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**ENVIRONMENTAL
RESTORATION
PROGRAM**

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

MASTER

MANAGED BY
LOCKHEED MARTIN ENERGY SYSTEMS, INC.
FOR THE UNITED STATES
DEPARTMENT OF ENERGY

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

Environmental Restoration Division
P.O. Box 2003
Oak Ridge, Tennessee 37831-7298

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LOCKHEED MARTIN ENERGY SYSTEMS, INC.
managing the
Environmental Management Activities at
Oak Ridge K-25 Site Paducah Gaseous Diffusion Plant
Oak Ridge Y-12 Plant Portsmouth Gaseous Diffusion Plant
Oak Ridge National Laboratory
under contract DE-AC05-84OR21400
for the
U.S. DEPARTMENT OF ENERGY

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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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CONTENTS

PREFACE	iii
ACKNOWLEDGMENTS	v
ABBREVIATIONS	xi
1. INTRODUCTION	1-1
1.1 APPLICATION	1-1
1.2 DEVELOPMENT	1-2
1.3 ORGANIZATION	1-3
1.4 REFERENCES	1-3
2. EQUATIONS	2-1
2.1 RESIDENTIAL LAND USE—GROUNDWATER, SURFACE WATER, SOIL, OR SEDIMENT	2-2
2.1.1 Groundwater or Surface Water	2-2
2.1.2 Soil or Sediment	2-6
2.2 COMMERCIAL/INDUSTRIAL LAND USE—GROUNDWATER, SURFACE WATER, SOIL, OR SEDIMENT	2-10
2.2.1 Groundwater or Surface Water	2-10
2.2.2 Soil or Sediment	2-12
2.3 AGRICULTURAL LAND USE—PRODUCE, WHOLE MILK, AND BEEF	2-20
2.3.1 Nonradionuclide Contaminant	2-20
2.3.2 Radionuclide Contaminant	2-24
2.3.3 Back-Calculated Concentrations for Groundwater and Soil	2-25
2.3.4 Supporting Equations	2-28
2.4 RECREATIONAL LAND USE—SURFACE WATER, SOIL, OR SEDIMENT	2-32
2.4.1 Surface Water	2-32
2.4.2 Soil or Sediment	2-35
2.5 EXCAVATION LAND USE—SOIL OR SEDIMENT	2-42
2.5.1 Soil or Sediment	2-42
2.6 REFERENCES	2-45
3. TABLES	3-1
3.1 RESIDENTIAL LAND USE	
3.1a Risk-based Preliminary Remediation Goals for nonradionuclides in groundwater (residential scenario)	3-3
3.1b Risk-based Preliminary Remediation Goals for radionuclides in groundwater (residential scenario)	3-39
3.1c Risk-based Preliminary Remediation Goals for nonradionuclides in soil (residential scenario)	3-59
3.1d Risk-based Preliminary Remediation Goals for radionuclides in soil (residential scenario)	3-101
3.1e Risk-based Preliminary Remediation Goals for nonradionuclides in fish (residential scenario)	3-121

3.1f	Risk-based Preliminary Remediation Goals for radionuclides in fish (residential scenario)	3-161
3.1g	Risk-based Preliminary Remediation Goals for water based on ingestion of fish for nonradionuclides (residential scenario)	3-181
3.1h	Risk-based Preliminary Remediation Goals for water based on ingestion of fish for radionuclides (residential scenario)	3-221
3.2	INDUSTRIAL LAND USE	
3.2a	Risk-based Preliminary Remediation Goals for nonradionuclides in groundwater (industrial scenario)	3-241
3.2b	Risk-based Preliminary Remediation Goals for radionuclides in groundwater (industrial scenario)	3-281
3.2c	Risk-based Preliminary Remediation Goals for nonradionuclides in soil (industrial scenario)	3-301
3.2d	Risk-based Preliminary Remediation Goals for radionuclides in soil (industrial scenario)	3-333
3.3	AGRICULTURAL LAND USE	
3.3a	Risk-based Preliminary Remediation Goals for nonradionuclides in water (agricultural scenario)	3-353
3.3b	Risk-based Preliminary Remediation Goals for radionuclides in water (agricultural scenario)	3-387
3.3c	Risk-based Preliminary Remediation Goals for nonradionuclides in soil and sediment (agricultural scenario)	3-407
3.3d	Risk-based Preliminary Remediation Goals for radionuclides in soil and sediment (agricultural scenario)	3-441
3.3e	Risk-based Preliminary Remediation Goals for nonradionuclides in water and soil (agricultural scenario)	3-461
3.3f	Risk-based Preliminary Remediation Goals for radionuclides in water and soil (agricultural scenario)	3-493
3.4	RECREATIONAL LAND USE	
3.4a	Risk-based Preliminary Remediation Goals for nonradionuclides in groundwater (recreational scenario)	3-513
3.4b	Risk-based Preliminary Remediation Goals for radionuclides in groundwater (recreational scenario)	3-549
3.4c	Risk-based Preliminary Remediation Goals for nonradionuclides in soil (recreational scenario)	3-569
3.4d	Risk-based Preliminary Remediation Goals for radionuclides in soil (recreational scenario)	3-603
3.4e	Risk-based Preliminary Remediation Goals for nonradionuclides in fish (recreational scenario)	3-623
3.4f	Risk-based Preliminary Remediation Goals for radionuclides in fish (recreational scenario)	3-663
3.4g	Risk-based Preliminary Remediation Goals for water based on ingestion of fish for nonradionuclides (recreational scenario)	3-683
3.4h	Risk-based Preliminary Remediation Goals for water based on ingestion of fish for radionuclides (recreational scenario)	3-723
3.5	EXCAVATION LAND USE	
3.5a	Risk-based Preliminary Remediation Goals for nonradionuclides in soil (excavation scenario)	3-743
3.5b	Risk-based Preliminary Remediation Goals for radionuclides in soil (excavation scenario)	3-775

3.6	CHEMICAL-SPECIFIC PARAMETERS	
3.6a	Toxicity values used in calculating risk-based Preliminary Remediation Goals (nonradionuclides)	3-795
3.6b	Chemical-specific parameters used in calculating risk-based Preliminary Remediation Goals (nonradionuclides)	3-835
3.6c	Chemical-specific parameters used in calculating risk-based Preliminary Remediation Goals (radionuclides)	3-877

FIGURES

1.	Land uses and exposure routes considered in the development of PRGs	1-5
2.	Combination PRGs for bis(2-ethylhexyl)phthalate	2-22

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ABBREVIATIONS

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.

Introduction

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- [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.

EquationsResidential 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)

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

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

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

5. Ingestion of fish—concentration in water

$$C = \frac{T \times BW \times AT}{TV_o \times IR_f \times FI \times EF \times ED \times BF} \quad (5)$$

6. Ingestion of fish—concentration in fish

$$C_f = \frac{T \times BW \times AT}{TV_o \times IR_f \times FI \times EF \times ED} \quad (6)$$

where

<u>Parameters</u>	<u>Definition (units)</u>	<u>Default Value</u>
AT	averaging time (yr × day/yr)	70 × 365 (carcinogen) [1] ED × 365 (noncarcinogen) [1]
BF	bioaccumulation factor (L/kg)	chemical-specific
BW	adult body weight (kg)	70 [1]
C	chemical PRG in water (mg/L)	—
C _f	chemical PRG in fish (mg/kg)	—
CF ₁	units conversion factor (L-m)/(cm-m ³)	10
ED	exposure duration (yr)	30 [1]
EF	exposure frequency (day/yr)	350 [1]
ET	exposure time (hr/day)	0.25 [4]
FI	fraction ingested (unitless)	1 [12]
IR _a	inhalation rate (m ³ /day)	20 [28]
IR _f	fish ingestion rate (kg/day)	0.054 [9]
IR _w	water ingestion rate (L/day)	2 [1]
K	volatilization factor of Andelman (1990) (L/m ³)	0.0005 × 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 and 0.1
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 contaminants**

Since most radionuclides are not considered to be volatile, the inhalation pathway is not usually considered for exposure through groundwater or surface water; the 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

$$C = \frac{TR}{SF_o \times IR_w \times EF \times ED} \quad (7)$$

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

$$C = \frac{TR}{SF_i \times IR_{air} \times EF \times ED \times CF_1 \times IEF} \quad (8)$$

3. Ingestion and inhalation (volatiles only)

$$C = \frac{TR}{EF \times ED \times [(SF_o \times IR_w) + (SF_i \times IR_{air} \times CF_1 \times IEF)]} \quad (9)$$

4. Ingestion of fish - concentration in water

$$C = \frac{TR}{SF_o \times IR_f \times FI \times EF \times ED \times BF} \quad (10)$$

5. Ingestion of fish - concentration in fish

$$C_f = \frac{TR}{SF_o \times IR_f \times CF_2 \times FI \times EF \times ED} \quad (11)$$

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)	-
C _f	radionuclide PRG in fish (pCi/g)	-
CF ₁	units conversion factor (day/hr)	1/24
CF ₂	units conversion factor (g/kg)	1000
ED	exposure duration (yr)	30 [1]
EF	exposure frequency (day/yr)	350 [1]
FI	fraction ingested (unitless)	1 [12]
IEF	inhalation exposure factor (L-hr)/(m ³ -day)	0.2802 (tritium) [14] 7.6030 (radon) [14]

Equations
Residential Land Use

IR_{air}	inhalation rate (m^3/day)	20 [28]
IR_f	fish ingestion rate (kg/day)	0.054 [9]
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}

EquationsResidential 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**

$$C = \frac{T \times AT}{TV_o \times CF \times EF \times IF_{soiladj} \times FI} \quad (12)$$

b. Noncarcinogenic (adult and child calculated separately)

$$C = \frac{T \times BW_n \times AT_n}{TV_o \times CF \times EF \times ED_n \times IR_n \times FI} \quad (13)$$

2. Inhalation only

$$C = \frac{T \times BW \times AT}{TV_i \times EF \times ED \times \left(\frac{1}{VF} + \frac{1}{PEF} \right) \times IR_{air}} \quad (14)$$

3. Dermal contact only

$$C = \frac{T \times BW \times AT}{TV_{ad} \times CF_d \times SA \times AF \times ABS \times EF \times ED} \quad (15)$$

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

$$C = \frac{T \times BW_a \times AT}{EF \times ED [(TV_o \times CF \times IR_a \times FI) + (TV_i \times (\frac{1}{VF} + \frac{1}{PEF}) \times IR_{air}) + (TV_{ad} \times CF_d \times SA \times AF \times ABS)]} \quad (16)$$

where

<u>Parameters</u>	<u>Definition (units)</u>	<u>Default Value</u>
ABS	absorption factor (unitless)	chemical-specific [4]
AF	adherence factor (mg/cm ²)	1 [11]
AT	averaging time (yr × day/yr)	70 × 365 (carcinogen)[1] ED × 365 (noncarcinogen)[1] ED _n × 365 [1]
AT _n	averaging time - noncarcinogenic ingestion only (yr × day/yr)	ED _n × 365 [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-cm ²)/(mg-m ²)	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. 21) [1]
IR _a	soil ingestion rate for adult (mg/day)	100 [1]
IR _{air}	total inhalation rate (m ³ /day)	20 [9]
IR _n	soil ingestion rate - noncarcinogenic (mg/day)	100 (adult) [1] 200 (child) [1]
PEF	particulate emission factor (m ³ /kg)	4.28 × 10 ⁹ (see Eq. 40)[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) (m ² /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 and 0.1
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) (m ³ /kg)	chemical-specific (see Eqs. 34-39) [5]

EquationsResidential Land Use**2.1.2.2 Radionuclide contaminant****1. Ingestion only**

$$C = \frac{TR}{SF_o \times CF \times EF \times IF_{soiladj} \times FI} \quad (17)$$

2. External radiation only

$$C = \frac{TR}{SF_x \times ED \times EF_x \times (1-S_e) \times T_e} \quad (18)$$

3. Inhalation only

$$C = \frac{TR}{SF_i \times ED \times CF_i \times EF \times \left(\frac{1}{VF} + \frac{1}{PEF}\right) \times IR_{air}} \quad (19)$$

4. Ingestion and external radiation and inhalation

$$C = \frac{TR}{(SF_o \times CF \times EF \times ED \times IR_a \times FI) + (SF_x \times ED \times EF_x \times (1-S_e) \times T_e) + (SF_i \times ED \times CF_i \times EF \times \left(\frac{1}{VF} + \frac{1}{PEF}\right) \times IR_{air})} \quad (20)$$

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 (see Eq. 22) [6]
IR _a	soil ingestion rate for adult (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 (see Eq. 40)[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)

$$IF_{soil/adj} = \frac{IR_{soil/age\ 1-6} \times ED_{age\ 1-6}}{BW_{age\ 1-6}} + \frac{IR_{soil/age\ 7-31} \times ED_{age\ 7-31}}{BW_{age\ 7-31}} \quad (21)$$

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

$$IF_{soil/adj} = (IR_{soil/age\ 1-6} \times ED_{age\ 1-6}) + (IR_{soil/age\ 7-31} \times ED_{age\ 7-31}) \quad (22)$$

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]

EquationsCommercial/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 exposure to 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

$$C = \frac{T \times BW \times AT}{TV_o \times IR_w \times EF \times ED} \quad (23)$$

where

<u>Parameters</u>	<u>Definition (units)</u>	<u>Default Value</u>
AT	averaging time (yr × day/yr)	70 × 365 (carcinogen) [1] ED × 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 and 0.1
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

$$C = \frac{TR}{SF_o \times IR_w \times EF \times ED} \quad (24)$$

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

EquationsCommercial/Industrial Land Use**2.2.2 Soil or Sediment****2.2.2.1 Nonradionuclide contaminant**

1. Ingestion only

$$C = \frac{T \times BW \times AT}{TV_o \times CF \times EF \times ED \times IR_s} \quad (25)$$

2. Inhalation only

$$C = \frac{T \times BW \times AT}{TV_i \times EF \times ED \times \left(\frac{1}{VF} + \frac{1}{PEF}\right) \times IR_a} \quad (26)$$

3. Dermal contact only

$$C = \frac{T \times BW \times AT}{TV_{ad} \times CF_d \times SA \times AF \times ABS \times EF \times ED} \quad (27)$$

4. Ingestion and inhalation and dermal contact

$$C = \frac{T \times BW \times AT}{EF \times ED \times [(TV_o \times CF \times IR_s) + (TV_i \times \left(\frac{1}{VF} + \frac{1}{PEF}\right) \times IR_a) + (TV_{ad} \times CF_d \times SA \times AF \times ABS)]} \quad (28)$$

where

<u>Parameters</u>	<u>Definition (units)</u>	<u>Default Value</u>
ABS	absorption factor (unitless)	chemical-specific [4]
AF	adherence factor (mg/cm ²)	1 [11]
AT	averaging time (yr × day/yr)	70 × 365 (carcinogen) [1] ED × 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 _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]
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. 40)[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 and 0.1
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 (see Eqs. 34–39)[5]

EquationsCommercial/Industrial Land Use**2.2.2.2 Radionuclide contaminant**

1. Ingestion only

$$C = \frac{TR}{SF_o \times ED \times CF \times EF \times IR_s} \quad (29)$$

2. Inhalation only

$$C = \frac{TR}{SF_i \times ED \times CF_i \times EF \times \left(\frac{1}{VF} + \frac{1}{PEF}\right) \times IR_a} \quad (30)$$

3. External radiation only

$$C = \frac{TR}{SF_x \times ED \times EF_x \times (1-S_e) \times T_e} \quad (31)$$

4. Ingestion and inhalation and external radiation

$$C = \frac{TR}{ED \times [(SF_o \times CF \times EF \times IR_s) + (SF_i \times CF_i \times EF \times \left(\frac{1}{VF} + \frac{1}{PEF}\right) \times IR_a) + (SF_x \times EF_x \times (1-S_e) \times T_e)]} \quad (32)$$

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 (see Eq. 40) [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

$$C_{sat} = \frac{(K_d \times C_w \times \beta) + (C_w \times P_w) + (C_w \times H' \times P_a)}{\beta} \quad (33)$$

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.

EquationsSupporting Equations

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 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).

2. Soil-to-air volatilization factor

$$VF = Q/C \times \frac{(3.1416 \times \alpha \times T)^{\frac{1}{2}}}{(2 \times D_{ei} \times P_a \times K_{as})} \times 10^{-4} \text{ m}^2/\text{cm}^2 \quad (34)$$

3. α

$$\alpha = \frac{(D_{ei} \times P_a)}{P_a + (\rho_s)(1-P_a)/K_{as}} \quad (35)$$

4. Q/C

$$Q/C = (\exp [\hat{Y}_h + 2.92s(\hat{Y}_h)])^{-1} \quad (36)$$

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

$$s(\hat{Y}_h) = 0.02685[0.25 + \frac{(X_h - 11.0509)^2}{26.3608}] \quad (37)$$

6. $\hat{Y}_h$

$$\hat{Y}_h = 0.1004X_h - 5.3466 \quad (38)$$

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 ($\text{g-soil}/\text{cm}^3\text{-air}$)	$(H/K_d) \times 41$, 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 ($\text{g}/\text{m}^2\text{-s}$) 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 ($\text{L-water}/\text{kg-soil}$)	site-specific or 0.15 [5]
ρ_s	true soil density or particulate density (g/cm^3)	2.65 [5]

EquationsSupporting Equations

7. Molecular diffusivity (used in calculating VF)

$$D_i = \frac{0.001T^{1.75} \sqrt{\frac{1}{MW_i} + \frac{1}{MW_a}}}{P_a [(\Sigma V_i)^{1/3} + (\Sigma V_a)^{1/3}]^2} \quad (39)$$

where

<u>Parameters</u>	<u>Definition (units)</u>	<u>Default Value</u>
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

$$PEF = Q/C \times \frac{3600 \text{ s/h}}{RSF \times (1 - G) \times (U_m/U_t)^3 \times F(x)} \quad (40)$$

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]

EquationsAgricultural Land Use**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 medium 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 the change in scale in each graph should be used 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**

$$C_v = \frac{T \times BW \times AT}{TV_o \times IR_v \times FI_v \times EF \times ED} \quad (41)$$

2.3.1.2 Ingestion of whole milk only**1. Carcinogen**

$$C_m = \frac{T \times AT}{TV_o \times FI \times EF \times IF_{milkadj}} \quad (42)$$

2. Noncarcinogen (adult and child calculated separately)

$$C_m = \frac{T \times BW_n \times AT_n}{TV_o \times IR_m \times FI \times EF \times ED_n} \quad (43)$$

2.3.1.3 Ingestion of beef only

$$C_b = \frac{T \times BW \times AT}{TV_o \times IR_b \times FI \times EF \times ED} \quad (44)$$

where

<u>Parameters</u>	<u>Definition (units)</u>	<u>Default Value</u>
AT	averaging time (yr × day/yr)	70 × 365 (carcinogen) [1] ED × 365 (noncarcinogen)[1]
AT _n	averaging time - noncarcinogenic ingestion of milk only (yr × day/yr)	ED _n × 365 [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. 66)
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 and 0.1
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

Bis(2-ethylhexyl)phthalate*

*Please note different scale for each plot

Fig. 2. Combination PRGs for bis(2-ethylhexyl)phthalate.

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EquationsAgricultural Land Use**2.3.2 Radionuclide Contaminant****2.3.2.1 Ingestion of vegetables only**

$$C_v = \frac{TR}{SF_o \times IR_v \times FI_v \times EF \times ED \times CF} \quad (45)$$

2.3.2.2 Ingestion of whole milk only

$$C_m = \frac{TR}{SF_o \times IF_{milk/adj} \times FI \times EF \times CF} \quad (46)$$

2.3.2.3 Ingestion of beef only

$$C_b = \frac{TR}{SF_o \times IR_b \times FI \times EF \times ED \times CF} \quad (47)$$

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. 67)
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

Root uptake - leafy vegetables [38]

$$R_{upv} = Bv_{wet} \quad (48)$$

Root uptake - grazing pasture [38]

$$R_{upp} = Bv_{dry} \quad (49)$$

Resuspension [32]

$$R_{es} = MLF \quad (50)$$

Root uptake from irrigation [37], [39], [27]

$$Irr_{rup} = \frac{Ir \times F \times Bv_{wet} \times [1 - \exp(-\lambda_B \times t_b)]}{P \times \lambda_B} \quad (51)$$

Resuspension from irrigation [32], [27]

$$Irr_{res} = \frac{Ir \times F \times MLF \times [1 - \exp(-\lambda_B \times t_b)]}{P \times \lambda_B} \quad (52)$$

Aerial deposition from irrigation [37], [27]

$$Irr_{dep} = \frac{Ir \times F \times I_f \times T \times [1 - \exp(-\lambda_E \times t_w)]}{Y_v \times \lambda_E} \quad (53)$$

2.3.3.1 Water contamination only

1. Vegetable

$$CW = \frac{C_v}{CF^* \times (Irr_{rup} + Irr_{res} + Irr_{dep})} \quad (54)$$

* This conversion factor is for radionuclides only.

EquationsAgricultural Land Use

2. Whole Milk

$$CW = \frac{C_m}{F_m \times Q_w \times CF^*} \quad (55)$$

3. Beef

$$CW = \frac{C_b}{F_b \times Q_w \times CF^*} \quad (56)$$

2.3.3.2 Soil contamination only

1. Vegetable

$$CS = \frac{C_v}{R_{upv} + R_{es}} \quad (57)$$

2. Whole milk

$$CS = \frac{C_m}{F_m \times [(Q_p \times f_p \times f_s \times (R_{upv} + R_{es})) + (Q_s \times f_p)]} \quad (58)$$

3. Beef

$$CS = \frac{C_b}{F_b \times [(Q_p \times f_p \times f_s \times (R_{upv} + R_{es})) + (Q_s \times f_p)]} \quad (59)$$

2.3.3.3 Water and soil contamination

1. Vegetable

$$INTCPT = \frac{C_v}{R_{upv} + R_{es}} \quad (60)$$

$$SLOPE = \frac{-(Irr_{rup} + Irr_{res} + Irr_{dep})}{R_{upv} + R_{es}} \quad (61)$$

* This conversion factor is for radionuclides only.

2. Whole milk

$$INTCPT = \frac{C_m}{F_m \times [(Q_p \times f_p \times f_s \times (R_{upp} + R_{es})) + (Q_s \times f_p)]} \quad (62)$$

$$SLOPE = \frac{-Q_w}{(Q_p \times f_p \times f_s \times (R_{upp} + R_{es})) + (Q_s \times f_p)} \quad (63)$$

3. Beef

$$INTCPT = \frac{C_b}{F_b \times [(Q_p \times f_p \times f_s \times (R_{upp} + R_{es})) + (Q_s \times f_p)]} \quad (64)$$

$$SLOPE = \frac{-Q_w}{(Q_p \times f_p \times f_s \times (R_{upp} + R_{es})) + (Q_s \times f_p)} \quad (65)$$

where

<u>Parameters</u>	<u>Definition (units)</u>	<u>Default Value</u>
Bv _{wet}	soil to plant uptake wet weight (kg/kg)	chemical-specific, or $7.7 \times K_{ow}^{-0.58}$ [29]
Bv _{dry}	soil to plant uptake dry weight (kg/kg)	chemical-specific, or $38 \times K_{ow}^{-0.58}$ [29]
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)	-
f _p	fraction of year animal is on site (unitless)	1.0
f _s	fraction of animal's food is from site (unitless)	0.90 (beef cattle) [23] 0.60 (dairy cattle) [23]
F	irrigation period (unitless)	0.25 (based on 3 months per year) [23]
F _b	transfer coefficient - beef (day/kg)	chemical-specific
F _m	transfer coefficient - milk (day/kg)	chemical-specific
Y _v	plant yield (wet) (kg/m ²)	2 [22]
I _r	interception fraction (unitless)	0.42 [30]
Irr _{rup}	root uptake from irrigation multiplier (L/kg)	-

EquationsAgricultural Land Use

Irr_{res}	resuspension from irrigation multiplier (L/kg)	-
Irr_{dep}	aerial deposition from irrigation multiplier (L/kg)	-
INTCPT	equation intercept	-
I_r	irrigation rate (L/m ² -day)	3.62 [23]
MLF	plant mass loading factor (unitless)	0.26 (vegetables) [31] 0.25 (pasture) [32]
P	area density for root zone (kg/m ²)	240 [33], [34], [35]
Q_p	quantity of pasture ingested (kg/day)	7.2 (beef cattle) [36] 16.1 (dairy cattle) [36]
Q_s	quantity of soil ingested (kg/day)	1 [26]
Q_w	quantity of water ingested (L/day)	50 (beef cattle) [36] 75 (dairy cattle) [36]
R_{upv}	wet root uptake for vegetables multiplier (unitless)	-
R_{upp}	dry root uptake for pasture multiplier (unitless)	-
R_{es}	resuspension multiplier (unitless)	-
SLOPE	equation slope	-
T	translocation factor (unitless)	1 [37]
t_b	long term deposition and buildup (day)	10950 [22]
T_R	half-life (day)	chemical-specific
t_v	above ground exposure time (day)	60 (vegetable) [22]
t_w	weathering half-life (day)	14 [22]
λ_B	effective rate for removal (1/day)	$\lambda_i + \lambda_{HL}$ [8]
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)**

$$IF_{milk/adj} = \frac{IR_{milk/age\ 1-6} \times ED_{age\ 1-6}}{BW_{age\ 1-6}} + \frac{IR_{milk/age\ 7-31} \times ED_{age\ 7-31}}{BW_{age\ 7-31}} \quad (66)$$

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]

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EquationsAgricultural Land Use**2.3.4.2 Age-adjusted milk ingestion factor for radionuclides**

$$IF_{milk/adj} = (IR_{milk/age\ 1-6} \times ED_{age\ 1-6}) + (IR_{milk/age\ 7-31} \times ED_{age\ 7-31}) \quad (67)$$

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

$$C_v = (C_w \times Irr_{veg} \times CF^*) + (C_s \times R_{veg}) + (C_w \times Irr_{res} \times CF^*) + (C_s \times R_{es}) + (C_w \times Irr_{dep} \times CF^*) \quad (68)$$

2.3.4.4 Chemical concentration in pasture (assuming no irrigation)

$$C_p = (C_s \times R_{upp}) + (C_s \times R_{es}) \quad (69)$$

2.3.4.5 Chemical concentration in beef

$$C_b = F_b \times [(C_p \times Q_p \times f_p \times f_s) + (C_s \times Q_s \times f_p) + (C_w \times CF^* \times Q_w)] \quad (70)$$

2.3.4.6 Chemical concentration in milk

$$C_m = F_m \times [(C_p \times Q_p \times f_p \times f_s) + (C_s \times Q_s \times f_p) + (C_w \times CF^* \times Q_w)] \quad (71)$$

where

<u>Parameters</u>	<u>Definition (units)</u>	<u>Default Value</u>
Bv_{wet}	soil to plant uptake wet weight (kg/kg)	chemical-specific, or $7.7 \times K_{ow}^{-0.58}$ [29]
Bv_{dry}	soil to plant uptake dry weight (kg/kg)	chemical-specific, or $38 \times K_{ow}^{-0.58}$ [29]
C_b	PRG in beef (mg/kg or pCi/g)	-
CF	units conversion factor (kg/g)	1/1000

* This conversion factor is for radionuclides only.

Equations
Agricultural Land Use

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)	-
f_p	fraction of year animal is on site (unitless)	1.0
f_s	fraction of animal's food is from site (unitless)	0.90 (beef cattle) [23] 0.60 (dairy cattle) [23]
F	irrigation period (unitless)	0.25 (based on 3 months year) [23]
per		
F_b	transfer coefficient - beef (day/kg)	chemical-specific, or $2.5 \times 10^{-8} K_{ow}$ [35]
F_m	transfer coefficient - milk (day/kg)	chemical-specific, or $7.9 \times 10^{-9} K_{ow}$ [35]
Y_v	plant yield (wet) (kg/m ²)	2 [22]
I_f	interception fraction (unitless)	0.42 [30]
Irr_{rup}	root uptake from irrigation multiplier (L/kg)	-
Irr_{res}	resuspension from irrigation multiplier (L/kg)	-
Irr_{dep}	aerial deposition from irrigation multiplier (L/kg)	-
INTCPT	equation intercept	-
Ir	irrigation rate (L/m ² -day)	3.62 [23]
MLF	plant mass loading factor (unitless)	0.26 (vegetables) [31] 0.25 (pasture) [32]
P	area density for root zone (kg/m ²)	240 [33], [34], [35]
Q_p	quantity of pasture ingested (kg/day)	7.2 (beef cattle) [36] 16.1 (dairy cattle) [36]
Q_s	quantity of soil ingested (kg/day)	1 [29]
Q_w	quantity of water ingested (L/day)	50 (beef cattle) [36] 75 (dairy cattle) [36]
R_{upv}	wet root uptake for vegetables multiplier (unitless)	-
R_{upp}	dry root uptake for pasture multiplier (unitless)	-
R_{es}	resuspension multiplier (unitless)	-
SLOPE	equation slope	-
T	translocation factor (unitless)	1 [29]
t_b	long term deposition and buildup (day)	10950 [22]
T_R	half-life (day)	chemical-specific
t_v	above ground exposure time (day)	60 (vegetable) [22]
t_w	weathering half-life (day)	14 [22]
λ_B	effective rate for removal (1/day)	$\lambda_i + \lambda_{HL}$ [8]
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]

*Equations**Recreational Land Use***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**

$$C = \frac{T \times BW \times AT}{TV_o \times IR_w \times EF \times ED \times ET} \quad (72)$$

2. Dermal contact only

$$C = \frac{T \times BW \times AT}{TV_{ad} \times SA \times K_p \times ET \times EF \times ED \times CF_1} \quad (73)$$

3. Ingestion and dermal contact

$$C = \frac{T \times BW \times AT}{EF \times ED \times [(TV_o \times IR_w \times ET) + (TV_{ad} \times SA \times K_p \times ET \times CF_1)]} \quad (74)$$

4. Ingestion of fish only - concentration in water

$$C = \frac{T \times BW \times AT}{TV_o \times IR_f \times FI \times EF_f \times ED \times BF} \quad (75)$$

5. Ingestion of fish only - concentration in fish

$$C_f = \frac{T \times BW \times AT}{TV_o \times IR_f \times FI \times EF_f \times ED} \quad (76)$$

where

<u>Parameters</u>	<u>Definition (units)</u>	<u>Default Value</u>
AT	averaging time (yr × day/yr)	70 × 365 (carcinogen) [1] ED × 365 (noncarcinogen) [1]
BF	bioaccumulation factor (L/kg)	chemical-specific
BW	adult body weight (kg)	70 [1]
C	chemical PRG in water (mg/L)	-
C _f	chemical PRG in fish (mg/kg)	-
CF ₁	units conversion factor (L/cm - m ²)	10
ED	exposure duration (yr)	30 [1]
EF	exposure frequency (day/yr)	45 [28]
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/hr)	0.05 [28]
K _p	permeability constant (cm/hr)	chemical-specific
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 and 0.1
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)

EquationsRecreational Land Use**2.4.1.2 Radionuclide contaminant**

1. Ingestion only

$$C = \frac{TR}{SF_o \times IR_w \times EF \times ED \times ET} \quad (77)$$

2. Ingestion of fish only - concentration in water

$$C = \frac{TR}{SF_o \times IR_f \times EF_f \times FI \times ED \times BF} \quad (78)$$

3. Ingestion of fish only - concentration in fish

$$C_f = \frac{TR}{SF_o \times IR_f \times CF \times EF_f \times FI \times ED} \quad (79)$$

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)	-
C _f	radionuclide PRG in fish (pCi/g)	-
CF	units conversion factor (g/kg)	1000
ED	exposure duration (yr)	30 [1]
EF	exposure frequency (day/yr)	45 [28]
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/hr)	0.05 [28]
SF _o	oral slope factor (risk/pCi)	radionuclide-specific
TR	target excess individual lifetime cancer risk (unitless)	10 ⁻⁶ and 10 ⁻⁴

2.4.2 Soil or Sediment

2.4.2.1 Nonradionuclide contaminant

1. Ingestion only

a. Carcinogen

$$C = \frac{T \times AT}{TV_o \times CF \times EF \times FI \times IF_{soiladj} \times ET \times CF_2} \quad (80)$$

b. Noncarcinogen (adult and child calculated separately)

$$C = \frac{T \times BW_n \times AT_n}{TV_o \times CF \times EF \times ED_n \times IR_n \times FI \times ET \times CF_2} \quad (81)$$

2. Inhalation only

$$C = \frac{T \times BW \times AT}{TV_i \times EF \times ED \times \left(\frac{1}{VF} + \frac{1}{PEF} \right) \times IR_{air} \times ET \times CF_2} \quad (82)$$

3. Dermal contact only

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

4. Ingestion and inhalation and dermal contact

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

where

<u>Parameters</u>	<u>Definition (units)</u>	<u>Default Value</u>
ABS	absorption factor (unitless)	chemical-specific [4]
AF	adherence factor (mg/cm ²)	1 [11]
AT	averaging time (yr × day/yr)	70 × 365 (carcinogen) [1] ED × 365 (noncarcinogen) [1]
AT _n	averaging time - noncarcinogenic ingestion only (yr × day/yr)	ED _n × 365 [1]
BW	adult body weight (kg)	70 [1]

EquationsRecreational Land Use

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-cm ²)/(mg-m ²)	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. 89) [1]
IR _a	ingestion rate for adult (mg/day)	100 [1]
IR _{air}	total inhalation rate (m ³ /day)	20 [9]
IR _n	ingestion rate - noncarcinogenic ingestion only (mg/day)	100 (adult) [1] 200 (child) [1]
PEF	particulate emission factor (m ³ /kg)	4.28 × 10 ⁹ (see Eq. 40)[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)	0.53 [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 and 0.1
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 (see Eqs. 34-39)[5]

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EquationsRecreational Land Use**2.4.2.2 Radionuclide contaminant**

1. Ingestion only

$$C = \frac{TR}{SF_o \times CF \times EF \times IF_{soil/adj} \times ET \times CF_2} \quad (85)$$

2. External radiation only

$$C = \frac{TR}{SF_x \times ED \times EF_x \times (1-S_e) \times T_e} \quad (86)$$

3. Inhalation only

$$C = \frac{TR}{SF_i \times ED \times CF_i \times EF \times \left(\frac{1}{VF} + \frac{1}{PEF}\right) \times IR_{air} \times ET \times CF_2} \quad (87)$$

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

$$C = \frac{TR}{ED \times [(SF_o \times CF \times EF \times IR_a \times ET \times CF_2) + (SF_x \times EF_x \times (1-S_e) \times T_e) + (SF_i \times CF_i \times EF \times \left(\frac{1}{VF} + \frac{1}{PEF}\right) \times IR_{air} \times ET \times CF_2)]} \quad (88)$$

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 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. 90) [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 (see Eq. 40) [5]
S _γ	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 _γ	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 [5]

2.4.2.3 Supporting equations

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

$$IF_{soil/adj} = \frac{IR_{soil/age\ 1-6} \times ED_{age\ 1-6}}{BW_{age\ 1-6}} + \frac{IR_{soil/age\ 7-31} \times ED_{age\ 7-31}}{BW_{age\ 7-31}} \quad (89)$$

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

$$IF_{soil/adj} = (IR_{soil/age\ 1-6} \times ED_{age\ 1-6}) + (IR_{soil/age\ 7-31} \times ED_{age\ 7-31}) \quad (90)$$

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]

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*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**

$$C = \frac{T \times BW \times AT}{TV_o \times CF \times EF \times ED \times IR_s} \quad (91)$$

2. Inhalation only

$$C = \frac{T \times BW \times AT}{TV_i \times EF \times ED \times \left(\frac{1}{VF} + \frac{1}{PEF} \right) \times IR_a} \quad (92)$$

3. Dermal contact only

$$C = \frac{T \times BW \times AT}{TV_{ad} \times CF_d \times SA \times AF \times ABS \times EF \times ED} \quad (93)$$

4. Ingestion and inhalation and dermal contact

$$C = \frac{T \times BW \times AT}{EF \times ED \times [(TV_o \times CF \times IR_s) + (TV_i \times (\frac{1}{VF} + \frac{1}{PEF}) \times IR_a) + (TV_{ad} \times CF_d \times SA \times AF \times ABS)]} \quad (94)$$

where

<u>Parameters</u>	<u>Definition (units)</u>	<u>Default Value</u>
ABS	absorption factor (unitless)	chemical-specific [4]
AF	adherence factor (mg/cm ²)	1 [11]
AT	averaging time (yr × day/yr)	70 × 365 (carcinogen) [1] ED × 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 _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 worker month)
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 (see Eq. 40)[5]
RfD _{ad}	absorbed subchronic reference dose (mg/kg-day)	chemical-specific [3]
RfD _i	inhalation subchronic reference dose (mg/kg-day)	chemical-specific [3]
RfD _o	oral subchronic 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 and 0.1
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 (see Eqs. 34-39)[5]

EquationsExcavation Land Use**2.5.1.2 Radionuclide contaminant**

1. Ingestion only

$$C = \frac{TR}{SF_o \times ED \times CF \times EF \times IR_s} \quad (95)$$

2. Inhalation only

$$C = \frac{TR}{SF_i \times ED \times CF_i \times EF \times \left(\frac{1}{VF} + \frac{1}{PEF}\right) \times IR_a} \quad (96)$$

3. External radiation only

$$C = \frac{TR}{SF_x \times ED \times EF_x \times (1-S_e) \times T_e} \quad (97)$$

4. Ingestion and inhalation and external radiation

$$C = \frac{TR}{ED \times [(SF_o \times CF \times EF \times IR_s) + (SF_i \times CF_i \times EF \times \left(\frac{1}{VF} + \frac{1}{PEF}\right) \times IR_a) + (SF_x \times EF_x \times (1-S_e) \times T_e)]} \quad (98)$$

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 (see Eq. 40)[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]

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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. Risk-based Preliminary Remediation Goals for nonradionuclides in groundwater (residential scenario)

Chemical	CASRN	Ingestion (mg/L)*				Dermal (mg/L)*				Inhalation (mg/L)†*				Ingestion + Dermal + Inhalation (mg/L)††*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
ALAR	001596-84-5			5.5E+00	5.5E-01												
Acenaphthene	000083-32-9			2.2E+00	2.2E-01			1.1E+00	1.1E-01							7.5E-01	7.5E-02
Acenaphthylene	000208-96-8																
Acephate	030560-19-1	9.8E-01	9.8E-03	1.5E-01	1.5E-02	5.6E+03	5.6E+01	8.3E+02	8.3E+01					9.8E-01	9.8E-03	1.5E-01	1.5E-02
Acetaldehyde	000075-07-0									2.2E-01	2.2E-03	1.9E-02	1.9E-03				
Acetochlor	034256-82-1			7.3E-01	7.3E-02												
Acetone	000067-64-1			3.7E+00	3.7E-01			2.2E+03	2.2E+02							3.6E+00	3.6E-01
Acetone Cyanohydrin	000075-86-5			2.9E-02	2.9E-03												
Acetonitrile	000075-05-8			2.2E-01	2.2E-02			1.2E+02	1.2E+01			1.0E-01	1.0E-02			7.1E-02	7.1E-03
Acetophenone ⁽⁹⁾	000098-86-2			3.7E+00	3.7E-01			2.1E+02	2.1E+01			4.2E-05	4.2E-06			4.2E-05	4.2E-06
Acrolein ⁽⁹⁾	000107-02-8			7.3E-01	7.3E-02			3.3E+02	3.3E+01			4.2E-05	4.2E-06			4.2E-05	4.2E-06
Acrylamide	000079-06-1	1.9E-03	1.9E-05	7.3E-03	7.3E-04	1.6E+00	1.6E-02	6.3E+00	6.3E-01					1.9E-03	1.9E-05	7.3E-03	7.3E-04
Acrylic Acid	000079-10-7			1.8E+01	1.8E+00			4.2E+03	4.2E+02							1.8E+01	1.8E+00
Acrylonitrile	000107-13-1	1.6E-02	1.6E-04	3.7E-02	3.7E-03	3.7E+00	3.7E-02	8.6E+00	8.6E-01	7.1E-03	7.1E-05	4.2E-03	4.2E-04	4.9E-03	4.9E-05	3.7E-03	3.7E-04
Alachlor	015972-60-8	1.1E-01	1.1E-03	3.7E-01	3.7E-02	4.4E+00	4.4E-02	1.5E+01	1.5E+00					1.0E-01	1.0E-03	3.6E-01	3.6E-02
Aldicarb	000116-06-3			3.7E-02	3.7E-03			9.0E+00	9.0E-01							3.6E-02	3.6E-03
Aldicarb Sulfone	001646-88-4			3.7E-02	3.7E-03												
Aldrin	000309-00-2	5.0E-04	5.0E-06	1.1E-03	1.1E-04	6.5E-02	6.5E-04	1.4E-01	1.4E-02					5.0E-04	5.0E-06	1.1E-03	1.1E-04
Allyl	074223-64-6			9.1E+00	9.1E-01			2.0E+05	2.0E+04							9.1E+00	9.1E-01
Allyl Alcohol	000107-18-6			1.8E-01	1.8E-02			1.0E+02	1.0E+01							1.8E-01	1.8E-02
Allyl Chloride ⁽⁹⁾	000107-05-1			1.8E+00	1.8E-01			8.6E+01	8.6E+00			2.1E-03	2.1E-04			2.1E-03	2.1E-04

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	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Aluminum	007429-90-5																
Aluminum Phosphide	020859-73-8			1.5E-02	1.5E-03			1.2E+00	1.2E-01							1.4E-02	1.4E-03
Amdro	067485-29-4			1.1E-02	1.1E-03												
Ametryn	000834-12-8			3.3E-01	3.3E-02			9.2E+01	9.2E+00							3.3E-01	3.3E-02
Aminophenol, m-	000591-27-5			2.6E+00	2.6E-01			9.1E+02	9.1E+01							2.5E+00	2.5E-01
Aminopyridine, 4-	000504-24-5			7.3E-04	7.3E-05			1.9E-01	1.9E-02							7.3E-04	7.3E-05
Amitraz	033089-61-1			9.1E-02	9.1E-03												
Ammonia	007664-41-7																
Ammonium Sulfamate	007773-06-0			7.3E+00	7.3E-01			6.0E+02	6.0E+01							7.2E+00	7.2E-01
Aniline	000062-53-3	1.5E+00	1.5E-02			7.5E+00	7.5E-02							1.2E+00	1.2E-02		
Anthracene	000120-12-7			1.1E+01	1.1E+00			1.5E+01	1.5E+00							6.4E+00	6.4E-01
Antimony (metallic)	007440-36-0			1.5E-02	1.5E-03			1.2E-01	1.2E-02							1.3E-02	1.3E-03
Antimony Pentoxide	001314-60-9			1.8E-02	1.8E-03			1.5E+00	1.5E-01							1.8E-02	1.8E-03
Antimony Potassium Tartrate	000304-61-0			3.3E-02	3.3E-03			2.7E+00	2.7E-01							3.2E-02	3.2E-03
Antimony Tetroxide	001332-81-6			1.5E-02	1.5E-03			1.2E+00	1.2E-01							1.4E-02	1.4E-03
Antimony Trioxide	001309-64-4			1.5E-02	1.5E-03			1.2E+00	1.2E-01							1.4E-02	1.4E-03
Apollo	074115-24-5			4.7E-01	4.7E-02												
Aramite	000140-57-8	3.4E-01	3.4E-03	1.8E+00	1.8E-01												
Aroclor 1016	012674-11-2			2.6E-03	2.6E-04			1.2E-03	1.2E-04							8.2E-04	8.2E-05
Aroclor 1221 ⁽¹⁾	011104-28-2	1.1E-03	1.1E-05			4.5E-03	4.5E-05							8.9E-04	8.9E-06		
Aroclor 1232 ⁽¹⁾	011141-16-5	1.1E-03	1.1E-05			3.0E-02	3.0E-04							1.1E-03	1.1E-05		

Table 3.1a. (continued)

Chemical	CASRN	Ingestion (mg/L)*				Dermal (mg/L)*				Inhalation (mg/L)*				Ingestion + Dermal + Inhalation (mg/L)**			
		10 ⁻⁴	10 ⁻⁵	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁵	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁵	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁵	HI=1	HI=0.1
Aroclor 1242 ⁽¹⁾	053469-21-9	1.1E-03	1.1E-05			1.1E-02	1.1E-04							1.0E-03	1.0E-05		
Aroclor 1248 ⁽¹⁾	012672-29-6	1.1E-03	1.1E-05			1.1E-03	1.1E-05							5.5E-04	5.5E-06		
Aroclor 1254	011097-69-1			7.3E-04	7.3E-05			7.8E-04	7.8E-05							3.8E-04	3.8E-05
Aroclor 1260 ⁽¹⁾	011096-82-5	1.1E-03	1.1E-05			3.9E-04	3.9E-06							2.9E-04	2.9E-06		
Arsenic Salts	NA																
Arsenic, Inorganic	007440-38-2	5.7E-03	5.7E-05	1.1E-02	1.1E-03	9.6E-01	9.6E-03	1.9E+00	1.9E-01					5.6E-03	5.6E-05	1.1E-02	1.1E-03
Arsine	007784-42-1																
Asbestos	001332-21-4																
Assure	076578-14-8			3.3E-01	3.3E-02												
Asulam	003337-71-1			1.8E+00	1.8E-01												
Atrazine	001912-24-9	3.8E-02	3.8E-04	1.3E+00	1.3E-01	1.0E+00	1.0E-02	3.5E+01	3.5E+00					3.7E-02	3.7E-04	1.2E+00	1.2E-01
Avermectin B1	065195-55-3			1.5E-02	1.5E-03												
Azobenzene	000103-33-3	7.7E-02	7.7E-04			2.2E-01	2.2E-03							5.7E-02	5.7E-04		
Barium	007440-39-3			2.6E+00	2.6E-01			7.4E+01	7.4E+00							2.5E+00	2.5E-01
Barium Cyanide	000542-62-1			3.7E+00	3.7E-01			3.0E+02	3.0E+01							3.6E+00	3.6E-01
Baygon	000114-26-1			1.5E-01	1.5E-02			2.2E+01	2.2E+00							1.5E-01	1.5E-02
Bayleton	043121-43-3			1.1E+00	1.1E-01			1.7E+02	1.7E+01							1.1E+00	1.1E-01
Baythroid	068359-37-5			9.1E-01	9.1E-02												
Benefin	001861-40-1			1.1E+01	1.1E+00			7.9E+01	7.9E+00							9.6E+00	9.6E-01
Benomyl	017804-35-2			1.8E+00	1.8E-01			2.7E+02	2.7E+01							1.8E+00	1.8E-01
Bentazon	025057-89-0			9.1E-02	9.1E-03			4.8E+01	4.8E+00							9.1E-02	9.1E-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	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Benz[a]anthracene ⁽²⁾	000056-55-3	1.2E-02	1.2E-04			1.8E-03	1.8E-05							1.6E-03	1.6E-05		
Benzaldehyde	000100-52-7			3.7E+00	3.7E-01			6.5E+01	6.5E+00							3.5E+00	3.5E-01
Benzene	000071-43-2	2.9E-01	2.9E-03			5.6E+00	5.6E-02			5.9E-02	5.9E-04			4.9E-02	4.9E-04		
Benzene Hexachloride	NA																
Benzene, Ethyldimethyl	NA																
Benzene, Ethylmethyl	NA																
Benzene, Methylpropenyl	NA																
Benzene, Methylpropyl	NA																
Benzene, Trimethyl	025551-13-7																
Benzenethiol	000108-98-5			3.7E-04	3.7E-05			3.1E-03	3.1E-04							3.3E-04	3.3E-05
Benidine	000092-87-5	3.7E-05	3.7E-07	1.1E-01	1.1E-02	9.4E-03	9.4E-05	2.8E+01	2.8E+00					3.7E-05	3.7E-07	1.1E-01	1.1E-02
Benzo[a]pyrene ⁽²⁾	000050-32-8	1.2E-03	1.2E-05			1.2E-04	1.2E-06							1.1E-04	1.1E-06		
Benzo[b]fluoranthene ⁽²⁾	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 ⁽²⁾	000207-08-9	1.2E-01	1.2E-03			2.5E-02	2.5E-04							2.0E-02	2.0E-04		
Benzoic Acid	000065-85-0			1.5E+02	1.5E+01			8.2E+03	8.2E+02							1.4E+02	1.4E+01
Benzotrichloride	000098-07-7	6.6E-04	6.6E-06			9.0E-03	9.0E-05							6.1E-04	6.1E-06		
Benzyl Alcohol	000100-51-6			1.1E+01	1.1E+00			5.0E+02	5.0E+01							1.1E+01	1.1E+00
Benzyl Chloride	000100-44-7	5.0E-02	5.0E-04			1.2E+00	1.2E-02							4.8E-02	4.8E-04		
Beryllium	007440-41-7	2.0E-03	2.0E-05	1.8E-01	1.8E-02	8.2E-03	8.2E-05	7.5E-01	7.5E-02					1.6E-03	1.6E-05	1.5E-01	1.5E-02
Bidrin	000141-66-2			3.7E-03	3.7E-04			3.4E+01	3.4E+00							3.6E-03	3.6E-04

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	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Biphenanthrin	082657-04-3			5.5E-01	5.5E-02												
Biphenyl, 1,1'-	000092-52-4			1.8E+00	1.8E-01			2.1E+00	2.1E-01							9.8E-01	9.8E-02
Bis(2-chloro-1-methylethyl)ether (Technical)	000108-60-1	1.2E-01	1.2E-03			3.4E+00	3.4E-02			4.9E-02	4.9E-04			3.4E-02	3.4E-04		
Bis(2-chloroethoxy)methane	000111-91-1																
Bis(2-chloroethyl)ether	000111-44-4	7.7E-03	7.7E-05			1.2E+00	1.2E-02			1.5E-03	1.5E-05			1.3E-03	1.3E-05		
Bis(2-chloroisopropyl)ether	039638-32-9			1.5E+00	1.5E-01			9.0E+01	9.0E+00							1.4E+00	1.4E-01
Bis(2-ethylhexyl)phthalate ⁽⁶⁾	000117-81-7	6.1E-01	6.1E-03	7.3E-01	7.3E-02	2.0E+00	2.0E-02	2.4E+00	2.4E-01					4.7E-01	4.7E-03	5.6E-01	5.6E-02
Bis(chloromethyl)ether	000542-88-1	3.9E-05	3.9E-07			1.8E-02	1.8E-04			7.7E-06	7.7E-08			6.4E-06	6.4E-08		
Bisphenol A	000080-05-7			1.8E+00	1.8E-01			1.4E+01	1.4E+00							1.6E+00	1.6E-01
Boron And Borates Only	007440-42-8			3.3E+00	3.3E-01			1.2E+03	1.2E+02							3.3E+00	3.3E-01
Boron Trifluoride	007637-07-2																
Bromochloromethane	000074-97-5																
Bromodichloromethane	000075-27-4	1.4E-01	1.4E-03	7.3E-01	7.3E-02	9.6E+00	9.6E-02	5.1E+01	5.1E+00					1.4E-01	1.4E-03	7.2E-01	7.2E-02
Bromodiphenyl Ether, p-	000101-55-3																
Bromoform	000075-25-2	1.1E+00	1.1E-02	7.3E-01	7.3E-02	1.0E+02	1.0E+00	6.9E+01	6.9E+00	4.4E-01	4.4E-03			3.1E-01	3.1E-03	7.2E-01	7.2E-02
Bromomethane ⁽⁶⁾	000074-83-9			5.1E-02	5.1E-03			4.8E+00	4.8E-01			1.0E-02	1.0E-03			8.6E-03	8.6E-04
Bromophos	002104-96-3			1.8E-01	1.8E-02												
Bromotrichloromethane	000075-62-7																
Bromoxynil	001689-84-5			7.3E-01	7.3E-02			1.7E+03	1.7E+02							7.3E-01	7.3E-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	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Bromoxynil Octanoate	001689-99-2			7.3E-01	7.3E-02												
Butadiene, 1,3-	000106-99-0									9.5E-04	9.5E-06						
Butanol, N-	000071-36-3			3.7E+00	3.7E-01			3.0E+02	3.0E+01							3.6E+00	3.6E-01
Butanone-2, 4-chloro-4,4-difluoro	NA																
Butyl Benzyl Phthlate	000085-68-7			7.3E+00	7.3E-01			2.6E+01	2.6E+00							5.7E+00	5.7E-01
Butylate	002008-41-5			1.8E+00	1.8E-01												
Butylchloride, t-	000507-20-0																
Butylphthalyl Butylglycolate	000085-70-1			3.7E+01	3.7E+00												
Cacodylic Acid	000075-60-5			1.1E-01	1.1E-02			8.2E+01	8.2E+00							1.1E-01	1.1E-02
Cadmium (Water)	007440-43-9			1.8E-02	1.8E-03			7.5E-02	7.5E-03							1.5E-02	1.5E-03
Calcium Cyanide	000592-01-8			1.5E+00	1.5E-01			1.2E+02	1.2E+01							1.4E+00	1.4E-01
Caprolactam	000105-60-2			1.8E+01	1.8E+00			1.3E+04	1.3E+03							1.8E+01	1.8E+00
Captafol	002425-06-1	9.9E-01	9.9E-03	7.3E-02	7.3E-03	2.4E+02	2.4E+00	1.8E+01	1.8E+00					9.9E-01	9.9E-03	7.3E-02	7.3E-03
Captan	000133-06-2	2.4E+00	2.4E-02	4.7E+00	4.7E-01	3.9E+02	3.9E+00	7.5E+02	7.5E+01					2.4E+00	2.4E-02	4.7E+00	4.7E-01
Carbaryl	000063-25-2			3.7E+00	3.7E-01			1.6E+02	1.6E+01							3.6E+00	3.6E-01
Carbazole	000086-74-8	4.3E-01	4.3E-03			1.4E+00	1.4E-02							3.2E-01	3.2E-03		
Carbofuran	001563-66-2			1.8E-01	1.8E-02			3.2E+01	3.2E+00							1.8E-01	1.8E-02
Carbon Disulfide	000075-15-0			3.7E+00	3.7E-01			4.0E+01	4.0E+00			1.5E+00	1.5E-01			1.0E+00	1.0E-01
Carbon Tetrachloride ⁽⁶⁾	000056-23-5	6.6E-02	6.6E-04	2.6E-02	2.6E-03	8.0E-01	8.0E-03	3.1E-01	3.1E-02	3.2E-02	3.2E-04			2.1E-02	2.1E-04	2.4E-02	2.4E-03
Carbosulfan	055285-14-8			3.7E-01	3.7E-02												

Table 3.1a. (continued)

Chemical	CASRN	Ingestion (mg/L)*				Dermal (mg/L)*				Inhalation (mg/L)†*				Ingestion + Dermal + Inhalation (mg/L)††*			
		10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Carboxin	005234-68-4			3.7E+00	3.7E-01			3.5E+02	3.5E+01							3.6E+00	3.6E-01
Chloral	000075-87-6			7.3E-02	7.3E-03												
Chloramben	000133-90-4			5.5E-01	5.5E-02												
Chloranil	000118-75-2	2.1E-02	2.1E-04														
Chlordane ⁽⁶⁾	000057-74-9	6.6E-03	6.6E-05	2.2E-03	2.2E-04	2.6E-02	2.6E-04	8.7E-03	8.7E-04					5.2E-03	5.2E-05	1.7E-03	1.7E-04
Chloride	016887-00-6																
Chlorimuron, Ethyl-	090982-32-4			7.3E-01	7.3E-02												
Chlorine	007782-50-5			3.7E+00	3.7E-01			3.0E+02	3.0E+01							3.6E+00	3.6E-01
Chlorine Dioxide	010049-04-4																
Chlorite (Sodium Salt)	007758-19-2																
Chloro-1,1-difluoroethane, 1-	000075-68-3											1.0E+02	1.0E+01				
Chloro-1,3-butadiene, 2-	000126-99-8			7.3E-01	7.3E-02			2.3E+01	2.3E+00			1.5E-02	1.5E-03			1.4E-02	1.4E-03
Chloro-2-methylaniline HCl, 4-	003165-93-3	1.9E-02	1.9E-04														
Chloro-2-methylaniline, 4-	000095-69-2	1.5E-02	1.5E-04														
Chloroacetic Acid	000079-11-8			7.3E-02	7.3E-03			4.2E+00	4.2E-01							7.2E-02	7.2E-03
Chloroacetophenone, 2-	000532-27-4																
Chloroaniline, p-	000106-47-8			1.5E-01	1.5E-02			9.7E-01	9.7E-02							1.3E-01	1.3E-02
Chlorobenzene ⁽⁶⁾	000108-90-7			7.3E-01	7.3E-02			2.3E+00	2.3E-01			4.2E-02	4.2E-03			3.9E-02	3.9E-03
Chlorobenzilate	000510-15-6	3.2E-02	3.2E-04	7.3E-01	7.3E-02	2.1E-01	2.1E-03	4.8E+00	4.8E-01					2.7E-02	2.7E-04	6.3E-01	6.3E-02
Chlorobenzoic Acid, p-	000074-11-3			7.3E+00	7.3E-01			8.6E+01	8.6E+00							6.7E+00	6.7E-01

Table 3.1a. (continued)

Chemical	CASRN	Ingestion (mg/L)*				Dermal (mg/L)*				Inhalation (mg/L)†*				Ingestion + Dermal + Inhalation (mg/L)††*			
		10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Chlorobenzotrifluoride, 4-	000098-56-6			7.3E-01	7.3E-02			2.2E+00	2.2E-01							5.5E-01	5.5E-02
Chlorobutane, 1-	000109-69-3			1.5E+01	1.5E+00			1.3E+02	1.3E+01							1.3E+01	1.3E+00
Chlorobutane, 2-	000078-86-4																
Chlorocyclopentadiene	041851-50-7																
Chlorodibromoethane	073506-94-2	1.0E-01	1.0E-03														
Chlorodifluoromethane	000075-45-6											1.0E+02	1.0E+01				
Chloroform ⁽⁶⁾	000067-66-3	1.4E+00	1.4E-02	3.7E-01	3.7E-02	1.3E+01	1.3E-01	3.4E+00	3.4E-01	2.1E-02	2.1E-04			2.1E-02	2.1E-04	3.3E-01	3.3E-02
Chloromethane ⁽⁶⁾	000074-87-3	6.6E-01	6.6E-03			5.1E+01	5.1E-01			2.7E-01	2.7E-03			1.9E-01	1.9E-03		
Chloromethyl Methyl Ether	000107-30-2																
Chloronaphthalene, Beta-	000091-58-7			2.9E+00	2.9E-01			6.1E+00	6.1E-01							2.0E+00	2.0E-01
Chloronitrobenzene, o-	000088-73-3	3.4E-01	3.4E-03			1.5E+01	1.5E-01							3.3E-01	3.3E-03		
Chloronitrobenzene, p-	000121-73-3	4.7E-01	4.7E-03			1.5E+01	1.5E-01							4.6E-01	4.6E-03		
Chlorophenol, 2-	000095-57-8			1.8E-01	1.8E-02			1.8E+00	1.8E-01							1.7E-01	1.7E-02
Chlorophenyl Methyl Sulfide, p-	000123-09-1																
Chlorophenyl Methyl Sulfoxide	000934-73-6																
Chloropropane, 2-	000075-29-6											2.1E-01	2.1E-02				
Chlorothalonil	001897-45-6	7.7E-01	7.7E-03	5.5E-01	5.5E-02	6.4E+00	6.4E-02	4.5E+00	4.5E-01					6.9E-01	6.9E-03	4.9E-01	4.9E-02
Chlorotoluene, o-	000095-49-8			7.3E-01	7.3E-02			2.9E+00	2.9E-01							5.8E-01	5.8E-02

3-10

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	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Chlorpropham	000101-21-3			7.3E+00	7.3E-01			1.4E+02	1.4E+01							6.9E+00	6.9E-01
Chlorpyrifos	002921-88-2			1.1E-01	1.1E-02			2.8E-01	2.8E-02							7.9E-02	7.9E-03
Chlorpyrifos Methyl	005598-13-0			3.7E-01	3.7E-02			5.9E+00	5.9E-01							3.4E-01	3.4E-02
Chlorsulfuron	064902-72-3			1.8E+00	1.8E-01			2.7E+05	2.7E+04							1.8E+00	1.8E-01
Chlorthiophos	060238-56-4			2.9E-02	2.9E-03												
Chromium (III) (Insoluble Salts)	016065-83-1			3.7E+01	3.7E+00			7.5E+01	7.5E+00							2.5E+01	2.5E+00
Chromium (VI) ⁽⁹⁾	018540-29-9			1.8E-01	1.8E-02			1.5E+00	1.5E-01							1.6E-01	1.6E-02
Chromium Salts	NA																
Chrysene ⁽²⁾	000218-01-9	1.2E+00	1.2E-02			1.8E-01	1.8E-03							1.6E-01	1.6E-03		
Cobalt	007440-48-4																
Coke Oven Emissions	008007-45-2																
Copper	007440-50-8																
Copper Cyanide	000544-92-3			1.8E-01	1.8E-02			1.5E+01	1.5E+00							1.8E-01	1.8E-02
Creosote	008001-58-9																
Cresol, m-	000108-39-4			1.8E+00	1.8E-01			2.5E+01	2.5E+00							1.7E+00	1.7E-01
Cresol, o-	000095-48-7			1.8E+00	1.8E-01			2.4E+01	2.4E+00							1.7E+00	1.7E-01
Cresol, p-	000106-44-5			1.8E-01	1.8E-02			2.7E+00	2.7E-01							1.7E-01	1.7E-02
Crotonaldehyde	000123-73-9	4.5E-03	4.5E-05			6.8E-02	6.8E-04							4.2E-03	4.2E-05		
Cumene	000098-82-8			1.5E+00	1.5E-01			4.5E+00	4.5E-01			1.9E-02	1.9E-03			1.8E-02	1.8E-03
Cyanazine	021725-46-2	1.0E-02	1.0E-04	7.3E-02	7.3E-03	8.6E-01	8.6E-03	6.2E+00	6.2E-01					1.0E-02	1.0E-04	7.2E-02	7.2E-03
Cyanide (CN-)	000057-12-5			7.3E-01	7.3E-02			6.8E+00	6.8E-01							6.6E-01	6.6E-02

Table 3.1a. (continued)

Chemical	CASRN	Ingestion (mg/L)*				Dermal (mg/L)*				Inhalation (mg/L)*				Ingestion + Dermal + Inhalation (mg/L)**			
		10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Cyanogen	000460-19-5			1.5E+00	1.5E-01												
Cyanogen Bromide	000506-68-3			3.3E+00	3.3E-01												
Cyanogen Chloride	000506-77-4			1.8E+00	1.8E-01			5.4E+02	5.4E+01							1.8E+00	1.8E-01
Cyclohexane, 1,2,3,4,5-pentabromo-6-chloro-	000087-84-3	3.7E-01	3.7E-03														
Cyclohexanone	000108-94-1			1.8E+02	1.8E+01			3.3E+04	3.3E+03							1.8E+02	1.8E+01
Cyclohexylamine	000108-91-8			7.3E+00	7.3E-01			2.7E+02	2.7E+01							7.1E+00	7.1E-01
Cyclopentadiene	000542-92-7																
Cyhalothrin/karate	068085-85-8			1.8E-01	1.8E-02			1.4E-01	1.4E-02							7.9E-02	7.9E-03
Cypermethrin	052315-07-8			3.7E-01	3.7E-02												
Cyromazine	066215-27-8			2.7E-01	2.7E-02												
DDD	000072-54-8	3.5E-02	3.5E-04			3.7E-02	3.7E-04							1.8E-02	1.8E-04		
DDE	000072-55-9	2.5E-02	2.5E-04			3.0E-02	3.0E-04							1.4E-02	1.4E-04		
DDT	000050-29-3	2.5E-02	2.5E-04	1.8E-02	1.8E-03	1.7E-02	1.7E-04	1.2E-02	1.2E-03					1.0E-02	1.0E-04	7.3E-03	7.3E-04
Dacthal	001861-32-1			3.7E-01	3.7E-02												
Dalapon	000075-99-0			1.1E+00	1.1E-01			2.5E+02	2.5E+01							1.1E+00	1.1E-01
Decabromodiphenyl Ether	001163-19-5			3.7E-01	3.7E-02			8.5E+03	8.5E+02							3.6E-01	3.6E-02
Demeton	008065-48-3			1.5E-03	1.5E-04												
Di(2-ethylhexyl)adipate	000103-23-1	7.1E+00	7.1E-02	2.2E+01	2.2E+00	4.1E-01	4.1E-03	1.3E+00	1.3E-01					3.8E-01	3.8E-03	1.2E+00	1.2E-01
Diallate	002303-16-4	1.4E-01	1.4E-03			3.3E+02	3.3E+00							1.4E-01	1.4E-03		
Diazinon	000333-41-5			3.3E-02	3.3E-03			5.1E-01	5.1E-02							3.1E-02	3.1E-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	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Dibenz[a,h]anthracene ⁽²⁾	000053-70-3	1.2E-03	1.2E-05			5.5E-05	5.5E-07							5.3E-05	5.3E-07		
Dibromo-3-chloropropane, 1,2-	000096-12-8	6.1E-03	6.1E-05			4.2E-01	4.2E-03			7.1E-01	7.1E-03	4.2E-04	4.2E-05	5.9E-03	5.9E-05		
Dibromobenzene, 1,4-	000106-37-6			3.7E-01	3.7E-02			3.5E+00	3.5E-01							3.3E-01	3.3E-02
Dibromochloromethane	000124-48-1	1.0E-01	1.0E-03	7.3E-01	7.3E-02	6.4E+00	6.4E-02	4.6E+01	4.6E+00					1.0E-01	1.0E-03	7.2E-01	7.2E-02
Dibromodichloromethane	000594-18-3																
Dibromodiphenyl Ether, p,p'-	002050-47-7																
Dibromoethane, 1,2-	000106-93-4	1.0E-04	1.0E-06			1.0E-02	1.0E-04			2.2E-03	2.2E-05	4.2E-04	4.2E-05	9.5E-05	9.5E-07		
Dibromomethane (Methylene Bromide)	000074-95-3			3.7E-01	3.7E-02			1.0E+02	1.0E+01							3.6E-01	3.6E-02
Dibutyl Phthalate	000084-74-2			3.7E+00	3.7E-01			1.3E+01	1.3E+00							2.9E+00	2.9E-01
Dicamba	001918-00-9			1.1E+00	1.1E-01			2.0E+01	2.0E+00							1.0E+00	1.0E-01
Dichloro-2-butene, 1,4-	000764-41-0									1.8E-04	1.8E-06						
Dichloroacetic Acid																	
Dichlorobenzene, 1,2- ⁽³⁾	000095-50-1			3.3E+00	3.3E-01			1.8E+01	1.8E+00			4.2E-01	4.2E-02			3.6E-01	3.6E-02
Dichlorobenzene, 1,3-	000541-73-1																
Dichlorobenzene, 1,4-	000106-46-7	3.5E-01	3.5E-03			2.1E+00	2.1E-02					1.7E+00	1.7E-01	3.0E-01	3.0E-03		
Dichlorobenzidine, 3,3'-	000091-94-1	1.9E-02	1.9E-04			2.3E-01	2.3E-03							1.7E-02	1.7E-04		
Dichlorodifluoromethane	000075-71-8			7.3E+00	7.3E-01			5.8E+01	5.8E+00			4.2E-01	4.2E-02			3.9E-01	3.9E-02
Dichloroethane, 1,1-	000075-34-3			3.7E+00	3.7E-01			1.7E+02	1.7E+01			1.0E+00	1.0E-01			8.1E-01	8.1E-02

Table 3.1a. (continued)

Chemical	CASRN	Ingestion (mg/L)*				Dermal (mg/L)*				Inhalation (mg/L)**				Ingestion + Dermal + Inhalation (mg/L)**			
		10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Dichloroethane, 1,2-	000107-06-2	9.4E-02	9.4E-04			7.3E+00	7.3E-02			1.9E-02	1.9E-04			1.6E-02	1.6E-04		
Dichloroethylene, 1,1-	000075-35-4	1.4E-02	1.4E-04	3.3E-01	3.3E-02	6.6E-01	6.6E-03	1.5E+01	1.5E+00	1.4E-03	1.4E-05			1.3E-03	1.3E-05	3.2E-01	3.2E-02
Dichloroethylene, 1,2- (Mixed Isomers)	000540-59-0			3.3E-01	3.3E-02			1.0E+02	1.0E+01							3.3E-01	3.3E-02
Dichloroethylene, 1,2- cis-	000156-59-2			3.7E-01	3.7E-02			1.5E+01	1.5E+00							3.6E-01	3.6E-02
Dichloroethylene, 1,2- trans-	000156-60-5			7.3E-01	7.3E-02			2.8E+02	2.8E+01							7.3E-01	7.3E-02
Dichlorophenol, 2,4-	000120-83-2			1.1E-01	1.1E-02			6.2E-01	6.2E-02							9.3E-02	9.3E-03
Dichlorophenoxy Acetic Acid, 2,4-	000094-75-7			3.7E-01	3.7E-02			2.4E+01	2.4E+00							3.6E-01	3.6E-02
Dichlorophenoxy)butyric Acid, 4-(2,4-	000094-82-6			2.9E-01	2.9E-02			1.3E+01	1.3E+00							2.9E-01	2.9E-02
Dichloropropane, 1,2-	000078-87-5	1.3E-01	1.3E-03			3.8E+00	3.8E-02					8.3E-03	8.3E-04	1.2E-01	1.2E-03		
Dichloropropanol, 2,3-	000616-23-9			1.1E-01	1.1E-02												
Dichloropropene, 1,3-	000542-75-6	4.7E-02	4.7E-04	1.1E-02	1.1E-03	2.0E+00	2.0E-02	4.5E-01	4.5E-02	1.3E-02	1.3E-04	4.2E-02	4.2E-03	1.0E-02	1.0E-04	8.5E-03	8.5E-04
Dichlorvos	000062-73-7	2.9E-02	2.9E-04	1.8E-02	1.8E-03	6.4E+00	6.4E-02	4.0E+00	4.0E-01					2.9E-02	2.9E-04	1.8E-02	1.8E-03
Dicofol	000115-32-2																
Dicyclopentadiene	000077-73-6			1.1E+00	1.1E-01			1.1E+01	1.1E+00			4.2E-04	4.2E-05			4.2E-04	4.2E-05
Dieldrin	000060-57-1	5.3E-04	5.3E-06	1.8E-03	1.8E-04	6.9E-03	6.9E-05	2.4E-02	2.4E-03					4.9E-04	4.9E-06	1.7E-03	1.7E-04
Diethyl Phthalate	000084-66-2			2.9E+01	2.9E+00			2.3E+03	2.3E+02							2.9E+01	2.9E+00
Diethyl-p- nitrophenylphosphate	000311-45-5																
Diethylene Glycol Dinitrate (DEGDN)	000693-21-0																

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	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Diethylene Glycol Monobutyl Ether	000112-34-5																
Diethylene Glycol Monoethyl Ether	000111-90-0			7.3E+01	7.3E+00			6.0E+04	6.0E+03							7.3E+01	7.3E+00
Diethylformamide	000617-84-5			4.0E-01	4.0E-02												
Diethylstilbestrol	000056-53-1	1.8E-06	1.8E-08			1.1E-06	1.1E-08							6.7E-07	6.7E-09		
Difenzoquat	043222-48-6			2.9E+00	2.9E-01												
Diflubenzuron	035367-38-5			7.3E-01	7.3E-02												
Difluoroethane, 1,1-	000075-37-6											8.3E+01	8.3E+00				
Diisopropyl Methylphosphonate	001445-75-6			2.9E+00	2.9E-01			7.4E+02	7.4E+01							2.9E+00	2.9E-01
Dimethipin	055290-64-7			7.3E-01	7.3E-02												
Dimethoate	000060-51-5			7.3E-03	7.3E-04			2.4E-01	2.4E-02							7.1E-03	7.1E-04
Dimethoxybenzidine, 3,3'-	000119-90-4	6.1E-01	6.1E-03			1.3E+02	1.3E+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	7.3E-03			6.2E-01	6.2E-02							6.5E-02	6.5E-03
Dimethylbenzidine, 3,3'-	000119-93-7	9.3E-04	9.3E-06			4.3E-02	4.3E-04							9.1E-04	9.1E-06		
Dimethylethyl Lead	107584-40-7																
Dimethylformamide	000068-12-2			3.7E+00	3.7E-01			5.7E+03	5.7E+02							3.6E+00	3.6E-01

Table 3.1a. (continued)

Chemical	CASRN	Ingestion (mg/L) ^a				Dermal (mg/L) ^a				Inhalation (mg/L) [†]				Ingestion + Dermal + Inhalation (mg/L) ^{††}			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Dimethylhydrazine, 1,1-	000057-14-7	3.3E-03	3.3E-05														
Dimethylhydrazine, 1,2-	000540-73-8																
Dimethylphenol, 2,4-	000105-67-9			7.3E-01	7.3E-02			2.2E+00	2.2E-01							5.5E-01	5.5E-02
Dimethylphenol, 2,6-	000576-26-1			2.2E-02	2.2E-03			2.8E-01	2.8E-02							2.0E-02	2.0E-03
Dimethylphenol, 3,4-	000095-65-8			3.7E-02	3.7E-03			1.9E-01	1.9E-02							3.1E-02	3.1E-03
Dimethylphthalate ^(b)	000131-11-3			3.7E+02	3.7E+01			8.5E+04	8.5E+03							3.6E+02	3.6E+01
Dimethylterephthalate	000120-61-6			3.7E+00	3.7E-01												
Dinitro-o-cresol, 4,6-	000534-52-1																
Dinitro-o-cyclohexyl Phenol, 4,6-	000131-89-5			7.3E-02	7.3E-03			2.7E+04	2.7E+03							7.3E-02	7.3E-03
Dinitrobenzene, 1,2-	000528-29-0			1.5E-02	1.5E-03			2.3E+00	2.3E-01							1.5E-02	1.5E-03
Dinitrobenzene, 1,3-	000099-65-0			3.7E-03	3.7E-04			4.1E-01	4.1E-02							3.6E-03	3.6E-04
Dinitrobenzene, 1,4-	000100-25-4			1.5E-02	1.5E-03			1.4E+00	1.4E-01							1.4E-02	1.4E-03
Dinitrophenol, 2,4-	000051-28-5			7.3E-02	7.3E-03			9.4E+00	9.4E-01							7.2E-02	7.2E-03
Dinitrotoluene, 2,4-	000121-14-2	1.3E-02	1.3E-04	7.3E-02	7.3E-03	1.2E+00	1.2E-02	6.7E+00	6.7E-01					1.2E-02	1.2E-04	7.2E-02	7.2E-03
Dinitrotoluene, 2,6-	000606-20-2	1.3E-02	1.3E-04	3.7E-02	3.7E-03	1.8E+00	1.8E-02	5.1E+00	5.1E-01					1.2E-02	1.2E-04	3.6E-02	3.6E-03
Dinitrotoluene, 2-Amino-4,6-	035572-78-2																
Dinoseb	000088-85-7			3.7E-02	3.7E-03			2.7E-01	2.7E-02							3.2E-02	3.2E-03
Dioxane, 1,4-	000123-91-1	7.7E-01	7.7E-03			6.4E+02	6.4E+00							7.7E-01	7.7E-03		
Diphenamid	000957-51-7			1.1E+00	1.1E-01			9.8E+01	9.8E+00							1.1E+00	1.1E-01
Diphenylamine	000122-39-4			9.1E-01	9.1E-02			3.5E+00	3.5E-01							7.2E-01	7.2E-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	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Diphenylhydrazine, 1,2-	000122-66-7	1.1E-02	1.1E-04			1.2E-01	1.2E-03							9.8E-03	9.8E-05		
Diquat	000085-00-7			8.0E-02	8.0E-03			1.6E+05	1.6E+04							8.0E-02	8.0E-03
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	1.5E-04			1.1E-02	1.1E-03							1.3E-03	1.3E-04
Diuron	000330-54-1			7.3E-02	7.3E-03			2.5E+00	2.5E-01							7.1E-02	7.1E-03
Dodine	002439-10-3			1.5E-01	1.5E-02												
EPTC	000759-94-4			9.1E-01	9.1E-02												
Endosulfan	000115-29-7			2.2E-01	2.2E-02												
Endothall	000145-73-3			7.3E-01	7.3E-02												
Endrin	000072-20-8			1.1E-02	1.1E-03			5.6E-03	5.6E-04							3.7E-03	3.7E-04
Epichlorohydrin	000106-89-8	8.6E-01	8.6E-03	7.3E-02	7.3E-03	7.7E+02	7.7E+00	6.5E+01	6.5E+00	4.1E-01	4.1E-03	2.1E-03	2.1E-04	2.8E-01	2.8E-03	2.0E-03	2.0E-04
Epoxybutane, 1,2-	000106-88-7																
Ethephon	016672-87-0			1.8E-01	1.8E-02												
Ethion	000563-12-2			1.8E-02	1.8E-03			1.1E-01	1.1E-02							1.6E-02	1.6E-03
Ethoxyethanol Acetate, 2-	000111-15-9			1.1E+01	1.1E+00			2.6E+03	2.6E+02							1.1E+01	1.1E+00
Ethoxyethanol, 2-	000110-80-5			1.5E+01	1.5E+00			1.0E+04	1.0E+03							1.5E+01	1.5E+00
Ethyl Acetate	000141-78-6			3.3E+01	3.3E+00			5.2E+03	5.2E+02							3.3E+01	3.3E+00
Ethyl Acrylate	000140-88-5	1.8E-01	1.8E-03			9.1E+00	9.1E-02							1.7E-01	1.7E-03		

Table 3.1a. (continued)

Chemical	CASRN	Ingestion (mg/L)*				Dermal (mg/L)*				Inhalation (mg/L)†				Ingestion + Dermal + Inhalation (mg/L)††			
		10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Ethyl Chloride	000075-00-3											2.1E+01	2.1E+00				
Ethyl Ether	000060-29-7			7.3E+00	7.3E-01			1.4E+02	1.4E+01							6.9E+00	6.9E-01
Ethyl Methacrylate	000097-63-2			3.3E+00	3.3E-01			1.3E+02	1.3E+01							3.2E+00	3.2E-01
Ethyl-p-nitrophenyl Phosphonate	002104-64-5			3.7E-04	3.7E-05			7.4E-03	7.4E-04							3.5E-04	3.5E-05
Ethylbenzene ⁽⁶⁾	000100-41-4			3.7E+00	3.7E-01			2.0E+01	2.0E+00			2.1E+00	2.1E-01			1.2E+00	1.2E-01
Ethylene Cyanohydrin	000109-78-4			1.1E+01	1.1E+00			3.7E+04	3.7E+03							1.1E+01	1.1E+00
Ethylene Diamine	000107-15-3			7.3E-01	7.3E-02			1.7E+02	1.7E+01							7.3E-01	7.3E-02
Ethylene Glycol	000107-21-1			7.3E+01	7.3E+00			4.2E+05	4.2E+04							7.3E+01	7.3E+00
Ethylene Glycol Monobutyl Ether	000111-76-2																
Ethylene Oxide	000075-21-8	8.3E-03	8.3E-05			4.4E+00	4.4E-02			4.9E-03	4.9E-05			3.1E-03	3.1E-05		
Ethylene Thiourea	000096-45-7	7.7E-02	7.7E-04	2.9E-03	2.9E-04	9.4E+01	9.4E-01	3.5E+00	3.5E-01					7.7E-02	7.7E-04	2.9E-03	2.9E-04
Ethylphthalyl Ethyl Glycolate	000084-72-0			1.1E+02	1.1E+01												
Express	101200-48-0			2.9E-01	2.9E-02												
Fenamiphos	022224-92-6			9.1E-03	9.1E-04												
Fenpropathrin	039515-41-8			9.1E-01	9.1E-02												
Fluometuron	002164-17-2			4.7E-01	4.7E-02			2.6E+01	2.6E+00							4.7E-01	4.7E-02
Fluoranthene	000206-44-0			1.5E+00	1.5E-01			5.2E-01	5.2E-02							3.8E-01	3.8E-02
Fluorene	000086-73-7			1.5E+00	1.5E-01			2.0E+00	2.0E-01							8.4E-01	8.4E-02
Fluoride	007782-41-4			2.2E+00	2.2E-01			8.8E+02	8.8E+01							2.2E+00	2.2E-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	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Fluridone	059756-60-4			2.9E+00	2.9E-01												
Flurprimidol	056425-91-3			7.3E-01	7.3E-02												
Flutolanil	066332-96-5			2.2E+00	2.2E-01												
Fluvalinate	069409-94-5			3.7E-01	3.7E-02												
Folpet	000133-07-3	2.4E+00	2.4E-02	3.7E+00	3.7E-01	1.1E+02	1.1E+00	1.6E+02	1.6E+01					2.4E+00	2.4E-02	3.6E+00	3.6E-01
Fomesafen	072178-02-0	4.5E-02	4.5E-04														
Fonofos	000944-22-9			7.3E-02	7.3E-03			4.0E-01	4.0E-02							6.2E-02	6.2E-03
Formaldehyde	000050-00-0			7.3E+00	7.3E-01			1.1E+03	1.1E+02	3.8E-02	3.8E-04					7.3E+00	7.3E-01
Formic Acid	000064-18-6			7.3E+01	7.3E+00			3.6E+04	3.6E+03							7.3E+01	7.3E+00
Fosetyl-AL	039148-24-8			1.1E+02	1.1E+01												
Furan	000110-00-9			3.7E-02	3.7E-03			2.0E+00	2.0E-01							3.6E-02	3.6E-03
Furazolidone	000067-45-8	2.2E-03	2.2E-05			1.9E+00	1.9E-02							2.2E-03	2.2E-05		
Furfural	000098-01-1			1.1E-01	1.1E-02			2.1E-01	2.1E-02							7.2E-02	7.2E-03
Furium	000531-82-8	1.7E-04	1.7E-06														
Furmecycloz	060568-05-0	2.8E-01	2.8E-03														
Glufosinate, Ammonium	077182-82-2			1.5E-02	1.5E-03												
Glycidyl	000765-34-4			1.5E-02	1.5E-03			1.4E+01	1.4E+00							1.5E-02	1.5E-03
Glyphosate	001071-83-6			3.7E+00	3.7E-01			5.7E+05	5.7E+04							3.6E+00	3.6E-01
Goal	042874-03-3			1.1E-01	1.1E-02												
Haloxyp, Methyl	069806-40-2			1.8E-03	1.8E-04												
Harmony	079277-27-3			4.7E-01	4.7E-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	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Heptachlor	000076-44-8	1.9E-03	1.9E-05	1.8E-02	1.8E-03	5.1E-02	5.1E-04	4.9E-01	4.9E-02					1.8E-03	1.8E-05	1.8E-02	1.8E-03
Heptachlor Epoxide	001024-57-3	9.4E-04	9.4E-06	4.7E-04	4.7E-05	5.1E-03	5.1E-05	2.6E-03	2.6E-04					7.9E-04	7.9E-06	4.0E-04	4.0E-05
Heptane, N-	000142-82-5																
Hexabromobenzene	000087-82-1			7.3E-02	7.3E-03			1.4E+00	1.4E-01							6.9E-02	6.9E-03
Hexachlorobenzene ⁽⁶⁾	000118-74-1	5.3E-03	5.3E-05	2.9E-02	2.9E-03	8.4E-03	8.4E-05	4.6E-02	4.6E-03	1.1E-03	1.1E-05			8.0E-04	8.0E-06	1.8E-02	1.8E-03
Hexachlorobutadiene ⁽⁶⁾	000087-68-3	1.1E-01	1.1E-03	7.3E-03	7.3E-04	3.0E-01	3.0E-03	2.0E-02	2.0E-03	2.2E-02	2.2E-04			1.7E-02	1.7E-04	5.4E-03	5.4E-04
Hexachlorocyclohexane, Alpha-	000319-84-6	1.4E-03	1.4E-05			2.9E-02	2.9E-04							1.3E-03	1.3E-05		
Hexachlorocyclohexane, Beta-	000319-85-7	4.7E-03	4.7E-05			8.0E-02	8.0E-04							4.5E-03	4.5E-05		
Hexachlorocyclohexane, Delta-	000319-86-8																
Hexachlorocyclohexane, Epsilon	006108-10-7																
Hexachlorocyclohexane, Gamma-	000058-89-9	6.6E-03	6.6E-05	1.1E-02	1.1E-03	1.9E-01	1.9E-03	3.1E-01	3.1E-02					6.3E-03	6.3E-05	1.1E-02	1.1E-03
Hexachlorocyclohexane, Technical	000608-73-1	4.7E-03	4.7E-05														
Hexachlorocyclopentadiene	000077-47-4			2.6E-01	2.6E-02			2.9E+00	2.9E-01			1.5E-04	1.5E-05			1.5E-04	1.5E-05
Hexachlorodibenzo-p-dioxin, Mixture	019408-74-3	1.4E-06	1.4E-08			6.3E-07	6.3E-09							4.3E-07	4.3E-09		
Hexachloroethane	000067-72-1	6.1E-01	6.1E-03	3.7E-02	3.7E-03	4.8E+00	4.8E-02	2.9E-01	2.9E-02	1.2E-01	1.2E-03			9.9E-02	9.9E-04	3.2E-02	3.2E-03
Hexachlorophene	000070-30-4			1.1E-02	1.1E-03			1.7E-03	1.7E-04							1.5E-03	1.5E-04
Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	000121-82-4	7.7E-02	7.7E-04	1.1E-01	1.1E-02	1.7E+00	1.7E-02	2.4E+00	2.4E-01					7.4E-02	7.4E-04	1.0E-01	1.0E-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	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Hexamethylene Diisocyanate, 1,6-	000822-06-0																
Hexane, N-	000110-54-3			2.2E+00	2.2E-01			2.2E+00	2.2E-01			4.2E-01	4.2E-02			3.0E-01	3.0E-02
Hexanone, 2-	000591-78-6																
Hexazinone	051235-04-2			1.2E+00	1.2E-01			1.0E+06	6.0E+05							1.2E+00	1.2E-01
HpCDD, 2,3,7,8-(*)	037871-00-4	5.7E-06	5.7E-08														
HpCDF, 2,3,7,8-(*)	038998-75-3	5.7E-06	5.7E-08														
HxCDD, 2,3,7,8-(*)	034465-46-8	5.7E-07	5.7E-09														
HxCDF, 2,3,7,8-(*)	055684-94-1	5.7E-07	5.7E-09														
Hydrazine	000302-01-2	2.8E-03	2.8E-05			1.4E+01	1.4E-01							2.8E-03	2.8E-05		
Hydrazine Sulfate	010034-93-2	2.8E-03	2.8E-05			1.4E+01	1.4E-01							2.8E-03	2.8E-05		
Hydrogen Chloride	007647-01-0																
Hydrogen Cyanide	000074-90-8			7.3E-01	7.3E-02			2.1E+01	2.1E+00							7.1E-01	7.1E-02
Hydrogen Sulfide	007783-06-4			1.1E-01	1.1E-02			1.6E+00	1.6E-01							1.0E-01	1.0E-02
Hydroquinone	000123-31-9			1.5E+00	1.5E-01			3.0E+02	3.0E+01							1.5E+00	1.5E-01
Imazalil	035554-44-0			4.7E-01	4.7E-02												
Imazaquin	081335-37-7			9.1E+00	9.1E-01												
Indeno[1,2,3-cd]pyrene(*)	000193-39-5	1.2E-02	1.2E-04			7.8E-04	7.8E-06							7.4E-04	7.4E-06		
Iprodione	036734-19-7			1.5E+00	1.5E-01												
Iron	007439-89-6																
Isobutyl Alcohol	000078-83-1			1.1E+01	1.1E+00			1.4E+03	1.4E+02							1.1E+01	1.1E+00
Isophorone	000078-59-1	9.0E+00	9.0E-02	7.3E+00	7.3E-01	4.2E+02	4.2E+00	3.4E+02	3.4E+01					8.8E+00	8.8E-02	7.1E+00	7.1E-01

Table 3.1a. (continued)

Chemical	CASRN	Ingestion (mg/L)*				Dermal (mg/L)*				Inhalation (mg/L)**				Ingestion + Dermal + Inhalation (mg/L)††			
		10 ⁻⁴	10 ⁻³	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻³	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻³	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻³	HI=1	HI=0.1
Isopropalin	033820-53-0			5.5E-01	5.5E-02												
Isopropanol	000067-63-0																
Isopropyl Methyl Phosphonic Acid	001832-54-8			3.7E+00	3.7E-01												
Isoxaben	082558-50-7			1.8E+00	1.8E-01												
Karate	091465-08-6			1.8E-01	1.8E-02												
Kerb	023950-58-5			2.7E+00	2.7E-01												
Lactofen	077501-63-4			7.3E-02	7.3E-03												
Lead Alkyls	NA																
Lead And Compounds	007439-92-1			1.5E-02	1.5E-02												
Linuron	000330-55-2			7.3E-02	7.3E-03												
Lithium	007439-93-2																
Londax	083055-99-6			7.3E+00	7.3E-01												
MCPA	000094-74-6			1.8E-02	1.8E-03			7.7E-01	7.7E-02					1.8E-02	1.8E-03		
MCPB	000094-81-5			3.7E-01	3.7E-02												
MCPP	000093-65-2			3.7E-02	3.7E-03			1.1E+00	1.1E-01					3.5E-02	3.5E-03		
Magnesium	007439-95-4																
Malathion	000121-75-5			7.3E-01	7.3E-02			7.1E+01	7.1E+00					7.2E-01	7.2E-02		
Maleic Anhydride	000108-31-6			3.7E+00	3.7E-01												
Maleic Hydrazide	000123-33-1			1.8E+01	1.8E+00			1.8E+04	1.8E+03					1.8E+01	1.8E+00		
Malononitrile	000109-77-3			7.3E-04	7.3E-05			3.0E-01	3.0E-02					7.3E-04	7.3E-05		
Mancozeb	008018-01-7			1.1E+00	1.1E-01												

Nonradionuclides/groundwater/residential

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	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Maneb	012427-38-2			1.8E-01	1.8E-02			8.2E+02	8.2E+01							1.8E-01	1.8E-02
Manganese (Water)	007439-96-5			1.7E+00	1.7E-01			2.8E+01	2.8E+00							1.6E+00	1.6E-01
Mephosfolan	000950-10-7			3.3E-03	3.3E-04												
Mepiquat Chloride	024307-26-4			1.1E+00	1.1E-01												
Mercuric Chloride	007487-94-7			1.1E-02	1.1E-03			9.0E-01	9.0E-02							1.1E-02	1.1E-03
Mercury (elemental)	007439-97-6			1.1E-02	1.1E-03			4.5E-04	4.5E-05							4.3E-04	4.3E-05
Mercury, Inorganic Salt	007439-97-6			1.1E-02	1.1E-03			3.2E-01	3.2E-02							1.1E-02	1.1E-03
Merphos	000150-50-5			1.1E-03	1.1E-04												
Merphos Oxide	000078-48-8			1.1E-03	1.1E-04			8.8E-04	8.8E-05							4.9E-04	4.9E-05
Metalaxyl	057837-19-1			2.2E+00	2.2E-01												
Methacrylonitrile	000126-98-7			3.7E-03	3.7E-04			6.7E-01	6.7E-02			1.5E-03	1.5E-04			1.0E-03	1.0E-04
Methamidophos	010265-92-6			1.8E-03	1.8E-04			4.2E+00	4.2E-01							1.8E-03	1.8E-04
Methanol	000067-56-1			1.8E+01	1.8E+00			3.8E+03	3.8E+02							1.8E+01	1.8E+00
Methidathion	000950-37-8			3.7E-02	3.7E-03												
Methomyl	016752-77-5			9.1E-01	9.1E-02			3.6E+02	3.6E+01							9.1E-01	9.1E-02
Methoxy-5-nitroaniline, 2-	000099-59-2	1.9E-01	1.9E-03			1.5E+01	1.5E-01							1.8E-01	1.8E-03		
Methoxychlor	000072-43-5			1.8E-01	1.8E-02			1.9E+00	1.9E-01							1.7E-01	1.7E-02
Methoxyethanol Acetate, 2-	000110-49-6			7.3E-02	7.3E-03												
Methoxyethanol, 2-	000109-86-4			3.7E-02	3.7E-03			4.0E+01	4.0E+00							3.6E-02	3.6E-03
Methyl Acetate	000079-20-9			3.7E+01	3.7E+00			8.3E+03	8.3E+02							3.6E+01	3.6E+00

Table 3.1a. (continued)

Chemical	CASRN	Ingestion (mg/L)*				Dermal (mg/L)*				Inhalation (mg/L)*				Ingestion + Dermal + Inhalation (mg/L)**			
		10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Methyl Acrylate	000096-33-3			1.1E+00	1.1E-01			1.3E+02	1.3E+01							1.1E+00	1.1E-01
Methyl Ethyl Ketone	000078-93-3			2.2E+01	2.2E+00			6.6E+03	6.6E+02			2.1E+00	2.1E-01			1.9E+00	1.9E-01
Methyl Isobutyl Ketone	000108-10-1			2.9E+00	2.9E-01			2.9E+02	2.9E+01			1.7E-01	1.7E-02			1.6E-01	1.6E-02
Methyl Mercury	022967-92-6			3.7E-03	3.7E-04												
Methyl Methacrylate	000080-62-6			2.9E+00	2.9E-01			2.5E+02	2.5E+01							2.9E+00	2.9E-01
Methyl Parathion	000298-00-0			9.1E-03	9.1E-04			1.8E+00	1.8E-01							9.1E-03	9.1E-04
Methyl Styrene (Mixed Isomers)	025013-15-4			2.2E-01	2.2E-02			8.3E-01	8.3E-02			8.3E-02	8.3E-03			5.6E-02	5.6E-03
Methyl hydrazine ⁽⁹⁾	000060-34-4	7.7E-03	7.7E-05														
Methyl tert-Butyl Ether (MTBE)	001634-04-4											6.3E+00	6.3E-01				
Methyl-5-Nitroaniline, 2-	000099-55-8	2.6E-01	2.6E-03			9.0E+00	9.0E-02							2.5E-01	2.5E-03		
Methylaniline Hydrochloride, 2-	000636-21-5	4.7E-02	4.7E-04			4.6E+00	4.6E-02							4.7E-02	4.7E-04		
Methylcyclohexane	000108-87-2											6.3E+00	6.3E-01				
Methylene Chloride	000075-09-2	1.1E+00	1.1E-02	2.2E+00	2.2E-01	9.9E+01	9.9E-01	1.9E+02	1.9E+01	1.0E+00	1.0E-02	6.3E+00	6.3E-01	5.4E-01	5.4E-03	1.6E+00	1.6E-01
Methylene-bis(2-chloroaniline), 4,4'-	000101-14-4	6.6E-02	6.6E-04	2.6E-02	2.6E-03	4.8E-01	4.8E-03	1.9E-01	1.9E-02					5.8E-02	5.8E-04	2.2E-02	2.2E-03
Methylene-bis(N,N-dimethyl) Aniline, 4,4'-	000101-61-1	1.9E-01	1.9E-03			2.9E-01	2.9E-03							1.1E-01	1.1E-03		
Methylenebisbenzenamine, 4,4'- ⁽⁹⁾	000101-77-9	3.4E-02	3.4E-04			4.4E+00	4.4E-02							3.4E-02	3.4E-04		

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	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Methylenediphenyl Isocyanate, 4,4'-	000101-68-8											4.2E-05	4.2E-06				
Methylstyrene, Alpha-	000098-83-9			2.6E+00	2.6E-01			9.7E+00	9.7E-01							2.0E+00	2.0E-01
Methyltriethyl Lead	001762-28-3																
Metolachlor	051218-45-2			5.5E+00	5.5E-01												
Metribuzin ⁽⁵⁾	021087-64-9			9.1E-01	9.1E-02			1.2E+02	1.2E+01							9.1E-01	9.1E-02
Mirex ⁽⁵⁾	002385-85-5	4.7E-03	4.7E-05	7.3E-03	7.3E-04	1.9E-01	1.9E-03	3.0E-01	3.0E-02					4.6E-03	4.6E-05	7.1E-03	7.1E-04
Molinate	002212-67-1			7.3E-02	7.3E-03			3.4E-01	3.4E-02							6.0E-02	6.0E-03
Molybdenum	007439-98-7			1.8E-01	1.8E-02			2.9E+01	2.9E+00							1.8E-01	1.8E-02
Monochloramine	010599-90-3			3.7E+00	3.7E-01												
Monochlorobutanes	025154-42-1			1.5E+01	1.5E+00												
Naled	000300-76-5			7.3E-02	7.3E-03			1.7E+01	1.7E+00							7.3E-02	7.3E-03
Naphthalene ⁽⁶⁾	000091-20-3			1.3E+00	1.3E-01			6.2E+00	6.2E-01							1.1E+00	1.1E-01
Naphthalene, 1-Methyl	000090-12-0																
Naphthalene, 2-Methyl	000091-57-6																
Napropamide	015299-99-7			3.7E+00	3.7E-01			6.1E+03	6.1E+02							3.6E+00	3.6E-01
Niagara Blue 4B	002429-74-5																
Nickel Carbonyl	013463-39-3																
Nickel Refinery Dust	NA																
Nickel Soluble Salts	007440-02-0			7.3E-01	7.3E-02			8.1E+01	8.1E+00							7.2E-01	7.2E-02
Nickel Subsulfide	012035-72-2																
Nitrapyrin ⁽⁹⁾	001929-82-4			5.5E-02	5.5E-03			1.1E+00	1.1E-01							5.2E-02	5.2E-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	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Nitrate	014797-55-8			5.8E+01	5.8E+00			1.2E+04	1.2E+03							5.8E+01	5.8E+00
Nitric Oxide ^(b)	010102-43-9			3.7E+00	3.7E-01			3.0E+02	3.0E+01							3.6E+00	3.6E-01
Nitrite	014797-65-0			3.7E+00	3.7E-01			7.5E+02	7.5E+01							3.6E+00	3.6E-01
Nitroaniline, 2-	000088-74-4											4.2E-04	4.2E-05				
Nitrobenzene	000098-95-3			1.8E-02	1.8E-03			1.1E+00	1.1E-01			4.2E-03	4.2E-04			3.4E-03	3.4E-04
Nitrofurantoin	000067-20-9			2.6E+00	2.6E-01												
Nitrofurazone	000059-87-0	5.7E-03	5.7E-05														
Nitrogen Dioxide ^(b)	010102-44-0			3.7E+01	3.7E+00			1.2E+04	1.2E+03							3.6E+01	3.6E+00
Nitroguanidine	000556-88-7			3.7E+00	3.7E-01												
Nitrophenol, 4-	000100-02-7																
Nitropropane, 2- ^(b)	000079-46-9	9.0E-04	9.0E-06			3.0E-01	3.0E-03			1.8E-04	1.8E-06	4.2E-02	4.2E-03	1.5E-04	1.5E-06		
Nitroso-N-ethylurea, N-	000759-73-9	6.1E-05	6.1E-07			2.3E-02	2.3E-04							6.1E-05	6.1E-07		
Nitroso-N-methylurea, N-	000684-93-5																
Nitroso-di-N-butylamine, N-	000924-16-3	1.6E-03	1.6E-05			1.1E-01	1.1E-03			3.2E-04	3.2E-06			2.6E-04	2.6E-06		
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		
Nitrosodiethanolamine, N-	001116-54-7	3.0E-03	3.0E-05			1.3E+02	1.3E+00							3.0E-03	3.0E-05		
Nitrosodiethylamine, N-	000055-18-5	5.7E-05	5.7E-07			9.8E-03	9.8E-05							5.6E-05	5.6E-07		
Nitrosodimethylamine, N-	000062-75-9	1.7E-04	1.7E-06			1.3E-01	1.3E-03							1.7E-04	1.7E-06		

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	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Nitrosodiphenylamine, N-	000086-30-6	1.7E+00	1.7E-02			9.2E+00	9.2E-02							1.5E+00	1.5E-02		
Nitrosomethylethylamine, N-	010595-95-6	3.9E-04	3.9E-06														
Nitrosomethylvinylamine, N-	004549-40-0																
Nitrosopyrrolidine, N-	000930-55-2	4.1E-03	4.1E-05			1.1E+01	1.1E-01							4.1E-03	4.1E-05		
Nitrotoluene, 4-Amino-2-	000119-32-4																
Nitrotoluene, m-	000099-08-1			3.7E-01	3.7E-02			8.6E+00	8.6E-01							3.5E-01	3.5E-02
Nitrotoluene, o-	000088-72-2			3.7E-01	3.7E-02			1.0E+01	1.0E+00							3.5E-01	3.5E-02
Nitrotoluene, p-	000099-99-0			3.7E-01	3.7E-02			8.6E+00	8.6E-01							3.5E-01	3.5E-02
Norflurazon	027314-13-2			1.5E+00	1.5E-01												
Nustar	085509-19-9			2.6E-02	2.6E-03												
OCDD ^(a)	003268-87-9	5.7E-05	5.7E-07														
OCDF ^(a)	039001-02-0	5.7E-05	5.7E-07														
Octabromodiphenyl Ether	032536-52-0			1.1E-01	1.1E-02												
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetra (HMX)	002691-41-0			1.8E+00	1.8E-01			1.4E+03	1.4E+02							1.8E+00	1.8E-01
Octamethylpyrophosphor amide	000152-16-9			7.3E-02	7.3E-03												
Octyl Phthalate, di-N-	000117-84-0			7.3E-01	7.3E-02			1.0E-02	1.0E-03							9.9E-03	9.9E-04
Oryzalin	019044-88-3			1.8E+00	1.8E-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	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Oxadiazon	019666-30-9			1.8E-01	1.8E-02												
Oxamyl	023135-22-0			9.1E-01	9.1E-02												
Paclobutrazol	076738-62-0			4.7E-01	4.7E-02												
Paraquat	001910-42-5			1.6E-01	1.6E-02			2.4E+05	2.4E+04							1.6E-01	1.6E-02
Parathion	000056-38-2			2.2E-01	2.2E-02			2.7E+00	2.7E-01							2.0E-01	2.0E-02
PeCDD, 2,3,7,8-(*)	036088-22-9	1.1E-07	1.1E-09														
PeCDF, 1,2,3,7,8-(*)	057117-41-6	1.1E-07	1.1E-09														
PeCDF, 2,3,4,7,8-(*)	057117-31-4	1.1E-06	1.1E-08														
Pebutate	001114-71-2			1.8E+00	1.8E-01												
Pendimethalin	040487-42-1			1.5E+00	1.5E-01												
Pentabromodiphenyl Ether	032534-81-9			7.3E-02	7.3E-03												
Pentachlorobenzene	000608-93-5			2.9E-02	2.9E-03			3.5E-02	3.5E-03							1.6E-02	1.6E-03
Pentachlorocyclopentadiene	025329-35-5																
Pentachloronitrobenzene	000082-68-8	3.3E-02	3.3E-04	1.1E-01	1.1E-02	1.8E-01	1.8E-03	6.1E-01	6.1E-02					2.8E-02	2.8E-04	9.3E-02	9.3E-03
Pentachlorophenol	000087-86-5	7.1E-02	7.1E-04	1.1E+00	1.1E-01	4.5E-02	4.5E-04	6.9E-01	6.9E-02					2.8E-02	2.8E-04	4.3E-01	4.3E-02
Pentyl Alcohol, N-	000071-41-0																
Permethrin	052645-53-1			1.8E+00	1.8E-01			1.6E+02	1.6E+01							1.8E+00	1.8E-01
Phenanthrene	000085-01-8																
Phenmedipham	013684-63-4			9.1E+00	9.1E-01			5.6E+05	5.6E+04							9.1E+00	9.1E-01
Phenol	000108-95-2			2.2E+01	2.2E+00			1.5E+03	1.5E+02							2.2E+01	2.2E+00

Table 3.1a. (continued)

Chemical	CASRN	Ingestion (mg/L)*			Dermal (mg/L)*			Inhalation (mg/L)**			Ingestion + Dermal + Inhalation (mg/L)***		
		10 ⁻⁴	10 ⁻⁴	HQ=1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Phenylethanediamine, m-	000108-45-2		2.2E-01	2.2E-02			3.7E+02	3.7E+01			2.2E-01	2.2E-02	
Phenylethanediamine, o-	000095-54-5	1.8E-01	1.8E-03		4.4E+01	4.4E-01			1.8E-01	1.8E-03			
Phenylethanediamine, p-	000106-50-3			6.9E+00	6.9E-01		2.4E+04	2.4E+03			6.9E+00	6.9E-01	
Phenylmercuric Acetate	000062-38-4				2.9E-03	2.9E-04							
Phenylphenol, 2-	000090-43-7	4.4E+00	4.4E-02		3.3E+01	3.3E-01			3.9E+00	3.9E-02			
Phorate	000298-02-2			7.3E-03	7.3E-04		1.9E+00	1.9E-01			7.3E-03	7.3E-04	
Phosmet	000732-11-6			7.3E-01	7.3E-02		7.0E+01	7.0E+00			7.2E-01	7.2E-02	
Phosphine	007803-51-2			1.1E-02	1.1E-03		9.0E-01	9.0E-02			1.1E-02	1.1E-03	
Phosphoric Acid	007664-38-2												
Phthalic Acid, p-	000100-21-0			3.7E+01	3.7E+00		2.5E+03	2.5E+02			3.6E+01	3.6E+00	
Phthalic Anhydride	000085-44-9			7.3E+01	7.3E+00		1.7E+05	1.7E+04			7.3E+01	7.3E+00	
Picloram	001918-02-1			2.6E+00	2.6E-01		2.8E+02	2.8E+01			2.5E+00	2.5E-01	
Pirimiphos, Methyl	029232-93-7				3.7E-01	3.7E-02							
Polybrominated Biphenyls	NA	9.6E-04	9.6E-06	2.6E-04	2.6E-05								
Polychlorinated Biphenyls	001336-36-3	1.1E-03	1.1E-05		1.2E-03	1.2E-05			5.7E-04	5.7E-06			
Potassium Cyanide	000151-50-8			1.8E+00	1.8E-01		1.2E+03	1.2E+02			1.8E+00	1.8E-01	
Potassium Silver Cyanide	000506-61-6			7.3E+00	7.3E-01		6.0E+02	6.0E+01			7.2E+00	7.2E-01	
Prochloraz	067747-09-5	5.7E-02	5.7E-04	3.3E-01	3.3E-02								
Profluralin	026399-36-0			2.2E-01	2.2E-02								
Prometon	001610-18-0						3.3E+01	3.3E+00				5.4E-01	5.4E-02

Nonradionuclides/groundwater/residential

Table 3.1a. (continued)

Chemical	CASRN	Ingestion (mg/L)*				Dermal (mg/L)*				Inhalation (mg/L)*				Ingestion + Dermal + Inhalation (mg/L)**			
		10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Prometryn	007287-19-6			1.5E-01	1.5E-02			7.9E+00	7.9E-01							1.4E-01	1.4E-02
Propachlor	001918-16-7			4.7E-01	4.7E-02												
Propanil	000709-98-8			1.8E-01	1.8E-02			2.6E+00	2.6E-01							1.7E-01	1.7E-02
Propargite	002312-35-8			7.3E-01	7.3E-02												
Propargyl Alcohol	000107-19-7			7.3E-02	7.3E-03												
Propazine	000139-40-2			7.3E-01	7.3E-02			4.0E+01	4.0E+00							7.2E-01	7.2E-02
Propham	000122-42-9			7.3E-01	7.3E-02			5.2E+00	5.2E-01							6.4E-01	6.4E-02
Propiconazole	060207-90-1			4.7E-01	4.7E-02												
Propylene Glycol	000057-55-6			7.3E+02	7.3E+01			1.0E+06	3.7E+05							7.3E+02	7.3E+01
Propylene Glycol Monoethyl Ether	001569-02-4			2.6E+01	2.6E+00												
Propylene Glycol Monomethyl Ether	000107-98-2			2.6E+01	2.6E+00			1.3E+04	1.3E+03							2.6E+01	2.6E+00
Propylene Oxide	000075-56-9	3.5E-02	3.5E-04			1.3E+01	1.3E-01			1.3E-01	1.3E-03	6.3E-02	6.3E-03	2.8E-02	2.8E-04		
Pursuit	081335-77-5			9.1E+00	9.1E-01												
Pydrin	051630-58-1			9.1E-01	9.1E-02			2.6E+01	2.6E+00							8.8E-01	8.8E-02
Pyrene	000129-00-0			1.1E+00	1.1E-01			4.3E-01	4.3E-02							3.1E-01	3.1E-02
Pyridine	000110-86-1			3.7E-02	3.7E-03			1.4E+00	1.4E-01							3.6E-02	3.6E-03
Quinalphos	013593-03-8			1.8E-02	1.8E-03												
Quinoline	000091-22-5	7.1E-04	7.1E-06			1.5E-02	1.5E-04							6.8E-04	6.8E-06		
Refractory Ceramic Fibers	NA																
Resmethrin	010453-86-8			1.1E+00	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	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Ronnel	000299-84-3			1.8E+00	1.8E-01			4.3E+00	4.3E-01							1.3E+00	1.3E-01
Rotenone	000083-79-4			1.5E-01	1.5E-02			4.9E+00	4.9E-01							1.4E-01	1.4E-02
Savey	078587-05-0			9.1E-01	9.1E-02												
Selenious Acid	007783-00-8			1.8E-01	1.8E-02												
Selenite	014124-67-5																
Selenium	007782-49-2			1.8E-01	1.8E-02			3.3E+01	3.3E+00							1.8E-01	1.8E-02
Selenium Sulfide	007446-34-6																
Selenourea	000630-10-4			1.8E-01	1.8E-02												
Sethoxydim	074051-80-2			3.3E+00	3.3E-01												
Silver	007440-22-4			1.8E-01	1.8E-02			1.4E+01	1.4E+00							1.8E-01	1.8E-02
Silver Cyanide	000506-64-9			3.7E+00	3.7E-01			3.0E+02	3.0E+01							3.6E+00	3.6E-01
Simazine	000122-34-9	7.1E-02	7.1E-04	1.8E-01	1.8E-02	3.6E+00	3.6E-02	9.2E+00	9.2E-01					7.0E-02	7.0E-04	1.8E-01	1.8E-02
Sodium	007440-23-5																
Sodium Acifluorfen	062476-59-9			4.7E-01	4.7E-02												
Sodium Azide	026628-22-8			1.5E-01	1.5E-02			1.2E+01	1.2E+00							1.4E-01	1.4E-02
Sodium Cyanide	000143-33-9			1.5E+00	1.5E-01			1.9E+03	1.9E+02							1.5E+00	1.5E-01
Sodium Diethyldithiocarbamate	000148-18-5	3.2E-02	3.2E-04	1.1E+00	1.1E-01												
Sodium Fluoroacetate	000062-74-8			7.3E-04	7.3E-05												
Sodium Metavanadate	013718-26-8			3.7E-02	3.7E-03			3.0E+00	3.0E-01							3.6E-02	3.6E-03
Stirofos (Tetrachlorovinphos)	000961-11-5	3.5E-01	3.5E-03	1.1E+00	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	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Strontium, Stable	007440-24-6			2.2E+01	2.2E+00			1.8E+03	1.8E+02							2.2E+01	2.2E+00
Strychnine	000057-24-9			1.1E-02	1.1E-03			5.8E+00	5.8E-01							1.1E-02	1.1E-03
Styrene ⁽⁶⁾	000100-42-5			7.3E+00	7.3E-01			3.6E+00	3.6E-01			2.1E+00	2.1E-01			1.1E+00	1.1E-01
Sulfate	014808-79-8																
Systhane	088671-89-0			9.1E-01	9.1E-02												
TCDD, 2,3,7,8- ⁽⁴⁾	001746-01-6	5.7E-08	5.7E-10			8.4E-09	8.4E-11							7.3E-09	7.3E-11		
TCDF, 2,3,7,8- ⁽⁴⁾	051207-31-9	5.7E-07	5.7E-09														
TCMTB	021564-17-0			1.1E+00	1.1E-01												
Tebuthiuron	034014-18-1			2.6E+00	2.6E-01			5.3E+03	5.3E+02							2.6E+00	2.6E-01
Temephos	003383-96-8			7.3E-01	7.3E-02												
Terbacil	005902-51-2			4.7E-01	4.7E-02												
Terbufos	013071-79-9			9.1E-04	9.1E-05			1.4E-02	1.4E-03							8.6E-04	8.6E-05
Terbutryn	000886-50-0			3.7E-02	3.7E-03			2.6E-01	2.6E-02							3.2E-02	3.2E-03
Tetrabutyl Lead	001920-90-7																
Tetrachlorobenzene, 1,2,4,5-	000095-94-3			1.1E-02	1.1E-03			2.1E-02	2.1E-03							7.2E-03	7.2E-04
Tetrachloroethane, 1,1,1,2-	000630-20-6	3.3E-01	3.3E-03	1.1E+00	1.1E-01	4.5E+00	4.5E-02	1.5E+01	1.5E+00	6.6E-02	6.6E-04			5.4E-02	5.4E-04	1.0E+00	1.0E-01
Tetrachloroethane, 1,1,2,2-	000079-34-5	4.3E-02	4.3E-04			1.4E+00	1.4E-02			8.5E-03	8.5E-05			7.1E-03	7.1E-05		
Tetrachloroethylene ⁽⁶⁾	000127-18-4	1.6E-01	1.6E-03	3.7E-01	3.7E-02	1.8E-01	1.8E-03	4.1E-01	4.1E-02	8.5E-01	8.5E-03			7.8E-02	7.8E-04	1.9E-01	1.9E-02
Tetrachlorophenol, 2,3,4,6-	000058-90-2			1.1E+00	1.1E-01			3.8E+00	3.8E-01							8.5E-01	8.5E-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	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Tetrachlorotoluene, p-alpha, alpha, alpha-	005216-25-1	4.3E-04	4.3E-06														
Tetraethyl Dithiopyrophosphate	003689-24-5			1.8E-02	1.8E-03			1.4E+00	1.4E-01							1.8E-02	1.8E-03
Tetraethyl Lead	000078-00-2																
Tetrafluoroethane, 1,1,1,2-	000811-97-2											1.7E+02	1.7E+01				
Tetramethyl Lead	000075-74-1																
Tetrapropyl Lead	003440-75-3																
Thallic Oxide ⁽⁹⁾	001314-32-5			2.6E-03	2.6E-04												
Thallium (I) Nitrate	010102-45-1			3.3E-03	3.3E-04			2.7E-01	2.7E-02							3.2E-03	3.2E-04
Thallium (Soluble Salts)	007440-28-0																
Thallium Acetate	000563-68-8			3.3E-03	3.3E-04												
Thallium Carbonate	006533-73-9			2.9E-03	2.9E-04												
Thallium Chloride	007791-12-0			2.9E-03	2.9E-04			2.4E-01	2.4E-02							2.9E-03	2.9E-04
Thallium Selenite ⁽⁹⁾	012039-52-0			3.3E-03	3.3E-04			2.7E-01	2.7E-02							3.2E-03	3.2E-04
Thallium Sulfate	007446-18-6			2.9E-03	2.9E-04			2.4E-01	2.4E-02							2.9E-03	2.9E-04
Thiobencarb	028249-77-6			3.7E-01	3.7E-02												
Thiofanox	039196-18-4			1.1E-02	1.1E-03			3.9E+02	3.9E+01							1.1E-02	1.1E-03
Thiophanate, Methyl	023564-05-8			2.9E+00	2.9E-01												
Thiram	000137-26-8			1.8E-01	1.8E-02												
Thorium	007440-29-1																
Tin	007440-31-5			2.2E+01	2.2E+00			9.0E+02	9.0E+01							2.1E+01	2.1E+00

Table 3.1a. (continued)

Chemical	CASRN	Ingestion (mg/L)*				Dermal (mg/L)*				Inhalation (mg/L)**				Ingestion + Dermal + Inhalation (mg/L)**			
		10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Titanium	007440-32-6																
Toluene ⁽⁶⁾	000108-88-3			7.3E+00	7.3E-01			5.4E+01	5.4E+00			8.3E-01	8.3E-02			7.4E-01	7.4E-02
Toluene diisocyanate mixture (TDI)	026471-62-5											1.5E-04	1.5E-05				
Toluene-2,4-diamine	000095-80-7	2.7E-03	2.7E-05			9.1E-01	9.1E-03							2.7E-03	2.7E-05		
Toluene-2,5-diamine	000095-70-5			2.2E+01	2.2E+00												
Toluene-2,6-diamine	000823-40-5			7.3E+00	7.3E-01												
Toluidine, o- (Methylaniline, 2-)	000095-53-4	3.5E-02	3.5E-04			2.0E+00	2.0E-02							3.5E-02	3.5E-04		
Toluidine, p-	000106-49-0	4.5E-02	4.5E-04			8.3E-01	8.3E-03							4.3E-02	4.3E-04		
Toxaphene	008001-35-2	7.7E-03	7.7E-05			1.1E-01	1.1E-03							7.2E-03	7.2E-05		
Tralothrin	066841-25-6			2.7E-01	2.7E-02												
Triallate	002303-17-5			4.7E-01	4.7E-02			5.5E+00	5.5E-01							4.4E-01	4.4E-02
Triasulfuron	082097-50-5			3.7E-01	3.7E-02												
Tribromobenzene, 1,2,4-	000615-54-3			1.8E-01	1.8E-02												
Tribromochloromethane	000594-15-0																
Tribromodiphenyl Ether	049690-94-0																
Tributyltin Oxide	000056-35-9			1.1E-03	1.1E-04												
Trichloro-1,2,2-trifluoroethane, 1,1,2-	000076-13-1			1.1E+03	1.1E+02			3.8E+04	3.8E+03			6.3E+01	6.3E+00			5.9E+01	5.9E+00
Trichloro-2'-hydroxydiphenylether	003380-34-5																
Trichloroacetic Acid																	

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	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
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														
Trichlorobenzene, 1,2,4-	000120-82-1			3.7E-01	3.7E-02			1.5E+00	1.5E-01			4.2E-01	4.2E-02			1.7E-01	1.7E-02
Trichloroethane, 1,1,1-(⁹)	000071-55-6			3.3E+00	3.3E-01			7.2E+01	7.2E+00			2.1E+00	2.1E-01			1.3E+00	1.3E-01
Trichloroethane, 1,1,2-	000079-00-5	1.5E-01	1.5E-03	1.5E-01	1.5E-02	5.9E+00	5.9E-02	5.8E+00	5.8E-01	3.0E-02	3.0E-04			2.5E-02	2.5E-04	1.4E-01	1.4E-02
Trichloroethylene(⁹)	000079-01-6	7.7E-01	7.7E-03			3.0E+00	3.0E-02			2.8E-01	2.8E-03			1.9E-01	1.9E-03		
Trichlorofluoromethane	000075-69-4			1.1E+01	1.1E+00			6.1E+01	6.1E+00			1.5E+00	1.5E-01			1.3E+00	1.3E-01
Trichlorophenol, 2,4,5-	000095-95-4			3.7E+00	3.7E-01			2.0E+01	2.0E+00							3.1E+00	3.1E-01
Trichlorophenol, 2,4,6-	000088-06-2	7.7E-01	7.7E-03			2.7E+00	2.7E-02							6.0E-01	6.0E-03		
Trichlorophenoxy) Propionic Acid, 2(2,4,5-	000093-72-1			2.9E-01	2.9E-02			2.4E+00	2.4E-01							2.6E-01	2.6E-02
Trichlorophenoxyacetic Acid, 2,4,5-	000093-76-5			3.7E-01	3.7E-02			2.1E+00	2.1E-01							3.1E-01	3.1E-02
Trichloropropane, 1,1,2-	000598-77-6			1.8E-01	1.8E-02												
Trichloropropane, 1,2,3-	000096-18-4	1.2E-03	1.2E-05	2.2E-01	2.2E-02	9.1E-04	9.1E-06	1.6E-01	1.6E-02					5.2E-04	5.2E-06	9.3E-02	9.3E-03
Trichloropropene, 1,2,3-	000096-19-5			1.8E-01	1.8E-02												
Trichlorotoluene, 2,3,6-	002077-46-5																
Trichlorotoluene, alpha 2,6-	002014-83-7																
Tridiphan	058138-08-2			1.1E-01	1.1E-02												
Triethyl Lead	005224-23-7																

Table 3.1a. (continued)

Chemical	CASRN	Ingestion (mg/L)*				Dermal (mg/L)*				Inhalation (mg/L) [†]				Ingestion + Dermal + Inhalation (mg/L) ^{††}			
		10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Triethylamine	000121-44-8											1.5E-02	1.5E-03				
Trifluralin	001582-09-8	1.1E+00	1.1E-02	2.7E-01	2.7E-02	2.3E+00	2.3E-02	5.7E-01	5.7E-02					7.5E-01	7.5E-03	1.8E-01	1.8E-02
Trimethyl Lead	007442-13-9																
Trimethyl Phosphate	000512-56-1	2.3E-01	2.3E-03														
Trimethylethyl Lead	001762-26-1																
Trinitrobenzene, 1,3,5-	000099-35-4			1.8E-03	1.8E-04			7.2E-01	7.2E-02							1.8E-03	1.8E-04
Trinitrophenylmethylnitr amine	000479-45-8			3.7E-01	3.7E-02			8.5E+01	8.5E+00							3.6E-01	3.6E-02
Trinitrotoluene, 2,4,6-	000118-96-7	2.8E-01	2.8E-03	1.8E-02	1.8E-03	2.1E+01	2.1E-01	1.3E+00	1.3E-01					2.8E-01	2.8E-03	1.8E-02	1.8E-03
Tripnpyl Lead	006618-03-7																
Uranium (Soluble Salts)	NA			1.1E-01	1.1E-02			3.8E+01	3.8E+00							1.1E-01	1.1E-02
Vanadium Pentoxide	001314-62-1			3.3E-01	3.3E-02			2.7E+01	2.7E+00							3.2E-01	3.2E-02
Vanadium Sulfate	036907-42-3			7.3E-01	7.3E-02			6.0E+01	6.0E+00							7.2E-01	7.2E-02
Vanadium, Metallic	007440-62-2			2.6E-01	2.6E-02			1.1E+00	1.1E-01							2.1E-01	2.1E-02
Vanadyl Sulfate	027774-13-6			7.3E-01	7.3E-02			6.0E+01	6.0E+00							7.2E-01	7.2E-02
Vernolate	001929-77-7			3.7E-02	3.7E-03												
Vinclozolin	050471-44-8			9.1E-01	9.1E-02												
Vinyl Acetate	000108-05-4			3.7E+01	3.7E+00			8.4E+02	8.4E+01			4.2E-01	4.2E-02			4.1E-01	4.1E-02
Vinyl Bromide	000593-60-2									1.5E-02	1.5E-04	6.3E-03	6.3E-04				
Vinyl Chloride ⁽⁹⁾	000075-01-4	4.5E-03	4.5E-05			2.5E-01	2.5E-03			5.7E-03	5.7E-05			2.5E-03	2.5E-05		
Warfarin	000081-81-2			1.1E-02	1.1E-03			4.8E-01	4.8E-02							1.1E-02	1.1E-03
White Phosphorus	007723-14-0			7.3E-04	7.3E-05			6.0E-02	6.0E-03							7.2E-04	7.2E-05

Table 3.1a. (continued)

Chemical	CASRN	Ingestion (mg/L)*				Dermal (mg/L)*				Inhalation (mg/L)†*				Ingestion + Dermal + Inhalation (mg/L)††			
		10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Xylene, Mixture ⁽⁶⁾	001330-20-7			7.3E+01	7.3E+00			2.9E+02	2.9E+01							5.8E+01	5.8E+00
Xylene, P. ⁽⁶⁾	000106-42-3																
Xylene, m. ⁽⁶⁾	000108-38-3			7.3E+01	7.3E+00			3.0E+02	3.0E+01							5.9E+01	5.9E+00
Xylene, o. ⁽⁶⁾	000095-47-6			7.3E+01	7.3E+00			3.0E+02	3.0E+01							5.9E+01	5.9E+00
Zinc (Metallic)	007440-66-6			1.1E+01	1.1E+00			9.0E+02	9.0E+01							1.1E+01	1.1E+00
Zinc Cyanide	000557-21-1			1.8E+00	1.8E-01			1.5E+02	1.5E+01							1.8E+00	1.8E-01
Zinc Phosphide	001314-84-7			1.1E-02	1.1E-03			9.0E-01	9.0E-02							1.1E-02	1.1E-03
Zinc	012122-67-7			1.8E+00	1.8E-01												
Zirconium	007440-67-7																

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 for only those 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^{-5} 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 inhalation of volatiles. 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, dermal, OR inhalation), the total for ingestion plus dermal plus inhalation was not calculated.
- * By definition, 1 L (water) = 1.0E + 06 mg (water). Therefore, a limit of 1.0E + 06 mg/L was used for any PRG that was calculated to be above this limit.
- (1) The same oral slope factor as used for polychlorinated biphenyls.
- (2) The PRG was calculated considering *Supplemental Guidance from RAGS: Region 4 Bulletins, Human Health Risk Assessment* (Interim 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,

Table 3.1a. (continued)

- 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.
- (3) The toxicity values for trichloroethylene have been withdrawn from IRIS and HEAST pending further investigation. However, the most recent toxicity values have been used to calculate the PRG.
 - (4) The PRG was calculated considering *Supplemental Guidance from RAGS: Region 4 Bulletins, Human Health Risk Assessment* (Interim Guidance) from EPA (November 1995). The slope factors for chemicals so marked indicate that a TEF methodology was used for chlorinated dioxin and furan congeners based on each compound's relative potency to the potency of 2,3,7,8-tetrachlorodibenzodioxin (TCDD). The following TEFs were used to convert each slope factor to an equivalent slope factor of 2,3,7,8-TCDD: (1) 2,3,7,8-TCDD, TEF = 1.0; (2) 2,3,7,8-PeCDD, TEF = 0.5; (3) 2,3,7,8-HxCDD, TEF = 0.1; (4) 2,3,7,8-HpCDD, TEF = 0.01; (5) OCDD, TEF = 0.001; (6) 2,3,7,8-TCDF, TEF = 0.1; (7) 1,2,3,7,8-PeCDF, TEF = 0.5; (8) 2,3,4,7,8-PeCDF, TEF = 0.05; (9) 2,3,7,8-HxCDF, TEF = 0.1; (10) 2,3,7,8-HpCDF, TEF = 0.01; and (11) OCDF, TEF = 0.001.
 - (5) Toxicity values for these chemicals have been withdrawn from IRIS and HEAST pending further investigation. However, the most recent toxicity values have been used to calculate the PRG.
 - (6) Toxicity values for these chemicals were obtained from the Superfund Health Risk Technical Support Center.

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	015760-04-0	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				

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
Ar-41	014163-25-8						
At-217	017239-90-6	5.3E+08	5.3E+06				
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				

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
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				
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				

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-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				
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				

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
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				
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				

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
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	4.3E+05	4.3E+03	5.8E+04	5.8E+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				
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				

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-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				
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						

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-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				
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				

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
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				
P-33	015749-66-3	6.1E+03	6.1E+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
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				

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-148	014683-19-3	3.3E+02	3.3E+00				
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				

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
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				
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				

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
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				
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			7.8E+03	7.8E+01		
Rn-222+D	014859-67-7			2.0E+02	2.0E+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				

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
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				
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				

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
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				
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				

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
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				
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				

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
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				
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				

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
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						
Xe-127	013994-19-9						
Xe-129m	013965-99-6						

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-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				
Zr-93	015751-77-6	9.1E+03	9.1E+01				
Zr-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 slope factors were available for only one pathway (i.e., ingestion OR inhalation), the total for ingestion plus inhalation was not calculated.

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)**v			
		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
ALAR	001596-84-5			1.1E+05	1.2E+04	1.1E+04	1.2E+03			1.0E+05	1.0E+04							5.3E+04	5.3E+03
Acenaphthene	000083-32-9			4.4E+04	4.7E+03	4.4E+03	4.7E+02			2.6E+04	2.6E+03							1.6E+04	1.6E+03
Acenaphthylene	000208-96-8																		
Acephate	030560-19-1	7.3E+03	7.3E+01	2.9E+03	3.1E+02	2.9E+02	3.1E+01	1.8E+04	1.8E+02	2.8E+03	2.8E+02					9.5E+03	9.5E+01	1.4E+03	1.4E+02
Acetaldehyde	000075-07-0											6.6E+03	6.6E+01	5.6E+02	5.6E+01				
Acetochlor	034256-82-1			1.5E+04	1.6E+03	1.5E+03	1.6E+02			1.4E+04	1.4E+03							7.1E+03	7.1E+02
Acetone	000067-64-1			7.3E+04	7.8E+03	7.3E+03	7.8E+02			1.1E+05	1.1E+04							4.5E+04	4.5E+03
Acetone Cyano-hydrin	000075-86-5			5.8E+02	6.3E+01	5.8E+01	6.3E+00			5.5E+02	5.5E+01			1.0E+06	1.0E+06			2.8E+02	2.8E+01
Acetonitrile	000075-05-8			4.4E+03	4.7E+02	4.4E+02	4.7E+01			6.6E+03	6.6E+02			1.0E+06	1.0E+06			2.6E+03	2.6E+02
Acetophenone ⁽⁵⁾	000098-86-2			7.3E+04	7.8E+03	7.3E+03	7.8E+02			1.1E+05	1.1E+04			8.9E+04	8.9E+03			2.9E+04	2.9E+03
Acrolein ⁽⁶⁾	000107-02-8			1.5E+04	1.6E+03	1.5E+03	1.6E+02			2.2E+04	2.2E+03			2.8E-01	2.8E-02			2.8E-01	2.8E-02
Acrylamide	000079-06-1	1.4E+01	1.4E-01	1.5E+02	1.6E+01	1.5E+01	1.6E+00	3.6E+01	3.6E-01	1.4E+02	1.4E+01	8.1E+05	8.1E+03			1.8E+01	1.8E-01	7.1E+01	7.1E+00
Acrylic Acid	000079-10-7			3.7E+05	3.9E+04	3.7E+04	3.9E+03			3.4E+05	3.4E+04			1.0E+06	4.5E+05			1.7E+05	1.7E+04
Acrylonitrile	000107-13-1	1.2E+02	1.2E+00	7.3E+02	7.8E+01	7.3E+01	7.8E+00	4.8E+02	4.8E+00	1.1E+03	1.1E+02	1.3E+01	1.3E-01	7.6E+00	7.6E-01	1.2E+01	1.2E-01	7.4E+00	7.4E-01
Alachlor	015972-60-8	8.0E+02	8.0E+00	7.3E+03	7.8E+02	7.3E+02	7.8E+01	2.0E+03	2.0E+01	6.9E+03	6.9E+02					1.0E+03	1.0E+01	3.5E+03	3.5E+02
Aldicarb	000116-06-3			7.3E+02	7.8E+01	7.3E+01	7.8E+00			6.9E+02	6.9E+01							3.5E+02	3.5E+01
Aldicarb Sul-fone	001646-88-4			7.3E+02	7.8E+01	7.3E+01	7.8E+00			6.9E+02	6.9E+01							3.5E+02	3.5E+01
Aldrin	000309-00-2	3.8E+00	3.8E-02	2.2E+01	2.3E+00	2.2E+00	2.3E-01	9.5E+00	9.5E-02	2.1E+01	2.1E+00	2.1E+05	2.1E+03			4.9E+00	4.9E-02	1.1E+01	1.1E+00
Allyl	074223-64-6			1.8E+05	2.0E+04	1.8E+04	2.0E+03			1.7E+05	1.7E+04							8.9E+04	8.9E+03
Allyl Alcohol	000107-18-6			3.7E+03	3.9E+02	3.7E+02	3.9E+01			5.5E+03	5.5E+02							2.2E+03	2.2E+02

Table 3.1c. (continued)

Chemical	CASRN	Ingestion (mg/kg)*						Dermal (mg/kg)*				Inhalation (mg/kg)* ^v				Ingestion + Dermal + Inhalation (mg/kg) ^{†v}			
		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Allyl Chloride ⁽⁹⁾	000107-05-1			3.7E+04	3.9E+03	3.7E+03	3.9E+02			5.5E+04	5.5E+03			1.0E+01	1.0E+00			1.0E+01	1.0E+00
Aluminum	007429-90-5																		
Aluminum Phosphide	020859-73-8			2.9E+02	3.1E+01	2.9E+01	3.1E+00			1.1E+03	1.1E+02							2.3E+02	2.3E+01
Amdro	067485-29-4			2.2E+02	2.3E+01	2.2E+01	2.3E+00			2.1E+02	2.1E+01							1.1E+02	1.1E+01
Ametryn	000834-12-8			6.6E+03	7.0E+02	6.6E+02	7.0E+01			6.2E+03	6.2E+02							3.2E+03	3.2E+02
Aminophenol, m-	000591-27-5			5.1E+04	5.5E+03	5.1E+03	5.5E+02			4.8E+04	4.8E+03							2.5E+04	2.5E+03
Aminopyridine, 4-	000504-24-5			1.5E+01	1.6E+00	1.5E+00	1.6E-01			1.4E+01	1.4E+00							7.1E+00	7.1E-01
Amitraz	033089-61-1			1.8E+03	2.0E+02	1.8E+02	2.0E+01			1.7E+03	1.7E+02							8.9E+02	8.9E+01
Ammonia	007664-41-7													1.0E+06	1.0E+06				
Ammonium Sulfamate	007773-06-0			1.5E+05	1.6E+04	1.5E+04	1.6E+03			5.5E+05	5.5E+04							1.2E+05	1.2E+04
Aniline	000062-53-3	1.1E+04	1.1E+02					2.8E+04	2.8E+02					1.0E+06	4.5E+05	1.5E+04	1.5E+02		
Anthracene	000120-12-7			2.2E+05	2.3E+04	2.2E+04	2.3E+03			3.1E+05	3.1E+04							1.3E+05	1.3E+04
Antimony (metallic)	007440-36-0			2.9E+02	3.1E+01	2.9E+01	3.1E+00			1.1E+02	1.1E+01							8.0E+01	8.0E+00
Antimony Pentoxide	001314-60-9			3.7E+02	3.9E+01	3.7E+01	3.9E+00			1.4E+03	1.4E+02							2.9E+02	2.9E+01
Antimony Potassium Tartrate	000304-61-0			6.6E+02	7.0E+01	6.6E+01	7.0E+00			2.5E+03	2.5E+02							5.2E+02	5.2E+01
Antimony Tetroxide	001332-81-6			2.9E+02	3.1E+01	2.9E+01	3.1E+00			1.1E+03	1.1E+02							2.3E+02	2.3E+01
Antimony Trioxide	001309-64-4			2.9E+02	3.1E+01	2.9E+01	3.1E+00			1.1E+03	1.1E+02			8.9E+05	8.9E+04			2.3E+02	2.3E+01
Apollo	074115-24-5			9.5E+03	1.0E+03	9.5E+02	1.0E+02			9.0E+03	9.0E+02							4.6E+03	4.6E+02

Table 3.1c. (continued)

Chemical	CASRN	Ingestion (mg/kg)*						Dermal (mg/kg)*				Inhalation (mg/kg)**				Ingestion + Dermal + Inhalation (mg/kg)**			
		10 ⁻⁴	10 ⁻⁴	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Aramite	000140-57-8	2.6E+03	2.6E+01	3.7E+04	3.9E+03	3.7E+03	3.9E+02	6.4E+03	6.4E+01	3.4E+04	3.4E+03	1.0E+06	1.0E+06			3.3E+03	3.3E+01	1.8E+04	1.8E+03
Aroclor 1016	012674-11-2			5.1E+01	5.5E+00	5.1E+00	5.5E-01			1.4E+01	1.4E+00							1.1E+01	1.1E+00
Aroclor 1221 ⁽¹⁾	011104-28-2	8.3E+00	8.3E-02					6.3E+00	6.3E-02							4.9E+00	4.9E-02		
Aroclor 1232 ⁽¹⁾	011141-16-5	8.3E+00	8.3E-02					6.3E+00	6.3E-02							4.9E+00	4.9E-02		
Aroclor 1242 ⁽¹⁾	053469-21-9	8.3E+00	8.3E-02					6.3E+00	6.3E-02							4.9E+00	4.9E-02		
Aroclor 1248 ⁽¹⁾	012672-29-6	8.3E+00	8.3E-02					6.3E+00	6.3E-02							4.9E+00	4.9E-02		
Aroclor 1254	011097-69-1			1.5E+01	1.6E+00	1.5E+00	1.6E-01			4.1E+00	4.1E-01							3.2E+00	3.2E-01
Aroclor 1260 ⁽¹⁾	011096-82-5	8.3E+00	8.3E-02					6.3E+00	6.3E-02							4.9E+00	4.9E-02		
Arsenic Salts	NA																		
Arsenic, Inorganic	007440-38-2	4.3E+01	4.3E-01	2.2E+02	2.3E+01	2.2E+01	2.3E+00	8.8E+02	8.8E+00	1.7E+03	1.7E+02	7.3E+04	7.3E+02			1.0E+02	1.0E+00	1.9E+02	1.9E+01
Arsine	007784-42-1													2.2E+05	2.2E+04				
Asbestos	001332-21-4																		
Assure	076578-14-8			6.6E+03	7.0E+02	6.6E+02	7.0E+01			6.2E+03	6.2E+02							3.2E+03	3.2E+02
Asulam	003337-71-1			3.7E+04	3.9E+03	3.7E+03	3.9E+02			3.4E+04	3.4E+03							1.8E+04	1.8E+03
Atrazine	001912-24-9	2.9E+02	2.9E+00	2.6E+04	2.7E+03	2.6E+03	2.7E+02	7.2E+02	7.2E+00	2.4E+04	2.4E+03					3.7E+02	3.7E+00	1.2E+04	1.2E+03
Avermectin B1	065195-55-3			2.9E+02	3.1E+01	2.9E+01	3.1E+00			2.8E+02	2.8E+01							1.4E+02	1.4E+01
Azobenzene	000103-33-3	5.8E+02	5.8E+00					1.5E+03	1.5E+01			1.0E+06	3.3E+05			7.5E+02	7.5E+00		
Barium	007440-39-3			5.1E+04	5.5E+03	5.1E+03	5.5E+02			6.7E+04	6.7E+03			1.0E+06	2.2E+05			2.9E+04	2.9E+03
Barium Cyanide	000542-62-1			7.3E+04	7.8E+03	7.3E+03	7.8E+02			2.8E+05	2.8E+04							5.8E+04	5.8E+03

Table 3.1c. (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	HQ=0.1 Adult	HQ=0.1 Child	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Baygon	000114-26-1			2.9E+03	3.1E+02	2.9E+02	3.1E+01			2.8E+03	2.8E+02							1.4E+03	1.4E+02
Bayleton	043121-43-3			2.2E+04	2.3E+03	2.2E+03	2.3E+02			2.1E+04	2.1E+03							1.1E+04	1.1E+03
Baythroid	068359-37-5			1.8E+04	2.0E+03	1.8E+03	2.0E+02			1.7E+04	1.7E+03							8.9E+03	8.9E+02
Benefin	001861-40-1			2.2E+05	2.3E+04	2.2E+04	2.3E+03			2.1E+05	2.1E+04							1.1E+05	1.1E+04
Benomyl	017804-35-2			3.7E+04	3.9E+03	3.7E+03	3.9E+02			3.4E+04	3.4E+03							1.8E+04	1.8E+03
Bentazon	025057-89-0			1.8E+03	2.0E+02	1.8E+02	2.0E+01			1.7E+03	1.7E+02							8.9E+02	8.9E+01
Benz[a]anthracene ⁽²⁾	000056-55-3	8.8E+01	8.8E-01					1.4E+02	1.4E+00			1.0E+06	1.2E+05			8.6E+01	8.6E-01		
Benzaldehyde	000100-52-7			7.3E+04	7.8E+03	7.3E+03	7.8E+02			1.1E+05	1.1E+04							4.4E+04	4.4E+03
Benzene	000071-43-2	2.2E+03	2.2E+01					1.1E+04	1.1E+02			5.0E+02	5.5E+00			4.8E+02	4.8E+00		
Benzene Hexachloride	NA																		
Benzene, Ethyldimethyl	NA																		
Benzene, Ethylmethyl	NA																		
Benzene, Methylpropenyl	NA																		
Benzene, Methylpropyl	NA																		
Benzene, Trimethyl	025551-13-7																		
Benzenethiol	000108-98-5			7.3E+00	7.8E-01	7.3E-01	7.8E-02			6.9E+00	6.9E-01							3.5E+00	3.5E-01
Benzidine	000092-87-5	2.8E-01	2.8E-03	2.2E+03	2.3E+02	2.2E+02	2.3E+01	1.1E+00	1.1E-02	3.3E+03	3.3E+02	1.6E+04	1.6E+02			4.5E-01	4.5E-03	1.3E+03	1.3E+02
Benzo[a]pyrene ⁽²⁾	000050-32-8	8.8E+00	8.8E-02					1.4E+01	1.4E-01			1.0E+06	1.2E+04			8.6E+00	8.6E-02		

Table 3.1c. (continued)

Chemical	CASRN	Ingestion (mg/kg)*						Dermal (mg/kg)*				Inhalation (mg/kg)**				Ingestion + Dermal + Inhalation (mg/kg)**v			
		10 ⁻⁴	10 ⁻⁴	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Benzo[b]-fluoranthene ^{tn}	000205-99-2	8.8E+01	8.8E-01					1.4E+02	1.4E+00			1.0E+06	1.2E+05			8.6E+01	8.6E-01		
Benzo[g,h,i]-perylene	000191-24-2																		
Benzo[k]-fluoranthene ^{tn}	000207-08-9	8.8E+02	8.8E+00					1.4E+03	1.4E+01			1.0E+06	1.0E+06			8.6E+02	8.6E+00		
Benzoic Acid	000065-85-0			1.0E+06	3.1E+05	2.9E+05	3.1E+04			1.0E+06	5.5E+05							1.0E+06	1.9E+05
Benzotrachloride	000098-07-7	4.9E+00	4.9E-02					1.2E+01	1.2E-01							6.4E+00	6.4E-02		
Benzyl Alcohol	000100-51-6			2.2E+05	2.3E+04	2.2E+04	2.3E+03			2.7E+05	2.7E+04							1.2E+05	1.2E+04
Benzyl Chloride	000100-44-7	3.8E+02	3.8E+00					1.5E+03	1.5E+01							6.0E+02	6.0E+00		
Beryllium	007440-41-7	1.5E+01	1.5E-01	3.7E+03	3.9E+02	3.7E+02	3.9E+01	7.5E+00	7.5E-02	6.9E+02	6.9E+01	4.3E+05	4.3E+03			6.3E+00	6.3E-02	5.8E+02	5.8E+01
Bidrin	000141-66-2			7.3E+01	7.8E+00	7.3E+00	7.8E-01			6.9E+01	6.9E+00							3.5E+01	3.5E+00
Biphenanthrin	082657-04-3			1.1E+04	1.2E+03	1.1E+03	1.2E+02			1.0E+04	1.0E+03							5.3E+03	5.3E+02
Biphenyl, 1,1'-	000092-52-4			3.7E+04	3.9E+03	3.7E+03	3.9E+02			3.4E+04	3.4E+03							1.8E+04	1.8E+03
Bis(2-chloro-1-methyl-ethyl)ether (Technical)	000108-60-1	9.1E+02	9.1E+00					3.7E+03	3.7E+01			3.5E+02	3.4E+01			3.5E+02	1.0E+01		
Bis(2-chloroethoxy) methane	000111-91-1																		
Bis(2-chloroethyl)-ether	000111-44-4	5.8E+01	5.8E-01					2.3E+02	2.3E+00			1.4E+02	1.4E+00			5.6E+01	5.6E-01		
Bis(2-chloroisopropyl)ether	039638-32-9			2.9E+04	3.1E+03	2.9E+03	3.1E+02			4.4E+04	4.4E+03							1.8E+04	1.8E+03

Table 3.1c. (continued)

Chemical	CASRN	Ingestion (mg/kg)*						Dermal (mg/kg)*				Inhalation (mg/kg)*v				Ingestion + Dermal + Inhalation (mg/kg)*+v			
		10 ⁻⁴	10 ⁻⁴	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Bis(2-ethylhexyl)-phthalate ⁽⁶⁾	000117-81-7	4.6E+03	4.6E+01	1.5E+04	1.6E+03	1.5E+03	1.6E+02	4.4E+03	4.4E+01	5.2E+03	5.2E+02					3.2E+03	3.2E+01	3.9E+03	3.9E+02
Bis(chloromethyl)ether	000542-88-1	2.9E-01	2.9E-03					1.2E+00	1.2E-02			4.4E-01	4.4E-03			2.3E-01	2.3E-03		
Bisphenol A	000080-05-7			3.7E+04	3.9E+03	3.7E+03	3.9E+02			3.4E+04	3.4E+03							1.8E+04	1.8E+03
Boron And Borates Only	007440-42-8			6.6E+04	7.0E+03	6.6E+03	7.0E+02			1.0E+06	1.1E+05			1.0E+06	1.0E+06			6.2E+04	6.2E+03
Boron Tri-fluoride	007637-07-2													1.0E+06	3.1E+05				
Bromochloromethane	000074-97-5																		
Bromodichloromethane	000075-27-4	1.0E+03	1.0E+01	1.5E+04	1.6E+03	1.5E+03	1.6E+02	5.1E+03	5.1E+01	2.7E+04	2.7E+03					1.8E+03	1.8E+01	9.5E+03	9.5E+02
Bromodiphenyl Ether, p-	000101-55-3																		
Bromoform	000075-25-2	8.1E+03	8.1E+01	1.5E+04	1.6E+03	1.5E+03	1.6E+02	2.4E+04	2.4E+02	1.7E+04	1.7E+03	1.0E+06	1.0E+06			1.1E+04	1.1E+02	7.8E+03	7.8E+02
Bromomethane ⁽⁶⁾	000074-83-9			1.0E+03	1.1E+02	1.0E+02	1.1E+01			1.5E+03	1.5E+02			1.7E+01	1.7E+00			1.7E+01	1.7E+00
Bromophos	002104-96-3			3.7E+03	3.9E+02	3.7E+02	3.9E+01			3.4E+03	3.4E+02							1.8E+03	1.8E+02
Bromotrichloromethane	000075-62-7																		
Bromoxynil	001689-84-5			1.5E+04	1.6E+03	1.5E+03	1.6E+02			1.4E+04	1.4E+03							7.1E+03	7.1E+02
Bromoxynil Octanoate	001689-99-2			1.5E+04	1.6E+03	1.5E+03	1.6E+02			1.4E+04	1.4E+03							7.1E+03	7.1E+02
Butadiene, 1,3-	000106-99-0											2.9E+00	2.9E-02						
Butanol, N-	000071-36-3			7.3E+04	7.8E+03	7.3E+03	7.8E+02			6.9E+04	6.9E+03							3.5E+04	3.5E+03

Table 3.1c. (continued)

Chemical	CASRN	Ingestion (mg/kg)*						Dermal (mg/kg)*				Inhalation (mg/kg)* ^x				Ingestion + Dermal + Inhalation (mg/kg)* ^{xv}			
		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Butanone-2, 4-chloro-4,4-difluoro	NA																		
Butyl Benzyl Phthalate	000085-68-7			1.5E+05	1.6E+04	1.5E+04	1.6E+03			1.7E+05	1.7E+04							7.8E+04	7.8E+03
Butylate	002008-41-5			3.7E+04	3.9E+03	3.7E+03	3.9E+02			3.4E+04	3.4E+03							1.8E+04	1.8E+03
Butylchloride, t-	000507-20-0																		
Butylphthalyl Butylglycolate	000085-70-1			7.3E+05	7.8E+04	7.3E+04	7.8E+03			6.9E+05	6.9E+04							3.5E+05	3.5E+04
Cacodylic Acid	000075-60-5			2.2E+03	2.3E+02	2.2E+02	2.3E+01			2.1E+03	2.1E+02							1.1E+03	1.1E+02
Cadmium (Diet)	007440-43-9			7.3E+02	7.8E+01	7.3E+01	7.8E+00			1.4E+01	1.4E+00	6.0E+05	6.0E+03					1.4E+01	1.4E+00
Calcium Cyanide	000592-01-8			2.9E+04	3.1E+03	2.9E+03	3.1E+02			1.1E+05	1.1E+04							2.3E+04	2.3E+03
Caprolactam	000105-60-2			3.7E+05	3.9E+04	3.7E+04	3.9E+03			3.4E+05	3.4E+04							1.8E+05	1.8E+04
Captafol	002425-06-1	7.4E+03	7.4E+01	1.5E+03	1.6E+02	1.5E+02	1.6E+01	1.9E+04	1.9E+02	1.4E+03	1.4E+02					9.6E+03	9.6E+01	7.1E+02	7.1E+01
Captan	000133-06-2	1.8E+04	1.8E+02	9.5E+04	1.0E+04	9.5E+03	1.0E+03	4.6E+04	4.6E+02	9.0E+04	9.0E+03					2.4E+04	2.4E+02	4.6E+04	4.6E+03
Carbaryl	000063-25-2			7.3E+04	7.8E+03	7.3E+03	7.8E+02			6.9E+04	6.9E+03							3.5E+04	3.5E+03
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	3.7E+02	3.9E+01			3.4E+03	3.4E+02							1.8E+03	1.8E+02
Carbon Disulfide	000075-15-0			7.3E+04	7.8E+03	7.3E+03	7.8E+02			3.5E+03	3.5E+02			1.7E+03	1.4E+03			1.7E+03	2.7E+02
Carbon Tetrachloride ^Q	000056-23-5	4.9E+02	4.9E+00	5.1E+02	5.5E+01	5.1E+01	5.5E+00	1.6E+03	1.6E+01	6.3E+02	6.3E+01	3.1E+02	3.1E+00			2.1E+02	2.1E+00	2.8E+02	2.8E+01
Carbosulfan	055285-14-8			7.3E+03	7.8E+02	7.3E+02	7.8E+01			6.9E+03	6.9E+02							3.5E+03	3.5E+02
Carboxin	005234-68-4			7.3E+04	7.8E+03	7.3E+03	7.8E+02			6.9E+04	6.9E+03							3.5E+04	3.5E+03

Table 3.1c. (continued)

Chemical	CASRN	Ingestion (mg/kg)*						Dermal (mg/kg)*				Inhalation (mg/kg) ^v				Ingestion + Dermal + Inhalation (mg/kg) ^{t,v}			
		10 ⁻⁴	10 ⁻⁴	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Chloral	000075-87-6			1.5E+03	1.6E+02	1.5E+02	1.6E+01			1.4E+03	1.4E+02							7.1E+02	7.1E+01
Chloramben	000133-90-4			1.1E+04	1.2E+03	1.1E+03	1.2E+02			1.0E+04	1.0E+03							5.3E+03	5.3E+02
Chloranil	000118-75-2	1.6E+02	1.6E+00					4.0E+02	4.0E+00							2.1E+02	2.1E+00		
Chlordane ⁽⁹⁾	000057-74-9	4.9E+01	4.9E-01	4.4E+01	4.7E+00	4.4E+00	4.7E-01	1.2E+02	1.2E+00	4.1E+01	4.1E+00	1.0E+06	2.8E+04			6.4E+01	6.4E-01	2.1E+01	2.1E+00
Chloride	016887-00-6																		
Chlorimuron, Ethyl-	090982-32-4			1.5E+04	1.6E+03	1.5E+03	1.6E+02			1.4E+04	1.4E+03							7.1E+03	7.1E+02
Chlorine	007782-50-5			7.3E+04	7.8E+03	7.3E+03	7.8E+02			2.8E+05	2.8E+04							5.8E+04	5.8E+03
Chlorine Dioxide	010049-04-4													8.9E+05	8.9E+04				
Chlorite (Sodium Salt)	007758-19-2																		
Chloro-1,1-difluoroethane, 1-	000075-68-3													1.0E+06	1.0E+06				
Chloro-1,3-butadiene, 2-	000126-99-8			1.5E+04	1.6E+03	1.5E+03	1.6E+02			2.2E+04	2.2E+03			3.1E+02	3.1E+01			3.0E+02	3.0E+01
Chloro-2-methylaniline HCl, 4-	003165-93-3	1.4E+02	1.4E+00					3.5E+02	3.5E+00							1.8E+02	1.8E+00		
Chloro-2-methylaniline, 4-	000095-69-2	1.1E+02	1.1E+00					2.8E+02	2.8E+00							1.4E+02	1.4E+00		
Chloroacetic Acid	000079-11-8			1.5E+03	1.6E+02	1.5E+02	1.6E+01			1.4E+03	1.4E+02							7.1E+02	7.1E+01
Chloroacetophenone, 2-	000532-27-4													1.3E+05	1.3E+04				
Chloroaniline, p-	000106-47-8			2.9E+03	3.1E+02	2.9E+02	3.1E+01			2.8E+03	2.8E+02							1.4E+03	1.4E+02

Table 3.1c. (continued)

Chemical	CASRN	Ingestion (mg/kg)*						Dermal (mg/kg)*				Inhalation (mg/kg) ^v				Ingestion + Dermal + Inhalation (mg/kg) ^{†v}			
		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Chlorobenzene ⁽⁶⁾	000108-90-7			1.5E+04	1.6E+03	1.5E+03	1.6E+02			8.5E+03	8.5E+02			5.1E+02	1.0E+02			5.1E+02	8.6E+01
Chlorobenzilate	000510-15-6	2.4E+02	2.4E+00	1.5E+04	1.6E+03	1.5E+03	1.6E+02	6.0E+02	6.0E+00	1.4E+04	1.4E+03	1.0E+06	1.4E+05			3.1E+02	3.1E+00	7.1E+03	7.1E+02
Chlorobenzoic Acid, p-	000074-11-3			1.5E+05	1.6E+04	1.5E+04	1.6E+03			1.4E+05	1.4E+04							7.1E+04	7.1E+03
Chlorobenzotrifluoride, 4-	000098-56-6			1.5E+04	1.6E+03	1.5E+03	1.6E+02			1.4E+04	1.4E+03							7.1E+03	7.1E+02
Chlorobutane, 1-	000109-69-3			2.9E+05	3.1E+04	2.9E+04	3.1E+03			4.4E+05	4.4E+04							1.8E+05	1.8E+04
Chlorobutane, 2-	000078-86-4																		
Chlorocyclopentadiene	041851-50-7																		
Chlorodibromomethane	073506-94-2	7.6E+02	7.6E+00					3.1E+03	3.1E+01							1.2E+03	1.2E+01		
Chlorodifluoromethane	000075-45-6													1.0E+06	1.0E+06				
Chloroform ⁽⁶⁾	000067-66-3	1.0E+04	1.0E+02	7.3E+03	7.8E+02	7.3E+02	7.8E+01	1.1E+04	1.1E+02	2.8E+03	2.8E+02	1.9E+02	1.9E+00			1.8E+02	1.8E+00	1.5E+03	2.0E+02
Chloromethane ⁽⁶⁾	000074-87-3	4.9E+03	4.9E+01					2.0E+04	2.0E+02			4.4E+02	4.4E+00			4.2E+02	4.2E+00		
Chloromethyl Methyl Ether	000107-30-2																		
Chloronaphthalene, Beta-	000091-58-7			5.8E+04	6.3E+03	5.8E+03	6.3E+02			8.8E+04	8.8E+03							3.5E+04	3.5E+03
Chloronitrobenzene, o-	000088-73-3	2.6E+03	2.6E+01					1.0E+04	1.0E+02							4.1E+03	4.1E+01		
Chloronitrobenzene, p-	000121-73-3	3.5E+03	3.5E+01					1.4E+04	1.4E+02							5.7E+03	5.7E+01		

Table 3.1c. (continued)

Chemical	CASRN	Ingestion (mg/kg)*						Dermal (mg/kg)*				Inhalation (mg/kg) ^{iv}				Ingestion + Dermal + Inhalation (mg/kg) ^{i,v}			
		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Chlorophenol, 2-	000095-57-8			3.7E+03	3.9E+02	3.7E+02	3.9E+01			5.5E+03	5.5E+02							2.2E+03	2.2E+02
Chlorophenyl Methyl Sulfide, p-	000123-09-1																		
Chlorophenyl Methyl Sulfoxide	000934-73-6																		
Chloropropane, 2-	000075-29-6													1.5E+03	1.5E+02				
Chlorothalonil	001897-45-6	5.8E+03	5.8E+01	1.1E+04	1.2E+03	1.1E+03	1.2E+02	1.5E+04	1.5E+02	1.0E+04	1.0E+03					7.5E+03	7.5E+01	5.3E+03	5.3E+02
Chlorotoluene, o-	000095-49-8			1.5E+04	1.6E+03	1.5E+03	1.6E+02			2.2E+04	2.2E+03							8.8E+03	8.8E+02
Chlorpropham	000101-21-3			1.5E+05	1.6E+04	1.5E+04	1.6E+03			1.4E+05	1.4E+04							7.1E+04	7.1E+03
Chlorpyrifos	002921-88-2			2.2E+03	2.3E+02	2.2E+02	2.3E+01			2.1E+03	2.1E+02							1.1E+03	1.1E+02
Chlorpyrifos Methyl	005598-13-0			7.3E+03	7.8E+02	7.3E+02	7.8E+01			6.9E+03	6.9E+02							3.5E+03	3.5E+02
Chlorsulfuron	064902-72-3			3.7E+04	3.9E+03	3.7E+03	3.9E+02			3.4E+04	3.4E+03							1.8E+04	1.8E+03
Chlorthiophos	060238-56-4			5.8E+02	6.3E+01	5.8E+01	6.3E+00			5.5E+02	5.5E+01							2.8E+02	2.8E+01
Chromium (III) (Insoluble Salts)	016065-83-1			7.3E+05	7.8E+04	7.3E+04	7.8E+03			6.9E+04	6.9E+03							6.3E+04	6.3E+03
Chromium (VI) ⁶	018540-29-9			3.7E+03	3.9E+02	3.7E+02	3.9E+01			1.4E+03	1.4E+02	8.9E+04	8.9E+02					1.0E+03	1.0E+02
Chromium Salts	NA																		
Chrysene ²⁰	000218-01-9	8.8E+03	8.8E+01					1.4E+04	1.4E+02			1.0E+06	1.0E+06			8.6E+03	8.6E+01		
Cobalt	007440-48-4																		
Coke Oven Emissions	008007-45-2											1.0E+06	1.7E+04						

Table 3.1c. (continued)

Chemical	CASRN	Ingestion (mg/kg)*						Dermal (mg/kg)*				Inhalation (mg/kg)* ^v				Ingestion + Dermal + Inhalation (mg/kg)* ^v			
		10 ⁻⁴	10 ⁻⁴	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Copper	007440-50-8																		
Copper Cyanide	000544-92-3			3.7E+03	3.9E+02	3.7E+02	3.9E+01			1.4E+04	1.4E+03							2.9E+03	2.9E+02
Creosote	008001-58-9																		
Cresol, m-	000108-39-4			3.7E+04	3.9E+03	3.7E+03	3.9E+02			3.4E+04	3.4E+03							1.8E+04	1.8E+03
Cresol, o-	000095-48-7			3.7E+04	3.9E+03	3.7E+03	3.9E+02			3.4E+04	3.4E+03							1.8E+04	1.8E+03
Cresol, p-	000106-44-5			3.7E+03	3.9E+02	3.7E+02	3.9E+01			4.5E+03	4.5E+02							2.0E+03	2.0E+02
Crotonaldehyde	000123-73-9	3.4E+01	3.4E-01					8.5E+01	8.5E-01							4.4E+01	4.4E-01		
Cumene	000098-82-8			2.9E+04	3.1E+03	2.9E+03	3.1E+02			4.4E+04	4.4E+03			3.5E+02	6.6E+01			3.5E+02	6.4E+01
Cyanazine	021725-46-2	7.6E+01	7.6E-01	1.5E+03	1.6E+02	1.5E+02	1.6E+01	1.9E+02	1.9E+00	1.4E+03	1.4E+02					9.8E+01	9.8E-01	7.1E+02	7.1E+01
Cyanide (CN-)	000057-12-5			1.5E+04	1.6E+03	1.5E+03	1.6E+02			4.7E+03	4.7E+02							3.5E+03	3.5E+02
Cyanogen	000460-19-5			2.9E+04	3.1E+03	2.9E+03	3.1E+02			4.4E+04	4.4E+03							1.8E+04	1.8E+03
Cyanogen Bromide	000506-68-3			6.6E+04	7.0E+03	6.6E+03	7.0E+02			9.9E+04	9.9E+03							4.0E+04	4.0E+03
Cyanogen Chloride	000506-77-4			3.7E+04	3.9E+03	3.7E+03	3.9E+02			5.5E+04	5.5E+03							2.2E+04	2.2E+03
Cyclohexane, 1,2,3,4,5-pentabromo-6-chloro-	000087-84-3	2.8E+03	2.8E+01					7.0E+03	7.0E+01							3.6E+03	3.6E+01		
Cyclohexanone	000108-94-1			1.0E+06	3.9E+05	3.7E+05	3.9E+04			1.0E+06	5.5E+05							1.0E+06	2.2E+05
Cyclohexylamine	000108-91-8			1.5E+05	1.6E+04	1.5E+04	1.6E+03			1.4E+05	1.4E+04							7.1E+04	7.1E+03
Cyclopentadiene	000542-92-7																		
Cyhalothrin/karate	068085-85-8			3.7E+03	3.9E+02	3.7E+02	3.9E+01			3.4E+03	3.4E+02							1.8E+03	1.8E+02

Table 3.1c. (continued)

Chemical	CASRN	Ingestion (mg/kg)*						Dermal (mg/kg)*				Inhalation (mg/kg)* ^v				Ingestion + Dermal + Inhalation (mg/kg) ^{†v}			
		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Cypermethrin	052315-07-8			7.3E+03	7.8E+02	7.3E+02	7.8E+01			6.9E+03	6.9E+02							3.5E+03	3.5E+02
Cyromazine	066215-27-8			5.5E+03	5.9E+02	5.5E+02	5.9E+01			5.2E+03	5.2E+02							2.7E+03	2.7E+02
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	3.7E+01	3.9E+00	6.6E+02	6.6E+00	4.8E+02	4.8E+01	1.0E+06	1.1E+05			2.9E+02	2.9E+00	2.1E+02	2.1E+01
Dacthal	001861-32-1			7.3E+03	7.8E+02	7.3E+02	7.8E+01			6.9E+03	6.9E+02							3.5E+03	3.5E+02
Dalapon	000075-99-0			2.2E+04	2.3E+03	2.2E+03	2.3E+02			2.1E+04	2.1E+03							1.1E+04	1.1E+03
Decabromodiphenyl Ether	001163-19-5			7.3E+03	7.8E+02	7.3E+02	7.8E+01			1.1E+04	1.1E+03							4.4E+03	4.4E+02
Demeton	008065-48-3			2.9E+01	3.1E+00	2.9E+00	3.1E-01			2.8E+01	2.8E+00							1.4E+01	1.4E+00
Di(2-ethylhexyl)-adipate	000103-23-1	5.3E+04	5.3E+02	4.4E+05	4.7E+04	4.4E+04	4.7E+03	1.3E+05	1.3E+03	4.1E+05	4.1E+04					6.9E+04	6.9E+02	2.1E+05	2.1E+04
Diallate	002303-16-4	1.0E+03	1.0E+01					4.2E+03	4.2E+01							1.7E+03	1.7E+01		
Diazinon	000333-41-5			6.6E+02	7.0E+01	6.6E+01	7.0E+00			6.2E+02	6.2E+01							3.2E+02	3.2E+01
Dibenz[a,h]-anthracene ⁽²⁾	000053-70-3	8.8E+00	8.8E-02					1.4E+01	1.4E-01			1.0E+06	1.2E+04			8.6E+00	8.6E-02		
Dibromo-3-chloropropane, 1,2-	000096-12-8	4.6E+01	4.6E-01					1.8E+02	1.8E+00			1.0E+06	1.0E+06	8.9E+05	8.9E+04	7.3E+01	7.3E-01		
Dibromo-benzene, 1,4-	000106-37-6			7.3E+03	7.8E+02	7.3E+02	7.8E+01			1.1E+04	1.1E+03							4.4E+03	4.4E+02
Dibromochloromethane	000124-48-1	7.6E+02	7.6E+00	1.5E+04	1.6E+03	1.5E+03	1.6E+02	2.3E+03	2.3E+01	1.7E+04	1.7E+03					1.1E+03	1.1E+01	7.8E+03	7.8E+02
Dibromodichloromethane	000594-18-3																		
Dibromodiphenyl Ether, p,p'-	002050-47-7																		

Table 3.1c. (continued)

Chemical	CASRN	Ingestion (mg/kg)*						Dermal (mg/kg)*				Inhalation (mg/kg)* ^y				Ingestion + Dermal + Inhalation (mg/kg)* ^{yv}			
		10 ⁻⁴	10 ⁻⁴	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Dibromoethane, 1,2-	000106-93-4	7.5E-01	7.5E-03					3.0E+00	3.0E-02			1.5E+02	1.5E+00	2.8E+01	2.8E+00	1.2E+00	1.2E-02		
Dibromomethane (Methylene Bromide)	000074-95-3			7.3E+03	7.8E+02	7.3E+02	7.8E+01			1.1E+04	1.1E+03							4.4E+03	4.4E+02
Dibutyl Phthalate	000084-74-2			7.3E+04	7.8E+03	7.3E+03	7.8E+02			1.4E+05	1.4E+04							4.8E+04	4.8E+03
Dicamba	001918-00-9			2.2E+04	2.3E+03	2.2E+03	2.3E+02			2.1E+04	2.1E+03							1.1E+04	1.1E+03
Dichloro-2-butene, 1,4-	000764-41-0											1.2E+01	1.2E-01						
Dichloroacetic Acid																			
Dichlorobenzene, 1,2-(^o)	000095-50-1			6.6E+04	7.0E+03	6.6E+03	7.0E+02			9.9E+04	9.9E+03			5.1E+02	5.1E+02			5.1E+02	5.1E+02
Dichlorobenzene, 1,3-	000541-73-1																		
Dichlorobenzene, 1,4-	000106-46-7	2.7E+03	2.7E+01					1.2E+04	1.2E+02					3.2E+01	3.2E+01	3.2E+01	3.2E+01		
Dichlorobenzidine, 3,3'-	000091-94-1	1.4E+02	1.4E+00					3.6E+02	3.6E+00							1.8E+02	1.8E+00		
Dichlorodifluoromethane	000075-71-8			1.5E+05	1.6E+04	1.5E+04	1.6E+03			6.3E+04	6.3E+03			2.3E+02	2.3E+01			2.3E+02	2.3E+01
Dichloroethane, 1,1-	000075-34-3			7.3E+04	7.8E+03	7.3E+03	7.8E+02			1.4E+05	1.4E+04			5.6E+00	5.6E-01			5.6E+00	5.6E-01
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	6.6E+02	7.0E+01	5.4E+02	5.4E+00	1.2E+04	1.2E+03	4.5E+00	4.5E-02			4.4E+00	4.4E-02	1.2E+03	4.3E+02

Table 3.1c. (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	HQ=0.1 Adult	HQ=0.1 Child	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Dichloroethylene, 1,2- (Mixed Isomers)	000540-59-0			6.6E+03	7.0E+02	6.6E+02	7.0E+01			9.9E+03	9.9E+02							4.0E+03	4.0E+02
Dichloroethylene, 1,2-cis-	000156-59-2			7.3E+03	7.8E+02	7.3E+02	7.8E+01			1.4E+04	1.4E+03							4.8E+03	4.8E+02
Dichloroethylene, 1,2-trans-	000156-60-5			1.5E+04	1.6E+03	1.5E+03	1.6E+02			2.8E+04	2.8E+03							9.5E+03	9.5E+02
Dichlorophenol, 2,4-	000120-83-2			2.2E+03	2.3E+02	2.2E+02	2.3E+01			3.4E+03	3.4E+02							1.3E+03	1.3E+02
Dichlorophenoxy Acetic Acid, 2,4-	000094-75-7			7.3E+03	7.8E+02	7.3E+02	7.8E+01			1.1E+04	1.1E+03							4.4E+03	4.4E+02
Dichlorophenoxybutyric Acid, 4-(2,4-	000094-82-6			5.8E+03	6.3E+02	5.8E+02	6.3E+01			5.5E+03	5.5E+02							2.8E+03	2.8E+02
Dichloropropane, 1,2-	000078-87-5	9.4E+02	9.4E+00					3.5E+03	3.5E+01					1.0E+02	1.0E+01	4.8E+02	1.5E+01		
Dichloropropanol, 2,3-	000616-23-9			2.2E+03	2.3E+02	2.2E+02	2.3E+01			2.1E+03	2.1E+02							1.1E+03	1.1E+02
Dichloropropene, 1,3-	000542-75-6	3.5E+02	3.5E+00	2.2E+02	2.3E+01	2.2E+01	2.3E+00	9.8E+02	9.8E+00	2.3E+02	2.3E+01	5.4E+02	5.4E+00	1.7E+03	1.7E+02	2.5E+02	2.5E+00	1.0E+02	1.0E+01
Dichlorvos	000062-73-7	2.2E+02	2.2E+00	3.7E+02	3.9E+01	3.7E+01	3.9E+00	5.5E+02	5.5E+00	3.4E+02	3.4E+01			1.0E+06	2.2E+05	2.9E+02	2.9E+00	1.8E+02	1.8E+01
Dicofol	000115-32-2																		
Dicyclopentadiene	000077-73-6			2.2E+04	2.3E+03	2.2E+03	2.3E+02			3.3E+04	3.3E+03			3.0E+01	3.0E+00			3.0E+01	3.0E+00
Dieldrin	000060-57-1	4.0E+00	4.0E-02	3.7E+01	3.9E+00	3.7E+00	3.9E-01	1.0E+01	1.0E-01	3.4E+01	3.4E+00	2.3E+05	2.3E+03			5.2E+00	5.2E-02	1.8E+01	1.8E+00
Diethyl Phthalate	000084-66-2			5.8E+05	6.3E+04	5.8E+04	6.3E+03			9.9E+05	9.9E+04							3.7E+05	3.7E+04
Diethyl-p-nitrophenylphosphate	000311-45-5																		

Table 3.1c. (continued)

Chemical	CASRN	Ingestion (mg/kg)*						Dermal (mg/kg)*				Inhalation (mg/kg)* ^v				Ingestion + Dermal + Inhalation (mg/kg)* ^{iv}			
		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Diethylene Glycol Dinitrate (DEGDN)	000693-21-0																		
Diethylene Glycol Monobutyl Ether	000112-34-5													1.0E+06	1.0E+06				
Diethylene Glycol Monoethyl Ether	000111-90-0			1.0E+06	1.6E+05	1.5E+05	1.6E+04			1.0E+06	1.4E+05							7.1E+05	7.1E+04
Diethylformamide	000617-84-5			8.0E+03	8.6E+02	8.0E+02	8.6E+01			7.6E+03	7.6E+02							3.9E+03	3.9E+02
Diethylstilbestrol	000056-53-1	1.4E-02	1.4E-04					3.4E-02	3.4E-04			7.4E+03	7.4E+01			1.8E-02	1.8E-04		
Difenzoquat	043222-48-6			5.8E+04	6.3E+03	5.8E+03	6.3E+02			5.5E+04	5.5E+03							2.8E+04	2.8E+03
Diflubenzuron	035367-38-5			1.5E+04	1.6E+03	1.5E+03	1.6E+02			1.4E+04	1.4E+03							7.1E+03	7.1E+02
Difluoroethane, 1,1-	000075-37-6													1.0E+06	1.0E+06				
Diisopropyl Methylphosphonate	001445-75-6			5.8E+04	6.3E+03	5.8E+03	6.3E+02			5.5E+04	5.5E+03							2.8E+04	2.8E+03
Dimethipin	055290-64-7			1.5E+04	1.6E+03	1.5E+03	1.6E+02			1.4E+04	1.4E+03							7.1E+03	7.1E+02
Dimethoate	000060-51-5			1.5E+02	1.6E+01	1.5E+01	1.6E+00			1.4E+02	1.4E+01							7.1E+01	7.1E+00
Dimethoxybenzidine, 3,3'-	000119-90-4	4.6E+03	4.6E+01					1.1E+04	1.1E+02							5.9E+03	5.9E+01		
Dimethyl Sulfate	000077-78-1																		
Dimethylaniline HCl, 2,4-	021436-96-4	1.1E+02	1.1E+00					2.8E+02	2.8E+00							1.4E+02	1.4E+00		

Table 3.1c. (continued)

Chemical	CASRN	Ingestion (mg/kg)*						Dermal (mg/kg)*				Inhalation (mg/kg) ^v				Ingestion + Dermal + Inhalation (mg/kg) ^{†v}			
		10 ⁻⁴	10 ⁻⁴	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Dimethylaniline, 2,4-	000095-68-1	8.5E+01	8.5E-01					2.1E+02	2.1E+00							1.1E+02	1.1E+00		
Dimethylaniline, N,N-	000121-69-7			1.5E+03	1.6E+02	1.5E+02	1.6E+01			1.4E+03	1.4E+02							7.1E+02	7.1E+01
Dimethylbenzidine, 3,3'-	000119-93-7	6.9E+00	6.9E-02					1.7E+01	1.7E-01							9.0E+00	9.0E-02		
Dimethylethyl Lead	107584-40-7																		
Dimethylformamide	000068-12-2			7.3E+04	7.8E+03	7.3E+03	7.8E+02			6.9E+04	6.9E+03			1.0E+06	1.0E+06			3.5E+04	3.5E+03
Dimethylhydrazine, 1,1. ⁽⁹⁾	000057-14-7	2.5E+01	2.5E-01					6.2E+01	6.2E-01			1.0E+06	1.0E+04			3.2E+01	3.2E-01		
Dimethylhydrazine, 1,2-	000540-73-8																		
Dimethylphenol, 2,4-	000105-67-9			1.5E+04	1.6E+03	1.5E+03	1.6E+02			2.2E+04	2.2E+03							8.8E+03	8.8E+02
Dimethylphenol, 2,6-	000576-26-1			4.4E+02	4.7E+01	4.4E+01	4.7E+00			4.1E+02	4.1E+01							2.1E+02	2.1E+01
Dimethylphenol, 3,4-	000095-65-8			7.3E+02	7.8E+01	7.3E+01	7.8E+00			6.9E+02	6.9E+01							3.5E+02	3.5E+01
Dimethylphthalate ⁽⁹⁾	000131-11-3			1.0E+06	7.8E+05	7.3E+05	7.8E+04			1.0E+06	1.0E+06							1.0E+06	4.6E+05
Dimethylterephthalate	000120-61-6			7.3E+04	7.8E+03	7.3E+03	7.8E+02			6.9E+04	6.9E+03							3.5E+04	3.5E+03
Dinitro-o-cresol, 4,6-	000534-52-1																		
Dinitro-o-cyclohexyl Phenol, 4,6-	000131-89-5			1.5E+03	1.6E+02	1.5E+02	1.6E+01			1.4E+03	1.4E+02							7.1E+02	7.1E+01
Dinitrobenzene, 1,2-	000528-29-0			2.9E+02	3.1E+01	2.9E+01	3.1E+00			5.1E+02	5.1E+01							1.9E+02	1.9E+01

Table 3.1c. (continued)

Chemical	CASRN	Ingestion (mg/kg)*						Dermal (mg/kg)*				Inhalation (mg/kg)* ^v				Ingestion + Dermal + Inhalation (mg/kg) ^{1,v}			
		10 ⁻⁴	10 ⁻⁴	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Dinitrobenzene, 1,3-	000099-65-0			7.3E+01	7.8E+00	7.3E+00	7.8E-01			9.0E+01	9.0E+00							4.0E+01	4.0E+00
Dinitrobenzene, 1,4-	000100-25-4			2.9E+02	3.1E+01	2.9E+01	3.1E+00			2.8E+02	2.8E+01							1.4E+02	1.4E+01
Dinitrophenol, 2,4-	000051-28-5			1.5E+03	1.6E+02	1.5E+02	1.6E+01			2.8E+03	2.8E+02							9.5E+02	9.5E+01
Dinitrotoluene, 2,4-	000121-14-2	9.4E+01	9.4E-01	1.5E+03	1.6E+02	1.5E+02	1.6E+01	4.0E+02	4.0E+00	2.3E+03	2.3E+02					1.5E+02	1.5E+00	9.0E+02	9.0E+01
Dinitrotoluene, 2,6-	000606-20-2	9.4E+01	9.4E-01	7.3E+02	7.8E+01	7.3E+01	7.8E+00	4.0E+02	4.0E+00	1.2E+03	1.2E+02					1.5E+02	1.5E+00	4.5E+02	4.5E+01
Dinitrotoluene, 2-Amino-4,6-	035572-78-2																		
Dinoseb	000088-85-7			7.3E+02	7.8E+01	7.3E+01	7.8E+00			6.9E+02	6.9E+01							3.5E+02	3.5E+01
Dioxane, 1,4-	000123-91-1	5.8E+03	5.8E+01					2.3E+04	2.3E+02							9.3E+03	9.3E+01		
Diphenamid	000957-51-7			2.2E+04	2.3E+03	2.2E+03	2.3E+02			2.1E+04	2.1E+03							1.1E+04	1.1E+03
Diphenylamine	000122-39-4			1.8E+04	2.0E+03	1.8E+03	2.0E+02			1.7E+04	1.7E+03							8.9E+03	8.9E+02
Diphenylhydrazine, 1,2-	000122-66-7	8.0E+01	8.0E-01					2.0E+02	2.0E+00			1.0E+06	4.6E+04			1.0E+02	1.0E+00		
Diquat	000085-00-7			1.6E+03	1.7E+02	1.6E+02	1.7E+01			1.5E+03	1.5E+02							7.8E+02	7.8E+01
Direct Black 38	001937-37-7	7.4E+00	7.4E-02					1.9E+01	1.9E-01							9.6E+00	9.6E-02		
Direct Blue 6	002602-46-2	7.9E+00	7.9E-02					2.0E+01	2.0E-01							1.0E+01	1.0E-01		
Direct Brown 95	016071-86-6	6.9E+00	6.9E-02					1.7E+01	1.7E-01							8.9E+00	8.9E-02		
Direct Sky Blue	002610-05-1																		
Disulfoton	000298-04-4			2.9E+01	3.1E+00	2.9E+00	3.1E-01			2.8E+01	2.8E+00							1.4E+01	1.4E+00
Diuron	000330-54-1			1.5E+03	1.6E+02	1.5E+02	1.6E+01			1.4E+03	1.4E+02							7.1E+02	7.1E+01

Table 3.1c. (continued)

Chemical	CASRN	Ingestion (mg/kg)*						Dermal (mg/kg)*				Inhalation (mg/kg) ^{xy}				Ingestion + Dermal + Inhalation (mg/kg) ^{xy}			
		10 ⁻⁴	10 ⁻⁴	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Dodine	002439-10-3			2.9E+03	3.1E+02	2.9E+02	3.1E+01			2.8E+03	2.8E+02							1.4E+03	1.4E+02
EPTC	000759-94-4			1.8E+04	2.0E+03	1.8E+03	2.0E+02			1.7E+04	1.7E+03							8.9E+03	8.9E+02
Endosulfan	000115-29-7			4.4E+03	4.7E+02	4.4E+02	4.7E+01			4.1E+03	4.1E+02							2.1E+03	2.1E+02
Endothall	000145-73-3			1.5E+04	1.6E+03	1.5E+03	1.6E+02			1.4E+04	1.4E+03							7.1E+03	7.1E+02
Endrin	000072-20-8			2.2E+02	2.3E+01	2.2E+01	2.3E+00			8.3E+00	8.3E-01							8.0E+00	8.0E-01
Epichlorohydrin	000106-89-8	6.5E+03	6.5E+01	1.5E+03	1.6E+02	1.5E+02	1.6E+01	2.6E+04	2.6E+02	2.2E+03	2.2E+02	3.2E+03	1.9E+02	9.9E+01	9.9E+00	3.2E+03	6.7E+01	8.9E+01	8.9E+00
Epoxybutane, 1,2-	000106-88-7													1.0E+06	1.0E+06				
Ethephon	016672-87-0			3.7E+03	3.9E+02	3.7E+02	3.9E+01			3.4E+03	3.4E+02							1.8E+03	1.8E+02
Ethion	000563-12-2			3.7E+02	3.9E+01	3.7E+01	3.9E+00			3.4E+02	3.4E+01							1.8E+02	1.8E+01
Ethoxyethanol Acetate, 2-	000111-15-9			2.2E+05	2.3E+04	2.2E+04	2.3E+03			2.1E+05	2.1E+04							1.1E+05	1.1E+04
Ethoxyethanol, 2-	000110-80-5			2.9E+05	3.1E+04	2.9E+04	3.1E+03			2.8E+05	2.8E+04			1.0E+06	1.0E+06			1.4E+05	1.4E+04
Ethyl Acetate	000141-78-6			6.6E+05	7.0E+04	6.6E+04	7.0E+03			9.9E+05	9.9E+04							4.0E+05	4.0E+04
Ethyl Acrylate	000140-88-5	1.3E+03	1.3E+01					3.3E+03	3.3E+01							1.7E+03	1.7E+01		
Ethyl Chloride	000075-00-3													1.5E+02	1.5E+02				
Ethyl Ether	000060-29-7			1.5E+05	1.6E+04	1.5E+04	1.6E+03			2.2E+05	2.2E+04							8.8E+04	8.8E+03
Ethyl Methacrylate	000097-63-2			6.6E+04	7.0E+03	6.6E+03	7.0E+02			9.9E+04	9.9E+03							4.0E+04	4.0E+03
Ethyl-p-nitrophenyl Phosphonate	002104-64-5			7.3E+00	7.8E-01	7.3E-01	7.8E-02			6.9E+00	6.9E-01							3.5E+00	3.5E-01
Ethylbenzene ⁽⁶⁾	000100-41-4			7.3E+04	7.8E+03	7.3E+03	7.8E+02			1.3E+05	1.3E+04			4.7E-01	4.7E-01			4.7E-01	4.7E-01
Ethylene Cyanohydrin	000109-78-4			2.2E+05	2.3E+04	2.2E+04	2.3E+03			2.1E+05	2.1E+04							1.1E+05	1.1E+04

Table 3.1c. (continued)

Chemical	CASRN	Ingestion (mg/kg) ^a						Dermal (mg/kg) ^a				Inhalation (mg/kg) ^b				Ingestion + Dermal + Inhalation (mg/kg) ^{c,y}			
		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Ethylene Diamine	000107-15-3			1.5E+04	1.6E+03	1.5E+03	1.6E+02			1.4E+04	1.4E+03							7.1E+03	7.1E+02
Ethylene Glycol	000107-21-1			1.0E+06	1.6E+05	1.5E+05	1.6E+04			1.0E+06	1.4E+05							7.1E+05	7.1E+04
Ethylene Glycol Monobutyl Ether	000111-76-2													1.0E+06	1.0E+06				
Ethylene Oxide	000075-21-8	6.3E+01	6.3E-01					2.5E+02	2.5E+00			4.9E+01	4.9E-01			3.3E+01	3.3E-01		
Ethylene Thiourea	000096-45-7	5.8E+02	5.8E+00	5.8E+01	6.3E+00	5.8E+00	6.3E-01	1.5E+03	1.5E+01	5.5E+01	5.5E+00					7.5E+02	7.5E+00	2.8E+01	2.8E+00
Ethylphthalyl Ethyl Glycolate	000084-72-0			1.0E+06	2.3E+05	2.2E+05	2.3E+04			1.0E+06	2.1E+05							1.0E+06	1.1E+05
Express	101200-48-0			5.8E+03	6.3E+02	5.8E+02	6.3E+01			5.5E+03	5.5E+02							2.8E+03	2.8E+02
Fenamiphos	022224-92-6			1.8E+02	2.0E+01	1.8E+01	2.0E+00			1.7E+02	1.7E+01							8.9E+01	8.9E+00
Fenpropathrin	039515-41-8			1.8E+04	2.0E+03	1.8E+03	2.0E+02			1.7E+04	1.7E+03							8.9E+03	8.9E+02
Fluometuron	002164-17-2			9.5E+03	1.0E+03	9.5E+02	1.0E+02			9.0E+03	9.0E+02							4.6E+03	4.6E+02
Fluoranthene	000206-44-0			2.9E+04	3.1E+03	2.9E+03	3.1E+02			1.7E+04	1.7E+03							1.1E+04	1.1E+03
Fluorene	000086-73-7			2.9E+04	3.1E+03	2.9E+03	3.1E+02			4.4E+04	4.4E+03							1.8E+04	1.8E+03
Fluoride	007782-41-4			4.4E+04	4.7E+03	4.4E+03	4.7E+02			8.0E+05	8.0E+04							4.2E+04	4.2E+03
Fluridone	059756-60-4			5.8E+04	6.3E+03	5.8E+03	6.3E+02			5.5E+04	5.5E+03							2.8E+04	2.8E+03
Flurprimidol	056425-91-3			1.5E+04	1.6E+03	1.5E+03	1.6E+02			1.4E+04	1.4E+03							7.1E+03	7.1E+02
Flutolanil	066332-96-5			4.4E+04	4.7E+03	4.4E+03	4.7E+02			4.1E+04	4.1E+03							2.1E+04	2.1E+03
Fluvalinate	069409-94-5			7.3E+03	7.8E+02	7.3E+02	7.8E+01			6.9E+03	6.9E+02							3.5E+03	3.5E+02
Folpet	000133-07-3	1.8E+04	1.8E+02	7.3E+04	7.8E+03	7.3E+03	7.8E+02	4.6E+04	4.6E+02	6.9E+04	6.9E+03					2.4E+04	2.4E+02	3.5E+04	3.5E+03
Fomesafen	072178-02-0	3.4E+02	3.4E+00					8.5E+02	8.5E+00							4.4E+02	4.4E+00		

Table 3.1c. (continued)

Chemical	CASRN	Ingestion (mg/kg)*						Dermal (mg/kg)*				Inhalation (mg/kg)**				Ingestion + Dermal + Inhalation (mg/kg)**v			
		10 ⁻⁴	10 ⁻⁴	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Fonofos	000944-22-9			1.5E+03	1.6E+02	1.5E+02	1.6E+01			1.4E+03	1.4E+02							7.1E+02	7.1E+01
Formaldehyde	000050-00-0			1.5E+05	1.6E+04	1.5E+04	1.6E+03			2.2E+05	2.2E+04	1.0E+06	8.1E+05					8.8E+04	8.8E+03
Formic Acid	000064-18-6			1.0E+06	1.6E+05	1.5E+05	1.6E+04			1.0E+06	1.4E+05							7.1E+05	7.1E+04
Fosetyl-AL	039148-24-8			1.0E+06	2.3E+05	2.2E+05	2.3E+04			1.0E+06	2.1E+05							1.0E+06	1.1E+05
Furan	000110-00-9			7.3E+02	7.8E+01	7.3E+01	7.8E+00			1.1E+03	1.1E+02							4.4E+02	4.4E+01
Furazolidone	000067-45-8	1.7E+01	1.7E-01					4.2E+01	4.2E-01							2.2E+01	2.2E-01		
Furfural	000098-01-1			2.2E+03	2.3E+02	2.2E+02	2.3E+01			2.1E+03	2.1E+02			1.0E+06	1.0E+06			1.1E+03	1.1E+02
Furium	000531-82-8	1.3E+00	1.3E-02					3.2E+00	3.2E-02							1.7E+00	1.7E-02		
Furmecycloz	060568-05-0	2.1E+03	2.1E+01					5.4E+03	5.4E+01							2.8E+03	2.8E+01		
Glufosinate, Ammonium	077182-82-2			2.9E+02	3.1E+01	2.9E+01	3.1E+00			2.8E+02	2.8E+01							1.4E+02	1.4E+01
Glycidyl	000765-34-4			2.9E+02	3.1E+01	2.9E+01	3.1E+00			2.8E+02	2.8E+01			1.0E+06	4.5E+05			1.4E+02	1.4E+01
Glyphosate	001071-83-6			7.3E+04	7.8E+03	7.3E+03	7.8E+02			6.9E+04	6.9E+03							3.5E+04	3.5E+03
Goal	042874-03-3			2.2E+03	2.3E+02	2.2E+02	2.3E+01			2.1E+03	2.1E+02							1.1E+03	1.1E+02
Haloxyp, Methyl	069806-40-2			3.7E+01	3.9E+00	3.7E+00	3.9E-01			3.4E+01	3.4E+00							1.8E+01	1.8E+00
Harmony	079277-27-3			9.5E+03	1.0E+03	9.5E+02	1.0E+02			9.0E+03	9.0E+02							4.6E+03	4.6E+02
Heptachlor	000076-44-8	1.4E+01	1.4E-01	3.7E+02	3.9E+01	3.7E+01	3.9E+00	5.1E+01	5.1E-01	5.0E+02	5.0E+01	8.1E+05	8.1E+03			2.2E+01	2.2E-01	2.1E+02	2.1E+01
Heptachlor Epoxide	001024-57-3	7.0E+00	7.0E-02	9.5E+00	1.0E+00	9.5E-01	1.0E-01	2.6E+01	2.6E-01	1.3E+01	1.3E+00	4.0E+05	4.0E+03			1.1E+01	1.1E-01	5.5E+00	5.5E-01
Heptane, N-	000142-82-5																		
Hexabromobenzene	000087-82-1			1.5E+03	1.6E+02	1.5E+02	1.6E+01			2.2E+03	2.2E+02							8.8E+02	8.8E+01
Hexachlorobenzene ⁹⁾	000118-74-1	4.0E+01	4.0E-01	5.8E+02	6.3E+01	5.8E+01	6.3E+00	1.6E+02	1.6E+00	8.8E+02	8.8E+01	1.0E+06	2.3E+04			6.4E+01	6.4E-01	3.5E+02	3.5E+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	HQ=0.1 Adult	HQ=0.1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Hexachlorobutadiene ⁽⁶⁾	000087-68-3	8.2E+02	8.2E+00	1.5E+02	1.6E+01	1.5E+01	1.6E+00	3.3E+03	3.3E+01	2.2E+02	2.2E+01	1.0E+06	4.7E+05			1.3E+03	1.3E+01	8.8E+01	8.8E+00
Hexachlorocyclohexane, Alpha-	000319-84-6	1.0E+01	1.0E-01					5.0E+01	5.0E-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			1.0E+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	2.2E+01	2.3E+00	2.4E+02	2.4E+00	4.0E+02	4.0E+01					8.5E+01	8.5E-01	1.4E+02	1.4E+01
Hexachlorocyclohexane, Technical	000608-73-1	3.5E+01	3.5E-01					8.9E+01	8.9E-01			1.0E+06	2.0E+04			4.6E+01	4.6E-01		
Hexachlorocyclopentadiene	000077-47-4			5.1E+03	5.5E+02	5.1E+02	5.5E+01			7.7E+03	7.7E+02			3.1E+05	3.1E+04			3.0E+03	3.0E+02
Hexachlorodibenzo-p-dioxin, Mixture	019408-74-3	1.0E-02	1.0E-04					2.6E-02	2.6E-04			8.0E+02	8.0E+00			1.3E-02	1.3E-04		
Hexachloroethane	000067-72-1	4.6E+03	4.6E+01	7.3E+02	7.8E+01	7.3E+01	7.8E+00	1.8E+04	1.8E+02	1.1E+03	1.1E+02	1.0E+06	1.0E+06			7.3E+03	7.3E+01	4.4E+02	4.4E+01
Hexachlorophene	000070-30-4			2.2E+02	2.3E+01	2.2E+01	2.3E+00			2.1E+02	2.1E+01							1.1E+02	1.1E+01
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	2.2E+02	2.3E+01	2.9E+03	2.9E+01	4.1E+03	4.1E+02					1.0E+03	1.0E+01	1.4E+03	1.4E+02

Table 3.1c. (continued)

Chemical	CASRN	Ingestion (mg/kg)*						Dermal (mg/kg)*				Inhalation (mg/kg) ^y				Ingestion + Dermal + Inhalation (mg/kg) ^{†y}			
		10 ⁻⁴	10 ⁻⁴	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Hexamethyl-ene Di-isocyanate, 1,6-	000822-06-0													4.5E+04	4.5E+03				
Hexane, N-	000110-54-3			4.4E+04	4.7E+03	4.4E+03	4.7E+02			6.6E+04	6.6E+03			9.1E+01	9.1E+01			9.1E+01	9.1E+01
Hexanone, 2-	000591-78-6																		
Hexazinone	051235-04-2			2.4E+04	2.6E+03	2.4E+03	2.6E+02			2.3E+04	2.3E+03							1.2E+04	1.2E+03
HpCDD, 2,3,7,8-(⁴⁰)	037871-00-4	4.3E-02	4.3E-04					3.6E-02	3.6E-04			2.4E+03	2.4E+01			2.7E-02	2.7E-04		
HpCDF, 2,3,7,8-(⁴⁰)	038998-75-3	4.3E-02	4.3E-04					1.1E-01	1.1E-03			2.4E+03	2.4E+01			5.5E-02	5.5E-04		
HxCDD, 2,3,7,8-(⁴⁰)	034465-46-8	4.3E-03	4.3E-05					3.6E-03	3.6E-05			2.4E+02	2.4E+00			2.7E-03	2.7E-05		
HxCDF, 2,3,7,8-(⁴⁰)	055684-94-1	4.3E-03	4.3E-05					1.1E-02	1.1E-04			2.4E+02	2.4E+00			5.5E-03	5.5E-05		
Hydrazine	000302-01-2	2.1E+01	2.1E-01					5.4E+01	5.4E-01			2.1E+05	2.1E+03			2.8E+01	2.8E-01		
Hydrazine Sul-fate	010034-93-2	2.1E+01	2.1E-01					5.4E+01	5.4E-01			2.1E+05	2.1E+03			2.8E+01	2.8E-01		
Hydrogen Chloride	007647-01-0													1.0E+06	1.0E+06				
Hydrogen Cy-anide	000074-90-8			1.5E+04	1.6E+03	1.5E+03	1.6E+02			4.7E+04	4.7E+03			1.0E+06	1.0E+06			1.1E+04	1.1E+03
Hydrogen Sul-fide	007783-06-4			2.2E+03	2.3E+02	2.2E+02	2.3E+01			8.3E+03	8.3E+02			1.0E+06	4.5E+05			1.7E+03	1.7E+02
Hydroquinone	000123-31-9			2.9E+04	3.1E+03	2.9E+03	3.1E+02			2.8E+04	2.8E+03							1.4E+04	1.4E+03
Imazalil	035554-44-0			9.5E+03	1.0E+03	9.5E+02	1.0E+02			9.0E+03	9.0E+02							4.6E+03	4.6E+02
Imazaquin	081335-37-7			1.8E+05	2.0E+04	1.8E+04	2.0E+03			1.7E+05	1.7E+04							8.9E+04	8.9E+03
Indeno[1,2,3-cd]pyrene ⁽²⁾	000193-39-5	8.8E+01	8.8E-01					1.4E+02	1.4E+00			1.0E+06	1.2E+05			8.6E+01	8.6E-01		

Table 3.1c. (continued)

Chemical	CASRN	Ingestion (mg/kg)*						Dermal (mg/kg)*				Inhalation (mg/kg)**				Ingestion + Dermal + Inhalation (mg/kg)**v			
		10 ⁻⁴	10 ⁻⁴	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Iprodione	036734-19-7			2.9E+04	3.1E+03	2.9E+03	3.1E+02			2.8E+04	2.8E+03							1.4E+04	1.4E+03
Iron	007439-89-6																		
Isobutyl Alcohol	000078-83-1			2.2E+05	2.3E+04	2.2E+04	2.3E+03			3.3E+05	3.3E+04							1.3E+05	1.3E+04
Isophorone	000078-59-1	6.7E+04	6.7E+02	1.5E+05	1.6E+04	1.5E+04	1.6E+03	1.7E+05	1.7E+03	1.4E+05	1.4E+04					8.7E+04	8.7E+02	7.1E+04	7.1E+03
Isopropalin	033820-53-0			1.1E+04	1.2E+03	1.1E+03	1.2E+02			1.0E+04	1.0E+03							5.3E+03	5.3E+02
Isopropanol	000067-63-0																		
Isopropyl Methyl Phosphonic Acid	001832-54-8			7.3E+04	7.8E+03	7.3E+03	7.8E+02			6.9E+04	6.9E+03							3.5E+04	3.5E+03
Isoxaben	082558-50-7			3.7E+04	3.9E+03	3.7E+03	3.9E+02			3.4E+04	3.4E+03							1.8E+04	1.8E+03
Karate	091465-08-6			3.7E+03	3.9E+02	3.7E+02	3.9E+01			3.4E+03	3.4E+02							1.8E+03	1.8E+02
Kerb	023950-58-5			5.5E+04	5.9E+03	5.5E+03	5.9E+02			5.2E+04	5.2E+03							2.7E+04	2.7E+03
Lactofen	077501-63-4			1.5E+03	1.6E+02	1.5E+02	1.6E+01			1.4E+03	1.4E+02							7.1E+02	7.1E+01
Lead Alkyls	NA																		
Lead And Compounds	007439-92-1			4.0E+02	4.0E+02	4.0E+02	4.0E+02												
Linuron	000330-55-2			1.5E+03	1.6E+02	1.5E+02	1.6E+01			1.4E+03	1.4E+02							7.1E+02	7.1E+01
Lithium	007439-93-2																		
Londax	083055-99-6			1.5E+05	1.6E+04	1.5E+04	1.6E+03			1.4E+05	1.4E+04							7.1E+04	7.1E+03
MCPA	000094-74-6			3.7E+02	3.9E+01	3.7E+01	3.9E+00			3.4E+02	3.4E+01							1.8E+02	1.8E+01
MCPB	000094-81-5			7.3E+03	7.8E+02	7.3E+02	7.8E+01			6.9E+03	6.9E+02							3.5E+03	3.5E+02
MCPP	000093-65-2			7.3E+02	7.8E+01	7.3E+01	7.8E+00			6.9E+02	6.9E+01							3.5E+02	3.5E+01
Magnesium	007439-95-4																		

