+00	0.0E+00
Xe-123	015700-10-4		8.9E-16		8.9E-02	8.6E+01	0.0E+00	0.0E+00		0.0E+00	0.0E+00
Xe-125	013994-18-8		1.2E-15		7.0E-01	8.6E+01	0.0E+00	0.0E+00		0.0E+00	0.0E+00
Xe-127	013994-19-9		4.1E-16		3.6E-01	8.6E+01	0.0E+00	0.0E+00		0.0E+00	0.0E+00
Xe-129m	013965-99-6		5.7E-16		8.9E-00	8.6E+01	0.0E+00	0.0E+00		0.0E+00	0.0E+00
Xe-131m	014683-11-5		4.1E-16		1.2E-01	8.6E+01	0.0E+00	0.0E+00		0.0E+00	0.0E+00
Xe-133	014932-42-4		4.1E-16		5.3E-00	8.6E+01	0.0E+00	0.0E+00		0.0E+00	0.0E+00
Xe-133m	014932-42-4		5.1E-16		2.2E+00	8.6E+01	0.0E+00	0.0E+00		0.0E+00	0.0E+00
Xe-135	014995-62-1		7.5E-16		3.8E-01	8.6E+01	0.0E+00	0.0E+00		0.0E+00	0.0E+00
Xe-135m	014995-62-1		1.9E-16		1.1E-02	8.6E+01	0.0E+00	0.0E+00		0.0E+00	0.0E+00
Xe-137	014835-21-3		1.4E-15		2.7E-03	8.6E+01	0.0E+00	0.0E+00		0.0E+00	0.0E+00
Xe-138	015751-81-2		2.1E-15		9.8E-03	8.6E+01	0.0E+00	0.0E+00		0.0E+00	0.0E+00
Y-90	010098-91-6	1.5E-11	9.9E-12	0.0E+00	2.7E+00	1.0E-03	6.0E-03	1.5E-03	3.0E+01	2.0E-05	1.0E-03
Y-91	014234-24-3	1.4E-11	1.9E-11	1.4E-08	5.9E+01	1.0E-03	6.0E-03	1.5E-03	3.0E+01	2.0E-05	1.0E-03
Y-91m	014234-24-3	3.7E-14	3.0E-14	1.9E-06	3.5E-02	1.0E-03	6.0E-03	1.5E-03	3.0E+01	2.0E-05	1.0E-03
Y-92	015751-59-4	2.0E-12	1.6E-12	9.8E-07	1.5E-01	1.0E-03	6.0E-03	1.5E-03	3.0E+01	2.0E-05	1.0E-03
Y-93	014981-70-5	5.7E-12	3.5E-12	3.4E-07	4.2E-01	1.0E-03	6.0E-03	1.5E-03	3.0E+01	2.0E-05	1.0E-03
Zn-65	013982-39-3	9.9E-12	1.0E-11	2.3E-06	2.4E+02	1.0E-03	1.0E+00	4.0E-01	1.0E+03	1.0E-02	1.0E-01
Zn-69	013982-23-5	6.2E-14	1.0E-13	2.0E-11	3.9E-02	1.0E-03	1.0E+00	4.0E-01	1.0E+03	1.0E-02	1.0E-01

Table 3.6b. (continued)

Chemical [†]	CASRN	Oral SF (mg/kg-day) ⁻¹	Inhalation SF (mg/kg-day) ⁻¹	External Exp. SF (mg/kg-day) ⁻¹	Half- life [T _R]	Deposition Velocity (m/day) [d]	Soil-to- Plant Uptake (B _v)	Soil-to- Wet Plant uptake (B _w)	Bioacc. factor for fish (L/kg) [BF]	Transfer coeff. for milk (day/kg) [F _M]	Transfer coeff. for beef (day/kg) [F _B]
Zn-69m	013982-23-5	1.5E-12	1.2E-12	1.4E-06	5.8E-01	1.0E-03	1.0E+00	4.0E-01	1.0E+03	1.0E-02	1.0E-01
Zr-93	015751-77-6	5.2E-13	5.3E-12	0.0E+00	5.6E+08	1.0E-03	5.0E-04	1.3E-04	3.0E+02	5.5E-07	1.0E-06
Zr-95	013967-71-0	3.9E-12	6.5E-12	2.8E-06	6.4E+01	1.0E-03	5.0E-04	1.3E-04	3.0E+02	5.5E-07	1.0E-06
Zr-97	014928-30-4	1.0E-11	4.7E-12	6.9E-07	7.0E-01	1.0E-03	5.0E-04	1.3E-04	3.0E+02	5.5E-07	1.0E-06

Notes:

[†] Isotopes designated with an "m" indicate that the isotope is metastable; isotopes designated with a "+D" indicate that the radionuclide slope factors include contributions from daughter products.

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