Table 3.1c. (continued)

Chemical	CASRN	Ingestion (mg/kg)*						Dermal (mg/kg)*				Inhalation (mg/kg)* ^v				Ingestion + Dermal + Inhalation (mg/kg)* ^v			
		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Malathion	000121-75-5			1.5E+04	1.6E+03	1.5E+03	1.6E+02			1.4E+04	1.4E+03							7.1E+03	7.1E+02
Maleic Anhydride	000108-31-6			7.3E+04	7.8E+03	7.3E+03	7.8E+02			6.9E+04	6.9E+03							3.5E+04	3.5E+03
Maleic Hydrate	000123-33-1			3.7E+05	3.9E+04	3.7E+04	3.9E+03			3.4E+05	3.4E+04							1.8E+05	1.8E+04
Malononitrile	000109-77-3			1.5E+01	1.6E+00	1.5E+00	1.6E-01			2.2E+01	2.2E+00							8.8E+00	8.8E-01
Mancozeb	008018-01-7			2.2E+04	2.3E+03	2.2E+03	2.3E+02			2.1E+04	2.1E+03							1.1E+04	1.1E+03
Maneb	012427-38-2			3.7E+03	3.9E+02	3.7E+02	3.9E+01			3.4E+03	3.4E+02							1.8E+03	1.8E+02
Manganese (Water)	007439-96-5			3.4E+04	3.7E+03	3.4E+03	3.7E+02			2.6E+04	2.6E+03			2.2E+05	2.2E+04			1.4E+04	1.4E+03
Mepfosfolan	000950-10-7			6.6E+01	7.0E+00	6.6E+00	7.0E-01			6.2E+01	6.2E+00							3.2E+01	3.2E+00
Mepiquat Chloride	024307-26-4			2.2E+04	2.3E+03	2.2E+03	2.3E+02			2.1E+04	2.1E+03							1.1E+04	1.1E+03
Mercuric Chloride	007487-94-7			2.2E+02	2.3E+01	2.2E+01	2.3E+00			8.3E+02	8.3E+01							1.7E+02	1.7E+01
Mercury (elemental)	007439-97-6			2.2E+02	2.3E+01	2.2E+01	2.3E+00			4.1E-01	4.1E-02			1.0E+06	1.3E+05			4.1E-01	4.1E-02
Mercury, Inorganic Salt	007439-97-6			2.2E+02	2.3E+01	2.2E+01	2.3E+00			2.9E+02	2.9E+01			1.0E+06	1.3E+05			1.2E+02	1.2E+01
Merphos	000150-50-5			2.2E+01	2.3E+00	2.2E+00	2.3E-01			2.1E+01	2.1E+00							1.1E+01	1.1E+00
Merphos Oxide	000078-48-8			2.2E+01	2.3E+00	2.2E+00	2.3E-01			2.1E+01	2.1E+00							1.1E+01	1.1E+00
Metalaxyl	057837-19-1			4.4E+04	4.7E+03	4.4E+03	4.7E+02			4.1E+04	4.1E+03							2.1E+04	2.1E+03
Methacrylonitrile	000126-98-7			7.3E+01	7.8E+00	7.3E+00	7.8E-01			1.1E+02	1.1E+01			8.3E+01	8.3E+00			2.9E+01	2.9E+00
Methamidophos	010265-92-6			3.7E+01	3.9E+00	3.7E+00	3.9E-01			3.4E+01	3.4E+00							1.8E+01	1.8E+00
Methanol	000067-56-1			3.7E+05	3.9E+04	3.7E+04	3.9E+03			5.5E+05	5.5E+04							2.2E+05	2.2E+04

Table 3.1c. (continued)

Chemical	CASRN	Ingestion (mg/kg) [*]						Dermal (mg/kg) [*]				Inhalation (mg/kg) ^{xy}				Ingestion + Dermal + Inhalation (mg/kg) ^{xy}			
		10 ⁻⁴	10 ⁻⁴	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Methidathion	000950-37-8			7.3E+02	7.8E+01	7.3E+01	7.8E+00			6.9E+02	6.9E+01							3.5E+02	3.5E+01
Methomyl	016752-77-5			1.8E+04	2.0E+03	1.8E+03	2.0E+02			1.7E+04	1.7E+03							8.9E+03	8.9E+02
Methoxy-5-nitroaniline, 2-	000099-59-2	1.4E+03	1.4E+01					3.5E+03	3.5E+01							1.8E+03	1.8E+01		
Methoxychlor	000072-43-5			3.7E+03	3.9E+02	3.7E+02	3.9E+01			3.4E+03	3.4E+02							1.8E+03	1.8E+02
Methoxyethanol Acetate, 2-	000110-49-6			1.5E+03	1.6E+02	1.5E+02	1.6E+01			1.4E+03	1.4E+02							7.1E+02	7.1E+01
Methoxyethanol, 2-	000109-86-4			7.3E+02	7.8E+01	7.3E+01	7.8E+00			6.9E+02	6.9E+01			1.0E+06	1.0E+06			3.5E+02	3.5E+01
Methyl Acetate	000079-20-9			7.3E+05	7.8E+04	7.3E+04	7.8E+03			6.9E+05	6.9E+04							3.5E+05	3.5E+04
Methyl Acrylate	000096-33-3			2.2E+04	2.3E+03	2.2E+03	2.3E+02			2.1E+04	2.1E+03							1.1E+04	1.1E+03
Methyl Ethyl Ketone	000078-93-3			4.4E+05	4.7E+04	4.4E+04	4.7E+03			6.6E+05	6.6E+04			9.2E+03	2.6E+03			9.2E+03	2.4E+03
Methyl Isobutyl Ketone	000108-10-1			5.8E+04	6.3E+03	5.8E+03	6.3E+02			8.8E+04	8.8E+03			7.0E+02	5.4E+02			7.0E+02	4.7E+02
Methyl Mercury	022967-92-6			7.3E+01	7.8E+00	7.3E+00	7.8E-01			1.2E+02	1.2E+01							4.6E+01	4.6E+00
Methyl Methacrylate	000080-62-6			5.8E+04	6.3E+03	5.8E+03	6.3E+02			8.8E+04	8.8E+03							3.5E+04	3.5E+03
Methyl Parathion	000298-00-0			1.8E+02	2.0E+01	1.8E+01	2.0E+00			1.7E+02	1.7E+01							8.9E+01	8.9E+00
Methyl Styrene (Mixed Isomers)	025013-15-4			4.4E+03	4.7E+02	4.4E+02	4.7E+01			6.6E+03	6.6E+02			1.0E+06	1.0E+06			2.6E+03	2.6E+02
Methyl hydrazine ⁽⁹⁾	000060-34-4	5.8E+01	5.8E-01					1.5E+02	1.5E+00							7.5E+01	7.5E-01		

Table 3.1c. (continued)

Chemical	CASRN	Ingestion (mg/kg)*						Dermal (mg/kg)*				Inhalation (mg/kg)* ^v				Ingestion + Dermal + Inhalation (mg/kg) ^{†v}			
		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Methyl tert-Butyl Ether (MTBE)	001634-04-4													1.0E+06	1.0E+06				
Methyl-5-Nitroaniline, 2-	000099-55-8	1.9E+03	1.9E+01					4.9E+03	4.9E+01							2.5E+03	2.5E+01		
Methylaniline Hydrochloride, 2-	000636-21-5	3.5E+02	3.5E+00					8.9E+02	8.9E+00							4.6E+02	4.6E+00		
Methylcyclohexane	000108-87-2													2.4E+02	2.4E+02				
Methylene Chloride	000075-09-2	8.5E+03	8.5E+01	4.4E+04	4.7E+03	4.4E+03	4.7E+02	4.1E+04	4.1E+02	7.9E+04	7.9E+03	1.0E+03	4.8E+01	1.0E+03	1.0E+03	1.0E+03	3.6E+01	1.0E+03	1.0E+03
Methylenebis(2-chloroaniline), 4,4'-	000101-14-4	4.9E+02	4.9E+00	5.1E+02	5.5E+01	5.1E+01	5.5E+00	1.2E+03	1.2E+01	4.8E+02	4.8E+01	1.0E+06	2.8E+05			6.4E+02	6.4E+00	2.5E+02	2.5E+01
Methylenebis(N,N-dimethyl) Aniline, 4,4'-	000101-61-1	1.4E+03	1.4E+01					3.5E+03	3.5E+01							1.8E+03	1.8E+01		
Methylenebisbenzenamine, 4,4'-(⁹)	000101-77-9	2.6E+02	2.6E+00					6.4E+02	6.4E+00							3.3E+02	3.3E+00		
Methylenediphenyl Isocyanate, 4,4'-	000101-68-8													8.9E+04	8.9E+03				
Methylstyrene, Alpha-	000098-83-9			5.1E+04	5.5E+03	5.1E+03	5.5E+02			7.7E+04	7.7E+03							3.1E+04	3.1E+03
Methyltriethyl Lead	001762-28-3																		
Metolachlor	051218-45-2			1.1E+05	1.2E+04	1.1E+04	1.2E+03			1.0E+05	1.0E+04							5.3E+04	5.3E+03
Metribuzin(⁹)	021087-64-9			1.8E+04	2.0E+03	1.8E+03	2.0E+02			1.7E+04	1.7E+03							8.9E+03	8.9E+02

Table 3.1c. (continued)

Chemical	CASRN	Ingestion (mg/kg) ^a						Dermal (mg/kg) ^a				Inhalation (mg/kg) ^{b,v}				Ingestion + Dermal + Inhalation (mg/kg) ^{t,v}			
		10 ⁻⁴	10 ⁻⁴	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Mirex ⁽⁹⁾	002385-85-5	3.5E+01	3.5E-01	1.5E+02	1.6E+01	1.5E+01	1.6E+00	8.9E+01	8.9E-01	1.4E+02	1.4E+01					4.6E+01	4.6E-01	7.1E+01	7.1E+00
Molinate	002212-67-1			1.5E+03	1.6E+02	1.5E+02	1.6E+01			1.4E+03	1.4E+02							7.1E+02	7.1E+01
Molybdenum	007439-98-7			3.7E+03	3.9E+02	3.7E+02	3.9E+01			2.6E+04	2.6E+03							3.2E+03	3.2E+02
Monochloramine	010599-90-3			7.3E+04	7.8E+03	7.3E+03	7.8E+02			6.9E+04	6.9E+03							3.5E+04	3.5E+03
Monochlorobutanes	025154-42-1			2.9E+05	3.1E+04	2.9E+04	3.1E+03			2.8E+05	2.8E+04							1.4E+05	1.4E+04
Naled	000300-76-5			1.5E+03	1.6E+02	1.5E+02	1.6E+01			1.4E+03	1.4E+02							7.1E+02	7.1E+01
Naphthalene ⁽⁶⁾	000091-20-3			2.6E+04	2.8E+03	2.6E+03	2.8E+02			3.9E+04	3.9E+03							1.6E+04	1.6E+03
Naphthalene, 1-Methyl	000090-12-0																		
Naphthalene, 2-Methyl	000091-57-6																		
Napropamide	015299-99-7			7.3E+04	7.8E+03	7.3E+03	7.8E+02			6.9E+04	6.9E+03							3.5E+04	3.5E+03
Niagara Blue 4B	002429-74-5																		
Nickel Carbonyl	013463-39-3																		
Nickel Refinery Dust	NA											1.0E+06	4.3E+04						
Nickel Soluble Salts	007440-02-0			1.5E+04	1.6E+03	1.5E+03	1.6E+02			7.4E+04	7.4E+03							1.2E+04	1.2E+03
Nickel Subsulfide	012035-72-2											1.0E+06	2.1E+04						
Nitrapyrin ⁽⁹⁾	001929-82-4			1.1E+03	1.2E+02	1.1E+02	1.2E+01			1.0E+03	1.0E+02							5.3E+02	5.3E+01
Nitrate	014797-55-8			1.0E+06	1.3E+05	1.2E+05	1.3E+04			1.0E+06	1.0E+06							1.0E+06	1.1E+05
Nitric Oxide ⁽⁹⁾	010102-43-9			7.3E+04	7.8E+03	7.3E+03	7.8E+02			2.8E+05	2.8E+04							5.8E+04	5.8E+03

Table 3.1c. (continued)

Chemical	CASRN	Ingestion (mg/kg)*						Dermal (mg/kg)*				Inhalation (mg/kg)* ^v				Ingestion + Dermal + Inhalation (mg/kg)* ^v			
		10 ⁻⁴	10 ⁻⁴	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Nitrite	014797-65-0			7.3E+04	7.8E+03	7.3E+03	7.8E+02			6.9E+05	6.9E+04							6.6E+04	6.6E+03
Nitroaniline, 2-	000088-74-4													1.5E+01	1.5E+00				
Nitrobenzene	000098-95-3			3.7E+02	3.9E+01	3.7E+01	3.9E+00			6.7E+02	6.7E+01			8.6E+00	8.6E-01			8.3E+00	8.3E-01
Nitrofurantoin	000067-20-9			5.1E+04	5.5E+03	5.1E+03	5.5E+02			4.8E+04	4.8E+03							2.5E+04	2.5E+03
Nitrofurazone	000059-87-0	4.3E+01	4.3E-01					1.1E+02	1.1E+00							5.5E+01	5.5E-01		
Nitrogen Dioxide ⁽⁹⁾	010102-44-0			7.3E+05	7.8E+04	7.3E+04	7.8E+03			1.0E+06	1.0E+06							6.8E+05	6.8E+04
Nitroguanidine	000556-88-7			7.3E+04	7.8E+03	7.3E+03	7.8E+02			6.9E+04	6.9E+03							3.5E+04	3.5E+03
Nitrophenol, 4-	000100-02-7																		
Nitropropane, 2- ⁽⁹⁾	000079-46-9	6.7E+00	6.7E-02					2.7E+01	2.7E-01			8.4E+00	8.4E-02	1.9E+03	1.9E+02	4.7E+00	4.7E-02		
Nitroso-N-ethylurea, N-	000759-73-9	4.6E-01	4.6E-03					1.1E+00	1.1E-02							5.9E-01	5.9E-03		
Nitroso-N-methylurea, N-	000684-93-5																		
Nitroso-di-N-butylamine, N-	000924-16-3	1.2E+01	1.2E-01					4.8E+01	4.8E-01			6.1E+01	6.1E-01			1.4E+01	1.4E-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		
Nitrosodi-ethanolamine, N-	001116-54-7	2.3E+01	2.3E-01					5.7E+01	5.7E-01							3.0E+01	3.0E-01		
Nitrosodi-ethylamine, N-	000055-18-5	4.3E-01	4.3E-03					1.1E+00	1.1E-02			2.4E+04	2.4E+02			5.5E-01	5.5E-03		
Nitrosodi-methylamine, N-	000062-75-9	1.3E+00	1.3E-02					3.2E+00	3.2E-02			7.2E+04	7.2E+02			1.6E+00	1.6E-02		

Table 3.1c. (continued)

Chemical	CASRN	Ingestion (mg/kg)*						Dermal (mg/kg)*				Inhalation (mg/kg)* ^v				Ingestion + Dermal + Inhalation (mg/kg)* ^v			
		10 ⁻⁴	10 ⁻⁴	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Nitrosodi-phenylamine, N-	000086-30-6	1.3E+04	1.3E+02					1.6E+04	1.6E+02							1.1E+04	1.1E+02		
Nitrosomethyl ethylamine, N-	010595-95-6	2.9E+00	2.9E-02					7.3E+00	7.3E-02							3.8E+00	3.8E-02		
Nitrosomethyl vinylamine, N-	004549-40-0																		
Nitrosopyrrolidine, N-	000930-55-2	3.0E+01	3.0E-01					7.7E+01	7.7E-01			1.0E+06	1.7E+04			3.9E+01	3.9E-01		
Nitrotoluene, 4-Amino-2-	000119-32-4																		
Nitrotoluene, m-	000099-08-1			7.3E+03	7.8E+02	7.3E+02	7.8E+01			1.1E+04	1.1E+03							4.4E+03	4.4E+02
Nitrotoluene, o-	000088-72-2			7.3E+03	7.8E+02	7.3E+02	7.8E+01			1.1E+04	1.1E+03							4.4E+03	4.4E+02
Nitrotoluene, p-	000099-99-0			7.3E+03	7.8E+02	7.3E+02	7.8E+01			1.1E+04	1.1E+03							4.4E+03	4.4E+02
Norflurazon	027314-13-2			2.9E+04	3.1E+03	2.9E+03	3.1E+02			2.8E+04	2.8E+03							1.4E+04	1.4E+03
Nustar	085509-19-9			5.1E+02	5.5E+01	5.1E+01	5.5E+00			4.8E+02	4.8E+01							2.5E+02	2.5E+01
OCDD ⁽⁴⁾	003268-87-9	4.3E-01	4.3E-03					3.6E-01	3.6E-03			2.4E+04	2.4E+02			2.7E-01	2.7E-03		
OCDF ⁽⁴⁾	039001-02-0	4.3E-01	4.3E-03					1.1E+00	1.1E-02			2.4E+04	2.4E+02			5.5E-01	5.5E-03		
Octabromo-diphenyl Ether	032536-52-0			2.2E+03	2.3E+02	2.2E+02	2.3E+01			2.1E+03	2.1E+02							1.1E+03	1.1E+02
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetra (HMX)	002691-41-0			3.7E+04	3.9E+03	3.7E+03	3.9E+02			1.0E+04	1.0E+03							8.1E+03	8.1E+02
Octamethyl-pyrophosphoramide	000152-16-9			1.5E+03	1.6E+02	1.5E+02	1.6E+01			1.4E+03	1.4E+02							7.1E+02	7.1E+01

Table 3.1c. (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	HQ=0.1 Adult	HQ=0.1 Child	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Octyl Phthalate, di-N-	000117-84-0			1.5E+04	1.6E+03	1.5E+03	1.6E+02			2.5E+04	2.5E+03							9.2E+03	9.2E+02
Oryzalin	019044-88-3			3.7E+04	3.9E+03	3.7E+03	3.9E+02			3.4E+04	3.4E+03							1.8E+04	1.8E+03
Oxadiazon	019666-30-9			3.7E+03	3.9E+02	3.7E+02	3.9E+01			3.4E+03	3.4E+02							1.8E+03	1.8E+02
Oxamyl	023135-22-0			1.8E+04	2.0E+03	1.8E+03	2.0E+02			1.7E+04	1.7E+03							8.9E+03	8.9E+02
Paclobutrazol	076738-62-0			9.5E+03	1.0E+03	9.5E+02	1.0E+02			9.0E+03	9.0E+02							4.6E+03	4.6E+02
Paraquat	001910-42-5			3.3E+03	3.5E+02	3.3E+02	3.5E+01			3.1E+03	3.1E+02							1.6E+03	1.6E+02
Parathion	000056-38-2			4.4E+03	4.7E+02	4.4E+02	4.7E+01			4.1E+03	4.1E+02							2.1E+03	2.1E+02
PeCDD, 2,3,7,8-(*)	036088-22-9	8.5E-04	8.5E-06					7.1E-04	7.1E-06			4.9E+01	4.9E-01			5.4E-04	5.4E-06		
PeCDF, 1,2,3,7,8-(*)	057117-41-6	8.5E-04	8.5E-06					2.1E-03	2.1E-05			4.9E+01	4.9E-01			1.1E-03	1.1E-05		
PeCDF, 2,3,4,7,8-(*)	057117-31-4	8.5E-03	8.5E-05					2.1E-02	2.1E-04			4.9E+02	4.9E+00			1.1E-02	1.1E-04		
Pebutate	001114-71-2			3.7E+04	3.9E+03	3.7E+03	3.9E+02			3.4E+04	3.4E+03							1.8E+04	1.8E+03
Pendimethalin	040487-42-1			2.9E+04	3.1E+03	2.9E+03	3.1E+02			2.8E+04	2.8E+03							1.4E+04	1.4E+03
Pentabromo- diphenyl Ether	032534-81-9			1.5E+03	1.6E+02	1.5E+02	1.6E+01			1.4E+03	1.4E+02							7.1E+02	7.1E+01
Pentachloro- benzene	000608-93-5			5.8E+02	6.3E+01	5.8E+01	6.3E+00			8.8E+02	8.8E+01							3.5E+02	3.5E+01
Pentachloro- cyclopenta- diene	025329-35-5																		
Pentachloro- nitrobenzene	000082-68-8	2.5E+02	2.5E+00	2.2E+03	2.3E+02	2.2E+02	2.3E+01	9.9E+02	9.9E+00	3.3E+03	3.3E+02					3.9E+02	3.9E+00	1.3E+03	1.3E+02
Pentachloro- phenol	000087-86-5	5.3E+02	5.3E+00	2.2E+04	2.3E+03	2.2E+03	2.3E+02	2.7E+03	2.7E+01	4.1E+04	4.1E+03					9.3E+02	9.3E+00	1.4E+04	1.4E+03
Pentyl Alco- hol, N-	000071-41-0																		

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	HQ=0.1 Adult	HQ=0.1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Permethrin	052645-53-1			3.7E+04	3.9E+03	3.7E+03	3.9E+02			3.4E+04	3.4E+03							1.8E+04	1.8E+03
Phenanthrene	000085-01-8																		
Phenmedipham	013684-63-4			1.8E+05	2.0E+04	1.8E+04	2.0E+03			1.7E+05	1.7E+04							8.9E+04	8.9E+03
Phenol	000108-95-2			4.4E+05	4.7E+04	4.4E+04	4.7E+03			7.4E+05	7.4E+04							2.8E+05	2.8E+04
Phenylenediamine, m-	000108-45-2			4.4E+03	4.7E+02	4.4E+02	4.7E+01			4.1E+03	4.1E+02							2.1E+03	2.1E+02
Phenylenediamine, o-	000095-54-5	1.4E+03	1.4E+01					3.4E+03	3.4E+01							1.8E+03	1.8E+01		
Phenylenediamine, p-	000106-50-3			1.4E+05	1.5E+04	1.4E+04	1.5E+03			1.3E+05	1.3E+04							6.7E+04	6.7E+03
Phenylmercuric Acetate	000062-38-4			5.8E+01	6.3E+00	5.8E+00	6.3E-01			5.5E+01	5.5E+00							2.8E+01	2.8E+00
Phenylphenol, 2-	000090-43-7	3.3E+04	3.3E+02					8.3E+04	8.3E+02							4.3E+04	4.3E+02		
Phorate	000298-02-2			1.5E+02	1.6E+01	1.5E+01	1.6E+00			1.4E+02	1.4E+01							7.1E+01	7.1E+00
Phosmet	000732-11-6			1.5E+04	1.6E+03	1.5E+03	1.6E+02			1.4E+04	1.4E+03							7.1E+03	7.1E+02
Phosphine	007803-51-2			2.2E+02	2.3E+01	2.2E+01	2.3E+00			8.3E+02	8.3E+01			1.0E+06	1.3E+05			1.7E+02	1.7E+01
Phosphoric Acid	007664-38-2													1.0E+06	1.0E+06				
Phthalic Acid, p-	000100-21-0			7.3E+05	7.8E+04	7.3E+04	7.8E+03			6.9E+05	6.9E+04							3.5E+05	3.5E+04
Phthalic Anhydride	000085-44-9			1.0E+06	1.6E+05	1.5E+05	1.6E+04			1.0E+06	1.4E+05			1.0E+06	1.0E+06			7.1E+05	7.1E+04
Picloram	001918-02-1			5.1E+04	5.5E+03	5.1E+03	5.5E+02			4.8E+04	4.8E+03							2.5E+04	2.5E+03
Pirimiphos, Methyl	029232-93-7			7.3E+03	7.8E+02	7.3E+02	7.8E+01			6.9E+03	6.9E+02							3.5E+03	3.5E+02
Polybrominated Biphenyls	NA	7.2E+00	7.2E-02	5.1E+00	5.5E-01	5.1E-01	5.5E-02	3.4E+01	3.4E-01	9.0E+00	9.0E-01					1.2E+01	1.2E-01	3.3E+00	3.3E-01

Nonradionuclides/soil/residential

Table 3.1c. (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	HQ=0.1 Adult	HQ=0.1 Child	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Polychlorinated Biphenyls	001336-36-3	8.3E+00	8.3E-02					6.3E+00	6.3E-02							4.9E+00	4.9E-02		
Potassium Cyanide	000151-50-8			3.7E+04	3.9E+03	3.7E+03	3.9E+02			5.5E+04	5.5E+03							2.2E+04	2.2E+03
Potassium Silver Cyanide	000506-61-6			1.5E+05	1.6E+04	1.5E+04	1.6E+03			5.5E+05	5.5E+04							1.2E+05	1.2E+04
Prochloraz	067747-09-5	4.3E+02	4.3E+00	6.6E+03	7.0E+02	6.6E+02	7.0E+01	1.1E+03	1.1E+01	6.2E+03	6.2E+02					5.5E+02	5.5E+00	3.2E+03	3.2E+02
Profluralin	026399-36-0			4.4E+03	4.7E+02	4.4E+02	4.7E+01			4.1E+03	4.1E+02							2.1E+03	2.1E+02
Prometon	001610-18-0			1.1E+04	1.2E+03	1.1E+03	1.2E+02			1.0E+04	1.0E+03							5.3E+03	5.3E+02
Prometryn	007287-19-6			2.9E+03	3.1E+02	2.9E+02	3.1E+01			2.8E+03	2.8E+02							1.4E+03	1.4E+02
Propachlor	001918-16-7			9.5E+03	1.0E+03	9.5E+02	1.0E+02			9.0E+03	9.0E+02							4.6E+03	4.6E+02
Propanil	000709-98-8			3.7E+03	3.9E+02	3.7E+02	3.9E+01			3.4E+03	3.4E+02							1.8E+03	1.8E+02
Propargite	002312-35-8			1.5E+04	1.6E+03	1.5E+03	1.6E+02			1.4E+04	1.4E+03							7.1E+03	7.1E+02
Propargyl Alcohol	000107-19-7			1.5E+03	1.6E+02	1.5E+02	1.6E+01			2.2E+03	2.2E+02							8.8E+02	8.8E+01
Propazine	000139-40-2			1.5E+04	1.6E+03	1.5E+03	1.6E+02			1.4E+04	1.4E+03							7.1E+03	7.1E+02
Propham	000122-42-9			1.5E+04	1.6E+03	1.5E+03	1.6E+02			1.4E+04	1.4E+03							7.1E+03	7.1E+02
Propiconazole	060207-90-1			9.5E+03	1.0E+03	9.5E+02	1.0E+02			9.0E+03	9.0E+02							4.6E+03	4.6E+02
Propylene Glycol	000057-55-6			1.0E+06	1.0E+06	1.0E+06	1.6E+05			1.0E+06	1.0E+06							1.0E+06	7.1E+05
Propylene Glycol Monoethyl Ether	001569-02-4			5.1E+05	5.5E+04	5.1E+04	5.5E+03			4.8E+05	4.8E+04							2.5E+05	2.5E+04
Propylene Glycol Monomethyl Ether	000107-98-2			5.1E+05	5.5E+04	5.1E+04	5.5E+03			4.8E+05	4.8E+04			1.0E+06	1.0E+06			2.5E+05	2.5E+04
Propylene Oxide	000075-56-9	2.7E+02	2.7E+00					1.1E+03	1.1E+01			4.2E+03	4.2E+01	2.0E+03	2.0E+02	3.9E+02	3.9E+00		

Table 3.1c. (continued)

Chemical	CASRN	Ingestion (mg/kg)*						Dermal (mg/kg)*				Inhalation (mg/kg)* ^u				Ingestion + Dermal + Inhalation (mg/kg) ^{†v}			
		10 ⁻⁴	10 ⁻⁴	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Pursuit	081335-77-5			1.8E+05	2.0E+04	1.8E+04	2.0E+03			1.7E+05	1.7E+04							8.9E+04	8.9E+03
Pydrin	051630-58-1			1.8E+04	2.0E+03	1.8E+03	2.0E+02			1.7E+04	1.7E+03							8.9E+03	8.9E+02
Pyrene	000129-00-0			2.2E+04	2.3E+03	2.2E+03	2.3E+02			1.3E+04	1.3E+03							8.1E+03	8.1E+02
Pyridine	000110-86-1			7.3E+02	7.8E+01	7.3E+01	7.8E+00			6.9E+02	6.9E+01							3.5E+02	3.5E+01
Quinalphos	013593-03-8			3.7E+02	3.9E+01	3.7E+01	3.9E+00			3.4E+02	3.4E+01							1.8E+02	1.8E+01
Quinoline	000091-22-5	5.3E+00	5.3E-02					1.3E+01	1.3E-01							6.9E+00	6.9E-02		
Refractory Ceramic Fibers	NA																		
Resmethrin	010453-86-8			2.2E+04	2.3E+03	2.2E+03	2.3E+02			2.1E+04	2.1E+03							1.1E+04	1.1E+03
Ronnel	000299-84-3			3.7E+04	3.9E+03	3.7E+03	3.9E+02			3.4E+04	3.4E+03							1.8E+04	1.8E+03
Rotenone	000083-79-4			2.9E+03	3.1E+02	2.9E+02	3.1E+01			2.8E+03	2.8E+02							1.4E+03	1.4E+02
Savey	078587-05-0			1.8E+04	2.0E+03	1.8E+03	2.0E+02			1.7E+04	1.7E+03							8.9E+03	8.9E+02
Selenious Acid	007783-00-8			3.7E+03	3.9E+02	3.7E+02	3.9E+01			6.0E+03	6.0E+02							2.3E+03	2.3E+02
Selenite	014124-67-5																		
Selenium	007782-49-2			3.7E+03	3.9E+02	3.7E+02	3.9E+01			3.0E+04	3.0E+03							3.3E+03	3.3E+02
Selenium Sul-fide	007446-34-6																		
Selenourea	000630-10-4			3.7E+03	3.9E+02	3.7E+02	3.9E+01			3.4E+03	3.4E+02							1.8E+03	1.8E+02
Sethoxydim	074051-80-2			6.6E+04	7.0E+03	6.6E+03	7.0E+02			6.2E+04	6.2E+03							3.2E+04	3.2E+03
Silver	007440-22-4			3.7E+03	3.9E+02	3.7E+02	3.9E+01			1.2E+04	1.2E+03							2.8E+03	2.8E+02
Silver Cyanide	000506-64-9			7.3E+04	7.8E+03	7.3E+03	7.8E+02			2.8E+05	2.8E+04							5.8E+04	5.8E+03
Simazine	000122-34-9	5.3E+02	5.3E+00	3.7E+03	3.9E+02	3.7E+02	3.9E+01	1.3E+03	1.3E+01	3.4E+03	3.4E+02					6.9E+02	6.9E+00	1.8E+03	1.8E+02
Sodium	007440-23-5																		

Table 3.1c. (continued)

Chemical	CASRN	Ingestion (mg/kg)*						Dermal (mg/kg)*				Inhalation (mg/kg) ^v				Ingestion + Dermal + Inhalation (mg/kg) ^{†v}			
		10 ⁻⁴	10 ⁻⁴	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Sodium Acifluorfen	062476-59-9			9.5E+03	1.0E+03	9.5E+02	1.0E+02			9.0E+03	9.0E+02							4.6E+03	4.6E+02
Sodium Azide	026628-22-8			2.9E+03	3.1E+02	2.9E+02	3.1E+01			1.1E+04	1.1E+03							2.3E+03	2.3E+02
Sodium Cyanide	000143-33-9			2.9E+04	3.1E+03	2.9E+03	3.1E+02			4.4E+04	4.4E+03							1.8E+04	1.8E+03
Sodium Diethyldithiocarbamate	000148-18-5	2.4E+02	2.4E+00	2.2E+04	2.3E+03	2.2E+03	2.3E+02	6.0E+02	6.0E+00	2.1E+04	2.1E+03					3.1E+02	3.1E+00	1.1E+04	1.1E+03
Sodium Fluoroacetate	000062-74-8			1.5E+01	1.6E+00	1.5E+00	1.6E-01			1.4E+01	1.4E+00							7.1E+00	7.1E-01
Sodium Metavanadate	013718-26-8			7.3E+02	7.8E+01	7.3E+01	7.8E+00			2.8E+03	2.8E+02							5.8E+02	5.8E+01
Stirofos (Tetrachlorovinphos)	000961-11-5	2.7E+03	2.7E+01	2.2E+04	2.3E+03	2.2E+03	2.3E+02	6.7E+03	6.7E+01	2.1E+04	2.1E+03					3.4E+03	3.4E+01	1.1E+04	1.1E+03
Strontium, Stable	007440-24-6			4.4E+05	4.7E+04	4.4E+04	4.7E+03			1.0E+06	1.7E+05							3.5E+05	3.5E+04
Strychnine	000057-24-9			2.2E+02	2.3E+01	2.2E+01	2.3E+00			2.1E+02	2.1E+01							1.1E+02	1.1E+01
Styrene ⁽⁴⁾	000100-42-5			1.5E+05	1.6E+04	1.5E+04	1.6E+03			2.2E+05	2.2E+04			6.7E+02	6.7E+02			6.7E+02	6.7E+02
Sulfate	014808-79-8																		
Systhane	088671-89-0			1.8E+04	2.0E+03	1.8E+03	2.0E+02			1.7E+04	1.7E+03							8.9E+03	8.9E+02
TCDD, 2,3,7,8- ⁽⁴⁾	001746-01-6	4.3E-04	4.3E-06					3.6E-04	3.6E-06			2.4E+01	2.4E-01			2.7E-04	2.7E-06		
TCDF, 2,3,7,8- ⁽⁴⁾	051207-31-9	4.3E-03	4.3E-05					1.1E-02	1.1E-04			2.4E+02	2.4E+00			5.5E-03	5.5E-05		
TCMTB	021564-17-0			2.2E+04	2.3E+03	2.2E+03	2.3E+02			2.1E+04	2.1E+03							1.1E+04	1.1E+03
Tebuthiuron	034014-18-1			5.1E+04	5.5E+03	5.1E+03	5.5E+02			4.8E+04	4.8E+03							2.5E+04	2.5E+03
Temephos	003383-96-8			1.5E+04	1.6E+03	1.5E+03	1.6E+02			1.4E+04	1.4E+03							7.1E+03	7.1E+02
Terbacil	005902-51-2			9.5E+03	1.0E+03	9.5E+02	1.0E+02			9.0E+03	9.0E+02							4.6E+03	4.6E+02

Table 3.1c. (continued)

Chemical	CASRN	Ingestion (mg/kg)*						Dermal (mg/kg)*				Inhalation (mg/kg)* ^v				Ingestion + Dermal + Inhalation (mg/kg) ^{†v}			
		10 ⁻⁴	10 ⁻⁴	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Terbufos	013071-79-9			1.8E+01	2.0E+00	1.8E+00	2.0E-01			1.7E+01	1.7E+00							8.9E+00	8.9E-01
Terbutryn	000886-50-0			7.3E+02	7.8E+01	7.3E+01	7.8E+00			6.9E+02	6.9E+01							3.5E+02	3.5E+01
Tetrabutyl Lead	001920-90-7																		
Tetrachlorobenzene, 1,2,4,5-	000095-94-3			2.2E+02	2.3E+01	2.2E+01	2.3E+00			3.3E+02	3.3E+01							1.3E+02	1.3E+01
Tetrachloroethane, 1,1,1,2-	000630-20-6	2.5E+03	2.5E+01	2.2E+04	2.3E+03	2.2E+03	2.3E+02	9.9E+03	9.9E+01	3.3E+04	3.3E+03	7.7E+02	1.7E+01			7.7E+02	1.2E+01	7.7E+02	7.7E+02
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 ⁶⁹	000127-18-4	1.2E+03	1.2E+01	7.3E+03	7.8E+02	7.3E+02	7.8E+01	6.2E+03	6.2E+01	1.4E+04	1.4E+03	1.2E+02	9.4E+01			1.2E+02	1.7E+01	1.2E+02	1.2E+02
Tetrachlorophenol, 2,3,4,6-	000058-90-2			2.2E+04	2.3E+03	2.2E+03	2.3E+02			2.1E+04	2.1E+03							1.1E+04	1.1E+03
Tetrachlorotoluene, p-alpha, alpha, alpha-	005216-25-1	3.2E+00	3.2E-02					1.3E+01	1.3E-01							5.1E+00	5.1E-02		
Tetraethyl Dithiopyrophosphate	003689-24-5			3.7E+02	3.9E+01	3.7E+01	3.9E+00			3.4E+02	3.4E+01							1.8E+02	1.8E+01
Tetraethyl Lead	000078-00-2																		
Tetrafluoroethane, 1,1,1,2-	000811-97-2													1.1E+02	1.1E+02				
Tetramethyl Lead	000075-74-1																		
Tetrapropyl Lead	003440-75-3																		

Table 3.1c. (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	HQ=0.1 Adult	HQ=0.1 Child	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Thallic Oxide ⁽⁹⁾	001314-32-5			5.1E+01	5.5E+00	5.1E+00	5.5E-01			4.8E+01	4.8E+00							2.5E+01	2.5E+00
Thallium (I) Nitrate	010102-45-1			6.6E+01	7.0E+00	6.6E+00	7.0E-01			2.5E+02	2.5E+01							5.2E+01	5.2E+00
Thallium (Soluble Salts)	007440-28-0																		
Thallium Acetate	000563-68-8			6.6E+01	7.0E+00	6.6E+00	7.0E-01			6.2E+01	6.2E+00							3.2E+01	3.2E+00
Thallium Carbonate	006533-73-9			5.8E+01	6.3E+00	5.8E+00	6.3E-01			5.5E+01	5.5E+00							2.8E+01	2.8E+00
Thallium Chloride	007791-12-0			5.8E+01	6.3E+00	5.8E+00	6.3E-01			2.2E+02	2.2E+01							4.6E+01	4.6E+00
Thallium Selenite ⁽⁹⁾	012039-52-0			6.6E+01	7.0E+00	6.6E+00	7.0E-01			2.5E+02	2.5E+01							5.2E+01	5.2E+00
Thallium Sulfate	007446-18-6			5.8E+01	6.3E+00	5.8E+00	6.3E-01			2.2E+02	2.2E+01							4.6E+01	4.6E+00
Thiobencarb	028249-77-6			7.3E+03	7.8E+02	7.3E+02	7.8E+01			6.9E+03	6.9E+02							3.5E+03	3.5E+02
Thiofanox	039196-18-4			2.2E+02	2.3E+01	2.2E+01	2.3E+00			2.1E+02	2.1E+01							1.1E+02	1.1E+01
Thiophanate, Methyl	023564-05-8			5.8E+04	6.3E+03	5.8E+03	6.3E+02			5.5E+04	5.5E+03							2.8E+04	2.8E+03
Thiram	000137-26-8			3.7E+03	3.9E+02	3.7E+02	3.9E+01			3.4E+03	3.4E+02							1.8E+03	1.8E+02
Thorium	007440-29-1																		
Tin	007440-31-5			4.4E+05	4.7E+04	4.4E+04	4.7E+03			8.3E+05	8.3E+04							2.9E+05	2.9E+04
Titanium	007440-32-6																		
Toluene ⁽⁹⁾	000108-88-3			1.5E+05	1.6E+04	1.5E+04	1.6E+03			2.2E+05	2.2E+04			2.5E+02	2.5E+02			2.5E+02	2.5E+02
Toluene diisocyanate mixture (TDI)	026471-62-5													3.1E+05	3.1E+04				

Table 3.1c. (continued)

Chemical	CASRN	Ingestion (mg/kg)*						Dermal (mg/kg)*				Inhalation (mg/kg)**				Ingestion + Dermal + Inhalation (mg/kg)**			
		10 ⁻⁴	10 ⁻⁴	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Toluene-2,4-diamine	000095-80-7	2.0E+01	2.0E-01					5.0E+01	5.0E-01							2.6E+01	2.6E-01		
Toluene-2,5-diamine	000095-70-5			4.4E+05	4.7E+04	4.4E+04	4.7E+03			4.1E+05	4.1E+04							2.1E+05	2.1E+04
Toluene-2,6-diamine	000823-40-5			1.5E+05	1.6E+04	1.5E+04	1.6E+03			1.4E+05	1.4E+04							7.1E+04	7.1E+03
Toluidine, o- (Methylaniline, 2-)	000095-53-4	2.7E+02	2.7E+00					6.7E+02	6.7E+00							3.4E+02	3.4E+00		
Toluidine, p-	000106-49-0	3.4E+02	3.4E+00					8.5E+02	8.5E+00							4.4E+02	4.4E+00		
Toxaphene	008001-35-2	5.8E+01	5.8E-01					1.5E+02	1.5E+00			1.0E+06	3.3E+04			7.5E+01	7.5E-01		
Tralomehrin	066841-25-6			5.5E+03	5.9E+02	5.5E+02	5.9E+01			5.2E+03	5.2E+02							2.7E+03	2.7E+02
Triallate	002303-17-5			9.5E+03	1.0E+03	9.5E+02	1.0E+02			9.0E+03	9.0E+02							4.6E+03	4.6E+02
Triasulfuron	082097-50-5			7.3E+03	7.8E+02	7.3E+02	7.8E+01			6.9E+03	6.9E+02							3.5E+03	3.5E+02
Tribromobenzene, 1,2,4-	000615-54-3			3.7E+03	3.9E+02	3.7E+02	3.9E+01			5.5E+03	5.5E+02							2.2E+03	2.2E+02
Tribromo-chloromethane	000594-15-0																		
Tribromodiphenyl Ether	049690-94-0																		
Tributyltin Oxide	000056-35-9			2.2E+01	2.3E+00	2.2E+00	2.3E-01			2.1E+01	2.1E+00							1.1E+01	1.1E+00
Trichloro-1,2,2-trifluoroethane, 1,1,2-	000076-13-1			1.0E+06	1.0E+06	1.0E+06	2.3E+05			1.0E+06	1.0E+06			2.1E+02	2.1E+02			2.1E+02	2.1E+02
Trichloro-2'-hydroxydiphenylether	003380-34-5																		
Trichloroacetic Acid																			

Table 3.1c. (continued)

Chemical	CASRN	Ingestion (mg/kg)*						Dermal (mg/kg)*				Inhalation (mg/kg)**				Ingestion + Dermal + Inhalation (mg/kg)**v			
		10 ⁻⁴	10 ⁻⁴	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Trichloroaniline HCl, 2,4,6-	033663-50-2	2.2E+03	2.2E+01					5.5E+03	5.5E+01							2.9E+03	2.9E+01		
Trichloroaniline, 2,4,6-	000634-93-5	1.9E+03	1.9E+01					4.7E+03	4.7E+01							2.4E+03	2.4E+01		
Trichlorobenzene, 1,2,4-	000120-82-1			7.3E+03	7.8E+02	7.3E+02	7.8E+01			1.3E+04	1.3E+03			8.3E+02	8.3E+02			8.3E+02	4.4E+02
Trichloroethane, 1,1,1-(⁹)	000071-55-6			6.6E+04	7.0E+03	6.6E+03	7.0E+02			1.1E+05	1.1E+04			7.3E+02	7.3E+02			7.3E+02	7.3E+02
Trichloroethane, 1,1,2-	000079-00-5	1.1E+03	1.1E+01	2.9E+03	3.1E+02	2.9E+02	3.1E+01	4.6E+03	4.6E+01	4.5E+03	4.5E+02	5.3E+02	5.3E+00			4.1E+02	4.1E+00	8.5E+02	1.8E+02
Trichloroethylene(⁹)	000079-01-6	5.8E+03	5.8E+01					4.4E+03	4.4E+01			4.5E+02	2.7E+01			4.5E+02	1.5E+01		
Trichlorofluoromethane	000075-69-4			2.2E+05	2.3E+04	2.2E+04	2.3E+03			9.5E+04	9.5E+03			7.1E+02	4.3E+02			7.1E+02	4.0E+02
Trichlorophenol, 2,4,5-	000095-95-4			7.3E+04	7.8E+03	7.3E+03	7.8E+02			1.1E+05	1.1E+04							4.4E+04	4.4E+03
Trichlorophenol, 2,4,6-	000088-06-2	5.8E+03	5.8E+01					1.5E+04	1.5E+02			1.0E+06	1.0E+06			7.5E+03	7.5E+01		
Trichlorophenoxy) Propionic Acid, 2(2,4,5-	000093-72-1			5.8E+03	6.3E+02	5.8E+02	6.3E+01			5.5E+03	5.5E+02							2.8E+03	2.8E+02
Trichlorophenoxyacetic Acid, 2,4,5-	000093-76-5			7.3E+03	7.8E+02	7.3E+02	7.8E+01			6.9E+03	6.9E+02							3.5E+03	3.5E+02
Trichloropropane, 1,1,2-	000598-77-6			3.7E+03	3.9E+02	3.7E+02	3.9E+01			5.5E+03	5.5E+02							2.2E+03	2.2E+02
Trichloropropane, 1,2,3-	000096-18-4	9.1E+00	9.1E-02	4.4E+03	4.7E+02	4.4E+02	4.7E+01	3.7E+01	3.7E-01	6.6E+03	6.6E+02					1.5E+01	1.5E-01	2.6E+03	2.6E+02
Trichloropropene, 1,2,3-	000096-19-5			3.7E+03	3.9E+02	3.7E+02	3.9E+01			5.5E+03	5.5E+02							2.2E+03	2.2E+02

Table 3.1c. (continued)

Chemical	CASRN	Ingestion (mg/kg)*						Dermal (mg/kg)*				Inhalation (mg/kg)**				Ingestion + Dermal + Inhalation (mg/kg)**v			
		10 ⁻⁴	10 ⁻⁴	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Trichlorotoluene, 2,3,6-	002077-46-5																		
Trichlorotoluene, alpha 2,6-	002014-83-7																		
Tridipane	058138-08-2			2.2E+03	2.3E+02	2.2E+02	2.3E+01			2.1E+03	2.1E+02							1.1E+03	1.1E+02
Triethyl Lead	005224-23-7																		
Triethylamine	000121-44-8													1.2E+03	1.2E+02				
Trifluralin	001582-09-8	8.3E+03	8.3E+01	5.5E+03	5.9E+02	5.5E+02	5.9E+01	2.1E+04	2.1E+02	5.2E+03	5.2E+02					1.1E+04	1.1E+02	2.7E+03	2.7E+02
Trimethyl Lead	007442-13-9																		
Trimethyl Phosphate	000512-56-1	1.7E+03	1.7E+01					4.3E+03	4.3E+01							2.2E+03	2.2E+01		
Trimethylethyl Lead	001762-26-1																		
Trinitrobenzene, 1,3,5-	000099-35-4			3.7E+01	3.9E+00	3.7E+00	3.9E-01			4.5E+01	4.5E+00							2.0E+01	2.0E+00
Trinitrophenyl methylnitramine	000479-45-8			7.3E+03	7.8E+02	7.3E+02	7.8E+01			6.9E+03	6.9E+02							3.5E+03	3.5E+02
Trinitrotoluene, 2,4,6-	000118-96-7	2.1E+03	2.1E+01	3.7E+02	3.9E+01	3.7E+01	3.9E+00	6.4E+03	6.4E+01	4.1E+02	4.1E+01					3.0E+03	3.0E+01	1.9E+02	1.9E+01
Tripropyl Lead	006618-03-7																		
Uranium (Soluble Salts)	NA			2.2E+03	2.3E+02	2.2E+02	2.3E+01			3.5E+04	3.5E+03							2.1E+03	2.1E+02
Vanadium Pentoxide	001314-62-1			6.6E+03	7.0E+02	6.6E+02	7.0E+01			2.5E+04	2.5E+03							5.2E+03	5.2E+02
Vanadium Sulfate	036907-42-3			1.5E+04	1.6E+03	1.5E+03	1.6E+02			5.5E+04	5.5E+03							1.2E+04	1.2E+03
Vanadium, Metallic	007440-62-2			5.1E+03	5.5E+02	5.1E+02	5.5E+01			9.6E+02	9.6E+01							8.1E+02	8.1E+01

Table 3.1c. (continued)

Chemical	CASRN	Ingestion (mg/kg)*						Dermal (mg/kg)*				Inhalation (mg/kg) ^v				Ingestion + Dermal + Inhalation (mg/kg) ^{†v}			
		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Vanadyl Sulfate	027774-13-6			1.5E+04	1.6E+03	1.5E+03	1.6E+02			5.5E+04	5.5E+03							1.2E+04	1.2E+03
Vermolate	001929-77-7			7.3E+02	7.8E+01	7.3E+01	7.8E+00			6.9E+02	6.9E+01							3.5E+02	3.5E+01
Vinclozolin	050471-44-8			1.8E+04	2.0E+03	1.8E+03	2.0E+02			1.7E+04	1.7E+03							8.9E+03	8.9E+02
Vinyl Acetate	000108-05-4			7.3E+05	7.8E+04	7.3E+04	7.8E+03			9.0E+05	9.0E+04			7.8E+02	2.8E+02			7.8E+02	2.7E+02
Vinyl Bromide	000593-60-2											1.1E+02	1.1E+00	4.4E+01	4.4E+00				
Vinyl Chloride ⁽⁶⁾	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	2.2E+01	2.3E+00			2.1E+02	2.1E+01							1.1E+02	1.1E+01
White Phosphorus	007723-14-0			1.5E+01	1.6E+00	1.5E+00	1.6E-01			5.5E+01	5.5E+00							1.2E+01	1.2E+00
Xylene, Mixture ⁽⁶⁾	001330-20-7			1.0E+06	1.6E+05	1.5E+05	1.6E+04			1.0E+06	2.5E+05							9.3E+05	9.3E+04
Xylene, P- ⁽⁶⁾	000106-42-3																		
Xylene, m- ⁽⁶⁾	000108-38-3			1.0E+06	1.6E+05	1.5E+05	1.6E+04			1.0E+06	2.2E+05							8.8E+05	8.8E+04
Xylene, o- ⁽⁶⁾	000095-47-6			1.0E+06	1.6E+05	1.5E+05	1.6E+04			1.0E+06	2.2E+05							8.8E+05	8.8E+04
Zinc (Metallic)	007440-66-6			2.2E+05	2.3E+04	2.2E+04	2.3E+03			8.3E+05	8.3E+04							1.7E+05	1.7E+04
Zinc Cyanide	000557-21-1			3.7E+04	3.9E+03	3.7E+03	3.9E+02			1.4E+05	1.4E+04							2.9E+04	2.9E+03
Zinc Phosphide	001314-84-7			2.2E+02	2.3E+01	2.2E+01	2.3E+00			8.3E+02	8.3E+01							1.7E+02	1.7E+01
Zineb	012122-67-7			3.7E+04	3.9E+03	3.7E+03	3.9E+02			3.4E+04	3.4E+03							1.8E+04	1.8E+03
Zirconium	007440-67-7																		

Notes:

- * By definition, 1 kg = 1.0E + 06 mg. Therefore, a limit of 1.0E + 06 mg/kg was used for any PRG that was calculated to be above this limit.

Table 3.1c. (continued)

- † If slope factors and/or reference doses were available for only one pathway (i.e., ingestion, dermal, OR inhalation), the total for ingestion plus inhalation plus dermal was not calculated.
- ‡ The volatilization factor 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 volatilization factor 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) The same oral slope factor as used for polychlorinated biphenyls.
 - (2) The PRG was calculated considering *Supplemental Guidance from RAGS: Region 4 Bulletins, Human Health Risk Assessment* (Interim 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 $7.3 \text{ (mg/kg/day)}^{-1}$ 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.
 - (3) The toxicity values for trichloroethylene have been withdrawn from IRIS and HEAST pending further investigation. However, the most recent toxicity values have been used to calculate the PRG.
 - (4) The PRG was calculated considering *Supplemental Guidance from RAGS: Region 4 Bulletins, Human Health Risk Assessment* (Interim Guidance) from EPA (November 1995). The slope factors for chemicals so marked indicate that a TEF methodology was used for chlorinated dioxin and furan congeners based on each compound's relative potency to the potency of 2,3,7,8-tetrachlorodibenzodioxin (TCDD). The following TEFs were used to convert each slope factor to an equivalent slope factor of 2,3,7,8-TCDD: (1) 2,3,7,8-TCDD, TEF = 1.0; (2) 2,3,7,8-PeCDD, TEF = 0.5; (3) 2,3,7,8-HxCDD, TEF = 0.1; (4) 2,3,7,8-HpCDD, TEF = 0.01; (5) OCDD, TEF = 0.001; (6) 2,3,7,8-TCDF, TEF = 0.1; (7) 1,2,3,7,8-PeCDF, TEF = 0.5; (8) 2,3,4,7,8-PeCDF, TEF = 0.05; (9) 2,3,7,8-HxCDF, TEF = 0.1; (10) 2,3,7,8-HpCDF, TEF = 0.01; and (11) OCDF, TEF = 0.001.
 - (5) Toxicity values for these chemicals have been withdrawn from IRIS and HEAST pending further investigation. However, the most recent toxicity values have been used to calculate the PRG.
 - (6) Toxicity values for these chemicals were obtained from the Superfund Health Risk Technical Support Center.

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

Chemical ^t	CASRN	Ingestion (pCi/g)		Inhalation (pCi/g)		External Exposure (pCi/g) ^{tt}		Ingestion + External + Inhalation (pCi/g) ^{ttt}	
		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	4.9E+05	4.9E+03	5.6E+02	5.6E+00	3.0E+02	3.0E+00
Ac-227	014952-40-0	2.3E+02	2.3E+00	2.9E+04	2.9E+02	1.8E+05	1.8E+03	2.7E+02	2.7E+00
Ac-227+D	014952-40-0	1.3E+02	1.3E+00	2.6E+04	2.6E+02	7.3E+00	7.3E-02	6.9E+00	6.9E-02
Ac-228	014331-83-0	4.9E+04	4.9E+02	6.2E+07	6.2E+05	1.3E+00	1.3E-02	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	2.2E+11	2.2E+09	7.5E+01	7.5E-01	7.5E+01	7.5E-01
Ag-108m	014391-65-2	1.3E+04	1.3E+02	2.9E+07	2.9E+05	7.7E-01	7.7E-03	7.7E-01	7.7E-03
Ag-108m+D	014391-65-2	1.3E+04	1.3E+02	2.9E+07	2.9E+05	7.7E-01	7.7E-03	7.7E-01	7.7E-03
Ag-109m	014378-38-2	2.9E+08	2.9E+06	5.9E+12	5.9E+10	3.7E+03	3.7E+01	3.7E+03	3.7E+01
Ag-110	014391-76-5	3.3E+07	3.3E+05	6.5E+11	6.5E+09	3.8E+01	3.8E-01	3.8E+01	3.8E-01
Ag-110m	015760-04-0	9.4E+03	9.4E+01	6.4E+07	6.4E+05	4.1E-01	4.1E-03	4.1E-01	4.1E-03
Ag-111	157690-04-0	1.2E+04	1.2E+02	3.9E+08	3.9E+06	5.1E+01	5.1E-01	5.1E+01	5.1E-01
Am-241	014596-10-2	2.4E+02	2.4E+00	5.3E+04	5.3E+02	9.5E+02	9.5E+00	2.2E+02	2.2E+00
Am-242	013981-54-9	5.4E+04	5.4E+02	2.0E+08	2.0E+06	7.5E+02	7.5E+00	7.5E+02	7.5E+00
Am-242m	013981-54-9	2.7E+02	2.7E+00	5.8E+04	5.8E+02	5.0E+04	5.0E+02	3.2E+02	3.2E+00
Am-243	014993-75-0	2.4E+02	2.4E+00	5.3E+04	5.3E+02	1.8E+02	1.8E+00	1.1E+02	1.1E+00
Am-243+D	014993-75-0	2.4E+02	2.4E+00	5.3E+04	5.3E+02	1.6E+01	1.6E-01	1.5E+01	1.5E-01

Table 3.1d. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		Inhalation (pCi/g)		External Exposure (pCi/g) ^{††}		Ingestion + External + Inhalation (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Ar-41	014163-25-8			4.3E+12	4.3E+10				
At-217	017239-90-6	8.8E+09	8.8E+07	4.0E+12	4.0E+10	5.0E+03	5.0E+01	5.0E+03	5.0E+01
Au-196	014914-16-0	6.1E+04	6.1E+02	2.0E+09	2.0E+07	3.1E+00	3.1E-02	3.1E+00	3.1E-02
Au-198	010043-49-0	1.5E+04	1.5E+02	5.6E+08	5.6E+06	3.2E+00	3.2E-02	3.2E+00	3.2E-02
Ba-131	014914-75-1	4.7E+04	4.7E+02	4.3E+09	4.3E+07	3.4E+00	3.4E-02	3.4E+00	3.4E-02
Ba-133	013981-41-4	2.9E+04	2.9E+02	5.1E+08	5.1E+06	4.7E+00	4.7E-02	4.7E+00	4.7E-02
Ba-133m	013981-41-4	2.9E+04	2.9E+02	3.6E+09	3.6E+07	4.3E+01	4.3E-01	4.3E+01	4.3E-01
Ba-137m	013981-97-0	3.3E+07	3.3E+05	1.3E+12	1.3E+10	2.0E+00	2.0E-02	2.0E+00	2.0E-02
Ba-139	014378-25-7	2.6E+05	2.6E+03	1.3E+10	1.3E+08	5.2E+01	5.2E-01	5.2E+01	5.2E-01
Ba-140	014798-08-4	6.7E+03	6.7E+01	6.4E+08	6.4E+06	7.2E+00	7.2E-02	7.2E+00	7.2E-02
Be-7	013966-02-4	9.2E+05	9.2E+03	1.1E+10	1.1E+08	2.5E+01	2.5E-01	2.5E+01	2.5E-01
Bi-206	015776-19-9	1.1E+04	1.1E+02	4.0E+08	4.0E+06	3.6E-01	3.6E-03	3.6E-01	3.6E-03
Bi-207	013982-38-2	1.6E+04	1.6E+02	2.2E+08	2.2E+06	7.9E-01	7.9E-03	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	1.2E+09	1.2E+07	2.9E+01	2.9E-01	2.9E+01	2.9E-01
Bi-212	014913-49-6	1.3E+05	1.3E+03	5.6E+07	5.6E+05	6.5E+00	6.5E-02	6.5E+00	6.5E-02
Bi-213	015776-20-2	1.8E+05	1.8E+03	6.6E+07	6.6E+05	9.4E+00	9.4E-02	9.4E+00	9.4E-02

Table 3.1d. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		Inhalation (pCi/g)		External Exposure (pCi/g) ^{††}		Ingestion + External + Inhalation (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Bi-214	014733-03-0	4.1E+05	4.1E+03	1.4E+08	1.4E+06	7.2E-01	7.2E-03	7.2E-01	7.2E-03
Br-82	014686-69-2	5.6E+04	5.6E+02	2.6E+09	2.6E+07	4.3E-01	4.3E-03	4.3E-01	4.3E-03
C-11	014333-33-6	1.8E+06	1.8E+04	6.0E+10	6.0E+08	1.2E+00	1.2E-02	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
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	8.1E+08	8.1E+06	1.1E+12	1.1E+10	4.7E+04	4.7E+02
Ca-47	001439-99-2	1.2E+04	1.2E+02	3.9E+08	3.9E+06	1.1E+00	1.1E-02	1.1E+00	1.1E-02
Cd-109	014109-32-1	9.9E+03	9.9E+01	1.1E+08	1.1E+06	7.7E+03	7.7E+01	4.7E+03	4.7E+01
Cd-115	014336-68-6	1.1E+04	1.1E+02	4.1E+08	4.1E+06	6.2E+00	6.2E-02	6.2E+00	6.2E-02
Cd-115m	014336-68-6	5.6E+03	5.6E+01	1.2E+08	1.2E+06	5.1E+01	5.1E-01	5.0E+01	5.0E-01
Ce-141	013967-74-3	2.0E+04	2.0E+02	4.7E+08	4.7E+06	3.1E+01	3.1E-01	3.1E+01	3.1E-01
Ce-143	014119-19-8	1.3E+04	1.3E+02	5.3E+08	5.3E+06	5.9E+00	5.9E-02	5.9E+00	5.9E-02
Ce-144	014762-78-8	2.7E+03	2.7E+01	1.9E+07	1.9E+05	1.7E+02	1.7E+00	1.6E+02	1.6E+00
Ce-144+D	014762-78-8	2.7E+03	2.7E+01	1.9E+07	1.9E+05	2.8E+01	2.8E-01	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	1.3E+10	1.3E+08	6.7E-01	6.7E-03	6.7E-01	6.7E-03
Cm-242	015510-73-3	2.1E+03	2.1E+01	6.5E+05	6.5E+03	1.9E+05	1.9E+03	2.4E+03	2.4E+01

Table 3.1d. (continued)

Chemical ^t	CASRN	Ingestion (pCi/g)		Inhalation (pCi/g)		External Exposure (pCi/g) ^{tt}		Ingestion + External + Inhalation (pCi/g) ^{ttt}	
		10 ⁻⁴	10 ⁻⁵	10 ⁻⁴	10 ⁻⁵	10 ⁻⁴	10 ⁻⁵	10 ⁻⁴	10 ⁻⁵
Cm-243	015757-87-6	3.2E+02	3.2E+00	7.1E+04	7.1E+02	2.5E+01	2.5E-01	2.4E+01	2.4E-01
Cm-243+D	015757-87-6	3.1E+02	3.1E+00	7.0E+04	7.0E+02	2.5E+01	2.5E-01	2.4E+01	2.4E-01
Cm-244	013981-15-2	3.8E+02	3.8E+00	8.4E+04	8.4E+02	2.1E+05	2.1E+03	4.5E+02	4.5E+00
Cm-245	015621-76-8	2.4E+02	2.4E+00	5.2E+04	5.2E+02	7.9E+01	7.9E-01	6.2E+01	6.2E-01
Cm-246	015757-90-1	2.4E+02	2.4E+00	5.2E+04	5.2E+02	2.4E+05	2.4E+03	2.8E+02	2.8E+00
Cm-247	015758-32-4	2.6E+02	2.6E+00	5.7E+04	5.7E+02	4.2E+00	4.2E-02	4.2E+00	4.2E-02
Cm-248	015758-33-5	6.1E+01	6.1E-01	1.4E+04	1.4E+02	3.0E+05	3.0E+03	7.2E+01	7.2E-01
Co-57	013981-50-5	8.2E+04	8.2E+02	7.1E+08	7.1E+06	2.1E+01	2.1E-01	2.1E+01	2.1E-01
Co-58	013981-38-9	2.8E+04	2.8E+02	3.9E+08	3.9E+06	1.2E+00	1.2E-02	1.2E+00	1.2E-02
Co-58m	013981-38-9	8.4E+05	8.4E+03	2.3E+10	2.3E+08	1.4E+05	1.4E+03	1.2E+05	1.2E+03
Co-60	010198-40-0	4.2E+03	4.2E+01	3.0E+07	3.0E+05	4.5E-01	4.5E-03	4.5E-01	4.5E-03
Cr-51	014392-02-0	5.8E+05	5.8E+03	1.2E+10	1.2E+08	4.3E+01	4.3E-01	4.3E+01	4.3E-01
Cs-131	014914-76-2	4.4E+05	4.4E+03	1.9E+10	1.9E+08	1.9E+03	1.9E+01	1.9E+03	1.9E+01
Cs-134	013967-70-9	1.7E+03	1.7E+01	7.1E+07	7.1E+05	7.4E-01	7.4E-03	7.4E-01	7.4E-03
Cs-134m	013967-70-9	1.7E+06	1.7E+04	6.6E+10	6.6E+08	2.2E+02	2.2E+00	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	4.4E+08	4.4E+06	5.3E-01	5.3E-03	5.3E-01	5.3E-03

Radionuclides/soil/residential

Table 3.1d. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		Inhalation (pCi/g)		External Exposure (pCi/g) ^{††}		Ingestion + External + Inhalation (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
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	1.1E+08	1.1E+06	2.1E+00	2.1E-02	2.1E+00	2.1E-02
Cs-138	015758-29-9	4.5E+05	4.5E+03	1.6E+10	1.6E+08	4.6E-01	4.6E-03	4.6E-01	4.6E-03
Cu-64	013981-25-4	1.5E+05	1.5E+03	4.9E+09	4.9E+07	6.5E+00	6.5E-02	6.5E+00	6.5E-02
Dy-165	013967-64-1	2.4E+05	2.4E+03	9.1E+09	9.1E+07	7.0E+01	7.0E-01	7.0E+01	7.0E-01
Dy-166	015840-01-4	8.4E+03	8.4E+01	2.6E+08	2.6E+06	1.6E+02	1.6E+00	1.6E+02	1.6E+00
Er-169	015840-13-8	3.7E+04	3.7E+02	1.4E+09	1.4E+07	6.7E+05	6.7E+03	4.2E+04	4.2E+02
Er-171	014391-45-8	4.9E+04	4.9E+02	2.7E+09	2.7E+07	4.2E+00	4.2E-02	4.2E+00	4.2E-02
Eu-152	014683-23-9	1.4E+04	1.4E+02	2.6E+07	2.6E+05	1.1E+00	1.1E-02	1.1E+00	1.1E-02
Eu-154	015585-10-1	8.5E+03	8.5E+01	2.2E+07	2.2E+05	9.3E-01	9.3E-03	9.3E-01	9.3E-03
Eu-155	014391-16-3	4.8E+04	4.8E+02	2.1E+08	2.1E+06	7.1E+01	7.1E-01	7.1E+01	7.1E-01
Eu-156	014280-35-4	7.3E+03	7.3E+01	2.2E+08	2.2E+06	8.0E-01	8.0E-03	8.0E-01	8.0E-03
F-18	013981-56-1	7.3E+05	7.3E+03	3.1E+10	3.1E+08	1.2E+00	1.2E-02	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	2.9E+08	2.9E+06	9.4E-01	9.4E-03	9.4E-01	9.4E-03
Fr-221	015756-41-9	5.5E+05	5.5E+03	2.5E+08	2.5E+06	6.4E+01	6.4E-01	6.4E+01	6.4E-01
Fr-223	015756-98-6	1.8E+05	1.8E+03	3.5E+09	3.5E+07	1.0E+02	1.0E+00	1.0E+02	1.0E+00

Table 3.1d. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		Inhalation (pCi/g)		External Exposure (pCi/g) ^{††}		Ingestion + External + Inhalation (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁵	10 ⁻⁴	10 ⁻⁵	10 ⁻⁴	10 ⁻⁵	10 ⁻⁴	10 ⁻⁵
Ga-67	014119-09-6	9.5E+04	9.5E+02	4.0E+09	4.0E+07	1.2E+01	1.2E-01	1.2E+01	1.2E-01
Ga-72	013982-22-4	1.7E+04	1.7E+02	9.4E+08	9.4E+06	3.9E-01	3.9E-03	3.9E-01	3.9E-03
Gd-153	014276-65-4	6.0E+04	6.0E+02	6.4E+08	6.4E+06	6.0E+01	6.0E-01	6.0E+01	6.0E-01
Gd-159	014041-42-0	3.1E+04	3.1E+02	1.6E+09	1.6E+07	4.5E+01	4.5E-01	4.5E+01	4.5E-01
Ge-71	014374-81-3	6.7E+06	6.7E+04	3.5E+10	3.5E+08	2.8E+05	2.8E+03	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	2.9E+09	2.9E+07	7.9E+01	7.9E-01	7.9E+01	7.9E-01
Hg-203	013982-78-0	3.0E+04	3.0E+02	6.7E+08	6.7E+06	6.9E+00	6.9E-02	6.9E+00	6.9E-02
Ho-166	013967-65-2	1.0E+04	1.0E+02	5.0E+08	5.0E+06	6.2E+01	6.2E-01	6.2E+01	6.2E-01
I-122	018287-75-7	3.7E+06	3.7E+04	9.1E+10	9.1E+08	1.3E+00	1.3E-02	1.3E+00	1.3E-02
I-123	015715-08-9	1.5E+05	1.5E+03	6.9E+09	6.9E+07	1.7E+01	1.7E-01	1.7E+01	1.7E-01
I-125	014158-31-7	3.1E+03	3.1E+01	1.2E+08	1.2E+06	1.8E+03	1.8E+01	1.2E+03	1.2E+01
I-126	014158-32-8	1.6E+03	1.6E+01	6.5E+07	6.5E+05	2.9E+00	2.9E-02	2.9E+00	2.9E-02
I-129	015046-84-1	4.3E+02	4.3E+00	1.7E+07	1.7E+05	1.6E+03	1.6E+01	3.9E+02	3.9E+00
I-130	014914-02-4	1.6E+04	1.6E+02	7.8E+08	7.8E+06	5.5E-01	5.5E-03	5.5E-01	5.5E-03
I-131	010043-66-0	2.2E+03	2.2E+01	8.8E+07	8.8E+05	3.5E+00	3.5E-02	3.5E+00	3.5E-02
I-132	014683-16-0	1.2E+05	1.2E+03	5.8E+09	5.8E+07	5.0E-01	5.0E-03	5.0E-01	5.0E-03

Table 3.1d. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		Inhalation (pCi/g)		External Exposure (pCi/g) ^{††}		Ingestion + External + Inhalation (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
I-133	014834-67-4	7.5E+03	7.5E+01	3.4E+08	3.4E+06	2.0E+00	2.0E-02	2.0E+00	2.0E-02
I-134	014914-27-3	3.4E+05	3.4E+03	1.5E+10	1.5E+08	4.3E-01	4.3E-03	4.3E-01	4.3E-03
I-135	014834-68-5	3.5E+04	3.5E+02	1.7E+09	1.7E+07	7.0E-01	7.0E-03	7.0E-01	7.0E-03
In-113m	014885-78-0	9.6E+05	9.6E+03	3.5E+10	3.5E+08	5.6E+00	5.6E-02	5.6E+00	5.6E-02
In-114	013981-55-0	1.8E+07	1.8E+05	3.5E+11	3.5E+09	3.8E+01	3.8E-01	3.8E+01	3.8E-01
In-114m	013981-55-0	3.9E+03	3.9E+01	8.1E+07	8.1E+05	2.2E+01	2.2E-01	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	1.2E+10	1.2E+08	1.0E+01	1.0E-01	1.0E+01	1.0E-01
Ir-190	014981-91-0	1.6E+04	1.6E+02	4.5E+08	4.5E+06	9.3E-01	9.3E-03	9.3E-01	9.3E-03
Ir-194	014158-35-1	1.1E+04	1.1E+02	4.9E+08	4.9E+06	1.4E+01	1.4E-01	1.4E+01	1.4E-01
K-40	013966-00-2	6.3E+03	6.3E+01	2.7E+08	2.7E+06	7.1E+00	7.1E-02	7.1E+00	7.1E-02
K-42	014378-21-3	6.2E+04	6.2E+02	2.7E+09	2.7E+07	4.0E+00	4.0E-02	4.0E+00	4.0E-02
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				

Table 3.1d. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		Inhalation (pCi/g)		External Exposure (pCi/g) ^{††}		Ingestion + External + Inhalation (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
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	4.0E+08	4.0E+06	4.8E-01	4.8E-03	4.8E-01	4.8E-03
Lu-177	014265-75-9	2.7E+04	2.7E+02	9.3E+08	9.3E+06	6.0E+01	6.0E-01	6.0E+01	6.0E-01
Mn-52	014092-99-0	1.3E+04	1.3E+02	4.6E+08	4.6E+06	3.2E-01	3.2E-03	3.2E-01	3.2E-03
Mn-54	013966-31-9	4.0E+04	4.0E+02	5.5E+08	5.5E+06	1.3E+00	1.3E-02	1.3E+00	1.3E-02
Mn-56	014681-52-8	9.3E+04	9.3E+02	3.9E+09	3.9E+07	6.3E-01	6.3E-03	6.3E-01	6.3E-03
Mo-99	014119-15-4	3.5E+04	3.5E+02	4.6E+08	4.6E+06	8.0E+00	8.0E-02	8.0E+00	8.0E-02
Na-22	013966-32-0	9.9E+03	9.9E+01	4.2E+08	4.2E+06	5.3E-01	5.3E-03	5.3E-01	5.3E-03
Na-24	013982-04-2	5.8E+04	5.8E+02	2.7E+09	2.7E+07	2.5E-01	2.5E-03	2.5E-01	2.5E-03
Nb-93m	007440-03-1	1.2E+05	1.2E+03	4.7E+08	4.7E+06	1.2E+05	1.2E+03	6.5E+04	6.5E+02
Nb-94	014681-63-1	1.1E+04	1.1E+02	2.5E+07	2.5E+05	7.1E-01	7.1E-03	7.1E-01	7.1E-03
Nb-95	013967-76-5	3.5E+04	3.5E+02	6.6E+08	6.6E+06	1.5E+00	1.5E-02	1.5E+00	1.5E-02
Nb-95m	013967-76-5	2.6E+04	2.6E+02	9.1E+08	9.1E+06	5.0E+01	5.0E-01	5.0E+01	5.0E-01
Nb-97	018496-04-3	4.5E+05	4.5E+03	9.6E+09	9.6E+07	1.7E+00	1.7E-02	1.7E+00	1.7E-02
Nb-97m	018496-04-3	2.4E+07	2.4E+05	6.1E+11	6.1E+09	1.6E+00	1.6E-02	1.6E+00	1.6E-02
Nd-147	014269-74-0	1.3E+04	1.3E+02	4.2E+08	4.2E+06	1.3E+01	1.3E-01	1.3E+01	1.3E-01

Table 3.1d. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		Inhalation (pCi/g)		External Exposure (pCi/g) ^{††}		Ingestion + External + Inhalation (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Nd-149	015749-81-2	1.7E+05	1.7E+03	4.8E+09	4.8E+07	4.0E+00	4.0E-02	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	5.7E+09	5.7E+07	2.0E+00	2.0E-02	2.0E+00	2.0E-02
Np-236	015700-36-4	8.5E+04	8.5E+02	5.3E+08	5.3E+06	4.7E+01	4.7E-01	4.7E+01	4.7E-01
Np-237	013994-20-2	2.7E+02	2.7E+00	5.9E+04	5.9E+02	5.7E+02	5.7E+00	2.1E+02	2.1E+00
Np-237+D	013994-20-2	2.6E+02	2.6E+00	5.9E+04	5.9E+02	9.4E+00	9.4E-02	9.1E+00	9.1E-02
Np-238	015766-25-3	1.7E+04	1.7E+02	4.4E+08	4.4E+06	2.2E+00	2.2E-02	2.2E+00	2.2E-02
Np-239	013968-59-7	1.9E+04	1.9E+02	8.5E+08	8.5E+06	1.8E+01	1.8E-01	1.8E+01	1.8E-01
Np-240	015690-84-3	4.5E+05	4.5E+03	1.6E+10	1.6E+08	1.2E+00	1.2E-02	1.2E+00	1.2E-02
Np-240m	015690-84-3	3.3E+06	3.3E+04	7.2E+10	7.2E+08	4.1E+00	4.1E-02	4.1E+00	4.1E-02
Os-185	015766-50-4	4.4E+04	4.4E+02	4.4E+08	4.4E+06	1.8E+00	1.8E-02	1.8E+00	1.8E-02
Os-191	014119-24-5	2.6E+04	2.6E+02	7.6E+08	7.6E+06	5.0E+01	5.0E-01	5.0E+01	5.0E-01
Os-191m	014119-24-5	1.6E+05	1.6E+03	6.1E+09	6.1E+07	1.3E+03	1.3E+01	1.3E+03	1.3E+01
Os-193	016057-77-5	1.8E+04	1.8E+02	7.6E+08	7.6E+06	2.4E+01	2.4E-01	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
P-33	015749-66-3	1.0E+05	1.0E+03	5.2E+09	5.2E+07			1.2E+05	1.2E+03

Table 3.1d. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		Inhalation (pCi/g)		External Exposure (pCi/g) ^{††}		Ingestion + External + Inhalation (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Pa-231	014331-85-2	5.3E+02	5.3E+00	8.4E+04	8.4E+02	1.6E+02	1.6E+00	1.3E+02	1.3E+00
Pa-233	013981-14-1	1.7E+04	1.7E+02	4.1E+08	4.1E+06	9.6E+00	9.6E-02	9.6E+00	9.6E-02
Pa-234	015100-28-4	3.7E+04	3.7E+02	1.6E+09	1.6E+07	6.6E-01	6.6E-03	6.6E-01	6.6E-03
Pa-234m	015100-28-4	1.7E+07	1.7E+05	3.3E+11	3.3E+09	1.1E+02	1.1E+00	1.1E+02	1.1E+00
Pb-203	014687-25-3	7.7E+04	7.7E+02	6.6E+09	6.6E+07	6.8E+00	6.8E-02	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	1.2E+06	1.2E+04	3.9E+04	3.9E+02	1.4E+02	1.4E+00
Pb-210+D	014255-04-0	7.9E+01	7.9E-01	5.3E+05	5.3E+03	3.0E+04	3.0E+02	9.4E+01	9.4E-01
Pb-211	015816-77-0	2.3E+05	2.3E+03	2.0E+08	2.0E+06	2.3E+01	2.3E-01	2.3E+01	2.3E-01
Pb-212	015092-94-1	4.4E+03	4.4E+01	5.3E+07	5.3E+05	1.4E+01	1.4E-01	1.4E+01	1.4E-01
Pb-214	015067-28-4	2.7E+05	2.7E+03	3.3E+08	3.3E+06	6.1E+00	6.1E-02	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	1.9E+09	1.9E+07	8.1E+03	8.1E+01	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	1.0E+09	1.0E+07	1.8E+03	1.8E+01	1.7E+03	1.7E+01
Pm-147	014380-75-7	5.6E+04	5.6E+02	2.7E+08	2.7E+06	6.8E+05	6.8E+03	6.1E+04	6.1E+02

Table 3.1d. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		Inhalation (pCi/g)		External Exposure (pCi/g) ^{††}		Ingestion + External + Inhalation (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Pm-148	014683-19-3	5.5E+03	5.5E+01	1.9E+08	1.9E+06	2.0E+00	2.0E-02	2.0E+00	2.0E-02
Pm-148m	014683-19-3	8.0E+03	8.0E+01	6.9E+07	6.9E+05	5.9E-01	5.9E-03	5.9E-01	5.9E-03
Pm-149	015765-31-8	1.4E+04	1.4E+02	5.7E+08	5.7E+06	1.2E+02	1.2E+00	1.2E+02	1.2E+00
Po-210	013981-52-7	2.4E+02	2.4E+00	9.5E+05	9.5E+03	1.3E+05	1.3E+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	2.6E+16	2.6E+14	3.7E+04	3.7E+02	3.7E+04	3.7E+02
Po-214	015735-67-8	3.7E+12	3.7E+10	7.4E+14	7.4E+12	1.3E+04	1.3E+02	1.3E+04	1.3E+02
Po-215	015706-52-2	1.6E+11	1.6E+09	4.6E+13	4.6E+11	8.5E+03	8.5E+01	8.5E+03	8.5E+01
Po-216	015756-58-8	9.0E+08	9.0E+06	6.9E+11	6.9E+09	7.7E+04	7.7E+02	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	4.9E+08	4.9E+06	1.9E+01	1.9E-01	1.9E+01	1.9E-01
Pr-143	014981-79-4	1.2E+04	1.2E+02	3.6E+08	3.6E+06	1.3E+08	1.3E+06	1.4E+04	1.4E+02
Pr-144	014119-05-2	9.8E+05	9.8E+03	1.6E+10	1.6E+08	3.3E+01	3.3E-01	3.3E+01	3.3E-01
Pr-144m	014119-05-2	2.5E+06	2.5E+04	3.6E+10	3.6E+08	2.3E+03	2.3E+01	2.3E+03	2.3E+01
Pt-191	015706-36-2	5.3E+04	5.3E+02	4.9E+09	4.9E+07	6.4E+00	6.4E-02	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	3.5E+09	3.5E+07	5.8E+02	5.8E+00	5.8E+02	5.8E+00

Table 3.1d. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		Inhalation (pCi/g)		External Exposure (pCi/g) ^{††}		Ingestion + External + Inhalation (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Pt-197	015735-74-7	3.7E+04	3.7E+02	4.5E+09	4.5E+07	1.4E+02	1.4E+00	1.4E+02	1.4E+00
Pt-197m	015735-74-7	2.4E+05	2.4E+03	2.0E+10	2.0E+08	2.6E+01	2.6E-01	2.6E+01	2.6E-01
Pu-236	015411-92-4	1.0E+03	1.0E+01	1.5E+05	1.5E+03	1.9E+05	1.9E+03	1.2E+03	1.2E+01
Pu-238	013981-16-3	2.7E+02	2.7E+00	7.4E+04	7.4E+02	2.2E+05	2.2E+03	3.2E+02	3.2E+00
Pu-239	015117-48-3	2.5E+02	2.5E+00	7.3E+04	7.3E+02	3.4E+05	3.4E+03	3.0E+02	3.0E+00
Pu-240	014119-33-6	2.5E+02	2.5E+00	7.3E+04	7.3E+02	2.3E+05	2.3E+03	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	5.3E+04	5.3E+02	9.5E+02	9.5E+00	2.2E+02	2.2E+00
Pu-242	013982-10-0	2.6E+02	2.6E+00	7.7E+04	7.7E+02	2.8E+05	2.8E+03	3.2E+02	3.2E+00
Pu-243	015706-37-3	2.2E+05	2.2E+03	7.6E+09	7.6E+07	2.3E+02	2.3E+00	2.3E+02	2.3E+00
Pu-244	014119-34-7	2.5E+02	2.5E+00	7.6E+04	7.6E+02	3.4E+05	3.4E+03	3.0E+02	3.0E+00
Pu-244+D	014119-34-7	2.5E+02	2.5E+00	7.6E+04	7.6E+02	1.2E+00	1.2E-02	1.2E+00	1.2E-02
Ra-223	015623-45-7	3.4E+02	3.4E+00	5.7E+05	5.7E+03	1.8E+01	1.8E-01	1.7E+01	1.7E-01
Ra-224	013233-32-4	5.3E+02	5.3E+00	9.1E+05	9.1E+03	1.8E+02	1.8E+00	1.4E+02	1.4E+00
Ra-224 ⁽¹⁾	013233-32-4	5.3E+02	5.3E+00	7.9E+02	7.9E+00	1.8E+02	1.8E+00	1.2E+02	1.2E+00
Ra-225	013981-53-8	5.1E+02	5.1E+00	8.6E+05	8.6E+03	2.5E+03	2.5E+01	4.9E+02	4.9E+00
Ra-226	013982-63-3	2.7E+02	2.7E+00	7.5E+05	7.5E+03	3.3E+02	3.3E+00	1.6E+02	1.6E+00

Table 3.1d. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		Inhalation (pCi/g)		External Exposure (pCi/g) ^{††}		Ingestion + External + Inhalation (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Ra-226 ⁽²⁾	013982-63-3	2.7E+02	2.7E+00	4.9E-01	4.9E-03	3.3E+02	3.3E+00	4.9E-01	4.9E-03
Ra-226+D	013982-63-3	2.7E+02	2.7E+00	7.4E+05	7.4E+03	6.4E-01	6.4E-03	6.4E-01	6.4E-03
Ra-226+D ⁽²⁾	013982-63-3	2.7E+02	2.7E+00	4.9E-01	4.9E-03	6.4E-01	6.4E-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	2.1E+06	2.1E+04	1.3E+00	1.3E-02	1.3E+00	1.3E-02
Rb-82	014391-63-0	7.6E+06	7.6E+04	1.7E+11	1.7E+09	1.1E+00	1.1E-02	1.1E+00	1.1E-02
Rb-86	014932-53-7	1.1E+04	1.1E+02	4.8E+08	4.8E+06	1.2E+01	1.2E-01	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	1.5E+10	1.5E+08	1.6E+00	1.6E-02	1.6E+00	1.6E-02
Rb-89	014191-65-2	9.2E+05	9.2E+03	2.9E+10	2.9E+08	5.1E-01	5.1E-03	5.1E-01	5.1E-03
Rh-103m	007440-16-6	9.7E+06	9.7E+04	1.6E+11	1.6E+09	7.4E+04	7.4E+02	7.4E+04	7.4E+02
Rh-105	014913-89-4	4.1E+04	4.1E+02	1.7E+09	1.7E+07	1.7E+01	1.7E-01	1.7E+01	1.7E-01
Rh-105m	014913-89-4	7.3E+07	7.3E+05	2.2E+12	2.2E+10	1.9E+02	1.9E+00	1.9E+02	1.9E+00
Rh-106	014234-34-5	2.2E+07	2.2E+05	4.4E+11	4.4E+09	5.7E+00	5.7E-02	5.7E+00	5.7E-02
Rn-219	014835-02-0			3.0E+10	3.0E+08	2.5E+01	2.5E-01	2.5E+01	2.5E-01
Rn-220	022481-48-7			1.1E+10	1.1E+08	2.3E+03	2.3E+01	2.3E+03	2.3E+01
Rn-222+D	014859-67-7			2.7E+08	2.7E+06				

Table 3.1d. (continued)

Chemical ^f	CASRN	Ingestion (pCi/g)		Inhalation (pCi/g)		External Exposure (pCi/g) ^{††}		Ingestion + External + Inhalation (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Ru-103	013968-53-1	2.4E+04	2.4E+02	4.4E+08	4.4E+06	2.6E+00	2.6E-02	2.6E+00	2.6E-02
Ru-105	014331-95-4	6.9E+04	6.9E+02	2.5E+09	2.5E+07	1.5E+00	1.5E-02	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	1.8E+07	1.8E+05	5.7E+00	5.7E-02	5.7E+00	5.7E-02
Ru-97	015758-35-7	1.3E+05	1.3E+03	5.0E+09	5.0E+07	9.6E+00	9.6E-02	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	3.7E+08	3.7E+06	2.7E+00	2.7E-02	2.7E+00	2.7E-02
Sb-124	014683-10-4	7.4E+03	7.4E+01	1.5E+08	1.5E+06	5.9E-01	5.9E-03	5.9E-01	5.9E-03
Sb-125	014234-35-6	2.7E+04	2.7E+02	3.9E+08	3.9E+06	3.2E+00	3.2E-02	3.2E+00	3.2E-02
Sb-125+D	014234-35-6	2.2E+04	2.2E+02	3.5E+08	3.5E+06	3.2E+00	3.2E-02	3.2E+00	3.2E-02
Sb-126	015756-32-8	8.2E+03	8.2E+01	2.4E+08	2.4E+06	4.2E-01	4.2E-03	4.2E-01	4.2E-03
Sb-126m	015756-32-8	1.1E+06	1.1E+04	3.2E+10	3.2E+08	7.5E-01	7.5E-03	7.5E-01	7.5E-03
Sb-127	013968-50-8	9.4E+03	9.4E+01	3.4E+08	3.4E+06	1.8E+00	1.8E-02	1.8E+00	1.8E-02
Sb-129	014331-88-5	4.3E+04	4.3E+02	2.4E+09	2.4E+07	7.8E-01	7.8E-03	7.8E-01	7.8E-03
Sc-46	013967-63-0	1.4E+04	1.4E+02	1.6E+08	1.6E+06	5.5E-01	5.5E-03	5.5E-01	5.5E-03
Sc-47	014391-96-9	2.7E+04	2.7E+02	1.0E+09	1.0E+07	1.7E+01	1.7E-01	1.7E+01	1.7E-01
Sc-48	014391-86-7	1.2E+04	1.2E+02	4.9E+08	4.9E+06	3.3E-01	3.3E-03	3.3E-01	3.3E-03

Table 3.1d. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		Inhalation (pCi/g)		External Exposure (pCi/g) ^{††}		Ingestion + External + Inhalation (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Se-75	014265-71-5	1.2E+04	1.2E+02	4.1E+08	4.1E+06	4.9E+00	4.9E-02	4.9E+00	4.9E-02
Si-31	014276-49-4	1.6E+05	1.6E+03	6.2E+09	6.2E+07	1.3E+03	1.3E+01	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	4.4E+08	4.4E+06	1.5E+07	1.5E+05	2.0E+05	2.0E+03
Sm-153	015766-00-4	2.0E+04	2.0E+02	9.4E+08	9.4E+06	9.3E+01	9.3E-01	9.3E+01	9.3E-01
Sn-113	013966-06-8	2.1E+04	2.1E+02	3.1E+08	3.1E+06	1.5E+03	1.5E+01	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	1.7E+08	1.7E+06	3.6E+00	3.6E-02	3.6E+00	3.6E-02
Sn-126	015832-50-5	3.7E+03	3.7E+01	4.8E+07	4.8E+05	1.3E+02	1.3E+00	1.3E+02	1.3E+00
Sr-82	014809-50-8	3.1E+03	3.1E+01	2.3E+08	2.3E+06	4.8E+04	4.8E+02	3.4E+03	3.4E+01
Sr-85	013967-73-2	5.7E+04	5.7E+02	1.8E+09	1.8E+07	2.8E+00	2.8E-02	2.8E+00	2.8E-02
Sr-85m	013967-73-2	4.4E+06	4.4E+04	2.9E+11	2.9E+09	8.3E+00	8.3E-02	8.3E+00	8.3E-02
Sr-89	014158-27-1	7.7E+03	7.7E+01	5.5E+08	5.5E+06	8.1E+03	8.1E+01	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	2.6E+09	2.6E+07	1.6E+00	1.6E-02	1.6E+00	1.6E-02

Table 3.1d. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		Inhalation (pCi/g)		External Exposure (pCi/g) ^{††}		Ingestion + External + Inhalation (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Sr-92	014928-29-1	3.9E+04	3.9E+02	4.3E+09	4.3E+07	8.4E-01	8.4E-03	8.4E-01	8.4E-03
Ta-182	013982-00-8	1.1E+04	1.1E+02	1.2E+08	1.2E+06	9.3E-01	9.3E-03	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	1.8E+08	1.8E+06	1.1E+00	1.1E-02	1.1E+00	1.1E-02
Tc-95	014809-56-4	1.2E+06	1.2E+04	6.0E+10	6.0E+08	1.6E+00	1.6E-02	1.6E+00	1.6E-02
Tc-95m	014809-56-4	6.4E+04	6.4E+02	9.7E+08	9.7E+06	2.1E+00	2.1E-02	2.1E+00	2.1E-02
Tc-96	014808-44-7	3.5E+04	3.5E+02	1.1E+09	1.1E+07	4.6E-01	4.6E-03	4.6E-01	4.6E-03
Tc-96m	014808-44-7	3.0E+06	3.0E+04	9.0E+10	9.0E+08	5.6E+01	5.6E-01	5.6E+01	5.6E-01
Tc-97	015759-35-0	5.0E+05	5.0E+03	5.9E+09	5.9E+07	1.7E+04	1.7E+02	1.7E+04	1.7E+02
Tc-97m	015759-35-0	6.6E+04	6.6E+02	1.0E+09	1.0E+07	1.6E+04	1.6E+02	1.4E+04	1.4E+02
Tc-99	014133-76-7	5.7E+04	5.7E+02	7.1E+08	7.1E+06	7.0E+06	7.0E+04	6.7E+04	6.7E+02
Tc-99m	014133-76-7	1.4E+06	1.4E+04	5.8E+10	5.8E+08	1.7E+01	1.7E-01	1.7E+01	1.7E-01
Te-125m	014390-73-9	3.2E+04	3.2E+02	7.2E+08	7.2E+06	2.0E+03	2.0E+01	1.9E+03	1.9E+01
Te-127	013981-49-2	9.3E+04	9.3E+02	4.7E+09	4.7E+07	2.7E+02	2.7E+00	2.7E+02	2.7E+00
Te-127m	013981-49-2	1.3E+04	1.3E+02	1.6E+08	1.6E+06	6.1E+03	6.1E+01	4.4E+03	4.4E+01
Te-129	014269-71-7	5.4E+05	5.4E+03	1.4E+10	1.4E+08	3.0E+01	3.0E-01	3.0E+01	3.0E-01
Te-129m	014269-71-7	6.8E+03	6.8E+01	1.5E+08	1.5E+06	6.3E+01	6.3E-01	6.2E+01	6.2E-01

Table 3.1d. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		Inhalation (pCi/g)		External Exposure (pCi/g) ^{††}		Ingestion + External + Inhalation (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Te-131	014683-12-6	2.0E+05	2.0E+03	8.2E+09	8.2E+07	3.2E+00	3.2E-02	3.2E+00	3.2E-02
Te-131m	014683-12-6	9.0E+03	9.0E+01	2.4E+08	2.4E+06	8.2E-01	8.2E-03	8.2E-01	8.2E-03
Te-132	014234-28-7	6.5E+03	6.5E+01	2.4E+08	2.4E+06	1.0E+01	1.0E-01	1.0E+01	1.0E-01
Th-227	015623-47-9	2.0E+03	2.0E+01	4.7E+05	4.7E+03	2.5E+01	2.5E-01	2.5E+01	2.5E-01
Th-228	014274-82-9	1.3E+03	1.3E+01	2.2E+04	2.2E+02	8.2E+03	8.2E+01	1.2E+03	1.2E+01
Th-228+D	014274-82-9	3.4E+02	3.4E+00	2.1E+04	2.1E+02	4.4E+00	4.4E-02	4.3E+00	4.3E-02
Th-229	015594-54-4	1.4E+03	1.4E+01	2.7E+04	2.7E+02	7.3E+01	7.3E-01	7.0E+01	7.0E-01
Th-229+D	015594-54-4	2.2E+02	2.2E+00	2.5E+04	2.5E+02	7.3E+00	7.3E-02	7.1E+00	7.1E-02
Th-230	014269-63-7	2.1E+03	2.1E+01	1.2E+05	1.2E+03	9.9E+04	9.9E+02	2.4E+03	2.4E+01
Th-231	014932-40-2	4.4E+04	4.4E+02	1.9E+09	1.9E+07	2.1E+03	2.1E+01	2.0E+03	2.0E+01
Th-232	007440-29-1	2.4E+03	2.4E+01	1.1E+05	1.1E+03	2.2E+05	2.2E+03	2.8E+03	2.8E+01
Th-234	015065-10-8	4.1E+03	4.1E+01	1.1E+08	1.1E+06	1.2E+03	1.2E+01	9.9E+02	9.9E+00
Tl-202	015720-57-7	7.9E+04	7.9E+02	3.4E+09	3.4E+07	3.1E+00	3.1E-02	3.1E+00	3.1E-02
Tl-204	013968-51-9	4.0E+04	4.0E+02	1.8E+09	1.8E+07	5.0E+03	5.0E+01	4.5E+03	4.5E+01
Tl-208	014913-50-9	4.5E+06	4.5E+04	1.5E+11	1.5E+09	3.0E-01	3.0E-03	3.0E-01	3.0E-03
Tl-209	015690-73-0	5.7E+06	5.7E+04	1.8E+11	1.8E+09	5.5E-01	5.5E-03	5.5E-01	5.5E-03
Tm-170	013981-30-1	1.1E+04	1.1E+02	1.9E+08	1.9E+06	1.1E+03	1.1E+01	1.0E+03	1.0E+01

Table 3.1d. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		Inhalation (pCi/g)		External Exposure (pCi/g) ^{††}		Ingestion + External + Inhalation (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Tm-171	014333-45-0	1.4E+05	1.4E+03	1.1E+09	1.1E+07	1.4E+04	1.4E+02	1.3E+04	1.3E+02
U-232	014158-29-3	9.8E+02	9.8E+00	3.9E+04	3.9E+02	1.3E+05	1.3E+03	1.1E+03	1.1E+01
U-233	013968-55-3	1.8E+03	1.8E+01	1.4E+05	1.4E+03	1.2E+05	1.2E+03	2.1E+03	2.1E+01
U-234	013966-29-5	1.8E+03	1.8E+01	1.5E+05	1.5E+03	2.0E+05	2.0E+03	2.1E+03	2.1E+01
U-235	015117-96-1	1.8E+03	1.8E+01	1.6E+05	1.6E+03	1.7E+01	1.7E-01	1.6E+01	1.6E-01
U-235+D	015117-96-1	1.7E+03	1.7E+01	1.6E+05	1.6E+03	1.6E+01	1.6E-01	1.6E+01	1.6E-01
U-236	013982-70-2	1.9E+03	1.9E+01	1.5E+05	1.5E+03	2.5E+05	2.5E+03	2.2E+03	2.2E+01
U-237	014269-75-1	2.0E+04	2.0E+02	6.5E+08	6.5E+06	3.2E+01	3.2E-01	3.2E+01	3.2E-01
U-238	007440-61-1	1.9E+03	1.9E+01	1.6E+05	1.6E+03	2.9E+05	2.9E+03	2.2E+03	2.2E+01
U-238+D	007440-61-1	1.3E+03	1.3E+01	1.6E+05	1.6E+03	8.3E+01	8.3E-01	7.8E+01	7.8E-01
U-240	015687-53-3	1.5E+04	1.5E+02	6.1E+08	6.1E+06	4.0E+04	4.0E+02	1.2E+04	1.2E+02
V-48	014331-97-6	1.0E+04	1.0E+02	3.0E+08	3.0E+06	3.9E-01	3.9E-03	3.9E-01	3.9E-03
W-181	015749-46-9	2.9E+05	2.9E+03	2.5E+10	2.5E+08	2.1E+02	2.1E+00	2.1E+02	2.1E+00
W-185	014932-41-3	3.9E+04	3.9E+02	4.8E+09	4.8E+07	8.6E+04	8.6E+02	3.0E+04	3.0E+02
W-187	014983-48-3	3.2E+04	3.2E+02	3.9E+09	3.9E+07	2.7E+00	2.7E-02	2.7E+00	2.7E-02
Xe-122	015151-09-4			6.6E+11	6.6E+09				
Xe-123	015700-10-4			2.3E+12	2.3E+10				

Table 3.1d. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		Inhalation (pCi/g)		External Exposure (pCi/g) ^{††}		Ingestion + External + Inhalation (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
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	1.1E+08	1.1E+06	3.1E+02	3.1E+00	3.0E+02	3.0E+00
Y-91m	014234-24-3	2.2E+06	2.2E+04	6.8E+10	6.8E+08	2.3E+00	2.3E-02	2.3E+00	2.3E-02
Y-92	015751-59-4	4.1E+04	4.1E+02	1.3E+09	1.3E+07	4.4E+00	4.4E-02	4.4E+00	4.4E-02
Y-93	014981-70-5	1.4E+04	1.4E+02	5.9E+08	5.9E+06	1.3E+01	1.3E-01	1.3E+01	1.3E-01
Zn-65	013982-39-3	8.0E+03	8.0E+01	2.0E+08	2.0E+06	1.9E+00	1.9E-02	1.9E+00	1.9E-02
Zn-69	013982-23-5	1.3E+06	1.3E+04	2.0E+10	2.0E+08	2.1E+05	2.1E+03	1.9E+05	1.9E+03

Table 3.1d. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		Inhalation (pCi/g)		External Exposure (pCi/g) ^{††}		Ingestion + External + 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	1.7E+09	1.7E+07	3.0E+00	3.0E-02	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	3.1E+08	3.1E+06	1.5E+00	1.5E-02	1.5E+00	1.5E-02
Zr-97	014928-30-4	7.6E+03	7.6E+01	4.3E+08	4.3E+06	6.3E+00	6.3E-02	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, then no external exposure slope factors were available or the external exposure slope factor was equal to 0.00E+00 (resulting in an undefined PRG for the external exposure pathway for soil under residential land use).
- ††† If slope factors and/or reference doses were available for only one pathway (i.e., ingestion, inhalation, OR external exposure), the total for ingestion plus inhalation plus external exposure was not calculated.
- (1) The default volatilization factor of 200 for Ra-224 was calculated as the ratio of the average Ra-224 background concentration in soil to the average Rn-220 background concentration in air. Inhalation slope factor values are for Rn-222 plus decay products (i.e., Rn-222+D) formed from the radioactive decay of Ra-226 and for Rn-220+D from the decay of Ra-224. Slope factor values were taken from Table 4a of EPA's *Health Effects Assessment Summary Tables* (HEAST 1992).
- (2) The default volatilization factor of 8 for Ra-226 was calculated as the ratio of the average natural background concentration of Ra-226 in soil to the corresponding average natural background concentration of Rn-222 in air. Inhalation slope factor values are for Rn-222 plus decay products (i.e., Rn-222+D) formed from the radioactive decay of Ra-226 and for Rn-220+D from the decay of Ra-224. Slope factor values were taken from Table 4a of EPA's *Health Effects Assessment Summary Tables* (HEAST 1992).

Table 3.1e. Risk-based Preliminary Remediation Goals for nonradionuclides in fish (residential scenario)

Chemical	CASRN	Ingestion of fish (mg/kg)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
ALAR	001596-84-5			2.0E+02	2.0E+01
Acenaphthene	000083-32-9			8.1E+01	8.1E+00
Acenaphthylene	000208-96-8				
Acephate	030560-19-1	3.6E+01	3.6E-01	5.4E+00	5.4E-01
Acetaldehyde	000075-07-0				
Acetochlor	034256-82-1			2.7E+01	2.7E+00
Acetone	000067-64-1			1.4E+02	1.4E+01
Acetone Cyanohydrin	000075-86-5			1.1E+00	1.1E-01
Acetonitrile	000075-05-8			8.1E+00	8.1E-01
Acetophenone ⁽⁵⁾	000098-86-2			1.4E+02	1.4E+01
Acrolein ⁽⁶⁾	000107-02-8			2.7E+01	2.7E+00
Acrylamide	000079-06-1	7.0E-02	7.0E-04	2.7E-01	2.7E-02
Acrylic Acid	000079-10-7			6.8E+02	6.8E+01
Acrylonitrile	000107-13-1	5.8E-01	5.8E-03	1.4E+00	1.4E-01
Alachlor	015972-60-8	3.9E+00	3.9E-02	1.4E+01	1.4E+00
Aldicarb	000116-06-3			1.4E+00	1.4E-01
Aldicarb Sulfone	001646-88-4			1.4E+00	1.4E-01
Aldrin	000309-00-2	1.9E-02	1.9E-04	4.1E-02	4.1E-03

Table 3.1e. (continued)

Chemical	CASRN	Ingestion of fish (mg/kg)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Allyl	074223-64-6			3.4E+02	3.4E+01
Allyl Alcohol	000107-18-6			6.8E+00	6.8E-01
Allyl Chloride ⁽⁹⁾	000107-05-1			6.8E+01	6.8E+00
Aluminum	007429-90-5				
Aluminum Phosphide	020859-73-8			5.4E-01	5.4E-02
Amdro	067485-29-4			4.1E-01	4.1E-02
Ametryn	000834-12-8			1.2E+01	1.2E+00
Aminophenol, m-	000591-27-5			9.5E+01	9.5E+00
Aminopyridine, 4-	000504-24-5			2.7E-02	2.7E-03
Amitraz	033089-61-1			3.4E+00	3.4E-01
Ammonia	007664-41-7				
Ammonium Sulfamate	007773-06-0			2.7E+02	2.7E+01
Aniline	000062-53-3	5.5E+01	5.5E-01		
Anthracene	000120-12-7			4.1E+02	4.1E+01
Antimony (metallic)	007440-36-0			5.4E-01	5.4E-02
Antimony Pentoxide	001314-60-9			6.8E-01	6.8E-02
Antimony Potassium Tartrate	000304-61-0			1.2E+00	1.2E-01
Antimony Tetroxide	001332-81-6			5.4E-01	5.4E-02

Table 3.1e. (continued)

Chemical	CASRN	Ingestion of fish (mg/kg)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Antimony Trioxide	001309-64-4			5.4E-01	5.4E-02
Apollo	074115-24-5			1.8E+01	1.8E+00
Aramite	000140-57-8	1.3E+01	1.3E-01	6.8E+01	6.8E+00
Aroclor 1016	012674-11-2			9.5E-02	9.5E-03
Aroclor 1221 ⁽¹⁾	011104-28-2	4.1E-02	4.1E-04		
Aroclor 1232 ⁽¹⁾	011141-16-5	4.1E-02	4.1E-04		
Aroclor 1242 ⁽¹⁾	053469-21-9	4.1E-02	4.1E-04		
Aroclor 1248 ⁽¹⁾	012672-29-6	4.1E-02	4.1E-04		
Aroclor 1254	011097-69-1			2.7E-02	2.7E-03
Aroclor 1260 ⁽¹⁾	011096-82-5	4.1E-02	4.1E-04		
Arsenic Salts	NA				
Arsenic, Inorganic	007440-38-2	2.1E-01	2.1E-03	4.1E-01	4.1E-02
Arsine	007784-42-1				
Asbestos	001332-21-4				
Assure	076578-14-8			1.2E+01	1.2E+00
Asulam	003337-71-1			6.8E+01	6.8E+00
Atrazine	001912-24-9	1.4E+00	1.4E-02	4.7E+01	4.7E+00
Avermectin B1	065195-55-3			5.4E-01	5.4E-02

Table 3.1e. (continued)

Chemical	CASRN	Ingestion of fish (mg/kg)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Azobenzene	000103-33-3	2.9E+00	2.9E-02		
Barium	007440-39-3			9.5E+01	9.5E+00
Barium Cyanide	000542-62-1			1.4E+02	1.4E+01
Baygon	000114-26-1			5.4E+00	5.4E-01
Bayleton	043121-43-3			4.1E+01	4.1E+00
Baythroid	068359-37-5			3.4E+01	3.4E+00
Benefin	001861-40-1			4.1E+02	4.1E+01
Benomyl	017804-35-2			6.8E+01	6.8E+00
Bentazon	025057-89-0			3.4E+00	3.4E-01
Benz[a]anthracene ⁽²⁾	000056-55-3	4.3E-01	4.3E-03		
Benzaldehyde	000100-52-7			1.4E+02	1.4E+01
Benzene	000071-43-2	1.1E+01	1.1E-01		
Benzene Hexachloride	NA				
Benzene, Ethyldimethyl	NA				
Benzene, Ethylmethyl	NA				
Benzene, Methylpropenyl	NA				
Benzene, Methylpropyl	NA				
Benzene, Trimethyl	025551-13-7				

Table 3.1e. (continued)

Chemical	CASRN	Ingestion of fish (mg/kg)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Benzenethiol	000108-98-5			1.4E-02	1.4E-03
Benzidine	000092-87-5	1.4E-03	1.4E-05	4.1E+00	4.1E-01
Benzo[a]pyrene ⁽²⁾	000050-32-8	4.3E-02	4.3E-04		
Benzo[b]fluoranthene ⁽²⁾	000205-99-2	4.3E-01	4.3E-03		
Benzo[g,h,i]perylene	000191-24-2				
Benzo[k]fluoranthene ⁽²⁾	000207-08-9	4.3E+00	4.3E-02		
Benzoic Acid	000065-85-0			5.4E+03	5.4E+02
Benzotrichloride	000098-07-7	2.4E-02	2.4E-04		
Benzyl Alcohol	000100-51-6			4.1E+02	4.1E+01
Benzyl Chloride	000100-44-7	1.9E+00	1.9E-02		
Beryllium	007440-41-7	7.3E-02	7.3E-04	6.8E+00	6.8E-01
Bidrin	000141-66-2			1.4E-01	1.4E-02
Biphenthrin	082657-04-3			2.0E+01	2.0E+00
Biphenyl, 1,1'-	000092-52-4			6.8E+01	6.8E+00
Bis(2-chloro-1-methylethyl)ether (Technical)	000108-60-1	4.5E+00	4.5E-02		
Bis(2-chloroethoxy)methane	000111-91-1				
Bis(2-chloroethyl)ether	000111-44-4	2.9E-01	2.9E-03		

Table 3.1e. (continued)

Chemical	CASRN	Ingestion of fish (mg/kg)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Bis(2-chloroisopropyl)ether	039638-32-9			5.4E+01	5.4E+00
Bis(2-ethylhexyl)phthalate ⁽⁹⁾	000117-81-7	2.3E+01	2.3E-01	2.7E+01	2.7E+00
Bis(chloromethyl)ether	000542-88-1	1.4E-03	1.4E-05		
Bisphenol A	000080-05-7			6.8E+01	6.8E+00
Boron And Borates Only	007440-42-8			1.2E+02	1.2E+01
Boron Trifluoride	007637-07-2				
Bromo-chloromethane	000074-97-5				
Bromodichloromethane	000075-27-4	5.1E+00	5.1E-02	2.7E+01	2.7E+00
Bromodiphenyl Ether, p-	000101-55-3				
Bromoform	000075-25-2	4.0E+01	4.0E-01	2.7E+01	2.7E+00
Bromomethane ⁽⁹⁾	000074-83-9			1.9E+00	1.9E-01
Bromophos	002104-96-3			6.8E+00	6.8E-01
Bromotrichloromethane	000075-62-7				
Bromoxynil	001689-84-5			2.7E+01	2.7E+00
Bromoxynil Octanoate	001689-99-2			2.7E+01	2.7E+00
Butadiene, 1,3-	000106-99-0				
Butanol, N-	000071-36-3			1.4E+02	1.4E+01

Nonradionuclides/fish/residential

Table 3.1e. (continued)

Chemical	CASRN	Ingestion of fish (mg/kg)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Butanone-2, 4-chloro-4,4-difluoro	NA				
Butyl Benzyl Phthlate	000085-68-7			2.7E+02	2.7E+01
Butylate	002008-41-5			6.8E+01	6.8E+00
Butylchloride, t-	000507-20-0				
Butylphthalyl Butylglycolate	000085-70-1			1.4E+03	1.4E+02
Cacodylic Acid	000075-60-5			4.1E+00	4.1E-01
Cadmium (Diet)	007440-43-9			1.4E+00	1.4E-01
Calcium Cyanide	000592-01-8			5.4E+01	5.4E+00
Caprolactam	000105-60-2			6.8E+02	6.8E+01
Captafol	002425-06-1	3.7E+01	3.7E-01	2.7E+00	2.7E-01
Captan	000133-06-2	9.0E+01	9.0E-01	1.8E+02	1.8E+01
Carbaryl	000063-25-2			1.4E+02	1.4E+01
Carbazole	000086-74-8	1.6E+01	1.6E-01		
Carbofuran	001563-66-2			6.8E+00	6.8E-01
Carbon Disulfide	000075-15-0			1.4E+02	1.4E+01
Carbon Tetrachloride ⁽⁶⁾	000056-23-5	2.4E+00	2.4E-02	9.5E-01	9.5E-02
Carbosulfan	055285-14-8			1.4E+01	1.4E+00

Table 3.1e. (continued)

Chemical	CASRN	Ingestion of fish (mg/kg)*		
		10 ⁻⁴	10 ⁻⁵	HQ=1
Carboxin	005234-68-4			1.4E+02
Chloral	000075-87-6			2.7E+00
Chloramben	000133-90-4			2.0E+00
Chloranil	000118-75-2	7.8E-01	7.8E-03	
Chlordane ^(a)	000057-74-9	2.4E-01	2.4E-03	8.1E-03
Chloride	016887-00-6			
Chlorimuron, Ethyl-	090982-32-4			2.7E+01
Chlorine	007782-50-5			1.4E+02
Chlorine Dioxide	010049-04-4			
Chlorite (Sodium Salt)	007758-19-2			
Chloro-1,1-difluoroethane, 1-	000075-68-3			
Chloro-1,3-butadiene, 2-	000126-99-8			2.7E+01
Chloro-2-methylaniline HCl, 4-	003165-93-3	6.9E-01	6.9E-03	
Chloro-2-methylaniline, 4-	000095-69-2	5.4E-01	5.4E-03	
Chloroacetic Acid	000079-11-8			2.7E+00
Chloroacetophenone, 2-	000532-27-4			
Chloroaniline, p-	000106-47-8			5.4E-01
Chlorobenzene ^(a)	000108-90-7			2.7E+00

Nonradionuclides/fish/residential

Table 3.1e. (continued)

Chemical	CASRN	Ingestion of fish (mg/kg)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Chlorobenzilate	000510-15-6	1.2E+00	1.2E-02	2.7E+01	2.7E+00
Chlorobenzoic Acid, p-	000074-11-3			2.7E+02	2.7E+01
Chlorobenzotrifluoride, 4-	000098-56-6			2.7E+01	2.7E+00
Chlorobutane, 1-	000109-69-3			5.4E+02	5.4E+01
Chlorobutane, 2-	000078-86-4				
Chlorocyclopentadiene	041851-50-7				
Chlorodibromoethane	073506-94-2	3.8E+00	3.8E-02		
Chlorodifluoromethane	000075-45-6				
Chloroform ⁽⁶⁾	000067-66-3	5.2E+01	5.2E-01	1.4E+01	1.4E+00
Chloromethane ⁽⁶⁾	000074-87-3	2.4E+01	2.4E-01		
Chloromethyl Methyl Ether	000107-30-2				
Chloronaphthalene, Beta-	000091-58-7			1.1E+02	1.1E+01
Chloronitrobenzene, o-	000088-73-3	1.3E+01	1.3E-01		
Chloronitrobenzene, p-	000121-73-3	1.8E+01	1.8E-01		
Chlorophenol, 2-	000095-57-8			6.8E+00	6.8E-01
Chlorophenyl Methyl Sulfide, p-	000123-09-1				
Chlorophenyl Methyl Sulfoxide	000934-73-6				
Chloropropane, 2-	000075-29-6				

Table 3.1c. (continued)

Chemical	CASRN	Ingestion of fish (mg/kg)*		
		10 ⁻⁴	10 ⁻⁶	HQ=1
Chlorothalonil	001897-45-6	2.9E+01	2.9E-01	2.0E+00
Chlorotoluene, o-	000095-49-8			2.7E+00
Chlorpropylamine	000101-21-3			2.7E+01
Chlorpyrifos	002921-88-2			4.1E-01
Chlorpyrifos Methyl	005598-13-0			1.4E+00
Chlorosulfuron	064902-72-3			6.8E+01
Chlorothiophos	060238-56-4			1.1E-01
Chromium (III) (Insoluble Salts)	016065-83-1			1.4E+03
Chromium (VI) ⁽⁹⁾	018540-29-9			6.8E+00
Chromium Salts	NA			
Chrysene ⁽²⁾	000218-01-9	4.3E+01	4.3E-01	
Cobalt	007440-48-4			
Coke Oven Emissions	008007-45-2			
Copper	007440-50-8			
Copper Cyanide	000544-92-3			6.8E+00
Cresote	008001-58-9			
Cresol, m-	000108-39-4			6.8E+00
Cresol, o-	000095-48-7			6.8E+01

Nonradionuclides/fish/residential

Table 3.1e. (continued)

Chemical	CASRN	Ingestion of fish (mg/kg)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Cresol, p-	000106-44-5			6.8E+00	6.8E-01
Crotonaldehyde	000123-73-9	1.7E-01	1.7E-03		
Cumene	000098-82-8			5.4E+01	5.4E+00
Cyanazine	021725-46-2	3.8E-01	3.8E-03	2.7E+00	2.7E-01
Cyanide (CN-)	000057-12-5			2.7E+01	2.7E+00
Cyanogen	000460-19-5			5.4E+01	5.4E+00
Cyanogen Bromide	000506-68-3			1.2E+02	1.2E+01
Cyanogen Chloride	000506-77-4			6.8E+01	6.8E+00
Cyclohexane, 1,2,3,4,5-pentabromo-6-chloro-	000087-84-3	1.4E+01	1.4E-01		
Cyclohexanone	000108-94-1			6.8E+03	6.8E+02
Cyclohexylamine	000108-91-8			2.7E+02	2.7E+01
Cyclopentadiene	000542-92-7				
Cyhalothrin/karate	068085-85-8			6.8E+00	6.8E-01
Cypermethrin	052315-07-8			1.4E+01	1.4E+00
Cyromazine	066215-27-8			1.0E+01	1.0E+00
DDD	000072-54-8	1.3E+00	1.3E-02		
DDE	000072-55-9	9.3E-01	9.3E-03		

Table 3.1e. (continued)

Chemical	CASRN	Ingestion of fish (mg/kg)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
DDT	000050-29-3	9.3E-01	9.3E-03	6.8E-01	6.8E-02
Dacthal	001861-32-1			1.4E+01	1.4E+00
Dalapon	000075-99-0			4.1E+01	4.1E+00
Decabromodiphenyl Ether	001163-19-5			1.4E+01	1.4E+00
Demeton	008065-48-3			5.4E-02	5.4E-03
Di(2-ethylhexyl)adipate	000103-23-1	2.6E+02	2.6E+00	8.1E+02	8.1E+01
Diallate	002303-16-4	5.2E+00	5.2E-02		
Diazinon	000333-41-5			1.2E+00	1.2E-01
Dibenz[a,h]anthracene ⁽²⁾	000053-70-3	4.3E-02	4.3E-04		
Dibromo-3-chloropropane, 1,2-	000096-12-8	2.3E-01	2.3E-03		
Dibromobenzene, 1,4-	000106-37-6			1.4E+01	1.4E+00
Dibromochloromethane	000124-48-1	3.8E+00	3.8E-02	2.7E+01	2.7E+00
Dibromodichloromethane	000594-18-3				
Dibromodiphenyl Ether, p,p'-	002050-47-7				
Dibromoethane, 1,2-	000106-93-4	3.7E-03	3.7E-05		
Dibromomethane (Methylene Bromide)	000074-95-3			1.4E+01	1.4E+00
Dibutyl Phthalate	000084-74-2			1.4E+02	1.4E+01

Table 3.1e. (continued)

Chemical	CASRN	Ingestion of fish (mg/kg)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Dicamba	001918-00-9			4.1E+01	4.1E+00
Dichloro-2-butene, 1,4-	000764-41-0				
Dichloroacetic Acid					
Dichlorobenzene, 1,2- ⁽⁵⁾	000095-50-1			1.2E+02	1.2E+01
Dichlorobenzene, 1,3-	000541-73-1				
Dichlorobenzene, 1,4-	000106-46-7	1.3E+01	1.3E-01		
Dichlorobenzidine, 3,3'-	000091-94-1	7.0E-01	7.0E-03		
Dichlorodifluoromethane	000075-71-8			2.7E+02	2.7E+01
Dichloroethane, 1,1-	000075-34-3			1.4E+02	1.4E+01
Dichloroethane, 1,2-	000107-06-2	3.5E+00	3.5E-02		
Dichloroethylene, 1,1-	000075-35-4	5.3E-01	5.3E-03	1.2E+01	1.2E+00
Dichloroethylene, 1,2- (Mixed Isomers)	000540-59-0			1.2E+01	1.2E+00
Dichloroethylene, 1,2-cis-	000156-59-2			1.4E+01	1.4E+00
Dichloroethylene, 1,2-trans-	000156-60-5			2.7E+01	2.7E+00
Dichlorophenol, 2,4-	000120-83-2			4.1E+00	4.1E-01
Dichlorophenoxy Acetic Acid, 2,4-	000094-75-7			1.4E+01	1.4E+00

Table 3.1e. (continued)

Chemical	CASRN	Ingestion of fish (mg/kg)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Dichlorophenoxy)butyric Acid, 4-(2,4-	000094-82-6			1.1E+01	1.1E+00
Dichloropropane, 1,2-	000078-87-5	4.6E+00	4.6E-02		
Dichloropropanol, 2,3-	000616-23-9			4.1E+00	4.1E-01
Dichloropropene, 1,3-	000542-75-6	1.8E+00	1.8E-02	4.1E-01	4.1E-02
Dichlorvos	000062-73-7	1.1E+00	1.1E-02	6.8E-01	6.8E-02
Dicofol	000115-32-2				
Dicyclopentadiene	000077-73-6			4.1E+01	4.1E+00
Dieldrin	000060-57-1	2.0E-02	2.0E-04	6.8E-02	6.8E-03
Diethyl Phthalate	000084-66-2			1.1E+03	1.1E+02
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			2.7E+03	2.7E+02
Diethylformamide	000617-84-5			1.5E+01	1.5E+00
Diethylstilbesterol	000056-53-1	6.7E-05	6.7E-07		

Table 3.1e. (continued)

Chemical	CASRN	Ingestion of fish (mg/kg)			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Difenzquat	043222-48-6			1.1E+02	1.1E+01
Diflubenzuron	035367-38-5			2.7E+01	2.7E+00
Difluoroethane, 1,1-	000075-37-6				
Diisopropyl Methylphosphonate	001445-75-6			1.1E+02	1.1E+01
Dimethipin	055290-64-7			2.7E+01	2.7E+00
Dimethoate	000060-51-5			2.7E-01	2.7E-02
Dimethoxybenzidine, 3,3'-	000119-90-4	2.3E+01	2.3E-01		
Dimethyl Sulfate	000077-78-1				
Dimethylaniline HCl, 2,4-	021436-96-4	5.4E-01	5.4E-03		
Dimethylaniline, 2,4-	000095-68-1	4.2E-01	4.2E-03		
Dimethylaniline, N,N-	000121-69-7			2.7E+00	2.7E-01
Dimethylbenzidine, 3,3'-	000119-93-7	3.4E-02	3.4E-04		
Dimethylethyl Lead	107584-40-7				
Dimethylformamide	000068-12-2			1.4E+02	1.4E+01
Dimethylhydrazine, 1,1-(s)	000057-14-7	1.2E-01	1.2E-03		
Dimethylhydrazine, 1,2-	000540-73-8				
Dimethylphenol, 2,4-	000105-67-9			2.7E+01	2.7E+00
Dimethylphenol, 2,6-	000576-26-1			8.1E-01	8.1E-02

Nonradionuclides/fish/residential

Table 3.1e. (continued)

Chemical	CASRN	Ingestion of fish (mg/kg)		
		10 ⁻⁴	10 ⁻⁶	HQ=1
Dimethylphenol, 3,4-	000095-65-8			1.4E-01
Dimethylphthalate ^(a)	000131-11-3			1.4E+03
Dimethylterephthalate	000120-61-6			1.4E+01
Dinitro-o-cresol, 4,6-	000534-52-1			
Dinitro-o-cyclohexyl Phenol, 4,6-	000131-89-5			2.7E-01
Dinitrobenzene, 1,2-	000528-29-0			5.4E-02
Dinitrobenzene, 1,3-	000099-65-0			1.4E-02
Dinitrobenzene, 1,4-	000100-25-4			5.4E-02
Dinitrophenol, 2,4-	000051-28-5			2.7E-01
Dinitrotoluene, 2,4-	000121-14-2	4.6E-01	4.6E-03	2.7E-01
Dinitrotoluene, 2,6-	000606-20-2	4.6E-01	4.6E-03	1.4E-01
Dinitrotoluene, 2-Amino-4,6-	035572-78-2			
Dinoseb	000088-85-7			1.4E+00
Dioxane, 1,4-	000123-91-1	2.9E+01	2.9E-01	
Diphenamid	000957-51-7			4.1E+01
Diphenylamine	000122-39-4			3.4E+00
Diphenylhydrazine, 1,2-	000122-66-7	3.9E-01	3.9E-03	

Nonradionuclides/fish/residential

Table 3.1e. (continued)

Chemical	CASRN	Ingestion of fish (mg/kg)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Diquat	000085-00-7			3.0E+00	3.0E-01
Direct Black 38	001937-37-7	3.7E-02	3.7E-04		
Direct Blue 6	002602-46-2	3.9E-02	3.9E-04		
Direct Brown 95	016071-86-6	3.4E-02	3.4E-04		
Direct Sky Blue	002610-05-1				
Disulfoton	000298-04-4			5.4E-02	5.4E-03
Diuron	000330-54-1			2.7E+00	2.7E-01
Dodine	002439-10-3			5.4E+00	5.4E-01
EPTC	000759-94-4			3.4E+01	3.4E+00
Endosulfan	000115-29-7			8.1E+00	8.1E-01
Endothall	000145-73-3			2.7E+01	2.7E+00
Endrin	000072-20-8			4.1E-01	4.1E-02
Epichlorohydrin	000106-89-8	3.2E+01	3.2E-01	2.7E+00	2.7E-01
Epoxybutane, 1,2-	000106-88-7				
Ethephon	016672-87-0			6.8E+00	6.8E-01
Ethion	000563-12-2			6.8E-01	6.8E-02
Ethoxyethanol Acetate, 2-	000111-15-9			4.1E+02	4.1E+01
Ethoxyethanol, 2-	000110-80-5			5.4E+02	5.4E+01

Table 3.1e. (continued)

Chemical	CASRN	Ingestion of fish (mg/kg)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Ethyl Acetate	000141-78-6			1.2E+03	1.2E+02
Ethyl Acrylate	000140-88-5	6.6E+00	6.6E-02		
Ethyl Chloride	000075-00-3				
Ethyl Ether	000060-29-7			2.7E+02	2.7E+01
Ethyl Methacrylate	000097-63-2			1.2E+02	1.2E+01
Ethyl-p-nitrophenyl Phosphonate	002104-64-5			1.4E-02	1.4E-03
Ethylbenzene ⁽⁶⁾	000100-41-4			1.4E+02	1.4E+01
Ethylene Cyanohydrin	000109-78-4			4.1E+02	4.1E+01
Ethylene Diamine	000107-15-3			2.7E+01	2.7E+00
Ethylene Glycol	000107-21-1			2.7E+03	2.7E+02
Ethylene Glycol Monobutyl Ether	000111-76-2				
Ethylene Oxide	000075-21-8	3.1E-01	3.1E-03		
Ethylene Thiourea	000096-45-7	2.9E+00	2.9E-02	1.1E-01	1.1E-02
Ethylphthalyl Ethyl Glycolate	000084-72-0			4.1E+03	4.1E+02
Express	101200-48-0			1.1E+01	1.1E+00
Fenamiphos	022224-92-6			3.4E-01	3.4E-02
Fenpropathrin	039515-41-8			3.4E+01	3.4E+00

Table 3.1e. (continued)

Chemical	CASRN	Ingestion of fish (mg/kg)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Fluometuron	002164-17-2			1.8E+01	1.8E+00
Fluoranthene	000206-44-0			5.4E+01	5.4E+00
Fluorene	000086-73-7			5.4E+01	5.4E+00
Fluoride	007782-41-4			8.1E+01	8.1E+00
Fluridone	059756-60-4			1.1E+02	1.1E+01
Flurprimidol	056425-91-3			2.7E+01	2.7E+00
Flutolanil	066332-96-5			8.1E+01	8.1E+00
Fluvalinate	069409-94-5			1.4E+01	1.4E+00
Folpet	000133-07-3	9.0E+01	9.0E-01	1.4E+02	1.4E+01
Fomesafen	072178-02-0	1.7E+00	1.7E-02		
Fonofos	000944-22-9			2.7E+00	2.7E-01
Formaldehyde	000050-00-0			2.7E+02	2.7E+01
Formic Acid	000064-18-6			2.7E+03	2.7E+02
Fosetyl-AL	039148-24-8			4.1E+03	4.1E+02
Furan	000110-00-9			1.4E+00	1.4E-01
Furazolidone	000067-45-8	8.3E-02	8.3E-04		
Furfural	000098-01-1			4.1E+00	4.1E-01
Furium	000531-82-8	6.3E-03	6.3E-05		

Table 3.1e. (continued)

Chemical	CASRN	Ingestion of fish (mg/kg)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Furmecycloz	060568-05-0	1.1E+01	1.1E-01		
Glufosinate, Ammonium	077182-82-2			5.4E-01	5.4E-02
Glycidyl	000765-34-4			5.4E-01	5.4E-02
Glyphosate	001071-83-6			1.4E+02	1.4E+01
Goal	042874-03-3			4.1E+00	4.1E-01
Haloxypop, Methyl	069806-40-2			6.8E-02	6.8E-03
Harmony	079277-27-3			1.8E+01	1.8E+00
Heptachlor	000076-44-8	7.0E-02	7.0E-04	6.8E-01	6.8E-02
Heptachlor Epoxide	001024-57-3	3.5E-02	3.5E-04	1.8E-02	1.8E-03
Heptane, N-	000142-82-5				
Hexabromobenzene	000087-82-1			2.7E+00	2.7E-01
Hexachlorobenzene ⁽⁶⁾	000118-74-1	2.0E-01	2.0E-03	1.1E+00	1.1E-01
Hexachlorobutadiene ⁽⁶⁾	000087-68-3	4.0E+00	4.0E-02	2.7E-01	2.7E-02
Hexachlorocyclohexane, Alpha-	000319-84-6	5.0E-02	5.0E-04		
Hexachlorocyclohexane, Beta-	000319-85-7	1.8E-01	1.8E-03		
Hexachlorocyclohexane, Delta-	000319-86-8				
Hexachlorocyclohexane, Epsilon	006108-10-7				

Table 3.1e. (continued)

Chemical	CASRN	Ingestion of fish (mg/kg)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Hexachlorocyclohexane, Gamma-	000058-89-9	2.4E-01	2.4E-03	4.1E-01	4.1E-02
Hexachlorocyclohexane, Technical	000608-73-1	1.8E-01	1.8E-03		
Hexachlorocyclopentadiene	000077-47-4			9.5E+00	9.5E-01
Hexachlorodibenzo-p-dioxin, Mixture	019408-74-3	5.1E-05	5.1E-07		
Hexachloroethane	000067-72-1	2.3E+01	2.3E-01	1.4E+00	1.4E-01
Hexachlorophene	000070-30-4			4.1E-01	4.1E-02
Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	000121-82-4	2.9E+00	2.9E-02	4.1E+00	4.1E-01
Hexamethylene Diisocyanate, 1,6-	000822-06-0				
Hexane, N-	000110-54-3			8.1E+01	8.1E+00
Hexanone, 2-	000591-78-6				
Hexazinone	051235-04-2			4.5E+01	4.5E+00
HpCDD, 2,3,7,8-(4)	037871-00-4	2.1E-04	2.1E-06		
HpCDF, 2,3,7,8-(4)	038998-75-3	2.1E-04	2.1E-06		
HxCDD, 2,3,7,8-(4)	034465-46-8	2.1E-05	2.1E-07		
HxCDF, 2,3,7,8-(4)	055684-94-1	2.1E-05	2.1E-07		

Table 3.1e. (continued)

Chemical	CASRN	Ingestion of fish (mg/kg)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Hydrazine	000302-01-2	1.1E-01	1.1E-03		
Hydrazine Sulfate	010034-93-2	1.1E-01	1.1E-03		
Hydrogen Chloride	007647-01-0				
Hydrogen Cyanide	000074-90-8			2.7E+01	2.7E+00
Hydrogen Sulfide	007783-06-4			4.1E+00	4.1E-01
Hydroquinone	000123-31-9			5.4E+01	5.4E+00
Imazalil	035554-44-0			1.8E+01	1.8E+00
Imazaquin	081335-37-7			3.4E+02	3.4E+01
Indeno[1,2,3-cd]pyrene ⁽²⁾	000193-39-5	4.3E-01	4.3E-03		
Iprodione	036734-19-7			5.4E+01	5.4E+00
Iron	007439-89-6				
Isobutyl Alcohol	000078-83-1			4.1E+02	4.1E+01
Isophorone	000078-59-1	3.3E+02	3.3E+00	2.7E+02	2.7E+01
Isopropalin	033820-53-0			2.0E+01	2.0E+00
Isopropanol	000067-63-0				
Isopropyl Methyl Phosphonic Acid	001832-54-8			1.4E+02	1.4E+01
Isoxaben	082558-50-7			6.8E+01	6.8E+00

Table 3.1e. (continued)

Chemical	CASRN	Ingestion of fish (mg/kg)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Karate	091465-08-6			6.8E+00	6.8E-01
Kerb	023950-58-5			1.0E+02	1.0E+01
Lactofen	077501-63-4			2.7E+00	2.7E-01
Lead Alkyls	NA				
Lead And Compounds	007439-92-1				
Linuron	000330-55-2			2.7E+00	2.7E-01
Lithium	007439-93-2				
Londax	083055-99-6			2.7E+02	2.7E+01
MCPA	000094-74-6			6.8E-01	6.8E-02
MCPB	000094-81-5			1.4E+01	1.4E+00
MCPP	000093-65-2			1.4E+00	1.4E-01
Magnesium	007439-95-4				
Malathion	000121-75-5			2.7E+01	2.7E+00
Maleic Anhydride	000108-31-6			1.4E+02	1.4E+01
Maleic Hydrazide	000123-33-1			6.8E+02	6.8E+01
Malononitrile	000109-77-3			2.7E-02	2.7E-03
Mancozeb	008018-01-7			4.1E+01	4.1E+00
Maneb	012427-38-2			6.8E+00	6.8E-01

Table 3.1e. (continued)

Chemical	CASRN	Ingestion of fish (mg/kg)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Manganese (Diet)	007439-96-5			1.9E+02	1.9E+01
Mephosfolan	000950-10-7			1.2E-01	1.2E-02
Mepiquat Chloride	024307-26-4			4.1E+01	4.1E+00
Mercuric Chloride	007487-94-7			4.1E-01	4.1E-02
Mercury (elemental)	007439-97-6			4.1E-01	4.1E-02
Mercury, Inorganic Salt	007439-97-6			4.1E-01	4.1E-02
Merphos	000150-50-5			4.1E-02	4.1E-03
Merphos Oxide	000078-48-8			4.1E-02	4.1E-03
Metalaxyl	057837-19-1			8.1E+01	8.1E+00
Methacrylonitrile	000126-98-7			1.4E-01	1.4E-02
Methamidophos	010265-92-6			6.8E-02	6.8E-03
Methanol	000067-56-1			6.8E+02	6.8E+01
Methidathion	000950-37-8			1.4E+00	1.4E-01
Methomyl	016752-77-5			3.4E+01	3.4E+00
Methoxy-5-nitroaniline, 2-	000099-59-2	6.9E+00	6.9E-02		
Methoxychlor	000072-43-5			6.8E+00	6.8E-01
Methoxyethanol Acetate, 2-	000110-49-6			2.7E+00	2.7E-01
Methoxyethanol, 2-	000109-86-4			1.4E+00	1.4E-01

Table 3.1e. (continued)

Chemical	CASRN	Ingestion of fish (mg/kg)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Methyl Acetate	000079-20-9			1.4E+03	1.4E+02
Methyl Acrylate	000096-33-3			4.1E+01	4.1E+00
Methyl Ethyl Ketone	000078-93-3			8.1E+02	8.1E+01
Methyl Isobutyl Ketone	000108-10-1			1.1E+02	1.1E+01
Methyl Mercury	022967-92-6			1.4E-01	1.4E-02
Methyl Methacrylate	000080-62-6			1.1E+02	1.1E+01
Methyl Parathion	000298-00-0			3.4E-01	3.4E-02
Methyl Styrene (Mixed Isomers)	025013-15-4			8.1E+00	8.1E-01
Methyl hydrazine ⁽⁵⁾	000060-34-4	2.9E-01	2.9E-03		
Methyl tert-Butyl Ether (MTBE)	001634-04-4				
Methyl-5-Nitroaniline, 2-	000099-55-8	9.6E+00	9.6E-02		
Methylaniline Hydrochloride, 2-	000636-21-5	1.8E+00	1.8E-02		
Methylcyclohexane	000108-87-2				
Methylene Chloride	000075-09-2	4.2E+01	4.2E-01	8.1E+01	8.1E+00
Methylene-bis(2-chloroaniline), 4,4'-	000101-14-4	2.4E+00	2.4E-02	9.5E-01	9.5E-02
Methylene-bis(N,N-dimethyl) Aniline, 4,4'-	000101-61-1	6.9E+00	6.9E-02		

Table 3.1e. (continued)

Chemical	CASRN	Ingestion of fish (mg/kg)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Methylenebisbenzenamine, 4,4'-(⁵)	000101-77-9	1.3E+00	1.3E-02		
Methylenediphenyl Isocyanate, 4,4'-	000101-68-8				
Methylstyrene, Alpha-	000098-83-9			9.5E+01	9.5E+00
Methyltriethyl Lead	001762-28-3				
Metolachlor	051218-45-2			2.0E+02	2.0E+01
Metribuzin ⁽⁵⁾	021087-64-9			3.4E+01	3.4E+00
Mirex ⁽⁵⁾	002385-85-5	1.8E-01	1.8E-03	2.7E-01	2.7E-02
Molinate	002212-67-1			2.7E+00	2.7E-01
Molybdenum	007439-98-7			6.8E+00	6.8E-01
Monochloramine	010599-90-3			1.4E+02	1.4E+01
Monochlorobutanes	025154-42-1			5.4E+02	5.4E+01
Naled	000300-76-5			2.7E+00	2.7E-01
Naphthalene ⁽⁶⁾	000091-20-3			4.8E+01	4.8E+00
Naphthalene, 1-Methyl	000090-12-0				
Naphthalene, 2-Methyl	000091-57-6				
Napropamide	015299-99-7			1.4E+02	1.4E+01
Niagara Blue 4B	002429-74-5				

Table 3.1e. (continued)

Chemical	CASRN	Ingestion of fish (mg/kg)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Nickel Carbonyl	013463-39-3				
Nickel Refinery Dust	NA				
Nickel Soluble Salts	007440-02-0			2.7E+01	2.7E+00
Nickel Subsulfide	012035-72-2				
Nitrapyrin ⁽⁵⁾	001929-82-4			2.0E+00	2.0E-01
Nitrate	014797-55-8			2.2E+03	2.2E+02
Nitric Oxide ⁽⁵⁾	010102-43-9			1.4E+02	1.4E+01
Nitrite	014797-65-0			1.4E+02	1.4E+01
Nitroaniline, 2-	000088-74-4				
Nitrobenzene	000098-95-3			6.8E-01	6.8E-02
Nitrofurantoin	000067-20-9			9.5E+01	9.5E+00
Nitrofurazone	000059-87-0	2.1E-01	2.1E-03		
Nitrogen Dioxide ⁽⁵⁾	010102-44-0			1.4E+03	1.4E+02
Nitroguanidine	000556-88-7			1.4E+02	1.4E+01
Nitrophenol, 4-	000100-02-7				
Nitropropane, 2- ⁽⁵⁾	000079-46-9	3.3E-02	3.3E-04		
Nitroso-N-ethylurea, N-	000759-73-9	2.3E-03	2.3E-05		
Nitroso-N-methylurea, N-	000684-93-5				

Table 3.1e. (continued)

Chemical	CASRN	Ingestion of fish (mg/kg)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Nitroso-di-N-butylamine, N-	000924-16-3	5.8E-02	5.8E-04		
Nitroso-di-N-propylamine, N-	000621-64-7	4.5E-02	4.5E-04		
Nitrosodiethanolamine, N-	001116-54-7	1.1E-01	1.1E-03		
Nitrosodiethylamine, N-	000055-18-5	2.1E-03	2.1E-05		
Nitrosodimethylamine, N-	000062-75-9	6.2E-03	6.2E-05		
Nitrosodiphenylamine, N-	000086-30-6	6.4E+01	6.4E-01		
Nitrosomethylethylamine, N-	010595-95-6	1.4E-02	1.4E-04		
Nitrosomethylvinylamine, N-	004549-40-0				
Nitrosopyrrolidine, N-	000930-55-2	1.5E-01	1.5E-03		
Nitrotoluene, 4-Amino-2-	000119-32-4				
Nitrotoluene, m-	000099-08-1			1.4E+01	1.4E+00
Nitrotoluene, o-	000088-72-2			1.4E+01	1.4E+00
Nitrotoluene, p-	000099-99-0			1.4E+01	1.4E+00
Norflurazon	027314-13-2			5.4E+01	5.4E+00
Nustar	085509-19-9			9.5E-01	9.5E-02
OCDD ⁽⁴⁾	003268-87-9	2.1E-03	2.1E-05		
OCDF ⁽⁴⁾	039001-02-0	2.1E-03	2.1E-05		
Octabromodiphenyl Ether	032536-52-0			4.1E+00	4.1E-01

Table 3.1e. (continued)

Chemical	CASRN	Ingestion of fish (mg/kg)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetra (HMX)	002691-41-0			6.8E+01	6.8E+00
Octamethylpyrophosphoramidate	000152-16-9			2.7E+00	2.7E-01
Octyl Phthalate, di-N-	000117-84-0			2.7E+01	2.7E+00
Oryzalin	019044-88-3			6.8E+01	6.8E+00
Oxadiazon	019666-30-9			6.8E+00	6.8E-01
Oxamyl	023135-22-0			3.4E+01	3.4E+00
Paclobutrazol	076738-62-0			1.8E+01	1.8E+00
Paraquat	001910-42-5			6.1E+00	6.1E-01
Parathion	000056-38-2			8.1E+00	8.1E-01
PeCDD, 2,3,7,8-(4)	036088-22-9	4.2E-06	4.2E-08		
PeCDF, 1,2,3,7,8-(4)	057117-41-6	4.2E-06	4.2E-08		
PeCDF, 2,3,4,7,8-(4)	057117-31-4	4.2E-05	4.2E-07		
Pebulate	001114-71-2			6.8E+01	6.8E+00
Pendimethalin	040487-42-1			5.4E+01	5.4E+00
Pentabromodiphenyl Ether	032534-81-9			2.7E+00	2.7E-01
Pentachlorobenzene	000608-93-5			1.1E+00	1.1E-01
Pentachlorocyclopentadiene	025329-35-5				

Table 3.1c. (continued)

Chemical	CASRN	Ingestion of fish (mg/kg)*		
		10 ⁻⁴	10 ⁻⁶	HQ=1
Pentachloronitrobenzene	000082-68-8	1.2E+00	1.2E-02	4.1E+00
Pentachlorophenol	000087-86-5	2.6E+00	2.6E-02	4.1E+01
Pentyl Alcohol, N-	000071-41-0			
Permethrin	052645-53-1			6.8E+01
Phenanthrene	000085-01-8			
Phenmedipham	013684-63-4			3.4E+02
Phenol	000108-95-2			8.1E+02
Phenylenediamine, m-	000108-45-2			8.1E+00
Phenylenediamine, o-	000095-54-5	6.7E+00	6.7E-02	
Phenylenediamine, p-	000106-50-3			2.6E+02
Phenylmercuric Acetate	000062-38-4			1.1E-01
Phenylphenol, 2-	000090-43-7	1.6E+02	1.6E+00	
Phorate	000298-02-2			2.7E-01
Phosmet	000732-11-6			2.7E+01
Phosphine	007803-51-2			4.1E-01
Phosphoric Acid	007664-38-2			
Phthalic Acid, P-	000100-21-0			1.4E+03
Phthalic Anhydride	000085-44-9			2.7E+03
				2.7E+02

Nonradionuclides/fish/residential

Table 3.1e. (continued)

Chemical	CASRN	Ingestion of fish (mg/kg)*			
		10 ⁻⁴	10 ⁻⁵	HQ=1	HQ=0.1
Picloram	001918-02-1			9.5E+01	9.5E+00
Pirimiphos, Methyl	029232-93-7			1.4E+01	1.4E+00
Polybrominated Biphenyls	NA	3.5E-02	3.5E-04	9.5E-03	9.5E-04
Polychlorinated Biphenyls	001336-36-3	4.1E-02	4.1E-04		
Potassium Cyanide	000151-50-8			6.8E+01	6.8E+00
Potassium Silver Cyanide	000506-61-6			2.7E+02	2.7E+01
Prochloraz	067747-09-5	2.1E+00	2.1E-02	1.2E+01	1.2E+00
Profluralin	026399-36-0			8.1E+00	8.1E-01
Prometon	001610-18-0			2.0E+01	2.0E+00
Promethyn	007287-19-6			5.4E+00	5.4E-01
Propachlor	001918-16-7			1.8E+01	1.8E+00
Propanil	000709-98-8			6.8E+00	6.8E-01
Propargite	002312-35-8			2.7E+01	2.7E+00
Propargyl Alcohol	000107-19-7			2.7E+00	2.7E-01
Propazine	000139-40-2			2.7E+01	2.7E+00
Propham	000122-42-9			2.7E+01	2.7E+00
Propiconazole	060207-90-1			1.8E+01	1.8E+00
Propylene Glycol	000057-55-6			2.7E+04	2.7E+03

Nonradionuclides/fish/residential

Table 3.1e. (continued)

Chemical	CASRN	Ingestion of fish (mg/kg)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Propylene Glycol Monoethyl Ether	001569-02-4			9.5E+02	9.5E+01
Propylene Glycol Monomethyl Ether	000107-98-2			9.5E+02	9.5E+01
Propylene Oxide	000075-56-9	1.3E+00	1.3E-02		
Pursuit	081335-77-5			3.4E+02	3.4E+01
Pydrin	051630-58-1			3.4E+01	3.4E+00
Pyrene	000129-00-0			4.1E+01	4.1E+00
Pyridine	000110-86-1			1.4E+00	1.4E-01
Quinalphos	013593-03-8			6.8E-01	6.8E-02
Quinoline	000091-22-5	2.6E-02	2.6E-04		
Refractory Ceramic Fibers	NA				
Resmethrin	010453-86-8			4.1E+01	4.1E+00
Ronnel	000299-84-3			6.8E+01	6.8E+00
Rotenone	000083-79-4			5.4E+00	5.4E-01
Savey	078587-05-0			3.4E+01	3.4E+00
Selenious Acid	007783-00-8			6.8E+00	6.8E-01
Selenite	014124-67-5				
Selenium	007782-49-2			6.8E+00	6.8E-01

Table 3.1e. (continued)

Chemical	CASRN	Ingestion of fish (mg/kg)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Selenium Sulfide	007446-34-6				
Selenourea	000630-10-4			6.8E+00	6.8E-01
Sethoxydim	074051-80-2			1.2E+02	1.2E+01
Silver	007440-22-4			6.8E+00	6.8E-01
Silver Cyanide	000506-64-9			1.4E+02	1.4E+01
Simazine	000122-34-9	2.6E+00	2.6E-02	6.8E+00	6.8E-01
Sodium	007440-23-5				
Sodium Acifluorfen	062476-59-9			1.8E+01	1.8E+00
Sodium Azide	026628-22-8			5.4E+00	5.4E-01
Sodium Cyanide	000143-33-9			5.4E+01	5.4E+00
Sodium Diethyldithiocarbamate	000148-18-5	1.2E+00	1.2E-02	4.1E+01	4.1E+00
Sodium Fluoroacetate	000062-74-8			2.7E-02	2.7E-03
Sodium Metavanadate	013718-26-8			1.4E+00	1.4E-01
Stirofos (Tetrachlorovinphos)	000961-11-5	1.3E+01	1.3E-01	4.1E+01	4.1E+00
Strontium, Stable	007440-24-6			8.1E+02	8.1E+01
Strychnine	000057-24-9			4.1E-01	4.1E-02
Styrene ⁽⁶⁾	000100-42-5			2.7E+02	2.7E+01
Sulfate	014808-79-8				

Table 3.1e. (continued)

Chemical	CASRN	Ingestion of fish (mg/kg)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Systhane	088671-89-0			3.4E+01	3.4E+00
TCDD, 2,3,7,8-(4)	001746-01-6	2.1E-06	2.1E-08		
TCDF, 2,3,7,8-(4)	051207-31-9	2.1E-05	2.1E-07		
TCMTB	021564-17-0			4.1E+01	4.1E+00
Tebuthiuron	034014-18-1			9.5E+01	9.5E+00
Temephos	003383-96-8			2.7E+01	2.7E+00
Terbacil	005902-51-2			1.8E+01	1.8E+00
Terbufos	013071-79-9			3.4E-02	3.4E-03
Terbutryn	000886-50-0			1.4E+00	1.4E-01
Tetrabutyl Lead	001920-90-7				
Tetrachlorobenzene, 1,2,4,5-	000095-94-3			4.1E-01	4.1E-02
Tetrachloroethane, 1,1,1,2-	000630-20-6	1.2E+01	1.2E-01	4.1E+01	4.1E+00
Tetrachloroethane, 1,1,2,2-	000079-34-5	1.6E+00	1.6E-02		
Tetrachloroethylene ⁽⁶⁾	000127-18-4	6.1E+00	6.1E-02	1.4E+01	1.4E+00
Tetrachlorophenol, 2,3,4,6-	000058-90-2			4.1E+01	4.1E+00
Tetrachlorotoluene, p- alpha, alpha, alpha-	005216-25-1	1.6E-02	1.6E-04		
Tetraethyl Dithiopyrophosphate	003689-24-5			6.8E-01	6.8E-02

Table 3.1e. (continued)

Chemical	CASRN	Ingestion of fish (mg/kg)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Tetraethyl Lead	000078-00-2				
Tetrafluoroethane, 1,1,1,2-	000811-97-2				
Tetramethyl Lead	000075-74-1				
Tetrapropyl Lead	003440-75-3				
Thallic Oxide ⁽⁵⁾	001314-32-5			9.5E-02	9.5E-03
Thallium (I) Nitrate	010102-45-1			1.2E-01	1.2E-02
Thallium (Soluble Salts)	007440-28-0				
Thallium Acetate	000563-68-8			1.2E-01	1.2E-02
Thallium Carbonate	006533-73-9			1.1E-01	1.1E-02
Thallium Chloride	007791-12-0			1.1E-01	1.1E-02
Thallium Selenite ⁽⁵⁾	012039-52-0			1.2E-01	1.2E-02
Thallium Sulfate	007446-18-6			1.1E-01	1.1E-02
Thiobencarb	028249-77-6			1.4E+01	1.4E+00
Thiofanox	039196-18-4			4.1E-01	4.1E-02
Thiophanate, Methyl	023564-05-8			1.1E+02	1.1E+01
Thiram	000137-26-8			6.8E+00	6.8E-01
Thorium	007440-29-1				
Tin	007440-31-5			8.1E+02	8.1E+01

Table 3.1e. (continued)

Chemical	CASRN	Ingestion of fish (mg/kg)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Titanium	007440-32-6				
Toluene ⁽⁶⁾	000108-88-3			2.7E+02	2.7E+01
Toluene diisocyanate mixture (TDI)	026471-62-5				
Toluene-2,4-diamine	000095-80-7	9.9E-02	9.9E-04		
Toluene-2,5-diamine	000095-70-5			8.1E+02	8.1E+01
Toluene-2,6-diamine	000823-40-5			2.7E+02	2.7E+01
Toluidine, o- (Methylaniline, 2-)	000095-53-4	1.3E+00	1.3E-02		
Toluidine, p-	000106-49-0	1.7E+00	1.7E-02		
Toxaphene	008001-35-2	2.9E-01	2.9E-03		
Tralomethrin	066841-25-6			1.0E+01	1.0E+00
Triallate	002303-17-5			1.8E+01	1.8E+00
Triasulfuron	082097-50-5			1.4E+01	1.4E+00
Tribromobenzene, 1,2,4-	000615-54-3			6.8E+00	6.8E-01
Tribromochloromethane	000594-15-0				
Tribromodiphenyl Ether	049690-94-0				
Tributyltin Oxide	000056-35-9			4.1E-02	4.1E-03
Trichloro-1,2,2-trifluoroethane, 1,1,2-	000076-13-1			4.1E+04	4.1E+03

Table 3.1e. (continued)

Chemical	CASRN	Ingestion of fish (mg/kg)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Trichloro-2'-hydroxydiphenylether	003380-34-5				
Trichloroacetic Acid					
Trichloroaniline HCl, 2,4,6-	033663-50-2	1.1E+01	1.1E-01		
Trichloroaniline, 2,4,6-	000634-93-5	9.3E+00	9.3E-02		
Trichlorobenzene, 1,2,4-	000120-82-1			1.4E+01	1.4E+00
Trichloroethane, 1,1,1- ⁽⁵⁾	000071-55-6			1.2E+02	1.2E+01
Trichloroethane, 1,1,2-	000079-00-5	5.5E+00	5.5E-02	5.4E+00	5.4E-01
Trichloroethylene ⁽³⁾	000079-01-6	2.9E+01	2.9E-01		
Trichlorofluoromethane	000075-69-4			4.1E+02	4.1E+01
Trichlorophenol, 2,4,5-	000095-95-4			1.4E+02	1.4E+01
Trichlorophenol, 2,4,6-	000088-06-2	2.9E+01	2.9E-01		
Trichlorophenoxy) Propionic Acid, 2(2,4,5-	000093-72-1			1.1E+01	1.1E+00
Trichlorophenoxyacetic Acid, 2,4,5-	000093-76-5			1.4E+01	1.4E+00
Trichloropropane, 1,1,2-	000598-77-6			6.8E+00	6.8E-01
Trichloropropane, 1,2,3-	000096-18-4	4.5E-02	4.5E-04	8.1E+00	8.1E-01
Trichloropropene, 1,2,3-	000096-19-5			6.8E+00	6.8E-01

Table 3.1e. (continued)

Chemical	CASRN	Ingestion of fish (mg/kg)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Trichlorotoluene, 2,3,6-	002077-46-5				
Trichlorotoluene, alpha 2,6-	002014-83-7				
Tridiphane	058138-08-2			4.1E+00	4.1E-01
Triethyl Lead	005224-23-7				
Triethylamine	000121-44-8				
Trifluralin	001582-09-8	4.1E+01	4.1E-01	1.0E+01	1.0E+00
Trimethyl Lead	007442-13-9				
Trimethyl Phosphate	000512-56-1	8.5E+00	8.5E-02		
Trimethylethyl Lead	001762-26-1				
Trinitrobenzene, 1,3,5-	000099-35-4			6.8E-02	6.8E-03
Trinitrophenylmethylnitramine	000479-45-8			1.4E+01	1.4E+00
Trinitrotoluene, 2,4,6-	000118-96-7	1.1E+01	1.1E-01	6.8E-01	6.8E-02
Tripropyl Lead	006618-03-7				
Uranium (Soluble Salts)	NA			4.1E+00	4.1E-01
Vanadium Pentoxide	001314-62-1			1.2E+01	1.2E+00
Vanadium Sulfate	036907-42-3			2.7E+01	2.7E+00
Vanadium, Metallic	007440-62-2			9.5E+00	9.5E-01
Vanadyl Sulfate	027774-13-6			2.7E+01	2.7E+00

Table 3.1e. (continued)

Chemical	CASRN	Ingestion of fish (mg/kg)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Vernolate	001929-77-7			1.4E+00	1.4E-01
Vinclozolin	050471-44-8			3.4E+01	3.4E+00
Vinyl Acetate	000108-05-4			1.4E+03	1.4E+02
Vinyl Bromide	000593-60-2				
Vinyl Chloride ⁽⁶⁾	000075-01-4	1.7E-01	1.7E-03		
Warfarin	000081-81-2			4.1E-01	4.1E-02
White Phosphorus	007723-14-0			2.7E-02	2.7E-03
Xylene, Mixture ⁽⁶⁾	001330-20-7			2.7E+03	2.7E+02
Xylene, P- ⁽⁶⁾	000106-42-3				
Xylene, m- ⁽⁶⁾	000108-38-3			2.7E+03	2.7E+02
Xylene, o- ⁽⁶⁾	000095-47-6			2.7E+03	2.7E+02
Zinc (Metallic)	007440-66-6			4.1E+02	4.1E+01
Zinc Cyanide	000557-21-1			6.8E+01	6.8E+00
Zinc Phosphide	001314-84-7			4.1E-01	4.1E-02
Zineb	012122-67-7			6.8E+01	6.8E+00
Zirconium	007440-67-7				

Table 3.1e. (continued)

Notes:

- * By definition, 1 kg = 1.0E + 06 mg. Therefore, a limit of 1.0E + 06 mg/kg was used for any PRG that was calculated to be above this limit.
- (1) The same oral slope factor as used for polychlorinated biphenyls.
- (2) The PRG was calculated considering *Supplemental Guidance from RAGS: Region 4 Bulletins, Human Health Risk Assessment* (Interim 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.
- (3) The toxicity values for trichloroethylene have been withdrawn from IRIS and HEAST pending further investigation. However, the most recent toxicity values have been used to calculate the PRG.
- (4) The PRG was calculated considering *Supplemental Guidance from RAGS: Region 4 Bulletins, Human Health Risk Assessment* (Interim Guidance) from EPA (November 1995). The slope factors for chemicals so marked indicate that a TEF methodology was used for chlorinated dioxin and furan congeners based on each compound's relative potency to the potency of 2,3,7,8-tetrachlorodibenzodioxin (TCDD). The following TEFs were used to convert each slope factor to an equivalent slope factor of 2,3,7,8-TCDD: (1) 2,3,7,8-TCDD, TEF = 1.0; (2) 2,3,7,8-PeCDD, TEF = 0.5; (3) 2,3,7,8-HxCDD, TEF = 0.1; (4) 2,3,7,8-HpCDD, TEF = 0.01; (5) OCDD, TEF = 0.001; (6) 2,3,7,8-TCDF, TEF = 0.1; (7) 1,2,3,7,8-PeCDF, TEF = 0.5; (8) 2,3,4,7,8-PeCDF, TEF = 0.05; (9) 2,3,7,8-HxCDF, TEF = 0.1; (10) 2,3,7,8-HpCDF, TEF = 0.01; and (11) OCDF, TEF = 0.001.
- (5) Toxicity values for these chemicals have been withdrawn from IRIS and HEAST pending further investigation. However, the most recent toxicity values have been used to calculate the PRG.
- (6) Toxicity values for these chemicals were obtained from the Superfund Health Risk Technical Support Center.

3-160

**Table 3.1f. Risk-based Preliminary Remediation Goals for radionuclides in fish
(residential scenario)**

Chemical [†]	CASRN	Ingestion of fish (pCi/g)	
		10 ⁻⁴	10 ⁻⁶
Ac-225	014265-85-1	1.2E+00	1.2E-02
Ac-227	014952-40-0	5.0E-01	5.0E-03
Ac-227+D	014952-40-0	2.8E-01	2.8E-03
Ac-228	014331-83-0	1.1E+02	1.1E+00
Ag-105	014928-14-4	1.1E+02	1.1E+00
Ag-108	014391-65-2	2.5E+04	2.5E+02
Ag-108m	014391-65-2	2.9E+01	2.9E-01
Ag-108m+D	014391-65-2	2.9E+01	2.9E-01
Ag-109m	014378-38-2	6.5E+05	6.5E+03
Ag-110	014391-76-5	7.2E+04	7.2E+02
Ag-110m	015760-04-0	2.1E+01	2.1E-01
Ag-111	157690-04-0	2.6E+01	2.6E-01
Am-241	014596-10-2	5.4E-01	5.4E-03
Am-242	013981-54-9	1.2E+02	1.2E+00
Am-242m	013981-54-9	6.0E-01	6.0E-03
Am-243	014993-75-0	5.4E-01	5.4E-03
Am-243+D	014993-75-0	5.3E-01	5.3E-03

Table 3.1f. (continued)

Chemical [†]	CASRN	Ingestion of fish (pCi/g)	
		10 ⁻⁴	10 ⁻⁶
Ar-41	014163-25-8		
At-217	017239-90-6	2.0E+07	2.0E+05
Au-196	014914-16-0	1.4E+02	1.4E+00
Au-198	010043-49-0	3.3E+01	3.3E-01
Ba-131	014914-75-1	1.0E+02	1.0E+00
Ba-133	013981-41-4	6.5E+01	6.5E-01
Ba-133m	013981-41-4	6.4E+01	6.4E-01
Ba-137m	013981-97-0	7.3E+04	7.3E+02
Ba-139	014378-25-7	5.8E+02	5.8E+00
Ba-140	014798-08-4	1.5E+01	1.5E-01
Be-7	013966-02-4	2.0E+03	2.0E+01
Bi-206	015776-19-9	2.5E+01	2.5E-01
Bi-207	013982-38-2	3.5E+01	3.5E-01
Bi-210	014331-79-4	2.4E+01	2.4E-01
Bi-211	015229-37-5	9.7E+03	9.7E+01
Bi-212	014913-49-6	2.8E+02	2.8E+00
Bi-213	015776-20-2	4.0E+02	4.0E+00
Bi-214	014733-03-0	9.0E+02	9.0E+00

Table 3.1f. (continued)

Chemical [†]	CASRN	Ingestion of fish (pCi/g)	
		10 ⁻⁴	10 ⁻⁶
Br-82	014686-69-2	1.2E+02	1.2E+00
C-11	014333-33-6	3.9E+03	3.9E+01
C-14	014762-75-5	1.7E+02	1.7E+00
C-15	015929-23-4	2.7E+05	2.7E+03
Ca-45	013966-05-7	8.7E+01	8.7E-01
Ca-47	001439-99-2	2.6E+01	2.6E-01
Cd-109	014109-32-1	2.2E+01	2.2E-01
Cd-115	014336-68-6	2.4E+01	2.4E-01
Cd-115m	014336-68-6	1.2E+01	1.2E-01
Ce-141	013967-74-3	4.5E+01	4.5E-01
Ce-143	014119-19-8	3.0E+01	3.0E-01
Ce-144	014762-78-8	6.0E+00	6.0E-02
Ce-144+D	014762-78-8	5.9E+00	5.9E-02
Cl-36	013981-43-6	7.9E+01	7.9E-01
Cl-38	014158-34-0	8.5E+02	8.5E+00
Cm-242	015510-73-3	4.6E+00	4.6E-02
Cm-243	015757-87-6	7.0E-01	7.0E-03
Cm-243+D	015757-87-6	7.0E-01	7.0E-03

Table 3.1f. (continued)

Chemical [†]	CASRN	Ingestion of fish (pCi/g)	
		10 ⁻⁴	10 ⁻⁶
Cm-244	013981-15-2	8.4E-01	8.4E-03
Cm-245	015621-76-8	5.3E-01	5.3E-03
Cm-246	015757-90-1	5.3E-01	5.3E-03
Cm-247	015758-32-4	5.7E-01	5.7E-03
Cm-248	015758-33-5	1.3E-01	1.3E-03
Co-57	013981-50-5	1.8E+02	1.8E+00
Co-58	013981-38-9	6.3E+01	6.3E-01
Co-58m	013981-38-9	1.9E+03	1.9E+01
Co-60	010198-40-0	9.3E+00	9.3E-02
Cr-51	014392-02-0	1.3E+03	1.3E+01
Cs-131	014914-76-2	9.8E+02	9.8E+00
Cs-134	013967-70-9	3.7E+00	3.7E-02
Cs-134m	013967-70-9	3.9E+03	3.9E+01
Cs-135	015726-30-4	3.9E+01	3.9E-01
Cs-136	014234-29-8	2.3E+01	2.3E-01
Cs-137	010045-97-3	5.6E+00	5.6E-02
Cs-137+D	010045-97-3	5.6E+00	5.6E-02
Cs-138	015758-29-9	1.0E+03	1.0E+01

Table 3.1f. (continued)

Chemical [†]	CASRN	Ingestion of fish (pCi/g)	
		10 ⁻⁴	10 ⁻⁶
Cu-64	013981-25-4	3.4E+02	3.4E+00
Dy-165	013967-64-1	5.4E+02	5.4E+00
Dy-166	015840-01-4	1.9E+01	1.9E-01
Er-169	015840-13-8	8.3E+01	8.3E-01
Er-171	014391-45-8	1.1E+02	1.1E+00
Eu-152	014683-23-9	3.1E+01	3.1E-01
Eu-154	015585-10-1	1.9E+01	1.9E-01
Eu-155	014391-16-3	1.1E+02	1.1E+00
Eu-156	014280-35-4	1.6E+01	1.6E-01
F-18	013981-56-1	1.6E+03	1.6E+01
Fe-55	014681-59-5	5.0E+02	5.0E+00
Fe-59	014596-12-4	3.0E+01	3.0E-01
Fr-221	015756-41-9	1.2E+03	1.2E+01
Fr-223	015756-98-6	4.0E+02	4.0E+00
Ga-67	014119-09-6	2.1E+02	2.1E+00
Ga-72	013982-22-4	3.7E+01	3.7E-01
Gd-153	014276-65-4	1.3E+02	1.3E+00
Gd-159	014041-42-0	6.8E+01	6.8E-01

Table 3.1f. (continued)

Chemical†	CASRN	Ingestion of fish (pCi/g)	
		10 ⁻⁴	10 ⁻⁶
Ge-71	014374-81-3	1.5E+04	1.5E+02
H-3	010028-17-8	2.5E+03	2.5E+01
Hg-197	013981-51-6	1.5E+02	1.5E+00
Hg-203	013982-78-0	6.7E+01	6.7E-01
Ho-166	013967-65-2	2.3E+01	2.3E-01
I-122	018287-75-7	8.2E+03	8.2E+01
I-123	015715-08-9	3.3E+02	3.3E+00
I-125	014158-31-7	6.8E+00	6.8E-02
I-126	014158-32-8	3.7E+00	3.7E-02
I-129	015046-84-1	9.6E-01	9.6E-03
I-130	014914-02-4	3.6E+01	3.6E-01
I-131	010043-66-0	4.9E+00	4.9E-02
I-132	014683-16-0	2.7E+02	2.7E+00
I-133	014834-67-4	1.7E+01	1.7E-01
I-134	014914-27-3	7.6E+02	7.6E+00
I-135	014834-68-5	7.8E+01	7.8E-01
In-113m	014885-78-0	2.1E+03	2.1E+01
In-114	013981-55-0	3.9E+04	3.9E+02

Table 3.1f. (continued)

Chemical [†]	CASRN	Ingestion of fish (pCi/g)	
		10 ⁻⁴	10 ⁻⁶
In-114m	013981-55-0	8.6E+00	8.6E-02
In-115	014191-71-0	5.1E+00	5.1E-02
In-115m	014191-71-0	5.2E+02	5.2E+00
Ir-190	014981-91-0	3.6E+01	3.6E-01
Ir-194	014158-35-1	2.5E+01	2.5E-01
K-40	013966-00-2	1.4E+01	1.4E-01
K-42	014378-21-3	1.4E+02	1.4E+00
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	1.9E+01	1.9E-01
Lu-177	014265-75-9	6.0E+01	6.0E-01
Mn-52	014092-99-0	2.9E+01	2.9E-01
Mn-54	013966-31-9	9.0E+01	9.0E-01

Table 3.1f. (continued)

Chemical [†]	CASRN	Ingestion of fish (pCi/g)	
		10 ⁻⁴	10 ⁻⁶
Mn-56	014681-52-8	2.1E+02	2.1E+00
Mo-99	014119-15-4	7.8E+01	7.8E-01
Na-22	013966-32-0	2.2E+01	2.2E-01
Na-24	013982-04-2	1.3E+02	1.3E+00
Nb-93m	007440-03-1	2.7E+02	2.7E+00
Nb-94	014681-63-1	2.6E+01	2.6E-01
Nb-95	013967-76-5	7.8E+01	7.8E-01
Nb-95m	013967-76-5	5.8E+01	5.8E-01
Nb-97	018496-04-3	1.0E+03	1.0E+01
Nb-97m	018496-04-3	5.4E+04	5.4E+02
Nd-147	014269-74-0	3.0E+01	3.0E-01
Nd-149	015749-81-2	3.9E+02	3.9E+00
Ni-59	014336-70-0	9.5E+02	9.5E+00
Ni-63	013981-37-8	3.2E+02	3.2E+00
Ni-65	014833-49-9	3.1E+02	3.1E+00
Np-236	015700-36-4	1.9E+02	1.9E+00
Np-237	013994-20-2	6.0E-01	6.0E-03
Np-237+D	013994-20-2	5.9E-01	5.9E-03

Table 3.1f. (continued)

Chemical [†]	CASRN	Ingestion of fish (pCi/g)	
		10 ⁻⁴	10 ⁻⁶
Np-238	015766-25-3	3.9E+01	3.9E-01
Np-239	013968-59-7	4.1E+01	4.1E-01
Np-240	015690-84-3	1.0E+03	1.0E+01
Np-240m	015690-84-3	7.3E+03	7.3E+01
Os-185	015766-50-4	9.8E+01	9.8E-01
Os-191	014119-24-5	5.8E+01	5.8E-01
Os-191m	014119-24-5	3.6E+02	3.6E+00
Os-193	016057-77-5	4.0E+01	4.0E-01
P-32	014596-37-3	2.9E+01	2.9E-01
P-33	015749-66-3	2.3E+02	2.3E+00
Pa-231	014331-85-2	1.2E+00	1.2E-02
Pa-233	013981-14-1	3.8E+01	3.8E-01
Pa-234	015100-28-4	8.3E+01	8.3E-01
Pa-234m	015100-28-4	3.7E+04	3.7E+02
Pb-203	014687-25-3	1.7E+02	1.7E+00
Pb-209	014119-30-3	8.4E+02	8.4E+00
Pb-210	014255-04-0	2.6E-01	2.6E-03
Pb-210+D	014255-04-0	1.7E-01	1.7E-03

Table 3.1f. (continued)

Chemical†	CASRN	Ingestion of fish (pCi/g)	
		10 ⁻⁴	10 ⁻⁶
Pb-211	015816-77-0	5.2E+02	5.2E+00
Pb-212	015092-94-1	9.8E+00	9.8E-02
Pb-214	015067-28-4	6.0E+02	6.0E+00
Pd-100	015690-69-4	4.7E+01	4.7E-01
Pd-101	015749-54-9	4.7E+02	4.7E+00
Pd-103	014967-68-1	1.7E+02	1.7E+00
Pd-107	017637-99-9	8.4E+02	8.4E+00
Pd-109	014981-64-7	5.3E+01	5.3E-01
Pm-147	014380-75-7	1.3E+02	1.3E+00
Pm-148	014683-19-3	1.2E+01	1.2E-01
Pm-148m	014683-19-3	1.8E+01	1.8E-01
Pm-149	015765-31-8	3.2E+01	3.2E-01
Po-210	013981-52-7	5.4E-01	5.4E-03
Po-212	015389-34-1	3.9E+12	3.9E+10
Po-213	015756-57-7	2.6E+11	2.6E+09
Po-214	015735-67-8	8.3E+09	8.3E+07
Po-215	015706-52-2	3.5E+08	3.5E+06
Po-216	015756-58-8	2.0E+06	2.0E+04

Table 3.1f. (continued)

Chemical ¹	CASRN	Ingestion of fish (pCi/g)	
		10 ⁻⁴	10 ⁻⁶
Po-218	015422-24-9	3.5E+03	3.5E+01
Pr-142	014191-64-1	2.5E+01	2.5E-01
Pr-143	014981-79-4	2.7E+01	2.7E-01
Pr-144	014119-05-2	2.2E+03	2.2E+01
Pr-144m	014119-05-2	5.5E+03	5.5E+01
Pt-191	015706-36-2	1.2E+02	1.2E+00
Pt-193	015735-70-3	1.1E+03	1.1E+01
Pt-193m	015735-70-3	7.0E+01	7.0E-01
Pt-197	015735-74-7	8.3E+01	8.3E-01
Pt-197m	015735-74-7	5.4E+02	5.4E+00
Pu-236	015411-92-4	2.3E+00	2.3E-02
Pu-238	013981-16-3	6.0E-01	6.0E-03
Pu-239	015117-48-3	5.6E-01	5.6E-03
Pu-240	014119-33-6	5.6E-01	5.6E-03
Pu-241	014119-32-5	3.4E+01	3.4E-01
Pu-241+D	014119-32-5	5.3E-01	5.3E-03
Pu-242	013982-10-0	5.9E-01	5.9E-03
Pu-243	015706-37-3	4.8E+02	4.8E+00

Table 3.1f. (continued)

Chemical [†]	CASRN	Ingestion of fish (pCi/g)	
		10 ⁻⁴	10 ⁻⁶
Pu-244	014119-34-7	5.6E-01	5.6E-03
Pu-244+D	014119-34-7	5.5E-01	5.5E-03
Ra-223	015623-45-7	7.5E-01	7.5E-03
Ra-224	013233-32-4	1.2E+00	1.2E-02
Ra-225	013981-53-8	1.1E+00	1.1E-02
Ra-226	013982-63-3	6.0E-01	6.0E-03
Ra-226+D	013982-63-3	6.0E-01	6.0E-03
Ra-228	015262-20-1	7.2E-01	7.2E-03
Ra-228+D	015262-20-1	7.1E-01	7.1E-03
Rb-82	014391-63-0	1.7E+04	1.7E+02
Rb-86	014932-53-7	2.5E+01	2.5E-01
Rb-87	013982-13-3	4.8E+01	4.8E-01
Rb-88	014928-36-0	1.2E+03	1.2E+01
Rb-89	014191-65-2	2.0E+03	2.0E+01
Rh-103m	007440-16-6	2.2E+04	2.2E+02
Rh-105	014913-89-4	9.1E+01	9.1E-01
Rh-105m	014913-89-4	1.6E+05	1.6E+03
Rh-106	014234-34-5	4.9E+04	4.9E+02

Table 3.1f. (continued)

Chemical [†]	CASRN	Ingestion of fish (pCi/g)	
		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	5.3E+01	5.3E-01
Ru-105	014331-95-4	1.5E+02	1.5E+00
Ru-106	013967-48-1	5.1E+00	5.1E-02
Ru-106+D	013967-48-1	5.1E+00	5.1E-02
Ru-97	015758-35-7	3.0E+02	3.0E+00
S-35	015117-53-0	4.2E+02	4.2E+00
Sb-122	014374-79-9	2.0E+01	2.0E-01
Sb-124	014683-10-4	1.6E+01	1.6E-01
Sb-125	014234-35-6	5.9E+01	5.9E-01
Sb-125+D	014234-35-6	5.0E+01	5.0E-01
Sb-126	015756-32-8	1.8E+01	1.8E-01
Sb-126m	015756-32-8	2.4E+03	2.4E+01
Sb-127	013968-50-8	2.1E+01	2.1E-01
Sb-129	014331-88-5	9.5E+01	9.5E-01
Sc-46	013967-63-0	3.1E+01	3.1E-01

Table 3.1f. (continued)

Chemical [†]	CASRN	Ingestion of fish (pCi/g)	
		10 ⁻⁴	10 ⁻⁶
Sc-47	014391-96-9	6.0E+01	6.0E-01
Sc-48	014391-86-7	2.7E+01	2.7E-01
Se-75	014265-71-5	2.7E+01	2.7E-01
Si-31	014276-49-4	3.5E+02	3.5E+00
Sm-147	014392-33-7	7.0E+00	7.0E-02
Sm-151	015715-94-3	3.8E+02	3.8E+00
Sm-153	015766-00-4	4.4E+01	4.4E-01
Sn-113	013966-06-8	4.7E+01	4.7E-01
Sn-121	014683-06-8	1.4E+02	1.4E+00
Sn-121m	014683-06-8	8.8E+01	8.8E-01
Sn-125	014683-08-0	1.0E+01	1.0E-01
Sn-126	015832-50-5	8.3E+00	8.3E-02
Sr-82	014809-50-8	6.8E+00	6.8E-02
Sr-85	013967-73-2	1.3E+02	1.3E+00
Sr-85m	013967-73-2	9.8E+03	9.8E+01
Sr-89	014158-27-1	1.7E+01	1.7E-01
Sr-90	010098-97-2	4.3E+00	4.3E-02
Sr-90+D	010098-97-2	3.2E+00	3.2E-02

Table 3.1f. (continued)

Chemical [†]	CASRN	Ingestion of fish (pCi/g)	
		10 ⁻⁴	10 ⁻⁶
Sr-91	014331-91-0	6.3E+01	6.3E-01
Sr-92	014928-29-1	8.7E+01	8.7E-01
Ta-182	013982-00-8	2.5E+01	2.5E-01
Tb-158	015759-55-4	4.2E+01	4.2E-01
Tb-160	013981-29-8	2.3E+01	2.3E-01
Tc-95	014809-56-4	2.6E+03	2.6E+01
Tc-95m	014809-56-4	1.4E+02	1.4E+00
Tc-96	014808-44-7	7.7E+01	7.7E-01
Tc-96m	014808-44-7	6.8E+03	6.8E+01
Tc-97	015759-35-0	1.1E+03	1.1E+01
Tc-97m	015759-35-0	1.5E+02	1.5E+00
Tc-99	014133-76-7	1.3E+02	1.3E+00
Tc-99m	014133-76-7	3.2E+03	3.2E+01
Te-125m	014390-73-9	7.0E+01	7.0E-01
Te-127	013981-49-2	2.1E+02	2.1E+00
Te-127m	013981-49-2	2.9E+01	2.9E-01
Te-129	014269-71-7	1.2E+03	1.2E+01
Te-129m	014269-71-7	1.5E+01	1.5E-01

Table 3.1f. (continued)

Chemical [†]	CASRN	Ingestion of fish (pCi/g)	
		10 ⁻⁴	10 ⁻⁶
Te-131	014683-12-6	4.5E+02	4.5E+00
Te-131m	014683-12-6	2.0E+01	2.0E-01
Te-132	014234-28-7	1.4E+01	1.4E-01
Th-227	015623-47-9	4.4E+00	4.4E-02
Th-228	014274-82-9	2.8E+00	2.8E-02
Th-228+D	014274-82-9	7.6E-01	7.6E-03
Th-229	015594-54-4	3.1E+00	3.1E-02
Th-229+D	015594-54-4	5.0E-01	5.0E-03
Th-230	014269-63-7	4.7E+00	4.7E-02
Th-231	014932-40-2	9.9E+01	9.9E-01
Th-232	007440-29-1	5.4E+00	5.4E-02
Th-234	015065-10-8	9.1E+00	9.1E-02
Tl-202	015720-57-7	1.7E+02	1.7E+00
Tl-204	013968-51-9	9.0E+01	9.0E-01
Tl-208	014913-50-9	1.0E+04	1.0E+02
Tl-209	015690-73-0	1.3E+04	1.3E+02
Tm-170	013981-30-1	2.4E+01	2.4E-01
Tm-171	014333-45-0	3.0E+02	3.0E+00

Table 3.1f. (continued)

Chemical†	CASRN	Ingestion of fish (pCi/g)	
		10 ⁻⁴	10 ⁻⁶
U-232	014158-29-3	2.2E+00	2.2E-02
U-233	013968-55-3	3.9E+00	3.9E-02
U-234	013966-29-5	4.0E+00	4.0E-02
U-235	015117-96-1	3.9E+00	3.9E-02
U-235+D	015117-96-1	3.8E+00	3.8E-02
U-236	013982-70-2	4.2E+00	4.2E-02
U-237	014269-75-1	4.4E+01	4.4E-01
U-238	007440-61-1	4.1E+00	4.1E-02
U-238+D	007440-61-1	2.8E+00	2.8E-02
U-240	015687-53-3	3.2E+01	3.2E-01
V-48	014331-97-6	2.3E+01	2.3E-01
W-181	015749-46-9	6.5E+02	6.5E+00
W-185	014932-41-3	8.6E+01	8.6E-01
W-187	014983-48-3	7.2E+01	7.2E-01
Xe-122	015151-09-4		
Xe-123	015700-10-4		
Xe-125	013994-18-8		
Xe-127	013994-19-9		

Table 3.1f. (continued)

Chemical [†]	CASRN	Ingestion of fish (pCi/g)	
		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	1.2E+01	1.2E-01
Y-91	014234-24-3	1.3E+01	1.3E-01
Y-91m	014234-24-3	4.8E+03	4.8E+01
Y-92	015751-59-4	9.0E+01	9.0E-01
Y-93	014981-70-5	3.1E+01	3.1E-01
Zn-65	013982-39-3	1.8E+01	1.8E-01
Zn-69	013982-23-5	2.8E+03	2.8E+01
Zn-69m	013982-23-5	1.2E+02	1.2E+00
Zr-93	015751-77-6	3.4E+02	3.4E+00
Zr-95	013967-71-0	4.5E+01	4.5E-01

Table 3.1f. (continued)

Chemical [†]	CASRN	Ingestion of fish (pCi/g)	
		10 ⁻⁴	10 ⁻⁶
Zr-97	014928-30-4	1.7E+01	1.7E-01

Note:

† 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 3.1g. Risk-based Preliminary Remediation Goals for water based on ingestion of fish for nonradionuclides (residential scenario)

Chemical	CASRN	Ingestion of fish (concentration in water) (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
ALAR	001596-84-5				
Acenaphthene	000083-32-9			7.4E-02	7.4E-03
Acenaphthylene	000208-96-8				
Acephate	030560-19-1	2.7E+02	2.7E+00	4.1E+01	4.1E+00
Acetaldehyde	000075-07-0				
Acetochlor	034256-82-1				
Acetone	000067-64-1			3.5E+02	3.5E+01
Acetone Cyanohydrin	000075-86-5				
Acetonitrile	000075-05-8			2.5E+01	2.5E+00
Acetophenone ⁽⁵⁾	000098-86-2			1.2E+01	1.2E+00
Acrolein ⁽⁶⁾	000107-02-8			5.5E+01	5.5E+00
Acrylamide	000079-06-1	3.8E-01	3.8E-03	1.5E+00	1.5E-01
Acrylic Acid	000079-10-7			8.7E+02	8.7E+01
Acrylonitrile	000107-13-1	6.4E-01	6.4E-03	1.5E+00	1.5E-01
Alachlor	015972-60-8	4.2E-02	4.2E-04	1.4E-01	1.4E-02
Aldicarb	000116-06-3			3.2E-01	3.2E-02
Aldicarb Sulfone	001646-88-4				
Aldrin	000309-00-2	1.7E-04	1.7E-06	3.6E-04	3.6E-05

Table 3.1g. (continued)

Chemical	CASRN	Ingestion of fish (concentration in water) (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Ally	074223-64-6			5.6E+02	5.6E+01
Allyl Alcohol	000107-18-6			1.7E+01	1.7E+00
Allyl Chloride ⁽⁹⁾	000107-05-1			9.9E+00	9.9E-01
Aluminum	007429-90-5				
Aluminum Phosphide	020859-73-8				
Amdro	067485-29-4				
Ametryn	000834-12-8			8.9E-01	8.9E-02
Aminophenol, m-	000591-27-5			1.1E+02	1.1E+01
Aminopyridine, 4-	000504-24-5			2.8E-02	2.8E-03
Amitraz	033089-61-1				
Ammonia	007664-41-7				
Ammonium Sulfamate	007773-06-0				
Aniline	000062-53-3	1.9E+01	1.9E-01		
Anthracene	000120-12-7			3.1E-01	3.1E-02
Antimony (metallic)	007440-36-0			5.4E-03	5.4E-04
Antimony Pentoxide	001314-60-9				
Antimony Potassium Tartrate	000304-61-0				
Antimony Tetroxide	001332-81-6				

Table 3.1g. (continued)

Chemical	CASRN	Ingestion of fish (concentration in water) (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Antimony Trioxide	001309-64-4				
Apollo	074115-24-5				
Aramite	000140-57-8				
Aroclor 1016	012674-11-2			5.3E-06	5.3E-07
Aroclor 1221 ⁽¹⁾	011104-28-2	5.3E-05	5.3E-07		
Aroclor 1232 ⁽¹⁾	011141-16-5	2.6E-04	2.6E-06		
Aroclor 1242 ⁽¹⁾	053469-21-9	5.3E-05	5.3E-07		
Aroclor 1248 ⁽¹⁾	012672-29-6	2.7E-06	2.7E-08		
Aroclor 1254	011097-69-1			1.3E-06	1.3E-07
Aroclor 1260 ⁽¹⁾	011096-82-5	2.8E-07	2.8E-09		
Arsenic Salts	NA				
Arsenic, Inorganic	007440-38-2				
Arsine	007784-42-1				
Asbestos	001332-21-4				
Assure	076578-14-8				
Asulam	003337-71-1				
Atrazine	001912-24-9	2.1E-02	2.1E-04	7.1E-01	7.1E-02
Avermectin B1	065195-55-3				

Table 3.1g. (continued)

Chemical	CASRN	Ingestion of fish (concentration in water) (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Azobenzene	000103-33-3	6.3E-03	6.3E-05		
Barium	007440-39-3			2.4E+01	2.4E+00
Barium Cyanide	000542-62-1				
Baygon	000114-26-1			5.6E-01	5.6E-02
Bayleton	043121-43-3			1.2E+00	1.2E-01
Baythroid	068359-37-5				
Benefin	001861-40-1			2.4E-01	2.4E-02
Benomyl	017804-35-2			2.1E+00	2.1E-01
Bentazon	025057-89-0			8.4E-01	8.4E-02
Benz[a]anthracene ⁽²⁾	000056-55-3	3.4E-05	3.4E-07		
Benzaldehyde	000100-52-7			4.1E+00	4.1E-01
Benzene	000071-43-2	4.7E-01	4.7E-03		
Benzene Hexachloride	NA				
Benzene, Ethyldimethyl	NA				
Benzene, Ethylmethyl	NA				
Benzene, Methylpropenyl	NA				
Benzene, Methylpropyl	NA				
Benzene, Trimethyl	025551-13-7				

Table 3.1g. (continued)

Chemical	CASRN	Ingestion of fish (concentration in water) (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Benzenethiol	000108-98-5			2.9E-04	2.9E-05
Benzidine	000092-87-5	2.4E-04	2.4E-06	7.1E-01	7.1E-02
Benzo[a]pyrene ⁽²⁾	000050-32-8	1.7E-06	1.7E-08		
Benzo[b]fluoranthene ⁽²⁾	000205-99-2	1.7E-05	1.7E-07		
Benzo[g,h,i]perylene	000191-24-2				
Benzo[k]fluoranthene ⁽²⁾	000207-08-9	5.0E-05	5.0E-07		
Benzoic Acid	000065-85-0			3.3E+02	3.3E+01
Benzotrichloride	000098-07-7	2.6E-04	2.6E-06		
Benzyl Alcohol	000100-51-6			1.0E+02	1.0E+01
Benzyl Chloride	000100-44-7	5.6E-02	5.6E-04		
Beryllium	007440-41-7	7.3E-04	7.3E-06	6.8E-02	6.8E-03
Bidrin	000141-66-2			7.5E-01	7.5E-02
Biphenthrin	082657-04-3				
Biphenyl, 1,1'-	000092-52-4			8.8E-02	8.8E-03
Bis(2-chloro-1-methylethyl)ether (Technical)	000108-60-1	8.4E-02	8.4E-04		
Bis(2-chloroethoxy)methane	000111-91-1				
Bis(2-chloroethyl)ether	000111-44-4	5.0E-02	5.0E-04		

Table 3.1g. (continued)

Chemical	CASRN	Ingestion of fish (concentration in water) (mg/L)*			
		10 ⁻⁴	10 ⁻⁵	HQ=1	HQ=0.1
Bis(2-chloroisopropyl)ether	039638-32-9			2.3E+00	2.3E-01
Bis(2-ethylhexyl)phthalate ⁽⁶⁾	000117-81-7	7.2E-03	7.2E-05	8.7E-03	8.7E-04
Bis(chloromethyl)ether	000542-88-1	1.3E-03	1.3E-05		
Bisphenol A	000080-05-7			2.1E-01	2.1E-02
Boron And Borates Only	007440-42-8				
Boron Trifluoride	007637-07-2				
Bromochloromethane	000074-97-5				
Bromodichloromethane	000075-27-4	2.2E-01	2.2E-03	1.2E+00	1.2E-01
Bromodiphenyl Ether, p-	000101-55-3				
Bromoform	000075-25-2	1.0E+00	1.0E-02	6.9E-01	6.9E-02
Bromomethane ⁽⁶⁾	000074-83-9			3.9E-01	3.9E-02
Bromophos	002104-96-3				
Bromotrichloromethane	000075-62-7				
Bromoxynil	001689-84-5			1.9E+01	1.9E+00
Bromoxynil Octanoate	001689-99-2				
Butadiene, 1,3-	000106-99-0				
Butanol, N-	000071-36-3			7.4E+01	7.4E+00
Butanone-2, 4-chloro-4,4-difluoro	NA				

Water/Ingestion of fish/nonradionuclides/residential

Table 3.1g. (continued)

Chemical	CASRN	Ingestion of fish (concentration in water) (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Butyl Benzyl Phthlate	000085-68-7			8.7E-02	8.7E-03
Butylate	002008-41-5				
Butylchloride, t-	000507-20-0				
Butylphthalyl Butylglycolate	000085-70-1				
Cacodylic Acid	000075-60-5			6.9E+00	6.9E-01
Cadmium (Diet)	007440-43-9			6.8E-03	6.8E-04
Calcium Cyanide	000592-01-8				
Caprolactam	000105-60-2			1.6E+03	1.6E+02
Captafol	002425-06-1	7.7E-01	7.7E-03	5.7E-02	5.7E-03
Captan	000133-06-2	2.7E+00	2.7E-02	5.3E+00	5.3E-01
Carbaryl	000063-25-2			4.1E+00	4.1E-01
Carbazole	000086-74-8	3.5E-02	3.5E-04		
Carbofuran	001563-66-2			7.0E-01	7.0E-02
Carbon Disulfide	000075-15-0			4.9E+00	4.9E-01
Carbon Tetrachloride ⁽⁶⁾	000056-23-5	3.1E-02	3.1E-04	1.2E-02	1.2E-03
Carbosulfan	055285-14-8				
Carboxin	005234-68-4			5.8E+00	5.8E-01
Chloral	000075-87-6				

Table 3.1g. (continued)

Chemical	CASRN	Ingestion of fish (concentration in water) (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Chloramben	000133-90-4				
Chloranil	000118-75-2				
Chlordane ⁽⁶⁾	000057-74-9	2.7E-05	2.7E-07	9.1E-06	9.1E-07
Chloride	016887-00-6				
Chlorimuron, Ethyl-	090982-32-4				
Chlorine	007782-50-5				
Chlorine Dioxide	010049-04-4				
Chlorite (Sodium Salt)	007758-19-2				
Chloro-1,1-difluoroethane, 1-	000075-68-3				
Chloro-1,3-butadiene, 2-	000126-99-8			2.0E+00	2.0E-01
Chloro-2-methylaniline HCl, 4-	003165-93-3				
Chloro-2-methylaniline, 4-	000095-69-2				
Chloroacetic Acid	000079-11-8			5.6E-01	5.6E-02
Chloroacetophenone, 2-	000532-27-4				
Chloroaniline, p-	000106-47-8			6.8E-02	6.8E-03
Chlorobenzene ⁽⁶⁾	000108-90-7			3.4E-01	3.4E-02
Chlorobenzilate	000510-15-6	7.5E-04	7.5E-06	1.7E-02	1.7E-03
Chlorobenzoic Acid, p-	000074-11-3			4.1E+00	4.1E-01

Table 3.1g. (continued)

Chemical	CASRN	Ingestion of fish (concentration in water) (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Chlorobenzotrifluoride, 4-	000098-56-6			6.6E-02	6.6E-03
Chlorobutane, 1-	000109-69-3			9.7E+00	9.7E-01
Chlorobutane, 2-	000078-86-4				
Chlorocyclopentadiene	041851-50-7				
Chlorodibromoethane	073506-94-2				
Chlorodifluoromethane	000075-45-6				
Chloroform ⁽⁶⁾	000067-66-3	2.7E+00	2.7E-02	6.9E-01	6.9E-02
Chloromethane ⁽⁶⁾	000074-87-3	8.4E+00	8.4E-02		
Chloromethyl Methyl Ether	000107-30-2				
Chloronaphthalene, Beta-	000091-58-7			1.4E-01	1.4E-02
Chloronitrobenzene, o-	000088-73-3	4.6E-01	4.6E-03		
Chloronitrobenzene, p-	000121-73-3	4.5E-01	4.5E-03		
Chlorophenol, 2-	000095-57-8			2.4E-01	2.4E-02
Chlorophenyl Methyl Sulfide, p-	000123-09-1				
Chlorophenyl Methyl Sulfoxide	000934-73-6				
Chloropropane, 2-	000075-29-6				
Chlorothalonil	001897-45-6	5.3E-02	5.3E-04	3.7E-02	3.7E-03
Chlorotoluene, o-	000095-49-8			1.2E-01	1.2E-02

Table 3.1g. (continued)

Chemical	CASRN	Ingestion of fish (concentration in water) (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Chlorpropham	000101-21-3			2.9E+00	2.9E-01
Chlorpyrifos	002921-88-2			6.5E-04	6.5E-05
Chlorpyrifos Methyl	005598-13-0			1.2E-02	1.2E-03
Chlorsulfuron	064902-72-3			1.2E+03	1.2E+02
Chlorthiophos	060238-56-4				
Chromium (III) (Insoluble Salts)	016065-83-1			6.8E+00	6.8E-01
Chromium (VI) ⁽⁶⁾	018540-29-9			3.4E-02	3.4E-03
Chromium Salts	NA				
Chrysene ⁽²⁾	000218-01-9	3.4E-03	3.4E-05		
Cobalt	007440-48-4				
Coke Oven Emissions	008007-45-2				
Copper	007440-50-8				
Copper Cyanide	000544-92-3				
Creosote	008001-58-9				
Cresol, m-	000108-39-4			3.5E+00	3.5E-01
Cresol, o-	000095-48-7			4.1E+00	4.1E-01
Cresol, p-	000106-44-5			4.1E-01	4.1E-02
Crotonaldehyde	000123-73-9	1.2E-02	1.2E-04		

Table 3.1g. (continued)

Chemical	CASRN	Ingestion of fish (concentration in water) (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Cumene	000098-82-8			2.0E-01	2.0E-02
Cyanazine	021725-46-2	1.3E-02	1.3E-04	9.4E-02	9.4E-03
Cyanide (CN-)	000057-12-5			6.7E+00	6.7E-01
Cyanogen	000460-19-5				
Cyanogen Bromide	000506-68-3				
Cyanogen Chloride	000506-77-4			8.1E+01	8.1E+00
Cyclohexane, 1,2,3,4,5-pentabromo-6-chloro-	000087-84-3				
Cyclohexanone	000108-94-1			2.8E+03	2.8E+02
Cyclohexylamine	000108-91-8			3.3E+01	3.3E+00
Cyclopentadiene	000542-92-7				
Cyhalothrin/karate	068085-85-8			6.5E-05	6.5E-06
Cypermethrin	052315-07-8				
Cyromazine	066215-27-8				
DDD	000072-54-8	8.7E-05	8.7E-07		
DDE	000072-55-9	7.3E-05	7.3E-07		
DDT	000050-29-3	2.3E-05	2.3E-07	1.7E-05	1.7E-06
Dacthal	001861-32-1				

Table 3.1g. (continued)

Chemical	CASRN	Ingestion of fish (concentration in water) (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Dalapon	000075-99-0			1.8E+01	1.8E+00
Decabromodiphenyl Ether	001163-19-5			2.4E-03	2.4E-04
Demeton	008065-48-3				
Di(2-ethylhexyl)adipate	000103-23-1	5.3E-04	5.3E-06	1.6E-03	1.6E-04
Diallate	002303-16-4	2.4E+00	2.4E-02		
Diazinon	000333-41-5			2.7E-03	2.7E-04
Dibenz[a,h]anthracene ⁽²⁾	000053-70-3	5.0E-07	5.0E-09		
Dibromo-3-chloropropane, 1,2-	000096-12-8	4.0E-03	4.0E-05		
Dibromobenzene, 1,4-	000106-37-6			3.0E-02	3.0E-03
Dibromochloromethane	000124-48-1	1.4E-01	1.4E-03	9.8E-01	9.8E-02
Dibromodichloromethane	000594-18-3				
Dibromodiphenyl Ether, p,p'-	002050-47-7				
Dibromoethane, 1,2-	000106-93-4	1.9E-04	1.9E-06		
Dibromomethane (Methylene Bromide)	000074-95-3			2.8E+00	2.8E-01
Dibutyl Phthalate	000084-74-2			4.3E-02	4.3E-03
Dicamba	001918-00-9			3.6E-01	3.6E-02
Dichloro-2-butene, 1,4-	000764-41-0				

Table 3.1g. (continued)

Chemical	CASRN	Ingestion of fish (concentration in water) (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Dichloroacetic Acid					
Dichlorobenzene, 1,2- ⁽⁵⁾	000095-50-1			5.4E-01	5.4E-02
Dichlorobenzene, 1,3-	000541-73-1				
Dichlorobenzene, 1,4-	000106-46-7	5.8E-02	5.8E-04		
Dichlorobenzidine, 3,3'-	000091-94-1	2.6E-03	2.6E-05		
Dichlorodifluoromethane	000075-71-8			9.8E+00	9.8E-01
Dichloroethane, 1,1-	000075-34-3			9.8E+00	9.8E-01
Dichloroethane, 1,2-	000107-06-2	4.3E-01	4.3E-03		
Dichloroethylene, 1,1-	000075-35-4	3.8E-02	3.8E-04	8.9E-01	8.9E-02
Dichloroethylene, 1,2- (Mixed Isomers)	000540-59-0			8.9E+00	8.9E-01
Dichloroethylene, 1,2-cis-	000156-59-2			8.3E-01	8.3E-02
Dichloroethylene, 1,2-trans-	000156-60-5			2.0E+01	2.0E+00
Dichlorophenol, 2,4-	000120-83-2			4.3E-02	4.3E-03
Dichlorophenoxy Acetic Acid, 2,4-	000094-75-7			2.9E-01	2.9E-02
Dichlorophenoxy)butyric Acid, 4-(2,4-	000094-82-6			3.8E-02	3.8E-03
Dichloropropane, 1,2-	000078-87-5	2.4E-01	2.4E-03		
Dichloropropanol, 2,3-	000616-23-9				

Table 3.1g. (continued)

Chemical	CASRN	Ingestion of fish (concentration in water) (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Dichloropropene, 1,3-	000542-75-6	1.8E-01	1.8E-03	4.2E-02	4.2E-03
Dichlorvos	000062-73-7	5.3E-02	5.3E-04	3.3E-02	3.3E-03
Dicofol	000115-32-2				
Dicyclopentadiene	000077-73-6			4.4E-01	4.4E-02
Dieldrin	000060-57-1	1.1E-05	1.1E-07	3.7E-05	3.7E-06
Diethyl Phthalate	000084-66-2			2.3E+01	2.3E+00
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			5.3E+03	5.3E+02
Diethylformamide	000617-84-5				
Diethylstilbesterol	000056-53-1	7.5E-09	7.5E-11		
Difenzoquat	043222-48-6				
Diflubenzuron	035367-38-5				
Difluoroethane, 1,1-	000075-37-6				
Diisopropyl Methylphosphonate	001445-75-6			3.0E+01	3.0E+00
Dimethipin	055290-64-7				
Dimethoate	000060-51-5			4.1E-03	4.1E-04

Table 3.1g. (continued)

Chemical	CASRN	Ingestion of fish (concentration in water) (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Dimethoxybenzidine, 3,3'-	000119-90-4	1.6E+00	1.6E-02		
Dimethyl Sulfate	000077-78-1				
Dimethylaniline HCl, 2,4-	021436-96-4				
Dimethylaniline, 2,4-	000095-68-1				
Dimethylaniline, N,N-	000121-69-7			4.9E-02	4.9E-03
Dimethylbenzidine, 3,3'-	000119-93-7	1.0E-03	1.0E-05		
Dimethylethyl Lead	107584-40-7				
Dimethylformamide	000068-12-2			1.3E+03	1.3E+02
Dimethylhydrazine, 1,1- ⁽⁵⁾	000057-14-7				
Dimethylhydrazine, 1,2-	000540-73-8				
Dimethylphenol, 2,4-	000105-67-9			8.2E-01	8.2E-02
Dimethylphenol, 2,6-	000576-26-1			2.2E-02	2.2E-03
Dimethylphenol, 3,4-	000095-65-8			4.9E-02	4.9E-03
Dimethylphthalate ⁽⁵⁾	000131-11-3			1.4E+03	1.4E+02
Dimethylterephthalate	000120-61-6			1.2E+00	1.2E-01
Dinitro-o-cresol, 4,6-	000534-52-1				
Dinitro-o-cyclohexyl Phenol, 4,6-	000131-89-5			5.2E+02	5.2E+01
Dinitrobenzene, 1,2-	000528-29-0			5.6E-02	5.6E-03

Table 3.1g. (continued)

Chemical	CASRN	Ingestion of fish (concentration in water) (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Dinitrobenzene, 1,3-	000099-65-0			1.4E-02	1.4E-03
Dinitrobenzene, 1,4-	000100-25-4			6.7E-02	6.7E-03
Dinitrophenol, 2,4-	000051-28-5			3.3E-01	3.3E-02
Dinitrotoluene, 2,4-	000121-14-2	2.4E-02	2.4E-04	1.4E-01	1.4E-02
Dinitrotoluene, 2,6-	000606-20-2	4.0E-02	4.0E-04	1.2E-01	1.2E-02
Dinitrotoluene, 2-Amino-4,6-	035572-78-2				
Dinoseb	000088-85-7			3.5E-03	3.5E-04
Dioxane, 1,4-	000123-91-1	7.8E+01	7.8E-01		
Diphenamid	000957-51-7			1.5E+00	1.5E-01
Diphenylamine	000122-39-4			1.3E-01	1.3E-02
Diphenylhydrazine, 1,2-	000122-66-7	4.2E-03	4.2E-05		
Diquat	000085-00-7			1.1E+03	1.1E+02
Direct Black 38	001937-37-7				
Direct Blue 6	002602-46-2				
Direct Brown 95	016071-86-6				
Direct Sky Blue	002610-05-1				
Disulfoton	000298-04-4			8.4E-05	8.4E-06
Diuron	000330-54-1			4.1E-02	4.1E-03

Table 3.1g. (continued)

Chemical	CASRN	Ingestion of fish (concentration in water) (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Dodine	002439-10-3				
EPTC	000759-94-4				
Endosulfan	000115-29-7				
Endothall	000145-73-3				
Endrin	000072-20-8			2.2E-04	2.2E-05
Epichlorohydrin	000106-89-8	7.8E+01	7.8E-01	6.6E+00	6.6E-01
Epoxybutane, 1,2-	000106-88-7				
Ethephon	016672-87-0				
Ethion	000563-12-2			1.6E-04	1.6E-05
Ethoxyethanol Acetate, 2-	000111-15-9			2.2E+02	2.2E+01
Ethoxyethanol, 2-	000110-80-5			1.1E+03	1.1E+02
Ethyl Acetate	000141-78-6			5.0E+02	5.0E+01
Ethyl Acrylate	000140-88-5	1.1E+00	1.1E-02		
Ethyl Chloride	000075-00-3				
Ethyl Ether	000060-29-7			9.7E+01	9.7E+00
Ethyl Methacrylate	000097-63-2			7.4E+00	7.4E-01
Ethyl-p-nitrophenyl Phosphonate	002104-64-5			3.0E-05	3.0E-06
Ethylbenzene ⁽⁶⁾	000100-41-4			1.0E+00	1.0E-01

Table 3.1g. (continued)

Chemical	CASRN	Ingestion of fish (concentration in water) (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Ethylene Cyanohydrin	000109-78-4			9.5E+03	9.5E+02
Ethylene Diamine	000107-15-3			4.2E+01	4.2E+00
Ethylene Glycol	000107-21-1			1.3E+05	1.3E+04
Ethylene Glycol Monobutyl Ether	000111-76-2				
Ethylene Oxide	000075-21-8	8.9E-01	8.9E-03		
Ethylene Thiourea	000096-45-7	1.5E+01	1.5E-01	5.8E-01	5.8E-02
Ethylphthalyl Ethyl Glycolate	000084-72-0				
Express	101200-48-0				
Fenamiphos	022224-92-6				
Fenpropathrin	039515-41-8				
Fluometuron	002164-17-2			4.5E-01	4.5E-02
Fluoranthene	000206-44-0			1.7E-02	1.7E-03
Fluorene	000086-73-7			4.2E-02	4.2E-03
Fluoride	007782-41-4				
Fluridone	059756-60-4				
Flurprimidol	056425-91-3				
Flutolanil	066332-96-5				
Fluvalinate	069409-94-5				

Table 3.1g. (continued)

Chemical	CASRN	Ingestion of fish (concentration in water) (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Folpet	000133-07-3	6.7E-01	6.7E-03	1.0E+00	1.0E-01
Fomesafen	072178-02-0				
Fonofos	000944-22-9			4.7E-03	4.7E-04
Formaldehyde	000050-00-0			4.6E+02	4.6E+01
Formic Acid	000064-18-6			1.2E+04	1.2E+03
Fosetyl-AL	039148-24-8				
Furan	000110-00-9			2.4E-01	2.4E-02
Furazolidone	000067-45-8	4.3E-02	4.3E-04		
Furfural	000098-01-1			1.5E-02	1.5E-03
Furium	000531-82-8				
Furmecyclox	060568-05-0				
Glufosinate, Ammonium	077182-82-2				
Glycidyl	000765-34-4			3.3E+00	3.3E-01
Glyphosate	001071-83-6			4.4E+04	4.4E+03
Goal	042874-03-3				
Haloxypop, Methyl	069806-40-2				
Harmony	079277-27-3				
Heptachlor	000076-44-8	6.4E-05	6.4E-07	6.2E-04	6.2E-05

Table 3.1g. (continued)

Chemical	CASRN	Ingestion of fish (concentration in water) (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Heptachlor Epoxide	001024-57-3	4.6E-06	4.6E-08	2.3E-06	2.3E-07
Heptane, N-	000142-82-5				
Hexabromobenzene	000087-82-1			1.1E-04	1.1E-05
Hexachlorobenzene ⁽⁶⁾	000118-74-1	3.1E-05	3.1E-07	1.7E-04	1.7E-05
Hexachlorobutadiene ⁽⁶⁾	000087-68-3	1.5E-03	1.5E-05	1.0E-04	1.0E-05
Hexachlorocyclohexane, Alpha-	000319-84-6	9.2E-05	9.2E-07		
Hexachlorocyclohexane, Beta-	000319-85-7	2.7E-04	2.7E-06		
Hexachlorocyclohexane, Delta-	000319-86-8				
Hexachlorocyclohexane, Epsilon	006108-10-7				
Hexachlorocyclohexane, Gamma-	000058-89-9	6.4E-04	6.4E-06	1.1E-03	1.1E-04
Hexachlorocyclohexane, Technical	000608-73-1				
Hexachlorocyclopentadiene	000077-47-4			1.5E-02	1.5E-03
Hexachlorodibenzo-p-dioxin, Mixture	019408-74-3	7.0E-10	7.0E-12		
Hexachloroethane	000067-72-1	4.2E-02	4.2E-04	2.5E-03	2.5E-04
Hexachlorophene	000070-30-4			1.4E-06	1.4E-07
Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	000121-82-4	1.5E-02	1.5E-04	2.1E-02	2.1E-03
Hexamethylene Diisocyanate, 1,6-	000822-06-0				

Table 3.1g. (continued)

Chemical	CASRN	Ingestion of fish (concentration in water) (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Hexane, N-	000110-54-3			1.5E-01	1.5E-02
Hexanone, 2-	000591-78-6				
Hexazinone	051235-04-2			1.7E+05	1.7E+04
HpCDD, 2,3,7,8-(4)	037871-00-4				
HpCDF, 2,3,7,8-(4)	038998-75-3				
HxCDD, 2,3,7,8-(4)	034465-46-8				
HxCDF, 2,3,7,8-(4)	055684-94-1				
Hydrazine	000302-01-2	7.0E+00	7.0E-02		
Hydrazine Sulfate	010034-93-2	7.0E+00	7.0E-02		
Hydrogen Chloride	007647-01-0				
Hydrogen Cyanide	000074-90-8			2.4E+01	2.4E+00
Hydrogen Sulfide	007783-06-4			1.3E+00	1.3E-01
Hydroquinone	000123-31-9			3.5E+01	3.5E+00
Imazalil	035554-44-0				
Imazaquin	081335-37-7				
Indeno[1,2,3-cd]pyrene ⁽²⁾	000193-39-5	7.1E-06	7.1E-08		
Iprodione	036734-19-7				
Iron	007439-89-6				

Table 3.1g. (continued)

Chemical	CASRN	Ingestion of fish (concentration in water) (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Isobutyl Alcohol	000078-83-1			1.6E+02	1.6E+01
Isophorone	000078-59-1	2.9E+01	2.9E-01	2.3E+01	2.3E+00
Isopropalin	033820-53-0				
Isopropanol	000067-63-0				
Isopropyl Methyl Phosphonic Acid	001832-54-8				
Isoxaben	082558-50-7				
Karate	091465-08-6				
Kerb	023950-58-5				
Lactofen	077501-63-4				
Lead Alkyls	NA				
Lead And Compounds	007439-92-1				
Linuron	000330-55-2				
Lithium	007439-93-2				
Londax	083055-99-6				
MCPA	000094-74-6			2.1E-02	2.1E-03
MCPB	000094-81-5				
MCPP	000093-65-2			2.4E-02	2.4E-03
Magnesium	007439-95-4				

Table 3.1g. (continued)

Chemical	CASRN	Ingestion of fish (concentration in water) (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Malathion	000121-75-5			2.9E-01	2.9E-02
Maleic Anhydride	000108-31-6				
Maleic Hydrazide	000123-33-1			2.3E+03	2.3E+02
Malononitrile	000109-77-3			4.3E-02	4.3E-03
Mancozeb	008018-01-7				
Maneb	012427-38-2			1.1E+01	1.1E+00
Manganese (Diet)	007439-96-5			4.7E-01	4.7E-02
Mephosfolan	000950-10-7				
Mepiquat Chloride	024307-26-4				
Mercuric Chloride	007487-94-7				
Mercury (elemental)	007439-97-6			4.1E-04	4.1E-05
Mercury, Inorganic Salt	007439-97-6			4.1E-04	4.1E-05
Merphos	000150-50-5				
Merphos Oxide	000078-48-8			3.2E-06	3.2E-07
Metalaxyl	057837-19-1				
Methacrylonitrile	000126-98-7			8.9E-02	8.9E-03
Methamidophos	010265-92-6			3.6E-01	3.6E-02
Methanol	000067-56-1			4.4E+03	4.4E+02

Table 3.1g. (continued)

Chemical	CASRN	Ingestion of fish (concentration in water) (mg/L)*		
		10 ⁻⁴	10 ⁻⁶	HQ=1
Methidathion	000950-37-8			
Methomyl	016752-77-5			2.0E+00
Methoxy-5-nitroaniline, 2-	000099-59-2	8.4E-01	8.4E-03	
Methoxychlor	000072-43-5			5.2E-04
Methoxyethanol Acetate, 2-	000110-49-6			
Methoxyethanol, 2-	000109-86-4			8.8E-01
Methyl Acetate	000079-20-9			1.7E+02
Methyl Acrylate	000096-33-3			2.1E+00
Methyl Ethyl Ketone	000078-93-3			8.6E+01
Methyl Isobutyl Ketone	000108-10-1			2.2E+00
Methyl Mercury	022967-92-6			
Methyl Methacrylate	000080-62-6			1.9E+00
Methyl Parathion	000298-00-0			2.1E-03
Methyl Styrene (Mixed Isomers)	025013-15-4			3.9E-02
Methyl hydrazine ^(c)	000060-34-4			
Methyl tert-Butyl Ether (MTBE)	001634-04-4			
Methyl-5-Nitroaniline, 2-	000099-55-8	4.9E-01	4.9E-03	
Methylaniline Hydrochloride, 2-	000636-21-5	3.0E+00	3.0E-02	

Water/Ingestion of fish/nonradionuclides/residential

Table 3.1g. (continued)

Chemical	CASRN	Ingestion of fish (concentration in water) (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Methylcyclohexane	000108-87-2				
Methylene Chloride	000075-09-2	7.3E+00	7.3E-02	1.4E+01	1.4E+00
Methylene-bis(2-chloroaniline), 4,4'-	000101-14-4	4.5E-03	4.5E-05	1.7E-03	1.7E-04
Methylene-bis(N,N-dimethyl) Aniline, 4,4'-	000101-61-1	2.6E-03	2.6E-05		
Methylenebisbenzenamine, 4,4'-(⁵)	000101-77-9	1.3E-01	1.3E-03		
Methylenediphenyl Isocyanate, 4,4'-	000101-68-8				
Methylstyrene, Alpha-	000098-83-9			4.6E-01	4.6E-02
Methyltriethyl Lead	001762-28-3				
Metolachlor	051218-45-2				
Metribuzin(⁵)	021087-64-9			2.9E+00	2.9E-01
Mirex(⁵)	002385-85-5	2.9E-05	2.9E-07	4.5E-05	4.5E-06
Molinate	002212-67-1			9.5E-03	9.5E-04
Molybdenum	007439-98-7			6.8E-01	6.8E-02
Monochloramine	010599-90-3				
Monochlorobutanes	025154-42-1				
Naled	000300-76-5			3.4E-02	3.4E-03
Naphthalene(⁶)	000091-20-3			2.5E-01	2.5E-02

Table 3.1g. (continued)

Chemical	CASRN	Ingestion of fish (concentration in water) (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Naphthalene, 1-Methyl	000090-12-0				
Naphthalene, 2-Methyl	000091-57-6				
Napropamide	015299-99-7			7.2E+01	7.2E+00
Niagara Blue 4B	002429-74-5				
Nickel Carbonyl	013463-39-3				
Nickel Refinery Dust	NA				
Nickel Soluble Salts	007440-02-0			2.7E-01	2.7E-02
Nickel Subsulfide	012035-72-2				
Nitrapyrin ⁽⁵⁾	001929-82-4			1.8E-02	1.8E-03
Nitrate	014797-55-8				
Nitric Oxide ⁽⁵⁾	010102-43-9				
Nitrite	014797-65-0				
Nitroaniline, 2-	000088-74-4				
Nitrobenzene	000098-95-3			4.9E-02	4.9E-03
Nitrofurantoin	000067-20-9				
Nitrofurazone	000059-87-0				
Nitrogen Dioxide ⁽⁵⁾	010102-44-0				
Nitroguanidine	000556-88-7				

Table 3.1g. (continued)

Chemical	CASRN	Ingestion of fish (concentration in water) (mg/L) ^a		
		10 ⁻⁴	10 ⁻⁵	HQ=1 HQ=0.1
Nitrophenol, 4-	000100-02-7			
Nitropropane, 2 ⁽⁵⁾	000079-46-9	2.2E-02	2.2E-04	
Nitroso-N-ethylurea, N-	000759-73-9	2.6E-03	2.6E-05	
Nitroso-N-methylurea, N-	000684-93-5			
Nitroso-di-N-butylamine, N-	000924-16-3	3.6E-03	3.6E-05	
Nitroso-di-N-propylamine, N-	000621-64-7	6.6E-03	6.6E-05	
Nitrosodietanolamine, N-	001116-54-7	3.1E+00	3.1E-02	
Nitrosodiethylamine, N-	000055-18-5	1.5E-03	1.5E-05	
Nitrosodimethylamine, N-	000062-75-9	2.8E-02	2.8E-04	
Nitrosodiphenylamine, N-	000086-30-6	4.8E-01	4.8E-03	
Nitrosomethylethylamine, N-	010595-95-6			
Nitrosomethylvinylamine, N-	004549-40-0			
Nitrosopyrrolidine, N-	000930-55-2	1.7E+00	1.7E-02	
Nitrofluene, 4-Amino-2-	000119-32-4			
Nitrofluene, m-	000099-08-1			3.4E-01
Nitrofluene, o-	000088-72-2			4.1E-01
Nitrofluene, p-	000099-99-0			3.4E-02
Northrazon	027314-13-2			

Water/Ingestion of fish/nonradionuclides/residential

Table 3.1g. (continued)

Chemical	CASRN	Ingestion of fish (concentration in water) (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Nustar	085509-19-9				
OCDD ⁽⁴⁾	003268-87-9	7.6E-10	7.6E-12		
OCDF ⁽⁴⁾	039001-02-0				
Octabromodiphenyl Ether	032536-52-0				
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetra (HMX)	002691-41-0			4.1E+01	4.1E+00
Octamethylpyrophosphoramide	000152-16-9				
Octyl Phthalate, di-N-	000117-84-0			4.7E-06	4.7E-07
Oryzalin	019044-88-3				
Oxadiazon	019666-30-9				
Oxamyl	023135-22-0				
Paclobutrazol	076738-62-0				
Paraquat	001910-42-5			1.7E+04	1.7E+03
Parathion	000056-38-2			1.8E-02	1.8E-03
PeCDD, 2,3,7,8- ⁽⁴⁾	036088-22-9	8.2E-11	8.2E-13		
PeCDF, 1,2,3,7,8- ⁽⁴⁾	057117-41-6				
PeCDF, 2,3,4,7,8- ⁽⁴⁾	057117-31-4				
Pebulate	001114-71-2				

Table 3.1g. (continued)

Chemical	CASRN	Ingestion of fish (concentration in water) (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Pendimethalin	040487-42-1				
Pentabromodiphenyl Ether	032534-81-9				
Pentachlorobenzene	000608-93-5			2.1E-04	2.1E-05
Pentachlorocyclopentadiene	025329-35-5				
Pentachloronitrobenzene	000082-68-8	6.6E-04	6.6E-06	2.2E-03	2.2E-04
Pentachlorophenol	000087-86-5	1.5E-04	1.5E-06	2.3E-03	2.3E-04
Pentyl Alcohol, N-	000071-41-0				
Permethrin	052645-53-1			2.5E-01	2.5E-02
Phenanthrene	000085-01-8				
Phenmedipham	013684-63-4			5.6E+03	5.6E+02
Phenol	000108-95-2			1.0E+02	1.0E+01
Phenylenediamine, m-	000108-45-2			5.1E+01	5.1E+00
Phenylenediamine, o-	000095-54-5	5.3E+00	5.3E-02		
Phenylenediamine, p-	000106-50-3			3.6E+03	3.6E+02
Phenylmercuric Acetate	000062-38-4				
Phenylphenol, 2-	000090-43-7	1.2E+00	1.2E-02		
Phorate	000298-02-2			2.3E-02	2.3E-03
Phosmet	000732-11-6			3.4E-01	3.4E-02

Water/Ingestion of fish/nonradionuclides/residential

Table 3.1g. (continued)

Chemical	CASRN	Ingestion of fish (concentration in water) (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Phosphine	007803-51-2				
Phosphoric Acid	007664-38-2				
Phthalic Acid, P-	000100-21-0			1.2E+02	1.2E+01
Phthalic Anhydride	000085-44-9			1.4E+04	1.4E+03
Picloram	001918-02-1			2.4E+00	2.4E-01
Pirimiphos, Methyl	029232-93-7				
Polybrominated Biphenyls	NA				
Polychlorinated Biphenyls	001336-36-3	1.9E-06	1.9E-08		
Potassium Cyanide	000151-50-8			1.8E+02	1.8E+01
Potassium Silver Cyanide	000506-61-6				
Prochloraz	067747-09-5				
Profluralin	026399-36-0				
Prometon	001610-18-0			6.2E-01	6.2E-02
Prometryn	007287-19-6			1.2E-01	1.2E-02
Propachlor	001918-16-7				
Propanil	000709-98-8			4.9E-02	4.9E-03
Propargite	002312-35-8				
Propargyl Alcohol	000107-19-7				

Table 3.1g. (continued)

Chemical	CASRN	Ingestion of fish (concentration in water) (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Propazine	000139-40-2			6.9E-01	6.9E-02
Propham	000122-42-9			1.7E-01	1.7E-02
Propiconazole	060207-90-1				
Propylene Glycol	000057-55-6			9.0E+05	9.0E+04
Propylene Glycol Monoethyl Ether	001569-02-4				
Propylene Glycol Monomethyl Ether	000107-98-2			2.2E+03	2.2E+02
Propylene Oxide	000075-56-9	2.1E+00	2.1E-02		
Pursuit	081335-77-5				
Pydrin	051630-58-1			2.5E-02	2.5E-03
Pyrene	000129-00-0			1.3E-02	1.3E-03
Pyridine	000110-86-1			2.4E-01	2.4E-02
Quinalphos	013593-03-8				
Quinoline	000091-22-5	1.1E-03	1.1E-05		
Refractory Ceramic Fibers	NA				
Resmethrin	010453-86-8				
Ronnel	000299-84-3			1.5E-02	1.5E-03
Rotenone	000083-79-4			7.0E-03	7.0E-04
Savey	078587-05-0				

Table 3.1g. (continued)

Chemical	CASRN	Ingestion of fish (concentration in water) (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Selenious Acid	007783-00-8				
Selenite	014124-67-5				
Selenium	007782-49-2				
Selenium Sulfide	007446-34-6				
Selenourea	000630-10-4				
Sethoxydim	074051-80-2				
Silver	007440-22-4			1.4E+00	1.4E-01
Silver Cyanide	000506-64-9				
Simazine	000122-34-9	9.5E-02	9.5E-04	2.4E-01	2.4E-02
Sodium	007440-23-5				
Sodium Acifluorfen	062476-59-9				
Sodium Azide	026628-22-8				
Sodium Cyanide	000143-33-9			3.9E+02	3.9E+01
Sodium Diethyldithiocarbamate	000148-18-5				
Sodium Fluoroacetate	000062-74-8				
Sodium Metavanadate	013718-26-8				
Stirofos (Tetrachlorovinphos)	000961-11-5				
Strontium, Stable	007440-24-6			1.4E+01	1.4E+00

Table 3.1g. (continued)

Chemical	CASRN	Ingestion of fish (concentration in water) (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Strychnine	000057-24-9			2.5E-02	2.5E-03
Styrene ⁽⁶⁾	000100-42-5			2.9E+00	2.9E-01
Sulfate	014808-79-8				
Systhane	088671-89-0				
TCDD, 2,3,7,8- ⁽⁴⁾	001746-01-6	2.4E-11	2.4E-13		
TCDF, 2,3,7,8- ⁽⁴⁾	051207-31-9	1.3E-09	1.3E-11		
TCMTB	021564-17-0				
Tebuthiuron	034014-18-1			1.2E+02	1.2E+01
Temephos	003383-96-8				
Terbacil	005902-51-2				
Terbufos	013071-79-9			9.2E-05	9.2E-06
Terbutryn	000886-50-0			3.3E-03	3.3E-04
Tetrabutyl Lead	001920-90-7				
Tetrachlorobenzene, 1,2,4,5-	000095-94-3			2.2E-04	2.2E-05
Tetrachloroethane, 1,1,1,2-	000630-20-6	1.1E-01	1.1E-03	3.6E-01	3.6E-02
Tetrachloroethane, 1,1,2,2-	000079-34-5	4.0E-02	4.0E-04		
Tetrachloroethylene ⁽⁶⁾	000127-18-4	1.1E-01	1.1E-03	2.4E-01	2.4E-02
Tetrachlorophenol, 2,3,4,6-	000058-90-2			5.3E-02	5.3E-03

Table 3.1g. (continued)

Chemical	CASRN	Ingestion of fish (concentration in water) (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Tetrachlorotoluene, p- alpha, alpha, alpha-	005216-25-1				
Tetraethyl Dithiopyrophosphate	003689-24-5			6.0E-03	6.0E-04
Tetraethyl Lead	000078-00-2				
Tetrafluoroethane, 1,1,1,2-	000811-97-2				
Tetramethyl Lead	000075-74-1				
Tetrapropyl Lead	003440-75-3				
Thallic Oxide ⁽⁵⁾	001314-32-5				
Thallium (I) Nitrate	010102-45-1				
Thallium (Soluble Salts)	007440-28-0				
Thallium Acetate	000563-68-8				
Thallium Carbonate	006533-73-9				
Thallium Chloride	007791-12-0				
Thallium Selenite ⁽⁵⁾	012039-52-0				
Thallium Sulfate	007446-18-6				
Thiobencarb	028249-77-6				
Thiofanox	039196-18-4			1.3E+01	1.3E+00
Thiophanate, Methyl	023564-05-8				

Table 3.1g. (continued)

Chemical	CASRN	Ingestion of fish (concentration in water) (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Thiram	000137-26-8				
Thorium	007440-29-1				
Tin	007440-31-5			2.7E-01	2.7E-02
Titanium	007440-32-6				
Toluene ⁽⁶⁾	000108-88-3			4.1E+00	4.1E-01
Toluene diisocyanate mixture (TDI)	026471-62-5				
Toluene-2,4-diamine	000095-80-7	9.2E-02	9.2E-04		
Toluene-2,5-diamine	000095-70-5				
Toluene-2,6-diamine	000823-40-5				
Toluidine, o- (Methylaniline, 2-)	000095-53-4	2.3E-01	2.3E-03		
Toluidine, p-	000106-49-0	8.5E-02	8.5E-04		
Toxaphene	008001-35-2	1.1E-04	1.1E-06		
Tralomethrin	066841-25-6				
Triallate	002303-17-5			2.8E-02	2.8E-03
Triasulfuron	082097-50-5				
Tribromobenzene, 1,2,4-	000615-54-3				
Tribromochloromethane	000594-15-0				
Tribromodiphenyl Ether	049690-94-0				

Table 3.1g. (continued)

Chemical	CASRN	Ingestion of fish (concentration in water) (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Tributyltin Oxide	000056-35-9				
Trichloro-1,2,2-trifluoroethane, 1,1,2-	000076-13-1			7.3E+02	7.3E+01
Trichloro-2'-hydroxydiphenylether	003380-34-5				
Trichloroacetic Acid					
Trichloroaniline HCl, 2,4,6-	033663-50-2				
Trichloroaniline, 2,4,6-	000634-93-5				
Trichlorobenzene, 1,2,4-	000120-82-1			2.1E-02	2.1E-03
Trichloroethane, 1,1,1-(⁶)	000071-55-6			2.6E+00	2.6E-01
Trichloroethane, 1,1,2-	000079-00-5	2.8E-01	2.8E-03	2.8E-01	2.8E-02
Trichloroethylene(⁹)	000079-01-6	7.3E-01	7.3E-03		
Trichlorofluoromethane	000075-69-4			8.7E+00	8.7E-01
Trichlorophenol, 2,4,5-	000095-95-4			3.0E-01	3.0E-02
Trichlorophenol, 2,4,6-	000088-06-2	7.5E-02	7.5E-04		
Trichlorophenoxy) Propionic Acid, 2(2,4,5-	000093-72-1			2.0E-02	2.0E-03
Trichlorophenoxyacetic Acid, 2,4,5-	000093-76-5			2.1E-02	2.1E-03
Trichloropropane, 1,1,2-	000598-77-6				
Trichloropropane, 1,2,3-	000096-18-4	2.4E-05	2.4E-07	4.4E-03	4.4E-04

Table 3.1g. (continued)

Chemical	CASRN	Ingestion of fish (concentration in water) (mg/L)*			
		10 ⁻⁴	10 ⁻⁵	HQ=1	HQ=0.1
Trichloropropene, 1,2,3-	000096-19-5				
Trichlorotoluene, 2,3,6-	002077-46-5				
Trichlorotoluene, alpha 2,6-	002014-83-7				
Tridiphan	058138-08-2				
Triethyl Lead	005224-23-7				
Triethylamine	000121-44-8				
Trifluralin	001582-09-8	6.5E-03	6.5E-05	1.6E-03	1.6E-04
Trimethyl Lead	007442-13-9				
Trimethyl Phosphate	000512-56-1				
Trimethylethyl Lead	001762-26-1				
Trinitrobenzene, 1,3,5-	000099-35-4			1.4E-02	1.4E-03
Trinitrophenylmethylmethylamine	000479-45-8			6.9E-01	6.9E-02
Trinitrotoluene, 2,4,6-	000118-96-7	3.2E-01	3.2E-03	2.1E-02	2.1E-03
Tripropyl Lead	006618-03-7				
Uranium (Soluble Salts)	NA			4.1E-01	4.1E-02
Vanadium Pentoxide	001314-62-1				
Vanadium Sulfate	036907-42-3				
Vanadium, Metallic	007440-62-2			9.5E-01	9.5E-02

Water/Ingestion of fish/nonradionuclides/residential

Table 3.1g. (continued)

Chemical	CASRN	Ingestion of fish (concentration in water) (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Vanadyl Sulfate	027774-13-6				
Vernolate	001929-77-7				
Vinclozolin	050471-44-8				
Vinyl Acetate	000108-05-4			6.4E+02	6.4E+01
Vinyl Bromide	000593-60-2				
Vinyl Chloride ⁽⁶⁾	000075-01-4	2.4E-02	2.4E-04		
Warfarin	000081-81-2			2.5E-03	2.5E-04
White Phosphorus	007723-14-0				
Xylene, Mixture ⁽⁶⁾	001330-20-7			1.4E+01	1.4E+00
Xylene, P- ⁽⁶⁾	000106-42-3				
Xylene, m- ⁽⁶⁾	000108-38-3			1.7E+01	1.7E+00
Xylene, o- ⁽⁶⁾	000095-47-6			1.7E+01	1.7E+00
Zinc (Metallic)	007440-66-6			4.1E-01	4.1E-02
Zinc Cyanide	000557-21-1				
Zinc Phosphide	001314-84-7				
Zineb	012122-67-7				
Zirconium	007440-67-7				

Notes:

* By definition, 1 L (water) = 1.0E + 06 mg (water). Therefore, a limit of 1.0E + 06 mg/L was used for any PRG that was calculated to be above this limit.

Table 3.1g. (continued)

- (1) The same oral slope factor as used for polychlorinated biphenyls.
- (2) The PRG was calculated considering *Supplemental Guidance from RAGS: Region 4 Bulletins, Human Health Risk Assessment* (Interim 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.
- (3) The toxicity values for trichloroethylene have been withdrawn from IRIS and HEAST pending further investigation. However, the most recent toxicity values have been used to calculate the PRG.
- (4) The PRG was calculated considering *Supplemental Guidance from RAGS: Region 4 Bulletins, Human Health Risk Assessment* (Interim Guidance) from EPA (November 1995). The slope factors for chemicals so marked indicate that a TEF methodology was used for chlorinated dioxin and furan congeners based on each compound's relative potency to the potency of 2,3,7,8-tetrachlorodibenzodioxin (TCDD). The following TEFs were used to convert each slope factor to an equivalent slope factor of 2,3,7,8-TCDD: (1) 2,3,7,8-TCDD, TEF = 1.0; (2) 2,3,7,8-PeCDD, TEF = 0.5; (3) 2,3,7,8-HxCDD, TEF = 0.1; (4) 2,3,7,8-HpCDD, TEF = 0.01; (5) OCDD, TEF = 0.001; (6) 2,3,7,8-TCDF, TEF = 0.1; (7) 1,2,3,7,8-PeCDF, TEF = 0.5; (8) 2,3,4,7,8-PeCDF, TEF = 0.05; (9) 2,3,7,8-HxCDF, TEF = 0.1; (10) 2,3,7,8-HpCDF, TEF = 0.01; and (11) OCDF, TEF = 0.001.
- (5) Toxicity values for these chemicals have been withdrawn from IRIS and HEAST pending further investigation. However, the most recent toxicity values have been used to calculate the PRG.
- (6) Toxicity values for these chemicals were obtained from the Superfund Health Risk Technical Support Center.

Table 3.1h. Risk-based Preliminary Remediation Goals for water based on ingestion of fish for radionuclides (residential scenario)

Chemical [†]	CASRN	Ingestion of fish (concentration in water) (pCi/L)	
		10 ⁻⁴	10 ⁻⁶
Ac-225	014265-85-1	5.0E+01	5.0E-01
Ac-227	014952-40-0	2.0E+01	2.0E-01
Ac-227+D	014952-40-0	5.8E-01	5.8E-03
Ac-228	014331-83-0	4.4E+03	4.4E+01
Ag-105	014928-14-4	2.2E+04	2.2E+02
Ag-108	014391-65-2	5.1E+06	5.1E+04
Ag-108m	014391-65-2	5.8E+03	5.8E+01
Ag-108m+D	014391-65-2	5.8E+03	5.8E+01
Ag-109m	014378-38-2	1.3E+08	1.3E+06
Ag-110	014391-76-5	1.4E+07	1.4E+05
Ag-110m	014391-76-5	4.2E+03	4.2E+01
Ag-111	015760-04-0	5.2E+03	5.2E+01
Am-241	014596-10-2	1.8E+01	1.8E-01
Am-242	013981-54-9	4.0E+03	4.0E+01
Am-242m	013981-54-9	2.0E+01	2.0E-01
Am-243	014993-75-0	1.8E+01	1.8E-01
Am-243+D	014993-75-0	8.9E+00	8.9E-02

Table 3.1h. (continued)

Chemical [†]	CASRN	Ingestion of fish (concentration in water) (pCi/L)	
		10 ⁻⁴	10 ⁻⁶
Ar-41	014163-25-8		
At-217	017239-90-6		
Au-196	014914-16-0		
Au-198	010043-49-0		
Ba-131	014914-75-1	2.6E+04	2.6E+02
Ba-133	013981-41-4	1.6E+04	1.6E+02
Ba-133m	013981-41-4	1.6E+04	1.6E+02
Ba-137m	013981-97-0	1.8E+07	1.8E+05
Ba-139	014378-25-7	1.5E+05	1.5E+03
Ba-140	014798-08-4	3.7E+03	3.7E+01
Be-7	013966-02-4	2.0E+04	2.0E+02
Bi-206	015776-19-9	2.5E+03	2.5E+01
Bi-207	013982-38-2	3.5E+03	3.5E+01
Bi-210	014331-79-4	2.4E+03	2.4E+01
Bi-211	015229-37-5	9.7E+05	9.7E+03
Bi-212	014913-49-6	2.8E+04	2.8E+02
Bi-213	015776-20-2	4.0E+04	4.0E+02

Table 3.1h. (continued)

Chemical [†]	CASRN	Ingestion of fish (concentration in water) (pCi/L)	
		10 ⁻⁴	10 ⁻⁶
Bi-214	014733-03-0	9.0E+04	9.0E+02
Br-82	014686-69-2	3.1E+02	3.1E+00
C-11	014333-33-6		
C-14	014762-75-5		
C-15	015929-23-4		
Ca-45	013966-05-7		
Ca-47	001439-99-2		
Cd-109	014109-32-1	1.1E+02	1.1E+00
Cd-115	014336-68-6	1.2E+02	1.2E+00
Cd-115m	014336-68-6	6.2E+01	6.2E-01
Ce-141	013967-74-3	1.5E+03	1.5E+01
Ce-143	014119-19-8	9.9E+02	9.9E+00
Ce-144	014762-78-8	2.0E+02	2.0E+00
Ce-144+D	014762-78-8	2.6E+01	2.6E-01
Cl-36	013981-43-6		
Cl-38	014158-34-0		
Cm-242	015510-73-3	1.5E+02	1.5E+00

Table 3.1h. (continued)

Chemical [†]	CASRN	Ingestion of fish (concentration in water) (pCi/L)	
		10 ⁻⁴	10 ⁻⁶
Cm-243	015757-87-6	2.3E+01	2.3E-01
Cm-243+D	015757-87-6	7.1E-01	7.1E-03
Cm-244	013981-15-2	2.8E+01	2.8E-01
Cm-245	015621-76-8	1.8E+01	1.8E-01
Cm-246	015757-90-1	1.8E+01	1.8E-01
Cm-247	015758-32-4	1.9E+01	1.9E-01
Cm-248	015758-33-5	4.5E+00	4.5E-02
Co-57	013981-50-5	6.1E+02	6.1E+00
Co-58	013981-38-9	2.1E+02	2.1E+00
Co-58m	013981-38-9	6.2E+03	6.2E+01
Co-60	010198-40-0	3.1E+01	3.1E-01
Cr-51	014392-02-0	6.4E+03	6.4E+01
Cs-131	014914-76-2	4.9E+02	4.9E+00
Cs-134	013967-70-9	1.9E+00	1.9E-02
Cs-134m	013967-70-9	1.9E+03	1.9E+01
Cs-135	015726-30-4	1.9E+01	1.9E-01
Cs-136	014234-29-8	1.1E+01	1.1E-01

Table 3.1h. (continued)

Chemical [†]	CASRN	Ingestion of fish (concentration in water) (pCi/L)	
		10 ⁻⁴	10 ⁻⁶
Cs-137	010045-97-3	2.8E+00	2.8E-02
Cs-137+D	010045-97-3	2.8E+00	2.8E-02
Cs-138	015758-29-9	5.0E+02	5.0E+00
Cu-64	013981-25-4	1.7E+03	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	6.2E+02	6.2E+00
Eu-154	015585-10-1	3.8E+02	3.8E+00
Eu-155	014391-16-3	2.1E+03	2.1E+01
Eu-156	014280-35-4	3.2E+02	3.2E+00
F-18	013981-56-1		
Fe-55	014681-59-5	2.5E+03	2.5E+01
Fe-59	014596-12-4	1.5E+02	1.5E+00
Fr-221	015756-41-9		
Fr-223	015756-98-6		

Table 3.1h. (continued)

Chemical†	CASRN	Ingestion of fish (concentration in water) (pCi/L)	
		10 ⁻⁴	10 ⁻⁶
Ga-67	014119-09-6		
Ga-72	013982-22-4		
Gd-153	014276-65-4		
Gd-159	014041-42-0		
Ge-71	014374-81-3		
H-3	010028-17-8	2.5E+06	2.5E+04
Hg-197	013981-51-6	1.5E+02	1.5E+00
Hg-203	013982-78-0	6.7E+01	6.7E-01
Ho-166	013967-65-2		
I-122	018287-75-7	2.0E+05	2.0E+03
I-123	015715-08-9	8.1E+03	8.1E+01
I-125	014158-31-7	1.7E+02	1.7E+00
I-126	014158-32-8	9.1E+01	9.1E-01
I-129	015046-84-1	2.4E+01	2.4E-01
I-130	014914-02-4	9.1E+02	9.1E+00
I-131	010043-66-0	1.2E+02	1.2E+00
I-132	014683-16-0	6.7E+03	6.7E+01

Table 3.1h. (continued)

Chemical [†]	CASRN	Ingestion of fish (concentration in water) (pCi/L)	
		10 ⁻⁴	10 ⁻⁶
I-133	014834-67-4	4.2E+02	4.2E+00
I-134	014914-27-3	1.9E+04	1.9E+02
I-135	014834-68-5	1.9E+03	1.9E+01
In-113m	014885-78-0		
In-114	013981-55-0		
In-114m	013981-55-0		
In-115	014191-71-0		
In-115m	014191-71-0		
Ir-190	014981-91-0		
Ir-194	014158-35-1		
K-40	013966-00-2		
K-42	014378-21-3		
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		

Table 3.1h. (continued)

Chemical†	CASRN	Ingestion of fish (concentration in water) (pCi/L)	
		10 ⁻⁴	10 ⁻⁶
Kr-89	016316-03-3		
Kr-90	015741-13-6		
La-140	013981-28-7	6.2E+02	6.2E+00
Lu-177	014265-75-9		
Mn-52	014092-99-0	7.3E+01	7.3E-01
Mn-54	013966-31-9	2.2E+02	2.2E+00
Mn-56	014681-52-8	5.1E+02	5.1E+00
Mo-99	014119-15-4	7.8E+03	7.8E+01
Na-22	013966-32-0	1.1E+03	1.1E+01
Na-24	013982-04-2	6.4E+03	6.4E+01
Nb-93m	007440-03-1	8.9E+02	8.9E+00
Nb-94	014681-63-1	8.5E+01	8.5E-01
Nb-95	013967-76-5	2.6E+02	2.6E+00
Nb-95m	013967-76-5	1.9E+02	1.9E+00
Nb-97	018496-04-3	3.4E+03	3.4E+01
Nb-97m	018496-04-3	1.8E+05	1.8E+03
Nd-147	014269-74-0	3.0E+02	3.0E+00

Table 3.1h. (continued)

Chemical [†]	CASRN	Ingestion of fish (concentration in water) (pCi/L)	
		10 ⁻⁴	10 ⁻⁶
Nd-149	015749-81-2	3.9E+03	3.9E+01
Ni-59	014336-70-0	9.5E+03	9.5E+01
Ni-63	013981-37-8	3.2E+03	3.2E+01
Ni-65	014833-49-9	3.1E+03	3.1E+01
Np-236	015700-36-4	6.3E+03	6.3E+01
Np-237	013994-20-2	2.0E+01	2.0E-01
Np-237+D	013994-20-2	1.5E+01	1.5E-01
Np-238	015766-25-3	1.3E+03	1.3E+01
Np-239	013968-59-7	1.4E+03	1.4E+01
Np-240	015690-84-3	3.3E+04	3.3E+02
Np-240m	015690-84-3	2.4E+05	2.4E+03
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	5.8E-01	5.8E-03
P-33	015749-66-3	4.5E+00	4.5E-02

Table 3.1h. (continued)

Chemical [†]	CASRN	Ingestion of fish (concentration in water) (pCi/L)	
		10 ⁻⁴	10 ⁻⁶
Pa-231	014331-85-2	1.2E+02	1.2E+00
Pa-233	013981-14-1	3.8E+03	3.8E+01
Pa-234	015100-28-4	8.3E+03	8.3E+01
Pa-234m	015100-28-4	3.7E+06	3.7E+04
Pb-203	014687-25-3	5.7E+02	5.7E+00
Pb-209	014119-30-3	2.8E+03	2.8E+01
Pb-210	014255-04-0	8.7E-01	8.7E-03
Pb-210+D	014255-04-0	4.9E-01	4.9E-03
Pb-211	015816-77-0	1.7E+03	1.7E+01
Pb-212	015092-94-1	3.3E+01	3.3E-01
Pb-214	015067-28-4	2.0E+03	2.0E+01
Pd-100	015690-69-4		
Pd-101	015749-54-9		
Pd-103	014967-68-1		
Pd-107	017637-99-9		
Pd-109	014981-64-7		
Pm-147	014380-75-7	4.2E+03	4.2E+01

Table 3.1h. (continued)

Chemical [†]	CASRN	Ingestion of fish (concentration in water) (pCi/L)	
		10 ⁻⁴	10 ⁻⁶
Pm-148	014683-19-3	4.1E+02	4.1E+00
Pm-148m	014683-19-3	5.9E+02	5.9E+00
Pm-149	015765-31-8	1.1E+03	1.1E+01
Po-210	013981-52-7	1.1E+01	1.1E-01
Po-212	015389-34-1	7.8E+13	7.8E+11
Po-213	015756-57-7	5.3E+12	5.3E+10
Po-214	015735-67-8	1.7E+11	1.7E+09
Po-215	015706-52-2	7.1E+09	7.1E+07
Po-216	015756-58-8	4.0E+07	4.0E+05
Po-218	015422-24-9	6.9E+04	6.9E+02
Pr-142	014191-64-1	2.5E+02	2.5E+00
Pr-143	014981-79-4	2.7E+02	2.7E+00
Pr-144	014119-05-2	2.2E+04	2.2E+02
Pr-144m	014119-05-2	5.5E+04	5.5E+02
Pt-191	015706-36-2		
Pt-193	015735-70-3		
Pt-193m	015735-70-3		

Table 3.1h. (continued)

Chemical ^f	CASRN	Ingestion of fish (concentration in water) (pCi/L)	
		10 ⁻⁴	10 ⁻⁶
Pt-197	015735-74-7		
Pt-197m	015735-74-7		
Pu-236	015411-92-4	7.7E+01	7.7E-01
Pu-238	013981-16-3	2.0E+01	2.0E-01
Pu-239	015117-48-3	1.9E+01	1.9E-01
Pu-240	014119-33-6	1.9E+01	1.9E-01
Pu-241	014119-32-5	1.1E+03	1.1E+01
Pu-241+D	014119-32-5	7.6E+00	7.6E-02
Pu-242	013982-10-0	2.0E+01	2.0E-01
Pu-243	015706-37-3	1.6E+04	1.6E+02
Pu-244	014119-34-7	1.9E+01	1.9E-01
Pu-244+D	014119-34-7	7.9E+00	7.9E-02
Ra-223	015623-45-7	1.5E+01	1.5E-01
Ra-224	013233-32-4	2.4E+01	2.4E-01
Ra-225	013981-53-8	2.2E+01	2.2E-01
Ra-226	013982-63-3	1.2E+01	1.2E-01
Ra-226+D	013982-63-3	1.3E+00	1.3E-02

Table 3.1h. (continued)

Chemical [†]	CASRN	Ingestion of fish (concentration in water) (pCi/L)	
		10 ⁻⁴	10 ⁻⁶
Ra-228	015262-20-1	1.4E+01	1.4E-01
Ra-228+D	015262-20-1	1.4E+01	1.4E-01
Rb-82	014391-63-0	8.4E+03	8.4E+01
Rb-86	014932-53-7	1.2E+01	1.2E-01
Rb-87	013982-13-3	2.4E+01	2.4E-01
Rb-88	014928-36-0	6.0E+02	6.0E+00
Rb-89	014191-65-2	1.0E+03	1.0E+01
Rh-103m	007440-16-6	2.2E+06	2.2E+04
Rh-105	014913-89-4	9.1E+03	9.1E+01
Rh-105m	014913-89-4	1.6E+07	1.6E+05
Rh-106	014234-34-5	4.9E+06	4.9E+04
Rn-219	014835-02-0		
Rn-220	022481-48-7		
Rn-222+D	014859-67-7		
Ru-103	013968-53-1	5.3E+03	5.3E+01
Ru-105	014331-95-4	1.5E+04	1.5E+02
Ru-106	013967-48-1	5.1E+02	5.1E+00

Table 3.1h. (continued)

Chemical†	CASRN	Ingestion of fish (concentration in water) (pCi/L)	
		10 ⁻⁴	10 ⁻⁶
Ru-106+D	013967-48-1	2.6E+02	2.6E+00
Ru-97	015758-35-7	3.0E+04	3.0E+02
S-35	015117-53-0	5.3E+02	5.3E+00
Sb-122	014374-79-9	2.0E+02	2.0E+00
Sb-124	014683-10-4	1.6E+02	1.6E+00
Sb-125	014234-35-6	5.9E+02	5.9E+00
Sb-125+D	014234-35-6	1.0E+02	1.0E+00
Sb-126	015756-32-8	1.8E+02	1.8E+00
Sb-126m	015756-32-8	2.4E+04	2.4E+02
Sb-127	013968-50-8	2.1E+02	2.1E+00
Sb-129	014331-88-5	9.5E+02	9.5E+00
Sc-46	013967-63-0	3.1E+02	3.1E+00
Sc-47	014391-96-9	6.0E+02	6.0E+00
Sc-48	014391-86-7	2.7E+02	2.7E+00
Se-75	014265-71-5		
Si-31	014276-49-4		
Sm-147	014392-33-7		

Table 3.1h. (continued)

Chemical [†]	CASRN	Ingestion of fish (concentration in water) (pCi/L)	
		10 ⁻⁴	10 ⁻⁶
Sm-151	015715-94-3		
Sm-153	015766-00-4		
Sn-113	013966-06-8	1.6E+01	1.6E-01
Sn-121	014683-06-8	4.8E+01	4.8E-01
Sn-121m	014683-06-8	2.9E+01	2.9E-01
Sn-125	014683-08-0	3.5E+00	3.5E-02
Sn-126	015832-50-5	2.8E+00	2.8E-02
Sr-82	014809-50-8	1.1E+02	1.1E+00
Sr-85	013967-73-2	2.1E+03	2.1E+01
Sr-85m	013967-73-2	1.6E+05	1.6E+03
Sr-89	014158-27-1	2.9E+02	2.9E+00
Sr-90	010098-97-2	7.2E+01	7.2E-01
Sr-90+D	010098-97-2	3.5E+01	3.5E-01
Sr-91	014331-91-0	1.0E+03	1.0E+01
Sr-92	014928-29-1	1.4E+03	1.4E+01
Ta-182	013982-00-8	2.5E+02	2.5E+00
Tb-158	015759-55-4		

Table 3.1h. (continued)

Chemical [†]	CASRN	Ingestion of fish (concentration in water) (pCi/L)	
		10 ⁻⁴	10 ⁻⁶
Tb-160	013981-29-8		
Tc-95	014809-56-4	1.3E+05	1.3E+03
Tc-95m	014809-56-4	7.1E+03	7.1E+01
Tc-96	014808-44-7	3.9E+03	3.9E+01
Tc-96m	014808-44-7	3.4E+05	3.4E+03
Tc-97	015759-35-0	5.6E+04	5.6E+02
Tc-97m	015759-35-0	7.3E+03	7.3E+01
Tc-99	014133-76-7	6.3E+03	6.3E+01
Tc-99m	014133-76-7	1.6E+05	1.6E+03
Te-125m	014390-73-9	1.8E+02	1.8E+00
Te-127	013981-49-2	5.2E+02	5.2E+00
Te-127m	013981-49-2	7.3E+01	7.3E-01
Te-129	014269-71-7	3.0E+03	3.0E+01
Te-129m	014269-71-7	3.8E+01	3.8E-01
Te-131	014683-12-6	1.1E+03	1.1E+01
Te-131m	014683-12-6	5.0E+01	5.0E-01
Te-132	014234-28-7	3.6E+01	3.6E-01

Table 3.1h. (continued)

Chemical [†]	CASRN	Ingestion of fish (concentration in water) (pCi/L)	
		10 ⁻⁴	10 ⁻⁶
Th-227	015623-47-9	4.4E+01	4.4E-01
Th-228	014274-82-9	2.8E+01	2.8E-01
Th-228+D	014274-82-9	1.4E+00	1.4E-02
Th-229	015594-54-4	3.1E+01	3.1E-01
Th-229+D	015594-54-4	9.5E-01	9.5E-03
Th-230	014269-63-7	4.7E+01	4.7E-01
Th-231	014932-40-2	9.9E+02	9.9E+00
Th-232	007440-29-1	5.4E+01	5.4E-01
Th-234	015065-10-8	9.1E+01	9.1E-01
Tl-202	015720-57-7		
Tl-204	013968-51-9		
Tl-208	014913-50-9		
Tl-209	015690-73-0		
Tm-170	013981-30-1		
Tm-171	014333-45-0		
U-232	014158-29-3	2.2E+02	2.2E+00
U-233	013968-55-3	3.9E+02	3.9E+00

Table 3.1h. (continued)

Chemical†	CASRN	Ingestion of fish (concentration in water) (pCi/L)	
		10 ⁻⁴	10 ⁻⁶
U-234	013966-29-5	4.0E+02	4.0E+00
U-235	015117-96-1	3.9E+02	3.9E+00
U-235+D	015117-96-1	3.4E+01	3.4E-01
U-236	013982-70-2	4.2E+02	4.2E+00
U-237	014269-75-1	4.4E+03	4.4E+01
U-238	007440-61-1	4.1E+02	4.1E+00
U-238+D	007440-61-1	2.2E+01	2.2E-01
U-240	015687-53-3	3.2E+03	3.2E+01
V-48	014331-97-6	2.3E+03	2.3E+01
W-181	015749-46-9	6.5E+04	6.5E+02
W-185	014932-41-3	8.6E+03	8.6E+01
W-187	014983-48-3	7.2E+03	7.2E+01
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 3.1h. (continued)

Chemical [†]	CASRN	Ingestion of fish (concentration in water) (pCi/L)	
		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	3.9E+02	3.9E+00
Y-91	014234-24-3	4.4E+02	4.4E+00
Y-91m	014234-24-3	1.6E+05	1.6E+03
Y-92	015751-59-4	3.0E+03	3.0E+01
Y-93	014981-70-5	1.0E+03	1.0E+01
Zn-65	013982-39-3	1.8E+01	1.8E-01
Zn-69	013982-23-5	2.8E+03	2.8E+01
Zn-69m	013982-23-5	1.2E+02	1.2E+00
Zr-93	015751-77-6	1.1E+03	1.1E+01
Zr-95	013967-71-0	1.5E+02	1.5E+00

Table 3.1h. (continued)

Chemical [†]	CASRN	Ingestion of fish (concentration in water) (pCi/L)	
		10 ⁻⁴	10 ⁻⁶
Zr-97	014928-30-4	5.7E+01	5.7E-01

Note:

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

Chemical	CASRN	Ingestion (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
ALAR	001596-84-5			1.5E+01	1.5E+00
Acenaphthene	000083-32-9			6.1E+00	6.1E-01
Acenaphthylene	000208-96-8				
Acephate	030560-19-1	3.3E+00	3.3E-02	4.1E-01	4.1E-02
Acetaldehyde	000075-07-0				
Acetochlor	034256-82-1			2.0E+00	2.0E-01
Acetone	000067-64-1			1.0E+01	1.0E+00
Acetone Cyanohydrin	000075-86-5			8.2E-02	8.2E-03
Acetonitrile	000075-05-8			6.1E-01	6.1E-02
Acetophenone ⁽⁵⁾	000098-86-2			1.0E+01	1.0E+00
Acrolein ⁽⁶⁾	000107-02-8			2.0E+00	2.0E-01
Acrylamide	000079-06-1	6.4E-03	6.4E-05	2.0E-02	2.0E-03
Acrylic Acid	000079-10-7			5.1E+01	5.1E+00
Acrylonitrile	000107-13-1	5.3E-02	5.3E-04	1.0E-01	1.0E-02
Alachlor	015972-60-8	3.6E-01	3.6E-03	1.0E+00	1.0E-01
Aldicarb	000116-06-3			1.0E-01	1.0E-02
Aldicarb Sulfone	001646-88-4			1.0E-01	1.0E-02
Aldrin	000309-00-2	1.7E-03	1.7E-05	3.1E-03	3.1E-04

Table 3.2a. (continued)

Chemical	CASRN	Ingestion (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Allyl	074223-64-6			2.6E+01	2.6E+00
Allyl Alcohol	000107-18-6			5.1E-01	5.1E-02
Allyl Chloride ⁽⁵⁾	000107-05-1			5.1E+00	5.1E-01
Aluminum	007429-90-5				
Aluminum Phosphide	020859-73-8			4.1E-02	4.1E-03
Amdro	067485-29-4			3.1E-02	3.1E-03
Ametryn	000834-12-8			9.2E-01	9.2E-02
Aminophenol, m-	000591-27-5			7.2E+00	7.2E-01
Aminopyridine, 4-	000504-24-5			2.0E-03	2.0E-04
Amitraz	033089-61-1			2.6E-01	2.6E-02
Ammonia	007664-41-7				
Ammonium Sulfamate	007773-06-0			2.0E+01	2.0E+00
Aniline	000062-53-3	5.0E+00	5.0E-02		
Anthracene	000120-12-7			3.1E+01	3.1E+00
Antimony (metallic)	007440-36-0			4.1E-02	4.1E-03
Antimony Pentoxide	001314-60-9			5.1E-02	5.1E-03
Antimony Potassium Tartrate	000304-61-0			9.2E-02	9.2E-03
Antimony Tetroxide	001332-81-6			4.1E-02	4.1E-03

Table 3.2a. (continued)

Chemical	CASRN	Ingestion (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Antimony Trioxide	001309-64-4			4.1E-02	4.1E-03
Apollo	074115-24-5			1.3E+00	1.3E-01
Aramite	000140-57-8	1.1E+00	1.1E-02	5.1E+00	5.1E-01
Aroclor 1016	012674-11-2			7.2E-03	7.2E-04
Aroclor 1221 ⁽¹⁾	011104-28-2	3.7E-03	3.7E-05		
Aroclor 1232 ⁽¹⁾	011141-16-5	3.7E-03	3.7E-05		
Aroclor 1242 ⁽¹⁾	053469-21-9	3.7E-03	3.7E-05		
Aroclor 1248 ⁽¹⁾	012672-29-6	3.7E-03	3.7E-05		
Aroclor 1254	011097-69-1			2.0E-03	2.0E-04
Aroclor 1260 ⁽¹⁾	011096-82-5	3.7E-03	3.7E-05		
Arsenic Salts	NA				
Arsenic, Inorganic	007440-38-2	1.9E-02	1.9E-04	3.1E-02	3.1E-03
Arsine	007784-42-1				
Asbestos	001332-21-4				
Assure	076578-14-8			9.2E-01	9.2E-02
Asulam	003337-71-1			5.1E+00	5.1E-01
Atrazine	001912-24-9	1.3E-01	1.3E-03	3.6E+00	3.6E-01
Avermectin B1	065195-55-3			4.1E-02	4.1E-03

Table 3.2a. (continued)

Chemical	CASRN	Ingestion (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Azobenzene	000103-33-3	2.6E-01	2.6E-03		
Barium	007440-39-3			7.2E+00	7.2E-01
Barium Cyanide	000542-62-1			1.0E+01	1.0E+00
Baygon	000114-26-1			4.1E-01	4.1E-02
Bayleton	043121-43-3			3.1E+00	3.1E-01
Baythroid	068359-37-5			2.6E+00	2.6E-01
Benefin	001861-40-1			3.1E+01	3.1E+00
Benomyl	017804-35-2			5.1E+00	5.1E-01
Bentazon	025057-89-0			2.6E-01	2.6E-02
Benz[a]anthracene ⁽²⁾	000056-55-3	3.9E-02	3.9E-04		
Benzaldehyde	000100-52-7			1.0E+01	1.0E+00
Benzene	000071-43-2	9.9E-01	9.9E-03		
Benzene Hexachloride	NA				
Benzene, Ethyldimethyl	NA				
Benzene, Ethylmethyl	NA				
Benzene, Methylpropenyl	NA				
Benzene, Methylpropyl	NA				
Benzene, Trimethyl	025551-13-7				

Table 3.2a. (continued)

Chemical	CASRN	Ingestion (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Benzenethiol	000108-98-5			1.0E-03	1.0E-04
Benzidine	000092-87-5	1.2E-04	1.2E-06	3.1E-01	3.1E-02
Benzo[a]pyrene ⁽²⁾	000050-32-8	3.9E-03	3.9E-05		
Benzo[b]fluoranthene ⁽²⁾	000205-99-2	3.9E-02	3.9E-04		
Benzo[g,h,i]perylene	000191-24-2				
Benzo[k]fluoranthene ⁽²⁾	000207-08-9	3.9E-01	3.9E-03		
Benzoic Acid	000065-85-0			4.1E+02	4.1E+01
Benzotrichloride	000098-07-7	2.2E-03	2.2E-05		
Benzyl Alcohol	000100-51-6			3.1E+01	3.1E+00
Benzyl Chloride	000100-44-7	1.7E-01	1.7E-03		
Beryllium	007440-41-7	6.7E-03	6.7E-05	5.1E-01	5.1E-02
Bidrin	000141-66-2			1.0E-02	1.0E-03
Biphenthrin	082657-04-3			1.5E+00	1.5E-01
Biphenyl, 1,1'-	000092-52-4			5.1E+00	5.1E-01
Bis(2-chloro-1-methylethyl)ether (Technical)	000108-60-1	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		

Table 3.2a. (continued)

Chemical	CASRN	Ingestion (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Bis(2-chloroisopropyl)ether	039638-32-9			4.1E+00	4.1E-01
Bis(2-ethylhexyl)phthalate ⁽⁶⁾	000117-81-7	2.0E+00	2.0E-02	2.0E+00	2.0E-01
Bis(chloromethyl)ether	000542-88-1	1.3E-04	1.3E-06		
Bisphenol A	000080-05-7			5.1E+00	5.1E-01
Boron And Borates Only	007440-42-8			9.2E+00	9.2E-01
Boron Trifluoride	007637-07-2				
Bromochloromethane	000074-97-5				
Bromodichloromethane	000075-27-4	4.6E-01	4.6E-03	2.0E+00	2.0E-01
Bromodiphenyl Ether, p-	000101-55-3				
Bromoform	000075-25-2	3.6E+00	3.6E-02	2.0E+00	2.0E-01
Bromomethane ⁽⁶⁾	000074-83-9			1.4E-01	1.4E-02
Bromophos	002104-96-3			5.1E-01	5.1E-02
Bromotrichloromethane	000075-62-7				
Bromoxynil	001689-84-5			2.0E+00	2.0E-01
Bromoxynil Octanoate	001689-99-2			2.0E+00	2.0E-01
Butadiene, 1,3-	000106-99-0				
Butanol, N-	000071-36-3			1.0E+01	1.0E+00
Butanone-2, 4-chloro-4,4-difluoro	NA				

Table 3.2a. (continued)

Chemical	CASRN	Ingestion (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Butyl Benzyl Phthlate	000085-68-7			2.0E+01	2.0E+00
Butylate	002008-41-5			5.1E+00	5.1E-01
Butylchloride, t-	000507-20-0				
Butylphthalyl Butylglycolate	000085-70-1			1.0E+02	1.0E+01
Cacodylic Acid	000075-60-5			3.1E-01	3.1E-02
Cadmium (Water)	007440-43-9			5.1E-02	5.1E-03
Calcium Cyanide	000592-01-8			4.1E+00	4.1E-01
Caprolactam	000105-60-2			5.1E+01	5.1E+00
Captafol	002425-06-1	3.3E+00	3.3E-02	2.0E-01	2.0E-02
Captan	000133-06-2	8.2E+00	8.2E-02	1.3E+01	1.3E+00
Carbaryl	000063-25-2			1.0E+01	1.0E+00
Carbazole	000086-74-8	1.4E+00	1.4E-02		
Carbofuran	001563-66-2			5.1E-01	5.1E-02
Carbon Disulfide	000075-15-0			1.0E+01	1.0E+00
Carbon Tetrachloride ⁽⁶⁾	000056-23-5	2.2E-01	2.2E-03	7.2E-02	7.2E-03
Carbosulfan	055285-14-8			1.0E+00	1.0E-01
Carboxin	005234-68-4			1.0E+01	1.0E+00
Chloral	000075-87-6			2.0E-01	2.0E-02

Table 3.2a. (continued)

Chemical	CASRN	Ingestion (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Chloramben	000133-90-4			1.5E+00	1.5E-01
Chloranil	000118-75-2	7.1E-02	7.1E-04		
Chlordane ⁽⁶⁾	000057-74-9	2.2E-02	2.2E-04	6.1E-03	6.1E-04
Chloride	016887-00-6				
Chlorimuron, Ethyl-	090982-32-4			2.0E+00	2.0E-01
Chlorine	007782-50-5			1.0E+01	1.0E+00
Chlorine Dioxide	010049-04-4				
Chlorite (Sodium Salt)	007758-19-2				
Chloro-1,1-difluoroethane, 1-	000075-68-3				
Chloro-1,3-butadiene, 2-	000126-99-8			2.0E+00	2.0E-01
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	2.0E-02
Chloroacetophenone, 2-	000532-27-4				
Chloroaniline, p-	000106-47-8			4.1E-01	4.1E-02
Chlorobenzene ⁽⁶⁾	000108-90-7			2.0E+00	2.0E-01
Chlorobenzilate	000510-15-6	1.1E-01	1.1E-03	2.0E+00	2.0E-01
Chlorobenzoic Acid, p-	000074-11-3			2.0E+01	2.0E+00

Table 3.2a. (continued)

Chemical	CASRN	Ingestion (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Chlorobenzotrifluoride, 4-	000098-56-6			2.0E+00	2.0E-01
Chlorobutane, 1-	000109-69-3			4.1E+01	4.1E+00
Chlorobutane, 2-	000078-86-4				
Chlorocyclopentadiene	041851-50-7				
Chlorodibromoethane	073506-94-2	3.4E-01	3.4E-03		
Chlorodifluoromethane	000075-45-6				
Chloroform ⁽⁶⁾	000067-66-3	4.7E+00	4.7E-02	1.0E+00	1.0E-01
Chloromethane ⁽⁶⁾	000074-87-3	2.2E+00	2.2E-02		
Chloromethyl Methyl Ether	000107-30-2				
Chloronaphthalene, Beta-	000091-58-7			8.2E+00	8.2E-01
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	5.1E-02
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	1.5E-01
Chlorotoluene, o-	000095-49-8			2.0E+00	2.0E-01

Table 3.2a. (continued)

Chemical	CASRN	Ingestion (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Chlorpropham	000101-21-3			2.0E+01	2.0E+00
Chlorpyrifos	002921-88-2			3.1E-01	3.1E-02
Chlorpyrifos Methyl	005598-13-0			1.0E+00	1.0E-01
Chlorsulfuron	064902-72-3			5.1E+00	5.1E-01
Chlorthiophos	060238-56-4			8.2E-02	8.2E-03
Chromium (III) (Insoluble Salts)	016065-83-1			1.0E+02	1.0E+01
Chromium (VI) ⁽⁶⁾	018540-29-9			5.1E-01	5.1E-02
Chromium Salts	NA				
Chrysene ⁽²⁾	000218-01-9	3.9E+00	3.9E-02		
Cobalt	007440-48-4				
Coke Oven Emissions	008007-45-2				
Copper	007440-50-8				
Copper Cyanide	000544-92-3			5.1E-01	5.1E-02
Creosote	008001-58-9				
Cresol, m-	000108-39-4			5.1E+00	5.1E-01
Cresol, o-	000095-48-7			5.1E+00	5.1E-01
Cresol, p-	000106-44-5			5.1E-01	5.1E-02
Crotonaldehyde	000123-73-9	1.5E-02	1.5E-04		

Table 3.2a. (continued)

Chemical	CASRN	Ingestion (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Cumene	000098-82-8			4.1E+00	4.1E-01
Cyanazine	021725-46-2	3.4E-02	3.4E-04	2.0E-01	2.0E-02
Cyanide (CN ⁻)	000057-12-5			2.0E+00	2.0E-01
Cyanogen	000460-19-5			4.1E+00	4.1E-01
Cyanogen Bromide	000506-68-3			9.2E+00	9.2E-01
Cyanogen Chloride	000506-77-4			5.1E+00	5.1E-01
Cyclohexane, 1,2,3,4,5-pentabromo-6-chloro-	000087-84-3	1.2E+00	1.2E-02		
Cyclohexanone	000108-94-1			5.1E+02	5.1E+01
Cyclohexylamine	000108-91-8			2.0E+01	2.0E+00
Cyclopentadiene	000542-92-7				
Cyhalothrin/karate	068085-85-8			5.1E-01	5.1E-02
Cypermethrin	052315-07-8			1.0E+00	1.0E-01
Cyromazine	066215-27-8			7.7E-01	7.7E-02
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	5.1E-03
Dacthal	001861-32-1			1.0E+00	1.0E-01

Table 3.2a. (continued)

Chemical	CASRN	Ingestion (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Dalapon	000075-99-0			3.1E+00	3.1E-01
Decabromodiphenyl Ether	001163-19-5			1.0E+00	1.0E-01
Demeton	008065-48-3			4.1E-03	4.1E-04
Di(2-ethylhexyl)adipate	000103-23-1	2.4E+01	2.4E-01	6.1E+01	6.1E+00
Diallate	002303-16-4	4.7E-01	4.7E-03		
Diazinon	000333-41-5			9.2E-02	9.2E-03
Dibenz[a,h]anthracene ⁽²⁾	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	1.0E-01
Dibromochloromethane	000124-48-1	3.4E-01	3.4E-03	2.0E+00	2.0E-01
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	1.0E-01
Dibutyl Phthalate	000084-74-2			1.0E+01	1.0E+00
Dicamba	001918-00-9			3.1E+00	3.1E-01
Dichloro-2-butene, 1,4-	000764-41-0				

Table 3.2a. (continued)

Chemical	CASRN	Ingestion (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Dichloroacetic Acid					
Dichlorobenzene, 1,2- ⁽⁹⁾	000095-50-1			9.2E+00	9.2E-01
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	2.0E+00
Dichloroethane, 1,1-	000075-34-3			1.0E+01	1.0E+00
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	9.2E-02
Dichloroethylene, 1,2- (Mixed Isomers)	000540-59-0			9.2E-01	9.2E-02
Dichloroethylene, 1,2-cis-	000156-59-2			1.0E+00	1.0E-01
Dichloroethylene, 1,2-trans-	000156-60-5			2.0E+00	2.0E-01
Dichlorophenol, 2,4-	000120-83-2			3.1E-01	3.1E-02
Dichlorophenoxy Acetic Acid, 2,4-	000094-75-7			1.0E+00	1.0E-01
Dichlorophenoxy)butyric Acid, 4-(2,4-	000094-82-6			8.2E-01	8.2E-02
Dichloropropane, 1,2-	000078-87-5	4.2E-01	4.2E-03		
Dichloropropanol, 2,3-	000616-23-9			3.1E-01	3.1E-02

Table 3.2a. (continued)

Chemical	CASRN	Ingestion (mg/L)*		
		10 ⁻⁴	10 ⁻⁶	HQ=1
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 Dimitate (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
Diethylstilbestrol	000056-53-1	6.1E-06	6.1E-08	
Difenzquat	043222-48-6			8.2E+00
Diffenazuron	035367-38-5			2.0E+00
Diffuoroethane, 1,1-	000075-37-6			
Diisopropyl Methylphosphonate	001445-75-6			8.2E+00
Dimethipin	055290-64-7			2.0E+00
Dimethoate	000060-51-5			2.0E-02

Nonradionuclides/groundwater/industrial

Table 3.2a. (continued)

Chemical	CASRN	Ingestion (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
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	2.0E-02
Dimethylbenzidine, 3,3'-	000119-93-7	3.1E-03	3.1E-05		
Dimethylethyl Lead	107584-40-7				
Dimethylformamide	000068-12-2			1.0E+01	1.0E+00
Dimethylhydrazine, 1,1-(⁶)	000057-14-7	1.1E-02	1.1E-04		
Dimethylhydrazine, 1,2-	000540-73-8				
Dimethylphenol, 2,4-	000105-67-9			2.0E+00	2.0E-01
Dimethylphenol, 2,6-	000576-26-1			6.1E-02	6.1E-03
Dimethylphenol, 3,4-	000095-65-8			1.0E-01	1.0E-02
Dimethylphthalate(⁹)	000131-11-3			1.0E+03	1.0E+02
Dimethylterephthalate	000120-61-6			1.0E+01	1.0E+00
Dinitro-o-cresol, 4,6-	000534-52-1				
Dinitro-o-cyclohexyl Phenol, 4,6-	000131-89-5			2.0E-01	2.0E-02
Dinitrobenzene, 1,2-	000528-29-0			4.1E-02	4.1E-03

Table 3.2a. (continued)

Chemical	CASRN	Ingestion (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Dinitrobenzene, 1,3-	000099-65-0			1.0E-02	1.0E-03
Dinitrobenzene, 1,4-	000100-25-4			4.1E-02	4.1E-03
Dinitrophenol, 2,4-	000051-28-5			2.0E-01	2.0E-02
Dinitrotoluene, 2,4-	000121-14-2	4.2E-02	4.2E-04	2.0E-01	2.0E-02
Dinitrotoluene, 2,6-	000606-20-2	4.2E-02	4.2E-04	1.0E-01	1.0E-02
Dinitrotoluene, 2-Amino-4,6-	035572-78-2				
Dinoseb	000088-85-7			1.0E-01	1.0E-02
Dioxane, 1,4-	000123-91-1	2.6E+00	2.6E-02		
Diphenamid	000957-51-7			3.1E+00	3.1E-01
Diphenylamine	000122-39-4			2.6E+00	2.6E-01
Diphenylhydrazine, 1,2-	000122-66-7	3.6E-02	3.6E-04		
Diquat	000085-00-7			2.2E-01	2.2E-02
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	4.1E-04
Diuron	000330-54-1			2.0E-01	2.0E-02

Table 3.2a. (continued)

Chemical	CASRN	Ingestion (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Dodine	002439-10-3			4.1E-01	4.1E-02
EPTC	000759-94-4			2.6E+00	2.6E-01
Endosulfan	000115-29-7			6.1E-01	6.1E-02
Endothall	000145-73-3			2.0E+00	2.0E-01
Endrin	000072-20-8			3.1E-02	3.1E-03
Epichlorohydrin	000106-89-8	2.9E+00	2.9E-02	2.0E-01	2.0E-02
Epoxybutane, 1,2-	000106-88-7				
Ethephon	016672-87-0			5.1E-01	5.1E-02
Ethion	000563-12-2			5.1E-02	5.1E-03
Ethoxyethanol Acetate, 2-	000111-15-9			3.1E+01	3.1E+00
Ethoxyethanol, 2-	000110-80-5			4.1E+01	4.1E+00
Ethyl Acetate	000141-78-6			9.2E+01	9.2E+00
Ethyl Acrylate	000140-88-5	6.0E-01	6.0E-03		
Ethyl Chloride	000075-00-3				
Ethyl Ether	000060-29-7			2.0E+01	2.0E+00
Ethyl Methacrylate	000097-63-2			9.2E+00	9.2E-01
Ethyl-p-nitrophenyl Phosphonate	002104-64-5			1.0E-03	1.0E-04
Ethylbenzene ⁽⁶⁾	000100-41-4			1.0E+01	1.0E+00

Table 3.2a. (continued)

Chemical	CASRN	Ingestion (mg/L)*			
		10 ⁻⁴	10 ⁻⁵	HQ=1	HQ=0.1
Ethylene Cyanohydrin	000109-78-4			3.1E+01	3.1E+00
Ethylene Diamine	000107-15-3			2.0E+00	2.0E-01
Ethylene Glycol	000107-21-1			2.0E+02	2.0E+01
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	8.2E-04
Ethylphthalyl Ethyl Glycolate	000084-72-0			3.1E+02	3.1E+01
Express	101200-48-0			8.2E-01	8.2E-02
Fenamiphos	022224-92-6			2.6E-02	2.6E-03
Fenpropathrin	039515-41-8			2.6E+00	2.6E-01
Fluometuron	002164-17-2			1.3E+00	1.3E-01
Fluoranthene	000206-44-0			4.1E+00	4.1E-01
Fluorene	000086-73-7			4.1E+00	4.1E-01
Fluoride	007782-41-4			6.1E+00	6.1E-01
Fluridone	059756-60-4			8.2E+00	8.2E-01
Fluprimidol	056425-91-3			2.0E+00	2.0E-01
Flutolanil	066332-96-5			6.1E+00	6.1E-01
Fluvalinate	069409-94-5			1.0E+00	1.0E-01

Nonradionuclides/groundwater/industrial

Table 3.2a. (continued)

Chemical	CASRN	Ingestion (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Folpet	000133-07-3	8.2E+00	8.2E-02	1.0E+01	1.0E+00
Fomesafen	072178-02-0	1.5E-01	1.5E-03		
Fonofos	000944-22-9			2.0E-01	2.0E-02
Formaldehyde	000050-00-0			2.0E+01	2.0E+00
Formic Acid	000064-18-6			2.0E+02	2.0E+01
Fosetyl-AL	039148-24-8			3.1E+02	3.1E+01
Furan	000110-00-9			1.0E-01	1.0E-02
Furazolidone	000067-45-8	7.5E-03	7.5E-05		
Furfural	000098-01-1			3.1E-01	3.1E-02
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	4.1E-03
Glycidyl	000765-34-4			4.1E-02	4.1E-03
Glyphosate	001071-83-6			1.0E+01	1.0E+00
Goal	042874-03-3			3.1E-01	3.1E-02
Haloxypop, Methyl	069806-40-2			5.1E-03	5.1E-04
Harmony	079277-27-3			1.3E+00	1.3E-01
Heptachlor	000076-44-8	6.4E-03	6.4E-05	5.1E-02	5.1E-03

Table 3.2a. (continued)

Chemical	CASRN	Ingestion (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Heptachlor Epoxide	001024-57-3	3.1E-03	3.1E-05	1.3E-03	1.3E-04
Heptane, N-	000142-82-5				
Hexabromobenzene	000087-82-1			2.0E-01	2.0E-02
Hexachlorobenzene ⁽⁶⁾	000118-74-1	1.8E-02	1.8E-04	8.2E-02	8.2E-03
Hexachlorobutadiene ⁽⁶⁾	000087-68-3	3.7E-01	3.7E-03	2.0E-02	2.0E-03
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	3.1E-03
Hexachlorocyclohexane, Technical	000608-73-1	1.6E-02	1.6E-04		
Hexachlorocyclopentadiene	000077-47-4			7.2E-01	7.2E-02
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	1.0E-02
Hexachlorophene	000070-30-4			3.1E-02	3.1E-03
Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	000121-82-4	2.6E-01	2.6E-03	3.1E-01	3.1E-02
Hexamethylene Diisocyanate, 1,6-	000822-06-0				

Table 3.2a. (continued)

Chemical	CASRN	Ingestion (mg/L)*			
		10 ⁻⁴	10 ⁻⁵	HQ=1	HQ=0.1
Hexane, N-	000110-54-3			6.1E+00	6.1E-01
Hexanone, 2-	000591-78-6				
Hexazinone	051235-04-2			3.4E+00	3.4E-01
HpCDD, 2,3,7,8-(4)	037871-00-4	1.9E-05	1.9E-07		
HpCDF, 2,3,7,8-(4)	038998-75-3	1.9E-05	1.9E-07		
HxCDD, 2,3,7,8-(4)	034465-46-8	1.9E-06	1.9E-08		
HxCDF, 2,3,7,8-(4)	055684-94-1	1.9E-06	1.9E-08		
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	2.0E-01
Hydrogen Sulfide	007783-06-4			3.1E-01	3.1E-02
Hydroquinone	000123-31-9			4.1E+00	4.1E-01
Imazalil	035554-44-0			1.3E+00	1.3E-01
Imazaquin	081335-37-7			2.6E+01	2.6E+00
Indeno[1,2,3-cd]pyrene ⁽²⁾	000193-39-5	3.9E-02	3.9E-04		
Iprodione	036734-19-7			4.1E+00	4.1E-01
Iron	007439-89-6				

Table 3.2a. (continued)

Chemical	CASRN	Ingestion (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Isobutyl Alcohol	000078-83-1			3.1E+01	3.1E+00
Isophorone	000078-59-1	3.0E+01	3.0E-01	2.0E+01	2.0E+00
Isopropalin	033820-53-0			1.5E+00	1.5E-01
Isopropanol	000067-63-0				
Isopropyl Methyl Phosphonic Acid	001832-54-8			1.0E+01	1.0E+00
Isoxaben	082558-50-7			5.1E+00	5.1E-01
Karate	091465-08-6			5.1E-01	5.1E-02
Kerb	023950-58-5			7.7E+00	7.7E-01
Lactofen	077501-63-4			2.0E-01	2.0E-02
Lead Alkyls	NA				
Lead And Compounds	007439-92-1				
Linuron	000330-55-2			2.0E-01	2.0E-02
Lithium	007439-93-2				
Londax	083055-99-6			2.0E+01	2.0E+00
MCPA	000094-74-6			5.1E-02	5.1E-03
MCPB	000094-81-5			1.0E+00	1.0E-01
MCPP	000093-65-2			1.0E-01	1.0E-02
Magnesium	007439-95-4				

Table 3.2a. (continued)

Chemical	CASRN	Ingestion (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Malathion	000121-75-5			2.0E+00	2.0E-01
Maleic Anhydride	000108-31-6			1.0E+01	1.0E+00
Maleic Hydrazide	000123-33-1			5.1E+01	5.1E+00
Malononitrile	000109-77-3			2.0E-03	2.0E-04
Mancozeb	008018-01-7			3.1E+00	3.1E-01
Maneb	012427-38-2			5.1E-01	5.1E-02
Manganese (Water)	007439-96-5			4.8E+00	4.8E-01
Mephosfolan	000950-10-7			9.2E-03	9.2E-04
Mepiquat Chloride	024307-26-4			3.1E+00	3.1E-01
Mercuric Chloride	007487-94-7			3.1E-02	3.1E-03
Mercury (elemental)	007439-97-6			3.1E-02	3.1E-03
Mercury, Inorganic Salt	007439-97-6			3.1E-02	3.1E-03
Merphos	000150-50-5			3.1E-03	3.1E-04
Merphos Oxide	000078-48-8			3.1E-03	3.1E-04
Metalaxyl	057837-19-1			6.1E+00	6.1E-01
Methacrylonitrile	000126-98-7			1.0E-02	1.0E-03
Methamidophos	010265-92-6			5.1E-03	5.1E-04
Methanol	000067-56-1			5.1E+01	5.1E+00

Table 3.2a. (continued)

Chemical	CASRN	Ingestion (mg/L)*		
		10 ⁻⁴	10 ⁻⁶	HQ=1 HQ=0.1
Methidathion	000950-37-8			1.0E-01 1.0E-02
Methomyl	016752-77-5			2.6E+00 2.6E-01
Methoxy-5-nitroaniline, 2-	000099-59-2	6.2E-01	6.2E-03	
Methoxychlor	000072-43-5			5.1E-01 5.1E-02
Methoxyethanol Acetate, 2-	000110-49-6			2.0E-01 2.0E-02
Methoxyethanol, 2-	000109-86-4			1.0E-01 1.0E-02
Methyl Acetate	000079-20-9			1.0E+02 1.0E+01
Methyl Acrylate	000096-33-3			3.1E+00 3.1E-01
Methyl Ethyl Ketone	000078-93-3			6.1E+01 6.1E+00
Methyl Isobutyl Ketone	000108-10-1			8.2E+00 8.2E-01
Methyl Mercury	022967-92-6			1.0E-02 1.0E-03
Methyl Methacrylate	000080-62-6			8.2E+00 8.2E-01
Methyl Parathion	000298-00-0			2.6E-02 2.6E-03
Methyl Styrene (Mixed Isomers)	025013-15-4			6.1E-01 6.1E-02
Methyl hydrazine ⁽⁵⁾	000060-34-4	2.6E-02	2.6E-04	
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	

Nonradionuclides/groundwater/industrial

Table 3.2a. (continued)

Chemical	CASRN	Ingestion (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Methylcyclohexane	000108-87-2				
Methylene Chloride	000075-09-2	3.8E+00	3.8E-02	6.1E+00	6.1E-01
Methylene-bis(2-chloroaniline), 4,4'-	000101-14-4	2.2E-01	2.2E-03	7.2E-02	7.2E-03
Methylene-bis(N,N-dimethyl) Aniline, 4,4'-	000101-61-1	6.2E-01	6.2E-03		
Methylenebisbenzenamine, 4,4'-(⁵)	000101-77-9	1.1E-01	1.1E-03		
Methylenediphenyl Isocyanate, 4,4'-	000101-68-8				
Methylstyrene, Alpha-	000098-83-9			7.2E+00	7.2E-01
Methyltriethyl Lead	001762-28-3				
Metolachlor	051218-45-2			1.5E+01	1.5E+00
Metribuzin(⁵)	021087-64-9			2.6E+00	2.6E-01
Mirex(⁵)	002385-85-5	1.6E-02	1.6E-04	2.0E-02	2.0E-03
Molinate	002212-67-1			2.0E-01	2.0E-02
Molybdenum	007439-98-7			5.1E-01	5.1E-02
Monochloramine	010599-90-3			1.0E+01	1.0E+00
Monochlorobutanes	025154-42-1			4.1E+01	4.1E+00
Naled	000300-76-5			2.0E-01	2.0E-02
Naphthalene(⁶)	000091-20-3			3.6E+00	3.6E-01

Table 3.2a. (continued)

Chemical	CASRN	Ingestion (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Naphthalene, 1-Methyl	000090-12-0				
Naphthalene, 2-Methyl	000091-57-6				
Napropamide	015299-99-7			1.0E+01	1.0E+00
Niagara Blue 4B	002429-74-5				
Nickel Carbonyl	013463-39-3				
Nickel Refinery Dust	NA				
Nickel Soluble Salts	007440-02-0			2.0E+00	2.0E-01
Nickel Subsulfide	012035-72-2				
Nitrapyrin ⁽⁵⁾	001929-82-4			1.5E-01	1.5E-02
Nitrate	014797-55-8			1.6E+02	1.6E+01
Nitric Oxide ⁽⁵⁾	010102-43-9			1.0E+01	1.0E+00
Nitrite	014797-65-0			1.0E+01	1.0E+00
Nitroaniline, 2-	000088-74-4				
Nitrobenzene	000098-95-3			5.1E-02	5.1E-03
Nitrofurantoin	000067-20-9			7.2E+00	7.2E-01
Nitrofurazone	000059-87-0	1.9E-02	1.9E-04		
Nitrogen Dioxide ⁽⁵⁾	010102-44-0			1.0E+02	1.0E+01
Nitroguanidine	000556-88-7			1.0E+01	1.0E+00

Table 3.2a. (continued)

Chemical	CASRN	Ingestion (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Nitrophenol, 4-	000100-02-7				
Nitropropane, 2- ⁽⁵⁾	000079-46-9	3.0E-03	3.0E-05		
Nitroso-N-ethylurea, N-	000759-73-9	2.0E-04	2.0E-06		
Nitroso-N-methylurea, N-	000684-93-5				
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		
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		
Nitrosodiphenylamine, N-	000086-30-6	5.8E+00	5.8E-02		
Nitrosomethylethylamine, N-	010595-95-6	1.3E-03	1.3E-05		
Nitrosomethylvinylamine, N-	004549-40-0				
Nitrosopyrrolidine, N-	000930-55-2	1.4E-02	1.4E-04		
Nitrotoluene, 4-Amino-2-	000119-32-4				
Nitrotoluene, m-	000099-08-1			1.0E+00	1.0E-01
Nitrotoluene, o-	000088-72-2			1.0E+00	1.0E-01
Nitrotoluene, p-	000099-99-0			1.0E+00	1.0E-01
Norflurazon	027314-13-2			4.1E+00	4.1E-01

Table 3.2a. (continued)

Chemical	CASRN	Ingestion (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Nustar	085509-19-9			7.2E-02	7.2E-03
OCDD ⁽⁴⁾	003268-87-9	1.9E-04	1.9E-06		
OCDF ⁽⁴⁾	039001-02-0	1.9E-04	1.9E-06		
Octabromodiphenyl Ether	032536-52-0			3.1E-01	3.1E-02
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetra (HMX)	002691-41-0			5.1E+00	5.1E-01
Octamethylpyrophosphoramidate	000152-16-9			2.0E-01	2.0E-02
Octyl Phthalate, di-N-	000117-84-0			2.0E+00	2.0E-01
Oryzalin	019044-88-3			5.1E+00	5.1E-01
Oxadiazon	019666-30-9			5.1E-01	5.1E-02
Oxamyl	023135-22-0			2.6E+00	2.6E-01
Paclobutrazol	076738-62-0			1.3E+00	1.3E-01
Paraquat	001910-42-5			4.6E-01	4.6E-02
Parathion	000056-38-2			6.1E-01	6.1E-02
PeCDD, 2,3,7,8- ⁽⁴⁾	036088-22-9	3.8E-07	3.8E-09		
PeCDF, 1,2,3,7,8- ⁽⁴⁾	057117-41-6	3.8E-07	3.8E-09		
PeCDF, 2,3,4,7,8- ⁽⁴⁾	057117-31-4	3.8E-06	3.8E-08		
Pebulate	001114-71-2			5.1E+00	5.1E-01

Table 3.2a. (continued)

Chemical	CASRN	Ingestion (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Pendimethalin	040487-42-1			4.1E+00	4.1E-01
Pentabromodiphenyl Ether	032534-81-9			2.0E-01	2.0E-02
Pentachlorobenzene	000608-93-5			8.2E-02	8.2E-03
Pentachlorocyclopentadiene	025329-35-5				
Pentachloronitrobenzene	000082-68-8	1.1E-01	1.1E-03	3.1E-01	3.1E-02
Pentachlorophenol	000087-86-5	2.4E-01	2.4E-03	3.1E+00	3.1E-01
Pentyl Alcohol, N-	000071-41-0				
Permethrin	052645-53-1			5.1E+00	5.1E-01
Phenanthrene	000085-01-8				
Phenmedipham	013684-63-4			2.6E+01	2.6E+00
Phenol	000108-95-2			6.1E+01	6.1E+00
Phenylenediamine, m-	000108-45-2			6.1E-01	6.1E-02
Phenylenediamine, o-	000095-54-5	6.1E-01	6.1E-03		
Phenylenediamine, p-	000106-50-3			1.9E+01	1.9E+00
Phenylmercuric Acetate	000062-38-4			8.2E-03	8.2E-04
Phenylphenol, 2-	000090-43-7	1.5E+01	1.5E-01		
Phorate	000298-02-2			2.0E-02	2.0E-03
Phosmet	000732-11-6			2.0E+00	2.0E-01

Table 3.2a. (continued)

Chemical	CASRN	Ingestion (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Phosphine	007803-51-2			3.1E-02	3.1E-03
Phosphoric Acid	007664-38-2				
Phthalic Acid, P-	000100-21-0			1.0E+02	1.0E+01
Phthalic Anhydride	000085-44-9			2.0E+02	2.0E+01
Picloram	001918-02-1			7.2E+00	7.2E-01
Pirimiphos, Methyl	029232-93-7			1.0E+00	1.0E-01
Polybrominated Biphenyls	NA	3.2E-03	3.2E-05	7.2E-04	7.2E-05
Polychlorinated Biphenyls	001336-36-3	3.7E-03	3.7E-05		
Potassium Cyanide	000151-50-8			5.1E+00	5.1E-01
Potassium Silver Cyanide	000506-61-6			2.0E+01	2.0E+00
Prochloraz	067747-09-5	1.9E-01	1.9E-03	9.2E-01	9.2E-02
Profluralin	026399-36-0			6.1E-01	6.1E-02
Prometon	001610-18-0			1.5E+00	1.5E-01
Prometryn	007287-19-6			4.1E-01	4.1E-02
Propachlor	001918-16-7			1.3E+00	1.3E-01
Propanil	000709-98-8			5.1E-01	5.1E-02
Propargite	002312-35-8			2.0E+00	2.0E-01
Propargyl Alcohol	000107-19-7			2.0E-01	2.0E-02

Table 3.2a. (continued)

Chemical	CASRN	Ingestion (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Propazine	000139-40-2			2.0E+00	2.0E-01
Propham	000122-42-9			2.0E+00	2.0E-01
Propiconazole	060207-90-1			1.3E+00	1.3E-01
Propylene Glycol	000057-55-6			2.0E+03	2.0E+02
Propylene Glycol Monoethyl Ether	001569-02-4			7.2E+01	7.2E+00
Propylene Glycol Monomethyl Ether	000107-98-2			7.2E+01	7.2E+00
Propylene Oxide	000075-56-9	1.2E-01	1.2E-03		
Pursuit	081335-77-5			2.6E+01	2.6E+00
Pydrin	051630-58-1			2.6E+00	2.6E-01
Pyrene	000129-00-0			3.1E+00	3.1E-01
Pyridine	000110-86-1			1.0E-01	1.0E-02
Quinalphos	013593-03-8			5.1E-02	5.1E-03
Quinoline	000091-22-5	2.4E-03	2.4E-05		
Refractory Ceramic Fibers	NA				
Resmethrin	010453-86-8			3.1E+00	3.1E-01
Ronnel	000299-84-3			5.1E+00	5.1E-01
Rotenone	000083-79-4			4.1E-01	4.1E-02
Savey	078587-05-0			2.6E+00	2.6E-01

Table 3.2a. (continued)

Chemical	CASRN	Ingestion (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Selenious Acid	007783-00-8			5.1E-01	5.1E-02
Selenite	014124-67-5				
Selenium	007782-49-2			5.1E-01	5.1E-02
Selenium Sulfide	007446-34-6				
Selenourea	000630-10-4			5.1E-01	5.1E-02
Sethoxydim	074051-80-2			9.2E+00	9.2E-01
Silver	007440-22-4			5.1E-01	5.1E-02
Silver Cyanide	000506-64-9			1.0E+01	1.0E+00
Simazine	000122-34-9	2.4E-01	2.4E-03	5.1E-01	5.1E-02
Sodium	007440-23-5				
Sodium Acifluorfen	062476-59-9			1.3E+00	1.3E-01
Sodium Azide	026628-22-8			4.1E-01	4.1E-02
Sodium Cyanide	000143-33-9			4.1E+00	4.1E-01
Sodium Diethyldithiocarbamate	000148-18-5	1.1E-01	1.1E-03	3.1E+00	3.1E-01
Sodium Fluoroacetate	000062-74-8			2.0E-03	2.0E-04
Sodium Metavanadate	013718-26-8			1.0E-01	1.0E-02
Stirofos (Tetrachlorovinphos)	000961-11-5	1.2E+00	1.2E-02	3.1E+00	3.1E-01
Strontium, Stable	007440-24-6			6.1E+01	6.1E+00

Table 3.2a. (continued)

Chemical	CASRN	Ingestion (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Strychnine	000057-24-9			3.1E-02	3.1E-03
Styrene ⁽⁶⁾	000100-42-5			2.0E+01	2.0E+00
Sulfate	014808-79-8				
Systhane	088671-89-0			2.6E+00	2.6E-01
TCDD, 2,3,7,8- ⁽⁴⁾	001746-01-6	1.9E-07	1.9E-09		
TCDF, 2,3,7,8- ⁽⁴⁾	051207-31-9	1.9E-06	1.9E-08		
TCMTB	021564-17-0			3.1E+00	3.1E-01
Tebuthiuron	034014-18-1			7.2E+00	7.2E-01
Temephos	003383-96-8			2.0E+00	2.0E-01
Terbacil	005902-51-2			1.3E+00	1.3E-01
Terbufos	013071-79-9			2.6E-03	2.6E-04
Terbutryn	000886-50-0			1.0E-01	1.0E-02
Tetrabutyl Lead	001920-90-7				
Tetrachlorobenzene, 1,2,4,5-	000095-94-3			3.1E-02	3.1E-03
Tetrachloroethane, 1,1,1,2-	000630-20-6	1.1E+00	1.1E-02	3.1E+00	3.1E-01
Tetrachloroethane, 1,1,2,2-	000079-34-5	1.4E-01	1.4E-03		
Tetrachloroethylene ⁽⁶⁾	000127-18-4	5.5E-01	5.5E-03	1.0E+00	1.0E-01
Tetrachlorophenol, 2,3,4,6-	000058-90-2			3.1E+00	3.1E-01

Table 3.2a. (continued)

Chemical	CASRN	Ingestion (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Tetrachlorotoluene, p- alpha, alpha, alpha-	005216-25-1	1.4E-03	1.4E-05		
Tetraethyl Dithiopyrophosphate	003689-24-5			5.1E-02	5.1E-03
Tetraethyl Lead	000078-00-2				
Tetrafluoroethane, 1,1,1,2-	000811-97-2				
Tetramethyl Lead	000075-74-1				
Tetrapropyl Lead	003440-75-3				
Thallic Oxide ⁽⁵⁾	001314-32-5			7.2E-03	7.2E-04
Thallium (I) Nitrate	010102-45-1			9.2E-03	9.2E-04
Thallium (Soluble Salts)	007440-28-0				
Thallium Acetate	000563-68-8			9.2E-03	9.2E-04
Thallium Carbonate	006533-73-9			8.2E-03	8.2E-04
Thallium Chloride	007791-12-0			8.2E-03	8.2E-04
Thallium Selenite ⁽⁵⁾	012039-52-0			9.2E-03	9.2E-04
Thallium Sulfate	007446-18-6			8.2E-03	8.2E-04
Thiobencarb	028249-77-6			1.0E+00	1.0E-01
Thiofanox	039196-18-4			3.1E-02	3.1E-03
Thiophanate, Methyl	023564-05-8			8.2E+00	8.2E-01

Table 3.2a. (continued)

Chemical	CASRN	Ingestion (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Thiram	000137-26-8			5.1E-01	5.1E-02
Thorium	007440-29-1				
Tin	007440-31-5			6.1E+01	6.1E+00
Titanium	007440-32-6				
Toluene ⁽⁶⁾	000108-88-3			2.0E+01	2.0E+00
Toluene diisocyanate mixture (TDI)	026471-62-5				
Toluene-2,4-diamine	000095-80-7	8.9E-03	8.9E-05		
Toluene-2,5-diamine	000095-70-5			6.1E+01	6.1E+00
Toluene-2,6-diamine	000823-40-5			2.0E+01	2.0E+00
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	7.7E-02
Triallate	002303-17-5			1.3E+00	1.3E-01
Triasulfuron	082097-50-5			1.0E+00	1.0E-01
Tribromobenzene, 1,2,4-	000615-54-3			5.1E-01	5.1E-02
Tribromochloromethane	000594-15-0				
Tribromodiphenyl Ether	049690-94-0				

Table 3.2a. (continued)

Chemical	CASRN	Ingestion (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Tributyltin Oxide	000056-35-9			3.1E-03	3.1E-04
Trichloro-1,2,2-trifluoroethane, 1,1,2-	000076-13-1			3.1E+03	3.1E+02
Trichloro-2'-hydroxydiphenylether	003380-34-5				
Trichloroacetic Acid					
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	1.0E-01
Trichloroethane, 1,1,1- ⁽⁵⁾	000071-55-6			9.2E+00	9.2E-01
Trichloroethane, 1,1,2-	000079-00-5	5.0E-01	5.0E-03	4.1E-01	4.1E-02
Trichloroethylene ⁽³⁾	000079-01-6	2.6E+00	2.6E-02		
Trichlorofluoromethane	000075-69-4			3.1E+01	3.1E+00
Trichlorophenol, 2,4,5-	000095-95-4			1.0E+01	1.0E+00
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	8.2E-02
Trichlorophenoxyacetic Acid, 2,4,5-	000093-76-5			1.0E+00	1.0E-01
Trichloropropane, 1,1,2-	000598-77-6			5.1E-01	5.1E-02
Trichloropropane, 1,2,3-	000096-18-4	4.1E-03	4.1E-05	6.1E-01	6.1E-02

Table 3.2a. (continued)

Chemical	CASRN	Ingestion (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Trichloropropene, 1,2,3-	000096-19-5			5.1E-01	5.1E-02
Trichlorotoluene, 2,3,6-	002077-46-5				
Trichlorotoluene, alpha 2,6-	002014-83-7				
Tridiphan	058138-08-2			3.1E-01	3.1E-02
Triethyl Lead	005224-23-7				
Triethylamine	000121-44-8				
Trifluralin	001582-09-8	3.7E+00	3.7E-02	7.7E-01	7.7E-02
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	5.1E-04
Trinitrophenylmethylnitramine	000479-45-8			1.0E+00	1.0E-01
Trinitrotoluene, 2,4,6-	000118-96-7	9.5E-01	9.5E-03	5.1E-02	5.1E-03
Tripropyl Lead	006618-03-7				
Uranium (Soluble Salts)	NA			3.1E-01	3.1E-02
Vanadium Pentoxide	001314-62-1			9.2E-01	9.2E-02
Vanadium Sulfate	036907-42-3			2.0E+00	2.0E-01
Vanadium, Metallic	007440-62-2			7.2E-01	7.2E-02

Table 3.2a. (continued)

Chemical	CASRN	Ingestion (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Vanadyl Sulfate	027774-13-6			2.0E+00	2.0E-01
Vernolate	001929-77-7			1.0E-01	1.0E-02
Vinclozolin	050471-44-8			2.6E+00	2.6E-01
Vinyl Acetate	000108-05-4			1.0E+02	1.0E+01
Vinyl Bromide	000593-60-2				
Vinyl Chloride ⁽⁶⁾	000075-01-4	1.5E-02	1.5E-04		
Warfarin	000081-81-2			3.1E-02	3.1E-03
White Phosphorus	007723-14-0			2.0E-03	2.0E-04
Xylene, Mixture ⁽⁶⁾	001330-20-7			2.0E+02	2.0E+01
Xylene, P- ⁽⁶⁾	000106-42-3				
Xylene, m- ⁽⁶⁾	000108-38-3			2.0E+02	2.0E+01
Xylene, o- ⁽⁶⁾	000095-47-6			2.0E+02	2.0E+01
Zinc (Metallic)	007440-66-6			3.1E+01	3.1E+00
Zinc Cyanide	000557-21-1			5.1E+00	5.1E-01
Zinc Phosphide	001314-84-7			3.1E-02	3.1E-03
Zineb	012122-67-7			5.1E+00	5.1E-01
Zirconium	007440-67-7				

Table 3.2a. (continued)

Notes:

- * By definition, 1 L (water) = 1.0E + 06 mg (water). Therefore, a limit of 1.0E + 06 mg/L was used for any PRG that was calculated to be above this limit.
- (1) The same oral slope factor as used for polychlorinated biphenyls.
- (2) The PRG was calculated considering *Supplemental Guidance from RAGS: Region 4 Bulletins, Human Health Risk Assessment* (Interim 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.
- (3) The toxicity values for trichloroethylene have been withdrawn from IRIS and HEAST pending further investigation. However, the most recent toxicity values have been used to calculate the PRG.
- (4) The PRG was calculated considering *Supplemental Guidance from RAGS: Region 4 Bulletins, Human Health Risk Assessment* (Interim Guidance) from EPA (November 1995). The slope factors for chemicals so marked indicate that a TEF methodology was used for chlorinated dioxin and furan congeners based on each compound's relative potency to the potency of 2,3,7,8-tetrachlorodibenzodioxin (TCDD). The following TEFs were used to convert each slope factor to an equivalent slope factor of 2,3,7,8-TCDD: (1) 2,3,7,8-TCDD, TEF = 1.0; (2) 2,3,7,8-PeCDD, TEF = 0.5; (3) 2,3,7,8-HxCDD, TEF = 0.1; (4) 2,3,7,8-HpCDD, TEF = 0.01; (5) OCDD, TEF = 0.001; (6) 2,3,7,8-TCDF, TEF = 0.1; (7) 1,2,3,7,8-PeCDF, TEF = 0.5; (8) 2,3,4,7,8-PeCDF, TEF = 0.05; (9) 2,3,7,8-HxCDF, TEF = 0.1; (10) 2,3,7,8-HpCDF, TEF = 0.01; and (11) OCDF, TEF = 0.001.
- (5) Toxicity values for these chemicals have been withdrawn from IRIS and HEAST pending further investigation. However, the most recent toxicity values have been used to calculate the PRG.
- (6) Toxicity values for these chemicals were obtained from the Superfund Health Risk Technical Support Center.

100-100000

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**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	015760-04-0	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 [†]	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 [†]	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 [†]	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 [†]	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 [†]	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 [†]	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 [†]	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 [†]	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 [†]	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 [†]	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 ¹	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 [†]	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 [†]	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 [†]	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 [†]	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

Note:

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

Chemical	CASRN	Ingestion (mg/kg)*				Inhalation (mg/kg)*†				Dermal (mg/kg)*				Ingestion + Inhalation + Dermal (mg/kg)*†‡			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
ALAR	001596-84-5			3.1E+05	3.1E+04							2.4E+05	2.4E+04			1.4E+05	1.4E+04
Acenaphthene	000083-32-9			1.2E+05	1.2E+04							6.0E+04	6.0E+03			4.0E+04	4.0E+03
Acenaphthylene	000208-96-8																
Acephate	030560-19-1	6.6E+04	6.6E+02	8.2E+03	8.2E+02					5.2E+04	5.2E+02	6.5E+03	6.5E+02	2.9E+04	2.9E+02	3.6E+03	3.6E+02
Acetaldehyde	000075-07-0					1.1E+04	1.1E+02	7.9E+02	7.9E+01								
Acetochlor	034256-82-1			4.1E+04	4.1E+03							3.2E+04	3.2E+03			1.8E+04	1.8E+03
Acetone	000067-64-1			2.0E+05	2.0E+04							2.7E+05	2.7E+04			1.2E+05	1.2E+04
Acetone Cyanohydrin	000075-86-5			1.6E+03	1.6E+02			1.0E+06	1.0E+06			1.3E+03	1.3E+02			7.2E+02	7.2E+01
Acetonitrile	000075-05-8			1.2E+04	1.2E+03			1.0E+06	1.0E+06			1.6E+04	1.6E+03			6.9E+03	6.9E+02
Acetophenone ^(§)	000098-86-2			2.0E+05	2.0E+04			1.3E+05	1.3E+04			2.6E+05	2.6E+04			6.0E+04	6.0E+03
Acrolein ^(§)	000107-02-8			4.1E+04	4.1E+03			3.9E-01	3.9E-02			5.2E+04	5.2E+03			3.9E-01	3.9E-02
Acrylamide	000079-06-1	1.3E+02	1.3E+00	4.1E+02	4.1E+01	1.0E+06	1.4E+04			1.0E+02	1.0E+00	3.2E+02	3.2E+01	5.6E+01	5.6E-01	1.8E+02	1.8E+01
Acrylic Acid	000079-10-7			1.0E+06	1.0E+05			1.0E+06	6.3E+05			8.1E+05	8.1E+04			4.2E+05	4.2E+04
Acrylonitrile	000107-13-1	1.1E+03	1.1E+01	2.0E+03	2.0E+02	2.2E+01	2.2E-01	1.1E+01	1.1E+00	1.3E+03	1.3E+01	2.6E+03	2.6E+02	2.1E+01	2.1E-01	1.1E+01	1.1E+00
Alachlor	015972-60-8	7.2E+03	7.2E+01	2.0E+04	2.0E+03					5.7E+03	5.7E+01	1.6E+04	1.6E+03	3.2E+03	3.2E+01	9.0E+03	9.0E+02
Aldicarb	000116-06-3			2.0E+03	2.0E+02							1.6E+03	1.6E+02			9.0E+02	9.0E+01
Aldicarb Sulfone	001646-88-4			2.0E+03	2.0E+02							1.6E+03	1.6E+02			9.0E+02	9.0E+01
Aldrin	000309-00-2	3.4E+01	3.4E-01	6.1E+01	6.1E+00	3.6E+05	3.6E+03			2.7E+01	2.7E-01	4.9E+01	4.9E+00	1.5E+01	1.5E-01	2.7E+01	2.7E+00
Allyl	074223-64-6			5.1E+05	5.1E+04							4.0E+05	4.0E+04			2.3E+05	2.3E+04
Allyl Alcohol	000107-18-6			1.0E+04	1.0E+03							1.3E+04	1.3E+03			5.7E+03	5.7E+02
Allyl Chloride ^(§)	000107-05-1			1.0E+05	1.0E+04			1.4E+01	1.4E+00			1.3E+05	1.3E+04			1.4E+01	1.4E+00
Aluminum	007429-90-5																
Aluminum Phosphide	020859-73-8			8.2E+02	8.2E+01							2.6E+03	2.6E+02			6.2E+02	6.2E+01

Table 3.2c. (continued)

Chemical	CASRN	Ingestion (mg/kg)*				Inhalation (mg/kg)**				Dermal (mg/kg)*				Ingestion + Inhalation + Dermal (mg/kg)**v			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Amdro	067485-29-4			6.1E+02	6.1E+01							4.9E+02	4.9E+01			2.7E+02	2.7E+01
Ametryn	000834-12-8			1.8E+04	1.8E+03							1.5E+04	1.5E+03			8.1E+03	8.1E+02
Aminophenol, m-	000591-27-5			1.4E+05	1.4E+04							1.1E+05	1.1E+04			6.3E+04	6.3E+03
Aminopyridine, 4-	000504-24-5			4.1E+01	4.1E+00							3.2E+01	3.2E+00			1.8E+01	1.8E+00
Amitraz	033089-61-1			5.1E+03	5.1E+02							4.0E+03	4.0E+02			2.3E+03	2.3E+02
Ammonia	007664-41-7							1.0E+06	1.0E+06								
Ammonium Sulfamate	007773-06-0			4.1E+05	4.1E+04							1.0E+06	1.3E+05			3.1E+05	3.1E+04
Aniline	000062-53-3	1.0E+05	1.0E+03					1.0E+06	6.3E+05	7.9E+04	7.9E+02			4.4E+04	4.4E+02		
Anthracene	000120-12-7			6.1E+05	6.1E+04							7.4E+05	7.4E+04			3.3E+05	3.3E+04
Antimony (metallic)	007440-36-0			8.2E+02	8.2E+01							2.6E+02	2.6E+01			2.0E+02	2.0E+01
Antimony Pentoxide	001314-60-9			1.0E+03	1.0E+02							3.2E+03	3.2E+02			7.8E+02	7.8E+01
Antimony Potassium Tartrate	000304-61-0			1.8E+03	1.8E+02							5.8E+03	5.8E+02			1.4E+03	1.4E+02
Antimony Tetroxide	001332-81-6			8.2E+02	8.2E+01							2.6E+03	2.6E+02			6.2E+02	6.2E+01
Antimony Trioxide	001309-64-4			8.2E+02	8.2E+01			1.0E+06	1.3E+05			2.6E+03	2.6E+02			6.2E+02	6.2E+01
Apollo	074115-24-5			2.7E+04	2.7E+03							2.1E+04	2.1E+03			1.2E+04	1.2E+03
Aramite	000140-57-8	2.3E+04	2.3E+02	1.0E+05	1.0E+04	1.0E+06	1.0E+06			1.8E+04	1.8E+02	8.1E+04	8.1E+03	1.0E+04	1.0E+02	4.5E+04	4.5E+03
Aroclor 1016	012674-11-2			1.4E+02	1.4E+01							3.4E+01	3.4E+00			2.7E+01	2.7E+00
Aroclor 1221 ^(b)	011104-28-2	7.4E+01	7.4E-01							1.8E+01	1.8E-01			1.4E+01	1.4E-01		
Aroclor 1232 ^(b)	011141-16-5	7.4E+01	7.4E-01							1.8E+01	1.8E-01			1.4E+01	1.4E-01		
Aroclor 1242 ^(b)	053469-21-9	7.4E+01	7.4E-01							1.8E+01	1.8E-01			1.4E+01	1.4E-01		
Aroclor 1248 ^(b)	012672-29-6	7.4E+01	7.4E-01							1.8E+01	1.8E-01			1.4E+01	1.4E-01		
Aroclor 1254	011097-69-1			4.1E+01	4.1E+00							9.7E+00	9.7E-01			7.8E+00	7.8E-01
Aroclor 1260 ^(b)	011096-82-5	7.4E+01	7.4E-01							1.8E+01	1.8E-01			1.4E+01	1.4E-01		

Table 3.2c. (continued)

Chemical	CASRN	Ingestion (mg/kg)*				Inhalation (mg/kg)* ^v				Dermal (mg/kg)*				Ingestion + Inhalation + Dermal (mg/kg)* ^u			
		10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Arsenic Salts	NA																
Arsenic, Inorganic	007440-38-2	3.8E+02	3.8E+00	6.1E+02	6.1E+01	1.2E+05	1.2E+03			2.5E+03	2.5E+01	4.0E+03	4.0E+02	3.3E+02	3.3E+00	5.3E+02	5.3E+01
Arsine	007784-42-1							3.1E+05	3.1E+04								
Asbestos	001332-21-4																
Assure	076578-14-8			1.8E+04	1.8E+03							1.5E+04	1.5E+03			8.1E+03	8.1E+02
Asulam	003337-71-1			1.0E+05	1.0E+04							8.1E+04	8.1E+03			4.5E+04	4.5E+03
Atrazine	001912-24-9	2.6E+03	2.6E+01	7.2E+04	7.2E+03					2.0E+03	2.0E+01	5.7E+04	5.7E+03	1.1E+03	1.1E+01	3.2E+04	3.2E+03
Avermectin B1	065195-55-3			8.2E+02	8.2E+01							6.5E+02	6.5E+01			3.6E+02	3.6E+01
Azobenzene	000103-33-3	5.2E+03	5.2E+01			1.0E+06	5.6E+05			4.1E+03	4.1E+01			2.3E+03	2.3E+01		
Barium	007440-39-3			1.4E+05	1.4E+04			1.0E+06	3.1E+05			1.6E+05	1.6E+04			7.3E+04	7.3E+03
Barium Cyanide	000542-62-1			2.0E+05	2.0E+04							6.5E+05	6.5E+04			1.6E+05	1.6E+04
Baygon	000114-26-1			8.2E+03	8.2E+02							6.5E+03	6.5E+02			3.6E+03	3.6E+02
Bayleton	043121-43-3			6.1E+04	6.1E+03							4.9E+04	4.9E+03			2.7E+04	2.7E+03
Baythroid	068359-37-5			5.1E+04	5.1E+03							4.0E+04	4.0E+03			2.3E+04	2.3E+03
Benefin	001861-40-1			6.1E+05	6.1E+04							4.9E+05	4.9E+04			2.7E+05	2.7E+04
Benomyl	017804-35-2			1.0E+05	1.0E+04							8.1E+04	8.1E+03			4.5E+04	4.5E+03
Bentazon	025057-89-0			5.1E+03	5.1E+02							4.0E+03	4.0E+02			2.3E+03	2.3E+02
Benz[a]anthracene ⁽²⁾	000056-55-3	7.8E+02	7.8E+00			1.0E+06	2.0E+05			3.8E+02	3.8E+00			2.6E+02	2.6E+00		
Benzaldehyde	000100-52-7			2.0E+05	2.0E+04							2.6E+05	2.6E+04			1.1E+05	1.1E+04
Benzene	000071-43-2	2.0E+04	2.0E+02			5.0E+02	9.3E+00			3.0E+04	3.0E+02			5.0E+02	8.6E+00		
Benzene Hexachloride	NA																
Benzene, Ethyldimethyl	NA																
Benzene, Ethylmethyl	NA																

Table 3.2c. (continued)

Chemical	CASRN	Ingestion (mg/kg)*				Inhalation (mg/kg)*†				Dermal (mg/kg)*				Ingestion + Inhalation + Dermal (mg/kg)*†‡			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Benzene, Methylpropenyl	NA																
Benzene, Methylpropyl	NA																
Benzene, Trimethyl	025551-13-7																
Benzenethiol	000108-98-5			2.0E+01	2.0E+00							1.6E+01	1.6E+00			9.0E+00	9.0E-01
Benzidine	000092-87-5	2.5E+00	2.5E-02	6.1E+03	6.1E+02	2.7E+04	2.7E+02			3.1E+00	3.1E-02	7.8E+03	7.8E+02	1.4E+00	1.4E-02	3.4E+03	3.4E+02
Benzo[a]pyrene ⁽²⁾	000050-32-8	7.8E+01	7.8E-01			1.0E+06	2.0E+04			3.9E+01	3.9E-01			2.6E+01	2.6E-01		
Benzo[b]fluoranthene ⁽²⁾	000205-99-2	7.8E+02	7.8E+00			1.0E+06	2.0E+05			3.8E+02	3.8E+00			2.6E+02	2.6E+00		
Benzo[g,h,i]perylene	000191-24-2																
Benzo[k]fluoranthene ⁽²⁾	000207-08-9	7.8E+03	7.8E+01			1.0E+06	1.0E+06			3.8E+03	3.8E+01			2.6E+03	2.6E+01		
Benzoic Acid	000065-85-0			1.0E+06	8.2E+05							1.0E+06	1.0E+06			1.0E+06	5.0E+05
Benzotrichloride	000098-07-7	4.4E+01	4.4E-01							3.5E+01	3.5E-01			1.9E+01	1.9E-01		
Benzyl Alcohol	000100-51-6			6.1E+05	6.1E+04							6.4E+05	6.4E+04			3.1E+05	3.1E+04
Benzyl Chloride	000100-44-7	3.4E+03	3.4E+01							4.3E+03	4.3E+01			1.9E+03	1.9E+01		
Beryllium	007440-41-7	1.3E+02	1.3E+00	1.0E+04	1.0E+03	7.3E+05	7.3E+03			2.1E+01	2.1E-01	1.6E+03	1.6E+02	1.8E+01	1.8E-01	1.4E+03	1.4E+02
Bidrin	000141-66-2			2.0E+02	2.0E+01							1.6E+02	1.6E+01			9.0E+01	9.0E+00
Biphenanthrin	082657-04-3			3.1E+04	3.1E+03							2.4E+04	2.4E+03			1.4E+04	1.4E+03
Biphenyl, 1,1'-	000092-52-4			1.0E+05	1.0E+04							8.1E+04	8.1E+03			4.5E+04	4.5E+03
Bis(2-chloro-1-methylethyl)ether (Technical)	000108-60-1	8.2E+03	8.2E+01			3.5E+02	5.7E+01			1.0E+04	1.0E+02			3.5E+02	2.5E+01		
Bis(2-chloroethoxy)methane	000111-91-1																
Bis(2-chloroethyl)ether	000111-44-4	5.2E+02	5.2E+00			2.3E+02	2.3E+00			6.6E+02	6.6E+00			1.3E+02	1.3E+00		
Bis(2-chloroisopropyl)ether	039638-32-9			8.2E+04	8.2E+03							1.0E+05	1.0E+04			4.6E+04	4.6E+03

Table 3.2c. (continued)

Chemical	CASRN	Ingestion (mg/kg)*				Inhalation (mg/kg)**				Dermal (mg/kg)*				Ingestion + Inhalation + Dermal (mg/kg)*†‡			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Bis(2-ethyl-hexyl)phthalate ⁽⁶⁾	000117-81-7	4.1E+04	4.1E+02	4.1E+04	4.1E+03					1.2E+04	1.2E+02	1.2E+04	1.2E+03	9.4E+03	9.4E+01	9.4E+03	9.4E+02
Bis(chloromethyl)ether	000542-88-1	2.6E+00	2.6E-02			7.4E-01	7.4E-03			3.3E+00	3.3E-02			4.9E-01	4.9E-03		
Bisphenol A	000080-05-7			1.0E+05	1.0E+04							8.1E+04	8.1E+03			4.5E+04	4.5E+03
Boron And Borates Only	007440-42-8			1.8E+05	1.8E+04			1.0E+06	1.0E+06			1.0E+06	2.6E+05			1.7E+05	1.7E+04
Boron Trifluoride	007637-07-2							1.0E+06	4.4E+05								
Bromochloromethane	000074-97-5																
Bromodichloromethane	000075-27-4	9.2E+03	9.2E+01	4.1E+04	4.1E+03					1.4E+04	1.4E+02	6.3E+04	6.3E+03	5.6E+03	5.6E+01	2.5E+04	2.5E+03
Bromodiphenyl Ether, p-	000101-55-3																
Bromoform	000075-25-2	7.2E+04	7.2E+02	4.1E+04	4.1E+03	1.0E+06	1.0E+06			6.9E+04	6.9E+02	3.9E+04	3.9E+03	3.5E+04	3.5E+02	2.0E+04	2.0E+03
Bromomethane ⁽⁶⁾	000074-83-9			2.9E+03	2.9E+02			2.4E+01	2.4E+00			3.6E+03	3.6E+02			2.4E+01	2.4E+00
Bromophos	002104-96-3			1.0E+04	1.0E+03							8.1E+03	8.1E+02			4.5E+03	4.5E+02
Bromotrichloromethane	000075-62-7																
Bromoxynil	001689-84-5			4.1E+04	4.1E+03							3.2E+04	3.2E+03			1.8E+04	1.8E+03
Bromoxynil Octanoate	001689-99-2			4.1E+04	4.1E+03							3.2E+04	3.2E+03			1.8E+04	1.8E+03
Butadiene, 1,3-	000106-99-0					4.8E+00	4.8E-02										
Butanol, N-	000071-36-3			2.0E+05	2.0E+04							1.6E+05	1.6E+04			9.0E+04	9.0E+03
Butanone-2, 4-chloro-4,4-difluoro	NA																
Butyl Benzyl Phthalate	000085-68-7			4.1E+05	4.1E+04							3.9E+05	3.9E+04			2.0E+05	2.0E+04
Butylate	002008-41-5			1.0E+05	1.0E+04							8.1E+04	8.1E+03			4.5E+04	4.5E+03
Butylchloride, t-	000507-20-0																
Butylphthalyl Butylglycolate	000085-70-1			1.0E+06	2.0E+05							1.0E+06	1.6E+05			9.0E+05	9.0E+04
Cacodylic Acid	000075-60-5			6.1E+03	6.1E+02							4.9E+03	4.9E+02			2.7E+03	2.7E+02

3-305

Table 3.2c. (continued)

Chemical	CASRN	Ingestion (mg/kg)*				Inhalation (mg/kg)**				Dermal (mg/kg)*				Ingestion + Inhalation + Dermal (mg/kg)**			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Cadmium (Diet)	007440-43-9			2.0E+03	2.0E+02	1.0E+06	1.0E+04					3.2E+01	3.2E+00			3.2E+01	3.2E+00
Calcium Cyanide	000592-01-8			8.2E+04	8.2E+03							2.6E+05	2.6E+04			6.2E+04	6.2E+03
Caprolactam	000105-60-2			1.0E+06	1.0E+05							8.1E+05	8.1E+04			4.5E+05	4.5E+04
Captafol	002425-06-1	6.7E+04	6.7E+02	4.1E+03	4.1E+02					5.3E+04	5.3E+02	3.2E+03	3.2E+02	2.9E+04	2.9E+02	1.8E+03	1.8E+02
Caplan	000133-06-2	1.6E+05	1.6E+03	2.7E+05	2.7E+04					1.3E+05	1.3E+03	2.1E+05	2.1E+04	7.2E+04	7.2E+02	1.2E+05	1.2E+04
Carbaryl	000063-25-2			2.0E+05	2.0E+04							1.6E+05	1.6E+04			9.0E+04	9.0E+03
Carbazole	000086-74-8	2.9E+04	2.9E+02							3.2E+04	3.2E+02			1.5E+04	1.5E+02		
Carbofuran	001563-66-2			1.0E+04	1.0E+03							8.1E+03	8.1E+02			4.5E+03	4.5E+02
Carbon Disulfide	000075-15-0			2.0E+05	2.0E+04				1.7E+03			8.2E+03	8.2E+02			1.7E+03	5.6E+02
Carbon Tetrachloride ⁽⁶⁾	000056-23-5	4.4E+03	4.4E+01	1.4E+03	1.4E+02	5.1E+02	5.1E+00			4.5E+03	4.5E+01	1.5E+03	1.5E+02	4.2E+02	4.2E+00	7.3E+02	7.3E+01
Carbosulfan	005285-14-8			2.0E+04	2.0E+03							1.6E+04	1.6E+03			9.0E+03	9.0E+02
Carboxin	005234-68-4			2.0E+05	2.0E+04							1.6E+05	1.6E+04			9.0E+04	9.0E+03
Chloral	000075-87-6			4.1E+03	4.1E+02							3.2E+03	3.2E+02			1.8E+03	1.8E+02
Chloramben	000133-90-4			3.1E+04	3.1E+03							2.4E+04	2.4E+03			1.4E+04	1.4E+03
Chloranil	000118-75-2	1.4E+03	1.4E+01							1.1E+03	1.1E+01			6.3E+02	6.3E+00		
Chlordane ⁽⁶⁾	000057-74-9	4.4E+02	4.4E+00	1.2E+02	1.2E+01	1.0E+06	4.7E+04			3.5E+02	3.5E+00	9.7E+01	9.7E+00	1.9E+02	1.9E+00	5.4E+01	5.4E+00
Chloride	016887-00-6																
Chlorimuron, Ethyl-	090982-32-4			4.1E+04	4.1E+03							3.2E+04	3.2E+03			1.8E+04	1.8E+03
Chlorine	007782-50-5			2.0E+05	2.0E+04							6.5E+05	6.5E+04			1.6E+05	1.6E+04
Chlorine Dioxide	010049-04-4								1.0E+06								
Chlorite (Sodium Salt)	007758-19-2																
Chloro-1,1-difluoroethane, 1-	000075-68-3								1.0E+06								
Chloro-1,3-butadiene, 2-	000126-99-8			4.1E+04	4.1E+03				4.4E+02			5.2E+04	5.2E+03			4.3E+02	4.3E+01

Table 3.2c. (continued)

Chemical	CASRN	Ingestion (mg/kg)*				Inhalation (mg/kg)*†				Dermal (mg/kg)*				Ingestion + Inhalation + Dermal (mg/kg)†*‡			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Chloro-2-methylaniline HCl, 4-	003165-93-3	1.2E+03	1.2E+01							9.8E+02	9.8E+00			5.5E+02	5.5E+00		
Chloro-2-methylaniline, 4-	000095-69-2	9.9E+02	9.9E+00							7.8E+02	7.8E+00			4.4E+02	4.4E+00		
Chloroacetic Acid	000079-11-8			4.1E+03	4.1E+02							3.2E+03	3.2E+02			1.8E+03	1.8E+02
Chloroacetophenone, 2-	000532-27-4							1.9E+05	1.9E+04								
Chloroaniline, p-	000106-47-8			8.2E+03	8.2E+02							6.5E+03	6.5E+02			3.6E+03	3.6E+02
Chlorobenzene ⁽⁶⁾	000108-90-7			4.1E+04	4.1E+03			5.1E+02	1.4E+02			2.0E+04	2.0E+03			5.1E+02	1.3E+02
Chlorobenzilate	000510-15-6	2.1E+03	2.1E+01	4.1E+04	4.1E+03	1.0E+06	2.3E+05			1.7E+03	1.7E+01	3.2E+04	3.2E+03	9.4E+02	9.4E+00	1.8E+04	1.8E+03
Chlorobenzoic Acid, p-	000074-11-3			4.1E+05	4.1E+04							3.2E+05	3.2E+04			1.8E+05	1.8E+04
Chlorobenzotrifluoride, 4-	000098-56-6			4.1E+04	4.1E+03							3.2E+04	3.2E+03			1.8E+04	1.8E+03
Chlorobutane, 1-	000109-69-3			8.2E+05	8.2E+04							1.0E+06	1.0E+05			4.6E+05	4.6E+04
Chlorobutane, 2-	000078-86-4																
Chlorocyclopentadiene	041851-50-7																
Chlorodibromoethane	073506-94-2	6.8E+03	6.8E+01							8.6E+03	8.6E+01			3.8E+03	3.8E+01		
Chlorodifluoromethane	000075-45-6							1.0E+06	1.0E+06								
Chloroform ⁽⁶⁾	000067-66-3	9.4E+04	9.4E+02	2.0E+04	2.0E+03	3.1E+02	3.1E+00			3.0E+04	3.0E+02	6.5E+03	6.5E+02	3.1E+02	3.1E+00	1.5E+03	4.9E+02
Chloromethane ⁽⁶⁾	000074-87-3	4.4E+04	4.4E+02			7.4E+02	7.4E+00			5.6E+04	5.6E+02			7.2E+02	7.2E+00		
Chloromethyl Methyl Ether	000107-30-2																
Chloronaphthalene, Beta-	000091-58-7			1.6E+05	1.6E+04							2.1E+05	2.1E+04			9.1E+04	9.1E+03
Chloronitrobenzene, o-	000088-73-3	2.3E+04	2.3E+02							2.9E+04	2.9E+02			1.3E+04	1.3E+02		
Chloronitrobenzene, p-	000121-73-3	3.2E+04	3.2E+02							4.0E+04	4.0E+02			1.8E+04	1.8E+02		
Chlorophenol, 2-	000095-57-8			1.0E+04	1.0E+03							1.3E+04	1.3E+03			5.7E+03	5.7E+02

Table 3.2c. (continued)

Chemical	CASRN	Ingestion (mg/kg)*				Inhalation (mg/kg)* ^v				Dermal (mg/kg)*				Ingestion + Inhalation + Dermal (mg/kg)* ^v			
		10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Chlorophenyl Methyl Sulfide, p-	000123-09-1																
Chlorophenyl Methyl Sulfoxide	000934-73-6																
Chloropropane, 2-	000075-29-6							1.6E+03	2.2E+02								
Chlorothalonil	001897-45-6	5.2E+04	5.2E+02	3.1E+04	3.1E+03					4.1E+04	4.1E+02	2.4E+04	2.4E+03	2.3E+04	2.3E+02	1.4E+04	1.4E+03
Chlorotoluene, o-	000095-49-8			4.1E+04	4.1E+03							5.2E+04	5.2E+03			2.3E+04	2.3E+03
Chlorpropham	000101-21-3			4.1E+05	4.1E+04							3.2E+05	3.2E+04			1.8E+05	1.8E+04
Chlorpyrifos	002921-88-2			6.1E+03	6.1E+02							4.9E+03	4.9E+02			2.7E+03	2.7E+02
Chlorpyrifos Methyl	005598-13-0			2.0E+04	2.0E+03							1.6E+04	1.6E+03			9.0E+03	9.0E+02
Chlorsulfuron	064902-72-3			1.0E+05	1.0E+04							8.1E+04	8.1E+03			4.5E+04	4.5E+03
Chlorthiophos	060238-56-4			1.6E+03	1.6E+02							1.3E+03	1.3E+02			7.2E+02	7.2E+01
Chromium (III) (Insoluble Salts)	016065-83-1			1.0E+06	2.0E+05							1.6E+05	1.6E+04			1.5E+05	1.5E+04
Chromium (VI) ⁽⁶⁾	018540-29-9			1.0E+04	1.0E+03	1.5E+05	1.5E+03					3.2E+03	3.2E+02			2.5E+03	2.5E+02
Chromium Salts	NA																
Chrysene ⁽²⁾	000218-01-9	7.8E+04	7.8E+02			1.0E+06	1.0E+06			3.8E+04	3.8E+02			2.6E+04	2.6E+02		
Cobalt	007440-48-4																
Coke Oven Emissions	008007-45-2					1.0E+06	2.8E+04										
Copper	007440-50-8																
Copper Cyanide	000544-92-3			1.0E+04	1.0E+03							3.2E+04	3.2E+03			7.8E+03	7.8E+02
Creosote	008001-58-9																
Cresol, m-	000108-39-4			1.0E+05	1.0E+04							8.1E+04	8.1E+03			4.5E+04	4.5E+03
Cresol, o-	000095-48-7			1.0E+05	1.0E+04							8.1E+04	8.1E+03			4.5E+04	4.5E+03
Cresol, p-	000106-44-5			1.0E+04	1.0E+03							1.1E+04	1.1E+03			5.2E+03	5.2E+02

3-308

Table 3.2c. (continued)

Chemical	CASRN	Ingestion (mg/kg)*				Inhalation (mg/kg)*†				Dermal (mg/kg)*				Ingestion + Inhalation + Dermal (mg/kg)*†			
		10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Crotonaldehyde	000123-73-9	3.0E+02	3.0E+00							2.4E+02	2.4E+00			1.3E+02	1.3E+00		
Cumene	000098-82-8			8.2E+04	8.2E+03			3.5E+02	9.3E+01			1.0E+05	1.0E+04			3.5E+02	9.1E+01
Cyanazine	021725-46-2	6.8E+02	6.8E+00	4.1E+03	4.1E+02					5.4E+02	5.4E+00	3.2E+03	3.2E+02	3.0E+02	3.0E+00	1.8E+03	1.8E+02
Cyanide (CN-)	000057-12-5			4.1E+04	4.1E+03							1.1E+04	1.1E+03			8.7E+03	8.7E+02
Cyanogen	000460-19-5			8.2E+04	8.2E+03							1.0E+05	1.0E+04			4.6E+04	4.6E+03
Cyanogen Bromide	000506-68-3			1.8E+05	1.8E+04							2.3E+05	2.3E+04			1.0E+05	1.0E+04
Cyanogen Chloride	000506-77-4			1.0E+05	1.0E+04							1.3E+05	1.3E+04			5.7E+04	5.7E+03
Cyclohexane, 1,2,3,4,5-pentabromo-6-chloro-	000087-84-3	2.5E+04	2.5E+02							2.0E+04	2.0E+02			1.1E+04	1.1E+02		
Cyclohexanone	000108-94-1			1.0E+06	1.0E+06							1.0E+06	1.0E+06			1.0E+06	5.7E+05
Cyclohexylamine	000108-91-8			4.1E+05	4.1E+04							3.2E+05	3.2E+04			1.8E+05	1.8E+04
Cyclopentadiene	000542-92-7																
Cyhalothrin/karate	068085-85-8			1.0E+04	1.0E+03							8.1E+03	8.1E+02			4.5E+03	4.5E+02
Cypermethrin	052315-07-8			2.0E+04	2.0E+03							1.6E+04	1.6E+03			9.0E+03	9.0E+02
Cyromazine	066215-27-8			1.5E+04	1.5E+03							1.2E+04	1.2E+03			6.8E+03	6.8E+02
DDD	000072-54-8	2.4E+03	2.4E+01							2.6E+03	2.6E+01			1.3E+03	1.3E+01		
DDE	000072-55-9	1.7E+03	1.7E+01							1.9E+03	1.9E+01			8.8E+02	8.8E+00		
DDT	000050-29-3	1.7E+03	1.7E+01	1.0E+03	1.0E+02	1.0E+06	1.8E+05			1.9E+03	1.9E+01	1.1E+03	1.1E+02	8.8E+02	8.8E+00	5.4E+02	5.4E+01
Dacthal	001861-32-1			2.0E+04	2.0E+03							1.6E+04	1.6E+03			9.0E+03	9.0E+02
Dalapon	000075-99-0			6.1E+04	6.1E+03							4.9E+04	4.9E+03			2.7E+04	2.7E+03
Decabromodiphenyl Ether	001163-19-5			2.0E+04	2.0E+03							2.6E+04	2.6E+03			1.1E+04	1.1E+03
Demeton	008065-48-3			8.2E+01	8.2E+00							6.5E+01	6.5E+00			3.6E+01	3.6E+00
Di(2-ethylhexyl)adipate	000103-23-1	4.8E+05	4.8E+03	1.0E+06	1.2E+05					3.8E+05	3.8E+03	9.7E+05	9.7E+04	2.1E+05	2.1E+03	5.4E+05	5.4E+04

Table 3.2c. (continued)

Chemical	CASRN	Ingestion (mg/kg)*				Inhalation (mg/kg)* ^y				Dermal (mg/kg)*				Ingestion + Inhalation + Dermal (mg/kg)* ^y			
		10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Diallate	002303-16-4	9.4E+03	9.4E+01							1.2E+04	1.2E+02			5.2E+03	5.2E+01		
Diazinon	000333-41-5			1.8E+03	1.8E+02							1.5E+03	1.5E+02			8.1E+02	8.1E+01
Dibenz[a,h]anthracene ⁽³⁾	000053-70-3	7.8E+01	7.8E-01			1.0E+06	2.0E+04			3.8E+01	3.8E-01			2.6E+01	2.6E-01		
Dibromo-3-chloropropane, 1,2-	000096-12-8	4.1E+02	4.1E+00			1.0E+06	1.0E+06	1.0E+06	1.3E+05	5.2E+02	5.2E+00			2.3E+02	2.3E+00		
Dibromobenzene, 1,4-	000106-37-6			2.0E+04	2.0E+03							2.6E+04	2.6E+03			1.1E+04	1.1E+03
Dibromochloromethane	000124-48-1	6.8E+03	6.8E+01	4.1E+04	4.1E+03					6.5E+03	6.5E+01	3.9E+04	3.9E+03	3.3E+03	3.3E+01	2.0E+04	2.0E+03
Dibromodichloromethane	000594-18-3																
Dibromodiphenyl Ether, p,p'-	002050-47-7																
Dibromoethane, 1,2-	000106-93-4	6.7E+00	6.7E-02			2.5E+02	2.5E+00	3.9E+01	3.9E+00	8.5E+00	8.5E-02			3.7E+00	3.7E-02		
Dibromomethane (Methylene Bromide)	000074-95-3			2.0E+04	2.0E+03							2.6E+04	2.6E+03			1.1E+04	1.1E+03
Dibutyl Phthalate	000084-74-2			2.0E+05	2.0E+04							3.2E+05	3.2E+04			1.3E+05	1.3E+04
Dicamba	001918-00-9			6.1E+04	6.1E+03							4.9E+04	4.9E+03			2.7E+04	2.7E+03
Dichloro-2-butene, 1,4-	000764-41-0					2.0E+01	2.0E-01										
Dichloroacetic Acid																	
Dichlorobenzene, 1,2- ⁽³⁾	000095-50-1			1.8E+05	1.8E+04			5.1E+02	5.1E+02			2.3E+05	2.3E+04			5.1E+02	5.1E+02
Dichlorobenzene, 1,3-	000541-73-1																
Dichlorobenzene, 1,4-	000106-46-7	2.4E+04	2.4E+02					3.2E+01	3.2E+01	3.4E+04	3.4E+02			3.2E+01	3.2E+01		
Dichlorobenzidine, 3,3'-	000091-94-1	1.3E+03	1.3E+01							1.0E+03	1.0E+01			5.6E+02	5.6E+00		
Dichlorodifluoromethane	000075-71-8			4.1E+05	4.1E+04			3.2E+02	3.2E+01			1.5E+05	1.5E+04			3.2E+02	3.2E+01
Dichloroethane, 1,1-	000075-34-3			2.0E+05	2.0E+04			7.8E+00	7.8E-01			3.2E+05	3.2E+04			7.8E+00	7.8E-01
Dichloroethane, 1,2-	000107-06-2	6.3E+03	6.3E+01			3.4E+02	3.4E+00			1.0E+04	1.0E+02			3.1E+02	3.1E+00		
Dichloroethylene, 1,1-	000075-35-4	9.5E+02	9.5E+00	1.8E+04	1.8E+03	7.5E+00	7.5E-02			1.5E+03	1.5E+01	2.9E+04	2.9E+03	7.4E+00	7.4E-02	1.2E+03	1.1E+03

3-310

Table 3.2c. (continued)

Chemical	CASRN	Ingestion (mg/kg)*				Inhalation (mg/kg)* [†]				Dermal (mg/kg)*				Ingestion + Inhalation + Dermal (mg/kg)* [†]			
		10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Dichloroethylene, 1,2- (Mixed Isomers)	000540-59-0			1.8E+04	1.8E+03							2.3E+04	2.3E+03			1.0E+04	1.0E+03
Dichloroethylene, 1,2-cis-	000156-59-2			2.0E+04	2.0E+03							3.2E+04	3.2E+03			1.3E+04	1.3E+03
Dichloroethylene, 1,2-trans-	000156-60-5			4.1E+04	4.1E+03							6.5E+04	6.5E+03			2.5E+04	2.5E+03
Dichlorophenol, 2,4-	000120-83-2			6.1E+03	6.1E+02							8.0E+03	8.0E+02			3.5E+03	3.5E+02
Dichlorophenoxy Acetic Acid, 2,4-	000094-75-7			2.0E+04	2.0E+03							2.6E+04	2.6E+03			1.1E+04	1.1E+03
Dichlorophenoxy)butyric Acid, 4-(2,4-	000094-82-6			1.6E+04	1.6E+03							1.3E+04	1.3E+03			7.2E+03	7.2E+02
Dichloropropane, 1,2-	000078-87-5	8.4E+03	8.4E+01					1.4E+02	1.4E+01	9.9E+03	9.9E+01			4.8E+02	4.5E+01		
Dichloropropanol, 2,3-	000616-23-9			6.1E+03	6.1E+02							4.9E+03	4.9E+02			2.7E+03	2.7E+02
Dichloropropene, 1,3-	000542-75-6	3.2E+03	3.2E+01	6.1E+02	6.1E+01	9.0E+02	9.0E+00	2.4E+03	2.4E+02	2.8E+03	2.8E+01	5.3E+02	5.3E+01	5.6E+02	5.6E+00	2.5E+02	2.5E+01
Dichlorvos	000062-73-7	2.0E+03	2.0E+01	1.0E+03	1.0E+02			1.0E+06	3.1E+05	1.6E+03	1.6E+01	8.1E+02	8.1E+01	8.7E+02	8.7E+00	4.5E+02	4.5E+01
Dicofol	000115-32-2																
Dicyclopentadiene	000077-73-6			6.1E+04	6.1E+03			4.2E+01	4.2E+00			7.8E+04	7.8E+03			4.2E+01	4.2E+00
Dieldrin	000060-57-1	3.6E+01	3.6E-01	1.0E+02	1.0E+01	3.8E+05	3.8E+03			2.8E+01	2.8E-01	8.1E+01	8.1E+00	1.6E+01	1.6E-01	4.5E+01	4.5E+00
Diethyl Phthalate	000084-66-2			1.0E+06	1.6E+05							1.0E+06	2.3E+05			9.6E+05	9.6E+04
Diethyl-p-nitrophenylphosphate	000311-45-5																
Diethylene Glycol Dinitrate (DEGDN)	000693-21-0																
Diethylene Glycol Monobutyl Ether	000112-34-5							1.0E+06	1.0E+06								
Diethylene Glycol Monoethyl Ether	000111-90-0			1.0E+06	4.1E+05							1.0E+06	3.2E+05			1.0E+06	1.8E+05
Diethylformamide	000617-84-5			2.2E+04	2.2E+03							1.8E+04	1.8E+03			9.9E+03	9.9E+02
Diethylstilbestrol	000056-53-1	1.2E-01	1.2E-03			1.3E+04	1.3E+02			9.6E-02	9.6E-04			5.4E-02	5.4E-04		

Table 3.2c. (continued)

Chemical	CASRN	Ingestion (mg/kg)*				Inhalation (mg/kg)* ^v				Dermal (mg/kg)*				Ingestion + Inhalation + Dermal (mg/kg)* ^v			
		10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Difenzoquat	043222-48-6			1.6E+05	1.6E+04							1.3E+05	1.3E+04			7.2E+04	7.2E+03
Diflubenzuron	035367-38-5			4.1E+04	4.1E+03							3.2E+04	3.2E+03			1.8E+04	1.8E+03
Difluoroethane, 1,1-	000075-37-6							1.0E+06	1.0E+06								
Diisopropyl Methylphosphonate	001445-75-6			1.6E+05	1.6E+04							1.3E+05	1.3E+04			7.2E+04	7.2E+03
Dimethipin	055290-64-7			4.1E+04	4.1E+03							3.2E+04	3.2E+03			1.8E+04	1.8E+03
Dimethoate	000060-51-5			4.1E+02	4.1E+01							3.2E+02	3.2E+01			1.8E+02	1.8E+01
Dimethoxybenzidine, 3,3'-	000119-90-4	4.1E+04	4.1E+02							3.2E+04	3.2E+02			1.8E+04	1.8E+02		
Dimethyl Sulfate	000077-78-1																
Dimethylaniline HCl, 2,4-	021436-96-4	9.9E+02	9.9E+00							7.8E+02	7.8E+00			4.4E+02	4.4E+00		
Dimethylaniline, 2,4-	000095-68-1	7.6E+02	7.6E+00							6.0E+02	6.0E+00			3.4E+02	3.4E+00		
Dimethylaniline, N,N-	000121-69-7			4.1E+03	4.1E+02							3.2E+03	3.2E+02			1.8E+03	1.8E+02
Dimethylbenzidine, 3,3'-	000119-93-7	6.2E+01	6.2E-01							4.9E+01	4.9E-01			2.7E+01	2.7E-01		
Dimethylethyl Lead	107584-40-7																
Dimethylformamide	000068-12-2			2.0E+05	2.0E+04			1.0E+06	1.0E+06			1.6E+05	1.6E+04			9.0E+04	9.0E+03
Dimethylhydrazine, 1,1- ⁽⁹⁾	000057-14-7	2.2E+02	2.2E+00			1.0E+06	1.8E+04			1.7E+02	1.7E+00			9.7E+01	9.7E-01		
Dimethylhydrazine, 1,2-	000540-73-8																
Dimethylphenol, 2,4-	000105-67-9			4.1E+04	4.1E+03							5.2E+04	5.2E+03			2.3E+04	2.3E+03
Dimethylphenol, 2,6-	000576-26-1			1.2E+03	1.2E+02							9.7E+02	9.7E+01			5.4E+02	5.4E+01
Dimethylphenol, 3,4-	000095-65-8			2.0E+03	2.0E+02							1.6E+03	1.6E+02			9.0E+02	9.0E+01
Dimethylphthalate ⁽⁹⁾	000131-11-3			1.0E+06	1.0E+06							1.0E+06	1.0E+06			1.0E+06	1.0E+06
Dimethylterephthalate	000120-61-6			2.0E+05	2.0E+04							1.6E+05	1.6E+04			9.0E+04	9.0E+03
Dinitro-o-cresol, 4,6-	000534-52-1																

Table 3.2c. (continued)

Chemical	CASRN	Ingestion (mg/kg)*				Inhalation (mg/kg)**				Dermal (mg/kg)*				Ingestion + Inhalation + Dermal (mg/kg)**			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Dinitro-o-cyclohexyl Phenol, 4,6-	000131-89-5			4.1E+03	4.1E+02							3.2E+03	3.2E+02			1.8E+03	1.8E+02
Dinitrobenzene, 1,2-	000528-29-0			8.2E+02	8.2E+01							1.2E+03	1.2E+02			4.9E+02	4.9E+01
Dinitrobenzene, 1,3-	000099-65-0			2.0E+02	2.0E+01							2.1E+02	2.1E+01			1.0E+02	1.0E+01
Dinitrobenzene, 1,4-	000100-25-4			8.2E+02	8.2E+01							6.5E+02	6.5E+01			3.6E+02	3.6E+01
Dinitrophenol, 2,4-	000051-28-5			4.1E+03	4.1E+02							6.5E+03	6.5E+02			2.5E+03	2.5E+02
Dinitrotoluene, 2,4-	000121-14-2	8.4E+02	8.4E+00	4.1E+03	4.1E+02					1.1E+03	1.1E+01	5.5E+03	5.5E+02	4.8E+02	4.8E+00	2.3E+03	2.3E+02
Dinitrotoluene, 2,6-	000606-20-2	8.4E+02	8.4E+00	2.0E+03	2.0E+02					1.1E+03	1.1E+01	2.7E+03	2.7E+02	4.8E+02	4.8E+00	1.2E+03	1.2E+02
Dinitrotoluene, 2-Amino-4,6-	035572-78-2																
Dinoseb	000088-85-7			2.0E+03	2.0E+02							1.6E+03	1.6E+02			9.0E+02	9.0E+01
Dioxane, 1,4-	000123-91-1	5.2E+04	5.2E+02							6.6E+04	6.6E+02			2.9E+04	2.9E+02		
Diphenamid	000957-51-7			6.1E+04	6.1E+03							4.9E+04	4.9E+03			2.7E+04	2.7E+03
Diphenylamine	000122-39-4			5.1E+04	5.1E+03							4.0E+04	4.0E+03			2.3E+04	2.3E+03
Diphenylhydrazine, 1,2-	000122-66-7	7.2E+02	7.2E+00			1.0E+06	7.7E+04			5.7E+02	5.7E+00			3.2E+02	3.2E+00		
Diquat	000085-00-7			4.5E+03	4.5E+02							3.6E+03	3.6E+02			2.0E+03	2.0E+02
Direct Black 38	001937-37-7	6.7E+01	6.7E-01							5.3E+01	5.3E-01			2.9E+01	2.9E-01		
Direct Blue 6	002602-46-2	7.1E+01	7.1E-01							5.6E+01	5.6E-01			3.1E+01	3.1E-01		
Direct Brown 95	016071-86-6	6.2E+01	6.2E-01							4.9E+01	4.9E-01			2.7E+01	2.7E-01		
Direct Sky Blue	002610-05-1																
Disulfoton	000298-04-4			8.2E+01	8.2E+00							6.5E+01	6.5E+00			3.6E+01	3.6E+00
Diuron	000330-54-1			4.1E+03	4.1E+02							3.2E+03	3.2E+02			1.8E+03	1.8E+02
Dodine	002439-10-3			8.2E+03	8.2E+02							6.5E+03	6.5E+02			3.6E+03	3.6E+02
EPTC	000759-94-4			5.1E+04	5.1E+03							4.0E+04	4.0E+03			2.3E+04	2.3E+03

3-313

Table 3.2c. (continued)

Chemical	CASRN	Ingestion (mg/kg)*				Inhalation (mg/kg)* ^v				Dermal (mg/kg)*				Ingestion + Inhalation + Dermal (mg/kg)* ^{u,v}			
		10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Endosulfan	000115-29-7			1.2E+04	1.2E+03							9.7E+03	9.7E+02			5.4E+03	5.4E+02
Endothall	000145-73-3			4.1E+04	4.1E+03							3.2E+04	3.2E+03			1.8E+04	1.8E+03
Endrin	000072-20-8			6.1E+02	6.1E+01							1.9E+01	1.9E+00			1.9E+01	1.9E+00
Epichlorohydrin	000106-89-8	5.8E+04	5.8E+02	4.1E+03	4.1E+02	3.2E+03	3.2E+02	1.4E+02	1.4E+01	7.3E+04	7.3E+02	5.2E+03	5.2E+02	3.2E+03	1.6E+02	1.3E+02	1.3E+01
Epoxybutane, 1,2-	000106-88-7							1.0E+06	1.0E+06								
Ethephon	016672-87-0			1.0E+04	1.0E+03							8.1E+03	8.1E+02			4.5E+03	4.5E+02
Ethion	000563-12-2			1.0E+03	1.0E+02							8.1E+02	8.1E+01			4.5E+02	4.5E+01
Ethoxyethanol Acetate, 2-	000111-15-9			6.1E+05	6.1E+04							4.9E+05	4.9E+04			2.7E+05	2.7E+04
Ethoxyethanol, 2-	000110-80-5			8.2E+05	8.2E+04			1.0E+06	1.0E+06			6.5E+05	6.5E+04			3.6E+05	3.6E+04
Ethyl Acetate	000141-78-6			1.0E+06	1.8E+05							1.0E+06	2.3E+05			1.0E+06	1.0E+05
Ethyl Acrylate	000140-88-5	1.2E+04	1.2E+02							9.4E+03	9.4E+01			5.3E+03	5.3E+01		
Ethyl Chloride	000075-00-3							1.5E+02	1.5E+02								
Ethyl Ether	000060-29-7			4.1E+05	4.1E+04							5.2E+05	5.2E+04			2.3E+05	2.3E+04
Ethyl Methacrylate	000097-63-2			1.8E+05	1.8E+04							2.3E+05	2.3E+04			1.0E+05	1.0E+04
Ethyl-p-nitrophenyl Phosphonate	002104-64-5			2.0E+01	2.0E+00							1.6E+01	1.6E+00			9.0E+00	9.0E-01
Ethylbenzene ⁽⁶⁾	000100-41-4			2.0E+05	2.0E+04			4.7E-01	4.7E-01			3.1E+05	3.1E+04			4.7E-01	4.7E-01
Ethylene Cyanohydrin	000109-78-4			6.1E+05	6.1E+04							4.9E+05	4.9E+04			2.7E+05	2.7E+04
Ethylene Diamine	000107-15-3			4.1E+04	4.1E+03							3.2E+04	3.2E+03			1.8E+04	1.8E+03
Ethylene Glycol	000107-21-1			1.0E+06	4.1E+05							1.0E+06	3.2E+05			1.0E+06	1.8E+05
Ethylene Glycol Monobutyl Ether	000111-76-2							1.0E+06	1.0E+06								
Ethylene Oxide	000075-21-8	5.6E+02	5.6E+00			8.2E+01	8.2E-01			7.1E+02	7.1E+00			6.5E+01	6.5E-01		
Ethylene Thiourea	000096-45-7	5.2E+03	5.2E+01	1.6E+02	1.6E+01					4.1E+03	4.1E+01	1.3E+02	1.3E+01	2.3E+03	2.3E+01	7.2E+01	7.2E+00

3-314

Table 3.2c. (continued)

Chemical	CASRN	Ingestion (mg/kg)*				Inhalation (mg/kg)* ^y				Dermal (mg/kg)*				Ingestion + Inhalation + Dermal (mg/kg)* ^y			
		10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Ethylphthalyl Ethyl Glycolate	000084-72-0			1.0E+06	6.1E+05							1.0E+06	4.9E+05			1.0E+06	2.7E+05
Express	101200-48-0			1.6E+04	1.6E+03							1.3E+04	1.3E+03			7.2E+03	7.2E+02
Fenamiphos	022224-92-6			5.1E+02	5.1E+01							4.0E+02	4.0E+01			2.3E+02	2.3E+01
Fenpropathrin	039515-41-8			5.1E+04	5.1E+03							4.0E+04	4.0E+03			2.3E+04	2.3E+03
Fluometuron	002164-17-2			2.7E+04	2.7E+03							2.1E+04	2.1E+03			1.2E+04	1.2E+03
Fluoranthene	000206-44-0			8.2E+04	8.2E+03							4.0E+04	4.0E+03			2.7E+04	2.7E+03
Fluorene	000086-73-7			8.2E+04	8.2E+03							1.0E+05	1.0E+04			4.6E+04	4.6E+03
Fluoride	007782-41-4			1.2E+05	1.2E+04							1.0E+06	1.9E+05			1.2E+05	1.2E+04
Fluridone	059756-60-4			1.6E+05	1.6E+04							1.3E+05	1.3E+04			7.2E+04	7.2E+03
Flurprimidol	056425-91-3			4.1E+04	4.1E+03							3.2E+04	3.2E+03			1.8E+04	1.8E+03
Flutolanil	066332-96-5			1.2E+05	1.2E+04							9.7E+04	9.7E+03			5.4E+04	5.4E+03
Fluvalinate	069409-94-5			2.0E+04	2.0E+03							1.6E+04	1.6E+03			9.0E+03	9.0E+02
Folpet	000133-07-3	1.6E+05	1.6E+03	2.0E+05	2.0E+04					1.3E+05	1.3E+03	1.6E+05	1.6E+04	7.2E+04	7.2E+02	9.0E+04	9.0E+03
Fomesafen	072178-02-0	3.0E+03	3.0E+01							2.4E+03	2.4E+01			1.3E+03	1.3E+01		
Fonofos	000944-22-9			4.1E+03	4.1E+02							3.2E+03	3.2E+02			1.8E+03	1.8E+02
Formaldehyde	000050-00-0			4.1E+05	4.1E+04	1.0E+06	1.0E+06					5.2E+05	5.2E+04			2.3E+05	2.3E+04
Formic Acid	000064-18-6			1.0E+06	4.1E+05							1.0E+06	3.2E+05			1.0E+06	1.8E+05
Fosetyl-AL	039148-24-8			1.0E+06	6.1E+05							1.0E+06	4.9E+05			1.0E+06	2.7E+05
Furan	000110-00-9			2.0E+03	2.0E+02							2.6E+03	2.6E+02			1.1E+03	1.1E+02
Furazolidone	000067-45-8	1.5E+02	1.5E+00							1.2E+02	1.2E+00			6.7E+01	6.7E-01		
Furfural	000098-01-1			6.1E+03	6.1E+02			1.0E+06	1.0E+06			4.9E+03	4.9E+02			2.7E+03	2.7E+02
Furium	000531-82-8	1.1E+01	1.1E-01							9.1E+00	9.1E-02			5.1E+00	5.1E-02		
Furmecyclox	060568-05-0	1.9E+04	1.9E+02							1.5E+04	1.5E+02			8.4E+03	8.4E+01		

3-315

Table 3.2c. (continued)

Chemical	CASRN	Ingestion (mg/kg)*				Inhalation (mg/kg)* ^v				Dermal (mg/kg)*				Ingestion + Inhalation + Dermal (mg/kg)* ^v			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Glufosinate, Ammonium	077182-82-2			8.2E+02	8.2E+01							6.5E+02	6.5E+01			3.6E+02	3.6E+01
Glycidyl	000765-34-4			8.2E+02	8.2E+01			1.0E+06	6.3E+05			6.5E+02	6.5E+01			3.6E+02	3.6E+01
Glyphosate	001071-83-6			2.0E+05	2.0E+04							1.6E+05	1.6E+04			9.0E+04	9.0E+03
Goal	042874-03-3			6.1E+03	6.1E+02							4.9E+03	4.9E+02			2.7E+03	2.7E+02
Haloxyp, Methyl	069806-40-2			1.0E+02	1.0E+01							8.1E+01	8.1E+00			4.5E+01	4.5E+00
Harmony	079277-27-3			2.7E+04	2.7E+03							2.1E+04	2.1E+03			1.2E+04	1.2E+03
Heptachlor	000076-44-8	1.3E+02	1.3E+00	1.0E+03	1.0E+02	1.0E+06	1.4E+04			1.4E+02	1.4E+00	1.2E+03	1.2E+02	6.8E+01	6.8E-01	5.4E+02	5.4E+01
Heptachlor Epoxide	001024-57-3	6.3E+01	6.3E-01	2.7E+01	2.7E+00	6.7E+05	6.7E+03			7.2E+01	7.2E-01	3.0E+01	3.0E+00	3.4E+01	3.4E-01	1.4E+01	1.4E+00
Heptane, N-	000142-82-5																
Hexabromobenzene	000087-82-1			4.1E+03	4.1E+02							5.2E+03	5.2E+02			2.3E+03	2.3E+02
Hexachlorobenzene ⁽⁶⁾	000118-74-1	3.6E+02	3.6E+00	1.6E+03	1.6E+02	1.0E+06	3.8E+04			4.5E+02	4.5E+00	2.1E+03	2.1E+02	2.0E+02	2.0E+00	9.1E+02	9.1E+01
Hexachlorobutadiene ⁽⁶⁾	000087-68-3	7.3E+03	7.3E+01	4.1E+02	4.1E+01	1.0E+06	7.9E+05			9.3E+03	9.3E+01	5.2E+02	5.2E+01	4.1E+03	4.1E+01	2.3E+02	2.3E+01
Hexachlorocyclohexane, Alpha-	000319-84-6	9.1E+01	9.1E-01			9.7E+05	9.7E+03			1.4E+02	1.4E+00			5.5E+01	5.5E-01		
Hexachlorocyclohexane, Beta-	000319-85-7	3.2E+02	3.2E+00			1.0E+06	3.4E+04			4.6E+02	4.6E+00			1.9E+02	1.9E+00		
Hexachlorocyclohexane, Delta-	000319-86-8																
Hexachlorocyclohexane, Epsilon	006108-10-7																
Hexachlorocyclohexane, Gamma-	000058-89-9	4.4E+02	4.4E+00	6.1E+02	6.1E+01					6.8E+02	6.8E+00	9.4E+02	9.4E+01	2.7E+02	2.7E+00	3.7E+02	3.7E+01
Hexachlorocyclohexane, Technical	000608-73-1	3.2E+02	3.2E+00			1.0E+06	3.4E+04			2.5E+02	2.5E+00			1.4E+02	1.4E+00		
Hexachlorocyclopentadiene	000077-47-4			1.4E+04	1.4E+03			4.4E+05	4.4E+04			1.8E+04	1.8E+03			7.8E+03	7.8E+02
Hexachlorodibenzo-p-dioxin, Mixture	019408-74-3	9.2E-02	9.2E-04			1.3E+03	1.3E+01			7.3E-02	7.3E-04			4.1E-02	4.1E-04		

Table 3.2c. (continued)

Chemical	CASRN	Ingestion (mg/kg)*				Inhalation (mg/kg)*†				Dermal (mg/kg)*				Ingestion + Inhalation + Dermal (mg/kg)*†‡			
		10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Hexachloroethane	000067-72-1	4.1E+04	4.1E+02	2.0E+03	2.0E+02	1.0E+06	1.0E+06			5.2E+04	5.2E+02	2.6E+03	2.6E+02	2.3E+04	2.3E+02	1.1E+03	1.1E+02
Hexachlorophene	000070-30-4			6.1E+02	6.1E+01							4.9E+02	4.9E+01			2.7E+02	2.7E+01
Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	000121-82-4	5.2E+03	5.2E+01	6.1E+03	6.1E+02					8.2E+03	8.2E+01	9.7E+03	9.7E+02	3.2E+03	3.2E+01	3.8E+03	3.8E+02
Hexamethylene Diisocyanate, 1,6-	000822-06-0							6.3E+04	6.3E+03								
Hexane, N-	000110-54-3			1.2E+05	1.2E+04			9.1E+01	9.1E+01			1.6E+05	1.6E+04			9.1E+01	9.1E+01
Hexanone, 2-	000591-78-6																
Hexazinone	051235-04-2			6.7E+04	6.7E+03							5.3E+04	5.3E+03			3.0E+04	3.0E+03
HpCDD, 2,3,7,8-(4)	037871-00-4	3.8E-01	3.8E-03			4.1E+03	4.1E+01			1.0E-01	1.0E-03			8.0E-02	8.0E-04		
HpCDF, 2,3,7,8-(4)	038998-75-3	3.8E-01	3.8E-03			4.1E+03	4.1E+01			3.0E-01	3.0E-03			1.7E-01	1.7E-03		
HxCDD, 2,3,7,8-(4)	034465-46-8	3.8E-02	3.8E-04			4.1E+02	4.1E+00			1.0E-02	1.0E-04			8.0E-03	8.0E-05		
HxCDF, 2,3,7,8-(4)	055684-94-1	3.8E-02	3.8E-04			4.1E+02	4.1E+00			3.0E-02	3.0E-04			1.7E-02	1.7E-04		
Hydrazine	000302-01-2	1.9E+02	1.9E+00			3.6E+05	3.6E+03			1.5E+02	1.5E+00			8.4E+01	8.4E-01		
Hydrazine Sulfate	010034-93-2	1.9E+02	1.9E+00			3.6E+05	3.6E+03			1.5E+02	1.5E+00			8.4E+01	8.4E-01		
Hydrogen Chloride	007647-01-0							1.0E+06	1.0E+06								
Hydrogen Cyanide	000074-90-8			4.1E+04	4.1E+03			1.0E+06	1.0E+06			1.1E+05	1.1E+04			3.0E+04	3.0E+03
Hydrogen Sulfide	007783-06-4			6.1E+03	6.1E+02			1.0E+06	6.3E+05			1.9E+04	1.9E+03			4.7E+03	4.7E+02
Hydroquinone	000123-31-9			8.2E+04	8.2E+03							6.5E+04	6.5E+03			3.6E+04	3.6E+03
Imazalil	035554-44-0			2.7E+04	2.7E+03							2.1E+04	2.1E+03			1.2E+04	1.2E+03
Imazaquin	081335-37-7			5.1E+05	5.1E+04							4.0E+05	4.0E+04			2.3E+05	2.3E+04
Indeno[1,2,3-cd]pyrene(4)	000193-39-5	7.8E+02	7.8E+00			1.0E+06	2.0E+05			3.8E+02	3.8E+00			2.6E+02	2.6E+00		
Iprodione	036734-19-7			8.2E+04	8.2E+03							6.5E+04	6.5E+03			3.6E+04	3.6E+03
Iron	007439-89-6																

Table 3.2c. (continued)

Chemical	CASRN	Ingestion (mg/kg)*				Inhalation (mg/kg)*				Dermal (mg/kg)*				Ingestion + Inhalation + Dermal (mg/kg)**			
		10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Isobutyl Alcohol	000078-83-1			6.1E+05	6.1E+04							7.8E+05	7.8E+04			3.4E+05	3.4E+04
Isophorone	000078-59-1	6.0E+05	6.0E+03	4.1E+05	4.1E+04					4.8E+05	4.8E+03	3.2E+05	3.2E+04	2.7E+05	2.7E+03	1.8E+05	1.8E+04
Isopropalin	033820-53-0			3.1E+04	3.1E+03							2.4E+04	2.4E+03			1.4E+04	1.4E+03
Isopropanol	000067-63-0																
Isopropyl Methyl Phosphonic Acid	001832-54-8			2.0E+05	2.0E+04							1.6E+05	1.6E+04			9.0E+04	9.0E+03
Isoxaben	082558-50-7			1.0E+05	1.0E+04							8.1E+04	8.1E+03			4.5E+04	4.5E+03
Karate	091465-08-6			1.0E+04	1.0E+03							8.1E+03	8.1E+02			4.5E+03	4.5E+02
Kerb	023950-58-5			1.5E+05	1.5E+04							1.2E+05	1.2E+04			6.8E+04	6.8E+03
Lactofen	077501-63-4			4.1E+03	4.1E+02							3.2E+03	3.2E+02			1.8E+03	1.8E+02
Lead Alkyls	NA																
Lead And Compounds	007439-92-1																
Linuron	000330-55-2			4.1E+03	4.1E+02							3.2E+03	3.2E+02			1.8E+03	1.8E+02
Lithium	007439-93-2																
Londax	083055-99-6			4.1E+05	4.1E+04							3.2E+05	3.2E+04			1.8E+05	1.8E+04
MCPA	000094-74-6			1.0E+03	1.0E+02							8.1E+02	8.1E+01			4.5E+02	4.5E+01
MCPB	000094-81-5			2.0E+04	2.0E+03							1.6E+04	1.6E+03			9.0E+03	9.0E+02
MCPP	000093-65-2			2.0E+03	2.0E+02							1.6E+03	1.6E+02			9.0E+02	9.0E+01
Magnesium	007439-95-4																
Malathion	000121-75-5			4.1E+04	4.1E+03							3.2E+04	3.2E+03			1.8E+04	1.8E+03
Maleic Anhydride	000108-31-6			2.0E+05	2.0E+04							1.6E+05	1.6E+04			9.0E+04	9.0E+03
Maleic Hydrazide	000123-33-1			1.0E+06	1.0E+05							8.1E+05	8.1E+04			4.5E+05	4.5E+04
Malononitrile	000109-77-3			4.1E+01	4.1E+00							5.2E+01	5.2E+00			2.3E+01	2.3E+00
Mancozeb	008018-01-7			6.1E+04	6.1E+03							4.9E+04	4.9E+03			2.7E+04	2.7E+03

3-318

Table 3.2c. (continued)

Chemical	CASRN	Ingestion (mg/kg) ^a				Inhalation (mg/kg) ^{a,y}				Dermal (mg/kg) ^a				Ingestion + Inhalation + Dermal (mg/kg) ^{a,y}			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Maneb	012427-38-2			1.0E+04	1.0E+03							8.1E+03	8.1E+02			4.5E+03	4.5E+02
Manganese (Water)	007439-96-5			9.5E+04	9.5E+03			3.1E+05	3.1E+04			6.0E+04	6.0E+03			3.3E+04	3.3E+03
Mephosfolan	000950-10-7			1.8E+02	1.8E+01							1.5E+02	1.5E+01			8.1E+01	8.1E+00
Mepiquat Chloride	024307-26-4			6.1E+04	6.1E+03							4.9E+04	4.9E+03			2.7E+04	2.7E+03
Mercuric Chloride	007487-94-7			6.1E+02	6.1E+01							1.9E+03	1.9E+02			4.7E+02	4.7E+01
Mercury (elemental)	007439-97-6			6.1E+02	6.1E+01			1.0E+06	1.9E+05			9.7E-01	9.7E-02			9.7E-01	9.7E-02
Mercury, Inorganic Salt	007439-97-6			6.1E+02	6.1E+01			1.0E+06	1.9E+05			6.8E+02	6.8E+01			3.2E+02	3.2E+01
Merphos	000150-50-5			6.1E+01	6.1E+00							4.9E+01	4.9E+00			2.7E+01	2.7E+00
Merphos Oxide	000078-48-8			6.1E+01	6.1E+00							4.9E+01	4.9E+00			2.7E+01	2.7E+00
Metalaxyl	057837-19-1			1.2E+05	1.2E+04							9.7E+04	9.7E+03			5.4E+04	5.4E+03
Methacrylonitrile	000126-98-7			2.0E+02	2.0E+01			1.2E+02	1.2E+01			2.6E+02	2.6E+01			5.8E+01	5.8E+00
Methamidophos	010265-92-6			1.0E+02	1.0E+01							8.1E+01	8.1E+00			4.5E+01	4.5E+00
Methanol	000067-56-1			1.0E+06	1.0E+05							1.0E+06	1.3E+05			5.7E+05	5.7E+04
Methidathion	000950-37-8			2.0E+03	2.0E+02							1.6E+03	1.6E+02			9.0E+02	9.0E+01
Methomyl	016752-77-5			5.1E+04	5.1E+03							4.0E+04	4.0E+03			2.3E+04	2.3E+03
Methoxy-5-nitroaniline, 2-	000099-59-2	1.2E+04	1.2E+02							9.8E+03	9.8E+01			5.5E+03	5.5E+01		
Methoxychlor	000072-43-5			1.0E+04	1.0E+03							8.1E+03	8.1E+02			4.5E+03	4.5E+02
Methoxyethanol Acetate, 2-	000110-49-6			4.1E+03	4.1E+02							3.2E+03	3.2E+02			1.8E+03	1.8E+02
Methoxyethanol, 2-	000109-86-4			2.0E+03	2.0E+02			1.0E+06	1.0E+06			1.6E+03	1.6E+02			9.0E+02	9.0E+01
Methyl Acetate	000079-20-9			1.0E+06	2.0E+05							1.0E+06	1.6E+05			9.0E+05	9.0E+04
Methyl Acrylate	000096-33-3			6.1E+04	6.1E+03							4.9E+04	4.9E+03			2.7E+04	2.7E+03
Methyl Ethyl Ketone	000078-93-3			1.0E+06	1.2E+05			9.2E+03	3.6E+03			1.0E+06	1.6E+05			9.2E+03	3.5E+03

Table 3.2c. (continued)

Chemical	CASRN	Ingestion (mg/kg)*				Inhalation (mg/kg)* ^v				Dermal (mg/kg)*				Ingestion + Inhalation + Dermal (mg/kg)* ^v			
		10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Methyl Isobutyl Ketone	000108-10-1			1.6E+05	1.6E+04			7.0E+02	7.0E+02			2.1E+05	2.1E+04			7.0E+02	7.0E+02
Methyl Mercury	022967-92-6			2.0E+02	2.0E+01							2.9E+02	2.9E+01			1.2E+02	1.2E+01
Methyl Methacrylate	000080-62-6			1.6E+05	1.6E+04							2.1E+05	2.1E+04			9.1E+04	9.1E+03
Methyl Parathion	000298-00-0			5.1E+02	5.1E+01							4.0E+02	4.0E+01			2.3E+02	2.3E+01
Methyl Styrene (Mixed Isomers)	025013-15-4			1.2E+04	1.2E+03			1.0E+06	1.0E+06			1.6E+04	1.6E+03			6.9E+03	6.9E+02
Methyl hydrazine ⁽³⁾	000060-34-4	5.2E+02	5.2E+00							4.1E+02	4.1E+00			2.3E+02	2.3E+00		
Methyl tert-Butyl Ether (MTBE)	001634-04-4							1.0E+06	1.0E+06								
Methyl-5-Nitroaniline, 2-	000099-55-8	1.7E+04	1.7E+02							1.4E+04	1.4E+02			7.7E+03	7.7E+01		
Methylaniline Hydrochloride, 2-	000636-21-5	3.2E+03	3.2E+01							2.5E+03	2.5E+01			1.4E+03	1.4E+01		
Methylcyclohexane	000108-87-2							2.4E+02	2.4E+02								
Methylene Chloride	000075-09-2	7.6E+04	7.6E+02	1.2E+05	1.2E+04	1.0E+03	8.1E+01	1.0E+03	1.0E+03	1.1E+05	1.1E+03	1.8E+05	1.8E+04	1.0E+03	6.9E+01	1.0E+03	1.0E+03
Methylene-bis(2-chloroaniline), 4,4'-	000101-14-4	4.4E+03	4.4E+01	1.4E+03	1.4E+02	1.0E+06	4.7E+05			3.5E+03	3.5E+01	1.1E+03	1.1E+02	1.9E+03	1.9E+01	6.3E+02	6.3E+01
Methylene-bis(N,N-dimethyl) Aniline, 4,4'-	000101-61-1	1.2E+04	1.2E+02							9.8E+03	9.8E+01			5.5E+03	5.5E+01		
Methylenebisbenzenamine, 4,4'- ⁽³⁾	000101-77-9	2.3E+03	2.3E+01							1.8E+03	1.8E+01			1.0E+03	1.0E+01		
Methylenediphenyl Isocyanate, 4,4'-	000101-68-8							1.3E+05	1.3E+04								
Methylstyrene, Alpha-	000098-83-9			1.4E+05	1.4E+04							1.8E+05	1.8E+04			8.0E+04	8.0E+03
Methyltriethyl Lead	001762-28-3																
Metolachlor	051218-45-2			3.1E+05	3.1E+04							2.4E+05	2.4E+04			1.4E+05	1.4E+04
Metribuzin ⁽³⁾	021087-64-9			5.1E+04	5.1E+03							4.0E+04	4.0E+03			2.3E+04	2.3E+03
Mirex ⁽³⁾	002385-85-5	3.2E+02	3.2E+00	4.1E+02	4.1E+01					2.5E+02	2.5E+00	3.2E+02	3.2E+01	1.4E+02	1.4E+00	1.8E+02	1.8E+01

Table 3.2c. (continued)

Chemical	CASRN	Ingestion (mg/kg)*				Inhalation (mg/kg)**				Dermal (mg/kg)*				Ingestion + Inhalation + Dermal (mg/kg)*+*			
		10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Molinate	002212-67-1			4.1E+03	4.1E+02							3.2E+03	3.2E+02			1.8E+03	1.8E+02
Molybdenum	007439-98-7			1.0E+04	1.0E+03							6.1E+04	6.1E+03			8.8E+03	8.8E+02
Monochloramine	010599-90-3			2.0E+05	2.0E+04							1.6E+05	1.6E+04			9.0E+04	9.0E+03
Monochlorobutanes	025154-42-1			8.2E+05	8.2E+04							6.5E+05	6.5E+04			3.6E+05	3.6E+04
Naled	000300-76-5			4.1E+03	4.1E+02							3.2E+03	3.2E+02			1.8E+03	1.8E+02
Naphthalene ^(b)	000091-20-3			7.3E+04	7.3E+03							9.2E+04	9.2E+03			4.1E+04	4.1E+03
Naphthalene, 1-Methyl	000090-12-0																
Naphthalene, 2-Methyl	000091-57-6																
Napropamide	015299-99-7			2.0E+05	2.0E+04							1.6E+05	1.6E+04			9.0E+04	9.0E+03
Niagara Blue 4B	002429-74-5																
Nickel Carbonyl	013463-39-3																
Nickel Refinery Dust	NA					1.0E+06	7.3E+04										
Nickel Soluble Salts	007440-02-0			4.1E+04	4.1E+03							1.7E+05	1.7E+04			3.3E+04	3.3E+03
Nickel Subsulfide	012035-72-2					1.0E+06	3.6E+04										
Nitrapyrin ^(b)	001929-82-4			3.1E+03	3.1E+02							2.4E+03	2.4E+02			1.4E+03	1.4E+02
Nitrate	014797-55-8			1.0E+06	3.3E+05							1.0E+06	1.0E+06			1.0E+06	2.9E+05
Nitric Oxide ^(b)	010102-43-9			2.0E+05	2.0E+04							6.5E+05	6.5E+04			1.6E+05	1.6E+04
Nitrite	014797-65-0			2.0E+05	2.0E+04							1.0E+06	1.6E+05			1.8E+05	1.8E+04
Nitroaniline, 2-	000088-74-4							2.1E+01	2.1E+00								
Nitrobenzene	000098-95-3			1.0E+03	1.0E+02			1.2E+01	1.2E+00			1.6E+03	1.6E+02			1.2E+01	1.2E+00
Nitrofurantoin	000067-20-9			1.4E+05	1.4E+04							1.1E+05	1.1E+04			6.3E+04	6.3E+03
Nitrofurazone	000059-87-0	3.8E+02	3.8E+00							3.0E+02	3.0E+00			1.7E+02	1.7E+00		
Nitrogen Dioxide ^(b)	010102-44-0			1.0E+06	2.0E+05							1.0E+06	1.0E+06			1.0E+06	1.9E+05

Table 3.2c. (continued)

Chemical	CASRN	Ingestion (mg/kg)*				Inhalation (mg/kg)* ^v				Dermal (mg/kg)*				Ingestion + Inhalation + Dermal (mg/kg)* ^v			
		10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Nitroguanidine	000556-88-7			2.0E+05	2.0E+04							1.6E+05	1.6E+04			9.0E+04	9.0E+03
Nitrophenol, 4-	000100-02-7																
Nitropropane, 2- ^(d)	000079-46-9	6.0E+01	6.0E-01			1.4E+01	1.4E-01	2.7E+03	2.7E+02	7.6E+01	7.6E-01			9.9E+00	9.9E-02		
Nitroso-N-ethylurea, N-	000759-73-9	4.1E+00	4.1E-02							3.2E+00	3.2E-02			1.8E+00	1.8E-02		
Nitroso-N-methylurea, N-	000684-93-5																
Nitroso-di-N-butylamine, N-	000924-16-3	1.1E+02	1.1E+00			1.0E+02	1.0E+00			1.3E+02	1.3E+00			3.8E+01	3.8E-01		
Nitroso-di-N-propylamine, N-	000621-64-7	8.2E+01	8.2E-01							3.2E+01	3.2E-01			2.3E+01	2.3E-01		
Nitrosodiethanolamine, N-	001116-54-7	2.0E+02	2.0E+00							1.6E+02	1.6E+00			9.0E+01	9.0E-01		
Nitrosodiethylamine, N-	000055-18-5	3.8E+00	3.8E-02			4.1E+04	4.1E+02			3.0E+00	3.0E-02			1.7E+00	1.7E-02		
Nitrosodimethylamine, N-	000062-75-9	1.1E+01	1.1E-01			1.2E+05	1.2E+03			8.9E+00	8.9E-02			5.0E+00	5.0E-02		
Nitrosodiphenylamine, N-	000086-30-6	1.2E+05	1.2E+03							4.6E+04	4.6E+02			3.3E+04	3.3E+02		
Nitrosomethylethylamine, N-	010595-95-6	2.6E+01	2.6E-01							2.1E+01	2.1E-01			1.1E+01	1.1E-01		
Nitrosomethylvinylamine, N-	004549-40-0																
Nitrosopyrrolidine, N-	000930-55-2	2.7E+02	2.7E+00			1.0E+06	2.9E+04			2.2E+02	2.2E+00			1.2E+02	1.2E+00		
Nitrotoluene, 4-Amino-2-	000119-32-4																
Nitrotoluene, m-	000099-08-1			2.0E+04	2.0E+03							2.6E+04	2.6E+03			1.1E+04	1.1E+03
Nitrotoluene, o-	000088-72-2			2.0E+04	2.0E+03							2.6E+04	2.6E+03			1.1E+04	1.1E+03
Nitrotoluene, p-	000099-99-0			2.0E+04	2.0E+03							2.6E+04	2.6E+03			1.1E+04	1.1E+03
Norflurazon	027314-13-2			8.2E+04	8.2E+03							6.5E+04	6.5E+03			3.6E+04	3.6E+03
Nustar	085509-19-9			1.4E+03	1.4E+02							1.1E+03	1.1E+02			6.3E+02	6.3E+01
OCDD ^(d)	003268-87-9	3.8E+00	3.8E-02			4.1E+04	4.1E+02			1.0E+00	1.0E-02			8.0E-01	8.0E-03		

3-322

Table 3.2c. (continued)

Chemical	CASRN	Ingestion (mg/kg)*				Inhalation (mg/kg)* ^y				Dermal (mg/kg)*				Ingestion + Inhalation + Dermal (mg/kg)* ^y			
		10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
OCDF ⁽⁴⁾	039001-02-0	3.8E+00	3.8E-02			4.1E+04	4.1E+02			3.0E+00	3.0E-02			1.7E+00	1.7E-02		
Octabromodiphenyl Ether	032536-52-0			6.1E+03	6.1E+02							4.9E+03	4.9E+02			2.7E+03	2.7E+02
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetra (HMX)	002691-41-0			1.0E+05	1.0E+04							2.4E+04	2.4E+03			2.0E+04	2.0E+03
Octamethylpyrophosphoramide	000152-16-9			4.1E+03	4.1E+02							3.2E+03	3.2E+02			1.8E+03	1.8E+02
Octyl Phthalate, di-N-	000117-84-0			4.1E+04	4.1E+03							5.8E+04	5.8E+03			2.4E+04	2.4E+03
Oryzalin	019044-88-3			1.0E+05	1.0E+04							8.1E+04	8.1E+03			4.5E+04	4.5E+03
Oxadiazon	019666-30-9			1.0E+04	1.0E+03							8.1E+03	8.1E+02			4.5E+03	4.5E+02
Oxamyl	023135-22-0			5.1E+04	5.1E+03							4.0E+04	4.0E+03			2.3E+04	2.3E+03
Paclobutrazol	076738-62-0			2.7E+04	2.7E+03							2.1E+04	2.1E+03			1.2E+04	1.2E+03
Paraquat	001910-42-5			9.2E+03	9.2E+02							7.3E+03	7.3E+02			4.1E+03	4.1E+02
Parathion	000056-38-2			1.2E+04	1.2E+03							9.7E+03	9.7E+02			5.4E+03	5.4E+02
PeCDD, 2,3,7,8 ⁽⁴⁾	036088-22-9	7.6E-03	7.6E-05			8.2E+01	8.2E-01			2.0E-03	2.0E-05			1.6E-03	1.6E-05		
PeCDF, 1,2,3,7,8 ⁽⁴⁾	057117-41-6	7.6E-03	7.6E-05			8.2E+01	8.2E-01			6.0E-03	6.0E-05			3.4E-03	3.4E-05		
PeCDF, 2,3,4,7,8 ⁽⁴⁾	057117-31-4	7.6E-02	7.6E-04			8.2E+02	8.2E+00			6.0E-02	6.0E-04			3.4E-02	3.4E-04		
Pebulate	001114-71-2			1.0E+05	1.0E+04							8.1E+04	8.1E+03			4.5E+04	4.5E+03
Pendimethalin	040487-42-1			8.2E+04	8.2E+03							6.5E+04	6.5E+03			3.6E+04	3.6E+03
Pentabromodiphenyl Ether	032534-81-9			4.1E+03	4.1E+02							3.2E+03	3.2E+02			1.8E+03	1.8E+02
Pentachlorobenzene	000608-93-5			1.6E+03	1.6E+02							2.1E+03	2.1E+02			9.1E+02	9.1E+01
Pentachlorocyclopentadiene	025329-35-5																
Pentachloronitrobenzene	000082-68-8	2.2E+03	2.2E+01	6.1E+03	6.1E+02					2.8E+03	2.8E+01	7.8E+03	7.8E+02	1.2E+03	1.2E+01	3.4E+03	3.4E+02
Pentachlorophenol	000087-86-5	4.8E+03	4.8E+01	6.1E+04	6.1E+03					7.5E+03	7.5E+01	9.7E+04	9.7E+03	2.9E+03	2.9E+01	3.8E+04	3.8E+03

Table 3.2c. (continued)

Chemical	CASRN	Ingestion (mg/kg)*				Inhalation (mg/kg)* ^v				Dermal (mg/kg)*				Ingestion + Inhalation + Dermal (mg/kg)* ^{iv}			
		10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Pentyl Alcohol, N-	000071-41-0																
Permethrin	052645-53-1			1.0E+05	1.0E+04							8.1E+04	8.1E+03			4.5E+04	4.5E+03
Phenanthrene	000085-01-8																
Phenmedipham	013684-63-4			5.1E+05	5.1E+04							4.0E+05	4.0E+04			2.3E+05	2.3E+04
Phenol	000108-95-2			1.0E+06	1.2E+05							1.0E+06	1.7E+05			7.2E+05	7.2E+04
Phenylenediamine, m-	000108-45-2			1.2E+04	1.2E+03							9.7E+03	9.7E+02			5.4E+03	5.4E+02
Phenylenediamine, o-	000095-54-5	1.2E+04	1.2E+02							9.6E+03	9.6E+01			5.4E+03	5.4E+01		
Phenylenediamine, p-	000106-50-3			3.9E+05	3.9E+04							3.1E+05	3.1E+04			1.7E+05	1.7E+04
Phenylmercuric Acetate	000062-38-4			1.6E+02	1.6E+01							1.3E+02	1.3E+01			7.2E+01	7.2E+00
Phenylphenol, 2-	000090-43-7	3.0E+05	3.0E+03							2.3E+05	2.3E+03			1.3E+05	1.3E+03		
Phorate	000298-02-2			4.1E+02	4.1E+01							3.2E+02	3.2E+01			1.8E+02	1.8E+01
Phosmet	000732-11-6			4.1E+04	4.1E+03							3.2E+04	3.2E+03			1.8E+04	1.8E+03
Phosphine	007803-51-2			6.1E+02	6.1E+01			1.0E+06	1.9E+05			1.9E+03	1.9E+02			4.7E+02	4.7E+01
Phosphoric Acid	007664-38-2							1.0E+06	1.0E+06								
Phthalic Acid, P-	000100-21-0			1.0E+06	2.0E+05							1.0E+06	1.6E+05			9.0E+05	9.0E+04
Phthalic Anhydride	000085-44-9			1.0E+06	4.1E+05			1.0E+06	1.0E+06			1.0E+06	3.2E+05			1.0E+06	1.8E+05
Picloram	001918-02-1			1.4E+05	1.4E+04							1.1E+05	1.1E+04			6.3E+04	6.3E+03
Pirimiphos, Methyl	029232-93-7			2.0E+04	2.0E+03							1.6E+04	1.6E+03			9.0E+03	9.0E+02
Polybrominated Biphenyls	NA	6.4E+01	6.4E-01	1.4E+01	1.4E+00					9.5E+01	9.5E-01	2.1E+01	2.1E+00	3.8E+01	3.8E-01	8.5E+00	8.5E-01
Polychlorinated Biphenyls	001336-36-3	7.4E+01	7.4E-01							1.8E+01	1.8E-01			1.4E+01	1.4E-01		
Potassium Cyanide	000151-50-8			1.0E+05	1.0E+04							1.3E+05	1.3E+04			5.7E+04	5.7E+03
Potassium Silver Cyanide	000506-61-6			4.1E+05	4.1E+04							1.0E+06	1.3E+05			3.1E+05	3.1E+04

3-324

Table 3.2c. (continued)

Chemical	CASRN	Ingestion (mg/kg) ^a				Inhalation (mg/kg) ^a				Dermal (mg/kg) ^a				Ingestion + Inhalation + Dermal (mg/kg) ^{a,b}			
		10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Prochloraz	067747-09-5	3.8E+03	3.8E+01	1.8E+04	1.8E+03					3.0E+03	3.0E+01	1.5E+04	1.5E+03	1.7E+03	1.7E+01	8.1E+03	8.1E+02
Profluralin	026399-36-0			1.2E+04	1.2E+03							9.7E+03	9.7E+02			5.4E+03	5.4E+02
Prometon	001610-18-0			3.1E+04	3.1E+03							2.4E+04	2.4E+03			1.4E+04	1.4E+03
Prometryn	007287-19-6			8.2E+03	8.2E+02							6.5E+03	6.5E+02			3.6E+03	3.6E+02
Propachlor	001918-16-7			2.7E+04	2.7E+03							2.1E+04	2.1E+03			1.2E+04	1.2E+03
Propanil	000709-98-8			1.0E+04	1.0E+03							8.1E+03	8.1E+02			4.5E+03	4.5E+02
Propargite	002312-35-8			4.1E+04	4.1E+03							3.2E+04	3.2E+03			1.8E+04	1.8E+03
Propargyl Alcohol	000107-19-7			4.1E+03	4.1E+02							5.2E+03	5.2E+02			2.3E+03	2.3E+02
Propazine	000139-40-2			4.1E+04	4.1E+03							3.2E+04	3.2E+03			1.8E+04	1.8E+03
Propham	000122-42-9			4.1E+04	4.1E+03							3.2E+04	3.2E+03			1.8E+04	1.8E+03
Propiconazole	060207-90-1			2.7E+04	2.7E+03							2.1E+04	2.1E+03			1.2E+04	1.2E+03
Propylene Glycol	000057-55-6			1.0E+06	1.0E+06							1.0E+06	1.0E+06			1.0E+06	1.0E+06
Propylene Glycol Monoethyl Ether	001569-02-4			1.0E+06	1.4E+05							1.0E+06	1.1E+05			6.3E+05	6.3E+04
Propylene Glycol Monomethyl Ether	000107-98-2			1.0E+06	1.4E+05			1.0E+06	1.0E+06			1.0E+06	1.1E+05			6.3E+05	6.3E+04
Propylene Oxide	000075-56-9	2.4E+03	2.4E+01			7.0E+03	7.0E+01	2.8E+03	2.8E+02	3.0E+03	3.0E+01			1.1E+03	1.1E+01		
Pursuit	081335-77-5			5.1E+05	5.1E+04							4.0E+05	4.0E+04			2.3E+05	2.3E+04
Pydrin	051630-58-1			5.1E+04	5.1E+03							4.0E+04	4.0E+03			2.3E+04	2.3E+03
Pyrene	000129-00-0			6.1E+04	6.1E+03							3.0E+04	3.0E+03			2.0E+04	2.0E+03
Pyridine	000110-86-1			2.0E+03	2.0E+02							1.6E+03	1.6E+02			9.0E+02	9.0E+01
Quinalphos	013593-03-8			1.0E+03	1.0E+02							8.1E+02	8.1E+01			4.5E+02	4.5E+01
Quinoline	000091-22-5	4.8E+01	4.8E-01							3.8E+01	3.8E-01			2.1E+01	2.1E-01		
Refractory Ceramic Fibers	NA																

Table 3.2c. (continued)

Chemical	CASRN	Ingestion (mg/kg)*				Inhalation (mg/kg)*				Dermal (mg/kg)*				Ingestion + Inhalation + Dermal (mg/kg)*			
		10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Resmethrin	010453-86-8			6.1E+04	6.1E+03							4.9E+04	4.9E+03			2.7E+04	2.7E+03
Ronnel	000299-84-3			1.0E+05	1.0E+04							8.1E+04	8.1E+03			4.5E+04	4.5E+03
Rotenone	000083-79-4			8.2E+03	8.2E+02							6.5E+03	6.5E+02			3.6E+03	3.6E+02
Savey	078587-05-0			5.1E+04	5.1E+03							4.0E+04	4.0E+03			2.3E+04	2.3E+03
Selenious Acid	007783-00-8			1.0E+04	1.0E+03							1.4E+04	1.4E+03			5.9E+03	5.9E+02
Selenite	014124-67-5																
Selenium	007782-49-2			1.0E+04	1.0E+03							7.1E+04	7.1E+03			8.9E+03	8.9E+02
Selenium Sulfide	007446-34-6																
Selenourea	000630-10-4			1.0E+04	1.0E+03							8.1E+03	8.1E+02			4.5E+03	4.5E+02
Sethoxydim	074051-80-2			1.8E+05	1.8E+04							1.5E+05	1.5E+04			8.1E+04	8.1E+03
Silver	007440-22-4			1.0E+04	1.0E+03							2.9E+04	2.9E+03			7.6E+03	7.6E+02
Silver Cyanide	000506-64-9			2.0E+05	2.0E+04							6.5E+05	6.5E+04			1.6E+05	1.6E+04
Simazine	000122-34-9	4.8E+03	4.8E+01	1.0E+04	1.0E+03					3.8E+03	3.8E+01	8.1E+03	8.1E+02	2.1E+03	2.1E+01	4.5E+03	4.5E+02
Sodium	007440-23-5																
Sodium Acifluorfen	062476-59-9			2.7E+04	2.7E+03							2.1E+04	2.1E+03			1.2E+04	1.2E+03
Sodium Azide	026628-22-8			8.2E+03	8.2E+02							2.6E+04	2.6E+03			6.2E+03	6.2E+02
Sodium Cyanide	000143-33-9			8.2E+04	8.2E+03							1.0E+05	1.0E+04			4.6E+04	4.6E+03
Sodium Diethyldithiocarbamate	000148-18-5	2.1E+03	2.1E+01	6.1E+04	6.1E+03					1.7E+03	1.7E+01	4.9E+04	4.9E+03	9.4E+02	9.4E+00	2.7E+04	2.7E+03
Sodium Fluoroacetate	000062-74-8			4.1E+01	4.1E+00							3.2E+01	3.2E+00			1.8E+01	1.8E+00
Sodium Metavanadate	013718-26-8			2.0E+03	2.0E+02							6.5E+03	6.5E+02			1.6E+03	1.6E+02
Stirofos (Tetrachlorovinphos)	000961-11-5	2.4E+04	2.4E+02	6.1E+04	6.1E+03					1.9E+04	1.9E+02	4.9E+04	4.9E+03	1.1E+04	1.1E+02	2.7E+04	2.7E+03
Strontium, Stable	007440-24-6			1.0E+06	1.2E+05							1.0E+06	3.9E+05			9.3E+05	9.3E+04

3-326

Table 3.2c. (continued)

Chemical	CASRN	Ingestion (mg/kg)*				Inhalation (mg/kg)* ^v				Dermal (mg/kg)*				Ingestion + Inhalation + Dermal (mg/kg)* ^v			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Strychnine	000057-24-9			6.1E+02	6.1E+01							4.9E+02	4.9E+01			2.7E+02	2.7E+01
Styrene ⁽⁶⁾	000100-42-5			4.1E+05	4.1E+04			6.7E+02	6.7E+02			5.2E+05	5.2E+04			6.7E+02	6.7E+02
Sulfate	014808-79-8																
Systhane	088671-89-0			5.1E+04	5.1E+03							4.0E+04	4.0E+03			2.3E+04	2.3E+03
TCDD, 2,3,7,8- ⁽⁶⁾	001746-01-6	3.8E-03	3.8E-05			4.1E+01	4.1E-01			1.0E-03	1.0E-05			8.0E-04	8.0E-06		
TCDF, 2,3,7,8- ⁽⁶⁾	051207-31-9	3.8E-02	3.8E-04			4.1E+02	4.1E+00			3.0E-02	3.0E-04			1.7E-02	1.7E-04		
TCMTB	021564-17-0			6.1E+04	6.1E+03							4.9E+04	4.9E+03			2.7E+04	2.7E+03
Tebuthiuron	034014-18-1			1.4E+05	1.4E+04							1.1E+05	1.1E+04			6.3E+04	6.3E+03
Temephos	003383-96-8			4.1E+04	4.1E+03							3.2E+04	3.2E+03			1.8E+04	1.8E+03
Terbacil	005902-51-2			2.7E+04	2.7E+03							2.1E+04	2.1E+03			1.2E+04	1.2E+03
Terbufos	013071-79-9			5.1E+01	5.1E+00							4.0E+01	4.0E+00			2.3E+01	2.3E+00
Terbutryn	000886-50-0			2.0E+03	2.0E+02							1.6E+03	1.6E+02			9.0E+02	9.0E+01
Tetrabutyl Lead	001920-90-7																
Tetrachlorobenzene, 1,2,4,5-	000095-94-3			6.1E+02	6.1E+01							7.8E+02	7.8E+01			3.4E+02	3.4E+01
Tetrachloroethane, 1,1,1,2-	000630-20-6	2.2E+04	2.2E+02	6.1E+04	6.1E+03	7.7E+02	2.9E+01			2.8E+04	2.8E+02	7.8E+04	7.8E+03	7.7E+02	2.4E+01	7.7E+02	7.7E+02
Tetrachloroethane, 1,1,2,2-	000079-34-5	2.9E+03	2.9E+01			6.8E+02	6.8E+00			3.2E+03	3.2E+01			4.7E+02	4.7E+00		
Tetrachloroethylene ⁽⁶⁾	000127-18-4	1.1E+04	1.1E+02	2.0E+04	2.0E+03	1.2E+02	1.2E+02			1.7E+04	1.7E+02	3.2E+04	3.2E+03	1.2E+02	4.7E+01	1.2E+02	1.2E+02
Tetrachlorophenol, 2,3,4,6-	000058-90-2			6.1E+04	6.1E+03							4.9E+04	4.9E+03			2.7E+04	2.7E+03
Tetrachlorotoluene, p-alpha, alpha, alpha-	005216-25-1	2.9E+01	2.9E-01							3.6E+01	3.6E-01			1.6E+01	1.6E-01		
Tetraethyl Dithiopyrophosphate	003689-24-5			1.0E+03	1.0E+02							8.1E+02	8.1E+01			4.5E+02	4.5E+01

Table 3.2c. (continued)

Chemical	CASRN	Ingestion (mg/kg)*				Inhalation (mg/kg)* ^v				Dermal (mg/kg)*				Ingestion + Inhalation + Dermal (mg/kg)* ^{vy}			
		10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Tetraethyl Lead	000078-00-2																
Tetrafluoroethane, 1,1,1,2-	000811-97-2							1.1E+02	1.1E+02								
Tetramethyl Lead	000075-74-1																
Tetrapropyl Lead	003440-75-3																
Thallic Oxide ⁽⁵⁾	001314-32-5			1.4E+02	1.4E+01							1.1E+02	1.1E+01			6.3E+01	6.3E+00
Thallium (I) Nitrate	010102-45-1			1.8E+02	1.8E+01							5.8E+02	5.8E+01			1.4E+02	1.4E+01
Thallium (Soluble Salts)	007440-28-0																
Thallium Acetate	000563-68-8			1.8E+02	1.8E+01							1.5E+02	1.5E+01			8.1E+01	8.1E+00
Thallium Carbonate	006533-73-9			1.6E+02	1.6E+01							1.3E+02	1.3E+01			7.2E+01	7.2E+00
Thallium Chloride	007791-12-0			1.6E+02	1.6E+01							5.2E+02	5.2E+01			1.2E+02	1.2E+01
Thallium Selenite ⁽⁵⁾	012039-52-0			1.8E+02	1.8E+01							5.8E+02	5.8E+01			1.4E+02	1.4E+01
Thallium Sulfate	007446-18-6			1.6E+02	1.6E+01							5.2E+02	5.2E+01			1.2E+02	1.2E+01
Thiobencarb	028249-77-6			2.0E+04	2.0E+03							1.6E+04	1.6E+03			9.0E+03	9.0E+02
Thiofanox	039196-18-4			6.1E+02	6.1E+01							4.9E+02	4.9E+01			2.7E+02	2.7E+01
Thiophanate, Methyl	023564-05-8			1.6E+05	1.6E+04							1.3E+05	1.3E+04			7.2E+04	7.2E+03
Thiram	000137-26-8			1.0E+04	1.0E+03							8.1E+03	8.1E+02			4.5E+03	4.5E+02
Thorium	007440-29-1																
Tin	007440-31-5			1.0E+06	1.2E+05							1.0E+06	1.9E+05			7.5E+05	7.5E+04
Titanium	007440-32-6																
Toluene ⁽⁶⁾	000108-88-3			4.1E+05	4.1E+04			2.5E+02	2.5E+02			5.2E+05	5.2E+04			2.5E+02	2.5E+02
Toluene diisocyanate mixture (TDI)	026471-62-5							4.4E+05	4.4E+04								
Toluene-2,4-diamine	000095-80-7	1.8E+02	1.8E+00							1.4E+02	1.4E+00			7.9E+01	7.9E-01		

Table 3.2c. (continued)

Chemical	CASRN	Ingestion (mg/kg)*				Inhalation (mg/kg)* ^x				Dermal (mg/kg)*				Ingestion + Inhalation + Dermal (mg/kg) ^{x,y}			
		10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Toluene-2,5-diamine	000095-70-5			1.0E+06	1.2E+05							9.7E+05	9.7E+04			5.4E+05	5.4E+04
Toluene-2,6-diamine	000823-40-5			4.1E+05	4.1E+04							3.2E+05	3.2E+04			1.8E+05	1.8E+04
Toluidine, o- (Methylaniline, 2-)	000095-53-4	2.4E+03	2.4E+01							1.9E+03	1.9E+01			1.1E+03	1.1E+01		
Toluidine, p-	000106-49-0	3.0E+03	3.0E+01							2.4E+03	2.4E+01			1.3E+03	1.3E+01		
Toxaphene	008001-35-2	5.2E+02	5.2E+00			1.0E+06	5.6E+04			4.1E+02	4.1E+00			2.3E+02	2.3E+00		
Tralomethrin	066841-25-6			1.5E+04	1.5E+03							1.2E+04	1.2E+03			6.8E+03	6.8E+02
Triallate	002303-17-5			2.7E+04	2.7E+03							2.1E+04	2.1E+03			1.2E+04	1.2E+03
Triasulfuron	082097-50-5			2.0E+04	2.0E+03							1.6E+04	1.6E+03			9.0E+03	9.0E+02
Tribromobenzene, 1,2,4-	000615-54-3			1.0E+04	1.0E+03							1.3E+04	1.3E+03			5.7E+03	5.7E+02
Tribromochloromethane	000594-15-0																
Tribromodiphenyl Ether	049690-94-0																
Tributyltin Oxide	000056-35-9			6.1E+01	6.1E+00							4.9E+01	4.9E+00			2.7E+01	2.7E+00
Trichloro-1,2,2- trifluoroethane, 1,1,2-	000076-13-1			1.0E+06	1.0E+06			2.1E+02	2.1E+02			1.0E+06	1.0E+06			2.1E+02	2.1E+02
Trichloro-2'- hydroxydiphenylether	003380-34-5																
Trichloroacetic Acid																	
Trichloroaniline HCl, 2,4,6-	033663-50-2	2.0E+04	2.0E+02							1.6E+04	1.6E+02			8.7E+03	8.7E+01		
Trichloroaniline, 2,4,6-	000634-93-5	1.7E+04	1.7E+02							1.3E+04	1.3E+02			7.4E+03	7.4E+01		
Trichlorobenzene, 1,2,4-	000120-82-1			2.0E+04	2.0E+03			8.3E+02	8.3E+02			3.1E+04	3.1E+03			8.3E+02	8.3E+02
Trichloroethane, 1,1,1-(⁹)	000071-55-6			1.8E+05	1.8E+04			7.3E+02	7.3E+02			2.6E+05	2.6E+04			7.3E+02	7.3E+02
Trichloroethane, 1,1,2-	000079-00-5	1.0E+04	1.0E+02	8.2E+03	8.2E+02	8.5E+02	8.8E+00			1.3E+04	1.3E+02	1.0E+04	1.0E+03	7.6E+02	7.6E+00	8.5E+02	4.6E+02
Trichloroethylene(⁹)	000079-01-6	5.2E+04	5.2E+02			4.5E+02	4.5E+01			1.2E+04	1.2E+02			4.5E+02	3.1E+01		

Table 3.2c. (continued)

Chemical	CASRN	Ingestion (mg/kg)*				Inhalation (mg/kg)* ^x				Dermal (mg/kg)*				Ingestion + Inhalation + Dermal (mg/kg) ^{1-v}			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Trichlorofluoromethane	000075-69-4			6.1E+05	6.1E+04			7.1E+02	6.0E+02			2.2E+05	2.2E+04			7.1E+02	5.7E+02
Trichlorophenol, 2,4,5-	000095-95-4			2.0E+05	2.0E+04							2.6E+05	2.6E+04			1.1E+05	1.1E+04
Trichlorophenol, 2,4,6-	000088-06-2	5.2E+04	5.2E+02			1.0E+06	1.0E+06			4.1E+04	4.1E+02			2.3E+04	2.3E+02		
Trichlorophenoxy) Propionic Acid, 2(2,4,5-	000093-72-1			1.6E+04	1.6E+03							1.3E+04	1.3E+03			7.2E+03	7.2E+02
Trichlorophenoxyacetic Acid, 2,4,5-	000093-76-5			2.0E+04	2.0E+03							1.6E+04	1.6E+03			9.0E+03	9.0E+02
Trichloropropane, 1,1,2-	000598-77-6			1.0E+04	1.0E+03							1.3E+04	1.3E+03			5.7E+03	5.7E+02
Trichloropropane, 1,2,3-	000096-18-4	8.2E+01	8.2E-01	1.2E+04	1.2E+03					1.0E+02	1.0E+00	1.6E+04	1.6E+03	4.6E+01	4.6E-01	6.9E+03	6.9E+02
Trichloropropene, 1,2,3-	000096-19-5			1.0E+04	1.0E+03							1.3E+04	1.3E+03			5.7E+03	5.7E+02
Trichlorotoluene, 2,3,6-	002077-46-5																
Trichlorotoluene, alpha 2,6-	002014-83-7																
Tridiphenyl	058138-08-2			6.1E+03	6.1E+02							4.9E+03	4.9E+02			2.7E+03	2.7E+02
Triethyl Lead	005224-23-7																
Triethylamine	000121-44-8							1.7E+03	1.7E+02								
Trifluralin	001582-09-8	7.4E+04	7.4E+02	1.5E+04	1.5E+03					5.9E+04	5.9E+02	1.2E+04	1.2E+03	3.3E+04	3.3E+02	6.8E+03	6.8E+02
Trimethyl Lead	007442-13-9																
Trimethyl Phosphate	000512-56-1	1.5E+04	1.5E+02							1.2E+04	1.2E+02			6.8E+03	6.8E+01		
Trimethylethyl Lead	001762-26-1																
Trinitrobenzene, 1,3,5-	000099-35-4			1.0E+02	1.0E+01							1.1E+02	1.1E+01			5.2E+01	5.2E+00
Trinitrophenylmethyl- nitramine	000479-45-8			2.0E+04	2.0E+03							1.6E+04	1.6E+03			9.0E+03	9.0E+02
Trinitrotoluene, 2,4,6-	000118-96-7	1.9E+04	1.9E+02	1.0E+03	1.0E+02					1.8E+04	1.8E+02	9.7E+02	9.7E+01	9.3E+03	9.3E+01	5.0E+02	5.0E+01
Tripropyl Lead	006618-03-7																

3-330

Table 3.2c. (continued)

Chemical	CASRN	Ingestion (mg/kg)*				Inhalation (mg/kg)* ^v				Dermal (mg/kg)*				Ingestion + Inhalation + Dermal (mg/kg)* ^{u,v}			
		10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Uranium (Soluble Salts)	NA			6.1E+03	6.1E+02							8.2E+04	8.2E+03			5.7E+03	5.7E+02
Vanadium Pentoxide	001314-62-1			1.8E+04	1.8E+03							5.8E+04	5.8E+03			1.4E+04	1.4E+03
Vanadium Sulfate	036907-42-3			4.1E+04	4.1E+03							1.3E+05	1.3E+04			3.1E+04	3.1E+03
Vanadium, Metallic	007440-62-2			1.4E+04	1.4E+03							2.3E+03	2.3E+02			2.0E+03	2.0E+02
Vanadyl Sulfate	027774-13-6			4.1E+04	4.1E+03							1.3E+05	1.3E+04			3.1E+04	3.1E+03
Vemolate	001929-77-7			2.0E+03	2.0E+02							1.6E+03	1.6E+02			9.0E+02	9.0E+01
Vinclozolin	050471-44-8			5.1E+04	5.1E+03							4.0E+04	4.0E+03			2.3E+04	2.3E+03
Vinyl Acetate	000108-05-4			1.0E+06	2.0E+05			7.8E+02	3.9E+02			1.0E+06	2.1E+05			7.8E+02	3.9E+02
Vinyl Bromide	000593-60-2					1.8E+02	1.8E+00	6.2E+01	6.2E+00								
Vinyl Chloride ⁽⁶⁾	000075-01-4	3.0E+02	3.0E+00			4.1E-02	4.1E-04			4.8E+02	4.8E+00			4.1E-02	4.1E-04		
Warfarin	000081-81-2			6.1E+02	6.1E+01							4.9E+02	4.9E+01			2.7E+02	2.7E+01
White Phosphorus	007723-14-0			4.1E+01	4.1E+00							1.3E+02	1.3E+01			3.1E+01	3.1E+00
Xylene, Mixture ⁽⁶⁾	001330-20-7			1.0E+06	4.1E+05							1.0E+06	6.0E+05			1.0E+06	2.4E+05
Xylene, P ⁽⁶⁾	000106-42-3																
Xylene, m ⁽⁶⁾	000108-38-3			1.0E+06	4.1E+05							1.0E+06	5.2E+05			1.0E+06	2.3E+05
Xylene, o ⁽⁶⁾	000095-47-6			1.0E+06	4.1E+05							1.0E+06	5.2E+05			1.0E+06	2.3E+05
Zinc (Metallic)	007440-66-6			6.1E+05	6.1E+04							1.0E+06	1.9E+05			4.7E+05	4.7E+04
Zinc Cyanide	000557-21-1			1.0E+05	1.0E+04							3.2E+05	3.2E+04			7.8E+04	7.8E+03
Zinc Phosphide	001314-84-7			6.1E+02	6.1E+01							1.9E+03	1.9E+02			4.7E+02	4.7E+01

Table 3.2c. (continued)

Chemical	CASRN	Ingestion (mg/kg)*				Inhalation (mg/kg)* [†]				Dermal (mg/kg)*				Ingestion + Inhalation + Dermal (mg/kg)* [†]			
		10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Zineb	012122-67-7			1.0E+05	1.0E+04							8.1E+04	8.1E+03			4.5E+04	4.5E+03
Zirconium	007440-67-7																

Notes:

- * By definition, 1 kg = 1.0E + 06 mg. Therefore, a limit of 1.0E + 06 mg/kg was used for any PRG that was calculated to be above this limit.
- † If slope factors and/or reference doses were available for only one pathway (i.e., ingestion, dermal, OR inhalation), the total for ingestion plus inhalation plus dermal was not calculated.
- ‡ The volatilization factor 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 volatilization factor 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) The same oral slope factor as used for polychlorinated biphenyls.
 - (2) The PRG was calculated considering *Supplemental Guidance from RAGS: Region 4 Bulletins, Human Health Risk Assessment* (Interim 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.
 - (3) The toxicity values for trichloroethylene have been withdrawn from IRIS and HEAST pending further investigation. However, the most recent toxicity values have been used to calculate the PRG.
 - (4) The PRG was calculated considering *Supplemental Guidance from RAGS: Region 4 Bulletins, Human Health Risk Assessment* (Interim Guidance) from EPA (November 1995). The slope factors for chemicals so marked indicate that a TEF methodology was used for chlorinated dioxin and furan congeners based on each compound's relative potency to the potency of 2,3,7,8-tetrachlorodibenzodioxin (TCDD). The following TEFs were used to convert each slope factor to an equivalent slope factor of 2,3,7,8-TCDD: (1) 2,3,7,8-TCDD, TEF = 1.0; (2) 2,3,7,8-PeCDD, TEF = 0.5; (3) 2,3,7,8-HxCDD, TEF = 0.1; (4) 2,3,7,8-HpCDD, TEF = 0.01; (5) OCDD, TEF = 0.001; (6) 2,3,7,8-TCDF, TEF = 0.1; (7) 1,2,3,7,8-PeCDF, TEF = 0.5; (8) 2,3,4,7,8-PeCDF, TEF = 0.05; (9) 2,3,7,8-HxCDF, TEF = 0.1; (10) 2,3,7,8-HpCDF, TEF = 0.01; and (11) OCDF, TEF = 0.001.
 - (5) Toxicity values for these chemicals have been withdrawn from IRIS and HEAST pending further investigation. However, the most recent toxicity values have been used to calculate the PRG.
 - (6) Toxicity values for these chemicals were obtained from the Superfund Health Risk Technical Support Center.

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

Chemical [†]	CASRN	Ingestion (pCi/g)		Inhalation (pCi/g)		External Exposure (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	2.3E+03	2.3E+01	8.2E+05	8.2E+03	2.8E+03	2.8E+01	1.2E+03	1.2E+01
Ac-227	014952-40-0	9.1E+02	9.1E+00	4.8E+04	4.8E+02	9.3E+05	9.3E+03	8.9E+02	8.9E+00
Ac-227+D	014952-40-0	5.1E+02	5.1E+00	4.4E+04	4.4E+02	3.7E+01	3.7E-01	3.4E+01	3.4E-01
Ac-228	014331-83-0	2.0E+05	2.0E+03	1.0E+08	1.0E+06	6.7E+00	6.7E-02	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	3.6E+11	3.6E+09	3.8E+02	3.8E+00	3.8E+02	3.8E+00
Ag-108m	014391-65-2	5.3E+04	5.3E+02	4.9E+07	4.9E+05	3.9E+00	3.9E-02	3.9E+00	3.9E-02
Ag-108m+D	014391-65-2	5.3E+04	5.3E+02	4.9E+07	4.9E+05	3.9E+00	3.9E-02	3.9E+00	3.9E-02
Ag-109m	014378-38-2	1.2E+09	1.2E+07	9.9E+12	9.9E+10	1.9E+04	1.9E+02	1.9E+04	1.9E+02
Ag-110	014391-76-5	1.3E+08	1.3E+06	1.1E+12	1.1E+10	1.9E+02	1.9E+00	1.9E+02	1.9E+00
Ag-110m	014391-76-5	3.8E+04	3.8E+02	1.1E+08	1.1E+06	2.1E+00	2.1E-02	2.1E+00	2.1E-02
Ag-111	015760-04-0	4.7E+04	4.7E+02	6.5E+08	6.5E+06	2.6E+02	2.6E+00	2.6E+02	2.6E+00
Am-241	014596-10-2	9.8E+02	9.8E+00	8.9E+04	8.9E+02	4.8E+03	4.8E+01	8.0E+02	8.0E+00
Am-242	013981-54-9	2.2E+05	2.2E+03	3.3E+08	3.3E+06	3.8E+03	3.8E+01	3.7E+03	3.7E+01
Am-242m	013981-54-9	1.1E+03	1.1E+01	9.8E+04	9.8E+02	2.5E+05	2.5E+03	1.1E+03	1.1E+01
Am-243	014993-75-0	9.8E+02	9.8E+00	9.0E+04	9.0E+02	9.0E+02	9.0E+00	4.7E+02	4.7E+00
Am-243+D	014993-75-0	9.7E+02	9.7E+00	9.0E+04	9.0E+02	8.2E+01	8.2E-01	7.6E+01	7.6E-01

Table 3.2d. (continued)

Chemical ^t	CASRN	Ingestion (pCi/g)		Inhalation (pCi/g)		External Exposure (pCi/g) ^{††}		Ingestion + Inhalation + External Exposure (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Ar-41	014163-25-8			7.3E+12	7.3E+10				
At-217	017239-90-6	3.6E+10	3.6E+08	6.7E+12	6.7E+10	2.5E+04	2.5E+02	2.5E+04	2.5E+02
Au-196	014914-16-0	2.5E+05	2.5E+03	3.3E+09	3.3E+07	1.6E+01	1.6E-01	1.6E+01	1.6E-01
Au-198	010043-49-0	6.1E+04	6.1E+02	9.4E+08	9.4E+06	1.6E+01	1.6E-01	1.6E+01	1.6E-01
Ba-131	014914-75-1	1.9E+05	1.9E+03	7.2E+09	7.2E+07	1.7E+01	1.7E-01	1.7E+01	1.7E-01
Ba-133	013981-41-4	1.2E+05	1.2E+03	8.5E+08	8.5E+06	2.4E+01	2.4E-01	2.4E+01	2.4E-01
Ba-133m	013981-41-4	1.2E+05	1.2E+03	6.1E+09	6.1E+07	2.2E+02	2.2E+00	2.2E+02	2.2E+00
Ba-137m	013981-97-0	1.3E+08	1.3E+06	2.2E+12	2.2E+10	9.9E+00	9.9E-02	9.9E+00	9.9E-02
Ba-139	014378-25-7	1.1E+06	1.1E+04	2.2E+10	2.2E+08	2.6E+02	2.6E+00	2.6E+02	2.6E+00
Ba-140	014798-08-4	2.7E+04	2.7E+02	1.1E+09	1.1E+07	3.7E+01	3.7E-01	3.6E+01	3.6E-01
Be-7	013966-02-4	3.7E+06	3.7E+04	1.9E+10	1.9E+08	1.3E+02	1.3E+00	1.3E+02	1.3E+00
Bi-206	015776-19-9	4.5E+04	4.5E+02	6.8E+08	6.8E+06	1.8E+00	1.8E-02	1.8E+00	1.8E-02
Bi-207	013982-38-2	6.3E+04	6.3E+02	3.6E+08	3.6E+06	4.0E+00	4.0E-02	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	2.0E+09	2.0E+07	1.5E+02	1.5E+00	1.5E+02	1.5E+00
Bi-212	014913-49-6	5.2E+05	5.2E+03	9.4E+07	9.4E+05	3.3E+01	3.3E-01	3.3E+01	3.3E-01
Bi-213	015776-20-2	7.3E+05	7.3E+03	1.1E+08	1.1E+06	4.7E+01	4.7E-01	4.7E+01	4.7E-01

Radionuclides/soil/industrial

Table 3.2d. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		Inhalation (pCi/g)		External Exposure (pCi/g) ^{††}		Ingestion + Inhalation + External Exposure (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Bi-214	014733-03-0	1.6E+06	1.6E+04	2.3E+08	2.3E+06	3.6E+00	3.6E-02	3.6E+00	3.6E-02
Br-82	014686-69-2	2.3E+05	2.3E+03	4.4E+09	4.4E+07	2.2E+00	2.2E-02	2.2E+00	2.2E-02
C-11	014333-33-6	7.1E+06	7.1E+04	1.0E+11	1.0E+09	6.1E+00	6.1E-02	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
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	1.4E+09	1.4E+07	5.6E+12	5.6E+10	1.6E+05	1.6E+03
Ca-47	001439-99-2	4.8E+04	4.8E+02	6.6E+08	6.6E+06	5.3E+00	5.3E-02	5.3E+00	5.3E-02
Cd-109	014109-32-1	4.0E+04	4.0E+02	1.9E+08	1.9E+06	3.9E+04	3.9E+02	2.0E+04	2.0E+02
Cd-115	014336-68-6	4.4E+04	4.4E+02	7.0E+08	7.0E+06	3.1E+01	3.1E-01	3.1E+01	3.1E-01
Cd-115m	014336-68-6	2.3E+04	2.3E+02	2.0E+08	2.0E+06	2.6E+02	2.6E+00	2.5E+02	2.5E+00
Ce-141	013967-74-3	8.2E+04	8.2E+02	7.9E+08	7.9E+06	1.6E+02	1.6E+00	1.6E+02	1.6E+00
Ce-143	014119-19-8	5.4E+04	5.4E+02	8.9E+08	8.9E+06	3.0E+01	3.0E-01	3.0E+01	3.0E-01
Ce-144	014762-78-8	1.1E+04	1.1E+02	3.2E+07	3.2E+05	8.5E+02	8.5E+00	7.9E+02	7.9E+00
Ce-144+D	014762-78-8	1.1E+04	1.1E+02	3.2E+07	3.2E+05	1.4E+02	1.4E+00	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	2.1E+10	2.1E+08	3.4E+00	3.4E-02	3.4E+00	3.4E-02
Cm-242	015510-73-3	8.4E+03	8.4E+01	1.1E+06	1.1E+04	9.4E+05	9.4E+03	8.2E+03	8.2E+01

Table 3.2d. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		Inhalation (pCi/g)		External Exposure (pCi/g) ^{††}		Ingestion + Inhalation + External Exposure (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Cm-243	015757-87-6	1.3E+03	1.3E+01	1.2E+05	1.2E+03	1.3E+02	1.3E+00	1.2E+02	1.2E+00
Cm-243+D	015757-87-6	1.3E+03	1.3E+01	1.2E+05	1.2E+03	1.3E+02	1.3E+00	1.2E+02	1.2E+00
Cm-244	013981-15-2	1.5E+03	1.5E+01	1.4E+05	1.4E+03	1.1E+06	1.1E+04	1.5E+03	1.5E+01
Cm-245	015621-76-8	9.6E+02	9.6E+00	8.7E+04	8.7E+02	4.0E+02	4.0E+00	2.8E+02	2.8E+00
Cm-246	015757-90-1	9.6E+02	9.6E+00	8.8E+04	8.8E+02	1.2E+06	1.2E+04	9.5E+02	9.5E+00
Cm-247	015758-32-4	1.0E+03	1.0E+01	9.6E+04	9.6E+02	2.1E+01	2.1E-01	2.1E+01	2.1E-01
Cm-248	015758-33-5	2.4E+02	2.4E+00	2.3E+04	2.3E+02	1.5E+06	1.5E+04	2.4E+02	2.4E+00
Co-57	013981-50-5	3.3E+05	3.3E+03	1.2E+09	1.2E+07	1.1E+02	1.1E+00	1.1E+02	1.1E+00
Co-58	013981-38-9	1.1E+05	1.1E+03	6.6E+08	6.6E+06	5.9E+00	5.9E-02	5.9E+00	5.9E-02
Co-58m	013981-38-9	3.4E+06	3.4E+04	3.9E+10	3.9E+08	6.8E+05	6.8E+03	5.7E+05	5.7E+03
Co-60	010198-40-0	1.7E+04	1.7E+02	5.0E+07	5.0E+05	2.2E+00	2.2E-02	2.2E+00	2.2E-02
Cr-51	014392-02-0	2.3E+06	2.3E+04	2.0E+10	2.0E+08	2.1E+02	2.1E+00	2.1E+02	2.1E+00
Cs-131	014914-76-2	1.8E+06	1.8E+04	3.2E+10	3.2E+08	9.4E+03	9.4E+01	9.3E+03	9.3E+01
Cs-134	013967-70-9	6.8E+03	6.8E+01	1.2E+08	1.2E+06	3.7E+00	3.7E-02	3.7E+00	3.7E-02
Cs-134m	013967-70-9	7.0E+06	7.0E+04	1.1E+11	1.1E+09	1.1E+03	1.1E+01	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	7.4E+08	7.4E+06	2.7E+00	2.7E-02	2.7E+00	2.7E-02

Table 3.2d. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		Inhalation (pCi/g)		External Exposure (pCi/g) ^{††}		Ingestion + Inhalation + External Exposure (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
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	1.8E+08	1.8E+06	1.0E+01	1.0E-01	1.0E+01	1.0E-01
Cs-138	015758-29-9	1.8E+06	1.8E+04	2.6E+10	2.6E+08	2.3E+00	2.3E-02	2.3E+00	2.3E-02
Cu-64	013981-25-4	6.1E+05	6.1E+03	8.2E+09	8.2E+07	3.3E+01	3.3E-01	3.3E+01	3.3E-01
Dy-165	013967-64-1	9.8E+05	9.8E+03	1.5E+10	1.5E+08	3.5E+02	3.5E+00	3.5E+02	3.5E+00
Dy-166	015840-01-4	3.4E+04	3.4E+02	4.4E+08	4.4E+06	8.1E+02	8.1E+00	7.9E+02	7.9E+00
Er-169	015840-13-8	1.5E+05	1.5E+03	2.3E+09	2.3E+07	3.4E+06	3.4E+04	1.4E+05	1.4E+03
Er-171	014391-45-8	2.0E+05	2.0E+03	4.6E+09	4.6E+07	2.1E+01	2.1E-01	2.1E+01	2.1E-01
Eu-152	014683-23-9	5.6E+04	5.6E+02	4.3E+07	4.3E+05	5.4E+00	5.4E-02	5.4E+00	5.4E-02
Eu-154	015585-10-1	3.4E+04	3.4E+02	3.7E+07	3.7E+05	4.7E+00	4.7E-02	4.7E+00	4.7E-02
Eu-155	014391-16-3	1.9E+05	1.9E+03	3.6E+08	3.6E+06	3.6E+02	3.6E+00	3.6E+02	3.6E+00
Eu-156	014280-35-4	2.9E+04	2.9E+02	3.7E+08	3.7E+06	4.1E+00	4.1E-02	4.1E+00	4.1E-02
F-18	013981-56-1	2.9E+06	2.9E+04	5.2E+10	5.2E+08	6.3E+00	6.3E-02	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	4.8E+08	4.8E+06	4.7E+00	4.7E-02	4.7E+00	4.7E-02
Fr-221	015756-41-9	2.2E+06	2.2E+04	4.3E+08	4.3E+06	3.2E+02	3.2E+00	3.2E+02	3.2E+00
Fr-223	015756-98-6	7.2E+05	7.2E+03	5.8E+09	5.8E+07	5.3E+02	5.3E+00	5.2E+02	5.2E+00

Table 3.2d. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		Inhalation (pCi/g)		External Exposure (pCi/g) ^{††}		Ingestion + Inhalation + External Exposure (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁵	10 ⁻⁴	10 ⁻⁵	10 ⁻⁴	10 ⁻⁵	10 ⁻⁴	10 ⁻⁵
Ga-67	014119-09-6	3.8E+05	3.8E+03	6.7E+09	6.7E+07	6.1E+01	6.1E-01	6.1E+01	6.1E-01
Ga-72	013982-22-4	6.7E+04	6.7E+02	1.6E+09	1.6E+07	2.0E+00	2.0E-02	2.0E+00	2.0E-02
Gd-153	014276-65-4	2.4E+05	2.4E+03	1.1E+09	1.1E+07	3.0E+02	3.0E+00	3.0E+02	3.0E+00
Gd-159	014041-42-0	1.2E+05	1.2E+03	2.8E+09	2.8E+07	2.3E+02	2.3E+00	2.3E+02	2.3E+00
Ge-71	014374-81-3	2.7E+07	2.7E+05	5.9E+10	5.9E+08	1.4E+06	1.4E+04	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	4.9E+09	4.9E+07	4.0E+02	4.0E+00	4.0E+02	4.0E+00
Hg-203	013982-78-0	1.2E+05	1.2E+03	1.1E+09	1.1E+07	3.5E+01	3.5E-01	3.5E+01	3.5E-01
Ho-166	013967-65-2	4.2E+04	4.2E+02	8.4E+08	8.4E+06	3.1E+02	3.1E+00	3.1E+02	3.1E+00
I-122	018287-75-7	1.5E+07	1.5E+05	1.5E+11	1.5E+09	6.4E+00	6.4E-02	6.4E+00	6.4E-02
I-123	015715-08-9	5.9E+05	5.9E+03	1.2E+10	1.2E+08	8.7E+01	8.7E-01	8.7E+01	8.7E-01
I-125	014158-31-7	1.2E+04	1.2E+02	2.0E+08	2.0E+06	9.2E+03	9.2E+01	5.3E+03	5.3E+01
I-126	014158-32-8	6.6E+03	6.6E+01	1.1E+08	1.1E+06	1.5E+01	1.5E-01	1.5E+01	1.5E-01
I-129	015046-84-1	1.7E+03	1.7E+01	2.8E+07	2.8E+05	8.1E+03	8.1E+01	1.4E+03	1.4E+01
I-130	014914-02-4	6.6E+04	6.6E+02	1.3E+09	1.3E+07	2.8E+00	2.8E-02	2.8E+00	2.8E-02
I-131	010043-66-0	8.8E+03	8.8E+01	1.5E+08	1.5E+06	1.8E+01	1.8E-01	1.7E+01	1.7E-01
I-132	014683-16-0	4.8E+05	4.8E+03	9.7E+09	9.7E+07	2.5E+00	2.5E-02	2.5E+00	2.5E-02

Radionuclides/soil/industrial

Table 3.2d. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		Inhalation (pCi/g)		External Exposure (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-133	014834-67-4	3.0E+04	3.0E+02	5.7E+08	5.7E+06	1.0E+01	1.0E-01	1.0E+01	1.0E-01
I-134	014914-27-3	1.4E+06	1.4E+04	2.5E+10	2.5E+08	2.1E+00	2.1E-02	2.1E+00	2.1E-02
I-135	014834-68-5	1.4E+05	1.4E+03	2.9E+09	2.9E+07	3.5E+00	3.5E-02	3.5E+00	3.5E-02
In-113m	014885-78-0	3.9E+06	3.9E+04	5.9E+10	5.9E+08	2.8E+01	2.8E-01	2.8E+01	2.8E-01
In-114	013981-55-0	7.1E+07	7.1E+05	5.9E+11	5.9E+09	1.9E+02	1.9E+00	1.9E+02	1.9E+00
In-114m	013981-55-0	1.6E+04	1.6E+02	1.4E+08	1.4E+06	1.1E+02	1.1E+00	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	2.0E+10	2.0E+08	5.1E+01	5.1E-01	5.1E+01	5.1E-01
Ir-190	014981-91-0	6.5E+04	6.5E+02	7.6E+08	7.6E+06	4.7E+00	4.7E-02	4.7E+00	4.7E-02
Ir-194	014158-35-1	4.6E+04	4.6E+02	8.2E+08	8.2E+06	6.9E+01	6.9E-01	6.9E+01	6.9E-01
K-40	013966-00-2	2.6E+04	2.6E+02	4.6E+08	4.6E+06	3.6E+01	3.6E-01	3.6E+01	3.6E-01
K-42	014378-21-3	2.5E+05	2.5E+03	4.5E+09	4.5E+07	2.0E+01	2.0E-01	2.0E+01	2.0E-01
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				

Table 3.2d. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		Inhalation (pCi/g)		External Exposure (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-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	6.7E+08	6.7E+06	2.4E+00	2.4E-02	2.4E+00	2.4E-02
Lu-177	014265-75-9	1.1E+05	1.1E+03	1.6E+09	1.6E+07	3.0E+02	3.0E+00	3.0E+02	3.0E+00
Mn-52	014092-99-0	5.3E+04	5.3E+02	7.8E+08	7.8E+06	1.6E+00	1.6E-02	1.6E+00	1.6E-02
Mn-54	013966-31-9	1.6E+05	1.6E+03	9.3E+08	9.3E+06	6.7E+00	6.7E-02	6.7E+00	6.7E-02
Mn-56	014681-52-8	3.7E+05	3.7E+03	6.6E+09	6.6E+07	3.2E+00	3.2E-02	3.2E+00	3.2E-02
Mo-99	014119-15-4	1.4E+05	1.4E+03	7.7E+08	7.7E+06	4.0E+01	4.0E-01	4.0E+01	4.0E-01
Na-22	013966-32-0	4.0E+04	4.0E+02	7.0E+08	7.0E+06	2.7E+00	2.7E-02	2.7E+00	2.7E-02
Na-24	013982-04-2	2.3E+05	2.3E+03	4.6E+09	4.6E+07	1.2E+00	1.2E-02	1.2E+00	1.2E-02
Nb-93m	007440-03-1	4.8E+05	4.8E+03	7.9E+08	7.9E+06	6.0E+05	6.0E+03	2.7E+05	2.7E+03
Nb-94	014681-63-1	4.6E+04	4.6E+02	4.2E+07	4.2E+05	3.6E+00	3.6E-02	3.6E+00	3.6E-02
Nb-95	013967-76-5	1.4E+05	1.4E+03	1.1E+09	1.1E+07	7.4E+00	7.4E-02	7.4E+00	7.4E-02
Nb-95m	013967-76-5	1.0E+05	1.0E+03	1.5E+09	1.5E+07	2.5E+02	2.5E+00	2.5E+02	2.5E+00
Nb-97	018496-04-3	1.8E+06	1.8E+04	1.6E+10	1.6E+08	8.8E+00	8.8E-02	8.8E+00	8.8E-02
Nb-97m	018496-04-3	9.8E+07	9.8E+05	1.0E+12	1.0E+10	7.9E+00	7.9E-02	7.9E+00	7.9E-02
Nd-147	014269-74-0	5.4E+04	5.4E+02	7.1E+08	7.1E+06	6.8E+01	6.8E-01	6.8E+01	6.8E-01

Table 3.2d. (continued)

Chemical ^f	CASRN	Ingestion (pCi/g)		Inhalation (pCi/g)		External Exposure (pCi/g) ^{††}		Ingestion + Inhalation + External Exposure (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Nd-149	015749-81-2	7.0E+05	7.0E+03	8.1E+09	8.1E+07	2.0E+01	2.0E-01	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	9.5E+09	9.5E+07	1.0E+01	1.0E-01	1.0E+01	1.0E-01
Np-236	015700-36-4	3.4E+05	3.4E+03	8.9E+08	8.9E+06	2.4E+02	2.4E+00	2.4E+02	2.4E+00
Np-237	013994-20-2	1.1E+03	1.1E+01	9.9E+04	9.9E+02	2.9E+03	2.9E+01	7.8E+02	7.8E+00
Np-237+D	013994-20-2	1.1E+03	1.1E+01	9.9E+04	9.9E+02	4.7E+01	4.7E-01	4.5E+01	4.5E-01
Np-238	015766-25-3	7.0E+04	7.0E+02	7.3E+08	7.3E+06	1.1E+01	1.1E-01	1.1E+01	1.1E-01
Np-239	013968-59-7	7.5E+04	7.5E+02	1.4E+09	1.4E+07	9.0E+01	9.0E-01	9.0E+01	9.0E-01
Np-240	015690-84-3	1.8E+06	1.8E+04	2.6E+10	2.6E+08	6.0E+00	6.0E-02	6.0E+00	6.0E-02
Np-240m	015690-84-3	1.3E+07	1.3E+05	1.2E+11	1.2E+09	2.1E+01	2.1E-01	2.1E+01	2.1E-01
Os-185	015766-50-4	1.8E+05	1.8E+03	7.4E+08	7.4E+06	8.9E+00	8.9E-02	8.9E+00	8.9E-02
Os-191	014119-24-5	1.1E+05	1.1E+03	1.3E+09	1.3E+07	2.5E+02	2.5E+00	2.5E+02	2.5E+00
Os-191m	014119-24-5	6.5E+05	6.5E+03	1.0E+10	1.0E+08	6.8E+03	6.8E+01	6.7E+03	6.7E+01
Os-193	016057-77-5	7.3E+04	7.3E+02	1.3E+09	1.3E+07	1.2E+02	1.2E+00	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
P-33	015749-66-3	4.1E+05	4.1E+03	8.7E+09	8.7E+07			4.1E+05	4.1E+03

Table 3.2d. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		Inhalation (pCi/g)		External Exposure (pCi/g) ^{††}		Ingestion + Inhalation + External Exposure (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Pa-231	014331-85-2	2.1E+03	2.1E+01	1.4E+05	1.4E+03	8.1E+02	8.1E+00	5.8E+02	5.8E+00
Pa-233	013981-14-1	6.8E+04	6.8E+02	7.0E+08	7.0E+06	4.8E+01	4.8E-01	4.8E+01	4.8E-01
Pa-234	015100-28-4	1.5E+05	1.5E+03	2.6E+09	2.6E+07	3.3E+00	3.3E-02	3.3E+00	3.3E-02
Pa-234m	015100-28-4	6.7E+07	6.7E+05	5.5E+11	5.5E+09	5.4E+02	5.4E+00	5.4E+02	5.4E+00
Pb-203	014687-25-3	3.1E+05	3.1E+03	1.1E+10	1.1E+08	3.4E+01	3.4E-01	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	2.1E+06	2.1E+04	2.0E+05	2.0E+03	4.7E+02	4.7E+00
Pb-210+D	014255-04-0	3.2E+02	3.2E+00	8.9E+05	8.9E+03	1.5E+05	1.5E+03	3.2E+02	3.2E+00
Pb-211	015816-77-0	9.5E+05	9.5E+03	3.3E+08	3.3E+06	1.2E+02	1.2E+00	1.2E+02	1.2E+00
Pb-212	015092-94-1	1.8E+04	1.8E+02	8.9E+07	8.9E+05	7.3E+01	7.3E-01	7.3E+01	7.3E-01
Pb-214	015067-28-4	1.1E+06	1.1E+04	5.5E+08	5.5E+06	3.1E+01	3.1E-01	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	3.2E+09	3.2E+07	4.1E+04	4.1E+02	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	1.7E+09	1.7E+07	9.0E+03	9.0E+01	8.2E+03	8.2E+01
Pm-147	014380-75-7	2.3E+05	2.3E+03	4.6E+08	4.6E+06	3.4E+06	3.4E+04	2.1E+05	2.1E+03

Table 3.2d. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		Inhalation (pCi/g)		External Exposure (pCi/g) ^{††}		Ingestion + Inhalation + External Exposure (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Pm-148	014683-19-3	2.2E+04	2.2E+02	3.3E+08	3.3E+06	9.9E+00	9.9E-02	9.9E+00	9.9E-02
Pm-148m	014683-19-3	3.2E+04	3.2E+02	1.2E+08	1.2E+06	3.0E+00	3.0E-02	3.0E+00	3.0E-02
Pm-149	015765-31-8	5.8E+04	5.8E+02	9.6E+08	9.6E+06	6.0E+02	6.0E+00	5.9E+02	5.9E+00
Po-210	013981-52-7	9.8E+02	9.8E+00	1.6E+06	1.6E+04	6.6E+05	6.6E+03	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	4.4E+16	4.4E+14	1.9E+05	1.9E+03	1.9E+05	1.9E+03
Po-214	015735-67-8	1.5E+13	1.5E+11	1.2E+15	1.2E+13	6.8E+04	6.8E+02	6.8E+04	6.8E+02
Po-215	015706-52-2	6.4E+11	6.4E+09	7.7E+13	7.7E+11	4.3E+04	4.3E+02	4.3E+04	4.3E+02
Po-216	015756-58-8	3.6E+09	3.6E+07	1.2E+12	1.2E+10	3.9E+05	3.9E+03	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	8.2E+08	8.2E+06	9.4E+01	9.4E-01	9.3E+01	9.3E-01
Pr-143	014981-79-4	4.8E+04	4.8E+02	6.1E+08	6.1E+06	6.4E+08	6.4E+06	4.8E+04	4.8E+02
Pr-144	014119-05-2	4.0E+06	4.0E+04	2.6E+10	2.6E+08	1.6E+02	1.6E+00	1.6E+02	1.6E+00
Pr-144m	014119-05-2	9.9E+06	9.9E+04	6.1E+10	6.1E+08	1.2E+04	1.2E+02	1.2E+04	1.2E+02
Pt-191	015706-36-2	2.1E+05	2.1E+03	8.3E+09	8.3E+07	3.2E+01	3.2E-01	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	6.0E+09	6.0E+07	2.9E+03	2.9E+01	2.9E+03	2.9E+01

Table 3.2d. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		Inhalation (pCi/g)		External Exposure (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-197	015735-74-7	1.5E+05	1.5E+03	7.5E+09	7.5E+07	7.0E+02	7.0E+00	6.9E+02	6.9E+00
Pt-197m	015735-74-7	9.8E+05	9.8E+03	3.4E+10	3.4E+08	1.3E+02	1.3E+00	1.3E+02	1.3E+00
Pu-236	015411-92-4	4.2E+03	4.2E+01	2.6E+05	2.6E+03	9.4E+05	9.4E+03	4.1E+03	4.1E+01
Pu-238	013981-16-3	1.1E+03	1.1E+01	1.3E+05	1.3E+03	1.1E+06	1.1E+04	1.1E+03	1.1E+01
Pu-239	015117-48-3	1.0E+03	1.0E+01	1.2E+05	1.2E+03	1.7E+06	1.7E+04	1.0E+03	1.0E+01
Pu-240	014119-33-6	1.0E+03	1.0E+01	1.2E+05	1.2E+03	1.2E+06	1.2E+04	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	8.8E+04	8.8E+02	4.8E+03	4.8E+01	7.9E+02	7.9E+00
Pu-242	013982-10-0	1.1E+03	1.1E+01	1.3E+05	1.3E+03	1.4E+06	1.4E+04	1.1E+03	1.1E+01
Pu-243	015706-37-3	8.7E+05	8.7E+03	1.3E+10	1.3E+08	1.2E+03	1.2E+01	1.2E+03	1.2E+01
Pu-244	014119-34-7	1.0E+03	1.0E+01	1.3E+05	1.3E+03	1.7E+06	1.7E+04	1.0E+03	1.0E+01
Pu-244+D	014119-34-7	1.0E+03	1.0E+01	1.3E+05	1.3E+03	6.0E+00	6.0E-02	6.0E+00	6.0E-02
Ra-223	015623-45-7	1.4E+03	1.4E+01	9.5E+05	9.5E+03	9.0E+01	9.0E-01	8.4E+01	8.4E-01
Ra-224	013233-32-4	2.1E+03	2.1E+01	1.5E+06	1.5E+04	8.8E+02	8.8E+00	6.3E+02	6.3E+00
Ra-224 ⁽¹⁾	013233-32-4	2.1E+03	2.1E+01	1.3E+03	1.3E+01	8.8E+02	8.8E+00	4.3E+02	4.3E+00
Ra-225	013981-53-8	2.0E+03	2.0E+01	1.4E+06	1.4E+04	1.3E+04	1.3E+02	1.8E+03	1.8E+01
Ra-226	013982-63-3	1.1E+03	1.1E+01	1.3E+06	1.3E+04	1.7E+03	1.7E+01	6.6E+02	6.6E+00

Table 3.2d. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		Inhalation (pCi/g)		External Exposure (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-226 ⁽²⁾	013982-63-3	1.1E+03	1.1E+01	8.3E-01	8.3E-03	1.7E+03	1.7E+01	8.3E-01	8.3E-03
Ra-226+D	013982-63-3	1.1E+03	1.1E+01	1.2E+06	1.2E+04	3.2E+00	3.2E-02	3.2E+00	3.2E-02
Ra-226+D ⁽²⁾	013982-63-3	1.1E+03	1.1E+01	8.3E-01	8.3E-03	3.2E+00	3.2E-02	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	3.4E+06	3.4E+04	6.7E+00	6.7E-02	6.6E+00	6.6E-02
Rb-82	014391-63-0	3.0E+07	3.0E+05	2.9E+11	2.9E+09	5.6E+00	5.6E-02	5.6E+00	5.6E-02
Rb-86	014932-53-7	4.5E+04	4.5E+02	8.1E+08	8.1E+06	5.9E+01	5.9E-01	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	2.5E+10	2.5E+08	8.2E+00	8.2E-02	8.2E+00	8.2E-02
Rb-89	014191-65-2	3.7E+06	3.7E+04	5.0E+10	5.0E+08	2.6E+00	2.6E-02	2.6E+00	2.6E-02
Rh-103m	007440-16-6	3.9E+07	3.9E+05	2.7E+11	2.7E+09	3.7E+05	3.7E+03	3.7E+05	3.7E+03
Rh-105	014913-89-4	1.7E+05	1.7E+03	2.8E+09	2.8E+07	8.8E+01	8.8E-01	8.8E+01	8.8E-01
Rh-105m	014913-89-4	3.0E+08	3.0E+06	3.7E+12	3.7E+10	9.6E+02	9.6E+00	9.6E+02	9.6E+00
Rh-106	014234-34-5	8.8E+07	8.8E+05	7.4E+11	7.4E+09	2.9E+01	2.9E-01	2.9E+01	2.9E-01
Rn-219	014835-02-0			5.0E+10	5.0E+08	1.3E+02	1.3E+00	1.3E+02	1.3E+00
Rn-220	022481-48-7			1.8E+10	1.8E+08	1.2E+04	1.2E+02	1.2E+04	1.2E+02
Rn-222+D	014859-67-7			4.5E+08	4.5E+06				

Table 3.2d. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		Inhalation (pCi/g)		External Exposure (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-103	013968-53-1	9.6E+04	9.6E+02	7.5E+08	7.5E+06	1.3E+01	1.3E-01	1.3E+01	1.3E-01
Ru-105	014331-95-4	2.8E+05	2.8E+03	4.3E+09	4.3E+07	7.6E+00	7.6E-02	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	3.0E+07	3.0E+05	2.9E+01	2.9E-01	2.9E+01	2.9E-01
Ru-97	015758-35-7	5.4E+05	5.4E+03	8.4E+09	8.4E+07	4.8E+01	4.8E-01	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	6.3E+08	6.3E+06	1.4E+01	1.4E-01	1.4E+01	1.4E-01
Sb-124	014683-10-4	3.0E+04	3.0E+02	2.6E+08	2.6E+06	3.0E+00	3.0E-02	3.0E+00	3.0E-02
Sb-125	014234-35-6	1.1E+05	1.1E+03	6.6E+08	6.6E+06	1.6E+01	1.6E-01	1.6E+01	1.6E-01
Sb-125+D	014234-35-6	9.0E+04	9.0E+02	5.9E+08	5.9E+06	1.6E+01	1.6E-01	1.6E+01	1.6E-01
Sb-126	015756-32-8	3.3E+04	3.3E+02	4.1E+08	4.1E+06	2.1E+00	2.1E-02	2.1E+00	2.1E-02
Sb-126m	015756-32-8	4.4E+06	4.4E+04	5.3E+10	5.3E+08	3.8E+00	3.8E-02	3.8E+00	3.8E-02
Sb-127	013968-50-8	3.8E+04	3.8E+02	5.7E+08	5.7E+06	9.1E+00	9.1E-02	9.1E+00	9.1E-02
Sb-129	014331-88-5	1.7E+05	1.7E+03	4.0E+09	4.0E+07	3.9E+00	3.9E-02	3.9E+00	3.9E-02
Sc-46	013967-63-0	5.6E+04	5.6E+02	2.6E+08	2.6E+06	2.8E+00	2.8E-02	2.8E+00	2.8E-02
Sc-47	014391-96-9	1.1E+05	1.1E+03	1.7E+09	1.7E+07	8.8E+01	8.8E-01	8.8E+01	8.8E-01
Sc-48	014391-86-7	4.8E+04	4.8E+02	8.2E+08	8.2E+06	1.7E+00	1.7E-02	1.7E+00	1.7E-02

Table 3.2d. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		Inhalation (pCi/g)		External Exposure (pCi/g) ^{††}		Ingestion + Inhalation + External Exposure (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Se-75	014265-71-5	4.9E+04	4.9E+02	7.0E+08	7.0E+06	2.5E+01	2.5E-01	2.5E+01	2.5E-01
Si-31	014276-49-4	6.3E+05	6.3E+03	1.0E+10	1.0E+08	6.3E+03	6.3E+01	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	7.4E+08	7.4E+06	7.5E+07	7.5E+05	6.9E+05	6.9E+03
Sm-153	015766-00-4	8.0E+04	8.0E+02	1.6E+09	1.6E+07	4.7E+02	4.7E+00	4.7E+02	4.7E+00
Sn-113	013966-06-8	8.6E+04	8.6E+02	5.2E+08	5.2E+06	7.4E+03	7.4E+01	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	2.9E+08	2.9E+06	1.8E+01	1.8E-01	1.8E+01	1.8E-01
Sn-126	015832-50-5	1.5E+04	1.5E+02	8.0E+07	8.0E+05	6.6E+02	6.6E+00	6.3E+02	6.3E+00
Sr-82	014809-50-8	1.2E+04	1.2E+02	3.9E+08	3.9E+06	2.4E+05	2.4E+03	1.2E+04	1.2E+02
Sr-85	013967-73-2	2.3E+05	2.3E+03	3.0E+09	3.0E+07	1.4E+01	1.4E-01	1.4E+01	1.4E-01
Sr-85m	013967-73-2	1.8E+07	1.8E+05	4.8E+11	4.8E+09	4.2E+01	4.2E-01	4.2E+01	4.2E-01
Sr-89	014158-27-1	3.1E+04	3.1E+02	9.3E+08	9.3E+06	4.1E+04	4.1E+02	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	4.4E+09	4.4E+07	8.2E+00	8.2E-02	8.2E+00	8.2E-02

Table 3.2d. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		Inhalation (pCi/g)		External Exposure (pCi/g) ^{††}		Ingestion + Inhalation + External Exposure (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Sr-92	014928-29-1	1.6E+05	1.6E+03	7.3E+09	7.3E+07	4.2E+00	4.2E-02	4.2E+00	4.2E-02
Ta-182	013982-00-8	4.6E+04	4.6E+02	2.1E+08	2.1E+06	4.7E+00	4.7E-02	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	3.0E+08	3.0E+06	5.4E+00	5.4E-02	5.4E+00	5.4E-02
Tc-95	014809-56-4	4.7E+06	4.7E+04	1.0E+11	1.0E+09	8.1E+00	8.1E-02	8.1E+00	8.1E-02
Tc-95m	014809-56-4	2.6E+05	2.6E+03	1.6E+09	1.6E+07	1.1E+01	1.1E-01	1.1E+01	1.1E-01
Tc-96	014808-44-7	1.4E+05	1.4E+03	1.8E+09	1.8E+07	2.3E+00	2.3E-02	2.3E+00	2.3E-02
Tc-96m	014808-44-7	1.2E+07	1.2E+05	1.5E+11	1.5E+09	2.8E+02	2.8E+00	2.8E+02	2.8E+00
Tc-97	015759-35-0	2.0E+06	2.0E+04	1.0E+10	1.0E+08	8.8E+04	8.8E+02	8.4E+04	8.4E+02
Tc-97m	015759-35-0	2.7E+05	2.7E+03	1.7E+09	1.7E+07	8.2E+04	8.2E+02	6.3E+04	6.3E+02
Tc-99	014133-76-7	2.3E+05	2.3E+03	1.2E+09	1.2E+07	3.5E+07	3.5E+05	2.3E+05	2.3E+03
Tc-99m	014133-76-7	5.7E+06	5.7E+04	9.8E+10	9.8E+08	8.7E+01	8.7E-01	8.7E+01	8.7E-01
Te-125m	014390-73-9	1.3E+05	1.3E+03	1.2E+09	1.2E+07	1.0E+04	1.0E+02	9.4E+03	9.4E+01
Te-127	013981-49-2	3.7E+05	3.7E+03	7.9E+09	7.9E+07	1.4E+03	1.4E+01	1.3E+03	1.3E+01
Te-127m	013981-49-2	5.3E+04	5.3E+02	2.6E+08	2.6E+06	3.1E+04	3.1E+02	2.0E+04	2.0E+02
Te-129	014269-71-7	2.2E+06	2.2E+04	2.3E+10	2.3E+08	1.5E+02	1.5E+00	1.5E+02	1.5E+00
Te-129m	014269-71-7	2.7E+04	2.7E+02	2.6E+08	2.6E+06	3.2E+02	3.2E+00	3.1E+02	3.1E+00

Table 3.2d. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		Inhalation (pCi/g)		External Exposure (pCi/g) ^{††}		Ingestion + Inhalation + External Exposure (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Te-131	014683-12-6	8.2E+05	8.2E+03	1.4E+10	1.4E+08	1.6E+01	1.6E-01	1.6E+01	1.6E-01
Te-131m	014683-12-6	3.6E+04	3.6E+02	4.1E+08	4.1E+06	4.1E+00	4.1E-02	4.1E+00	4.1E-02
Te-132	014234-28-7	2.6E+04	2.6E+02	4.1E+08	4.1E+06	5.1E+01	5.1E-01	5.1E+01	5.1E-01
Th-227	015623-47-9	7.9E+03	7.9E+01	8.0E+05	8.0E+03	1.3E+02	1.3E+00	1.2E+02	1.2E+00
Th-228	014274-82-9	5.1E+03	5.1E+01	3.6E+04	3.6E+02	4.1E+04	4.1E+02	4.0E+03	4.0E+01
Th-228+D	014274-82-9	1.4E+03	1.4E+01	3.5E+04	3.5E+02	2.2E+01	2.2E-01	2.2E+01	2.2E-01
Th-229	015594-54-4	5.7E+03	5.7E+01	4.5E+04	4.5E+02	3.7E+02	3.7E+00	3.4E+02	3.4E+00
Th-229+D	015594-54-4	9.0E+02	9.0E+00	4.1E+04	4.1E+02	3.7E+01	3.7E-01	3.5E+01	3.5E-01
Th-230	014269-63-7	8.5E+03	8.5E+01	2.0E+05	2.0E+03	5.0E+05	5.0E+03	8.1E+03	8.1E+01
Th-231	014932-40-2	1.8E+05	1.8E+03	3.1E+09	3.1E+07	1.0E+04	1.0E+02	9.9E+03	9.9E+01
Th-232	007440-29-1	9.8E+03	9.8E+01	1.8E+05	1.8E+03	1.1E+06	1.1E+04	9.2E+03	9.2E+01
Th-234	015065-10-8	1.7E+04	1.7E+02	1.8E+08	1.8E+06	6.3E+03	6.3E+01	4.5E+03	4.5E+01
Tl-202	015720-57-7	3.2E+05	3.2E+03	5.6E+09	5.6E+07	1.5E+01	1.5E-01	1.5E+01	1.5E-01
Tl-204	013968-51-9	1.6E+05	1.6E+03	3.0E+09	3.0E+07	2.5E+04	2.5E+02	2.2E+04	2.2E+02
Tl-208	014913-50-9	1.8E+07	1.8E+05	2.5E+11	2.5E+09	1.5E+00	1.5E-02	1.5E+00	1.5E-02
Tl-209	015690-73-0	2.3E+07	2.3E+05	3.1E+11	3.1E+09	2.8E+00	2.8E-02	2.8E+00	2.8E-02
Tm-170	013981-30-1	4.3E+04	4.3E+02	3.1E+08	3.1E+06	5.7E+03	5.7E+01	5.0E+03	5.0E+01

Table 3.2d. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		Inhalation (pCi/g)		External Exposure (pCi/g) ^{††}		Ingestion + Inhalation + External Exposure (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
Tm-171	014333-45-0	5.5E+05	5.5E+03	1.9E+09	1.9E+07	7.0E+04	7.0E+02	6.2E+04	6.2E+02
U-232	014158-29-3	3.9E+03	3.9E+01	6.5E+04	6.5E+02	6.4E+05	6.4E+03	3.7E+03	3.7E+01
U-233	013968-55-3	7.1E+03	7.1E+01	2.4E+05	2.4E+03	6.2E+05	6.2E+03	6.9E+03	6.9E+01
U-234	013966-29-5	7.2E+03	7.2E+01	2.4E+05	2.4E+03	1.0E+06	1.0E+04	7.0E+03	7.0E+01
U-235	015117-96-1	7.1E+03	7.1E+01	2.6E+05	2.6E+03	8.3E+01	8.3E-01	8.2E+01	8.2E-01
U-235+D	015117-96-1	6.8E+03	6.8E+01	2.6E+05	2.6E+03	8.3E+01	8.3E-01	8.2E+01	8.2E-01
U-236	013982-70-2	7.6E+03	7.6E+01	2.6E+05	2.6E+03	1.3E+06	1.3E+04	7.3E+03	7.3E+01
U-237	014269-75-1	8.0E+04	8.0E+02	1.1E+09	1.1E+07	1.6E+02	1.6E+00	1.6E+02	1.6E+00
U-238	007440-61-1	7.5E+03	7.5E+01	2.8E+05	2.8E+03	1.5E+06	1.5E+04	7.3E+03	7.3E+01
U-238+D	007440-61-1	5.2E+03	5.2E+01	2.8E+05	2.8E+03	4.2E+02	4.2E+00	3.9E+02	3.9E+00
U-240	015687-53-3	5.9E+04	5.9E+02	1.0E+09	1.0E+07	2.0E+05	2.0E+03	4.5E+04	4.5E+02
V-48	014331-97-6	4.2E+04	4.2E+02	5.0E+08	5.0E+06	2.0E+00	2.0E-02	2.0E+00	2.0E-02
W-181	015749-46-9	1.2E+06	1.2E+04	4.3E+10	4.3E+08	1.0E+03	1.0E+01	1.0E+03	1.0E+01
W-185	014932-41-3	1.6E+05	1.6E+03	8.0E+09	8.0E+07	4.4E+05	4.4E+03	1.2E+05	1.2E+03
W-187	014983-48-3	1.3E+05	1.3E+03	6.5E+09	6.5E+07	1.3E+01	1.3E-01	1.3E+01	1.3E-01
Xe-122	015151-09-4			1.1E+12	1.1E+10				
Xe-123	015700-10-4			3.8E+12	3.8E+10				

Table 3.2d. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		Inhalation (pCi/g)		External Exposure (pCi/g) ^{††}		Ingestion + Inhalation + External Exposure (pCi/g) ^{†††}	
		10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶	10 ⁻⁴	10 ⁻⁶
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	1.9E+08	1.9E+06	1.6E+03	1.6E+01	1.5E+03	1.5E+01
Y-91m	014234-24-3	8.7E+06	8.7E+04	1.1E+11	1.1E+09	1.2E+01	1.2E-01	1.2E+01	1.2E-01
Y-92	015751-59-4	1.6E+05	1.6E+03	2.1E+09	2.1E+07	2.2E+01	2.2E-01	2.2E+01	2.2E-01
Y-93	014981-70-5	5.6E+04	5.6E+02	9.8E+08	9.8E+06	6.4E+01	6.4E-01	6.4E+01	6.4E-01
Zn-65	013982-39-3	3.2E+04	3.2E+02	3.4E+08	3.4E+06	9.6E+00	9.6E-02	9.6E+00	9.6E-02
Zn-69	013982-23-5	5.2E+06	5.2E+04	3.3E+10	3.3E+08	1.1E+06	1.1E+04	8.9E+05	8.9E+03

Table 3.2d. (continued)

Chemical [†]	CASRN	Ingestion (pCi/g)		Inhalation (pCi/g)		External Exposure (pCi/g) ^{††}		Ingestion + Inhalation + External Exposure (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	2.9E+09	2.9E+07	1.5E+01	1.5E-01	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	5.3E+08	5.3E+06	7.8E+00	7.8E-02	7.8E+00	7.8E-02
Zr-97	014928-30-4	3.1E+04	3.1E+02	7.2E+08	7.2E+06	3.2E+01	3.2E-01	3.2E+01	3.2E-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, then no external exposure slope factors were available or the external exposure slope factor was equal to 0.00E+00 (resulting in an undefined PRG for the external exposure pathway for soil under industrial land use).
- ††† If slope factors and/or reference doses were available for only one pathway (i.e., ingestion, inhalation, OR external exposure), the total for ingestion plus inhalation plus external exposure was not calculated.
- (1) The default volatilization factor of 200 for Ra-224 was calculated as the ratio of the average Ra-224 background concentration in soil to the average Rn-220 background concentration in air. Inhalation slope factor values are for Rn-222 plus decay products (i.e., Rn-222+D) formed from the radioactive decay of Ra-226 and for Rn-220+D from the decay of Ra-224. Slope factor values were taken from Table 4a of EPA's *Health Effects Assessment Summary Tables* (HEAST 1992).
- (2) The default volatilization factor of 8 for Ra-226 was calculated as the ratio of the average natural background concentration of Ra-226 in soil to the corresponding average natural background concentration of Rn-222 in air. Inhalation slope factor values are for Rn-222 plus decay products (i.e., Rn-222+D) formed from the radioactive decay of Ra-226 and for Rn-220+D from the decay of Ra-224. Slope factor values were taken from Table 4a of EPA's *Health Effects Assessment Summary Tables* (HEAST 1992).

Table 3.3a. Risk-based Preliminary Remediation Goals for nonradionuclides in water (agricultural scenario)

Chemical	CASRN	Ingestion of Vegetables (mg/L)*				Ingestion of Beef (mg/L)*				Ingestion of Milk (mg/L)*					
		10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child
ALAR	001596-84-5														
Acenaphthene	000083-32-9			4.0E+00	4.0E-01			2.3E+03	2.3E+02			1.2E+03	1.6E+02	1.2E+02	1.6E+01
Acenaphthylene	000208-96-8														
Acephate	030560-19-1	2.8E-02	2.8E-04	4.2E-03	4.2E-04	1.0E+06	1.0E+06	1.0E+06	1.0E+06	1.0E+06	3.3E+05	1.0E+06	1.0E+06	1.0E+06	1.5E+05
Acetaldehyde	000075-07-0														
Acetochlor	034256-82-1														
Acetone	000067-64-1			2.3E-01	2.3E-02			1.0E+06	1.0E+06			1.0E+06	1.0E+06	1.0E+06	9.0E+05
Acetone Cyanohydrin	000075-86-5														
Acetonitrile	000075-05-8			1.2E-02	1.2E-03			1.0E+06	1.0E+06			1.0E+06	6.8E+05	5.3E+05	6.8E+04
Acetophenone ⁽⁹⁾	000098-86-2			2.2E+00	2.2E-01			1.0E+06	1.6E+05			8.1E+05	1.0E+05	8.1E+04	1.0E+04
Acrolein ⁽⁹⁾	000107-02-8			5.6E-02	5.6E-03			1.0E+06	1.0E+06			1.0E+06	1.0E+06	1.0E+06	1.3E+05
Acrylamide	000079-06-1	6.9E-05	6.9E-07	2.7E-04	2.7E-05	1.9E+05	1.9E+03	7.3E+05	7.3E+04	4.2E+04	4.2E+02	3.8E+05	4.9E+04	3.8E+04	4.9E+03
Acrylic Acid	000079-10-7			1.9E+00	1.9E-01			1.0E+06	1.0E+06			1.0E+06	1.0E+06	1.0E+06	1.0E+06
Acrylonitrile	000107-13-1	1.9E-03	1.9E-05	4.3E-03	4.3E-04	1.9E+05	1.9E+03	4.4E+05	4.4E+04	4.2E+04	4.2E+02	2.3E+05	2.9E+04	2.3E+04	2.9E+03
Alachlor	015972-60-8	1.4E-01	1.4E-03	4.9E-01	4.9E-02	2.9E+03	2.9E+01	9.8E+03	9.8E+02	6.3E+02	6.3E+00	5.1E+03	6.5E+02	5.1E+02	6.5E+01
Aldicarb	000116-06-3			1.2E-02	1.2E-03			5.8E+04	5.8E+03			3.0E+04	3.8E+03	3.0E+03	3.8E+02
Aldicarb Sulfone	001646-88-4														
Aldrin	000309-00-2	7.0E-04	7.0E-06	1.5E-03	1.5E-04	1.1E+01	1.1E-01	2.3E+01	2.3E+00	2.4E+00	2.4E-02	1.2E+01	1.6E+00	1.2E+00	1.6E-01
Ally	074223-64-6			8.1E-01	8.1E-02			1.0E+06	1.0E+06			1.0E+06	1.0E+06	1.0E+06	1.0E+06
Allyl Alcohol	000107-18-6			1.2E-02	1.2E-03			1.0E+06	6.5E+05			1.0E+06	4.3E+05	3.4E+05	4.3E+04
Allyl Chloride ⁽⁹⁾	000107-05-1			8.2E-01	8.2E-02			1.0E+06	1.5E+05			8.0E+05	1.0E+05	8.0E+04	1.0E+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	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child
Aluminum	007429-90-5														
Aluminum Phosphide	020859-73-8														
Amdro	067485-29-4														
Ametryn	000834-12-8			2.2E-01	2.2E-02			1.1E+05	1.1E+04			5.8E+04	7.4E+03	5.8E+03	7.4E+02
Aminophenol, m-	000591-27-5			2.9E-01	2.9E-02			1.0E+06	1.0E+06			1.0E+06	1.0E+06	1.0E+06	2.2E+05
Aminopyridine, 4-	000504-24-5			9.0E-05	9.0E-06			8.2E+03	8.2E+02			4.2E+03	5.4E+02	4.2E+02	5.4E+01
Amitraz	033089-61-1														
Ammonia	007664-41-7														
Ammonium Sulfamate	007773-06-0														
Aniline	000062-53-3	3.9E-01	3.9E-03			1.0E+06	4.0E+04			8.8E+05	8.8E+03				
Anthracene	000120-12-7			2.0E+01	2.0E+00			9.3E+03	9.3E+02			4.8E+03	6.2E+02	4.8E+02	6.2E+01
Antimony (metallic)	007440-36-0			2.7E-02	2.7E-03			1.9E+02	1.9E+01			5.1E+01	6.6E+00	5.1E+00	6.6E-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			4.9E-03	4.9E-04			6.9E-02	6.9E-03			3.6E-02	4.6E-03	3.6E-03	4.6E-04
Aroclor 1221 ⁽¹⁾	011104-28-2	2.0E-03	2.0E-05			1.9E+00	1.9E-02			4.1E-01	4.1E-03				
Aroclor 1232 ⁽¹⁾	011141-16-5	1.6E-03	1.6E-05			1.5E+01	1.5E-01			3.3E+00	3.3E-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 ⁻⁵	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁵	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁵	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child
Aroclor 1242 ⁽¹⁾	053469-21-9	2.0E-03	2.0E-05			1.9E+00	1.9E-02			4.1E-01	4.1E-03				
Aroclor 1248 ⁽¹⁾	012672-29-6	2.1E-03	2.1E-05			3.7E-02	3.7E-04			8.2E-03	8.2E-05				
Aroclor 1254	011097-69-1			1.4E-03	1.4E-04			1.6E-02	1.6E-03			8.1E-03	1.0E-03	8.1E-04	1.0E-04
Aroclor 1260 ⁽¹⁾	011096-82-5	2.1E-03	2.1E-05			1.9E-03	1.9E-05			4.1E-04	4.1E-06				
Arsenic Salts	NA														
Arsenic, Inorganic	007440-38-2	1.1E-02	1.1E-04	2.1E-02	2.1E-03	1.5E+00	1.5E-02	2.9E+00	2.9E-01	3.5E+00	3.5E-02	1.6E+01	2.0E+00	1.6E+00	2.0E-01
Arsine	007784-42-1														
Asbestos	001332-21-4														
Assure	076578-14-8														
Asulam	003337-71-1														
Atrazine	001912-24-9	4.7E-02	4.7E-04	1.6E+00	1.6E-01	1.6E+03	1.6E+01	5.4E+04	5.4E+03	3.6E+02	3.6E+00	2.8E+04	3.6E+03	2.8E+03	3.6E+02
Avermectin B1	065195-55-3														
Azobenzene	000103-33-3	1.3E-01	1.3E-03			2.6E+02	2.6E+00			5.8E+01	5.8E-01				
Barium	007440-39-3			4.9E+00	4.9E-01			6.8E+03	6.8E+02			4.7E+02	6.0E+01	4.7E+01	6.0E+00
Barium Cyanide	000542-62-1														
Baygon	000114-26-1			8.0E-02	8.0E-03			7.8E+04	7.8E+03			4.1E+04	5.2E+03	4.1E+03	5.2E+02
Bayleton	043121-43-3			1.1E+00	1.1E-01			1.2E+05	1.2E+04			6.1E+04	7.8E+03	6.1E+03	7.8E+02
Baythroid	068359-37-5														
Benefin	001861-40-1			2.0E+01	2.0E+00			6.7E+03	6.7E+02			3.5E+03	4.5E+02	3.5E+02	4.5E+01
Benomyl	017804-35-2			1.8E+00	1.8E-01			2.0E+05	2.0E+04			1.0E+05	1.3E+04	1.0E+04	1.3E+03
Bentazon	025057-89-0			3.0E-02	3.0E-03			1.5E+05	1.5E+04			8.0E+04	1.0E+04	8.0E+03	1.0E+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	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child
Benz[a]anthracene ⁽²⁾	000056-55-3	2.2E-02	2.2E-04			5.0E-01	5.0E-03			1.1E-01	1.1E-03				
Benzaldehyde	000100-52-7			3.6E+00	3.6E-01			3.9E+05	3.9E+04			2.0E+05	2.6E+04	2.0E+04	2.6E+03
Benzene	000071-43-2	2.5E-01	2.5E-03			5.0E+04	5.0E+02			1.1E+04	1.1E+02				
Benzene Hexachloride	NA														
Benzene, Ethyldimethyl	NA														
Benzene, Ethylmethyl	NA														
Benzene, Methylpropenyl	NA														
Benzene, Methylpropyl	NA														
Benzene, Trimethyl	025551-13-7														
Benzenethiol	000108-98-5			4.0E-04	4.0E-05			2.5E+01	2.5E+00			1.3E+01	1.6E+00	1.3E+00	1.6E-01
Benzidine	000092-87-5	1.5E-05	1.5E-07	4.5E-02	4.5E-03	4.0E+01	4.0E-01	1.2E+05	1.2E+04	8.7E+00	8.7E-02	6.1E+04	7.8E+03	6.1E+03	7.8E+02
Benzo[a]pyrene ⁽²⁾	000050-32-8	2.2E-03	2.2E-05			2.0E-02	2.0E-04			4.4E-03	4.4E-05				
Benzo[b]fluoranthene ⁽²⁾	000205-99-2	2.2E-02	2.2E-04			2.0E-01	2.0E-03			4.4E-02	4.4E-04				
Benzo[g,h,i]perylene	000191-24-2														
Benzo[k]fluoranthene ⁽²⁾	000207-08-9	2.2E-01	2.2E-03			3.9E-01	3.9E-03			8.7E-02	8.7E-04				
Benzoic Acid	000065-85-0			1.1E+02	1.1E+01			1.0E+06	1.0E+06			1.0E+06	1.0E+06	1.0E+06	2.6E+05
Benzotrichloride	000098-07-7	8.8E-04	8.8E-06			1.8E+01	1.8E-01			3.9E+00	3.9E-02				
Benzyl Alcohol	000100-51-6			3.6E+00	3.6E-01			1.0E+06	1.0E+06			1.0E+06	1.0E+06	9.6E+05	1.2E+05
Benzyl Chloride	000100-44-7	4.9E-02	4.9E-04			5.4E+03	5.4E+01			1.2E+03	1.2E+01				
Beryllium	007440-41-7	3.8E-03	3.8E-05	3.5E-01	3.5E-02	1.1E+00	1.1E-02	9.7E+01	9.7E+00	8.2E+01	8.2E-01	1.8E+04	2.3E+03	1.8E+03	2.3E+02
Bidrin	000141-66-2			1.3E-04	1.3E-05			3.7E+05	3.7E+04			1.9E+05	2.5E+04	1.9E+04	2.5E+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 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child
Biphenethrin	082657-04-3														
Biphenyl, 1,1'-	000092-52-4			3.2E+00	3.2E-01			3.1E+03	3.1E+02			1.6E+03	2.1E+02	1.6E+02	2.1E+01
Bis(2-chloro-1-methylethyl)ether (Technical)	000108-60-1	1.4E-01	1.4E-03			6.8E+03	6.8E+01			1.5E+03	1.5E+01				
Bis(2-chloroethoxy)methane	000111-91-1														
Bis(2-chloroethyl)ether	000111-44-4	3.2E-03	3.2E-05			8.3E+03	8.3E+01			1.8E+03	1.8E+01				
Bis(2-chloroisopropyl)ether	039638-32-9			1.2E+00	1.2E-01			2.5E+05	2.5E+04			1.3E+05	1.6E+04	1.3E+04	1.6E+03
Bis(2-ethylhexyl)phthalate ⁽⁴⁾	000117-81-7	1.1E+00	1.1E-02	1.4E+00	1.4E-01	1.6E+02	1.6E+00	2.0E+02	2.0E+01	3.6E+01	3.6E-01	1.0E+02	1.3E+01	1.0E+01	1.3E+00
Bis(chloromethyl)ether	000542-88-1	5.4E-06	5.4E-08			3.4E+02	3.4E+00			7.6E+01	7.6E-01				
Bisphenol A	000080-05-7			3.0E+00	3.0E-01			9.8E+03	9.8E+02			5.1E+03	6.5E+02	5.1E+02	6.5E+01
Boron And Borates Only	007440-42-8			1.7E+00	1.7E-01			2.2E+03	2.2E+02			1.9E+02	2.5E+01	1.9E+01	2.5E+00
Boron Trifluoride	007637-07-2														
Bromochloromethane	000074-97-5														
Bromodichloromethane	000075-27-4	1.2E-01	1.2E-03	6.2E-01	6.2E-02	2.3E+04	2.3E+02	1.2E+05	1.2E+04	5.1E+03	5.1E+01	6.4E+04	8.2E+03	6.4E+03	8.2E+02
Bromodiphenyl Ether, p-	000101-55-3														
Bromoform	000075-25-2	1.1E+00	1.1E-02	7.6E-01	7.6E-02	9.2E+04	9.2E+02	6.2E+04	6.2E+03	2.0E+04	2.0E+02	3.2E+04	4.1E+03	3.2E+03	4.1E+02
Bromomethane ⁽⁴⁾	000074-83-9			1.9E-02	1.9E-03			6.9E+04	6.9E+03			3.6E+04	4.6E+03	3.6E+03	4.6E+02
Bromophos	002104-96-3														
Bromotrichloromethane	000075-62-7														
Bromoxynil	001689-84-5			1.2E-01	1.2E-02			1.0E+06	5.0E+05			1.0E+06	3.4E+05	2.6E+05	3.4E+04
Bromoxynil Octanoate	001689-99-2														

Table 3.3a. (continued)

Chemical	CASRN	Ingestion of Vegetables (mg/L)*				Ingestion of Beef (mg/L)*				Ingestion of Milk (mg/L)*					
		10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child
Butadiene, 1,3-	000106-99-0														
Butanol, N-	000071-36-3			7.1E-01	7.1E-02			1.0E+06	1.0E+06			1.0E+06	1.0E+06	9.0E+05	1.2E+05
Butanone-2, 4-chloro-4,4-difluoro	NA														
Butyl Benzyl Phthlate	000085-68-7			1.4E+01	1.4E+00			2.0E+03	2.0E+02			1.0E+03	1.3E+02	1.0E+02	1.3E+01
Butylate	002008-41-5														
Butylchloride, t-	000507-20-0														
Butylphthalyl Butylglycolate	000085-70-1														
Cacodylic Acid	000075-60-5			9.5E-03	9.5E-04			1.0E+06	2.3E+05			1.0E+06	1.6E+05	1.2E+05	1.6E+04
Cadmium (Diet)	007440-43-9			5.1E-02	5.1E-03			4.9E+01	4.9E+00			3.2E+00	4.1E-01	3.2E-01	4.1E-02
Calcium Cyanide	000592-01-8														
Caprolactam	000105-60-2			1.2E+00	1.2E-01			1.0E+06	1.0E+06			1.0E+06	1.0E+06	1.0E+06	1.0E+06
Captafol	002425-06-1	1.1E+00	1.1E-02	8.1E-02	8.1E-03	6.5E+04	6.5E+02	4.8E+03	4.8E+02	1.4E+04	1.4E+02	2.5E+03	3.2E+02	2.5E+02	3.2E+01
Captan	000133-06-2	2.4E+00	2.4E-02	4.6E+00	4.6E-01	2.6E+05	2.6E+03	5.1E+05	5.1E+04	5.7E+04	5.7E+02	2.6E+05	3.4E+04	2.6E+04	3.4E+03
Carbaryl	000063-25-2			3.6E+00	3.6E-01			3.9E+05	3.9E+04			2.0E+05	2.6E+04	2.0E+04	2.6E+03
Carbazole	000086-74-8	7.3E-01	7.3E-03			1.4E+03	1.4E+01			3.2E+02	3.2E+00				
Carbofuran	001563-66-2			1.0E-01	1.0E-02			9.8E+04	9.8E+03			5.1E+04	6.5E+03	5.1E+03	6.5E+02
Carbon Disulfide	000075-15-0			3.3E+00	3.3E-01			4.9E+05	4.9E+04			2.5E+05	3.3E+04	2.5E+04	3.3E+03
Carbon Tetrachloride ⁽⁶⁾	000056-23-5	8.4E-02	8.4E-04	3.3E-02	3.3E-03	2.2E+03	2.2E+01	8.6E+02	8.6E+01	4.9E+02	4.9E+00	4.5E+02	5.8E+01	4.5E+01	5.8E+00
Carbosulfan	055285-14-8														
Carboxin	005234-68-4			3.1E+00	3.1E-01			6.2E+05	6.2E+04			3.2E+05	4.1E+04	3.2E+04	4.1E+03
Chloral	000075-87-6														

Table 3.3a. (continued)

Chemical	CASRN	Ingestion of Vegetables (mg/L)*				Ingestion of Beef (mg/L)*				Ingestion of Milk (mg/L)*					
		10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child
Chloramben	000133-90-4														
Chloranil	000118-75-2														
Chlordane ⁽⁶⁾	000057-74-9	1.2E-02	1.2E-04	4.2E-03	4.2E-04	4.4E-01	4.4E-03	1.5E-01	1.5E-02	9.7E-02	9.7E-04	7.7E-02	9.8E-03	7.7E-03	9.8E-04
Chloride	016887-00-6														
Chlorimuron, Ethyl-	090982-32-4														
Chlorine	007782-50-5			1.4E-01	1.4E-02			9.7E+01	9.7E+00			1.9E+01	2.4E+00	1.9E+00	2.4E-01
Chlorine Dioxide	010049-04-4														
Chlorite (Sodium Salt)	007758-19-2														
Chloro-1,1-difluoroethane, 1-	000075-68-3														
Chloro-1,3-butadiene, 2-	000126-99-8			4.8E-01	4.8E-02			2.5E+05	2.5E+04			1.3E+05	1.6E+04	1.3E+04	1.6E+03
Chloro-2-methylaniline HCl, 4-	003165-93-3														
Chloro-2-methylaniline, 4-	000095-69-2														
Chloroacetic Acid	000079-11-8			2.7E-02	2.7E-03			9.8E+04	9.8E+03			5.1E+04	6.5E+03	5.1E+03	6.5E+02
Chloroacetophenone, 2-	000532-27-4														
Chloroaniline, p-	000106-47-8			1.9E-01	1.9E-02			4.9E+03	4.9E+02			2.6E+03	3.3E+02	2.6E+02	3.3E+01
Chlorobenzene ⁽⁶⁾	000108-90-7			9.4E-01	9.4E-02			2.5E+04	2.5E+03			1.3E+04	1.6E+03	1.3E+03	1.6E+02
Chlorobenzilate	000510-15-6	5.8E-02	5.8E-04	1.3E+00	1.3E-01	2.1E+01	2.1E-01	4.9E+02	4.9E+01	4.7E+00	4.7E-02	2.6E+02	3.3E+01	2.6E+01	3.3E+00
Chlorobenzoic Acid, p-	000074-11-3			8.9E+00	8.9E-01			3.1E+05	3.1E+04			1.6E+05	2.1E+04	1.6E+04	2.1E+03
Chlorobenzotrifluoride, 4-	000098-56-6			1.2E+00	1.2E-01			2.8E+03	2.8E+02			1.5E+03	1.9E+02	1.5E+02	1.9E+01
Chlorobutane, 1-	000109-69-3			1.7E+01	1.7E+00			7.8E+05	7.8E+04			4.1E+05	5.2E+04	4.1E+04	5.2E+03
Chlorobutane, 2-	000078-86-4														

Table 3.3a. (continued)

Chemical	CASRN	Ingestion of Vegetables (mg/L)*				Ingestion of Beef (mg/L)*				Ingestion of Milk (mg/L)*					
		10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child
Chlorocyclopentadiene	041851-50-7														
Chlorodibromoethane	073506-94-2														
Chlorodifluoromethane	000075-45-6														
Chloroform ⁽⁶⁾	000067-66-3	1.1E+00	1.1E-02	2.9E-01	2.9E-02	3.0E+05	3.0E+03	7.8E+04	7.8E+03	6.6E+04	6.6E+02	4.0E+04	5.2E+03	4.0E+03	5.2E+02
Chloromethane ⁽⁶⁾	000074-87-3	1.7E-01	1.7E-03			1.0E+06	1.7E+04			3.8E+05	3.8E+03				
Chloromethyl Methyl Ether	000107-30-2														
Chloronaphthalene, Beta-	000091-58-7			5.2E+00	5.2E-01			4.9E+03	4.9E+02			2.6E+03	3.3E+02	2.6E+02	3.3E+01
Chloronitrobenzene, o-	000088-73-3	3.1E-01	3.1E-03			4.6E+04	4.6E+02			1.0E+04	1.0E+02				
Chloronitrobenzene, p-	000121-73-3	4.9E-01	4.9E-03			4.0E+04	4.0E+02			8.8E+03	8.8E+01				
Chlorophenol, 2-	000095-57-8			1.7E-01	1.7E-02			2.5E+04	2.5E+03			1.3E+04	1.6E+03	1.3E+03	1.6E+02
Chlorophenyl Methyl Sulfide, p-	000123-09-1														
Chlorophenyl Methyl Sulfoxide	000934-73-6														
Chloropropane, 2-	000075-29-6														
Chlorothalonil	001897-45-6	1.3E+00	1.3E-02	9.5E-01	9.5E-02	2.1E+03	2.1E+01	1.5E+03	1.5E+02	4.6E+02	4.6E+00	7.6E+02	9.8E+01	7.6E+01	9.8E+00
Chlorotoluene, o-	000095-49-8			1.1E+00	1.1E-01			6.2E+03	6.2E+02			3.2E+03	4.1E+02	3.2E+02	4.1E+01
Chlorpropham	000101-21-3			9.8E+00	9.8E-01			2.0E+05	2.0E+04			1.0E+05	1.3E+04	1.0E+04	1.3E+03
Chlorpyrifos	002921-88-2			2.1E-01	2.1E-02			1.2E+01	1.2E+00			6.1E+00	7.8E-01	6.1E-01	7.8E-02
Chlorpyrifos Methyl	005598-13-0			6.6E-01	6.6E-02			3.9E+02	3.9E+01			2.0E+02	2.6E+01	2.0E+01	2.6E+00
Chlorsulfuron	064902-72-3			2.7E-02	2.7E-03			1.0E+06	1.0E+06			1.0E+06	1.0E+06	1.0E+06	1.0E+06
Chlorthiophos	060238-56-4														
Chromium (III) (Insoluble Salts)	016065-83-1			7.1E+01	7.1E+00			2.2E+03	2.2E+02			3.2E+05	4.1E+04	3.2E+04	4.1E+03

Table 3.3a. (continued)

Chemical	CASRN	Ingestion of Vegetables (mg/L) ^a			Ingestion of Beef (mg/L) ^a			Ingestion of Milk (mg/L) ^a			
		10 ⁻⁴	10 ⁻³	HQ=1	10 ⁻⁴	10 ⁻³	HQ=1	10 ⁻⁴	HQ=1	Adult	Child
Chromium (VI) ^(b)	018540-29-9			3.5E-01	3.5E-02		1.1E+01	1.1E+00	1.6E+03	2.0E+02	1.6E+02
Chromium Salts	NA										
Chrysene ^(c)	000218-01-9	2.2E+00	2.2E-02		5.0E+01	5.0E-01	1.1E+01	1.1E-01			
Cobalt	007440-48-4										
Coke Oven Emissions	008007-45-2										
Copper	007440-50-8										
Copper Cyanide	000544-92-3										
Cresosote	008001-58-9										
Cresol, m-	000108-39-4	1.4E+00	1.4E-01		3.9E+05	3.9E+04			2.0E+05	2.6E+04	2.0E+04
Cresol, o-	000095-48-7	1.3E+00	1.3E-01		4.9E+05	4.9E+04			2.5E+05	3.3E+04	2.5E+03
Cresol, p-	000106-44-5		1.3E-01	1.3E-02	4.9E+04	4.9E+03			2.5E+04	3.3E+03	2.5E+02
Crotonaldehyde	000123-73-9 ^d	3.0E-03	3.0E-05		1.5E+03	1.5E+01		3.3E+02	3.3E+00		
Cumene	000098-82-8			2.4E+00	2.4E-01	9.8E+03	9.8E+02		5.1E+03	6.6E+02	5.1E+02
Cyanazine	021725-46-2	9.3E-03	9.3E-05	6.7E-02	6.7E-03	1.3E+03	9.4E+03	2.9E+02	4.9E+03	6.3E+02	4.9E+02
Cyanide (CN-)	000057-12-5			2.4E-01	2.4E-02	1.0E+06	1.2E+05		6.4E+05	8.2E+04	6.4E+04
Cyanogen	000460-19-5										
Cyanogen Bromide	000506-68-3										
Cyanogen Chloride	000506-77-4			2.0E-01	2.0E-02	1.0E+06	1.0E+06	1.0E+06	1.0E+06	1.0E+06	1.0E+06
Cyclohexane, 1,2,3,4,5-pentabromo-6-chloro-	000087-84-3										
Cyclohexanone	000108-94-1			4.3E+01	4.3E+00		1.0E+06	1.0E+06	1.0E+06	1.0E+06	1.0E+06

Nonradionuclides/water/agricultural

Table 3.3a. (continued)

Chemical	CASRN	Ingestion of Vegetables (mg/L)*				Ingestion of Beef (mg/L)*				Ingestion of Milk (mg/L)*					
		10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child
Cyclohexylamine	000108-91-8			3.6E+00	3.6E-01			1.0E+06	4.9E+05			1.0E+06	3.3E+05	2.6E+05	3.3E+04
Cyclopentadiene	000542-92-7														
Cyhalothrin/karate	068085-85-8			3.5E-01	3.5E-02			4.9E-01	4.9E-02			2.5E-01	3.3E-02	2.5E-02	3.3E-03
Cypermethrin	052315-07-8														
Cyromazine	066215-27-8														
DDD	000072-54-8	6.8E-02	6.8E-04			1.2E+00	1.2E-02			2.6E-01	2.6E-03				
DDE	000072-55-9	4.8E-02	4.8E-04			1.1E+00	1.1E-02			2.3E-01	2.3E-03				
DDT	000050-29-3	4.8E-02	4.8E-04	3.5E-02	3.5E-03	2.3E-01	2.3E-03	1.7E-01	1.7E-02	5.1E-02	5.1E-04	8.8E-02	1.1E-02	8.8E-03	1.1E-03
Dacthal	001861-32-1														
Dalapon	000075-99-0			2.5E-01	2.5E-02			1.0E+06	3.9E+05			1.0E+06	2.6E+05	2.0E+05	2.6E+04
Decabromodiphenyl Ether	001163-19-5			6.9E-01	6.9E-02			4.5E+01	4.5E+00			2.3E+01	3.0E+00	2.3E+00	3.0E-01
Demeton	008065-48-3														
Di(2-ethylhexyl)adipate	000103-23-1	1.4E+01	1.4E-01	4.2E+01	4.2E+00	2.4E+00	2.4E-02	7.4E+00	7.4E-01	5.3E-01	5.3E-03	3.8E+00	4.9E-01	3.8E-01	4.9E-02
Diallate	002303-16-4	3.0E-02	3.0E-04			5.5E+05	5.5E+03			1.2E+05	1.2E+03				
Diazinon	000333-41-5			5.6E-02	5.6E-03			1.1E+02	1.1E+01			5.8E+01	7.4E+00	5.8E+00	7.4E-01
Dibenz[a,h]anthracene ⁽²⁾	000053-70-3	2.2E-03	2.2E-05			3.9E-03	3.9E-05			8.7E-04	8.7E-06				
Dibromo-3-chloropropane, 1,2-	000096-12-8	7.1E-03	7.1E-05			3.3E+02	3.3E+00			7.2E+01	7.2E-01				
Dibromobenzene, 1,4-	000106-37-6			6.2E-01	6.2E-02			1.2E+03	1.2E+02			6.4E+02	8.2E+01	6.4E+01	8.2E+00
Dibromochloromethane	000124-48-1	9.2E-02	9.2E-04	6.6E-01	6.6E-02	1.4E+04	1.4E+02	9.8E+04	9.8E+03	3.0E+03	3.0E+01	5.1E+04	6.5E+03	5.1E+03	6.5E+02
Dibromodichloromethane	000594-18-3														
Dibromodiphenyl Ether, p,p'-	002050-47-7														

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	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child
Dibromoethane, 1,2-	000106-93-4	7.8E-05	7.8E-07			2.1E+01	2.1E-01			4.7E+00	4.7E-02				
Dibromomethane (Methylene Bromide)	000074-95-3			1.3E-01	1.3E-02			4.9E+05	4.9E+04			2.5E+05	3.3E+04	2.5E+04	3.3E+03
Dibutyl Phthalate	000084-74-2			6.8E+00	6.8E-01			9.8E+02	9.8E+01			5.1E+02	6.5E+01	5.1E+01	6.5E+00
Dicamba	001918-00-9			1.5E+00	1.5E-01			2.3E+04	2.3E+03			1.2E+04	1.6E+03	1.2E+03	1.6E+02
Dichloro-2-butene, 1,4-	000764-41-0														
Dichloroacetic Acid															
Dichlorobenzene, 1,2 ⁽⁹⁾	000095-50-1			5.2E+00	5.2E-01			2.8E+04	2.8E+03			1.4E+04	1.9E+03	1.4E+03	1.9E+02
Dichlorobenzene, 1,3-	000541-73-1														
Dichlorobenzene, 1,4-	000106-46-7	5.6E-01	5.6E-03			3.0E+03	3.0E+01			6.6E+02	6.6E+00				
Dichlorobenzidine, 3,3'-	000091-94-1	3.1E-02	3.1E-04			1.3E+02	1.3E+00			2.8E+01	2.8E-01				
Dichlorodifluoromethane	000075-71-8			6.6E+00	6.6E-01			9.8E+05	9.8E+04			5.1E+05	6.5E+04	5.1E+04	6.5E+03
Dichloroethane, 1,1-	000075-34-3			2.4E+00	2.4E-01			1.0E+06	1.2E+05			6.4E+05	8.2E+04	6.4E+04	8.2E+03
Dichloroethane, 1,2-	000107-06-2	4.7E-02	4.7E-04			6.3E+04	6.3E+02			1.4E+04	1.4E+02				
Dichloroethylene, 1,1-	000075-35-4	9.4E-03	9.4E-05	2.2E-01	2.2E-02	4.8E+03	4.8E+01	1.1E+05	1.1E+04	1.1E+03	1.1E+01	5.8E+04	7.4E+03	5.8E+03	7.4E+02
Dichloroethylene, 1,2- (Mixed Isomers)	000540-59-0			5.2E-02	5.2E-03			1.0E+06	2.3E+05			1.0E+06	1.5E+05	1.2E+05	1.5E+04
Dichloroethylene, 1,2-cis-	000156-59-2			2.6E-01	2.6E-02			9.8E+04	9.8E+03			5.1E+04	6.5E+03	5.1E+03	6.5E+02
Dichloroethylene, 1,2-trans-	000156-60-5			1.2E-01	1.2E-02			1.0E+06	5.2E+05			1.0E+06	3.4E+05	2.7E+05	3.4E+04
Dichlorophenol, 2,4-	000120-83-2			1.5E-01	1.5E-02			2.9E+03	2.9E+02			1.5E+03	2.0E+02	1.5E+02	2.0E+01
Dichlorophenoxy Acetic Acid, 2,4-	000094-75-7			4.0E-01	4.0E-02			2.5E+04	2.5E+03			1.3E+04	1.6E+03	1.3E+03	1.6E+02
Dichlorophenoxybutyric Acid, 4-(2,4-	000094-82-6			4.7E-01	4.7E-02			1.8E+03	1.8E+02			9.5E+02	1.2E+02	9.5E+01	1.2E+01
Dichloropropane, 1,2-	000078-87-5	9.8E-02	9.8E-04			2.7E+04	2.7E+02			5.9E+03	5.9E+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	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child
Dichloropropanol, 2,3-	000616-23-9														
Dichloropropene, 1,3-	000542-75-6	2.6E-02	2.6E-04	6.0E-03	6.0E-04	2.5E+04	2.5E+02	5.9E+03	5.9E+02	5.6E+03	5.6E+01	3.0E+03	3.9E+02	3.0E+02	3.9E+01
Dichlorvos	000062-73-7	2.4E-02	2.4E-04	1.5E-02	1.5E-03	5.8E+03	5.8E+01	3.6E+03	3.6E+02	1.3E+03	1.3E+01	1.9E+03	2.4E+02	1.9E+02	2.4E+01
Dicofol	000115-32-2														
Dicyclopentadiene	000077-73-6			1.5E+00	1.5E-01			3.0E+04	3.0E+03			1.6E+04	2.0E+03	1.6E+03	2.0E+02
Dieldrin	000060-57-1	9.8E-04	9.8E-06	3.4E-03	3.4E-04	2.9E-01	2.9E-03	9.8E-01	9.8E-02	6.3E-02	6.3E-04	5.1E-01	6.5E-02	5.1E-02	6.5E-03
Diethyl Phthalate	000084-66-2			3.2E+01	3.2E+00			1.0E+06	2.0E+05			1.0E+06	1.3E+05	1.0E+05	1.3E+04
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			5.7E+00	5.7E-01			1.0E+06	1.0E+06			1.0E+06	1.0E+06	1.0E+06	1.0E+06
Diethylformamide	000617-84-5														
Diethylstilbesterol	000056-53-1	3.5E-06	3.5E-08			1.2E-04	1.2E-06			2.7E-05	2.7E-07				
Difenzoquat	043222-48-6														
Diffubenzuron	035367-38-5														
Diffuoroethane, 1,1-	000075-37-6														
Diisopropyl Methylphosphonate	001445-75-6			8.8E-01	8.8E-02			1.0E+06	5.8E+05			1.0E+06	3.9E+05	3.0E+05	3.9E+04
Dimethipin	055290-64-7														
Dimethoate	000060-51-5			8.9E-03	8.9E-04			3.1E+02	3.1E+01			1.6E+02	2.1E+01	1.6E+01	2.1E+00
Dimethoxybenzidine, 3,3'-	000119-90-4	4.0E-01	4.0E-03			2.1E+05	2.1E+03			4.5E+04	4.5E+02				
Dimethyl Sulfate	000077-78-1														

Table 3.3a. (continued)

Chemical	CASRN	Ingestion of Vegetables (mg/L)*				Ingestion of Beef (mg/L)*				Ingestion of Milk (mg/L)*					
		10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child
Dimethylaniline HCl, 2,4-	021436-96-4														
Dimethylaniline, 2,4-	000095-68-1														
Dimethylaniline, N,N-	000121-69-7			8.5E-02	8.5E-03			3.9E+03	3.9E+02			2.0E+03	2.6E+02	2.0E+02	2.6E+01
Dimethylbenzidine, 3,3'-	000119-93-7	9.0E-04	9.0E-06			9.9E+01	9.9E-01			2.2E+01	2.2E-01				
Dimethylethyl Lead	107584-40-7														
Dimethylformamide	000068-12-2			8.6E-02	8.6E-03			1.0E+06	1.0E+06			1.0E+06	1.0E+06	1.0E+06	1.0E+06
Dimethylhydrazine, 1,1- ^(d)	000057-14-7														
Dimethylhydrazine, 1,2-	000540-73-8														
Dimethylphenol, 2,4-	000105-67-9			7.1E-01	7.1E-02			7.8E+04	7.8E+03			4.0E+04	5.2E+03	4.0E+03	5.2E+02
Dimethylphenol, 2,6-	000576-26-1			2.2E-02	2.2E-03			2.0E+03	2.0E+02			1.1E+03	1.4E+02	1.1E+02	1.4E+01
Dimethylphenol, 3,4-	000095-65-8			3.3E-02	3.3E-03			4.9E+03	4.9E+02			2.5E+03	3.3E+02	2.5E+02	3.3E+01
Dimethylphthalate ^(d)	000131-11-3			2.0E+02	2.0E+01			1.0E+06	1.0E+06			1.0E+06	1.0E+06	1.0E+06	1.0E+06
Dimethylterephthalate	000120-61-6			5.1E+00	5.1E-01			7.8E+04	7.8E+03			4.0E+04	5.2E+03	4.0E+03	5.2E+02
Dinitro-o-cresol, 4,6-	000534-52-1														
Dinitro-o-cyclohexyl Phenol, 4,6-	000131-89-5			1.8E-04	1.8E-05			1.0E+06	1.0E+06			1.0E+06	1.0E+06	1.0E+06	1.0E+06
Dinitrobenzene, 1,2-	000528-29-0			8.0E-03	8.0E-04			7.8E+03	7.8E+02			4.1E+03	5.2E+02	4.1E+02	5.2E+01
Dinitrobenzene, 1,3-	000099-65-0			2.0E-03	2.0E-04			2.0E+03	2.0E+02			1.0E+03	1.3E+02	1.0E+02	1.3E+01
Dinitrobenzene, 1,4-	000100-25-4			7.3E-03	7.3E-04			9.8E+03	9.8E+02			5.1E+03	6.6E+02	5.1E+02	6.6E+01
Dinitrophenol, 2,4-	000051-28-5			3.6E-02	3.6E-03			4.9E+04	4.9E+03			2.6E+04	3.3E+03	2.6E+03	3.3E+02
Dinitrotoluene, 2,4-	000121-14-2	9.8E-03	9.8E-05	5.7E-02	5.7E-03	2.7E+03	2.7E+01	1.6E+04	1.6E+03	5.9E+02	5.9E+00	8.1E+03	1.0E+03	8.1E+02	1.0E+02
Dinitrotoluene, 2,6-	000606-20-2	7.6E-03	7.6E-05	2.2E-02	2.2E-03	5.3E+03	5.3E+01	1.6E+04	1.6E+03	1.2E+03	1.2E+01	8.1E+03	1.0E+03	8.1E+02	1.0E+02

Table 3.3a. (continued)

Chemical	CASRN	Ingestion of Vegetables (mg/L) ^a				Ingestion of Beef (mg/L) ^a				Ingestion of Milk (mg/L) ⁱ					
		10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child
Dinitrotoluene, 2-Amino-4,6-	035572-78-2														
Dinoseb	000088-85-7			6.1E-02	6.1E-03			1.6E+02	1.6E+01			8.1E+01	1.0E+01	8.1E+00	1.0E+00
Dioxane, 1,4-	000123-91-1	4.7E-02	4.7E-04			1.0E+06	3.1E+05			1.0E+06	6.8E+04				
Diphenamid	000957-51-7			9.7E-01	9.7E-02			1.6E+05	1.6E+04			8.2E+04	1.1E+04	8.2E+03	1.1E+03
Diphenylamine	000122-39-4			1.5E+00	1.5E-01			6.2E+03	6.2E+02			3.2E+03	4.1E+02	3.2E+02	4.1E+01
Diphenylhydrazine, 1,2-	000122-66-7	1.4E-02	1.4E-04			2.9E+02	2.9E+00			6.3E+01	6.3E-01				
Diquat	000085-00-7			1.2E-04	1.2E-05			1.0E+06	1.0E+06			1.0E+06	1.0E+06	1.0E+06	1.0E+06
Direct Black 38	001937-37-7														
Direct Blue 6	002602-46-2														
Direct Brown 95	016071-86-6														
Direct Sky Blue	002610-05-1														
Disulfoton	000298-04-4			2.6E-03	2.6E-04			3.1E+00	3.1E-01			1.6E+00	2.1E-01	1.6E-01	2.1E-02
Diuron	000330-54-1			8.9E-02	8.9E-03			3.1E+03	3.1E+02			1.6E+03	2.1E+02	1.6E+02	2.1E+01
Dodine	002439-10-3														
EPTC	000759-94-4														
Endosulfan	000115-29-7														
Endothall	000145-73-3														
Endrin	000072-20-8			2.0E-02	2.0E-03			5.9E+00	5.9E-01			3.0E+00	3.9E-01	3.0E-01	3.9E-02
Epichlorohydrin	000106-89-8	5.7E-02	5.7E-04	4.8E-03	4.8E-04	1.0E+06	3.0E+05	1.0E+06	2.5E+05	1.0E+06	6.5E+04	1.0E+06	1.7E+05	1.3E+05	1.7E+04
Epoxybutane, 1,2-	000106-88-7														
Ethephon	016672-87-0														

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	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child
Ethion	000563-12-2			3.4E-02	3.4E-03			3.3E+00	3.3E-01			1.7E+00	2.2E-01	1.7E-01	2.2E-02
Ethoxyethanol Acetate, 2-	000111-15-9			2.1E+00	2.1E-01			1.0E+06	1.0E+06			1.0E+06	1.0E+06	1.0E+06	3.5E+05
Ethoxyethanol, 2-	000110-80-5			1.1E+00	1.1E-01			1.0E+06	1.0E+06			1.0E+06	1.0E+06	1.0E+06	1.0E+06
Ethyl Acetate	000141-78-6			7.7E+00	7.7E-01			1.0E+06	1.0E+06			1.0E+06	1.0E+06	1.0E+06	7.2E+05
Ethyl Acrylate	000140-88-5	7.2E-02	7.2E-04			1.9E+05	1.9E+03			4.2E+04	4.2E+02				
Ethyl Chloride	000075-00-3														
Ethyl Ether	000060-29-7			1.9E+00	1.9E-01			1.0E+06	1.0E+06			1.0E+06	1.0E+06	1.0E+06	1.3E+05
Ethyl Methacrylate	000097-63-2			2.4E+00	2.4E-01			8.8E+05	8.8E+04			4.6E+05	5.9E+04	4.6E+04	5.9E+03
Ethyl-p-nitrophenyl Phosphonate	002104-64-5			6.2E-04	6.2E-05			1.2E+00	1.2E-01			6.4E-01	8.2E-02	6.4E-02	8.2E-03
Ethylbenzene ⁽⁶⁾	000100-41-4			5.3E+00	5.3E-01			6.2E+04	6.2E+03			3.2E+04	4.1E+03	3.2E+03	4.1E+02
Ethylene Cyanohydrin	000109-78-4			1.3E-01	1.3E-02			1.0E+06	1.0E+06			1.0E+06	1.0E+06	1.0E+06	1.0E+06
Ethylene Diamine	000107-15-3			6.7E-02	6.7E-03			1.0E+06	1.0E+06			1.0E+06	9.2E+05	7.2E+05	9.2E+04
Ethylene Glycol	000107-21-1			5.2E-01	5.2E-02			1.0E+06	1.0E+06			1.0E+06	1.0E+06	1.0E+06	1.0E+06
Ethylene Glycol Monobutyl Ether	000111-76-2														
Ethylene Oxide	000075-21-8	4.9E-04	4.9E-06			3.6E+05	3.6E+03			7.8E+04	7.8E+02				
Ethylene Thiourea	000096-45-7	2.9E-03	2.9E-05	1.1E-04	1.1E-05	1.0E+06	7.5E+04	2.8E+05	2.8E+04	1.0E+06	1.7E+04	1.5E+05	1.9E+04	1.5E+04	1.9E+03
Ethylphthalyl Ethyl Glycolate	000084-72-0														
Express	101200-48-0														
Fenamiphos	022224-92-6														
Fenpropathrin	039515-41-8														
Fluometuron	002164-17-2			4.9E-01	4.9E-02			4.0E+04	4.0E+03			2.1E+04	2.7E+03	2.1E+03	2.7E+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	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child
Fluoranthene	000206-44-0			2.7E+00	2.7E-01			3.9E+02	3.9E+01			2.0E+02	2.6E+01	2.0E+01	2.6E+00
Fluorene	000086-73-7			2.7E+00	2.7E-01			1.2E+03	1.2E+02			6.4E+02	8.3E+01	6.4E+01	8.3E+00
Fluoride	007782-41-4														
Fluridone	059756-60-4														
Flurprimidol	056425-91-3														
Flutolanil	066332-96-5														
Fluvalinate	069409-94-5														
Folpet	000133-07-3	3.5E+00	3.5E-02	5.3E+00	5.3E-01	4.1E+04	4.1E+02	6.2E+04	6.2E+03	9.1E+03	9.1E+01	3.2E+04	4.1E+03	3.2E+03	4.1E+02
Fomesafen	072178-02-0														
Fonofos	000944-22-9			1.3E-01	1.3E-02			1.8E+02	1.8E+01			9.3E+01	1.2E+01	9.3E+00	1.2E+00
Formaldehyde	000050-00-0			6.3E-01	6.3E-02			1.0E+06	1.0E+06			1.0E+06	1.0E+06	1.0E+06	1.0E+06
Formic Acid	000064-18-6			3.2E+00	3.2E-01			1.0E+06	1.0E+06			1.0E+06	1.0E+06	1.0E+06	1.0E+06
Fosetyl-AL	039148-24-8														
Furan	000110-00-9			1.5E-02	1.5E-03			3.9E+04	3.9E+03			2.0E+04	2.6E+03	2.0E+03	2.6E+02
Furazolidone	000067-45-8	4.5E-04	4.5E-06			1.0E+04	1.0E+02			2.2E+03	2.2E+01				
Furfural	000098-01-1			1.8E-01	1.8E-02			7.4E+02	7.4E+01			3.8E+02	4.9E+01	3.8E+01	4.9E+00
Furium	000531-82-8														
Furmecyclox	060568-05-0														
Glufosinate, Ammonium	077182-82-2														
Glycidyl	000765-34-4			4.9E-04	4.9E-05			1.0E+06	1.7E+05			8.7E+05	1.1E+05	8.7E+04	1.1E+04
Glyphosate	001071-83-6			6.0E-03	6.0E-04			1.0E+06	1.0E+06			1.0E+06	1.0E+06	1.0E+06	1.0E+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 ⁻⁵	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁵	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁵	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child
Goal	042874-03-3														
Haloxyfop, Methyl	069806-40-2														
Harmony	079277-27-3														
Heptachlor	000076-44-8	3.4E-03	3.4E-05	3.3E-02	3.3E-03	2.0E+00	2.0E-02	2.0E+01	2.0E+00	4.5E-01	4.5E-03	1.0E+01	1.3E+00	1.0E+00	1.3E-01
Heptachlor Epoxide	001024-57-3	1.8E-03	1.8E-05	9.0E-04	9.0E-05	7.9E-02	7.9E-04	4.0E-02	4.0E-03	1.7E-02	1.7E-04	2.1E-02	2.7E-03	2.1E-03	2.7E-04
Heptane, N-	000142-82-5														
Hexabromobenzene	000087-82-1			1.4E-01	1.4E-02			1.3E+00	1.3E-01			6.9E-01	8.8E-02	6.9E-02	8.8E-03
Hexachlorobenzene ⁽⁶⁾	000118-74-1	1.0E-02	1.0E-04	5.5E-02	5.5E-03	5.7E-01	5.7E-03	3.1E+00	3.1E-01	1.3E-01	1.3E-03	1.6E+00	2.1E-01	1.6E-01	2.1E-02
Hexachlorobutadiene ⁽⁶⁾	000087-68-3	2.0E-01	2.0E-03	1.4E-02	1.4E-03	3.7E+01	3.7E-01	2.5E+00	2.5E-01	8.1E+00	8.1E-02	1.3E+00	1.6E-01	1.3E-01	1.6E-02
Hexachlorocyclohexane, Alpha-	000319-84-6	2.3E-03	2.3E-05			3.6E+00	3.6E-02			8.0E-01	8.0E-03				
Hexachlorocyclohexane, Beta-	000319-85-7	8.3E-03	8.3E-05			1.0E+01	1.0E-01			2.2E+00	2.2E-02				
Hexachlorocyclohexane, Delta-	000319-86-8														
Hexachlorocyclohexane, Epsilon	006108-10-7														
Hexachlorocyclohexane, Gamma-	000058-89-9	1.1E-02	1.1E-04	1.8E-02	1.8E-03	2.8E+01	2.8E-01	4.7E+01	4.7E+00	6.1E+00	6.1E-02	2.4E+01	3.1E+00	2.4E+00	3.1E-01
Hexachlorocyclohexane, Technical	000608-73-1														
Hexachlorocyclopentadiene	000077-47-4			4.5E-01	4.5E-02			5.5E+02	5.5E+01			2.8E+02	3.6E+01	2.8E+01	3.6E+00
Hexachlorodibenzo-p-dioxin, Mixture	019408-74-3	2.6E-06	2.6E-08			5.8E-06	5.8E-08			1.3E-06	1.3E-08				
Hexachloroethane	000067-72-1	1.1E+00	1.1E-02	6.3E-02	6.3E-03	1.6E+03	1.6E+01	9.8E+01	9.8E+00	3.6E+02	3.6E+00	5.1E+01	6.5E+00	5.1E+00	6.5E-01
Hexachlorophene	000070-30-4			2.1E-02	2.1E-03			7.4E-03	7.4E-04			3.8E-03	4.9E-04	3.8E-04	4.9E-05
Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	000121-82-4	1.2E-01	1.2E-03	1.7E-01	1.7E-02	8.3E+02	8.3E+00	1.2E+03	1.2E+02	1.8E+02	1.8E+00	6.1E+02	7.8E+01	6.1E+01	7.8E+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 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child
Hexamethylene Diisocyanate, 1,6-	000822-06-0														
Hexane, N-	000110-54-3			3.8E+00	3.8E-01			5.9E+03	5.9E+02			3.1E+03	3.9E+02	3.1E+02	3.9E+01
Hexanone, 2-	000591-78-6														
Hexazinone	051235-04-2			3.1E-04	3.1E-05			1.0E+06	1.0E+06			1.0E+06	1.0E+06	1.0E+06	1.0E+06
HpCDD, 2,3,7,8-(⁴)	037871-00-4														
HpCDF, 2,3,7,8-(⁴)	038998-75-3														
HxCDD, 2,3,7,8-(⁴)	034465-46-8														
HxCDF, 2,3,7,8-(⁴)	055684-94-1														
Hydrazine	000302-01-2	1.6E-05	1.6E-07			1.0E+06	7.6E+04			1.0E+06	1.7E+04				
Hydrazine Sulfate	010034-93-2	1.6E-05	1.6E-07			1.0E+06	7.6E+04			1.0E+06	1.7E+04				
Hydrogen Chloride	007647-01-0														
Hydrogen Cyanide	000074-90-8			1.0E-01	1.0E-02			1.0E+06	6.5E+05			1.0E+06	4.3E+05	3.4E+05	4.3E+04
Hydrogen Sulfide	007783-06-4			3.0E-02	3.0E-03			2.6E+05	2.6E+04			1.4E+05	1.7E+04	1.4E+04	1.7E+03
Hydroquinone	000123-31-9			2.5E-01	2.5E-02			1.0E+06	8.8E+05			1.0E+06	5.8E+05	4.6E+05	5.8E+04
Imazalil	035554-44-0														
Imazaquin	081335-37-7														
Indeno[1,2,3-cd]pyrene(²)	000193-39-5	2.2E-02	2.2E-04			6.3E-02	6.3E-04			1.4E-02	1.4E-04				
Iprodione	036734-19-7														
Iron	007439-89-6														
Isobutyl Alcohol	000078-83-1			2.6E+00	2.6E-01			1.0E+06	1.0E+06			1.0E+06	1.0E+06	1.0E+06	2.3E+05
Isophorone	000078-59-1	5.4E+00	5.4E-02	4.4E+00	4.4E-01	1.0E+06	3.8E+04	1.0E+06	3.1E+05	8.4E+05	8.4E+03	1.0E+06	2.1E+05	1.6E+05	2.1E+04

Table 3.3a. (continued)

Chemical	CASRN	Ingestion of Vegetables (mg/L)*				Ingestion of Beer (mg/L)*				Ingestion of Milk (mg/L)*			
		10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	HQ=1 Adult	HQ=1 Child	HQ=0.1 Child
Isopropalin	033820-53-0												
Isopropanol	000067-63-0												
Isopropyl Methyl Phosphonic Acid	001832-54-8												
Isoxaben	082558-50-7												
Karac	091465-08-6												
Kerb	023950-58-5												
Lactofen	077501-63-4												
Lead Alkyls	NA												
Lead And Compounds	007439-92-1												
Linuron	000330-55-2												
Lithium	007439-93-2												
Londax	083055-99-6												
MCPA	000094-74-6	1.8E-02	1.8E-03			2.0E+03	2.0E+02			1.0E+03	1.3E+02	1.0E+02	1.3E+01
MCPB	000094-81-5												
MCCP	000093-65-2	4.2E-02	4.2E-03			2.0E+03	2.0E+02			1.0E+03	1.3E+02	1.0E+02	1.3E+01
Magnesium	007439-95-4												
Malathion	000121-75-5	9.8E-01	9.8E-02			2.0E+04	2.0E+03			1.0E+04	1.3E+03	1.0E+03	1.3E+02
Maleic Anhydride	000108-31-6												
Maleic Hydrazide	000123-33-1	9.5E-01	9.5E-02			1.0E+06	1.0E+06			1.0E+06	1.0E+06	1.0E+06	1.0E+06
Malononitrile	000109-77-3		6.7E-05	6.7E-06				1.4E+04	1.4E+03		7.4E+03	9.5E+02	7.4E+02
Mancozeb	008018-01-7												9.5E+01

Nonradionuclides/water/agricultural

Table 3.3a. (continued)

Chemical	CASRN	Ingestion of Vegetables (mg/L)*				Ingestion of Beef (mg/L)*				Ingestion of Milk (mg/L)*					
		10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child
Maneb	012427-38-2			1.6E-02	1.6E-03			1.0E+06	3.9E+05			1.0E+06	2.6E+05	2.0E+05	2.6E+04
Manganese (Diet)	007439-96-5			8.3E+00	8.3E-01			5.5E+03	5.5E+02			1.5E+04	1.9E+03	1.5E+03	1.9E+02
Mephosfolan	000950-10-7														
Mepiquat Chloride	024307-26-4														
Mercuric Chloride	007487-94-7														
Mercury (elemental)	007439-97-6			1.2E-02	1.2E-03			5.8E-01	5.8E-02			2.0E+00	2.6E-01	2.0E-01	2.6E-02
Mercury, Inorganic Salt	007439-97-6			1.2E-02	1.2E-03			5.8E-01	5.8E-02			2.0E+00	2.6E-01	2.0E-01	2.6E-02
Merphos	000150-50-5														
Merphos Oxide	000078-48-8			2.1E-03	2.1E-04			4.7E-02	4.7E-03			2.4E-02	3.1E-03	2.4E-03	3.1E-04
Metalaxyl	057837-19-1														
Methacrylonitrile	000126-98-7			6.2E-04	6.2E-05			2.2E+04	2.2E+03			1.2E+04	1.5E+03	1.2E+03	1.5E+02
Methamidophos	010265-92-6			6.7E-05	6.7E-06			1.8E+05	1.8E+04			9.2E+04	1.2E+04	9.2E+03	1.2E+03
Methanol	000067-56-1			5.8E-01	5.8E-02			1.0E+06	1.0E+06			1.0E+06	1.0E+06	1.0E+06	1.0E+06
Methidathion	000950-37-8														
Methomyl	016752-77-5			1.7E-01	1.7E-02			1.0E+06	4.9E+05			1.0E+06	3.3E+05	2.5E+05	3.3E+04
Methoxy-5-nitroaniline, 2-	000099-59-2	9.2E-02	9.2E-04			1.2E+05	1.2E+03			2.7E+04	2.7E+02				
Methoxychlor	000072-43-5			3.3E-01	3.3E-02			1.5E+02	1.5E+01			8.0E+01	1.0E+01	8.0E+00	1.0E+00
Methoxyethanol Acetate, 2-	000110-49-6														
Methoxyethanol, 2-	000109-86-4			1.2E-03	1.2E-04			1.0E+06	4.6E+05			1.0E+06	3.1E+05	2.4E+05	3.1E+04
Methyl Acetate	000079-20-9			4.0E+00	4.0E-01			1.0E+06	1.0E+06			1.0E+06	1.0E+06	1.0E+06	1.0E+06
Methyl Acrylate	000096-33-3			2.2E-01	2.2E-02			1.0E+06	5.0E+05			1.0E+06	3.3E+05	2.6E+05	3.3E+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 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child
Methyl Ethyl Ketone	000078-93-3			2.7E+00	2.7E-01			1.0E+06	1.0E+06			1.0E+06	1.0E+06	1.0E+06	1.0E+06
Methyl Isobutyl Ketone	000108-10-1			1.1E+00	1.1E-01			1.0E+06	3.9E+05			1.0E+06	2.6E+05	2.0E+05	2.6E+04
Methyl Mercury	022967-92-6														
Methyl Methacrylate	000080-62-6			1.2E+00	1.2E-01			1.0E+06	3.1E+05			1.0E+06	2.1E+05	1.6E+05	2.1E+04
Methyl Parathion	000298-00-0			6.6E-03	6.6E-04			2.5E+03	2.5E+02			1.3E+03	1.6E+02	1.3E+02	1.6E+01
Methyl Styrene (Mixed Isomers)	025013-15-4			3.4E-01	3.4E-02			2.1E+03	2.1E+02			1.1E+03	1.4E+02	1.1E+02	1.4E+01
Methyl hydrazine ^(b)	000060-34-4														
Methyl tert-Butyl Ether (MTBE)	001634-04-4														
Methyl-5-Nitroaniline, 2-	000099-55-8	2.0E-01	2.0E-03			5.5E+04	5.5E+02			1.2E+04	1.2E+02				
Methylaniline Hydrochloride, 2-	000636-21-5	4.1E-03	4.1E-05			1.0E+06	1.0E+04			2.2E+05	2.2E+03				
Methylcyclohexane	000108-87-2														
Methylene Chloride	000075-09-2	4.6E-01	4.6E-03	8.9E-01	8.9E-02	1.0E+06	1.2E+04	1.0E+06	2.3E+05	2.7E+05	2.7E+03	1.0E+06	1.6E+05	1.2E+05	1.6E+04
Methylene-bis(2-chloroaniline), 4,4'-	000101-14-4	1.1E-01	1.1E-03	4.4E-02	4.4E-03	1.8E+02	1.8E+00	6.9E+01	6.9E+00	3.9E+01	3.9E-01	3.6E+01	4.6E+00	3.6E+00	4.6E-01
Methylene-bis(N,N-dimethyl) Aniline, 4,4'-	000101-61-1	3.5E-01	3.5E-03			6.3E+01	6.3E-01			1.4E+01	1.4E-01				
Methylenebisbenzenamine, 4,4'- ^(b)	000101-77-9	1.9E-02	1.9E-04			1.8E+04	1.8E+02			4.0E+03	4.0E+01				
Methylenediphenyl Isocyanate, 4,4'-	000101-68-8														
Methylstyrene, Alpha-	000098-83-9			4.0E+00	4.0E-01			2.4E+04	2.4E+03			1.3E+04	1.6E+03	1.3E+03	1.6E+02
Methyltriethyl Lead	001762-28-3														
Metolachlor	051218-45-2														
Metribuzin ^(b)	021087-64-9			5.5E-01	5.5E-02			3.9E+05	3.9E+04			2.0E+05	2.6E+04	2.0E+04	2.6E+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 ⁻⁵	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁵	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁵	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child
Mirex ⁽⁹⁾	002385-85-5	9.0E-03	9.0E-05	1.4E-02	1.4E-03	5.3E-01	5.3E-03	8.2E-01	8.2E-02	1.2E-01	1.2E-03	4.2E-01	5.4E-02	4.2E-02	5.4E-03
Molinate	002212-67-1			1.2E-01	1.2E-02			4.6E+02	4.6E+01			2.4E+02	3.1E+01	2.4E+01	3.1E+00
Molybdenum	007439-98-7			2.9E-01	2.9E-02			9.7E+01	9.7E+00			9.4E+00	1.2E+00	9.4E-01	1.2E-01
Monochloramine	010599-90-3														
Monochlorobutanes	025154-42-1														
Naled	000300-76-5			9.4E-02	9.4E-03			2.5E+03	2.5E+02			1.3E+03	1.6E+02	1.3E+02	1.6E+01
Naphthalene ⁽⁶⁾	000091-20-3			2.0E+00	2.0E-01			1.4E+04	1.4E+03			7.2E+03	9.3E+02	7.2E+02	9.3E+01
Naphthalene, 1-Methyl	000090-12-0														
Naphthalene, 2-Methyl	000091-57-6														
Napropamide	015299-99-7			7.2E-01	7.2E-02			1.0E+06	1.0E+06			1.0E+06	1.0E+06	8.8E+05	1.1E+05
Niagara Blue 4B	002429-74-5														
Nickel Carbonyl	013463-39-3														
Nickel Refinery Dust	NA														
Nickel Soluble Salts	007440-02-0			1.2E+00	1.2E-01			7.8E+01	7.8E+00			4.0E+00	5.1E-01	4.0E-01	5.1E-02
Nickel Subulfide	012035-72-2														
Nitrapyrin ⁽⁵⁾	001929-82-4			7.6E-02	7.6E-03			1.2E+03	1.2E+02			6.1E+02	7.8E+01	6.1E+01	7.8E+00
Nitrate	014797-55-8														
Nitric Oxide ⁽⁹⁾	010102-43-9														
Nitrite	014797-65-0														
Nitroaniline, 2-	000088-74-4														
Nitrobenzene	000098-95-3			1.2E-02	1.2E-03			6.2E+03	6.2E+02			3.2E+03	4.1E+02	3.2E+02	4.1E+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	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child
Nitrofurantoin	000067-20-9														
Nitrofurazone	000059-87-0														
Nitrogen Dioxide ⁽⁹⁾	010102-44-0														
Nitroguanidine	000556-88-7														
Nitrophenol, 4-	000100-02-7														
Nitropropane, 2- ⁽⁹⁾	000079-46-9	1.5E-04	1.5E-06			5.4E+03	5.4E+01			1.2E+03	1.2E+01				
Nitroso-N-ethylurea, N-	000759-73-9	7.1E-06	7.1E-08			7.6E+02	7.6E+00			1.7E+02	1.7E+00				
Nitroso-N-methylurea, N-	000684-93-5														
Nitroso-di-N-butylamine, N-	000924-16-3	1.1E-03	1.1E-05			4.2E+02	4.2E+00			9.3E+01	9.3E-01				
Nitroso-di-N-propylamine, N-	000621-64-7	5.5E-04	5.5E-06			1.0E+03	1.0E+01			2.3E+02	2.3E+00				
Nitrosodiethanolamine, N-	001116-54-7	3.2E-05	3.2E-07			1.0E+06	2.6E+04			5.7E+05	5.7E+03				
Nitrosodiethylamine, N-	000055-18-5	9.0E-06	9.0E-08			4.0E+02	4.0E+00			8.8E+01	8.8E-01				
Nitrosodimethylamine, N-	000062-75-9	6.9E-06	6.9E-08			1.3E+04	1.3E+02			2.9E+03	2.9E+01				
Nitrosodiphenylamine, N-	000086-30-6	2.5E+00	2.5E-02			2.9E+04	2.9E+02			6.5E+03	6.5E+01				
Nitrosomethylethylamine, N-	010595-95-6														
Nitrosomethylvinylamine, N-	004549-40-0														
Nitrosopyrrolidine, N-	000930-55-2	8.4E-05	8.4E-07			1.0E+06	1.1E+04			2.4E+05	2.4E+03				
Nitrotoluene, 4-Amino-2-	000119-32-4														
Nitrotoluene, m-	000099-08-1			3.8E-01	3.8E-02			3.1E+04	3.1E+03			1.6E+04	2.1E+03	1.6E+03	2.1E+02
Nitrotoluene, o-	000088-72-2			3.6E-01	3.6E-02			3.9E+04	3.9E+03			2.0E+04	2.6E+03	2.0E+03	2.6E+02
Nitrotoluene, p-	000099-99-0			3.8E-01	3.8E-02			3.1E+04	3.1E+03			1.6E+04	2.1E+03	1.6E+03	2.1E+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	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child
Norflurazon	027314-13-2														
Nustar	085509-19-9														
OCDD ⁽⁴⁾	003268-87-9	1.1E-04	1.1E-06			2.0E-06	2.0E-08			4.4E-07	4.4E-09				
OCDF ⁽⁴⁾	039001-02-0														
Octabromodiphenyl Ether	032536-52-0														
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetra (HMX)	002691-41-0			3.3E-01	3.3E-02			1.0E+06	1.0E+06			1.0E+06	6.7E+05	5.2E+05	6.7E+04
Octamethylpyrophosphoramide	000152-16-9														
Octyl Phthalate, di-N-	000117-84-0			1.4E+00	1.4E-01			9.8E-03	9.8E-04			5.1E-03	6.5E-04	5.1E-04	6.5E-05
Oryzalin	019044-88-3														
Oxadiazon	019666-30-9														
Oxamyl	023135-22-0														
Paclobutrazol	076738-62-0														
Paraquat	001910-42-5			5.3E-05	5.3E-06			1.0E+06	1.0E+06			1.0E+06	1.0E+06	1.0E+06	1.0E+06
Parathion	000056-38-2			3.7E-01	3.7E-02			7.4E+02	7.4E+01			3.8E+02	4.9E+01	3.8E+01	4.9E+00
PeCDD, 2,3,7,8- ⁽⁴⁾	036088-22-9	2.2E-07	2.2E-09			7.7E-07	7.7E-09			1.7E-07	1.7E-09				
PeCDF, 1,2,3,7,8- ⁽⁴⁾	057117-41-6														
PeCDF, 2,3,4,7,8- ⁽⁴⁾	057117-31-4														
Pebulate	001114-71-2														
Pendimethalin	040487-42-1														
Pentabromodiphenyl Ether	032534-81-9														

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	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child
Pentachlorobenzene	000608-93-5			5.5E-02	5.5E-03			3.9E+00	3.9E-01			2.0E+00	2.6E-01	2.0E-01	2.6E-02
Pentachlorocyclopentadiene	025329-35-5														
Pentachloronitrobenzene	000082-68-8	6.1E-02	6.1E-04	2.0E-01	2.0E-02	1.8E+01	1.8E-01	5.9E+01	5.9E+00	3.9E+00	3.9E-02	3.0E+01	3.9E+00	3.0E+00	3.9E-01
Pentachlorophenol	000087-86-5	1.4E-01	1.4E-03	2.1E+00	2.1E-01	1.9E+00	1.9E-02	2.9E+01	2.9E+00	4.2E-01	4.2E-03	1.5E+01	2.0E+00	1.5E+00	2.0E-01
Pentyl Alcohol, N-	000071-41-0														
Permethrin	052645-53-1			2.9E+00	2.9E-01			1.2E+04	1.2E+03			6.4E+03	8.2E+02	6.4E+02	8.2E+01
Phenanthrene	000085-01-8														
Phenmedipham	013684-63-4			1.4E-01	1.4E-02			1.0E+06	1.0E+06			1.0E+06	1.0E+06	1.0E+06	1.0E+06
Phenol	000108-95-2			1.1E+01	1.1E+00			1.0E+06	1.0E+06			1.0E+06	9.8E+05	7.7E+05	9.8E+04
Phenylenediamine, m-	000108-45-2			7.2E-03	7.2E-04			1.0E+06	1.0E+06			1.0E+06	1.0E+06	1.0E+06	1.8E+05
Phenylenediamine, o-	000095-54-5	2.7E-02	2.7E-04			1.0E+06	1.4E+04			3.1E+05	3.1E+03				
Phenylenediamine, p-	000106-50-3			1.3E-01	1.3E-02			1.0E+06	1.0E+06			1.0E+06	1.0E+06	1.0E+06	1.0E+06
Phenylmercuric Acetate	000062-38-4														
Phenylphenol, 2-	000090-43-7	6.3E+00	6.3E-02			7.4E+04	7.4E+02			1.6E+04	1.6E+02				
Phorate	000298-02-2			4.4E-03	4.4E-04			3.1E+03	3.1E+02			1.6E+03	2.1E+02	1.6E+02	2.1E+01
Phosmet	000732-11-6			9.4E-01	9.4E-02			2.5E+04	2.5E+03			1.3E+04	1.6E+03	1.3E+03	1.6E+02
Phosphine	007803-51-2														
Phosphoric Acid	007664-38-2														
Phthalic Acid, P-	000100-21-0			2.2E+01	2.2E+00			1.0E+06	1.0E+06			1.0E+06	1.0E+06	8.1E+05	1.0E+05
Phthalic Anhydride	000085-44-9			2.8E+00	2.8E-01			1.0E+06	1.0E+06			1.0E+06	1.0E+06	1.0E+06	1.0E+06
Picloram	001918-02-1			2.7E+00	2.7E-01			2.2E+05	2.2E+04			1.1E+05	1.4E+04	1.1E+04	1.4E+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 ⁻⁵	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁵	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁵	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child
Pirimiphos, Methyl	029232-93-7														
Polybrominated Biphenyls	NA														
Polychlorinated Biphenyls	001336-36-3	2.1E-03	2.1E-05			2.4E-02	2.4E-04			5.2E-03	5.2E-05				
Potassium Cyanide	000151-50-8			1.1E-01	1.1E-02			1.0E+06	1.0E+06			1.0E+06	1.0E+06	1.0E+06	4.6E+05
Potassium Silver Cyanide	000506-61-6														
Prochloraz	067747-09-5														
Profluralin	026399-36-0														
Prometon	001610-18-0			5.3E-01	5.3E-02			5.9E+04	5.9E+03			3.0E+04	3.9E+03	3.0E+03	3.9E+02
Prometryn	007287-19-6			1.6E-01	1.6E-02			9.8E+03	9.8E+02			5.1E+03	6.6E+02	5.1E+02	6.6E+01
Propachlor	001918-16-7														
Propanil	000709-98-8			2.7E-01	2.7E-02			3.0E+03	3.0E+02			1.5E+03	2.0E+02	1.5E+02	2.0E+01
Propargite	002312-35-8														
Propargyl Alcohol	000107-19-7														
Propazine	000139-40-2			7.6E-01	7.6E-02			6.2E+04	6.2E+03			3.2E+04	4.1E+03	3.2E+03	4.1E+02
Propham	000122-42-9			1.1E+00	1.1E-01			9.8E+03	9.8E+02			5.1E+03	6.5E+02	5.1E+02	6.5E+01
Propiconazole	060207-90-1														
Propylene Glycol	000057-55-6			6.8E+00	6.8E-01			1.0E+06	1.0E+06			1.0E+06	1.0E+06	1.0E+06	1.0E+06
Propylene Glycol Monoethyl Ether	001569-02-4														
Propylene Glycol Monomethyl Ether	000107-98-2			1.8E+00	1.8E-01			1.0E+06	1.0E+06			1.0E+06	1.0E+06	1.0E+06	1.0E+06
Propylene Oxide	000075-56-9	3.2E-03	3.2E-05			7.1E+05	7.1E+03			1.6E+05	1.6E+03				
Pursuit	081335-77-5														

Table 3.3a. (continued)

Chemical	CASRN	Ingestion of Vegetables (mg/L)*				Ingestion of Beef (mg/L)*				Ingestion of Milk (mg/L)*					
		10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child
Pydrin	051630-58-1			1.7E+00	1.7E-01			7.4E+02	7.4E+01			3.8E+02	4.9E+01	3.8E+01	4.9E+00
Pyrene	000129-00-0			2.1E+00	2.1E-01			2.9E+02	2.9E+01			1.5E+02	2.0E+01	1.5E+01	2.0E+00
Pyridine	000110-86-1			1.5E-02	1.5E-03			3.9E+04	3.9E+03			2.0E+04	2.6E+03	2.0E+03	2.6E+02
Quinalphos	013593-03-8														
Quinoline	000091-22-5	6.0E-04	6.0E-06			1.2E+02	1.2E+00			2.6E+01	2.6E-01				
Refractory Ceramic Fibers	NA														
Resmethrin	010453-86-8														
Ronnel	000299-84-3			3.4E+00	3.4E-01			3.1E+02	3.1E+01			1.6E+02	2.1E+01	1.6E+01	2.1E+00
Rotenone	000083-79-4			2.6E-01	2.6E-02			2.5E+02	2.5E+01			1.3E+02	1.6E+01	1.3E+01	1.6E+00
Savey	078587-05-0														
Selenious Acid	007783-00-8														
Selenite	014124-67-5														
Selenium	007782-49-2			2.8E-01	2.8E-02			9.7E-01	9.7E-02			1.6E+00	2.0E-01	1.6E-01	2.0E-02
Selenium Sulfide	007446-34-6														
Selenourea	000630-10-4														
Sethoxydim	074051-80-2														
Silver	007440-22-4			3.5E-01	3.5E-02			3.2E+01	3.2E+00			3.2E+02	4.1E+01	3.2E+01	4.1E+00
Silver Cyanide	000506-64-9														
Simazine	000122-34-9	6.4E-02	6.4E-04	1.7E-01	1.7E-02	9.6E+03	9.6E+01	2.5E+04	2.5E+03	2.1E+03	2.1E+01	1.3E+04	1.6E+03	1.3E+03	1.6E+02
Sodium	007440-23-5														
Sodium Acifluorfen	062476-59-9														

Table 3.3a. (continued)

Chemical	CASRN	Ingestion of Vegetables (mg/L) ^a				Ingestion of Beef (mg/L) ^a				Ingestion of Milk (mg/L) ^a			
		10 ⁻⁴	10 ⁻³	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻³	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻³	HQ=1	HQ=0.1
Sodium Azide	026628-22-8												Child HQ=0.1
Sodium Cyanide	000143-33-9		4.4E-02	4.4E-03		1.0E+06	1.0E+06	1.0E+06	1.0E+06	1.0E+06	1.0E+06	1.0E+06	Adult HQ=0.1
Sodium Diethylidithiocarbamate	000148-18-5												
Sodium Fluoroacetate	000062-74-8												
Sodium Metavanadate	013718-26-8												
Stirofos (Tetrachlorovinphos)	000961-11-5												
Strontium, Stable	007440-24-6		2.7E+01	2.7E+00		1.5E+03	1.5E+03	1.5E+02		6.8E+02	8.8E+01	6.8E+01	
Stychnine	000057-24-9		7.9E-03	7.9E-04		2.9E+03	2.9E+03	2.9E+02		1.5E+03	2.0E+02	1.5E+02	
Styrene ^(b)	000100-42-5		9.8E+00	9.8E-01		2.0E+05	2.0E+05	2.0E+04		1.0E+05	1.3E+04	1.0E+04	
Sulfate	014808-79-8												
Systhane	088671-89-0												
TCDD, 2,3,7,8- ^(c)	001746-01-6	1.1E-07	1.1E-09		1.9E-07	1.9E-09		4.2E-08	4.2E-10				
TCDF, 2,3,7,8- ^(c)	051207-31-9	1.1E-06	1.1E-08		1.8E-05	1.8E-07		4.0E-06	4.0E-08				
TCMTB	021564-17-0												
Tebuthiuron	034014-18-1		2.7E-01	2.7E-02		1.0E+06	1.0E+06	1.0E+06		1.0E+06	1.0E+06	1.0E+06	2.6E+05
Temephos	003383-96-8												
Terbacil	005902-51-2												
Terbufos	013071-79-9		1.5E-03	1.5E-04		4.1E+00	4.1E-01			2.1E+00	2.7E-01	2.1E-01	2.7E-02
Terbutyn	000886-50-0		6.2E-02	6.2E-03		1.4E+02	1.4E+01			7.4E+01	9.4E+00	7.4E+00	9.4E-01
Tetrabutyl Lead	001920-90-7												
Tetrachlorobenzene, 1,2,4,5-	000095-94-3												
		10 ⁻⁴	2.0E-02	2.0E-03				5.9E+00	5.9E-01	3.0E+00	3.9E-01	3.0E-01	3.9E-02

Nonradionuclides/water/agricultural

Table 3.3a. (continued)

Chemical	CASRN	Ingestion of Vegetables (mg/L)*				Ingestion of Beef (mg/L)*				Ingestion of Milk (mg/L)*					
		10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child
Tetrachloroethane, 1,1,1,2-	000630-20-6	4.6E-01	4.6E-03	1.5E+00	1.5E-01	7.0E+03	7.0E+01	2.3E+04	2.3E+03	1.5E+03	1.5E+01	1.2E+04	1.6E+03	1.2E+03	1.6E+02
Tetrachloroethane, 1,1,2,2-	000079-34-5	4.4E-02	4.4E-04			3.6E+03	3.6E+01			8.0E+02	8.0E+00				
Tetrachloroethylene ⁽⁶⁾	000127-18-4	1.9E-01	1.9E-03	4.2E-01	4.2E-02	8.8E+03	8.8E+01	2.0E+04	2.0E+03	1.9E+03	1.9E+01	1.0E+04	1.3E+03	1.0E+03	1.3E+02
Tetrachlorophenol, 2,3,4,6-	000058-90-2			1.9E+00	1.9E-01			1.9E+03	1.9E+02			9.6E+02	1.2E+02	9.6E+01	1.2E+01
Tetrachlorotoluene, p- alpha, alpha, alpha-	005216-25-1														
Tetraethyl Dithiopyrophosphate	003689-24-5			2.5E-02	2.5E-03			3.9E+02	3.9E+01			2.0E+02	2.6E+01	2.0E+01	2.6E+00
Tetraethyl Lead	000078-00-2														
Tetrafluoroethane, 1,1,1,2-	000811-97-2														
Tetramethyl Lead	000075-74-1														
Tetrapropyl Lead	003440-75-3														
Thallic Oxide ⁽⁹⁾	001314-32-5														
Thallium (I) Nitrate	010102-45-1														
Thallium (Soluble Salts)	007440-28-0														
Thallium Acetate	000563-68-8														
Thallium Carbonate	006533-73-9														
Thallium Chloride	007791-12-0														
Thallium Selenite ⁽⁹⁾	012039-52-0														
Thallium Sulfate	007446-18-6														
Thiobencarb	028249-77-6														
Thiofanox	039196-18-4			1.1E-04	1.1E-05			1.0E+06	1.0E+06			1.0E+06	7.3E+05	5.7E+05	7.3E+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	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child
Thiophanate, Methyl	023564-05-8														
Thiram	000137-26-8														
Thorium	007440-29-1														
Tin	007440-31-5			2.3E+01	2.3E+00			1.2E+03	1.2E+02			1.9E+03	2.5E+02	1.9E+02	2.5E+01
Titanium	007440-32-6														
Toluene ⁽⁶⁾	000108-88-3			8.9E+00	8.9E-01			3.1E+05	3.1E+04			1.6E+05	2.1E+04	1.6E+04	2.1E+03
Toluene diisocyanate mixture (TDI)	026471-62-5														
Toluene-2,4-diamine	000095-80-7	3.5E-04	3.5E-06			2.6E+04	2.6E+02			5.7E+03	5.7E+01				
Toluene-2,5-diamine	000095-70-5														
Toluene-2,6-diamine	000823-40-5														
Toluidine, o- (Methylaniline, 2-)	000095-53-4	1.4E-02	1.4E-04			3.8E+04	3.8E+02			8.3E+03	8.3E+01				
Toluidine, p-	000106-49-0	3.5E-02	3.5E-04			9.6E+03	9.6E+01			2.1E+03	2.1E+01				
Toxaphene	008001-35-2	1.4E-02	1.4E-04			2.6E+00	2.6E-02			5.8E-01	5.8E-03				
Tralomehrin	066841-25-6														
Triallate	002303-17-5			8.3E-01	8.3E-02			1.1E+03	1.1E+02			5.5E+02	7.1E+01	5.5E+01	7.1E+00
Triasulfuron	082097-50-5														
Tribromobenzene, 1,2,4-	000615-54-3														
Tribromochloromethane	000594-15-0														
Tribromodiphenyl Ether	049690-94-0														
Tributyltin Oxide	000056-35-9														
Trichloro-1,2,2-trifluoroethane, 1,1,2-	000076-13-1			1.3E+03	1.3E+02			1.0E+06	1.0E+06			1.0E+06	1.0E+06	1.0E+06	3.9E+05

Table 3.3a. (continued)

Chemical	CASRN	Ingestion of Vegetables (mg/L) ^a				Ingestion of Beef (mg/L) ^a				Ingestion of Milk (mg/L) ^a					
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child
Trichloro-2'-hydroxydiphenylether	003380-34-5														
Trichloroacetic Acid															
Trichloroaniline HCl, 2,4,6-	033663-50-2														
Trichloroaniline, 2,4,6-	000634-93-5														
Trichlorobenzene, 1,2,4-	000120-82-1			6.4E-01	6.4E-02			7.8E+02	7.8E+01			4.0E+02	5.2E+01	4.0E+01	5.2E+00
Trichloroethane, 1,1,1- ^(b)	000071-55-6			3.6E+00	3.6E-01			2.2E+05	2.2E+04			1.1E+05	1.5E+04	1.1E+04	1.5E+03
Trichloroethane, 1,1,2-	000079-00-5	1.2E-01	1.2E-03	1.1E-01	1.1E-02	3.2E+04	3.2E+02	3.1E+04	3.1E+03	7.0E+03	7.0E+01	1.6E+04	2.1E+03	1.6E+03	2.1E+02
Trichloroethylene ^(b)	000079-01-6	8.0E-01	8.0E-03			6.6E+04	6.6E+02			1.4E+04	1.4E+02				
Trichlorofluoromethane	000075-69-4			1.2E+01	1.2E+00			7.4E+05	7.4E+04			3.8E+05	4.9E+04	3.8E+04	4.9E+03
Trichlorophenol, 2,4,5-	000095-95-4			6.2E+00	6.2E-01			1.2E+04	1.2E+03			6.4E+03	8.2E+02	6.4E+02	8.2E+01
Trichlorophenol, 2,4,6-	000088-06-2	1.3E+00	1.3E-02			3.3E+03	3.3E+01			7.3E+02	7.3E+00				
Trichlorophenoxy) Propionic Acid, 2(2,4,5-	000093-72-1			5.1E-01	5.1E-02			7.8E+02	7.8E+01			4.1E+02	5.2E+01	4.1E+01	5.2E+00
Trichlorophenoxyacetic Acid, 2,4,5-	000093-76-5			6.4E-01	6.4E-02			7.8E+02	7.8E+01			4.0E+02	5.2E+01	4.0E+01	5.2E+00
Trichloropropane, 1,1,2-	000598-77-6														
Trichloropropane, 1,2,3-	000096-18-4	2.2E-03	2.2E-05	4.0E-01	4.0E-02	6.5E-01	6.5E-03	1.2E+02	1.2E+01	1.4E-01	1.4E-03	6.1E+01	7.8E+00	6.1E+00	7.8E-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														

Table 3.3a. (continued)

Chemical	CASRN	Ingestion of Vegetables (mg/L)*				Ingestion of Beef (mg/L)*				Ingestion of Milk (mg/L)*					
		10 ⁻⁴	10 ⁻⁵	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁵	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁵	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child
Triethylamine	000121-44-8														
Trifluralin	001582-09-8	2.1E+00	2.1E-02	5.2E-01	5.2E-02	1.2E+02	1.2E+00	2.9E+01	2.9E+00	2.6E+01	2.6E-01	1.5E+01	1.9E+00	1.5E+00	1.9E-01
Trimethyl Lead	007442-13-9														
Trimethyl Phosphate	000512-56-1														
Trimethylethyl Lead	001762-26-1														
Trinitrobenzene, 1,3,5-	000099-35-4			6.7E-04	6.7E-05			2.5E+03	2.5E+02			1.3E+03	1.6E+02	1.3E+02	1.6E+01
Trinitrophenylmethylnitramine	000479-45-8			2.9E-01	2.9E-02			7.8E+04	7.8E+03			4.0E+04	5.2E+03	4.0E+03	5.2E+02
Trinitrotoluene, 2,4,6-	000118-96-7	2.8E-01	2.8E-03	1.8E-02	1.8E-03	3.0E+04	3.0E+02	2.0E+03	2.0E+02	6.7E+03	6.7E+01	1.0E+03	1.3E+02	1.0E+02	1.3E+01
Tripropyl Lead	006618-03-7														
Uranium (Soluble Salts)	NA			2.1E-01	2.1E-02			1.9E+02	1.9E+01			2.4E+01	3.1E+00	2.4E+00	3.1E-01
Vanadium Pentoxide	001314-62-1														
Vanadium Sulfate	036907-42-3														
Vanadium, Metallic	007440-62-2			4.9E-01	4.9E-02			5.5E+01	5.5E+00			1.1E+03	1.4E+02	1.1E+02	1.4E+01
Vanadyl Sulfate	027774-13-6														
Vernolate	001929-77-7														
Vinclozolin	050471-44-8														
Vinyl Acetate	000108-05-4			7.8E+00	7.8E-01			1.0E+06	1.0E+06			1.0E+06	1.0E+06	1.0E+06	9.7E+05
Vinyl Bromide	000593-60-2														
Vinyl Chloride ⁽⁶⁾	000075-01-4	2.0E-03	2.0E-05			3.8E+03	3.8E+01			8.4E+02	8.4E+00				
Warfarin	000081-81-2			1.6E-02	1.6E-03			1.5E+02	1.5E+01			7.6E+01	9.8E+00	7.6E+00	9.8E-01
White Phosphorus	007723-14-0														

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	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child
Xylene, Mixture ⁽⁶⁾	001330-20-7			1.1E+02	1.1E+01			7.8E+05	7.8E+04			4.0E+05	5.2E+04	4.0E+04	5.2E+03
Xylene, p- ⁽⁶⁾	000106-42-3														
Xylene, m- ⁽⁶⁾	000108-38-3			1.1E+02	1.1E+01			9.8E+05	9.8E+04			5.1E+05	6.5E+04	5.1E+04	6.5E+03
Xylene, o- ⁽⁶⁾	000095-47-6			1.1E+02	1.1E+01			9.8E+05	9.8E+04			5.1E+05	6.5E+04	5.1E+04	6.5E+03
Zinc (Metallic)	007440-66-6			1.2E+01	1.2E+00			5.8E+01	5.8E+00			9.6E+01	1.2E+01	9.6E+00	1.2E+00
Zinc Cyanide	000557-21-1														
Zinc Phosphide	001314-84-7														
Zineb	012122-67-7														
Zirconium	007440-67-7														

Notes:

- * By definition, 1 L (water) = 1.0E + 06 mg (water). Therefore, a limit of 1.0E + 06 mg/L was used for any PRG that was calculated to be above this limit.
- (1) The same oral slope factor as used for polychlorinated biphenyls.
 - (2) The PRG was calculated considering *Supplemental Guidance from RAGS: Region 4 Bulletins, Human Health Risk Assessment* (Interim 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.
 - (3) The toxicity values for trichloroethylene have been withdrawn from IRIS and HEAST pending further investigation. However, the most recent toxicity values have been used to calculate the PRG.
 - (4) The PRG was calculated considering *Supplemental Guidance from RAGS: Region 4 Bulletins, Human Health Risk Assessment* (Interim Guidance) from EPA (November 1995). The slope factors for chemicals so marked indicate that a TEF methodology was used for chlorinated dioxin and furan congeners based on each compound's relative potency to the potency of 2,3,7,8-tetrachlorodibenzodioxin (TCDD). The following TEFs were used to convert each slope factor to an equivalent slope factor of 2,3,7,8-TCDD: (1) 2,3,7,8-TCDD, TEF = 1.0; (2) 2,3,7,8-PeCDD, TEF = 0.5; (3) 2,3,7,8-HxCDD, TEF = 0.1; (4) 2,3,7,8-HpCDD, TEF = 0.01; (5) OCDD, TEF = 0.001; (6) 2,3,7,8-TCDF, TEF = 0.1; (7) 1,2,3,7,8-PeCDF, TEF = 0.5; (8) 2,3,4,7,8-PeCDF, TEF = 0.05; (9) 2,3,7,8-HxCDF, TEF = 0.1; (10) 2,3,7,8-HpCDF, TEF = 0.01; and (11) OCDF, TEF = 0.001.
 - (5) Toxicity values for these chemicals have been withdrawn from IRIS and HEAST pending further investigation. However, the most recent toxicity values have been used to calculate the PRG.
 - (6) Toxicity values for these chemicals were obtained from the Superfund Health Risk Technical Support Center.

Table 3.3b. Risk-based Preliminary Remediation Goals for radionuclides in water (agricultural scenario)

Chemical ¹	CASRN	Ingestion of Vegetables (pCi/L)		Ingestion of Beef (pCi/L)		Ingestion of Milk (pCi/L)	
		10 ⁻⁴	10 ⁻⁵	10 ⁻⁴	10 ⁻⁵	10 ⁻⁴	10 ⁻⁵
Ac-225	014265-85-1	5.2E+02	5.2E+00	7.2E+05	7.2E+03	1.3E+05	1.3E+03
Ac-227	014952-40-0	3.5E+01	3.5E-01	2.9E+05	2.9E+03	5.2E+04	5.2E+02
Ac-227+D	014952-40-0	1.9E+01	1.9E-01	8.4E+01	8.4E-01	2.5E+01	2.5E-01
Ac-228	014331-83-0	1.1E+06	1.1E+04	6.3E+07	6.3E+05	1.1E+07	1.1E+05
Ag-105	014928-14-4	2.5E+04	2.5E+02	5.2E+05	5.2E+03	4.5E+06	4.5E+04
Ag-108	014391-65-2	3.8E+10	3.8E+08	1.2E+08	1.2E+06	1.1E+09	1.1E+07
Ag-108m	014391-65-2	1.6E+03	1.6E+01	1.4E+05	1.4E+03	1.2E+06	1.2E+04
Ag-108m+D	014391-65-2	1.6E+03	1.6E+01	1.4E+05	1.4E+03	1.2E+06	1.2E+04
Ag-109m	014378-38-2	3.5E+12	3.5E+10	3.1E+09	3.1E+07	2.7E+10	2.7E+08
Ag-110	014391-76-5	6.2E+11	6.2E+09	3.5E+08	3.5E+06	3.0E+09	3.0E+07
Ag-110m	014391-76-5	3.7E+03	3.7E+01	1.0E+05	1.0E+03	8.7E+05	8.7E+03
Ag-111	015760-04-0	1.3E+04	1.3E+02	1.2E+05	1.2E+03	1.1E+06	1.1E+04
Am-241	014596-10-2	2.9E+01	2.9E-01	1.9E+05	1.9E+03	7.5E+05	7.5E+03
Am-242	013981-54-9	4.6E+05	4.6E+03	4.3E+07	4.3E+05	1.7E+08	1.7E+06
Am-242m	013981-54-9	3.3E+01	3.3E-01	2.2E+05	2.2E+03	8.4E+05	8.4E+03
Am-243	014993-75-0	2.8E+01	2.8E-01	1.9E+05	1.9E+03	7.5E+05	7.5E+03
Am-243+D	014993-75-0	2.8E+01	2.8E-01	7.4E+03	7.4E+01	1.7E+05	1.7E+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
Ar-41	014163-25-8						
At-217	017239-90-6	1.3E+17	1.3E+15	2.8E+10	2.8E+08	4.1E+09	4.1E+07
Au-196	014914-16-0	7.7E+04	7.7E+02	3.9E+05	3.9E+03	2.8E+07	2.8E+05
Au-198	010043-49-0	3.6E+04	3.6E+02	9.6E+04	9.6E+02	7.0E+06	7.0E+04
Ba-131	014914-75-1	4.0E+04	4.0E+02	7.5E+06	7.5E+04	4.5E+05	4.5E+03
Ba-133	013981-41-4	5.6E+03	5.6E+01	4.7E+06	4.7E+04	2.8E+05	2.8E+03
Ba-133m	013981-41-4	1.1E+05	1.1E+03	4.6E+06	4.6E+04	2.8E+05	2.8E+03
Ba-137m	013981-97-0	1.0E+11	1.0E+09	5.2E+09	5.2E+07	3.1E+08	3.1E+06
Ba-139	014378-25-7	2.5E+07	2.5E+05	4.2E+07	4.2E+05	2.5E+06	2.5E+04
Ba-140	014798-08-4	5.5E+03	5.5E+01	1.1E+06	1.1E+04	6.5E+04	6.5E+02
Be-7	013966-02-4	4.5E+05	4.5E+03	2.9E+07	2.9E+05	4.7E+09	4.7E+07
Bi-206	015776-19-9	1.4E+04	1.4E+02	8.9E+05	8.9E+03	1.0E+05	1.0E+03
Bi-207	013982-38-2	2.2E+03	2.2E+01	1.3E+06	1.3E+04	1.5E+05	1.5E+03
Bi-210	014331-79-4	1.6E+04	1.6E+02	8.7E+05	8.7E+03	1.0E+05	1.0E+03
Bi-211	015229-37-5	1.6E+10	1.6E+08	3.5E+08	3.5E+06	4.0E+07	4.0E+05
Bi-212	014913-49-6	1.7E+07	1.7E+05	1.0E+07	1.0E+05	1.2E+06	1.2E+04
Bi-213	015776-20-2	3.1E+07	3.1E+05	1.4E+07	1.4E+05	1.7E+06	1.7E+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
Bi-214	014733-03-0	1.6E+08	1.6E+06	3.3E+07	3.3E+05	3.8E+06	3.8E+04
Br-82	014686-69-2	2.3E+05	2.3E+03	7.2E+04	7.2E+02	1.3E+04	1.3E+02
C-11	014333-33-6						
C-14	014762-75-5						
C-15	015929-23-4						
Ca-45	013966-05-7	1.3E+04	1.3E+02	6.3E+05	6.3E+03	6.1E+04	6.1E+02
Ca-47	001439-99-2	1.8E+04	1.8E+02	1.9E+05	1.9E+03	1.8E+04	1.8E+02
Cd-109	014109-32-1	3.3E+03	3.3E+01	7.9E+05	7.9E+03	4.6E+04	4.6E+02
Cd-115	014336-68-6	3.1E+04	3.1E+02	8.7E+05	8.7E+03	5.0E+04	5.0E+02
Cd-115m	014336-68-6	2.8E+03	2.8E+01	4.5E+05	4.5E+03	2.6E+04	2.6E+02
Ce-141	013967-74-3	1.1E+04	1.1E+02	3.2E+07	3.2E+05	3.1E+06	3.1E+04
Ce-143	014119-19-8	5.8E+04	5.8E+02	2.1E+07	2.1E+05	2.1E+06	2.1E+04
Ce-144	014762-78-8	1.0E+03	1.0E+01	4.3E+06	4.3E+04	4.1E+05	4.1E+03
Ce-144+D	014762-78-8	1.0E+03	1.0E+01	1.4E+05	1.4E+03	1.8E+05	1.8E+03
Cl-36	013981-43-6	8.4E+01	8.4E-01	5.7E+04	5.7E+02	9.7E+03	9.7E+01
Cl-38	014158-34-0	6.0E+07	6.0E+05	6.1E+05	6.1E+03	1.0E+05	1.0E+03
Cm-242	015510-73-3	8.6E+02	8.6E+00	3.3E+06	3.3E+04	2.4E+07	2.4E+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
Cm-243	015757-87-6	4.6E+01	4.6E-01	5.1E+05	5.1E+03	3.7E+06	3.7E+04
Cm-243+D	015757-87-6	4.3E+01	4.3E-01	2.1E+02	2.1E+00	2.8E+02	2.8E+00
Cm-244	013981-15-2	6.1E+01	6.1E-01	6.0E+05	6.0E+03	4.4E+06	4.4E+04
Cm-245	015621-76-8	2.7E+01	2.7E-01	3.8E+05	3.8E+03	2.7E+06	2.7E+04
Cm-246	015757-90-1	2.8E+01	2.8E-01	3.8E+05	3.8E+03	2.8E+06	2.8E+04
Cm-247	015758-32-4	3.0E+01	3.0E-01	4.1E+05	4.1E+03	3.0E+06	3.0E+04
Cm-248	015758-33-5	7.0E+00	7.0E-02	9.7E+04	9.7E+02	7.0E+05	7.0E+03
Co-57	013981-50-5	3.1E+04	3.1E+02	2.6E+07	2.6E+05	5.4E+06	5.4E+04
Co-58	013981-38-9	1.3E+04	1.3E+02	9.0E+06	9.0E+04	1.9E+06	1.9E+04
Co-58m	013981-38-9	1.2E+07	1.2E+05	2.7E+08	2.7E+06	5.5E+07	5.5E+05
Co-60	010198-40-0	9.9E+02	9.9E+00	1.3E+06	1.3E+04	2.8E+05	2.8E+03
Cr-51	014392-02-0	3.4E+05	3.4E+03	2.0E+06	2.0E+04	2.7E+08	2.7E+06
Cs-131	014914-76-2	4.2E+05	4.2E+03	2.8E+05	2.8E+03	2.6E+05	2.6E+03
Cs-134	013967-70-9	5.4E+02	5.4E+00	1.1E+03	1.1E+01	9.8E+02	9.8E+00
Cs-134m	013967-70-9	7.9E+07	7.9E+05	1.1E+06	1.1E+04	1.0E+06	1.0E+04
Cs-135	015726-30-4	2.0E+03	2.0E+01	1.1E+04	1.1E+02	1.0E+04	1.0E+02
Cs-136	014234-29-8	8.2E+03	8.2E+01	6.6E+03	6.6E+01	6.0E+03	6.0E+01

Radionuclides/water/agricultural

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
Cs-137	010045-97-3	3.5E+02	3.5E+00	1.6E+03	1.6E+01	1.5E+03	1.5E+01
Cs-137+D	010045-97-3	3.5E+02	3.5E+00	1.6E+03	1.6E+01	1.4E+03	1.4E+01
Cs-138	015758-29-9	1.1E+08	1.1E+06	2.9E+05	2.9E+03	2.6E+05	2.6E+03
Cu-64	013981-25-4	1.6E+06	1.6E+04	5.4E+05	5.4E+03	4.7E+05	4.7E+03
Dy-165	013967-64-1	1.4E+07	1.4E+05	1.4E+06	1.4E+04	5.6E+07	5.6E+05
Dy-166	015840-01-4	1.7E+04	1.7E+02	4.9E+04	4.9E+02	1.9E+06	1.9E+04
Er-169	015840-13-8	3.6E+04	3.6E+02	3.0E+05	3.0E+03	8.7E+06	8.7E+04
Er-171	014391-45-8	8.6E+05	8.6E+03	3.9E+05	3.9E+03	1.1E+07	1.1E+05
Eu-152	014683-23-9	2.4E+03	2.4E+01	2.2E+05	2.2E+03	1.1E+06	1.1E+04
Eu-154	015585-10-1	1.7E+03	1.7E+01	1.4E+05	1.4E+03	6.5E+05	6.5E+03
Eu-155	014391-16-3	1.2E+04	1.2E+02	7.7E+05	7.7E+03	3.7E+06	3.7E+04
Eu-156	014280-35-4	5.4E+03	5.4E+01	1.2E+05	1.2E+03	5.6E+05	5.6E+03
F-18	013981-56-1	5.2E+07	5.2E+05	1.6E+05	1.6E+03	3.4E+06	3.4E+04
Fe-55	014681-59-5	6.9E+04	6.9E+02	3.6E+05	3.6E+03	3.5E+07	3.5E+05
Fe-59	014596-12-4	6.9E+03	6.9E+01	2.2E+04	2.2E+02	2.1E+06	2.1E+04
Fr-221	015756-41-9	8.9E+08	8.9E+06	7.0E+06	7.0E+04	1.3E+05	1.3E+03
Fr-223	015756-98-6	6.4E+08	6.4E+06	2.3E+06	2.3E+04	4.1E+04	4.1E+02

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
Ga-67	014119-09-6	2.0E+05	2.0E+03	1.0E+07	1.0E+05	4.4E+07	4.4E+05
Ga-72	013982-22-4	1.6E+05	1.6E+03	1.8E+06	1.8E+04	7.7E+06	7.7E+04
Gd-153	014276-65-4	2.4E+04	2.4E+02	9.6E+05	9.6E+03	4.6E+06	4.6E+04
Gd-159	014041-42-0	2.3E+05	2.3E+03	4.9E+05	4.9E+03	2.4E+06	2.4E+04
Ge-71	014374-81-3	5.7E+06	5.7E+04	3.1E+05	3.1E+03	4.4E+05	4.4E+03
H-3	010028-17-8					3.4E+05	3.4E+03
Hg-197	013981-51-6	1.6E+05	1.6E+03	2.2E+05	2.2E+03	6.6E+05	6.6E+03
Hg-203	013982-78-0	1.5E+04	1.5E+02	9.6E+04	9.6E+02	3.0E+05	3.0E+03
Ho-166	013967-65-2	5.5E+04	5.5E+02	7.5E+04	7.5E+02	2.4E+06	2.4E+04
I-122	018287-75-7	8.0E+09	8.0E+07	2.9E+06	2.9E+04	1.7E+06	1.7E+04
I-123	015715-08-9	1.5E+06	1.5E+04	1.2E+05	1.2E+03	6.8E+04	6.8E+02
I-125	014158-31-7	1.5E+03	1.5E+01	2.5E+03	2.5E+01	1.4E+03	1.4E+01
I-126	014158-32-8	1.3E+03	1.3E+01	1.3E+03	1.3E+01	7.6E+02	7.6E+00
I-129	015046-84-1	5.0E+01	5.0E-01	3.5E+02	3.5E+00	2.0E+02	2.0E+00
I-130	014914-02-4	1.8E+05	1.8E+03	1.3E+04	1.3E+02	7.6E+03	7.6E+01
I-131	010043-66-0	2.3E+03	2.3E+01	1.8E+03	1.8E+01	1.0E+03	1.0E+01
I-132	014683-16-0	6.9E+06	6.9E+04	9.6E+04	9.6E+02	5.5E+04	5.5E+02

Radionuclides/water/agricultural

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
I-133	014834-67-4	5.0E+04	5.0E+02	6.0E+03	6.0E+01	3.5E+03	3.5E+01
I-134	014914-27-3	5.1E+07	5.1E+05	2.7E+05	2.7E+03	1.6E+05	1.6E+03
I-135	014834-68-5	7.0E+05	7.0E+03	2.8E+04	2.8E+02	1.6E+04	1.6E+02
In-113m	014885-78-0	7.6E+07	7.6E+05	7.6E+06	7.6E+04	2.2E+07	2.2E+05
In-114	013981-55-0	1.1E+11	1.1E+09	1.4E+08	1.4E+06	4.1E+08	4.1E+06
In-114m	013981-55-0	1.9E+03	1.9E+01	3.1E+04	3.1E+02	8.9E+04	8.9E+02
In-115	014191-71-0	2.6E+02	2.6E+00	1.8E+04	1.8E+02	5.3E+04	5.3E+02
In-115m	014191-71-0	7.0E+06	7.0E+04	1.9E+06	1.9E+04	5.4E+06	5.4E+04
Ir-190	014981-91-0	1.4E+04	1.4E+02	2.6E+05	2.6E+03	3.7E+07	3.7E+05
Ir-194	014158-35-1	8.1E+04	8.1E+02	1.8E+05	1.8E+03	2.6E+07	2.6E+05
K-40	013966-00-2	4.0E+02	4.0E+00	1.0E+04	1.0E+02	4.1E+03	4.1E+01
K-42	014378-21-3	6.7E+05	6.7E+03	9.8E+04	9.8E+02	4.0E+04	4.0E+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						

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
Kr-89	016316-03-3						
Kr-90	015741-13-6						
La-140	013981-28-7	3.0E+04	3.0E+02	8.9E+05	8.9E+03	1.9E+06	1.9E+04
Lu-177	014265-75-9	3.2E+04	3.2E+02	1.9E+05	1.9E+03	6.2E+06	6.2E+04
Mn-52	014092-99-0	1.8E+04	1.8E+02	8.5E+05	8.5E+03	2.0E+06	2.0E+04
Mn-54	013966-31-9	1.5E+04	1.5E+02	2.6E+06	2.6E+04	6.2E+06	6.2E+04
Mn-56	014681-52-8	4.7E+06	4.7E+04	5.9E+06	5.9E+04	1.4E+07	1.4E+05
Mo-99	014119-15-4	8.3E+04	8.3E+02	1.1E+06	1.1E+04	9.5E+04	9.5E+02
Na-22	013966-32-0	2.9E+03	2.9E+01	4.0E+03	4.0E+01	2.9E+03	2.9E+01
Na-24	013982-04-2	5.2E+05	5.2E+03	2.3E+04	2.3E+02	1.7E+04	1.7E+02
Nb-93m	007440-03-1	2.0E+04	2.0E+02	1.3E+10	1.3E+08	1.3E+09	1.3E+07
Nb-94	014681-63-1	1.3E+03	1.3E+01	1.2E+09	1.2E+07	1.3E+08	1.3E+06
Nb-95	013967-76-5	1.9E+04	1.9E+02	3.8E+09	3.8E+07	4.0E+08	4.0E+06
Nb-95m	013967-76-5	4.9E+04	4.9E+02	2.8E+09	2.8E+07	2.9E+08	2.9E+06
Nb-97	018496-04-3	4.9E+07	4.9E+05	4.8E+10	4.8E+08	5.1E+09	5.1E+07
Nb-97m	018496-04-3	1.9E+11	1.9E+09	2.6E+12	2.6E+10	2.7E+11	2.7E+09
Nd-147	014269-74-0	1.2E+04	1.2E+02	1.4E+06	1.4E+04	3.1E+06	3.1E+04

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
Nd-149	015749-81-2	1.3E+07	1.3E+05	1.9E+07	1.9E+05	4.0E+07	4.0E+05
Ni-59	014336-70-0	4.4E+04	4.4E+02	2.7E+06	2.7E+04	1.2E+05	1.2E+03
Ni-63	013981-37-8	1.6E+04	1.6E+02	9.2E+05	9.2E+03	4.2E+04	4.2E+02
Ni-65	014833-49-9	7.4E+06	7.4E+04	9.0E+05	9.0E+03	4.1E+04	4.1E+02
Np-236	015700-36-4	9.8E+03	9.8E+01	2.7E+06	2.7E+04	7.9E+07	7.9E+05
Np-237	013994-20-2	3.1E+01	3.1E-01	8.6E+03	8.6E+01	2.5E+05	2.5E+03
Np-237+D	013994-20-2	3.0E+01	3.0E-01	8.4E+03	8.4E+01	1.2E+05	1.2E+03
Np-238	015766-25-3	5.1E+04	5.1E+02	5.6E+05	5.6E+03	1.6E+07	1.6E+05
Np-239	013968-59-7	5.0E+04	5.0E+02	5.9E+05	5.9E+03	1.7E+07	1.7E+05
Np-240	015690-84-3	5.4E+07	5.4E+05	1.4E+07	1.4E+05	4.1E+08	4.1E+06
Np-240m	015690-84-3	3.5E+09	3.5E+07	1.0E+08	1.0E+06	3.0E+09	3.0E+07
Os-185	015766-50-4	2.0E+04	2.0E+02	3.5E+03	3.5E+01	4.1E+04	4.1E+02
Os-191	014119-24-5	1.9E+04	1.9E+02	2.1E+03	2.1E+01	2.4E+04	2.4E+02
Os-191m	014119-24-5	1.7E+06	1.7E+04	1.3E+04	1.3E+02	1.5E+05	1.5E+03
Os-193	016057-77-5	8.6E+04	8.6E+02	1.5E+03	1.5E+01	1.7E+04	1.7E+02
P-32	014596-37-3	9.6E+03	9.6E+01	8.3E+03	8.3E+01	3.8E+03	3.8E+01
P-33	015749-66-3	5.8E+04	5.8E+02	6.5E+04	6.5E+02	2.9E+04	2.9E+02

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
Pa-231	014331-85-2	6.2E+01	6.2E-01	1.7E+06	1.7E+04	4.9E+05	4.9E+03
Pa-233	013981-14-1	1.0E+04	1.0E+02	5.4E+07	5.4E+05	1.6E+07	1.6E+05
Pa-234	015100-28-4	7.4E+05	7.4E+03	1.2E+08	1.2E+06	3.4E+07	3.4E+05
Pa-234m	015100-28-4	1.1E+11	1.1E+09	5.3E+10	5.3E+08	1.5E+10	1.5E+08
Pb-203	014687-25-3	2.2E+05	2.2E+03	6.2E+06	6.2E+04	1.2E+06	1.2E+04
Pb-209	014119-30-3	1.5E+07	1.5E+05	3.0E+07	3.0E+05	5.9E+06	5.9E+04
Pb-210	014255-04-0	1.8E+01	1.8E-01	9.4E+03	9.4E+01	1.8E+03	1.8E+01
Pb-210+D	014255-04-0	1.2E+01	1.2E-01	4.3E+02	4.3E+00	3.2E+02	3.2E+00
Pb-211	015816-77-0	5.1E+07	5.1E+05	1.9E+07	1.9E+05	3.6E+06	3.6E+04
Pb-212	015092-94-1	5.6E+04	5.6E+02	3.5E+05	3.5E+03	6.8E+04	6.8E+02
Pb-214	015067-28-4	7.9E+07	7.9E+05	2.2E+07	2.2E+05	4.2E+06	4.2E+04
Pd-100	015690-69-4	4.0E+04	4.0E+02	1.7E+05	1.7E+03	9.8E+03	9.8E+01
Pd-101	015749-54-9	3.3E+06	3.3E+04	1.7E+06	1.7E+04	9.8E+04	9.8E+02
Pd-103	014967-68-1	5.3E+04	5.3E+02	6.0E+05	6.0E+03	3.5E+04	3.5E+02
Pd-107	017637-99-9	4.0E+04	4.0E+02	3.0E+06	3.0E+04	1.8E+05	1.8E+03
Pd-109	014981-64-7	2.4E+05	2.4E+03	1.9E+05	1.9E+03	1.1E+04	1.1E+02
Pm-147	014380-75-7	1.7E+04	1.7E+02	3.6E+05	3.6E+03	1.3E+07	1.3E+05

Radionuclides/water/agricultural

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
Pm-148	014683-19-3	7.7E+03	7.7E+01	3.5E+04	3.5E+02	1.3E+06	1.3E+04
Pm-148m	014683-19-3	4.2E+03	4.2E+01	5.1E+04	5.1E+02	1.8E+06	1.8E+04
Pm-149	015765-31-8	4.1E+04	4.1E+02	9.2E+04	9.2E+02	3.3E+06	3.3E+04
Po-210	013981-52-7	1.0E+02	1.0E+00	1.6E+03	1.6E+01	3.3E+03	3.3E+01
Po-212	015389-34-1	2.8E+27	2.8E+25	1.1E+16	1.1E+14	2.4E+16	2.4E+14
Po-213	015756-57-7	1.3E+25	1.3E+23	7.6E+14	7.6E+12	1.6E+15	1.6E+13
Po-214	015735-67-8	1.1E+22	1.1E+20	2.4E+13	2.4E+11	5.1E+13	5.1E+11
Po-215	015706-52-2	4.2E+19	4.2E+17	1.0E+12	1.0E+10	2.2E+12	2.2E+10
Po-216	015756-58-8	2.9E+15	2.9E+13	5.8E+09	5.8E+07	1.2E+10	1.2E+08
Po-218	015422-24-9	4.0E+09	4.0E+07	1.0E+07	1.0E+05	2.1E+07	2.1E+05
Pr-142	014191-64-1	8.2E+04	8.2E+02	1.2E+06	1.2E+04	2.6E+06	2.6E+04
Pr-143	014981-79-4	9.5E+03	9.5E+01	1.3E+06	1.3E+04	2.8E+06	2.8E+04
Pr-144	014119-05-2	4.5E+08	4.5E+06	1.0E+08	1.0E+06	2.3E+08	2.3E+06
Pr-144m	014119-05-2	2.7E+09	2.7E+07	2.6E+08	2.6E+06	5.7E+08	5.7E+06
Pt-191	015706-36-2	1.3E+05	1.3E+03	4.2E+05	4.2E+03	4.9E+04	4.9E+02
Pt-193	015735-70-3	6.1E+04	6.1E+02	3.9E+06	3.9E+04	4.5E+05	4.5E+03
Pt-193m	015735-70-3	5.2E+04	5.2E+02	2.5E+05	2.5E+03	2.9E+04	2.9E+02

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
Pt-197	015735-74-7	2.8E+05	2.8E+03	3.0E+05	3.0E+03	3.5E+04	3.5E+02
Pt-197m	015735-74-7	2.0E+07	2.0E+05	2.0E+06	2.0E+04	2.3E+05	2.3E+03
Pu-236	015411-92-4	3.1E+02	3.1E+00	3.3E+06	3.3E+04	4.3E+06	4.3E+04
Pu-238	013981-16-3	3.4E+01	3.4E-01	8.6E+05	8.6E+03	1.1E+06	1.1E+04
Pu-239	015117-48-3	2.9E+01	2.9E-01	8.0E+05	8.0E+03	1.1E+06	1.1E+04
Pu-240	014119-33-6	2.9E+01	2.9E-01	8.1E+05	8.1E+03	1.1E+06	1.1E+04
Pu-241	014119-32-5	2.6E+03	2.6E+01	4.9E+07	4.9E+05	6.4E+07	6.4E+05
Pu-241+D	014119-32-5	4.1E+01	4.1E-01	2.2E+04	2.2E+02	2.7E+03	2.7E+01
Pu-242	013982-10-0	3.1E+01	3.1E-01	8.5E+05	8.5E+03	1.1E+06	1.1E+04
Pu-243	015706-37-3	5.7E+06	5.7E+04	6.9E+08	6.9E+06	9.0E+08	9.0E+06
Pu-244	014119-34-7	2.9E+01	2.9E-01	8.1E+05	8.1E+03	1.1E+06	1.1E+04
Pu-244+D	014119-34-7	2.9E+01	2.9E-01	6.1E+03	6.1E+01	2.8E+03	2.8E+01
Ra-223	015623-45-7	2.9E+02	2.9E+00	1.2E+04	1.2E+02	1.2E+03	1.2E+01
Ra-224	013233-32-4	1.0E+03	1.0E+01	1.9E+04	1.9E+02	1.9E+03	1.9E+01
Ra-225	013981-53-8	3.8E+02	3.8E+00	1.8E+04	1.8E+02	1.8E+03	1.8E+01
Ra-226	013982-63-3	3.1E+01	3.1E-01	9.6E+03	9.6E+01	9.6E+02	9.6E+00
Ra-226+D	013982-63-3	3.0E+01	3.0E-01	7.3E+02	7.3E+00	4.5E+02	4.5E+00

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
Ra-228	015262-20-1	7.6E+01	7.6E-01	1.1E+04	1.1E+02	1.1E+03	1.1E+01
Ra-228+D	015262-20-1	7.5E+01	7.5E-01	1.1E+04	1.1E+02	1.1E+03	1.1E+01
Rb-82	014391-63-0	4.7E+10	4.7E+08	2.4E+07	2.4E+05	2.9E+06	2.9E+04
Rb-86	014932-53-7	7.5E+03	7.5E+01	3.6E+04	3.6E+02	4.3E+03	4.3E+01
Rb-87	013982-13-3	2.0E+03	2.0E+01	6.9E+04	6.9E+02	8.3E+03	8.3E+01
Rb-88	014928-36-0	2.4E+08	2.4E+06	1.7E+06	1.7E+04	2.1E+05	2.1E+03
Rb-89	014191-65-2	4.7E+08	4.7E+06	2.9E+06	2.9E+04	3.5E+05	3.5E+03
Rh-103m	007440-16-6	1.4E+09	1.4E+07	1.6E+08	1.6E+06	4.5E+06	4.5E+04
Rh-105	014913-89-4	1.7E+05	1.7E+03	6.6E+05	6.6E+03	1.9E+04	1.9E+02
Rh-105m	014913-89-4	7.7E+11	7.7E+09	1.2E+09	1.2E+07	3.4E+07	3.4E+05
Rh-106	014234-34-5	3.4E+11	3.4E+09	3.5E+08	3.5E+06	1.0E+07	1.0E+05
Rn-219	014835-02-0						
Rn-220	022481-48-7						
Rn-222+D	014859-67-7						
Ru-103	013968-53-1	1.3E+04	1.3E+02	1.5E+04	1.5E+02	3.4E+07	3.4E+05
Ru-105	014331-95-4	2.1E+06	2.1E+04	4.3E+04	4.3E+02	9.7E+07	9.7E+05
Ru-106	013967-48-1	8.4E+02	8.4E+00	1.4E+03	1.4E+01	3.2E+06	3.2E+04

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 ⁻⁵	10 ⁻⁴	10 ⁻⁵	10 ⁻⁴	10 ⁻⁵
Ru-106+D	013967-48-1	8.1E+02	8.1E+00	1.4E+03	1.4E+01	1.1E+03	1.1E+01
Ru-97	015758-35-7	3.1E+05	3.1E+03	8.5E+04	8.5E+02	1.9E+08	1.9E+06
S-35	015117-53-0	7.9E+04	7.9E+02	3.1E+04	3.1E+02	5.5E+04	5.5E+02
Sb-122	014374-79-9	2.2E+04	2.2E+02	7.2E+06	7.2E+04	1.7E+06	1.7E+04
Sb-124	014683-10-4	3.6E+03	3.6E+01	5.9E+06	5.9E+04	1.4E+06	1.4E+04
Sb-125	014234-35-6	8.0E+03	8.0E+01	2.1E+07	2.1E+05	4.9E+06	4.9E+04
Sb-125+D	014234-35-6	3.9E+03	3.9E+01	1.0E+05	1.0E+03	2.2E+05	2.2E+03
Sb-126	015756-32-8	6.7E+03	6.7E+01	6.5E+06	6.5E+04	1.5E+06	1.5E+04
Sb-126m	015756-32-8	4.5E+08	4.5E+06	8.7E+08	8.7E+06	2.0E+08	2.0E+06
Sb-127	013968-50-8	1.7E+04	1.7E+02	7.5E+06	7.5E+04	1.7E+06	1.7E+04
Sb-129	014331-88-5	1.3E+06	1.3E+04	3.4E+07	3.4E+05	7.9E+06	7.9E+04
Sc-46	013967-63-0	6.3E+03	6.3E+01	2.2E+05	2.2E+03	1.1E+06	1.1E+04
Sc-47	014391-96-9	5.3E+04	5.3E+02	4.3E+05	4.3E+03	2.1E+06	2.1E+04
Sc-48	014391-86-7	4.0E+04	4.0E+02	1.9E+05	1.9E+03	9.2E+05	9.2E+03
Se-75	014265-71-5	5.1E+03	5.1E+01	3.9E+03	3.9E+01	5.6E+03	5.6E+01
Si-31	014276-49-4	7.9E+06	7.9E+04	1.3E+08	1.3E+06	3.6E+07	3.6E+05
Sm-147	014392-33-7	3.6E+02	3.6E+00	2.0E+04	2.0E+02	7.3E+05	7.3E+03

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 ⁻⁵	10 ⁻⁴	10 ⁻⁵	10 ⁻⁴	10 ⁻⁵
Sm-151	015715-94-3	2.1E+04	2.1E+02	1.1E+06	1.1E+04	4.0E+07	4.0E+05
Sm-153	015766-00-4	6.3E+04	6.3E+02	1.3E+05	1.3E+03	4.6E+06	4.6E+04
Sn-113	013966-06-8	8.8E+03	8.8E+01	6.8E+04	6.8E+02	9.9E+04	9.9E+02
Sn-121	014683-06-8	3.4E+05	3.4E+03	2.1E+05	2.1E+03	3.0E+05	3.0E+03
Sn-121m	014683-06-8	2.9E+03	2.9E+01	1.3E+05	1.3E+03	1.8E+05	1.8E+03
Sn-125	014683-08-0	4.4E+03	4.4E+01	1.5E+04	1.5E+02	2.2E+04	2.2E+02
Sn-126	015832-50-5	2.4E+02	2.4E+00	1.2E+04	1.2E+02	1.7E+04	1.7E+02
Sr-82	014809-50-8	1.8E+03	1.8E+01	1.2E+04	1.2E+02	5.1E+03	5.1E+01
Sr-85	013967-73-2	2.6E+04	2.6E+02	2.3E+05	2.3E+03	9.4E+04	9.4E+02
Sr-85m	013967-73-2	5.1E+08	5.1E+06	1.8E+07	1.8E+05	7.3E+06	7.3E+04
Sr-89	014158-27-1	3.8E+03	3.8E+01	3.1E+04	3.1E+02	1.3E+04	1.3E+02
Sr-90	010098-97-2	1.9E+02	1.9E+00	7.8E+03	7.8E+01	3.2E+03	3.2E+01
Sr-90+D	010098-97-2	1.4E+02	1.4E+00	5.0E+03	5.0E+01	2.3E+03	2.3E+01
Sr-91	014331-91-0	4.0E+05	4.0E+03	1.1E+05	1.1E+03	4.7E+04	4.7E+02
Sr-92	014928-29-1	1.9E+06	1.9E+04	1.6E+05	1.6E+03	6.5E+04	6.5E+02
Ta-182	013982-00-8	4.9E+03	4.9E+01	6.0E+05	6.0E+03	1.7E+07	1.7E+05
Tb-158	015759-55-4	2.3E+03	2.3E+01	1.3E+05	1.3E+03	4.4E+06	4.4E+04

Radionuclides/water/agricultural

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
Tb-160	013981-29-8	4.8E+03	4.8E+01	7.4E+04	7.4E+02	2.4E+06	2.4E+04
Tc-95	014809-56-4	1.5E+06	1.5E+04	3.7E+08	3.7E+06	3.9E+07	3.9E+05
Tc-95m	014809-56-4	1.3E+03	1.3E+01	2.0E+07	2.0E+05	2.1E+06	2.1E+04
Tc-96	014808-44-7	9.1E+03	9.1E+01	1.1E+07	1.1E+05	1.2E+06	1.2E+04
Tc-96m	014808-44-7	9.1E+07	9.1E+05	9.7E+08	9.7E+06	1.0E+08	1.0E+06
Tc-97	015759-35-0	1.0E+02	1.0E+00	1.6E+08	1.6E+06	1.7E+07	1.7E+05
Tc-97m	015759-35-0	9.6E+02	9.6E+00	2.1E+07	2.1E+05	2.2E+06	2.2E+04
Tc-99	014133-76-7	1.1E+01	1.1E-01	1.8E+07	1.8E+05	1.9E+06	1.9E+04
Tc-99m	014133-76-7	6.1E+06	6.1E+04	4.6E+08	4.6E+06	4.7E+07	4.7E+05
Te-125m	014390-73-9	1.4E+04	1.4E+02	1.4E+05	1.4E+03	3.3E+05	3.3E+03
Te-127	013981-49-2	1.3E+06	1.3E+04	4.2E+05	4.2E+03	9.5E+05	9.5E+03
Te-127m	013981-49-2	5.1E+03	5.1E+01	6.0E+04	6.0E+02	1.4E+05	1.4E+03
Te-129	014269-71-7	6.0E+07	6.0E+05	2.5E+06	2.5E+04	5.5E+06	5.5E+04
Te-129m	014269-71-7	3.6E+03	3.6E+01	3.1E+04	3.1E+02	7.0E+04	7.0E+02
Te-131	014683-12-6	6.3E+07	6.3E+05	9.3E+05	9.3E+03	2.1E+06	2.1E+04
Te-131m	014683-12-6	4.2E+04	4.2E+02	4.1E+04	4.1E+02	9.3E+04	9.3E+02
Te-132	014234-28-7	1.3E+04	1.3E+02	3.0E+04	3.0E+02	6.7E+04	6.7E+02

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
Th-227	015623-47-9	1.3E+03	1.3E+01	6.3E+05	6.3E+03	1.8E+06	1.8E+04
Th-228	014274-82-9	4.2E+02	4.2E+00	4.0E+05	4.0E+03	1.2E+06	1.2E+04
Th-228+D	014274-82-9	1.1E+02	1.1E+00	2.1E+02	2.1E+00	3.3E+02	3.3E+00
Th-229	015594-54-4	1.6E+02	1.6E+00	4.5E+05	4.5E+03	1.3E+06	1.3E+04
Th-229+D	015594-54-4	1.4E+01	1.4E-01	3.6E+02	3.6E+00	3.1E+01	3.1E-01
Th-230	014269-63-7	2.5E+02	2.5E+00	6.8E+05	6.8E+03	2.0E+06	2.0E+04
Th-231	014932-40-2	2.4E+05	2.4E+03	1.4E+07	1.4E+05	4.1E+07	4.1E+05
Th-232	007440-29-1	2.8E+02	2.8E+00	7.7E+05	7.7E+03	2.2E+06	2.2E+04
Th-234	015065-10-8	2.5E+03	2.5E+01	1.3E+06	1.3E+04	3.8E+06	3.8E+04
Tl-202	015720-57-7	6.5E+04	6.5E+02	6.3E+04	6.3E+02	1.8E+05	1.8E+03
Tl-204	013968-51-9	1.1E+04	1.1E+02	3.2E+04	3.2E+02	9.3E+04	9.3E+02
Tl-208	014913-50-9	1.2E+10	1.2E+08	3.6E+06	3.6E+04	1.0E+07	1.0E+05
Tl-209	015690-73-0	2.0E+10	2.0E+08	4.5E+06	4.5E+04	1.3E+07	1.3E+05
Tm-170	013981-30-1	4.5E+03	4.5E+01	7.5E+04	7.5E+02	2.4E+06	2.4E+04
Tm-171	014333-45-0	4.5E+04	4.5E+02	9.6E+05	9.6E+03	3.1E+07	3.1E+05
U-232	014158-29-3	1.2E+02	1.2E+00	1.0E+05	1.0E+03	1.1E+04	1.1E+02
U-233	013968-55-3	2.1E+02	2.1E+00	1.9E+05	1.9E+03	2.0E+04	2.0E+02

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
U-234	013966-29-5	2.1E+02	2.1E+00	1.9E+05	1.9E+03	2.1E+04	2.1E+02
U-235	015117-96-1	2.0E+02	2.0E+00	1.9E+05	1.9E+03	2.0E+04	2.0E+02
U-235+D	015117-96-1	2.0E+02	2.0E+00	1.4E+05	1.4E+03	1.9E+04	1.9E+02
U-236	013982-70-2	2.2E+02	2.2E+00	2.0E+05	2.0E+03	2.2E+04	2.2E+02
U-237	014269-75-1	2.4E+04	2.4E+02	2.1E+06	2.1E+04	2.3E+05	2.3E+03
U-238	007440-61-1	2.2E+02	2.2E+00	2.0E+05	2.0E+03	2.1E+04	2.1E+02
U-238+D	007440-61-1	1.5E+02	1.5E+00	9.8E+04	9.8E+02	1.4E+04	1.4E+02
U-240	015687-53-3	1.4E+05	1.4E+03	1.5E+06	1.5E+04	1.7E+05	1.7E+03
V-48	014331-97-6	7.6E+03	7.6E+01	1.3E+05	1.3E+03	2.4E+06	2.4E+04
W-181	015749-46-9	1.3E+05	1.3E+03	2.3E+05	2.3E+03	4.5E+06	4.5E+04
W-185	014932-41-3	1.8E+04	1.8E+02	3.1E+04	3.1E+02	6.0E+05	6.0E+03
W-187	014983-48-3	1.9E+05	1.9E+03	2.6E+04	2.6E+02	5.0E+05	5.0E+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	1.3E+04	1.3E+02	1.7E+05	1.7E+03	1.2E+06	1.2E+04
Y-91	014234-24-3	2.8E+03	2.8E+01	1.9E+05	1.9E+03	1.4E+06	1.4E+04
Y-91m	014234-24-3	3.4E+08	3.4E+06	6.9E+07	6.9E+05	5.0E+08	5.0E+06
Y-92	015751-59-4	1.5E+06	1.5E+04	1.3E+06	1.3E+04	9.4E+06	9.4E+04
Y-93	014981-70-5	1.8E+05	1.8E+03	4.4E+05	4.4E+03	3.2E+06	3.2E+04
Zn-65	013982-39-3	2.9E+03	2.9E+01	2.6E+03	2.6E+01	3.7E+03	3.7E+01
Zn-69	013982-23-5	1.8E+08	1.8E+06	4.1E+05	4.1E+03	5.9E+05	5.9E+03
Zn-69m	013982-23-5	5.1E+05	5.1E+03	1.7E+04	1.7E+02	2.4E+04	2.4E+02
Zr-93	015751-77-6	1.8E+04	1.8E+02	4.9E+09	4.9E+07	1.3E+09	1.3E+07
Zr-95	013967-71-0	9.6E+03	9.6E+01	6.5E+08	6.5E+06	1.7E+08	1.7E+06

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
Zr-97	014928-30-4	6.2E+04	6.2E+02	2.4E+08	2.4E+06	6.4E+07	6.4E+05

Note:

† 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. Risk-based Preliminary Remediation Goals for nonradionuclides in soil or sediment (agricultural scenario)

Chemical	CASRN	Ingestion of Vegetables (mg/kg)*				Ingestion of Beef (mg/kg)*				Ingestion of Milk (mg/kg)*					
		10 ⁻⁴	10 ⁻⁵	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁵	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁵	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child
ALAR	001596-84-5														
Acenaphthene	000083-32-9			1.9E+02	1.9E+01			3.4E+04	3.4E+03			2.0E+04	2.5E+03	2.0E+03	2.5E+02
Acenaphthylene	000208-96-8														
Acephate	030560-19-1	1.0E+00	1.0E-02	1.5E-01	1.5E-02	1.0E+06	9.6E+04	1.0E+06	1.4E+05	1.0E+06	2.1E+04	7.5E+05	9.6E+04	7.5E+04	9.6E+03
Acetaldehyde	000075-07-0														
Acetochlor	034256-82-1														
Acetone	000067-64-1			8.4E+00	8.4E-01			1.0E+06	1.0E+06			1.0E+06	1.0E+06	1.0E+06	1.3E+05
Acetone Cyanohydrin	000075-86-5														
Acetonitrile	000075-05-8			4.4E-01	4.4E-02			1.0E+06	1.3E+05			6.8E+05	8.8E+04	6.8E+04	8.8E+03
Acetophenone ⁽⁹⁾	000098-86-2			8.6E+01	8.6E+00			1.0E+06	2.8E+05			1.0E+06	1.9E+05	1.5E+05	1.9E+04
Acrolein ⁽⁹⁾	000107-02-8			2.0E+00	2.0E-01			1.0E+06	3.5E+05			1.0E+06	2.3E+05	1.8E+05	2.3E+04
Acrylamide	000079-06-1	2.5E-03	2.5E-05	9.6E-03	9.6E-04	1.6E+04	1.6E+02	6.0E+04	6.0E+03	3.5E+03	3.5E+01	3.1E+04	4.0E+03	3.1E+03	4.0E+02
Acrylic Acid	000079-10-7			7.0E+01	7.0E+00			1.0E+06	1.0E+06			1.0E+06	1.0E+06	1.0E+06	4.5E+05
Acrylonitrile	000107-13-1	6.8E-02	6.8E-04	1.6E-01	1.6E-02	5.3E+04	5.3E+02	1.2E+05	1.2E+04	1.2E+04	1.2E+02	6.4E+04	8.2E+03	6.4E+03	8.2E+02
Alachlor	015972-60-8	6.3E+00	6.3E-02	2.2E+01	2.2E+00	1.8E+04	1.8E+02	6.3E+04	6.3E+03	4.3E+03	4.3E+01	3.5E+04	4.4E+03	3.5E+03	4.4E+02
Aldicarb	000116-06-3			4.6E-01	4.6E-02			5.1E+04	5.1E+03			2.7E+04	3.4E+03	2.7E+03	3.4E+02
Aldicarb Sulfone	001646-88-4														
Aldrin	000309-00-2	3.1E-02	3.1E-04	6.8E-02	6.8E-03	7.5E+01	7.5E-01	1.6E+02	1.6E+01	1.7E+01	1.7E-01	9.0E+01	1.2E+01	9.0E+00	1.2E+00
Ally	074223-64-6			2.9E+01	2.9E+00			1.0E+06	1.0E+06			1.0E+06	1.0E+06	1.0E+06	2.6E+05
Allyl Alcohol	000107-18-6			4.3E-01	4.3E-02			9.7E+05	9.7E+04			5.1E+05	6.5E+04	5.1E+04	6.5E+03
Allyl Chloride ⁽⁹⁾	000107-05-1			3.2E+01	3.2E+00			1.0E+06	1.9E+05			1.0E+06	1.3E+05	1.0E+05	1.3E+04

Table 3.3c. (continued)

Chemical	CASRN	Ingestion of Vegetables (mg/kg) ^a				Ingestion of Beef (mg/kg) ^a				Ingestion of Milk (mg/kg) ^a			
		10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	HQ=1	Child	Adult
Aluminum	007429-90-5												
Aluminum Phosphide	020859-73-8												
Amdro	067485-29-4												
Ametryn	000834-12-8			8.6E+00	8.6E-01	2.2E+05	2.2E+04	1.0E+06	8.9E+05	1.0E+06	1.0E+06	6.0E+05	4.7E+05
Aminophenol, m-	000591-27-5			1.1E+01	1.1E+00							6.0E+05	6.0E+04
Aminopyridine, 4-	000504-24-5			3.3E-03	3.3E-04			2.4E+03	2.4E+02			1.6E+02	1.2E+02
Amitraz	033089-61-1												
Ammonia	007664-41-7												
Ammonium Sulfamate	007773-06-0												
Aniline	000062-53-3	1.5E+01	1.5E-01			1.0E+06	2.6E+04			5.8E+05	5.8E+03		
Anthracene	000120-12-7			9.7E+02	9.7E+01			1.4E+05	1.4E+04			8.1E+04	1.0E+04
Antimony (metallic)	007440-36-0			1.4E+00	1.4E-01			3.3E+03	3.3E+02			9.8E+02	1.3E+02
Antimony Pentoxide	001314-60-9												
Antimony Potassium Tartrate	000304-61-0												
Antimony Tetraoxide	001332-81-6												
Antimony Trioxide	001309-64-4												
Apollo	074115-24-5												
Aramite	000140-57-8												
Aroclor 1016	012674-11-2			2.4E-01	2.4E-02			1.3E+00	1.3E-01			9.6E-02	7.5E-02
Aroclor 1221 ⁽ⁿ⁾	011104-28-2	9.5E-02	9.5E-04			2.6E+01	2.6E-01			6.2E+00	6.2E-02		
Aroclor 1232 ⁽ⁿ⁾	011141-16-5	7.5E-02	7.5E-04			1.2E+02	1.2E+00			2.9E+01	2.9E-01		

Nonradionuclides/soil or sediment/agricultural

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	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child
Aroclor 1242 ⁽¹⁾	053469-21-9	9.5E-02	9.5E-04			2.6E+01	2.6E-01			6.2E+00	6.2E-02				
Aroclor 1248 ⁽¹⁾	012672-29-6	1.1E-01	1.1E-03			6.9E-01	6.9E-03			1.7E-01	1.7E-03				
Aroclor 1254	011097-69-1			7.0E-02	7.0E-03			2.9E-01	2.9E-02			1.7E-01	2.2E-02	1.7E-02	2.2E-03
Aroclor 1260 ⁽¹⁾	011096-82-5	1.1E-01	1.1E-03			3.6E-02	3.6E-04			9.0E-03	9.0E-05				
Arsenic Salts	NA														
Arsenic, Inorganic	007440-38-2	5.3E-01	5.3E-03	1.0E+00	1.0E-01	2.6E+01	2.6E-01	5.1E+01	5.1E+00	6.9E+01	6.9E-01	3.1E+02	4.0E+01	3.1E+01	4.0E+00
Arsine	007784-42-1														
Asbestos	001332-21-4														
Assure	076578-14-8														
Asulam	003337-71-1														
Atrazine	001912-24-9	2.0E+00	2.0E-02	6.8E+01	6.8E+00	8.8E+03	8.8E+01	2.9E+05	2.9E+04	2.0E+03	2.0E+01	1.6E+05	2.0E+04	1.6E+04	2.0E+03
Avermectin B1	065195-55-3														
Azobenzene	000103-33-3	6.3E+00	6.3E-02			3.1E+03	3.1E+01			7.6E+02	7.6E+00				
Barium	007440-39-3			2.4E+02	2.4E+01			1.0E+05	1.0E+04			8.0E+03	1.0E+03	8.0E+02	1.0E+02
Barium Cyanide	000542-62-1														
Baygon	000114-26-1			3.1E+00	3.1E-01			1.2E+05	1.2E+04			6.5E+04	8.4E+03	6.5E+03	8.4E+02
Bayleton	043121-43-3			4.4E+01	4.4E+00			4.2E+05	4.2E+04			2.2E+05	2.9E+04	2.2E+04	2.9E+03
Baythroid	068359-37-5														
Benefin	001861-40-1			9.9E+02	9.9E+01			1.1E+05	1.1E+04			6.1E+04	7.9E+03	6.1E+03	7.9E+02
Benomyl	017804-35-2			7.4E+01	7.4E+00			7.0E+05	7.0E+04			3.7E+05	4.8E+04	3.7E+04	4.8E+03
Bentazon	025057-89-0			1.1E+00	1.1E-01			1.3E+05	1.3E+04			6.8E+04	8.8E+03	6.8E+03	8.8E+02

Table 3.3c. (continued)

Chemical	CASRN	Ingestion of Vegetables (mg/kg)*				Ingestion of Beef (mg/kg)*				Ingestion of Milk (mg/kg)*					
		10 ⁺	10 ⁺	HQ=1	HQ=0.1	10 ⁺	10 ⁺	HQ=1	HQ=0.1	10 ⁺	10 ⁺	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child
Benz[a]anthracene ⁽²⁾	000056-55-3	1.1E+00	1.1E-02			9.1E+00	9.1E-02			2.3E+00	2.3E-02				
Benzaldehyde	000100-52-7			1.5E+02	1.5E+01			1.0E+06	1.4E+05			7.4E+05	9.5E+04	7.4E+04	9.5E+03
Benzene	000071-43-2	1.0E+01	1.0E-01			1.4E+05	1.4E+03			3.2E+04	3.2E+02				
Benzene Hexachloride	NA														
Benzene, Ethyldimethyl	NA														
Benzene, Ethylmethyl	NA														
Benzene, Methylpropenyl	NA														
Benzene, Methylpropyl	NA														
Benzene, Trimethyl	025551-13-7														
Benzenethiol	000108-98-5			1.7E-02	1.7E-03			1.1E+02	1.1E+01			5.8E+01	7.5E+00	5.8E+00	7.5E-01
Benzidine	000092-87-5	5.7E-04	5.7E-06	1.7E+00	1.7E-01	4.3E+01	4.3E-01	1.3E+05	1.3E+04	9.6E+00	9.6E-02	6.7E+04	8.6E+03	6.7E+03	8.6E+02
Benzo[a]pyrene ⁽²⁾	000050-32-8	1.1E-01	1.1E-03			3.7E-01	3.7E-03			9.3E-02	9.3E-04				
Benzo[b]fluoranthene ⁽²⁾	000205-99-2	1.1E+00	1.1E-02			3.7E+00	3.7E-02			9.3E-01	9.3E-03				
Benzo[g,h,i]perylene	000191-24-2														
Benzo[k]fluoranthene ⁽²⁾	000207-08-9	1.1E+01	1.1E-01			7.4E+00	7.4E-02			1.9E+00	1.9E-02				
Benzoic Acid	000065-85-0			4.2E+03	4.2E+02			1.0E+06	1.0E+06			1.0E+06	1.0E+06	1.0E+06	6.0E+05
Benzotrichloride	000098-07-7	3.9E-02	3.9E-04			1.1E+02	1.1E+00			2.6E+01	2.6E-01				
Benzyl Alcohol	000100-51-6			1.3E+02	1.3E+01			1.0E+06	1.0E+06			1.0E+06	1.0E+06	8.2E+05	1.1E+05
Benzyl Chloride	000100-44-7	2.0E+00	2.0E-02			1.9E+04	1.9E+02			4.3E+03	4.3E+01				
Beryllium	007440-41-7	1.9E-01	1.9E-03	1.7E+01	1.7E+00	2.0E+01	2.0E-01	1.8E+03	1.8E+02	1.7E+03	1.7E+01	3.8E+05	4.9E+04	3.8E+04	4.9E+03
Bidrin	000141-66-2			4.7E-03	4.7E-04			3.0E+04	3.0E+03			1.6E+04	2.0E+03	1.6E+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	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child
Bipenthrin	082657-04-3														
Biphenyl, 1,1'-	000092-52-4			1.6E+02	1.6E+01			4.2E+04	4.2E+03			2.4E+04	3.1E+03	2.4E+03	3.1E+02
Bis(2-chloro-1-methylethyl)ether (Technical)	000108-60-1	6.0E+00	6.0E-02			3.3E+04	3.3E+02			7.5E+03	7.5E+01				
Bis(2-chloroethoxy)methane	000111-91-1														
Bis(2-chloroethyl)ether	000111-44-4	1.2E-01	1.2E-03			9.0E+03	9.0E+01			2.0E+03	2.0E+01				
Bis(2-chloroisopropyl)ether	039638-32-9			5.0E+01	5.0E+00			7.1E+05	7.1E+04			3.8E+05	4.8E+04	3.8E+04	4.8E+03
Bis(2-ethylhexyl)phthalate ⁽⁶⁾	000117-81-7	5.6E+01	5.6E-01	6.7E+01	6.7E+00	2.7E+03	2.7E+01	3.3E+03	3.3E+02	6.8E+02	6.8E+00	1.9E+03	2.5E+02	1.9E+02	2.5E+01
Bis(chloromethyl)ether	000542-88-1	2.0E-04	2.0E-06			1.1E+02	1.1E+00			2.5E+01	2.5E-01				
Bisphenol A	000080-05-7			1.4E+02	1.4E+01			1.1E+05	1.1E+04			5.9E+04	7.6E+03	5.9E+03	7.6E+02
Boron And Borates Only	007440-42-8			6.5E+01	6.5E+00			3.8E+03	3.8E+02			3.4E+02	4.4E+01	3.4E+01	4.4E+00
Boron Trifluoride	007637-07-2														
Bromochloromethane	000074-97-5														
Bromodichloromethane	000075-27-4	4.7E+00	4.7E-02	2.5E+01	2.5E+00	6.6E+04	6.6E+02	3.5E+05	3.5E+04	1.5E+04	1.5E+02	1.9E+05	2.4E+04	1.9E+04	2.4E+03
Bromodiphenyl Ether, p-	000101-55-3														
Bromoform	000075-25-2	4.7E+01	4.7E-01	3.2E+01	3.2E+00	3.6E+05	3.6E+03	2.5E+05	2.5E+04	8.3E+04	8.3E+02	1.3E+05	1.7E+04	1.3E+04	1.7E+03
Bromomethane ⁽⁶⁾	000074-83-9			7.1E-01	7.1E-02			6.6E+04	6.6E+03			3.5E+04	4.4E+03	3.5E+03	4.4E+02
Bromophos	002104-96-3														
Bromotrichloromethane	000075-62-7														
Bromoxynil	001689-84-5			4.3E+00	4.3E-01			1.0E+06	1.9E+05			1.0E+06	1.3E+05	1.0E+05	1.3E+04
Bromoxynil Octanoate	001689-99-2														
Butadiene, 1,3-	000106-99-0														

Table 3.3c. (continued)

Chemical	CASRN	Ingestion of Vegetables (mg/kg)*				Ingestion of Beef (mg/kg)*				Ingestion of Milk (mg/kg)*					
		10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child
Butanol, N-	000071-36-3			2.6E+01	2.6E+00			1.0E+06	8.2E+05			1.0E+06	5.5E+05	4.3E+05	5.5E+04
Butanone-2, 4-chloro-4,4-difluoro	NA														
Butyl Benzyl Phthlate	000085-68-7			6.7E+02	6.7E+01			3.3E+04	3.3E+03			1.9E+04	2.5E+03	1.9E+03	2.5E+02
Butylate	002008-41-5														
Butylchloride, t-	000507-20-0														
Butylphthalyl Butylglycolate	000085-70-1														
Cacodylic Acid	000075-60-5			3.4E-01	3.4E-02			4.7E+05	4.7E+04			2.5E+05	3.1E+04	2.5E+04	3.1E+03
Cadmium (Diet)	007440-43-9			2.3E+00	2.3E-01			3.9E+02	3.9E+01			2.7E+01	3.5E+00	2.7E+00	3.5E-01
Calcium Cyanide	000592-01-8														
Caprolactam	000105-60-2			4.5E+01	4.5E+00			1.0E+06	1.0E+06			1.0E+06	1.0E+06	1.0E+06	6.3E+05
Captafol	002425-06-1	4.7E+01	4.7E-01	3.4E+00	3.4E-01	2.9E+05	2.9E+03	2.1E+04	2.1E+03	6.6E+04	6.6E+02	1.2E+04	1.5E+03	1.2E+03	1.5E+02
Captan	000133-06-2	9.9E+01	9.9E-01	1.9E+02	1.9E+01	9.3E+05	9.3E+03	1.0E+06	1.8E+05	2.1E+05	2.1E+03	9.7E+05	1.2E+05	9.7E+04	1.2E+04
Carbaryl	000063-25-2			1.5E+02	1.5E+01			1.0E+06	1.4E+05			7.4E+05	9.5E+04	7.4E+04	9.5E+03
Carbazole	000086-74-8	3.5E+01	3.5E-01			1.7E+04	1.7E+02			4.2E+03	4.2E+01				
Carbofuran	001563-66-2			3.9E+00	3.9E-01			1.5E+05	1.5E+04			8.1E+04	1.0E+04	8.1E+03	1.0E+03
Carbon Disulfide	000075-15-0			1.4E+02	1.4E+01			1.0E+06	1.6E+05			8.4E+05	1.1E+05	8.4E+04	1.1E+04
Carbon Tetrachloride ⁽⁶⁾	000056-23-5	3.7E+00	3.7E-02	1.4E+00	1.4E-01	1.3E+04	1.3E+02	5.1E+03	5.1E+02	3.0E+03	3.0E+01	2.8E+03	3.6E+02	2.8E+02	3.6E+01
Carbosulfan	055285-14-8														
Carboxin	005234-68-4			1.3E+02	1.3E+01			1.0E+06	1.8E+05			9.4E+05	1.2E+05	9.4E+04	1.2E+04
Chloral	000075-87-6														
Chloramben	000133-90-4														

Table 3.3c. (continued)

Chemical	CASRN	Ingestion of Vegetables (mg/kg)*				Ingestion of Beef (mg/kg)*				Ingestion of Milk (mg/kg)*					
		10 ⁻⁴	10 ⁻³	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻³	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻³	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child
Chloranil	000118-75-2														
Chlordane ⁽⁶⁾	000057-74-9	6.2E-01	6.2E-03	2.1E-01	2.1E-02	8.0E+00	8.0E-02	2.7E+00	2.7E-01	2.0E+00	2.0E-02	1.6E+00	2.0E-01	1.6E-01	2.0E-02
Chloride	016887-00-6														
Chlorimuron, Ethyl-	090982-32-4														
Chlorine	007782-50-5			5.1E+00	5.1E-01			1.1E+01	1.1E+00			2.1E+00	2.7E-01	2.1E-01	2.7E-02
Chlorine Dioxide	010049-04-4														
Chlorite (Sodium Salt)	007758-19-2														
Chloro-1,1-difluoroethane, 1-	000075-68-3														
Chloro-1,3-butadiene, 2-	000126-99-8			1.9E+01	1.9E+00			5.0E+05	5.0E+04			2.6E+05	3.4E+04	2.6E+04	3.4E+03
Chloro-2-methylaniline HCl, 4-	003165-93-3														
Chloro-2-methylaniline, 4-	000095-69-2														
Chloroacetic Acid	000079-11-8			1.0E+00	1.0E-01			9.4E+04	9.4E+03			4.9E+04	6.3E+03	4.9E+03	6.3E+02
Chloroacetophenone, 2-	000532-27-4														
Chloroaniline, p-	000106-47-8			8.2E+00	8.2E-01			2.9E+04	2.9E+03			1.6E+04	2.0E+03	1.6E+03	2.0E+02
Chlorobenzene ⁽⁶⁾	000108-90-7			4.1E+01	4.1E+00			1.5E+05	1.5E+04			7.9E+04	1.0E+04	7.9E+03	1.0E+03
Chlorobenzilate	000510-15-6	2.8E+00	2.8E-02	6.5E+01	6.5E+00	3.3E+02	3.3E+00	7.6E+03	7.6E+02	8.1E+01	8.1E-01	4.4E+03	5.7E+02	4.4E+02	5.7E+01
Chlorobenzoic Acid, p-	000074-11-3			3.9E+02	3.9E+01			1.0E+06	1.7E+05			9.0E+05	1.2E+05	9.0E+04	1.2E+04
Chlorobenzotrifluoride, 4-	000098-56-6			5.8E+01	5.8E+00			3.3E+04	3.3E+03			1.9E+04	2.4E+03	1.9E+03	2.4E+02
Chlorobutane, 1-	000109-69-3			7.3E+02	7.3E+01			1.0E+06	3.8E+05			1.0E+06	2.6E+05	2.1E+05	2.6E+04
Chlorobutane, 2-	000078-86-4														
Chlorocyclopentadiene	041851-50-7														

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	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child
Chlorodibromoethane	073506-94-2														
Chlorodifluoromethane	000075-45-6														
Chloroform ⁽⁶⁾	000067-66-3	4.4E+01	4.4E-01	1.2E+01	1.2E+00	7.6E+05	7.6E+03	2.0E+05	2.0E+04	1.7E+05	1.7E+03	1.1E+05	1.4E+04	1.1E+04	1.4E+03
Chloromethane ⁽⁶⁾	000074-87-3	6.4E+00	6.4E-02			1.0E+06	1.1E+04			2.5E+05	2.5E+03				
Chloromethyl Methyl Ether	000107-30-2														
Chloronaphthalene, Beta-	000091-58-7			2.5E+02	2.5E+01			6.8E+04	6.8E+03			3.9E+04	5.0E+03	3.9E+03	5.0E+02
Chloronitrobenzene, o-	000088-73-3	1.3E+01	1.3E-01			1.5E+05	1.5E+03			3.3E+04	3.3E+02				
Chloronitrobenzene, p-	000121-73-3	2.1E+01	2.1E-01			1.6E+05	1.6E+03			3.6E+04	3.6E+02				
Chlorophenol, 2-	000095-57-8			6.8E+00	6.8E-01			7.8E+04	7.8E+03			4.2E+04	5.4E+03	4.2E+03	5.4E+02
Chlorophenyl Methyl Sulfide, p-	000123-09-1														
Chlorophenyl Methyl Sulfoxide	000934-73-6														
Chloropropane, 2-	000075-29-6														
Chlorothalonil	001897-45-6	6.4E+01	6.4E-01	4.5E+01	4.5E+00	2.6E+04	2.6E+02	1.9E+04	1.9E+03	6.3E+03	6.3E+01	1.1E+04	1.4E+03	1.1E+03	1.4E+02
Chlorotoluene, o-	000095-49-8			5.3E+01	5.3E+00			5.9E+04	5.9E+03			3.3E+04	4.2E+03	3.3E+03	4.2E+02
Chlorpropham	000101-21-3			4.3E+02	4.3E+01			1.0E+06	1.3E+05			6.9E+05	8.9E+04	6.9E+04	8.9E+03
Chlorpyrifos	002921-88-2			1.0E+01	1.0E+00			2.1E+02	2.1E+01			1.2E+02	1.6E+01	1.2E+01	1.6E+00
Chlorpyrifos Methyl	005598-13-0			3.2E+01	3.2E+00			5.7E+03	5.7E+02			3.3E+03	4.2E+02	3.3E+02	4.2E+01
Chlorsulfuron	064902-72-3			9.8E-01	9.8E-02			1.0E+06	1.0E+06			1.0E+06	1.0E+06	1.0E+06	1.9E+05
Chlorthiophos	060238-56-4														
Chromium (III) (Insoluble Salts)	016065-83-1			3.5E+03	3.5E+02			3.8E+04	3.8E+03			1.0E+06	8.1E+05	6.3E+05	8.1E+04
Chromium (VI) ⁽⁶⁾	018540-29-9			1.8E+01	1.8E+00			1.9E+02	1.9E+01			3.1E+04	4.0E+03	3.1E+03	4.0E+02

Table 3.3c. (continued)

Chemical	CASRN	Ingestion of Vegetables (mg/kg) ^a				Ingestion of Beef (mg/kg) ^a				Ingestion of Milk (mg/kg) ^a					
		10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child
Chromium Salts	NA														
Chrysene ⁽²⁾	000218-01-9	1.1E+02	1.1E+00			9.1E+02	9.1E+00			2.3E+02	2.3E+00				
Cobalt	007440-48-4														
Coke Oven Emissions	008007-45-2														
Copper	007440-50-8														
Copper Cyanide	000544-92-3														
Creosote	008001-58-9														
Cresol, m-	000108-39-4			5.8E+01	5.8E+00			9.9E+05	9.9E+04			5.3E+05	6.8E+04	5.3E+04	6.8E+03
Cresol, o-	000095-48-7			5.3E+01	5.3E+00			1.0E+06	1.1E+05			5.9E+05	7.5E+04	5.9E+04	7.5E+03
Cresol, p-	000106-44-5			5.3E+00	5.3E-01			1.1E+05	1.1E+04			5.9E+04	7.5E+03	5.9E+03	7.5E+02
Crotonaldehyde	000123-73-9	1.2E-01	1.2E-03			3.0E+03	3.0E+01			6.8E+02	6.8E+00				
Cumene	000098-82-8			1.1E+02	1.1E+01			1.0E+05	1.0E+04			5.6E+04	7.2E+03	5.6E+03	7.2E+02
Cyanazine	021725-46-2	3.9E-01	3.9E-03	2.8E+00	2.8E-01	4.3E+03	4.3E+01	3.1E+04	3.1E+03	9.6E+02	9.6E+00	1.6E+04	2.1E+03	1.6E+03	2.1E+02
Cyanide (CN-)	000057-12-5			9.0E+00	9.0E-01			1.0E+06	1.0E+05			5.5E+05	7.0E+04	5.5E+04	7.0E+03
Cyanogen	000460-19-5														
Cyanogen Bromide	000506-68-3														
Cyanogen Chloride	000506-77-4			7.4E+00	7.4E-01			1.0E+06	6.4E+05			1.0E+06	4.3E+05	3.4E+05	4.3E+04
Cyclohexane, 1,2,3,4,5-pentabromo-6-chloro-	000087-84-3														
Cyclohexanone	000108-94-1			1.6E+03	1.6E+02			1.0E+06	1.0E+06			1.0E+06	1.0E+06	1.0E+06	1.0E+06
Cyclohexylamine	000108-91-8			1.4E+02	1.4E+01			1.0E+06	6.9E+05			1.0E+06	4.6E+05	3.6E+05	4.6E+04
Cyclopentadiene	000542-92-7														

Table 3.3c. (continued)

Chemical	CASRN	Ingestion of Vegetables (mg/kg)*				Ingestion of Beef (mg/kg)*				Ingestion of Milk (mg/kg)*					
		10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child
Cyhalothrin/karate	068085-85-8			1.7E+01	1.7E+00			9.3E+00	9.3E-01			5.5E+00	7.1E-01	5.5E-01	7.1E-02
Cypermethrin	052315-07-8														
Cyromazine	066215-27-8														
DDD	000072-54-8	3.4E+00	3.4E-02			2.2E+01	2.2E-01			5.5E+00	5.5E-02				
DDE	000072-55-9	2.4E+00	2.4E-02			1.9E+01	1.9E-01			4.9E+00	4.9E-02				
DDT	000050-29-3	2.4E+00	2.4E-02	1.7E+00	1.7E-01	4.4E+00	4.4E-02	3.2E+00	3.2E-01	1.1E+00	1.1E-02	1.9E+00	2.4E-01	1.9E-01	2.4E-02
Dacthal	001861-32-1														
Dalapon	000075-99-0			9.2E+00	9.2E-01			1.0E+06	2.2E+05			1.0E+06	1.5E+05	1.1E+05	1.5E+04
Decabromodiphenyl Ether	001163-19-5			3.4E+01	3.4E+00			7.9E+02	7.9E+01			4.6E+02	6.0E+01	4.6E+01	6.0E+00
Demeton	008065-48-3														
Di(2-ethylhexyl)adipate	000103-23-1	6.8E+02	6.8E+00	2.1E+03	2.1E+02	4.6E+01	4.6E-01	1.4E+02	1.4E+01	1.2E+01	1.2E-01	8.4E+01	1.1E+01	8.4E+00	1.1E+00
Diallate	002303-16-4	1.1E+00	1.1E-02			2.9E+05	2.9E+03			6.5E+04	6.5E+02				
Diazinon	000333-41-5			2.7E+00	2.7E-01			1.3E+03	1.3E+02			7.6E+02	9.7E+01	7.6E+01	9.7E+00
Dibenz[a,h]anthracene ⁽²⁾	000053-70-3	1.1E-01	1.1E-03			7.4E-02	7.4E-04			1.9E-02	1.9E-04				
Dibromo-3-chloropropane, 1,2-	000096-12-8	3.0E-01	3.0E-03			1.6E+03	1.6E+01			3.6E+02	3.6E+00				
Dibromobenzene, 1,4-	000106-37-6			3.0E+01	3.0E+00			1.5E+04	1.5E+03			8.4E+03	1.1E+03	8.4E+02	1.1E+02
Dibromochloromethane	000124-48-1	3.8E+00	3.8E-02	2.7E+01	2.7E+00	4.4E+04	4.4E+02	3.1E+05	3.1E+04	9.9E+03	9.9E+01	1.7E+05	2.1E+04	1.7E+04	2.1E+03
Dibromodichloromethane	000594-18-3														
Dibromodiphenyl Ether, p,p'-	002050-47-7														
Dibromoethane, 1,2-	000106-93-4	3.2E-03	3.2E-05			5.4E+01	5.4E-01			1.2E+01	1.2E-01				
Dibromomethane (Methylene Bromide)	000074-95-3			5.0E+00	5.0E-01			4.7E+05	4.7E+04			2.5E+05	3.2E+04	2.5E+04	3.2E+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	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child
Dibutyl Phthalate	000084-74-2			3.4E+02	3.4E+01			1.6E+04	1.6E+03			9.7E+03	1.2E+03	9.7E+02	1.2E+02
Dicamba	001918-00-9			6.8E+01	6.8E+00			1.6E+05	1.6E+04			9.0E+04	1.2E+04	9.0E+03	1.2E+03
Dichloro-2-butene, 1,4-	000764-41-0														
Dichloroacetic Acid															
Dichlorobenzene, 1,2-(⁶³)	000095-50-1			2.4E+02	2.4E+01			2.7E+05	2.7E+04			1.5E+05	1.9E+04	1.5E+04	1.9E+03
Dichlorobenzene, 1,3-	000541-73-1														
Dichlorobenzene, 1,4-	000106-46-7	2.6E+01	2.6E-01			2.9E+04	2.9E+02			6.8E+03	6.8E+01				
Dichlorobenzidine, 3,3'-	000091-94-1	1.4E+00	1.4E-02			1.3E+03	1.3E+01			3.1E+02	3.1E+00				
Dichlorodifluoromethane	000075-71-8			2.7E+02	2.7E+01			1.0E+06	3.1E+05			1.0E+06	2.1E+05	1.7E+05	2.1E+04
Dichloroethane, 1,1-	000075-34-3			9.5E+01	9.5E+00			1.0E+06	2.5E+05			1.0E+06	1.7E+05	1.3E+05	1.7E+04
Dichloroethane, 1,2-	000107-06-2	1.8E+00	1.8E-02			8.8E+04	8.8E+02			2.0E+04	2.0E+02				
Dichloroethylene, 1,1-	000075-35-4	3.7E-01	3.7E-03	8.6E+00	8.6E-01	9.6E+03	9.6E+01	2.2E+05	2.2E+04	2.2E+03	2.2E+01	1.2E+05	1.5E+04	1.2E+04	1.5E+03
Dichloroethylene, 1,2- (Mixed Isomers)	000540-59-0			1.9E+00	1.9E-01			8.8E+05	8.8E+04			4.6E+05	5.9E+04	4.6E+04	5.9E+03
Dichloroethylene, 1,2-cis-	000156-59-2			1.1E+01	1.1E+00			2.2E+05	2.2E+04			1.2E+05	1.5E+04	1.2E+04	1.5E+03
Dichloroethylene, 1,2-trans-	000156-60-5			4.2E+00	4.2E-01			1.0E+06	1.9E+05			1.0E+06	1.3E+05	1.0E+05	1.3E+04
Dichlorophenol, 2,4-	000120-83-2			6.5E+00	6.5E-01			1.9E+04	1.9E+03			1.0E+04	1.3E+03	1.0E+03	1.3E+02
Dichlorophenoxy Acetic Acid, 2,4-	000094-75-7			1.7E+01	1.7E+00			1.1E+05	1.1E+04			5.8E+04	7.5E+03	5.8E+03	7.5E+02
Dichlorophenoxy)butyric Acid, 4-(2,4-	000094-82-6			2.2E+01	2.2E+00			1.9E+04	1.9E+03			1.1E+04	1.4E+03	1.1E+03	1.4E+02
Dichloropropane, 1,2-	000078-87-5	3.9E+00	3.9E-02			6.8E+04	6.8E+02			1.5E+04	1.5E+02				
Dichloropropanol, 2,3-	000616-23-9														
Dichloropropene, 1,3-	000542-75-6	1.0E+00	1.0E-02	2.3E-01	2.3E-02	4.0E+04	4.0E+02	9.3E+03	9.3E+02	9.0E+03	9.0E+01	4.9E+03	6.3E+02	4.9E+02	6.3E+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 ⁻³	HQ=1	10 ⁻⁴	10 ⁻³	HQ=1	10 ⁻⁴	HQ=1	Child
Dichlorvos	000062-73-7	9.5E-01	9.5E-03	5.9E-01	5.9E-02	1.5E+04	1.5E+02	9.6E+03	3.5E+03	Adult
Dicofol	000115-32-2									Adult
Dicyclopentadiene	000077-73-6			6.5E+01	6.5E+00			1.9E+05	1.9E+04	Child
Dieldrin	000060-57-1	4.8E-02	4.8E-04	1.6E-01	1.6E-02	4.5E+00	4.5E-02	1.6E+01	1.6E+00	Adult
Diethyl Phthalate	000084-66-2			1.4E+03	1.4E+02			1.0E+06	8.7E+05	
Diethyl-p-nitrophenylphosphate	000311-45-5									
Diethylene Glycol Dimaleate (DEGM)	000693-21-0									
Diethylene Glycol Monobutyl Ether	000112-34-5									
Diethylene Glycol Monocetyl Ether	000111-90-0			2.1E+02	2.1E+01			1.0E+06	1.0E+06	1.0E+06
Diethylformamide	000617-84-5									
Diethylstilbestrol	000056-53-1	1.7E-04	1.7E-06			2.2E-03	2.2E-05	5.5E-04	5.5E-06	
Difenzquat	043222-48-6									
Diflubenzuron	035367-38-5									
Difluoroethane, 1,1-	000075-37-6									
Diisopropyl Methylphosphonate	001445-75-6			3.3E+01	3.3E+00			1.0E+06	4.5E+05	
Dimethipin	055290-64-7									
Dimethoate	000060-51-5			3.9E-01	3.9E-02			1.7E+03	1.7E+02	
Dimethoxybenzidine, 3,3'-	000119-90-4	1.6E+01	1.6E-01			4.1E+05	4.1E+03	9.3E+04	9.3E+02	
Dimethyl Sulfate	000077-78-1									
Dimethylamine HCl, 2,4-	021436-96-4									
Dimethylaniline, 2,4-	000095-68-1									

Nonradionuclides/soil or sediment/agricultural

Table 3.3c. (continued)

Chemical	CASRN	Ingestion of Vegetables (mg/kg)*				Ingestion of Beef (mg/kg)*				Ingestion of Milk (mg/kg)*					
		10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child
Dimethylaniline, N,N-	000121-69-7			3.7E+00	3.7E-01			1.9E+04	1.9E+03			1.0E+04	1.3E+03	1.0E+03	1.3E+02
Dimethylbenzidine, 3,3'-	000119-93-7	3.8E-02	3.8E-04			3.5E+02	3.5E+00			8.0E+01	8.0E-01				
Dimethylethyl Lead	107584-40-7														
Dimethylformamide	000068-12-2			3.1E+00	3.1E-01			1.0E+06	1.0E+06			1.0E+06	1.0E+06	1.0E+06	2.8E+05
Dimethylhydrazine, 1,1-(⁴)	000057-14-7														
Dimethylhydrazine, 1,2-	000540-73-8														
Dimethylphenol, 2,4-	000105-67-9			3.0E+01	3.0E+00			2.8E+05	2.8E+04			1.5E+05	1.9E+04	1.5E+04	1.9E+03
Dimethylphenol, 2,6-	000576-26-1			9.3E-01	9.3E-02			7.8E+03	7.8E+02			4.2E+03	5.3E+02	4.2E+02	5.3E+01
Dimethylphenol, 3,4-	000095-65-8			1.4E+00	1.4E-01			1.6E+04	1.6E+03			8.4E+03	1.1E+03	8.4E+02	1.1E+02
Dimethylphthalate(⁴)	000131-11-3			7.8E+03	7.8E+02			1.0E+06	1.0E+06			1.0E+06	1.0E+06	1.0E+06	1.0E+06
Dimethylterephthalate	000120-61-6			2.3E+02	2.3E+01			5.5E+05	5.5E+04			3.0E+05	3.9E+04	3.0E+04	3.9E+03
Dinitro-o-cresol, 4,6-	000534-52-1														
Dinitro-o-cyclohexyl Phenol, 4,6-	000131-89-5			6.4E-03	6.4E-04			1.0E+06	4.3E+05			1.0E+06	2.9E+05	2.2E+05	2.9E+04
Dinitrobenzene, 1,2-	000528-29-0			3.1E-01	3.1E-02			1.2E+04	1.2E+03			6.5E+03	8.4E+02	6.5E+02	8.4E+01
Dinitrobenzene, 1,3-	000099-65-0			7.8E-02	7.8E-03			3.1E+03	3.1E+02			1.6E+03	2.1E+02	1.6E+02	2.1E+01
Dinitrobenzene, 1,4-	000100-25-4			2.8E-01	2.8E-02			1.4E+04	1.4E+03			7.2E+03	9.3E+02	7.2E+02	9.3E+01
Dinitrophenol, 2,4-	000051-28-5			1.4E+00	1.4E-01			6.9E+04	6.9E+03			3.6E+04	4.6E+03	3.6E+03	4.6E+02
Dinitrotoluene, 2,4-	000121-14-2	3.9E-01	3.9E-03	2.3E+00	2.3E-01	6.8E+03	6.8E+01	4.0E+04	4.0E+03	1.5E+03	1.5E+01	2.1E+04	2.7E+03	2.1E+03	2.7E+02
Dinitrotoluene, 2,6-	000606-20-2	3.0E-01	3.0E-03	8.6E-01	8.6E-02	9.5E+03	9.5E+01	2.8E+04	2.8E+03	2.1E+03	2.1E+01	1.5E+04	1.9E+03	1.5E+03	1.9E+02
Dinitrotoluene, 2-Amino-4,6-	035572-78-2														
Dinoseb	000088-85-7			2.9E+00	2.9E-01			1.8E+03	1.8E+02			1.0E+03	1.3E+02	1.0E+02	1.3E+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 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child
Dioxane, 1,4-	000123-91-1	1.7E+00	1.7E-02			1.0E+06	4.3E+04			9.6E+05	9.6E+03				
Diphenamid	000957-51-7			4.0E+01	4.0E+00			4.9E+05	4.9E+04			2.6E+05	3.3E+04	2.6E+04	3.3E+03
Diphenylamine	000122-39-4			6.9E+01	6.9E+00			6.3E+04	6.3E+03			3.5E+04	4.5E+03	3.5E+03	4.5E+02
Diphenylhydrazine, 1,2-	000122-66-7	6.3E-01	6.3E-03			1.8E+03	1.8E+01			4.3E+02	4.3E+00				
Diquat	000085-00-7			4.4E-03	4.4E-04			1.0E+06	6.6E+05			1.0E+06	4.5E+05	3.5E+05	4.5E+04
Direct Black 38	001937-37-7														
Direct Blue 6	002602-46-2														
Direct Brown 95	016071-86-6														
Direct Sky Blue	002610-05-1														
Disulfoton	000298-04-4			1.2E-01	1.2E-02			4.1E+01	4.1E+00			2.3E+01	3.0E+00	2.3E+00	3.0E-01
Diuron	000330-54-1			3.9E+00	3.9E-01			1.7E+04	1.7E+03			9.0E+03	1.2E+03	9.0E+02	1.2E+02
Dodine	002439-10-3														
EPTC	000759-94-4														
Endosulfan	000115-29-7														
Endothall	000145-73-3														
Endrin	000072-20-8			9.9E-01	9.9E-02			9.3E+01	9.3E+00			5.4E+01	7.0E+00	5.4E+00	7.0E-01
Epichlorohydrin	000106-89-8	2.1E+00	2.1E-02	1.7E-01	1.7E-02	1.0E+06	4.5E+04	3.8E+05	3.8E+04	1.0E+06	1.0E+04	2.0E+05	2.6E+04	2.0E+04	2.6E+03
Epoxybutane, 1,2-	000106-88-7														
Ethephon	016672-87-0														
Ethion	000563-12-2			1.7E+00	1.7E-01			5.7E+01	5.7E+00			3.3E+01	4.3E+00	3.3E+00	4.3E-01
Ethoxyethanol Acetate, 2-	000111-15-9			7.8E+01	7.8E+00			1.0E+06	1.0E+06			1.0E+06	1.0E+06	1.0E+06	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	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child
Ethoxyethanol, 2-	000110-80-5			4.0E+01	4.0E+00			1.0E+06	1.0E+06			1.0E+06	1.0E+06	1.0E+06	4.6E+05
Ethyl Acetate	000141-78-6			2.9E+02	2.9E+01			1.0E+06	1.0E+06			1.0E+06	1.0E+06	1.0E+06	4.2E+05
Ethyl Acrylate	000140-88-5	2.7E+00	2.7E-02			2.1E+05	2.1E+03			4.6E+04	4.6E+02				
Ethyl Chloride	000075-00-3														
Ethyl Ether	000060-29-7			7.0E+01	7.0E+00			1.0E+06	1.0E+06			1.0E+06	8.7E+05	6.8E+05	8.7E+04
Ethyl Methacrylate	000097-63-2			9.5E+01	9.5E+00			1.0E+06	2.0E+05			1.0E+06	1.4E+05	1.1E+05	1.4E+04
Ethyl-p-nitrophenyl Phosphonate	002104-64-5			3.0E-02	3.0E-03			1.5E+01	1.5E+00			8.4E+00	1.1E+00	8.4E-01	1.1E-01
Ethylbenzene ⁽⁶⁾	000100-41-4			2.4E+02	2.4E+01			4.7E+05	4.7E+04			2.6E+05	3.3E+04	2.6E+04	3.3E+03
Ethylene Cyanohydrin	000109-78-4			4.8E+00	4.8E-01			1.0E+06	1.0E+06			1.0E+06	1.0E+06	1.0E+06	1.0E+06
Ethylene Diamine	000107-15-3			2.4E+00	2.4E-01			1.0E+06	3.0E+05			1.0E+06	2.0E+05	1.6E+05	2.0E+04
Ethylene Glycol	000107-21-1			1.9E+01	1.9E+00			1.0E+06	1.0E+06			1.0E+06	1.0E+06	1.0E+06	1.0E+06
Ethylene Glycol Monobutyl Ether	000111-76-2														
Ethylene Oxide	000075-21-8	1.8E-02	1.8E-04			4.8E+04	4.8E+02			1.1E+04	1.1E+02				
Ethylene Thiourea	000096-45-7	1.0E-01	1.0E-03	3.9E-03	3.9E-04	6.3E+05	6.3E+03	2.4E+04	2.4E+03	1.4E+05	1.4E+03	1.2E+04	1.6E+03	1.2E+03	1.6E+02
Ethylphthalyl Ethyl Glycolate	000084-72-0														
Express	101200-48-0														
Fenamiphos	022224-92-6														
Fenpropathrin	039515-41-8														
Fluometuron	002164-17-2			2.1E+01	2.1E+00			1.6E+05	1.6E+04			8.6E+04	1.1E+04	8.6E+03	1.1E+03
Fluoranthene	000206-44-0			1.3E+02	1.3E+01			6.6E+03	6.6E+02			3.9E+03	5.0E+02	3.9E+02	5.0E+01
Fluorene	000086-73-7			1.3E+02	1.3E+01			1.9E+04	1.9E+03			1.1E+04	1.4E+03	1.1E+03	1.4E+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	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child
Fluoride	007782-41-4														
Fluridone	059756-60-4														
Flurprimidol	056425-91-3														
Flutolanil	066332-96-5														
Fluvalinate	069409-94-5														
Folpet	000133-07-3	1.6E+02	1.6E+00	2.4E+02	2.4E+01	3.2E+05	3.2E+03	4.7E+05	4.7E+04	7.3E+04	7.3E+02	2.6E+05	3.3E+04	2.6E+04	3.3E+03
Fomesafen	072178-02-0														
Fonofos	000944-22-9			6.1E+00	6.1E-01			2.3E+03	2.3E+02			1.3E+03	1.7E+02	1.3E+02	1.7E+01
Formaldehyde	000050-00-0			2.3E+01	2.3E+00			1.0E+06	1.0E+06			1.0E+06	1.0E+06	1.0E+06	2.1E+05
Formic Acid	000064-18-6			1.1E+02	1.1E+01			1.0E+06	1.0E+06			1.0E+06	1.0E+06	1.0E+06	1.0E+06
Fosetyl-AL	039148-24-8														
Furan	000110-00-9			5.6E-01	5.6E-02			4.2E+04	4.2E+03			2.2E+04	2.9E+03	2.2E+03	2.9E+02
Furazolidone	000067-45-8	1.7E-02	1.7E-04			4.9E+03	4.9E+01			1.1E+03	1.1E+01				
Furfural	000098-01-1			8.2E+00	8.2E-01			7.5E+03	7.5E+02			4.2E+03	5.4E+02	4.2E+02	5.4E+01
Furium	000531-82-8														
Furmecyclox	060568-05-0														
Glufosinate, Ammonium	077182-82-2														
Glycidyl	000765-34-4			1.8E-02	1.8E-03			1.3E+05	1.3E+04			6.7E+04	8.6E+03	6.7E+03	8.6E+02
Glyphosate	001071-83-6			2.2E-01	2.2E-02			1.0E+06	1.0E+06			1.0E+06	1.0E+06	1.0E+06	1.0E+06
Goal	042874-03-3														
Haloxyp, Methyl	069806-40-2														

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	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child
Harmony	079277-27-3														
Heptachlor	000076-44-8	1.7E-01	1.7E-03	1.6E+00	1.6E-01	3.0E+01	3.0E-01	2.9E+02	2.9E+01	7.3E+00	7.3E-02	1.7E+02	2.1E+01	1.7E+01	2.1E+00
Heptachlor Epoxide	001024-57-3	8.8E-02	8.8E-04	4.5E-02	4.5E-03	1.4E+00	1.4E-02	7.2E-01	7.2E-02	3.6E-01	3.6E-03	4.3E-01	5.5E-02	4.3E-02	5.5E-03
Heptane, N-	000142-82-5														
Hexabromobenzene	000087-82-1			7.0E+00	7.0E-01			2.5E+01	2.5E+00			1.5E+01	1.9E+00	1.5E+00	1.9E-01
Hexachlorobenzene ⁽⁶⁾	000118-74-1	5.0E-01	5.0E-03	2.7E+00	2.7E-01	1.0E+01	1.0E-01	5.5E+01	5.5E+00	2.5E+00	2.5E-02	3.3E+01	4.2E+00	3.3E+00	4.2E-01
Hexachlorobutadiene ⁽⁶⁾	000087-68-3	1.0E+01	1.0E-01	6.7E-01	6.7E-02	6.1E+02	6.1E+00	4.1E+01	4.1E+00	1.5E+02	1.5E+00	2.4E+01	3.1E+00	2.4E+00	3.1E-01
Hexachlorocyclohexane, Alpha-	000319-84-6	1.1E-01	1.1E-03			4.6E+01	4.6E-01			1.1E+01	1.1E-01				
Hexachlorocyclohexane, Beta-	000319-85-7	4.0E-01	4.0E-03			1.3E+02	1.3E+00			3.2E+01	3.2E-01				
Hexachlorocyclohexane, Delta-	000319-86-8														
Hexachlorocyclohexane, Epsilon	006108-10-7														
Hexachlorocyclohexane, Gamma-	000058-89-9	5.2E-01	5.2E-03	8.7E-01	8.7E-02	3.2E+02	3.2E+00	5.3E+02	5.3E+01	7.6E+01	7.6E-01	3.0E+02	3.9E+01	3.0E+01	3.9E+00
Hexachlorocyclohexane, Technical	000608-73-1														
Hexachlorocyclopentadiene	000077-47-4			2.2E+01	2.2E+00			7.2E+03	7.2E+02			4.1E+03	5.3E+02	4.1E+02	5.3E+01
Hexachlorodibenzo-p-dioxin, Mixture	019408-74-3	1.3E-04	1.3E-06			1.1E-04	1.1E-06			2.8E-05	2.8E-07				
Hexachloroethane	000067-72-1	5.0E+01	5.0E-01	3.0E+00	3.0E-01	2.1E+04	2.1E+02	1.2E+03	1.2E+02	5.0E+03	5.0E+01	7.0E+02	9.0E+01	7.0E+01	9.0E+00
Hexachlorophene	000070-30-4			1.1E+00	1.1E-01			1.4E-01	1.4E-02			8.4E-02	1.1E-02	8.4E-03	1.1E-03
Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	000121-82-4	5.5E+00	5.5E-02	7.7E+00	7.7E-01	7.4E+03	7.4E+01	1.0E+04	1.0E+03	1.7E+03	1.7E+01	5.8E+03	7.4E+02	5.8E+02	7.4E+01
Hexamethylene Diisocyanate, 1,6-	000822-06-0														
Hexane, N-	000110-54-3			1.8E+02	1.8E+01			7.4E+04	7.4E+03			4.2E+04	5.4E+03	4.2E+03	5.4E+02
Hexanone, 2-	000591-78-6														

Table 3.3c. (continued)

Chemical	CASRN	Ingestion of Vegetables (mg/kg) ^a				Ingestion of Beef (mg/kg) ^a				Ingestion of Milk (mg/kg) ^a			
		10 ⁻⁴	10 ⁻³	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻³	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻³	HQ=1	HQ=0.1
Hexazinone	051235-04-2		1.1E-02	1.1E-03		1.0E+06	1.0E+06	1.0E+06		1.0E+06	1.0E+06	1.0E+06	1.0E+06
HpCDD, 2,3,7,8-(*)	037871-00-4												
HpCDF, 2,3,7,8-(*)	038998-75-3												
HxCDD, 2,3,7,8-(*)	034465-46-8												
HxCDF, 2,3,7,8-(*)	055684-94-1												
Hydrazine	000302-01-2	5.6E-04	5.6E-06		9.4E+04	9.4E+02	9.4E+04	9.4E+02		2.1E+04	2.1E+02		
Hydrazine Sulfate	010034-93-2	5.6E-04	5.6E-06		9.4E+04	9.4E+02	9.4E+04	9.4E+02		2.1E+04	2.1E+02		
Hydrogen Chloride	007647-01-0												
Hydrogen Cyanide	000074-90-8		3.7E+00	3.7E-01		1.0E+06	1.0E+06	2.2E+05		1.0E+06	1.4E+05	1.4E+05	1.4E+04
Hydrogen Sulfide	007783-06-4		1.1E+00	1.1E-01		1.8E+05	1.8E+05	1.8E+04		9.6E+04	1.2E+04	9.6E+03	1.2E+03
Hydroquinone	000123-31-9		9.2E+00	9.2E-01		1.0E+06	1.0E+06	3.6E+05		1.0E+06	2.4E+05	1.9E+05	2.4E+04
Imazalil	035554-44-0												
Imazaquin	081335-37-7												
Indeno[1,2,3-cd]pyrene ^(*)	000193-39-5	1.1E+00	1.1E-02		1.2E+00	1.2E-02			3.0E-01	3.0E-03			
Iprodione	036734-19-7												
Iron	007439-89-6												
Isobutyl Alcohol	000078-83-1		9.8E+01	9.8E+00		1.0E+06	1.0E+06	1.0E+06		1.0E+06	1.0E+06	1.0E+06	1.4E+05
Isophorone	000078-59-1	2.1E+02	2.1E+00	1.7E+02	1.7E+01	1.0E+06	1.0E+06	6.8E+04	1.0E+06	1.5E+04	1.0E+06	3.8E+05	3.8E+04
Isopropalin	033820-53-0												
Isopropanol	000067-63-0												
Isopropyl Methyl Phosphonic Acid	001832-54-8												

Nonradionuclides/soil or sediment/agricultural

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	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child
Isoxaben	082558-50-7														
Karate	091465-08-6														
Kerb	023950-58-5														
Lactofen	077501-63-4														
Lead Alkyls	NA														
Lead And Compounds	007439-92-1														
Linuron	000330-55-2														
Lithium	007439-93-2														
Londax	083055-99-6														
MCPA	000094-74-6			7.4E-01	7.4E-02			7.0E+03	7.0E+02			3.7E+03	4.8E+02	3.7E+02	4.8E+01
MCPB	000094-81-5														
MCPP	000093-65-2			1.8E+00	1.8E-01			9.5E+03	9.5E+02			5.1E+03	6.6E+02	5.1E+02	6.6E+01
Magnesium	007439-95-4														
Malathion	000121-75-5			4.3E+01	4.3E+00			1.3E+05	1.3E+04			6.9E+04	8.9E+03	6.9E+03	8.9E+02
Maleic Anhydride	000108-31-6														
Maleic Hydrazide	000123-33-1			3.4E+01	3.4E+00			1.0E+06	1.0E+06			1.0E+06	1.0E+06	1.0E+06	7.8E+05
Malononitrile	000109-77-3			2.4E-03	2.4E-04			3.0E+03	3.0E+02			1.6E+03	2.0E+02	1.6E+02	2.0E+01
Mancozeb	008018-01-7														
Maneb	012427-38-2			5.7E-01	5.7E-02			7.8E+05	7.8E+04			4.1E+05	5.2E+04	4.1E+04	5.2E+03
Manganese (Diet)	007439-96-5			3.9E+02	3.9E+01			3.9E+04	3.9E+03			1.1E+05	1.4E+04	1.1E+04	1.4E+03
Mephosfolan	000950-10-7														

Table 3.3c. (continued)

Chemical	CASRN	Ingestion of Vegetables (mg/kg)			Ingestion of Beef (mg/kg)			Ingestion of Milk (mg/kg)		
		10 ⁻⁴	10 ⁻⁴	HQ=1	10 ⁻⁴	10 ⁻⁴	HQ=1	10 ⁻⁴	HQ=1	HQ=0.1
Mepiquat Chloride	024307-26-4									
Mercuric Chloride	007487-94-7									
Mercury (elemental)	007439-97-6			4.9E-01	4.9E-02		3.2E+00	3.2E-01	1.2E+01	1.2E+00
Mercury, Inorganic Salt	007439-97-6			4.9E-01	4.9E-02		3.2E+00	3.2E-01	1.2E+01	1.2E+00
Merphos	000150-50-5									
Merphos Oxide	000078-48-8			1.0E-01	1.0E-02		8.5E-01	8.5E-02	5.0E-01	6.5E-02
Metaxyl	057837-19-1									
Methacrylonitrile	000126-98-7			2.3E-02	2.3E-03		9.2E+03	9.2E+02	4.8E+03	6.2E+02
Methamidophos	010265-92-6			2.4E-03	2.4E-04		1.5E+04	1.5E+03	7.8E+03	1.0E+03
Methanol	000067-56-1			2.1E+01	2.1E+00		1.0E+06	1.0E+06	1.0E+06	1.0E+06
Methidathion	000950-37-8									
Methomyl	016752-77-5			6.1E+00	6.1E-01		1.0E+06	2.2E+05	1.0E+06	1.5E+05
Methoxy-5-nitroaniline, 2-	000099-59-2	3.6E+00	3.6E-02			1.7E+05	1.7E+03		3.9E+04	3.9E+02
Methoxychlor	000072-43-5			1.6E+01	1.6E+00		2.3E+03	2.3E+02	1.4E+03	1.4E+02
Methoxyethanol Acetate, 2-	000110-49-6									
Methoxyethanol, 2-	000109-86-4			4.2E-02	4.2E-03		3.3E+05	3.3E+04	1.7E+05	2.2E+04
Methyl Acetate	000079-20-9			1.4E+02	1.4E+01		1.0E+06	1.0E+06	1.0E+06	1.0E+06
Methyl Acrylate	000096-33-3			8.0E+00	8.0E-01		1.0E+06	2.4E+05	1.0E+06	1.6E+05
Methyl Ethyl Ketone	000078-93-3			9.7E+01	9.7E+00		1.0E+06	1.0E+06	1.0E+06	1.0E+06
Methyl Isobutyl Ketone	000108-10-1			4.0E+01	4.0E+00		1.0E+06	3.8E+05	1.0E+06	2.5E+05
Methyl Mercury	022967-92-6									

Nonradionuclides/soil or sediment/agricultural

Table 3.3c. (continued)

Chemical	CASRN	Ingestion of Vegetables (mg/kg)*				Ingestion of Beef (mg/kg)*				Ingestion of Milk (mg/kg)*					
		10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	10 ⁻⁴	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child
Methyl Methacrylate	000080-62-6			4.5E+01	4.5E+00		1.0E+06	3.4E+05				1.0E+06	2.3E+05	1.8E+05	2.3E+04
Methyl Parathion	000298-00-0			2.6E-01	2.6E-02		5.5E+03	5.5E+02				2.9E+03	3.8E+02	2.9E+02	3.8E+01
Methyl Styrene (Mixed Isomers)	025013-15-4			1.6E+01	1.6E+00		1.9E+04	1.9E+03				1.1E+04	1.4E+03	1.1E+03	1.4E+02
Methyl hydrazine ^(b)	000060-34-4														
Methyl tert-Butyl Ether (MTBE)	001634-04-4														
Methyl-5-Nitroaniline, 2-	000099-55-8	8.1E+00	8.1E-02			1.4E+05	1.4E+03		3.2E+04	3.2E+02					
Methylaniline Hydrochloride, 2-	000636-21-5	1.5E-01	1.5E-03			2.0E+05	2.0E+03		4.5E+04	4.5E+02					
Methylcyclohexane	000108-87-2														
Methylene Chloride	000075-09-2	1.8E+01	1.8E-01	3.4E+01	3.4E+00	1.0E+06	1.3E+04	2.5E+05	2.9E+05	2.9E+03	1.0E+06	1.7E+05	1.7E+05	1.3E+05	1.7E+04
Methylene-bis(2-chloroaniline), 4,4'-	000101-14-4	5.4E+00	5.4E-02	2.1E+00	2.1E-01	2.2E+03	2.2E+01	8.6E+02	5.4E+02	5.4E+00	4.9E+02	6.3E+01	4.9E+01	4.9E+01	6.3E+00
Methylene-bis(N,N-dimethyl) Aniline, 4,4'-	000101-61-1	1.7E+01	1.7E-01			1.0E+03	1.0E+01		2.6E+02	2.6E+00					
Methylenbisbenzenamine, 4,4'- ^(b)	000101-77-9	7.3E-01	7.3E-03			2.9E+04	2.9E+02		6.4E+03	6.4E+01					
Methylenediphenyl Isocyanate, 4,4'-	000101-68-8														
Methylstyrene, Alpha-	000098-83-9			1.8E+02	1.8E+01		2.2E+05	2.2E+04			1.2E+05	1.6E+04	1.2E+04	1.2E+04	1.6E+03
Methyltriethyl Lead	001762-28-3														
Metolachlor	051218-45-2														
Metribuzin ^(b)	021087-64-9			2.2E+01	2.2E+00		6.9E+05	6.9E+04				3.7E+05	4.7E+04	3.7E+04	4.7E+03
Mirex ^(b)	002385-85-5	4.4E-01	4.4E-03	6.8E-01	6.8E-02	9.3E+00	9.3E-02	1.4E+01	2.3E+00	2.3E-02	8.5E+00	1.1E+00	8.5E-01	2.7E+02	1.1E-01
Molinate	002212-67-1			5.5E+00	5.5E-01		4.8E+03	4.8E+02				3.4E+02	3.4E+02	2.7E+02	3.4E+01
Molybdenum	007439-98-7			1.3E+01	1.3E+00		9.3E+02	9.3E+01				9.7E+01	1.2E+01	9.7E+00	1.2E+00
Monochloramine	010599-90-3														

Table 3.3c. (continued)

Chemical	CASRN	Ingestion of Vegetables (mg/kg)*				Ingestion of Beef (mg/kg)*				Ingestion of Milk (mg/kg)*					
		10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child
Monochlorobutanes	025154-42-1														
Naled	000300-76-5			4.1E+00	4.1E-01			1.5E+04	1.5E+03			7.9E+03	1.0E+03	7.9E+02	1.0E+02
Naphthalene ⁽⁶⁾	000091-20-3			9.2E+01	9.2E+00			1.2E+05	1.2E+04			6.9E+04	8.8E+03	6.9E+03	8.8E+02
Naphthalene, 1-Methyl	000090-12-0														
Naphthalene, 2-Methyl	000091-57-6														
Napropamide	015299-99-7			2.6E+01	2.6E+00			1.0E+06	8.1E+05			1.0E+06	5.5E+05	4.3E+05	5.5E+04
Niagara Blue 4B	002429-74-5														
Nickel Carbonyl	013463-39-3														
Nickel Refinery Dust	NA														
Nickel Soluble Salts	007440-02-0			5.9E+01	5.9E+00			1.0E+03	1.0E+02			5.8E+01	7.5E+00	5.8E+00	7.5E-01
Nickel Subulfide	012035-72-2														
Nitrapyrin ⁽⁵⁾	001929-82-4			3.4E+00	3.4E-01			8.2E+03	8.2E+02			4.5E+03	5.8E+02	4.5E+02	5.8E+01
Nitrate	014797-55-8														
Nitric Oxide ⁽⁹⁾	010102-43-9														
Nitrite	014797-65-0														
Nitroaniline, 2-	000088-74-4														
Nitrobenzene	000098-95-3			4.8E-01	4.8E-02			1.2E+04	1.2E+03			6.6E+03	8.4E+02	6.6E+02	8.4E+01
Nitrofurantoin	000067-20-9														
Nitrofurazone	000059-87-0														
Nitrogen Dioxide ⁽⁹⁾	010102-44-0														
Nitroguanidine	000556-88-7														

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	HQ=0.1	10 ⁻⁴	10 ⁻⁵	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁵	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child
Nitrophenol, 4-	000100-02-7														
Nitropropane, 2- ⁽⁹⁾	000079-46-9	5.7E-03	5.7E-05			2.2E+03	2.2E+01			5.0E+02	5.0E+00				
Nitroso-N-ethylurea, N-	000759-73-9	2.6E-04	2.6E-06			2.1E+02	2.1E+00			4.6E+01	4.6E-01				
Nitroso-N-methylurea, N-	000684-93-5														
Nitroso-di-N-butylamine, N-	000924-16-3	4.5E-02	4.5E-04			9.6E+02	9.6E+00			2.2E+02	2.2E+00				
Nitroso-di-N-propylamine, N-	000621-64-7	2.1E-02	2.1E-04			1.3E+03	1.3E+01			2.8E+02	2.8E+00				
Nitrosodiethanolamine, N-	001116-54-7	1.2E-03	1.2E-05			6.2E+04	6.2E+02			1.4E+04	1.4E+02				
Nitrosodiethylamine, N-	000055-18-5	3.3E-04	3.3E-06			1.5E+02	1.5E+00			3.4E+01	3.4E-01				
Nitrosodimethylamine, N-	000062-75-9	2.5E-04	2.5E-06			1.2E+03	1.2E+01			2.8E+02	2.8E+00				
Nitrosodiphenylamine, N-	000086-30-6	1.1E+02	1.1E+00			2.3E+05	2.3E+03			5.2E+04	5.2E+02				
Nitrosomethylethylamine, N-	010595-95-6														
Nitrosomethylvinylamine, N-	004549-40-0														
Nitrosopyrrolidine, N-	000930-55-2	3.0E-03	3.0E-05			5.1E+04	5.1E+02			1.1E+04	1.1E+02				
Nitrotoluene, 4-Amino-2-	000119-32-4														
Nitrotoluene, m-	000099-08-1			1.6E+01	1.6E+00			1.2E+05	1.2E+04			6.6E+04	8.5E+03	6.6E+03	8.5E+02
Nitrotoluene, o-	000088-72-2			1.5E+01	1.5E+00			1.4E+05	1.4E+04			7.4E+04	9.5E+03	7.4E+03	9.5E+02
Nitrotoluene, p-	000099-99-0			1.6E+01	1.6E+00			1.2E+05	1.2E+04			6.6E+04	8.5E+03	6.6E+03	8.5E+02
Norflurazon	027314-13-2														
Nustar	085509-19-9														
OCDD ⁽⁹⁾	003268-87-9	5.5E-03	5.5E-05			3.8E-05	3.8E-07			9.7E-06	9.7E-08				
OCDF ⁽⁹⁾	039001-02-0														

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	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child
Octabromodiphenyl Ether	032536-52-0														
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetra (HMX)	002691-41-0			1.2E+01	1.2E+00			1.0E+06	4.4E+05			1.0E+06	2.9E+05	2.3E+05	2.9E+04
Octamethylpyrophosphoramidate	000152-16-9														
Octyl Phthalate, di-N-	000117-84-0			7.0E+01	7.0E+00			1.9E-01	1.9E-02			1.1E-01	1.4E-02	1.1E-02	1.4E-03
Oryzalin	019044-88-3														
Oxadiazon	019666-30-9														
Oxamyl	023135-22-0														
Paclobutrazol	076738-62-0														
Paraquat	001910-42-5			1.9E-03	1.9E-04			1.0E+06	1.0E+06			1.0E+06	1.0E+06	1.0E+06	2.8E+05
Parathion	000056-38-2			1.8E+01	1.8E+00			8.9E+03	8.9E+02			5.0E+03	6.5E+02	5.0E+02	6.5E+01
PeCDD, 2,3,7,8-(⁴)	036088-22-9	1.1E-05	1.1E-07			1.4E-05	1.4E-07			3.6E-06	3.6E-08				
PeCDF, 1,2,3,7,8-(⁴)	057117-41-6														
PeCDF, 2,3,4,7,8-(⁴)	057117-31-4														
Pebulate	001114-71-2														
Pendimethalin	040487-42-1														
Pentabromodiphenyl Ether	032534-81-9														
Pentachlorobenzene	000608-93-5			2.7E+00	2.7E-01			6.9E+01	6.9E+00			4.1E+01	5.2E+00	4.1E+00	5.2E-01
Pentachlorocyclopentadiene	025329-35-5														
Pentachloronitrobenzene	000082-68-8	3.0E+00	3.0E-02	9.9E+00	9.9E-01	2.8E+02	2.8E+00	9.3E+02	9.3E+01	6.9E+01	6.9E-01	5.4E+02	7.0E+01	5.4E+01	7.0E+00
Pentachlorophenol	000087-86-5	6.7E+00	6.7E-02	1.0E+02	1.0E+01	3.5E+01	3.5E-01	5.4E+02	5.4E+01	8.9E+00	8.9E-02	3.2E+02	4.1E+01	3.2E+01	4.1E+00
Pentyl Alcohol, N-	000071-41-0														

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	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child
Permethrin	052645-53-1			1.4E+02	1.4E+01			1.3E+05	1.3E+04			7.0E+04	9.0E+03	7.0E+03	9.0E+02
Phenanthrene	000085-01-8														
Phenmedipham	013684-63-4			5.2E+00	5.2E-01			1.0E+06	1.0E+06			1.0E+06	1.0E+06	1.0E+06	9.3E+05
Phenol	000108-95-2			4.2E+02	4.2E+01			1.0E+06	1.0E+06			1.0E+06	1.0E+06	1.0E+06	1.4E+05
Phenylenediamine, m-	000108-45-2			2.6E-01	2.6E-02			1.0E+06	2.0E+05			1.0E+06	1.3E+05	1.0E+05	1.3E+04
Phenylenediamine, o-	000095-54-5	1.0E+00	1.0E-02			5.0E+05	5.0E+03			1.1E+05	1.1E+03				
Phenylenediamine, p-	000106-50-3			4.5E+00	4.5E-01			1.0E+06	1.0E+06			1.0E+06	1.0E+06	1.0E+06	6.4E+05
Phenylmercuric Acetate	000062-38-4														
Phenylphenol, 2-	000090-43-7	2.9E+02	2.9E+00			5.7E+05	5.7E+03			1.3E+05	1.3E+03				
Phorate	000298-02-2			1.7E-01	1.7E-02			5.5E+03	5.5E+02			2.9E+03	3.8E+02	2.9E+02	3.8E+01
Phosmet	000732-11-6			4.1E+01	4.1E+00			1.5E+05	1.5E+04			7.9E+04	1.0E+04	7.9E+03	1.0E+03
Phosphine	007803-51-2														
Phosphoric Acid	007664-38-2														
Phthalic Acid, P-	000100-21-0			8.6E+02	8.6E+01			1.0E+06	1.0E+06			1.0E+06	1.0E+06	1.0E+06	1.9E+05
Phthalic Anhydride	000085-44-9			1.0E+02	1.0E+01			1.0E+06	1.0E+06			1.0E+06	1.0E+06	1.0E+06	1.0E+06
Picloram	001918-02-1			1.1E+02	1.1E+01			8.6E+05	8.6E+04			4.6E+05	5.9E+04	4.6E+04	5.9E+03
Pirimiphos, Methyl	029232-93-7														
Polybrominated Biphenyls	NA														
Polychlorinated Biphenyls	001336-36-3	1.1E-01	1.1E-03			4.4E-01	4.4E-03			1.1E-01	1.1E-03				
Potassium Cyanide	000151-50-8			4.1E+00	4.1E-01			1.0E+06	1.0E+06			1.0E+06	6.7E+05	5.2E+05	6.7E+04
Potassium Silver Cyanide	000506-61-6														

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	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child
Prochloraz	067747-09-5														
Profluralin	026399-36-0														
Prometon	001610-18-0			2.2E+01	2.2E+00			2.1E+05	2.1E+04			1.1E+05	1.4E+04	1.1E+04	1.4E+03
Prometryn	007287-19-6			6.8E+00	6.8E-01			4.3E+04	4.3E+03			2.3E+04	3.0E+03	2.3E+03	3.0E+02
Propachlor	001918-16-7														
Propanil	000709-98-8			1.2E+01	1.2E+00			2.3E+04	2.3E+03			1.3E+04	1.6E+03	1.3E+03	1.6E+02
Propargite	002312-35-8														
Propargyl Alcohol	000107-19-7														
Propazine	000139-40-2			3.2E+01	3.2E+00			2.5E+05	2.5E+04			1.3E+05	1.7E+04	1.3E+04	1.7E+03
Propham	000122-42-9			5.0E+01	5.0E+00			8.1E+04	8.1E+03			4.5E+04	5.8E+03	4.5E+03	5.8E+02
Propiconazole	060207-90-1														
Propylene Glycol	000057-55-6			2.4E+02	2.4E+01			1.0E+06	1.0E+06			1.0E+06	1.0E+06	1.0E+06	1.0E+06
Propylene Glycol Monoethyl Ether	001569-02-4														
Propylene Glycol Monomethyl Ether	000107-98-2			6.4E+01	6.4E+00			1.0E+06	1.0E+06			1.0E+06	1.0E+06	1.0E+06	8.8E+05
Propylene Oxide	000075-56-9	1.2E-01	1.2E-03			1.5E+05	1.5E+03			3.3E+04	3.3E+02				
Pursuit	081335-77-5														
Pydrin	051630-58-1			8.1E+01	8.1E+00			1.1E+04	1.1E+03			6.5E+03	8.4E+02	6.5E+02	8.4E+01
Pyrene	000129-00-0			1.0E+02	1.0E+01			4.9E+03	4.9E+02			2.9E+03	3.7E+02	2.9E+02	3.7E+01
Pyridine	000110-86-1			5.6E-01	5.6E-02			4.2E+04	4.2E+03			2.2E+04	2.9E+03	2.2E+03	2.9E+02
Quinalphos	013593-03-8														
Quinoline	000091-22-5	2.4E-02	2.4E-04			3.4E+02	3.4E+00			7.7E+01	7.7E-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	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child
Refractory Ceramic Fibers	NA														
Resmethrin	010453-86-8														
Ronnel	000299-84-3			1.7E+02	1.7E+01			5.3E+03	5.3E+02			3.2E+03	4.0E+02	3.2E+02	4.0E+01
Rotenone	000083-79-4			1.2E+01	1.2E+00			3.4E+03	3.4E+02			1.9E+03	2.5E+02	1.9E+02	2.5E+01
Savey	078587-05-0														
Selenious Acid	007783-00-8														
Selenite	014124-67-5														
Selenium	007782-49-2			1.3E+01	1.3E+00			8.3E+00	8.3E-01			1.5E+01	1.9E+00	1.5E+00	1.9E-01
Selenium Sulfide	007446-34-6														
Selenourea	000630-10-4														
Sethoxydim	074051-80-2														
Silver	007440-22-4			1.8E+01	1.8E+00			1.8E+02	1.8E+01			1.8E+03	2.4E+02	1.8E+02	2.4E+01
Silver Cyanide	000506-64-9														
Simazine	000122-34-9	2.7E+00	2.7E-02	6.8E+00	6.8E-01	3.0E+04	3.0E+02	7.8E+04	7.8E+03	6.9E+03	6.9E+01	4.2E+04	5.4E+03	4.2E+03	5.4E+02
Sodium	007440-23-5														
Sodium Acifluorfen	062476-59-9														
Sodium Azide	026628-22-8														
Sodium Cyanide	000143-33-9			1.6E+00	1.6E-01			1.0E+06	1.0E+06			1.0E+06	9.3E+05	7.3E+05	9.3E+04
Sodium Diethyldithiocarbamate	000148-18-5														
Sodium Fluoroacetate	000062-74-8														
Sodium Metavanadate	013718-26-8														

Table 3.3c. (continued)

Chemical	CASRN	Ingestion of Vegetables (mg/kg)*				Ingestion of Beef (mg/kg)*				Ingestion of Milk (mg/kg)*					
		10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child
Stirofos (Tetrachlorovinphos)	000961-11-5														
Strontium, Stable	007440-24-6			1.2E+03	1.2E+02			7.5E+03	7.5E+02			3.7E+03	4.7E+02	3.7E+02	4.7E+01
Strychnine	000057-24-9			3.2E-01	3.2E-02			6.7E+03	6.7E+02			3.5E+03	4.5E+02	3.5E+02	4.5E+01
Styrene ⁽⁶⁾	000100-42-5			4.3E+02	4.3E+01			1.0E+06	1.3E+05			6.9E+05	8.9E+04	6.9E+04	8.9E+03
Sulfate	014808-79-8														
Systhane	088671-89-0														
TCDD, 2,3,7,8- ⁽⁶⁾	001746-01-6	5.4E-06	5.4E-08			3.6E-06	3.6E-08			9.2E-07	9.2E-09				
TCDF, 2,3,7,8- ⁽⁶⁾	051207-31-9	5.4E-05	5.4E-07			3.4E-04	3.4E-06			8.5E-05	8.5E-07				
TCMTB	021564-17-0														
Tebuthiuron	034014-18-1			9.7E+00	9.7E-01			1.0E+06	9.5E+05			1.0E+06	6.3E+05	4.9E+05	6.3E+04
Temephos	003383-96-8														
Terbacil	005902-51-2														
Terbufos	013071-79-9			7.2E-02	7.2E-03			4.6E+01	4.6E+00			2.6E+01	3.3E+00	2.6E+00	3.3E-01
Terbutryn	000886-50-0			2.9E+00	2.9E-01			1.7E+03	1.7E+02			9.3E+02	1.2E+02	9.3E+01	1.2E+01
Tetrabutyl Lead	001920-90-7														
Tetrachlorobenzene, 1,2,4,5-	000095-94-3			9.9E-01	9.9E-02			9.3E+01	9.3E+00			5.4E+01	7.0E+00	5.4E+00	7.0E-01
Tetrachloroethane, 1,1,1,2-	000630-20-6	2.0E+01	2.0E-01	6.8E+01	6.8E+00	4.9E+04	4.9E+02	1.6E+05	1.6E+04	1.1E+04	1.1E+02	9.0E+04	1.2E+04	9.0E+03	1.2E+03
Tetrachloroethane, 1,1,2,2-	000079-34-5	1.9E+00	1.9E-02			1.4E+04	1.4E+02			3.3E+03	3.3E+01				
Tetrachloroethylene ⁽⁶⁾	000127-18-4	8.2E+00	8.2E-02	1.8E+01	1.8E+00	4.3E+04	4.3E+02	9.5E+04	9.5E+03	9.8E+03	9.8E+01	5.1E+04	6.6E+03	5.1E+03	6.6E+02
Tetrachlorophenol, 2,3,4,6-	000058-90-2			9.4E+01	9.4E+00			2.5E+04	2.5E+03			1.5E+04	1.9E+03	1.5E+03	1.9E+02
Tetrachlorotoluene, p- alpha, alpha, alpha-	005216-25-1														

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	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child
Tetraethyl Dithiopyrophosphate	003689-24-5			1.1E+00	1.1E-01			2.7E+03	2.7E+02			1.5E+03	1.9E+02	1.5E+02	1.9E+01
Tetraethyl Lead	000078-00-2														
Tetrafluoroethane, 1,1,1,2-	000811-97-2														
Tetramethyl Lead	000075-74-1														
Tetrapropyl Lead	003440-75-3														
Thallic Oxide ⁽⁹⁾	001314-32-5														
Thallium (I) Nitrate	010102-45-1														
Thallium (Soluble Salts)	007440-28-0														
Thallium Acetate	000563-68-8														
Thallium Carbonate	006533-73-9														
Thallium Chloride	007791-12-0														
Thallium Selenite ⁽⁹⁾	012039-52-0														
Thallium Sulfate	007446-18-6														
Thiobencarb	028249-77-6														
Thiofanox	039196-18-4			3.8E-03	3.8E-04			2.4E+05	2.4E+04			1.2E+05	1.6E+04	1.2E+04	1.6E+03
Thiophanate, Methyl	023564-05-8														
Thiram	000137-26-8														
Thorium	007440-29-1														
Tin	007440-31-5			9.8E+02	9.8E+01			6.4E+03	6.4E+02			1.1E+04	1.4E+03	1.1E+03	1.4E+02
Titanium	007440-32-6														
Toluene ⁽⁹⁾	000108-88-3			3.9E+02	3.9E+01			1.0E+06	1.7E+05			9.0E+05	1.2E+05	9.0E+04	1.2E+04

Table 3.3c. (continued)

Chemical	CASRN	Ingestion of Vegetables (mg/kg)*				Ingestion of Beef (mg/kg)*				Ingestion of Milk (mg/kg)*					
		10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child
Toluene diisocyanate mixture (TDI)	026471-62-5														
Toluene-2,4-diamine	000095-80-7	1.3E-02	1.3E-04			8.2E+03	8.2E+01			1.8E+03	1.8E+01				
Toluene-2,5-diamine	000095-70-5														
Toluene-2,6-diamine	000823-40-5														
Toluidine, o- (Methylaniline, 2-)	000095-53-4	5.5E-01	5.5E-03			4.1E+04	4.1E+02			9.2E+03	9.2E+01				
Toluidine, p-	000106-49-0	1.4E+00	1.4E-02			2.4E+04	2.4E+02			5.5E+03	5.5E+01				
Toxaphene	008001-35-2	7.1E-01	7.1E-03			4.3E+01	4.3E-01			1.1E+01	1.1E-01				
Tralomethrin	066841-25-6														
Triallate	002303-17-5			4.0E+01	4.0E+00			1.4E+04	1.4E+03			7.9E+03	1.0E+03	7.9E+02	1.0E+02
Triasulfuron	082097-50-5														
Tribromobenzene, 1,2,4-	000615-54-3														
Tribromochloromethane	000594-15-0														
Tribromodiphenyl Ether	049690-94-0														
Tributyltin Oxide	000056-35-9														
Trichloro-1,2,2-trifluoroethane, 1,1,2-	000076-13-1			5.5E+04	5.5E+03			1.0E+06	1.0E+06			1.0E+06	1.0E+06	1.0E+06	1.0E+06
Trichloro-2'-hydroxydiphenylether	003380-34-5														
Trichloroacetic Acid															
Trichloroaniline HCl, 2,4,6-	033663-50-2														
Trichloroaniline, 2,4,6-	000634-93-5														
Trichlorobenzene, 1,2,4-	000120-82-1			3.1E+01	3.1E+00			1.0E+04	1.0E+03			5.9E+03	7.5E+02	5.9E+02	7.5E+01
Trichloroethane, 1,1,1-(⁹)	000071-55-6			1.5E+02	1.5E+01			9.8E+05	9.8E+04			5.2E+05	6.7E+04	5.2E+04	6.7E+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	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child
Trichloroethane, 1,1,2-	000079-00-5	4.7E+00	4.7E-02	4.6E+00	4.6E-01	8.1E+04	8.1E+02	7.9E+04	7.9E+03	1.8E+04	1.8E+02	4.2E+04	5.4E+03	4.2E+03	5.4E+02
Trichloroethylene ^(b)	000079-01-6	3.4E+01	3.4E-01			2.6E+05	2.6E+03			5.9E+04	5.9E+02				
Trichlorofluoromethane	000075-69-4			5.1E+02	5.1E+01			1.0E+06	3.3E+05			1.0E+06	2.2E+05	1.7E+05	2.2E+04
Trichlorophenol, 2,4,5-	000095-95-4			3.0E+02	3.0E+01			1.5E+05	1.5E+04			8.4E+04	1.1E+04	8.4E+03	1.1E+03
Trichlorophenol, 2,4,6-	000088-06-2	6.1E+01	6.1E-01			3.8E+04	3.8E+02			9.0E+03	9.0E+01				
Trichlorophenoxy Propionic Acid, 2(2,4,5-	000093-72-1			2.4E+01	2.4E+00			9.9E+03	9.9E+02			5.6E+03	7.2E+02	5.6E+02	7.2E+01
Trichlorophenoxyacetic Acid, 2,4,5-	000093-76-5			3.1E+01	3.1E+00			1.0E+04	1.0E+03			5.9E+03	7.5E+02	5.9E+02	7.5E+01
Trichloropropane, 1,1,2-	000598-77-6														
Trichloropropane, 1,2,3-	000096-18-4	1.1E-01	1.1E-03	2.0E+01	2.0E+00	1.0E+01	1.0E-01	1.9E+03	1.9E+02	2.6E+00	2.6E-02	1.1E+03	1.4E+02	1.1E+02	1.4E+01
Trichloropropene, 1,2,3-	000096-19-5														
Trichlorotoluene, 2,3,6-	002077-46-5														
Trichlorotoluene, alpha 2,6-	002014-83-7														
Tridipane	058138-08-2														
Triethyl Lead	005224-23-7														
Triethylamine	000121-44-8														
Trifluralin	001582-09-8	1.0E+02	1.0E+00	2.6E+01	2.6E+00	2.1E+03	2.1E+01	5.2E+02	5.2E+01	5.2E+02	5.2E+00	3.1E+02	3.9E+01	3.1E+01	3.9E+00
Trimethyl Lead	007442-13-9														
Trimethyl Phosphate	000512-56-1														
Trimethylethyl Lead	001762-26-1														
Trinitrobenzene, 1,3,5-	000099-35-4			2.5E-02	2.5E-03			2.4E+03	2.4E+02			1.2E+03	1.6E+02	1.2E+02	1.6E+01
Trinitrophenylmethylnitramine	000479-45-8			1.2E+01	1.2E+00			2.0E+05	2.0E+04			1.1E+05	1.4E+04	1.1E+04	1.4E+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 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child
Trinitrotoluene, 2,4,6-	000118-96-7	1.2E+01	1.2E-01	7.4E-01	7.4E-02	1.1E+05	1.1E+03	7.0E+03	7.0E+02	2.5E+04	2.5E+02	3.7E+03	4.8E+02	3.7E+02	4.8E+01
Tripropyl Lead	006618-03-7														
Uranium (Soluble Salts)	NA			1.1E+01	1.1E+00			3.5E+03	3.5E+02			4.9E+02	6.3E+01	4.9E+01	6.3E+00
Vanadium Pentoxide	001314-62-1														
Vanadium Sulfate	036907-42-3														
Vanadium, Metallic	007440-62-2			2.4E+01	2.4E+00			1.0E+03	1.0E+02			2.4E+04	3.1E+03	2.4E+03	3.1E+02
Vanadyl Sulfate	027774-13-6														
Vernolate	001929-77-7														
Vinclozolin	050471-44-8														
Vinyl Acetate	000108-05-4			2.9E+02	2.9E+01			1.0E+06	1.0E+06			1.0E+06	1.0E+06	1.0E+06	5.1E+05
Vinyl Bromide	000593-60-2														
Vinyl Chloride ⁽⁶⁾	000075-01-4	7.7E-02	7.7E-04			4.7E+03	4.7E+01			1.0E+03	1.0E+01				
Warfarin	000081-81-2			7.5E-01	7.5E-02			1.2E+03	1.2E+02			6.7E+02	8.6E+01	6.7E+01	8.6E+00
White Phosphorus	007723-14-0														
Xylene, Mixture ⁽⁶⁾	001330-20-7			5.2E+03	5.2E+02			1.0E+06	6.9E+05			1.0E+06	4.9E+05	3.8E+05	4.9E+04
Xylene, P- ⁽⁶⁾	000106-42-3														
Xylene, m- ⁽⁶⁾	000108-38-3			5.0E+03	5.0E+02			1.0E+06	8.1E+05			1.0E+06	5.8E+05	4.5E+05	5.8E+04
Xylene, o- ⁽⁶⁾	000095-47-6			5.0E+03	5.0E+02			1.0E+06	8.1E+05			1.0E+06	5.8E+05	4.5E+05	5.8E+04
Zinc (Metallic)	007440-66-6			5.2E+02	5.2E+01			3.2E+02	3.2E+01			5.5E+02	7.1E+01	5.5E+01	7.1E+00
Zinc Cyanide	000557-21-1														
Zinc Phosphide	001314-84-7														

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	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child
Zincb	012122-67-7														
Zirconium	007440-67-7														

Notes:

- * By definition, 1 kg = 1.0E + 06 mg. Therefore, a limit of 1.0E + 06 mg/kg was used for any PRG that was calculated to be above this limit.
- (1) The same oral slope factor as used for polychlorinated biphenyls.
 - (2) The PRG was calculated considering *Supplemental Guidance from RAGS: Region 4 Bulletins, Human Health Risk Assessment* (Interim 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.
 - (3) The toxicity values for trichloroethylene have been withdrawn from IRIS and HEAST pending further investigation. However, the most recent toxicity values have been used to calculate the PRG.
 - (4) The PRG was calculated considering *Supplemental Guidance from RAGS: Region 4 Bulletins, Human Health Risk Assessment* (Interim Guidance) from EPA (November 1995). The slope factors for chemicals so marked indicate that a TEF methodology was used for chlorinated dioxin and furan congeners based on each compound's relative potency to the potency of 2,3,7,8-tetrachlorodibenzodioxin (TCDD). The following TEFs were used to convert each slope factor to an equivalent slope factor of 2,3,7,8-TCDD: (1) 2,3,7,8-TCDD, TEF = 1.0; (2) 2,3,7,8-PeCDD, TEF = 0.5; (3) 2,3,7,8-HxCDD, TEF = 0.1; (4) 2,3,7,8-HpCDD, TEF = 0.01; (5) OCDD, TEF = 0.001; (6) 2,3,7,8-TCDF, TEF = 0.1; (7) 1,2,3,7,8-PeCDF, TEF = 0.5; (8) 2,3,4,7,8-PeCDF, TEF = 0.05; (9) 2,3,7,8-HxCDF, TEF = 0.1; (10) 2,3,7,8-HpCDF, TEF = 0.01; and (11) OCDF, TEF = 0.001.
 - (5) Toxicity values for these chemicals have been withdrawn from IRIS and HEAST pending further investigation. However, the most recent toxicity values have been used to calculate the PRG.
 - (6) Toxicity values for these chemicals were obtained from the Superfund Health Risk Technical Support Center.

1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100.

Table 3.3d. Risk-based Preliminary Remediation Goals for radionuclides in soil or sediment (agricultural scenario)

| 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 |
| Ac-225 | 014265-85-1 | 3.2E+00 | 3.2E-02 | 1.4E+04 | 1.4E+02 | 2.8E+03 | 2.8E+01 |
| Ac-227 | 014952-40-0 | 1.3E+00 | 1.3E-02 | 5.5E+03 | 5.5E+01 | 1.1E+03 | 1.1E+01 |
| Ac-227+D | 014952-40-0 | 6.8E-01 | 6.8E-03 | 9.7E-01 | 9.7E-03 | 3.2E-01 | 3.2E-03 |
| Ac-228 | 014331-83-0 | 2.8E+02 | 2.8E+00 | 1.2E+06 | 1.2E+04 | 2.5E+05 | 2.5E+03 |
| Ag-105 | 014928-14-4 | 2.8E+02 | 2.8E+00 | 2.9E+03 | 2.9E+01 | 2.6E+04 | 2.6E+02 |
| Ag-108 | 014391-65-2 | 6.6E+04 | 6.6E+02 | 6.7E+05 | 6.7E+03 | 6.1E+06 | 6.1E+04 |
| Ag-108m | 014391-65-2 | 7.6E+01 | 7.6E-01 | 7.7E+02 | 7.7E+00 | 7.0E+03 | 7.0E+01 |
| Ag-108m+D | 014391-65-2 | 7.6E+01 | 7.6E-01 | 7.7E+02 | 7.7E+00 | 7.0E+03 | 7.0E+01 |
| Ag-109m | 014378-38-2 | 1.7E+06 | 1.7E+04 | 1.7E+07 | 1.7E+05 | 1.6E+08 | 1.6E+06 |
| Ag-110 | 014391-76-5 | 1.9E+05 | 1.9E+03 | 1.9E+06 | 1.9E+04 | 1.7E+07 | 1.7E+05 |
| Ag-110m | 014391-76-5 | 5.4E+01 | 5.4E-01 | 5.5E+02 | 5.5E+00 | 5.0E+03 | 5.0E+01 |
| Ag-111 | 015760-04-0 | 6.7E+01 | 6.7E-01 | 6.8E+02 | 6.8E+00 | 6.2E+03 | 6.2E+01 |
| Am-241 | 014596-10-2 | 1.4E+00 | 1.4E-02 | 3.7E+03 | 3.7E+01 | 1.6E+04 | 1.6E+02 |
| Am-242 | 013981-54-9 | 3.1E+02 | 3.1E+00 | 8.2E+05 | 8.2E+03 | 3.6E+06 | 3.6E+04 |
| Am-242m | 013981-54-9 | 1.6E+00 | 1.6E-02 | 4.1E+03 | 4.1E+01 | 1.8E+04 | 1.8E+02 |
| Am-243 | 014993-75-0 | 1.4E+00 | 1.4E-02 | 3.7E+03 | 3.7E+01 | 1.6E+04 | 1.6E+02 |
| Am-243+D | 014993-75-0 | 1.4E+00 | 1.4E-02 | 1.2E+02 | 1.2E+00 | 3.1E+03 | 3.1E+01 |

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 |
| Ar-41 | 014163-25-8 | | | | | | |
| At-217 | 017239-90-6 | 2.6E+07 | 2.6E+05 | 1.6E+08 | 1.6E+06 | 2.3E+07 | 2.3E+05 |
| Au-196 | 014914-16-0 | 2.5E+02 | 2.5E+00 | 3.7E+03 | 3.7E+01 | 2.9E+05 | 2.9E+03 |
| Au-198 | 010043-49-0 | 6.3E+01 | 6.3E-01 | 9.2E+02 | 9.2E+00 | 7.2E+04 | 7.2E+02 |
| Ba-131 | 014914-75-1 | 2.7E+02 | 2.7E+00 | 1.1E+05 | 1.1E+03 | 7.7E+03 | 7.7E+01 |
| Ba-133 | 013981-41-4 | 1.7E+02 | 1.7E+00 | 7.2E+04 | 7.2E+02 | 4.9E+03 | 4.9E+01 |
| Ba-133m | 013981-41-4 | 1.6E+02 | 1.6E+00 | 7.0E+04 | 7.0E+02 | 4.7E+03 | 4.7E+01 |
| Ba-137m | 013981-97-0 | 1.9E+05 | 1.9E+03 | 8.0E+07 | 8.0E+05 | 5.4E+06 | 5.4E+04 |
| Ba-139 | 014378-25-7 | 1.5E+03 | 1.5E+01 | 6.4E+05 | 6.4E+03 | 4.3E+04 | 4.3E+02 |
| Ba-140 | 014798-08-4 | 3.8E+01 | 3.8E-01 | 1.6E+04 | 1.6E+02 | 1.1E+03 | 1.1E+01 |
| Be-7 | 013966-02-4 | 5.2E+03 | 5.2E+01 | 5.5E+05 | 5.5E+03 | 1.0E+08 | 1.0E+06 |
| Bi-206 | 015776-19-9 | 6.2E+01 | 6.2E-01 | 1.6E+04 | 1.6E+02 | 2.1E+03 | 2.1E+01 |
| Bi-207 | 013982-38-2 | 8.8E+01 | 8.8E-01 | 2.2E+04 | 2.2E+02 | 2.9E+03 | 2.9E+01 |
| Bi-210 | 014331-79-4 | 6.1E+01 | 6.1E-01 | 1.5E+04 | 1.5E+02 | 2.0E+03 | 2.0E+01 |
| Bi-211 | 015229-37-5 | 2.4E+04 | 2.4E+02 | 6.1E+06 | 6.1E+04 | 8.1E+05 | 8.1E+03 |
| Bi-212 | 014913-49-6 | 7.1E+02 | 7.1E+00 | 1.8E+05 | 1.8E+03 | 2.4E+04 | 2.4E+02 |
| Bi-213 | 015776-20-2 | 1.0E+03 | 1.0E+01 | 2.5E+05 | 2.5E+03 | 3.3E+04 | 3.3E+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 |
| Bi-214 | 014733-03-0 | 2.3E+03 | 2.3E+01 | 5.7E+05 | 5.7E+03 | 7.5E+04 | 7.5E+02 |
| Br-82 | 014686-69-2 | 1.3E+02 | 1.3E+00 | 2.9E+02 | 2.9E+00 | 5.4E+01 | 5.4E-01 |
| C-11 | 014333-33-6 | | | | | | |
| C-14 | 014762-75-5 | | | | | | |
| C-15 | 015929-23-4 | | | | | | |
| Ca-45 | 013966-05-7 | 5.2E+01 | 5.2E-01 | 1.2E+03 | 1.2E+01 | 1.2E+02 | 1.2E+00 |
| Ca-47 | 001439-99-2 | 1.6E+01 | 1.6E-01 | 3.8E+02 | 3.8E+00 | 3.7E+01 | 3.7E-01 |
| Cd-109 | 014109-32-1 | 3.7E+01 | 3.7E-01 | 6.4E+03 | 6.4E+01 | 3.9E+02 | 3.9E+00 |
| Cd-115 | 014336-68-6 | 4.1E+01 | 4.1E-01 | 7.0E+03 | 7.0E+01 | 4.3E+02 | 4.3E+00 |
| Cd-115m | 014336-68-6 | 2.1E+01 | 2.1E-01 | 3.6E+03 | 3.6E+01 | 2.2E+02 | 2.2E+00 |
| Ce-141 | 013967-74-3 | 1.2E+02 | 1.2E+00 | 5.5E+05 | 5.5E+03 | 6.0E+04 | 6.0E+02 |
| Ce-143 | 014119-19-8 | 7.7E+01 | 7.7E-01 | 3.6E+05 | 3.6E+03 | 4.0E+04 | 4.0E+02 |
| Ce-144 | 014762-78-8 | 1.5E+01 | 1.5E-01 | 7.3E+04 | 7.3E+02 | 8.0E+03 | 8.0E+01 |
| Ce-144+D | 014762-78-8 | 1.5E+01 | 1.5E-01 | 2.2E+03 | 2.2E+01 | 3.1E+03 | 3.1E+01 |
| Cl-36 | 013981-43-6 | 3.0E+00 | 3.0E-02 | 6.2E+00 | 6.2E-02 | 1.1E+00 | 1.1E-02 |
| Cl-38 | 014158-34-0 | 3.2E+01 | 3.2E-01 | 6.7E+01 | 6.7E-01 | 1.2E+01 | 1.2E-01 |
| Cm-242 | 015510-73-3 | 1.2E+01 | 1.2E-01 | 6.3E+04 | 6.3E+02 | 5.2E+05 | 5.2E+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 |
| Cm-243 | 015757-87-6 | 1.8E+00 | 1.8E-02 | 9.6E+03 | 9.6E+01 | 8.0E+04 | 8.0E+02 |
| Cm-243+D | 015757-87-6 | 1.7E+00 | 1.7E-02 | 1.9E+00 | 1.9E-02 | 2.7E+00 | 2.7E-02 |
| Cm-244 | 013981-15-2 | 2.2E+00 | 2.2E-02 | 1.1E+04 | 1.1E+02 | 9.5E+04 | 9.5E+02 |
| Cm-245 | 015621-76-8 | 1.4E+00 | 1.4E-02 | 7.2E+03 | 7.2E+01 | 6.0E+04 | 6.0E+02 |
| Cm-246 | 015757-90-1 | 1.4E+00 | 1.4E-02 | 7.3E+03 | 7.3E+01 | 6.1E+04 | 6.1E+02 |
| Cm-247 | 015758-32-4 | 1.5E+00 | 1.5E-02 | 7.8E+03 | 7.8E+01 | 6.5E+04 | 6.5E+02 |
| Cm-248 | 015758-33-5 | 3.5E-01 | 3.5E-03 | 1.8E+03 | 1.8E+01 | 1.5E+04 | 1.5E+02 |
| Co-57 | 013981-50-5 | 4.3E+02 | 4.3E+00 | 4.4E+05 | 4.4E+03 | 1.0E+05 | 1.0E+03 |
| Co-58 | 013981-38-9 | 1.5E+02 | 1.5E+00 | 1.5E+05 | 1.5E+03 | 3.5E+04 | 3.5E+02 |
| Co-58m | 013981-38-9 | 4.4E+03 | 4.4E+01 | 4.5E+06 | 4.5E+04 | 1.1E+06 | 1.1E+04 |
| Co-60 | 010198-40-0 | 2.2E+01 | 2.2E-01 | 2.3E+04 | 2.3E+02 | 5.3E+03 | 5.3E+01 |
| Cr-51 | 014392-02-0 | 3.3E+03 | 3.3E+01 | 3.6E+04 | 3.6E+02 | 5.3E+06 | 5.3E+04 |
| Cs-131 | 014914-76-2 | 2.4E+03 | 2.4E+01 | 4.2E+03 | 4.2E+01 | 4.3E+03 | 4.3E+01 |
| Cs-134 | 013967-70-9 | 9.2E+00 | 9.2E-02 | 1.6E+01 | 1.6E-01 | 1.6E+01 | 1.6E-01 |
| Cs-134m | 013967-70-9 | 9.6E+03 | 9.6E+01 | 1.7E+04 | 1.7E+02 | 1.7E+04 | 1.7E+02 |
| Cs-135 | 015726-30-4 | 9.6E+01 | 9.6E-01 | 1.7E+02 | 1.7E+00 | 1.7E+02 | 1.7E+00 |
| Cs-136 | 014234-29-8 | 5.6E+01 | 5.6E-01 | 9.8E+01 | 9.8E-01 | 1.0E+02 | 1.0E+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 |
| Cs-137 | 010045-97-3 | 1.4E+01 | 1.4E-01 | 2.4E+01 | 2.4E-01 | 2.5E+01 | 2.5E-01 |
| Cs-137+D | 010045-97-3 | 1.4E+01 | 1.4E-01 | 2.0E+01 | 2.0E-01 | 1.9E+01 | 1.9E-01 |
| Cs-138 | 015758-29-9 | 2.5E+03 | 2.5E+01 | 4.3E+03 | 4.3E+01 | 4.4E+03 | 4.4E+01 |
| Cu-64 | 013981-25-4 | 6.7E+02 | 6.7E+00 | 3.4E+03 | 3.4E+01 | 3.1E+03 | 3.1E+01 |
| Dy-165 | 013967-64-1 | 1.4E+03 | 1.4E+01 | 2.6E+04 | 2.6E+02 | 1.2E+06 | 1.2E+04 |
| Dy-166 | 015840-01-4 | 4.8E+01 | 4.8E-01 | 9.1E+02 | 9.1E+00 | 4.2E+04 | 4.2E+02 |
| Er-169 | 015840-13-8 | 2.1E+02 | 2.1E+00 | 5.6E+03 | 5.6E+01 | 1.8E+05 | 1.8E+03 |
| Er-171 | 014391-45-8 | 2.8E+02 | 2.8E+00 | 7.3E+03 | 7.3E+01 | 2.4E+05 | 2.4E+03 |
| Eu-152 | 014683-23-9 | 7.9E+01 | 7.9E-01 | 3.8E+03 | 3.8E+01 | 2.1E+04 | 2.1E+02 |
| Eu-154 | 015585-10-1 | 4.8E+01 | 4.8E-01 | 2.3E+03 | 2.3E+01 | 1.3E+04 | 1.3E+02 |
| Eu-155 | 014391-16-3 | 2.8E+02 | 2.8E+00 | 1.3E+04 | 1.3E+02 | 7.1E+04 | 7.1E+02 |
| Eu-156 | 014280-35-4 | 4.2E+01 | 4.2E-01 | 2.0E+03 | 2.0E+01 | 1.1E+04 | 1.1E+02 |
| F-18 | 013981-56-1 | 4.0E+03 | 4.0E+01 | 2.6E+03 | 2.6E+01 | 6.3E+04 | 6.3E+02 |
| Fe-55 | 014681-59-5 | 1.3E+03 | 1.3E+01 | 6.7E+03 | 6.7E+01 | 7.4E+05 | 7.4E+03 |
| Fe-59 | 014596-12-4 | 7.8E+01 | 7.8E-01 | 4.0E+02 | 4.0E+00 | 4.5E+04 | 4.5E+02 |
| Fr-221 | 015756-41-9 | 3.1E+03 | 3.1E+01 | 1.2E+05 | 1.2E+03 | 2.6E+03 | 2.6E+01 |
| Fr-223 | 015756-98-6 | 1.0E+03 | 1.0E+01 | 4.0E+04 | 4.0E+02 | 8.3E+02 | 8.3E+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 |
| Ga-67 | 014119-09-6 | 5.4E+02 | 5.4E+00 | 1.9E+05 | 1.9E+03 | 9.4E+05 | 9.4E+03 |
| Ga-72 | 013982-22-4 | 9.5E+01 | 9.5E-01 | 3.3E+04 | 3.3E+02 | 1.6E+05 | 1.6E+03 |
| Gd-153 | 014276-65-4 | 3.4E+02 | 3.4E+00 | 1.6E+04 | 1.6E+02 | 8.9E+04 | 8.9E+02 |
| Gd-159 | 014041-42-0 | 1.7E+02 | 1.7E+00 | 8.3E+03 | 8.3E+01 | 4.5E+04 | 4.5E+02 |
| Ge-71 | 014374-81-3 | 2.8E+04 | 2.8E+02 | 2.9E+03 | 2.9E+01 | 4.6E+03 | 4.6E+01 |
| H-3 | 010028-17-8 | | | | | | |
| Hg-197 | 013981-51-6 | 1.8E+02 | 1.8E+00 | 1.2E+03 | 1.2E+01 | 3.8E+03 | 3.8E+01 |
| Hg-203 | 013982-78-0 | 8.1E+01 | 8.1E-01 | 5.3E+02 | 5.3E+00 | 1.7E+03 | 1.7E+01 |
| Ho-166 | 013967-65-2 | 6.0E+01 | 6.0E-01 | 1.4E+03 | 1.4E+01 | 5.2E+04 | 5.2E+02 |
| I-122 | 018287-75-7 | 2.1E+04 | 2.1E+02 | 5.6E+04 | 5.6E+02 | 3.7E+04 | 3.7E+02 |
| I-123 | 015715-08-9 | 8.4E+02 | 8.4E+00 | 2.2E+03 | 2.2E+01 | 1.5E+03 | 1.5E+01 |
| I-125 | 014158-31-7 | 1.8E+01 | 1.8E-01 | 4.7E+01 | 4.7E-01 | 3.1E+01 | 3.1E-01 |
| I-126 | 014158-32-8 | 9.4E+00 | 9.4E-02 | 2.5E+01 | 2.5E-01 | 1.7E+01 | 1.7E-01 |
| I-129 | 015046-84-1 | 2.5E+00 | 2.5E-02 | 6.5E+00 | 6.5E-02 | 4.3E+00 | 4.3E-02 |
| I-130 | 014914-02-4 | 9.4E+01 | 9.4E-01 | 2.5E+02 | 2.5E+00 | 1.6E+02 | 1.6E+00 |
| I-131 | 010043-66-0 | 1.3E+01 | 1.3E-01 | 3.3E+01 | 3.3E-01 | 2.2E+01 | 2.2E-01 |
| I-132 | 014683-16-0 | 6.9E+02 | 6.9E+00 | 1.8E+03 | 1.8E+01 | 1.2E+03 | 1.2E+01 |

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-133 | 014834-67-4 | 4.3E+01 | 4.3E-01 | 1.1E+02 | 1.1E+00 | 7.5E+01 | 7.5E-01 |
| I-134 | 014914-27-3 | 2.0E+03 | 2.0E+01 | 5.2E+03 | 5.2E+01 | 3.5E+03 | 3.5E+01 |
| I-135 | 014834-68-5 | 2.0E+02 | 2.0E+00 | 5.3E+02 | 5.3E+00 | 3.5E+02 | 3.5E+00 |
| In-113m | 014885-78-0 | 5.5E+03 | 5.5E+01 | 1.4E+05 | 1.4E+03 | 4.7E+05 | 4.7E+03 |
| In-114 | 013981-55-0 | 1.0E+05 | 1.0E+03 | 2.6E+06 | 2.6E+04 | 8.7E+06 | 8.7E+04 |
| In-114m | 013981-55-0 | 2.2E+01 | 2.2E-01 | 5.7E+02 | 5.7E+00 | 1.9E+03 | 1.9E+01 |
| In-115 | 014191-71-0 | 1.3E+01 | 1.3E-01 | 3.4E+02 | 3.4E+00 | 1.1E+03 | 1.1E+01 |
| In-115m | 014191-71-0 | 1.3E+03 | 1.3E+01 | 3.5E+04 | 3.5E+02 | 1.1E+05 | 1.1E+03 |
| Ir-190 | 014981-91-0 | 8.3E+01 | 8.3E-01 | 3.3E+03 | 3.3E+01 | 5.2E+05 | 5.2E+03 |
| Ir-194 | 014158-35-1 | 5.9E+01 | 5.9E-01 | 2.3E+03 | 2.3E+01 | 3.7E+05 | 3.7E+03 |
| K-40 | 013966-00-2 | 1.7E+01 | 1.7E-01 | 2.3E+01 | 2.3E-01 | 9.4E+00 | 9.4E-02 |
| K-42 | 014378-21-3 | 1.6E+02 | 1.6E+00 | 2.2E+02 | 2.2E+00 | 9.2E+01 | 9.2E-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 | | | | | | |

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 |
| Kr-89 | 016316-03-3 | | | | | | |
| Kr-90 | 015741-13-6 | | | | | | |
| La-140 | 013981-28-7 | 4.8E+01 | 4.8E-01 | 1.7E+04 | 1.7E+02 | 4.2E+04 | 4.2E+02 |
| Lu-177 | 014265-75-9 | 1.5E+02 | 1.5E+00 | 3.6E+03 | 3.6E+01 | 1.3E+05 | 1.3E+03 |
| Mn-52 | 014092-99-0 | 6.0E+01 | 6.0E-01 | 6.0E+03 | 6.0E+01 | 1.5E+04 | 1.5E+02 |
| Mn-54 | 013966-31-9 | 1.8E+02 | 1.8E+00 | 1.8E+04 | 1.8E+02 | 4.7E+04 | 4.7E+02 |
| Mn-56 | 014681-52-8 | 4.2E+02 | 4.2E+00 | 4.2E+04 | 4.2E+02 | 1.1E+05 | 1.1E+03 |
| Mo-99 | 014119-15-4 | 1.5E+02 | 1.5E+00 | 1.1E+04 | 1.1E+02 | 9.8E+02 | 9.8E+00 |
| Na-22 | 013966-32-0 | 5.1E+01 | 5.1E-01 | 5.1E+01 | 5.1E-01 | 4.0E+01 | 4.0E-01 |
| Na-24 | 013982-04-2 | 3.0E+02 | 3.0E+00 | 2.9E+02 | 2.9E+00 | 2.3E+02 | 2.3E+00 |
| Nb-93m | 007440-03-1 | 6.8E+02 | 6.8E+00 | 2.0E+08 | 2.0E+06 | 2.3E+07 | 2.3E+05 |
| Nb-94 | 014681-63-1 | 6.5E+01 | 6.5E-01 | 1.9E+07 | 1.9E+05 | 2.2E+06 | 2.2E+04 |
| Nb-95 | 013967-76-5 | 2.0E+02 | 2.0E+00 | 5.8E+07 | 5.8E+05 | 6.8E+06 | 6.8E+04 |
| Nb-95m | 013967-76-5 | 1.5E+02 | 1.5E+00 | 4.2E+07 | 4.2E+05 | 5.0E+06 | 5.0E+04 |
| Nb-97 | 018496-04-3 | 2.6E+03 | 2.6E+01 | 7.4E+08 | 7.4E+06 | 8.8E+07 | 8.8E+05 |
| Nb-97m | 018496-04-3 | 1.4E+05 | 1.4E+03 | 4.0E+10 | 4.0E+08 | 4.7E+09 | 4.7E+07 |
| Nd-147 | 014269-74-0 | 7.7E+01 | 7.7E-01 | 2.6E+04 | 2.6E+02 | 6.5E+04 | 6.5E+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 |
| Nd-149 | 015749-81-2 | 1.0E+03 | 1.0E+01 | 3.4E+05 | 3.4E+03 | 8.4E+05 | 8.4E+03 |
| Ni-59 | 014336-70-0 | 2.1E+03 | 2.1E+01 | 3.6E+04 | 3.6E+02 | 1.8E+03 | 1.8E+01 |
| Ni-63 | 013981-37-8 | 7.0E+02 | 7.0E+00 | 1.2E+04 | 1.2E+02 | 6.1E+02 | 6.1E+00 |
| Ni-65 | 014833-49-9 | 6.8E+02 | 6.8E+00 | 1.2E+04 | 1.2E+02 | 5.9E+02 | 5.9E+00 |
| Np-236 | 015700-36-4 | 4.9E+02 | 4.9E+00 | 4.4E+04 | 4.4E+02 | 1.4E+06 | 1.4E+04 |
| Np-237 | 013994-20-2 | 1.5E+00 | 1.5E-02 | 1.4E+02 | 1.4E+00 | 4.6E+03 | 4.6E+01 |
| Np-237+D | 013994-20-2 | 1.5E+00 | 1.5E-02 | 1.4E+02 | 1.4E+00 | 2.2E+03 | 2.2E+01 |
| Np-238 | 015766-25-3 | 9.9E+01 | 9.9E-01 | 9.1E+03 | 9.1E+01 | 3.0E+05 | 3.0E+03 |
| Np-239 | 013968-59-7 | 1.1E+02 | 1.1E+00 | 9.7E+03 | 9.7E+01 | 3.2E+05 | 3.2E+03 |
| Np-240 | 015690-84-3 | 2.6E+03 | 2.6E+01 | 2.3E+05 | 2.3E+03 | 7.6E+06 | 7.6E+04 |
| Np-240m | 015690-84-3 | 1.9E+04 | 1.9E+02 | 1.7E+06 | 1.7E+04 | 5.6E+07 | 5.6E+05 |
| Os-185 | 015766-50-4 | 2.5E+02 | 2.5E+00 | 6.5E+01 | 6.5E-01 | 8.6E+02 | 8.6E+00 |
| Os-191 | 014119-24-5 | 1.5E+02 | 1.5E+00 | 3.8E+01 | 3.8E-01 | 5.1E+02 | 5.1E+00 |
| Os-191m | 014119-24-5 | 9.1E+02 | 9.1E+00 | 2.4E+02 | 2.4E+00 | 3.1E+03 | 3.1E+01 |
| Os-193 | 016057-77-5 | 1.0E+02 | 1.0E+00 | 2.7E+01 | 2.7E-01 | 3.5E+02 | 3.5E+00 |
| P-32 | 014596-37-3 | 1.5E+01 | 1.5E-01 | 1.9E+01 | 1.9E-01 | 8.7E+00 | 8.7E-02 |
| P-33 | 015749-66-3 | 1.2E+02 | 1.2E+00 | 1.5E+02 | 1.5E+00 | 6.8E+01 | 6.8E-01 |

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 |
| Pa-231 | 014331-85-2 | 3.1E+00 | 3.1E-02 | 3.2E+04 | 3.2E+02 | 1.1E+04 | 1.1E+02 |
| Pa-233 | 013981-14-1 | 9.7E+01 | 9.7E-01 | 1.0E+06 | 1.0E+04 | 3.4E+05 | 3.4E+03 |
| Pa-234 | 015100-28-4 | 2.1E+02 | 2.1E+00 | 2.3E+06 | 2.3E+04 | 7.5E+05 | 7.5E+03 |
| Pa-234m | 015100-28-4 | 9.6E+04 | 9.6E+02 | 1.0E+09 | 1.0E+07 | 3.4E+08 | 3.4E+06 |
| Pb-203 | 014687-25-3 | 4.4E+02 | 4.4E+00 | 9.6E+04 | 9.6E+02 | 2.1E+04 | 2.1E+02 |
| Pb-209 | 014119-30-3 | 2.2E+03 | 2.2E+01 | 4.7E+05 | 4.7E+03 | 1.0E+05 | 1.0E+03 |
| Pb-210 | 014255-04-0 | 6.8E-01 | 6.8E-03 | 1.5E+02 | 1.5E+00 | 3.2E+01 | 3.2E-01 |
| Pb-210+D | 014255-04-0 | 4.4E-01 | 4.4E-03 | 5.4E+00 | 5.4E-02 | 4.4E+00 | 4.4E-02 |
| Pb-211 | 015816-77-0 | 1.4E+03 | 1.4E+01 | 2.9E+05 | 2.9E+03 | 6.3E+04 | 6.3E+02 |
| Pb-212 | 015092-94-1 | 2.5E+01 | 2.5E-01 | 5.5E+03 | 5.5E+01 | 1.2E+03 | 1.2E+01 |
| Pb-214 | 015067-28-4 | 1.6E+03 | 1.6E+01 | 3.4E+05 | 3.4E+03 | 7.3E+04 | 7.3E+02 |
| Pd-100 | 015690-69-4 | 1.1E+02 | 1.1E+00 | 2.4E+03 | 2.4E+01 | 1.5E+02 | 1.5E+00 |
| Pd-101 | 015749-54-9 | 1.1E+03 | 1.1E+01 | 2.4E+04 | 2.4E+02 | 1.5E+03 | 1.5E+01 |
| Pd-103 | 014967-68-1 | 3.8E+02 | 3.8E+00 | 8.4E+03 | 8.4E+01 | 5.4E+02 | 5.4E+00 |
| Pd-107 | 017637-99-9 | 1.9E+03 | 1.9E+01 | 4.2E+04 | 4.2E+02 | 2.7E+03 | 2.7E+01 |
| Pd-109 | 014981-64-7 | 1.2E+02 | 1.2E+00 | 2.7E+03 | 2.7E+01 | 1.7E+02 | 1.7E+00 |
| Pm-147 | 014380-75-7 | 3.2E+02 | 3.2E+00 | 6.7E+03 | 6.7E+01 | 2.8E+05 | 2.8E+03 |

Radionuclides/soil or sediment/agricultural

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-148 | 014683-19-3 | 3.1E+01 | 3.1E-01 | 6.6E+02 | 6.6E+00 | 2.7E+04 | 2.7E+02 |
| Pm-148m | 014683-19-3 | 4.6E+01 | 4.6E-01 | 9.5E+02 | 9.5E+00 | 3.9E+04 | 3.9E+02 |
| Pm-149 | 015765-31-8 | 8.2E+01 | 8.2E-01 | 1.7E+03 | 1.7E+01 | 7.1E+04 | 7.1E+02 |
| Po-210 | 013981-52-7 | 1.4E+00 | 1.4E-02 | 2.4E+01 | 2.4E-01 | 5.8E+01 | 5.8E-01 |
| Po-212 | 015389-34-1 | 1.0E+13 | 1.0E+11 | 1.8E+14 | 1.8E+12 | 4.2E+14 | 4.2E+12 |
| Po-213 | 015756-57-7 | 6.8E+11 | 6.8E+09 | 1.2E+13 | 1.2E+11 | 2.8E+13 | 2.8E+11 |
| Po-214 | 015735-67-8 | 2.2E+10 | 2.2E+08 | 3.7E+11 | 3.7E+09 | 8.9E+11 | 8.9E+09 |
| Po-215 | 015706-52-2 | 9.2E+08 | 9.2E+06 | 1.6E+10 | 1.6E+08 | 3.8E+10 | 3.8E+08 |
| Po-216 | 015756-58-8 | 5.2E+06 | 5.2E+04 | 9.0E+07 | 9.0E+05 | 2.2E+08 | 2.2E+06 |
| Po-218 | 015422-24-9 | 9.0E+03 | 9.0E+01 | 1.6E+05 | 1.6E+03 | 3.7E+05 | 3.7E+03 |
| Pr-142 | 014191-64-1 | 6.5E+01 | 6.5E-01 | 2.2E+04 | 2.2E+02 | 5.5E+04 | 5.5E+02 |
| Pr-143 | 014981-79-4 | 6.9E+01 | 6.9E-01 | 2.3E+04 | 2.3E+02 | 5.8E+04 | 5.8E+02 |
| Pr-144 | 014119-05-2 | 5.6E+03 | 5.6E+01 | 1.9E+06 | 1.9E+04 | 4.7E+06 | 4.7E+04 |
| Pr-144m | 014119-05-2 | 1.4E+04 | 1.4E+02 | 4.8E+06 | 4.8E+04 | 1.2E+07 | 1.2E+05 |
| Pt-191 | 015706-36-2 | 2.8E+02 | 2.8E+00 | 6.5E+03 | 6.5E+01 | 8.5E+02 | 8.5E+00 |
| Pt-193 | 015735-70-3 | 2.6E+03 | 2.6E+01 | 6.1E+04 | 6.1E+02 | 7.8E+03 | 7.8E+01 |
| Pt-193m | 015735-70-3 | 1.7E+02 | 1.7E+00 | 3.9E+03 | 3.9E+01 | 5.1E+02 | 5.1E+00 |

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 |
| Pt-197 | 015735-74-7 | 2.0E+02 | 2.0E+00 | 4.6E+03 | 4.6E+01 | 6.0E+02 | 6.0E+00 |
| Pt-197m | 015735-74-7 | 1.3E+03 | 1.3E+01 | 3.0E+04 | 3.0E+02 | 3.9E+03 | 3.9E+01 |
| Pu-236 | 015411-92-4 | 6.0E+00 | 6.0E-02 | 6.3E+04 | 6.3E+02 | 9.5E+04 | 9.5E+02 |
| Pu-238 | 013981-16-3 | 1.6E+00 | 1.6E-02 | 1.6E+04 | 1.6E+02 | 2.5E+04 | 2.5E+02 |
| Pu-239 | 015117-48-3 | 1.4E+00 | 1.4E-02 | 1.5E+04 | 1.5E+02 | 2.3E+04 | 2.3E+02 |
| Pu-240 | 014119-33-6 | 1.5E+00 | 1.5E-02 | 1.5E+04 | 1.5E+02 | 2.3E+04 | 2.3E+02 |
| Pu-241 | 014119-32-5 | 8.8E+01 | 8.8E-01 | 9.3E+05 | 9.3E+03 | 1.4E+06 | 1.4E+04 |
| Pu-241+D | 014119-32-5 | 1.4E+00 | 1.4E-02 | 3.9E+02 | 3.9E+00 | 5.6E+01 | 5.6E-01 |
| Pu-242 | 013982-10-0 | 1.5E+00 | 1.5E-02 | 1.6E+04 | 1.6E+02 | 2.4E+04 | 2.4E+02 |
| Pu-243 | 015706-37-3 | 1.2E+03 | 1.2E+01 | 1.3E+07 | 1.3E+05 | 2.0E+07 | 2.0E+05 |
| Pu-244 | 014119-34-7 | 1.5E+00 | 1.5E-02 | 1.5E+04 | 1.5E+02 | 2.3E+04 | 2.3E+02 |
| Pu-244+D | 014119-34-7 | 1.4E+00 | 1.4E-02 | 9.4E+01 | 9.4E-01 | 4.9E+01 | 4.9E-01 |
| Ra-223 | 015623-45-7 | 1.9E+00 | 1.9E-02 | 1.9E+02 | 1.9E+00 | 2.2E+01 | 2.2E-01 |
| Ra-224 | 013233-32-4 | 3.0E+00 | 3.0E-02 | 3.0E+02 | 3.0E+00 | 3.4E+01 | 3.4E-01 |
| Ra-225 | 013981-53-8 | 2.8E+00 | 2.8E-02 | 2.9E+02 | 2.9E+00 | 3.2E+01 | 3.2E-01 |
| Ra-226 | 013982-63-3 | 1.5E+00 | 1.5E-02 | 1.5E+02 | 1.5E+00 | 1.7E+01 | 1.7E-01 |
| Ra-226+D | 013982-63-3 | 1.4E+00 | 1.4E-02 | 7.2E+00 | 7.2E-02 | 4.7E+00 | 4.7E-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 |
| Ra-228 | 015262-20-1 | 1.8E+00 | 1.8E-02 | 1.8E+02 | 1.8E+00 | 2.1E+01 | 2.1E-01 |
| Ra-228+D | 015262-20-1 | 1.8E+00 | 1.8E-02 | 1.8E+02 | 1.8E+00 | 2.0E+01 | 2.0E-01 |
| Rb-82 | 014391-63-0 | 3.2E+04 | 3.2E+02 | 1.4E+05 | 1.4E+03 | 1.8E+04 | 1.8E+02 |
| Rb-86 | 014932-53-7 | 4.8E+01 | 4.8E-01 | 2.1E+02 | 2.1E+00 | 2.7E+01 | 2.7E-01 |
| Rb-87 | 013982-13-3 | 9.2E+01 | 9.2E-01 | 4.1E+02 | 4.1E+00 | 5.2E+01 | 5.2E-01 |
| Rb-88 | 014928-36-0 | 2.3E+03 | 2.3E+01 | 1.0E+04 | 1.0E+02 | 1.3E+03 | 1.3E+01 |
| Rb-89 | 014191-65-2 | 3.9E+03 | 3.9E+01 | 1.7E+04 | 1.7E+02 | 2.2E+03 | 2.2E+01 |
| Rh-103m | 007440-16-6 | 4.2E+04 | 4.2E+02 | 9.2E+05 | 9.2E+03 | 2.8E+04 | 2.8E+02 |
| Rh-105 | 014913-89-4 | 1.8E+02 | 1.8E+00 | 3.9E+03 | 3.9E+01 | 1.2E+02 | 1.2E+00 |
| Rh-105m | 014913-89-4 | 3.1E+05 | 3.1E+03 | 7.0E+06 | 7.0E+04 | 2.1E+05 | 2.1E+03 |
| Rh-106 | 014234-34-5 | 9.4E+04 | 9.4E+02 | 2.1E+06 | 2.1E+04 | 6.3E+04 | 6.3E+02 |
| Rn-219 | 014835-02-0 | | | | | | |
| Rn-220 | 022481-48-7 | | | | | | |
| Rn-222+D | 014859-67-7 | | | | | | |
| Ru-103 | 013968-53-1 | 1.3E+02 | 1.3E+00 | 1.9E+02 | 1.9E+00 | 4.7E+05 | 4.7E+03 |
| Ru-105 | 014331-95-4 | 3.6E+02 | 3.6E+00 | 5.5E+02 | 5.5E+00 | 1.4E+06 | 1.4E+04 |
| Ru-106 | 013967-48-1 | 1.2E+01 | 1.2E-01 | 1.8E+01 | 1.8E-01 | 4.5E+04 | 4.5E+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 |
| Ru-106+D | 013967-48-1 | 9.2E+00 | 9.2E-02 | 7.1E+00 | 7.1E-02 | 5.7E+00 | 5.7E-02 |
| Ru-97 | 015758-35-7 | 7.1E+02 | 7.1E+00 | 1.1E+03 | 1.1E+01 | 2.7E+06 | 2.7E+04 |
| S-35 | 015117-53-0 | 3.3E+02 | 3.3E+00 | 9.8E+01 | 9.8E-01 | 1.8E+02 | 1.8E+00 |
| Sb-122 | 014374-79-9 | 5.0E+01 | 5.0E-01 | 1.2E+05 | 1.2E+03 | 3.2E+04 | 3.2E+02 |
| Sb-124 | 014683-10-4 | 4.1E+01 | 4.1E-01 | 1.0E+05 | 1.0E+03 | 2.6E+04 | 2.6E+02 |
| Sb-125 | 014234-35-6 | 1.5E+02 | 1.5E+00 | 3.6E+05 | 3.6E+03 | 9.5E+04 | 9.5E+02 |
| Sb-125+D | 014234-35-6 | 3.5E+01 | 3.5E-01 | 1.1E+02 | 1.1E+00 | 2.3E+02 | 2.3E+00 |
| Sb-126 | 015756-32-8 | 4.5E+01 | 4.5E-01 | 1.1E+05 | 1.1E+03 | 2.9E+04 | 2.9E+02 |
| Sb-126m | 015756-32-8 | 6.1E+03 | 6.1E+01 | 1.5E+07 | 1.5E+05 | 3.9E+06 | 3.9E+04 |
| Sb-127 | 013968-50-8 | 5.2E+01 | 5.2E-01 | 1.3E+05 | 1.3E+03 | 3.3E+04 | 3.3E+02 |
| Sb-129 | 014331-88-5 | 2.4E+02 | 2.4E+00 | 5.8E+05 | 5.8E+03 | 1.5E+05 | 1.5E+03 |
| Sc-46 | 013967-63-0 | 7.9E+01 | 7.9E-01 | 4.1E+03 | 4.1E+01 | 2.3E+04 | 2.3E+02 |
| Sc-47 | 014391-96-9 | 1.5E+02 | 1.5E+00 | 8.0E+03 | 8.0E+01 | 4.4E+04 | 4.4E+02 |
| Sc-48 | 014391-86-7 | 6.8E+01 | 6.8E-01 | 3.6E+03 | 3.6E+01 | 2.0E+04 | 2.0E+02 |
| Se-75 | 014265-71-5 | 5.1E+01 | 5.1E-01 | 3.3E+01 | 3.3E-01 | 5.1E+01 | 5.1E-01 |
| Si-31 | 014276-49-4 | 6.8E+02 | 6.8E+00 | 1.3E+06 | 1.3E+04 | 4.0E+05 | 4.0E+03 |
| Sm-147 | 014392-33-7 | 1.8E+01 | 1.8E-01 | 3.8E+02 | 3.8E+00 | 1.6E+04 | 1.6E+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 |
| Sm-151 | 015715-94-3 | 9.9E+02 | 9.9E+00 | 2.1E+04 | 2.1E+02 | 8.5E+05 | 8.5E+03 |
| Sm-153 | 015766-00-4 | 1.1E+02 | 1.1E+00 | 2.4E+03 | 2.4E+01 | 9.8E+04 | 9.8E+02 |
| Sn-113 | 013966-06-8 | 5.7E+01 | 5.7E-01 | 3.8E+02 | 3.8E+00 | 5.7E+02 | 5.7E+00 |
| Sn-121 | 014683-06-8 | 1.7E+02 | 1.7E+00 | 1.1E+03 | 1.1E+01 | 1.7E+03 | 1.7E+01 |
| Sn-121m | 014683-06-8 | 1.1E+02 | 1.1E+00 | 7.0E+02 | 7.0E+00 | 1.1E+03 | 1.1E+01 |
| Sn-125 | 014683-08-0 | 1.3E+01 | 1.3E-01 | 8.3E+01 | 8.3E-01 | 1.3E+02 | 1.3E+00 |
| Sn-126 | 015832-50-5 | 1.0E+01 | 1.0E-01 | 6.6E+01 | 6.6E-01 | 9.9E+01 | 9.9E-01 |
| Sr-82 | 014809-50-8 | 9.9E+00 | 9.9E-02 | 6.3E+01 | 6.3E-01 | 2.7E+01 | 2.7E-01 |
| Sr-85 | 013967-73-2 | 1.8E+02 | 1.8E+00 | 1.2E+03 | 1.2E+01 | 5.0E+02 | 5.0E+00 |
| Sr-85m | 013967-73-2 | 1.4E+04 | 1.4E+02 | 9.0E+04 | 9.0E+02 | 3.9E+04 | 3.9E+02 |
| Sr-89 | 014158-27-1 | 2.5E+01 | 2.5E-01 | 1.6E+02 | 1.6E+00 | 6.8E+01 | 6.8E-01 |
| Sr-90 | 010098-97-2 | 6.3E+00 | 6.3E-02 | 4.0E+01 | 4.0E-01 | 1.7E+01 | 1.7E-01 |
| Sr-90+D | 010098-97-2 | 4.6E+00 | 4.6E-02 | 2.6E+01 | 2.6E-01 | 1.2E+01 | 1.2E-01 |
| Sr-91 | 014331-91-0 | 9.1E+01 | 9.1E-01 | 5.8E+02 | 5.8E+00 | 2.5E+02 | 2.5E+00 |
| Sr-92 | 014928-29-1 | 1.3E+02 | 1.3E+00 | 8.0E+02 | 8.0E+00 | 3.5E+02 | 3.5E+00 |
| Ta-182 | 013982-00-8 | 6.5E+01 | 6.5E-01 | 1.1E+04 | 1.1E+02 | 3.7E+05 | 3.7E+03 |
| Tb-158 | 015759-55-4 | 1.1E+02 | 1.1E+00 | 2.5E+03 | 2.5E+01 | 9.3E+04 | 9.3E+02 |

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 |
| Tb-160 | 013981-29-8 | 6.0E+01 | 6.0E-01 | 1.4E+03 | 1.4E+01 | 5.1E+04 | 5.1E+02 |
| Tc-95 | 014809-56-4 | 8.4E+00 | 8.4E-02 | 3.8E+04 | 3.8E+02 | 3.9E+03 | 3.9E+01 |
| Tc-95m | 014809-56-4 | 4.6E-01 | 4.6E-03 | 2.1E+03 | 2.1E+01 | 2.2E+02 | 2.2E+00 |
| Tc-96 | 014808-44-7 | 2.5E-01 | 2.5E-03 | 1.1E+03 | 1.1E+01 | 1.2E+02 | 1.2E+00 |
| Tc-96m | 014808-44-7 | 2.2E+01 | 2.2E-01 | 9.8E+04 | 9.8E+02 | 1.0E+04 | 1.0E+02 |
| Tc-97 | 015759-35-0 | 3.6E+00 | 3.6E-02 | 1.6E+04 | 1.6E+02 | 1.7E+03 | 1.7E+01 |
| Tc-97m | 015759-35-0 | 4.8E-01 | 4.8E-03 | 2.1E+03 | 2.1E+01 | 2.2E+02 | 2.2E+00 |
| Tc-99 | 014133-76-7 | 4.1E-01 | 4.1E-03 | 1.8E+03 | 1.8E+01 | 1.9E+02 | 1.9E+00 |
| Tc-99m | 014133-76-7 | 1.0E+01 | 1.0E-01 | 4.6E+04 | 4.6E+02 | 4.8E+03 | 4.8E+01 |
| Te-125m | 014390-73-9 | 4.9E+01 | 4.9E-01 | 1.5E+02 | 1.5E+00 | 3.4E+02 | 3.4E+00 |
| Te-127 | 013981-49-2 | 1.5E+02 | 1.5E+00 | 4.4E+02 | 4.4E+00 | 1.0E+03 | 1.0E+01 |
| Te-127m | 013981-49-2 | 2.1E+01 | 2.1E-01 | 6.3E+01 | 6.3E-01 | 1.4E+02 | 1.4E+00 |
| Te-129 | 014269-71-7 | 8.4E+02 | 8.4E+00 | 2.6E+03 | 2.6E+01 | 5.8E+03 | 5.8E+01 |
| Te-129m | 014269-71-7 | 1.1E+01 | 1.1E-01 | 3.2E+01 | 3.2E-01 | 7.4E+01 | 7.4E-01 |
| Te-131 | 014683-12-6 | 3.2E+02 | 3.2E+00 | 9.7E+02 | 9.7E+00 | 2.2E+03 | 2.2E+01 |
| Te-131m | 014683-12-6 | 1.4E+01 | 1.4E-01 | 4.3E+01 | 4.3E-01 | 9.8E+01 | 9.8E-01 |
| Te-132 | 014234-28-7 | 1.0E+01 | 1.0E-01 | 3.1E+01 | 3.1E-01 | 7.1E+01 | 7.1E-01 |

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 |
| Th-227 | 015623-47-9 | 1.1E+01 | 1.1E-01 | 1.2E+04 | 1.2E+02 | 3.9E+04 | 3.9E+02 |
| Th-228 | 014274-82-9 | 7.3E+00 | 7.3E-02 | 7.5E+03 | 7.5E+01 | 2.5E+04 | 2.5E+02 |
| Th-228+D | 014274-82-9 | 1.8E+00 | 1.8E-02 | 2.0E+00 | 2.0E-02 | 3.4E+00 | 3.4E-02 |
| Th-229 | 015594-54-4 | 8.1E+00 | 8.1E-02 | 8.4E+03 | 8.4E+01 | 2.8E+04 | 2.8E+02 |
| Th-229+D | 015594-54-4 | 6.1E-01 | 6.1E-03 | 1.6E+00 | 1.6E-02 | 1.4E-01 | 1.4E-03 |
| Th-230 | 014269-63-7 | 1.2E+01 | 1.2E-01 | 1.3E+04 | 1.3E+02 | 4.2E+04 | 4.2E+02 |
| Th-231 | 014932-40-2 | 2.6E+02 | 2.6E+00 | 2.6E+05 | 2.6E+03 | 8.7E+05 | 8.7E+03 |
| Th-232 | 007440-29-1 | 1.4E+01 | 1.4E-01 | 1.4E+04 | 1.4E+02 | 4.8E+04 | 4.8E+02 |
| Th-234 | 015065-10-8 | 2.4E+01 | 2.4E-01 | 2.4E+04 | 2.4E+02 | 8.1E+04 | 8.1E+02 |
| Tl-202 | 015720-57-7 | 4.5E+02 | 4.5E+00 | 1.2E+03 | 1.2E+01 | 3.9E+03 | 3.9E+01 |
| Tl-204 | 013968-51-9 | 2.3E+02 | 2.3E+00 | 6.1E+02 | 6.1E+00 | 2.0E+03 | 2.0E+01 |
| Tl-208 | 014913-50-9 | 2.6E+04 | 2.6E+02 | 6.9E+04 | 6.9E+02 | 2.3E+05 | 2.3E+03 |
| Tl-209 | 015690-73-0 | 3.3E+04 | 3.3E+02 | 8.6E+04 | 8.6E+02 | 2.8E+05 | 2.8E+03 |
| Tm-170 | 013981-30-1 | 6.0E+01 | 6.0E-01 | 1.4E+03 | 1.4E+01 | 5.2E+04 | 5.2E+02 |
| Tm-171 | 014333-45-0 | 7.7E+02 | 7.7E+00 | 1.8E+04 | 1.8E+02 | 6.7E+05 | 6.7E+03 |
| U-232 | 014158-29-3 | 5.6E+00 | 5.6E-02 | 1.9E+03 | 1.9E+01 | 2.3E+02 | 2.3E+00 |
| U-233 | 013968-55-3 | 1.0E+01 | 1.0E-01 | 3.4E+03 | 3.4E+01 | 4.2E+02 | 4.2E+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 |
| U-234 | 013966-29-5 | 1.0E+01 | 1.0E-01 | 3.4E+03 | 3.4E+01 | 4.3E+02 | 4.3E+00 |
| U-235 | 015117-96-1 | 1.0E+01 | 1.0E-01 | 3.4E+03 | 3.4E+01 | 4.2E+02 | 4.2E+00 |
| U-235+D | 015117-96-1 | 9.7E+00 | 9.7E-02 | 2.4E+03 | 2.4E+01 | 3.9E+02 | 3.9E+00 |
| U-236 | 013982-70-2 | 1.1E+01 | 1.1E-01 | 3.6E+03 | 3.6E+01 | 4.5E+02 | 4.5E+00 |
| U-237 | 014269-75-1 | 1.1E+02 | 1.1E+00 | 3.8E+04 | 3.8E+02 | 4.8E+03 | 4.8E+01 |
| U-238 | 007440-61-1 | 1.1E+01 | 1.1E-01 | 3.6E+03 | 3.6E+01 | 4.4E+02 | 4.4E+00 |
| U-238+D | 007440-61-1 | 7.3E+00 | 7.3E-02 | 1.7E+03 | 1.7E+01 | 2.8E+02 | 2.8E+00 |
| U-240 | 015687-53-3 | 8.4E+01 | 8.4E-01 | 2.8E+04 | 2.8E+02 | 3.5E+03 | 3.5E+01 |
| V-48 | 014331-97-6 | 6.0E+01 | 6.0E-01 | 2.5E+03 | 2.5E+01 | 5.3E+04 | 5.3E+02 |
| W-181 | 015749-46-9 | 1.6E+03 | 1.6E+01 | 5.3E+02 | 5.3E+00 | 1.0E+04 | 1.0E+02 |
| W-185 | 014932-41-3 | 2.2E+02 | 2.2E+00 | 7.1E+01 | 7.1E-01 | 1.4E+03 | 1.4E+01 |
| W-187 | 014983-48-3 | 1.8E+02 | 1.8E+00 | 5.8E+01 | 5.8E-01 | 1.2E+03 | 1.2E+01 |
| 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 3.3d. (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-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 | 3.0E+01 | 3.0E-01 | 3.2E+03 | 3.2E+01 | 2.6E+04 | 2.6E+02 |
| Y-91 | 014234-24-3 | 3.4E+01 | 3.4E-01 | 3.5E+03 | 3.5E+01 | 2.9E+04 | 2.9E+02 |
| Y-91m | 014234-24-3 | 1.2E+04 | 1.2E+02 | 1.3E+06 | 1.3E+04 | 1.1E+07 | 1.1E+05 |
| Y-92 | 015751-59-4 | 2.3E+02 | 2.3E+00 | 2.4E+04 | 2.4E+02 | 2.0E+05 | 2.0E+03 |
| Y-93 | 014981-70-5 | 7.9E+01 | 7.9E-01 | 8.2E+03 | 8.2E+01 | 6.8E+04 | 6.8E+02 |
| Zn-65 | 013982-39-3 | 2.3E+01 | 2.3E-01 | 1.4E+01 | 1.4E-01 | 2.1E+01 | 2.1E-01 |
| Zn-69 | 013982-23-5 | 3.7E+03 | 3.7E+01 | 2.3E+03 | 2.3E+01 | 3.4E+03 | 3.4E+01 |
| Zn-69m | 013982-23-5 | 1.5E+02 | 1.5E+00 | 9.2E+01 | 9.2E-01 | 1.4E+02 | 1.4E+00 |
| Zr-93 | 015751-77-6 | 8.8E+02 | 8.8E+00 | 9.3E+07 | 9.3E+05 | 2.8E+07 | 2.8E+05 |
| Zr-95 | 013967-71-0 | 1.2E+02 | 1.2E+00 | 1.2E+07 | 1.2E+05 | 3.7E+06 | 3.7E+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 |
| Zr-97 | 014928-30-4 | 4.4E+01 | 4.4E-01 | 4.6E+06 | 4.6E+04 | 1.4E+06 | 1.4E+04 |

Note:

† 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. Risk-based Preliminary Remediation Goals for nonradionuclides in water and soil (agricultural scenario)

Chemical	CASRN	Vegetable Intercept (mg/kg)*				Slope	Beef Intercept (mg/kg)*				Slope	Milk Intercept (mg/kg)*						Slope
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child	
ALAR	001596-84-5																	
Acenaphthene	000083-32-9			1.9E+02	1.9E+01	-4.9E+01			3.4E+04	3.4E+03	-1.5E+01			2.0E+04	2.5E+03	2.0E+03	2.5E+02	-1.6E+01
Acenaphthylene	000208-96-8																	
Acephate	030560-19-1	1.0E+00	1.0E-02	1.5E-01	1.5E-02	-3.6E+01	1.0E+06	9.6E+04	1.0E+06	1.4E+05	-6.5E-02	1.0E+06	2.1E+04	7.5E+05	9.6E+04	7.5E+04	9.6E+03	-6.5E-02
Acetaldehyde	000075-07-0																	
Acetochlor	034256-82-1																	
Acetone	000067-64-1			8.4E+00	8.4E-01	-3.6E+01			1.0E+06	1.0E+06	-1.5E-01			1.0E+06	1.0E+06	1.0E+06	1.3E+05	-1.5E-01
Acetone Cyanohydrin	000075-86-5																	
Acetonitrile	000075-05-8			4.4E-01	4.4E-02	-3.6E+01			1.0E+06	1.3E+05	-1.3E-01			6.8E+05	8.8E+04	6.8E+04	8.8E+03	-1.3E-01
Acetophenone ⁽⁹⁾	000098-86-2			8.6E+01	8.6E+00	-3.9E+01			1.0E+06	2.8E+05	-1.8E+00			1.0E+06	1.9E+05	1.5E+05	1.9E+04	-1.8E+00
Acrolein ⁽⁹⁾	000107-02-8			2.0E+00	2.0E-01	-3.6E+01			1.0E+06	3.5E+05	-1.8E-01			1.0E+06	2.3E+05	1.8E+05	2.3E+04	-1.8E-01
Acrylamide	000079-06-1	2.5E-03	2.5E-05	9.6E-03	9.6E-04	-3.6E+01	1.6E+04	1.6E+02	6.0E+04	6.0E+03	-8.3E-02	3.5E+03	3.5E+01	3.1E+04	4.0E+03	3.1E+03	4.0E+02	-8.3E-02
Acrylic Acid	000079-10-7			7.0E+01	7.0E+00	-3.6E+01			1.0E+06	1.0E+06	-2.5E-01			1.0E+06	1.0E+06	1.0E+06	4.5E+05	-2.5E-01
Acrylonitrile	000107-13-1	6.8E-02	6.8E-04	1.6E-01	1.6E-02	-3.6E+01	5.3E+04	5.3E+02	1.2E+05	1.2E+04	-2.8E-01	1.2E+04	1.2E+02	6.4E+04	8.2E+03	6.4E+03	8.2E+02	-2.8E-01
Alachlor	015972-60-8	6.3E+00	6.3E-02	2.2E+01	2.2E+00	-4.4E+01	1.8E+04	1.8E+02	6.3E+04	6.3E+03	-6.5E+00	4.3E+03	4.3E+01	3.5E+04	4.4E+03	3.5E+03	4.4E+02	-6.8E+00
Aldicarb	000116-06-3			4.6E-01	4.6E-02	-3.8E+01			5.1E+04	5.1E+03	-8.8E-01			2.7E+04	3.4E+03	2.7E+03	3.4E+02	-8.9E-01
Aldicarb Sulfone	001646-88-4																	
Aldrin	000309-00-2	3.1E-02	3.1E-04	6.8E-02	6.8E-03	-4.5E+01	7.5E+01	7.5E-01	1.6E+02	1.6E+01	-7.0E+00	1.7E+01	1.7E-01	9.0E+01	1.2E+01	9.0E+00	1.2E+00	-7.4E+00
Allyl	074223-64-6			2.9E+01	2.9E+00	-3.6E+01			1.0E+06	1.0E+06	-2.0E-01			1.0E+06	1.0E+06	1.0E+06	2.6E+05	-2.1E-01
Allyl Alcohol	000107-18-6			4.3E-01	4.3E-02	-3.6E+01			9.7E+05	9.7E+04	-1.5E-01			5.1E+05	6.5E+04	5.1E+04	6.5E+03	-1.5E-01
Allyl Chloride ⁽⁹⁾	000107-05-1			3.2E+01	3.2E+00	-3.8E+01			1.0E+06	1.9E+05	-1.2E+00			1.0E+06	1.3E+05	1.0E+05	1.3E+04	-1.2E+00
Aluminum	007429-90-5																	
Aluminum Phosphide	020859-73-8																	

Table 3.3e. (continued)

Chemical	CASRN	Vegetable Intercept (mg/kg)*				Slope	Beef Intercept (mg/kg)*				Slope	Milk Intercept (mg/kg)*						Slope
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child	
Amdro	067485-29-4																	
Ametryn	000834-12-8			8.6E+00	8.6E-01	-4.0E+01			2.2E+05	2.2E+04	-2.0E+00			1.2E+05	1.5E+04	1.2E+04	1.5E+03	-2.0E+00
Aminophenol, m-	000591-27-5			1.1E+01	1.1E+00	-3.6E+01			1.0E+06	8.9E+05	-2.7E-01			1.0E+06	6.0E+05	4.7E+05	6.0E+04	-2.7E-01
Aminopyridine, 4-	000504-24-5			3.3E-03	3.3E-04	-3.6E+01			2.4E+03	2.4E+02	-2.9E-01			1.2E+03	1.6E+02	1.2E+02	1.6E+01	-2.9E-01
Amtraz	033089-61-1																	
Ammonia	007664-41-7																	
Ammonium Sulfamate	007773-06-0																	
Aniline	000062-53-3	1.5E+01	1.5E-01			-3.7E+01	1.0E+06	2.6E+04			-6.5E-01	5.8E+05	5.8E+03					-6.6E-01
Anthracene	000120-12-7			9.7E+02	9.7E+01	-4.9E+01			1.4E+05	1.4E+04	-1.5E+01			8.1E+04	1.0E+04	8.1E+03	1.0E+03	-1.7E+01
Antimony (metallic)	007440-36-0			1.4E+00	1.4E-01	-4.9E+01			3.3E+03	3.3E+02	-1.7E+01			9.8E+02	1.3E+02	9.8E+01	1.3E+01	-1.9E+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			2.4E-01	2.4E-02	-5.0E+01			1.3E+00	1.3E-01	-1.8E+01			7.5E-01	9.6E-02	7.5E-02	9.6E-03	-2.1E+01
Aroclor 1221 ⁽¹⁾	011104-28-2	9.5E-02	9.5E-04			-4.8E+01	2.6E+01	2.6E-01			-1.4E+01	6.2E+00	6.2E-02					-1.5E+01
Aroclor 1232 ⁽¹⁾	011141-16-5	7.5E-02	7.5E-04			-4.6E+01	1.2E+02	1.2E+00			-8.3E+00	2.9E+01	2.9E-01					-8.8E+00
Aroclor 1242 ⁽¹⁾	053469-21-9	9.5E-02	9.5E-04			-4.8E+01	2.6E+01	2.6E-01			-1.4E+01	6.2E+00	6.2E-02					-1.5E+01
Aroclor 1248 ⁽¹⁾	012672-29-6	1.1E-01	1.1E-03			-5.0E+01	6.9E-01	6.9E-03			-1.8E+01	1.7E-01	1.7E-03					-2.1E+01
Aroclor 1254	011097-69-1			7.0E-02	7.0E-03	-5.0E+01			2.9E-01	2.9E-02	-1.9E+01			1.7E-01	2.2E-02	1.7E-02	2.2E-03	-2.1E+01
Aroclor 1260 ⁽¹⁾	011096-82-5	1.1E-01	1.1E-03			-5.0E+01	3.6E-02	3.6E-04			-1.9E+01	9.0E-03	9.0E-05					-2.2E+01

Table 3.3e. (continued)

Chemical	CASRN	Vegetable Intercept (mg/kg) [*]				Slope	Beef Intercept (mg/kg) [*]				Slope	Milk Intercept (mg/kg) [*]						Slope
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child	
Arsenic Salts	NA																	
Arsenic, Inorganic	007440-38-2	5.3E-01	5.3E-03	1.0E+00	1.0E-01	-4.9E+01	2.6E+01	2.6E-01	5.1E+01	5.1E+00	-1.7E+01	6.9E+01	6.9E-01	3.1E+02	4.0E+01	3.1E+01	4.0E+00	-2.0E+01
Asarone	007784-42-1																	
Asbestos	001332-21-4																	
Assure	076578-14-8																	
Asulam	003337-71-1																	
Atrazine	001912-24-9	2.0E+00	2.0E-02	6.8E+01	6.8E+00	-4.4E+01	8.8E+03	8.8E+01	2.9E+05	2.9E+04	-5.4E+00	2.0E+03	2.0E+01	1.6E+05	2.0E+04	1.6E+04	2.0E+03	-5.6E+00
Avermectin B1	065195-55-3																	
Azobenzene	000103-33-3	6.3E+00	6.3E-02			-4.8E+01	3.1E+03	3.1E+01			-1.2E+01	7.6E+02	7.6E+00					-1.3E+01
Barium	007440-39-3			2.4E+02	2.4E+01	-5.0E+01			1.0E+05	1.0E+04	-1.5E+01			8.0E+03	1.0E+03	8.0E+02	1.0E+02	-1.7E+01
Barium Cyanide	000542-62-1																	
Baygon	000114-26-1			3.1E+00	3.1E-01	-3.9E+01			1.2E+05	1.2E+04	-1.6E+00			6.5E+04	8.4E+03	6.5E+03	8.4E+02	-1.6E+00
Bayleton	043121-43-3			4.4E+01	4.4E+00	-4.2E+01			4.2E+05	4.2E+04	-3.6E+00			2.2E+05	2.9E+04	2.2E+04	2.9E+03	-3.7E+00
Baythroid	068359-37-5																	
Benefin	001861-40-1			9.9E+02	9.9E+01	-4.9E+01			1.1E+05	1.1E+04	-1.6E+01			6.1E+04	7.9E+03	6.1E+03	7.9E+02	-1.8E+01
Benomyl	017804-35-2			7.4E+01	7.4E+00	-4.2E+01			7.0E+05	7.0E+04	-3.6E+00			3.7E+05	4.8E+04	3.7E+04	4.8E+03	-3.7E+00
Bentazon	025057-89-0			1.1E+00	1.1E-01	-3.8E+01			1.3E+05	1.3E+04	-8.4E-01			6.8E+04	8.8E+03	6.8E+03	8.8E+02	-8.5E-01
Benz[a]anthracene ^m	000056-55-3	1.1E+00	1.1E-02			-5.0E+01	9.1E+00	9.1E-02			-1.8E+01	2.3E+00	2.3E-02					-2.1E+01
Benzaldehyde	000100-52-7			1.5E+02	1.5E+01	-4.2E+01			1.0E+06	1.4E+05	-3.6E+00			7.4E+05	9.5E+04	7.4E+04	9.5E+03	-3.7E+00
Benzene	000071-43-2	1.0E+01	1.0E-01			-4.1E+01	1.4E+05	1.4E+03			-2.9E+00	3.2E+04	3.2E+02					-2.9E+00
Benzene Hexachloride	NA																	
Benzene, Ethyldimethyl	NA																	
Benzene, Ethylmethyl	NA																	

Table 3.3e. (continued)

Chemical	CASRN	Vegetable Intercept (mg/kg)*				Slope	Beef Intercept (mg/kg)*				Slope	Milk Intercept (mg/kg)*						Slope
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child	
Benzene, Methylpropenyl	NA																	
Benzene, Methylpropyl	NA																	
Benzene, Trimethyl	025551-13-7																	
Benzenethiol	000108-98-5			1.7E-02	1.7E-03	-4.3E+01			1.1E+02	1.1E+01	-4.4E+00			5.8E+01	7.5E+00	5.8E+00	7.5E-01	-4.6E+00
Benzidine	000092-87-5	5.7E-04	5.7E-06	1.7E+00	1.7E-01	-3.8E+01	4.3E+01	4.3E-01	1.3E+05	1.3E+04	-1.1E+00	9.6E+00	9.6E-02	6.7E+04	8.6E+03	6.7E+03	8.6E+02	-1.1E+00
Benzo[a]pyrene ⁽²⁾	000050-32-8	1.1E-01	1.1E-03			-5.0E+01	3.7E-01	3.7E-03			-1.9E+01	9.3E-02	9.3E-04					-2.1E+01
Benzo[b]fluoranthene ⁽²⁾	000205-99-2	1.1E+00	1.1E-02			-5.0E+01	3.7E+00	3.7E-02			-1.9E+01	9.3E-01	9.3E-03					-2.1E+01
Benzo[g,h,i]perylene	000191-24-2																	
Benzo[k]fluoranthene ⁽²⁾	000207-08-9	1.1E+01	1.1E-01			-5.0E+01	7.4E+00	7.4E-02			-1.9E+01	1.9E+00	1.9E-02					-2.2E+01
Benzoic Acid	000065-85-0			4.2E+03	4.2E+02	-4.0E+01			1.0E+06	1.0E+06	-2.3E+00			1.0E+06	1.0E+06	1.0E+06	6.0E+05	-2.3E+00
Benzotrichloride	000098-07-7	3.9E-02	3.9E-04			-4.4E+01	1.1E+02	1.1E+00			-6.5E+00	2.6E+01	2.6E-01					-6.8E+00
Benzyl Alcohol	000100-51-6			1.3E+02	1.3E+01	-3.8E+01			1.0E+06	1.0E+06	-8.4E-01			1.0E+06	1.0E+06	8.2E+05	1.1E+05	-8.5E-01
Benzyl Chloride	000100-44-7	2.0E+00	2.0E-02			-4.2E+01	1.9E+04	1.9E+02			-3.6E+00	4.3E+03	4.3E+01					-3.7E+00
Beryllium	007440-41-7	1.9E-01	1.9E-03	1.7E+01	1.7E+00	-5.0E+01	2.0E+01	2.0E-01	1.8E+03	1.8E+02	-1.9E+01	1.7E+03	1.7E+01	3.8E+05	4.9E+04	3.8E+04	4.9E+03	-2.1E+01
Bidrin	000141-66-2			4.7E-03	4.7E-04	-3.6E+01			3.0E+04	3.0E+03	-8.2E-02			1.6E+04	2.0E+03	1.6E+03	2.0E+02	-8.2E-02
Biphenyltin	082657-04-3																	
Biphenyl, 1,1'-	000092-52-4			1.6E+02	1.6E+01	-4.8E+01			4.2E+04	4.2E+03	-1.4E+01			2.4E+04	3.1E+03	2.4E+03	3.1E+02	-1.5E+01
Bis(2-chloro-1-methylethyl)ether (Technical)	000108-60-1	6.0E+00	6.0E-02			-4.3E+01	3.3E+04	3.3E+02			-4.8E+00	7.5E+03	7.5E+01					-5.0E+00
Bis(2-chloroethoxy)methane	000111-91-1																	
Bis(2-chloroethyl)ether	000111-44-4	1.2E-01	1.2E-03			-3.8E+01	9.0E+03	9.0E+01			-1.1E+00	2.0E+03	2.0E+01					-1.1E+00
Bis(2-chloroisopropyl)ether	039638-32-9			5.0E+01	5.0E+00	-4.1E+01			7.1E+05	7.1E+04	-2.9E+00			3.8E+05	4.8E+04	3.8E+04	4.8E+03	-2.9E+00

3-464

Table 3.3e. (continued)

Chemical	CASRN	Vegetable Intercept (mg/kg)*				Slope	Beef Intercept (mg/kg)*				Slope	Milk Intercept (mg/kg)*					Slope
		10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1		10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1		10 ⁻⁴	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child	
Bis(2-ethylhexyl)phthalate ⁶⁹	000117-81-7	5.6E+01	5.6E-01	6.7E+01	6.7E+00	-4.9E+01	2.7E+03	2.7E+01	3.3E+03	3.3E+02	-1.7E+01	6.8E+02	1.9E+03	2.5E+02	1.9E+02	2.5E+01	-1.9E+01
Bis(chloromethyl)ether	000342-88-1	2.0E-04	2.0E-06			-3.6E+01	1.1E+02	1.1E+00			-3.3E-01	2.5E+01					-3.3E-01
Bisphenol A	000080-05-7			1.4E+02	1.4E+01	-4.7E+01			1.1E+05	1.1E+04	-1.1E+01		5.9E+04	7.6E+03	5.9E+03	7.6E+02	-1.2E+01
Boron And Borates Only	007440-42-8			6.5E+01	6.5E+00	-3.9E+01			3.8E+03	3.8E+02	-1.8E+00		3.4E+02	4.4E+01	3.4E+01	4.4E+00	-1.8E+00
Boron Trifluoride	007637-07-2																
Bromochloromethane	000074-97-5																
Bromodichloromethane	000075-27-4	4.7E+00	4.7E-02	2.5E+01	2.5E+00	-4.1E+01	6.6E+04	6.6E+02	3.5E+05	3.5E+04	-2.9E+00	1.5E+04	1.9E+05	2.4E+04	1.9E+04	2.4E+03	-2.9E+00
Bromodiphenyl Ether, p-	000101-55-3																
Bromoform	000075-25-2	4.7E+01	4.7E-01	3.2E+01	3.2E+00	-4.2E+01	3.6E+05	3.6E+03	2.5E+05	2.5E+04	-4.0E+00	8.3E+04	1.3E+05	1.7E+04	1.3E+04	1.7E+03	-4.1E+00
Bromomethane ⁶⁹	000074-83-9			7.1E-01	7.1E-02	-3.8E+01			6.6E+04	6.6E+03	-9.6E-01		3.5E+04	4.4E+03	3.5E+03	4.4E+02	-9.7E-01
Bromophos	002104-96-3																
Bromotrichloromethane	000075-62-7																
Bromoxynil	001689-84-5			4.3E+00	4.3E-01	-3.7E+01			1.0E+06	1.9E+05	-3.8E-01		1.0E+06	1.3E+05	1.0E+05	1.3E+04	-3.9E-01
Bromoxynil Octanoate	001689-99-2																
Butadiene, 1,3-	000106-99-0																
Butanol, N-	000071-36-3			2.6E+01	2.6E+00	-3.7E+01			1.0E+06	8.2E+05	-4.7E-01		1.0E+06	5.5E+05	4.3E+05	5.5E+04	-4.8E-01
Butanone-2, 4-chloro-4,4-difluoro	NA																
Butyl Benzyl Phthalate	000085-68-7			6.7E+02	6.7E+01	-4.9E+01			3.3E+04	3.3E+03	-1.7E+01		1.9E+04	2.5E+03	1.9E+03	2.5E+02	-1.9E+01
Butylate	002008-41-5																
Butylchloride, t-	000507-20-0																
Butylphthalyl Butylglycolate	000085-70-1																
Cacodylic Acid	000075-60-5			3.4E-01	3.4E-02	-3.6E+01			4.7E+05	4.7E+04	-2.0E-01		2.5E+05	3.1E+04	2.5E+04	3.1E+03	-2.0E-01

Table 3.3e. (continued)

Chemical	CASRN	Vegetable Intercept (mg/kg)*				Slope	Beef Intercept (mg/kg)*				Slope	Milk Intercept (mg/kg)*						Slope
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child	
Cadmium (Diet)	007440-43-9			2.3E+00	2.3E-01	-4.5E+01			3.9E+02	3.9E+01	-8.1E+00			2.7E+01	3.5E+00	2.7E+00	3.5E-01	-8.6E+00
Calcium Cyanide	000592-01-8																	
Caprolactam	000105-60-2			4.5E+01	4.5E+00	-3.6E+01			1.0E+06	1.0E+06	-1.6E-01			1.0E+06	1.0E+06	1.0E+06	6.3E+05	-1.6E-01
Captan	002425-06-1	4.7E+01	4.7E-01	3.4E+00	3.4E-01	-4.3E+01	2.9E+05	2.9E+03	2.1E+04	2.1E+03	-4.4E+00	6.6E+04	6.6E+02	1.2E+04	1.5E+03	1.2E+03	1.5E+02	-4.6E+00
Captan	000133-06-2	9.9E+01	9.9E-01	1.9E+02	1.9E+01	-4.2E+01	9.3E+05	9.3E+03	1.0E+06	1.8E+05	-3.6E+00	2.1E+05	2.1E+03	9.7E+05	1.2E+05	9.7E+04	1.2E+04	-3.7E+00
Carbaryl	000063-25-2			1.5E+02	1.5E+01	-4.2E+01			1.0E+06	1.4E+05	-3.6E+00			7.4E+05	9.5E+04	7.4E+04	9.5E+03	-3.7E+00
Carbazole	000086-74-8	3.5E+01	3.5E-01			-4.8E+01	1.7E+04	1.7E+02			-1.2E+01	4.2E+03	4.2E+01					-1.3E+01
Carbofuran	001563-66-2			3.9E+00	3.9E-01	-3.9E+01			1.5E+05	1.5E+04	-1.6E+00			8.1E+04	1.0E+04	8.1E+03	1.0E+03	-1.6E+00
Carbon Disulfide	000075-15-0			1.4E+02	1.4E+01	-4.1E+01			1.0E+06	1.6E+05	-3.2E+00			8.4E+05	1.1E+05	8.4E+04	1.1E+04	-3.3E+00
Carbon Tetrachloride ⁽⁹⁾	000056-23-5	3.7E+00	3.7E-02	1.4E+00	1.4E-01	-4.4E+01	1.3E+04	1.3E+02	5.1E+03	5.1E+02	-5.9E+00	3.0E+03	3.0E+01	2.8E+03	3.6E+02	2.8E+02	3.6E+01	-6.2E+00
Carbosulfan	055285-14-8																	
Carboxin	005234-68-4			1.3E+02	1.3E+01	-4.1E+01			1.0E+06	1.8E+05	-2.9E+00			9.4E+05	1.2E+05	9.4E+04	1.2E+04	-2.9E+00
Chloral	000075-87-6																	
Chloramben	000133-90-4																	
Chloranil	000118-75-2																	
Chlordane ⁽⁹⁾	000057-74-9	6.2E-01	6.2E-03	2.1E-01	2.1E-02	-4.9E+01	8.0E+00	8.0E-02	2.7E+00	2.7E-01	-1.8E+01	2.0E+00	2.0E-02	1.6E+00	2.0E-01	1.6E-01	2.0E-02	-2.1E+01
Chloride	016887-00-6																	
Chlorimuron, Ethyl-	090982-32-4																	
Chlorine	007782-50-5			5.1E+00	5.1E-01	-3.6E+01			1.1E+01	1.1E+00	-1.1E-01			2.1E+00	2.7E-01	2.1E-01	2.7E-02	-1.1E-01
Chlorine Dioxide	010049-04-4																	
Chlorite (Sodium Salt)	007758-19-2																	
Chloro-1,1-difluoroethane, 1-	000075-68-3																	
Chloro-1,3-butadiene, 2-	000126-99-8			1.9E+01	1.9E+00	-4.0E+01			5.0E+05	5.0E+04	-2.0E+00			2.6E+05	3.4E+04	2.6E+04	3.4E+03	-2.0E+00

Table 3.3e. (continued)

Chemical	CASRN	Vegetable Intercept (mg/kg)*				Slope	Beef Intercept (mg/kg)*				Slope	Milk Intercept (mg/kg)*						Slope
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1		10 ⁻⁴	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child		
Chloro-2-methylaniline HCl, 4-	003165-93-3																	
Chloro-2-methylaniline, 4-	000095-69-2																	
Chloroacetic Acid	000079-11-8			1.0E+00	1.0E-01	-3.8E+01			9.4E+04	9.4E+03	-9.6E-01		4.9E+04	6.3E+03	4.9E+03	6.3E+02	-9.7E-01	
Chloroacetophenone, 2-	000532-27-4																	
Chloroaniline, p-	000106-47-8			8.2E+00	8.2E-01	-4.4E+01			2.9E+04	2.9E+03	-5.9E+00		1.6E+04	2.0E+03	1.6E+03	2.0E+02	-6.2E+00	
Chlorobenzene ⁽⁶⁾	000108-90-7			4.1E+01	4.1E+00	-4.4E+01			1.5E+05	1.5E+04	-5.9E+00		7.9E+04	1.0E+04	7.9E+03	1.0E+03	-6.2E+00	
Chlorobenzilate	000510-15-6	2.8E+00	2.8E-02	6.5E+01	6.5E+00	-4.9E+01	3.3E+02	3.3E+00	7.6E+03	7.6E+02	-1.6E+01	8.1E+01	4.4E+03	5.7E+02	4.4E+02	5.7E+01	-1.7E+01	
Chlorobenzoic Acid, p-	000074-11-3			3.9E+02	3.9E+01	-4.4E+01			1.0E+06	1.7E+05	-5.4E+00		9.0E+05	1.2E+05	9.0E+04	1.2E+04	-5.6E+00	
Chlorobenzotrifluoride, 4-	000098-56-6			5.8E+01	5.8E+00	-4.7E+01			3.3E+04	3.3E+03	-1.2E+01		1.9E+04	2.4E+03	1.9E+03	2.4E+02	-1.3E+01	
Chlorobutane, 1-	000109-69-3			7.3E+02	7.3E+01	-4.3E+01			1.0E+06	3.8E+05	-4.9E+00		1.0E+06	2.6E+05	2.1E+05	2.6E+04	-5.1E+00	
Chlorobutane, 2-	000078-86-4																	
Chlorocyclopentadiene	041851-50-7																	
Chlorodibromoethane	073506-94-2																	
Chlorodifluoromethane	000075-45-6																	
Chloroform ⁽⁶⁾	000067-66-3	4.4E+01	4.4E-01	1.2E+01	1.2E+00	-4.0E+01	7.6E+05	7.6E+03	2.0E+05	2.0E+04	-2.5E+00	1.7E+05	1.1E+05	1.4E+04	1.1E+04	1.4E+03	-2.6E+00	
Chloromethane ⁽⁶⁾	000074-87-3	6.4E+00	6.4E-02			-3.7E+01	1.0E+06	1.1E+04			-6.6E-01	2.5E+05	2.5E+03				-6.7E-01	
Chloromethyl Methyl Ether	000107-30-2																	
Chloronaphthalene, Beta-	000091-58-7			2.5E+02	2.5E+01	-4.8E+01			6.8E+04	6.8E+03	-1.4E+01		3.9E+04	5.0E+03	3.9E+03	5.0E+02	-1.5E+01	
Chloronitrobenzene, o-	000088-73-3	1.3E+01	1.3E-01			-4.1E+01	1.5E+05	1.5E+03			-3.2E+00	3.3E+04	3.3E+02				-3.3E+00	
Chloronitrobenzene, p-	000121-73-3	2.1E+01	2.1E-01			-4.2E+01	1.6E+05	1.6E+03			-4.0E+00	3.6E+04	3.6E+02				-4.1E+00	
Chlorophenol, 2-	000095-57-8			6.8E+00	6.8E-01	-4.1E+01			7.8E+04	7.8E+03	-3.2E+00		4.2E+04	5.4E+03	4.2E+03	5.4E+02	-3.3E+00	
Chlorophenyl Methyl Sulfide, p-	000123-09-1																	

Table 3.3e. (continued)

Chemical	CASRN	Vegetable Intercept (mg/kg)*				Slope	Beef Intercept (mg/kg)*				Slope	Milk Intercept (mg/kg)*						Slope
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child	
Chlorophenyl Methyl Sulfoxide	000934-73-6																	
Chloropropane, 2-	000075-29-6																	
Chlorothalonil	001897-45-6	6.4E+01	6.4E-01	4.5E+01	4.5E+00	-4.8E+01	2.6E+04	2.6E+02	1.9E+04	1.9E+03	-1.3E+01	6.3E+03	6.3E+01	1.1E+04	1.4E+03	1.1E+03	1.4E+02	-1.4E+01
Chlorotoluene, o-	000095-49-8			5.3E+01	5.3E+00	-4.6E+01			5.9E+04	5.9E+03	-9.5E+00			3.3E+04	4.2E+03	3.3E+03	4.2E+02	-1.0E+01
Chlorpropham	000101-21-3			4.3E+02	4.3E+01	-4.4E+01			1.0E+06	1.3E+05	-6.5E+00			6.9E+05	8.9E+04	6.9E+04	8.9E+03	-6.8E+00
Chlorpyrifos	002921-88-2			1.0E+01	1.0E+00	-4.9E+01			2.1E+02	2.1E+01	-1.8E+01			1.2E+02	1.6E+01	1.2E+01	1.6E+00	-2.0E+01
Chlorpyrifos Methyl	005598-13-0			3.2E+01	3.2E+00	-4.9E+01			5.7E+03	5.7E+02	-1.5E+01			3.3E+03	4.2E+02	3.3E+02	4.2E+01	-1.6E+01
Chlorsulfuron	064902-72-3			9.8E-01	9.8E-02	-3.6E+01			1.0E+06	1.0E+06	-3.4E-02			1.0E+06	1.0E+06	1.0E+06	1.9E+05	-3.4E-02
Chlorthiophos	060238-56-4																	
Chromium (III) (Insoluble Salts)	016065-83-1			3.5E+03	3.5E+02	-5.0E+01			3.8E+04	3.8E+03	-1.7E+01			1.0E+06	8.1E+05	6.3E+05	8.1E+04	-2.0E+01
Chromium (VI) ⁽⁹⁾	018540-29-9			1.8E+01	1.8E+00	-5.0E+01			1.9E+02	1.9E+01	-1.7E+01			3.1E+04	4.0E+03	3.1E+03	4.0E+02	-2.0E+01
Chromium Salts	NA																	
Chrysene ⁽⁹⁾	000218-01-9	1.1E+02	1.1E+00			-5.0E+01	9.1E+02	9.1E+00			-1.8E+01	2.3E+02	2.3E+00					-2.1E+01
Cobalt	007440-48-4																	
Coke Oven Emissions	008007-45-2																	
Copper	007440-50-8																	
Copper Cyanide	000544-92-3																	
Creosote	008001-58-9																	
Cresol, m-	000108-39-4			5.8E+01	5.8E+00	-4.0E+01			9.9E+05	9.9E+04	-2.5E+00			5.3E+05	6.8E+04	5.3E+04	6.8E+03	-2.6E+00
Cresol, o-	000095-48-7			5.3E+01	5.3E+00	-4.0E+01			1.0E+06	1.1E+05	-2.3E+00			5.9E+05	7.5E+04	5.9E+04	7.5E+03	-2.3E+00
Cresol, p-	000106-44-5			5.3E+00	5.3E-01	-4.0E+01			1.1E+05	1.1E+04	-2.3E+00			5.9E+04	7.5E+03	5.9E+03	7.5E+02	-2.3E+00
Crotonaldehyde	000123-73-9	1.2E-01	1.2E-03			-4.0E+01	3.0E+03	3.0E+01			-2.0E+00	6.8E+02	6.8E+00					-2.0E+00

3-468

Table 3.3e. (continued)

Chemical	CASRN	Vegetable Intercept (mg/kg)*				Slope	Beef Intercept (mg/kg)*				Slope	Milk Intercept (mg/kg)*						Slope
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child	
Cumene	000098-82-8			1.1E+02	1.1E+01	-4.7E+01			1.0E+05	1.0E+04	-1.0E+01			5.6E+04	7.2E+03	5.6E+03	7.2E+02	-1.1E+01
Cyanazine	021725-46-2	3.9E-01	3.9E-03	2.8E+00	2.8E-01	-4.1E+01	4.3E+03	4.3E+01	3.1E+04	3.1E+03	-3.3E+00	9.6E+02	9.6E+00	1.6E+04	2.1E+03	1.6E+03	2.1E+02	-3.4E+00
Cyanide (CN-)	000057-12-5			9.0E+00	9.0E-01	-3.8E+01			1.0E+06	1.0E+05	-8.4E-01			5.5E+05	7.0E+04	5.5E+04	7.0E+03	-8.5E-01
Cyanogen	000460-19-5																	
Cyanogen Bromide	000506-68-3																	
Cyanogen Chloride	000506-77-4			7.4E+00	7.4E-01	-3.6E+01			1.0E+06	6.4E+05	-2.6E-01			1.0E+06	4.3E+05	3.4E+05	4.3E+04	-2.6E-01
Cyclohexane, 1,2,3,4,5-pentabromo-6-chloro-	000087-84-3																	
Cyclohexanone	000108-94-1			1.6E+03	1.6E+02	-3.7E+01			1.0E+06	1.0E+06	-5.8E-01			1.0E+06	1.0E+06	1.0E+06	1.0E+06	-5.9E-01
Cyclohexylamine	000108-91-8			1.4E+02	1.4E+01	-3.9E+01			1.0E+06	6.9E+05	-1.4E+00			1.0E+06	4.6E+05	3.6E+05	4.6E+04	-1.4E+00
Cyclopentadiene	000542-92-7																	
Cyhalothrin/karate	068085-85-8			1.7E+01	1.7E+00	-5.0E+01			9.3E+00	9.3E-01	-1.9E+01			5.5E+00	7.1E-01	5.5E-01	7.1E-02	-2.2E+01
Cypermethrin	052315-07-8																	
Cyromazine	066215-27-8																	
DDD	000072-54-8	3.4E+00	3.4E-02			-5.0E+01	2.2E+01	2.2E-01			-1.8E+01	5.5E+00	5.5E-02					-2.1E+01
DDE	000072-55-9	2.4E+00	2.4E-02			-5.0E+01	1.9E+01	1.9E-01			-1.8E+01	4.9E+00	4.9E-02					-2.1E+01
DDT	000050-29-3	2.4E+00	2.4E-02	1.7E+00	1.7E-01	-5.0E+01	4.4E+00	4.4E-02	3.2E+00	3.2E-01	-1.9E+01	1.1E+00	1.1E-02	1.9E+00	2.4E-01	1.9E-01	2.4E-02	-2.1E+01
Dacthal	001861-32-1																	
Dalapon	000075-99-0			9.2E+00	9.2E-01	-3.7E+01			1.0E+06	2.2E+05	-5.6E-01			1.0E+06	1.5E+05	1.1E+05	1.5E+04	-5.6E-01
Decabromodiphenyl Ether	001163-19-5			3.4E+01	3.4E+00	-4.9E+01			7.9E+02	7.9E+01	-1.8E+01			4.6E+02	6.0E+01	4.6E+01	6.0E+00	-2.0E+01
Demeton	008065-48-3																	
Di(2-ethylhexyl)adipate	000103-23-1	6.8E+02	6.8E+00	2.1E+03	2.1E+02	-5.0E+01	4.6E+01	4.6E-01	1.4E+02	1.4E+01	-1.9E+01	1.2E+01	1.2E-01	8.4E+01	1.1E+01	8.4E+00	1.1E+00	-2.2E+01
Diallate	002303-16-4	1.1E+00	1.1E-02			-3.7E+01	2.9E+05	2.9E+03			-5.2E-01	6.5E+04	6.5E+02					-5.3E-01
Diazinon	000333-41-5			2.7E+00	2.7E-01	-4.8E+01			1.3E+03	1.3E+02	-1.2E+01			7.6E+02	9.7E+01	7.6E+01	9.7E+00	-1.3E+01

Table 3.3e. (continued)

Chemical	CASRN	Vegetable Intercept (mg/kg)*				Slope	Beef Intercept (mg/kg)*				Slope	Milk Intercept (mg/kg)*						Slope
		10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1		10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1		10 ⁻⁴	10 ⁻⁴	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child	
Dibenz[a,h]anthracene ^m	000053-70-3	1.1E-01	1.1E-03			-5.0E+01	7.4E-02	7.4E-04			-1.9E+01	1.9E-02	1.9E-04					-2.2E+01
Dibromo-3-chloropropane, 1,2-	000096-12-8	3.0E-01	3.0E-03			-4.3E+01	1.6E+03	1.6E+01			-4.9E+00	3.6E+02	3.6E+00					-5.1E+00
Dibromobenzene, 1,4-	000106-37-6			3.0E+01	3.0E+00	-4.8E+01			1.5E+04	1.5E+03	-1.2E+01			8.4E+03	1.1E+03	8.4E+02	1.1E+02	-1.3E+01
Dibromochloromethane	000124-48-1	3.8E+00	3.8E-02	2.7E+01	2.7E+00	-4.1E+01	4.4E+04	4.4E+02	3.1E+05	3.1E+04	-3.2E+00	9.9E+03	9.9E+01	1.7E+05	2.1E+04	1.7E+04	2.1E+03	-3.3E+00
Dibromodichloromethane	000594-18-3																	
Dibromodiphenyl Ether, p,p'-	002050-47-7																	
Dibromomethane, 1,2-	000106-93-4	3.2E-03	3.2E-05			-4.0E+01	5.4E+01	5.4E-01			-2.5E+00	1.2E+01	1.2E-01					-2.6E+00
Dibromomethane (Methylene Bromide)	000074-95-3			5.0E+00	5.0E-01	-3.8E+01			4.7E+05	4.7E+04	-9.6E-01			2.5E+05	3.2E+04	2.5E+04	3.2E+03	-9.7E-01
Dibutyl Phthalate	000084-74-2			3.4E+02	3.4E+01	-4.9E+01			1.6E+04	1.6E+03	-1.7E+01			9.7E+03	1.2E+03	9.7E+02	1.2E+02	-1.9E+01
Dicamba	001918-00-9			6.8E+01	6.8E+00	-4.5E+01			1.6E+05	1.6E+04	-7.0E+00			9.0E+04	1.2E+04	9.0E+03	1.2E+03	-7.4E+00
Dichloro-2-butene, 1,4-	000764-41-0																	
Dichloroacetic Acid																		
Dichlorobenzene, 1,2- ^m	000095-50-1			2.4E+02	2.4E+01	-4.6E+01			2.7E+05	2.7E+04	-9.5E+00			1.5E+05	1.9E+04	1.5E+04	1.9E+03	-1.0E+01
Dichlorobenzene, 1,3-	000541-73-1																	
Dichlorobenzene, 1,4-	000106-46-7	2.6E+01	2.6E-01			-4.6E+01	2.9E+04	2.9E+02			-9.5E+00	6.8E+03	6.8E+01					-1.0E+01
Dichlorobenzidine, 3,3'-	000091-94-1	1.4E+00	1.4E-02			-4.7E+01	1.3E+03	1.3E+01			-1.0E+01	3.1E+02	3.1E+00					-1.1E+01
Dichlorodifluoromethane	000075-71-8			2.7E+02	2.7E+01	-4.1E+01			1.0E+06	3.1E+05	-3.2E+00			1.0E+06	2.1E+05	1.7E+05	2.1E+04	-3.3E+00
Dichloroethane, 1,1-	000075-34-3			9.5E+01	9.5E+00	-4.0E+01			1.0E+06	2.5E+05	-2.0E+00			1.0E+06	1.7E+05	1.3E+05	1.7E+04	-2.0E+00
Dichloroethane, 1,2-	000107-06-2	1.8E+00	1.8E-02			-3.9E+01	8.8E+04	8.8E+02			-1.4E+00	2.0E+04	2.0E+02					-1.4E+00
Dichloroethylene, 1,1-	000075-35-4	3.7E-01	3.7E-03	8.6E+00	8.6E-01	-4.0E+01	9.6E+03	9.6E+01	2.2E+05	2.2E+04	-2.0E+00	2.2E+03	2.2E+01	1.2E+05	1.5E+04	1.2E+04	1.5E+03	-2.0E+00
Dichloroethylene, 1,2- (fixed isomers)	000540-59-0			1.9E+00	1.9E-01	-3.7E+01			8.8E+05	8.8E+04	-3.8E-01			4.6E+05	5.9E+04	4.6E+04	5.9E+03	-3.8E-01

Table 3.3e. (continued)

Chemical	CASRN	Vegetable Intercept (mg/kg)*				Slope	Beef Intercept (mg/kg)*				Slope	Milk Intercept (mg/kg)*						Slope						
		10 ⁻⁴		HQ=1			HQ=0.1		10 ⁻⁴			HQ=1		HQ=0.1		10 ⁻⁴			HQ=1		HQ=0.1			
		10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1		10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1		10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴		HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	
Dichloroethylene, 1,2-cis-	000156-59-2			1.1E+01	1.1E+00	-4.0E+01			2.2E+05	2.2E+04	-2.3E+00		1.2E+05	1.5E+04	1.5E+03	1.2E+04	1.5E+03	-2.3E+00						

Table 3.3e. (continued)

Chemical	CASRN	Vegetable Intercept (mg/kg)*				Slope	Beef Intercept (mg/kg)*				Slope	Milk Intercept (mg/kg)*						Slope
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child	
Diiflubenzuron	035367-38-5																	
Diifluoroethane, 1,1-	000075-37-6																	
Diisopropyl Methylphosphonate	001445-75-6			3.3E+01	3.3E+00	-3.7E+01			1.0E+06	4.5E+05	-7.7E-01			1.0E+06	3.0E+05	2.4E+05	3.0E+04	-7.8E-01
Dimethipin	055290-64-7																	
Dimethoate	000060-51-5			3.9E-01	3.9E-02	-4.4E+01			1.7E+03	1.7E+02	-5.4E+00			9.0E+02	1.2E+02	9.0E+01	1.2E+01	-5.6E+00
Dimethoxybenzidine, 3,3'-	000119-90-4	1.6E+01	1.6E-01			-4.0E+01	4.1E+05	4.1E+03			-2.0E+00	9.3E+04	9.3E+02					-2.0E+00
Dimethyl Sulfate	000077-78-1																	
Dimethylaniline HCl, 2,4-	021436-96-4																	
Dimethylaniline, 2,4-	000095-68-1																	
Dimethylaniline, N,N-	000121-69-7			3.7E+00	3.7E-01	-4.3E+01			1.9E+04	1.9E+03	-4.9E+00			1.0E+04	1.3E+03	1.0E+03	1.3E+02	-5.1E+00
Dimethylbenzidine, 3,3'-	000119-93-7	3.8E-02	3.8E-04			-4.2E+01	3.5E+02	3.5E+00			-3.6E+00	8.0E+01	8.0E-01					-3.7E+00
Dimethylethyl Lead	107584-40-7																	
Dimethylformamide	000068-12-2			3.1E+00	3.1E-01	-3.6E+01			1.0E+06	1.0E+06	-5.3E-02			1.0E+06	1.0E+06	1.0E+06	2.8E+05	-5.4E-02
Dimethylhydrazine, 1,1-(¹⁹)	000057-14-7																	
Dimethylhydrazine, 1,2-	000540-73-8																	
Dimethylphenol, 2,4-	000105-67-9			3.0E+01	3.0E+00	-4.2E+01			2.8E+05	2.8E+04	-3.6E+00			1.5E+05	1.9E+04	1.5E+04	1.9E+03	-3.7E+00
Dimethylphenol, 2,6-	000576-26-1			9.3E-01	9.3E-02	-4.2E+01			7.8E+03	7.8E+02	-3.8E+00			4.2E+03	5.3E+02	4.2E+02	5.3E+01	-3.9E+00
Dimethylphenol, 3,4-	000095-65-8			1.4E+00	1.4E-01	-4.1E+01			1.6E+04	1.6E+03	-3.2E+00			8.4E+03	1.1E+03	8.4E+02	1.1E+02	-3.3E+00
Dimethylphthalate ⁽¹⁹⁾	000131-11-3			7.8E+03	7.8E+02	-3.9E+01			1.0E+06	1.0E+06	-1.6E+00			1.0E+06	1.0E+06	1.0E+06	1.0E+06	-1.6E+00
Dimethylterephthalate	000120-61-6			2.3E+02	2.3E+01	-4.5E+01			5.5E+05	5.5E+04	-7.0E+00			3.0E+05	3.9E+04	3.0E+04	3.9E+03	-7.4E+00
Dinitro-o-cresol, 4,6-	000534-52-1																	
Dinitro-o-cyclohexyl Phenol, 4,6-	000131-89-5			6.4E-03	6.4E-04	-3.6E+01			1.0E+06	4.3E+05	-5.5E-03			1.0E+06	2.9E+05	2.2E+05	2.9E+04	-5.5E-03

3-472

Table 3.3e. (continued)

Chemical	CASRN	Vegetable Intercept (mg/kg)*				Slope	Beef Intercept (mg/kg)*				Slope	Milk Intercept (mg/kg)*						Slope
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child	
Dinitrobenzene, 1,2-	000528-29-0			3.1E-01	3.1E-02	-3.9E+01			1.2E+04	1.2E+03	-1.6E+00			6.5E+03	8.4E+02	6.5E+02	8.4E+01	-1.6E+00
Dinitrobenzene, 1,3-	000099-65-0			7.8E-02	7.8E-03	-3.9E+01			3.1E+03	3.1E+02	-1.6E+00			1.6E+03	2.1E+02	1.6E+02	2.1E+01	-1.6E+00
Dinitrobenzene, 1,4-	000100-25-4			2.8E-01	2.8E-02	-3.9E+01			1.4E+04	1.4E+03	-1.4E+00			7.2E+03	9.3E+02	7.2E+02	9.3E+01	-1.4E+00
Dinitrophenol, 2,4-	000051-28-5			1.4E+00	1.4E-01	-3.9E+01			6.9E+04	6.9E+03	-1.4E+00			3.6E+04	4.6E+03	3.6E+03	4.6E+02	-1.4E+00
Dinitrotoluene, 2,4-	000121-14-2	3.9E-01	3.9E-03	2.3E+00	2.3E-01	-4.0E+01	6.8E+03	6.8E+01	4.0E+04	4.0E+03	-2.5E+00	1.5E+03	1.5E+01	2.1E+04	2.7E+03	2.1E+03	2.7E+02	-2.6E+00
Dinitrotoluene, 2,6-	000506-20-2	3.0E-01	3.0E-03	8.6E-01	8.6E-02	-3.9E+01	9.5E+03	9.5E+01	2.8E+04	2.8E+03	-1.8E+00	2.1E+03	2.1E+01	1.5E+04	1.9E+03	1.5E+03	1.9E+02	-1.8E+00
Dinitrotoluene, 2-Amino-4,6-	035572-78-2																	
Dinoseb	000088-85-7			2.9E+00	2.9E-01	-4.7E+01			1.8E+03	1.8E+02	-1.1E+01			1.0E+03	1.3E+02	1.0E+02	1.3E+01	-1.2E+01
Dioxane, 1,4-	000123-91-1	1.7E+00	1.7E-02			-3.6E+01	1.0E+06	4.3E+04			-1.4E-01	9.6E+05	9.6E+03					-1.4E-01
Diphenamid	000957-51-7			4.0E+01	4.0E+00	-4.1E+01			4.9E+05	4.9E+04	-3.1E+00			2.6E+05	3.3E+04	2.6E+04	3.3E+03	-3.2E+00
Diphenylamine	000122-39-4			6.9E+01	6.9E+00	-4.7E+01			6.3E+04	6.3E+03	-1.0E+01			3.5E+04	4.5E+03	3.5E+03	4.5E+02	-1.1E+01
Diphenylhydrazine, 1,2-	000122-66-7	6.3E-01	6.3E-03			-4.4E+01	1.8E+03	1.8E+01			-6.5E+00	4.3E+02	4.3E+00					-6.8E+00
Diquat	000085-00-7			4.4E-03	4.4E-04	-3.6E+01			1.0E+06	6.6E+05	-3.5E-03			1.0E+06	4.5E+05	3.5E+05	4.5E+04	-3.5E-03
Direct Black 38	001937-37-7																	
Direct Blue 6	002602-46-2																	
Direct Brown 95	016071-86-6																	
Direct Sky Blue	002610-05-1																	
Disulfoton	000298-04-4			1.2E-01	1.2E-02	-4.8E+01			4.1E+01	4.1E+00	-1.3E+01			2.3E+01	3.0E+00	2.3E+00	3.0E-01	-1.5E+01
Diuron	000330-54-1			3.9E+00	3.9E-01	-4.4E+01			1.7E+04	1.7E+03	-5.4E+00			9.0E+03	1.2E+03	9.0E+02	1.2E+02	-5.6E+00
Dodine	002439-10-3																	
EPTC	000759-94-4																	
Endosulfan	000115-29-7																	
Endothal	000145-73-3																	

Table 3.3e. (continued)

Chemical	CASRN	Vegetable Intercept (mg/kg)*				Slope	Beef Intercept (mg/kg)*				Slope	Milk Intercept (mg/kg)*						Slope
		10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1		10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1		10 ⁻⁴	10 ⁻⁴	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child	
Endrin	000072-20-8			9.9E-01	9.9E-02	-4.9E+01			9.3E+01	9.3E+00	-1.6E+01			5.4E+01	7.0E+00	5.4E+00	7.0E-01	-1.8E+01
Epichlorohydrin	000106-89-8	2.1E+00	2.1E-02	1.7E-01	1.7E-02	-3.6E+01	1.0E+06	4.5E+04	3.8E+05	3.8E+04	-1.5E-01	1.0E+06	1.0E+04	2.0E+05	2.6E+04	2.0E+04	2.6E+03	-1.5E-01
Epoxybutane, 1,2-	000106-88-7																	
Ethephon	016672-87-0																	
Ethion	000563-12-2			1.7E+00	1.7E-01	-4.9E+01			5.7E+01	5.7E+00	-1.7E+01			3.3E+01	4.3E+00	3.3E+00	4.3E-01	-2.0E+01
Ethoxyethanol Acetate, 2-	000111-15-9			7.8E+01	7.8E+00	-3.7E+01			1.0E+06	1.0E+06	-4.7E-01			1.0E+06	1.0E+06	1.0E+06	1.7E+05	-4.8E-01
Ethoxyethanol, 2-	000110-80-5			4.0E+01	4.0E+00	-3.6E+01			1.0E+06	1.0E+06	-1.8E-01			1.0E+06	1.0E+06	1.0E+06	4.6E+05	-1.8E-01
Ethyl Acetate	000141-78-6			2.9E+02	2.9E+01	-3.7E+01			1.0E+06	1.0E+06	-5.8E-01			1.0E+06	1.0E+06	1.0E+06	4.2E+05	-5.9E-01
Ethyl Acrylate	000140-88-5	2.7E+00	2.7E-02			-3.8E+01	2.1E+05	2.1E+03			-1.1E+00	4.6E+04	4.6E+02					-1.1E+00
Ethyl Chloride	000075-00-3																	
Ethyl Ether	000060-29-7			7.0E+01	7.0E+00	-3.7E+01			1.0E+06	1.0E+06	-6.4E-01			1.0E+06	8.7E+05	6.8E+05	8.7E+04	-6.5E-01
Ethyl Methacrylate	000097-63-2			9.5E+01	9.5E+00	-4.0E+01			1.0E+06	2.0E+05	-2.3E+00			1.0E+06	1.4E+05	1.1E+05	1.4E+04	-2.3E+00
Ethyl-p-nitrophenyl Phosphonate	002104-64-5			3.0E-02	3.0E-03	-4.8E+01			1.5E+01	1.5E+00	-1.2E+01			8.4E+00	1.1E+00	8.4E-01	1.1E-01	-1.3E+01
Ethylbenzene ⁽⁶⁾	000100-41-4			2.4E+02	2.4E+01	-4.5E+01			4.7E+05	4.7E+04	-7.6E+00			2.6E+05	3.3E+04	2.6E+04	3.3E+03	-8.1E+00
Ethylene Cyanohydrin	000109-78-4			4.8E+00	4.8E-01	-3.6E+01			1.0E+06	1.0E+06	-2.7E-02			1.0E+06	1.0E+06	1.0E+06	1.0E+06	-2.8E-02
Ethylene Diamine	000107-15-3			2.4E+00	2.4E-01	-3.6E+01			1.0E+06	3.0E+05	-2.1E-01			1.0E+06	2.0E+05	1.6E+05	2.0E+04	-2.2E-01
Ethylene Glycol	000107-21-1			1.9E+01	1.9E+00	-3.6E+01			1.0E+06	1.0E+06	-1.6E-02			1.0E+06	1.0E+06	1.0E+06	1.0E+06	-1.6E-02
Ethylene Glycol Monobutyl Ether	000111-76-2																	
Ethylene Oxide	000075-21-8	1.8E-02	1.8E-04			-3.6E+01	4.8E+04	4.8E+02			-1.4E-01	1.1E+04	1.1E+02					-1.4E-01
Ethylene Thiourea	000096-45-7	1.0E-01	1.0E-03	3.9E-03	3.9E-04	-3.6E+01	6.3E+05	6.3E+03	2.4E+04	2.4E+03	-8.4E-02	1.4E+05	1.4E+03	1.2E+04	1.6E+03	1.2E+03	1.6E+02	-8.4E-02
Ethylphthalyl Ethyl Glycolate	000084-72-0																	
Express	101200-48-0																	

Table 3.3e. (continued)

Chemical	CASRN	Vegetable Intercept (mg/kg)*				Slope	Beef Intercept (mg/kg)*				Slope	Milk Intercept (mg/kg)*						Slope
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child	
Fenamiphos	022224-92-6																	
Fenpropathrin	039515-41-8																	
Fluometuron	002164-17-2			2.1E+01	2.1E+00	-4.2E+01			1.6E+05	1.6E+04	-4.0E+00			8.6E+04	1.1E+04	8.6E+03	1.1E+03	-4.1E+00
Fluoranthene	000206-44-0			1.3E+02	1.3E+01	-4.9E+01			6.6E+03	6.6E+02	-1.7E+01			3.9E+03	5.0E+02	3.9E+02	5.0E+01	-1.9E+01
Fluorene	000086-73-7			1.3E+02	1.3E+01	-4.9E+01			1.9E+04	1.9E+03	-1.5E+01			1.1E+04	1.4E+03	1.1E+03	1.4E+02	-1.7E+01
Fluoride	007782-41-4																	
Fluridone	059756-60-4																	
Flurprimidol	056425-91-3																	
Flutolanil	066332-96-5																	
Fluvalinate	069409-94-5																	
Folpet	000133-07-3	1.6E+02	1.6E+00	2.4E+02	2.4E+01	-4.5E+01	3.2E+05	3.2E+03	4.7E+05	4.7E+04	-7.6E+00	7.3E+04	7.3E+02	2.6E+05	3.3E+04	2.6E+04	3.3E+03	-8.1E+00
Fomesafen	072178-02-0																	
Fonofos	000944-22-9			6.1E+00	6.1E-01	-4.8E+01			2.3E+03	2.3E+02	-1.3E+01			1.3E+03	1.7E+02	1.3E+02	1.7E+01	-1.4E+01
Formaldehyde	000050-00-0			2.3E+01	2.3E+00	-3.6E+01			1.0E+06	1.0E+06	-2.0E-01			1.0E+06	1.0E+06	1.0E+06	2.1E+05	-2.0E-01
Formic Acid	000064-18-6			1.1E+02	1.1E+01	-3.6E+01			1.0E+06	1.0E+06	-9.8E-02			1.0E+06	1.0E+06	1.0E+06	1.0E+06	-9.9E-02
Fosetyl-AL	039148-24-8																	
Furan	000110-00-9			5.6E-01	5.6E-02	-3.8E+01			4.2E+04	4.2E+03	-1.1E+00			2.2E+04	2.9E+03	2.2E+03	2.9E+02	-1.1E+00
Furazolidone	000067-45-8	1.7E-02	1.7E-04			-3.7E+01	4.9E+03	4.9E+01			-4.9E-01	1.1E+03	1.1E+01					-5.0E-01
Furfural	000098-01-1			8.2E+00	8.2E-01	-4.7E+01			7.5E+03	7.5E+02	-1.0E+01			4.2E+03	5.4E+02	4.2E+02	5.4E+01	-1.1E+01
Furium	000531-82-8																	
Furmecycloz	060568-05-0																	
Glufosinate, Ammonium	077182-82-2																	
Glycidyl	000765-34-4			1.8E-02	1.8E-03	-3.6E+01			1.3E+05	1.3E+04	-7.6E-02			6.7E+04	8.6E+03	6.7E+03	8.6E+02	-7.7E-02

Table 3.3e. (continued)

Chemical	CASRN	Vegetable Intercept (mg/kg)				Slope	Beef Intercept (mg/kg)				Slope	Milk Intercept (mg/kg)						Slope
		10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1		10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1		10 ⁻⁴	10 ⁻⁴	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child	
Glyphosate	001071-83-6			2.2E-01	2.2E-02	-3.6E+01			1.0E+06	1.0E+06	-3.7E-03			1.0E+06	1.0E+06	1.0E+06	1.0E+06	-3.7E-03
Goal	042874-03-3																	
Haloxypol, Methyl	069806-40-2																	
Harmony	079277-27-3																	
Heptachlor	000076-44-8	1.7E-01	1.7E-03	1.6E+00	1.6E-01	-4.9E+01	3.0E+01	3.0E+01	2.9E+02	2.9E+01	-1.5E+01	7.3E+00	7.3E-02	1.7E+02	2.1E+01	1.7E+01	2.1E+00	-1.6E+01
Heptachlor Epoxide	001024-57-3	8.8E-02	8.8E-04	4.5E-02	4.5E-03	-4.9E+01	1.4E+00	1.4E-02	7.2E-01	7.2E-02	-1.8E+01	3.6E-01	3.6E-03	4.3E-01	5.5E-02	4.3E-02	5.5E-03	-2.0E+01
Heptane, N-	000142-82-5																	
Hexabromobenzene	000087-82-1			7.0E+00	7.0E-01	-5.0E+01			2.5E+01	2.5E+00	-1.9E+01			1.5E+01	1.9E+00	1.5E+00	1.9E-01	-2.1E+01
Hexachlorobenzene ⁶⁰	000118-74-1	5.0E-01	5.0E-03	2.7E+00	2.7E-01	-4.9E+01	1.0E+01	1.0E-01	5.5E+01	5.5E+00	-1.8E+01	2.5E+00	2.5E-02	3.3E+01	4.2E+00	3.3E+00	4.2E-01	-2.0E+01
Hexachlorobutadiene ⁶⁰	000087-68-3	1.0E+01	1.0E-01	6.7E-01	6.7E-02	-4.9E+01	6.1E+02	6.1E+00	4.1E+01	4.1E+00	-1.7E+01	1.5E+02	1.5E+00	2.4E+01	3.1E+00	2.4E+00	3.1E-01	-1.9E+01
Hexachlorocyclohexane, Alpha-	000319-84-6	1.1E-01	1.1E-03			-4.8E+01	4.6E+01	4.6E-01			-1.3E+01	1.1E+01	1.1E-01					-1.4E+01
Hexachlorocyclohexane, Beta-	000319-85-7	4.0E-01	4.0E-03			-4.8E+01	1.3E+02	1.3E+00			-1.3E+01	3.2E+01	3.2E-01					-1.5E+01
Hexachlorocyclohexane, Delta-	000319-86-8																	
Hexachlorocyclohexane, Epsilon	006108-10-7																	
Hexachlorocyclohexane, Gamma-	000058-89-9	5.2E-01	5.2E-03	8.7E-01	8.7E-02	-4.7E+01	3.2E+02	3.2E+00	5.3E+02	5.3E+01	-1.1E+01	7.6E+01	7.6E-01	3.0E+02	3.9E+01	3.0E+01	3.9E+00	-1.2E+01
Hexachlorocyclohexane, Technical	000608-73-1																	
Hexachlorocyclopentadiene	000077-47-4			2.2E+01	2.2E+00	-4.8E+01			7.2E+03	7.2E+02	-1.3E+01			4.1E+03	5.3E+02	4.1E+02	5.3E+01	-1.5E+01
Hexachlorodibenzo-p-dioxin, Mixture	019408-74-3	1.3E-04	1.3E-06			-5.0E+01	1.1E-04	1.1E-06			-1.9E+01	2.8E-05	2.8E-07					-2.2E+01
Hexachloroethane	000067-72-1	5.0E+01	5.0E-01	3.0E+00	3.0E-01	-4.8E+01	2.1E+04	2.1E+02	1.2E+03	1.2E+02	-1.3E+01	5.0E+03	5.0E+01	7.0E+02	9.0E+01	7.0E+01	9.0E+00	-1.4E+01

Table 3.3e. (continued)

Chemical	CASRN	Vegetable Intercept (mg/kg)*				Slope	Beef Intercept (mg/kg)*				Slope	Milk Intercept (mg/kg)*						Slope
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child	
Hexachlorophene	000070-30-4			1.1E+00	1.1E-01	-5.0E+01			1.4E-01	1.4E-02	-1.9E+01			8.4E-02	1.1E-02	8.4E-03	1.1E-03	-2.2E+01
Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	000121-82-4	5.5E+00	5.5E-02	7.7E+00	7.7E-01	-4.6E+01	7.4E+03	7.4E+01	1.0E+04	1.0E+03	-8.9E+00	1.7E+03	1.7E+01	5.8E+03	7.4E+02	5.8E+02	7.4E+01	-9.5E+00
Hexamethylene Diisocyanate, 1,6-	000822-06-0																	
Hexane, N-	000110-54-3			1.8E+02	1.8E+01	-4.8E+01			7.4E+04	7.4E+03	-1.3E+01			4.2E+04	5.4E+03	4.2E+03	5.4E+02	-1.4E+01
Hexanone, 2-	000591-78-6																	
Hexazinone	051235-04-2			1.1E-02	1.1E-03	-3.6E+01			1.0E+06	1.0E+06	-5.7E-04			1.0E+06	1.0E+06	1.0E+06	1.0E+06	-5.7E-04
HpCDD, 2,3,7,8-(⁴⁰)	037871-00-4																	
HpCDF, 2,3,7,8-(⁴⁰)	038998-75-3																	
HxCDD, 2,3,7,8-(⁴⁰)	034465-46-8																	
HxCDF, 2,3,7,8-(⁴⁰)	055684-94-1																	
Hydrazine	000302-01-2	5.6E-04	5.6E-06			-3.6E+01	9.4E+04	9.4E+02			-1.2E-02	2.1E+04	2.1E+02					-1.2E-02
Hydrazine Sulfate	010034-93-2	5.6E-04	5.6E-06			-3.6E+01	9.4E+04	9.4E+02			-1.2E-02	2.1E+04	2.1E+02					-1.2E-02
Hydrogen Chloride	007647-01-0																	
Hydrogen Cyanide	000074-90-8			3.7E+00	3.7E-01	-3.6E+01			1.0E+06	2.2E+05	-3.3E-01			1.0E+06	1.4E+05	1.1E+05	1.4E+04	-3.3E-01
Hydrogen Sulfide	007783-06-4			1.1E+00	1.1E-01	-3.7E+01			1.8E+05	1.8E+04	-7.0E-01			9.6E+04	1.2E+04	9.6E+03	1.2E+03	-7.0E-01
Hydroquinone	000123-31-9			9.2E+00	9.2E-01	-3.7E+01			1.0E+06	3.6E+05	-4.1E-01			1.0E+06	2.4E+05	1.9E+05	2.4E+04	-4.2E-01
Imazalil	035554-44-0																	
Imazaquin	081335-37-7																	
Indeno[1,2,3-cd]pyrene(⁴⁰)	000193-39-5	1.1E+00	1.1E-02			-5.0E+01	1.2E+00	1.2E-02			-1.9E+01	3.0E-01	3.0E-03					-2.2E+01
Iprodione	036734-19-7																	
Iron	007439-89-6																	
Isobutyl Alcohol	000078-83-1			9.8E+01	9.8E+00	-3.7E+01			1.0E+06	1.0E+06	-6.0E-01			1.0E+06	1.0E+06	1.0E+06	1.4E+05	-6.0E-01

Table 3.3c. (continued)

Chemical	CASRN	Vegetable Intercept (mg/kg)						Beef Intercept (mg/kg)						Milk Intercept (mg/kg)						Slope
		10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	Slope	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	Slope	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	Adult	Child	Adult	Child	
Isophorone	000078-59-1	2.1E+02	2.1E+00	1.7E+02	1.7E+01	-3.9E+01	1.0E+06	6.8E+04	1.0E+06	5.5E+05	-1.8E+00	1.0E+06	1.5E+04	1.0E+06	3.8E+05	2.9E+05	3.8E+04	-1.8E+00		
Isopropalin	033820-53-0																			
Isopropanol	000067-63-0																			
Isopropyl Methyl Phosphonic Acid	001832-54-8																			
Isosabden	082558-50-7																			
Karate	091465-08-6																			
Kerb	023950-58-5																			
Lactofen	077501-63-4																			
Lead Alkyls	NA																			
Lead And Compounds	007439-92-1																			
Linuron	000330-55-2																			
Lithium	007439-93-2																			
Londax	083055-99-6																			
MCPA	000094-74-6	7.4E-01	7.4E-02	-4.2E+01			7.0E+03	7.0E+02	-3.6E+00			3.7E+03	4.8E+02	3.7E+02	4.8E+01	-3.7E+00				
MCPB	000094-81-5																			
MCPP	000093-65-2	1.8E+00	1.8E-01	-4.3E+01			9.5E+03	9.5E+02	-4.9E+00			5.1E+03	6.6E+02	5.1E+02	6.6E+01	-5.1E+00				
Magnesium	007439-95-4																			
Malathion	000121-75-5	4.3E+01	4.3E+00	-4.4E+01			1.3E+05	1.3E+04	-6.5E+00			6.9E+04	8.9E+03	6.9E+03	8.9E+02	-6.8E+00				
Maleic Anhydride	000108-31-6																			
Maleic Hydrazide	000123-33-1	3.4E+01	3.4E+00	-3.6E+01			1.0E+06	1.0E+06	-1.2E-01			1.0E+06	1.0E+06	1.0E+06	7.8E+05	-1.2E-01				
Malononitrile	000109-77-3	2.4E-03	2.4E-04	-3.6E+01			3.0E+03	3.0E+02	-2.1E-01			1.6E+03	2.0E+02	1.6E+02	2.0E+01	-2.1E-01				
Mancozeb	008018-01-7																			
Maneb	012427-38-2																			

Nonradionuclides/water and soil/agricultural

Table 3.3e. (continued)

Chemical	CASRN	Vegetable Intercept (mg/kg)*				Slope	Beef Intercept (mg/kg)*				Slope	Milk Intercept (mg/kg)*						Slope
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child	
Manganese (Diet)	007439-96-5			3.9E+02	3.9E+01	-4.7E+01			3.9E+04	3.9E+03	-7.1E+00			1.1E+05	1.4E+04	1.1E+04	1.4E+03	-7.5E+00
Mephosfolan	000950-10-7																	
Mepiquat Chloride	024307-26-4																	
Mercuric Chloride	007487-94-7																	
Mercury (elemental)	007439-97-6			4.9E-01	4.9E-02	-4.2E+01			3.2E+00	3.2E-01	-5.5E+00			1.2E+01	1.5E+00	1.2E+00	1.5E-01	-5.7E+00
Mercury, Inorganic Salt	007439-97-6			4.9E-01	4.9E-02	-4.2E+01			3.2E+00	3.2E-01	-5.5E+00			1.2E+01	1.5E+00	1.2E+00	1.5E-01	-5.7E+00
Merphos	000150-50-5																	
Merphos Oxide	000078-48-8			1.0E-01	1.0E-02	-5.0E+01			8.5E-01	8.5E-02	-1.8E+01			5.0E-01	6.5E-02	5.0E-02	6.5E-03	-2.1E+01
Metalaxyl	057837-19-1																	
Methacrylonitrile	000126-98-7			2.3E-02	2.3E-03	-3.7E+01			9.2E+03	9.2E+02	-4.1E-01			4.8E+03	6.2E+02	4.8E+02	6.2E+01	-4.1E-01
Methamidophos	010265-92-6			2.4E-03	2.4E-04	-3.6E+01			1.5E+04	1.5E+03	-8.4E-02			7.8E+03	1.0E+03	7.8E+02	1.0E+02	-8.4E-02
Methanol	000067-56-1			2.1E+01	2.1E+00	-3.6E+01			1.0E+06	1.0E+06	-7.2E-02			1.0E+06	1.0E+06	1.0E+06	1.0E+06	-7.3E-02
Methidathion	000950-37-8																	
Methomyl	016752-77-5			6.1E+00	6.1E-01	-3.7E+01			1.0E+06	2.2E+05	-4.4E-01			1.0E+06	1.5E+05	1.1E+05	1.5E+04	-4.5E-01
Methoxy-5-nitroaniline, 2-	000099-59-2	3.6E+00	3.6E-02			-3.9E+01	1.7E+05	1.7E+03			-1.4E+00	3.9E+04	3.9E+02					-1.4E+00
Methoxychlor	000072-43-5			1.6E+01	1.6E+00	-4.9E+01			2.3E+03	2.3E+02	-1.5E+01			1.4E+03	1.7E+02	1.4E+02	1.7E+01	-1.7E+01
Methoxyethanol Acetate, 2-	000110-49-6																	
Methoxyethanol, 2-	000109-86-4			4.2E-02	4.2E-03	-3.6E+01			3.3E+05	3.3E+04	-7.2E-02			1.7E+05	2.2E+04	1.7E+04	2.2E+03	-7.3E-02
Methyl Acetate	000079-20-9			1.4E+02	1.4E+01	-3.6E+01			1.0E+06	1.0E+06	-2.5E-01			1.0E+06	1.0E+06	1.0E+06	8.8E+05	-2.6E-01
Methyl Acrylate	000096-33-3			8.0E+00	8.0E-01	-3.7E+01			1.0E+06	2.4E+05	-4.8E-01			1.0E+06	1.6E+05	1.3E+05	1.6E+04	-4.9E-01
Methyl Ethyl Ketone	000078-93-3			9.7E+01	9.7E+00	-3.6E+01			1.0E+06	1.0E+06	-2.9E-01			1.0E+06	1.0E+06	1.0E+06	4.8E+05	-2.9E-01
Methyl Isobutyl Ketone	000108-10-1			4.0E+01	4.0E+00	-3.8E+01			1.0E+06	3.8E+05	-9.6E-01			1.0E+06	2.5E+05	2.0E+05	2.5E+04	-9.7E-01
Methyl Mercury	022967-92-6																	

Table 3.3e. (continued)

Chemical	CASRN	Vegetable Intercept (mg/kg)*				Beef Intercept (mg/kg)*				Milk Intercept (mg/kg)*						Slope
		10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	Slope	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child	
Methyl Methacrylate	000080-62-6			4.5E+01	4.5E+00	-3.8E+01			1.0E+06	3.4E+05		1.0E+06	2.3E+05	1.8E+05	2.3E+04	-1.1E+00
Methyl Parathion	000298-00-0			2.6E-01	2.6E-02	-4.0E+01			5.5E+03	5.5E+02		2.9E+03	3.8E+02	2.9E+02	3.8E+01	-2.3E+00
Methyl Styrene (Mixed Isomers)	025013-15-4			1.6E+01	1.6E+00	-4.6E+01			1.9E+04	1.9E+03		1.1E+04	1.4E+03	1.1E+03	1.4E+02	-9.9E+00
Methyl hydrazine ^(b)	000060-34-4															
Methyl tert-Butyl Ether (MTBE)	001634-04-4															
Methyl-5-Nitroaniline, 2-	000099-55-8	8.1E+00	8.1E-02			-4.0E+01	1.4E+05	1.4E+03				3.2E+04	3.2E+02			-2.6E+00
Methylamine Hydrochloride, 2-	000636-21-5	1.5E-01	1.5E-03			-3.6E+01	2.0E+05	2.0E+03				4.5E+04	4.5E+02			-2.0E-01
Methylcyclohexane	000108-87-2															
Methylene Chloride	000075-09-2	1.8E+01	1.8E-01	3.4E+01	3.4E+00	-3.8E+01	1.0E+06	1.3E+04	1.0E+06	2.5E+05		2.9E+05	2.9E+03	1.0E+06	1.7E+04	-1.1E+00
Methylene-bis(2-chloroaniline), 4,4'-	000101-14-4	5.4E+00	5.4E-02	2.1E+00	2.1E-01	-4.8E+01	2.2E+03	2.2E+01	8.6E+02	8.6E+01		5.4E+02	6.3E+01	4.9E+02	6.3E+00	-1.4E+01
Methylene-bis(N,N-dimethyl) Aniline, 4,4'-	000101-61-1	1.7E+01	1.7E-01			-4.9E+01	1.0E+03	1.0E+01				2.6E+02	2.6E+00			-1.9E+01
Methylenebisbenzenamine, 4,4'-	000101-77-9	7.3E-01	7.3E-03			-3.9E+01	2.9E+04	2.9E+02				6.4E+03	6.4E+01			-1.6E+00
Methylenediphenyl Isocyanate, 4,4'-	000101-68-8															
Methylstyrene, Alpha-	000098-83-9			1.8E+02	1.8E+01	-4.6E+01			2.2E+05	2.2E+04		1.2E+05	1.6E+04	1.2E+04	1.6E+03	-9.9E+00
Methylisobutyl Lead	001762-28-3															
Metolachlor	051218-45-2															
Metribuzin ^(b)	021087-64-9			2.2E+01	2.2E+00	-3.9E+01			6.9E+05	6.9E+04		3.7E+05	4.7E+04	3.7E+04	4.7E+03	-1.8E+00
Mirex ^(b)	002385-85-5	4.4E-01	4.4E-03	6.8E-01	6.8E-02	-4.9E+01	9.3E+00	9.3E-02	1.4E+01	1.4E+00		8.5E+00	1.1E+00	8.5E-01	1.1E-01	-2.0E+01
Molinate	002212-67-1			5.5E+00	5.5E-01	-4.7E+01			4.8E+03	4.8E+02		2.7E+03	3.4E+02	2.7E+02	3.4E+01	-1.1E+01
Molybdenum	007439-98-7			1.3E+01	1.3E+00	-4.6E+01			9.3E+02	9.3E+01		9.7E+01	1.2E+01	9.7E+00	1.2E+00	-1.0E+01

Table 3.3e. (continued)

Chemical	CASRN	Vegetable Intercept (mg/kg)*				Slope	Beef Intercept (mg/kg)*				Slope	Milk Intercept (mg/kg)*						Slope
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child	
Monochloramine	010599-90-3																	
Monochlorobutanes	025154-42-1																	
Naled	000300-76-5			4.1E+00	4.1E-01	-4.4E+01			1.5E+04	1.5E+03	-5.9E+00			7.9E+03	1.0E+03	7.9E+02	1.0E+02	-6.2E+00
Naphthalene ⁽⁹⁾	000091-20-3			9.2E+01	9.2E+00	-4.6E+01			1.2E+05	1.2E+04	-8.9E+00			6.9E+04	8.8E+03	6.9E+03	8.8E+02	-9.5E+00
Naphthalene, 1-Methyl	000090-12-0																	
Naphthalene, 2-Methyl	000091-57-6																	
Napropamide	015299-99-7			2.6E+01	2.6E+00	-3.7E+01			1.0E+06	8.1E+05	-4.8E-01			1.0E+06	5.5E+05	4.3E+05	5.5E+04	-4.8E-01
Niagara Blue 4B	002429-74-5																	
Nickel Carbonyl	013463-39-3																	
Nickel Refinery Dust	NA																	
Nickel Soluble Salts	007440-02-0			5.9E+01	5.9E+00	-4.7E+01			1.0E+03	1.0E+02	-1.3E+01			5.8E+01	7.5E+00	5.8E+00	7.5E-01	-1.5E+01
Nickel Subsulfide	012035-72-2																	
Nitrapyrin ⁽⁹⁾	001929-82-4			3.4E+00	3.4E-01	-4.5E+01			8.2E+03	8.2E+02	-7.0E+00			4.5E+03	5.8E+02	4.5E+02	5.8E+01	-7.4E+00
Nitrate	014797-55-8																	
Nitric Oxide ⁽⁹⁾	010102-43-9																	
Nitrite	014797-65-0																	
Nitroaniline, 2-	000088-74-4																	
Nitrobenzene	000098-95-3			4.8E-01	4.8E-02	-4.0E+01			1.2E+04	1.2E+03	-2.0E+00			6.6E+03	8.4E+02	6.6E+02	8.4E+01	-2.0E+00
Nitrofurantoin	000067-20-9																	
Nitrofurazone	000059-87-0																	
Nitrogen Dioxide ⁽⁹⁾	010102-44-0																	
Nitroguanidine	000556-88-7																	
Nitrophenol, 4-	000100-02-7																	

Table 3.3e. (continued)

Chemical	CASRN	Vegetable Intercept (mg/kg)*				Slope	Beef Intercept (mg/kg)*				Slope	Milk Intercept (mg/kg)*						Slope
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child	
Nitropropane, 2- ^(b)	000079-46-9	5.7E-03	5.7E-05			-3.7E+01	2.2E+03	2.2E+01			-4.1E-01	5.0E+02	5.0E+00					-4.2E-01
Nitroso-N-ethylurea, N-	000759-73-9	2.6E-04	2.6E-06			-3.6E+01	2.1E+02	2.1E+00			-2.7E-01	4.6E+01	4.6E-01					-2.7E-01
Nitroso-N-methylurea, N-	000684-93-5																	
Nitroso-di-N-butylamine, N-	000924-16-3	4.5E-02	4.5E-04			-4.0E+01	9.6E+02	9.6E+00			-2.3E+00	2.2E+02	2.2E+00					-2.3E+00
Nitroso-di-N-propylamine, N-	000621-64-7	2.1E-02	2.1E-04			-3.8E+01	1.3E+03	1.3E+01			-1.2E+00	2.8E+02	2.8E+00					-1.2E+00
Nitrosodiethanolamine, N-	001116-54-7	1.2E-03	1.2E-05			-3.6E+01	6.2E+04	6.2E+02			-2.4E-02	1.4E+04	1.4E+02					-2.4E-02
Nitrosodiethylamine, N-	000055-18-5	3.3E-04	3.3E-06			-3.7E+01	1.5E+02	1.5E+00			-3.8E-01	3.4E+01	3.4E-01					-3.8E-01
Nitrosodimethylamine, N-	000062-75-9	2.5E-04	2.5E-06			-3.6E+01	1.2E+03	1.2E+01			-9.4E-02	2.8E+02	2.8E+00					-9.5E-02
Nitrosodiphenylamine, N-	000086-30-6	1.1E+02	1.1E+00			-4.5E+01	2.3E+05	2.3E+03			-7.6E+00	5.2E+04	5.2E+02					-8.1E+00
Nitrosomethylethylamine, N-	010595-95-6																	
Nitrosomethylvinylamine, N-	004549-40-0																	
Nitrosopyrrolidine, N-	000930-55-2	3.0E-03	3.0E-05			-3.6E+01	5.1E+04	5.1E+02			-4.7E-02	1.1E+04	1.1E+02					-4.7E-02
Nitrotoluene, 4-Amino-2-	000119-32-4																	
Nitrotoluene, m-	000099-08-1			1.6E+01	1.6E+00	-4.2E+01			1.2E+05	1.2E+04	-4.0E+00			6.6E+04	8.5E+03	6.6E+03	8.5E+02	-4.1E+00
Nitrotoluene, o-	000088-72-2			1.5E+01	1.5E+00	-4.2E+01			1.4E+05	1.4E+04	-3.6E+00			7.4E+04	9.5E+03	7.4E+03	9.5E+02	-3.7E+00
Nitrotoluene, p-	000099-99-0			1.6E+01	1.6E+00	-4.2E+01			1.2E+05	1.2E+04	-4.0E+00			6.6E+04	8.5E+03	6.6E+03	8.5E+02	-4.1E+00
Norflurazon	027314-13-2																	
Nustar	085509-19-9																	
OCDD ^(a)	003268-87-9	5.5E-03	5.5E-05			-5.0E+01	3.8E-05	3.8E-07			-1.9E+01	9.7E-06	9.7E-08					-2.2E+01
OCDP ^(a)	039001-02-0																	
Octabromodiphenyl Ether	032536-52-0																	

Table 3.3e. (continued)

Chemical	CASRN	Vegetable Intercept (mg/kg)*				Slope	Beef Intercept (mg/kg)*				Slope	Milk Intercept (mg/kg)*						Slope
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child	
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetra (HMX)	002691-41-0			1.2E+01	1.2E+00	-3.7E+01			1.0E+06	4.4E+05	-4.4E-01			1.0E+06	2.9E+05	2.3E+05	2.9E+04	-4.4E-01
Octamethylpyrophosphoramide	000152-16-9																	
Octyl Phthalate, di-N-	000117-84-0			7.0E+01	7.0E+00	-5.0E+01			1.9E-01	1.9E-02	-1.9E+01			1.1E-01	1.4E-02	1.1E-02	1.4E-03	-2.2E+01
Oryzalin	019044-88-3																	
Oxadiazon	019666-30-9																	
Oxamyl	023135-22-0																	
Paclobutrazol	076738-62-0																	
Paraquat	001910-42-5			1.9E-03	1.9E-04	-3.6E+01			1.0E+06	1.0E+06	-7.2E-04			1.0E+06	1.0E+06	1.0E+06	2.8E+05	-7.3E-04
Parathion	000056-38-2			1.8E+01	1.8E+00	-4.8E+01			8.9E+03	8.9E+02	-1.2E+01			5.0E+03	6.5E+02	5.0E+02	6.5E+01	-1.3E+01
PeCDD, 2,3,7,8-(¹⁰)	036088-22-9	1.1E-05	1.1E-07			-5.0E+01	1.4E-05	1.4E-07			-1.9E+01	3.6E-06	3.6E-08					-2.2E+01
PeCDF, 1,2,3,7,8-(¹⁰)	057117-41-6																	
PeCDF, 2,3,4,7,8-(¹⁰)	057117-31-4																	
Pebulate	001114-71-2																	
Pendimethalin	040487-42-1																	
Pentabromodiphenyl Ether	032534-81-9																	
Pentachlorobenzene	000608-93-5			2.7E+00	2.7E-01	-4.9E+01			6.9E+01	6.9E+00	-1.7E+01			4.1E+01	5.2E+00	4.1E+00	5.2E-01	-2.0E+01
Pentachlorocyclopentadiene	025329-35-5																	
Pentachloronitrobenzene	000082-68-8	3.0E+00	3.0E-02	9.9E+00	9.9E-01	-4.9E+01	2.8E+02	2.8E+00	9.3E+02	9.3E+01	-1.6E+01	6.9E+01	6.9E-01	5.4E+02	7.0E+01	5.4E+01	7.0E+00	-1.8E+01
Pentachlorophenol	000087-86-5	6.7E+00	6.7E-02	1.0E+02	1.0E+01	-5.0E+01	3.5E+01	3.5E-01	5.4E+02	5.4E+01	-1.8E+01	8.9E+00	8.9E-02	3.2E+02	4.1E+01	3.2E+01	4.1E+00	-2.1E+01
Pentyl Alcohol, N-	000071-41-0																	
Permethrin	052645-53-1			1.4E+02	1.4E+01	-4.7E+01			1.3E+05	1.3E+04	-1.0E+01			7.0E+04	9.0E+03	7.0E+03	9.0E+02	-1.1E+01

Table 3.3e. (continued)

Chemical	CASRN	Vegetable Intercept (mg/kg)*				Slope	Beef Intercept (mg/kg)*				Slope	Milk Intercept (mg/kg)*						Slope
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child	
Phenanthrene	000085-01-8																	
Phenmedipham	013684-63-4			5.2E+00	5.2E-01	-3.6E+01			1.0E+06	1.0E+06	-3.6E-02			1.0E+06	1.0E+06	1.0E+06	9.3E+05	-3.6E-02
Phenol	000108-95-2			4.2E+02	4.2E+01	-3.9E+01			1.0E+06	1.0E+06	-1.4E+00			1.0E+06	1.0E+06	1.0E+06	1.4E+05	-1.4E+00
Phenylenediamine, m-	000108-45-2			2.6E-01	2.6E-02	-3.6E+01			1.0E+06	2.0E+05	-7.4E-02			1.0E+06	1.3E+05	1.0E+05	1.3E+04	-7.5E-02
Phenylenediamine, o-	000095-54-5	1.0E+00	1.0E-02			-3.7E+01	5.0E+05	5.0E+03			-3.6E-01	1.1E+05	1.1E+03					-3.6E-01
Phenylenediamine, p-	000106-50-3			4.5E+00	4.5E-01	-3.6E+01			1.0E+06	1.0E+06	-4.1E-02			1.0E+06	1.0E+06	1.0E+06	6.4E+05	-4.1E-02
Phenylmercuric Acetate	000062-38-4																	
Phenylphenol, 2-	000090-43-7	2.9E+02	2.9E+00			-4.5E+01	5.7E+05	5.7E+03			-7.6E+00	1.3E+05	1.3E+03					-8.1E+00
Phorate	000298-02-2			1.7E-01	1.7E-02	-3.9E+01			5.5E+03	5.5E+02	-1.8E+00			2.9E+03	3.8E+02	2.9E+02	3.8E+01	-1.8E+00
Phosmet	000732-11-6			4.1E+01	4.1E+00	-4.4E+01			1.5E+05	1.5E+04	-5.9E+00			7.9E+04	1.0E+04	7.9E+03	1.0E+03	-6.2E+00
Phosphine	007803-51-2																	
Phosphoric Acid	007664-38-2																	
Phthalic Acid, P-	000100-21-0			8.6E+02	8.6E+01	-3.9E+01			1.0E+06	1.0E+06	-1.8E+00			1.0E+06	1.0E+06	1.0E+06	1.9E+05	-1.8E+00
Phthalic Anhydride	000085-44-9			1.0E+02	1.0E+01	-3.6E+01			1.0E+06	1.0E+06	-8.8E-02			1.0E+06	1.0E+06	1.0E+06	1.0E+06	-8.9E-02
Picloram	001918-02-1			1.1E+02	1.1E+01	-4.2E+01			8.6E+05	8.6E+04	-4.0E+00			4.6E+05	5.9E+04	4.6E+04	5.9E+03	-4.1E+00
Pirimiphos, Methyl	029232-93-7																	
Polybrominated Biphenyls	NA																	
Polychlorinated Biphenyls	001336-36-3	1.1E-01	1.1E-03			-5.0E+01	4.4E-01	4.4E-03			-1.9E+01	1.1E-01	1.1E-03					-2.1E+01
Potassium Cyanide	000151-50-8			4.1E+00	4.1E-01	-3.6E+01			1.0E+06	1.0E+06	-1.4E-01			1.0E+06	6.7E+05	5.2E+05	6.7E+04	-1.5E-01
Potassium Silver Cyanide	000506-61-6																	
Prochloraz	067747-09-5																	
Profluralin	026399-36-0																	
Prometon	001610-18-0			2.2E+01	2.2E+00	-4.2E+01			2.1E+05	2.1E+04	-3.6E+00			1.1E+05	1.4E+04	1.1E+04	1.4E+03	-3.7E+00

Table 3.3e. (continued)

Chemical	CASRN	Vegetable Intercept (mg/kg)*				Slope	Beef Intercept (mg/kg)*				Slope	Milk Intercept (mg/kg)*						Slope
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child	
Prometryn	007287-19-6			6.8E+00	6.8E-01	-4.3E+01			4.3E+04	4.3E+03	-4.4E+00			2.3E+04	3.0E+03	2.3E+03	3.0E+02	-4.6E+00
Propachlor	001918-16-7																	
Propanil	000709-98-8			1.2E+01	1.2E+00	-4.5E+01			2.3E+04	2.3E+03	-7.8E+00			1.3E+04	1.6E+03	1.3E+03	1.6E+02	-8.2E+00
Propargite	002312-35-8																	
Propargyl Alcohol	000107-19-7																	
Propazine	000139-40-2			3.2E+01	3.2E+00	-4.2E+01			2.5E+05	2.5E+04	-4.0E+00			1.3E+05	1.7E+04	1.3E+04	1.7E+03	-4.1E+00
Propham	000122-42-9			5.0E+01	5.0E+00	-4.6E+01			8.1E+04	8.1E+03	-8.3E+00			4.5E+04	5.8E+03	4.5E+03	5.8E+02	-8.8E+00
Propiconazole	060207-90-1																	
Propylene Glycol	000057-55-6			2.4E+02	2.4E+01	-3.6E+01			1.0E+06	1.0E+06	-2.1E-02			1.0E+06	1.0E+06	1.0E+06	1.0E+06	-2.1E-02
Propylene Glycol Monoethyl Ether	001569-02-4																	
Propylene Glycol Monomethyl Ether	000107-98-2			6.4E+01	6.4E+00	-3.6E+01			1.0E+06	1.0E+06	-1.6E-01			1.0E+06	1.0E+06	1.0E+06	8.8E+05	-1.6E-01
Propylene Oxide	000075-56-9	1.2E-01	1.2E-03			-3.6E+01	1.5E+05	1.5E+03			-2.1E-01	3.3E+04	3.3E+02					-2.1E-01
Pursuit	081335-77-5																	
Pydrin	051630-58-1			8.1E+01	8.1E+00	-4.9E+01			1.1E+04	1.1E+03	-1.5E+01			6.5E+03	8.4E+02	6.5E+02	8.4E+01	-1.7E+01
Pyrene	000129-00-0			1.0E+02	1.0E+01	-4.9E+01			4.9E+03	4.9E+02	-1.7E+01			2.9E+03	3.7E+02	2.9E+02	3.7E+01	-1.9E+01
Pyridine	000110-86-1			5.6E-01	5.6E-02	-3.8E+01			4.2E+04	4.2E+03	-1.1E+00			2.2E+04	2.9E+03	2.2E+03	2.9E+02	-1.1E+00
Quinalphos	013593-03-8																	
Quinoline	000091-22-5	2.4E-02	2.4E-04			-4.1E+01	3.4E+02	3.4E+00			-2.9E+00	7.7E+01	7.7E-01					-2.9E+00
Refractory Ceramic Fibers	NA																	
Resmethrin	010453-86-8																	
Ronnel	000299-84-3			1.7E+02	1.7E+01	-4.9E+01			5.3E+03	5.3E+02	-1.7E+01			3.2E+03	4.0E+02	3.2E+02	4.0E+01	-2.0E+01
Rotenone	000083-79-4			1.2E+01	1.2E+00	-4.8E+01			3.4E+03	3.4E+02	-1.4E+01			1.9E+03	2.5E+02	1.9E+02	2.5E+01	-1.5E+01

Table 3.3e. (continued)

Chemical	CASRN	Vegetable Intercept (mg/kg)*				Slope	Beef Intercept (mg/kg)*				Slope	Milk Intercept (mg/kg)*						Slope
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child	
Savey	078587-05-0																	
Selenious Acid	007783-00-8																	
Selenite	014124-67-5																	
Selenium	007782-49-2			1.3E+01	1.3E+00	-4.6E+01			8.3E+00	8.3E-01	-8.5E+00			1.5E+01	1.9E+00	1.5E+00	1.9E-01	-9.1E+00
Selenium Sulfide	007446-34-6																	
Selenourea	000630-10-4																	
Sethoxydim	074051-80-2																	
Silver	007440-22-4			1.8E+01	1.8E+00	-5.0E+01			1.8E+02	1.8E+01	-5.5E+00			1.8E+03	2.4E+02	1.8E+02	2.4E+01	-5.7E+00
Silver Cyanide	000506-64-9																	
Simazine	000122-34-9	2.7E+00	2.7E-02	6.8E+00	6.8E-01	-4.1E+01	3.0E+04	3.0E+02	7.8E+04	7.8E+03	-3.2E+00	6.9E+03	6.9E+01	4.2E+04	5.4E+03	4.2E+03	5.4E+02	-3.3E+00
Sodium	007440-23-5																	
Sodium Acifluorfen	062476-59-9																	
Sodium Azide	026628-22-8																	
Sodium Cyanide	000143-33-9			1.6E+00	1.6E-01	-3.6E+01			1.0E+06	1.0E+06	-6.8E-02			1.0E+06	9.3E+05	7.3E+05	9.3E+04	-6.8E-02
Sodium Diethyldithiocarbamate	000148-18-5																	
Sodium Fluoroacetate	000062-74-8																	
Sodium Metavanadate	013718-26-8																	
Stirofos (Tetrachlorovinphos)	000961-11-5																	
Strontium, Stable	007440-24-6			1.2E+03	1.2E+02	-4.4E+01			7.5E+03	7.5E+02	-5.1E+00			3.7E+03	4.7E+02	3.7E+02	4.7E+01	-5.3E+00
Strychnine	000057-24-9			3.2E-01	3.2E-02	-4.0E+01			6.7E+03	6.7E+02	-2.3E+00			3.5E+03	4.5E+02	3.5E+02	4.5E+01	-2.3E+00
Styrene ^(b)	000100-42-5			4.3E+02	4.3E+01	-4.4E+01			1.0E+06	1.3E+05	-6.5E+00			6.9E+05	8.9E+04	6.9E+04	8.9E+03	-6.8E+00
Sulfate	014808-79-8																	

Table 3.3e. (continued)

Chemical	CASRN	Vegetable Intercept (mg/kg)*				Slope	Beef Intercept (mg/kg)*				Slope	Milk Intercept (mg/kg)*						Slope
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child	
Systhane	088671-89-0																	
TCDD, 2,3,7,8-(¹⁰)	001746-01-6	5.4E-06	5.4E-08			-5.0E+01	3.6E-06	3.6E-08			-1.9E+01	9.2E-07	9.2E-09					-2.2E+01
TCDF, 2,3,7,8-(¹⁰)	051207-31-9	5.4E-05	5.4E-07			-5.0E+01	3.4E-04	3.4E-06			-1.8E+01	8.5E-05	8.5E-07					-2.1E+01
TCMTB	021564-17-0																	
Tebuthiuron	034014-18-1			9.7E+00	9.7E-01	-3.6E+01			1.0E+06	9.5E+05	-2.4E-01			1.0E+06	6.3E+05	4.9E+05	6.3E+04	-2.5E-01
Temephos	003383-96-8																	
Terbacil	005902-51-2																	
Terbufos	013071-79-9			7.2E-02	7.2E-03	-4.7E+01			4.6E+01	4.6E+00	-1.1E+01			2.6E+01	3.3E+00	2.6E+00	3.3E-01	-1.2E+01
Terbutryn	000886-50-0			2.9E+00	2.9E-01	-4.7E+01			1.7E+03	1.7E+02	-1.2E+01			9.3E+02	1.2E+02	9.3E+01	1.2E+01	-1.3E+01
Tetrabutyl Lead	001920-90-7																	
Tetrachlorobenzene, 1,2,4,5-	000095-94-3			9.9E-01	9.9E-02	-4.9E+01			9.3E+01	9.3E+00	-1.6E+01			5.4E+01	7.0E+00	5.4E+00	7.0E-01	-1.8E+01
Tetrachloroethane, 1,1,1,2-	000630-20-6	2.0E+01	2.0E-01	6.8E+01	6.8E+00	-4.5E+01	4.9E+04	4.9E+02	1.6E+05	1.6E+04	-7.0E+00	1.1E+04	1.1E+02	9.0E+04	1.2E+04	9.0E+03	1.2E+03	-7.4E+00
Tetrachloroethane, 1,1,2,2-	000079-34-5	1.9E+00	1.9E-02			-4.2E+01	1.4E+04	1.4E+02			-4.0E+00	3.3E+03	3.3E+01					-4.1E+00
Tetrachloroethylene(¹⁰)	000127-18-4	8.2E+00	8.2E-02	1.8E+01	1.8E+00	-4.3E+01	4.3E+04	4.3E+02	9.5E+04	9.5E+03	-4.9E+00	9.8E+03	9.8E+01	5.1E+04	6.6E+03	5.1E+03	6.6E+02	-5.1E+00
Tetrachlorophenol, 2,3,4,6-	000058-90-2			9.4E+01	9.4E+00	-4.8E+01			2.5E+04	2.5E+03	-1.4E+01			1.5E+04	1.9E+03	1.5E+03	1.9E+02	-1.5E+01
Tetrachlorotoluene, p-alpha, alpha, alpha-	005216-25-1																	
Tetraethyl Dithiopyrophosphate	003689-24-5			1.1E+00	1.1E-01	-4.5E+01			2.7E+03	2.7E+02	-7.0E+00			1.5E+03	1.9E+02	1.5E+02	1.9E+01	-7.4E+00
Tetraethyl Lead	000078-00-2																	
Tetrafluoroethane, 1,1,1,2-	000811-97-2																	
Tetramethyl Lead	000075-74-1																	

Table 3.3e. (continued)

Chemical	CASRN	Vegetable Intercept (mg/kg)*				Slope	Beef Intercept (mg/kg)*				Slope	Milk Intercept (mg/kg)*						Slope
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child	
Tetrapropyl Lead	003440-75-3																	
Thallic Oxide ⁽⁹⁾	001314-32-5																	
Thallium (I) Nitrate	010102-45-1																	
Thallium (Soluble Salts)	007440-28-0																	
Thallium Acetate	000563-68-8																	
Thallium Carbonate	006533-73-9																	
Thallium Chloride	007791-12-0																	
Thallium Selenite ⁽⁹⁾	012039-52-0																	
Thallium Sulfate	007446-18-6																	
Thiobencarb	028249-77-6																	
Thiofanox	039196-18-4			3.8E-03	3.8E-04	-3.6E+01			2.4E+05	2.4E+04	-2.2E-02			1.2E+05	1.6E+04	1.2E+04	1.6E+03	-2.2E-02
Thiophanate, Methyl	023564-05-8																	
Thiram	000137-26-8																	
Thorium	007440-29-1																	
Tin	007440-31-5			9.8E+02	9.8E+01	-4.2E+01			6.4E+03	6.4E+02	-5.5E+00			1.1E+04	1.4E+03	1.1E+03	1.4E+02	-5.7E+00
Titanium	007440-32-6																	
Toluene ⁽⁹⁾	000108-88-3			3.9E+02	3.9E+01	-4.4E+01			1.0E+06	1.7E+05	-5.4E+00			9.0E+05	1.2E+05	9.0E+04	1.2E+04	-5.6E+00
Toluene diisocyanate mixture (TDI)	026471-62-5																	
Toluene-2,4-diamine	000095-80-7	1.3E-02	1.3E-04			-3.6E+01	8.2E+03	8.2E+01			-3.1E-01	1.8E+03	1.8E+01					-3.2E-01
Toluene-2,5-diamine	000095-70-5																	
Toluene-2,6-diamine	000823-40-5																	
Toluidine, o- (Methylaniline, 2-)	000095-53-4	5.5E-01	5.5E-03			-3.8E+01	4.1E+04	4.1E+02			-1.1E+00	9.2E+03	9.2E+01					-1.1E+00

3-488

Table 3.3e. (continued)

Chemical	CASRN	Vegetable Intercept (mg/kg) ^a				Slope	Beef Intercept (mg/kg) ^a				Slope	Milk Intercept (mg/kg) ^a						Slope
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child	
Toluidine, p-	000106-49-0	1.4E+00	1.4E-02			-4.0E+01	2.4E+04	2.4E+02			-2.5E+00	5.5E+03	5.5E+01					-2.6E+00
Toxaphene	008001-35-2	7.1E-01	7.1E-03			-4.9E+01	4.3E+01	4.3E-01			-1.7E+01	1.1E+01	1.1E-01					-1.9E+01
Tralomehrin	066841-25-6																	
Triallate	002303-17-5			4.0E+01	4.0E+00	-4.8E+01			1.4E+04	1.4E+03	-1.3E+01			7.9E+03	1.0E+03	7.9E+02	1.0E+02	-1.4E+01
Triasulfuron	082097-50-5																	
Tribromobenzene, 1,2,4-	000615-54-3																	
Tribromochloromethane	000594-15-0																	
Tribromodiphenyl Ether	049690-94-0																	
Tributyltin Oxide	000056-35-9																	
Trichloro-1,2,2-trifluoroethane, 1,1,2-	000076-13-1			5.5E+04	5.5E+03	-4.3E+01			1.0E+06	1.0E+06	-4.9E+00			1.0E+06	1.0E+06	1.0E+06	1.0E+06	-5.1E+00
Trichloro-2'-hydroxydiphenylether	003380-34-5																	
Trichloroacetic Acid																		
Trichloroaniline HCl, 2,4,6-	033663-50-2																	
Trichloroaniline, 2,4,6-	000634-93-5																	
Trichlorobenzene, 1,2,4-	000120-82-1			3.1E+01	3.1E+00	-4.8E+01			1.0E+04	1.0E+03	-1.3E+01			5.9E+03	7.5E+02	5.9E+02	7.5E+01	-1.5E+01
Trichloroethane, 1,1,1-(⁹)	000071-55-6			1.5E+02	1.5E+01	-4.3E+01			9.8E+05	9.8E+04	-4.4E+00			5.2E+05	6.7E+04	5.2E+04	6.7E+03	-4.6E+00
Trichloroethane, 1,1,2-	000079-00-5	4.7E+00	4.7E-02	4.6E+00	4.6E-01	-4.0E+01	8.1E+04	8.1E+02	7.9E+04	7.9E+03	-2.5E+00	1.8E+04	1.8E+02	4.2E+04	5.4E+03	4.2E+03	5.4E+02	-2.6E+00
Trichloroethylene(⁹)	000079-01-6	3.4E+01	3.4E-01			-4.2E+01	2.6E+05	2.6E+03			-4.0E+00	5.9E+04	5.9E+02					-4.1E+00
Trichlorofluoromethane	000075-69-4			5.1E+02	5.1E+01	-4.3E+01			1.0E+06	3.3E+05	-4.4E+00			1.0E+06	2.2E+05	1.7E+05	2.2E+04	-4.6E+00
Trichlorophenol, 2,4,5-	000095-95-4			3.0E+02	3.0E+01	-4.8E+01			1.5E+05	1.5E+04	-1.2E+01			8.4E+04	1.1E+04	8.4E+03	1.1E+03	-1.3E+01
Trichlorophenol, 2,4,6-	000088-06-2	6.1E+01	6.1E-01			-4.7E+01	3.8E+04	3.8E+02			-1.1E+01	9.0E+03	9.0E+01					-1.2E+01

Table 3.3e. (continued)

Chemical	CASRN	Vegetable Intercept (mg/kg)*				Slope	Beef Intercept (mg/kg)*				Slope	Milk Intercept (mg/kg)*						Slope
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1		10 ⁻⁴	10 ⁻⁶	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child	
Trichlorophenoxy) Propionic Acid, 2(2,4,5-	000093-72-1			2.4E+01	2.4E+00	-4.8E+01			9.9E+03	9.9E+02	-1.3E+01			5.6E+03	7.2E+02	5.6E+02	7.2E+01	-1.4E+01
Trichlorophenoxyacetic Acid, 2,4,5-	000093-76-5			3.1E+01	3.1E+00	-4.8E+01			1.0E+04	1.0E+03	-1.3E+01			5.9E+03	7.5E+02	5.9E+02	7.5E+01	-1.5E+01
Trichloropropane, 1,1,2-	000598-77-6																	
Trichloropropane, 1,2,3-	000096-18-4	1.1E-01	1.1E-03	2.0E+01	2.0E+00	-4.9E+01	1.0E+01	1.0E-01	1.9E+03	1.9E+02	-1.6E+01	2.6E+00	2.6E-02	1.1E+03	1.4E+02	1.1E+02	1.4E+01	-1.8E+01
Trichloropropene, 1,2,3-	000096-19-5																	
Trichlorotoluene, 2,3,6-	002077-46-5																	
Trichlorotoluene, alpha 2,6-	002014-83-7																	
Tridiphenyl	058138-08-2																	
Triethyl Lead	005224-23-7																	
Triethylamine	000121-44-8																	
Trifluralin	001582-09-8	1.0E+02	1.0E+00	2.6E+01	2.6E+00	-4.9E+01	2.1E+03	2.1E+01	5.2E+02	5.2E+01	-1.8E+01	5.2E+02	5.2E+00	3.1E+02	3.9E+01	3.1E+01	3.9E+00	-2.0E+01
Trimethyl Lead	007442-13-9																	
Trimethyl Phosphate	000512-56-1																	
Trimethylethyl Lead	001762-26-1																	
Trinitrobenzene, 1,3,5-	000099-35-4			2.5E-02	2.5E-03	-3.8E+01			2.4E+03	2.4E+02	-9.6E-01			1.2E+03	1.6E+02	1.2E+02	1.6E+01	-9.7E-01
Trinitrophenylmethyl nitramine	000479-45-8			1.2E+01	1.2E+00	-4.0E+01			2.0E+05	2.0E+04	-2.5E+00			1.1E+05	1.4E+04	1.1E+04	1.4E+03	-2.6E+00
Trinitrotoluene, 2,4,6-	000118-96-7	1.2E+01	1.2E-01	7.4E-01	7.4E-02	-4.2E+01	1.1E+05	1.1E+03	7.0E+03	7.0E+02	-3.6E+00	2.5E+04	2.5E+02	3.7E+03	4.8E+02	3.7E+02	4.8E+01	-3.7E+00
Tripropyl Lead	006618-03-7																	
Uranium (Soluble Salts)	NA			1.1E+01	1.1E+00	-5.0E+01			3.5E+03	3.5E+02	-1.8E+01			4.9E+02	6.3E+01	4.9E+01	6.3E+00	-2.1E+01
Vanadium Pentoxide	001314-62-1																	
Vanadium Sulfate	036907-42-3																	

Table 3.3e. (continued)

Chemical	CASRN	Vegetable Intercept (mg/kg)*				Slope	Beef Intercept (mg/kg)*				Slope	Milk Intercept (mg/kg)*						Slope
		10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1		10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1		10 ⁻⁴	10 ⁻⁴	HQ=1 Adult	HQ=1 Child	HQ=0.1 Adult	HQ=0.1 Child	
Vanadium, Metallic	007440-62-2			2.4E+01	2.4E+00	-5.0E+01			1.0E+03	1.0E+02	-1.9E+01			2.4E+04	3.1E+03	2.4E+03	3.1E+02	-2.2E+01
Vanadyl Sulfate	027774-13-6																	
Vernolate	001929-77-7																	
Vinclozolin	050471-44-8																	
Vinyl Acetate	000108-05-4			2.9E+02	2.9E+01	-3.7E+01			1.0E+06	1.0E+06	-5.2E-01			1.0E+06	1.0E+06	1.0E+06	5.1E+05	-5.3E-01
Vinyl Bromide	000593-60-2																	
Vinyl Chloride ^(a)	000075-01-4	7.7E-02	7.7E-04			-3.8E+01	4.7E+03	4.7E+01			-1.2E+00	1.0E+03	1.0E+01					-1.2E+00
Warfarin	000081-81-2			7.5E-01	7.5E-02	-4.6E+01			1.2E+03	1.2E+02	-8.3E+00			6.7E+02	8.6E+01	6.7E+01	8.6E+00	-8.8E+00
White Phosphorus	007723-14-0																	
Xylene, Mixture ^(a)	001330-20-7			5.2E+03	5.2E+02	-4.6E+01			1.0E+06	6.9E+05	-8.9E+00			1.0E+06	4.9E+05	3.8E+05	4.9E+04	-9.5E+00
Xylene, P ^(a)	000106-42-3																	
Xylene, m ^(a)	000108-38-3			5.0E+03	5.0E+02	-4.6E+01			1.0E+06	8.1E+05	-8.3E+00			1.0E+06	5.8E+05	4.5E+05	5.8E+04	-8.8E+00
Xylene, o ^(a)	000095-47-6			5.0E+03	5.0E+02	-4.6E+01			1.0E+06	8.1E+05	-8.3E+00			1.0E+06	5.8E+05	4.5E+05	5.8E+04	-8.8E+00
Zinc (Metallic)	007440-66-6			5.2E+02	5.2E+01	-4.3E+01			3.2E+02	3.2E+01	-5.5E+00			5.5E+02	7.1E+01	5.5E+01	7.1E+00	-5.8E+00
Zinc Cyanide	000557-21-1																	
Zinc Phosphide	001314-84-7																	
Zincb	012122-67-7																	
Zirconium	007440-67-7																	

Notes:

- * By definition, 1 kg = 1.0E + 06 mg. Therefore, a limit of 1.0E + 06 mg/kg was used for any PRG that was calculated to be above this limit.
- (1) The same oral slope factor as used for polychlorinated biphenyls.
- (2) The PRG was calculated considering *Supplemental Guidance from RAGS: Region 4 Bulletins, Human Health Risk Assessment* (Interim 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

Table 3.3e. (continued)

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.

- (3) The toxicity values for trichloroethylene have been withdrawn from IRIS and HEAST pending further investigation. However, the most recent toxicity values have been used to calculate the PRG.
- (4) The PRG was calculated considering *Supplemental Guidance from RAGS: Region 4 Bulletins, Human Health Risk Assessment* (Interim Guidance) from EPA (November 1995). The slope factors for chemicals so marked indicate that a TEF methodology was used for chlorinated dioxin and furan congeners based on each compound's relative potency to the potency of 2,3,7,8-tetrachlorodibenzodioxin (TCDD). The following TEFs were used to convert each slope factor to an equivalent slope factor of 2,3,7,8-TCDD: (1) 2,3,7,8-TCDD, TEF = 1.0; (2) 2,3,7,8-PeCDD, TEF = 0.5; (3) 2,3,7,8-HxCDD, TEF = 0.1; (4) 2,3,7,8-HpCDD, TEF = 0.01; (5) OCDD, TEF = 0.001; (6) 2,3,7,8-TCDF, TEF = 0.1; (7) 1,2,3,7,8-PeCDF, TEF = 0.5; (8) 2,3,4,7,8-PeCDF, TEF = 0.05; (9) 2,3,7,8-HxCDF, TEF = 0.1; (10) 2,3,7,8-HpCDF, TEF = 0.01; and (11) OCDF, TEF = 0.001.
- (5) Toxicity values for these chemicals have been withdrawn from IRIS and HEAST pending further investigation. However, the most recent toxicity values have been used to calculate the PRG.
- (6) Toxicity values for these chemicals were obtained from the Superfund Health Risk Technical Support Center.

Table 3.3f. Risk-based Preliminary Remediation Goals for radionuclides in water and soil (agricultural scenario)

| Chemical [†] | CASRN | Vegetable Intercept
(pCi/g) | | Slope | Beef Intercept
(pCi/g) | | Slope | Milk Intercept
(pCi/g) | | Slope |
|-----------------------|-------------|--------------------------------|------------------|----------|---------------------------|------------------|----------|---------------------------|------------------|----------|
| | | 10 ⁻⁴ | 10 ⁻⁶ | | 10 ⁻⁴ | 10 ⁻⁶ | | 10 ⁻⁴ | 10 ⁻⁶ | |
| Ac-225 | 014265-85-1 | 3.2E+00 | 3.2E-02 | -6.2E+00 | 1.4E+04 | 1.4E+02 | -1.9E+01 | 2.8E+03 | 2.8E+01 | -2.2E+01 |
| Ac-227 | 014952-40-0 | 1.3E+00 | 1.3E-02 | -3.8E+01 | 5.5E+03 | 5.5E+01 | -1.9E+01 | 1.1E+03 | 1.1E+01 | -2.2E+01 |
| Ac-227+D | 014952-40-0 | 6.8E-01 | 6.8E-03 | -3.7E+01 | 9.7E-01 | 9.7E-03 | -1.2E+01 | 3.2E-01 | 3.2E-03 | -1.3E+01 |
| Ac-228 | 014331-83-0 | 2.8E+02 | 2.8E+00 | -2.7E-01 | 1.2E+06 | 1.2E+04 | -1.9E+01 | 2.5E+05 | 2.5E+03 | -2.2E+01 |
| Ag-105 | 014928-14-4 | 2.8E+02 | 2.8E+00 | -1.1E+01 | 2.9E+03 | 2.9E+01 | -5.5E+00 | 2.6E+04 | 2.6E+02 | -5.7E+00 |
| Ag-108 | 014391-65-2 | 6.6E+04 | 6.6E+02 | -1.7E-03 | 6.7E+05 | 6.7E+03 | -5.5E+00 | 6.1E+06 | 6.1E+04 | -5.7E+00 |
| Ag-108m | 014391-65-2 | 7.6E+01 | 7.6E-01 | -4.7E+01 | 7.7E+02 | 7.7E+00 | -5.5E+00 | 7.0E+03 | 7.0E+01 | -5.7E+00 |
| Ag-108m+D | 014391-65-2 | 7.6E+01 | 7.6E-01 | -4.7E+01 | 7.7E+02 | 7.7E+00 | -5.5E+00 | 7.0E+03 | 7.0E+01 | -5.7E+00 |
| Ag-109m | 014378-38-2 | 1.7E+06 | 1.7E+04 | -4.9E-04 | 1.7E+07 | 1.7E+05 | -5.5E+00 | 1.6E+08 | 1.6E+06 | -5.7E+00 |
| Ag-110 | 014391-76-5 | 1.9E+05 | 1.9E+03 | -3.0E-04 | 1.9E+06 | 1.9E+04 | -5.5E+00 | 1.7E+07 | 1.7E+05 | -5.7E+00 |
| Ag-110m | 014391-76-5 | 5.4E+01 | 5.4E-01 | -1.5E+01 | 5.5E+02 | 5.5E+00 | -5.5E+00 | 5.0E+03 | 5.0E+01 | -5.7E+00 |
| Ag-111 | 015760-04-0 | 6.7E+01 | 6.7E-01 | -5.2E+00 | 6.8E+02 | 6.8E+00 | -5.5E+00 | 6.2E+03 | 6.2E+01 | -5.7E+00 |
| Am-241 | 014596-10-2 | 1.4E+00 | 1.4E-02 | -4.9E+01 | 3.7E+03 | 3.7E+01 | -1.9E+01 | 1.6E+04 | 1.6E+02 | -2.2E+01 |
| Am-242 | 013981-54-9 | 3.1E+02 | 3.1E+00 | -6.7E-01 | 8.2E+05 | 8.2E+03 | -1.9E+01 | 3.6E+06 | 3.6E+04 | -2.2E+01 |
| Am-242m | 013981-54-9 | 1.6E+00 | 1.6E-02 | -4.8E+01 | 4.1E+03 | 4.1E+01 | -1.9E+01 | 1.8E+04 | 1.8E+02 | -2.2E+01 |
| Am-243 | 014993-75-0 | 1.4E+00 | 1.4E-02 | -5.0E+01 | 3.7E+03 | 3.7E+01 | -1.9E+01 | 1.6E+04 | 1.6E+02 | -2.2E+01 |
| Am-243+D | 014993-75-0 | 1.4E+00 | 1.4E-02 | -5.0E+01 | 1.2E+02 | 1.2E+00 | -1.6E+01 | 3.1E+03 | 3.1E+01 | -1.8E+01 |

Table 3.3f. (continued)

| Chemical [†] | CASRN | Vegetable Intercept
(pCi/g) | | Slope | Beef Intercept
(pCi/g) | | Slope | Milk Intercept
(pCi/g) | | Slope |
|-----------------------|-------------|--------------------------------|------------------|----------|---------------------------|------------------|----------|---------------------------|------------------|----------|
| | | 10 ⁻⁴ | 10 ⁻⁶ | | 10 ⁻⁴ | 10 ⁻⁶ | | 10 ⁻⁴ | 10 ⁻⁶ | |
| Ar-41 | 014163-25-8 | | | | | | | | | |
| At-217 | 017239-90-6 | 2.6E+07 | 2.6E+05 | -2.0E-07 | 1.6E+08 | 1.6E+06 | -5.5E+00 | 2.3E+07 | 2.3E+05 | -5.7E+00 |
| Au-196 | 014914-16-0 | 2.5E+02 | 2.5E+00 | -3.3E+00 | 3.7E+03 | 3.7E+01 | -9.6E+00 | 2.9E+05 | 2.9E+03 | -1.0E+01 |
| Au-198 | 010043-49-0 | 6.3E+01 | 6.3E-01 | -1.7E+00 | 9.2E+02 | 9.2E+00 | -9.6E+00 | 7.2E+04 | 7.2E+02 | -1.0E+01 |
| Ba-131 | 014914-75-1 | 2.7E+02 | 2.7E+00 | -6.7E+00 | 1.1E+05 | 1.1E+03 | -1.5E+01 | 7.7E+03 | 7.7E+01 | -1.7E+01 |
| Ba-133 | 013981-41-4 | 1.7E+02 | 1.7E+00 | -3.0E+01 | 7.2E+04 | 7.2E+02 | -1.5E+01 | 4.9E+03 | 4.9E+01 | -1.7E+01 |
| Ba-133m | 013981-41-4 | 1.6E+02 | 1.6E+00 | -1.5E+00 | 7.0E+04 | 7.0E+02 | -1.5E+01 | 4.7E+03 | 4.7E+01 | -1.7E+01 |
| Ba-137m | 013981-97-0 | 1.9E+05 | 1.9E+03 | -1.9E-03 | 8.0E+07 | 8.0E+05 | -1.5E+01 | 5.4E+06 | 5.4E+04 | -1.7E+01 |
| Ba-139 | 014378-25-7 | 1.5E+03 | 1.5E+01 | -6.0E-02 | 6.4E+05 | 6.4E+03 | -1.5E+01 | 4.3E+04 | 4.3E+02 | -1.7E+01 |
| Ba-140 | 014798-08-4 | 3.8E+01 | 3.8E-01 | -7.0E+00 | 1.6E+04 | 1.6E+02 | -1.5E+01 | 1.1E+03 | 1.1E+01 | -1.7E+01 |
| Be-7 | 013966-02-4 | 5.2E+03 | 5.2E+01 | -1.2E+01 | 5.5E+05 | 5.5E+03 | -1.9E+01 | 1.0E+08 | 1.0E+06 | -2.1E+01 |
| Bi-206 | 015776-19-9 | 6.2E+01 | 6.2E-01 | -4.4E+00 | 1.6E+04 | 1.6E+02 | -1.8E+01 | 2.1E+03 | 2.1E+01 | -2.0E+01 |
| Bi-207 | 013982-38-2 | 8.8E+01 | 8.8E-01 | -4.1E+01 | 2.2E+04 | 2.2E+02 | -1.8E+01 | 2.9E+03 | 2.9E+01 | -2.0E+01 |
| Bi-210 | 014331-79-4 | 6.1E+01 | 6.1E-01 | -3.8E+00 | 1.5E+04 | 1.5E+02 | -1.8E+01 | 2.0E+03 | 2.0E+01 | -2.0E+01 |
| Bi-211 | 015229-37-5 | 2.4E+04 | 2.4E+02 | -1.5E-03 | 6.1E+06 | 6.1E+04 | -1.8E+01 | 8.1E+05 | 8.1E+03 | -2.0E+01 |
| Bi-212 | 014913-49-6 | 7.1E+02 | 7.1E+00 | -4.3E-02 | 1.8E+05 | 1.8E+03 | -1.8E+01 | 2.4E+04 | 2.4E+02 | -2.0E+01 |
| Bi-213 | 015776-20-2 | 1.0E+03 | 1.0E+01 | -3.2E-02 | 2.5E+05 | 2.5E+03 | -1.8E+01 | 3.3E+04 | 3.3E+02 | -2.0E+01 |

Radionuclides/water and soil/agricultural

Table 3.3f. (continued)

| Chemical [†] | CASRN | Vegetable Intercept
(pCi/g) | | Slope | Beef Intercept
(pCi/g) | | Slope | Milk Intercept
(pCi/g) | | Slope |
|-----------------------|-------------|--------------------------------|------------------|----------|---------------------------|------------------|----------|---------------------------|------------------|----------|
| | | 10 ⁻⁴ | 10 ⁻⁶ | | 10 ⁻⁴ | 10 ⁻⁶ | | 10 ⁻⁴ | 10 ⁻⁶ | |
| Bi-214 | 014733-03-0 | 2.3E+03 | 2.3E+01 | -1.4E-02 | 5.7E+05 | 5.7E+03 | -1.8E+01 | 7.5E+04 | 7.5E+02 | -2.0E+01 |
| Br-82 | 014686-69-2 | 1.3E+02 | 1.3E+00 | -5.8E-01 | 2.9E+02 | 2.9E+00 | -4.1E+00 | 5.4E+01 | 5.4E-01 | -4.2E+00 |
| C-11 | 014333-33-6 | | | | | | | | | |
| C-14 | 014762-75-5 | | | | | | | | | |
| C-15 | 015929-23-4 | | | | | | | | | |
| Ca-45 | 013966-05-7 | 5.2E+01 | 5.2E-01 | -3.9E+00 | 1.2E+03 | 1.2E+01 | -2.0E+00 | 1.2E+02 | 1.2E+00 | -2.0E+00 |
| Ca-47 | 001439-99-2 | 1.6E+01 | 1.6E-01 | -8.5E-01 | 3.8E+02 | 3.8E+00 | -2.0E+00 | 3.7E+01 | 3.7E-01 | -2.0E+00 |
| Cd-109 | 014109-32-1 | 3.7E+01 | 3.7E-01 | -1.1E+01 | 6.4E+03 | 6.4E+01 | -8.1E+00 | 3.9E+02 | 3.9E+00 | -8.6E+00 |
| Cd-115 | 014336-68-6 | 4.1E+01 | 4.1E-01 | -1.3E+00 | 7.0E+03 | 7.0E+01 | -8.1E+00 | 4.3E+02 | 4.3E+00 | -8.6E+00 |
| Cd-115m | 014336-68-6 | 2.1E+01 | 2.1E-01 | -7.4E+00 | 3.6E+03 | 3.6E+01 | -8.1E+00 | 2.2E+02 | 2.2E+00 | -8.6E+00 |
| Ce-141 | 013967-74-3 | 1.2E+02 | 1.2E+00 | -1.0E+01 | 5.5E+05 | 5.5E+03 | -1.7E+01 | 6.0E+04 | 6.0E+02 | -1.9E+01 |
| Ce-143 | 014119-19-8 | 7.7E+01 | 7.7E-01 | -1.3E+00 | 3.6E+05 | 3.6E+03 | -1.7E+01 | 4.0E+04 | 4.0E+02 | -1.9E+01 |
| Ce-144 | 014762-78-8 | 1.5E+01 | 1.5E-01 | -1.5E+01 | 7.3E+04 | 7.3E+02 | -1.7E+01 | 8.0E+03 | 8.0E+01 | -1.9E+01 |
| Ce-144+D | 014762-78-8 | 1.5E+01 | 1.5E-01 | -1.5E+01 | 2.2E+03 | 2.2E+01 | -1.6E+01 | 3.1E+03 | 3.1E+01 | -1.8E+01 |
| Cl-36 | 013981-43-6 | 3.0E+00 | 3.0E-02 | -3.6E+01 | 6.2E+00 | 6.2E-02 | -1.1E-01 | 1.1E+00 | 1.1E-02 | -1.1E-01 |
| Cl-38 | 014158-34-0 | 3.2E+01 | 3.2E-01 | -5.4E-04 | 6.7E+01 | 6.7E-01 | -1.1E-01 | 1.2E+01 | 1.2E-01 | -1.1E-01 |
| Cm-242 | 015510-73-3 | 1.2E+01 | 1.2E-01 | -1.4E+01 | 6.3E+04 | 6.3E+02 | -1.9E+01 | 5.2E+05 | 5.2E+03 | -2.2E+01 |

Table 3.3f. (continued)

| Chemical [†] | CASRN | Vegetable Intercept
(pCi/g) | | Slope | Beef Intercept
(pCi/g) | | Slope | Milk Intercept
(pCi/g) | | Slope |
|-----------------------|-------------|--------------------------------|------------------|----------|---------------------------|------------------|----------|---------------------------|------------------|----------|
| | | 10 ⁻⁴ | 10 ⁻⁶ | | 10 ⁻⁴ | 10 ⁻⁶ | | 10 ⁻⁴ | 10 ⁻⁶ | |
| Cm-243 | 015757-87-6 | 1.8E+00 | 1.8E-02 | -4.0E+01 | 9.6E+03 | 9.6E+01 | -1.9E+01 | 8.0E+04 | 8.0E+02 | -2.2E+01 |
| Cm-243+D | 015757-87-6 | 1.7E+00 | 1.7E-02 | -3.9E+01 | 1.9E+00 | 1.9E-02 | -9.1E+00 | 2.7E+00 | 2.7E-02 | -9.8E+00 |
| Cm-244 | 013981-15-2 | 2.2E+00 | 2.2E-02 | -3.6E+01 | 1.1E+04 | 1.1E+02 | -1.9E+01 | 9.5E+04 | 9.5E+02 | -2.2E+01 |
| Cm-245 | 015621-76-8 | 1.4E+00 | 1.4E-02 | -5.0E+01 | 7.2E+03 | 7.2E+01 | -1.9E+01 | 6.0E+04 | 6.0E+02 | -2.2E+01 |
| Cm-246 | 015757-90-1 | 1.4E+00 | 1.4E-02 | -5.0E+01 | 7.3E+03 | 7.3E+01 | -1.9E+01 | 6.1E+04 | 6.1E+02 | -2.2E+01 |
| Cm-247 | 015758-32-4 | 1.5E+00 | 1.5E-02 | -5.0E+01 | 7.8E+03 | 7.8E+01 | -1.9E+01 | 6.5E+04 | 6.5E+02 | -2.2E+01 |
| Cm-248 | 015758-33-5 | 3.5E-01 | 3.5E-03 | -5.0E+01 | 1.8E+03 | 1.8E+01 | -1.9E+01 | 1.5E+04 | 1.5E+02 | -2.2E+01 |
| Co-57 | 013981-50-5 | 4.3E+02 | 4.3E+00 | -1.4E+01 | 4.4E+05 | 4.4E+03 | -1.7E+01 | 1.0E+05 | 1.0E+03 | -1.9E+01 |
| Co-58 | 013981-38-9 | 1.5E+02 | 1.5E+00 | -1.1E+01 | 1.5E+05 | 1.5E+03 | -1.7E+01 | 3.5E+04 | 3.5E+02 | -1.9E+01 |
| Co-58m | 013981-38-9 | 4.4E+03 | 4.4E+01 | -3.6E-01 | 4.5E+06 | 4.5E+04 | -1.7E+01 | 1.1E+06 | 1.1E+04 | -1.9E+01 |
| Co-60 | 010198-40-0 | 2.2E+01 | 2.2E-01 | -2.2E+01 | 2.3E+04 | 2.3E+02 | -1.7E+01 | 5.3E+03 | 5.3E+01 | -1.9E+01 |
| Cr-51 | 014392-02-0 | 3.3E+03 | 3.3E+01 | -9.8E+00 | 3.6E+04 | 3.6E+02 | -1.7E+01 | 5.3E+06 | 5.3E+04 | -2.0E+01 |
| Cs-131 | 014914-76-2 | 2.4E+03 | 2.4E+01 | -5.8E+00 | 4.2E+03 | 4.2E+01 | -1.5E+01 | 4.3E+03 | 4.3E+01 | -1.7E+01 |
| Cs-134 | 013967-70-9 | 9.2E+00 | 9.2E-02 | -1.7E+01 | 1.6E+01 | 1.6E-01 | -1.5E+01 | 1.6E+01 | 1.6E-01 | -1.7E+01 |
| Cs-134m | 013967-70-9 | 9.6E+03 | 9.6E+01 | -1.2E-01 | 1.7E+04 | 1.7E+02 | -1.5E+01 | 1.7E+04 | 1.7E+02 | -1.7E+01 |
| Cs-135 | 015726-30-4 | 9.6E+01 | 9.6E-01 | -4.9E+01 | 1.7E+02 | 1.7E+00 | -1.5E+01 | 1.7E+02 | 1.7E+00 | -1.7E+01 |
| Cs-136 | 014234-29-8 | 5.6E+01 | 5.6E-01 | -6.9E+00 | 9.8E+01 | 9.8E-01 | -1.5E+01 | 1.0E+02 | 1.0E+00 | -1.7E+01 |

Table 3.3f. (continued)

| Chemical [†] | CASRN | Vegetable Intercept
(pCi/g) | | Slope | Beef Intercept
(pCi/g) | | Slope | Milk Intercept
(pCi/g) | | Slope |
|-----------------------|-------------|--------------------------------|------------------|----------|---------------------------|------------------|----------|---------------------------|------------------|----------|
| | | 10 ⁻⁴ | 10 ⁻⁶ | | 10 ⁻⁴ | 10 ⁻⁶ | | 10 ⁻⁴ | 10 ⁻⁶ | |
| Cs-137 | 010045-97-3 | 1.4E+01 | 1.4E-01 | -4.0E+01 | 2.4E+01 | 2.4E-01 | -1.5E+01 | 2.5E+01 | 2.5E-01 | -1.7E+01 |
| Cs-137+D | 010045-97-3 | 1.4E+01 | 1.4E-01 | -3.9E+01 | 2.0E+01 | 2.0E-01 | -1.3E+01 | 1.9E+01 | 1.9E-01 | -1.4E+01 |
| Cs-138 | 015758-29-9 | 2.5E+03 | 2.5E+01 | -2.2E-02 | 4.3E+03 | 4.3E+01 | -1.5E+01 | 4.4E+03 | 4.4E+01 | -1.7E+01 |
| Cu-64 | 013981-25-4 | 6.7E+02 | 6.7E+00 | -4.1E-01 | 3.4E+03 | 3.4E+01 | -6.4E+00 | 3.1E+03 | 3.1E+01 | -6.7E+00 |
| Dy-165 | 013967-64-1 | 1.4E+03 | 1.4E+01 | -1.0E-01 | 2.6E+04 | 2.6E+02 | -1.9E+01 | 1.2E+06 | 1.2E+04 | -2.1E+01 |
| Dy-166 | 015840-01-4 | 4.8E+01 | 4.8E-01 | -2.9E+00 | 9.1E+02 | 9.1E+00 | -1.9E+01 | 4.2E+04 | 4.2E+02 | -2.1E+01 |
| Er-169 | 015840-13-8 | 2.1E+02 | 2.1E+00 | -5.9E+00 | 5.6E+03 | 5.6E+01 | -1.9E+01 | 1.8E+05 | 1.8E+03 | -2.1E+01 |
| Er-171 | 014391-45-8 | 2.8E+02 | 2.8E+00 | -3.2E-01 | 7.3E+03 | 7.3E+01 | -1.9E+01 | 2.4E+05 | 2.4E+03 | -2.1E+01 |
| Eu-152 | 014683-23-9 | 7.9E+01 | 7.9E-01 | -3.3E+01 | 3.8E+03 | 3.8E+01 | -1.7E+01 | 2.1E+04 | 2.1E+02 | -1.9E+01 |
| Eu-154 | 015585-10-1 | 4.8E+01 | 4.8E-01 | -2.8E+01 | 2.3E+03 | 2.3E+01 | -1.7E+01 | 1.3E+04 | 1.3E+02 | -1.9E+01 |
| Eu-155 | 014391-16-3 | 2.8E+02 | 2.8E+00 | -2.3E+01 | 1.3E+04 | 1.3E+02 | -1.7E+01 | 7.1E+04 | 7.1E+02 | -1.9E+01 |
| Eu-156 | 014280-35-4 | 4.2E+01 | 4.2E-01 | -7.7E+00 | 2.0E+03 | 2.0E+01 | -1.7E+01 | 1.1E+04 | 1.1E+02 | -1.9E+01 |
| F-18 | 013981-56-1 | 4.0E+03 | 4.0E+01 | -7.6E-02 | 2.6E+03 | 2.6E+01 | -1.7E+01 | 6.3E+04 | 6.3E+02 | -1.9E+01 |
| Fe-55 | 014681-59-5 | 1.3E+03 | 1.3E+01 | -1.9E+01 | 6.7E+03 | 6.7E+01 | -1.9E+01 | 7.4E+05 | 7.4E+03 | -2.1E+01 |
| Fe-59 | 014596-12-4 | 7.8E+01 | 7.8E-01 | -1.1E+01 | 4.0E+02 | 4.0E+00 | -1.9E+01 | 4.5E+04 | 4.5E+02 | -2.1E+01 |
| Fr-221 | 015756-41-9 | 3.1E+03 | 3.1E+01 | -3.4E-03 | 1.2E+05 | 1.2E+03 | -1.8E+01 | 2.6E+03 | 2.6E+01 | -2.0E+01 |
| Fr-223 | 015756-98-6 | 1.0E+03 | 1.0E+01 | -1.6E-03 | 4.0E+04 | 4.0E+02 | -1.8E+01 | 8.3E+02 | 8.3E+00 | -2.0E+01 |

Table 3.3f. (continued)

| Chemical [†] | CASRN | Vegetable Intercept
(pCi/g) | | Slope | Beef Intercept
(pCi/g) | | Slope | Milk Intercept
(pCi/g) | | Slope |
|-----------------------|-------------|--------------------------------|------------------|----------|---------------------------|------------------|----------|---------------------------|------------------|----------|
| | | 10 ⁻⁴ | 10 ⁻⁶ | | 10 ⁻⁴ | 10 ⁻⁶ | | 10 ⁻⁴ | 10 ⁻⁶ | |
| Ga-67 | 014119-09-6 | 5.4E+02 | 5.4E+00 | -2.8E+00 | 1.9E+05 | 1.9E+03 | -1.9E+01 | 9.4E+05 | 9.4E+03 | -2.1E+01 |
| Ga-72 | 013982-22-4 | 9.5E+01 | 9.5E-01 | -5.9E-01 | 3.3E+04 | 3.3E+02 | -1.9E+01 | 1.6E+05 | 1.6E+03 | -2.1E+01 |
| Gd-153 | 014276-65-4 | 3.4E+02 | 3.4E+00 | -1.5E+01 | 1.6E+04 | 1.6E+02 | -1.7E+01 | 8.9E+04 | 8.9E+02 | -1.9E+01 |
| Gd-159 | 014041-42-0 | 1.7E+02 | 1.7E+00 | -7.7E-01 | 8.3E+03 | 8.3E+01 | -1.7E+01 | 4.5E+04 | 4.5E+02 | -1.9E+01 |
| Ge-71 | 014374-81-3 | 2.8E+04 | 2.8E+02 | -4.9E+00 | 2.9E+03 | 2.9E+01 | -9.6E+00 | 4.6E+03 | 4.6E+01 | -1.0E+01 |
| H-3 | 010028-17-8 | | | | | | | | | |
| Hg-197 | 013981-51-6 | 1.8E+02 | 1.8E+00 | -1.1E+00 | 1.2E+03 | 1.2E+01 | -5.5E+00 | 3.8E+03 | 3.8E+01 | -5.7E+00 |
| Hg-203 | 013982-78-0 | 8.1E+01 | 8.1E-01 | -5.4E+00 | 5.3E+02 | 5.3E+00 | -5.5E+00 | 1.7E+03 | 1.7E+01 | -5.7E+00 |
| Ho-166 | 013967-65-2 | 6.0E+01 | 6.0E-01 | -1.1E+00 | 1.4E+03 | 1.4E+01 | -1.9E+01 | 5.2E+04 | 5.2E+02 | -2.1E+01 |
| I-122 | 018287-75-7 | 2.1E+04 | 2.1E+02 | -2.6E-03 | 5.6E+04 | 5.6E+02 | -1.9E+01 | 3.7E+04 | 3.7E+02 | -2.2E+01 |
| I-123 | 015715-08-9 | 8.4E+02 | 8.4E+00 | -5.5E-01 | 2.2E+03 | 2.2E+01 | -1.9E+01 | 1.5E+03 | 1.5E+01 | -2.2E+01 |
| I-125 | 014158-31-7 | 1.8E+01 | 1.8E-01 | -1.2E+01 | 4.7E+01 | 4.7E-01 | -1.9E+01 | 3.1E+01 | 3.1E-01 | -2.2E+01 |
| I-126 | 014158-32-8 | 9.4E+00 | 9.4E-02 | -7.1E+00 | 2.5E+01 | 2.5E-01 | -1.9E+01 | 1.7E+01 | 1.7E-01 | -2.2E+01 |
| I-129 | 015046-84-1 | 2.5E+00 | 2.5E-02 | -5.0E+01 | 6.5E+00 | 6.5E-02 | -1.9E+01 | 4.3E+00 | 4.3E-02 | -2.2E+01 |
| I-130 | 014914-02-4 | 9.4E+01 | 9.4E-01 | -5.2E-01 | 2.5E+02 | 2.5E+00 | -1.9E+01 | 1.6E+02 | 1.6E+00 | -2.2E+01 |
| I-131 | 010043-66-0 | 1.3E+01 | 1.3E-01 | -5.4E+00 | 3.3E+01 | 3.3E-01 | -1.9E+01 | 2.2E+01 | 2.2E-01 | -2.2E+01 |
| I-132 | 014683-16-0 | 6.9E+02 | 6.9E+00 | -1.0E-01 | 1.8E+03 | 1.8E+01 | -1.9E+01 | 1.2E+03 | 1.2E+01 | -2.2E+01 |

Table 3.3f. (continued)

| Chemical [†] | CASRN | Vegetable Intercept
(pCi/g) | | Slope | Beef Intercept
(pCi/g) | | Slope | Milk Intercept
(pCi/g) | | Slope |
|-----------------------|-------------|--------------------------------|------------------|----------|---------------------------|------------------|----------|---------------------------|------------------|----------|
| | | 10 ⁻⁴ | 10 ⁻⁶ | | 10 ⁻⁴ | 10 ⁻⁶ | | 10 ⁻⁴ | 10 ⁻⁶ | |
| I-133 | 014834-67-4 | 4.3E+01 | 4.3E-01 | -8.6E-01 | 1.1E+02 | 1.1E+00 | -1.9E+01 | 7.5E+01 | 7.5E-01 | -2.2E+01 |
| I-134 | 014914-27-3 | 2.0E+03 | 2.0E+01 | -3.8E-02 | 5.2E+03 | 5.2E+01 | -1.9E+01 | 3.5E+03 | 3.5E+01 | -2.2E+01 |
| I-135 | 014834-68-5 | 2.0E+02 | 2.0E+00 | -2.8E-01 | 5.3E+02 | 5.3E+00 | -1.9E+01 | 3.5E+02 | 3.5E+00 | -2.2E+01 |
| In-113m | 014885-78-0 | 5.5E+03 | 5.5E+01 | -7.2E-02 | 1.4E+05 | 1.4E+03 | -1.9E+01 | 4.7E+05 | 4.7E+03 | -2.1E+01 |
| In-114 | 013981-55-0 | 1.0E+05 | 1.0E+03 | -8.7E-04 | 2.6E+06 | 2.6E+04 | -1.9E+01 | 8.7E+06 | 8.7E+04 | -2.1E+01 |
| In-114m | 013981-55-0 | 2.2E+01 | 2.2E-01 | -1.1E+01 | 5.7E+02 | 5.7E+00 | -1.9E+01 | 1.9E+03 | 1.9E+01 | -2.1E+01 |
| In-115 | 014191-71-0 | 1.3E+01 | 1.3E-01 | -5.0E+01 | 3.4E+02 | 3.4E+00 | -1.9E+01 | 1.1E+03 | 1.1E+01 | -2.1E+01 |
| In-115m | 014191-71-0 | 1.3E+03 | 1.3E+01 | -1.9E-01 | 3.5E+04 | 3.5E+02 | -1.9E+01 | 1.1E+05 | 1.1E+03 | -2.1E+01 |
| Ir-190 | 014981-91-0 | 8.3E+01 | 8.3E-01 | -6.1E+00 | 3.3E+03 | 3.3E+01 | -1.3E+01 | 5.2E+05 | 5.2E+03 | -1.4E+01 |
| Ir-194 | 014158-35-1 | 5.9E+01 | 5.9E-01 | -7.2E-01 | 2.3E+03 | 2.3E+01 | -1.3E+01 | 3.7E+05 | 3.7E+03 | -1.4E+01 |
| K-40 | 013966-00-2 | 1.7E+01 | 1.7E-01 | -4.2E+01 | 2.3E+01 | 2.3E-01 | -2.3E+00 | 9.4E+00 | 9.4E-02 | -2.3E+00 |
| K-42 | 014378-21-3 | 1.6E+02 | 1.6E+00 | -2.5E-01 | 2.2E+02 | 2.2E+00 | -2.3E+00 | 9.2E+01 | 9.2E-01 | -2.3E+00 |
| 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 | | | | | | | | | |

Table 3.3f. (continued)

| Chemical [†] | CASRN | Vegetable Intercept
(pCi/g) | | Slope | Beef Intercept
(pCi/g) | | Slope | Milk Intercept
(pCi/g) | | Slope |
|-----------------------|-------------|--------------------------------|------------------|----------|---------------------------|------------------|----------|---------------------------|------------------|----------|
| | | 10 ⁻⁴ | 10 ⁻⁶ | | 10 ⁻⁴ | 10 ⁻⁶ | | 10 ⁻⁴ | 10 ⁻⁶ | |
| Kr-89 | 016316-03-3 | | | | | | | | | |
| Kr-90 | 015741-13-6 | | | | | | | | | |
| La-140 | 013981-28-7 | 4.8E+01 | 4.8E-01 | -1.6E+00 | 1.7E+04 | 1.7E+02 | -1.9E+01 | 4.2E+04 | 4.2E+02 | -2.2E+01 |
| Lu-177 | 014265-75-9 | 1.5E+02 | 1.5E+00 | -4.8E+00 | 3.6E+03 | 3.6E+01 | -1.9E+01 | 1.3E+05 | 1.3E+03 | -2.1E+01 |
| Mn-52 | 014092-99-0 | 6.0E+01 | 6.0E-01 | -3.4E+00 | 6.0E+03 | 6.0E+01 | -7.1E+00 | 1.5E+04 | 1.5E+02 | -7.5E+00 |
| Mn-54 | 013966-31-9 | 1.8E+02 | 1.8E+00 | -1.2E+01 | 1.8E+04 | 1.8E+02 | -7.1E+00 | 4.7E+04 | 4.7E+02 | -7.5E+00 |
| Mn-56 | 014681-52-8 | 4.2E+02 | 4.2E+00 | -9.0E-02 | 4.2E+04 | 4.2E+02 | -7.1E+00 | 1.1E+05 | 1.1E+03 | -7.5E+00 |
| Mo-99 | 014119-15-4 | 1.5E+02 | 1.5E+00 | -1.9E+00 | 1.1E+04 | 1.1E+02 | -9.6E+00 | 9.8E+02 | 9.8E+00 | -1.0E+01 |
| Na-22 | 013966-32-0 | 5.1E+01 | 5.1E-01 | -1.7E+01 | 5.1E+01 | 5.1E-01 | -1.3E+01 | 4.0E+01 | 4.0E-01 | -1.4E+01 |
| Na-24 | 013982-04-2 | 3.0E+02 | 3.0E+00 | -5.7E-01 | 2.9E+02 | 2.9E+00 | -1.3E+01 | 2.3E+02 | 2.3E+00 | -1.4E+01 |
| Nb-93m | 007440-03-1 | 6.8E+02 | 6.8E+00 | -3.3E+01 | 2.0E+08 | 2.0E+06 | -1.5E+01 | 2.3E+07 | 2.3E+05 | -1.7E+01 |
| Nb-94 | 014681-63-1 | 6.5E+01 | 6.5E-01 | -5.0E+01 | 1.9E+07 | 1.9E+05 | -1.5E+01 | 2.2E+06 | 2.2E+04 | -1.7E+01 |
| Nb-95 | 013967-76-5 | 2.0E+02 | 2.0E+00 | -1.0E+01 | 5.8E+07 | 5.8E+05 | -1.5E+01 | 6.8E+06 | 6.8E+04 | -1.7E+01 |
| Nb-95m | 013967-76-5 | 1.5E+02 | 1.5E+00 | -3.0E+00 | 4.2E+07 | 4.2E+05 | -1.5E+01 | 5.0E+06 | 5.0E+04 | -1.7E+01 |
| Nb-97 | 018496-04-3 | 2.6E+03 | 2.6E+01 | -5.2E-02 | 7.4E+08 | 7.4E+06 | -1.5E+01 | 8.8E+07 | 8.8E+05 | -1.7E+01 |
| Nb-97m | 018496-04-3 | 1.4E+05 | 1.4E+03 | -7.2E-04 | 4.0E+10 | 4.0E+08 | -1.5E+01 | 4.7E+09 | 4.7E+07 | -1.7E+01 |
| Nd-147 | 014269-74-0 | 7.7E+01 | 7.7E-01 | -6.5E+00 | 2.6E+04 | 2.6E+02 | -1.8E+01 | 6.5E+04 | 6.5E+02 | -2.1E+01 |

Table 3.3f. (continued)

| Chemical ¹ | CASRN | Vegetable Intercept
(pCi/g) | | Slope | Beef Intercept
(pCi/g) | | Slope | Milk Intercept
(pCi/g) | | Slope |
|-----------------------|-------------|--------------------------------|------------------|----------|---------------------------|------------------|----------|---------------------------|------------------|----------|
| | | 10 ⁻⁴ | 10 ⁻⁶ | | 10 ⁻⁴ | 10 ⁻⁶ | | 10 ⁻⁴ | 10 ⁻⁶ | |
| Nd-149 | 015749-81-2 | 1.0E+03 | 1.0E+01 | -7.5E-02 | 3.4E+05 | 3.4E+03 | -1.8E+01 | 8.4E+05 | 8.4E+03 | -2.1E+01 |
| Ni-59 | 014336-70-0 | 2.1E+03 | 2.1E+01 | -4.7E+01 | 3.6E+04 | 3.6E+02 | -1.3E+01 | 1.8E+03 | 1.8E+01 | -1.5E+01 |
| Ni-63 | 013981-37-8 | 7.0E+02 | 7.0E+00 | -4.4E+01 | 1.2E+04 | 1.2E+02 | -1.3E+01 | 6.1E+02 | 6.1E+00 | -1.5E+01 |
| Ni-65 | 014833-49-9 | 6.8E+02 | 6.8E+00 | -9.3E-02 | 1.2E+04 | 1.2E+02 | -1.3E+01 | 5.9E+02 | 5.9E+00 | -1.5E+01 |
| Np-236 | 015700-36-4 | 4.9E+02 | 4.9E+00 | -5.0E+01 | 4.4E+04 | 4.4E+02 | -1.6E+01 | 1.4E+06 | 1.4E+04 | -1.8E+01 |
| Np-237 | 013994-20-2 | 1.5E+00 | 1.5E-02 | -5.0E+01 | 1.4E+02 | 1.4E+00 | -1.6E+01 | 4.6E+03 | 4.6E+01 | -1.8E+01 |
| Np-237+D | 013994-20-2 | 1.5E+00 | 1.5E-02 | -5.0E+01 | 1.4E+02 | 1.4E+00 | -1.6E+01 | 2.2E+03 | 2.2E+01 | -1.8E+01 |
| Np-238 | 015766-25-3 | 9.9E+01 | 9.9E-01 | -1.9E+00 | 9.1E+03 | 9.1E+01 | -1.6E+01 | 3.0E+05 | 3.0E+03 | -1.8E+01 |
| Np-239 | 013968-59-7 | 1.1E+02 | 1.1E+00 | -2.1E+00 | 9.7E+03 | 9.7E+01 | -1.6E+01 | 3.2E+05 | 3.2E+03 | -1.8E+01 |
| Np-240 | 015690-84-3 | 2.6E+03 | 2.6E+01 | -4.7E-02 | 2.3E+05 | 2.3E+03 | -1.6E+01 | 7.6E+06 | 7.6E+04 | -1.8E+01 |
| Np-240m | 015690-84-3 | 1.9E+04 | 1.9E+02 | -5.4E-03 | 1.7E+06 | 1.7E+04 | -1.6E+01 | 5.6E+07 | 5.6E+05 | -1.8E+01 |
| Os-185 | 015766-50-4 | 2.5E+02 | 2.5E+00 | -1.3E+01 | 6.5E+01 | 6.5E-01 | -1.8E+01 | 8.6E+02 | 8.6E+00 | -2.1E+01 |
| Os-191 | 014119-24-5 | 1.5E+02 | 1.5E+00 | -7.7E+00 | 3.8E+01 | 3.8E-01 | -1.8E+01 | 5.1E+02 | 5.1E+00 | -2.1E+01 |
| Os-191m | 014119-24-5 | 9.1E+02 | 9.1E+00 | -5.5E-01 | 2.4E+02 | 2.4E+00 | -1.8E+01 | 3.1E+03 | 3.1E+01 | -2.1E+01 |
| Os-193 | 016057-77-5 | 1.0E+02 | 1.0E+00 | -1.2E+00 | 2.7E+01 | 2.7E-01 | -1.8E+01 | 3.5E+02 | 3.5E+00 | -2.1E+01 |
| P-32 | 014596-37-3 | 1.5E+01 | 1.5E-01 | -1.6E+00 | 1.9E+01 | 1.9E-01 | -2.3E+00 | 8.7E+00 | 8.7E-02 | -2.3E+00 |
| P-33 | 015749-66-3 | 1.2E+02 | 1.2E+00 | -2.1E+00 | 1.5E+02 | 1.5E+00 | -2.3E+00 | 6.8E+01 | 6.8E-01 | -2.3E+00 |

Table 3.3f. (continued)

| Chemical [†] | CASRN | Vegetable Intercept
(pCi/g) | | Slope | Beef Intercept
(pCi/g) | | Slope | Milk Intercept
(pCi/g) | | Slope |
|-----------------------|-------------|--------------------------------|------------------|----------|---------------------------|------------------|----------|---------------------------|------------------|----------|
| | | 10 ⁻⁴ | 10 ⁻⁶ | | 10 ⁻⁴ | 10 ⁻⁶ | | 10 ⁻⁴ | 10 ⁻⁶ | |
| Pa-231 | 014331-85-2 | 3.1E+00 | 3.1E-02 | -5.0E+01 | 3.2E+04 | 3.2E+02 | -1.9E+01 | 1.1E+04 | 1.1E+02 | -2.2E+01 |
| Pa-233 | 013981-14-1 | 9.7E+01 | 9.7E-01 | -9.7E+00 | 1.0E+06 | 1.0E+04 | -1.9E+01 | 3.4E+05 | 3.4E+03 | -2.2E+01 |
| Pa-234 | 015100-28-4 | 2.1E+02 | 2.1E+00 | -2.9E-01 | 2.3E+06 | 2.3E+04 | -1.9E+01 | 7.5E+05 | 7.5E+03 | -2.2E+01 |
| Pa-234m | 015100-28-4 | 9.6E+04 | 9.6E+02 | -8.6E-04 | 1.0E+09 | 1.0E+07 | -1.9E+01 | 3.4E+08 | 3.4E+06 | -2.2E+01 |
| Pb-203 | 014687-25-3 | 4.4E+02 | 4.4E+00 | -2.0E+00 | 9.6E+04 | 9.6E+02 | -1.6E+01 | 2.1E+04 | 2.1E+02 | -1.8E+01 |
| Pb-209 | 014119-30-3 | 2.2E+03 | 2.2E+01 | -1.4E-01 | 4.7E+05 | 4.7E+03 | -1.6E+01 | 1.0E+05 | 1.0E+03 | -1.8E+01 |
| Pb-210 | 014255-04-0 | 6.8E-01 | 6.8E-03 | -3.8E+01 | 1.5E+02 | 1.5E+00 | -1.6E+01 | 3.2E+01 | 3.2E-01 | -1.8E+01 |
| Pb-210+D | 014255-04-0 | 4.4E-01 | 4.4E-03 | -3.7E+01 | 5.4E+00 | 5.4E-02 | -1.2E+01 | 4.4E+00 | 4.4E-02 | -1.4E+01 |
| Pb-211 | 015816-77-0 | 1.4E+03 | 1.4E+01 | -2.6E-02 | 2.9E+05 | 2.9E+03 | -1.6E+01 | 6.3E+04 | 6.3E+02 | -1.8E+01 |
| Pb-212 | 015092-94-1 | 2.5E+01 | 2.5E-01 | -4.5E-01 | 5.5E+03 | 5.5E+01 | -1.6E+01 | 1.2E+03 | 1.2E+01 | -1.8E+01 |
| Pb-214 | 015067-28-4 | 1.6E+03 | 1.6E+01 | -2.0E-02 | 3.4E+05 | 3.4E+03 | -1.6E+01 | 7.3E+04 | 7.3E+02 | -1.8E+01 |
| Pd-100 | 015690-69-4 | 1.1E+02 | 1.1E+00 | -2.7E+00 | 2.4E+03 | 2.4E+01 | -1.4E+01 | 1.5E+02 | 1.5E+00 | -1.5E+01 |
| Pd-101 | 015749-54-9 | 1.1E+03 | 1.1E+01 | -3.2E-01 | 2.4E+04 | 2.4E+02 | -1.4E+01 | 1.5E+03 | 1.5E+01 | -1.5E+01 |
| Pd-103 | 014967-68-1 | 3.8E+02 | 3.8E+00 | -7.1E+00 | 8.4E+03 | 8.4E+01 | -1.4E+01 | 5.4E+02 | 5.4E+00 | -1.5E+01 |
| Pd-107 | 017637-99-9 | 1.9E+03 | 1.9E+01 | -4.8E+01 | 4.2E+04 | 4.2E+02 | -1.4E+01 | 2.7E+03 | 2.7E+01 | -1.5E+01 |
| Pd-109 | 014981-64-7 | 1.2E+02 | 1.2E+00 | -5.0E-01 | 2.7E+03 | 2.7E+01 | -1.4E+01 | 1.7E+02 | 1.7E+00 | -1.5E+01 |
| Pm-147 | 014380-75-7 | 3.2E+02 | 3.2E+00 | -1.9E+01 | 6.7E+03 | 6.7E+01 | -1.9E+01 | 2.8E+05 | 2.8E+03 | -2.1E+01 |

Table 3.3f. (continued)

| Chemical [†] | CASRN | Vegetable Intercept
(pCi/g) | | Slope | Beef Intercept
(pCi/g) | | Slope | Milk Intercept
(pCi/g) | | Slope |
|-----------------------|-------------|--------------------------------|------------------|----------|---------------------------|------------------|----------|---------------------------|------------------|----------|
| | | 10 ⁻⁴ | 10 ⁻⁶ | | 10 ⁻⁴ | 10 ⁻⁶ | | 10 ⁻⁴ | 10 ⁻⁶ | |
| Pm-148 | 014683-19-3 | 3.1E+01 | 3.1E-01 | -4.1E+00 | 6.6E+02 | 6.6E+00 | -1.9E+01 | 2.7E+04 | 2.7E+02 | -2.1E+01 |
| Pm-148m | 014683-19-3 | 4.6E+01 | 4.6E-01 | -1.1E+01 | 9.5E+02 | 9.5E+00 | -1.9E+01 | 3.9E+04 | 3.9E+02 | -2.1E+01 |
| Pm-149 | 015765-31-8 | 8.2E+01 | 8.2E-01 | -2.0E+00 | 1.7E+03 | 1.7E+01 | -1.9E+01 | 7.1E+04 | 7.1E+02 | -2.1E+01 |
| Po-210 | 013981-52-7 | 1.4E+00 | 1.4E-02 | -1.4E+01 | 2.4E+01 | 2.4E-01 | -1.6E+01 | 5.8E+01 | 5.8E-01 | -1.8E+01 |
| Po-212 | 015389-34-1 | 1.0E+13 | 1.0E+11 | -3.7E-12 | 1.8E+14 | 1.8E+12 | -1.6E+01 | 4.2E+14 | 4.2E+12 | -1.8E+01 |
| Po-213 | 015756-57-7 | 6.8E+11 | 6.8E+09 | -5.2E-11 | 1.2E+13 | 1.2E+11 | -1.6E+01 | 2.8E+13 | 2.8E+11 | -1.8E+01 |
| Po-214 | 015735-67-8 | 2.2E+10 | 2.2E+08 | -2.0E-09 | 3.7E+11 | 3.7E+09 | -1.6E+01 | 8.9E+11 | 8.9E+09 | -1.8E+01 |
| Po-215 | 015706-52-2 | 9.2E+08 | 9.2E+06 | -2.2E-08 | 1.6E+10 | 1.6E+08 | -1.6E+01 | 3.8E+10 | 3.8E+08 | -1.8E+01 |
| Po-216 | 015756-58-8 | 5.2E+06 | 5.2E+04 | -1.8E-06 | 9.0E+07 | 9.0E+05 | -1.6E+01 | 2.2E+08 | 2.2E+06 | -1.8E+01 |
| Po-218 | 015422-24-9 | 9.0E+03 | 9.0E+01 | -2.2E-03 | 1.6E+05 | 1.6E+03 | -1.6E+01 | 3.7E+05 | 3.7E+03 | -1.8E+01 |
| Pr-142 | 014191-64-1 | 6.5E+01 | 6.5E-01 | -7.9E-01 | 2.2E+04 | 2.2E+02 | -1.8E+01 | 5.5E+04 | 5.5E+02 | -2.1E+01 |
| Pr-143 | 014981-79-4 | 6.9E+01 | 6.9E-01 | -7.3E+00 | 2.3E+04 | 2.3E+02 | -1.8E+01 | 5.8E+04 | 5.8E+02 | -2.1E+01 |
| Pr-144 | 014119-05-2 | 5.6E+03 | 5.6E+01 | -1.3E-02 | 1.9E+06 | 1.9E+04 | -1.8E+01 | 4.7E+06 | 4.7E+04 | -2.1E+01 |
| Pr-144m | 014119-05-2 | 1.4E+04 | 1.4E+02 | -5.3E-03 | 4.8E+06 | 4.8E+04 | -1.8E+01 | 1.2E+07 | 1.2E+05 | -2.1E+01 |
| Pt-191 | 015706-36-2 | 2.8E+02 | 2.8E+00 | -2.2E+00 | 6.5E+03 | 6.5E+01 | -1.5E+01 | 8.5E+02 | 8.5E+00 | -1.7E+01 |
| Pt-193 | 015735-70-3 | 2.6E+03 | 2.6E+01 | -4.2E+01 | 6.1E+04 | 6.1E+02 | -1.5E+01 | 7.8E+03 | 7.8E+01 | -1.7E+01 |
| Pt-193m | 015735-70-3 | 1.7E+02 | 1.7E+00 | -3.2E+00 | 3.9E+03 | 3.9E+01 | -1.5E+01 | 5.1E+02 | 5.1E+00 | -1.7E+01 |

Radionuclides/water and soil/agricultural

Table 3.3f. (continued)

| Chemical [†] | CASRN | Vegetable Intercept
(pCi/g) | | Slope | Beef Intercept
(pCi/g) | | Slope | Milk Intercept
(pCi/g) | | Slope |
|-----------------------|-------------|--------------------------------|------------------|----------|---------------------------|------------------|----------|---------------------------|------------------|----------|
| | | 10 ⁻⁴ | 10 ⁻⁶ | | 10 ⁻⁴ | 10 ⁻⁶ | | 10 ⁻⁴ | 10 ⁻⁶ | |
| Pt-197 | 015735-74-7 | 2.0E+02 | 2.0E+00 | -7.0E-01 | 4.6E+03 | 4.6E+01 | -1.5E+01 | 6.0E+02 | 6.0E+00 | -1.7E+01 |
| Pt-197m | 015735-74-7 | 1.3E+03 | 1.3E+01 | -6.3E-02 | 3.0E+04 | 3.0E+02 | -1.5E+01 | 3.9E+03 | 3.9E+01 | -1.7E+01 |
| Pu-236 | 015411-92-4 | 6.0E+00 | 6.0E-02 | -1.9E+01 | 6.3E+04 | 6.3E+02 | -1.9E+01 | 9.5E+04 | 9.5E+02 | -2.2E+01 |
| Pu-238 | 013981-16-3 | 1.6E+00 | 1.6E-02 | -4.6E+01 | 1.6E+04 | 1.6E+02 | -1.9E+01 | 2.5E+04 | 2.5E+02 | -2.2E+01 |
| Pu-239 | 015117-48-3 | 1.4E+00 | 1.4E-02 | -5.0E+01 | 1.5E+04 | 1.5E+02 | -1.9E+01 | 2.3E+04 | 2.3E+02 | -2.2E+01 |
| Pu-240 | 014119-33-6 | 1.5E+00 | 1.5E-02 | -5.0E+01 | 1.5E+04 | 1.5E+02 | -1.9E+01 | 2.3E+04 | 2.3E+02 | -2.2E+01 |
| Pu-241 | 014119-32-5 | 8.8E+01 | 8.8E-01 | -3.4E+01 | 9.3E+05 | 9.3E+03 | -1.9E+01 | 1.4E+06 | 1.4E+04 | -2.2E+01 |
| Pu-241+D | 014119-32-5 | 1.4E+00 | 1.4E-02 | -3.4E+01 | 3.9E+02 | 3.9E+00 | -1.8E+01 | 5.6E+01 | 5.6E-01 | -2.1E+01 |
| Pu-242 | 013982-10-0 | 1.5E+00 | 1.5E-02 | -5.0E+01 | 1.6E+04 | 1.6E+02 | -1.9E+01 | 2.4E+04 | 2.4E+02 | -2.2E+01 |
| Pu-243 | 015706-37-3 | 1.2E+03 | 1.2E+01 | -2.2E-01 | 1.3E+07 | 1.3E+05 | -1.9E+01 | 2.0E+07 | 2.0E+05 | -2.2E+01 |
| Pu-244 | 014119-34-7 | 1.5E+00 | 1.5E-02 | -5.0E+01 | 1.5E+04 | 1.5E+02 | -1.9E+01 | 2.3E+04 | 2.3E+02 | -2.2E+01 |
| Pu-244+D | 014119-34-7 | 1.4E+00 | 1.4E-02 | -5.0E+01 | 9.4E+01 | 9.4E-01 | -1.6E+01 | 4.9E+01 | 4.9E-01 | -1.7E+01 |
| Ra-223 | 015623-45-7 | 1.9E+00 | 1.9E-02 | -6.5E+00 | 1.9E+02 | 1.9E+00 | -1.6E+01 | 2.2E+01 | 2.2E-01 | -1.8E+01 |
| Ra-224 | 013233-32-4 | 3.0E+00 | 3.0E-02 | -2.9E+00 | 3.0E+02 | 3.0E+00 | -1.6E+01 | 3.4E+01 | 3.4E-01 | -1.8E+01 |
| Ra-225 | 013981-53-8 | 2.8E+00 | 2.8E-02 | -7.4E+00 | 2.9E+02 | 2.9E+00 | -1.6E+01 | 3.2E+01 | 3.2E-01 | -1.8E+01 |
| Ra-226 | 013982-63-3 | 1.5E+00 | 1.5E-02 | -4.9E+01 | 1.5E+02 | 1.5E+00 | -1.6E+01 | 1.7E+01 | 1.7E-01 | -1.8E+01 |
| Ra-226+D | 013982-63-3 | 1.4E+00 | 1.4E-02 | -4.9E+01 | 7.2E+00 | 7.2E-02 | -9.8E+00 | 4.7E+00 | 4.7E-02 | -1.1E+01 |

Radionuclides/water and soil/agricultural

Table 3.3f. (continued)

| Chemical [†] | CASRN | Vegetable Intercept
(pCi/g) | | Slope | Beef Intercept
(pCi/g) | | Slope | Milk Intercept
(pCi/g) | | Slope |
|-----------------------|-------------|--------------------------------|------------------|----------|---------------------------|------------------|----------|---------------------------|------------------|----------|
| | | 10 ⁻⁴ | 10 ⁻⁶ | | 10 ⁻⁴ | 10 ⁻⁶ | | 10 ⁻⁴ | 10 ⁻⁶ | |
| Ra-228 | 015262-20-1 | 1.8E+00 | 1.8E-02 | -2.4E+01 | 1.8E+02 | 1.8E+00 | -1.6E+01 | 2.1E+01 | 2.1E-01 | -1.8E+01 |
| Ra-228+D | 015262-20-1 | 1.8E+00 | 1.8E-02 | -2.4E+01 | 1.8E+02 | 1.8E+00 | -1.6E+01 | 2.0E+01 | 2.0E-01 | -1.8E+01 |
| Rb-82 | 014391-63-0 | 3.2E+04 | 3.2E+02 | -6.8E-04 | 1.4E+05 | 1.4E+03 | -5.9E+00 | 1.8E+04 | 1.8E+02 | -6.2E+00 |
| Rb-86 | 014932-53-7 | 4.8E+01 | 4.8E-01 | -6.3E+00 | 2.1E+02 | 2.1E+00 | -5.9E+00 | 2.7E+01 | 2.7E-01 | -6.2E+00 |
| Rb-87 | 013982-13-3 | 9.2E+01 | 9.2E-01 | -4.6E+01 | 4.1E+02 | 4.1E+00 | -5.9E+00 | 5.2E+01 | 5.2E-01 | -6.2E+00 |
| Rb-88 | 014928-36-0 | 2.3E+03 | 2.3E+01 | -9.7E-03 | 1.0E+04 | 1.0E+02 | -5.9E+00 | 1.3E+03 | 1.3E+01 | -6.2E+00 |
| Rb-89 | 014191-65-2 | 3.9E+03 | 3.9E+01 | -8.4E-03 | 1.7E+04 | 1.7E+02 | -5.9E+00 | 2.2E+03 | 2.2E+01 | -6.2E+00 |
| Rh-103m | 007440-16-6 | 4.2E+04 | 4.2E+02 | -3.1E-02 | 9.2E+05 | 9.2E+03 | -5.9E+00 | 2.8E+04 | 2.8E+02 | -6.2E+00 |
| Rh-105 | 014913-89-4 | 1.8E+02 | 1.8E+00 | -1.1E+00 | 3.9E+03 | 3.9E+01 | -5.9E+00 | 1.2E+02 | 1.2E+00 | -6.2E+00 |
| Rh-105m | 014913-89-4 | 3.1E+05 | 3.1E+03 | -4.1E-04 | 7.0E+06 | 7.0E+04 | -5.9E+00 | 2.1E+05 | 2.1E+03 | -6.2E+00 |
| Rh-106 | 014234-34-5 | 9.4E+04 | 9.4E+02 | -2.7E-04 | 2.1E+06 | 2.1E+04 | -5.9E+00 | 6.3E+04 | 6.3E+02 | -6.2E+00 |
| Rn-219 | 014835-02-0 | | | | | | | | | |
| Rn-220 | 022481-48-7 | | | | | | | | | |
| Rn-222+D | 014859-67-7 | | | | | | | | | |
| Ru-103 | 013968-53-1 | 1.3E+02 | 1.3E+00 | -1.0E+01 | 1.9E+02 | 1.9E+00 | -1.3E+01 | 4.7E+05 | 4.7E+03 | -1.4E+01 |
| Ru-105 | 014331-95-4 | 3.6E+02 | 3.6E+00 | -1.8E-01 | 5.5E+02 | 5.5E+00 | -1.3E+01 | 1.4E+06 | 1.4E+04 | -1.4E+01 |
| Ru-106 | 013967-48-1 | 1.2E+01 | 1.2E-01 | -1.4E+01 | 1.8E+01 | 1.8E-01 | -1.3E+01 | 4.5E+04 | 4.5E+02 | -1.4E+01 |

Table 3.3f. (continued)

| Chemical [†] | CASRN | Vegetable Intercept
(pCi/g) | | Slope | Beef Intercept
(pCi/g) | | Slope | Milk Intercept
(pCi/g) | | Slope |
|-----------------------|-------------|--------------------------------|------------------|----------|---------------------------|------------------|----------|---------------------------|------------------|----------|
| | | 10 ⁻⁴ | 10 ⁻⁶ | | 10 ⁻⁴ | 10 ⁻⁶ | | 10 ⁻⁴ | 10 ⁻⁶ | |
| Ru-106+D | 013967-48-1 | 9.2E+00 | 9.2E-02 | -1.1E+01 | 7.1E+00 | 7.1E-02 | -5.1E+00 | 5.7E+00 | 5.7E-02 | -5.3E+00 |
| Ru-97 | 015758-35-7 | 7.1E+02 | 7.1E+00 | -2.3E+00 | 1.1E+03 | 1.1E+01 | -1.3E+01 | 2.7E+06 | 2.7E+04 | -1.4E+01 |
| S-35 | 015117-53-0 | 3.3E+02 | 3.3E+00 | -4.2E+00 | 9.8E+01 | 9.8E-01 | -3.2E+00 | 1.8E+02 | 1.8E+00 | -3.3E+00 |
| Sb-122 | 014374-79-9 | 5.0E+01 | 5.0E-01 | -2.3E+00 | 1.2E+05 | 1.2E+03 | -1.7E+01 | 3.2E+04 | 3.2E+02 | -1.9E+01 |
| Sb-124 | 014683-10-4 | 4.1E+01 | 4.1E-01 | -1.2E+01 | 1.0E+05 | 1.0E+03 | -1.7E+01 | 2.6E+04 | 2.6E+02 | -1.9E+01 |
| Sb-125 | 014234-35-6 | 1.5E+02 | 1.5E+00 | -1.9E+01 | 3.6E+05 | 3.6E+03 | -1.7E+01 | 9.5E+04 | 9.5E+02 | -1.9E+01 |
| Sb-125+D | 014234-35-6 | 3.5E+01 | 3.5E-01 | -9.0E+00 | 1.1E+02 | 1.1E+00 | -1.0E+00 | 2.3E+02 | 2.3E+00 | -1.0E+00 |
| Sb-126 | 015756-32-8 | 4.5E+01 | 4.5E-01 | -6.7E+00 | 1.1E+05 | 1.1E+03 | -1.7E+01 | 2.9E+04 | 2.9E+02 | -1.9E+01 |
| Sb-126m | 015756-32-8 | 6.1E+03 | 6.1E+01 | -1.3E-02 | 1.5E+07 | 1.5E+05 | -1.7E+01 | 3.9E+06 | 3.9E+04 | -1.9E+01 |
| Sb-127 | 013968-50-8 | 5.2E+01 | 5.2E-01 | -3.1E+00 | 1.3E+05 | 1.3E+03 | -1.7E+01 | 3.3E+04 | 3.3E+02 | -1.9E+01 |
| Sb-129 | 014331-88-5 | 2.4E+02 | 2.4E+00 | -1.8E-01 | 5.8E+05 | 5.8E+03 | -1.7E+01 | 1.5E+05 | 1.5E+03 | -1.9E+01 |
| Sc-46 | 013967-63-0 | 7.9E+01 | 7.9E-01 | -1.3E+01 | 4.1E+03 | 4.1E+01 | -1.9E+01 | 2.3E+04 | 2.3E+02 | -2.1E+01 |
| Sc-47 | 014391-96-9 | 1.5E+02 | 1.5E+00 | -2.9E+00 | 8.0E+03 | 8.0E+01 | -1.9E+01 | 4.4E+04 | 4.4E+02 | -2.1E+01 |
| Sc-48 | 014391-86-7 | 6.8E+01 | 6.8E-01 | -1.7E+00 | 3.6E+03 | 3.6E+01 | -1.9E+01 | 2.0E+04 | 2.0E+02 | -2.1E+01 |
| Se-75 | 014265-71-5 | 5.1E+01 | 5.1E-01 | -9.9E+00 | 3.3E+01 | 3.3E-01 | -8.5E+00 | 5.1E+01 | 5.1E-01 | -9.1E+00 |
| Si-31 | 014276-49-4 | 6.8E+02 | 6.8E+00 | -8.6E-02 | 1.3E+06 | 1.3E+04 | -1.0E+01 | 4.0E+05 | 4.0E+03 | -1.1E+01 |
| Sm-147 | 014392-33-7 | 1.8E+01 | 1.8E-01 | -5.0E+01 | 3.8E+02 | 3.8E+00 | -1.9E+01 | 1.6E+04 | 1.6E+02 | -2.1E+01 |

Table 3.3f. (continued)

| Chemical [†] | CASRN | Vegetable Intercept
(pCi/g) | | Slope | Beef Intercept
(pCi/g) | | Slope | Milk Intercept
(pCi/g) | | Slope |
|-----------------------|-------------|--------------------------------|------------------|----------|---------------------------|------------------|----------|---------------------------|------------------|----------|
| | | 10 ⁻⁴ | 10 ⁻⁶ | | 10 ⁻⁴ | 10 ⁻⁶ | | 10 ⁻⁴ | 10 ⁻⁶ | |
| Sm-151 | 015715-94-3 | 9.9E+02 | 9.9E+00 | -4.6E+01 | 2.1E+04 | 2.1E+02 | -1.9E+01 | 8.5E+05 | 8.5E+03 | -2.1E+01 |
| Sm-153 | 015766-00-4 | 1.1E+02 | 1.1E+00 | -1.8E+00 | 2.4E+03 | 2.4E+01 | -1.9E+01 | 9.8E+04 | 9.8E+02 | -2.1E+01 |
| Sn-113 | 013966-06-8 | 5.7E+01 | 5.7E-01 | -6.5E+00 | 3.8E+02 | 3.8E+00 | -5.5E+00 | 5.7E+02 | 5.7E+00 | -5.7E+00 |
| Sn-121 | 014683-06-8 | 1.7E+02 | 1.7E+00 | -5.2E-01 | 1.1E+03 | 1.1E+01 | -5.5E+00 | 1.7E+03 | 1.7E+01 | -5.7E+00 |
| Sn-121m | 014683-06-8 | 1.1E+02 | 1.1E+00 | -3.7E+01 | 7.0E+02 | 7.0E+00 | -5.5E+00 | 1.1E+03 | 1.1E+01 | -5.7E+00 |
| Sn-125 | 014683-08-0 | 1.3E+01 | 1.3E-01 | -2.8E+00 | 8.3E+01 | 8.3E-01 | -5.5E+00 | 1.3E+02 | 1.3E+00 | -5.7E+00 |
| Sn-126 | 015832-50-5 | 1.0E+01 | 1.0E-01 | -4.2E+01 | 6.6E+01 | 6.6E-01 | -5.5E+00 | 9.9E+01 | 9.9E-01 | -5.7E+00 |
| Sr-82 | 014809-50-8 | 9.9E+00 | 9.9E-02 | -5.4E+00 | 6.3E+01 | 6.3E-01 | -5.1E+00 | 2.7E+01 | 2.7E-01 | -5.3E+00 |
| Sr-85 | 013967-73-2 | 1.8E+02 | 1.8E+00 | -7.0E+00 | 1.2E+03 | 1.2E+01 | -5.1E+00 | 5.0E+02 | 5.0E+00 | -5.3E+00 |
| Sr-85m | 013967-73-2 | 1.4E+04 | 1.4E+02 | -2.8E-02 | 9.0E+04 | 9.0E+02 | -5.1E+00 | 3.9E+04 | 3.9E+02 | -5.3E+00 |
| Sr-89 | 014158-27-1 | 2.5E+01 | 2.5E-01 | -6.6E+00 | 1.6E+02 | 1.6E+00 | -5.1E+00 | 6.8E+01 | 6.8E-01 | -5.3E+00 |
| Sr-90 | 010098-97-2 | 6.3E+00 | 6.3E-02 | -3.4E+01 | 4.0E+01 | 4.0E-01 | -5.1E+00 | 1.7E+01 | 1.7E-01 | -5.3E+00 |
| Sr-90+D | 010098-97-2 | 4.6E+00 | 4.6E-02 | -3.4E+01 | 2.6E+01 | 2.6E-01 | -5.1E+00 | 1.2E+01 | 1.2E-01 | -5.3E+00 |
| Sr-91 | 014331-91-0 | 9.1E+01 | 9.1E-01 | -2.3E-01 | 5.8E+02 | 5.8E+00 | -5.1E+00 | 2.5E+02 | 2.5E+00 | -5.3E+00 |
| Sr-92 | 014928-29-1 | 1.3E+02 | 1.3E+00 | -6.7E-02 | 8.0E+02 | 8.0E+00 | -5.1E+00 | 3.5E+02 | 3.5E+00 | -5.3E+00 |
| Ta-182 | 013982-00-8 | 6.5E+01 | 6.5E-01 | -1.3E+01 | 1.1E+04 | 1.1E+02 | -1.9E+01 | 3.7E+05 | 3.7E+03 | -2.1E+01 |
| Tb-158 | 015759-55-4 | 1.1E+02 | 1.1E+00 | -4.7E+01 | 2.5E+03 | 2.5E+01 | -1.9E+01 | 9.3E+04 | 9.3E+02 | -2.1E+01 |

Table 3.3f. (continued)

| Chemical [†] | CASRN | Vegetable Intercept
(pCi/g) | | Slope | Beef Intercept
(pCi/g) | | Slope | Milk Intercept
(pCi/g) | | Slope |
|-----------------------|-------------|--------------------------------|------------------|----------|---------------------------|------------------|----------|---------------------------|------------------|----------|
| | | 10 ⁻⁴ | 10 ⁻⁶ | | 10 ⁻⁴ | 10 ⁻⁶ | | 10 ⁻⁴ | 10 ⁻⁶ | |
| Tb-160 | 013981-29-8 | 6.0E+01 | 6.0E-01 | -1.2E+01 | 1.4E+03 | 1.4E+01 | -1.9E+01 | 5.1E+04 | 5.1E+02 | -2.1E+01 |
| Tc-95 | 014809-56-4 | 8.4E+00 | 8.4E-02 | -5.6E-03 | 3.8E+04 | 3.8E+02 | -1.0E-01 | 3.9E+03 | 3.9E+01 | -1.0E-01 |
| Tc-95m | 014809-56-4 | 4.6E-01 | 4.6E-03 | -3.5E-01 | 2.1E+03 | 2.1E+01 | -1.0E-01 | 2.2E+02 | 2.2E+00 | -1.0E-01 |
| Tc-96 | 014808-44-7 | 2.5E-01 | 2.5E-03 | -2.8E-02 | 1.1E+03 | 1.1E+01 | -1.0E-01 | 1.2E+02 | 1.2E+00 | -1.0E-01 |
| Tc-96m | 014808-44-7 | 2.2E+01 | 2.2E-01 | -2.4E-04 | 9.8E+04 | 9.8E+02 | -1.0E-01 | 1.0E+04 | 1.0E+02 | -1.0E-01 |
| Tc-97 | 015759-35-0 | 3.6E+00 | 3.6E-02 | -3.6E+01 | 1.6E+04 | 1.6E+02 | -1.0E-01 | 1.7E+03 | 1.7E+01 | -1.0E-01 |
| Tc-97m | 015759-35-0 | 4.8E-01 | 4.8E-03 | -5.0E-01 | 2.1E+03 | 2.1E+01 | -1.0E-01 | 2.2E+02 | 2.2E+00 | -1.0E-01 |
| Tc-99 | 014133-76-7 | 4.1E-01 | 4.1E-03 | -3.6E+01 | 1.8E+03 | 1.8E+01 | -1.0E-01 | 1.9E+02 | 1.9E+00 | -1.0E-01 |
| Tc-99m | 014133-76-7 | 1.0E+01 | 1.0E-01 | -1.7E-03 | 4.6E+04 | 4.6E+02 | -1.0E-01 | 4.8E+03 | 4.8E+01 | -1.0E-01 |
| Te-125m | 014390-73-9 | 4.9E+01 | 4.9E-01 | -3.5E+00 | 1.5E+02 | 1.5E+00 | -1.0E+00 | 3.4E+02 | 3.4E+00 | -1.1E+00 |
| Te-127 | 013981-49-2 | 1.5E+02 | 1.5E+00 | -1.1E-01 | 4.4E+02 | 4.4E+00 | -1.0E+00 | 1.0E+03 | 1.0E+01 | -1.1E+00 |
| Te-127m | 013981-49-2 | 2.1E+01 | 2.1E-01 | -4.0E+00 | 6.3E+01 | 6.3E-01 | -1.0E+00 | 1.4E+02 | 1.4E+00 | -1.1E+00 |
| Te-129 | 014269-71-7 | 8.4E+02 | 8.4E+00 | -1.4E-02 | 2.6E+03 | 2.6E+01 | -1.0E+00 | 5.8E+03 | 5.8E+01 | -1.1E+00 |
| Te-129m | 014269-71-7 | 1.1E+01 | 1.1E-01 | -3.0E+00 | 3.2E+01 | 3.2E-01 | -1.0E+00 | 7.4E+01 | 7.4E-01 | -1.1E+00 |
| Te-131 | 014683-12-6 | 3.2E+02 | 3.2E+00 | -5.0E-03 | 9.7E+02 | 9.7E+00 | -1.0E+00 | 2.2E+03 | 2.2E+01 | -1.1E+00 |
| Te-131m | 014683-12-6 | 1.4E+01 | 1.4E-01 | -3.3E-01 | 4.3E+01 | 4.3E-01 | -1.0E+00 | 9.8E+01 | 9.8E-01 | -1.1E+00 |
| Te-132 | 014234-28-7 | 1.0E+01 | 1.0E-01 | -7.7E-01 | 3.1E+01 | 3.1E-01 | -1.0E+00 | 7.1E+01 | 7.1E-01 | -1.1E+00 |

Table 3.3f. (continued)

| Chemical ¹ | CASRN | Vegetable Intercept
(pCi/g) | | Slope | Beef Intercept
(pCi/g) | | Slope | Milk Intercept
(pCi/g) | | Slope |
|-----------------------|-------------|--------------------------------|------------------|----------|---------------------------|------------------|----------|---------------------------|------------------|----------|
| | | 10 ⁻⁴ | 10 ⁻⁶ | | 10 ⁻⁴ | 10 ⁻⁶ | | 10 ⁻⁴ | 10 ⁻⁶ | |
| Th-227 | 015623-47-9 | 1.1E+01 | 1.1E-01 | -8.5E+00 | 1.2E+04 | 1.2E+02 | -1.9E+01 | 3.9E+04 | 3.9E+02 | -2.1E+01 |
| Th-228 | 014274-82-9 | 7.3E+00 | 7.3E-02 | -1.7E+01 | 7.5E+03 | 7.5E+01 | -1.9E+01 | 2.5E+04 | 2.5E+02 | -2.1E+01 |
| Th-228+D | 014274-82-9 | 1.8E+00 | 1.8E-02 | -1.6E+01 | 2.0E+00 | 2.0E-02 | -9.6E+00 | 3.4E+00 | 3.4E-02 | -1.0E+01 |
| Th-229 | 015594-54-4 | 8.1E+00 | 8.1E-02 | -5.0E+01 | 8.4E+03 | 8.4E+01 | -1.9E+01 | 2.8E+04 | 2.8E+02 | -2.1E+01 |
| Th-229+D | 015594-54-4 | 6.1E-01 | 6.1E-03 | -4.2E+01 | 1.6E+00 | 1.6E-02 | -4.3E+00 | 1.4E-01 | 1.4E-03 | -4.5E+00 |
| Th-230 | 014269-63-7 | 1.2E+01 | 1.2E-01 | -5.0E+01 | 1.3E+04 | 1.3E+02 | -1.9E+01 | 4.2E+04 | 4.2E+02 | -2.1E+01 |
| Th-231 | 014932-40-2 | 2.6E+02 | 2.6E+00 | -1.0E+00 | 2.6E+05 | 2.6E+03 | -1.9E+01 | 8.7E+05 | 8.7E+03 | -2.1E+01 |
| Th-232 | 007440-29-1 | 1.4E+01 | 1.4E-01 | -5.0E+01 | 1.4E+04 | 1.4E+02 | -1.9E+01 | 4.8E+04 | 4.8E+02 | -2.1E+01 |
| Th-234 | 015065-10-8 | 2.4E+01 | 2.4E-01 | -9.4E+00 | 2.4E+04 | 2.4E+02 | -1.9E+01 | 8.1E+04 | 8.1E+02 | -2.1E+01 |
| Tl-202 | 015720-57-7 | 4.5E+02 | 4.5E+00 | -6.9E+00 | 1.2E+03 | 1.2E+01 | -1.9E+01 | 3.9E+03 | 3.9E+01 | -2.2E+01 |
| Tl-204 | 013968-51-9 | 2.3E+02 | 2.3E+00 | -2.1E+01 | 6.1E+02 | 6.1E+00 | -1.9E+01 | 2.0E+03 | 2.0E+01 | -2.2E+01 |
| Tl-208 | 014913-50-9 | 2.6E+04 | 2.6E+02 | -2.2E-03 | 6.9E+04 | 6.9E+02 | -1.9E+01 | 2.3E+05 | 2.3E+03 | -2.2E+01 |
| Tl-209 | 015690-73-0 | 3.3E+04 | 3.3E+02 | -1.6E-03 | 8.6E+04 | 8.6E+02 | -1.9E+01 | 2.8E+05 | 2.8E+03 | -2.2E+01 |
| Tm-170 | 013981-30-1 | 6.0E+01 | 6.0E-01 | -1.3E+01 | 1.4E+03 | 1.4E+01 | -1.9E+01 | 5.2E+04 | 5.2E+02 | -2.1E+01 |
| Tm-171 | 014333-45-0 | 7.7E+02 | 7.7E+00 | -1.7E+01 | 1.8E+04 | 1.8E+02 | -1.9E+01 | 6.7E+05 | 6.7E+03 | -2.1E+01 |
| U-232 | 014158-29-3 | 5.6E+00 | 5.6E-02 | -4.5E+01 | 1.9E+03 | 1.9E+01 | -1.8E+01 | 2.3E+02 | 2.3E+00 | -2.1E+01 |
| U-233 | 013968-55-3 | 1.0E+01 | 1.0E-01 | -5.0E+01 | 3.4E+03 | 3.4E+01 | -1.8E+01 | 4.2E+02 | 4.2E+00 | -2.1E+01 |

Table 3.3f. (continued)

| Chemical† | CASRN | Vegetable Intercept
(pCi/g) | | Slope | Beef Intercept
(pCi/g) | | Slope | Milk Intercept
(pCi/g) | | Slope |
|-----------|-------------|--------------------------------|------------------|----------|---------------------------|------------------|----------|---------------------------|------------------|----------|
| | | 10 ⁻⁴ | 10 ⁻⁶ | | 10 ⁻⁴ | 10 ⁻⁶ | | 10 ⁻⁴ | 10 ⁻⁶ | |
| | | | | | | | | | | |
| U-234 | 013966-29-5 | 1.0E+01 | 1.0E-01 | -5.0E+01 | 3.4E+03 | 3.4E+01 | -1.8E+01 | 4.3E+02 | 4.3E+00 | -2.1E+01 |
| U-235 | 015117-96-1 | 1.0E+01 | 1.0E-01 | -5.0E+01 | 3.4E+03 | 3.4E+01 | -1.8E+01 | 4.2E+02 | 4.2E+00 | -2.1E+01 |
| U-235+D | 015117-96-1 | 9.7E+00 | 9.7E-02 | -5.0E+01 | 2.4E+03 | 2.4E+01 | -1.8E+01 | 3.9E+02 | 3.9E+00 | -2.0E+01 |
| U-236 | 013982-70-2 | 1.1E+01 | 1.1E-01 | -5.0E+01 | 3.6E+03 | 3.6E+01 | -1.8E+01 | 4.5E+02 | 4.5E+00 | -2.1E+01 |
| U-237 | 014269-75-1 | 1.1E+02 | 1.1E+00 | -4.8E+00 | 3.8E+04 | 3.8E+02 | -1.8E+01 | 4.8E+03 | 4.8E+01 | -2.1E+01 |
| U-238 | 007440-61-1 | 1.1E+01 | 1.1E-01 | -5.0E+01 | 3.6E+03 | 3.6E+01 | -1.8E+01 | 4.4E+02 | 4.4E+00 | -2.1E+01 |
| U-238+D | 007440-61-1 | 7.3E+00 | 7.3E-02 | -5.0E+01 | 1.7E+03 | 1.7E+01 | -1.7E+01 | 2.8E+02 | 2.8E+00 | -2.0E+01 |
| U-240 | 015687-53-3 | 8.4E+01 | 8.4E-01 | -6.0E-01 | 2.8E+04 | 2.8E+02 | -1.8E+01 | 3.5E+03 | 3.5E+01 | -2.1E+01 |
| V-48 | 014331-97-6 | 6.0E+01 | 6.0E-01 | -7.9E+00 | 2.5E+03 | 2.5E+01 | -1.9E+01 | 5.3E+04 | 5.3E+02 | -2.2E+01 |
| W-181 | 015749-46-9 | 1.6E+03 | 1.6E+01 | -1.3E+01 | 5.3E+02 | 5.3E+00 | -2.3E+00 | 1.0E+04 | 1.0E+02 | -2.3E+00 |
| W-185 | 014932-41-3 | 2.2E+02 | 2.2E+00 | -1.2E+01 | 7.1E+01 | 7.1E-01 | -2.3E+00 | 1.4E+03 | 1.4E+01 | -2.3E+00 |
| W-187 | 014983-48-3 | 1.8E+02 | 1.8E+00 | -9.5E-01 | 5.8E+01 | 5.8E-01 | -2.3E+00 | 1.2E+03 | 1.2E+01 | -2.3E+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 | | | | | | | | | |

Radionuclides/water and soil/agricultural

Table 3.3f. (continued)

| Chemical [†] | CASRN | Vegetable Intercept
(pCi/g) | | Slope | Beef Intercept
(pCi/g) | | Slope | Milk Intercept
(pCi/g) | | Slope |
|-----------------------|-------------|--------------------------------|------------------|----------|---------------------------|------------------|----------|---------------------------|------------------|----------|
| | | 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 | 3.0E+01 | 3.0E-01 | -2.4E+00 | 3.2E+03 | 3.2E+01 | -1.9E+01 | 2.6E+04 | 2.6E+02 | -2.1E+01 |
| Y-91 | 014234-24-3 | 3.4E+01 | 3.4E-01 | -1.2E+01 | 3.5E+03 | 3.5E+01 | -1.9E+01 | 2.9E+04 | 2.9E+02 | -2.1E+01 |
| Y-91m | 014234-24-3 | 1.2E+04 | 1.2E+02 | -3.6E-02 | 1.3E+06 | 1.3E+04 | -1.9E+01 | 1.1E+07 | 1.1E+05 | -2.1E+01 |
| Y-92 | 015751-59-4 | 2.3E+02 | 2.3E+00 | -1.5E-01 | 2.4E+04 | 2.4E+02 | -1.9E+01 | 2.0E+05 | 2.0E+03 | -2.1E+01 |
| Y-93 | 014981-70-5 | 7.9E+01 | 7.9E-01 | -4.3E-01 | 8.2E+03 | 8.2E+01 | -1.9E+01 | 6.8E+04 | 6.8E+02 | -2.1E+01 |
| Zn-65 | 013982-39-3 | 2.3E+01 | 2.3E-01 | -7.9E+00 | 1.4E+01 | 1.4E-01 | -5.5E+00 | 2.1E+01 | 2.1E-01 | -5.8E+00 |
| Zn-69 | 013982-23-5 | 3.7E+03 | 3.7E+01 | -2.0E-02 | 2.3E+03 | 2.3E+01 | -5.5E+00 | 3.4E+03 | 3.4E+01 | -5.8E+00 |
| Zn-69m | 013982-23-5 | 1.5E+02 | 1.5E+00 | -2.9E-01 | 9.2E+01 | 9.2E-01 | -5.5E+00 | 1.4E+02 | 1.4E+00 | -5.8E+00 |
| Zr-93 | 015751-77-6 | 8.8E+02 | 8.8E+00 | -5.0E+01 | 9.3E+07 | 9.3E+05 | -1.9E+01 | 2.8E+07 | 2.8E+05 | -2.2E+01 |
| Zr-95 | 013967-71-0 | 1.2E+02 | 1.2E+00 | -1.2E+01 | 1.2E+07 | 1.2E+05 | -1.9E+01 | 3.7E+06 | 3.7E+04 | -2.2E+01 |

Table 3.3f. (continued)

| Chemical [†] | CASRN | Vegetable Intercept
(pCi/g) | | Slope | Beef Intercept
(pCi/g) | | Slope | Milk Intercept
(pCi/g) | | Slope |
|-----------------------|-------------|--------------------------------|------------------|----------|---------------------------|------------------|----------|---------------------------|------------------|----------|
| | | 10 ⁻⁴ | 10 ⁻⁶ | | 10 ⁻⁴ | 10 ⁻⁶ | | 10 ⁻⁴ | 10 ⁻⁶ | |
| Zr-97 | 014928-30-4 | 4.4E+01 | 4.4E-01 | -7.1E-01 | 4.6E+06 | 4.6E+04 | -1.9E+01 | 1.4E+06 | 1.4E+04 | -2.2E+01 |

Note:

† 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. Risk-based Preliminary Remediation Goals for nonradionuclides in groundwater (recreational scenario)

Chemical	CASRN	Ingestion (mg/L)*				Dermal (mg/L)*				Ingestion + Dermal (mg/L)*†			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
ALAR	001596-84-5			1.7E+03	1.7E+02								
Acenaphthene	000083-32-9			6.8E+02	6.8E+01			2.2E+00	2.2E-01			2.2E+00	2.2E-01
Acenaphthylene	000208-96-8												
Acephate	030560-19-1	3.0E+02	3.0E+00	4.5E+01	4.5E+00	1.1E+04	1.1E+02	1.6E+03	1.6E+02	3.0E+02	3.0E+00	4.4E+01	4.4E+00
Acetaldehyde	000075-07-0												
Acetochlor	034256-82-1			2.3E+02	2.3E+01								
Acetone	000067-64-1			1.1E+03	1.1E+02			4.3E+03	4.3E+02			9.0E+02	9.0E+01
Acetone Cyanohydrin	000075-86-5			9.1E+00	9.1E-01								
Acetonitrile	000075-05-8			6.8E+01	6.8E+00			2.3E+02	2.3E+01			5.2E+01	5.2E+00
Acetophenone ⁽⁵⁾	000098-86-2			1.1E+03	1.1E+02			4.1E+02	4.1E+01			3.0E+02	3.0E+01
Acrolein ⁽⁶⁾	000107-02-8			2.3E+02	2.3E+01			6.3E+02	6.3E+01			1.7E+02	1.7E+01
Acrylamide	000079-06-1	5.9E-01	5.9E-03	2.3E+00	2.3E-01	3.2E+00	3.2E-02	1.2E+01	1.2E+00	5.0E-01	5.0E-03	1.9E+00	1.9E-01
Acrylic Acid	000079-10-7			5.7E+03	5.7E+02			8.1E+03	8.1E+02			3.3E+03	3.3E+02
Acrylonitrile	000107-13-1	4.9E+00	4.9E-02	1.1E+01	1.1E+00	7.2E+00	7.2E-02	1.7E+01	1.7E+00	2.9E+00	2.9E-02	6.8E+00	6.8E-01
Alachlor	015972-60-8	3.3E+01	3.3E-01	1.1E+02	1.1E+01	8.6E+00	8.6E-02	3.0E+01	3.0E+00	6.9E+00	6.9E-02	2.4E+01	2.4E+00
Aldicarb	000116-06-3			1.1E+01	1.1E+00			1.8E+01	1.8E+00			6.9E+00	6.9E-01
Aldicarb Sulfone	001646-88-4			1.1E+01	1.1E+00								
Aldrin	000309-00-2	1.6E-01	1.6E-03	3.4E-01	3.4E-02	1.3E-01	1.3E-03	2.7E-01	2.7E-02	7.0E-02	7.0E-04	1.5E-01	1.5E-02
Allyl	074223-64-6			2.8E+03	2.8E+02			4.0E+05	4.0E+04			2.8E+03	2.8E+02
Allyl Alcohol	000107-18-6			5.7E+01	5.7E+00			2.0E+02	2.0E+01			4.4E+01	4.4E+00

Table 3.4a. (continued)

Chemical	CASRN	Ingestion (mg/L)*			Dermal (mg/L)*			Ingestion + Dermal (mg/L)**			
		10 ⁻⁴	10 ⁻⁵	HQ=1	10 ⁻⁴	10 ⁻⁵	HQ=1	10 ⁻⁴	10 ⁻⁵	HI=1	HI=0.1
Allyl Chloride ⁽⁵⁾	000107-05-1			5.7E+02			1.7E+02				1.3E+01
Aluminum	007429-90-5										
Aluminum Phosphide	020859-73-8			4.5E+00			2.3E-01			1.5E+00	1.5E-01
Amdro	067485-29-4			3.4E+00							
Amethyn	000834-12-8			1.0E+02			1.8E+02			6.5E+01	6.5E+00
Aminophenol, m-	000591-27-5			7.9E+02			1.8E+03			5.5E+02	5.5E+01
Aminopyridine, 4-	000504-24-5			2.3E-01			3.6E-02			1.4E-01	1.4E-02
Amirtraz	033089-61-1			2.8E+01							
Ammonia	007664-41-7										
Ammonium Sulfamate	007773-06-0			2.3E+03			1.2E+03			7.7E+02	7.7E+01
Aniline	000062-53-3	4.6E+02	4.6E+00		1.5E+01	1.5E-01		1.4E+01	1.4E-01		
Anthracene	000120-12-7			3.4E+03			3.0E+01			3.0E+01	3.0E+00
Antimony (metallic)	007440-36-0			4.5E+00	4.5E-01		2.3E-01			2.2E-01	2.2E-02
Antimony Pentoxide	001314-60-9			5.7E+00	5.7E-01		2.9E+00			1.9E+00	1.9E-01
Antimony Potassium Tartrate	000304-61-0			1.0E+01	1.0E+00		5.3E+00			3.5E+00	3.5E-01
Antimony Tetroxide	001332-81-6			4.5E+00	4.5E-01		2.3E+00			1.5E+00	1.5E-01
Antimony Trioxide	001309-64-4			4.5E+00	4.5E-01		2.3E+00			1.5E+00	1.5E-01
Apollo	074115-24-5			1.5E+02	1.5E+01						
Aramidite	000140-57-8	1.1E+02	1.1E+00	5.7E+02	5.7E+01						
Aroclor 1016	012674-11-2									2.3E-03	2.3E-04

Table 3.4a. (continued)

Chemical	CASRN	Ingestion (mg/L)*				Dermal (mg/L)*				Ingestion + Dermal (mg/L)*†			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Aroclor 1221 ⁽¹⁾	011104-28-2	3.4E-01	3.4E-03			8.7E-03	8.7E-05			8.4E-03	8.4E-05		
Aroclor 1232 ⁽¹⁾	011141-16-5	3.4E-01	3.4E-03			5.8E-02	5.8E-04			5.0E-02	5.0E-04		
Aroclor 1242 ⁽¹⁾	053469-21-9	3.4E-01	3.4E-03			2.2E-02	2.2E-04			2.1E-02	2.1E-04		
Aroclor 1248 ⁽¹⁾	012672-29-6	3.4E-01	3.4E-03			2.2E-03	2.2E-05			2.1E-03	2.1E-05		
Aroclor 1254	011097-69-1			2.3E-01	2.3E-02			1.5E-03	1.5E-04			1.5E-03	1.5E-04
Aroclor 1260 ⁽¹⁾	011096-82-5	3.4E-01	3.4E-03			7.5E-04	7.5E-06			7.5E-04	7.5E-06		
Arsenic Salts	NA												
Arsenic, Inorganic	007440-38-2	1.8E+00	1.8E-02	3.4E+00	3.4E-01	1.9E+00	1.9E-02	3.6E+00	3.6E-01	9.1E-01	9.1E-03	1.8E+00	1.8E-01
Arsine	007784-42-1												
Asbestos	001332-21-4												
Assure	076578-14-8			1.0E+02	1.0E+01								
Asulam	003337-71-1			5.7E+02	5.7E+01								
Atrazine	001912-24-9	1.2E+01	1.2E-01	4.0E+02	4.0E+01	2.0E+00	2.0E-02	6.7E+01	6.7E+00	1.7E+00	1.7E-02	5.8E+01	5.8E+00
Avermectin B1	065195-55-3			4.5E+00	4.5E-01								
Azobenzene	000103-33-3	2.4E+01	2.4E-01			4.2E-01	4.2E-03			4.1E-01	4.1E-03		
Barium	007440-39-3			7.9E+02	7.9E+01			1.4E+02	1.4E+01			1.2E+02	1.2E+01
Barium Cyanide	000542-62-1			1.1E+03	1.1E+02			5.9E+02	5.9E+01			3.9E+02	3.9E+01
Baygon	000114-26-1			4.5E+01	4.5E+00			4.2E+01	4.2E+00			2.2E+01	2.2E+00
Bayleton	043121-43-3			3.4E+02	3.4E+01			3.3E+02	3.3E+01			1.7E+02	1.7E+01
Baythroid	068359-37-5			2.8E+02	2.8E+01								

Table 3.4a. (continued)

Chemical	CASRN	Ingestion (mg/L)*				Dermal (mg/L)*				Ingestion + Dermal (mg/L)*†			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Benefin	001861-40-1			3.4E+03	3.4E+02			1.5E+02	1.5E+01			1.5E+02	1.5E+01
Benomyl	017804-35-2			5.7E+02	5.7E+01			5.3E+02	5.3E+01			2.7E+02	2.7E+01
Bentazon	025057-89-0			2.8E+01	2.8E+00			9.3E+01	9.3E+00			2.2E+01	2.2E+00
Benz[a]anthracene ⁽²⁾	000056-55-3	3.6E+00	3.6E-02			3.6E-03	3.6E-05			3.6E-03	3.6E-05		
Benzaldehyde	000100-52-7			1.1E+03	1.1E+02			1.3E+02	1.3E+01			1.1E+02	1.1E+01
Benzene	000071-43-2	9.1E+01	9.1E-01			1.1E+01	1.1E-01			9.7E+00	9.7E-02		
Benzene Hexachloride	NA												
Benzene, Ethyldimethyl	NA												
Benzene, Ethylmethyl	NA												
Benzene, Methylpropenyl	NA												
Benzene, Methylpropyl	NA												
Benzene, Trimethyl	025551-13-7												
Benzenethiol	000108-98-5			1.1E-01	1.1E-02			6.1E-03	6.1E-04			5.8E-03	5.8E-04
Benzidine	000092-87-5	1.2E-02	1.2E-04	3.4E+01	3.4E+00	1.8E-02	1.8E-04	5.4E+01	5.4E+00	7.1E-03	7.1E-05	2.1E+01	2.1E+00
Benzo[a]pyrene ⁽²⁾	000050-32-8	3.6E-01	3.6E-03			2.4E-04	2.4E-06			2.4E-04	2.4E-06		
Benzo[b]fluoranthene ⁽²⁾	000205-99-2	3.6E+00	3.6E-02			2.4E-03	2.4E-05			2.4E-03	2.4E-05		
Benzo[g,h,i]perylene	000191-24-2												
Benzo[k]fluoranthene ⁽²⁾	000207-08-9	3.6E+01	3.6E-01			4.8E-02	4.8E-04			4.8E-02	4.8E-04		
Benzoic Acid	000065-85-0			4.5E+04	4.5E+03			1.6E+04	1.6E+03			1.2E+04	1.2E+03
Benzotrichloride	000098-07-7	2.0E-01	2.0E-03			1.8E-02	1.8E-04			1.6E-02	1.6E-04		

Table 3.4a. (continued)

Chemical	CASRN	Ingestion (mg/L)*				Dermal (mg/L)*				Ingestion + Dermal (mg/L)**			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Benzyl Alcohol	000100-51-6			3.4E+03	3.4E+02			9.7E+02	9.7E+01			7.5E+02	7.5E+01
Benzyl Chloride	000100-44-7	1.6E+01	1.6E-01			2.3E+00	2.3E-02			2.0E+00	2.0E-02		
Beryllium	007440-41-7	6.2E-01	6.2E-03	5.7E+01	5.7E+00	1.6E-02	1.6E-04	1.5E+00	1.5E-01	1.5E-02	1.5E-04	1.4E+00	1.4E-01
Bidrin	000141-66-2			1.1E+00	1.1E-01			6.5E+01	6.5E+00			1.1E+00	1.1E-01
Biphenthrin	082657-04-3			1.7E+02	1.7E+01								
Biphenyl, 1,1'-	000092-52-4			5.7E+02	5.7E+01			4.1E+00	4.1E-01			4.1E+00	4.1E-01
Bis(2-chloro-1-methylethyl)ether (Technical)	000108-60-1	3.8E+01	3.8E-01			6.7E+00	6.7E-02			5.7E+00	5.7E-02		
Bis(2-chloroethoxy)methane	000111-91-1												
Bis(2-chloroethyl)ether	000111-44-4	2.4E+00	2.4E-02			2.4E+00	2.4E-02			1.2E+00	1.2E-02		
Bis(2-chloroisopropyl)ether	039638-32-9			4.5E+02	4.5E+01			1.8E+02	1.8E+01			1.3E+02	1.3E+01
Bis(2-ethylhexyl)phthalate ⁽⁶⁾	000117-81-7	1.9E+02	1.9E+00	2.3E+02	2.3E+01	4.0E+00	4.0E-02	4.8E+00	4.8E-01	3.9E+00	3.9E-02	4.7E+00	4.7E-01
Bis(chloromethyl)ether	000542-88-1	1.2E-02	1.2E-04			3.5E-02	3.5E-04			9.0E-03	9.0E-05		
Bisphenol A	000080-05-7			5.7E+02	5.7E+01			2.6E+01	2.6E+00			2.5E+01	2.5E+00
Boron And Borates Only	007440-42-8			1.0E+03	1.0E+02			2.4E+03	2.4E+02			7.1E+02	7.1E+01
Boron Trifluoride	007637-07-2												
Bromochloromethane	000074-97-5												
Bromodichloromethane	000075-27-4	4.3E+01	4.3E-01	2.3E+02	2.3E+01	1.9E+01	1.9E-01	9.9E+01	9.9E+00	1.3E+01	1.3E-01	6.9E+01	6.9E+00
Bromodiphenyl Ether, p-	000101-55-3												
Bromoform	000075-25-2	3.4E+02	3.4E+00	2.3E+02	2.3E+01	2.0E+02	2.0E+00	1.4E+02	1.4E+01	1.2E+02	1.2E+00	8.5E+01	8.5E+00
Bromomethane ⁽⁶⁾	000074-83-9			1.6E+01	1.6E+00			9.4E+00	9.4E-01			5.9E+00	5.9E-01

Table 3.4a. (continued)

Chemical	CASRN	Ingestion (mg/L)*				Dermal (mg/L)*				Ingestion + Dermal (mg/L)**			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Bromophos	002104-96-3			5.7E+01	5.7E+00								
Bromotrichloromethane	000075-62-7												
Bromoxynil	001689-84-5			2.3E+02	2.3E+01			3.4E+03	3.4E+02			2.1E+02	2.1E+01
Bromoxynil Octanoate	001689-99-2			2.3E+02	2.3E+01								
Butadiene, 1,3-	000106-99-0												
Butanol, N-	000071-36-3			1.1E+03	1.1E+02			5.9E+02	5.9E+01			3.9E+02	3.9E+01
Butanone-2, 4-chloro-4,4-difluoro	NA												
Butyl Benzyl Phthlate	000085-68-7			2.3E+03	2.3E+02			5.0E+01	5.0E+00			4.9E+01	4.9E+00
Butylate	002008-41-5			5.7E+02	5.7E+01								
Butylchloride, t-	000507-20-0												
Butylphthalyl Butylglycolate	000085-70-1			1.1E+04	1.1E+03								
Cacodylic Acid	000075-60-5			3.4E+01	3.4E+00			1.6E+02	1.6E+01			2.8E+01	2.8E+00
Cadmium (Water)	007440-43-9			5.7E+00	5.7E-01			1.5E-01	1.5E-02			1.4E-01	1.4E-02
Calcium Cyanide	000592-01-8			4.5E+02	4.5E+01			2.3E+02	2.3E+01			1.5E+02	1.5E+01
Caprolactam	000105-60-2			5.7E+03	5.7E+02			2.6E+04	2.6E+03			4.6E+03	4.6E+02
Captafol	002425-06-1	3.1E+02	3.1E+00	2.3E+01	2.3E+00	4.6E+02	4.6E+00	3.4E+01	3.4E+00	1.9E+02	1.9E+00	1.4E+01	1.4E+00
Captan	000133-06-2	7.6E+02	7.6E+00	1.5E+03	1.5E+02	7.5E+02	7.5E+00	1.5E+03	1.5E+02	3.8E+02	3.8E+00	7.3E+02	7.3E+01
Carbaryl	000063-25-2			1.1E+03	1.1E+02			3.0E+02	3.0E+01			2.4E+02	2.4E+01
Carbazole	000086-74-8	1.3E+02	1.3E+00			2.6E+00	2.6E-02			2.6E+00	2.6E-02		
Carbofuran	001563-66-2			5.7E+01	5.7E+00			6.3E+01	6.3E+00			3.0E+01	3.0E+00

Table 3.4a. (continued)

Chemical	CASRN	Ingestion (mg/L)*				Dermal (mg/L)*				Ingestion + Dermal (mg/L)*†			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Carbon Disulfide	000075-15-0			1.1E+03	1.1E+02			7.7E+01	7.7E+00			7.2E+01	7.2E+00
Carbon Tetrachloride ⁽⁶⁾	000056-23-5	2.0E+01	2.0E-01	7.9E+00	7.9E-01	1.6E+00	1.6E-02	6.1E-01	6.1E-02	1.4E+00	1.4E-02	5.6E-01	5.6E-02
Carbosulfan	055285-14-8			1.1E+02	1.1E+01								
Carboxin	005234-68-4			1.1E+03	1.1E+02			6.8E+02	6.8E+01			4.2E+02	4.2E+01
Chloral	000075-87-6			2.3E+01	2.3E+00								
Chloramben	000133-90-4			1.7E+02	1.7E+01								
Chloranil	000118-75-2	6.6E+00	6.6E-02										
Chlordane ⁽⁶⁾	000057-74-9	2.0E+00	2.0E-02	6.8E-01	6.8E-02	5.1E-02	5.1E-04	1.7E-02	1.7E-03	4.9E-02	4.9E-04	1.6E-02	1.6E-03
Chloride	016887-00-6												
Chlorimuron, Ethyl-	090982-32-4			2.3E+02	2.3E+01								
Chlorine	007782-50-5			1.1E+03	1.1E+02			5.9E+02	5.9E+01			3.9E+02	3.9E+01
Chlorine Dioxide	010049-04-4												
Chlorite (Sodium Salt)	007758-19-2												
Chloro-1,1-difluoroethane, 1-	000075-68-3												
Chloro-1,3-butadiene, 2-	000126-99-8			2.3E+02	2.3E+01			4.5E+01	4.5E+00			3.8E+01	3.8E+00
Chloro-2-methylaniline HCl, 4-	003165-93-3	5.8E+00	5.8E-02										
Chloro-2-methylaniline, 4-	000095-69-2	4.6E+00	4.6E-02										
Chloroacetic Acid	000079-11-8			2.3E+01	2.3E+00			8.1E+00	8.1E-01			6.0E+00	6.0E-01
Chloroacetophenone, 2-	000532-27-4												
Chloroaniline, p-	000106-47-8			4.5E+01	4.5E+00			1.9E+00	1.9E-01			1.8E+00	1.8E-01

Table 3.4a. (continued)

Chemical	CASRN	Ingestion (mg/L)*				Dermal (mg/L)*				Ingestion + Dermal (mg/L)†*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Chlorobenzene ⁽⁶⁾	000108-90-7			2.3E+02	2.3E+01			4.4E+00	4.4E-01			4.3E+00	4.3E-01
Chlorobenzilate	000510-15-6	9.8E+00	9.8E-02	2.3E+02	2.3E+01	4.1E-01	4.1E-03	9.4E+00	9.4E-01	3.9E-01	3.9E-03	9.0E+00	9.0E-01
Chlorobenzoic Acid, p-	000074-11-3			2.3E+03	2.3E+02			1.7E+02	1.7E+01			1.6E+02	1.6E+01
Chlorobenzotrifluoride, 4-	000098-56-6			2.3E+02	2.3E+01			4.3E+00	4.3E-01			4.2E+00	4.2E-01
Chlorobutane, 1-	000109-69-3			4.5E+03	4.5E+02			2.6E+02	2.6E+01			2.4E+02	2.4E+01
Chlorobutane, 2-	000078-86-4												
Chlorocyclopentadiene	041851-50-7												
Chlorodibromoethane	073506-94-2	3.2E+01	3.2E-01										
Chlorodifluoromethane	000075-45-6												
Chloroform ⁽⁶⁾	000067-66-3	4.3E+02	4.3E+00	1.1E+02	1.1E+01	2.5E+01	2.5E-01	6.6E+00	6.6E-01	2.4E+01	2.4E-01	6.2E+00	6.2E-01
Chloromethane ⁽⁶⁾	000074-87-3	2.0E+02	2.0E+00			1.0E+02	1.0E+00			6.7E+01	6.7E-01		
Chloromethyl Methyl Ether	000107-30-2												
Chloronaphthalene, Beta-	000091-58-7			9.1E+02	9.1E+01			1.2E+01	1.2E+00			1.2E+01	1.2E+00
Chloronitrobenzene, o-	000088-73-3	1.1E+02	1.1E+00			2.9E+01	2.9E-01			2.3E+01	2.3E-01		
Chloronitrobenzene, p-	000121-73-3	1.5E+02	1.5E+00			2.9E+01	2.9E-01			2.4E+01	2.4E-01		
Chlorophenol, 2-	000095-57-8			5.7E+01	5.7E+00			3.5E+00	3.5E-01			3.3E+00	3.3E-01
Chlorophenyl Methyl Sulfide, p-	000123-09-1												
Chlorophenyl Methyl Sulfoxide	000934-73-6												
Chloropropane, 2-	000075-29-6												
Chlorothalonil	001897-45-6	2.4E+02	2.4E+00	1.7E+02	1.7E+01	1.2E+01	1.2E-01	8.8E+00	8.8E-01	1.2E+01	1.2E-01	8.3E+00	8.3E-01

Table 3.4a. (continued)

Chemical	CASRN	Ingestion (mg/L)*				Dermal (mg/L)*				Ingestion + Dermal (mg/L)**			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Chlorotoluene, o-	000095-49-8			2.3E+02	2.3E+01			5.6E+00	5.6E-01			5.5E+00	5.5E-01
Chlorpropham	000101-21-3			2.3E+03	2.3E+02			2.7E+02	2.7E+01			2.4E+02	2.4E+01
Chlorpyrifos	002921-88-2			3.4E+01	3.4E+00			5.5E-01	5.5E-02			5.4E-01	5.4E-02
Chlorpyrifos Methyl	005598-13-0			1.1E+02	1.1E+01			1.2E+01	1.2E+00			1.0E+01	1.0E+00
Chlorsulfuron	064902-72-3			5.7E+02	5.7E+01			5.2E+05	5.2E+04			5.7E+02	5.7E+01
Chlorthiophos	060238-56-4			9.1E+00	9.1E-01								
Chromium (III) (Insoluble Salts)	016065-83-1			1.1E+04	1.1E+03			1.5E+02	1.5E+01			1.4E+02	1.4E+01
Chromium (VI) ⁽⁶⁾	018540-29-9			5.7E+01	5.7E+00			2.9E+00	2.9E-01			2.8E+00	2.8E-01
Chromium Salts	NA												
Chrysene ⁽²⁾	000218-01-9	3.6E+02	3.6E+00			3.6E-01	3.6E-03			3.6E-01	3.6E-03		
Cobalt	007440-48-4												
Coke Oven Emissions	008007-45-2												
Copper	007440-50-8												
Copper Cyanide	000544-92-3			5.7E+01	5.7E+00			2.9E+01	2.9E+00			1.9E+01	1.9E+00
Creosote	008001-58-9												
Cresol, m-	000108-39-4			5.7E+02	5.7E+01			4.9E+01	4.9E+00			4.5E+01	4.5E+00
Cresol, o-	000095-48-7			5.7E+02	5.7E+01			4.6E+01	4.6E+00			4.2E+01	4.2E+00
Cresol, p-	000106-44-5			5.7E+01	5.7E+00			5.3E+00	5.3E-01			4.8E+00	4.8E-01
Crotonaldehyde	000123-73-9	1.4E+00	1.4E-02			1.3E-01	1.3E-03			1.2E-01	1.2E-03		
Cumene	000098-82-8			4.5E+02	4.5E+01			8.7E+00	8.7E-01			8.5E+00	8.5E-01

Table 3.4a. (continued)

Chemical	CASRN	Ingestion (mg/L) ^a			Dermal (mg/L) ^a			Ingestion + Dermal (mg/L) ^a		
		10 ⁻⁴	10 ⁻⁵	HQ=1	10 ⁻⁴	10 ⁻⁵	HQ=1	10 ⁻⁴	10 ⁻⁵	HI=1
Cyanazine	021725-46-2	3.2E+00	3.2E-02	2.3E+01	2.3E+00	1.7E+00	1.2E+01	1.1E+00	1.1E-02	7.8E-01
Cyanide (CN-)	000057-12-5			2.3E+02	2.3E+01		1.3E+01	1.3E+00		1.3E+00
Cyanogen	000460-19-5			4.5E+02	4.5E+01					
Cyanogen Bromide	000506-68-3			1.0E+03	1.0E+02					
Cyanogen Chloride	000506-77-4			5.7E+02	5.7E+01		1.1E+03	1.1E+02		3.7E+01
Cyclohexane, 1,2,3,4,5-pentabromo-6-chloro-	000087-84-3	1.2E+02	1.2E+00							
Cyclohexanone	000108-94-1			5.7E+04	5.7E+03		6.5E+04	6.5E+03		3.0E+03
Cyclohexylamine	000108-91-8			2.3E+03	2.3E+02		5.3E+02	5.3E+01		4.3E+01
Cyclopentadiene	000542-92-7									
Cyhalothrin/karate	068085-85-8			5.7E+01	5.7E+00		2.7E-01	2.7E-02		2.7E-02
Cypermethrin	052315-07-8			1.1E+02	1.1E+01					
Cyromazine	066215-27-8			8.5E+01	8.5E+00					
DDD	000072-54-8	1.1E+01	1.1E-01		7.1E-02	7.1E-04		7.1E-02	7.1E-04	
DDE	000072-55-9	7.8E+00	7.8E-02		5.9E-02	5.9E-04		5.8E-02	5.8E-04	
DDT	000050-29-3	7.8E+00	7.8E-02	5.7E+00	5.7E-01	3.3E-02	2.4E-02	2.4E-03	3.3E-04	2.4E-03
Dacthal	001861-32-1			1.1E+02	1.1E+01					
Dalapon	000075-99-0			3.4E+02	3.4E+01		4.8E+02	4.8E+01		2.0E+01
Decabromodiphenyl Ether	001163-19-5			1.1E+02	1.1E+01		1.7E+04	1.7E+03		1.1E+01
Demeton	008065-48-3			4.5E-01	4.5E-02					
Di(2-ethylhexyl)adipate	000103-23-1	2.2E+03	2.2E+01	6.8E+03	6.8E+02	7.9E-01	7.9E-03	2.4E+00	2.4E-01	2.4E-01

Nonradionuclides/groundwater/recreational

Table 3.4a. (continued)

Chemical	CASRN	Ingestion (mg/L)*				Dermal (mg/L)*				Ingestion + Dermal (mg/L)†*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Diallate	002303-16-4	4.3E+01	4.3E-01			6.3E+02	6.3E+00			4.1E+01	4.1E-01		
Diazinon	000333-41-5			1.0E+01	1.0E+00			9.9E-01	9.9E-02			9.0E-01	9.0E-02
Dibenz[a,h]anthracene ⁽²⁾	000053-70-3	3.6E-01	3.6E-03			1.1E-04	1.1E-06			1.1E-04	1.1E-06		
Dibromo-3-chloropropane, 1,2-	000096-12-8	1.9E+00	1.9E-02			8.1E-01	8.1E-03			5.7E-01	5.7E-03		
Dibromobenzene, 1,4-	000106-37-6			1.1E+02	1.1E+01			6.8E+00	6.8E-01			6.4E+00	6.4E-01
Dibromochloromethane	000124-48-1	3.2E+01	3.2E-01	2.3E+02	2.3E+01	1.3E+01	1.3E-01	9.0E+01	9.0E+00	9.0E+00	9.0E-02	6.4E+01	6.4E+00
Dibromodichloromethane	000594-18-3												
Dibromodiphenyl Ether, p,p'-	002050-47-7												
Dibromoethane, 1,2-	000106-93-4	3.1E-02	3.1E-04			1.9E-02	1.9E-04			1.2E-02	1.2E-04		
Dibromomethane (Methylene Bromide)	000074-95-3			1.1E+02	1.1E+01			2.0E+02	2.0E+01			7.2E+01	7.2E+00
Dibutyl Phthalate	000084-74-2			1.1E+03	1.1E+02			2.5E+01	2.5E+00			2.5E+01	2.5E+00
Dicamba	001918-00-9			3.4E+02	3.4E+01			3.8E+01	3.8E+00			3.4E+01	3.4E+00
Dichloro-2-butene, 1,4-	000764-41-0												
Dichloroacetic Acid													
Dichlorobenzene, 1,2- ⁽³⁾	000095-50-1			1.0E+03	1.0E+02			3.5E+01	3.5E+00			3.3E+01	3.3E+00
Dichlorobenzene, 1,3-	000541-73-1												
Dichlorobenzene, 1,4-	000106-46-7	1.1E+02	1.1E+00			4.1E+00	4.1E-02			4.0E+00	4.0E-02		
Dichlorobenzidine, 3,3'-	000091-94-1	5.9E+00	5.9E-02			4.5E-01	4.5E-03			4.1E-01	4.1E-03		
Dichlorodifluoromethane	000075-71-8			2.3E+03	2.3E+02			1.1E+02	1.1E+01			1.1E+02	1.1E+01
Dichloroethane, 1,1-	000075-34-3			1.1E+03	1.1E+02			3.3E+02	3.3E+01			2.5E+02	2.5E+01

Table 3.4a. (continued)

Chemical	CASRN	Ingestion (mg/L)*				Dermal (mg/L)*				Ingestion + Dermal (mg/L)**			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Dichloroethane, 1,2-	000107-06-2	2.9E+01	2.9E-01			1.4E+01	1.4E-01			9.5E+00	9.5E-02		
Dichloroethylene, 1,1-	000075-35-4	4.4E+00	4.4E-02	1.0E+02	1.0E+01	1.3E+00	1.3E-02	3.0E+01	3.0E+00	9.9E-01	9.9E-03	2.3E+01	2.3E+00
Dichloroethylene, 1,2- (Mixed Isomers)	000540-59-0			1.0E+02	1.0E+01			2.0E+02	2.0E+01			6.7E+01	6.7E+00
Dichloroethylene, 1,2-cis-	000156-59-2			1.1E+02	1.1E+01			2.9E+01	2.9E+00			2.3E+01	2.3E+00
Dichloroethylene, 1,2-trans-	000156-60-5			2.3E+02	2.3E+01			5.5E+02	5.5E+01			1.6E+02	1.6E+01
Dichlorophenol, 2,4-	000120-83-2			3.4E+01	3.4E+00			1.2E+00	1.2E-01			1.2E+00	1.2E-01
Dichlorophenoxy Acetic Acid, 2,4-	000094-75-7			1.1E+02	1.1E+01			4.6E+01	4.6E+00			3.3E+01	3.3E+00
Dichlorophenoxy)butyric Acid, 4-(2,4-	000094-82-6			9.1E+01	9.1E+00			2.6E+01	2.6E+00			2.0E+01	2.0E+00
Dichloropropane, 1,2-	000078-87-5	3.9E+01	3.9E-01			7.4E+00	7.4E-02			6.2E+00	6.2E-02		
Dichloropropanol, 2,3-	000616-23-9			3.4E+01	3.4E+00								
Dichloropropene, 1,3-	000542-75-6	1.5E+01	1.5E-01	3.4E+00	3.4E-01	3.8E+00	3.8E-02	8.8E-01	8.8E-02	3.0E+00	3.0E-02	7.0E-01	7.0E-02
Dichlorvos	000062-73-7	9.1E+00	9.1E-02	5.7E+00	5.7E-01	1.2E+01	1.2E-01	7.7E+00	7.7E-01	5.3E+00	5.3E-02	3.3E+00	3.3E-01
Dicofol	000115-32-2												
Dicyclopentadiene	000077-73-6			3.4E+02	3.4E+01			2.1E+01	2.1E+00			2.0E+01	2.0E+00
Dieldrin	000060-57-1	1.7E-01	1.7E-03	5.7E-01	5.7E-02	1.3E-02	1.3E-04	4.6E-02	4.6E-03	1.2E-02	1.2E-04	4.2E-02	4.2E-03
Diethyl Phthalate	000084-66-2			9.1E+03	9.1E+02			4.4E+03	4.4E+02			3.0E+03	3.0E+02
Diethyl-p-nitrophenylphosphate	000311-45-5												
Diethylene Glycol Dinitrate (DEGDN)	000693-21-0												

Table 3.4a. (continued)

Chemical	CASRN	Ingestion (mg/L)*			Dermal (mg/L)*			Ingestion + Dermal (mg/L)**		
		10 ⁻⁴	10 ⁻⁵	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁵	HQ=1	HQ=0.1	10 ⁻⁵
Diethylene Glycol Monobutyl Ether	000112-34-5									
Diethylene Glycol Monocethyl Ether	000111-90-0			2.3E+04	2.3E+03		1.2E+05	1.2E+04	1.9E+04	1.9E+03
Diethylformamide	000617-84-5			1.2E+02	1.2E+01					
Diethylstilbestrol	000056-53-1	5.6E-04	5.6E-06		2.1E-06	2.1E-08		2.0E-06	2.0E-08	
Difenzoquat	043222-48-6			9.1E+02	9.1E+01					
DiIubenzuron	035367-38-5			2.3E+02	2.3E+01					
DiIluoroethane, 1,1-	000075-37-6									
Disopropyl Methylphosphonate	001445-75-6			9.1E+02	9.1E+01			1.4E+03	1.4E+02	5.6E+02
Dimethipin	055290-64-7			2.3E+02	2.3E+01					
Dimethoate	000060-51-5			2.3E+00	2.3E-01			4.7E-01	4.7E-02	3.9E-01
Dimethoxybenzidine, 3,3'-	000119-90-4	1.9E+02	1.9E+00		2.4E+02	2.4E+00		1.1E+02	1.1E+00	
Dimethyl Sulfate	000077-78-1									
Dimethylaniline HCl, 2,4-	021436-96-4	4.6E+00	4.6E-02							
Dimethylaniline, 2,4-	000095-68-1	3.5E+00	3.5E-02							
Dimethylaniline, N,N-	000121-69-7			2.3E+01	2.3E+00		1.2E+00	1.2E-01	1.1E+00	1.1E-01
Dimethylbenzidine, 3,3'-	000119-93-7	2.9E-01	2.9E-03		8.4E-02	8.4E-04		6.5E-02	6.5E-04	
Dimethylethyl Lead	107584-40-7									
Dimethylformamide	000068-12-2			1.1E+03	1.1E+02		1.1E+04	1.1E+03	1.0E+03	1.0E+02
Dimethylhydrazine, 1,1 ⁶⁹	000057-14-7	1.0E+00	1.0E-02							

Nonradionuclides/groundwater/recreational

Table 3.4a. (continued)

Chemical	CASRN	Ingestion (mg/L)*				Dermal (mg/L)*				Ingestion + Dermal (mg/L)†			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Dimethylhydrazine, 1,2-	000540-73-8												
Dimethylphenol, 2,4-	000105-67-9			2.3E+02	2.3E+01			4.3E+00	4.3E-01			4.2E+00	4.2E-01
Dimethylphenol, 2,6-	000576-26-1			6.8E+00	6.8E-01			5.4E-01	5.4E-02			5.0E-01	5.0E-02
Dimethylphenol, 3,4-	000095-65-8			1.1E+01	1.1E+00			3.7E-01	3.7E-02			3.5E-01	3.5E-02
Dimethylphthalate ⁽⁵⁾	000131-11-3			1.1E+05	1.1E+04			1.6E+05	1.6E+04			6.7E+04	6.7E+03
Dimethylterephthalate	000120-61-6			1.1E+03	1.1E+02								
Dinitro-o-cresol, 4,6-	000534-52-1												
Dinitro-o-cyclohexyl Phenol, 4,6-	000131-89-5			2.3E+01	2.3E+00			5.3E+04	5.3E+03			2.3E+01	2.3E+00
Dinitrobenzene, 1,2-	000528-29-0			4.5E+00	4.5E-01			4.4E+00	4.4E-01			2.2E+00	2.2E-01
Dinitrobenzene, 1,3-	000099-65-0			1.1E+00	1.1E-01			8.0E-01	8.0E-02			4.7E-01	4.7E-02
Dinitrobenzene, 1,4-	000100-25-4			4.5E+00	4.5E-01			2.8E+00	2.8E-01			1.7E+00	1.7E-01
Dinitrophenol, 2,4-	000051-28-5			2.3E+01	2.3E+00			1.8E+01	1.8E+00			1.0E+01	1.0E+00
Dinitrotoluene, 2,4-	000121-14-2	3.9E+00	3.9E-02	2.3E+01	2.3E+00	2.2E+00	2.2E-02	1.3E+01	1.3E+00	1.4E+00	1.4E-02	8.3E+00	8.3E-01
Dinitrotoluene, 2,6-	000606-20-2	3.9E+00	3.9E-02	1.1E+01	1.1E+00	3.4E+00	3.4E-02	1.0E+01	1.0E+00	1.8E+00	1.8E-02	5.3E+00	5.3E-01
Dinitrotoluene, 2-Amino-4,6-	035572-78-2												
Dinoseb	000088-85-7			1.1E+01	1.1E+00			5.3E-01	5.3E-02			5.1E-01	5.1E-02
Dioxane, 1,4-	000123-91-1	2.4E+02	2.4E+00			1.2E+03	1.2E+01			2.0E+02	2.0E+00		
Diphenamid	000957-51-7			3.4E+02	3.4E+01			1.9E+02	1.9E+01			1.2E+02	1.2E+01
Diphenylamine	000122-39-4			2.8E+02	2.8E+01			6.7E+00	6.7E-01			6.6E+00	6.6E-01
Diphenylhydrazine, 1,2-	000122-66-7	3.3E+00	3.3E-02			2.4E-01	2.4E-03			2.2E-01	2.2E-03		

Table 3.4a. (continued)

Chemical	CASRN	Ingestion (mg/L)*			Dermal (mg/L)*			Ingestion + Dermal (mg/L)**		
		10 ⁻⁴	10 ⁻⁵	HQ=1	10 ⁻⁴	10 ⁻⁵	HQ=1	10 ⁻⁴	10 ⁻⁵	HI=1
Diquat	000085-00-7			2.5E+01	2.5E+00		3.1E+05	3.1E+04		2.5E+00
Direct Black 38	001937-37-7	3.1E-01	3.1E-03							
Direct Blue 6	002602-46-2	3.3E-01	3.3E-03							
Direct Brown 95	016071-86-6	2.8E-01	2.8E-03							
Direct Sky Blue	002610-05-1									
Disulfoton	000298-04-4			4.5E-01	4.5E-02		2.1E-02	2.1E-03		2.0E-03
Diuron	000330-54-1			2.3E+01	2.3E+00		4.9E+00	4.9E-01		4.0E-01
Dodine	002439-10-3			4.5E+01	4.5E+00					
EPTC	000759-94-4			2.8E+02	2.8E+01					
Endosulfan	000115-29-7			6.8E+01	6.8E+00					
Endothal	000145-73-3			2.3E+02	2.3E+01					
Endrin	000072-20-8			3.4E+00	3.4E-01		1.1E-02	1.1E-03		1.1E-03
Epichlorohydrin	000106-89-8	2.7E+02	2.7E+00	2.3E+01	2.3E+00	1.5E+03	1.5E+01	1.3E+02	2.3E+00	1.9E+00
Epoxycubane, 1,2-	000106-88-7									
Ethephon	016672-87-0			5.7E+01	5.7E+00					
Ethion	000563-12-2			5.7E+00	5.7E-01		2.1E-01	2.1E-02		2.1E-02
Ethoxyethanol Acetate, 2-	000111-15-9			3.4E+03	3.4E+02		5.1E+03	5.1E+02		2.0E+03
Ethoxyethanol, 2-	000110-80-5			4.5E+03	4.5E+02		2.0E+04	2.0E+03		3.7E+03
Ethyl Acetate	000141-78-6				1.0E+04		1.0E+04	1.0E+03		5.1E+03
Ethyl Acrylate	000140-88-5	5.5E+01	5.5E-01				1.8E+01	1.8E-01	1.3E+01	1.3E-01

Nonradionuclides/groundwater/recreational

Table 3.4a. (continued)

Chemical	CASRN	Ingestion (mg/L)*				Dermal (mg/L)*				Ingestion + Dermal (mg/L)*†			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Ethyl Chloride	000075-00-3												
Ethyl Ether	000060-29-7			2.3E+03	2.3E+02			2.8E+02	2.8E+01			2.5E+02	2.5E+01
Ethyl Methacrylate	000097-63-2			1.0E+03	1.0E+02			2.5E+02	2.5E+01			2.0E+02	2.0E+01
Ethyl-p-nitrophenyl Phosphonate	002104-64-5			1.1E-01	1.1E-02			1.4E-02	1.4E-03			1.3E-02	1.3E-03
Ethylbenzene ⁽⁶⁾	000100-41-4			1.1E+03	1.1E+02			3.8E+01	3.8E+00			3.7E+01	3.7E+00
Ethylene Cyanohydrin	000109-78-4			3.4E+03	3.4E+02			7.3E+04	7.3E+03			3.3E+03	3.3E+02
Ethylene Diamine	000107-15-3			2.3E+02	2.3E+01			3.3E+02	3.3E+01			1.3E+02	1.3E+01
Ethylene Glycol	000107-21-1			2.3E+04	2.3E+03			8.2E+05	8.2E+04			2.2E+04	2.2E+03
Ethylene Glycol Monobutyl Ether	000111-76-2												
Ethylene Oxide	000075-21-8	2.6E+00	2.6E-02			8.5E+00	8.5E-02			2.0E+00	2.0E-02		
Ethylene Thiourea	000096-45-7	2.4E+01	2.4E-01	9.1E-01	9.1E-02	1.8E+02	1.8E+00	6.9E+00	6.9E-01	2.1E+01	2.1E-01	8.0E-01	8.0E-02
Ethylphthalyl Ethyl Glycolate	000084-72-0			3.4E+04	3.4E+03								
Express	101200-48-0			9.1E+01	9.1E+00								
Fenamiphos	022224-92-6			2.8E+00	2.8E-01								
Fenpropathrin	039515-41-8			2.8E+02	2.8E+01								
Fluometuron	002164-17-2			1.5E+02	1.5E+01			5.1E+01	5.1E+00			3.8E+01	3.8E+00
Fluoranthene	000206-44-0			4.5E+02	4.5E+01			1.0E+00	1.0E-01			1.0E+00	1.0E-01
Fluorene	000086-73-7			4.5E+02	4.5E+01			3.8E+00	3.8E-01			3.8E+00	3.8E-01
Fluoride	007782-41-4			6.8E+02	6.8E+01			1.7E+03	1.7E+02			4.9E+02	4.9E+01

Table 3.4a. (continued)

Chemical	CASRN	Ingestion (mg/L)*				Dermal (mg/L)*				Ingestion + Dermal (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Fluridone	059756-60-4			9.1E+02	9.1E+01								HI=0.1
Flurprimidol	056425-91-3			2.3E+02	2.3E+01								
Flutolanil	066332-96-5			6.8E+02	6.8E+01								
Fluvalinate	069409-94-5			1.1E+02	1.1E+01								
Folpet	000133-07-3	7.6E+02	7.6E+00	1.1E+03	1.1E+02	2.1E+02	2.1E+00	3.1E+02	3.1E+01	1.6E+02	1.6E+00	2.4E+02	2.4E+01
Fomesafen	072178-02-0	1.4E+01	1.4E-01										
Fonofos	000944-22-9			2.3E+01	2.3E+00			7.8E-01	7.8E-02			7.5E-01	7.5E-02
Formaldehyde	000050-00-0			2.3E+03	2.3E+02			2.1E+03	2.1E+02			1.1E+03	1.1E+02
Formic Acid	000064-18-6			2.3E+04	2.3E+03			7.1E+04	7.1E+03			1.7E+04	1.7E+03
Fosetyl-AL	039148-24-8			3.4E+04	3.4E+03								
Furan	000110-00-9			1.1E+01	1.1E+00			3.8E+00	3.8E-01			2.9E+00	2.9E-01
Furazolidone	000067-45-8	7.0E-01	7.0E-03			3.7E+00	3.7E-02			5.9E-01	5.9E-03		
Furfural	000098-01-1			3.4E+01	3.4E+00			4.1E-01	4.1E-02			4.0E-01	4.0E-02
Furium	000531-82-8	5.3E-02	5.3E-04										
Furmecycloz	060568-05-0	8.8E+01	8.8E-01										
Glufosinate, Ammonium	077182-82-2			4.5E+00	4.5E-01								
Glycidyl	000765-34-4			4.5E+00	4.5E-01			2.8E+01	2.8E+00			3.9E+00	3.9E-01
Glyphosate	001071-83-6			1.1E+03	1.1E+02			1.0E+06	1.1E+05			1.1E+03	1.1E+02
Goal	042874-03-3			3.4E+01	3.4E+00								
Haloxyp, Methyl	069806-40-2			5.7E-01	5.7E-02								

Table 3.4a. (continued)

Chemical	CASRN	Ingestion (mg/L)*				Dermal (mg/L)*				Ingestion + Dermal (mg/L)†*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Harmony	079277-27-3			1.5E+02	1.5E+01								
Heptachlor	000076-44-8	5.9E-01	5.9E-03	5.7E+00	5.7E-01	9.9E-02	9.9E-04	9.6E-01	9.6E-02	8.5E-02	8.5E-04	8.2E-01	8.2E-02
Heptachlor Epoxide	001024-57-3	2.9E-01	2.9E-03	1.5E-01	1.5E-02	9.9E-03	9.9E-05	5.0E-03	5.0E-04	9.6E-03	9.6E-05	4.8E-03	4.8E-04
Heptane, N-	000142-82-5												
Hexabromobenzene	000087-82-1			2.3E+01	2.3E+00			2.8E+00	2.8E-01			2.5E+00	2.5E-01
Hexachlorobenzene ⁽⁶⁾	000118-74-1	1.7E+00	1.7E-02	9.1E+00	9.1E-01	1.6E-02	1.6E-04	8.9E-02	8.9E-03	1.6E-02	1.6E-04	8.8E-02	8.8E-03
Hexachlorobutadiene ⁽⁶⁾	000087-68-3	3.4E+01	3.4E-01	2.3E+00	2.3E-01	5.8E-01	5.8E-03	3.9E-02	3.9E-03	5.7E-01	5.7E-03	3.8E-02	3.8E-03
Hexachlorocyclohexane, Alpha-	000319-84-6	4.2E-01	4.2E-03			5.6E-02	5.6E-04			4.9E-02	4.9E-04		
Hexachlorocyclohexane, Beta-	000319-85-7	1.5E+00	1.5E-02			1.6E-01	1.6E-03			1.4E-01	1.4E-03		
Hexachlorocyclohexane, Delta-	000319-86-8												
Hexachlorocyclohexane, Epsilon	006108-10-7												
Hexachlorocyclohexane, Gamma-	000058-89-9	2.0E+00	2.0E-02	3.4E+00	3.4E-01	3.6E-01	3.6E-03	6.1E-01	6.1E-02	3.1E-01	3.1E-03	5.2E-01	5.2E-02
Hexachlorocyclohexane, Technical	000608-73-1	1.5E+00	1.5E-02										
Hexachlorocyclopentadiene	000077-47-4			7.9E+01	7.9E+00			5.7E+00	5.7E-01			5.3E+00	5.3E-01
Hexachlorodibenzo-p-dioxin, Mixture	019408-74-3	4.3E-04	4.3E-06			1.2E-06	1.2E-08			1.2E-06	1.2E-08		
Hexachloroethane	000067-72-1	1.9E+02	1.9E+00	1.1E+01	1.1E+00	9.3E+00	9.3E-02	5.6E-01	5.6E-02	8.9E+00	8.9E-02	5.3E-01	5.3E-02
Hexachlorophene	000070-30-4			3.4E+00	3.4E-01			3.3E-03	3.3E-04			3.3E-03	3.3E-04

Table 3.4a. (continued)

Chemical	CASRN	Ingestion (mg/L)*				Dermal (mg/L)*				Ingestion + Dermal (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	000121-82-4	2.4E+01	2.4E-01	3.4E+01	3.4E+00	3.3E+00	3.3E-02	4.7E+00	4.7E-01	2.9E+00	2.9E-02	4.2E+00	4.2E-01
Hexamethylene Diisocyanate, 1,6-	000822-06-0												
Hexane, N-	000110-54-3			6.8E+02	6.8E+01			4.2E+00	4.2E-01			4.2E+00	4.2E-01
Hexanone, 2-	000591-78-6												
Hexazinone	051235-04-2			3.7E+02	3.7E+01			1.0E+06	1.0E+06			3.7E+02	3.7E+01
HpCDD, 2,3,7,8-(⁴)	037871-00-4	1.8E-03	1.8E-05										
HpCDF, 2,3,7,8-(⁴)	038998-75-3	1.8E-03	1.8E-05										
HxCDD, 2,3,7,8-(⁴)	034465-46-8	1.8E-04	1.8E-06										
HxCDF, 2,3,7,8-(⁴)	055684-94-1	1.8E-04	1.8E-06										
Hydrazine	000302-01-2	8.8E-01	8.8E-03			2.8E+01	2.8E-01			8.6E-01	8.6E-03		
Hydrazine Sulfate	010034-93-2	8.8E-01	8.8E-03			2.8E+01	2.8E-01			8.6E-01	8.6E-03		
Hydrogen Chloride	007647-01-0												
Hydrogen Cyanide	000074-90-8			2.3E+02	2.3E+01			4.1E+01	4.1E+00			3.5E+01	3.5E+00
Hydrogen Sulfide	007783-06-4			3.4E+01	3.4E+00			3.1E+00	3.1E-01			2.9E+00	2.9E-01
Hydroquinone	000123-31-9			4.5E+02	4.5E+01			5.9E+02	5.9E+01			2.6E+02	2.6E+01
Imazalil	035554-44-0			1.5E+02	1.5E+01								
Imazaquin	081335-37-7			2.8E+03	2.8E+02								
Indeno[1,2,3-cd]pyrene(²)	000193-39-5	3.6E+00	3.6E-02			1.5E-03	1.5E-05			1.5E-03	1.5E-05		
Iprodione	036734-19-7			4.5E+02	4.5E+01								

Table 3.4a. (continued)

Chemical	CASRN	Ingestion (mg/L)*				Dermal (mg/L)*				Ingestion + Dermal (mg/L)†*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Iron	007439-89-6												
Isobutyl Alcohol	000078-83-1			3.4E+03	3.4E+02			2.7E+03	2.7E+02			1.5E+03	1.5E+02
Isophorone	000078-59-1	2.8E+03	2.8E+01	2.3E+03	2.3E+02	8.2E+02	8.2E+00	6.7E+02	6.7E+01	6.3E+02	6.3E+00	5.1E+02	5.1E+01
Isopropalin	033820-53-0			1.7E+02	1.7E+01								
Isopropanol	000067-63-0												
Isopropyl Methyl Phosphonic Acid	001832-54-8			1.1E+03	1.1E+02								
Isoxaben	082558-50-7			5.7E+02	5.7E+01								
Karate	091465-08-6			5.7E+01	5.7E+00								
Kerb	023950-58-5			8.5E+02	8.5E+01								
Lactofen	077501-63-4			2.3E+01	2.3E+00								
Lead Alkyls	NA												
Lead And Compounds	007439-92-1												
Linuron	000330-55-2			2.3E+01	2.3E+00								
Lithium	007439-93-2												
Londax	083055-99-6			2.3E+03	2.3E+02								
MCPA	000094-74-6			5.7E+00	5.7E-01			1.5E+00	1.5E-01			1.2E+00	1.2E-01
MCPB	000094-81-5			1.1E+02	1.1E+01								
MCPP	000093-65-2			1.1E+01	1.1E+00			2.2E+00	2.2E-01			1.9E+00	1.9E-01
Magnesium	007439-95-4												
Malathion	000121-75-5			2.3E+02	2.3E+01			1.4E+02	1.4E+01			8.6E+01	8.6E+00

Table 3.4a. (continued)

Chemical	CASRN	Ingestion (mg/L)*				Dermal (mg/L)*				Ingestion + Dermal (mg/L)*†			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Maleic Anhydride	000108-31-6			1.1E+03	1.1E+02								
Maleic Hydrazide	000123-33-1			5.7E+03	5.7E+02			3.6E+04	3.6E+03			4.9E+03	4.9E+02
Malononitrile	000109-77-3			2.3E-01	2.3E-02			5.8E-01	5.8E-02			1.6E-01	1.6E-02
Mancozeb	008018-01-7			3.4E+02	3.4E+01								
Maneb	012427-38-2			5.7E+01	5.7E+00			1.6E+03	1.6E+02			5.5E+01	5.5E+00
Manganese (Water)	007439-96-5			5.3E+02	5.3E+01			5.5E+01	5.5E+00			5.0E+01	5.0E+00
Mephosfolan	000950-10-7			1.0E+00	1.0E-01								
Mepiquat Chloride	024307-26-4			3.4E+02	3.4E+01								
Mercuric Chloride	007487-94-7			3.4E+00	3.4E-01			1.8E+00	1.8E-01			1.2E+00	1.2E-01
Mercury (elemental)	007439-97-6			3.4E+00	3.4E-01			8.8E-04	8.8E-05			8.8E-04	8.8E-05
Mercury, Inorganic Salt	007439-97-6			3.4E+00	3.4E-01			6.1E-01	6.1E-02			5.2E-01	5.2E-02
Merphos	000150-50-5			3.4E-01	3.4E-02								
Merphos Oxide	000078-48-8			3.4E-01	3.4E-02			1.7E-03	1.7E-04			1.7E-03	1.7E-04
Metalaxyl	057837-19-1			6.8E+02	6.8E+01								
Methacrylonitrile	000126-98-7			1.1E+00	1.1E-01			1.3E+00	1.3E-01			6.1E-01	6.1E-02
Methamidophos	010265-92-6			5.7E-01	5.7E-02			8.2E+00	8.2E-01			5.3E-01	5.3E-02
Methanol	000067-56-1			5.7E+03	5.7E+02			7.3E+03	7.3E+02			3.2E+03	3.2E+02
Methidathion	000950-37-8			1.1E+01	1.1E+00								
Methomyl	016752-77-5			2.8E+02	2.8E+01			7.0E+02	7.0E+01			2.0E+02	2.0E+01
Methoxy-5-nitroaniline, 2-	000099-59-2	5.8E+01	5.8E-01			3.0E+01	3.0E-01			2.0E+01	2.0E-01		

Table 3.4a. (continued)

Chemical	CASRN	Ingestion (mg/L)*				Dermal (mg/L)*				Ingestion + Dermal (mg/L)*†			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Methoxychlor	000072-43-5			5.7E+01	5.7E+00			3.7E+00	3.7E-01			3.5E+00	3.5E-01
Methoxyethanol Acetate, 2-	000110-49-6			2.3E+01	2.3E+00								
Methoxyethanol, 2-	000109-86-4			1.1E+01	1.1E+00			7.7E+01	7.7E+00			9.9E+00	9.9E-01
Methyl Acetate	000079-20-9			1.1E+04	1.1E+03			1.6E+04	1.6E+03			6.7E+03	6.7E+02
Methyl Acrylate	000096-33-3			3.4E+02	3.4E+01			2.6E+02	2.6E+01			1.5E+02	1.5E+01
Methyl Ethyl Ketone	000078-93-3			6.8E+03	6.8E+02			1.3E+04	1.3E+03			4.5E+03	4.5E+02
Methyl Isobutyl Ketone	000108-10-1			9.1E+02	9.1E+01			5.7E+02	5.7E+01			3.5E+02	3.5E+01
Methyl Mercury	022967-92-6			1.1E+00	1.1E-01								
Methyl Methacrylate	000080-62-6			9.1E+02	9.1E+01			4.8E+02	4.8E+01			3.1E+02	3.1E+01
Methyl Parathion	000298-00-0			2.8E+00	2.8E-01			3.5E+00	3.5E-01			1.6E+00	1.6E-01
Methyl Styrene (Mixed Isomers)	025013-15-4			6.8E+01	6.8E+00			1.6E+00	1.6E-01			1.6E+00	1.6E-01
Methyl hydrazine ⁽⁵⁾	000060-34-4	2.4E+00	2.4E-02										
Methyl tert-Butyl Ether (MTBE)	001634-04-4												
Methyl-5-Nitroaniline, 2-	000099-55-8	8.0E+01	8.0E-01			1.7E+01	1.7E-01			1.4E+01	1.4E-01		
Methylaniline Hydrochloride, 2-	000636-21-5	1.5E+01	1.5E-01			9.0E+00	9.0E-02			5.6E+00	5.6E-02		
Methylcyclohexane	000108-87-2												
Methylene Chloride	000075-09-2	3.5E+02	3.5E+00	6.8E+02	6.8E+01	1.9E+02	1.9E+00	3.7E+02	3.7E+01	1.2E+02	1.2E+00	2.4E+02	2.4E+01
Methylene-bis(2-chloroaniline), 4,4'-	000101-14-4	2.0E+01	2.0E-01	7.9E+00	7.9E-01	9.4E-01	9.4E-03	3.7E-01	3.7E-02	9.0E-01	9.0E-03	3.5E-01	3.5E-02

Table 3.4a. (continued)

Chemical	CASRN	Ingestion (mg/L) ^a			Dermal (mg/L) ^a			Ingestion + Dermal (mg/L) ^b		
		10 ⁻⁴	10 ⁻⁵	HQ=1	10 ⁻⁴	10 ⁻⁵	HQ=1	10 ⁻⁴	10 ⁻⁵	HI=1
Methylene-bis(N,N-dimethyl) Aniline, 4,4'-	000101-61-1	5.8E+01	5.8E-01		5.7E-01	5.7E-03		5.7E-01	5.7E-03	
Methylenebisbenzenamine, 4,4'-	000101-77-9	1.1E+01	1.1E-01		8.5E+00	8.5E-02		4.7E+00	4.7E-02	
Methylenediphenyl Isocyanate, 4,4'-	000101-68-8									
Methylstyrene, Alpha-	000098-83-9		7.9E+02	7.9E+01		1.9E+01	1.9E+00	1.8E+01	1.8E+00	
Methyltrityl Lead	001762-28-3									
Metolachlor	051218-45-2		1.7E+03	1.7E+02						
Metrizol ^(c)	021087-64-9		2.8E+02	2.8E+01		2.4E+02	2.4E+01	1.3E+02	1.3E+01	
Mirex ^(c)	002385-85-5	1.5E+00	1.5E-02	2.3E+00	2.3E-01	3.8E-03	5.8E-01	4.6E-01	3.0E-03	
Mollinate	002212-67-1		2.3E+01	2.3E+00		6.6E-01	6.6E-02	6.5E-01	6.5E-02	
Molybdenum	007439-98-7		5.7E+01	5.7E+00		5.6E+01	5.6E+00	2.8E+01	2.8E+00	
Monochloramine	010599-90-3		1.1E+03	1.1E+02						
Monochlorobutanes	025154-42-1		4.5E+03	4.5E+02						
Naled	000300-76-5		2.3E+01	2.3E+00		3.3E+01	3.3E+00	1.3E+01	1.3E+00	
Naphthalene ^(c)	000091-20-3		4.1E+02	4.1E+01		1.2E+01	1.2E+00	1.2E+01	1.2E+00	
Naphthalene, 1-Methyl	000090-12-0									
Naphthalene, 2-Methyl	000091-57-6									
Napropamide	015299-99-7		1.1E+03	1.1E+02		1.2E+04	1.2E+03	1.0E+03	1.0E+02	
Niagara Blue 4B	002429-74-5									
Nickel Carbonyl	013463-39-3									

Nonradionuclides/groundwater/recreational

Table 3.4a. (continued)

Chemical	CASRN	Ingestion (mg/L)*				Dermal (mg/L)*				Ingestion + Dermal (mg/L)*†			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Nickel Refinery Dust	NA												
Nickel Soluble Salts	007440-02-0			2.3E+02	2.3E+01			1.6E+02	1.6E+01			9.3E+01	9.3E+00
Nickel Subsulfide	012035-72-2												
Nitrapyrin ⁽⁵⁾	001929-82-4			1.7E+01	1.7E+00			2.2E+00	2.2E-01			1.9E+00	1.9E-01
Nitrate	014797-55-8			1.8E+04	1.8E+03			2.3E+04	2.3E+03			1.0E+04	1.0E+03
Nitric Oxide ⁽⁵⁾	010102-43-9			1.1E+03	1.1E+02			5.9E+02	5.9E+01			3.9E+02	3.9E+01
Nitrite	014797-65-0			1.1E+03	1.1E+02			1.5E+03	1.5E+02			6.4E+02	6.4E+01
Nitroaniline, 2-	000088-74-4												
Nitrobenzene	000098-95-3			5.7E+00	5.7E-01			2.1E+00	2.1E-01			1.5E+00	1.5E-01
Nitrofurantoin	000067-20-9			7.9E+02	7.9E+01								
Nitrofurazone	000059-87-0	1.8E+00	1.8E-02										
Nitrogen Dioxide ⁽⁵⁾	010102-44-0			1.1E+04	1.1E+03			2.3E+04	2.3E+03			7.6E+03	7.6E+02
Nitroguanidine	000556-88-7			1.1E+03	1.1E+02								
Nitrophenol, 4-	000100-02-7												
Nitropropane, 2- ⁽⁵⁾	000079-46-9	2.8E-01	2.8E-03			5.8E-01	5.8E-03			1.9E-01	1.9E-03		
Nitroso-N-ethylurea, N-	000759-73-9	1.9E-02	1.9E-04			4.5E-02	4.5E-04			1.3E-02	1.3E-04		
Nitroso-N-methylurea, N-	000684-93-5												
Nitroso-di-N-butylamine, N-	000924-16-3	4.9E-01	4.9E-03			2.1E-01	2.1E-03			1.5E-01	1.5E-03		
Nitroso-di-N-propylamine, N-	000621-64-7	3.8E-01	3.8E-03			8.7E-02	8.7E-04			7.1E-02	7.1E-04		
Nitrosodiethanolamine, N-	001116-54-7	9.5E-01	9.5E-03			2.4E+02	2.4E+00			9.4E-01	9.4E-03		

Table 3.4a. (continued)

Chemical	CASRN	Ingestion (mg/L)*				Dermal (mg/L)*				Ingestion + Dermal (mg/L)**			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Nitrosodiethylamine, N-	000055-18-5	1.8E-02	1.8E-04			1.9E-02	1.9E-04			9.1E-03	9.1E-05		
Nitrosodimethylamine, N-	000062-75-9	5.2E-02	5.2E-04			2.5E-01	2.5E-03			4.3E-02	4.3E-04		
Nitrosodiphenylamine, N-	000086-30-6	5.4E+02	5.4E+00			1.8E+01	1.8E-01			1.7E+01	1.7E-01		
Nitrosomethylethylamine, N-	010595-95-6	1.2E-01	1.2E-03										
Nitrosomethylvinylamine, N-	004549-40-0												
Nitrosopyrrolidine, N-	000930-55-2	1.3E+00	1.3E-02			2.1E+01	2.1E-01			1.2E+00	1.2E-02		
Nitrotoluene, 4-Amino-2-	000119-32-4												
Nitrotoluene, m-	000099-08-1			1.1E+02	1.1E+01			1.7E+01	1.7E+00			1.5E+01	1.5E+00
Nitrotoluene, o-	000088-72-2			1.1E+02	1.1E+01			2.0E+01	2.0E+00			1.7E+01	1.7E+00
Nitrotoluene, p-	000099-99-0			1.1E+02	1.1E+01			1.7E+01	1.7E+00			1.5E+01	1.5E+00
Norflurazon	027314-13-2			4.5E+02	4.5E+01								
Nustar	085509-19-9			7.9E+00	7.9E-01								
OCDD ⁽⁴⁾	003268-87-9	1.8E-02	1.8E-04										
OCDF ⁽⁴⁾	039001-02-0	1.8E-02	1.8E-04										
Octabromodiphenyl Ether	032536-52-0			3.4E+01	3.4E+00								
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetra (HMX)	002691-41-0			5.7E+02	5.7E+01			2.8E+03	2.8E+02			4.7E+02	4.7E+01
Octamethylpyrophosphoramidate	000152-16-9			2.3E+01	2.3E+00								
Octyl Phthalate, di-N-	000117-84-0			2.3E+02	2.3E+01			2.0E-02	2.0E-03			2.0E-02	2.0E-03
Oryzalin	019044-88-3			5.7E+02	5.7E+01								
Oxadiazon	019666-30-9			5.7E+01	5.7E+00								

Table 3.4a. (continued)

Chemical	CASRN	Ingestion (mg/L)*				Dermal (mg/L)*				Ingestion + Dermal (mg/L)**			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Oxamyl	023135-22-0			2.8E+02	2.8E+01								
Paclobutrazol	076738-62-0			1.5E+02	1.5E+01								
Paraquat	001910-42-5			5.1E+01	5.1E+00			4.7E+05	4.7E+04			5.1E+01	5.1E+00
Parathion	000056-38-2			6.8E+01	6.8E+00			5.2E+00	5.2E-01			4.8E+00	4.8E-01
PeCDD, 2,3,7,8-(4)	036088-22-9	3.5E-05	3.5E-07										
PeCDF, 1,2,3,7,8-(4)	057117-41-6	3.5E-05	3.5E-07										
PeCDF, 2,3,4,7,8-(4)	057117-31-4	3.5E-04	3.5E-06										
Pebulate	001114-71-2			5.7E+02	5.7E+01								
Pendimethalin	040487-42-1			4.5E+02	4.5E+01								
Pentabromodiphenyl Ether	032534-81-9			2.3E+01	2.3E+00								
Pentachlorobenzene	000608-93-5			9.1E+00	9.1E-01			6.7E-02	6.7E-03			6.7E-02	6.7E-03
Pentachlorocyclopentadiene	025329-35-5												
Pentachloronitrobenzene	000082-68-8	1.0E+01	1.0E-01	3.4E+01	3.4E+00	3.6E-01	3.6E-03	1.2E+00	1.2E-01	3.4E-01	3.4E-03	1.2E+00	1.2E-01
Pentachlorophenol	000087-86-5	2.2E+01	2.2E-01	3.4E+02	3.4E+01	8.8E-02	8.8E-04	1.4E+00	1.4E-01	8.7E-02	8.7E-04	1.3E+00	1.3E-01
Pentyl Alcohol, N-	000071-41-0												
Permethrin	052645-53-1			5.7E+02	5.7E+01			3.1E+02	3.1E+01			2.0E+02	2.0E+01
Phenanthrene	000085-01-8												
Phenmedipham	013684-63-4			2.8E+03	2.8E+02			1.0E+06	1.1E+05			2.8E+03	2.8E+02
Phenol	000108-95-2			6.8E+03	6.8E+02			2.9E+03	2.9E+02			2.0E+03	2.0E+02
Phenylenediamine, m-	000108-45-2			6.8E+01	6.8E+00			7.2E+02	7.2E+01			6.2E+01	6.2E+00

Table 3.4a. (continued)

Chemical	CASRN	Ingestion (mg/L)*				Dermal (mg/L)*				Ingestion + Dermal (mg/L)*†			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Phenylenediamine, o-	000095-54-5	5.6E+01	5.6E-01			8.5E+01	8.5E-01			3.4E+01	3.4E-01		
Phenylenediamine, p-	000106-50-3			2.2E+03	2.2E+02			4.7E+04	4.7E+03			2.1E+03	2.1E+02
Phenylmercuric Acetate	000062-38-4			9.1E-01	9.1E-02								
Phenylphenol, 2-	000090-43-7	1.4E+03	1.4E+01			6.3E+01	6.3E-01			6.1E+01	6.1E-01		
Phorate	000298-02-2			2.3E+00	2.3E-01			3.7E+00	3.7E-01			1.4E+00	1.4E-01
Phosmet	000732-11-6			2.3E+02	2.3E+01			1.4E+02	1.4E+01			8.5E+01	8.5E+00
Phosphine	007803-51-2			3.4E+00	3.4E-01			1.8E+00	1.8E-01			1.2E+00	1.2E-01
Phosphoric Acid	007664-38-2												
Phthalic Acid, P-	000100-21-0			1.1E+04	1.1E+03			4.9E+03	4.9E+02			3.4E+03	3.4E+02
Phthalic Anhydride	000085-44-9			2.3E+04	2.3E+03			3.4E+05	3.4E+04			2.1E+04	2.1E+03
Picloram	001918-02-1			7.9E+02	7.9E+01			5.5E+02	5.5E+01			3.3E+02	3.3E+01
Pirimiphos, Methyl	029232-93-7			1.1E+02	1.1E+01								
Polybrominated Biphenyls	NA	3.0E-01	3.0E-03	7.9E-02	7.9E-03								
Polychlorinated Biphenyls	001336-36-3	3.4E-01	3.4E-03			2.3E-03	2.3E-05			2.3E-03	2.3E-05		
Potassium Cyanide	000151-50-8			5.7E+02	5.7E+01			2.3E+03	2.3E+02			4.6E+02	4.6E+01
Potassium Silver Cyanide	000506-61-6			2.3E+03	2.3E+02			1.2E+03	1.2E+02			7.7E+02	7.7E+01
Prochloraz	067747-09-5	1.8E+01	1.8E-01	1.0E+02	1.0E+01								
Profluralin	026399-36-0			6.8E+01	6.8E+00								
Prometon	001610-18-0			1.7E+02	1.7E+01			6.3E+01	6.3E+00			4.6E+01	4.6E+00
Prometryn	007287-19-6			4.5E+01	4.5E+00			1.5E+01	1.5E+00			1.1E+01	1.1E+00

Table 3.4a. (continued)

Chemical	CASRN	Ingestion (mg/L)*				Dermal (mg/L)*				Ingestion + Dermal (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Propachlor	001918-16-7			1.5E+02	1.5E+01								
Propanil	000709-98-8			5.7E+01	5.7E+00			5.0E+00	5.0E-01			4.6E+00	4.6E-01
Propargite	002312-35-8			2.3E+02	2.3E+01								
Propargyl Alcohol	000107-19-7			2.3E+01	2.3E+00								
Propazine	000139-40-2			2.3E+02	2.3E+01			7.7E+01	7.7E+00			5.7E+01	5.7E+00
Propham	000122-42-9			2.3E+02	2.3E+01			1.0E+01	1.0E+00			9.7E+00	9.7E-01
Propiconazole	060207-90-1			1.5E+02	1.5E+01								
Propylene Glycol	000057-55-6			2.3E+05	2.3E+04			1.0E+06	7.2E+05			2.2E+05	2.2E+04
Propylene Glycol Monoethyl Ether	001569-02-4			7.9E+03	7.9E+02								
Propylene Glycol Monomethyl Ether	000107-98-2			7.9E+03	7.9E+02			2.6E+04	2.6E+03			6.1E+03	6.1E+02
Propylene Oxide	000075-56-9	1.1E+01	1.1E-01			2.6E+01	2.6E-01			7.7E+00	7.7E-02		
Pursuit	081335-77-5			2.8E+03	2.8E+02								
Pydrin	051630-58-1			2.8E+02	2.8E+01			5.1E+01	5.1E+00			4.3E+01	4.3E+00
Pyrene	000129-00-0			3.4E+02	3.4E+01			8.4E-01	8.4E-02			8.4E-01	8.4E-02
Pyridine	000110-86-1			1.1E+01	1.1E+00			2.8E+00	2.8E-01			2.2E+00	2.2E-01
Quinalphos	013593-03-8			5.7E+00	5.7E-01								
Quinoline	000091-22-5	2.2E-01	2.2E-03			3.0E-02	3.0E-04			2.6E-02	2.6E-04		
Refractory Ceramic Fibers	NA												
Resmethrin	010453-86-8			3.4E+02	3.4E+01								

Table 3.4a. (continued)

Chemical	CASRN	Ingestion (mg/L)*				Dermal (mg/L)*				Ingestion + Dermal (mg/L)**			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Ronnel	000299-84-3			5.7E+02	5.7E+01			8.4E+00	8.4E-01			8.3E+00	8.3E-01
Rotenone	000083-79-4			4.5E+01	4.5E+00			9.6E+00	9.6E-01			7.9E+00	7.9E-01
Savey	078587-05-0			2.8E+02	2.8E+01								
Selenious Acid	007783-00-8			5.7E+01	5.7E+00								
Selenite	014124-67-5												
Selenium	007782-49-2			5.7E+01	5.7E+00			6.4E+01	6.4E+00			3.0E+01	3.0E+00
Selenium Sulfide	007446-34-6												
Selenourea	000630-10-4			5.7E+01	5.7E+00								
Sethoxydim	074051-80-2			1.0E+03	1.0E+02								
Silver	007440-22-4			5.7E+01	5.7E+00			2.6E+01	2.6E+00			1.8E+01	1.8E+00
Silver Cyanide	000506-64-9			1.1E+03	1.1E+02			5.9E+02	5.9E+01			3.9E+02	3.9E+01
Simazine	000122-34-9	2.2E+01	2.2E-01	5.7E+01	5.7E+00	7.0E+00	7.0E-02	1.8E+01	1.8E+00	5.3E+00	5.3E-02	1.4E+01	1.4E+00
Sodium	007440-23-5												
Sodium Acifluorfen	062476-59-9			1.5E+02	1.5E+01								
Sodium Azide	026628-22-8			4.5E+01	4.5E+00			2.3E+01	2.3E+00			1.5E+01	1.5E+00
Sodium Cyanide	000143-33-9			4.5E+02	4.5E+01			3.7E+03	3.7E+02			4.1E+02	4.1E+01
Sodium Diethyldithiocarbamate	000148-18-5	9.8E+00	9.8E-02	3.4E+02	3.4E+01								
Sodium Fluoroacetate	000062-74-8			2.3E-01	2.3E-02								
Sodium Metavanadate	013718-26-8			1.1E+01	1.1E+00			5.9E+00	5.9E-01			3.9E+00	3.9E-01
Stirofos (Tetrachlorovinphos)	000961-11-5	1.1E+02	1.1E+00	3.4E+02	3.4E+01								

Table 3.4a. (continued)

Chemical	CASRN	Ingestion (mg/L)*				Dermal (mg/L)*				Ingestion + Dermal (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Strontium, Stable	007440-24-6			6.8E+03	6.8E+02			3.5E+03	3.5E+02			2.3E+03	2.3E+02
Strychnine	000057-24-9			3.4E+00	3.4E-01			1.1E+01	1.1E+00			2.6E+00	2.6E-01
Styrene ⁽⁶⁾	000100-42-5			2.3E+03	2.3E+02			7.0E+00	7.0E-01			7.0E+00	7.0E-01
Sulfate	014808-79-8												
Systhane	088671-89-0			2.8E+02	2.8E+01								
TCDD, 2,3,7,8- ⁽⁴⁾	001746-01-6	1.8E-05	1.8E-07			1.6E-08	1.6E-10			1.6E-08	1.6E-10		
TCDF, 2,3,7,8- ⁽⁴⁾	051207-31-9	1.8E-04	1.8E-06										
TCMTB	021564-17-0			3.4E+02	3.4E+01								
Tebuthiuron	034014-18-1			7.9E+02	7.9E+01			1.0E+04	1.0E+03			7.4E+02	7.4E+01
Temephos	003383-96-8			2.3E+02	2.3E+01								
Terbacil	005902-51-2			1.5E+02	1.5E+01								
Terbufos	013071-79-9			2.8E-01	2.8E-02			2.7E-02	2.7E-03			2.5E-02	2.5E-03
Terbutryn	000886-50-0			1.1E+01	1.1E+00			5.0E-01	5.0E-02			4.8E-01	4.8E-02
Tetrabutyl Lead	001920-90-7												
Tetrachlorobenzene, 1,2,4,5-	000095-94-3			3.4E+00	3.4E-01			4.1E-02	4.1E-03			4.1E-02	4.1E-03
Tetrachloroethane, 1,1,1,2-	000630-20-6	1.0E+02	1.0E+00	3.4E+02	3.4E+01	8.7E+00	8.7E-02	2.9E+01	2.9E+00	8.0E+00	8.0E-02	2.7E+01	2.7E+00
Tetrachloroethane, 1,1,2,2-	000079-34-5	1.3E+01	1.3E-01			2.7E+00	2.7E-02			2.2E+00	2.2E-02		
Tetrachloroethylene ⁽⁶⁾	000127-18-4	5.1E+01	5.1E-01	1.1E+02	1.1E+01	3.5E-01	3.5E-03	7.9E-01	7.9E-02	3.5E-01	3.5E-03	7.9E-01	7.9E-02
Tetrachlorophenol, 2,3,4,6-	000058-90-2			3.4E+02	3.4E+01			7.3E+00	7.3E-01			7.2E+00	7.2E-01
Tetrachlorotoluene, p- alpha, alpha-	005216-25-1	1.3E-01	1.3E-03										

Table 3.4a. (continued)

Chemical	CASRN	Ingestion (mg/L) ^a			Dermal (mg/L) ^a			Ingestion + Dermal (mg/L) ^b		
		10 ⁻⁴	10 ⁻⁵	HQ=1	HQ=0.1	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁵
Tetraethyl Dithiopyrophosphate	003689-24-5			5.7E+00	5.7E-01		2.6E+00	2.6E-01	1.8E+00	1.8E-01
Tetraethyl Lead	000078-00-2									
Tetrafluoroethane, 1,1,1,2-	000811-97-2									
Tetramethyl Lead	000075-74-1									
Tetrapropyl Lead	003440-75-3									
Thallic Oxide ^(c)	001314-32-5			7.9E-01	7.9E-02					
Thallium (I) Nitrate	010102-45-1			1.0E+00	1.0E-01		5.3E-01	5.3E-02	3.5E-01	3.5E-02
Thallium (Soluble Salts)	007440-28-0									
Thallium Acetate	000563-68-8			1.0E+00	1.0E-01					
Thallium Carbonate	006533-73-9			9.1E-01	9.1E-02					
Thallium Chloride	007791-12-0			9.1E-01	9.1E-02		4.7E-01	4.7E-02	3.1E-01	3.1E-02
Thallium Selenite ^(c)	012039-52-0			1.0E+00	1.0E-01		5.3E-01	5.3E-02	3.5E-01	3.5E-02
Thallium Sulfate	007446-18-6			9.1E-01	9.1E-02		4.7E-01	4.7E-02	3.1E-01	3.1E-02
Thiobencarb	028249-77-6			1.1E+02	1.1E+01					
Thiofanox	039196-18-4			3.4E+00	3.4E-01		7.6E+02	7.6E+01	3.4E+00	3.4E-01
Thiophanate, Methyl	023564-05-8			9.1E+02	9.1E+01					
Thiram	000137-26-8			5.7E+01	5.7E+00					
Thorium	007440-29-1									
Tin	007440-31-5			6.8E+03	6.8E+02		1.8E+03	1.8E+02	1.4E+03	1.4E+02
Titanium	007440-32-6									

Nonradionuclides/groundwater/recreational

Table 3.4a. (continued)

Chemical	CASRN	Ingestion (mg/L)*				Dermal (mg/L)*				Ingestion + Dermal (mg/L)†*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Toluene ⁽⁶⁾	000108-88-3			2.3E+03	2.3E+02			1.0E+02	1.0E+01			1.0E+02	1.0E+01
Toluene diisocyanate mixture (TDI)	026471-62-5												
Toluene-2,4-diamine	000095-80-7	8.3E-01	8.3E-03			1.8E+00	1.8E-02			5.6E-01	5.6E-03		
Toluene-2,5-diamine	000095-70-5			6.8E+03	6.8E+02								
Toluene-2,6-diamine	000823-40-5			2.3E+03	2.3E+02								
Toluidine, o- (Methylaniline, 2-)	000095-53-4	1.1E+01	1.1E-01			3.8E+00	3.8E-02			2.9E+00	2.9E-02		
Toluidine, p-	000106-49-0	1.4E+01	1.4E-01			1.6E+00	1.6E-02			1.4E+00	1.4E-02		
Toxaphene	008001-35-2	2.4E+00	2.4E-02			2.1E-01	2.1E-03			1.9E-01	1.9E-03		
Tralomethrin	066841-25-6			8.5E+01	8.5E+00								
Triallate	002303-17-5			1.5E+02	1.5E+01			1.1E+01	1.1E+00			1.0E+01	1.0E+00
Triasulfuron	082097-50-5			1.1E+02	1.1E+01								
Tribromobenzene, 1,2,4-	000615-54-3			5.7E+01	5.7E+00								
Tribromochloromethane	000594-15-0												
Tribromodiphenyl Ether	049690-94-0												
Tributyltin Oxide	000056-35-9			3.4E-01	3.4E-02								
Trichloro-1,2,2-trifluoroethane, 1,1,2-	000076-13-1			3.4E+05	3.4E+04			7.3E+04	7.3E+03			6.0E+04	6.0E+03
Trichloro-2'-hydroxydiphenylether	003380-34-5												
Trichloroacetic Acid													

Table 3.4a. (continued)

Chemical	CASRN	Ingestion (mg/L)*				Dermal (mg/L)*				Ingestion + Dermal (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Trichloroaniline HCl, 2,4,6-	033663-50-2	9.1E+01	9.1E-01										
Trichloroaniline, 2,4,6-	000634-93-5	7.8E+01	7.8E-01										
Trichlorobenzene, 1,2,4-	000120-82-1			1.1E+02	1.1E+01			2.8E+00	2.8E-01			2.8E+00	2.8E-01
Trichloroethane, 1,1,1-(⁶)	000071-55-6			1.0E+03	1.0E+02			1.4E+02	1.4E+01			1.2E+02	1.2E+01
Trichloroethane, 1,1,2-	000079-00-5	4.6E+01	4.6E-01	4.5E+01	4.5E+00	1.2E+01	1.2E-01	1.1E+01	1.1E+00	9.2E+00	9.2E-02	9.0E+00	9.0E-01
Trichloroethylene(⁹)	000079-01-6	2.4E+02	2.4E+00			5.8E+00	5.8E-02			5.7E+00	5.7E-02		
Trichlorofluoromethane	000075-69-4			3.4E+03	3.4E+02			1.2E+02	1.2E+01			1.1E+02	1.1E+01
Trichlorophenol, 2,4,5-	000095-95-4			1.1E+03	1.1E+02			3.9E+01	3.9E+00			3.8E+01	3.8E+00
Trichlorophenol, 2,4,6-	000088-06-2	2.4E+02	2.4E+00			5.3E+00	5.3E-02			5.1E+00	5.1E-02		
Trichlorophenoxy) Propionic Acid, 2(2,4,5-	000093-72-1			9.1E+01	9.1E+00			4.6E+00	4.6E-01			4.4E+00	4.4E-01
Trichlorophenoxyacetic Acid, 2,4,5-	000093-76-5			1.1E+02	1.1E+01			4.0E+00	4.0E-01			3.9E+00	3.9E-01
Trichloropropane, 1,1,2-	000598-77-6			5.7E+01	5.7E+00								
Trichloropropane, 1,2,3-	000096-18-4	3.8E-01	3.8E-03	6.8E+01	6.8E+00	1.8E-03	1.8E-05	3.2E-01	3.2E-02	1.8E-03	1.8E-05	3.2E-01	3.2E-02
Trichloropropene, 1,2,3-	000096-19-5			5.7E+01	5.7E+00								
Trichlorotoluene, 2,3,6-	002077-46-5												
Trichlorotoluene, alpha 2,6-	002014-83-7												
Tridiphan	058138-08-2			3.4E+01	3.4E+00								
Triethyl Lead	005224-23-7												
Triethylamine	000121-44-8												

Table 3.4a. (continued)

Chemical	CASRN	Ingestion (mg/L)*				Dermal (mg/L)*				Ingestion + Dermal (mg/L)*†			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Trifluralin	001582-09-8	3.4E+02	3.4E+00	8.5E+01	8.5E+00	4.5E+00	4.5E-02	1.1E+00	1.1E-01	4.4E+00	4.4E-02	1.1E+00	1.1E-01
Trimethyl Lead	007442-13-9												
Trimethyl Phosphate	000512-56-1	7.2E+01	7.2E-01										
Trimethylethyl Lead	001762-26-1												
Trinitrobenzene, 1,3,5-	000099-35-4			5.7E-01	5.7E-02			1.4E+00	1.4E-01			4.0E-01	4.0E-02
Trinitrophenylmethylnitramine	000479-45-8			1.1E+02	1.1E+01			1.6E+02	1.6E+01			6.7E+01	6.7E+00
Trinitrotoluene, 2,4,6-	000118-96-7	8.8E+01	8.8E-01	5.7E+00	5.7E-01	4.1E+01	4.1E-01	2.6E+00	2.6E-01	2.8E+01	2.8E-01	1.8E+00	1.8E-01
Tripropyl Lead	006618-03-7												
Uranium (Soluble Salts)	NA			3.4E+01	3.4E+00			7.5E+01	7.5E+00			2.3E+01	2.3E+00
Vanadium Pentoxide	001314-62-1			1.0E+02	1.0E+01			5.3E+01	5.3E+00			3.5E+01	3.5E+00
Vanadium Sulfate	036907-42-3			2.3E+02	2.3E+01			1.2E+02	1.2E+01			7.7E+01	7.7E+00
Vanadium, Metallic	007440-62-2			7.9E+01	7.9E+00			2.0E+00	2.0E-01			2.0E+00	2.0E-01
Vanadyl Sulfate	027774-13-6			2.3E+02	2.3E+01			1.2E+02	1.2E+01			7.7E+01	7.7E+00
Vernolate	001929-77-7			1.1E+01	1.1E+00								
Vinclozolin	050471-44-8			2.8E+02	2.8E+01								
Vinyl Acetate	000108-05-4			1.1E+04	1.1E+03			1.6E+03	1.6E+02			1.4E+03	1.4E+02
Vinyl Bromide	000593-60-2												
Vinyl Chloride ⁽⁶⁾	000075-01-4	1.4E+00	1.4E-02			4.9E-01	4.9E-03			3.6E-01	3.6E-03		
Warfarin	000081-81-2			3.4E+00	3.4E-01			9.4E-01	9.4E-02			7.3E-01	7.3E-02
White Phosphorus	007723-14-0			2.3E-01	2.3E-02			1.2E-01	1.2E-02			7.7E-02	7.7E-03

Table 3.4a. (continued)

Chemical	CASRN	Ingestion (mg/L)*			Dermal (mg/L)*			Ingestion + Dermal (mg/L)**		
		10 ⁻⁴	10 ⁻⁵	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁵	10 ⁻⁴	10 ⁻⁵	HI=1
Xylene, Mixture ⁽⁶⁾	001330-20-7		2.3E+04	2.3E+03	5.7E+02			5.5E+02		HI=0.1
Xylene, P- ⁽⁶⁾	000106-42-3									
Xylene, m- ⁽⁶⁾	000108-38-3		2.3E+04	2.3E+03	5.9E+02			5.7E+02		5.7E+01
Xylene, o- ⁽⁶⁾	000095-47-6		2.3E+04	2.3E+03	5.8E+02			5.7E+02		5.7E+01
Zinc (Metallic)	007440-66-6		3.4E+03	3.4E+02	1.8E+03			1.2E+03		1.2E+02
Zinc Cyanide	000557-21-1		5.7E+02	5.7E+01	2.9E+02			1.9E+02		1.9E+01
Zinc Phosphide	001314-84-7		3.4E+00	3.4E-01	1.8E+00			1.2E+00		1.2E-01
Zincb	012122-67-7		5.7E+02	5.7E+01						
Zirconium	007440-67-7									

Notes:

- * By definition, 1 L (water) = 1.0E + 06 mg (water). Therefore, a limit of 1.0E + 06 mg/L was used for any PRG that was calculated to be above this limit.
- † If slope factors and/or reference doses were available for only one pathway (i.e., ingestion, dermal, OR inhalation), the total for ingestion plus inhalation plus dermal was not calculated.
- (1) The same oral slope factor as used for polychlorinated biphenyls.
- (2) The PRG was calculated considering *Supplemental Guidance from RAGS: Region 4 Bulletins, Human Health Risk Assessment* (Interim 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 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.
- (3) The toxicity values for trichloroethylene have been withdrawn from IRIS and HEAST pending further investigation. However, the most recent toxicity values have been used to calculate the PRG.
- (4) The PRG was calculated considering *Supplemental Guidance from RAGS: Region 4 Bulletins, Human Health Risk Assessment* (Interim Guidance) from EPA (November 1995). The slope factors for chemicals so marked indicate that a TEF methodology was used for chlorinated dioxin and furan congeners based on each compound's relative potency to the potency of 2,3,7,8-tetrachlorodibenzodioxin (TCDD). The following TEFs were used to convert each slope factor to an equivalent slope factor of 2,3,7,8-TCDD: (1) 2,3,7,8-TCDD, TEF = 1.0; (2) 2,3,7,8-PeCDF, TEF = 0.5; (3) 2,3,7,8-HxCDD, TEF = 0.1; (4) 2,3,7,8-HpCDD, TEF = 0.01; (5) OCDD, TEF = 0.001; (6) 2,3,7,8-TCDF, TEF = 0.1; (7) 1,2,3,7,8-PeCDF, TEF = 0.5; (8) 2,3,4,7,8-PeCDF, TEF = 0.05; (9) 2,3,7,8-HxCDF, TEF = 0.1; (10) 2,3,7,8-HpCDF, TEF = 0.01; and (11) OCDF, TEF = 0.001.
- (5) Toxicity values for these chemicals have been withdrawn from IRIS and HEAST pending further investigation. However, the most recent toxicity values have been used to calculate the PRG.

Table 3.4a. (continued)

(6) Toxicity values for these chemicals were obtained from the Superfund Health Risk Technical Support Center.

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

Chemical†	CASRN	Ingestion (pCi/L)	
		10 ⁻⁴	10 ⁻⁶
Ac-225	014265-85-1	1.0E+04	1.0E+02
Ac-227	014952-40-0	4.2E+03	4.2E+01
Ac-227+D	014952-40-0	2.4E+03	2.4E+01
Ac-228	014331-83-0	9.1E+05	9.1E+03
Ag-105	014928-14-4	9.1E+05	9.1E+03
Ag-108	014391-65-2	2.1E+08	2.1E+06
Ag-108m	014391-65-2	2.4E+05	2.4E+03
Ag-108m+D	014391-65-2	2.4E+05	2.4E+03
Ag-109m	014378-38-2	5.5E+09	5.5E+07
Ag-110	014391-76-5	6.1E+08	6.1E+06
Ag-110m	014391-76-5	1.8E+05	1.8E+03
Ag-111	015760-04-0	2.2E+05	2.2E+03
Am-241	014596-10-2	4.5E+03	4.5E+01
Am-242	013981-54-9	1.0E+06	1.0E+04
Am-242m	013981-54-9	5.1E+03	5.1E+01
Am-243	014993-75-0	4.5E+03	4.5E+01
Am-243+D	014993-75-0	4.5E+03	4.5E+01

Table 3.4b. (continued)

Chemical [†]	CASRN	Ingestion (pCi/L)	
		10 ⁻⁴	10 ⁻⁶
Ar-41	014163-25-8		
At-217	017239-90-6	1.6E+11	1.6E+09
Au-196	014914-16-0	1.1E+06	1.1E+04
Au-198	010043-49-0	2.8E+05	2.8E+03
Ba-131	014914-75-1	8.7E+05	8.7E+03
Ba-133	013981-41-4	5.5E+05	5.5E+03
Ba-133m	013981-41-4	5.4E+05	5.4E+03
Ba-137m	013981-97-0	6.1E+08	6.1E+06
Ba-139	014378-25-7	4.9E+06	4.9E+04
Ba-140	014798-08-4	1.3E+05	1.3E+03
Be-7	013966-02-4	1.7E+07	1.7E+05
Bi-206	015776-19-9	2.1E+05	2.1E+03
Bi-207	013982-38-2	2.9E+05	2.9E+03
Bi-210	014331-79-4	2.0E+05	2.0E+03
Bi-211	015229-37-5	8.1E+07	8.1E+05
Bi-212	014913-49-6	2.4E+06	2.4E+04
Bi-213	015776-20-2	3.4E+06	3.4E+04
Bi-214	014733-03-0	7.6E+06	7.6E+04

Table 3.4b. (continued)

Chemical [†]	CASRN	Ingestion (pCi/L)	
		10 ⁻⁴	10 ⁻⁶
Br-82	014686-69-2	1.0E+06	1.0E+04
C-11	014333-33-6	3.3E+07	3.3E+05
C-14	014762-75-5	1.4E+06	1.4E+04
C-15	015929-23-4	2.2E+09	2.2E+07
Ca-45	013966-05-7	7.3E+05	7.3E+03
Ca-47	001439-99-2	2.2E+05	2.2E+03
Cd-109	014109-32-1	1.8E+05	1.8E+03
Cd-115	014336-68-6	2.0E+05	2.0E+03
Cd-115m	014336-68-6	1.0E+05	1.0E+03
Ce-141	013967-74-3	3.8E+05	3.8E+03
Ce-143	014119-19-8	2.5E+05	2.5E+03
Ce-144	014762-78-8	5.0E+04	5.0E+02
Ce-144+D	014762-78-8	5.0E+04	5.0E+02
Cl-36	013981-43-6	6.6E+05	6.6E+03
Cl-38	014158-34-0	7.2E+06	7.2E+04
Cm-242	015510-73-3	3.9E+04	3.9E+02
Cm-243	015757-87-6	5.9E+03	5.9E+01
Cm-243+D	015757-87-6	5.9E+03	5.9E+01

Table 3.4b. (continued)

Chemical [†]	CASRN	Ingestion (pCi/L)	
		10 ⁻⁴	10 ⁻⁶
Cm-244	013981-15-2	7.0E+03	7.0E+01
Cm-245	015621-76-8	4.4E+03	4.4E+01
Cm-246	015757-90-1	4.5E+03	4.5E+01
Cm-247	015758-32-4	4.8E+03	4.8E+01
Cm-248	015758-33-5	1.1E+03	1.1E+01
Co-57	013981-50-5	1.5E+06	1.5E+04
Co-58	013981-38-9	5.3E+05	5.3E+03
Co-58m	013981-38-9	1.6E+07	1.6E+05
Co-60	010198-40-0	7.8E+04	7.8E+02
Cr-51	014392-02-0	1.1E+07	1.1E+05
Cs-131	014914-76-2	8.2E+06	8.2E+04
Cs-134	013967-70-9	3.1E+04	3.1E+02
Cs-134m	013967-70-9	3.3E+07	3.3E+05
Cs-135	015726-30-4	3.3E+05	3.3E+03
Cs-136	014234-29-8	1.9E+05	1.9E+03
Cs-137	010045-97-3	4.7E+04	4.7E+02
Cs-137+D	010045-97-3	4.7E+04	4.7E+02
Cs-138	015758-29-9	8.4E+06	8.4E+04

Table 3.4b. (continued)

Chemical [†]	CASRN	Ingestion (pCi/L)	
		10 ⁻⁴	10 ⁻⁶
Cu-64	013981-25-4	2.8E+06	2.8E+04
Dy-165	013967-64-1	4.5E+06	4.5E+04
Dy-166	015840-01-4	1.6E+05	1.6E+03
Er-169	015840-13-8	7.0E+05	7.0E+03
Er-171	014391-45-8	9.1E+05	9.1E+03
Eu-152	014683-23-9	2.6E+05	2.6E+03
Eu-154	015585-10-1	1.6E+05	1.6E+03
Eu-155	014391-16-3	9.0E+05	9.0E+03
Eu-156	014280-35-4	1.4E+05	1.4E+03
F-18	013981-56-1	1.4E+07	1.4E+05
Fe-55	014681-59-5	4.2E+06	4.2E+04
Fe-59	014596-12-4	2.5E+05	2.5E+03
Fr-221	015756-41-9	1.0E+07	1.0E+05
Fr-223	015756-98-6	3.3E+06	3.3E+04
Ga-67	014119-09-6	1.8E+06	1.8E+04
Ga-72	013982-22-4	3.1E+05	3.1E+03
Gd-153	014276-65-4	1.1E+06	1.1E+04
Gd-159	014041-42-0	5.7E+05	5.7E+03

Table 3.4b. (continued)

Chemical [†]	CASRN	Ingestion (pCi/L)	
		10 ⁻⁴	10 ⁻⁶
Ge-71	014374-81-3	1.3E+08	1.3E+06
H-3	010028-17-8	2.1E+07	2.1E+05
Hg-197	013981-51-6	1.3E+06	1.3E+04
Hg-203	013982-78-0	5.6E+05	5.6E+03
Ho-166	013967-65-2	2.0E+05	2.0E+03
I-122	018287-75-7	6.9E+07	6.9E+05
I-123	015715-08-9	2.7E+06	2.7E+04
I-125	014158-31-7	5.7E+04	5.7E+02
I-126	014158-32-8	3.1E+04	3.1E+02
I-129	015046-84-1	8.1E+03	8.1E+01
I-130	014914-02-4	3.1E+05	3.1E+03
I-131	010043-66-0	4.1E+04	4.1E+02
I-132	014683-16-0	2.2E+06	2.2E+04
I-133	014834-67-4	1.4E+05	1.4E+03
I-134	014914-27-3	6.4E+06	6.4E+04
I-135	014834-68-5	6.5E+05	6.5E+03
In-113m	014885-78-0	1.8E+07	1.8E+05
In-114	013981-55-0	3.3E+08	3.3E+06

Table 3.4b. (continued)

Chemical [†]	CASRN	Ingestion (pCi/L)	
		10 ⁻⁴	10 ⁻⁶
In-114m	013981-55-0	7.2E+04	7.2E+02
In-115	014191-71-0	4.2E+04	4.2E+02
In-115m	014191-71-0	4.3E+06	4.3E+04
Ir-190	014981-91-0	3.0E+05	3.0E+03
Ir-194	014158-35-1	2.1E+05	2.1E+03
K-40	013966-00-2	1.2E+05	1.2E+03
K-42	014378-21-3	1.1E+06	1.1E+04
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	1.6E+05	1.6E+03
Lu-177	014265-75-9	5.0E+05	5.0E+03
Mn-52	014092-99-0	2.5E+05	2.5E+03
Mn-54	013966-31-9	7.6E+05	7.6E+03

Table 3.4b. (continued)

Chemical [†]	CASRN	Ingestion (pCi/L)	
		10 ⁻⁴	10 ⁻⁶
Mn-56	014681-52-8	1.7E+06	1.7E+04
Mo-99	014119-15-4	6.5E+05	6.5E+03
Na-22	013966-32-0	1.8E+05	1.8E+03
Na-24	013982-04-2	1.1E+06	1.1E+04
Nb-93m	007440-03-1	2.2E+06	2.2E+04
Nb-94	014681-63-1	2.1E+05	2.1E+03
Nb-95	013967-76-5	6.6E+05	6.6E+03
Nb-95m	013967-76-5	4.8E+05	4.8E+03
Nb-97	018496-04-3	8.5E+06	8.5E+04
Nb-97m	018496-04-3	4.5E+08	4.5E+06
Nd-147	014269-74-0	2.5E+05	2.5E+03
Nd-149	015749-81-2	3.3E+06	3.3E+04
Ni-59	014336-70-0	8.0E+06	8.0E+04
Ni-63	013981-37-8	2.7E+06	2.7E+04
Ni-65	014833-49-9	2.6E+06	2.6E+04
Np-236	015700-36-4	1.6E+06	1.6E+04
Np-237	013994-20-2	5.0E+03	5.0E+01
Np-237+D	013994-20-2	4.9E+03	4.9E+01

Table 3.4b. (continued)

Chemical [†]	CASRN	Ingestion (pCi/L)	
		10 ⁻⁴	10 ⁻⁶
Np-238	015766-25-3	3.2E+05	3.2E+03
Np-239	013968-59-7	3.5E+05	3.5E+03
Np-240	015690-84-3	8.4E+06	8.4E+04
Np-240m	015690-84-3	6.1E+07	6.1E+05
Os-185	015766-50-4	8.2E+05	8.2E+03
Os-191	014119-24-5	4.9E+05	4.9E+03
Os-191m	014119-24-5	3.0E+06	3.0E+04
Os-193	016057-77-5	3.4E+05	3.4E+03
P-32	014596-37-3	2.4E+05	2.4E+03
P-33	015749-66-3	1.9E+06	1.9E+04
Pa-231	014331-85-2	9.9E+03	9.9E+01
Pa-233	013981-14-1	3.2E+05	3.2E+03
Pa-234	015100-28-4	7.0E+05	7.0E+03
Pa-234m	015100-28-4	3.1E+08	3.1E+06
Pb-203	014687-25-3	1.4E+06	1.4E+04
Pb-209	014119-30-3	7.1E+06	7.1E+04
Pb-210	014255-04-0	2.2E+03	2.2E+01
Pb-210+D	014255-04-0	1.5E+03	1.5E+01

Table 3.4b. (continued)

Chemical [†]	CASRN	Ingestion (pCi/L)	
		10 ⁻⁴	10 ⁻⁶
Pb-211	015816-77-0	4.4E+06	4.4E+04
Pb-212	015092-94-1	8.2E+04	8.2E+02
Pb-214	015067-28-4	5.0E+06	5.0E+04
Pd-100	015690-69-4	4.0E+05	4.0E+03
Pd-101	015749-54-9	4.0E+06	4.0E+04
Pd-103	014967-68-1	1.4E+06	1.4E+04
Pd-107	017637-99-9	7.1E+06	7.1E+04
Pd-109	014981-64-7	4.4E+05	4.4E+03
Pm-147	014380-75-7	1.1E+06	1.1E+04
Pm-148	014683-19-3	1.0E+05	1.0E+03
Pm-148m	014683-19-3	1.5E+05	1.5E+03
Pm-149	015765-31-8	2.7E+05	2.7E+03
Po-210	013981-52-7	4.5E+03	4.5E+01
Po-212	015389-34-1	3.3E+16	3.3E+14
Po-213	015756-57-7	2.2E+15	2.2E+13
Po-214	015735-67-8	7.0E+13	7.0E+11
Po-215	015706-52-2	3.0E+12	3.0E+10
Po-216	015756-58-8	1.7E+10	1.7E+08

Table 3.4b. (continued)

Chemical [†]	CASRN	Ingestion (pCi/L)	
		10 ⁻⁴	10 ⁻⁶
Po-218	015422-24-9	2.9E+07	2.9E+05
Pr-142	014191-64-1	2.1E+05	2.1E+03
Pr-143	014981-79-4	2.2E+05	2.2E+03
Pr-144	014119-05-2	1.8E+07	1.8E+05
Pr-144m	014119-05-2	4.6E+07	4.6E+05
Pt-191	015706-36-2	9.9E+05	9.9E+03
Pt-193	015735-70-3	9.1E+06	9.1E+04
Pt-193m	015735-70-3	5.9E+05	5.9E+03
Pt-197	015735-74-7	7.0E+05	7.0E+03
Pt-197m	015735-74-7	4.6E+06	4.6E+04
Pu-236	015411-92-4	1.9E+04	1.9E+02
Pu-238	013981-16-3	5.0E+03	5.0E+01
Pu-239	015117-48-3	4.7E+03	4.7E+01
Pu-240	014119-33-6	4.7E+03	4.7E+01
Pu-241	014119-32-5	2.8E+05	2.8E+03
Pu-241+D	014119-32-5	4.4E+03	4.4E+01
Pu-242	013982-10-0	4.9E+03	4.9E+01
Pu-243	015706-37-3	4.0E+06	4.0E+04

Table 3.4b. (continued)

Chemical ^t	CASRN	Ingestion (pCi/L)	
		10 ⁻⁴	10 ⁻⁶
Pu-244	014119-34-7	4.7E+03	4.7E+01
Pu-244+D	014119-34-7	4.6E+03	4.6E+01
Ra-223	015623-45-7	6.3E+03	6.3E+01
Ra-224	013233-32-4	9.9E+03	9.9E+01
Ra-225	013981-53-8	9.4E+03	9.4E+01
Ra-226	013982-63-3	5.0E+03	5.0E+01
Ra-226+D	013982-63-3	5.0E+03	5.0E+01
Ra-228	015262-20-1	6.0E+03	6.0E+01
Ra-228+D	015262-20-1	6.0E+03	6.0E+01
Rb-82	014391-63-0	1.4E+08	1.4E+06
Rb-86	014932-53-7	2.1E+05	2.1E+03
Rb-87	013982-13-3	4.0E+05	4.0E+03
Rb-88	014928-36-0	1.0E+07	1.0E+05
Rb-89	014191-65-2	1.7E+07	1.7E+05
Rh-103m	007440-16-6	1.8E+08	1.8E+06
Rh-105	014913-89-4	7.7E+05	7.7E+03
Rh-105m	014913-89-4	1.4E+09	1.4E+07
Rh-106	014234-34-5	4.1E+08	4.1E+06

Radionuclides/groundwater/recreational

Table 3.4b. (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	4.5E+05	4.5E+03
Ru-105	014331-95-4	1.3E+06	1.3E+04
Ru-106	013967-48-1	4.3E+04	4.3E+02
Ru-106+D	013967-48-1	4.3E+04	4.3E+02
Ru-97	015758-35-7	2.5E+06	2.5E+04
S-35	015117-53-0	3.6E+06	3.6E+04
Sb-122	014374-79-9	1.7E+05	1.7E+03
Sb-124	014683-10-4	1.4E+05	1.4E+03
Sb-125	014234-35-6	5.0E+05	5.0E+03
Sb-125+D	014234-35-6	4.2E+05	4.2E+03
Sb-126	015756-32-8	1.5E+05	1.5E+03
Sb-126m	015756-32-8	2.0E+07	2.0E+05
Sb-127	013968-50-8	1.7E+05	1.7E+03
Sb-129	014331-88-5	8.0E+05	8.0E+03
Sc-46	013967-63-0	2.6E+05	2.6E+03

Table 3.4b. (continued)

Chemical [†]	CASRN	Ingestion (pCi/L)	
		10 ⁻⁴	10 ⁻⁶
Sc-47	014391-96-9	5.0E+05	5.0E+03
Sc-48	014391-86-7	2.2E+05	2.2E+03
Se-75	014265-71-5	2.3E+05	2.3E+03
Si-31	014276-49-4	2.9E+06	2.9E+04
Sm-147	014392-33-7	5.9E+04	5.9E+02
Sm-151	015715-94-3	3.2E+06	3.2E+04
Sm-153	015766-00-4	3.7E+05	3.7E+03
Sn-113	013966-06-8	4.0E+05	4.0E+03
Sn-121	014683-06-8	1.2E+06	1.2E+04
Sn-121m	014683-06-8	7.4E+05	7.4E+03
Sn-125	014683-08-0	8.8E+04	8.8E+02
Sn-126	015832-50-5	7.0E+04	7.0E+02
Sr-82	014809-50-8	5.7E+04	5.7E+02
Sr-85	013967-73-2	1.1E+06	1.1E+04
Sr-85m	013967-73-2	8.2E+07	8.2E+05
Sr-89	014158-27-1	1.4E+05	1.4E+03
Sr-90	010098-97-2	3.6E+04	3.6E+02
Sr-90+D	010098-97-2	2.7E+04	2.7E+02

Table 3.4b. (continued)

Chemical [†]	CASRN	Ingestion (pCi/L)	
		10 ⁻⁴	10 ⁻⁶
Sr-91	014331-91-0	5.3E+05	5.3E+03
Sr-92	014928-29-1	7.3E+05	7.3E+03
Ta-182	013982-00-8	2.1E+05	2.1E+03
Tb-158	015759-55-4	3.5E+05	3.5E+03
Tb-160	013981-29-8	1.9E+05	1.9E+03
Tc-95	014809-56-4	2.2E+07	2.2E+05
Tc-95m	014809-56-4	1.2E+06	1.2E+04
Tc-96	014808-44-7	6.5E+05	6.5E+03
Tc-96m	014808-44-7	5.7E+07	5.7E+05
Tc-97	015759-35-0	9.4E+06	9.4E+04
Tc-97m	015759-35-0	1.2E+06	1.2E+04
Tc-99	014133-76-7	1.1E+06	1.1E+04
Tc-99m	014133-76-7	2.7E+07	2.7E+05
Te-125m	014390-73-9	5.9E+05	5.9E+03
Te-127	013981-49-2	1.7E+06	1.7E+04
Te-127m	013981-49-2	2.5E+05	2.5E+03
Te-129	014269-71-7	1.0E+07	1.0E+05
Te-129m	014269-71-7	1.3E+05	1.3E+03

Table 3.4b. (continued)

Chemical [†]	CASRN	Ingestion (pCi/L)	
		10 ⁻⁴	10 ⁻⁶
Te-131	014683-12-6	3.8E+06	3.8E+04
Te-131m	014683-12-6	1.7E+05	1.7E+03
Te-132	014234-28-7	1.2E+05	1.2E+03
Th-227	015623-47-9	3.7E+04	3.7E+02
Th-228	014274-82-9	2.4E+04	2.4E+02
Th-228+D	014274-82-9	6.4E+03	6.4E+01
Th-229	015594-54-4	2.6E+04	2.6E+02
Th-229+D	015594-54-4	4.2E+03	4.2E+01
Th-230	014269-63-7	4.0E+04	4.0E+02
Th-231	014932-40-2	8.3E+05	8.3E+03
Th-232	007440-29-1	4.5E+04	4.5E+02
Th-234	015065-10-8	7.7E+04	7.7E+02
Tl-202	015720-57-7	1.5E+06	1.5E+04
Tl-204	013968-51-9	7.5E+05	7.5E+03
Tl-208	014913-50-9	8.5E+07	8.5E+05
Tl-209	015690-73-0	1.1E+08	1.1E+06
Tm-170	013981-30-1	2.0E+05	2.0E+03
Tm-171	014333-45-0	2.5E+06	2.5E+04

Table 3.4b. (continued)

Chemical [†]	CASRN	Ingestion (pCi/L)	
		10 ⁻⁴	10 ⁻⁶
U-232	014158-29-3	1.8E+04	1.8E+02
U-233	013968-55-3	3.3E+04	3.3E+02
U-234	013966-29-5	3.3E+04	3.3E+02
U-235	015117-96-1	3.3E+04	3.3E+02
U-235+D	015117-96-1	3.2E+04	3.2E+02
U-236	013982-70-2	3.5E+04	3.5E+02
U-237	014269-75-1	3.7E+05	3.7E+03
U-238	007440-61-1	3.5E+04	3.5E+02
U-238+D	007440-61-1	2.4E+04	2.4E+02
U-240	015687-53-3	2.7E+05	2.7E+03
V-48	014331-97-6	2.0E+05	2.0E+03
W-181	015749-46-9	5.4E+06	5.4E+04
W-185	014932-41-3	7.3E+05	7.3E+03
W-187	014983-48-3	6.0E+05	6.0E+03
Xe-122	015151-09-4		
Xe-123	015700-10-4		
Xe-125	013994-18-8		
Xe-127	013994-19-9		

Table 3.4b. (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	9.9E+04	9.9E+02
Y-91	014234-24-3	1.1E+05	1.1E+03
Y-91m	014234-24-3	4.0E+07	4.0E+05
Y-92	015751-59-4	7.6E+05	7.6E+03
Y-93	014981-70-5	2.6E+05	2.6E+03
Zn-65	013982-39-3	1.5E+05	1.5E+03
Zn-69	013982-23-5	2.4E+07	2.4E+05
Zn-69m	013982-23-5	9.7E+05	9.7E+03
Zr-93	015751-77-6	2.8E+06	2.8E+04
Zr-95	013967-71-0	3.8E+05	3.8E+03

Table 3.4b. (continued)

Chemical†	CASRN	Ingestion (pCi/L)	
		10 ⁻⁴	10 ⁻⁶
Zr-97	014928-30-4	1.4E+05	1.4E+03

Note:

† 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 (recreational scenario)

Chemical	CASRN	Ingestion (mg/kg)*						Dermal (mg/kg)*				Inhalation (mg/kg)* ^v				Ingestion + Dermal + Inhalation (mg/kg)* ^v			
		10 ⁻⁴	10 ⁻⁶	HQ=1 Child	HQ=1 Adult	HQ=0.1 Adult	HQ=0.1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
ALAR	001596-84-5			1.0E+06	1.0E+06	1.0E+06	1.3E+05			4.8E+05	4.8E+04							4.6E+05	4.6E+04
Acenaphthene	000083-32-9			5.3E+05	1.0E+06	4.9E+05	5.3E+04			1.2E+05	1.2E+04							1.2E+05	1.2E+04
Acenaphthylene	000208-96-8																		
Acephate	030560-19-1	8.2E+05	8.2E+03	3.5E+04	3.3E+05	3.3E+04	3.5E+03	8.6E+04	8.6E+02	1.3E+04	1.3E+03					8.3E+04	8.3E+02	1.2E+04	1.2E+03
Acetaldehyde	000075-07-0											4.9E+04	7.4E+03	4.9E+04	6.3E+03				
Acetochlor	034256-82-1			1.8E+05	1.0E+06	1.6E+05	1.8E+04			6.4E+04	6.4E+03							6.2E+04	6.2E+03
Acetone	000067-64-1			8.8E+05	1.0E+06	8.2E+05	8.8E+04			5.3E+05	5.3E+04							5.0E+05	5.0E+04
Acetone Cyanohydrin	000075-86-5			7.0E+03	6.5E+04	6.5E+03	7.0E+02			2.6E+03	2.6E+02			1.0E+06	1.0E+06			2.5E+03	2.5E+02
Acetonitrile	000075-05-8			5.3E+04	4.9E+05	4.9E+04	5.3E+03			3.1E+04	3.1E+03			1.0E+06	1.0E+06			2.9E+04	2.9E+03
Acetophenone ^(f)	000098-86-2			8.8E+05	1.0E+06	8.2E+05	8.8E+04			5.1E+05	5.1E+04			1.0E+06	1.0E+06			4.6E+05	4.6E+04
Acrolein ^(f)	000107-02-8			1.8E+05	1.0E+06	1.6E+05	1.8E+04			1.0E+05	1.0E+04			3.1E+01	3.1E+00			2.5E+01	2.5E+00
Acrylamide	000079-06-1	1.6E+03	1.6E+01	1.8E+03	1.6E+04	1.6E+03	1.8E+02	1.7E+02	1.7E+00	6.4E+02	6.4E+01	1.0E+06	9.1E+05			1.6E+02	1.6E+00	6.2E+02	6.2E+01
Acrylic Acid	000079-10-7			1.0E+06	1.0E+06	1.0E+06	4.4E+05			1.0E+06	1.6E+05			1.0E+06	1.0E+06			1.0E+06	1.5E+05
Acrylonitrile	000107-13-1	1.3E+04	1.3E+02	8.8E+03	8.2E+04	8.2E+03	8.8E+02	2.2E+03	2.2E+01	5.1E+03	5.1E+02	1.4E+03	1.4E+01	8.5E+02	8.5E+01	8.5E+02	8.5E+00	5.8E+02	5.8E+01
Alachlor	015972-60-8	8.9E+04	8.9E+02	8.8E+04	8.2E+05	8.2E+04	8.8E+03	9.4E+03	9.4E+01	3.2E+04	3.2E+03					9.0E+03	9.0E+01	3.1E+04	3.1E+03
Aldicarb	000116-06-3			8.8E+03	8.2E+04	8.2E+03	8.8E+02			3.2E+03	3.2E+02							3.1E+03	3.1E+02
Aldicarb Sulfone	001646-88-4			8.8E+03	8.2E+04	8.2E+03	8.8E+02			3.2E+03	3.2E+02							3.1E+03	3.1E+02
Aldrin	000309-00-2	4.2E+02	4.2E+00	2.6E+02	2.5E+03	2.5E+02	2.6E+01	4.4E+01	4.4E-01	9.6E+01	9.6E+00	1.0E+06	2.4E+05			4.2E+01	4.2E-01	9.3E+01	9.3E+00
Allyl	074223-64-6			1.0E+06	1.0E+06	1.0E+06	2.2E+05			8.0E+05	8.0E+04							7.7E+05	7.7E+04
Allyl Alcohol	000107-18-6			4.4E+04	4.1E+05	4.1E+04	4.4E+03			2.6E+04	2.6E+03							2.4E+04	2.4E+03
Allyl Chloride ^(f)	000107-05-1			4.4E+05	1.0E+06	4.1E+05	4.4E+04			2.6E+05	2.6E+04			6.3E+02	1.1E+02			6.3E+02	9.2E+01
Aluminum	007429-90-5																		

Table 3.4c. (continued)

Chemical	CASRN	Ingestion (mg/kg)*						Dermal (mg/kg)*				Inhalation (mg/kg)* ^v				Ingestion + Dermal + Inhalation (mg/kg) ^{†v}			
		10 ⁻⁴	10 ⁻⁴	HQ=1 Child	HQ=1 Adult	HQ=0.1 Adult	HQ=0.1 Child	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Aluminum Phosphide	020859-73-8			3.5E+03	3.3E+04	3.3E+03	3.5E+02			5.1E+03	5.1E+02							4.4E+03	4.4E+02
Amdro	067485-29-4			2.6E+03	2.5E+04	2.5E+03	2.6E+02			9.6E+02	9.6E+01							9.3E+02	9.3E+01
Ametryn	000834-12-8			7.9E+04	7.4E+05	7.4E+04	7.9E+03			2.9E+04	2.9E+03							2.8E+04	2.8E+03
Aminophenol, m-	000591-27-5			6.1E+05	1.0E+06	5.7E+05	6.1E+04			2.2E+05	2.2E+04							2.2E+05	2.2E+04
Aminopyridine, 4-	000504-24-5			1.8E+02	1.6E+03	1.6E+02	1.8E+01			6.4E+01	6.4E+00							6.2E+01	6.2E+00
Amitraz	033089-61-1			2.2E+04	2.0E+05	2.0E+04	2.2E+03			8.0E+03	8.0E+02							7.7E+03	7.7E+02
Ammonia	007664-41-7													1.0E+06	1.0E+06				
Ammonium Sulfamate	007773-06-0			1.0E+06	1.0E+06	1.0E+06	1.8E+05			1.0E+06	2.6E+05							1.0E+06	2.2E+05
Aniline	000062-53-3	1.0E+06	1.3E+04					1.3E+05	1.3E+03					1.0E+06	1.0E+06	1.3E+05	1.3E+03		
Anthracene	000120-12-7			1.0E+06	1.0E+06	1.0E+06	2.6E+05			1.0E+06	1.5E+05							1.0E+06	1.4E+05
Antimony (metallic)	007440-36-0			3.5E+03	3.3E+04	3.3E+03	3.5E+02			5.1E+02	5.1E+01							5.1E+02	5.1E+01
Antimony Pentoxide	001314-60-9			4.4E+03	4.1E+04	4.1E+03	4.4E+02			6.4E+03	6.4E+02							5.6E+03	5.6E+02
Antimony Potassium Tartrate	000304-61-0			7.9E+03	7.4E+04	7.4E+03	7.9E+02			1.2E+04	1.2E+03							1.0E+04	1.0E+03
Antimony Tetroxide	001332-81-6			3.5E+03	3.3E+04	3.3E+03	3.5E+02			5.1E+03	5.1E+02							4.4E+03	4.4E+02
Antimony Trioxide	001309-64-4			3.5E+03	3.3E+04	3.3E+03	3.5E+02			5.1E+03	5.1E+02			1.0E+06	1.0E+06			4.4E+03	4.4E+02
Apollo	074115-24-5			1.1E+05	1.0E+06	1.1E+05	1.1E+04			4.2E+04	4.2E+03							4.0E+04	4.0E+03
Aramite	000140-57-8	2.9E+05	2.9E+03	4.4E+05	1.0E+06	4.1E+05	4.4E+04	3.0E+04	3.0E+02	1.6E+05	1.6E+04	1.0E+06	1.0E+06			2.9E+04	2.9E+02	1.5E+05	1.5E+04
Aroclor 1016	012674-11-2			6.1E+02	5.7E+03	5.7E+02	6.1E+01			6.7E+01	6.7E+00							6.7E+01	6.7E+00
Aroclor 1221 ⁽¹⁾	011104-28-2	9.3E+02	9.3E+00					2.9E+01	2.9E-01							2.9E+01	2.9E-01		
Aroclor 1232 ⁽¹⁾	011141-16-5	9.3E+02	9.3E+00					2.9E+01	2.9E-01							2.9E+01	2.9E-01		
Aroclor 1242 ⁽¹⁾	053469-21-9	9.3E+02	9.3E+00					2.9E+01	2.9E-01							2.9E+01	2.9E-01		
Aroclor 1248 ⁽¹⁾	012672-29-6	9.3E+02	9.3E+00					2.9E+01	2.9E-01							2.9E+01	2.9E-01		

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 Child	HQ=1 Adult	HQ=0.1 Adult	HQ=0.1 Child	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Aroclor 1254	011097-69-1			1.8E+02	1.6E+03	1.6E+02	1.8E+01			1.9E+01	1.9E+00							1.9E+01	1.9E+00
Aroclor 1260 ⁽¹⁾	011096-82-5	9.3E+02	9.3E+00					2.9E+01	2.9E-01							2.9E+01	2.9E-01		
Arsenic Salts	NA																		
Arsenic, Inorganic	007440-38-2	4.8E+03	4.8E+01	2.6E+03	2.5E+04	2.5E+03	2.6E+02	4.1E+03	4.1E+01	7.9E+03	7.9E+02	1.0E+06	8.2E+04			3.1E+03	3.1E+01	6.0E+03	6.0E+02
Arsine	007784-42-1													1.0E+06	1.0E+06				
Asbestos	001332-21-4																		
Assure	076578-14-8			7.9E+04	7.4E+05	7.4E+04	7.9E+03			2.9E+04	2.9E+03							2.8E+04	2.8E+03
Asulam	003337-71-1			4.4E+05	1.0E+06	4.1E+05	4.4E+04			1.6E+05	1.6E+04							1.5E+05	1.5E+04
Atrazine	001912-24-9	3.2E+04	3.2E+02	3.1E+05	1.0E+06	2.9E+05	3.1E+04	3.4E+03	3.4E+01	1.1E+05	1.1E+04					3.3E+03	3.3E+01	1.1E+05	1.1E+04
Avermectin B1	065195-55-3			3.5E+03	3.3E+04	3.3E+03	3.5E+02			1.3E+03	1.3E+02							1.2E+03	1.2E+02
Azobenzene	000103-33-3	6.5E+04	6.5E+02					6.8E+03	6.8E+01			1.0E+06	1.0E+06			6.6E+03	6.6E+01		
Barium	007440-39-3			6.1E+05	1.0E+06	5.7E+05	6.1E+04			3.1E+05	3.1E+04			1.0E+06	1.0E+06			3.0E+05	3.0E+04
Barium Cyanide	000542-62-1			8.8E+05	1.0E+06	8.2E+05	8.8E+04			1.0E+06	1.3E+05							1.0E+06	1.1E+05
Baygon	000114-26-1			3.5E+04	3.3E+05	3.3E+04	3.5E+03			1.3E+04	1.3E+03							1.2E+04	1.2E+03
Bayleton	043121-43-3			2.6E+05	1.0E+06	2.5E+05	2.6E+04			9.6E+04	9.6E+03							9.3E+04	9.3E+03
Baythroid	068359-37-5			2.2E+05	1.0E+06	2.0E+05	2.2E+04			8.0E+04	8.0E+03							7.7E+04	7.7E+03
Benefin	001861-40-1			1.0E+06	1.0E+06	1.0E+06	2.6E+05			9.6E+05	9.6E+04							9.3E+05	9.3E+04
Benomyl	017804-35-2			4.4E+05	1.0E+06	4.1E+05	4.4E+04			1.6E+05	1.6E+04							1.5E+05	1.5E+04
Bentazon	025057-89-0			2.2E+04	2.0E+05	2.0E+04	2.2E+03			8.0E+03	8.0E+02							7.7E+03	7.7E+02
Benz[a]anthracene ⁽²⁾	000056-55-3	9.8E+03	9.8E+01					6.4E+02	6.4E+00			1.0E+06	1.0E+06			6.2E+02	6.2E+00		
Benzaldehyde	000100-52-7			8.8E+05	1.0E+06	8.2E+05	8.8E+04			5.1E+05	5.1E+04							4.8E+05	4.8E+04
Benzene	000071-43-2	2.5E+05	2.5E+03					5.0E+04	5.0E+02			5.0E+02	5.0E+02			5.0E+02	2.7E+02		

Table 3.4c. (continued)

Chemical	CASRN	Ingestion (mg/kg)*						Dermal (mg/kg)*				Inhalation (mg/kg)**v				Ingestion + Dermal + Inhalation (mg/kg)**v			
		10 ⁻⁴	10 ⁻⁴	HQ=1 Child	HQ=1 Adult	HQ=0.1 Adult	HQ=0.1 Child	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Benzene Hexachloride	NA																		
Benzene, Ethyldimethyl	NA																		
Benzene, Ethylmethyl	NA																		
Benzene, Methylpropenyl	NA																		
Benzene, Methylpropyl	NA																		
Benzene, Trimethyl	025551-13-7																		
Benzenethiol	000108-98-5			8.8E+01	8.2E+02	8.2E+01	8.8E+00			3.2E+01	3.2E+00							3.1E+01	3.1E+00
Benzidine	000092-87-5	3.1E+01	3.1E-01	2.6E+04	2.5E+05	2.5E+04	2.6E+03	5.2E+00	5.2E-02	1.5E+04	1.5E+03	1.0E+06	1.8E+04			4.9E+00	4.9E-02	1.5E+04	1.5E+03
Benzo[a]pyrene ⁽²⁾	000050-32-8	9.8E+02	9.8E+00					6.4E+01	6.4E-01			1.0E+06	1.0E+06			6.2E+01	6.2E-01		
Benzo[b]fluoranthene ⁽²⁾	000205-99-2	9.8E+03	9.8E+01					6.4E+02	6.4E+00			1.0E+06	1.0E+06			6.2E+02	6.2E+00		
Benzo[g,h,i]perylene	000191-24-2																		
Benzo[k]fluoranthene ⁽²⁾	000207-08-9	9.8E+04	9.8E+02					6.4E+03	6.4E+01			1.0E+06	1.0E+06			6.2E+03	6.2E+01		
Benzoic Acid	000065-85-0			1.0E+06	1.0E+06	1.0E+06	1.0E+06			1.0E+06	1.0E+06							1.0E+06	1.0E+06
Benzotrichloride	000098-07-7	5.5E+02	5.5E+00					5.8E+01	5.8E-01							5.6E+01	5.6E-01		
Benzyl Alcohol	000100-51-6			1.0E+06	1.0E+06	1.0E+06	2.6E+05			1.0E+06	1.3E+05							1.0E+06	1.2E+05
Benzyl Chloride	000100-44-7	4.2E+04	4.2E+02					7.1E+03	7.1E+01							6.6E+03	6.6E+01		
Beryllium	007440-41-7	1.7E+03	1.7E+01	4.4E+04	4.1E+05	4.1E+04	4.4E+03	3.5E+01	3.5E-01	3.2E+03	3.2E+02	1.0E+06	4.9E+05			3.5E+01	3.5E-01	3.2E+03	3.2E+02
Bidrin	000141-66-2			8.8E+02	8.2E+03	8.2E+02	8.8E+01			3.2E+02	3.2E+01							3.1E+02	3.1E+01
Biphenthrin	082657-04-3			1.3E+05	1.0E+06	1.2E+05	1.3E+04			4.8E+04	4.8E+03							4.6E+04	4.6E+03
Biphenyl, 1,1'-	000092-52-4			4.4E+05	1.0E+06	4.1E+05	4.4E+04			1.6E+05	1.6E+04							1.5E+05	1.5E+04
Bis(2-chloro-1-methylethyl)ether (Technical)	000108-60-1	1.0E+05	1.0E+03					1.7E+04	1.7E+02			3.5E+02	3.5E+02			3.5E+02	1.5E+02		

Table 3.4c. (continued)

Chemical	CASRN	Ingestion (mg/kg)*						Dermal (mg/kg)*				Inhalation (mg/kg)* ^v				Ingestion + Dermal + Inhalation (mg/kg)* ^v			
		10 ⁻⁴	10 ⁻⁶	HQ=1 Child	HQ=1 Adult	HQ=0.1 Adult	HQ=0.1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Bis(2-chloroethoxy)methane	000111-91-1																		
Bis(2-chloroethyl)ether	000111-44-4	6.5E+03	6.5E+01					1.1E+03	1.1E+01			6.4E+02	1.5E+02			6.4E+02	9.6E+00		
Bis(2-chloroisopropyl)ether	039638-32-9			3.5E+05	1.0E+06	3.3E+05	3.5E+04			2.1E+05	2.1E+04							1.9E+05	1.9E+04
Bis(2-ethylhexyl)phthalate ⁶⁰	000117-81-7	5.1E+05	5.1E+03	1.8E+05	1.0E+06	1.6E+05	1.8E+04	2.0E+04	2.0E+02	2.4E+04	2.4E+03					2.0E+04	2.0E+02	2.4E+04	2.4E+03
Bis(chloromethyl)ether	000542-88-1	3.3E+01	3.3E-01					5.5E+00	5.5E-02			4.9E+01	4.9E-01			4.6E+00	4.6E-02		
Bisphenol A	000080-05-7			4.4E+05	1.0E+06	4.1E+05	4.4E+04			1.6E+05	1.6E+04							1.5E+05	1.5E+04
Boron And Borates Only	007440-42-8			7.9E+05	1.0E+06	7.4E+05	7.9E+04			1.0E+06	5.2E+05			1.0E+06	1.0E+06			1.0E+06	3.0E+05
Boron Trifluoride	007637-07-2													1.0E+06	1.0E+06				
Bromochloromethane	000074-97-5																		
Bromodichloromethane	000075-27-4	1.2E+05	1.2E+03	1.8E+05	1.0E+06	1.6E+05	1.8E+04	2.4E+04	2.4E+02	1.3E+05	1.3E+04					2.2E+04	2.2E+02	1.2E+05	1.2E+04
Bromodiphenyl Ether, p-	000101-55-3																		
Bromoform	000075-25-2	9.1E+05	9.1E+03	1.8E+05	1.0E+06	1.6E+05	1.8E+04	1.1E+05	1.1E+03	7.7E+04	7.7E+03	1.0E+06	1.0E+06			1.1E+05	1.1E+03	7.4E+04	7.4E+03
Bromomethane ⁶⁰	000074-83-9			1.2E+04	1.1E+05	1.1E+04	1.2E+03			7.2E+03	7.2E+02			3.4E+02	1.9E+02			3.4E+02	1.2E+02
Bromophos	002104-96-3			4.4E+04	4.1E+05	4.1E+04	4.4E+03			1.6E+04	1.6E+03							1.5E+04	1.5E+03
Bromotrichloromethane	000075-62-7																		
Bromoxynil	001689-84-5			1.8E+05	1.0E+06	1.6E+05	1.8E+04			6.4E+04	6.4E+03							6.2E+04	6.2E+03
Bromoxynil Octanoate	001689-99-2			1.8E+05	1.0E+06	1.6E+05	1.8E+04			6.4E+04	6.4E+03							6.2E+04	6.2E+03
Butadiene, 1,3-	000106-99-0											3.2E+02	3.2E+00						
Butanol, N-	000071-36-3			8.8E+05	1.0E+06	8.2E+05	8.8E+04			3.2E+05	3.2E+04							3.1E+05	3.1E+04
Butanone-2, 4-chloro-4,4-difluoro	NA																		

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 Child	HQ=1 Adult	HQ=0.1 Adult	HQ=0.1 Child	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Butyl Benzyl Phthalate	000085-68-7			1.0E+06	1.0E+06	1.0E+06	1.8E+05			7.8E+05	7.8E+04							7.5E+05	7.5E+04
Butylate	002008-41-5			4.4E+05	1.0E+06	4.1E+05	4.4E+04			1.6E+05	1.6E+04							1.5E+05	1.5E+04
Butylchloride, t-	000507-20-0																		
Butylphthalyl Butylglycolate	000085-70-1			1.0E+06	1.0E+06	1.0E+06	8.8E+05			1.0E+06	3.2E+05							1.0E+06	3.1E+05
Cacodylic Acid	000075-60-5			2.6E+04	2.5E+05	2.5E+04	2.6E+03			9.6E+03	9.6E+02							9.3E+03	9.3E+02
Cadmium (Diet)	007440-43-9			8.8E+03	8.2E+04	8.2E+03	8.8E+02			6.4E+01	6.4E+00	1.0E+06	6.7E+05					6.4E+01	6.4E+00
Calcium Cyanide	000592-01-8			3.5E+05	1.0E+06	3.3E+05	3.5E+04			5.1E+05	5.1E+04							4.4E+05	4.4E+04
Caprolactam	000105-60-2			1.0E+06	1.0E+06	1.0E+06	4.4E+05			1.0E+06	1.6E+05							1.0E+06	1.5E+05
Captan	002425-06-1	8.3E+05	8.3E+03	1.8E+04	1.6E+05	1.6E+04	1.8E+03	8.7E+04	8.7E+02	6.4E+03	6.4E+02					8.4E+04	8.4E+02	6.2E+03	6.2E+02
Captan	000133-06-2	1.0E+06	2.0E+04	1.0E+06	1.0E+06	1.0E+06	1.1E+05	2.1E+05	2.1E+03	4.2E+05	4.2E+04					2.1E+05	2.1E+03	4.0E+05	4.0E+04
Carbaryl	000063-25-2			8.8E+05	1.0E+06	8.2E+05	8.8E+04			3.2E+05	3.2E+04							3.1E+05	3.1E+04
Carbazole	000086-74-8	3.6E+05	3.6E+03					5.2E+04	5.2E+02							5.0E+04	5.0E+02		
Carbofuran	001563-66-2			4.4E+04	4.1E+05	4.1E+04	4.4E+03			1.6E+04	1.6E+03							1.5E+04	1.5E+03
Carbon Disulfide	000075-15-0			8.8E+05	1.0E+06	8.2E+05	8.8E+04			1.6E+04	1.6E+03			1.7E+03	1.7E+03			1.7E+03	1.3E+03
Carbon Tetrachloride ⁽⁹⁾	000056-23-5	5.5E+04	5.5E+02	6.1E+03	5.7E+04	5.7E+03	6.1E+02	7.5E+03	7.5E+01	2.9E+03	2.9E+02	1.0E+03	3.4E+02			1.0E+03	5.9E+01	1.0E+03	2.8E+02
Carbosulfan	055285-14-8			8.8E+04	8.2E+05	8.2E+04	8.8E+03			3.2E+04	3.2E+03							3.1E+04	3.1E+03
Carboxin	005234-68-4			8.8E+05	1.0E+06	8.2E+05	8.8E+04			3.2E+05	3.2E+04							3.1E+05	3.1E+04
Chloral	000075-87-6			1.8E+04	1.6E+05	1.6E+04	1.8E+03			6.4E+03	6.4E+02							6.2E+03	6.2E+02
Chloramben	000133-90-4			1.3E+05	1.0E+06	1.2E+05	1.3E+04			4.8E+04	4.8E+03							4.6E+04	4.6E+03
Chloranil	000118-75-2	1.8E+04	1.8E+02					1.9E+03	1.9E+01							1.8E+03	1.8E+01		
Chlordane ⁽⁹⁾	000057-74-9	5.5E+03	5.5E+01	5.3E+02	4.9E+03	4.9E+02	5.3E+01	5.8E+02	5.8E+00	1.9E+02	1.9E+01	1.0E+06	1.0E+06			5.6E+02	5.6E+00	1.9E+02	1.9E+01
Chloride	016887-00-6																		

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 Child	HQ=1 Adult	HQ=0.1 Adult	HQ=0.1 Child	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Chlorimuron, Ethyl-	090982-32-4			1.8E+05	1.0E+06	1.6E+05	1.8E+04			6.4E+04	6.4E+03							6.2E+04	6.2E+03
Chlorine	007782-50-5			8.8E+05	1.0E+06	8.2E+05	8.8E+04			1.0E+06	1.3E+05							1.0E+06	1.1E+05
Chlorine Dioxide	010049-04-4													1.0E+06	1.0E+06				
Chlorite (Sodium Salt)	007758-19-2																		
Chloro-1,1-difluoroethane, 1-	000075-68-3													1.0E+06	1.0E+06				
Chloro-1,3-butadiene, 2-	000126-99-8			1.8E+05	1.0E+06	1.6E+05	1.8E+04			1.0E+05	1.0E+04			1.7E+03	1.7E+03			1.7E+03	1.7E+03
Chloro-2-methylaniline HCl, 4-	003165-93-3	1.6E+04	1.6E+02					1.6E+03	1.6E+01							1.6E+03	1.6E+01		
Chloro-2-methylaniline, 4-	000095-69-2	1.2E+04	1.2E+02					1.3E+03	1.3E+01							1.2E+03	1.2E+01		
Chloroacetic Acid	000079-11-8			1.8E+04	1.6E+05	1.6E+04	1.8E+03			6.4E+03	6.4E+02							6.2E+03	6.2E+02
Chloroacetophenone, 2-	000532-27-4													1.0E+06	1.0E+06				
Chloroaniline, p-	000106-47-8			3.5E+04	3.3E+05	3.3E+04	3.5E+03			1.3E+04	1.3E+03							1.2E+04	1.2E+03
Chlorobenzene ⁽⁶⁾	000108-90-7			1.8E+05	1.0E+06	1.6E+05	1.8E+04			4.0E+04	4.0E+03			5.1E+02	5.1E+02			5.1E+02	5.1E+02
Chlorobenzilate	000510-15-6	2.6E+04	2.6E+02	1.8E+05	1.0E+06	1.6E+05	1.8E+04	2.8E+03	2.8E+01	6.4E+04	6.4E+03	1.0E+06	1.0E+06			2.7E+03	2.7E+01	6.2E+04	6.2E+03
Chlorobenzoic Acid, p-	000074-11-3			1.0E+06	1.0E+06	1.0E+06	1.8E+05			6.4E+05	6.4E+04							6.2E+05	6.2E+04
Chlorobenzotrifluoride, 4-	000098-56-6			1.8E+05	1.0E+06	1.6E+05	1.8E+04			6.4E+04	6.4E+03							6.2E+04	6.2E+03
Chlorobutane, 1-	000109-69-3			1.0E+06	1.0E+06	1.0E+06	3.5E+05			1.0E+06	2.1E+05							1.0E+06	1.9E+05
Chlorobutane, 2-	000078-86-4																		
Chlorocyclopentadiene	041851-50-7																		
Chlorodibromoethane	073506-94-2	8.5E+04	8.5E+02					1.4E+04	1.4E+02							1.3E+04	1.3E+02		
Chlorodifluoromethane	000075-45-6													1.0E+06	1.0E+06				

Table 3.4c. (continued)

Chemical	CASRN	Ingestion (mg/kg)*						Dermal (mg/kg)*				Inhalation (mg/kg)* ^v				Ingestion + Dermal + Inhalation (mg/kg)* ^v			
		10 ⁻⁴	10 ⁻⁶	HQ=1 Child	HQ=1 Adult	HQ=0.1 Adult	HQ=0.1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Chloroform ⁽⁶⁾	000067-66-3	1.0E+06	1.2E+04	8.8E+04	8.2E+05	8.2E+04	8.8E+03	4.9E+04	4.9E+02	1.3E+04	1.3E+03	1.5E+03	2.1E+02			1.5E+03	1.5E+02	1.5E+03	1.3E+03
Chloromethane ⁽⁶⁾	000074-87-3	5.5E+05	5.5E+03					9.2E+04	9.2E+02			1.2E+03	4.9E+02			1.2E+03	3.1E+02		
Chloromethyl Methyl Ether	000107-30-2																		
Chloronaphthalene, Beta-	000091-58-7			7.0E+05	1.0E+06	6.5E+05	7.0E+04			4.1E+05	4.1E+04							3.9E+05	3.9E+04
Chloronitrobenzene, o-	000088-73-3	2.9E+05	2.9E+03					4.8E+04	4.8E+02							4.5E+04	4.5E+02		
Chloronitrobenzene, p-	000121-73-3	4.0E+05	4.0E+03					6.7E+04	6.7E+02							6.3E+04	6.3E+02		
Chlorophenol, 2-	000095-57-8			4.4E+04	4.1E+05	4.1E+04	4.4E+03			2.6E+04	2.6E+03							2.4E+04	2.4E+03
Chlorophenyl Methyl Sulfide, p-	000123-09-1																		
Chlorophenyl Methyl Sulfoxide	000934-73-6																		
Chloropropane, 2-	000075-29-6													1.6E+03	1.6E+03				
Chlorothalonil	001897-45-6	6.5E+05	6.5E+03	1.3E+05	1.0E+06	1.2E+05	1.3E+04	6.8E+04	6.8E+02	4.8E+04	4.8E+03					6.6E+04	6.6E+02	4.6E+04	4.6E+03
Chlorotoluene, o-	000095-49-8			1.8E+05	1.0E+06	1.6E+05	1.8E+04			1.0E+05	1.0E+04							9.7E+04	9.7E+03
Chlorpropham	000101-21-3			1.0E+06	1.0E+06	1.0E+06	1.8E+05			6.4E+05	6.4E+04							6.2E+05	6.2E+04
Chlorpyrifos	002921-88-2			2.6E+04	2.5E+05	2.5E+04	2.6E+03			9.6E+03	9.6E+02							9.3E+03	9.3E+02
Chlorpyrifos Methyl	005598-13-0			8.8E+04	8.2E+05	8.2E+04	8.8E+03			3.2E+04	3.2E+03							3.1E+04	3.1E+03
Chlorsulfuron	064902-72-3			4.4E+05	1.0E+06	4.1E+05	4.4E+04			1.6E+05	1.6E+04							1.5E+05	1.5E+04
Chlorthiophos	060238-56-4			7.0E+03	6.5E+04	6.5E+03	7.0E+02			2.6E+03	2.6E+02							2.5E+03	2.5E+02
Chromium (III) (Insoluble Salts)	016065-83-1			1.0E+06	1.0E+06	1.0E+06	8.8E+05			3.2E+05	3.2E+04							3.2E+05	3.2E+04
Chromium (VI) ⁽⁶⁾	018540-29-9			4.4E+04	4.1E+05	4.1E+04	4.4E+03			6.4E+03	6.4E+02	1.0E+06	1.0E+05					6.3E+03	6.3E+02
Chromium Salts	NA																		

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 Child	HQ=1 Adult	HQ=0.1 Adult	HQ=0.1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Chrysene ⁽²⁾	000218-01-9	9.8E+05	9.8E+03					6.4E+04	6.4E+02			1.0E+06	1.0E+06			6.2E+04	6.2E+02		
Cobalt	007440-48-4																		
Coke Oven Emissions	008007-45-2											1.0E+06	1.0E+06						
Copper	007440-50-8																		
Copper Cyanide	000544-92-3			4.4E+04	4.1E+05	4.1E+04	4.4E+03			6.4E+04	6.4E+03							5.6E+04	5.6E+03
Creosote	008001-58-9																		
Cresol, m-	000108-39-4			4.4E+05	1.0E+06	4.1E+05	4.4E+04			1.6E+05	1.6E+04							1.5E+05	1.5E+04
Cresol, o-	000095-48-7			4.4E+05	1.0E+06	4.1E+05	4.4E+04			1.6E+05	1.6E+04							1.5E+05	1.5E+04
Cresol, p-	000106-44-5			4.4E+04	4.1E+05	4.1E+04	4.4E+03			2.1E+04	2.1E+03							2.0E+04	2.0E+03
Crotonaldehyde	000123-73-9	3.8E+03	3.8E+01					3.9E+02	3.9E+00							3.8E+02	3.8E+00		
Cumene	000098-82-8			3.5E+05	1.0E+06	3.3E+05	3.5E+04			2.1E+05	2.1E+04			3.5E+02	3.5E+02			3.5E+02	3.5E+02
Cyanazine	021725-46-2	8.5E+03	8.5E+01	1.8E+04	1.6E+05	1.6E+04	1.8E+03	8.9E+02	8.9E+00	6.4E+03	6.4E+02					8.6E+02	8.6E+00	6.2E+03	6.2E+02
Cyanide (CN-)	000057-12-5			1.8E+05	1.0E+06	1.6E+05	1.8E+04			2.2E+04	2.2E+03							2.2E+04	2.2E+03
Cyanogen	000460-19-5			3.5E+05	1.0E+06	3.3E+05	3.5E+04			2.1E+05	2.1E+04							1.9E+05	1.9E+04
Cyanogen Bromide	000506-68-3			7.9E+05	1.0E+06	7.4E+05	7.9E+04			4.6E+05	4.6E+04							4.4E+05	4.4E+04
Cyanogen Chloride	000506-77-4			4.4E+05	1.0E+06	4.1E+05	4.4E+04			2.6E+05	2.6E+04							2.4E+05	2.4E+04
Cyclohexane, 1,2,3,4,5-pentabromo-6-chloro-	000087-84-3	3.1E+05	3.1E+03					3.3E+04	3.3E+02							3.1E+04	3.1E+02		
Cyclohexanone	000108-94-1			1.0E+06	1.0E+06	1.0E+06	1.0E+06			1.0E+06	1.0E+06							1.0E+06	1.0E+06
Cyclohexylamine	000108-91-8			1.0E+06	1.0E+06	1.0E+06	1.8E+05			6.4E+05	6.4E+04							6.2E+05	6.2E+04
Cyclopentadiene	000542-92-7																		
Cyhalothrin/karate	068085-85-8			4.4E+04	4.1E+05	4.1E+04	4.4E+03			1.6E+04	1.6E+03							1.5E+04	1.5E+03
Cypermethrin	052315-07-8			8.8E+04	8.2E+05	8.2E+04	8.8E+03			3.2E+04	3.2E+03							3.1E+04	3.1E+03

Table 3.4c. (continued)

Chemical	CASRN	Ingestion (mg/kg)*						Dermal (mg/kg)*				Inhalation (mg/kg)* ^v				Ingestion + Dermal + Inhalation (mg/kg)* ^{u,v}			
		10 ⁻⁴	10 ⁻⁶	HQ=1 Child	HQ=1 Adult	HQ=0.1 Adult	HQ=0.1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Cyromazine	066215-27-8			6.6E+04	6.1E+05	6.1E+04	6.6E+03			2.4E+04	2.4E+03							2.3E+04	2.3E+03
DDD	000072-54-8	3.0E+04	3.0E+02					4.4E+03	4.4E+01							4.1E+03	4.1E+01		
DDE	000072-55-9	2.1E+04	2.1E+02					3.1E+03	3.1E+01							2.9E+03	2.9E+01		
DDT	000050-29-3	2.1E+04	2.1E+02	4.4E+03	4.1E+04	4.1E+03	4.4E+02	3.1E+03	3.1E+01	2.2E+03	2.2E+02	1.0E+06	1.0E+06			2.9E+03	2.9E+01	2.1E+03	2.1E+02
Dacthal	001861-32-1			8.8E+04	8.2E+05	8.2E+04	8.8E+03			3.2E+04	3.2E+03							3.1E+04	3.1E+03
Dalapon	000075-99-0			2.6E+05	1.0E+06	2.5E+05	2.6E+04			9.6E+04	9.6E+03							9.3E+04	9.3E+03
Decabromodiphenyl Ether	001163-19-5			8.8E+04	8.2E+05	8.2E+04	8.8E+03			5.1E+04	5.1E+03							4.8E+04	4.8E+03
Demeton	008065-48-3			3.5E+02	3.3E+03	3.3E+02	3.5E+01			1.3E+02	1.3E+01							1.2E+02	1.2E+01
Di(2-ethylhexyl)adipate	000103-23-1	1.0E+06	6.0E+04	1.0E+06	1.0E+06	1.0E+06	5.3E+05	6.2E+05	6.2E+03	1.0E+06	1.9E+05					6.0E+05	6.0E+03	1.0E+06	1.9E+05
Diallate	002303-16-4	1.2E+05	1.2E+03					2.0E+04	2.0E+02							1.9E+04	1.9E+02		
Diazinon	000333-41-5			7.9E+03	7.4E+04	7.4E+03	7.9E+02			2.9E+03	2.9E+02							2.8E+03	2.8E+02
Dibenz[a,h]anthracene ²	000053-70-3	9.8E+02	9.8E+00					6.4E+01	6.4E-01			1.0E+06	1.0E+06			6.2E+01	6.2E-01		
Dibromo-3-chloropropane, 1,2-	000096-12-8	5.1E+03	5.1E+01					8.6E+02	8.6E+00			1.0E+06	1.0E+06	1.0E+06	1.0E+06	8.1E+02	8.1E+00		
Dibromobenzene, 1,4-	000106-37-6			8.8E+04	8.2E+05	8.2E+04	8.8E+03			5.1E+04	5.1E+03							4.8E+04	4.8E+03
Dibromochloromethane	000124-48-1	8.5E+04	8.5E+02	1.8E+05	1.0E+06	1.6E+05	1.8E+04	1.1E+04	1.1E+02	7.7E+04	7.7E+03					1.0E+04	1.0E+02	7.4E+04	7.4E+03
Dibromodichloromethane	000594-18-3																		
Dibromodiphenyl Ether, p,p'-	002050-47-7																		
Dibromoethane, 1,2-	000106-93-4	8.4E+01	8.4E-01					1.4E+01	1.4E-01			5.5E+03	1.7E+02	3.1E+03	3.1E+02	1.3E+01	1.3E-01		
Dibromomethane (Methylene Bromide)	000074-95-3			8.8E+04	8.2E+05	8.2E+04	8.8E+03			5.1E+04	5.1E+03							4.8E+04	4.8E+03
Dibutyl Phthalate	000084-74-2			8.8E+05	1.0E+06	8.2E+05	8.8E+04			6.4E+05	6.4E+04							6.0E+05	6.0E+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 Child	HQ=1 Adult	HQ=0.1 Adult	HQ=0.1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Dicamba	001918-00-9			2.6E+05	1.0E+06	2.5E+05	2.6E+04			9.6E+04	9.6E+03							9.3E+04	9.3E+03
Dichloro-2-butene, 1,4-	000764-41-0											1.4E+03	1.4E+01						
Dichloroacetic Acid																			
Dichlorobenzene, 1,2-(^{tn})	000095-50-1			7.9E+05	1.0E+06	7.4E+05	7.9E+04			4.6E+05	4.6E+04			5.1E+02	5.1E+02			5.1E+02	5.1E+02
Dichlorobenzene, 1,3-	000541-73-1																		
Dichlorobenzene, 1,4-	000106-46-7	3.0E+05	3.0E+03					5.6E+04	5.6E+02					3.2E+01	3.2E+01	3.2E+01	3.2E+01		
Dichlorobenzidine, 3,3'-	000091-94-1	1.6E+04	1.6E+02					1.7E+03	1.7E+01							1.6E+03	1.6E+01		
Dichlorodifluoromethane	000075-71-8			1.0E+06	1.0E+06	1.0E+06	1.8E+05			3.0E+05	3.0E+04			1.0E+03	1.0E+03			1.0E+03	1.0E+03
Dichloroethane, 1,1-	000075-34-3			8.8E+05	1.0E+06	8.2E+05	8.8E+04			6.4E+05	6.4E+04			6.3E+02	6.3E+01			5.0E+02	5.0E+01
Dichloroethane, 1,2-	000107-06-2	7.9E+04	7.9E+02					1.6E+04	1.6E+02			6.7E+02	2.2E+02			6.7E+02	9.1E+01		
Dichloroethylene, 1,1-	000075-35-4	1.2E+04	1.2E+02	7.9E+04	7.4E+05	7.4E+04	7.9E+03	2.5E+03	2.5E+01	5.8E+04	5.8E+03	5.0E+02	5.0E+00			4.1E+02	4.1E+00	1.2E+03	1.2E+03
Dichloroethylene, 1,2- (Mixed Isomers)	000540-59-0			7.9E+04	7.4E+05	7.4E+04	7.9E+03			4.6E+04	4.6E+03							4.4E+04	4.4E+03
Dichloroethylene, 1,2-cis-	000156-59-2			8.8E+04	8.2E+05	8.2E+04	8.8E+03			6.4E+04	6.4E+03							6.0E+04	6.0E+03
Dichloroethylene, 1,2-trans-	000156-60-5			1.8E+05	1.0E+06	1.6E+05	1.8E+04			1.3E+05	1.3E+04							1.2E+05	1.2E+04
Dichlorophenol, 2,4-	000120-83-2			2.6E+04	2.5E+05	2.5E+04	2.6E+03			1.6E+04	1.6E+03							1.5E+04	1.5E+03
Dichlorophenoxy Acetic Acid, 2,4-	000094-75-7			8.8E+04	8.2E+05	8.2E+04	8.8E+03			5.1E+04	5.1E+03							4.8E+04	4.8E+03
Dichlorophenoxy)butyric Acid, 4-(2,4-	000094-82-6			7.0E+04	6.5E+05	6.5E+04	7.0E+03			2.6E+04	2.6E+03							2.5E+04	2.5E+03
Dichloropropane, 1,2-	000078-87-5	1.1E+05	1.1E+03					1.6E+04	1.6E+02					4.8E+02	4.8E+02	4.8E+02	1.5E+02		
Dichloropropanol, 2,3-	000616-23-9			2.6E+04	2.5E+05	2.5E+04	2.6E+03			9.6E+03	9.6E+02							9.3E+03	9.3E+02
Dichloropropene, 1,3-	000542-75-6	4.0E+04	4.0E+02	2.6E+03	2.5E+04	2.5E+03	2.6E+02	4.6E+03	4.6E+01	1.1E+03	1.1E+02	3.7E+03	6.0E+02	3.7E+03	3.7E+03	3.7E+03	4.1E+01	8.1E+02	8.1E+01

Table 3.4c. (continued)

Chemical	CASRN	Ingestion (mg/kg)*						Dermal (mg/kg)*				Inhalation (mg/kg)* ^v				Ingestion + Dermal + Inhalation (mg/kg)* ^v			
		10 ⁻⁴	10 ⁻⁴	HQ=1 Child	HQ=1 Adult	HQ=0.1 Adult	HQ=0.1 Child	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Dichlorvos	000062-73-7	2.5E+04	2.5E+02	4.4E+03	4.1E+04	4.1E+03	4.4E+02	2.6E+03	2.6E+01	1.6E+03	1.6E+02			1.0E+06	1.0E+06	2.5E+03	2.5E+01	1.5E+03	1.5E+02
Dicofol	000115-32-2																		
Dicyclopentadiene	000077-73-6			2.6E+05	1.0E+06	2.5E+05	2.6E+04			1.5E+05	1.5E+04			7.4E+02	3.4E+02			7.4E+02	2.6E+02
Dieldrin	000060-57-1	4.5E+02	4.5E+00	4.4E+02	4.1E+03	4.1E+02	4.4E+01	4.7E+01	4.7E-01	1.6E+02	1.6E+01	1.0E+06	2.6E+05			4.5E+01	4.5E-01	1.5E+02	1.5E+01
Diethyl Phthalate	000084-66-2			1.0E+06	1.0E+06	1.0E+06	7.0E+05			1.0E+06	4.6E+05							1.0E+06	4.3E+05
Diethyl-p-nitrophenylphosphate	000311-45-5																		
Diethylene Glycol Dinitrate (DEGDN)	000693-21-0																		
Diethylene Glycol Monobutyl Ether	000112-34-5													1.0E+06	1.0E+06				
Diethylene Glycol Monoethyl Ether	000111-90-0			1.0E+06	1.0E+06	1.0E+06	1.0E+06			1.0E+06	6.4E+05							1.0E+06	6.2E+05
Diethylformamide	000617-84-5			9.6E+04	9.0E+05	9.0E+04	9.6E+03			3.5E+04	3.5E+03							3.4E+04	3.4E+03
Diethylstilbesterol	000056-53-1	1.5E+00	1.5E-02					1.6E-01	1.6E-03			8.3E+05	8.3E+03			1.5E-01	1.5E-03		
Difenzoquat	043222-48-6			7.0E+05	1.0E+06	6.5E+05	7.0E+04			2.6E+05	2.6E+04							2.5E+05	2.5E+04
Diflubenzuron	035367-38-5			1.8E+05	1.0E+06	1.6E+05	1.8E+04			6.4E+04	6.4E+03							6.2E+04	6.2E+03
Diffuoroethane, 1,1-	000075-37-6													1.0E+06	1.0E+06				
Diisopropyl Methylphosphonate	001445-75-6			7.0E+05	1.0E+06	6.5E+05	7.0E+04			2.6E+05	2.6E+04							2.5E+05	2.5E+04
Dimethipin	055290-64-7			1.8E+05	1.0E+06	1.6E+05	1.8E+04			6.4E+04	6.4E+03							6.2E+04	6.2E+03
Dimethoate	000060-51-5			1.8E+03	1.6E+04	1.6E+03	1.8E+02			6.4E+02	6.4E+01							6.2E+02	6.2E+01
Dimethoxybenzidine, 3,3'-	000119-90-4	5.1E+05	5.1E+03					5.4E+04	5.4E+02							5.2E+04	5.2E+02		
Dimethyl Sulfate	000077-78-1																		

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 Child	HQ=1 Adult	HQ=0.1 Adult	HQ=0.1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Dimethylaniline HCl, 2,4-	021436-96-4	1.2E+04	1.2E+02					1.3E+03	1.3E+01							1.2E+03	1.2E+01		
Dimethylaniline, 2,4-	000095-68-1	9.5E+03	9.5E+01					1.0E+03	1.0E+01							9.6E+02	9.6E+00		
Dimethylaniline, N,N-	000121-69-7			1.8E+04	1.6E+05	1.6E+04	1.8E+03			6.4E+03	6.4E+02							6.2E+03	6.2E+02
Dimethylbenzidine, 3,3'-	000119-93-7	7.8E+02	7.8E+00					8.2E+01	8.2E-01							7.8E+01	7.8E-01		
Dimethylethyl Lead	107584-40-7																		
Dimethylformamide	000068-12-2			8.8E+05	1.0E+06	8.2E+05	8.8E+04			3.2E+05	3.2E+04			1.0E+06	1.0E+06			3.1E+05	3.1E+04
Dimethylhydrazine, 1,1-(⁴⁹)	000057-14-7	2.8E+03	2.8E+01					2.9E+02	2.9E+00			1.0E+06	1.0E+06			2.8E+02	2.8E+00		
Dimethylhydrazine, 1,2-	000540-73-8																		
Dimethylphenol, 2,4-	000105-67-9			1.8E+05	1.0E+06	1.6E+05	1.8E+04			1.0E+05	1.0E+04							9.7E+04	9.7E+03
Dimethylphenol, 2,6-	000576-26-1			5.3E+03	4.9E+04	4.9E+03	5.3E+02			1.9E+03	1.9E+02							1.9E+03	1.9E+02
Dimethylphenol, 3,4-	000095-65-8			8.8E+03	8.2E+04	8.2E+03	8.8E+02			3.2E+03	3.2E+02							3.1E+03	3.1E+02
Dimethylphthalate ⁽⁴⁹⁾	000131-11-3			1.0E+06	1.0E+06	1.0E+06	1.0E+06			1.0E+06	1.0E+06							1.0E+06	1.0E+06
Dimethylterephthalate	000120-61-6			8.8E+05	1.0E+06	8.2E+05	8.8E+04			3.2E+05	3.2E+04							3.1E+05	3.1E+04
Dinitro-o-cresol, 4,6-	000534-52-1																		
Dinitro-o-cyclohexyl Phenol, 4,6-	000131-89-5			1.8E+04	1.6E+05	1.6E+04	1.8E+03			6.4E+03	6.4E+02							6.2E+03	6.2E+02
Dinitrobenzene, 1,2-	000528-29-0			3.5E+03	3.3E+04	3.3E+03	3.5E+02			2.4E+03	2.4E+02							2.2E+03	2.2E+02
Dinitrobenzene, 1,3-	000099-65-0			8.8E+02	8.2E+03	8.2E+02	8.8E+01			4.2E+02	4.2E+01							4.0E+02	4.0E+01
Dinitrobenzene, 1,4-	000100-25-4			3.5E+03	3.3E+04	3.3E+03	3.5E+02			1.3E+03	1.3E+02							1.2E+03	1.2E+02
Dinitrophenol, 2,4-	000051-28-5			1.8E+04	1.6E+05	1.6E+04	1.8E+03			1.3E+04	1.3E+03							1.2E+04	1.2E+03
Dinitrotoluene, 2,4-	000121-14-2	1.1E+04	1.1E+02	1.8E+04	1.6E+05	1.6E+04	1.8E+03	1.9E+03	1.9E+01	1.1E+04	1.1E+03					1.8E+03	1.8E+01	1.0E+04	1.0E+03

Table 3.4c. (continued)

Chemical	CASRN	Ingestion (mg/kg)*						Dermal (mg/kg)*				Inhalation (mg/kg)* ^y				Ingestion + Dermal + Inhalation (mg/kg) ^{†v}			
		10 ⁻⁴	10 ⁻⁴	HQ=1 Child	HQ=1 Adult	HQ=0.1 Adult	HQ=0.1 Child	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Dinitrotoluene, 2,6-	000606-20-2	1.1E+04	1.1E+02	8.8E+03	8.2E+04	8.2E+03	8.8E+02	1.9E+03	1.9E+01	5.5E+03	5.5E+02					1.8E+03	1.8E+01	5.1E+03	5.1E+02
Dinitrotoluene, 2-Amino-4,6-	035572-78-2																		
Dinoseb	000088-85-7			8.8E+03	8.2E+04	8.2E+03	8.8E+02			3.2E+03	3.2E+02							3.1E+03	3.1E+02
Dioxane, 1,4-	000123-91-1	6.5E+05	6.5E+03					1.1E+05	1.1E+03							1.0E+05	1.0E+03		
Diphenamid	000957-51-7			2.6E+05	1.0E+06	2.5E+05	2.6E+04			9.6E+04	9.6E+03							9.3E+04	9.3E+03
Diphenylamine	000122-39-4			2.2E+05	1.0E+06	2.0E+05	2.2E+04			8.0E+04	8.0E+03							7.7E+04	7.7E+03
Diphenylhydrazine, 1,2-	000122-66-7	8.9E+03	8.9E+01					9.4E+02	9.4E+00			1.0E+06	1.0E+06			9.0E+02	9.0E+00		
Diquat	000085-00-7			1.9E+04	1.8E+05	1.8E+04	1.9E+03			7.1E+03	7.1E+02							6.8E+03	6.8E+02
Direct Black 38	001937-37-7	8.3E+02	8.3E+00					8.7E+01	8.7E-01							8.4E+01	8.4E-01		
Direct Blue 6	002602-46-2	8.8E+02	8.8E+00					9.3E+01	9.3E-01							8.9E+01	8.9E-01		
Direct Brown 95	016071-86-6	7.7E+02	7.7E+00					8.1E+01	8.1E-01							7.8E+01	7.8E-01		
Direct Sky Blue	002610-05-1																		
Disulfoton	000298-04-4			3.5E+02	3.3E+03	3.3E+02	3.5E+01			1.3E+02	1.3E+01							1.2E+02	1.2E+01
Diuron	000330-54-1			1.8E+04	1.6E+05	1.6E+04	1.8E+03			6.4E+03	6.4E+02							6.2E+03	6.2E+02
Dodine	002439-10-3			3.5E+04	3.3E+05	3.3E+04	3.5E+03			1.3E+04	1.3E+03							1.2E+04	1.2E+03
EPTC	000759-94-4			2.2E+05	1.0E+06	2.0E+05	2.2E+04			8.0E+04	8.0E+03							7.7E+04	7.7E+03
Endosulfan	000115-29-7			5.3E+04	4.9E+05	4.9E+04	5.3E+03			1.9E+04	1.9E+03							1.9E+04	1.9E+03
Endothall	000145-73-3			1.8E+05	1.0E+06	1.6E+05	1.8E+04			6.4E+04	6.4E+03							6.2E+04	6.2E+03
Endrin	000072-20-8			2.6E+03	2.5E+04	2.5E+03	2.6E+02			3.9E+01	3.9E+00							3.9E+01	3.9E+00
Epichlorohydrin	000106-89-8	7.2E+05	7.2E+03	1.8E+04	1.6E+05	1.6E+04	1.8E+03	1.2E+05	1.2E+03	1.0E+04	1.0E+03	3.2E+03	3.2E+03	3.2E+03	1.1E+03	3.2E+03	1.1E+03	3.2E+03	4.1E+02
Epoxybutane, 1,2-	000106-88-7													1.0E+06	1.0E+06				
Ethephon	016672-87-0			4.4E+04	4.1E+05	4.1E+04	4.4E+03			1.6E+04	1.6E+03							1.5E+04	1.5E+03

Table 3.4c. (continued)

Chemical	CASRN	Ingestion (mg/kg)*						Dermal (mg/kg)*				Inhalation (mg/kg)*				Ingestion + Dermal + Inhalation (mg/kg)* ^x			
		10 ⁻⁴	10 ⁻⁴	HQ=1 Child	HQ=1 Adult	HQ=0.1 Adult	HQ=0.1 Child	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Ethion	000563-12-2			4.4E+03	4.1E+04	4.1E+03	4.4E+02			1.6E+03	1.6E+02							1.5E+03	1.5E+02
Ethoxyethanol Acetate, 2-	000111-15-9			1.0E+06	1.0E+06	1.0E+06	2.6E+05			9.6E+05	9.6E+04							9.3E+05	9.3E+04
Ethoxyethanol, 2-	000110-80-5			1.0E+06	1.0E+06	1.0E+06	3.5E+05			1.0E+06	1.3E+05			1.0E+06	1.0E+06			1.0E+06	1.2E+05
Ethyl Acetate	000141-78-6			1.0E+06	1.0E+06	1.0E+06	7.9E+05			1.0E+06	4.6E+05							1.0E+06	4.4E+05
Ethyl Acrylate	000140-88-5	1.5E+05	1.5E+03					1.6E+04	1.6E+02							1.5E+04	1.5E+02		
Ethyl Chloride	000075-00-3													1.5E+02	1.5E+02				
Ethyl Ether	000060-29-7			1.0E+06	1.0E+06	1.0E+06	1.8E+05			1.0E+06	1.0E+05							9.7E+05	9.7E+04
Ethyl Methacrylate	000097-63-2			7.9E+05	1.0E+06	7.4E+05	7.9E+04			4.6E+05	4.6E+04							4.4E+05	4.4E+04
Ethyl-p-nitrophenyl Phosphonate	002104-64-5			8.8E+01	8.2E+02	8.2E+01	8.8E+00			3.2E+01	3.2E+00							3.1E+01	3.1E+00
Ethylbenzene ⁽⁴⁾	000100-41-4			8.8E+05	1.0E+06	8.2E+05	8.8E+04			6.2E+05	6.2E+04			4.7E-01	4.7E-01			4.7E-01	4.7E-01
Ethylene Cyanohydrin	000109-78-4			1.0E+06	1.0E+06	1.0E+06	2.6E+05			9.6E+05	9.6E+04							9.3E+05	9.3E+04
Ethylene Diamine	000107-15-3			1.8E+05	1.0E+06	1.6E+05	1.8E+04			6.4E+04	6.4E+03							6.2E+04	6.2E+03
Ethylene Glycol	000107-21-1			1.0E+06	1.0E+06	1.0E+06	1.0E+06			1.0E+06	6.4E+05							1.0E+06	6.2E+05
Ethylene Glycol Monobutyl Ether	000111-76-2													1.0E+06	1.0E+06				
Ethylene Oxide	000075-21-8	7.0E+03	7.0E+01					1.2E+03	1.2E+01			5.4E+03	5.4E+01			9.2E+02	9.2E+00		
Ethylene Thiourea	000096-45-7	6.5E+04	6.5E+02	7.0E+02	6.5E+03	6.5E+02	7.0E+01	6.8E+03	6.8E+01	2.6E+02	2.6E+01					6.6E+03	6.6E+01	2.5E+02	2.5E+01
Ethylphthalyl Ethyl Glycolate	000084-72-0			1.0E+06	1.0E+06	1.0E+06	1.0E+06			1.0E+06	9.6E+05							1.0E+06	9.3E+05
Express	101200-48-0			7.0E+04	6.5E+05	6.5E+04	7.0E+03			2.6E+04	2.6E+03							2.5E+04	2.5E+03
Fenamiphos	022224-92-6			2.2E+03	2.0E+04	2.0E+03	2.2E+02			8.0E+02	8.0E+01							7.7E+02	7.7E+01
Fenpropathrin	039515-41-8			2.2E+05	1.0E+06	2.0E+05	2.2E+04			8.0E+04	8.0E+03							7.7E+04	7.7E+03
Fluometuron	002164-17-2			1.1E+05	1.0E+06	1.1E+05	1.1E+04			4.2E+04	4.2E+03							4.0E+04	4.0E+03

Table 3.4c. (continued)

Chemical	CASRN	Ingestion (mg/kg)*						Dermal (mg/kg)*				Inhalation (mg/kg)* ^v				Ingestion + Dermal + Inhalation (mg/kg)* ^{u,v}			
		10 ⁻⁴	10 ⁻⁶	HQ=1 Child	HQ=1 Adult	HQ=0.1 Adult	HQ=0.1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Fluoranthene	000206-44-0			3.5E+05	1.0E+06	3.3E+05	3.5E+04			8.0E+04	8.0E+03							7.8E+04	7.8E+03
Fluorene	000086-73-7			3.5E+05	1.0E+06	3.3E+05	3.5E+04			2.1E+05	2.1E+04							1.9E+05	1.9E+04
Fluoride	007782-41-4			5.3E+05	1.0E+06	4.9E+05	5.3E+04			1.0E+06	3.7E+05							1.0E+06	2.1E+05
Fluridone	059756-60-4			7.0E+05	1.0E+06	6.5E+05	7.0E+04			2.6E+05	2.6E+04							2.5E+05	2.5E+04
Flurprimidol	056425-91-3			1.8E+05	1.0E+06	1.6E+05	1.8E+04			6.4E+04	6.4E+03							6.2E+04	6.2E+03
Flutolanil	066332-96-5			5.3E+05	1.0E+06	4.9E+05	5.3E+04			1.9E+05	1.9E+04							1.9E+05	1.9E+04
Fluvalinate	069409-94-5			8.8E+04	8.2E+05	8.2E+04	8.8E+03			3.2E+04	3.2E+03							3.1E+04	3.1E+03
Folpet	000133-07-3	1.0E+06	2.0E+04	8.8E+05	1.0E+06	8.2E+05	8.8E+04	2.1E+05	2.1E+03	3.2E+05	3.2E+04					2.1E+05	2.1E+03	3.1E+05	3.1E+04
Fomesafen	072178-02-0	3.8E+04	3.8E+02					3.9E+03	3.9E+01							3.8E+03	3.8E+01		
Fonofos	000944-22-9			1.8E+04	1.6E+05	1.6E+04	1.8E+03			6.4E+03	6.4E+02							6.2E+03	6.2E+02
Formaldehyde	000050-00-0			1.0E+06	1.0E+06	1.0E+06	1.8E+05			1.0E+06	1.0E+05	1.0E+06	1.0E+06					9.7E+05	9.7E+04
Formic Acid	000064-18-6			1.0E+06	1.0E+06	1.0E+06	1.0E+06			1.0E+06	6.4E+05							1.0E+06	6.2E+05
Fosetyl-AL	039148-24-8			1.0E+06	1.0E+06	1.0E+06	1.0E+06			1.0E+06	9.6E+05							1.0E+06	9.3E+05
Furan	000110-00-9			8.8E+03	8.2E+04	8.2E+03	8.8E+02			5.1E+03	5.1E+02							4.8E+03	4.8E+02
Furazolidone	000067-45-8	1.9E+03	1.9E+01					2.0E+02	2.0E+00							1.9E+02	1.9E+00		
Furfural	000098-01-1			2.6E+04	2.5E+05	2.5E+04	2.6E+03			9.6E+03	9.6E+02			1.0E+06	1.0E+06			9.3E+03	9.3E+02
Furium	000531-82-8	1.4E+02	1.4E+00					1.5E+01	1.5E-01							1.4E+01	1.4E-01		
Furmecycloz	060568-05-0	2.4E+05	2.4E+03					2.5E+04	2.5E+02							2.4E+04	2.4E+02		
Glufosinate, Ammonium	077182-82-2			3.5E+03	3.3E+04	3.3E+03	3.5E+02			1.3E+03	1.3E+02							1.2E+03	1.2E+02
Glycidyl	000765-34-4			3.5E+03	3.3E+04	3.3E+03	3.5E+02			1.3E+03	1.3E+02			1.0E+06	1.0E+06			1.2E+03	1.2E+02
Glyphosate	001071-83-6			8.8E+05	1.0E+06	8.2E+05	8.8E+04			3.2E+05	3.2E+04							3.1E+05	3.1E+04
Goal	042874-03-3			2.6E+04	2.5E+05	2.5E+04	2.6E+03			9.6E+03	9.6E+02							9.3E+03	9.3E+02

Table 3.4c. (continued)

Chemical	CASRN	Ingestion (mg/kg) ^a						Dermal (mg/kg) ^a				Inhalation (mg/kg) ^{a,b}				Ingestion + Dermal + Inhalation (mg/kg) ^{a,b}			
		10 ⁻⁴	10 ⁻⁴	HQ=1 Child	HQ=1 Adult	HQ=0.1 Adult	HQ=0.1 Child	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Haloxypol, Methyl	069806-40-2			4.4E+02	4.1E+03	4.1E+02	4.4E+01			1.6E+02	1.6E+01							1.5E+02	1.5E+01
Harmony	079277-27-3			1.1E+05	1.0E+06	1.1E+05	1.1E+04			4.2E+04	4.2E+03							4.0E+04	4.0E+03
Heptachlor	000076-44-8	1.6E+03	1.6E+01	4.4E+03	4.1E+04	4.1E+03	4.4E+02	2.4E+02	2.4E+00	2.3E+03	2.3E+02	1.0E+06	9.1E+05			2.3E+02	2.3E+00	2.2E+03	2.2E+02
Heptachlor Epoxide	001024-57-3	7.9E+02	7.9E+00	1.1E+02	1.1E+03	1.1E+02	1.1E+01	1.2E+02	1.2E+00	6.0E+01	6.0E+00	1.0E+06	4.5E+05			1.1E+02	1.1E+00	5.7E+01	5.7E+00
Heptane, N-	000142-82-5																		
Hexabromobenzene	000087-82-1			1.8E+04	1.6E+05	1.6E+04	1.8E+03			1.0E+04	1.0E+03							9.7E+03	9.7E+02
Hexachlorobenzene ⁶⁰	000118-74-1	4.5E+03	4.5E+01	7.0E+03	6.5E+04	6.5E+03	7.0E+02	7.5E+02	7.5E+00	4.1E+03	4.1E+02	1.0E+06	1.0E+06			7.1E+02	7.1E+00	3.9E+03	3.9E+02
Hexachlorobutadiene ⁶⁰	000087-68-3	9.2E+04	9.2E+02	1.8E+03	1.6E+04	1.6E+03	1.8E+02	1.5E+04	1.5E+02	1.0E+03	1.0E+02	1.0E+06	1.0E+06			1.4E+04	1.4E+02	9.7E+02	9.7E+01
Hexachlorocyclohexane , Alpha-	000319-84-6	1.1E+03	1.1E+01					2.3E+02	2.3E+00			1.0E+06	6.5E+05			2.1E+02	2.1E+00		
Hexachlorocyclohexane , Beta-	000319-85-7	4.0E+03	4.0E+01					7.6E+02	7.6E+00			1.0E+06	1.0E+06			7.1E+02	7.1E+00		
Hexachlorocyclohexane , Delta-	000319-86-8																		
Hexachlorocyclohexane , Epsilon	006108-10-7																		
Hexachlorocyclohexane , Gamma-	000058-89-9	5.5E+03	5.5E+01	2.6E+03	2.5E+04	2.5E+03	2.6E+02	1.1E+03	1.1E+01	1.9E+03	1.9E+02					1.0E+03	1.0E+01	1.7E+03	1.7E+02
Hexachlorocyclohexane , Technical	000608-73-1	4.0E+03	4.0E+01					4.2E+02	4.2E+00			1.0E+06	1.0E+06			4.0E+02	4.0E+00		
Hexachlorocyclopentadiene	000077-47-4			6.1E+04	5.7E+05	5.7E+04	6.1E+03			3.6E+04	3.6E+03			1.0E+06	1.0E+06			3.4E+04	3.4E+03
Hexachlorodibenzo-p-dioxin, Mixture	019408-74-3	1.2E+00	1.2E-02					1.2E-01	1.2E-03			9.0E+04	9.0E+02			1.2E-01	1.2E-03		
Hexachloroethane	000067-72-1	5.1E+05	5.1E+03	8.8E+03	8.2E+04	8.2E+03	8.8E+02	8.6E+04	8.6E+02	5.1E+03	5.1E+02	1.0E+06	1.0E+06			8.1E+04	8.1E+02	4.8E+03	4.8E+02
Hexachlorophene	000070-30-4			2.6E+03	2.5E+04	2.5E+03	2.6E+02			9.6E+02	9.6E+01							9.3E+02	9.3E+01

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 Child	HQ=1 Adult	HQ=0.1 Adult	HQ=0.1 Child	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	000121-82-4	6.5E+04	6.5E+02	2.6E+04	2.5E+05	2.5E+04	2.6E+03	1.4E+04	1.4E+02	1.9E+04	1.9E+03					1.3E+04	1.3E+02	1.8E+04	1.8E+03
Hexamethylene Diisocyanate, 1,6-	000822-06-0													1.0E+06	5.0E+05				
Hexane, N-	000110-54-3			5.3E+05	1.0E+06	4.9E+05	5.3E+04			3.1E+05	3.1E+04			9.1E+01	9.1E+01			9.1E+01	9.1E+01
Hexanone, 2-	000591-78-6																		
Hexazinone	051235-04-2			2.9E+05	1.0E+06	2.7E+05	2.9E+04			1.1E+05	1.1E+04							1.0E+05	1.0E+04
HpCDD, 2,3,7,8-(4)	037871-00-4	4.8E+00	4.8E-02					1.7E-01	1.7E-03			2.7E+05	2.7E+03			1.6E-01	1.6E-03		
HpCDF, 2,3,7,8-(4)	038998-75-3	4.8E+00	4.8E-02					5.0E-01	5.0E-03			2.7E+05	2.7E+03			4.8E-01	4.8E-03		
HxCDD, 2,3,7,8-(4)	034465-46-8	4.8E-01	4.8E-03					1.7E-02	1.7E-04			2.7E+04	2.7E+02			1.6E-02	1.6E-04		
HxCDF, 2,3,7,8-(4)	055684-94-1	4.8E-01	4.8E-03					5.0E-02	5.0E-04			2.7E+04	2.7E+02			4.8E-02	4.8E-04		
Hydrazine	000302-01-2	2.4E+03	2.4E+01					2.5E+02	2.5E+00			1.0E+06	2.4E+05			2.4E+02	2.4E+00		
Hydrazine Sulfate	010034-93-2	2.4E+03	2.4E+01					2.5E+02	2.5E+00			1.0E+06	2.4E+05			2.4E+02	2.4E+00		
Hydrogen Chloride	007647-01-0													1.0E+06	1.0E+06				
Hydrogen Cyanide	000074-90-8			1.8E+05	1.0E+06	1.6E+05	1.8E+04			2.2E+05	2.2E+04			1.0E+06	1.0E+06			1.9E+05	1.9E+04
Hydrogen Sulfide	007783-06-4			2.6E+04	2.5E+05	2.5E+04	2.6E+03			3.9E+04	3.9E+03			1.0E+06	1.0E+06			3.3E+04	3.3E+03
Hydroquinone	000123-31-9			3.5E+05	1.0E+06	3.3E+05	3.5E+04			1.3E+05	1.3E+04							1.2E+05	1.2E+04
Imazalil	035554-44-0			1.1E+05	1.0E+06	1.1E+05	1.1E+04			4.2E+04	4.2E+03							4.0E+04	4.0E+03
Imazaquin	081335-37-7			1.0E+06	1.0E+06	1.0E+06	2.2E+05			8.0E+05	8.0E+04							7.7E+05	7.7E+04
Indeno[1,2,3-cd]pyrene ⁽⁵⁾	000193-39-5	9.8E+03	9.8E+01					6.4E+02	6.4E+00			1.0E+06	1.0E+06			6.2E+02	6.2E+00		
Iprodione	036734-19-7			3.5E+05	1.0E+06	3.3E+05	3.5E+04			1.3E+05	1.3E+04							1.2E+05	1.2E+04
Iron	007439-89-6																		
Isobutyl Alcohol	000078-83-1			1.0E+06	1.0E+06	1.0E+06	2.6E+05			1.0E+06	1.5E+05							1.0E+06	1.5E+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 Child	HQ=1 Adult	HQ=0.1 Adult	HQ=0.1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Isophorone	000078-59-1	1.0E+06	7.5E+04	1.0E+06	1.0E+06	1.0E+06	1.8E+05	7.9E+05	7.9E+03	6.4E+05	6.4E+04					7.6E+05	7.6E+03	6.2E+05	6.2E+04
Isopropalin	033820-53-0			1.3E+05	1.0E+06	1.2E+05	1.3E+04			4.8E+04	4.8E+03							4.6E+04	4.6E+03
Isopropanol	000067-63-0																		
Isopropyl Methyl Phosphonic Acid	001832-54-8			8.8E+05	1.0E+06	8.2E+05	8.8E+04			3.2E+05	3.2E+04							3.1E+05	3.1E+04
Isoxaben	082558-50-7			4.4E+05	1.0E+06	4.1E+05	4.4E+04			1.6E+05	1.6E+04							1.5E+05	1.5E+04
Karate	091465-08-6			4.4E+04	4.1E+05	4.1E+04	4.4E+03			1.6E+04	1.6E+03							1.5E+04	1.5E+03
Kerb	023950-58-5			6.6E+05	1.0E+06	6.1E+05	6.6E+04			2.4E+05	2.4E+04							2.3E+05	2.3E+04
Lactofen	077501-63-4			1.8E+04	1.6E+05	1.6E+04	1.8E+03			6.4E+03	6.4E+02							6.2E+03	6.2E+02
Lead Alkyls	NA																		
Lead And Compounds	007439-92-1																		
Linuron	000330-55-2			1.8E+04	1.6E+05	1.6E+04	1.8E+03			6.4E+03	6.4E+02							6.2E+03	6.2E+02
Lithium	007439-93-2																		
Londax	083055-99-6			1.0E+06	1.0E+06	1.0E+06	1.8E+05			6.4E+05	6.4E+04							6.2E+05	6.2E+04
MCPA	000094-74-6			4.4E+03	4.1E+04	4.1E+03	4.4E+02			1.6E+03	1.6E+02							1.5E+03	1.5E+02
MCPB	000094-81-5			8.8E+04	8.2E+05	8.2E+04	8.8E+03			3.2E+04	3.2E+03							3.1E+04	3.1E+03
MCPB	000093-65-2			8.8E+03	8.2E+04	8.2E+03	8.8E+02			3.2E+03	3.2E+02							3.1E+03	3.1E+02
Magnesium	007439-95-4																		
Malathion	000121-75-5			1.8E+05	1.0E+06	1.6E+05	1.8E+04			6.4E+04	6.4E+03							6.2E+04	6.2E+03
Maleic Anhydride	000108-31-6			8.8E+05	1.0E+06	8.2E+05	8.8E+04			3.2E+05	3.2E+04							3.1E+05	3.1E+04
Maleic Hydrazide	000123-33-1			1.0E+06	1.0E+06	1.0E+06	4.4E+05			1.0E+06	1.6E+05							1.0E+06	1.5E+05
Malononitrile	000109-77-3			1.8E+02	1.6E+03	1.6E+02	1.8E+01			1.0E+02	1.0E+01							9.7E+01	9.7E+00
Mancozeb	008018-01-7			2.6E+05	1.0E+06	2.5E+05	2.6E+04			9.6E+04	9.6E+03							9.3E+04	9.3E+03

Table 3.4c. (continued)

Chemical	CASRN	Ingestion (mg/kg)*						Dermal (mg/kg)*				Inhalation (mg/kg)* ^v				Ingestion + Dermal + Inhalation (mg/kg)* ^v			
		10 ⁻⁴	10 ⁻⁴	HQ=1 Child	HQ=1 Adult	HQ=0.1 Adult	HQ=0.1 Child	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Maneb	012427-38-2			4.4E+04	4.1E+05	4.1E+04	4.4E+03			1.6E+04	1.6E+03							1.5E+04	1.5E+03
Manganese (Water)	007439-96-5			4.1E+05	1.0E+06	3.8E+05	4.1E+04			1.2E+05	1.2E+04			1.0E+06	1.0E+06			1.2E+05	1.2E+04
Meposfolan	000950-10-7			7.9E+02	7.4E+03	7.4E+02	7.9E+01			2.9E+02	2.9E+01							2.8E+02	2.8E+01
Mepiquat Chloride	024307-26-4			2.6E+05	1.0E+06	2.5E+05	2.6E+04			9.6E+04	9.6E+03							9.3E+04	9.3E+03
Mercuric Chloride	007487-94-7			2.6E+03	2.5E+04	2.5E+03	2.6E+02			3.9E+03	3.9E+02							3.3E+03	3.3E+02
Mercury (elemental)	007439-97-6			2.6E+03	2.5E+04	2.5E+03	2.6E+02			1.9E+00	1.9E-01			1.0E+06	1.0E+06			1.9E+00	1.9E-01
Mercury, Inorganic Salt	007439-97-6			2.6E+03	2.5E+04	2.5E+03	2.6E+02			1.3E+03	1.3E+02			1.0E+06	1.0E+06			1.3E+03	1.3E+02
Merphos	000150-50-5			2.6E+02	2.5E+03	2.5E+02	2.6E+01			9.6E+01	9.6E+00							9.3E+01	9.3E+00
Merphos Oxide	000078-48-8			2.6E+02	2.5E+03	2.5E+02	2.6E+01			9.6E+01	9.6E+00							9.3E+01	9.3E+00
Metalaxyl	057837-19-1			5.3E+05	1.0E+06	4.9E+05	5.3E+04			1.9E+05	1.9E+04							1.9E+05	1.9E+04
Methacrylonitrile	000126-98-7			8.8E+02	8.2E+03	8.2E+02	8.8E+01			5.1E+02	5.1E+01			9.3E+03	9.3E+02			3.7E+02	3.7E+01
Methamidophos	010265-92-6			4.4E+02	4.1E+03	4.1E+02	4.4E+01			1.6E+02	1.6E+01							1.5E+02	1.5E+01
Methanol	000067-56-1			1.0E+06	1.0E+06	1.0E+06	4.4E+05			1.0E+06	2.6E+05							1.0E+06	2.4E+05
Methidathion	000950-37-8			8.8E+03	8.2E+04	8.2E+03	8.8E+02			3.2E+03	3.2E+02							3.1E+03	3.1E+02
Methomyl	016752-77-5			2.2E+05	1.0E+06	2.0E+05	2.2E+04			8.0E+04	8.0E+03							7.7E+04	7.7E+03
Methoxy-5-nitroaniline, 2-	000099-59-2	1.6E+05	1.6E+03					1.6E+04	1.6E+02							1.6E+04	1.6E+02		
Methoxychlor	000072-43-5			4.4E+04	4.1E+05	4.1E+04	4.4E+03			1.6E+04	1.6E+03							1.5E+04	1.5E+03
Methoxyethanol Acetate, 2-	000110-49-6			1.8E+04	1.6E+05	1.6E+04	1.8E+03			6.4E+03	6.4E+02							6.2E+03	6.2E+02
Methoxyethanol, 2-	000109-86-4			8.8E+03	8.2E+04	8.2E+03	8.8E+02			3.2E+03	3.2E+02			1.0E+06	1.0E+06			3.1E+03	3.1E+02
Methyl Acetate	000079-20-9			1.0E+06	1.0E+06	1.0E+06	8.8E+05			1.0E+06	3.2E+05							1.0E+06	3.1E+05
Methyl Acrylate	000096-33-3			2.6E+05	1.0E+06	2.5E+05	2.6E+04			9.6E+04	9.6E+03							9.3E+04	9.3E+03
Methyl Ethyl Ketone	000078-93-3			1.0E+06	1.0E+06	1.0E+06	5.3E+05			1.0E+06	3.1E+05			9.2E+03	9.2E+03			9.2E+03	9.2E+03

Table 3.4c. (continued)

Chemical	CASRN	Ingestion (mg/kg)*						Dermal (mg/kg)*				Inhalation (mg/kg)* ^v				Ingestion + Dermal + Inhalation (mg/kg)* ^v			
		10 ⁻⁴	10 ⁻⁴	HQ=1 Child	HQ=1 Adult	HQ=0.1 Adult	HQ=0.1 Child	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Methyl Isobutyl Ketone	000108-10-1			7.0E+05	1.0E+06	6.5E+05	7.0E+04			4.1E+05	4.1E+04			7.0E+02	7.0E+02			7.0E+02	7.0E+02
Methyl Mercury	022967-92-6			8.8E+02	8.2E+03	8.2E+02	8.8E+01			5.8E+02	5.8E+01							5.4E+02	5.4E+01
Methyl Methacrylate	000080-62-6			7.0E+05	1.0E+06	6.5E+05	7.0E+04			4.1E+05	4.1E+04							3.9E+05	3.9E+04
Methyl Parathion	000298-00-0			2.2E+03	2.0E+04	2.0E+03	2.2E+02			8.0E+02	8.0E+01							7.7E+02	7.7E+01
Methyl Styrene (Mixed Isomers)	025013-15-4			5.3E+04	4.9E+05	4.9E+04	5.3E+03			3.1E+04	3.1E+03			1.0E+06	1.0E+06			2.9E+04	2.9E+03
Methyl hydrazine ^(b)	000060-34-4	6.5E+03	6.5E+01					6.8E+02	6.8E+00							6.6E+02	6.6E+00		
Methyl tert-Butyl Ether (MTBE)	001634-04-4													1.0E+06	1.0E+06				
Methyl-5-Nitroaniline, 2-	000099-55-8	2.2E+05	2.2E+03					2.3E+04	2.3E+02							2.2E+04	2.2E+02		
Methylaniline Hydrochloride, 2-	000636-21-5	4.0E+04	4.0E+02					4.2E+03	4.2E+01							4.0E+03	4.0E+01		
Methylcyclohexane	000108-87-2													2.4E+02	2.4E+02				
Methylene Chloride	000075-09-2	9.5E+05	9.5E+03	5.3E+05	1.0E+06	4.9E+05	5.3E+04	1.9E+05	1.9E+03	3.7E+05	3.7E+04	1.0E+03	1.0E+03	1.0E+03	1.0E+03	1.0E+03	1.0E+03	1.0E+03	1.0E+03
Methylene-bis(2-chloroaniline), 4,4'-	000101-14-4	5.5E+04	5.5E+02	6.1E+03	5.7E+04	5.7E+03	6.1E+02	5.8E+03	5.8E+01	2.2E+03	2.2E+02	1.0E+06	1.0E+06			5.6E+03	5.6E+01	2.2E+03	2.2E+02
Methylene-bis(N,N-dimethyl) Aniline, 4,4'-	000101-61-1	1.6E+05	1.6E+03					1.6E+04	1.6E+02							1.6E+04	1.6E+02		
Methylenebisbenzenamine, 4,4' ^(b)	000101-77-9	2.9E+04	2.9E+02					3.0E+03	3.0E+01							2.9E+03	2.9E+01		
Methylenediphenyl Isocyanate, 4,4'-	000101-68-8													1.0E+06	1.0E+06				
Methylstyrene, Alpha-	000098-83-9			6.1E+05	1.0E+06	5.7E+05	6.1E+04			3.6E+05	3.6E+04							3.4E+05	3.4E+04
Methyltriethyl Lead	001762-28-3																		
Metolachlor	051218-45-2			1.0E+06	1.0E+06	1.0E+06	1.3E+05			4.8E+05	4.8E+04							4.6E+05	4.6E+04
Metribuzin ^(b)	021087-64-9			2.2E+05	1.0E+06	2.0E+05	2.2E+04			8.0E+04	8.0E+03							7.7E+04	7.7E+03

Table 3.4c. (continued)

Chemical	CASRN	Ingestion (mg/kg)*						Dermal (mg/kg)*				Inhalation (mg/kg)* ^y				Ingestion + Dermal + Inhalation (mg/kg)* ^x			
		10 ⁻⁴	10 ⁻⁶	HQ=1 Child	HQ=1 Adult	HQ=0.1 Adult	HQ=0.1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Mirex ⁽¹⁾	002385-85-5	4.0E+03	4.0E+01	1.8E+03	1.6E+04	1.6E+03	1.8E+02	4.2E+02	4.2E+00	6.4E+02	6.4E+01					4.0E+02	4.0E+00	6.2E+02	6.2E+01
Molinate	002212-67-1			1.8E+04	1.6E+05	1.6E+04	1.8E+03			6.4E+03	6.4E+02							6.2E+03	6.2E+02
Molybdenum	007439-98-7			4.4E+04	4.1E+05	4.1E+04	4.4E+03			1.2E+05	1.2E+04							9.4E+04	9.4E+03
Monochloramine	010599-90-3			8.8E+05	1.0E+06	8.2E+05	8.8E+04			3.2E+05	3.2E+04							3.1E+05	3.1E+04
Monochlorobutanes	025154-42-1			1.0E+06	1.0E+06	1.0E+06	3.5E+05			1.0E+06	1.3E+05							1.0E+06	1.2E+05
Naled	000300-76-5			1.8E+04	1.6E+05	1.6E+04	1.8E+03			6.4E+03	6.4E+02							6.2E+03	6.2E+02
Naphthalene ⁽⁶⁾	000091-20-3			3.1E+05	1.0E+06	2.9E+05	3.1E+04			1.8E+05	1.8E+04							1.7E+05	1.7E+04
Naphthalene, 1-Methyl	000090-12-0																		
Naphthalene, 2-Methyl	000091-57-6																		
Napropamide	015299-99-7			8.8E+05	1.0E+06	8.2E+05	8.8E+04			3.2E+05	3.2E+04							3.1E+05	3.1E+04
Niagara Blue 4B	002429-74-5																		
Nickel Carbonyl	013463-39-3																		
Nickel Refinery Dust	NA											1.0E+06	1.0E+06						
Nickel Soluble Salts	007440-02-0			1.8E+05	1.0E+06	1.6E+05	1.8E+04			3.5E+05	3.5E+04							2.9E+05	2.9E+04
Nickel Subulfide	012035-72-2											1.0E+06	1.0E+06						
Nitrapyrin ⁽³⁾	001929-82-4			1.3E+04	1.2E+05	1.2E+04	1.3E+03			4.8E+03	4.8E+02							4.6E+03	4.6E+02
Nitrate	014797-55-8			1.0E+06	1.0E+06	1.0E+06	1.0E+06			1.0E+06	1.0E+06							1.0E+06	1.0E+06
Nitric Oxide ⁽¹⁾	010102-43-9			8.8E+05	1.0E+06	8.2E+05	8.8E+04			1.0E+06	1.3E+05							1.0E+06	1.1E+05
Nitrite	014797-65-0			8.8E+05	1.0E+06	8.2E+05	8.8E+04			1.0E+06	3.2E+05							1.0E+06	2.3E+05
Nitroaniline, 2-	000088-74-4													9.6E+01	9.6E+01				
Nitrobenzene	000098-95-3			4.4E+03	4.1E+04	4.1E+03	4.4E+02			3.1E+03	3.1E+02			3.2E+02	9.6E+01			3.2E+02	5.8E+01
Nitrofurantoin	000067-20-9			6.1E+05	1.0E+06	5.7E+05	6.1E+04			2.2E+05	2.2E+04							2.2E+05	2.2E+04

Table 3.4c. (continued)

Chemical	CASRN	Ingestion (mg/kg)*						Dermal (mg/kg)*				Inhalation (mg/kg)*v				Ingestion + Dermal + Inhalation (mg/kg)*v			
		10 ⁻⁴	10 ⁻⁶	HQ=1 Child	HQ=1 Adult	HQ=0.1 Adult	HQ=0.1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Nitrofurazone	000059-87-0	4.8E+03	4.8E+01					5.0E+02	5.0E+00							4.8E+02	4.8E+00		
Nitrogen Dioxide ⁽⁹⁾	010102-44-0			1.0E+06	1.0E+06	1.0E+06	8.8E+05			1.0E+06	1.0E+06							1.0E+06	1.0E+06
Nitroguanidine	000556-88-7			8.8E+05	1.0E+06	8.2E+05	8.8E+04			3.2E+05	3.2E+04							3.1E+05	3.1E+04
Nitrophenol, 4-	000100-02-7																		
Nitropropane, 2- ⁽⁹⁾	000079-46-9	7.5E+02	7.5E+00					1.3E+02	1.3E+00			9.4E+02	9.4E+00	1.5E+04	1.5E+04	1.1E+02	1.1E+00		
Nitroso-N-ethylurea, N-	000759-73-9	5.1E+01	5.1E-01					5.4E+00	5.4E-02							5.2E+00	5.2E-02		
Nitroso-N-methylurea, N-	000684-93-5																		
Nitroso-di-N-butylamine, N-	000924-16-3	1.3E+03	1.3E+01					2.2E+02	2.2E+00			1.5E+03	6.9E+01			2.0E+02	2.0E+00		
Nitroso-di-N-propylamine, N-	000621-64-7	1.0E+03	1.0E+01					5.4E+01	5.4E-01							5.3E+01	5.3E-01		
Nitrosodiethanolamine, N-	001116-54-7	2.6E+03	2.6E+01					2.7E+02	2.7E+00							2.6E+02	2.6E+00		
Nitrosodiethylamine, N-	000055-18-5	4.8E+01	4.8E-01					5.0E+00	5.0E-02			1.0E+06	2.7E+04			4.8E+00	4.8E-02		
Nitrosodimethylamine, N-	000062-75-9	1.4E+02	1.4E+00					1.5E+01	1.5E-01			1.0E+06	8.0E+04			1.4E+01	1.4E-01		
Nitrosodiphenylamine, N-	000086-30-6	1.0E+06	1.5E+04					7.7E+04	7.7E+02							7.5E+04	7.5E+02		
Nitrosomethylethylamine, N-	010595-95-6	3.3E+02	3.3E+00					3.4E+01	3.4E-01							3.3E+01	3.3E-01		
Nitrosomethylvinylamine, N-	004549-40-0																		
Nitrosopyrrolidine, N-	000930-55-2	3.4E+03	3.4E+01					3.6E+02	3.6E+00			1.0E+06	1.0E+06			3.4E+02	3.4E+00		
Nitrotoluene, 4-Amino-2-	000119-32-4																		
Nitrotoluene, m-	000099-08-1			8.8E+04	8.2E+05	8.2E+04	8.8E+03			5.1E+04	5.1E+03							4.8E+04	4.8E+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 Child	HQ=1 Adult	HQ=0.1 Adult	HQ=0.1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Nitrotoluene, o-	000088-72-2			8.8E+04	8.2E+05	8.2E+04	8.8E+03			5.1E+04	5.1E+03							4.8E+04	4.8E+03
Nitrotoluene, p-	000099-99-0			8.8E+04	8.2E+05	8.2E+04	8.8E+03			5.1E+04	5.1E+03							4.8E+04	4.8E+03
Norflurazon	027314-13-2			3.5E+05	1.0E+06	3.3E+05	3.5E+04			1.3E+05	1.3E+04							1.2E+05	1.2E+04
Nustar	085509-19-9			6.1E+03	5.7E+04	5.7E+03	6.1E+02			2.2E+03	2.2E+02							2.2E+03	2.2E+02
OCDD ^(a)	003268-87-9	4.8E+01	4.8E-01					1.7E+00	1.7E-02			1.0E+06	2.7E+04			1.6E+00	1.6E-02		
OCDF ^(a)	039001-02-0	4.8E+01	4.8E-01					5.0E+00	5.0E-02			1.0E+06	2.7E+04			4.8E+00	4.8E-02		
Octabromodiphenyl Ether	032536-52-0			2.6E+04	2.5E+05	2.5E+04	2.6E+03			9.6E+03	9.6E+02							9.3E+03	9.3E+02
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetra (HMX)	002691-41-0			4.4E+05	1.0E+06	4.1E+05	4.4E+04			4.8E+04	4.8E+03							4.8E+04	4.8E+03
Octamethylpyrophosphoramide	000152-16-9			1.8E+04	1.6E+05	1.6E+04	1.8E+03			6.4E+03	6.4E+02							6.2E+03	6.2E+02
Octyl Phthalate, di-N-	000117-84-0			1.8E+05	1.0E+06	1.6E+05	1.8E+04			1.2E+05	1.2E+04							1.1E+05	1.1E+04
Oryzalin	019044-88-3			4.4E+05	1.0E+06	4.1E+05	4.4E+04			1.6E+05	1.6E+04							1.5E+05	1.5E+04
Oxadiazon	019666-30-9			4.4E+04	4.1E+05	4.1E+04	4.4E+03			1.6E+04	1.6E+03							1.5E+04	1.5E+03
Oxamyl	023135-22-0			2.2E+05	1.0E+06	2.0E+05	2.2E+04			8.0E+04	8.0E+03							7.7E+04	7.7E+03
Paclobutrazol	076738-62-0			1.1E+05	1.0E+06	1.1E+05	1.1E+04			4.2E+04	4.2E+03							4.0E+04	4.0E+03
Paraquat	001910-42-5			3.9E+04	3.7E+05	3.7E+04	3.9E+03			1.4E+04	1.4E+03							1.4E+04	1.4E+03
Parathion	000056-38-2			5.3E+04	4.9E+05	4.9E+04	5.3E+03			1.9E+04	1.9E+03							1.9E+04	1.9E+03
PeCDD, 2,3,7,8-(a)	036088-22-9	9.5E-02	9.5E-04					3.3E-03	3.3E-05			5.4E+03	5.4E+01			3.3E-03	3.3E-05		
PeCDF, 1,2,3,7,8-(a)	057117-41-6	9.5E-02	9.5E-04					1.0E-02	1.0E-04			5.4E+03	5.4E+01			9.6E-03	9.6E-05		
PeCDF, 2,3,4,7,8-(a)	057117-31-4	9.5E-01	9.5E-03					1.0E-01	1.0E-03			5.4E+04	5.4E+02			9.6E-02	9.6E-04		
Pebulate	001114-71-2			4.4E+05	1.0E+06	4.1E+05	4.4E+04			1.6E+05	1.6E+04							1.5E+05	1.5E+04
Pendimethalin	040487-42-1			3.5E+05	1.0E+06	3.3E+05	3.5E+04			1.3E+05	1.3E+04							1.2E+05	1.2E+04

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 Child	HQ=1 Adult	HQ=0.1 Adult	HQ=0.1 Child	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Pentabromodiphenyl Ether	032534-81-9			1.8E+04	1.6E+05	1.6E+04	1.8E+03			6.4E+03	6.4E+02							6.2E+03	6.2E+02
Pentachlorobenzene	000608-93-5			7.0E+03	6.5E+04	6.5E+03	7.0E+02			4.1E+03	4.1E+02							3.9E+03	3.9E+02
Pentachlorocyclopentadiene	025329-35-5																		
Pentachloronitrobenzene	000082-68-8	2.8E+04	2.8E+02	2.6E+04	2.5E+05	2.5E+04	2.6E+03	4.6E+03	4.6E+01	1.5E+04	1.5E+03					4.3E+03	4.3E+01	1.5E+04	1.5E+03
Pentachlorophenol	000087-86-5	6.0E+04	6.0E+02	2.6E+05	1.0E+06	2.5E+05	2.6E+04	1.2E+04	1.2E+02	1.9E+05	1.9E+04					1.2E+04	1.2E+02	1.8E+05	1.8E+04
Pentyl Alcohol, N-	000071-41-0																		
Permethrin	052645-53-1			4.4E+05	1.0E+06	4.1E+05	4.4E+04			1.6E+05	1.6E+04							1.5E+05	1.5E+04
Phenanthrene	000085-01-8																		
Phenmedipham	013684-63-4			1.0E+06	1.0E+06	1.0E+06	2.2E+05			8.0E+05	8.0E+04							7.7E+05	7.7E+04
Phenol	000108-95-2			1.0E+06	1.0E+06	1.0E+06	5.3E+05			1.0E+06	3.5E+05							1.0E+06	3.2E+05
Phenylenediamine, m-	000108-45-2			5.3E+04	4.9E+05	4.9E+04	5.3E+03			1.9E+04	1.9E+03							1.9E+04	1.9E+03
Phenylenediamine, o-	000095-54-5	1.5E+05	1.5E+03					1.6E+04	1.6E+02							1.5E+04	1.5E+02		
Phenylenediamine, p-	000106-50-3			1.0E+06	1.0E+06	1.0E+06	1.7E+05			6.1E+05	6.1E+04							5.9E+05	5.9E+04
Phenylmercuric Acetate	000062-38-4			7.0E+02	6.5E+03	6.5E+02	7.0E+01			2.6E+02	2.6E+01							2.5E+02	2.5E+01
Phenylphenol, 2-	000090-43-7	1.0E+06	3.7E+04					3.9E+05*	3.9E+03							3.7E+05	3.7E+03		
Phorate	000298-02-2			1.8E+03	1.6E+04	1.6E+03	1.8E+02			6.4E+02	6.4E+01							6.2E+02	6.2E+01
Phosmet	000732-11-6			1.8E+05	1.0E+06	1.6E+05	1.8E+04			6.4E+04	6.4E+03							6.2E+04	6.2E+03
Phosphine	007803-51-2			2.6E+03	2.5E+04	2.5E+03	2.6E+02			3.9E+03	3.9E+02			1.0E+06	1.0E+06			3.3E+03	3.3E+02
Phosphoric Acid	007664-38-2													1.0E+06	1.0E+06				
Phthalic Acid, P-	000100-21-0			1.0E+06	1.0E+06	1.0E+06	8.8E+05			1.0E+06	3.2E+05							1.0E+06	3.1E+05
Phthalic Anhydride	000085-44-9			1.0E+06	1.0E+06	1.0E+06	1.0E+06			1.0E+06	6.4E+05			1.0E+06	1.0E+06			1.0E+06	6.2E+05

Table 3.4c. (continued)

Chemical	CASRN	Ingestion (mg/kg)*						Dermal (mg/kg)*				Inhalation (mg/kg)* ^v				Ingestion + Dermal + Inhalation (mg/kg)* ^v			
		10 ⁻⁴	10 ⁻⁶	HQ=1 Child	HQ=1 Adult	HQ=0.1 Adult	HQ=0.1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Picloram	001918-02-1			6.1E+05	1.0E+06	5.7E+05	6.1E+04			2.2E+05	2.2E+04							2.2E+05	2.2E+04
Pirimiphos, Methyl	029232-93-7			8.8E+04	8.2E+05	8.2E+04	8.8E+03			3.2E+04	3.2E+03							3.1E+04	3.1E+03
Polybrominated Biphenyls	NA	8.0E+02	8.0E+00	6.1E+01	5.7E+02	5.7E+01	6.1E+00	1.6E+02	1.6E+00	4.2E+01	4.2E+00					1.5E+02	1.5E+00	3.9E+01	3.9E+00
Polychlorinated Biphenyls	001336-36-3	9.3E+02	9.3E+00					2.9E+01	2.9E-01							2.9E+01	2.9E-01		
Potassium Cyanide	000151-50-8			4.4E+05	1.0E+06	4.1E+05	4.4E+04			2.6E+05	2.6E+04							2.4E+05	2.4E+04
Potassium Silver Cyanide	000506-61-6			1.0E+06	1.0E+06	1.0E+06	1.8E+05			1.0E+06	2.6E+05							1.0E+06	2.2E+05
Prochloraz	067747-09-5	4.8E+04	4.8E+02	7.9E+04	7.4E+05	7.4E+04	7.9E+03	5.0E+03	5.0E+01	2.9E+04	2.9E+03					4.8E+03	4.8E+01	2.8E+04	2.8E+03
Profluralin	026399-36-0			5.3E+04	4.9E+05	4.9E+04	5.3E+03			1.9E+04	1.9E+03							1.9E+04	1.9E+03
Prometon	001610-18-0			1.3E+05	1.0E+06	1.2E+05	1.3E+04			4.8E+04	4.8E+03							4.6E+04	4.6E+03
Prometryn	007287-19-6			3.5E+04	3.3E+05	3.3E+04	3.5E+03			1.3E+04	1.3E+03							1.2E+04	1.2E+03
Propachlor	001918-16-7			1.1E+05	1.0E+06	1.1E+05	1.1E+04			4.2E+04	4.2E+03							4.0E+04	4.0E+03
Propanil	000709-98-8			4.4E+04	4.1E+05	4.1E+04	4.4E+03			1.6E+04	1.6E+03							1.5E+04	1.5E+03
Propargite	002312-35-8			1.8E+05	1.0E+06	1.6E+05	1.8E+04			6.4E+04	6.4E+03							6.2E+04	6.2E+03
Propargyl Alcohol	000107-19-7			1.8E+04	1.6E+05	1.6E+04	1.8E+03			1.0E+04	1.0E+03							9.7E+03	9.7E+02
Propazine	000139-40-2			1.8E+05	1.0E+06	1.6E+05	1.8E+04			6.4E+04	6.4E+03							6.2E+04	6.2E+03
Propham	000122-42-9			1.8E+05	1.0E+06	1.6E+05	1.8E+04			6.4E+04	6.4E+03							6.2E+04	6.2E+03
Propiconazole	060207-90-1			1.1E+05	1.0E+06	1.1E+05	1.1E+04			4.2E+04	4.2E+03							4.0E+04	4.0E+03
Propylene Glycol	000057-55-6			1.0E+06	1.0E+06	1.0E+06	1.0E+06			1.0E+06	1.0E+06							1.0E+06	1.0E+06
Propylene Glycol Monoethyl Ether	001569-02-4			1.0E+06	1.0E+06	1.0E+06	6.1E+05			1.0E+06	2.2E+05							1.0E+06	2.2E+05
Propylene Glycol Monomethyl Ether	000107-98-2			1.0E+06	1.0E+06	1.0E+06	6.1E+05			1.0E+06	2.2E+05			1.0E+06	1.0E+06			1.0E+06	2.2E+05

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 Child	HQ=1 Adult	HQ=0.1 Adult	HQ=0.1 Child	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Propylene Oxide	000075-56-9	3.0E+04	3.0E+02					5.0E+03	5.0E+01			2.8E+04	4.7E+03	2.8E+04	2.2E+04	4.7E+03	4.7E+01		
Pursuit	081335-77-5			1.0E+06	1.0E+06	1.0E+06	2.2E+05			8.0E+05	8.0E+04							7.7E+05	7.7E+04
Pydrin	051630-58-1			2.2E+05	1.0E+06	2.0E+05	2.2E+04			8.0E+04	8.0E+03							7.7E+04	7.7E+03
Pyrene	000129-00-0			2.6E+05	1.0E+06	2.5E+05	2.6E+04			6.0E+04	6.0E+03							5.8E+04	5.8E+03
Pyridine	000110-86-1			8.8E+03	8.2E+04	8.2E+03	8.8E+02			3.2E+03	3.2E+02							3.1E+03	3.1E+02
Quinalphos	013593-03-8			4.4E+03	4.1E+04	4.1E+03	4.4E+02			1.6E+03	1.6E+02							1.5E+03	1.5E+02
Quinoline	000091-22-5	6.0E+02	6.0E+00					6.2E+01	6.2E-01							6.0E+01	6.0E-01		
Refractory Ceramic Fibers	NA																		
Resmethrin	010453-86-8			2.6E+05	1.0E+06	2.5E+05	2.6E+04			9.6E+04	9.6E+03							9.3E+04	9.3E+03
Ronnel	000299-84-3			4.4E+05	1.0E+06	4.1E+05	4.4E+04			1.6E+05	1.6E+04							1.5E+05	1.5E+04
Rotenone	000083-79-4			3.5E+04	3.3E+05	3.3E+04	3.5E+03			1.3E+04	1.3E+03							1.2E+04	1.2E+03
Savay	078587-05-0			2.2E+05	1.0E+06	2.0E+05	2.2E+04			8.0E+04	8.0E+03							7.7E+04	7.7E+03
Selenious Acid	007783-00-8			4.4E+04	4.1E+05	4.1E+04	4.4E+03			2.8E+04	2.8E+03							2.6E+04	2.6E+03
Selenite	014124-67-5																		
Selenium	007782-49-2			4.4E+04	4.1E+05	4.1E+04	4.4E+03			1.4E+05	1.4E+04							1.1E+05	1.1E+04
Selenium Sulfide	007446-34-6																		
Selenourea	000630-10-4			4.4E+04	4.1E+05	4.1E+04	4.4E+03			1.6E+04	1.6E+03							1.5E+04	1.5E+03
Sethoxydim	074051-80-2			7.9E+05	1.0E+06	7.4E+05	7.9E+04			2.9E+05	2.9E+04							2.8E+05	2.8E+04
Silver	007440-22-4			4.4E+04	4.1E+05	4.1E+04	4.4E+03			5.8E+04	5.8E+03							5.1E+04	5.1E+03
Silver Cyanide	000506-64-9			8.8E+05	1.0E+06	8.2E+05	8.8E+04			1.0E+06	1.3E+05							1.0E+06	1.1E+05
Simazine	000122-34-9	6.0E+04	6.0E+02	4.4E+04	4.1E+05	4.1E+04	4.4E+03	6.2E+03	6.2E+01	1.6E+04	1.6E+03					6.0E+03	6.0E+01	1.5E+04	1.5E+03
Sodium	007440-23-5																		

Table 3.4c. (continued)

Chemical	CASRN	Ingestion (mg/kg)*						Dermal (mg/kg)*				Inhalation (mg/kg)* ^v				Ingestion + Dermal + Inhalation (mg/kg) ^{†v}			
		10 ⁻⁴	10 ⁻⁶	HQ=1 Child	HQ=1 Adult	HQ=0.1 Adult	HQ=0.1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Sodium Acifluorfen	062476-59-9			1.1E+05	1.0E+06	1.1E+05	1.1E+04			4.2E+04	4.2E+03							4.0E+04	4.0E+03
Sodium Azide	026628-22-8			3.5E+04	3.3E+05	3.3E+04	3.5E+03			5.1E+04	5.1E+03							4.4E+04	4.4E+03
Sodium Cyanide	000143-33-9			3.5E+05	1.0E+06	3.3E+05	3.5E+04			2.1E+05	2.1E+04							1.9E+05	1.9E+04
Sodium Diethyldithiocarbamate	000148-18-5	2.6E+04	2.6E+02	2.6E+05	1.0E+06	2.5E+05	2.6E+04	2.8E+03	2.8E+01	9.6E+04	9.6E+03					2.7E+03	2.7E+01	9.3E+04	9.3E+03
Sodium Fluoroacetate	000062-74-8			1.8E+02	1.6E+03	1.6E+02	1.8E+01			6.4E+01	6.4E+00							6.2E+01	6.2E+00
Sodium Metavanadate	013718-26-8			8.8E+03	8.2E+04	8.2E+03	8.8E+02			1.3E+04	1.3E+03							1.1E+04	1.1E+03
Stirofos (Tetrachlorovinphos)	000961-11-5	3.0E+05	3.0E+03	2.6E+05	1.0E+06	2.5E+05	2.6E+04	3.1E+04	3.1E+02	9.6E+04	9.6E+03					3.0E+04	3.0E+02	9.3E+04	9.3E+03
Strontium, Stable	007440-24-6			1.0E+06	1.0E+06	1.0E+06	5.3E+05			1.0E+06	7.7E+05							1.0E+06	6.7E+05
Strychnine	000057-24-9			2.6E+03	2.5E+04	2.5E+03	2.6E+02			9.6E+02	9.6E+01							9.3E+02	9.3E+01
Styrene ^(a)	000100-42-5			1.0E+06	1.0E+06	1.0E+06	1.8E+05			1.0E+06	1.0E+05			6.7E+02	6.7E+02			6.7E+02	6.7E+02
Sulfate	014808-79-8																		
Systhane	088671-89-0			2.2E+05	1.0E+06	2.0E+05	2.2E+04			8.0E+04	8.0E+03							7.7E+04	7.7E+03
TCDD, 2,3,7,8- ^(b)	001746-01-6	4.8E-02	4.8E-04					1.7E-03	1.7E-05			2.7E+03	2.7E+01			1.6E-03	1.6E-05		
TCDF, 2,3,7,8- ^(b)	051207-31-9	4.8E-01	4.8E-03					5.0E-02	5.0E-04			2.7E+04	2.7E+02			4.8E-02	4.8E-04		
TCMTB	021564-17-0			2.6E+05	1.0E+06	2.5E+05	2.6E+04			9.6E+04	9.6E+03							9.3E+04	9.3E+03
Tebuthiuron	034014-18-1			6.1E+05	1.0E+06	5.7E+05	6.1E+04			2.2E+05	2.2E+04							2.2E+05	2.2E+04
Temephos	003383-96-8			1.8E+05	1.0E+06	1.6E+05	1.8E+04			6.4E+04	6.4E+03							6.2E+04	6.2E+03
Terbacil	005902-51-2			1.1E+05	1.0E+06	1.1E+05	1.1E+04			4.2E+04	4.2E+03							4.0E+04	4.0E+03
Terbufos	013071-79-9			2.2E+02	2.0E+03	2.0E+02	2.2E+01			8.0E+01	8.0E+00							7.7E+01	7.7E+00
Terbutryn	000886-50-0			8.8E+03	8.2E+04	8.2E+03	8.8E+02			3.2E+03	3.2E+02							3.1E+03	3.1E+02
Tetrabutyl Lead	001920-90-7																		

3-596

Table 3.4c. (continued)

Chemical	CASRN	Ingestion (mg/kg)*						Dermal (mg/kg)*				Inhalation (mg/kg)* ^v				Ingestion + Dermal + Inhalation (mg/kg)* ^v			
		10 ⁻⁴	10 ⁻⁴	HQ=1 Child	HQ=1 Adult	HQ=0.1 Adult	HQ=0.1 Child	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Tetrachlorobenzene, 1,2,4,5-	000095-94-3			2.6E+03	2.5E+04	2.5E+03	2.6E+02			1.5E+03	1.5E+02							1.5E+03	1.5E+02
Tetrachloroethane, 1,1,1,2-	000630-20-6	2.8E+05	2.8E+03	2.6E+05	1.0E+06	2.5E+05	2.6E+04	4.6E+04	4.6E+02	1.5E+05	1.5E+04	7.7E+02	7.7E+02			7.7E+02	3.5E+02	7.7E+02	7.7E+02
Tetrachloroethane, 1,1,2,2-	000079-34-5	3.6E+04	3.6E+02					5.2E+03	5.2E+01			1.1E+03	4.5E+02			1.1E+03	4.5E+01		
Tetrachloroethylene ^(b)	000127-18-4	1.4E+05	1.4E+03	8.8E+04	8.2E+05	8.2E+04	8.8E+03	2.9E+04	2.9E+02	6.4E+04	6.4E+03	1.2E+02	1.2E+02			1.2E+02	1.2E+02	1.2E+02	1.2E+02
Tetrachlorophenol, 2,3,4,6-	000058-90-2			2.6E+05	1.0E+06	2.5E+05	2.6E+04			9.6E+04	9.6E+03							9.3E+04	9.3E+03
Tetrachlorotoluene, p-alpha, alpha, alpha-	005216-25-1	3.6E+02	3.6E+00					6.0E+01	6.0E-01							5.6E+01	5.6E-01		
Tetraethyl Dithiopyrophosphate	003689-24-5			4.4E+03	4.1E+04	4.1E+03	4.4E+02			1.6E+03	1.6E+02							1.5E+03	1.5E+02
Tetraethyl Lead	000078-00-2																		
Tetrafluoroethane, 1,1,1,2-	000811-97-2													1.1E+02	1.1E+02				
Tetramethyl Lead	000075-74-1																		
Tetrapropyl Lead	003440-75-3																		
Thallic Oxide ^(b)	001314-32-5			6.1E+02	5.7E+03	5.7E+02	6.1E+01			2.2E+02	2.2E+01							2.2E+02	2.2E+01
Thallium (I) Nitrate	010102-45-1			7.9E+02	7.4E+03	7.4E+02	7.9E+01			1.2E+03	1.2E+02							1.0E+03	1.0E+02
Thallium (Soluble Salts)	007440-28-0																		
Thallium Acetate	000563-68-8			7.9E+02	7.4E+03	7.4E+02	7.9E+01			2.9E+02	2.9E+01							2.8E+02	2.8E+01
Thallium Carbonate	006533-73-9			7.0E+02	6.5E+03	6.5E+02	7.0E+01			2.6E+02	2.6E+01							2.5E+02	2.5E+01
Thallium Chloride	007791-12-0			7.0E+02	6.5E+03	6.5E+02	7.0E+01			1.0E+03	1.0E+02							8.9E+02	8.9E+01
Thallium Selenite ^(b)	012039-52-0			7.9E+02	7.4E+03	7.4E+02	7.9E+01			1.2E+03	1.2E+02							1.0E+03	1.0E+02
Thallium Sulfate	007446-18-6			7.0E+02	6.5E+03	6.5E+02	7.0E+01			1.0E+03	1.0E+02							8.9E+02	8.9E+01

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 Child	HQ=1 Adult	HQ=0.1 Adult	HQ=0.1 Child	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Thiobencarb	028249-77-6			8.8E+04	8.2E+05	8.2E+04	8.8E+03			3.2E+04	3.2E+03							3.1E+04	3.1E+03
Thiofanox	039196-18-4			2.6E+03	2.5E+04	2.5E+03	2.6E+02			9.6E+02	9.6E+01							9.3E+02	9.3E+01
Thiophanate, Methyl	023564-05-8			7.0E+05	1.0E+06	6.5E+05	7.0E+04			2.6E+05	2.6E+04							2.5E+05	2.5E+04
Thiram	000137-26-8			4.4E+04	4.1E+05	4.1E+04	4.4E+03			1.6E+04	1.6E+03							1.5E+04	1.5E+03
Thorium	007440-29-1																		
Tin	007440-31-5			1.0E+06	1.0E+06	1.0E+06	5.3E+05			1.0E+06	3.9E+05							1.0E+06	3.6E+05
Titanium	007440-32-6																		
Toluene ⁹⁰	000108-88-3			1.0E+06	1.0E+06	1.0E+06	1.8E+05			1.0E+06	1.0E+05			2.5E+02	2.5E+02			2.5E+02	2.5E+02
Toluene diisocyanate mixture (TDI)	026471-62-5													1.0E+06	1.0E+06				
Toluene-2,4-diamine	000095-80-7	2.2E+03	2.2E+01					2.3E+02	2.3E+00							2.3E+02	2.3E+00		
Toluene-2,5-diamine	000095-70-5			1.0E+06	1.0E+06	1.0E+06	5.3E+05			1.0E+06	1.9E+05							1.0E+06	1.9E+05
Toluene-2,6-diamine	000823-40-5			1.0E+06	1.0E+06	1.0E+06	1.8E+05			6.4E+05	6.4E+04							6.2E+05	6.2E+04
Toluidine, o- (Methylaniline, 2-)	000095-53-4	3.0E+04	3.0E+02					3.1E+03	3.1E+01							3.0E+03	3.0E+01		
Toluidine, p-	000106-49-0	3.8E+04	3.8E+02					3.9E+03	3.9E+01							3.8E+03	3.8E+01		
Toxaphene	008001-35-2	6.5E+03	6.5E+01					6.8E+02	6.8E+00			1.0E+06	1.0E+06			6.6E+02	6.6E+00		
Traflomethrin	066841-25-6			6.6E+04	6.1E+05	6.1E+04	6.6E+03			2.4E+04	2.4E+03							2.3E+04	2.3E+03
Triallate	002303-17-5			1.1E+05	1.0E+06	1.1E+05	1.1E+04			4.2E+04	4.2E+03							4.0E+04	4.0E+03
Triasulfuron	082097-50-5			8.8E+04	8.2E+05	8.2E+04	8.8E+03			3.2E+04	3.2E+03							3.1E+04	3.1E+03
Tribromobenzene, 1,2,4-	000615-54-3			4.4E+04	4.1E+05	4.1E+04	4.4E+03			2.6E+04	2.6E+03							2.4E+04	2.4E+03
Tribromochloromethane	000594-15-0																		

Table 3.4c. (continued)

Chemical	CASRN	Ingestion (mg/kg)*						Dermal (mg/kg)*				Inhalation (mg/kg)* ^v				Ingestion + Dermal + Inhalation (mg/kg)* ^v			
		10 ⁻⁴	10 ⁻⁴	HQ=1 Child	HQ=1 Adult	HQ=0.1 Adult	HQ=0.1 Child	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Tribromodiphenyl Ether	049690-94-0																		
Tributyltin Oxide	000056-35-9					2.5E+03	2.6E+01											9.3E+01	9.3E+00
Trichloro-1,2,2-trifluoroethane, 1,1,2-	000076-12-1			1.0E+06	1.0E+06	1.0E+06	1.0E+06			1.0E+06	1.0E+06				2.1E+02			2.1E+02	2.1E+02
Trichloro-2'-hydroxydiphenylether	003380-34-5																		
Trichloroacetic Acid																			
Trichloroaniline HCl, 2,4,6-	033663-50-2	2.5E+05	2.5E+03					2.6E+04	2.6E+02							2.5E+04	2.5E+02		
Trichloroaniline, 2,4,6-	000634-93-5	2.1E+05	2.1E+03					2.2E+04	2.2E+02							2.1E+04	2.1E+02		
Trichlorobenzene, 1,2,4-	000120-82-1			8.8E+04	8.2E+05		8.8E+03			6.2E+04	6.2E+03				8.3E+02			8.3E+02	8.3E+02
Trichloroethane, 1,1,1-	000071-55-6			7.9E+05	1.0E+06		7.9E+04			5.2E+05	5.2E+04				7.3E+02			7.3E+02	7.3E+02
Trichloroethane, 1,1,2-	000079-00-5	1.3E+05	1.3E+03	3.5E+04	3.3E+05		3.5E+03	2.1E+04	2.1E+02	2.1E+04	2.1E+03	8.5E+02	5.9E+02			8.5E+02	1.5E+02	8.5E+02	8.5E+02
Trichloroethylene ^{2b}	000079-01-6	6.5E+05	6.5E+03					2.0E+04	2.0E+02			4.5E+02	4.5E+02			4.5E+02	1.9E+02		
Trichlorofluoromethane	000075-69-4			1.0E+06	1.0E+06		2.6E+05			4.4E+05	4.4E+04			7.1E+02	7.1E+02			7.1E+02	7.1E+02
Trichlorophenol, 2,4,5-	000095-95-4			8.8E+05	1.0E+06		8.8E+04			5.1E+05	5.1E+04							4.8E+05	4.8E+04
Trichlorophenol, 2,4,6-	000088-06-2	6.5E+05	6.5E+03					6.8E+04	6.8E+02			1.0E+06	1.0E+06			6.6E+04	6.6E+02		
Trichlorophenoxy) Propionic Acid, 2(2,4,5-	000093-72-1			7.0E+04	6.5E+05		7.0E+03			2.6E+04	2.6E+03							2.5E+04	2.5E+03
Trichlorophenoxyacetic Acid, 2,4,5-	000093-76-5			8.8E+04	8.2E+05		8.8E+03			3.2E+04	3.2E+03							3.1E+04	3.1E+03
Trichloropropane, 1,1,2-	000598-77-6			4.4E+04	4.1E+05		4.4E+03			2.6E+04	2.6E+03							2.4E+04	2.4E+03
Trichloropropane, 1,2,3-	000096-18-4	1.0E+03	1.0E+01	5.3E+04	4.9E+05		5.3E+03	1.7E+02	1.7E+00	3.1E+04	3.1E+03					1.6E+02	1.6E+00	2.9E+04	2.9E+03

Table 3.4c. (continued)

Chemical	CASRN	Ingestion (mg/kg)*						Dermal (mg/kg)*				Inhalation (mg/kg)* ^v				Ingestion + Dermal + Inhalation (mg/kg) ^{†v}			
		10 ⁻⁴	10 ⁻⁴	HQ=1 Child	HQ=1 Adult	HQ=0.1 Adult	HQ=0.1 Child	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Trichloropropene, 1,2,3-	000096-19-5			4.4E+04	4.1E+05	4.1E+04	4.4E+03			2.6E+04	2.6E+03							2.4E+04	2.4E+03
Trichlorotoluene, 2,3,6-	002077-46-5																		
Trichlorotoluene, alpha 2,6-	002014-83-7																		
Tridiphenyl	058138-08-2			2.6E+04	2.5E+05	2.5E+04	2.6E+03			9.6E+03	9.6E+02							9.3E+03	9.3E+02
Triethyl Lead	005224-23-7																		
Triethylamine	000121-44-8													2.2E+04	1.3E+04				
Trifluralin	001582-09-8	9.3E+05	9.3E+03	6.6E+04	6.1E+05	6.1E+04	6.6E+03	9.7E+04	9.7E+02	2.4E+04	2.4E+03					9.4E+04	9.4E+02	2.3E+04	2.3E+03
Trimethyl Lead	007442-13-9																		
Trimethyl Phosphate	000512-56-1	1.9E+05	1.9E+03					2.0E+04	2.0E+02							2.0E+04	2.0E+02		
Trimethylethyl Lead	001762-26-1																		
Trinitrobenzene, 1,3,5-	000099-35-4			4.4E+02	4.1E+03	4.1E+02	4.4E+01			2.1E+02	2.1E+01							2.0E+02	2.0E+01
Trinitrophenylmethylnitramine	000479-45-8			8.8E+04	8.2E+05	8.2E+04	8.8E+03			3.2E+04	3.2E+03							3.1E+04	3.1E+03
Trinitrotoluene, 2,4,6-	000118-96-7	2.4E+05	2.4E+03	4.4E+03	4.1E+04	4.1E+03	4.4E+02	3.0E+04	3.0E+02	1.9E+03	1.9E+02					2.9E+04	2.9E+02	1.8E+03	1.8E+02
Tripropyl Lead	006618-03-7																		
Uranium (Soluble Salts)	NA			2.6E+04	2.5E+05	2.5E+04	2.6E+03			1.6E+05	1.6E+04							9.8E+04	9.8E+03
Vanadium Pentoxide	001314-62-1			7.9E+04	7.4E+05	7.4E+04	7.9E+03			1.2E+05	1.2E+04							1.0E+05	1.0E+04
Vanadium Sulfate	036907-42-3			1.8E+05	1.0E+06	1.6E+05	1.8E+04			2.6E+05	2.6E+04							2.2E+05	2.2E+04
Vanadium, Metallic	007440-62-2			6.1E+04	5.7E+05	5.7E+04	6.1E+03			4.5E+03	4.5E+02							4.5E+03	4.5E+02
Vanadyl Sulfate	027774-13-6			1.8E+05	1.0E+06	1.6E+05	1.8E+04			2.6E+05	2.6E+04							2.2E+05	2.2E+04
Vernolate	001929-77-7			8.8E+03	8.2E+04	8.2E+03	8.8E+02			3.2E+03	3.2E+02							3.1E+03	3.1E+02

3-600

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 Child	HQ=1 Adult	HQ=0.1 Adult	HQ=0.1 Child	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Vinclozolin	050471-44-8			2.2E+05	1.0E+06	2.0E+05	2.2E+04			8.0E+04	8.0E+03							7.7E+04	7.7E+03
Vinyl Acetate	000108-05-4			1.0E+06	1.0E+06	1.0E+06	8.8E+05			1.0E+06	4.2E+05			7.8E+02	7.8E+02			7.8E+02	7.8E+02
Vinyl Bromide	000593-60-2											4.2E+03	1.2E+02	4.2E+03	4.9E+02				
Vinyl Chloride ⁽⁹⁾	000075-01-4	3.8E+03	3.8E+01					7.9E+02	7.9E+00			2.7E+00	2.7E-02			2.7E+00	2.7E-02		
Warfarin	000081-81-2			2.6E+03	2.5E+04	2.5E+03	2.6E+02			9.6E+02	9.6E+01							9.3E+02	9.3E+01
White Phosphorus	007723-14-0			1.8E+02	1.6E+03	1.6E+02	1.8E+01			2.6E+02	2.6E+01							2.2E+02	2.2E+01
Xylene, Mixture ⁽⁹⁾	001330-20-7			1.0E+06	1.0E+06	1.0E+06	1.0E+06			1.0E+06	1.0E+06							1.0E+06	1.0E+06
Xylene, p- ⁽⁹⁾	000106-42-3																		
Xylene, m- ⁽⁹⁾	000108-38-3			1.0E+06	1.0E+06	1.0E+06	1.0E+06			1.0E+06	1.0E+06							1.0E+06	9.7E+05
Xylene, o- ⁽⁹⁾	000095-47-6			1.0E+06	1.0E+06	1.0E+06	1.0E+06			1.0E+06	1.0E+06							1.0E+06	9.7E+05
Zinc (Metallic)	007440-66-6			1.0E+06	1.0E+06	1.0E+06	2.6E+05			1.0E+06	3.9E+05							1.0E+06	3.3E+05
Zinc Cyanide	000557-21-1			4.4E+05	1.0E+06	4.1E+05	4.4E+04			6.4E+05	6.4E+04							5.6E+05	5.6E+04
Zinc Phosphide	001314-84-7			2.6E+03	2.5E+04	2.5E+03	2.6E+02			3.9E+03	3.9E+02							3.3E+03	3.3E+02
Zincb	012122-67-7			4.4E+05	1.0E+06	4.1E+05	4.4E+04			1.6E+05	1.6E+04							1.5E+05	1.5E+04
Zirconium	007440-67-7																		

Notes:

- * By definition, 1 kg = 1.0E + 06 mg. Therefore, a limit of 1.0E + 06 mg/kg was used for any PRG that was calculated to be above this limit.
- † If slope factors and/or reference doses were available for only one pathway (i.e., ingestion, dermal, OR inhalation), the total for ingestion plus inhalation plus dermal was not calculated.
- ‡ The volatilization factor 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 volatilization factor 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) The same oral slope factor as used for polychlorinated biphenyls.
- (2) The PRG was calculated considering *Supplemental Guidance from RAGS: Region 4 Bulletins, Human Health Risk Assessment* (Interim 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;

Table 3.4c. (continued)

- (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.
- (3) The toxicity values for trichloroethylene have been withdrawn from IRIS and HEAST pending further investigation. However, the most recent toxicity values have been used to calculate the PRG.
- (4) The PRG was calculated considering *Supplemental Guidance from RAGS: Region 4 Bulletins, Human Health Risk Assessment* (Interim Guidance) from EPA (November 1995). The slope factors for chemicals so marked indicate that a TEF methodology was used for chlorinated dioxin and furan congeners based on each compound's relative potency to the potency of 2,3,7,8-tetrachlorodibenzodioxin (TCDD). The following TEFs were used to convert each slope factor to an equivalent slope factor of 2,3,7,8-TCDD: (1) 2,3,7,8-TCDD, TEF = 1.0; (2) 2,3,7,8-PeCDD, TEF = 0.5; (3) 2,3,7,8-HxCDD, TEF = 0.1; (4) 2,3,7,8-HpCDD, TEF = 0.01; (5) OCDD, TEF = 0.001; (6) 2,3,7,8-TCDF, TEF = 0.1; (7) 1,2,3,7,8-PeCDF, TEF = 0.5; (8) 2,3,4,7,8-PeCDF, TEF = 0.05; (9) 2,3,7,8-HxCDF, TEF = 0.1; (10) 2,3,7,8-HpCDF, TEF = 0.01; and (11) OCDF, TEF = 0.001.
- (5) Toxicity values for these chemicals have been withdrawn from IRIS and HEAST pending further investigation. However, the most recent toxicity values have been used to calculate the PRG.
- (6) Toxicity values for these chemicals were obtained from the Superfund Health Risk Technical Support Center.

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

| Chemical [†] | CASRN | Ingestion
(pCi/g) | | Inhalation
(pCi/g) | | External Exposure
(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 | 2.3E+06 | 2.3E+04 | 6.2E+04 | 6.2E+02 | 3.4E+04 | 3.4E+02 |
| Ac-227 | 014952-40-0 | 2.5E+04 | 2.5E+02 | 1.3E+05 | 1.3E+03 | 2.1E+07 | 2.1E+05 | 3.0E+04 | 3.0E+02 |
| Ac-227+D | 014952-40-0 | 1.4E+04 | 1.4E+02 | 1.2E+05 | 1.2E+03 | 8.2E+02 | 8.2E+00 | 7.8E+02 | 7.8E+00 |
| Ac-228 | 014331-83-0 | 5.5E+06 | 5.5E+04 | 2.9E+08 | 2.9E+06 | 1.5E+02 | 1.5E+00 | 1.5E+02 | 1.5E+00 |
| Ag-105 | 014928-14-4 | 5.5E+06 | 5.5E+04 | 4.1E+09 | 4.1E+07 | | | 6.5E+06 | 6.5E+04 |
| Ag-108 | 014391-65-2 | 1.3E+09 | 1.3E+07 | 1.0E+12 | 1.0E+10 | 8.4E+03 | 8.4E+01 | 8.4E+03 | 8.4E+01 |
| Ag-108m | 014391-65-2 | 1.5E+06 | 1.5E+04 | 1.4E+08 | 1.4E+06 | 8.7E+01 | 8.7E-01 | 8.7E+01 | 8.7E-01 |
| Ag-108m+D | 014391-65-2 | 1.5E+06 | 1.5E+04 | 1.4E+08 | 1.4E+06 | 8.7E+01 | 8.7E-01 | 8.7E+01 | 8.7E-01 |
| Ag-109m | 014378-38-2 | 3.3E+10 | 3.3E+08 | 2.8E+13 | 2.8E+11 | 4.2E+05 | 4.2E+03 | 4.2E+05 | 4.2E+03 |
| Ag-110 | 014391-76-5 | 3.6E+09 | 3.6E+07 | 3.0E+12 | 3.0E+10 | 4.3E+03 | 4.3E+01 | 4.3E+03 | 4.3E+01 |
| Ag-110m | 014391-76-5 | 1.1E+06 | 1.1E+04 | 3.0E+08 | 3.0E+06 | 4.6E+01 | 4.6E-01 | 4.6E+01 | 4.6E-01 |
| Ag-111 | 015760-04-0 | 1.3E+06 | 1.3E+04 | 1.8E+09 | 1.8E+07 | 5.7E+03 | 5.7E+01 | 5.7E+03 | 5.7E+01 |
| Am-241 | 014596-10-2 | 2.7E+04 | 2.7E+02 | 2.5E+05 | 2.5E+03 | 1.1E+05 | 1.1E+03 | 2.5E+04 | 2.5E+02 |
| Am-242 | 013981-54-9 | 6.0E+06 | 6.0E+04 | 9.2E+08 | 9.2E+06 | 8.4E+04 | 8.4E+02 | 8.4E+04 | 8.4E+02 |
| Am-242m | 013981-54-9 | 3.0E+04 | 3.0E+02 | 2.7E+05 | 2.7E+03 | 5.6E+06 | 5.6E+04 | 3.6E+04 | 3.6E+02 |
| Am-243 | 014993-75-0 | 2.7E+04 | 2.7E+02 | 2.5E+05 | 2.5E+03 | 2.0E+04 | 2.0E+02 | 1.2E+04 | 1.2E+02 |
| Am-243+D | 014993-75-0 | 2.7E+04 | 2.7E+02 | 2.5E+05 | 2.5E+03 | 1.8E+03 | 1.8E+01 | 1.7E+03 | 1.7E+01 |

Table 3.4d. (continued)

| Chemical [†] | CASRN | Ingestion
(pCi/g) | | Inhalation
(pCi/g) | | External Exposure
(pCi/g) ^{††} | | Ingestion + Inhalation
+ External Exposure
(pCi/g) ^{†††} | |
|-----------------------|-------------|----------------------|------------------|-----------------------|------------------|--|------------------|---|------------------|
| | | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ |
| Ar-41 | 014163-25-8 | | | 2.0E+13 | 2.0E+11 | | | | |
| At-217 | 017239-90-6 | 9.9E+11 | 9.9E+09 | 1.9E+13 | 1.9E+11 | 5.6E+05 | 5.6E+03 | 5.6E+05 | 5.6E+03 |
| Au-196 | 014914-16-0 | 6.8E+06 | 6.8E+04 | 9.2E+09 | 9.2E+07 | 3.5E+02 | 3.5E+00 | 3.5E+02 | 3.5E+00 |
| Au-198 | 010043-49-0 | 1.7E+06 | 1.7E+04 | 2.6E+09 | 2.6E+07 | 3.6E+02 | 3.6E+00 | 3.6E+02 | 3.6E+00 |
| Ba-131 | 014914-75-1 | 5.2E+06 | 5.2E+04 | 2.0E+10 | 2.0E+08 | 3.8E+02 | 3.8E+00 | 3.8E+02 | 3.8E+00 |
| Ba-133 | 013981-41-4 | 3.3E+06 | 3.3E+04 | 2.4E+09 | 2.4E+07 | 5.3E+02 | 5.3E+00 | 5.3E+02 | 5.3E+00 |
| Ba-133m | 013981-41-4 | 3.2E+06 | 3.2E+04 | 1.7E+10 | 1.7E+08 | 4.9E+03 | 4.9E+01 | 4.9E+03 | 4.9E+01 |
| Ba-137m | 013981-97-0 | 3.7E+09 | 3.7E+07 | 6.1E+12 | 6.1E+10 | 2.2E+02 | 2.2E+00 | 2.2E+02 | 2.2E+00 |
| Ba-139 | 014378-25-7 | 2.9E+07 | 2.9E+05 | 6.2E+10 | 6.2E+08 | 5.8E+03 | 5.8E+01 | 5.8E+03 | 5.8E+01 |
| Ba-140 | 014798-08-4 | 7.5E+05 | 7.5E+03 | 3.0E+09 | 3.0E+07 | 8.1E+02 | 8.1E+00 | 8.1E+02 | 8.1E+00 |
| Be-7 | 013966-02-4 | 1.0E+08 | 1.0E+06 | 5.3E+10 | 5.3E+08 | 2.8E+03 | 2.8E+01 | 2.8E+03 | 2.8E+01 |
| Bi-206 | 015776-19-9 | 1.3E+06 | 1.3E+04 | 1.9E+09 | 1.9E+07 | 4.1E+01 | 4.1E-01 | 4.1E+01 | 4.1E-01 |
| Bi-207 | 013982-38-2 | 1.8E+06 | 1.8E+04 | 1.0E+09 | 1.0E+07 | 8.9E+01 | 8.9E-01 | 8.9E+01 | 8.9E-01 |
| Bi-210 | 014331-79-4 | 1.2E+06 | 1.2E+04 | 1.9E+08 | 1.9E+06 | | | 1.5E+06 | 1.5E+04 |
| Bi-211 | 015229-37-5 | 4.9E+08 | 4.9E+06 | 5.5E+09 | 5.5E+07 | 3.3E+03 | 3.3E+01 | 3.3E+03 | 3.3E+01 |
| Bi-212 | 014913-49-6 | 1.4E+07 | 1.4E+05 | 2.6E+08 | 2.6E+06 | 7.3E+02 | 7.3E+00 | 7.3E+02 | 7.3E+00 |
| Bi-213 | 015776-20-2 | 2.0E+07 | 2.0E+05 | 3.1E+08 | 3.1E+06 | 1.1E+03 | 1.1E+01 | 1.1E+03 | 1.1E+01 |

Radionuclides/soil/recreational

Table 3.4d. (continued)

| Chemical [†] | CASRN | Ingestion
(pCi/g) | | Inhalation
(pCi/g) | | External Exposure
(pCi/g) ^{††} | | Ingestion + Inhalation
+ External Exposure
(pCi/g) ^{†††} | |
|-----------------------|-------------|----------------------|------------------|-----------------------|------------------|--|------------------|---|------------------|
| | | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ |
| Bi-214 | 014733-03-0 | 4.6E+07 | 4.6E+05 | 6.5E+08 | 6.5E+06 | 8.1E+01 | 8.1E-01 | 8.1E+01 | 8.1E-01 |
| Br-82 | 014686-69-2 | 6.3E+06 | 6.3E+04 | 1.2E+10 | 1.2E+08 | 4.8E+01 | 4.8E-01 | 4.8E+01 | 4.8E-01 |
| C-11 | 014333-33-6 | 2.0E+08 | 2.0E+06 | 2.8E+11 | 2.8E+09 | 1.3E+02 | 1.3E+00 | 1.3E+02 | 1.3E+00 |
| C-14 | 014762-75-5 | 8.6E+06 | 8.6E+04 | 1.4E+12 | 1.4E+10 | | | 1.0E+07 | 1.0E+05 |
| C-15 | 015929-23-4 | 1.3E+10 | 1.3E+08 | 1.2E+13 | 1.2E+11 | | | 1.6E+10 | 1.6E+08 |
| Ca-45 | 013966-05-7 | 4.4E+06 | 4.4E+04 | 3.8E+09 | 3.8E+07 | 1.3E+14 | 1.3E+12 | 5.3E+06 | 5.3E+04 |
| Ca-47 | 001439-99-2 | 1.3E+06 | 1.3E+04 | 1.8E+09 | 1.8E+07 | 1.2E+02 | 1.2E+00 | 1.2E+02 | 1.2E+00 |
| Cd-109 | 014109-32-1 | 1.1E+06 | 1.1E+04 | 5.1E+08 | 5.1E+06 | 8.7E+05 | 8.7E+03 | 5.2E+05 | 5.2E+03 |
| Cd-115 | 014336-68-6 | 1.2E+06 | 1.2E+04 | 1.9E+09 | 1.9E+07 | 6.9E+02 | 6.9E+00 | 6.9E+02 | 6.9E+00 |
| Cd-115m | 014336-68-6 | 6.3E+05 | 6.3E+03 | 5.6E+08 | 5.6E+06 | 5.7E+03 | 5.7E+01 | 5.6E+03 | 5.6E+01 |
| Ce-141 | 013967-74-3 | 2.3E+06 | 2.3E+04 | 2.2E+09 | 2.2E+07 | 3.5E+03 | 3.5E+01 | 3.4E+03 | 3.4E+01 |
| Ce-143 | 014119-19-8 | 1.5E+06 | 1.5E+04 | 2.5E+09 | 2.5E+07 | 6.6E+02 | 6.6E+00 | 6.6E+02 | 6.6E+00 |
| Ce-144 | 014762-78-8 | 3.0E+05 | 3.0E+03 | 8.8E+07 | 8.8E+05 | 1.9E+04 | 1.9E+02 | 1.8E+04 | 1.8E+02 |
| Ce-144+D | 014762-78-8 | 3.0E+05 | 3.0E+03 | 8.8E+07 | 8.8E+05 | 3.1E+03 | 3.1E+01 | 3.1E+03 | 3.1E+01 |
| Cl-36 | 013981-43-6 | 4.0E+06 | 4.0E+04 | 7.3E+09 | 7.3E+07 | | | 4.8E+06 | 4.8E+04 |
| Cl-38 | 014158-34-0 | 4.3E+07 | 4.3E+05 | 5.8E+10 | 5.8E+08 | 7.5E+01 | 7.5E-01 | 7.5E+01 | 7.5E-01 |
| Cm-242 | 015510-73-3 | 2.3E+05 | 2.3E+03 | 3.0E+06 | 3.0E+04 | 2.1E+07 | 2.1E+05 | 2.7E+05 | 2.7E+03 |

Table 3.4d. (continued)

| Chemical [†] | CASRN | Ingestion
(pCi/g) | | Inhalation
(pCi/g) | | External Exposure
(pCi/g) ^{††} | | Ingestion + Inhalation
+ External Exposure
(pCi/g) ^{†††} | |
|-----------------------|-------------|----------------------|------------------|-----------------------|------------------|--|------------------|---|------------------|
| | | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ |
| Cm-243 | 015757-87-6 | 3.5E+04 | 3.5E+02 | 3.3E+05 | 3.3E+03 | 2.8E+03 | 2.8E+01 | 2.7E+03 | 2.7E+01 |
| Cm-243+D | 015757-87-6 | 3.5E+04 | 3.5E+02 | 3.3E+05 | 3.3E+03 | 2.8E+03 | 2.8E+01 | 2.7E+03 | 2.7E+01 |
| Cm-244 | 013981-15-2 | 4.2E+04 | 4.2E+02 | 3.9E+05 | 3.9E+03 | 2.4E+07 | 2.4E+05 | 5.0E+04 | 5.0E+02 |
| Cm-245 | 015621-76-8 | 2.7E+04 | 2.7E+02 | 2.4E+05 | 2.4E+03 | 8.8E+03 | 8.8E+01 | 6.9E+03 | 6.9E+01 |
| Cm-246 | 015757-90-1 | 2.7E+04 | 2.7E+02 | 2.4E+05 | 2.4E+03 | 2.7E+07 | 2.7E+05 | 3.2E+04 | 3.2E+02 |
| Cm-247 | 015758-32-4 | 2.9E+04 | 2.9E+02 | 2.7E+05 | 2.7E+03 | 4.7E+02 | 4.7E+00 | 4.7E+02 | 4.7E+00 |
| Cm-248 | 015758-33-5 | 6.8E+03 | 6.8E+01 | 6.5E+04 | 6.5E+02 | 3.3E+07 | 3.3E+05 | 8.1E+03 | 8.1E+01 |
| Co-57 | 013981-50-5 | 9.2E+06 | 9.2E+04 | 3.3E+09 | 3.3E+07 | 2.4E+03 | 2.4E+01 | 2.4E+03 | 2.4E+01 |
| Co-58 | 013981-38-9 | 3.2E+06 | 3.2E+04 | 1.8E+09 | 1.8E+07 | 1.3E+02 | 1.3E+00 | 1.3E+02 | 1.3E+00 |
| Co-58m | 013981-38-9 | 9.4E+07 | 9.4E+05 | 1.1E+11 | 1.1E+09 | 1.5E+07 | 1.5E+05 | 1.3E+07 | 1.3E+05 |
| Co-60 | 010198-40-0 | 4.7E+05 | 4.7E+03 | 1.4E+08 | 1.4E+06 | 5.0E+01 | 5.0E-01 | 5.0E+01 | 5.0E-01 |
| Cr-51 | 014392-02-0 | 6.4E+07 | 6.4E+05 | 5.5E+10 | 5.5E+08 | 4.8E+03 | 4.8E+01 | 4.8E+03 | 4.8E+01 |
| Cs-131 | 014914-76-2 | 4.9E+07 | 4.9E+05 | 9.0E+10 | 9.0E+08 | 2.1E+05 | 2.1E+03 | 2.1E+05 | 2.1E+03 |
| Cs-134 | 013967-70-9 | 1.9E+05 | 1.9E+03 | 3.3E+08 | 3.3E+06 | 8.3E+01 | 8.3E-01 | 8.3E+01 | 8.3E-01 |
| Cs-134m | 013967-70-9 | 2.0E+08 | 2.0E+06 | 3.1E+11 | 3.1E+09 | 2.5E+04 | 2.5E+02 | 2.5E+04 | 2.5E+02 |
| Cs-135 | 015726-30-4 | 2.0E+06 | 2.0E+04 | 3.5E+09 | 3.5E+07 | | | 2.4E+06 | 2.4E+04 |
| Cs-136 | 014234-29-8 | 1.1E+06 | 1.1E+04 | 2.0E+09 | 2.0E+07 | 6.0E+01 | 6.0E-01 | 6.0E+01 | 6.0E-01 |

Radionuclides/soil/recreational

Table 3.4d. (continued)

| Chemical ^t | CASRN | Ingestion
(pCi/g) | | Inhalation
(pCi/g) | | External Exposure
(pCi/g) ^{tt} | | Ingestion + Inhalation
+ External Exposure
(pCi/g) ^{ttt} | |
|-----------------------|-------------|----------------------|------------------|-----------------------|------------------|--|------------------|---|------------------|
| | | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ |
| Cs-137 | 010045-97-3 | 2.8E+05 | 2.8E+03 | 5.0E+08 | 5.0E+06 | | | 3.4E+05 | 3.4E+03 |
| Cs-137+D | 010045-97-3 | 2.8E+05 | 2.8E+03 | 5.0E+08 | 5.0E+06 | 2.3E+02 | 2.3E+00 | 2.3E+02 | 2.3E+00 |
| Cs-138 | 015758-29-9 | 5.1E+07 | 5.1E+05 | 7.3E+10 | 7.3E+08 | 5.1E+01 | 5.1E-01 | 5.1E+01 | 5.1E-01 |
| Cu-64 | 013981-25-4 | 1.7E+07 | 1.7E+05 | 2.3E+10 | 2.3E+08 | 7.2E+02 | 7.2E+00 | 7.2E+02 | 7.2E+00 |
| Dy-165 | 013967-64-1 | 2.7E+07 | 2.7E+05 | 4.3E+10 | 4.3E+08 | 7.9E+03 | 7.9E+01 | 7.9E+03 | 7.9E+01 |
| Dy-166 | 015840-01-4 | 9.4E+05 | 9.4E+03 | 1.2E+09 | 1.2E+07 | 1.8E+04 | 1.8E+02 | 1.8E+04 | 1.8E+02 |
| Er-169 | 015840-13-8 | 4.2E+06 | 4.2E+04 | 6.3E+09 | 6.3E+07 | 7.5E+07 | 7.5E+05 | 4.7E+06 | 4.7E+04 |
| Er-171 | 014391-45-8 | 5.5E+06 | 5.5E+04 | 1.3E+10 | 1.3E+08 | 4.7E+02 | 4.7E+00 | 4.7E+02 | 4.7E+00 |
| Eu-152 | 014683-23-9 | 1.6E+06 | 1.6E+04 | 1.2E+08 | 1.2E+06 | 1.2E+02 | 1.2E+00 | 1.2E+02 | 1.2E+00 |
| Eu-154 | 015585-10-1 | 9.5E+05 | 9.5E+03 | 1.0E+08 | 1.0E+06 | 1.0E+02 | 1.0E+00 | 1.0E+02 | 1.0E+00 |
| Eu-155 | 014391-16-3 | 5.4E+06 | 5.4E+04 | 9.9E+08 | 9.9E+06 | 8.0E+03 | 8.0E+01 | 8.0E+03 | 8.0E+01 |
| Eu-156 | 014280-35-4 | 8.2E+05 | 8.2E+03 | 1.0E+09 | 1.0E+07 | 9.0E+01 | 9.0E-01 | 9.0E+01 | 9.0E-01 |
| F-18 | 013981-56-1 | 8.2E+07 | 8.2E+05 | 1.5E+11 | 1.5E+09 | 1.4E+02 | 1.4E+00 | 1.4E+02 | 1.4E+00 |
| Fe-55 | 014681-59-5 | 2.5E+07 | 2.5E+05 | 1.7E+10 | 1.7E+08 | | | 3.0E+07 | 3.0E+05 |
| Fe-59 | 014596-12-4 | 1.5E+06 | 1.5E+04 | 1.3E+09 | 1.3E+07 | 1.1E+02 | 1.1E+00 | 1.1E+02 | 1.1E+00 |
| Fr-221 | 015756-41-9 | 6.1E+07 | 6.1E+05 | 1.2E+09 | 1.2E+07 | 7.2E+03 | 7.2E+01 | 7.2E+03 | 7.2E+01 |
| Fr-223 | 015756-98-6 | 2.0E+07 | 2.0E+05 | 1.6E+10 | 1.6E+08 | 1.2E+04 | 1.2E+02 | 1.2E+04 | 1.2E+02 |

Radionuclides/soil/recreational

Table 3.4d. (continued)

| Chemical [†] | CASRN | Ingestion
(pCi/g) | | Inhalation
(pCi/g) | | External Exposure
(pCi/g) ^{††} | | Ingestion + Inhalation
+ External Exposure
(pCi/g) ^{†††} | |
|-----------------------|-------------|----------------------|------------------|-----------------------|------------------|--|------------------|---|------------------|
| | | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ |
| Ga-67 | 014119-09-6 | 1.1E+07 | 1.1E+05 | 1.9E+10 | 1.9E+08 | 1.3E+03 | 1.3E+01 | 1.3E+03 | 1.3E+01 |
| Ga-72 | 013982-22-4 | 1.9E+06 | 1.9E+04 | 4.4E+09 | 4.4E+07 | 4.3E+01 | 4.3E-01 | 4.3E+01 | 4.3E-01 |
| Gd-153 | 014276-65-4 | 6.7E+06 | 6.7E+04 | 3.0E+09 | 3.0E+07 | 6.7E+03 | 6.7E+01 | 6.7E+03 | 6.7E+01 |
| Gd-159 | 014041-42-0 | 3.4E+06 | 3.4E+04 | 7.7E+09 | 7.7E+07 | 5.1E+03 | 5.1E+01 | 5.1E+03 | 5.1E+01 |
| Ge-71 | 014374-81-3 | 7.5E+08 | 7.5E+06 | 1.6E+11 | 1.6E+09 | 3.1E+07 | 3.1E+05 | 3.0E+07 | 3.0E+05 |
| H-3 | 010028-17-8 | 1.2E+08 | 1.2E+06 | 9.9E+10 | 9.9E+08 | | | 1.5E+08 | 1.5E+06 |
| Hg-197 | 013981-51-6 | 7.5E+06 | 7.5E+04 | 1.4E+10 | 1.4E+08 | 8.9E+03 | 8.9E+01 | 8.9E+03 | 8.9E+01 |
| Hg-203 | 013982-78-0 | 3.4E+06 | 3.4E+04 | 3.1E+09 | 3.1E+07 | 7.8E+02 | 7.8E+00 | 7.8E+02 | 7.8E+00 |
| Ho-166 | 013967-65-2 | 1.2E+06 | 1.2E+04 | 2.3E+09 | 2.3E+07 | 7.0E+03 | 7.0E+01 | 7.0E+03 | 7.0E+01 |
| I-122 | 018287-75-7 | 4.1E+08 | 4.1E+06 | 4.3E+11 | 4.3E+09 | 1.4E+02 | 1.4E+00 | 1.4E+02 | 1.4E+00 |
| I-123 | 015715-08-9 | 1.6E+07 | 1.6E+05 | 3.2E+10 | 3.2E+08 | 1.9E+03 | 1.9E+01 | 1.9E+03 | 1.9E+01 |
| I-125 | 014158-31-7 | 3.4E+05 | 3.4E+03 | 5.6E+08 | 5.6E+06 | 2.0E+05 | 2.0E+03 | 1.4E+05 | 1.4E+03 |
| I-126 | 014158-32-8 | 1.8E+05 | 1.8E+03 | 3.0E+08 | 3.0E+06 | 3.3E+02 | 3.3E+00 | 3.3E+02 | 3.3E+00 |
| I-129 | 015046-84-1 | 4.8E+04 | 4.8E+02 | 7.8E+07 | 7.8E+05 | 1.8E+05 | 1.8E+03 | 4.4E+04 | 4.4E+02 |
| I-130 | 014914-02-4 | 1.8E+06 | 1.8E+04 | 3.6E+09 | 3.6E+07 | 6.1E+01 | 6.1E-01 | 6.1E+01 | 6.1E-01 |
| I-131 | 010043-66-0 | 2.5E+05 | 2.5E+03 | 4.1E+08 | 4.1E+06 | 3.9E+02 | 3.9E+00 | 3.9E+02 | 3.9E+00 |
| I-132 | 014683-16-0 | 1.3E+07 | 1.3E+05 | 2.7E+10 | 2.7E+08 | 5.6E+01 | 5.6E-01 | 5.6E+01 | 5.6E-01 |

Table 3.4d. (continued)

| Chemical [†] | CASRN | Ingestion
(pCi/g) | | Inhalation
(pCi/g) | | External Exposure
(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-133 | 014834-67-4 | 8.4E+05 | 8.4E+03 | 1.6E+09 | 1.6E+07 | 2.2E+02 | 2.2E+00 | 2.2E+02 | 2.2E+00 |
| I-134 | 014914-27-3 | 3.8E+07 | 3.8E+05 | 6.9E+10 | 6.9E+08 | 4.8E+01 | 4.8E-01 | 4.8E+01 | 4.8E-01 |
| I-135 | 014834-68-5 | 3.9E+06 | 3.9E+04 | 8.1E+09 | 8.1E+07 | 7.8E+01 | 7.8E-01 | 7.8E+01 | 7.8E-01 |
| In-113m | 014885-78-0 | 1.1E+08 | 1.1E+06 | 1.7E+11 | 1.7E+09 | 6.2E+02 | 6.2E+00 | 6.2E+02 | 6.2E+00 |
| In-114 | 013981-55-0 | 2.0E+09 | 2.0E+07 | 1.6E+12 | 1.6E+10 | 4.3E+03 | 4.3E+01 | 4.3E+03 | 4.3E+01 |
| In-114m | 013981-55-0 | 4.3E+05 | 4.3E+03 | 3.8E+08 | 3.8E+06 | 2.4E+03 | 2.4E+01 | 2.4E+03 | 2.4E+01 |
| In-115 | 014191-71-0 | 2.5E+05 | 2.5E+03 | 4.6E+07 | 4.6E+05 | | | 3.1E+05 | 3.1E+03 |
| In-115m | 014191-71-0 | 2.6E+07 | 2.6E+05 | 5.4E+10 | 5.4E+08 | 1.1E+03 | 1.1E+01 | 1.1E+03 | 1.1E+01 |
| Ir-190 | 014981-91-0 | 1.8E+06 | 1.8E+04 | 2.1E+09 | 2.1E+07 | 1.0E+02 | 1.0E+00 | 1.0E+02 | 1.0E+00 |
| Ir-194 | 014158-35-1 | 1.3E+06 | 1.3E+04 | 2.3E+09 | 2.3E+07 | 1.5E+03 | 1.5E+01 | 1.5E+03 | 1.5E+01 |
| K-40 | 013966-00-2 | 7.1E+05 | 7.1E+03 | 1.3E+09 | 1.3E+07 | 8.0E+02 | 8.0E+00 | 8.0E+02 | 8.0E+00 |
| K-42 | 014378-21-3 | 6.9E+06 | 6.9E+04 | 1.3E+10 | 1.3E+08 | 4.5E+02 | 4.5E+00 | 4.5E+02 | 4.5E+00 |
| Kr-83m | 013965-98-5 | | | 2.7E+14 | 2.7E+12 | | | | |
| Kr-85 | 013983-27-2 | | | 3.3E+13 | 3.3E+11 | | | | |
| Kr-85m | 013983-27-2 | | | 3.5E+13 | 3.5E+11 | | | | |
| Kr-87 | 014809-68-8 | | | 7.9E+12 | 7.9E+10 | | | | |
| Kr-88 | 014995-61-0 | | | 4.3E+12 | 4.3E+10 | | | | |

Radionuclides/soil/recreational

Table 3.4d. (continued)

| Chemical [†] | CASRN | Ingestion
(pCi/g) | | Inhalation
(pCi/g) | | External Exposure
(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-89 | 016316-03-3 | | | 5.9E+12 | 5.9E+10 | | | | |
| Kr-90 | 015741-13-6 | | | 6.0E+12 | 6.0E+10 | | | | |
| La-140 | 013981-28-7 | 9.4E+05 | 9.4E+03 | 1.9E+09 | 1.9E+07 | 5.3E+01 | 5.3E-01 | 5.3E+01 | 5.3E-01 |
| Lu-177 | 014265-75-9 | 3.0E+06 | 3.0E+04 | 4.3E+09 | 4.3E+07 | 6.7E+03 | 6.7E+01 | 6.7E+03 | 6.7E+01 |
| Mn-52 | 014092-99-0 | 1.5E+06 | 1.5E+04 | 2.2E+09 | 2.2E+07 | 3.6E+01 | 3.6E-01 | 3.6E+01 | 3.6E-01 |
| Mn-54 | 013966-31-9 | 4.5E+06 | 4.5E+04 | 2.6E+09 | 2.6E+07 | 1.5E+02 | 1.5E+00 | 1.5E+02 | 1.5E+00 |
| Mn-56 | 014681-52-8 | 1.0E+07 | 1.0E+05 | 1.8E+10 | 1.8E+08 | 7.0E+01 | 7.0E-01 | 7.0E+01 | 7.0E-01 |
| Mo-99 | 014119-15-4 | 3.9E+06 | 3.9E+04 | 2.1E+09 | 2.1E+07 | 8.9E+02 | 8.9E+00 | 8.9E+02 | 8.9E+00 |
| Na-22 | 013966-32-0 | 1.1E+06 | 1.1E+04 | 2.0E+09 | 2.0E+07 | 5.9E+01 | 5.9E-01 | 5.9E+01 | 5.9E-01 |
| Na-24 | 013982-04-2 | 6.4E+06 | 6.4E+04 | 1.3E+10 | 1.3E+08 | 2.7E+01 | 2.7E-01 | 2.7E+01 | 2.7E-01 |
| Nb-93m | 007440-03-1 | 1.3E+07 | 1.3E+05 | 2.2E+09 | 2.2E+07 | 1.3E+07 | 1.3E+05 | 7.3E+06 | 7.3E+04 |
| Nb-94 | 014681-63-1 | 1.3E+06 | 1.3E+04 | 1.2E+08 | 1.2E+06 | 8.0E+01 | 8.0E-01 | 8.0E+01 | 8.0E-01 |
| Nb-95 | 013967-76-5 | 4.0E+06 | 4.0E+04 | 3.1E+09 | 3.1E+07 | 1.7E+02 | 1.7E+00 | 1.7E+02 | 1.7E+00 |
| Nb-95m | 013967-76-5 | 2.9E+06 | 2.9E+04 | 4.2E+09 | 4.2E+07 | 5.6E+03 | 5.6E+01 | 5.6E+03 | 5.6E+01 |
| Nb-97 | 018496-04-3 | 5.1E+07 | 5.1E+05 | 4.5E+10 | 4.5E+08 | 2.0E+02 | 2.0E+00 | 2.0E+02 | 2.0E+00 |
| Nb-97m | 018496-04-3 | 2.7E+09 | 2.7E+07 | 2.9E+12 | 2.9E+10 | 1.8E+02 | 1.8E+00 | 1.8E+02 | 1.8E+00 |
| Nd-147 | 014269-74-0 | 1.5E+06 | 1.5E+04 | 2.0E+09 | 2.0E+07 | 1.5E+03 | 1.5E+01 | 1.5E+03 | 1.5E+01 |

Table 3.4d. (continued)

| Chemical ¹ | CASRN | Ingestion
(pCi/g) | | Inhalation
(pCi/g) | | External Exposure
(pCi/g) ^{††} | | Ingestion + Inhalation
+ External Exposure
(pCi/g) ^{†††} | |
|-----------------------|-------------|----------------------|------------------|-----------------------|------------------|--|------------------|---|------------------|
| | | 10 ⁻⁴ | 10 ⁻⁵ | 10 ⁻⁴ | 10 ⁻⁵ | 10 ⁻⁴ | 10 ⁻⁵ | 10 ⁻⁴ | 10 ⁻⁵ |
| Nd-149 | 015749-81-2 | 2.0E+07 | 2.0E+05 | 2.3E+10 | 2.3E+08 | 4.5E+02 | 4.5E+00 | 4.5E+02 | 4.5E+00 |
| Ni-59 | 014336-70-0 | 4.8E+07 | 4.8E+05 | 2.4E+10 | 2.4E+08 | | | 5.8E+07 | 5.8E+05 |
| Ni-63 | 013981-37-8 | 1.6E+07 | 1.6E+05 | 9.4E+09 | 9.4E+07 | | | 1.9E+07 | 1.9E+05 |
| Ni-65 | 014833-49-9 | 1.6E+07 | 1.6E+05 | 2.7E+10 | 2.7E+08 | 2.3E+02 | 2.3E+00 | 2.3E+02 | 2.3E+00 |
| Np-236 | 015700-36-4 | 9.5E+06 | 9.5E+04 | 2.5E+09 | 2.5E+07 | 5.3E+03 | 5.3E+01 | 5.3E+03 | 5.3E+01 |
| Np-237 | 013994-20-2 | 3.0E+04 | 3.0E+02 | 2.8E+05 | 2.8E+03 | 6.4E+04 | 6.4E+02 | 2.3E+04 | 2.3E+02 |
| Np-237+D | 013994-20-2 | 3.0E+04 | 3.0E+02 | 2.8E+05 | 2.8E+03 | 1.1E+03 | 1.1E+01 | 1.0E+03 | 1.0E+01 |
| Np-238 | 015766-25-3 | 1.9E+06 | 1.9E+04 | 2.0E+09 | 2.0E+07 | 2.5E+02 | 2.5E+00 | 2.5E+02 | 2.5E+00 |
| Np-239 | 013968-59-7 | 2.1E+06 | 2.1E+04 | 4.0E+09 | 4.0E+07 | 2.0E+03 | 2.0E+01 | 2.0E+03 | 2.0E+01 |
| Np-240 | 015690-84-3 | 5.0E+07 | 5.0E+05 | 7.3E+10 | 7.3E+08 | 1.3E+02 | 1.3E+00 | 1.3E+02 | 1.3E+00 |
| Np-240m | 015690-84-3 | 3.7E+08 | 3.7E+06 | 3.4E+11 | 3.4E+09 | 4.6E+02 | 4.6E+00 | 4.6E+02 | 4.6E+00 |
| Os-185 | 015766-50-4 | 4.9E+06 | 4.9E+04 | 2.1E+09 | 2.1E+07 | 2.0E+02 | 2.0E+00 | 2.0E+02 | 2.0E+00 |
| Os-191 | 014119-24-5 | 2.9E+06 | 2.9E+04 | 3.5E+09 | 3.5E+07 | 5.6E+03 | 5.6E+01 | 5.6E+03 | 5.6E+01 |
| Os-191m | 014119-24-5 | 1.8E+07 | 1.8E+05 | 2.9E+10 | 2.9E+08 | 1.5E+05 | 1.5E+03 | 1.5E+05 | 1.5E+03 |
| Os-193 | 016057-77-5 | 2.0E+06 | 2.0E+04 | 3.6E+09 | 3.6E+07 | 2.7E+03 | 2.7E+01 | 2.7E+03 | 2.7E+01 |
| P-32 | 014596-37-3 | 1.5E+06 | 1.5E+04 | 3.2E+09 | 3.2E+07 | | | 1.7E+06 | 1.7E+04 |
| P-33 | 015749-66-3 | 1.1E+07 | 1.1E+05 | 2.4E+10 | 2.4E+08 | | | 1.4E+07 | 1.4E+05 |

Table 3.4d. (continued)

| Chemical [†] | CASRN | Ingestion
(pCi/g) | | Inhalation
(pCi/g) | | External Exposure
(pCi/g) ^{††} | | Ingestion + Inhalation
+ External Exposure
(pCi/g) ^{†††} | |
|-----------------------|-------------|----------------------|------------------|-----------------------|------------------|--|------------------|---|------------------|
| | | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ |
| Pa-231 | 014331-85-2 | 6.0E+04 | 6.0E+02 | 3.9E+05 | 3.9E+03 | 1.8E+04 | 1.8E+02 | 1.4E+04 | 1.4E+02 |
| Pa-233 | 013981-14-1 | 1.9E+06 | 1.9E+04 | 1.9E+09 | 1.9E+07 | 1.1E+03 | 1.1E+01 | 1.1E+03 | 1.1E+01 |
| Pa-234 | 015100-28-4 | 4.2E+06 | 4.2E+04 | 7.3E+09 | 7.3E+07 | 7.4E+01 | 7.4E-01 | 7.4E+01 | 7.4E-01 |
| Pa-234m | 015100-28-4 | 1.9E+09 | 1.9E+07 | 1.5E+12 | 1.5E+10 | 1.2E+04 | 1.2E+02 | 1.2E+04 | 1.2E+02 |
| Pb-203 | 014687-25-3 | 8.6E+06 | 8.6E+04 | 3.1E+10 | 3.1E+08 | 7.6E+02 | 7.6E+00 | 7.6E+02 | 7.6E+00 |
| Pb-209 | 014119-30-3 | 4.3E+07 | 4.3E+05 | 1.4E+11 | 1.4E+09 | | | 5.1E+07 | 5.1E+05 |
| Pb-210 | 014255-04-0 | 1.3E+04 | 1.3E+02 | 5.7E+06 | 5.7E+04 | 4.3E+06 | 4.3E+04 | 1.6E+04 | 1.6E+02 |
| Pb-210+D | 014255-04-0 | 8.8E+03 | 8.8E+01 | 2.5E+06 | 2.5E+04 | 3.4E+06 | 3.4E+04 | 1.1E+04 | 1.1E+02 |
| Pb-211 | 015816-77-0 | 2.6E+07 | 2.6E+05 | 9.2E+08 | 9.2E+06 | 2.6E+03 | 2.6E+01 | 2.6E+03 | 2.6E+01 |
| Pb-212 | 015092-94-1 | 4.9E+05 | 4.9E+03 | 2.5E+08 | 2.5E+06 | 1.6E+03 | 1.6E+01 | 1.6E+03 | 1.6E+01 |
| Pb-214 | 015067-28-4 | 3.0E+07 | 3.0E+05 | 1.5E+09 | 1.5E+07 | 6.9E+02 | 6.9E+00 | 6.9E+02 | 6.9E+00 |
| Pd-100 | 015690-69-4 | 2.4E+06 | 2.4E+04 | 2.7E+09 | 2.7E+07 | | | 2.9E+06 | 2.9E+04 |
| Pd-101 | 015749-54-9 | 2.4E+07 | 2.4E+05 | 4.2E+10 | 4.2E+08 | | | 2.9E+07 | 2.9E+05 |
| Pd-103 | 014967-68-1 | 8.5E+06 | 8.5E+04 | 8.8E+09 | 8.8E+07 | 9.0E+05 | 9.0E+03 | 8.3E+05 | 8.3E+03 |
| Pd-107 | 017637-99-9 | 4.3E+07 | 4.3E+05 | 6.5E+09 | 6.5E+07 | | | 5.1E+07 | 5.1E+05 |
| Pd-109 | 014981-64-7 | 2.7E+06 | 2.7E+04 | 4.8E+09 | 4.8E+07 | 2.0E+05 | 2.0E+03 | 1.9E+05 | 1.9E+03 |
| Pm-147 | 014380-75-7 | 6.3E+06 | 6.3E+04 | 1.3E+09 | 1.3E+07 | 7.7E+07 | 7.7E+05 | 6.9E+06 | 6.9E+04 |

Table 3.4d. (continued)

| Chemical [†] | CASRN | Ingestion
(pCi/g) | | Inhalation
(pCi/g) | | External Exposure
(pCi/g) ^{††} | | Ingestion + Inhalation
+ External Exposure
(pCi/g) ^{†††} | |
|-----------------------|-------------|----------------------|------------------|-----------------------|------------------|--|------------------|---|------------------|
| | | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ |
| Pm-148 | 014683-19-3 | 6.2E+05 | 6.2E+03 | 9.1E+08 | 9.1E+06 | 2.2E+02 | 2.2E+00 | 2.2E+02 | 2.2E+00 |
| Pm-148m | 014683-19-3 | 9.0E+05 | 9.0E+03 | 3.2E+08 | 3.2E+06 | 6.6E+01 | 6.6E-01 | 6.6E+01 | 6.6E-01 |
| Pm-149 | 015765-31-8 | 1.6E+06 | 1.6E+04 | 2.7E+09 | 2.7E+07 | 1.3E+04 | 1.3E+02 | 1.3E+04 | 1.3E+02 |
| Po-210 | 013981-52-7 | 2.7E+04 | 2.7E+02 | 4.4E+06 | 4.4E+04 | 1.5E+07 | 1.5E+05 | 3.3E+04 | 3.3E+02 |
| Po-212 | 015389-34-1 | 2.0E+17 | 2.0E+15 | 1.6E+18 | 1.6E+16 | | | 2.4E+17 | 2.4E+15 |
| Po-213 | 015756-57-7 | 1.3E+16 | 1.3E+14 | 1.2E+17 | 1.2E+15 | 4.1E+06 | 4.1E+04 | 4.1E+06 | 4.1E+04 |
| Po-214 | 015735-67-8 | 4.2E+14 | 4.2E+12 | 3.4E+15 | 3.4E+13 | 1.5E+06 | 1.5E+04 | 1.5E+06 | 1.5E+04 |
| Po-215 | 015706-52-2 | 1.8E+13 | 1.8E+11 | 2.1E+14 | 2.1E+12 | 9.5E+05 | 9.5E+03 | 9.5E+05 | 9.5E+03 |
| Po-216 | 015756-58-8 | 1.0E+11 | 1.0E+09 | 3.2E+12 | 3.2E+10 | 8.7E+06 | 8.7E+04 | 8.7E+06 | 8.7E+04 |
| Po-218 | 015422-24-9 | 1.7E+08 | 1.7E+06 | 2.6E+09 | 2.6E+07 | | | 2.1E+08 | 2.1E+06 |
| Pr-142 | 014191-64-1 | 1.3E+06 | 1.3E+04 | 2.3E+09 | 2.3E+07 | 2.1E+03 | 2.1E+01 | 2.1E+03 | 2.1E+01 |
| Pr-143 | 014981-79-4 | 1.3E+06 | 1.3E+04 | 1.7E+09 | 1.7E+07 | 1.4E+10 | 1.4E+08 | 1.6E+06 | 1.6E+04 |
| Pr-144 | 014119-05-2 | 1.1E+08 | 1.1E+06 | 7.3E+10 | 7.3E+08 | 3.7E+03 | 3.7E+01 | 3.7E+03 | 3.7E+01 |
| Pr-144m | 014119-05-2 | 2.8E+08 | 2.8E+06 | 1.7E+11 | 1.7E+09 | 2.6E+05 | 2.6E+03 | 2.6E+05 | 2.6E+03 |
| Pt-191 | 015706-36-2 | 5.9E+06 | 5.9E+04 | 2.3E+10 | 2.3E+08 | 7.2E+02 | 7.2E+00 | 7.2E+02 | 7.2E+00 |
| Pt-193 | 015735-70-3 | 5.5E+07 | 5.5E+05 | 1.2E+11 | 1.2E+09 | | | 6.6E+07 | 6.6E+05 |
| Pt-193m | 015735-70-3 | 3.5E+06 | 3.5E+04 | 1.7E+10 | 1.7E+08 | 6.5E+04 | 6.5E+02 | 6.4E+04 | 6.4E+02 |

Radionuclides/soil/recreational

Table 3.4d. (continued)

| Chemical [†] | CASRN | Ingestion
(pCi/g) | | Inhalation
(pCi/g) | | External Exposure
(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-197 | 015735-74-7 | 4.2E+06 | 4.2E+04 | 2.1E+10 | 2.1E+08 | 1.5E+04 | 1.5E+02 | 1.5E+04 | 1.5E+02 |
| Pt-197m | 015735-74-7 | 2.7E+07 | 2.7E+05 | 9.5E+10 | 9.5E+08 | 2.9E+03 | 2.9E+01 | 2.9E+03 | 2.9E+01 |
| Pu-236 | 015411-92-4 | 1.2E+05 | 1.2E+03 | 7.1E+05 | 7.1E+03 | 2.1E+07 | 2.1E+05 | 1.4E+05 | 1.4E+03 |
| Pu-238 | 013981-16-3 | 3.0E+04 | 3.0E+02 | 3.5E+05 | 3.5E+03 | 2.5E+07 | 2.5E+05 | 3.6E+04 | 3.6E+02 |
| Pu-239 | 015117-48-3 | 2.8E+04 | 2.8E+02 | 3.4E+05 | 3.4E+03 | 3.9E+07 | 3.9E+05 | 3.4E+04 | 3.4E+02 |
| Pu-240 | 014119-33-6 | 2.8E+04 | 2.8E+02 | 3.4E+05 | 3.4E+03 | 2.6E+07 | 2.6E+05 | 3.4E+04 | 3.4E+02 |
| Pu-241 | 014119-32-5 | 1.7E+06 | 1.7E+04 | 3.4E+07 | 3.4E+05 | | | 2.0E+06 | 2.0E+04 |
| Pu-241+D | 014119-32-5 | 2.7E+04 | 2.7E+02 | 2.5E+05 | 2.5E+03 | 1.1E+05 | 1.1E+03 | 2.4E+04 | 2.4E+02 |
| Pu-242 | 013982-10-0 | 3.0E+04 | 3.0E+02 | 3.6E+05 | 3.6E+03 | 3.1E+07 | 3.1E+05 | 3.5E+04 | 3.5E+02 |
| Pu-243 | 015706-37-3 | 2.4E+07 | 2.4E+05 | 3.6E+10 | 3.6E+08 | 2.6E+04 | 2.6E+02 | 2.6E+04 | 2.6E+02 |
| Pu-244 | 014119-34-7 | 2.8E+04 | 2.8E+02 | 3.6E+05 | 3.6E+03 | 3.8E+07 | 3.8E+05 | 3.4E+04 | 3.4E+02 |
| Pu-244+D | 014119-34-7 | 2.8E+04 | 2.8E+02 | 3.6E+05 | 3.6E+03 | 1.3E+02 | 1.3E+00 | 1.3E+02 | 1.3E+00 |
| Ra-223 | 015623-45-7 | 3.8E+04 | 3.8E+02 | 2.6E+06 | 2.6E+04 | 2.0E+03 | 2.0E+01 | 1.9E+03 | 1.9E+01 |
| Ra-224 | 013233-32-4 | 6.0E+04 | 6.0E+02 | 4.2E+06 | 4.2E+04 | 2.0E+04 | 2.0E+02 | 1.5E+04 | 1.5E+02 |
| Ra-224 ⁽¹⁾ | 013233-32-4 | 6.0E+04 | 6.0E+02 | 8.9E+04 | 8.9E+02 | 2.0E+04 | 2.0E+02 | 1.3E+04 | 1.3E+02 |
| Ra-225 | 013981-53-8 | 5.7E+04 | 5.7E+02 | 4.0E+06 | 4.0E+04 | 2.8E+05 | 2.8E+03 | 5.5E+04 | 5.5E+02 |
| Ra-226 | 013982-63-3 | 3.0E+04 | 3.0E+02 | 3.5E+06 | 3.5E+04 | 3.7E+04 | 3.7E+02 | 1.8E+04 | 1.8E+02 |

Table 3.4d. (continued)

| Chemical [†] | CASRN | Ingestion
(pCi/g) | | Inhalation
(pCi/g) | | External Exposure
(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-226 ⁽²⁾ | 013982-63-3 | 3.0E+04 | 3.0E+02 | 5.5E+01 | 5.5E-01 | 3.7E+04 | 3.7E+02 | 5.5E+01 | 5.5E-01 |
| Ra-226+D | 013982-63-3 | 3.0E+04 | 3.0E+02 | 3.5E+06 | 3.5E+04 | 7.2E+01 | 7.2E-01 | 7.2E+01 | 7.2E-01 |
| Ra-226+D ⁽²⁾ | 013982-63-3 | 3.0E+04 | 3.0E+02 | 5.5E+01 | 5.5E-01 | 7.2E+01 | 7.2E-01 | 3.1E+01 | 3.1E-01 |
| Ra-228 | 015262-20-1 | 3.6E+04 | 3.6E+02 | 9.9E+06 | 9.9E+04 | | | 4.3E+04 | 4.3E+02 |
| Ra-228+D | 015262-20-1 | 3.6E+04 | 3.6E+02 | 9.6E+06 | 9.6E+04 | 1.5E+02 | 1.5E+00 | 1.5E+02 | 1.5E+00 |
| Rb-82 | 014391-63-0 | 8.5E+08 | 8.5E+06 | 8.1E+11 | 8.1E+09 | 1.3E+02 | 1.3E+00 | 1.3E+02 | 1.3E+00 |
| Rb-86 | 014932-53-7 | 1.2E+06 | 1.2E+04 | 2.3E+09 | 2.3E+07 | 1.3E+03 | 1.3E+01 | 1.3E+03 | 1.3E+01 |
| Rb-87 | 013982-13-3 | 2.4E+06 | 2.4E+04 | 4.2E+09 | 4.2E+07 | | | 2.9E+06 | 2.9E+04 |
| Rb-88 | 014928-36-0 | 6.1E+07 | 6.1E+05 | 7.0E+10 | 7.0E+08 | 1.8E+02 | 1.8E+00 | 1.8E+02 | 1.8E+00 |
| Rb-89 | 014191-65-2 | 1.0E+08 | 1.0E+06 | 1.4E+11 | 1.4E+09 | 5.7E+01 | 5.7E-01 | 5.7E+01 | 5.7E-01 |
| Rh-103m | 007440-16-6 | 1.1E+09 | 1.1E+07 | 7.4E+11 | 7.4E+09 | 8.3E+06 | 8.3E+04 | 8.3E+06 | 8.3E+04 |
| Rh-105 | 014913-89-4 | 4.6E+06 | 4.6E+04 | 7.8E+09 | 7.8E+07 | 2.0E+03 | 2.0E+01 | 2.0E+03 | 2.0E+01 |
| Rh-105m | 014913-89-4 | 8.2E+09 | 8.2E+07 | 1.0E+13 | 1.0E+11 | 2.1E+04 | 2.1E+02 | 2.1E+04 | 2.1E+02 |
| Rh-106 | 014234-34-5 | 2.4E+09 | 2.4E+07 | 2.1E+12 | 2.1E+10 | 6.4E+02 | 6.4E+00 | 6.4E+02 | 6.4E+00 |
| Rn-219 | 014835-02-0 | | | 1.4E+11 | 1.4E+09 | 2.8E+03 | 2.8E+01 | 2.8E+03 | 2.8E+01 |
| Rn-220 | 022481-48-7 | | | 5.0E+10 | 5.0E+08 | 2.6E+05 | 2.6E+03 | 2.6E+05 | 2.6E+03 |
| Rn-222+D | 014859-67-7 | | | 1.3E+09 | 1.3E+07 | | | | |

Table 3.4d. (continued)

| Chemical [†] | CASRN | Ingestion
(pCi/g) | | Inhalation
(pCi/g) | | External Exposure
(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-103 | 013968-53-1 | 2.7E+06 | 2.7E+04 | 2.1E+09 | 2.1E+07 | 2.9E+02 | 2.9E+00 | 2.9E+02 | 2.9E+00 |
| Ru-105 | 014331-95-4 | 7.7E+06 | 7.7E+04 | 1.2E+10 | 1.2E+08 | 1.7E+02 | 1.7E+00 | 1.7E+02 | 1.7E+00 |
| Ru-106 | 013967-48-1 | 2.6E+05 | 2.6E+03 | 8.3E+07 | 8.3E+05 | | | 3.1E+05 | 3.1E+03 |
| Ru-106+D | 013967-48-1 | 2.6E+05 | 2.6E+03 | 8.3E+07 | 8.3E+05 | 6.4E+02 | 6.4E+00 | 6.4E+02 | 6.4E+00 |
| Ru-97 | 015758-35-7 | 1.5E+07 | 1.5E+05 | 2.3E+10 | 2.3E+08 | 1.1E+03 | 1.1E+01 | 1.1E+03 | 1.1E+01 |
| S-35 | 015117-53-0 | 2.1E+07 | 2.1E+05 | 5.1E+10 | 5.1E+08 | | | 2.6E+07 | 2.6E+05 |
| Sb-122 | 014374-79-9 | 1.0E+06 | 1.0E+04 | 1.7E+09 | 1.7E+07 | 3.0E+02 | 3.0E+00 | 3.0E+02 | 3.0E+00 |
| Sb-124 | 014683-10-4 | 8.3E+05 | 8.3E+03 | 7.2E+08 | 7.2E+06 | 6.6E+01 | 6.6E-01 | 6.6E+01 | 6.6E-01 |
| Sb-125 | 014234-35-6 | 3.0E+06 | 3.0E+04 | 1.8E+09 | 1.8E+07 | 3.6E+02 | 3.6E+00 | 3.6E+02 | 3.6E+00 |
| Sb-125+D | 014234-35-6 | 2.5E+06 | 2.5E+04 | 1.6E+09 | 1.6E+07 | 3.6E+02 | 3.6E+00 | 3.6E+02 | 3.6E+00 |
| Sb-126 | 015756-32-8 | 9.1E+05 | 9.1E+03 | 1.1E+09 | 1.1E+07 | 4.7E+01 | 4.7E-01 | 4.7E+01 | 4.7E-01 |
| Sb-126m | 015756-32-8 | 1.2E+08 | 1.2E+06 | 1.5E+11 | 1.5E+09 | 8.4E+01 | 8.4E-01 | 8.4E+01 | 8.4E-01 |
| Sb-127 | 013968-50-8 | 1.0E+06 | 1.0E+04 | 1.6E+09 | 1.6E+07 | 2.0E+02 | 2.0E+00 | 2.0E+02 | 2.0E+00 |
| Sb-129 | 014331-88-5 | 4.8E+06 | 4.8E+04 | 1.1E+10 | 1.1E+08 | 8.8E+01 | 8.8E-01 | 8.8E+01 | 8.8E-01 |
| Sc-46 | 013967-63-0 | 1.6E+06 | 1.6E+04 | 7.3E+08 | 7.3E+06 | 6.2E+01 | 6.2E-01 | 6.2E+01 | 6.2E-01 |
| Sc-47 | 014391-96-9 | 3.0E+06 | 3.0E+04 | 4.7E+09 | 4.7E+07 | 1.9E+03 | 1.9E+01 | 1.9E+03 | 1.9E+01 |
| Sc-48 | 014391-86-7 | 1.3E+06 | 1.3E+04 | 2.3E+09 | 2.3E+07 | 3.7E+01 | 3.7E-01 | 3.7E+01 | 3.7E-01 |

Table 3.4d. (continued)

| Chemical [†] | CASRN | Ingestion
(pCi/g) | | Inhalation
(pCi/g) | | External Exposure
(pCi/g) ^{††} | | Ingestion + Inhalation
+ External Exposure
(pCi/g) ^{†††} | |
|-----------------------|-------------|----------------------|------------------|-----------------------|------------------|--|------------------|---|------------------|
| | | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ |
| Se-75 | 014265-71-5 | 1.4E+06 | 1.4E+04 | 1.9E+09 | 1.9E+07 | 5.5E+02 | 5.5E+00 | 5.5E+02 | 5.5E+00 |
| Si-31 | 014276-49-4 | 1.8E+07 | 1.8E+05 | 2.9E+10 | 2.9E+08 | 1.4E+05 | 1.4E+03 | 1.4E+05 | 1.4E+03 |
| Sm-147 | 014392-33-7 | 3.5E+05 | 3.5E+03 | 1.4E+06 | 1.4E+04 | | | 4.2E+05 | 4.2E+03 |
| Sm-151 | 015715-94-3 | 1.9E+07 | 1.9E+05 | 2.1E+09 | 2.1E+07 | 1.7E+09 | 1.7E+07 | 2.3E+07 | 2.3E+05 |
| Sm-153 | 015766-00-4 | 2.2E+06 | 2.2E+04 | 4.4E+09 | 4.4E+07 | 1.0E+04 | 1.0E+02 | 1.0E+04 | 1.0E+02 |
| Sn-113 | 013966-06-8 | 2.4E+06 | 2.4E+04 | 1.4E+09 | 1.4E+07 | 1.6E+05 | 1.6E+03 | 1.6E+05 | 1.6E+03 |
| Sn-121 | 014683-06-8 | 7.3E+06 | 7.3E+04 | 1.6E+10 | 1.6E+08 | | | 8.7E+06 | 8.7E+04 |
| Sn-121m | 014683-06-8 | 4.4E+06 | 4.4E+04 | 1.3E+09 | 1.3E+07 | | | 5.3E+06 | 5.3E+04 |
| Sn-125 | 014683-08-0 | 5.3E+05 | 5.3E+03 | 8.0E+08 | 8.0E+06 | 4.0E+02 | 4.0E+00 | 4.0E+02 | 4.0E+00 |
| Sn-126 | 015832-50-5 | 4.2E+05 | 4.2E+03 | 2.2E+08 | 2.2E+06 | 1.5E+04 | 1.5E+02 | 1.4E+04 | 1.4E+02 |
| Sr-82 | 014809-50-8 | 3.4E+05 | 3.4E+03 | 1.1E+09 | 1.1E+07 | 5.4E+06 | 5.4E+04 | 3.8E+05 | 3.8E+03 |
| Sr-85 | 013967-73-2 | 6.3E+06 | 6.3E+04 | 8.4E+09 | 8.4E+07 | 3.2E+02 | 3.2E+00 | 3.2E+02 | 3.2E+00 |
| Sr-85m | 013967-73-2 | 4.9E+08 | 4.9E+06 | 1.3E+12 | 1.3E+10 | 9.3E+02 | 9.3E+00 | 9.3E+02 | 9.3E+00 |
| Sr-89 | 014158-27-1 | 8.6E+05 | 8.6E+03 | 2.6E+09 | 2.6E+07 | 9.0E+05 | 9.0E+03 | 4.8E+05 | 4.8E+03 |
| Sr-90 | 010098-97-2 | 2.2E+05 | 2.2E+03 | 1.6E+08 | 1.6E+06 | | | 2.6E+05 | 2.6E+03 |
| Sr-90+D | 010098-97-2 | 1.6E+05 | 1.6E+03 | 1.4E+08 | 1.4E+06 | | | 1.9E+05 | 1.9E+03 |
| Sr-91 | 014331-91-0 | 3.2E+06 | 3.2E+04 | 1.2E+10 | 1.2E+08 | 1.8E+02 | 1.8E+00 | 1.8E+02 | 1.8E+00 |

Table 3.4d. (continued)

| Chemical [†] | CASRN | Ingestion
(pCi/g) | | Inhalation
(pCi/g) | | External Exposure
(pCi/g) ^{††} | | Ingestion + Inhalation
+ External Exposure
(pCi/g) ^{†††} | |
|-----------------------|-------------|----------------------|------------------|-----------------------|------------------|--|------------------|---|------------------|
| | | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ |
| Sr-92 | 014928-29-1 | 4.4E+06 | 4.4E+04 | 2.0E+10 | 2.0E+08 | 9.4E+01 | 9.4E-01 | 9.4E+01 | 9.4E-01 |
| Ta-182 | 013982-00-8 | 1.3E+06 | 1.3E+04 | 5.8E+08 | 5.8E+06 | 1.0E+02 | 1.0E+00 | 1.0E+02 | 1.0E+00 |
| Tb-158 | 015759-55-4 | 2.1E+06 | 2.1E+04 | 1.4E+08 | 1.4E+06 | | | 2.5E+06 | 2.5E+04 |
| Tb-160 | 013981-29-8 | 1.2E+06 | 1.2E+04 | 8.4E+08 | 8.4E+06 | 1.2E+02 | 1.2E+00 | 1.2E+02 | 1.2E+00 |
| Tc-95 | 014809-56-4 | 1.3E+08 | 1.3E+06 | 2.8E+11 | 2.8E+09 | 1.8E+02 | 1.8E+00 | 1.8E+02 | 1.8E+00 |
| Tc-95m | 014809-56-4 | 7.2E+06 | 7.2E+04 | 4.5E+09 | 4.5E+07 | 2.3E+02 | 2.3E+00 | 2.3E+02 | 2.3E+00 |
| Tc-96 | 014808-44-7 | 3.9E+06 | 3.9E+04 | 4.9E+09 | 4.9E+07 | 5.2E+01 | 5.2E-01 | 5.2E+01 | 5.2E-01 |
| Tc-96m | 014808-44-7 | 3.4E+08 | 3.4E+06 | 4.2E+11 | 4.2E+09 | 6.3E+03 | 6.3E+01 | 6.3E+03 | 6.3E+01 |
| Tc-97 | 015759-35-0 | 5.6E+07 | 5.6E+05 | 2.8E+10 | 2.8E+08 | 2.0E+06 | 2.0E+04 | 1.9E+06 | 1.9E+04 |
| Tc-97m | 015759-35-0 | 7.4E+06 | 7.4E+04 | 4.9E+09 | 4.9E+07 | 1.8E+06 | 1.8E+04 | 1.5E+06 | 1.5E+04 |
| Tc-99 | 014133-76-7 | 6.3E+06 | 6.3E+04 | 3.3E+09 | 3.3E+07 | 7.9E+08 | 7.9E+06 | 7.5E+06 | 7.5E+04 |
| Tc-99m | 014133-76-7 | 1.6E+08 | 1.6E+06 | 2.7E+11 | 2.7E+09 | 1.9E+03 | 1.9E+01 | 1.9E+03 | 1.9E+01 |
| Te-125m | 014390-73-9 | 3.5E+06 | 3.5E+04 | 3.3E+09 | 3.3E+07 | 2.3E+05 | 2.3E+03 | 2.1E+05 | 2.1E+03 |
| Te-127 | 013981-49-2 | 1.0E+07 | 1.0E+05 | 2.2E+10 | 2.2E+08 | 3.0E+04 | 3.0E+02 | 3.0E+04 | 3.0E+02 |
| Te-127m | 013981-49-2 | 1.5E+06 | 1.5E+04 | 7.3E+08 | 7.3E+06 | 6.9E+05 | 6.9E+03 | 4.9E+05 | 4.9E+03 |
| Te-129 | 014269-71-7 | 6.0E+07 | 6.0E+05 | 6.5E+10 | 6.5E+08 | 3.3E+03 | 3.3E+01 | 3.3E+03 | 3.3E+01 |
| Te-129m | 014269-71-7 | 7.6E+05 | 7.6E+03 | 7.2E+08 | 7.2E+06 | 7.0E+03 | 7.0E+01 | 7.0E+03 | 7.0E+01 |

Table 3.4d. (continued)

| Chemical [†] | CASRN | Ingestion
(pCi/g) | | Inhalation
(pCi/g) | | External Exposure
(pCi/g) ^{††} | | Ingestion + Inhalation
+ External Exposure
(pCi/g) ^{†††} | |
|-----------------------|-------------|----------------------|------------------|-----------------------|------------------|--|------------------|---|------------------|
| | | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ |
| Te-131 | 014683-12-6 | 2.3E+07 | 2.3E+05 | 3.8E+10 | 3.8E+08 | 3.6E+02 | 3.6E+00 | 3.6E+02 | 3.6E+00 |
| Te-131m | 014683-12-6 | 1.0E+06 | 1.0E+04 | 1.1E+09 | 1.1E+07 | 9.2E+01 | 9.2E-01 | 9.2E+01 | 9.2E-01 |
| Te-132 | 014234-28-7 | 7.3E+05 | 7.3E+03 | 1.1E+09 | 1.1E+07 | 1.1E+03 | 1.1E+01 | 1.1E+03 | 1.1E+01 |
| Th-227 | 015623-47-9 | 2.2E+05 | 2.2E+03 | 2.2E+06 | 2.2E+04 | 2.8E+03 | 2.8E+01 | 2.8E+03 | 2.8E+01 |
| Th-228 | 014274-82-9 | 1.4E+05 | 1.4E+03 | 1.0E+05 | 1.0E+03 | 9.2E+05 | 9.2E+03 | 1.4E+05 | 1.4E+03 |
| Th-228+D | 014274-82-9 | 3.8E+04 | 3.8E+02 | 9.8E+04 | 9.8E+02 | 4.9E+02 | 4.9E+00 | 4.8E+02 | 4.8E+00 |
| Th-229 | 015594-54-4 | 1.6E+05 | 1.6E+03 | 1.3E+05 | 1.3E+03 | 8.2E+03 | 8.2E+01 | 7.8E+03 | 7.8E+01 |
| Th-229+D | 015594-54-4 | 2.5E+04 | 2.5E+02 | 1.2E+05 | 1.2E+03 | 8.1E+02 | 8.1E+00 | 7.9E+02 | 7.9E+00 |
| Th-230 | 014269-63-7 | 2.4E+05 | 2.4E+03 | 5.5E+05 | 5.5E+03 | 1.1E+07 | 1.1E+05 | 2.7E+05 | 2.7E+03 |
| Th-231 | 014932-40-2 | 5.0E+06 | 5.0E+04 | 8.7E+09 | 8.7E+07 | 2.3E+05 | 2.3E+03 | 2.2E+05 | 2.2E+03 |
| Th-232 | 007440-29-1 | 2.7E+05 | 2.7E+03 | 4.9E+05 | 4.9E+03 | 2.5E+07 | 2.5E+05 | 3.1E+05 | 3.1E+03 |
| Th-234 | 015065-10-8 | 4.6E+05 | 4.6E+03 | 5.0E+08 | 5.0E+06 | 1.4E+05 | 1.4E+03 | 1.1E+05 | 1.1E+03 |
| Tl-202 | 015720-57-7 | 8.8E+06 | 8.8E+04 | 1.6E+10 | 1.6E+08 | 3.4E+02 | 3.4E+00 | 3.4E+02 | 3.4E+00 |
| Tl-204 | 013968-51-9 | 4.5E+06 | 4.5E+04 | 8.3E+09 | 8.3E+07 | 5.6E+05 | 5.6E+03 | 5.1E+05 | 5.1E+03 |
| Tl-208 | 014913-50-9 | 5.1E+08 | 5.1E+06 | 7.0E+11 | 7.0E+09 | 3.4E+01 | 3.4E-01 | 3.4E+01 | 3.4E-01 |
| Tl-209 | 015690-73-0 | 6.3E+08 | 6.3E+06 | 8.5E+11 | 8.5E+09 | 6.2E+01 | 6.2E-01 | 6.2E+01 | 6.2E-01 |
| Tm-170 | 013981-30-1 | 1.2E+06 | 1.2E+04 | 8.7E+08 | 8.7E+06 | 1.3E+05 | 1.3E+03 | 1.2E+05 | 1.2E+03 |

Table 3.4d. (continued)

| Chemical [†] | CASRN | Ingestion
(pCi/g) | | Inhalation
(pCi/g) | | External Exposure
(pCi/g) ^{††} | | Ingestion + Inhalation
+ External Exposure
(pCi/g) ^{†††} | |
|-----------------------|-------------|----------------------|------------------|-----------------------|------------------|--|------------------|---|------------------|
| | | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ |
| Tm-171 | 014333-45-0 | 1.5E+07 | 1.5E+05 | 5.2E+09 | 5.2E+07 | 1.5E+06 | 1.5E+04 | 1.4E+06 | 1.4E+04 |
| U-232 | 014158-29-3 | 1.1E+05 | 1.1E+03 | 1.8E+05 | 1.8E+03 | 1.4E+07 | 1.4E+05 | 1.3E+05 | 1.3E+03 |
| U-233 | 013968-55-3 | 2.0E+05 | 2.0E+03 | 6.8E+05 | 6.8E+03 | 1.4E+07 | 1.4E+05 | 2.3E+05 | 2.3E+03 |
| U-234 | 013966-29-5 | 2.0E+05 | 2.0E+03 | 6.8E+05 | 6.8E+03 | 2.3E+07 | 2.3E+05 | 2.3E+05 | 2.3E+03 |
| U-235 | 015117-96-1 | 2.0E+05 | 2.0E+03 | 7.3E+05 | 7.3E+03 | 1.9E+03 | 1.9E+01 | 1.8E+03 | 1.8E+01 |
| U-235+D | 015117-96-1 | 1.9E+05 | 1.9E+03 | 7.3E+05 | 7.3E+03 | 1.8E+03 | 1.8E+01 | 1.8E+03 | 1.8E+01 |
| U-236 | 013982-70-2 | 2.1E+05 | 2.1E+03 | 7.2E+05 | 7.2E+03 | 2.8E+07 | 2.8E+05 | 2.5E+05 | 2.5E+03 |
| U-237 | 014269-75-1 | 2.2E+06 | 2.2E+04 | 3.1E+09 | 3.1E+07 | 3.6E+03 | 3.6E+01 | 3.5E+03 | 3.5E+01 |
| U-238 | 007440-61-1 | 2.1E+05 | 2.1E+03 | 7.7E+05 | 7.7E+03 | 3.2E+07 | 3.2E+05 | 2.4E+05 | 2.4E+03 |
| U-238+D | 007440-61-1 | 1.4E+05 | 1.4E+03 | 7.7E+05 | 7.7E+03 | 9.3E+03 | 9.3E+01 | 8.8E+03 | 8.8E+01 |
| U-240 | 015687-53-3 | 1.6E+06 | 1.6E+04 | 2.8E+09 | 2.8E+07 | 4.5E+06 | 4.5E+04 | 1.4E+06 | 1.4E+04 |
| V-48 | 014331-97-6 | 1.2E+06 | 1.2E+04 | 1.4E+09 | 1.4E+07 | 4.3E+01 | 4.3E-01 | 4.3E+01 | 4.3E-01 |
| W-181 | 015749-46-9 | 3.3E+07 | 3.3E+05 | 1.2E+11 | 1.2E+09 | 2.3E+04 | 2.3E+02 | 2.3E+04 | 2.3E+02 |
| W-185 | 014932-41-3 | 4.4E+06 | 4.4E+04 | 2.2E+10 | 2.2E+08 | 9.7E+06 | 9.7E+04 | 3.4E+06 | 3.4E+04 |
| W-187 | 014983-48-3 | 3.6E+06 | 3.6E+04 | 1.8E+10 | 1.8E+08 | 3.0E+02 | 3.0E+00 | 3.0E+02 | 3.0E+00 |
| Xe-122 | 015151-09-4 | | | 3.1E+12 | 3.1E+10 | | | | |
| Xe-123 | 015700-10-4 | | | 1.1E+13 | 1.1E+11 | | | | |

Table 3.4d. (continued)

| Chemical [†] | CASRN | Ingestion
(pCi/g) | | Inhalation
(pCi/g) | | External Exposure
(pCi/g) ^{††} | | Ingestion + Inhalation
+ External Exposure
(pCi/g) ^{†††} | |
|-----------------------|-------------|----------------------|------------------|-----------------------|------------------|--|------------------|---|------------------|
| | | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ |
| Xe-125 | 013994-18-8 | | | 7.9E+12 | 7.9E+10 | | | | |
| Xe-127 | 013994-19-9 | | | 2.3E+13 | 2.3E+11 | | | | |
| Xe-129m | 013965-99-6 | | | 1.7E+13 | 1.7E+11 | | | | |
| Xe-131m | 014683-11-5 | | | 2.3E+13 | 2.3E+11 | | | | |
| Xe-133 | 014932-42-4 | | | 2.3E+13 | 2.3E+11 | | | | |
| Xe-133m | 014932-42-4 | | | 1.9E+13 | 1.9E+11 | | | | |
| Xe-135 | 014995-62-1 | | | 1.3E+13 | 1.3E+11 | | | | |
| Xe-135m | 014995-62-1 | | | 5.1E+13 | 5.1E+11 | | | | |
| Xe-137 | 014835-21-3 | | | 6.8E+12 | 6.8E+10 | | | | |
| Xe-138 | 015751-81-2 | | | 4.6E+12 | 4.6E+10 | | | | |
| Y-90 | 010098-91-6 | 5.9E+05 | 5.9E+03 | 9.6E+08 | 9.6E+06 | | | 7.1E+05 | 7.1E+03 |
| Y-91 | 014234-24-3 | 6.6E+05 | 6.6E+03 | 5.1E+08 | 5.1E+06 | 3.5E+04 | 3.5E+02 | 3.3E+04 | 3.3E+02 |
| Y-91m | 014234-24-3 | 2.4E+08 | 2.4E+06 | 3.2E+11 | 3.2E+09 | 2.6E+02 | 2.6E+00 | 2.6E+02 | 2.6E+00 |
| Y-92 | 015751-59-4 | 4.6E+06 | 4.6E+04 | 5.9E+09 | 5.9E+07 | 5.0E+02 | 5.0E+00 | 5.0E+02 | 5.0E+00 |
| Y-93 | 014981-70-5 | 1.5E+06 | 1.5E+04 | 2.7E+09 | 2.7E+07 | 1.4E+03 | 1.4E+01 | 1.4E+03 | 1.4E+01 |
| Zn-65 | 013982-39-3 | 9.0E+05 | 9.0E+03 | 9.5E+08 | 9.5E+06 | 2.1E+02 | 2.1E+00 | 2.1E+02 | 2.1E+00 |
| Zn-69 | 013982-23-5 | 1.4E+08 | 1.4E+06 | 9.2E+10 | 9.2E+08 | 2.4E+07 | 2.4E+05 | 2.1E+07 | 2.1E+05 |

Table 3.4d. (continued)

| Chemical [†] | CASRN | Ingestion
(pCi/g) | | Inhalation
(pCi/g) | | External Exposure
(pCi/g) ^{††} | | Ingestion + Inhalation
+ External Exposure
(pCi/g) ^{†††} | |
|-----------------------|-------------|----------------------|------------------|-----------------------|------------------|--|------------------|---|------------------|
| | | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ |
| Zn-69m | 013982-23-5 | 5.8E+06 | 5.8E+04 | 8.1E+09 | 8.1E+07 | 3.4E+02 | 3.4E+00 | 3.4E+02 | 3.4E+00 |
| Zr-93 | 015751-77-6 | 1.7E+07 | 1.7E+05 | 1.8E+09 | 1.8E+07 | | | 2.0E+07 | 2.0E+05 |
| Zr-95 | 013967-71-0 | 2.3E+06 | 2.3E+04 | 1.5E+09 | 1.5E+07 | 1.7E+02 | 1.7E+00 | 1.7E+02 | 1.7E+00 |
| Zr-97 | 014928-30-4 | 8.5E+05 | 8.5E+03 | 2.0E+09 | 2.0E+07 | 7.1E+02 | 7.1E+00 | 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, then no external exposure slope factors were available or the external exposure slope factor was equal to 0.00E+00 (resulting in an undefined PRG for the external exposure pathway for soil under recreational land use).
- ††† If slope factors and/or reference doses were available for only one pathway (i.e., ingestion, inhalation, OR external exposure), the total for ingestion plus inhalation plus external exposure was not calculated.
- (1) The default volatilization factor of 200 for Ra-224 was calculated as the ratio of the average Ra-224 background concentration in soil to the average Rn-220 background concentration in air. Inhalation slope factor values are for Rn-222 plus decay products (i.e., Rn-222+D) formed from the radioactive decay of Ra-226 and for Rn-220+D from the decay of Ra-224. Slope factor values were taken from Table 4a of EPA's *Health Effects Assessment Summary Tables* (HEAST 1992).
- (2) The default volatilization factor of 8 for Ra-226 was calculated as the ratio of the average natural background concentration of Ra-226 in soil to the corresponding average natural background concentration of Rn-222 in air. Inhalation slope factor values are for Rn-222 plus decay products (i.e., Rn-222+D) formed from the radioactive decay of Ra-226 and for Rn-220+D from the decay of Ra-224. Slope factor values were taken from Table 4a of EPA's *Health Effects Assessment Summary Tables* (HEAST 1992).

Table 3.4e. Risk-based Preliminary Remediation Goals for nonradionuclides in fish (recreational scenario)

Chemical	CASRN	Ingestion of fish (mg/kg)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
ALAR	001596-84-5			1.5E+03	1.5E+02
Acenaphthene	000083-32-9			5.9E+02	5.9E+01
Acenaphthylene	000208-96-8				
Acephate	030560-19-1	2.6E+02	2.6E+00	3.9E+01	3.9E+00
Acetaldehyde	000075-07-0				
Acetochlor	034256-82-1			2.0E+02	2.0E+01
Acetone	000067-64-1			9.9E+02	9.9E+01
Acetone Cyanohydrin	000075-86-5			7.9E+00	7.9E-01
Acetonitrile	000075-05-8			5.9E+01	5.9E+00
Acetophenone ⁽⁵⁾	000098-86-2			9.9E+02	9.9E+01
Acrolein ⁽⁶⁾	000107-02-8			2.0E+02	2.0E+01
Acrylamide	000079-06-1	5.1E-01	5.1E-03	2.0E+00	2.0E-01
Acrylic Acid	000079-10-7			4.9E+03	4.9E+02
Acrylonitrile	000107-13-1	4.3E+00	4.3E-02	9.9E+00	9.9E-01
Alachlor	015972-60-8	2.9E+01	2.9E-01	9.9E+01	9.9E+00
Aldicarb	000116-06-3			9.9E+00	9.9E-01
Aldicarb Sulfone	001646-88-4			9.9E+00	9.9E-01
Aldrin	000309-00-2	1.4E-01	1.4E-03	3.0E-01	3.0E-02

Table 3.4e. (continued)

Chemical	CASRN	Ingestion of fish (mg/kg)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Ally	074223-64-6			2.5E+03	2.5E+02
Allyl Alcohol	000107-18-6			4.9E+01	4.9E+00
Allyl Chloride ⁽⁹⁾	000107-05-1			4.9E+02	4.9E+01
Aluminum	007429-90-5				
Aluminum Phosphide	020859-73-8			3.9E+00	3.9E-01
Amdro	067485-29-4			3.0E+00	3.0E-01
Ametryn	000834-12-8			8.9E+01	8.9E+00
Aminophenol, m-	000591-27-5			6.9E+02	6.9E+01
Aminopyridine, 4-	000504-24-5			2.0E-01	2.0E-02
Amitraz	033089-61-1			2.5E+01	2.5E+00
Ammonia	007664-41-7				
Ammonium Sulfamate	007773-06-0			2.0E+03	2.0E+02
Aniline	000062-53-3	4.0E+02	4.0E+00		
Anthracene	000120-12-7			3.0E+03	3.0E+02
Antimony (metallic)	007440-36-0			3.9E+00	3.9E-01
Antimony Pentoxide	001314-60-9			4.9E+00	4.9E-01
Antimony Potassium Tartrate	000304-61-0			8.9E+00	8.9E-01
Antimony Tetroxide	001332-81-6			3.9E+00	3.9E-01

Table 3.4e. (continued)

Chemical	CASRN	Ingestion of fish (mg/kg)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Antimony Trioxide	001309-64-4			3.9E+00	3.9E-01
Apollo	074115-24-5			1.3E+02	1.3E+01
Aramite	000140-57-8	9.2E+01	9.2E-01	4.9E+02	4.9E+01
Aroclor 1016	012674-11-2			6.9E-01	6.9E-02
Aroclor 1221 ⁽¹⁾	011104-28-2	3.0E-01	3.0E-03		
Aroclor 1232 ⁽¹⁾	011141-16-5	3.0E-01	3.0E-03		
Aroclor 1242 ⁽¹⁾	053469-21-9	3.0E-01	3.0E-03		
Aroclor 1248 ⁽¹⁾	012672-29-6	3.0E-01	3.0E-03		
Aroclor 1254	011097-69-1			2.0E-01	2.0E-02
Aroclor 1260 ⁽¹⁾	011096-82-5	3.0E-01	3.0E-03		
Arsenic Salts	NA				
Arsenic, Inorganic	007440-38-2	1.5E+00	1.5E-02	3.0E+00	3.0E-01
Arsine	007784-42-1				
Asbestos	001332-21-4				
Assure	076578-14-8			8.9E+01	8.9E+00
Asulam	003337-71-1			4.9E+02	4.9E+01
Atrazine	001912-24-9	1.0E+01	1.0E-01	3.5E+02	3.5E+01
Avermectin B1	065195-55-3			3.9E+00	3.9E-01

Table 3.4e. (continued)

Chemical	CASRN	Ingestion of fish (mg/kg)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Azobenzene	000103-33-3	2.1E+01	2.1E-01		
Barium	007440-39-3			6.9E+02	6.9E+01
Barium Cyanide	000542-62-1			9.9E+02	9.9E+01
Baygon	000114-26-1			3.9E+01	3.9E+00
Bayleton	043121-43-3			3.0E+02	3.0E+01
Baythroid	068359-37-5			2.5E+02	2.5E+01
Benefin	001861-40-1			3.0E+03	3.0E+02
Benomyl	017804-35-2			4.9E+02	4.9E+01
Bentazon	025057-89-0			2.5E+01	2.5E+00
Benz[a]anthracene ⁽²⁾	000056-55-3	3.2E+00	3.2E-02		
Benzaldehyde	000100-52-7			9.9E+02	9.9E+01
Benzene	000071-43-2	7.9E+01	7.9E-01		
Benzene Hexachloride	NA				
Benzene, Ethyldimethyl	NA				
Benzene, Ethylmethyl	NA				
Benzene, Methylpropenyl	NA				
Benzene, Methylpropyl	NA				
Benzene, Trimethyl	025551-13-7				

Table 3.4e. (continued)

Chemical	CASRN	Ingestion of fish (mg/kg)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Benzenethiol	000108-98-5			9.9E-02	9.9E-03
Benzidine	000092-87-5	1.0E-02	1.0E-04	3.0E+01	3.0E+00
Benzo[a]pyrene ⁽²⁾	000050-32-8	3.2E-01	3.2E-03		
Benzo[b]fluoranthene ⁽²⁾	000205-99-2	3.2E+00	3.2E-02		
Benzo[g,h,i]perylene	000191-24-2				
Benzo[k]fluoranthene ⁽²⁾	000207-08-9	3.2E+01	3.2E-01		
Benzoic Acid	000065-85-0			3.9E+04	3.9E+03
Benzotrichloride	000098-07-7	1.8E-01	1.8E-03		
Benzyl Alcohol	000100-51-6			3.0E+03	3.0E+02
Benzyl Chloride	000100-44-7	1.4E+01	1.4E-01		
Beryllium	007440-41-7	5.3E-01	5.3E-03	4.9E+01	4.9E+00
Bidrin	000141-66-2			9.9E-01	9.9E-02
Biphenthrin	082657-04-3			1.5E+02	1.5E+01
Biphenyl, 1,1'-	000092-52-4			4.9E+02	4.9E+01
Bis(2-chloro-1-methylethyl)ether
(Technical)	000108-60-1	3.3E+01	3.3E-01		
Bis(2-chloroethoxy)methane	000111-91-1				
Bis(2-chloroethyl)ether	000111-44-4	2.1E+00	2.1E-02		

Table 3.4e. (continued)

Chemical	CASRN	Ingestion of fish (mg/kg)			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Bis(2-chloroisopropyl)ether	039638-32-9			3.9E+02	3.9E+01
Bis(2-ethylhexyl)phthalate ⁽⁹⁾	000117-81-7	1.6E+02	1.6E+00	2.0E+02	2.0E+01
Bis(chloromethyl)ether	000542-88-1	1.0E-02	1.0E-04		
Bisphenol A	000080-05-7			4.9E+02	4.9E+01
Boron And Borates Only	007440-42-8			8.9E+02	8.9E+01
Boron Trifluoride	007637-07-2				
Bromochloromethane	000074-97-5				
Bromodichloromethane	000075-27-4	3.7E+01	3.7E-01	2.0E+02	2.0E+01
Bromodiphenyl Ether, p-	000101-55-3				
Bromoform	000075-25-2	2.9E+02	2.9E+00	2.0E+02	2.0E+01
Bromomethane ⁽⁹⁾	000074-83-9			1.4E+01	1.4E+00
Bromophos	002104-96-3			4.9E+01	4.9E+00
Bromotrichloromethane	000075-62-7				
Bromoxynil	001689-84-5			2.0E+02	2.0E+01
Bromoxynil Octanoate	001689-99-2			2.0E+02	2.0E+01
Butadiene, 1,3-	000106-99-0				
Butanol, N-	000071-36-3			9.9E+02	9.9E+01
Butanone-2,4-chloro-4,4-difluoro	NA				

Nonradionuclides/fish/recreational

Table 3.4e. (continued)

Chemical	CASRN	Ingestion of fish (mg/kg)*			
		10 ⁻⁴	10 ⁻⁵	HQ=1	HQ=0.1
Butyl Benzyl Phthlate	000085-68-7			2.0E+03	2.0E+02
Butylate	002008-41-5			4.9E+02	4.9E+01
Butylchloride, t-	000507-20-0				
Butylphthalyl Butylglycolate	000085-70-1			9.9E+03	9.9E+02
Cacodylic Acid	000075-60-5			3.0E+01	3.0E+00
Cadmium (Diet)	007440-43-9			9.9E+00	9.9E-01
Calcium Cyanide	000592-01-8			3.9E+02	3.9E+01
Caprolactam	000105-60-2			4.9E+03	4.9E+02
Captafol	002425-06-1	2.7E+02	2.7E+00	2.0E+01	2.0E+00
Captan	000133-06-2	6.6E+02	6.6E+00	1.3E+03	1.3E+02
Carbaryl	000063-25-2			9.9E+02	9.9E+01
Carbazole	000086-74-8	1.2E+02	1.2E+00		
Carbofuran	001563-66-2			4.9E+01	4.9E+00
Carbon Disulfide	000075-15-0			9.9E+02	9.9E+01
Carbon Tetrachloride ⁽⁶⁾	000056-23-5	1.8E+01	1.8E-01	6.9E+00	6.9E-01
Carbosulfan	055285-14-8			9.9E+01	9.9E+00
Carboxin	005234-68-4			9.9E+02	9.9E+01
Chloral	000075-87-6			2.0E+01	2.0E+00

Table 3.4e. (continued)

Chemical	CASRN	Ingestion of fish (mg/kg)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Chloramben	000133-90-4			1.5E+02	1.5E+01
Chloranil	000118-75-2	5.7E+00	5.7E-02		
Chlordane ⁽⁶⁾	000057-74-9	1.8E+00	1.8E-02	5.9E-01	5.9E-02
Chloride	016887-00-6				
Chlorimuron, Ethyl-	090982-32-4			2.0E+02	2.0E+01
Chlorine	007782-50-5			9.9E+02	9.9E+01
Chlorine Dioxide	010049-04-4				
Chlorite (Sodium Salt)	007758-19-2				
Chloro-1,1-difluoroethane, 1-	000075-68-3				
Chloro-1,3-butadiene, 2-	000126-99-8			2.0E+02	2.0E+01
Chloro-2-methylaniline HCl, 4-	003165-93-3	5.0E+00	5.0E-02		
Chloro-2-methylaniline, 4-	000095-69-2	4.0E+00	4.0E-02		
Chloroacetic Acid	000079-11-8			2.0E+01	2.0E+00
Chloroacetophenone, 2-	000532-27-4				
Chloroaniline, p-	000106-47-8			3.9E+01	3.9E+00
Chlorobenzene ⁽⁶⁾	000108-90-7			2.0E+02	2.0E+01
Chlorobenzilate	000510-15-6	8.5E+00	8.5E-02	2.0E+02	2.0E+01
Chlorobenzoic Acid, p-	000074-11-3			2.0E+03	2.0E+02

Table 3.4e. (continued)

Chemical	CASRN	Ingestion of fish (mg/kg)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Chlorobenzotrifluoride, 4-	000098-56-6			2.0E+02	2.0E+01
Chlorobutane, 1-	000109-69-3			3.9E+03	3.9E+02
Chlorobutane, 2-	000078-86-4				
Chlorocyclopentadiene	041851-50-7				
Chlorodibromoethane	073506-94-2	2.7E+01	2.7E-01		
Chlorodifluoromethane	000075-45-6				
Chloroform ⁽⁶⁾	000067-66-3	3.8E+02	3.8E+00	9.9E+01	9.9E+00
Chloromethane ⁽⁶⁾	000074-87-3	1.8E+02	1.8E+00		
Chloromethyl Methyl Ether	000107-30-2				
Chloronaphthalene, Beta-	000091-58-7			7.9E+02	7.9E+01
Chloronitrobenzene, o-	000088-73-3	9.2E+01	9.2E-01		
Chloronitrobenzene, p-	000121-73-3	1.3E+02	1.3E+00		
Chlorophenol, 2-	000095-57-8			4.9E+01	4.9E+00
Chlorophenyl Methyl Sulfide, p-	000123-09-1				
Chlorophenyl Methyl Sulfoxide	000934-73-6				
Chloropropane, 2-	000075-29-6				
Chlorothalonil	001897-45-6	2.1E+02	2.1E+00	1.5E+02	1.5E+01
Chlorotoluene, o-	000095-49-8			2.0E+02	2.0E+01

Table 3.4e. (continued)

Chemical	CASRN	Ingestion of fish (mg/kg)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Chlorpropham	000101-21-3			2.0E+03	2.0E+02
Chlorpyrifos	002921-88-2			3.0E+01	3.0E+00
Chlorpyrifos Methyl	005598-13-0			9.9E+01	9.9E+00
Chlorsulfuron	064902-72-3			4.9E+02	4.9E+01
Chlorthiophos	060238-56-4			7.9E+00	7.9E-01
Chromium (III) (Insoluble Salts)	016065-83-1			9.9E+03	9.9E+02
Chromium (VI) ⁽⁶⁾	018540-29-9			4.9E+01	4.9E+00
Chromium Salts	NA				
Chrysene ⁽²⁾	000218-01-9	3.2E+02	3.2E+00		
Cobalt	007440-48-4				
Coke Oven Emissions	008007-45-2				
Copper	007440-50-8				
Copper Cyanide	000544-92-3			4.9E+01	4.9E+00
Creosote	008001-58-9				
Cresol, m-	000108-39-4			4.9E+02	4.9E+01
Cresol, o-	000095-48-7			4.9E+02	4.9E+01
Cresol, p-	000106-44-5			4.9E+01	4.9E+00
Crotonaldehyde	000123-73-9	1.2E+00	1.2E-02		

Table 3.4e. (continued)

Chemical	CASRN	Ingestion of fish (mg/kg)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Cumene	000098-82-8			3.9E+02	3.9E+01
Cyanazine	021725-46-2	2.7E+00	2.7E-02	2.0E+01	2.0E+00
Cyanide (CN-)	000057-12-5			2.0E+02	2.0E+01
Cyanogen	000460-19-5			3.9E+02	3.9E+01
Cyanogen Bromide	000506-68-3			8.9E+02	8.9E+01
Cyanogen Chloride	000506-77-4			4.9E+02	4.9E+01
Cyclohexane, 1,2,3,4,5-pentabromo-6-chloro-	000087-84-3	1.0E+02	1.0E+00		
Cyclohexanone	000108-94-1			4.9E+04	4.9E+03
Cyclohexylamine	000108-91-8			2.0E+03	2.0E+02
Cyclopentadiene	000542-92-7				
Cyhalothrin/karate	068085-85-8			4.9E+01	4.9E+00
Cypermethrin	052315-07-8			9.9E+01	9.9E+00
Cyromazine	066215-27-8			7.4E+01	7.4E+00
DDD	000072-54-8	9.6E+00	9.6E-02		
DDE	000072-55-9	6.8E+00	6.8E-02		
DDT	000050-29-3	6.8E+00	6.8E-02	4.9E+00	4.9E-01
Dacthal	001861-32-1			9.9E+01	9.9E+00

Table 3.4e. (continued)

Chemical	CASRN	Ingestion of fish (mg/kg)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Dalapon	000075-99-0			3.0E+02	3.0E+01
Decabromodiphenyl Ether	001163-19-5			9.9E+01	9.9E+00
Demeton	008065-48-3			3.9E-01	3.9E-02
Di(2-ethylhexyl)adipate	000103-23-1	1.9E+03	1.9E+01	5.9E+03	5.9E+02
Diallate	002303-16-4	3.8E+01	3.8E-01		
Diazinon	000333-41-5			8.9E+00	8.9E-01
Dibenz[a,h]anthracene ⁽²⁾	000053-70-3	3.2E-01	3.2E-03		
Dibromo-3-chloropropane, 1,2-	000096-12-8	1.6E+00	1.6E-02		
Dibromobenzene, 1,4-	000106-37-6			9.9E+01	9.9E+00
Dibromochloromethane	000124-48-1	2.7E+01	2.7E-01	2.0E+02	2.0E+01
Dibromodichloromethane	000594-18-3				
Dibromodiphenyl Ether, p,p'-	002050-47-7				
Dibromoethane, 1,2-	000106-93-4	2.7E-02	2.7E-04		
Dibromomethane (Methylene Bromide)	000074-95-3			9.9E+01	9.9E+00
Dibutyl Phthalate	000084-74-2			9.9E+02	9.9E+01
Dicamba	001918-00-9			3.0E+02	3.0E+01
Dichloro-2-butene, 1,4-	000764-41-0				
Dichloroacetic Acid					

Table 3.4e. (continued)

Chemical	CASRN	Ingestion of fish (mg/kg)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Dichlorobenzene, 1,2- ⁽⁵⁾	000095-50-1			8.9E+02	8.9E+01
Dichlorobenzene, 1,3-	000541-73-1				
Dichlorobenzene, 1,4-	000106-46-7	9.6E+01	9.6E-01		
Dichlorobenzidine, 3,3'-	000091-94-1	5.1E+00	5.1E-02		
Dichlorodifluoromethane	000075-71-8			2.0E+03	2.0E+02
Dichloroethane, 1,1-	000075-34-3			9.9E+02	9.9E+01
Dichloroethane, 1,2-	000107-06-2	2.5E+01	2.5E-01		
Dichloroethylene, 1,1-	000075-35-4	3.8E+00	3.8E-02	8.9E+01	8.9E+00
Dichloroethylene, 1,2- (Mixed Isomers)	000540-59-0			8.9E+01	8.9E+00
Dichloroethylene, 1,2-cis-	000156-59-2			9.9E+01	9.9E+00
Dichloroethylene, 1,2-trans-	000156-60-5			2.0E+02	2.0E+01
Dichlorophenol, 2,4-	000120-83-2			3.0E+01	3.0E+00
Dichlorophenoxy Acetic Acid, 2,4-	000094-75-7			9.9E+01	9.9E+00
Dichlorophenoxy)butyric Acid, 4-(2,4-	000094-82-6			7.9E+01	7.9E+00
Dichloropropane, 1,2-	000078-87-5	3.4E+01	3.4E-01		
Dichloropropanol, 2,3-	000616-23-9			3.0E+01	3.0E+00
Dichloropropene, 1,3-	000542-75-6	1.3E+01	1.3E-01	3.0E+00	3.0E-01
Dichlorvos	000062-73-7	7.9E+00	7.9E-02	4.9E+00	4.9E-01

Table 3.4e. (continued)

Chemical	CASRN	Ingestion of fish (mg/kg)*			
		10 ⁻⁴	10 ⁻⁵	HQ=1	HQ=0.1
Dicofol	000115-32-2				
Dicyclopentadiene	000077-73-6			3.0E+02	3.0E+01
Dieldrin	000060-57-1	1.4E-01	1.4E-03	4.9E-01	4.9E-02
Diethyl Phthalate	000084-66-2			7.9E+03	7.9E+02
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+04	2.0E+03
Diethylformamide	000617-84-5			1.1E+02	1.1E+01
Diethylstilbestrol	000056-53-1	4.9E-04	4.9E-06		
Difenzquat	043222-48-6			7.9E+02	7.9E+01
Diflubenzuron	035367-38-5			2.0E+02	2.0E+01
Difluoroethane, 1,1-	000075-37-6				
Diisopropyl Methylphosphonate	001445-75-6			7.9E+02	7.9E+01
Dimethipin	055290-64-7			2.0E+02	2.0E+01
Dimethoate	000060-51-5			2.0E+00	2.0E-01
Dimethoxybenzidine, 3,3'-	000119-90-4	1.6E+02	1.6E+00		
Dimethyl Sulfate	000077-78-1				

Nonraddionuclides/fish/recreational

Table 3.4e. (continued)

Chemical	CASRN	Ingestion of fish (mg/kg)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Dimethylaniline HCl, 2,4-	021436-96-4	4.0E+00	4.0E-02		
Dimethylaniline, 2,4-	000095-68-1	3.1E+00	3.1E-02		
Dimethylaniline, N,N-	000121-69-7			2.0E+01	2.0E+00
Dimethylbenzidine, 3,3'-	000119-93-7	2.5E-01	2.5E-03		
Dimethylethyl Lead	107584-40-7				
Dimethylformamide	000068-12-2			9.9E+02	9.9E+01
Dimethylhydrazine, 1,1- ⁽⁵⁾	000057-14-7	8.8E-01	8.8E-03		
Dimethylhydrazine, 1,2-	000540-73-8				
Dimethylphenol, 2,4-	000105-67-9			2.0E+02	2.0E+01
Dimethylphenol, 2,6-	000576-26-1			5.9E+00	5.9E-01
Dimethylphenol, 3,4-	000095-65-8			9.9E+00	9.9E-01
Dimethylphthalate ⁽⁵⁾	000131-11-3			9.9E+04	9.9E+03
Dimethylterephthalate	000120-61-6			9.9E+02	9.9E+01
Dinitro-o-cresol, 4,6-	000534-52-1				
Dinitro-o-cyclohexyl Phenol, 4,6-	000131-89-5			2.0E+01	2.0E+00
Dinitrobenzene, 1,2-	000528-29-0			3.9E+00	3.9E-01
Dinitrobenzene, 1,3-	000099-65-0			9.9E-01	9.9E-02
Dinitrobenzene, 1,4-	000100-25-4			3.9E+00	3.9E-01

Table 3.4e. (continued)

Chemical	CASRN	Ingestion of fish (mg/kg)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Dinitrophenol, 2,4-	000051-28-5			2.0E+01	2.0E+00
Dinitrotoluene, 2,4-	000121-14-2	3.4E+00	3.4E-02	2.0E+01	2.0E+00
Dinitrotoluene, 2,6-	000606-20-2	3.4E+00	3.4E-02	9.9E+00	9.9E-01
Dinitrotoluene, 2-Amino-4,6-	035572-78-2				
Dinoseb	000088-85-7			9.9E+00	9.9E-01
Dioxane, 1,4-	000123-91-1	2.1E+02	2.1E+00		
Diphenamid	000957-51-7			3.0E+02	3.0E+01
Diphenylamine	000122-39-4			2.5E+02	2.5E+01
Diphenylhydrazine, 1,2-	000122-66-7	2.9E+00	2.9E-02		
Diquat	000085-00-7			2.2E+01	2.2E+00
Direct Black 38	001937-37-7	2.7E-01	2.7E-03		
Direct Blue 6	002602-46-2	2.8E-01	2.8E-03		
Direct Brown 95	016071-86-6	2.5E-01	2.5E-03		
Direct Sky Blue	002610-05-1				
Disulfoton	000298-04-4			3.9E-01	3.9E-02
Diuron	000330-54-1			2.0E+01	2.0E+00
Dodine	002439-10-3			3.9E+01	3.9E+00
EPTC	000759-94-4			2.5E+02	2.5E+01

Table 3.4e. (continued)

Chemical	CASRN	Ingestion of fish (mg/kg)*		
		10 ⁻⁴	10 ⁻⁶	HQ=1
Endosulfan	000115-29-7			5.9E+00
Endothall	000145-73-3			2.0E+02
Endrin	000072-20-8			3.0E+00
Epichlorohydrin	000106-89-8	2.3E+02	2.3E+00	2.0E+00
Epoxybutane, 1,2-	000106-88-7			
Ethephon	016672-87-0			4.9E+00
Ethion	000563-12-2			4.9E+00
Ethoxyethanol Acetate, 2-	000111-15-9			3.0E+03
Ethoxyethanol, 2-	000110-80-5			3.9E+03
Ethyl Acetate	000141-78-6			8.9E+03
Ethyl Acrylate	000140-88-5	4.8E+01	4.8E-01	
Ethyl Chloride	000075-00-3			
Ethyl Ether	000060-29-7			2.0E+03
Ethyl Methacrylate	000097-63-2			8.9E+02
Ethyl-p-nitrophenyl Phosphonate	002104-64-5			9.9E-02
Ethylbenzene ⁽⁶⁾	000100-41-4			9.9E+02
Ethylene Cyanohydrin	000109-78-4			3.0E+03
Ethylene Diamine	000107-15-3			2.0E+02

Nonradionuclides/fish/recreational

Table 3.4e. (continued)

Chemical	CASRN	Ingestion of fish (mg/kg)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Ethylene Glycol	000107-21-1			2.0E+04	2.0E+03
Ethylene Glycol Monobutyl Ether	000111-76-2				
Ethylene Oxide	000075-21-8	2.3E+00	2.3E-02		
Ethylene Thiourea	000096-45-7	2.1E+01	2.1E-01	7.9E-01	7.9E-02
Ethylphthalyl Ethyl Glycolate	000084-72-0			3.0E+04	3.0E+03
Express	101200-48-0			7.9E+01	7.9E+00
Fenamiphos	022224-92-6			2.5E+00	2.5E-01
Fenpropathrin	039515-41-8			2.5E+02	2.5E+01
Fluometuron	002164-17-2			1.3E+02	1.3E+01
Fluoranthene	000206-44-0			3.9E+02	3.9E+01
Fluorene	000086-73-7			3.9E+02	3.9E+01
Fluoride	007782-41-4			5.9E+02	5.9E+01
Fluridone	059756-60-4			7.9E+02	7.9E+01
Flurprimidol	056425-91-3			2.0E+02	2.0E+01
Flutolanil	066332-96-5			5.9E+02	5.9E+01
Fluvalinate	069409-94-5			9.9E+01	9.9E+00
Folpet	000133-07-3	6.6E+02	6.6E+00	9.9E+02	9.9E+01
Fomesafen	072178-02-0	1.2E+01	1.2E-01		

Table 3.4e. (continued)

Chemical	CASRN	Ingestion of fish (mg/kg)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Fonofos	000944-22-9			2.0E+01	2.0E+00
Formaldehyde	000050-00-0			2.0E+03	2.0E+02
Formic Acid	000064-18-6			2.0E+04	2.0E+03
Fosetyl-AL	039148-24-8			3.0E+04	3.0E+03
Furan	000110-00-9			9.9E+00	9.9E-01
Furazolidone	000067-45-8	6.1E-01	6.1E-03		
Furfural	000098-01-1			3.0E+01	3.0E+00
Furium	000531-82-8	4.6E-02	4.6E-04		
Furmecyclox	060568-05-0	7.7E+01	7.7E-01		
Glufosinate, Ammonium	077182-82-2			3.9E+00	3.9E-01
Glycidyl	000765-34-4			3.9E+00	3.9E-01
Glyphosate	001071-83-6			9.9E+02	9.9E+01
Goal	042874-03-3			3.0E+01	3.0E+00
Haloxypop, Methyl	069806-40-2			4.9E-01	4.9E-02
Harmony	079277-27-3			1.3E+02	1.3E+01
Heptachlor	000076-44-8	5.1E-01	5.1E-03	4.9E+00	4.9E-01
Heptachlor Epoxide	001024-57-3	2.5E-01	2.5E-03	1.3E-01	1.3E-02
Heptane, N-	000142-82-5				

Table 3.4c. (continued)

Chemical	CASRN	Ingestion of fish (mg/kg)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Hexabromobenzene	000087-82-1			2.0E+01	2.0E+00
Hexachlorobenzene ⁽⁶⁾	000118-74-1	1.4E+00	1.4E-02	7.9E+00	7.9E-01
Hexachlorobutadiene ⁽⁶⁾	000087-68-3	2.9E+01	2.9E-01	2.0E+00	2.0E-01
Hexachlorocyclohexane, Alpha-	000319-84-6	3.7E-01	3.7E-03		
Hexachlorocyclohexane, Beta-	000319-85-7	1.3E+00	1.3E-02		
Hexachlorocyclohexane, Delta-	000319-86-8				
Hexachlorocyclohexane, Epsilon	006108-10-7				
Hexachlorocyclohexane, Gamma-	000058-89-9	1.8E+00	1.8E-02	3.0E+00	3.0E-01
Hexachlorocyclohexane, Technical	000608-73-1	1.3E+00	1.3E-02		
Hexachlorocyclopentadiene	000077-47-4			6.9E+01	6.9E+00
Hexachlorodibenzo-p-dioxin, Mixture	019408-74-3	3.7E-04	3.7E-06		
Hexachloroethane	000067-72-1	1.6E+02	1.6E+00	9.9E+00	9.9E-01
Hexachlorophene	000070-30-4			3.0E+00	3.0E-01
Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	000121-82-4	2.1E+01	2.1E-01	3.0E+01	3.0E+00
Hexamethylene Diisocyanate, 1,6-	000822-06-0				
Hexane, N-	000110-54-3			5.9E+02	5.9E+01
Hexanone, 2-	000591-78-6				

Nonradionuclides/fish/recreational

Table 3.4e. (continued)

Chemical	CASRN	Ingestion of fish (mg/kg)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Hexazinone	051235-04-2			3.3E+02	3.3E+01
HpCDD, 2,3,7,8-(4)	037871-00-4	1.5E-03	1.5E-05		
HpCDF, 2,3,7,8-(4)	038998-75-3	1.5E-03	1.5E-05		
HxCDD, 2,3,7,8-(4)	034465-46-8	1.5E-04	1.5E-06		
HxCDF, 2,3,7,8-(4)	055684-94-1	1.5E-04	1.5E-06		
Hydrazine	000302-01-2	7.7E-01	7.7E-03		
Hydrazine Sulfate	010034-93-2	7.7E-01	7.7E-03		
Hydrogen Chloride	007647-01-0				
Hydrogen Cyanide	000074-90-8			2.0E+02	2.0E+01
Hydrogen Sulfide	007783-06-4			3.0E+01	3.0E+00
Hydroquinone	000123-31-9			3.9E+02	3.9E+01
Imazalil	035554-44-0			1.3E+02	1.3E+01
Imazaquin	081335-37-7			2.5E+03	2.5E+02
Indeno[1,2,3-cd]pyrene ⁽²⁾	000193-39-5	3.2E+00	3.2E-02		
Iprodione	036734-19-7			3.9E+02	3.9E+01
Iron	007439-89-6				
Isobutyl Alcohol	000078-83-1			3.0E+03	3.0E+02
Isophorone	000078-59-1	2.4E+03	2.4E+01	2.0E+03	2.0E+02

Table 3.4e. (continued)

Chemical	CASRN	Ingestion of fish (mg/kg)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Isopropalin	033820-53-0			1.5E+02	1.5E+01
Isopropanol	000067-63-0				
Isopropyl Methyl Phosphonic Acid	001832-54-8			9.9E+02	9.9E+01
Isoxaben	082558-50-7			4.9E+02	4.9E+01
Karate	091465-08-6			4.9E+01	4.9E+00
Kerb	023950-58-5			7.4E+02	7.4E+01
Lactofen	077501-63-4			2.0E+01	2.0E+00
Lead Alkyls	NA				
Lead And Compounds	007439-92-1				
Linuron	000330-55-2			2.0E+01	2.0E+00
Lithium	007439-93-2				
Londax	083055-99-6			2.0E+03	2.0E+02
MCPA	000094-74-6			4.9E+00	4.9E-01
MCPB	000094-81-5			9.9E+01	9.9E+00
MCPB	000093-65-2			9.9E+00	9.9E-01
Magnesium	007439-95-4				
Malathion	000121-75-5			2.0E+02	2.0E+01
Maleic Anhydride	000108-31-6			9.9E+02	9.9E+01

Table 3.4e. (continued)

Chemical	CASRN	Ingestion of fish (mg/kg)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Maleic Hydrazide	000123-33-1			4.9E+03	4.9E+02
Malononitrile	000109-77-3			2.0E-01	2.0E-02
Mancozeb	008018-01-7			3.0E+02	3.0E+01
Maneb	012427-38-2			4.9E+01	4.9E+00
Manganese (Diet)	007439-96-5			1.4E+03	1.4E+02
Mephosfolan	000950-10-7			8.9E-01	8.9E-02
Mepiquat Chloride	024307-26-4			3.0E+02	3.0E+01
Mercuric Chloride	007487-94-7			3.0E+00	3.0E-01
Mercury (elemental)	007439-97-6			3.0E+00	3.0E-01
Mercury, Inorganic Salt	007439-97-6			3.0E+00	3.0E-01
Merphos	000150-50-5			3.0E-01	3.0E-02
Merphos Oxide	000078-48-8			3.0E-01	3.0E-02
Metalaxyl	057837-19-1			5.9E+02	5.9E+01
Methacrylonitrile	000126-98-7			9.9E-01	9.9E-02
Methamidophos	010265-92-6			4.9E-01	4.9E-02
Methanol	000067-56-1			4.9E+03	4.9E+02
Methidathion	000950-37-8			9.9E+00	9.9E-01
Methomyl	016752-77-5			2.5E+02	2.5E+01

Table 3.4e. (continued)

Chemical	CASRN	Ingestion of fish (mg/kg)*		
		10 ⁻⁴	10 ⁻⁶	HQ=1
Methoxy-5-nitroaniline, 2-	000099-59-2	5.0E+01	5.0E-01	
Methoxychlor	000072-43-5			4.9E+00
Methoxyethanol Acetate, 2-	000110-49-6			2.0E+01
Methoxyethanol, 2-	000109-86-4			9.9E+00
Methyl Acetate	000079-20-9			9.9E+02
Methyl Acrylate	000096-33-3			3.0E+01
Methyl Ethyl Ketone	000078-93-3			5.9E+02
Methyl Isobutyl Ketone	000108-10-1			7.9E+01
Methyl Mercury	022967-92-6			9.9E-01
Methyl Methacrylate	000080-62-6			7.9E+01
Methyl Parathion	000298-00-0			2.5E+00
Methyl Styrene (Mixed Isomers)	025013-15-4			5.9E+01
Methyl hydrazine ⁽⁵⁾	000060-34-4	2.1E+00	2.1E-02	
Methyl tert-Butyl Ether (MTBE)	001634-04-4			
Methyl-5-Nitroaniline, 2-	000099-55-8	7.0E+01	7.0E-01	
Methylaniline Hydrochloride, 2-	000636-21-5	1.3E+01	1.3E-01	
Methylcyclohexane	000108-87-2			
Methylene Chloride	000075-09-2	3.1E+02	3.1E+00	5.9E+01

Nonradionuclides/fish/recreational

Table 3.4e. (continued)

Chemical	CASRN	Ingestion of fish (mg/kg)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Methylene-bis(2-chloroaniline), 4,4'-	000101-14-4	1.8E+01	1.8E-01	6.9E+00	6.9E-01
Methylene-bis(N,N-dimethyl) Aniline, 4,4'-	000101-61-1	5.0E+01	5.0E-01		
Methylenebisbenzenamine, 4,4'-(⁵)	000101-77-9	9.2E+00	9.2E-02		
Methylenediphenyl Isocyanate, 4,4'-	000101-68-8				
Methylstyrene, Alpha-	000098-83-9			6.9E+02	6.9E+01
Methyltriethyl Lead	001762-28-3				
Metolachlor	051218-45-2			1.5E+03	1.5E+02
Metribuzin(⁵)	021087-64-9			2.5E+02	2.5E+01
Mirex(⁵)	002385-85-5	1.3E+00	1.3E-02	2.0E+00	2.0E-01
Molinate	002212-67-1			2.0E+01	2.0E+00
Molybdenum	007439-98-7			4.9E+01	4.9E+00
Monochloramine	010599-90-3			9.9E+02	9.9E+01
Monochlorobutanes	025154-42-1			3.9E+03	3.9E+02
Naled	000300-76-5			2.0E+01	2.0E+00
Naphthalene(⁶)	000091-20-3			3.5E+02	3.5E+01
Naphthalene, 1-Methyl	000090-12-0				
Naphthalene, 2-Methyl	000091-57-6				

Table 3.4e. (continued)

Chemical	CASRN	Ingestion of fish (mg/kg)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Napropamide	015299-99-7			9.9E+02	9.9E+01
Niagara Blue 4B	002429-74-5				
Nickel Carbonyl	013463-39-3				
Nickel Refinery Dust	NA				
Nickel Soluble Salts	007440-02-0			2.0E+02	2.0E+01
Nickel Subsulfide	012035-72-2				
Nitrapyrin ⁽⁵⁾	001929-82-4			1.5E+01	1.5E+00
Nitrate	014797-55-8			1.6E+04	1.6E+03
Nitric Oxide ⁽⁵⁾	010102-43-9			9.9E+02	9.9E+01
Nitrite	014797-65-0			9.9E+02	9.9E+01
Nitroaniline, 2-	000088-74-4				
Nitrobenzene	000098-95-3			4.9E+00	4.9E-01
Nitrofurantoin	000067-20-9			6.9E+02	6.9E+01
Nitrofurazone	000059-87-0	1.5E+00	1.5E-02		
Nitrogen Dioxide ⁽⁵⁾	010102-44-0			9.9E+03	9.9E+02
Nitroguanidine	000556-88-7			9.9E+02	9.9E+01
Nitrophenol, 4-	000100-02-7				
Nitropropane, 2- ⁽⁵⁾	000079-46-9	2.4E-01	2.4E-03		

Chemical	CASRN	Ingestion of fish (mg/kg)*			OCDD ⁽⁴⁾
		10 ⁻⁴	10 ⁻⁵	HQ=1	HQ=0.1
Nitroso-N-ethylurea, N-	000759-73-9	1.6E-02	1.6E-04		
Nitroso-N-methylurea, N-	000684-93-5				
Nitroso-di-N-butylamine, N-	000924-16-3	4.3E-01	4.3E-03		
Nitroso-di-N-propylamine, N-	000621-64-7	3.3E-01	3.3E-03		
Nitrosodietanolamine, N-	001116-54-7	8.2E-01	8.2E-03		
Nitrosodiethylamine, N-	000055-18-5	1.5E-02	1.5E-04		
Nitrosodimethylamine, N-	000062-75-9	4.5E-02	4.5E-04		
Nitrosodiphenylamine, N-	000086-30-6	4.7E+02	4.7E+00		
Nitrosomethylethylamine, N-	010595-95-6	1.0E-01	1.0E-03		
Nitrosomethylvinylamine, N-	004549-40-0				
Nitrosopyrrolidine, N-	000930-55-2	1.1E+00	1.1E-02		
Nitrotoluene, 4-Amino-2-	000119-32-4				
Nitrotoluene, m-	000099-08-1			9.9E+01	9.9E+00
Nitrotoluene, o-	000088-72-2			9.9E+01	9.9E+00
Nitrotoluene, p-	000099-99-0			9.9E+01	9.9E+00
Norflurazon	027314-13-2			3.9E+02	3.9E+01
Nustar	085509-19-9			6.9E+00	6.9E-01
OCDD ⁽⁴⁾	003268-87-9	1.5E-02	1.5E-04		

Table 3.4e. (continued)

Table 3.4e. (continued)

Chemical	CASRN	Ingestion of fish (mg/kg)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
OCDF ⁽⁴⁾	039001-02-0	1.5E-02	1.5E-04		
Octabromodiphenyl Ether	032536-52-0			3.0E+01	3.0E+00
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetra (HMX)	002691-41-0			4.9E+02	4.9E+01
Octamethylpyrophosphoramidate	000152-16-9			2.0E+01	2.0E+00
Octyl Phthalate, di-N-	000117-84-0			2.0E+02	2.0E+01
Oryzalin	019044-88-3			4.9E+02	4.9E+01
Oxadiazon	019666-30-9			4.9E+01	4.9E+00
Oxamyl	023135-22-0			2.5E+02	2.5E+01
Paclobutrazol	076738-62-0			1.3E+02	1.3E+01
Paraquat	001910-42-5			4.4E+01	4.4E+00
Parathion	000056-38-2			5.9E+01	5.9E+00
PeCDD, 2,3,7,8- ⁽⁴⁾	036088-22-9	3.1E-05	3.1E-07		
PeCDF, 1,2,3,7,8- ⁽⁴⁾	057117-41-6	3.1E-05	3.1E-07		
PeCDF, 2,3,4,7,8- ⁽⁴⁾	057117-31-4	3.1E-04	3.1E-06		
Pebulate	001114-71-2			4.9E+02	4.9E+01
Pendimethalin	040487-42-1			3.9E+02	3.9E+01
Pentabromodiphenyl Ether	032534-81-9			2.0E+01	2.0E+00

Table 3.4e. (continued)

Chemical	CASRN	Ingestion of fish (mg/kg)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Pentachlorobenzene	000608-93-5			7.9E+00	7.9E-01
Pentachlorocyclopentadiene	025329-35-5				
Pentachloronitrobenzene	000082-68-8	8.8E+00	8.8E-02	3.0E+01	3.0E+00
Pentachlorophenol	000087-86-5	1.9E+01	1.9E-01	3.0E+02	3.0E+01
Pentyl Alcohol, N-	000071-41-0				
Permethrin	052645-53-1			4.9E+02	4.9E+01
Phenanthrene	000085-01-8				
Phenmedipham	013684-63-4			2.5E+03	2.5E+02
Phenol	000108-95-2			5.9E+03	5.9E+02
Phenylenediamine, m-	000108-45-2			5.9E+01	5.9E+00
Phenylenediamine, o-	000095-54-5	4.9E+01	4.9E-01		
Phenylenediamine, p-	000106-50-3			1.9E+03	1.9E+02
Phenylmercuric Acetate	000062-38-4			7.9E-01	7.9E-02
Phenylphenol, 2-	000090-43-7	1.2E+03	1.2E+01		
Phorate	000298-02-2			2.0E+00	2.0E-01
Phosmet	000732-11-6			2.0E+02	2.0E+01
Phosphine	007803-51-2			3.0E+00	3.0E-01
Phosphoric Acid	007664-38-2				

Table 3.4e. (continued)

Chemical	CASRN	Ingestion of fish (mg/kg)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Phthalic Acid, P-	000100-21-0			9.9E+03	9.9E+02
Phthalic Anhydride	000085-44-9			2.0E+04	2.0E+03
Picloram	001918-02-1			6.9E+02	6.9E+01
Pirimiphos, Methyl	029232-93-7			9.9E+01	9.9E+00
Polybrominated Biphenyls	NA	2.6E-01	2.6E-03	6.9E-02	6.9E-03
Polychlorinated Biphenyls	001336-36-3	3.0E-01	3.0E-03		
Potassium Cyanide	000151-50-8			4.9E+02	4.9E+01
Potassium Silver Cyanide	000506-61-6			2.0E+03	2.0E+02
Prochloraz	067747-09-5	1.5E+01	1.5E-01	8.9E+01	8.9E+00
Profluralin	026399-36-0			5.9E+01	5.9E+00
Prometon	001610-18-0			1.5E+02	1.5E+01
Prometryn	007287-19-6			3.9E+01	3.9E+00
Propachlor	001918-16-7			1.3E+02	1.3E+01
Propanil	000709-98-8			4.9E+01	4.9E+00
Propargite	002312-35-8			2.0E+02	2.0E+01
Propargyl Alcohol	000107-19-7			2.0E+01	2.0E+00
Propazine	000139-40-2			2.0E+02	2.0E+01
Propham	000122-42-9			2.0E+02	2.0E+01

Table 3.4e. (continued)

Chemical	CASRN	Ingestion of fish (mg/kg)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Propiconazole	060207-90-1			1.3E+02	1.3E+01
Propylene Glycol	000057-55-6			2.0E+05	2.0E+04
Propylene Glycol Monoethyl Ether	001569-02-4			6.9E+03	6.9E+02
Propylene Glycol Monomethyl Ether	000107-98-2			6.9E+03	6.9E+02
Propylene Oxide	000075-56-9	9.6E+00	9.6E-02		
Pursuit	081335-77-5			2.5E+03	2.5E+02
Pydrin	051630-58-1			2.5E+02	2.5E+01
Pyrene	000129-00-0			3.0E+02	3.0E+01
Pyridine	000110-86-1			9.9E+00	9.9E-01
Quinalphos	013593-03-8			4.9E+00	4.9E-01
Quinoline	000091-22-5	1.9E-01	1.9E-03		
Refractory Ceramic Fibers	NA				
Resmethrin	010453-86-8			3.0E+02	3.0E+01
Ronnel	000299-84-3			4.9E+02	4.9E+01
Rotenone	000083-79-4			3.9E+01	3.9E+00
Savey	078587-05-0			2.5E+02	2.5E+01
Selenious Acid	007783-00-8			4.9E+01	4.9E+00
Selenite	014124-67-5				

Table 3.4e. (continued)

Chemical	CASRN	Ingestion of fish (mg/kg)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Selenium	007782-49-2			4.9E+01	4.9E+00
Selenium Sulfide	007446-34-6				
Selenourea	000630-10-4			4.9E+01	4.9E+00
Sethoxydim	074051-80-2			8.9E+02	8.9E+01
Silver	007440-22-4			4.9E+01	4.9E+00
Silver Cyanide	000506-64-9			9.9E+02	9.9E+01
Simazine	000122-34-9	1.9E+01	1.9E-01	4.9E+01	4.9E+00
Sodium	007440-23-5				
Sodium Acifluorfen	062476-59-9			1.3E+02	1.3E+01
Sodium Azide	026628-22-8			3.9E+01	3.9E+00
Sodium Cyanide	000143-33-9			3.9E+02	3.9E+01
Sodium Diethyldithiocarbamate	000148-18-5	8.5E+00	8.5E-02	3.0E+02	3.0E+01
Sodium Fluoroacetate	000062-74-8			2.0E-01	2.0E-02
Sodium Metavanadate	013718-26-8			9.9E+00	9.9E-01
Stirofos (Tetrachlorovinphos)	000961-11-5	9.6E+01	9.6E-01	3.0E+02	3.0E+01
Strontium, Stable	007440-24-6			5.9E+03	5.9E+02
Strychnine	000057-24-9			3.0E+00	3.0E-01
Styrene ⁽⁶⁾	000100-42-5			2.0E+03	2.0E+02

Table 3.4e. (continued)

Chemical	CASRN	Ingestion of fish (mg/kg)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Sulfate	014808-79-8				
Systhane	088671-89-0			2.5E+02	2.5E+01
TCDD, 2,3,7,8-(⁴)	001746-01-6	1.5E-05	1.5E-07		
TCDF, 2,3,7,8-(⁴)	051207-31-9	1.5E-04	1.5E-06		
TCMTB	021564-17-0			3.0E+02	3.0E+01
Tebuthiuron	034014-18-1			6.9E+02	6.9E+01
Temephos	003383-96-8			2.0E+02	2.0E+01
Terbacil	005902-51-2			1.3E+02	1.3E+01
Terbufos	013071-79-9			2.5E-01	2.5E-02
Terbutryn	000886-50-0			9.9E+00	9.9E-01
Tetrabutyl Lead	001920-90-7				
Tetrachlorobenzene, 1,2,4,5-	000095-94-3			3.0E+00	3.0E-01
Tetrachloroethane, 1,1,1,2-	000630-20-6	8.8E+01	8.8E-01	3.0E+02	3.0E+01
Tetrachloroethane, 1,1,2,2-	000079-34-5	1.2E+01	1.2E-01		
Tetrachloroethylene(⁶)	000127-18-4	4.4E+01	4.4E-01	9.9E+01	9.9E+00
Tetrachlorophenol, 2,3,4,6-	000058-90-2			3.0E+02	3.0E+01
Tetrachlorotoluene, p- alpha, alpha, alpha-	005216-25-1	1.2E-01	1.2E-03		

Table 3.4e. (continued)

Chemical	CASRN	Ingestion of fish (mg/kg)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Tetraethyl Dithiopyrophosphate	003689-24-5			4.9E+00	4.9E-01
Tetraethyl Lead	000078-00-2				
Tetrafluoroethane, 1,1,1,2-	000811-97-2				
Tetramethyl Lead	000075-74-1				
Tetrapropyl Lead	003440-75-3				
Thallic Oxide ⁽⁵⁾	001314-32-5			6.9E-01	6.9E-02
Thallium (I) Nitrate	010102-45-1			8.9E-01	8.9E-02
Thallium (Soluble Salts)	007440-28-0				
Thallium Acetate	000563-68-8			8.9E-01	8.9E-02
Thallium Carbonate	006533-73-9			7.9E-01	7.9E-02
Thallium Chloride	007791-12-0			7.9E-01	7.9E-02
Thallium Selenite ⁽⁵⁾	012039-52-0			8.9E-01	8.9E-02
Thallium Sulfate	007446-18-6			7.9E-01	7.9E-02
Thiobencarb	028249-77-6			9.9E+01	9.9E+00
Thiofanox	039196-18-4			3.0E+00	3.0E-01
Thiophanate, Methyl	023564-05-8			7.9E+02	7.9E+01
Thiram	000137-26-8			4.9E+01	4.9E+00
Thorium	007440-29-1				

Table 3.4e. (continued)

Chemical	CASRN	Ingestion of fish (mg/kg)*		
		10 ⁻⁴	10 ⁻⁵	HQ=1
Tin	007440-31-5			5.9E+03
Titanium	007440-32-6			
Toluene ⁽⁶⁾	000108-88-3			2.0E+03
Toluene diisocyanate mixture (TDI)	026471-62-5			
Toluene-2,4-diamine	000095-80-7	7.2E-01	7.2E-03	
Toluene-2,5-diamine	000095-70-5			5.9E+03
Toluene-2,6-diamine	000823-40-5			2.0E+03
Toluidine, o- (Methylaniline, 2-)	000095-53-4	9.6E+00	9.6E-02	
Toluidine, p-	000106-49-0	1.2E+01	1.2E-01	
Toxaphene	008001-35-2	2.1E+00	2.1E-02	
Tralomeethrin	066841-25-6			7.4E+00
Triallate	002303-17-5			1.3E+01
Triasulfuron	082097-50-5			9.9E+00
Tribromobenzene, 1,2,4-	000615-54-3			4.9E+00
Tribromochloromethane	000594-15-0			
Tribromodiphenyl Ether	049690-94-0			
Tributyltin Oxide	000056-35-9			3.0E-01
Trichloro-1,2,2-trifluoroethane, 1,1,2-	000076-13-1			3.0E+05

Nonradionuclides/fish/recreational

Table 3.4e. (continued)

Chemical	CASRN	Ingestion of fish (mg/kg)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Trichloro-2'-hydroxydiphenylether	003380-34-5				
Trichloroacetic Acid					
Trichloroaniline HCl, 2,4,6-	033663-50-2	7.9E+01	7.9E-01		
Trichloroaniline, 2,4,6-	000634-93-5	6.8E+01	6.8E-01		
Trichlorobenzene, 1,2,4-	000120-82-1			9.9E+01	9.9E+00
Trichloroethane, 1,1,1-(⁶)	000071-55-6			8.9E+02	8.9E+01
Trichloroethane, 1,1,2-	000079-00-5	4.0E+01	4.0E-01	3.9E+01	3.9E+00
Trichloroethylene(⁶)	000079-01-6	2.1E+02	2.1E+00		
Trichlorofluoromethane	000075-69-4			3.0E+03	3.0E+02
Trichlorophenol, 2,4,5-	000095-95-4			9.9E+02	9.9E+01
Trichlorophenol, 2,4,6-	000088-06-2	2.1E+02	2.1E+00		
Trichlorophenoxy) Propionic Acid, 2(2,4,5-	000093-72-1			7.9E+01	7.9E+00
Trichlorophenoxyacetic Acid, 2,4,5-	000093-76-5			9.9E+01	9.9E+00
Trichloropropane, 1,1,2-	000598-77-6			4.9E+01	4.9E+00
Trichloropropane, 1,2,3-	000096-18-4	3.3E-01	3.3E-03	5.9E+01	5.9E+00
Trichloropropene, 1,2,3-	000096-19-5			4.9E+01	4.9E+00
Trichlorotoluene, 2,3,6-	002077-46-5				

Table 3.4e. (continued)

Chemical	CASRN	Ingestion of fish (mg/kg)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Trichlorotoluene, alpha 2,6-	002014-83-7				
Tridiphan	058138-08-2			3.0E+01	3.0E+00
Triethyl Lead	005224-23-7				
Triethylamine	000121-44-8				
Trifluralin	001582-09-8	3.0E+02	3.0E+00	7.4E+01	7.4E+00
Trimethyl Lead	007442-13-9				
Trimethyl Phosphate	000512-56-1	6.2E+01	6.2E-01		
Trimethylethyl Lead	001762-26-1				
Trinitrobenzene, 1,3,5-	000099-35-4			4.9E-01	4.9E-02
Trinitrophenylmethylnitramine	000479-45-8			9.9E+01	9.9E+00
Trinitrotoluene, 2,4,6-	000118-96-7	7.7E+01	7.7E-01	4.9E+00	4.9E-01
Tripropyl Lead	006618-03-7				
Uranium (Soluble Salts)	NA			3.0E+01	3.0E+00
Vanadium Pentoxide	001314-62-1			8.9E+01	8.9E+00
Vanadium Sulfate	036907-42-3			2.0E+02	2.0E+01
Vanadium, Metallic	007440-62-2			6.9E+01	6.9E+00
Vanadyl Sulfate	027774-13-6			2.0E+02	2.0E+01
Vernolate	001929-77-7			9.9E+00	9.9E-01

Table 3.4e. (continued)

Chemical	CASRN	Ingestion of fish (mg/kg)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Vinclozolin	050471-44-8			2.5E+02	2.5E+01
Vinyl Acetate	000108-05-4			9.9E+03	9.9E+02
Vinyl Bromide	000593-60-2				
Vinyl Chloride ⁽⁶⁾	000075-01-4	1.2E+00	1.2E-02		
Warfarin	000081-81-2			3.0E+00	3.0E-01
White Phosphorus	007723-14-0			2.0E-01	2.0E-02
Xylene, Mixture ⁽⁶⁾	001330-20-7			2.0E+04	2.0E+03
Xylene, P- ⁽⁶⁾	000106-42-3				
Xylene, m- ⁽⁶⁾	000108-38-3			2.0E+04	2.0E+03
Xylene, o- ⁽⁶⁾	000095-47-6			2.0E+04	2.0E+03
Zinc (Metallic)	007440-66-6			3.0E+03	3.0E+02
Zinc Cyanide	000557-21-1			4.9E+02	4.9E+01
Zinc Phosphide	001314-84-7			3.0E+00	3.0E-01
Zineb	012122-67-7			4.9E+02	4.9E+01
Zirconium	007440-67-7				

Table 3.4e. (continued)

Notes:

- * By definition, $1 \text{ kg} = 1.0\text{E} + 06 \text{ mg}$. Therefore, a limit of $1.0\text{E} + 06 \text{ mg/kg}$ was used for any PRG that was calculated to be above this limit.
- (1) The same oral slope factor as used for polychlorinated biphenyls.
- (2) The PRG was calculated considering *Supplemental Guidance from RAGS: Region 4 Bulletins, Human Health Risk Assessment* (Interim 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 $7.3 (\text{mg/kg/day})^{-1}$ 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.
- (3) The toxicity values for trichloroethylene have been withdrawn from IRIS and HEAST pending further investigation. However, the most recent toxicity values have been used to calculate the PRG.
- (4) The PRG was calculated considering *Supplemental Guidance from RAGS: Region 4 Bulletins, Human Health Risk Assessment* (Interim Guidance) from EPA (November 1995). The slope factors for chemicals so marked indicate that a TEF methodology was used for chlorinated dioxin and furan congeners based on each compound's relative potency to the potency of 2,3,7,8-tetrachlorodibenzodioxin (TCDD). The following TEFs were used to convert each slope factor to an equivalent slope factor of 2,3,7,8-TCDD: (1) 2,3,7,8-TCDD, TEF = 1.0; (2) 2,3,7,8-PeCDD, TEF = 0.5; (3) 2,3,7,8-HxCDD, TEF = 0.1; (4) 2,3,7,8-HpCDD, TEF = 0.01; (5) OCDD, TEF = 0.001; (6) 2,3,7,8-TCDF, TEF = 0.1; (7) 1,2,3,7,8-PeCDF, TEF = 0.5; (8) 2,3,4,7,8-PeCDF, TEF = 0.05; (9) 2,3,7,8-HxCDF, TEF = 0.1; (10) 2,3,7,8-HpCDF, TEF = 0.01; and (11) OCDF, TEF = 0.001.
- (5) Toxicity values for these chemicals have been withdrawn from IRIS and HEAST pending further investigation. However, the most recent toxicity values have been used to calculate the PRG.
- (6) Toxicity values for these chemicals were obtained from the Superfund Health Risk Technical Support Center.

Table 3.4f. Risk-based Preliminary Remediation Goals for radionuclides in fish (recreational scenario)

Chemical [†]	CASRN	Ingestion of fish (pCi/g)	
		10 ⁻⁴	10 ⁻⁶
Ac-225	014265-85-1	9.1E+00	9.1E-02
Ac-227	014952-40-0	3.7E+00	3.7E-02
Ac-227+D	014952-40-0	2.1E+00	2.1E-02
Ac-228	014331-83-0	7.9E+02	7.9E+00
Ag-105	014928-14-4	7.9E+02	7.9E+00
Ag-108	014391-65-2	1.9E+05	1.9E+03
Ag-108m	014391-65-2	2.1E+02	2.1E+00
Ag-108m+D	014391-65-2	2.1E+02	2.1E+00
Ag-109m	014378-38-2	4.7E+06	4.7E+04
Ag-110	014391-76-5	5.3E+05	5.3E+03
Ag-110m	014391-76-5	1.5E+02	1.5E+00
Ag-111	015760-04-0	1.9E+02	1.9E+00
Am-241	014596-10-2	3.9E+00	3.9E-02
Am-242	013981-54-9	8.7E+02	8.7E+00
Am-242m	013981-54-9	4.4E+00	4.4E-02
Am-243	014993-75-0	3.9E+00	3.9E-02
Am-243+D	014993-75-0	3.9E+00	3.9E-02
Ar-41	014163-25-8		

Table 3.4f. (continued)

Chemical [†]	CASRN	Ingestion of fish (pCi/g)	
		10 ⁻⁴	10 ⁻⁶
At-217	017239-90-6	1.4E+08	1.4E+06
Au-196	014914-16-0	9.9E+02	9.9E+00
Au-198	010043-49-0	2.4E+02	2.4E+00
Ba-131	014914-75-1	7.6E+02	7.6E+00
Ba-133	013981-41-4	4.8E+02	4.8E+00
Ba-133m	013981-41-4	4.7E+02	4.7E+00
Ba-137m	013981-97-0	5.3E+05	5.3E+03
Ba-139	014378-25-7	4.2E+03	4.2E+01
Ba-140	014798-08-4	1.1E+02	1.1E+00
Be-7	013966-02-4	1.5E+04	1.5E+02
Bi-206	015776-19-9	1.8E+02	1.8E+00
Bi-207	013982-38-2	2.5E+02	2.5E+00
Bi-210	014331-79-4	1.8E+02	1.8E+00
Bi-211	015229-37-5	7.1E+04	7.1E+02
Bi-212	014913-49-6	2.1E+03	2.1E+01
Bi-213	015776-20-2	2.9E+03	2.9E+01
Bi-214	014733-03-0	6.6E+03	6.6E+01
Br-82	014686-69-2	9.1E+02	9.1E+00

Table 3.4f. (continued)

Chemical [†]	CASRN	Ingestion of fish (pCi/g)	
		10 ⁻⁴	10 ⁻⁶
C-11	014333-33-6	2.9E+04	2.9E+02
C-14	014762-75-5	1.2E+03	1.2E+01
C-15	015929-23-4	1.9E+06	1.9E+04
Ca-45	013966-05-7	6.4E+02	6.4E+00
Ca-47	001439-99-2	1.9E+02	1.9E+00
Cd-109	014109-32-1	1.6E+02	1.6E+00
Cd-115	014336-68-6	1.8E+02	1.8E+00
Cd-115m	014336-68-6	9.1E+01	9.1E-01
Ce-141	013967-74-3	3.3E+02	3.3E+00
Ce-143	014119-19-8	2.2E+02	2.2E+00
Ce-144	014762-78-8	4.3E+01	4.3E-01
Ce-144+D	014762-78-8	4.3E+01	4.3E-01
Cl-36	013981-43-6	5.8E+02	5.8E+00
Cl-38	014158-34-0	6.2E+03	6.2E+01
Cm-242	015510-73-3	3.4E+01	3.4E-01
Cm-243	015757-87-6	5.1E+00	5.1E-02
Cm-243+D	015757-87-6	5.1E+00	5.1E-02
Cm-244	013981-15-2	6.1E+00	6.1E-02

Table 3.4f. (continued)

Chemical [†]	CASRN	Ingestion of fish (pCi/g)	
		10 ⁻⁴	10 ⁻⁶
Cm-245	015621-76-8	3.8E+00	3.8E-02
Cm-246	015757-90-1	3.9E+00	3.9E-02
Cm-247	015758-32-4	4.2E+00	4.2E-02
Cm-248	015758-33-5	9.8E-01	9.8E-03
Co-57	013981-50-5	1.3E+03	1.3E+01
Co-58	013981-38-9	4.6E+02	4.6E+00
Co-58m	013981-38-9	1.4E+04	1.4E+02
Co-60	010198-40-0	6.8E+01	6.8E-01
Cr-51	014392-02-0	9.3E+03	9.3E+01
Cs-131	014914-76-2	7.1E+03	7.1E+01
Cs-134	013967-70-9	2.7E+01	2.7E-01
Cs-134m	013967-70-9	2.8E+04	2.8E+02
Cs-135	015726-30-4	2.8E+02	2.8E+00
Cs-136	014234-29-8	1.7E+02	1.7E+00
Cs-137	010045-97-3	4.1E+01	4.1E-01
Cs-137+D	010045-97-3	4.1E+01	4.1E-01
Cs-138	015758-29-9	7.3E+03	7.3E+01
Cu-64	013981-25-4	2.4E+03	2.4E+01

Table 3.4f. (continued)

Chemical [†]	CASRN	Ingestion of fish (pCi/g)	
		10 ⁻⁴	10 ⁻⁶
Dy-165	013967-64-1	3.9E+03	3.9E+01
Dy-166	015840-01-4	1.4E+02	1.4E+00
Er-169	015840-13-8	6.1E+02	6.1E+00
Er-171	014391-45-8	7.9E+02	7.9E+00
Eu-152	014683-23-9	2.2E+02	2.2E+00
Eu-154	015585-10-1	1.4E+02	1.4E+00
Eu-155	014391-16-3	7.8E+02	7.8E+00
Eu-156	014280-35-4	1.2E+02	1.2E+00
F-18	013981-56-1	1.2E+04	1.2E+02
Fe-55	014681-59-5	3.7E+03	3.7E+01
Fe-59	014596-12-4	2.2E+02	2.2E+00
Fr-221	015756-41-9	8.9E+03	8.9E+01
Fr-223	015756-98-6	2.9E+03	2.9E+01
Ga-67	014119-09-6	1.5E+03	1.5E+01
Ga-72	013982-22-4	2.7E+02	2.7E+00
Gd-153	014276-65-4	9.7E+02	9.7E+00
Gd-159	014041-42-0	4.9E+02	4.9E+00
Ge-71	014374-81-3	1.1E+05	1.1E+03

Table 3.4f. (continued)

Chemical [†]	CASRN	Ingestion of fish (pCi/g)	
		10 ⁻⁴	10 ⁻⁶
H-3	010028-17-8	1.8E+04	1.8E+02
Hg-197	013981-51-6	1.1E+03	1.1E+01
Hg-203	013982-78-0	4.9E+02	4.9E+00
Ho-166	013967-65-2	1.7E+02	1.7E+00
I-122	018287-75-7	6.0E+04	6.0E+02
I-123	015715-08-9	2.4E+03	2.4E+01
I-125	014158-31-7	5.0E+01	5.0E-01
I-126	014158-32-8	2.7E+01	2.7E-01
I-129	015046-84-1	7.0E+00	7.0E-02
I-130	014914-02-4	2.7E+02	2.7E+00
I-131	010043-66-0	3.6E+01	3.6E-01
I-132	014683-16-0	1.9E+03	1.9E+01
I-133	014834-67-4	1.2E+02	1.2E+00
I-134	014914-27-3	5.6E+03	5.6E+01
I-135	014834-68-5	5.7E+02	5.7E+00
In-113m	014885-78-0	1.5E+04	1.5E+02
In-114	013981-55-0	2.8E+05	2.8E+03
In-114m	013981-55-0	6.2E+01	6.2E-01

Table 3.4f. (continued)

Chemical [†]	CASRN	Ingestion of fish (pCi/g)	
		10 ⁻⁴	10 ⁻⁶
In-115	014191-71-0	3.7E+01	3.7E-01
In-115m	014191-71-0	3.8E+03	3.8E+01
Ir-190	014981-91-0	2.6E+02	2.6E+00
Ir-194	014158-35-1	1.8E+02	1.8E+00
K-40	013966-00-2	1.0E+02	1.0E+00
K-42	014378-21-3	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	1.4E+02	1.4E+00
Lu-177	014265-75-9	4.4E+02	4.4E+00
Mn-52	014092-99-0	2.1E+02	2.1E+00
Mn-54	013966-31-9	6.6E+02	6.6E+00
Mn-56	014681-52-8	1.5E+03	1.5E+01

Table 3.4f. (continued)

Chemical [†]	CASRN	Ingestion of fish (pCi/g)	
		10 ⁻⁴	10 ⁻⁶
Mo-99	014119-15-4	5.7E+02	5.7E+00
Na-22	013966-32-0	1.6E+02	1.6E+00
Na-24	013982-04-2	9.3E+02	9.3E+00
Nb-93m	007440-03-1	1.9E+03	1.9E+01
Nb-94	014681-63-1	1.9E+02	1.9E+00
Nb-95	013967-76-5	5.7E+02	5.7E+00
Nb-95m	013967-76-5	4.2E+02	4.2E+00
Nb-97	018496-04-3	7.3E+03	7.3E+01
Nb-97m	018496-04-3	3.9E+05	3.9E+03
Nd-147	014269-74-0	2.2E+02	2.2E+00
Nd-149	015749-81-2	2.8E+03	2.8E+01
Ni-59	014336-70-0	7.0E+03	7.0E+01
Ni-63	013981-37-8	2.3E+03	2.3E+01
Ni-65	014833-49-9	2.3E+03	2.3E+01
Np-236	015700-36-4	1.4E+03	1.4E+01
Np-237	013994-20-2	4.4E+00	4.4E-02
Np-237+D	013994-20-2	4.3E+00	4.3E-02
Np-238	015766-25-3	2.8E+02	2.8E+00

Table 3.4f. (continued)

Chemical ¹	CASRN	Ingestion of fish (pCi/g)	
		10 ⁻⁴	10 ⁻⁶
Np-239	013968-59-7	3.0E+02	3.0E+00
Np-240	015690-84-3	7.3E+03	7.3E+01
Np-240m	015690-84-3	5.3E+04	5.3E+02
Os-185	015766-50-4	7.1E+02	7.1E+00
Os-191	014119-24-5	4.2E+02	4.2E+00
Os-191m	014119-24-5	2.6E+03	2.6E+01
Os-193	016057-77-5	2.9E+02	2.9E+00
P-32	014596-37-3	2.1E+02	2.1E+00
P-33	015749-66-3	1.6E+03	1.6E+01
Pa-231	014331-85-2	8.6E+00	8.6E-02
Pa-233	013981-14-1	2.7E+02	2.7E+00
Pa-234	015100-28-4	6.0E+02	6.0E+00
Pa-234m	015100-28-4	2.7E+05	2.7E+03
Pb-203	014687-25-3	1.2E+03	1.2E+01
Pb-209	014119-30-3	6.2E+03	6.2E+01
Pb-210	014255-04-0	1.9E+00	1.9E-02
Pb-210+D	014255-04-0	1.3E+00	1.3E-02
Pb-211	015816-77-0	3.8E+03	3.8E+01

Table 3.4f. (continued)

Chemical [†]	CASRN	Ingestion of fish (pCi/g)	
		10 ⁻⁴	10 ⁻⁶
Pb-212	015092-94-1	7.1E+01	7.1E-01
Pb-214	015067-28-4	4.4E+03	4.4E+01
Pd-100	015690-69-4	3.4E+02	3.4E+00
Pd-101	015749-54-9	3.4E+03	3.4E+01
Pd-103	014967-68-1	1.2E+03	1.2E+01
Pd-107	017637-99-9	6.2E+03	6.2E+01
Pd-109	014981-64-7	3.9E+02	3.9E+00
Pm-147	014380-75-7	9.1E+02	9.1E+00
Pm-148	014683-19-3	8.9E+01	8.9E-01
Pm-148m	014683-19-3	1.3E+02	1.3E+00
Pm-149	015765-31-8	2.3E+02	2.3E+00
Po-210	013981-52-7	3.9E+00	3.9E-02
Po-212	015389-34-1	2.9E+13	2.9E+11
Po-213	015756-57-7	1.9E+12	1.9E+10
Po-214	015735-67-8	6.1E+10	6.1E+08
Po-215	015706-52-2	2.6E+09	2.6E+07
Po-216	015756-58-8	1.5E+07	1.5E+05
Po-218	015422-24-9	2.5E+04	2.5E+02

Table 3.4f. (continued)

Chemical [†]	CASRN	Ingestion of fish (pCi/g)	
		10 ⁻⁴	10 ⁻⁶
Pr-142	014191-64-1	1.8E+02	1.8E+00
Pr-143	014981-79-4	1.9E+02	1.9E+00
Pr-144	014119-05-2	1.6E+04	1.6E+02
Pr-144m	014119-05-2	4.0E+04	4.0E+02
Pt-191	015706-36-2	8.6E+02	8.6E+00
Pt-193	015735-70-3	7.9E+03	7.9E+01
Pt-193m	015735-70-3	5.1E+02	5.1E+00
Pt-197	015735-74-7	6.1E+02	6.1E+00
Pt-197m	015735-74-7	4.0E+03	4.0E+01
Pu-236	015411-92-4	1.7E+01	1.7E-01
Pu-238	013981-16-3	4.4E+00	4.4E-02
Pu-239	015117-48-3	4.1E+00	4.1E-02
Pu-240	014119-33-6	4.1E+00	4.1E-02
Pu-241	014119-32-5	2.5E+02	2.5E+00
Pu-241+D	014119-32-5	3.9E+00	3.9E-02
Pu-242	013982-10-0	4.3E+00	4.3E-02
Pu-243	015706-37-3	3.5E+03	3.5E+01
Pu-244	014119-34-7	4.1E+00	4.1E-02

Table 3.4f. (continued)

Chemical [†]	CASRN	Ingestion of fish (pCi/g)	
		10 ⁻⁴	10 ⁻⁶
Pu-244+D	014119-34-7	4.0E+00	4.0E-02
Ra-223	015623-45-7	5.5E+00	5.5E-02
Ra-224	013233-32-4	8.6E+00	8.6E-02
Ra-225	013981-53-8	8.2E+00	8.2E-02
Ra-226	013982-63-3	4.4E+00	4.4E-02
Ra-226+D	013982-63-3	4.3E+00	4.3E-02
Ra-228	015262-20-1	5.2E+00	5.2E-02
Ra-228+D	015262-20-1	5.2E+00	5.2E-02
Rb-82	014391-63-0	1.2E+05	1.2E+03
Rb-86	014932-53-7	1.8E+02	1.8E+00
Rb-87	013982-13-3	3.5E+02	3.5E+00
Rb-88	014928-36-0	8.8E+03	8.8E+01
Rb-89	014191-65-2	1.5E+04	1.5E+02
Rh-103m	007440-16-6	1.6E+05	1.6E+03
Rh-105	014913-89-4	6.7E+02	6.7E+00
Rh-105m	014913-89-4	1.2E+06	1.2E+04
Rh-106	014234-34-5	3.5E+05	3.5E+03
Rn-219	014835-02-0		

Table 3.4f. (continued)

Chemical [†]	CASRN	Ingestion of fish (pCi/g)	
		10 ⁻⁴	10 ⁻⁶
Rn-220	022481-48-7		
Rn-222+D	014859-67-7		
Ru-103	013968-53-1	3.9E+02	3.9E+00
Ru-105	014331-95-4	1.1E+03	1.1E+01
Ru-106	013967-48-1	3.7E+01	3.7E-01
Ru-106+D	013967-48-1	3.7E+01	3.7E-01
Ru-97	015758-35-7	2.2E+03	2.2E+01
S-35	015117-53-0	3.1E+03	3.1E+01
Sb-122	014374-79-9	1.5E+02	1.5E+00
Sb-124	014683-10-4	1.2E+02	1.2E+00
Sb-125	014234-35-6	4.3E+02	4.3E+00
Sb-125+D	014234-35-6	3.6E+02	3.6E+00
Sb-126	015756-32-8	1.3E+02	1.3E+00
Sb-126m	015756-32-8	1.8E+04	1.8E+02
Sb-127	013968-50-8	1.5E+02	1.5E+00
Sb-129	014331-88-5	6.9E+02	6.9E+00
Sc-46	013967-63-0	2.2E+02	2.2E+00
Sc-47	014391-96-9	4.4E+02	4.4E+00

Table 3.4f. (continued)

Chemical [†]	CASRN	Ingestion of fish (pCi/g)	
		10 ⁻⁴	10 ⁻⁶
Sc-48	014391-86-7	1.9E+02	1.9E+00
Se-75	014265-71-5	2.0E+02	2.0E+00
Si-31	014276-49-4	2.6E+03	2.6E+01
Sm-147	014392-33-7	5.1E+01	5.1E-01
Sm-151	015715-94-3	2.8E+03	2.8E+01
Sm-153	015766-00-4	3.2E+02	3.2E+00
Sn-113	013966-06-8	3.5E+02	3.5E+00
Sn-121	014683-06-8	1.1E+03	1.1E+01
Sn-121m	014683-06-8	6.4E+02	6.4E+00
Sn-125	014683-08-0	7.7E+01	7.7E-01
Sn-126	015832-50-5	6.1E+01	6.1E-01
Sr-82	014809-50-8	5.0E+01	5.0E-01
Sr-85	013967-73-2	9.2E+02	9.2E+00
Sr-85m	013967-73-2	7.1E+04	7.1E+02
Sr-89	014158-27-1	1.2E+02	1.2E+00
Sr-90	010098-97-2	3.1E+01	3.1E-01
Sr-90+D	010098-97-2	2.3E+01	2.3E-01
Sr-91	014331-91-0	4.6E+02	4.6E+00

Table 3.4f. (continued)

Chemical ¹	CASRN	Ingestion of fish (pCi/g)	
		10 ⁻⁴	10 ⁻⁶
Sr-92	014928-29-1	6.3E+02	6.3E+00
Ta-182	013982-00-8	1.8E+02	1.8E+00
Tb-158	015759-55-4	3.1E+02	3.1E+00
Tb-160	013981-29-8	1.7E+02	1.7E+00
Tc-95	014809-56-4	1.9E+04	1.9E+02
Tc-95m	014809-56-4	1.0E+03	1.0E+01
Tc-96	014808-44-7	5.6E+02	5.6E+00
Tc-96m	014808-44-7	4.9E+04	4.9E+02
Tc-97	015759-35-0	8.1E+03	8.1E+01
Tc-97m	015759-35-0	1.1E+03	1.1E+01
Tc-99	014133-76-7	9.2E+02	9.2E+00
Tc-99m	014133-76-7	2.3E+04	2.3E+02
Te-125m	014390-73-9	5.1E+02	5.1E+00
Te-127	013981-49-2	1.5E+03	1.5E+01
Te-127m	013981-49-2	2.1E+02	2.1E+00
Te-129	014269-71-7	8.7E+03	8.7E+01
Te-129m	014269-71-7	1.1E+02	1.1E+00
Te-131	014683-12-6	3.3E+03	3.3E+01

Table 3.4f. (continued)

Chemical [†]	CASRN	Ingestion of fish (pCi/g)	
		10 ⁻⁴	10 ⁻⁶
Te-131m	014683-12-6	1.5E+02	1.5E+00
Te-132	014234-28-7	1.1E+02	1.1E+00
Th-227	015623-47-9	3.2E+01	3.2E-01
Th-228	014274-82-9	2.0E+01	2.0E-01
Th-228+D	014274-82-9	5.6E+00	5.6E-02
Th-229	015594-54-4	2.3E+01	2.3E-01
Th-229+D	015594-54-4	3.6E+00	3.6E-02
Th-230	014269-63-7	3.4E+01	3.4E-01
Th-231	014932-40-2	7.2E+02	7.2E+00
Th-232	007440-29-1	3.9E+01	3.9E-01
Th-234	015065-10-8	6.7E+01	6.7E-01
Tl-202	015720-57-7	1.3E+03	1.3E+01
Tl-204	013968-51-9	6.5E+02	6.5E+00
Tl-208	014913-50-9	7.3E+04	7.3E+02
Tl-209	015690-73-0	9.2E+04	9.2E+02
Tm-170	013981-30-1	1.7E+02	1.7E+00
Tm-171	014333-45-0	2.2E+03	2.2E+01
U-232	014158-29-3	1.6E+01	1.6E-01

Table 3.4f. (continued)

Chemical ¹	CASRN	Ingestion of fish (pCi/g)	
		10 ⁻⁴	10 ⁻⁶
U-233	013968-55-3	2.9E+01	2.9E-01
U-234	013966-29-5	2.9E+01	2.9E-01
U-235	015117-96-1	2.8E+01	2.8E-01
U-235+D	015117-96-1	2.7E+01	2.7E-01
U-236	013982-70-2	3.1E+01	3.1E-01
U-237	014269-75-1	3.2E+02	3.2E+00
U-238	007440-61-1	3.0E+01	3.0E-01
U-238+D	007440-61-1	2.1E+01	2.1E-01
U-240	015687-53-3	2.4E+02	2.4E+00
V-48	014331-97-6	1.7E+02	1.7E+00
W-181	015749-46-9	4.7E+03	4.7E+01
W-185	014932-41-3	6.3E+02	6.3E+00
W-187	014983-48-3	5.2E+02	5.2E+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		

Table 3.4f. (continued)

Chemical [†]	CASRN	Ingestion of fish (pCi/g)	
		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	8.6E+01	8.6E-01
Y-91	014234-24-3	9.5E+01	9.5E-01
Y-91m	014234-24-3	3.5E+04	3.5E+02
Y-92	015751-59-4	6.6E+02	6.6E+00
Y-93	014981-70-5	2.2E+02	2.2E+00
Zn-65	013982-39-3	1.3E+02	1.3E+00
Zn-69	013982-23-5	2.1E+04	2.1E+02
Zn-69m	013982-23-5	8.5E+02	8.5E+00
Zr-93	015751-77-6	2.5E+03	2.5E+01
Zr-95	013967-71-0	3.3E+02	3.3E+00
Zr-97	014928-30-4	1.2E+02	1.2E+00

Table 3.4f. (continued)

Note:

† 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 3.4g. Risk-based Preliminary Remediation Goals for water based on ingestion of fish for nonradionuclides (recreational scenario)

Chemical	CASRN	Ingestion of Fish (concentration in water) (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
ALAR	001596-84-5				
Acenaphthene	000083-32-9			5.4E-01	5.4E-02
Acenaphthylene	000208-96-8				
Acephate	030560-19-1	2.0E+03	2.0E+01	3.0E+02	3.0E+01
Acetaldehyde	000075-07-0				
Acetochlor	034256-82-1				
Acetone	000067-64-1			2.5E+03	2.5E+02
Acetone Cyanohydrin	000075-86-5				
Acetonitrile	000075-05-8			1.8E+02	1.8E+01
Acetophenone ⁽⁵⁾	000098-86-2			8.5E+01	8.5E+00
Acrolein ⁽⁶⁾	000107-02-8			4.0E+02	4.0E+01
Acrylamide	000079-06-1	2.8E+00	2.8E-02	1.1E+01	1.1E+00
Acrylic Acid	000079-10-7			6.3E+03	6.3E+02
Acrylonitrile	000107-13-1	4.7E+00	4.7E-02	1.1E+01	1.1E+00
Alachlor	015972-60-8	3.1E-01	3.1E-03	1.0E+00	1.0E-01
Aldicarb	000116-06-3			2.3E+00	2.3E-01
Aldicarb Sulfone	001646-88-4				
Aldrin	000309-00-2	1.2E-03	1.2E-05	2.6E-03	2.6E-04

Table 3.4g. (continued)

Chemical	CASRN	Ingestion of Fish (concentration in water) (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Allyl	074223-64-6			4.1E+03	4.1E+02
Allyl Alcohol	000107-18-6			1.2E+02	1.2E+01
Allyl Chloride ⁽⁵⁾	000107-05-1			7.2E+01	7.2E+00
Aluminum	007429-90-5				
Aluminum Phosphide	020859-73-8				
Amdro	067485-29-4				
Ametryn	000834-12-8			6.5E+00	6.5E-01
Aminophenol, m-	000591-27-5			8.1E+02	8.1E+01
Aminopyridine, 4-	000504-24-5			2.1E-01	2.1E-02
Amitraz	033089-61-1				
Ammonia	007664-41-7				
Ammonium Sulfamate	007773-06-0				
Aniline	000062-53-3	1.4E+02	1.4E+00		
Anthracene	000120-12-7			2.3E+00	2.3E-01
Antimony (metallic)	007440-36-0			3.9E-02	3.9E-03
Antimony Pentoxide	001314-60-9				
Antimony Potassium Tartrate	000304-61-0				
Antimony Tetroxide	001332-81-6				

Table 3.4g. (continued)

Chemical	CASRN	Ingestion of Fish (concentration in water) (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Antimony Trioxide	001309-64-4				
Apollo	074115-24-5				
Aramite	000140-57-8				
Aroclor 1016	012674-11-2			3.8E-05	3.8E-06
Aroclor 1221 ⁽¹⁾	011104-28-2	3.9E-04	3.9E-06		
Aroclor 1232 ⁽¹⁾	011141-16-5	1.9E-03	1.9E-05		
Aroclor 1242 ⁽¹⁾	053469-21-9	3.9E-04	3.9E-06		
Aroclor 1248 ⁽¹⁾	012672-29-6	2.0E-05	2.0E-07		
Aroclor 1254	011097-69-1			9.2E-06	9.2E-07
Aroclor 1260 ⁽¹⁾	011096-82-5	2.0E-06	2.0E-08		
Arsenic Salts	NA				
Arsenic, Inorganic	007440-38-2				
Arsine	007784-42-1				
Asbestos	001332-21-4				
Assure	076578-14-8				
Asulam	003337-71-1				
Atrazine	001912-24-9	1.6E-01	1.6E-03	5.2E+00	5.2E-01
Avermectin B1	065195-55-3				

Table 3.4g. (continued)

Chemical	CASRN	Ingestion of Fish (concentration in water) (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Azobenzene	000103-33-3	4.6E-02	4.6E-04		
Barium	007440-39-3			1.7E+02	1.7E+01
Barium Cyanide	000542-62-1				
Baygon	000114-26-1			4.1E+00	4.1E-01
Bayleton	043121-43-3			9.0E+00	9.0E-01
Baythroid	068359-37-5				
Benefin	001861-40-1			1.8E+00	1.8E-01
Benomyl	017804-35-2			1.5E+01	1.5E+00
Bentazon	025057-89-0			6.1E+00	6.1E-01
Benz[a]anthracene ⁽²⁾	000056-55-3	2.5E-04	2.5E-06		
Benzaldehyde	000100-52-7			3.0E+01	3.0E+00
Benzene	000071-43-2	3.4E+00	3.4E-02		
Benzene Hexachloride	NA				
Benzene, Ethyldimethyl	NA				
Benzene, Ethylmethyl	NA				
Benzene, Methylpropenyl	NA				
Benzene, Methylpropyl	NA				
Benzene, Trimethyl	025551-13-7				

Table 3.4g. (continued)

Chemical	CASRN	Ingestion of Fish (concentration in water) (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Benzenethiol	000108-98-5			2.1E-03	2.1E-04
Benzidine	000092-87-5	1.7E-03	1.7E-05	5.2E+00	5.2E-01
Benzo[a]pyrene ⁽²⁾	000050-32-8	1.2E-05	1.2E-07		
Benzo[b]fluoranthene ⁽²⁾	000205-99-2	1.2E-04	1.2E-06		
Benzo[g,h,i]perylene	000191-24-2				
Benzo[k]fluoranthene ⁽²⁾	000207-08-9	3.6E-04	3.6E-06		
Benzoic Acid	000065-85-0			2.4E+03	2.4E+02
Benzotrichloride	000098-07-7	1.9E-03	1.9E-05		
Benzyl Alcohol	000100-51-6			7.3E+02	7.3E+01
Benzyl Chloride	000100-44-7	4.1E-01	4.1E-03		
Beryllium	007440-41-7	5.3E-03	5.3E-05	4.9E-01	4.9E-02
Bidrin	000141-66-2			5.5E+00	5.5E-01
Biphenthrin	082657-04-3				
Biphenyl, 1,1'-	000092-52-4			6.4E-01	6.4E-02
Bis(2-chloro-1-methylethyl)ether
(Technical)	000108-60-1	6.1E-01	6.1E-03		
Bis(2-chloroethoxy)methane	000111-91-1				
Bis(2-chloroethyl)ether	000111-44-4	3.7E-01	3.7E-03		

Table 3.4g. (continued)

Chemical	CASRN	Ingestion of Fish (concentration in water) (mg/L) ^a		
		10 ⁻⁴	10 ⁻⁶	HQ=1
Bis(2-chloroisopropyl)ether	039638-32-9			1.7E+00
Bis(2-ethylhexyl)phthalate ⁽⁶⁾	000117-81-7	5.3E-02	5.3E-04	6.3E-02
Bis(chloromethyl)ether	000542-88-1	9.1E-03	9.1E-05	
Bisphenol A	000080-05-7			1.5E+00
Boron And Borates Only	007440-42-8			
Boron Trifluoride	007637-07-2			
Bromochloromethane	000074-97-5			
Bromodichloromethane	000075-27-4	1.6E+00	1.6E-02	8.5E-01
Bromodiphenyl Ether, p-	000101-55-3			
Bromoform	000075-25-2	7.4E+00	7.4E-02	5.0E+00
Bromomethane ⁽⁶⁾	000074-83-9			2.9E+00
Bromophos	002104-96-3			
Bromotrichloromethane	000075-62-7			
Bromoxynil	001689-84-5			1.4E+02
Bromoxynil Octanoate	001689-99-2			
Butadiene, 1,3-	000106-99-0			
Butanol, N-	000071-36-3			5.4E+01
Butanone-2, 4-chloro-4,4-difluoro	NA			

Nonradionuclides/Ingestion of fish/concentration in water/recreational

Table 3.4g. (continued)

Chemical	CASRN	Ingestion of Fish (concentration in water) (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Butyl Benzyl Phthlate	000085-68-7			6.3E-01	6.3E-02
Butylate	002008-41-5				
Butylchloride, t-	000507-20-0				
Butylphthalyl Butylglycolate	000085-70-1				
Cacodylic Acid	000075-60-5			5.0E+01	5.0E+00
Cadmium (Diet)	007440-43-9			4.9E-02	4.9E-03
Calcium Cyanide	000592-01-8				
Caprolactam	000105-60-2			1.2E+04	1.2E+03
Captafol	002425-06-1	5.6E+00	5.6E-02	4.1E-01	4.1E-02
Captan	000133-06-2	2.0E+01	2.0E-01	3.9E+01	3.9E+00
Carbaryl	000063-25-2			3.0E+01	3.0E+00
Carbazole	000086-74-8	2.5E-01	2.5E-03		
Carbofuran	001563-66-2			5.1E+00	5.1E-01
Carbon Disulfide	000075-15-0			3.6E+01	3.6E+00
Carbon Tetrachloride ⁽⁶⁾	000056-23-5	2.2E-01	2.2E-03	8.7E-02	8.7E-03
Carbosulfan	055285-14-8				
Carboxin	005234-68-4			4.2E+01	4.2E+00
Chloral	000075-87-6				

Table 3.4g. (continued)

Chemical	CASRN	Ingestion of Fish (concentration in water) (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Chloramben	000133-90-4				
Chloranil	000118-75-2				
Chlordane ⁽⁶⁾	000057-74-9	2.0E-04	2.0E-06	6.6E-05	6.6E-06
Chloride	016887-00-6				
Chlorimuron, Ethyl-	090982-32-4				
Chlorine	007782-50-5				
Chlorine Dioxide	010049-04-4				
Chlorite (Sodium Salt)	007758-19-2				
Chloro-1,1-difluoroethane, 1-	000075-68-3				
Chloro-1,3-butadiene, 2-	000126-99-8			1.4E+01	1.4E+00
Chloro-2-methylaniline HCl, 4-	003165-93-3				
Chloro-2-methylaniline, 4-	000095-69-2				
Chloroacetic Acid	000079-11-8			4.1E+00	4.1E-01
Chloroacetophenone, 2-	000532-27-4				
Chloroaniline, p-	000106-47-8			5.0E-01	5.0E-02
Chlorobenzene ⁽⁶⁾	000108-90-7			2.5E+00	2.5E-01
Chlorobenzilate	000510-15-6	5.5E-03	5.5E-05	1.3E-01	1.3E-02
Chlorobenzoic Acid, p-	000074-11-3			3.0E+01	3.0E+00

Table 3.4g. (continued)

Chemical	CASRN	Ingestion of Fish (concentration in water) (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Chlorobenzotrifluoride, 4-	000098-56-6			4.8E-01	4.8E-02
Chlorobutane, 1-	000109-69-3			7.1E+01	7.1E+00
Chlorobutane, 2-	000078-86-4				
Chlorocyclopentadiene	041851-50-7				
Chlorodibromoethane	073506-94-2				
Chlorodifluoromethane	000075-45-6				
Chloroform ⁽⁶⁾	000067-66-3	1.9E+01	1.9E-01	5.1E+00	5.1E-01
Chloromethane ⁽⁶⁾	000074-87-3	6.1E+01	6.1E-01		
Chloromethyl Methyl Ether	000107-30-2				
Chloronaphthalene, Beta-	000091-58-7			1.0E+00	1.0E-01
Chloronitrobenzene, o-	000088-73-3	3.3E+00	3.3E-02		
Chloronitrobenzene, p-	000121-73-3	3.3E+00	3.3E-02		
Chlorophenol, 2-	000095-57-8			1.8E+00	1.8E-01
Chlorophenyl Methyl Sulfide, p-	000123-09-1				
Chlorophenyl Methyl Sulfoxide	000934-73-6				
Chloropropane, 2-	000075-29-6				
Chlorothalonil	001897-45-6	3.9E-01	3.9E-03	2.7E-01	2.7E-02
Chlorotoluene, o-	000095-49-8			8.7E-01	8.7E-02

Table 3.4g. (continued)

Chemical	CASRN	Ingestion of Fish (concentration in water) (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Chlorpropham	000101-21-3			2.1E+01	2.1E+00
Chlorpyrifos	002921-88-2			4.7E-03	4.7E-04
Chlorpyrifos Methyl	005598-13-0			9.0E-02	9.0E-03
Chlorsulfuron	064902-72-3			8.7E+03	8.7E+02
Chlorthiophos	060238-56-4				
Chromium (III) (Insoluble Salts)	016065-83-1			4.9E+01	4.9E+00
Chromium (VI) ⁽⁶⁾	018540-29-9			2.5E-01	2.5E-02
Chromium Salts	NA				
Chrysene ⁽²⁾	000218-01-9	2.5E-02	2.5E-04		
Cobalt	007440-48-4				
Coke Oven Emissions	008007-45-2				
Copper	007440-50-8				
Copper Cyanide	000544-92-3				
Creosote	008001-58-9				
Cresol, m-	000108-39-4			2.5E+01	2.5E+00
Cresol, o-	000095-48-7			3.0E+01	3.0E+00
Cresol, p-	000106-44-5			3.0E+00	3.0E-01
Crotonaldehyde	000123-73-9	8.8E-02	8.8E-04		

Table 3.4g. (continued)

Chemical	CASRN	Ingestion of Fish (concentration in water) (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Cumene	000098-82-8			1.5E+00	1.5E-01
Cyanazine	021725-46-2	9.6E-02	9.6E-04	6.9E-01	6.9E-02
Cyanide (CN-)	000057-12-5			4.9E+01	4.9E+00
Cyanogen	000460-19-5				
Cyanogen Bromide	000506-68-3				
Cyanogen Chloride	000506-77-4			5.9E+02	5.9E+01
Cyclohexane, 1,2,3,4,5-pentabromo-6-chloro-	000087-84-3				
Cyclohexanone	000108-94-1			2.0E+04	2.0E+03
Cyclohexylamine	000108-91-8			2.4E+02	2.4E+01
Cyclopentadiene	000542-92-7				
Cyhalothrin/karate	068085-85-8			4.8E-04	4.8E-05
Cypermethrin	052315-07-8				
Cyromazine	066215-27-8				
DDD	000072-54-8	6.4E-04	6.4E-06		
DDE	000072-55-9	5.3E-04	5.3E-06		
DDT	000050-29-3	1.7E-04	1.7E-06	1.2E-04	1.2E-05
Dacthal	001861-32-1				

Table 3.4g. (continued)

Chemical	CASRN	Ingestion of Fish (concentration in water) (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Dalapon	000075-99-0			1.3E+02	1.3E+01
Decabromodiphenyl Ether	001163-19-5			1.7E-02	1.7E-03
Demeton	008065-48-3				
Di(2-ethylhexyl)adipate	000103-23-1	3.8E-03	3.8E-05	1.2E-02	1.2E-03
Diallate	002303-16-4	1.8E+01	1.8E-01		
Diazinon	000333-41-5			1.9E-02	1.9E-03
Dibenz[a,h]anthracene ⁽²⁾	000053-70-3	3.6E-06	3.6E-08		
Dibromo-3-chloropropane, 1,2-	000096-12-8	2.9E-02	2.9E-04		
Dibromobenzene, 1,4-	000106-37-6			2.2E-01	2.2E-02
Dibromochloromethane	000124-48-1	9.9E-01	9.9E-03	7.1E+00	7.1E-01
Dibromodichloromethane	000594-18-3				
Dibromodiphenyl Ether, p,p'-	002050-47-7				
Dibromoethane, 1,2-	000106-93-4	1.4E-03	1.4E-05		
Dibromomethane (Methylene Bromide)	000074-95-3			2.1E+01	2.1E+00
Dibutyl Phthalate	000084-74-2			3.2E-01	3.2E-02
Dicamba	001918-00-9			2.6E+00	2.6E-01
Dichloro-2-butene, 1,4-	000764-41-0				
Dichloroacetic Acid					

Table 3.4g. (continued)

Chemical	CASRN	Ingestion of Fish (concentration in water) (mg/L) ^a			
		10 ⁻⁴	10 ⁻⁵	HQ=1	HQ=0.1
Dichlorobenzene, 1,2-(⁶)	000095-50-1			3.9E+00	3.9E-01
Dichlorobenzene, 1,3-	000541-73-1				
Dichlorobenzene, 1,4-	000106-46-7	4.2E-01	4.2E-03		
Dichlorobenzidine, 3,3'-	000091-94-1	1.9E-02	1.9E-04		
Dichlorodifluoromethane	000075-71-8			7.1E+01	7.1E+00
Dichloroethane, 1,1-	000075-34-3			7.2E+01	7.2E+00
Dichloroethane, 1,2-	000107-06-2	3.1E+00	3.1E-02		
Dichloroethylene, 1,1-	000075-35-4	2.8E-01	2.8E-03	6.5E+00	6.5E-01
Dichloroethylene, 1,2- (Mixed Isomers)	000540-59-0			6.5E+01	6.5E+00
Dichloroethylene, 1,2-cis-	000156-59-2			6.0E+00	6.0E-01
Dichloroethylene, 1,2-trans-	000156-60-5			1.4E+02	1.4E+01
Dichlorophenol, 2,4-	000120-83-2			3.1E-01	3.1E-02
Dichlorophenoxy Acetic Acid, 2,4-	000094-75-7			2.1E+00	2.1E-01
Dichlorophenoxy)butyric Acid, 4-(2,4-	000094-82-6			2.8E-01	2.8E-02
Dichloropropane, 1,2-	000078-87-5	1.7E+00	1.7E-02		
Dichloropropanol, 2,3-	000616-23-9				
Dichloropropene, 1,3-	000542-75-6	1.3E+00	1.3E-02	3.1E-01	3.1E-02
Dichlorvos	000062-73-7	3.9E-01	3.9E-03	2.4E-01	2.4E-02

Nonradionuclides/ingestion of fish/concentration in water/recreational

Table 3.4g. (continued)

Chemical	CASRN	Ingestion of Fish (concentration in water) (mg/L) ^a			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Dicofol	000115-32-2				
Dicyclopentadiene	000077-73-6			3.2E+00	3.2E-01
Dieldrin	000060-57-1	7.8E-05	7.8E-07	2.7E-04	2.7E-05
Diethyl Phthalate	000084-66-2			1.7E+02	1.7E+01
Diethyl-p-nitrophenylphosphate	000311-45-5				
Diethylene Glycol Dimitate (DEGDN)	000693-21-0				
Diethylene Glycol Monobutyl Ether	000112-34-5				
Diethylene Glycol Monoethyl Ether	000111-90-0			3.9E+04	3.9E+03
Diethylformamide	000617-84-5				
Diethylstilbestrol	000056-53-1	5.5E-08	5.5E-10		
Difenzquat	043222-48-6				
Diflubenzuron	035367-38-5				
Difluoroethane, 1,1-	000075-37-6				
Diisopropyl Methylphosphonate	001445-75-6			2.2E+02	2.2E+01
Dimethipin	055290-64-7				
Dimethoate	000060-51-5			3.0E-02	3.0E-03
Dimethoxybenzidine, 3,3'-	000119-90-4	1.2E+01	1.2E-01		
Dimethyl Sulfate	000077-78-1				

Nonradionuclides/Ingestion of fish/concentration in water/recreational

Table 3.4g. (continued)

Chemical	CASRN	Ingestion of Fish (concentration in water) (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Dimethylaniline HCl, 2,4-	021436-96-4				
Dimethylaniline, 2,4-	000095-68-1				
Dimethylaniline, N,N-	000121-69-7			3.5E-01	3.5E-02
Dimethylbenzidine, 3,3'-	000119-93-7	7.6E-03	7.6E-05		
Dimethylethyl Lead	107584-40-7				
Dimethylformamide	000068-12-2			9.6E+03	9.6E+02
Dimethylhydrazine, 1,1- ⁽⁵⁾	000057-14-7				
Dimethylhydrazine, 1,2-	000540-73-8				
Dimethylphenol, 2,4-	000105-67-9			6.0E+00	6.0E-01
Dimethylphenol, 2,6-	000576-26-1			1.6E-01	1.6E-02
Dimethylphenol, 3,4-	000095-65-8			3.6E-01	3.6E-02
Dimethylphthalate ⁽⁵⁾	000131-11-3			1.0E+04	1.0E+03
Dimethylterephthalate	000120-61-6			8.8E+00	8.8E-01
Dinitro-o-cresol, 4,6-	000534-52-1				
Dinitro-o-cyclohexyl Phenol, 4,6-	000131-89-5			3.8E+03	3.8E+02
Dinitrobenzene, 1,2-	000528-29-0			4.1E-01	4.1E-02
Dinitrobenzene, 1,3-	000099-65-0			1.0E-01	1.0E-02
Dinitrobenzene, 1,4-	000100-25-4			4.9E-01	4.9E-02

Table 3.4g. (continued)

Chemical	CASRN	Ingestion of Fish (concentration in water) (mg/L)*		
		10 ⁻⁴	10 ⁻⁶	HQ=1
Dinitrophenol, 2,4-	000051-28-5			2.4E+00
Dinitrotoluene, 2,4-	000121-14-2	1.7E-01	1.7E-03	1.0E+00
Dinitrotoluene, 2,6-	000606-20-2	2.9E-01	2.9E-03	8.5E-01
Dinitrotoluene, 2-Amino-4,6-	035572-78-2			
Dinoseb	000088-85-7			2.6E-02
Dioxane, 1,4-	000123-91-1	5.7E+02	5.7E+00	
Diphenamid	000957-51-7			1.1E+01
Diphenylamine	000122-39-4			9.2E-01
Diphenylhydrazine, 1,2-	000122-66-7	3.1E-02	3.1E-04	
Diquat	000085-00-7			7.7E+03
Direct Black 38	001937-37-7			
Direct Blue 6	002602-46-2			
Direct Brown 95	016071-86-6			
Direct Sky Blue	002610-05-1			
Disulfoton	000298-04-4			6.1E-04
Diuron	000330-54-1			3.0E-01
Dodine	002439-10-3			
EPTC	000759-94-4			

Nonradionuclides/Ingestion of fish/concentration in water/recreational

Table 3.4g. (continued)

Chemical	CASRN	Ingestion of Fish (concentration in water) (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Endosulfan	000115-29-7				
Endothall	000145-73-3				
Endrin	000072-20-8			1.6E-03	1.6E-04
Epichlorohydrin	000106-89-8	5.7E+02	5.7E+00	4.8E+01	4.8E+00
Epoxybutane, 1,2-	000106-88-7				
Ethephon	016672-87-0				
Ethion	000563-12-2			1.2E-03	1.2E-04
Ethoxyethanol Acetate, 2-	000111-15-9			1.6E+03	1.6E+02
Ethoxyethanol, 2-	000110-80-5			8.0E+03	8.0E+02
Ethyl Acetate	000141-78-6			3.7E+03	3.7E+02
Ethyl Acrylate	000140-88-5	8.4E+00	8.4E-02		
Ethyl Chloride	000075-00-3				
Ethyl Ether	000060-29-7			7.1E+02	7.1E+01
Ethyl Methacrylate	000097-63-2			5.4E+01	5.4E+00
Ethyl-p-nitrophenyl Phosphonate	002104-64-5			2.2E-04	2.2E-05
Ethylbenzene ⁽⁶⁾	000100-41-4			7.4E+00	7.4E-01
Ethylene Cyanohydrin	000109-78-4			6.9E+04	6.9E+03
Ethylene Diamine	000107-15-3			3.1E+02	3.1E+01

Table 3.4g. (continued)

Chemical	CASRN	Ingestion of Fish (concentration in water) (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Ethylene Glycol	000107-21-1			9.3E+05	9.3E+04
Ethylene Glycol Monobutyl Ether	000111-76-2				
Ethylene Oxide	000075-21-8	6.5E+00	6.5E-02		
Ethylene Thiourea	000096-45-7	1.1E+02	1.1E+00	4.3E+00	4.3E-01
Ethylphthalyl Ethyl Glycolate	000084-72-0				
Express	101200-48-0				
Fenamiphos	022224-92-6				
Fenpropathrin	039515-41-8				
Fluometuron	002164-17-2			3.3E+00	3.3E-01
Fluoranthene	000206-44-0			1.3E-01	1.3E-02
Fluorene	000086-73-7			3.0E-01	3.0E-02
Fluoride	007782-41-4				
Fluridone	059756-60-4				
Flurprimidol	056425-91-3				
Flutolanil	066332-96-5				
Fluvalinate	069409-94-5				
Folpet	000133-07-3	4.9E+00	4.9E-02	7.4E+00	7.4E-01
Fomesafen	072178-02-0				

Table 3.4g. (continued)

Chemical	CASRN	Ingestion of Fish (concentration in water) (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Fonofos	000944-22-9			3.4E-02	3.4E-03
Formaldehyde	000050-00-0			3.3E+03	3.3E+02
Formic Acid	000064-18-6			8.6E+04	8.6E+03
Fosetyl-AL	039148-24-8				
Furan	000110-00-9			1.7E+00	1.7E-01
Furazolidone	000067-45-8	3.1E-01	3.1E-03		
Furfural	000098-01-1			1.1E-01	1.1E-02
Furium	000531-82-8				
Furmecyclox	060568-05-0				
Glufosinate, Ammonium	077182-82-2				
Glycidyl	000765-34-4			2.4E+01	2.4E+00
Glyphosate	001071-83-6			3.2E+05	3.2E+04
Goal	042874-03-3				
Haloxypop, Methyl	069806-40-2				
Harmony	079277-27-3				
Heptachlor	000076-44-8	4.7E-04	4.7E-06	4.5E-03	4.5E-04
Heptachlor Epoxide	001024-57-3	3.4E-05	3.4E-07	1.7E-05	1.7E-06
Heptane, N-	000142-82-5				

Table 3.4g. (continued)

Chemical	CASRN	Ingestion of Fish (concentration in water) (mg/L)*		
		10 ⁻⁴	10 ⁻⁶	HQ=1
Hexabromobenzene	000087-82-1			8.2E-04
Hexachlorobenzene ⁽⁶⁾	000118-74-1	2.3E-04	2.3E-06	1.3E-03
Hexachlorobutadiene ⁽⁶⁾	000087-68-3	1.1E-02	1.1E-04	7.5E-04
Hexachlorocyclohexane, Alpha-	000319-84-6	6.7E-04	6.7E-06	
Hexachlorocyclohexane, Beta-	000319-85-7	2.0E-03	2.0E-05	
Hexachlorocyclohexane, Delta-	000319-86-8			
Hexachlorocyclohexane, Epsilon	006108-10-7			
Hexachlorocyclohexane, Gamma-	000058-89-9	4.6E-03	4.6E-05	7.7E-03
Hexachlorocyclohexane, Technical	000608-73-1			
Hexachlorocyclopentadiene	000077-47-4			1.1E-01
Hexachlorodibenzo-p-dioxin, Mixture	019408-74-3	5.1E-09	5.1E-11	
Hexachloroethane	000067-72-1	3.0E-01	3.0E-03	1.8E-02
Hexachlorophene	000070-30-4			1.0E-05
Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	000121-82-4	1.1E-01	1.1E-03	1.6E-01
Hexamethylene Diisocyanate, 1,6-	000822-06-0			
Hexane, N-	000110-54-3			1.1E+00
Hexanone, 2-	000591-78-6			

Nonadionucclides/Ingestion of fish/concentration in water/recreational

Table 3.4g. (continued)

Chemical	CASRN	Ingestion of Fish (concentration in water) (mg/L)			
		10^{-4}	10^{-5}	HQ=1	HQ=0.1
Hexazinone	051235-04-2			1.0E+06	1.2E+05
HpCDD, 2,3,7,8-(4)	037871-00-4				
HpCDF, 2,3,7,8-(4)	038998-75-3				
HxCDD, 2,3,7,8-(4)	034465-46-8				
HxCDF, 2,3,7,8-(4)	055684-94-1				
Hydrazine	000302-01-2	5.1E+01	5.1E-01		
Hydrazine Sulfate	010034-93-2	5.1E+01	5.1E-01		
Hydrogen Chloride	007647-01-0				
Hydrogen Cyanide	000074-90-8			1.7E+02	1.7E+01
Hydrogen Sulfide	007783-06-4			9.5E+00	9.5E-01
Hydroquinone	000123-31-9			2.6E+02	2.6E+01
Imazalil	035554-44-0				
Imazaquin	081335-37-7				
Indeno[1,2,3-cd]pyrene ⁽²⁾	000193-39-5	5.2E-05	5.2E-07		
Iprodione	036734-19-7				
Iron	007439-89-6				
Isobutyl Alcohol	000078-83-1			1.2E+03	1.2E+02
Isophorone	000078-59-1	2.1E+02	2.1E+00	1.7E+02	1.7E+01

Nonradionuclides/ingestion of fish/concentration in water/recreational

Table 3.4g. (continued)

Chemical	CASRN	Ingestion of Fish (concentration in water) (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Isopropalin	033820-53-0				
Isopropanol	000067-63-0				
Isopropyl Methyl Phosphonic Acid	001832-54-8				
Isoxaben	082558-50-7				
Karate	091465-08-6				
Kerb	023950-58-5				
Lactofen	077501-63-4				
Lead Alkyls	NA				
Lead And Compounds	007439-92-1				
Linuron	000330-55-2				
Lithium	007439-93-2				
Londax	083055-99-6				
MCPA	000094-74-6			1.5E-01	1.5E-02
MCPB	000094-81-5				
MCPD	000093-65-2			1.8E-01	1.8E-02
Magnesium	007439-95-4				
Malathion	000121-75-5			2.1E+00	2.1E-01
Maleic Anhydride	000108-31-6				

Table 3.4g. (continued)

Chemical	CASRN	Ingestion of Fish (concentration in water) (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Maleic Hydrazide	000123-33-1			1.7E+04	1.7E+03
Malononitrile	000109-77-3			3.1E-01	3.1E-02
Mancozeb	008018-01-7				
Maneb	012427-38-2			8.4E+01	8.4E+00
Manganese (Diet)	007439-96-5			3.5E+00	3.5E-01
Mephosfolan	000950-10-7				
Mepiquat Chloride	024307-26-4				
Mercuric Chloride	007487-94-7				
Mercury (elemental)	007439-97-6			3.0E-03	3.0E-04
Mercury, Inorganic Salt	007439-97-6			3.0E-03	3.0E-04
Merphos	000150-50-5				
Merphos Oxide	000078-48-8			2.3E-05	2.3E-06
Metalaxyl	057837-19-1				
Methacrylonitrile	000126-98-7			6.5E-01	6.5E-02
Methamidophos	010265-92-6			2.7E+00	2.7E-01
Methanol	000067-56-1			3.2E+04	3.2E+03
Methidathion	000950-37-8				
Methomyl	016752-77-5			1.5E+02	1.5E+01

Table 3.4g. (continued)

Chemical	CASRN	Ingestion of Fish (concentration in water) (mg/L) ^a			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Methoxy-5-nitroaniline, 2-	000099-59-2	6.2E+00	6.2E-02		
Methoxychlor	000072-43-5			3.8E-02	3.8E-03
Methoxyethanol Acetate, 2-	000110-49-6				
Methoxyethanol, 2-	000109-86-4			6.4E+01	6.4E+00
Methyl Acetate	000079-20-9			1.2E+04	1.2E+03
Methyl Acrylate	000096-33-3			1.6E+02	1.6E+01
Methyl Ethyl Ketone	000078-93-3			6.3E+03	6.3E+02
Methyl Isobutyl Ketone	000108-10-1			1.6E+02	1.6E+01
Methyl Mercury	022967-92-6				
Methyl Methacrylate	000080-62-6			1.4E+02	1.4E+01
Methyl Parathion	000298-00-0			1.5E-01	1.5E-02
Methyl Styrene (Mixed Isomers)	025013-15-4			2.9E-01	2.9E-02
Methyl hydrazine ⁽⁵⁾	000060-34-4				
Methyl tert-Butyl Ether (MTBE)	001634-04-4				
Methyl-5-Nitroaniline, 2-	000099-55-8	3.6E+00	3.6E-02		
Methylaniline Hydrochloride, 2-	000636-21-5	2.2E+01	2.2E-01		
Methylcyclohexane	000108-87-2				
Methylene Chloride	000075-09-2	5.4E+01	5.4E-01	1.0E+02	1.0E+01

Table 3.4g. (continued)

Chemical	CASRN	Ingestion of Fish (concentration in water) (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Methylene-bis(2-chloroaniline), 4,4'-	000101-14-4	3.3E-02	3.3E-04	1.3E-02	1.3E-03
Methylene-bis(N,N-dimethyl) Aniline, 4,4'-	000101-61-1	1.9E-02	1.9E-04		
Methylenebisbenzenamine, 4,4'-(⁵)	000101-77-9	9.5E-01	9.5E-03		
Methylenediphenyl Isocyanate, 4,4'-	000101-68-8				
Methylstyrene, Alpha-	000098-83-9			3.3E+00	3.3E-01
Methyltriethyl Lead	001762-28-3				
Metolachlor	051218-45-2				
Metribuzin(⁵)	021087-64-9			2.1E+01	2.1E+00
Mirex(⁵)	002385-85-5	2.1E-04	2.1E-06	3.3E-04	3.3E-05
Molinate	002212-67-1			7.0E-02	7.0E-03
Molybdenum	007439-98-7			4.9E+00	4.9E-01
Monochloramine	010599-90-3				
Monochlorobutanes	025154-42-1				
Naled	000300-76-5			2.5E-01	2.5E-02
Naphthalene(⁶)	000091-20-3			1.9E+00	1.9E-01
Naphthalene, 1-Methyl	000090-12-0				
Naphthalene, 2-Methyl	000091-57-6				
Napropamide	015299-99-7			5.3E+02	5.3E+01

Table 3.4g. (continued)

Chemical	CASRN	Ingestion of Fish (concentration in water) (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Niagara Blue 4B	002429-74-5				
Nickel Carbonyl	013463-39-3				
Nickel Refinery Dust	NA				
Nickel Soluble Salts	007440-02-0			2.0E+00	2.0E-01
Nickel Subsulfide	012035-72-2				
Nitrapyrin ⁽⁵⁾	001929-82-4			1.3E-01	1.3E-02
Nitrate	014797-55-8				
Nitric Oxide ⁽⁵⁾	010102-43-9				
Nitrite	014797-65-0				
Nitroaniline, 2-	000088-74-4				
Nitrobenzene	000098-95-3			3.6E-01	3.6E-02
Nitrofurantoin	000067-20-9				
Nitrofurazone	000059-87-0				
Nitrogen Dioxide ⁽⁵⁾	010102-44-0				
Nitroguanidine	000556-88-7				
Nitrophenol, 4-	000100-02-7				
Nitropropane, 2- ⁽⁵⁾	000079-46-9	1.6E-01	1.6E-03		
Nitroso-N-ethylurea, N-	000759-73-9	1.9E-02	1.9E-04		

Table 3.4g. (continued)

Chemical	CASRN	Ingestion of Fish (concentration in water) (mg/L) ^a		
		10 ⁻⁴	10 ⁻⁶	HQ=1
Nitroso-N-methylurea, N-	000684-93-5			
Nitroso-di-N-butylamine, N-	000924-16-3	2.6E-02	2.6E-04	
Nitroso-di-N-propylamine, N-	000621-64-7	4.8E-02	4.8E-04	
Nitrosodietolanolamine, N-	001116-54-7	2.3E+01	2.3E-01	
Nitrosodiethylamine, N-	000055-18-5	1.1E-02	1.1E-04	
Nitrosodimethylamine, N-	000062-75-9	2.1E-01	2.1E-03	
Nitrosodiphenylamine, N-	000086-30-6	3.5E+00	3.5E-02	
Nitrosomethylethylamine, N-	010595-95-6			
Nitrosomethylvinylamine, N-	004549-40-0			
Nitrosopyrrolidine, N-	000930-55-2	1.3E+01	1.3E-01	
Nitrotoluene, 4-Amino-2-	000119-32-4			
Nitrotoluene, m-	000099-08-1			2.5E+00
Nitrotoluene, o-	000088-72-2			3.0E+01
Nitrotoluene, p-	000099-99-0			2.5E+00
Norflurazon	027314-13-2			
Nustar	085509-19-9			
OCDD ⁽⁴⁾	003268-87-9	5.5E-09	5.5E-11	
OCDF ⁽⁴⁾	039001-02-0			

Nonradionuclides/ingestion of fish/concentration in water/recreational

Table 3.4g. (continued)

Chemical	CASRN	Ingestion of Fish (concentration in water) (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Octabromodiphenyl Ether	032536-52-0				
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetra (HMX)	002691-41-0			3.0E+02	3.0E+01
Octamethylpyrophosphoramidate	000152-16-9				
Octyl Phthalate, di-N-	000117-84-0			3.4E-05	3.4E-06
Oryzalin	019044-88-3				
Oxadiazon	019666-30-9				
Oxamyl	023135-22-0				
Paclobutrazol	076738-62-0				
Paraquat	001910-42-5			1.2E+05	1.2E+04
Parathion	000056-38-2			1.3E-01	1.3E-02
PeCDD, 2,3,7,8-(4)	036088-22-9	6.0E-10	6.0E-12		
PeCDF, 1,2,3,7,8-(4)	057117-41-6				
PeCDF, 2,3,4,7,8-(4)	057117-31-4				
Pebulate	001114-71-2				
Pendimethalin	040487-42-1				
Pentabromodiphenyl Ether	032534-81-9				
Pentachlorobenzene	000608-93-5			1.5E-03	1.5E-04

Table 3.4g. (continued)

Chemical	CASRN	Ingestion of Fish (concentration in water) (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Pentachlorocyclopentadiene	025329-35-5				
Pentachloronitrobenzene	000082-68-8	4.8E-03	4.8E-05	1.6E-02	1.6E-03
Pentachlorophenol	000087-86-5	1.1E-03	1.1E-05	1.6E-02	1.6E-03
Pentyl Alcohol, N-	000071-41-0				
Permethrin	052645-53-1			1.8E+00	1.8E-01
Phenanthrene	000085-01-8				
Phenmedipham	013684-63-4			4.1E+04	4.1E+03
Phenol	000108-95-2			7.3E+02	7.3E+01
Phenylenediamine, m-	000108-45-2			3.7E+02	3.7E+01
Phenylenediamine, o-	000095-54-5	3.8E+01	3.8E-01		
Phenylenediamine, p-	000106-50-3			2.6E+04	2.6E+03
Phenylmercuric Acetate	000062-38-4				
Phenylphenol, 2-	000090-43-7	8.9E+00	8.9E-02		
Phorate	000298-02-2			1.7E-01	1.7E-02
Phosmet	000732-11-6			2.5E+00	2.5E-01
Phosphine	007803-51-2				
Phosphoric Acid	007664-38-2				
Phthalic Acid, P-	000100-21-0			8.5E+02	8.5E+01

Table 3.4g. (continued)

Chemical	CASRN	Ingestion of Fish (concentration in water) (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Phthalic Anhydride	000085-44-9			9.9E+04	9.9E+03
Picloram	001918-02-1			1.8E+01	1.8E+00
Pyrimiphos, Methyl	029232-93-7				
Polybrominated Biphenyls	NA				
Polychlorinated Biphenyls	001336-36-3	1.4E-05	1.4E-07		
Potassium Cyanide	000151-50-8			1.3E+03	1.3E+02
Potassium Silver Cyanide	000506-61-6				
Prochloraz	067747-09-5				
Profluralin	026399-36-0				
Prometon	001610-18-0			4.5E+00	4.5E-01
Promethyn	007287-19-6			8.4E-01	8.4E-02
Propachlor	001918-16-7				
Propanil	000709-98-8			3.6E-01	3.6E-02
Propargite	002312-35-8				
Propargyl Alcohol	000107-19-7				
Propazine	000139-40-2			5.0E+00	5.0E-01
Propham	000122-42-9			1.2E+00	1.2E-01
Propiconazole	060207-90-1				

Nonradionuclides/Ingestion of fish/concentration in water/recreational

Table 3.4g. (continued)

Chemical	CASRN	Ingestion of Fish (concentration in water) (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Propylene Glycol	000057-55-6			1.0E+06	6.6E+05
Propylene Glycol Monoethyl Ether	001569-02-4				
Propylene Glycol Monomethyl Ether	000107-98-2			1.6E+04	1.6E+03
Propylene Oxide	000075-56-9	1.5E+01	1.5E-01		
Pursuit	081335-77-5				
Pydrin	051630-58-1			1.8E-01	1.8E-02
Pyrene	000129-00-0			9.5E-02	9.5E-03
Pyridine	000110-86-1			1.7E+00	1.7E-01
Quinalphos	013593-03-8				
Quinoline	000091-22-5	8.3E-03	8.3E-05		
Refractory Ceramic Fibers	NA				
Resmethrin	010453-86-8				
Ronnel	000299-84-3			1.1E-01	1.1E-02
Rotenone	000083-79-4			5.1E-02	5.1E-03
Savey	078587-05-0				
Selenious Acid	007783-00-8				
Selenite	014124-67-5				
Selenium	007782-49-2				

Table 3.4g. (continued)

Chemical	CASRN	Ingestion of Fish (concentration in water) (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Selenium Sulfide	007446-34-6				
Selenourea	000630-10-4				
Sethoxydim	074051-80-2				
Silver	007440-22-4			9.9E+00	9.9E-01
Silver Cyanide	000506-64-9				
Simazine	000122-34-9	6.9E-01	6.9E-03	1.8E+00	1.8E-01
Sodium	007440-23-5				
Sodium Acifluorfen	062476-59-9				
Sodium Azide	026628-22-8				
Sodium Cyanide	000143-33-9			2.8E+03	2.8E+02
Sodium Diethyldithiocarbamate	000148-18-5				
Sodium Fluoroacetate	000062-74-8				
Sodium Metavanadate	013718-26-8				
Stirofos (Tetrachlorovinphos)	000961-11-5				
Strontium, Stable	007440-24-6			9.9E+01	9.9E+00
Strychnine	000057-24-9			1.8E-01	1.8E-02
Styrene ⁽⁶⁾	000100-42-5			2.1E+01	2.1E+00
Sulfate	014808-79-8				

Table 3.4g. (continued)

Chemical	CASRN	Ingestion of Fish (concentration in water) (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Systhane	088671-89-0				
TCDD, 2,3,7,8-(4)	001746-01-6	1.8E-10	1.8E-12		
TCDF, 2,3,7,8-(4)	051207-31-9	9.8E-09	9.8E-11		
TCMTB	021564-17-0				
Tebuthiuron	034014-18-1			9.0E+02	9.0E+01
Temephos	003383-96-8				
Terbacil	005902-51-2				
Terbufos	013071-79-9			6.7E-04	6.7E-05
Terbutryn	000886-50-0			2.4E-02	2.4E-03
Tetrabutyl Lead	001920-90-7				
Tetrachlorobenzene, 1,2,4,5-	000095-94-3			1.6E-03	1.6E-04
Tetrachloroethane, 1,1,1,2-	000630-20-6	7.9E-01	7.9E-03	2.6E+00	2.6E-01
Tetrachloroethane, 1,1,2,2-	000079-34-5	2.9E-01	2.9E-03		
Tetrachloroethylene ⁽⁶⁾	000127-18-4	7.9E-01	7.9E-03	1.8E+00	1.8E-01
Tetrachlorophenol, 2,3,4,6-	000058-90-2			3.8E-01	3.8E-02
Tetrachlorotoluene, p- alpha, alpha, alpha-	005216-25-1				
Tetraethyl Dithiopyrophosphate	003689-24-5			4.4E-02	4.4E-03
Tetraethyl Lead	000078-00-2				

Table 3.4g. (continued)

Chemical	CASRN	Ingestion of Fish (concentration in water) (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Tetrafluoroethane, 1,1,1,2-	000811-97-2				
Tetramethyl Lead	000075-74-1				
Tetrapropyl Lead	003440-75-3				
Thallic Oxide ⁽⁵⁾	001314-32-5				
Thallium (I) Nitrate	010102-45-1				
Thallium (Soluble Salts)	007440-28-0				
Thallium Acetate	000563-68-8				
Thallium Carbonate	006533-73-9				
Thallium Chloride	007791-12-0				
Thallium Selenite ⁽⁵⁾	012039-52-0				
Thallium Sulfate	007446-18-6				
Thiobencarb	028249-77-6				
Thiofanox	039196-18-4			9.3E+01	9.3E+00
Thiophanate, Methyl	023564-05-8				
Thiram	000137-26-8				
Thorium	007440-29-1				
Tin	007440-31-5			2.0E+00	2.0E-01
Titanium	007440-32-6				

Chemical	CASRN	Ingestion of Fish (concentration in water) (mg/L)*		
		10 ⁻⁴	10 ⁻⁶	HQ=1
Toluene ⁽⁶⁾	000108-88-3			3.0E+00
Toluene diisocyanate mixture (TDI)	026471-62-5			
Toluene-2,4-diamine	000095-80-7	6.7E-01	6.7E-03	
Toluene-2,5-diamine	000095-70-5			
Toluene-2,6-diamine	000823-40-5			
Toluidine, o- (Methylaniline, 2-)	000095-53-4	1.7E+00	1.7E-02	
Toluidine, p-	000106-49-0	6.2E-01	6.2E-03	
Toxaphene	008001-35-2	8.0E-04	8.0E-06	
Tralomeethrin	066841-25-6			
Triallate	002303-17-5			2.1E-01
Triasulfuron	082097-50-5			
Tribromobenzene, 1,2,4-	000615-54-3			
Tribromochloromethane	000594-15-0			
Tribromodiphenyl Ether	049690-94-0			
Tributyltin Oxide	000056-35-9			
Trichloro-1,2,2-trifluoroethane, 1,1,2-	000076-13-1			5.3E+02
Trichloro-2-hydroxydiphenylether	003380-34-5			
Trichloroacetic Acid				

Page 35 of 39

3-717

Table 3.4g. (continued)

Chemical	CASRN	Ingestion of Fish (concentration in water) (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Trichloroaniline HCl, 2,4,6-	033663-50-2				
Trichloroaniline, 2,4,6-	000634-93-5				
Trichlorobenzene, 1,2,4-	000120-82-1			1.5E-01	1.5E-02
Trichloroethane, 1,1,1-(⁶)	000071-55-6			1.9E+01	1.9E+00
Trichloroethane, 1,1,2-	000079-00-5	2.1E+00	2.1E-02	2.0E+00	2.0E-01
Trichloroethylene(³)	000079-01-6	5.3E+00	5.3E-02		
Trichlorofluoromethane	000075-69-4			6.3E+01	6.3E+00
Trichlorophenol, 2,4,5-	000095-95-4			2.2E+00	2.2E-01
Trichlorophenol, 2,4,6-	000088-06-2	5.5E-01	5.5E-03		
Trichlorophenoxy) Propionic Acid, 2(2,4,5-	000093-72-1			1.5E-01	1.5E-02
Trichlorophenoxyacetic Acid, 2,4,5-	000093-76-5			1.5E-01	1.5E-02
Trichloropropane, 1,1,2-	000598-77-6				
Trichloropropane, 1,2,3-	000096-18-4	1.8E-04	1.8E-06	3.2E-02	3.2E-03
Trichloropropene, 1,2,3-	000096-19-5				
Trichlorotoluene, 2,3,6-	002077-46-5				
Trichlorotoluene, alpha 2,6-	002014-83-7				
Tridiphan	058138-08-2				
Triethyl Lead	005224-23-7				

Table 3.4g. (continued)

Chemical	CASRN	Ingestion of Fish (concentration in water) (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Triethylamine	000121-44-8				
Trifluralin	001582-09-8	4.8E-02	4.8E-04	1.2E-02	1.2E-03
Trimethyl Lead	007442-13-9				
Trimethyl Phosphate	000512-56-1				
Trimethylethyl Lead	001762-26-1				
Trinitrobenzene, 1,3,5-	000099-35-4			1.0E-01	1.0E-02
Trinitrophenylmethylnitramine	000479-45-8			5.1E+00	5.1E-01
Trinitrotoluene, 2,4,6-	000118-96-7	2.3E+00	2.3E-02	1.5E-01	1.5E-02
Tripropyl Lead	006618-03-7				
Uranium (Soluble Salts)	NA			3.0E+00	3.0E-01
Vanadium Pentoxide	001314-62-1				
Vanadium Sulfate	036907-42-3				
Vanadium, Metallic	007440-62-2			6.9E+00	6.9E-01
Vanadyl Sulfate	027774-13-6				
Vernolate	001929-77-7				
Vinclozolin	050471-44-8				
Vinyl Acetate	000108-05-4			4.7E+03	4.7E+02
Vinyl Bromide	000593-60-2				

Table 3.4g. (continued)

Chemical	CASRN	Ingestion of Fish (concentration in water) (mg/L)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1
Vinyl Chloride ⁽⁶⁾	000075-01-4	1.8E-01	1.8E-03		
Warfarin	000081-81-2			1.9E-02	1.9E-03
White Phosphorus	007723-14-0				
Xylene, Mixture ⁽⁶⁾	001330-20-7			1.0E+02	1.0E+01
Xylene, P- ⁽⁶⁾	000106-42-3				
Xylene, m- ⁽⁶⁾	000108-38-3			1.2E+02	1.2E+01
Xylene, o- ⁽⁶⁾	000095-47-6			1.2E+02	1.2E+01
Zinc (Metallic)	007440-66-6			3.0E+00	3.0E-01
Zinc Cyanide	000557-21-1				
Zinc Phosphide	001314-84-7				
Zineb	012122-67-7				
Zirconium	007440-67-7				

Notes:

- * By definition, 1 L (water) = 1.0E + 06 mg (water). Therefore, a limit of 1.0E + 06 mg/L was used for any PRG that was calculated to be above this limit.
- (1) The same oral slope factor as used for polychlorinated biphenyls.
 - (2) The PRG was calculated considering *Supplemental Guidance from RAGS: Region 4 Bulletins, Human Health Risk Assessment* (Interim 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)

Table 3.4g. (continued)

- 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.
- (3) The toxicity values for trichloroethylene have been withdrawn from IRIS and HEAST pending further investigation. However, the most recent toxicity values have been used to calculate the PRG.
- (4) The PRG was calculated considering *Supplemental Guidance from RAGS: Region 4 Bulletins, Human Health Risk Assessment* (Interim Guidance) from EPA (November 1995). The slope factors for chemicals so marked indicate that a TEF methodology was used for chlorinated dioxin and furan congeners based on each compound's relative potency to the potency of 2,3,7,8-tetrachlorodibenzodioxin (TCDD). The following TEFs were used to convert each slope factor to an equivalent slope factor of 2,3,7,8-TCDD: (1) 2,3,7,8-TCDD, TEF = 1.0; (2) 2,3,7,8-PeCDD, TEF = 0.5; (3) 2,3,7,8-HxCDD, TEF = 0.1; (4) 2,3,7,8-HpCDD, TEF = 0.01; (5) OCDD, TEF = 0.001; (6) 2,3,7,8-TCDF, TEF = 0.1; (7) 1,2,3,7,8-PeCDF, TEF = 0.5; (8) 2,3,4,7,8-PeCDF, TEF = 0.05; (9) 2,3,7,8-HxCDF, TEF = 0.1; (10) 2,3,7,8-HpCDF, TEF = 0.01; and (11) OCDF, TEF = 0.001.
- (5) Toxicity values for these chemicals have been withdrawn from IRIS and HEAST pending further investigation. However, the most recent toxicity values have been used to calculate the PRG.
- (6) Toxicity values for these chemicals were obtained from the Superfund Health Risk Technical Support Center.

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Table 3.4h. Risk-based Preliminary Remediation Goals for water based on ingestion of fish for radionuclides (recreational scenario)

| Chemical [†] | CASRN | Ingestion of Fish (concentration in water)
(pCi/L) | |
|-----------------------|-------------|---|------------------|
| | | 10 ⁻⁴ | 10 ⁻⁶ |
| Ac-225 | 014265-85-1 | 3.6E+02 | 3.6E+00 |
| Ac-227 | 014952-40-0 | 1.5E+02 | 1.5E+00 |
| Ac-227+D | 014952-40-0 | 4.5E+00 | 4.5E-02 |
| Ac-228 | 014331-83-0 | 3.2E+04 | 3.2E+02 |
| Ag-105 | 014928-14-4 | 1.6E+05 | 1.6E+03 |
| Ag-108 | 014391-65-2 | 3.7E+07 | 3.7E+05 |
| Ag-108m | 014391-65-2 | 4.3E+04 | 4.3E+02 |
| Ag-108m+D | 014391-65-2 | 4.3E+04 | 4.3E+02 |
| Ag-109m | 014378-38-2 | 9.5E+08 | 9.5E+06 |
| Ag-110 | 014391-76-5 | 1.1E+08 | 1.1E+06 |
| Ag-110m | 014391-76-5 | 3.1E+04 | 3.1E+02 |
| Ag-111 | 015760-04-0 | 3.8E+04 | 3.8E+02 |
| Am-241 | 014596-10-2 | 1.3E+02 | 1.3E+00 |
| Am-242 | 013981-54-9 | 2.9E+04 | 2.9E+02 |
| Am-242m | 013981-54-9 | 1.5E+02 | 1.5E+00 |
| Am-243 | 014993-75-0 | 1.3E+02 | 1.3E+00 |
| Am-243+D | 014993-75-0 | 6.5E+01 | 6.5E-01 |

Table 3.4h. (continued)

| Chemical† | CASRN | Ingestion of Fish (concentration in water)
(pCi/L) | |
|-----------|-------------|---|------------------|
| | | 10 ⁻⁴ | 10 ⁻⁶ |
| Ar-41 | 014163-25-8 | | |
| At-217 | 017239-90-6 | | |
| Au-196 | 014914-16-0 | | |
| Au-198 | 010043-49-0 | | |
| Ba-131 | 014914-75-1 | 1.9E+05 | 1.9E+03 |
| Ba-133 | 013981-41-4 | 1.2E+05 | 1.2E+03 |
| Ba-133m | 013981-41-4 | 1.2E+05 | 1.2E+03 |
| Ba-137m | 013981-97-0 | 1.3E+08 | 1.3E+06 |
| Ba-139 | 014378-25-7 | 1.1E+06 | 1.1E+04 |
| Ba-140 | 014798-08-4 | 2.7E+04 | 2.7E+02 |
| Be-7 | 013966-02-4 | 1.5E+05 | 1.5E+03 |
| Bi-206 | 015776-19-9 | 1.8E+04 | 1.8E+02 |
| Bi-207 | 013982-38-2 | 2.5E+04 | 2.5E+02 |
| Bi-210 | 014331-79-4 | 1.8E+04 | 1.8E+02 |
| Bi-211 | 015229-37-5 | 7.1E+06 | 7.1E+04 |
| Bi-212 | 014913-49-6 | 2.1E+05 | 2.1E+03 |
| Bi-213 | 015776-20-2 | 2.9E+05 | 2.9E+03 |

Table 3.4h. (continued)

| Chemical [†] | CASRN | Ingestion of Fish (concentration in water)
(pCi/L) | |
|-----------------------|-------------|---|------------------|
| | | 10 ⁻⁴ | 10 ⁻⁶ |
| Bi-214 | 014733-03-0 | 6.6E+05 | 6.6E+03 |
| Br-82 | 014686-69-2 | 2.3E+03 | 2.3E+01 |
| C-11 | 014333-33-6 | | |
| C-14 | 014762-75-5 | | |
| C-15 | 015929-23-4 | | |
| Ca-45 | 013966-05-7 | | |
| Ca-47 | 001439-99-2 | | |
| Cd-109 | 014109-32-1 | 8.0E+02 | 8.0E+00 |
| Cd-115 | 014336-68-6 | 8.8E+02 | 8.8E+00 |
| Cd-115m | 014336-68-6 | 4.5E+02 | 4.5E+00 |
| Ce-141 | 013967-74-3 | 1.1E+04 | 1.1E+02 |
| Ce-143 | 014119-19-8 | 7.3E+03 | 7.3E+01 |
| Ce-144 | 014762-78-8 | 1.4E+03 | 1.4E+01 |
| Ce-144+D | 014762-78-8 | 1.9E+02 | 1.9E+00 |
| Cl-36 | 013981-43-6 | | |
| Cl-38 | 014158-34-0 | | |
| Cm-242 | 015510-73-3 | 1.1E+03 | 1.1E+01 |

Table 3.4h. (continued)

| Chemical [†] | CASRN | Ingestion of Fish (concentration in water)
(pCi/L) | |
|-----------------------|-------------|---|------------------|
| | | 10 ⁻⁴ | 10 ⁻⁶ |
| Cm-243 | 015757-87-6 | 1.7E+02 | 1.7E+00 |
| Cm-243+D | 015757-87-6 | 5.2E+00 | 5.2E-02 |
| Cm-244 | 013981-15-2 | 2.0E+02 | 2.0E+00 |
| Cm-245 | 015621-76-8 | 1.3E+02 | 1.3E+00 |
| Cm-246 | 015757-90-1 | 1.3E+02 | 1.3E+00 |
| Cm-247 | 015758-32-4 | 1.4E+02 | 1.4E+00 |
| Cm-248 | 015758-33-5 | 3.3E+01 | 3.3E-01 |
| Co-57 | 013981-50-5 | 4.4E+03 | 4.4E+01 |
| Co-58 | 013981-38-9 | 1.5E+03 | 1.5E+01 |
| Co-58m | 013981-38-9 | 4.5E+04 | 4.5E+02 |
| Co-60 | 010198-40-0 | 2.3E+02 | 2.3E+00 |
| Cr-51 | 014392-02-0 | 4.7E+04 | 4.7E+02 |
| Cs-131 | 014914-76-2 | 3.6E+03 | 3.6E+01 |
| Cs-134 | 013967-70-9 | 1.4E+01 | 1.4E-01 |
| Cs-134m | 013967-70-9 | 1.4E+04 | 1.4E+02 |
| Cs-135 | 015726-30-4 | 1.4E+02 | 1.4E+00 |
| Cs-136 | 014234-29-8 | 8.3E+01 | 8.3E-01 |

Table 3.4h. (continued)

| Chemical [†] | CASRN | Ingestion of Fish (concentration in water)
(pCi/L) | |
|-----------------------|-------------|---|------------------|
| | | 10 ⁻⁴ | 10 ⁻⁶ |
| Cs-137 | 010045-97-3 | 2.0E+01 | 2.0E-01 |
| Cs-137+D | 010045-97-3 | 2.0E+01 | 2.0E-01 |
| Cs-138 | 015758-29-9 | 3.7E+03 | 3.7E+01 |
| Cu-64 | 013981-25-4 | 1.2E+04 | 1.2E+02 |
| 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 | 4.5E+03 | 4.5E+01 |
| Eu-154 | 015585-10-1 | 2.7E+03 | 2.7E+01 |
| Eu-155 | 014391-16-3 | 1.6E+04 | 1.6E+02 |
| Eu-156 | 014280-35-4 | 2.4E+03 | 2.4E+01 |
| F-18 | 013981-56-1 | | |
| Fe-55 | 014681-59-5 | 1.8E+04 | 1.8E+02 |
| Fe-59 | 014596-12-4 | 1.1E+03 | 1.1E+01 |
| Fr-221 | 015756-41-9 | | |
| Fr-223 | 015756-98-6 | | |

Table 3.4h. (continued)

| Chemical [†] | CASRN | Ingestion of Fish (concentration in water)
(pCi/L) | |
|-----------------------|-------------|---|------------------|
| | | 10 ⁻⁴ | 10 ⁻⁶ |
| Ga-67 | 014119-09-6 | | |
| Ga-72 | 013982-22-4 | | |
| Gd-153 | 014276-65-4 | | |
| Gd-159 | 014041-42-0 | | |
| Ge-71 | 014374-81-3 | | |
| H-3 | 010028-17-8 | 1.8E+07 | 1.8E+05 |
| Hg-197 | 013981-51-6 | 1.1E+03 | 1.1E+01 |
| Hg-203 | 013982-78-0 | 4.9E+02 | 4.9E+00 |
| Ho-166 | 013967-65-2 | | |
| I-122 | 018287-75-7 | 1.5E+06 | 1.5E+04 |
| I-123 | 015715-08-9 | 5.9E+04 | 5.9E+02 |
| I-125 | 014158-31-7 | 1.2E+03 | 1.2E+01 |
| I-126 | 014158-32-8 | 6.7E+02 | 6.7E+00 |
| I-129 | 015046-84-1 | 1.7E+02 | 1.7E+00 |
| I-130 | 014914-02-4 | 6.6E+03 | 6.6E+01 |
| I-131 | 010043-66-0 | 8.9E+02 | 8.9E+00 |
| I-132 | 014683-16-0 | 4.9E+04 | 4.9E+02 |

Table 3.4h. (continued)

| Chemical [†] | CASRN | Ingestion of Fish (concentration in water)
(pCi/L) | |
|-----------------------|-------------|---|------------------|
| | | 10 ⁻⁴ | 10 ⁻⁶ |
| I-133 | 014834-67-4 | 3.0E+03 | 3.0E+01 |
| I-134 | 014914-27-3 | 1.4E+05 | 1.4E+03 |
| I-135 | 014834-68-5 | 1.4E+04 | 1.4E+02 |
| In-113m | 014885-78-0 | | |
| In-114 | 013981-55-0 | | |
| In-114m | 013981-55-0 | | |
| In-115 | 014191-71-0 | | |
| In-115m | 014191-71-0 | | |
| Ir-190 | 014981-91-0 | | |
| Ir-194 | 014158-35-1 | | |
| K-40 | 013966-00-2 | | |
| K-42 | 014378-21-3 | | |
| 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 | | |

Table 3.4h. (continued)

| Chemical [†] | CASRN | Ingestion of Fish (concentration in water)
(pCi/L) | |
|-----------------------|-------------|---|------------------|
| | | 10 ⁻⁴ | 10 ⁻⁶ |
| Kr-89 | 016316-03-3 | | |
| Kr-90 | 015741-13-6 | | |
| La-140 | 013981-28-7 | 4.5E+03 | 4.5E+01 |
| Lu-177 | 014265-75-9 | | |
| Mn-52 | 014092-99-0 | 5.3E+02 | 5.3E+00 |
| Mn-54 | 013966-31-9 | 1.6E+03 | 1.6E+01 |
| Mn-56 | 014681-52-8 | 3.8E+03 | 3.8E+01 |
| Mo-99 | 014119-15-4 | 5.7E+04 | 5.7E+02 |
| Na-22 | 013966-32-0 | 8.0E+03 | 8.0E+01 |
| Na-24 | 013982-04-2 | 4.7E+04 | 4.7E+02 |
| Nb-93m | 007440-03-1 | 6.5E+03 | 6.5E+01 |
| Nb-94 | 014681-63-1 | 6.2E+02 | 6.2E+00 |
| Nb-95 | 013967-76-5 | 1.9E+03 | 1.9E+01 |
| Nb-95m | 013967-76-5 | 1.4E+03 | 1.4E+01 |
| Nb-97 | 018496-04-3 | 2.4E+04 | 2.4E+02 |
| Nb-97m | 018496-04-3 | 1.3E+06 | 1.3E+04 |
| Nd-147 | 014269-74-0 | 2.2E+03 | 2.2E+01 |

Table 3.4h. (continued)

| Chemical [†] | CASRN | Ingestion of Fish (concentration in water)
(pCi/L) | |
|-----------------------|-------------|---|------------------|
| | | 10 ⁻⁴ | 10 ⁻⁶ |
| Nd-149 | 015749-81-2 | 2.8E+04 | 2.8E+02 |
| Ni-59 | 014336-70-0 | 7.0E+04 | 7.0E+02 |
| Ni-63 | 013981-37-8 | 2.3E+04 | 2.3E+02 |
| Ni-65 | 014833-49-9 | 2.3E+04 | 2.3E+02 |
| Np-236 | 015700-36-4 | 4.6E+04 | 4.6E+02 |
| Np-237 | 013994-20-2 | 1.5E+02 | 1.5E+00 |
| Np-237+D | 013994-20-2 | 1.1E+02 | 1.1E+00 |
| Np-238 | 015766-25-3 | 9.4E+03 | 9.4E+01 |
| Np-239 | 013968-59-7 | 1.0E+04 | 1.0E+02 |
| Np-240 | 015690-84-3 | 2.4E+05 | 2.4E+03 |
| Np-240m | 015690-84-3 | 1.8E+06 | 1.8E+04 |
| 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 | 4.2E+00 | 4.2E-02 |
| P-33 | 015749-66-3 | 3.3E+01 | 3.3E-01 |

Table 3.4h. (continued)

| Chemical [†] | CASRN | Ingestion of Fish (concentration in water)
(pCi/L) | |
|-----------------------|-------------|---|------------------|
| | | 10 ⁻⁴ | 10 ⁻⁶ |
| Pa-231 | 014331-85-2 | 8.6E+02 | 8.6E+00 |
| Pa-233 | 013981-14-1 | 2.7E+04 | 2.7E+02 |
| Pa-234 | 015100-28-4 | 6.0E+04 | 6.0E+02 |
| Pa-234m | 015100-28-4 | 2.7E+07 | 2.7E+05 |
| Pb-203 | 014687-25-3 | 4.2E+03 | 4.2E+01 |
| Pb-209 | 014119-30-3 | 2.1E+04 | 2.1E+02 |
| Pb-210 | 014255-04-0 | 6.4E+00 | 6.4E-02 |
| Pb-210+D | 014255-04-0 | 3.5E+00 | 3.5E-02 |
| Pb-211 | 015816-77-0 | 1.3E+04 | 1.3E+02 |
| Pb-212 | 015092-94-1 | 2.4E+02 | 2.4E+00 |
| Pb-214 | 015067-28-4 | 1.5E+04 | 1.5E+02 |
| Pd-100 | 015690-69-4 | | |
| Pd-101 | 015749-54-9 | | |
| Pd-103 | 014967-68-1 | | |
| Pd-107 | 017637-99-9 | | |
| Pd-109 | 014981-64-7 | | |
| Pm-147 | 014380-75-7 | 3.0E+04 | 3.0E+02 |

Table 3.4h. (continued)

| Chemical [†] | CASRN | Ingestion of Fish (concentration in water)
(pCi/L) | |
|-----------------------|-------------|---|------------------|
| | | 10 ⁻⁴ | 10 ⁻⁶ |
| Pm-148 | 014683-19-3 | 3.0E+03 | 3.0E+01 |
| Pm-148m | 014683-19-3 | 4.3E+03 | 4.3E+01 |
| Pm-149 | 015765-31-8 | 7.8E+03 | 7.8E+01 |
| Po-210 | 013981-52-7 | 7.9E+01 | 7.9E-01 |
| Po-212 | 015389-34-1 | 5.7E+14 | 5.7E+12 |
| Po-213 | 015756-57-7 | 3.8E+13 | 3.8E+11 |
| Po-214 | 015735-67-8 | 1.2E+12 | 1.2E+10 |
| Po-215 | 015706-52-2 | 5.2E+10 | 5.2E+08 |
| Po-216 | 015756-58-8 | 2.9E+08 | 2.9E+06 |
| Po-218 | 015422-24-9 | 5.1E+05 | 5.1E+03 |
| Pr-142 | 014191-64-1 | 1.8E+03 | 1.8E+01 |
| Pr-143 | 014981-79-4 | 1.9E+03 | 1.9E+01 |
| Pr-144 | 014119-05-2 | 1.6E+05 | 1.6E+03 |
| Pr-144m | 014119-05-2 | 4.0E+05 | 4.0E+03 |
| Pt-191 | 015706-36-2 | | |
| Pt-193 | 015735-70-3 | | |
| Pt-193m | 015735-70-3 | | |

Table 3.4h. (continued)

| Chemical [†] | CASRN | Ingestion of Fish (concentration in water)
(pCi/L) | |
|-----------------------|-------------|---|------------------|
| | | 10 ⁻⁴ | 10 ⁻⁶ |
| Pt-197 | 015735-74-7 | | |
| Pt-197m | 015735-74-7 | | |
| Pu-236 | 015411-92-4 | 5.6E+02 | 5.6E+00 |
| Pu-238 | 013981-16-3 | 1.5E+02 | 1.5E+00 |
| Pu-239 | 015117-48-3 | 1.4E+02 | 1.4E+00 |
| Pu-240 | 014119-33-6 | 1.4E+02 | 1.4E+00 |
| Pu-241 | 014119-32-5 | 8.2E+03 | 8.2E+01 |
| Pu-241+D | 014119-32-5 | 5.5E+01 | 5.5E-01 |
| Pu-242 | 013982-10-0 | 1.4E+02 | 1.4E+00 |
| Pu-243 | 015706-37-3 | 1.2E+05 | 1.2E+03 |
| Pu-244 | 014119-34-7 | 1.4E+02 | 1.4E+00 |
| Pu-244+D | 014119-34-7 | 5.8E+01 | 5.8E-01 |
| Ra-223 | 015623-45-7 | 1.1E+02 | 1.1E+00 |
| Ra-224 | 013233-32-4 | 1.7E+02 | 1.7E+00 |
| Ra-225 | 013981-53-8 | 1.6E+02 | 1.6E+00 |
| Ra-226 | 013982-63-3 | 8.7E+01 | 8.7E-01 |
| Ra-226+D | 013982-63-3 | 9.4E+00 | 9.4E-02 |

Table 3.4h. (continued)

| Chemical [†] | CASRN | Ingestion of Fish (concentration in water)
(pCi/L) | |
|-----------------------|-------------|---|------------------|
| | | 10 ⁻⁴ | 10 ⁻⁶ |
| Ra-228 | 015262-20-1 | 1.0E+02 | 1.0E+00 |
| Ra-228+D | 015262-20-1 | 1.0E+02 | 1.0E+00 |
| Rb-82 | 014391-63-0 | 6.1E+04 | 6.1E+02 |
| Rb-86 | 014932-53-7 | 9.0E+01 | 9.0E-01 |
| Rb-87 | 013982-13-3 | 1.7E+02 | 1.7E+00 |
| Rb-88 | 014928-36-0 | 4.4E+03 | 4.4E+01 |
| Rb-89 | 014191-65-2 | 7.4E+03 | 7.4E+01 |
| Rh-103m | 007440-16-6 | 1.6E+07 | 1.6E+05 |
| Rh-105 | 014913-89-4 | 6.7E+04 | 6.7E+02 |
| Rh-105m | 014913-89-4 | 1.2E+08 | 1.2E+06 |
| Rh-106 | 014234-34-5 | 3.5E+07 | 3.5E+05 |
| Rn-219 | 014835-02-0 | | |
| Rn-220 | 022481-48-7 | | |
| Rn-222+D | 014859-67-7 | | |
| Ru-103 | 013968-53-1 | 3.9E+04 | 3.9E+02 |
| Ru-105 | 014331-95-4 | 1.1E+05 | 1.1E+03 |
| Ru-106 | 013967-48-1 | 3.7E+03 | 3.7E+01 |

Table 3.4h. (continued)

| Chemical [†] | CASRN | Ingestion of Fish (concentration in water)
(pCi/L) | |
|-----------------------|-------------|---|------------------|
| | | 10 ⁻⁴ | 10 ⁻⁶ |
| Ru-106+D | 013967-48-1 | 1.9E+03 | 1.9E+01 |
| Ru-97 | 015758-35-7 | 2.2E+05 | 2.2E+03 |
| S-35 | 015117-53-0 | 3.9E+03 | 3.9E+01 |
| Sb-122 | 014374-79-9 | 1.5E+03 | 1.5E+01 |
| Sb-124 | 014683-10-4 | 1.2E+03 | 1.2E+01 |
| Sb-125 | 014234-35-6 | 4.3E+03 | 4.3E+01 |
| Sb-125+D | 014234-35-6 | 7.3E+02 | 7.3E+00 |
| Sb-126 | 015756-32-8 | 1.3E+03 | 1.3E+01 |
| Sb-126m | 015756-32-8 | 1.8E+05 | 1.8E+03 |
| Sb-127 | 013968-50-8 | 1.5E+03 | 1.5E+01 |
| Sb-129 | 014331-88-5 | 6.9E+03 | 6.9E+01 |
| Sc-46 | 013967-63-0 | 2.2E+03 | 2.2E+01 |
| Sc-47 | 014391-96-9 | 4.4E+03 | 4.4E+01 |
| Sc-48 | 014391-86-7 | 1.9E+03 | 1.9E+01 |
| Se-75 | 014265-71-5 | | |
| Si-31 | 014276-49-4 | | |
| Sm-147 | 014392-33-7 | | |

Table 3.4h. (continued)

| Chemical [†] | CASRN | Ingestion of Fish (concentration in water)
(pCi/L) | |
|-----------------------|-------------|---|------------------|
| | | 10 ⁻⁴ | 10 ⁻⁶ |
| Sm-151 | 015715-94-3 | | |
| Sm-153 | 015766-00-4 | | |
| Sn-113 | 013966-06-8 | 1.2E+02 | 1.2E+00 |
| Sn-121 | 014683-06-8 | 3.5E+02 | 3.5E+00 |
| Sn-121m | 014683-06-8 | 2.1E+02 | 2.1E+00 |
| Sn-125 | 014683-08-0 | 2.6E+01 | 2.6E-01 |
| Sn-126 | 015832-50-5 | 2.0E+01 | 2.0E-01 |
| Sr-82 | 014809-50-8 | 8.3E+02 | 8.3E+00 |
| Sr-85 | 013967-73-2 | 1.5E+04 | 1.5E+02 |
| Sr-85m | 013967-73-2 | 1.2E+06 | 1.2E+04 |
| Sr-89 | 014158-27-1 | 2.1E+03 | 2.1E+01 |
| Sr-90 | 010098-97-2 | 5.2E+02 | 5.2E+00 |
| Sr-90+D | 010098-97-2 | 2.6E+02 | 2.6E+00 |
| Sr-91 | 014331-91-0 | 7.6E+03 | 7.6E+01 |
| Sr-92 | 014928-29-1 | 1.1E+04 | 1.1E+02 |
| Ta-182 | 013982-00-8 | 1.8E+03 | 1.8E+01 |
| Tb-158 | 015759-55-4 | | |

Table 3.4h. (continued)

| Chemical† | CASRN | Ingestion of Fish (concentration in water)
(pCi/L) | |
|-----------|-------------|---|------------------|
| | | 10 ⁻⁴ | 10 ⁻⁶ |
| Tb-160 | 013981-29-8 | | |
| Tc-95 | 014809-56-4 | 9.4E+05 | 9.4E+03 |
| Tc-95m | 014809-56-4 | 5.2E+04 | 5.2E+02 |
| Tc-96 | 014808-44-7 | 2.8E+04 | 2.8E+02 |
| Tc-96m | 014808-44-7 | 2.5E+06 | 2.5E+04 |
| Tc-97 | 015759-35-0 | 4.1E+05 | 4.1E+03 |
| Tc-97m | 015759-35-0 | 5.4E+04 | 5.4E+02 |
| Tc-99 | 014133-76-7 | 4.6E+04 | 4.6E+02 |
| Tc-99m | 014133-76-7 | 1.2E+06 | 1.2E+04 |
| Te-125m | 014390-73-9 | 1.3E+03 | 1.3E+01 |
| Te-127 | 013981-49-2 | 3.8E+03 | 3.8E+01 |
| Te-127m | 013981-49-2 | 5.3E+02 | 5.3E+00 |
| Te-129 | 014269-71-7 | 2.2E+04 | 2.2E+02 |
| Te-129m | 014269-71-7 | 2.7E+02 | 2.7E+00 |
| Te-131 | 014683-12-6 | 8.2E+03 | 8.2E+01 |
| Te-131m | 014683-12-6 | 3.6E+02 | 3.6E+00 |
| Te-132 | 014234-28-7 | 2.6E+02 | 2.6E+00 |

Table 3.4h. (continued)

| Chemical [†] | CASRN | Ingestion of Fish (concentration in water)
(pCi/L) | |
|-----------------------|-------------|---|------------------|
| | | 10 ⁻⁴ | 10 ⁻⁶ |
| Th-227 | 015623-47-9 | 3.2E+02 | 3.2E+00 |
| Th-228 | 014274-82-9 | 2.0E+02 | 2.0E+00 |
| Th-228+D | 014274-82-9 | 9.9E+00 | 9.9E-02 |
| Th-229 | 015594-54-4 | 2.3E+02 | 2.3E+00 |
| Th-229+D | 015594-54-4 | 6.9E+00 | 6.9E-02 |
| Th-230 | 014269-63-7 | 3.4E+02 | 3.4E+00 |
| Th-231 | 014932-40-2 | 7.2E+03 | 7.2E+01 |
| Th-232 | 007440-29-1 | 3.9E+02 | 3.9E+00 |
| Th-234 | 015065-10-8 | 6.7E+02 | 6.7E+00 |
| Tl-202 | 015720-57-7 | | |
| Tl-204 | 013968-51-9 | | |
| Tl-208 | 014913-50-9 | | |
| Tl-209 | 015690-73-0 | | |
| Tm-170 | 013981-30-1 | | |
| Tm-171 | 014333-45-0 | | |
| U-232 | 014158-29-3 | 1.6E+03 | 1.6E+01 |
| U-233 | 013968-55-3 | 2.9E+03 | 2.9E+01 |

Table 3.4h. (continued)

| Chemical [†] | CASRN | Ingestion of Fish (concentration in water)
(pCi/L) | |
|-----------------------|-------------|---|------------------|
| | | 10 ⁻⁴ | 10 ⁻⁶ |
| U-234 | 013966-29-5 | 2.9E+03 | 2.9E+01 |
| U-235 | 015117-96-1 | 2.8E+03 | 2.8E+01 |
| U-235+D | 015117-96-1 | 2.5E+02 | 2.5E+00 |
| U-236 | 013982-70-2 | 3.1E+03 | 3.1E+01 |
| U-237 | 014269-75-1 | 3.2E+04 | 3.2E+02 |
| U-238 | 007440-61-1 | 3.0E+03 | 3.0E+01 |
| U-238+D | 007440-61-1 | 1.6E+02 | 1.6E+00 |
| U-240 | 015687-53-3 | 2.4E+04 | 2.4E+02 |
| V-48 | 014331-97-6 | 1.7E+04 | 1.7E+02 |
| W-181 | 015749-46-9 | 4.7E+05 | 4.7E+03 |
| W-185 | 014932-41-3 | 6.3E+04 | 6.3E+02 |
| W-187 | 014983-48-3 | 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 3.4h. (continued)

| Chemical [†] | CASRN | Ingestion of Fish (concentration in water)
(pCi/L) | |
|-----------------------|-------------|---|------------------|
| | | 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 | 2.9E+03 | 2.9E+01 |
| Y-91 | 014234-24-3 | 3.2E+03 | 3.2E+01 |
| Y-91m | 014234-24-3 | 1.2E+06 | 1.2E+04 |
| Y-92 | 015751-59-4 | 2.2E+04 | 2.2E+02 |
| Y-93 | 014981-70-5 | 7.5E+03 | 7.5E+01 |
| Zn-65 | 013982-39-3 | 1.3E+02 | 1.3E+00 |
| Zn-69 | 013982-23-5 | 2.1E+04 | 2.1E+02 |
| Zn-69m | 013982-23-5 | 8.5E+02 | 8.5E+00 |
| Zr-93 | 015751-77-6 | 8.2E+03 | 8.2E+01 |
| Zr-95 | 013967-71-0 | 1.1E+03 | 1.1E+01 |

Table 3.4h. (continued)

| Chemical† | CASRN | Ingestion of Fish (concentration in water)
(pCi/L) | |
|-----------|-------------|---|------------------|
| | | 10 ⁻⁴ | 10 ⁻⁶ |
| Zr-97 | 014928-30-4 | 4.1E+02 | 4.1E+00 |

Note:

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

Chemical	CASRN	Ingestion (mg/kg)*				Inhalation (mg/kg)*				Dermal (mg/kg)*				Ingestion + Inhalation + Dermal (mg/kg)*			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
ALAR	001596-84-5			4.0E+05	4.0E+04							1.0E+06	3.0E+05			3.5E+05	3.5E+04
Acenaphthene	000083-32-9			1.0E+06	1.6E+05							1.0E+06	7.5E+05			1.0E+06	1.3E+05
Acenaphthylene	000208-96-8																
Acephate	030560-19-1	1.0E+06	2.1E+04	1.1E+04	1.1E+03					1.0E+06	1.6E+05	8.1E+04	8.1E+03	1.0E+06	1.9E+04	9.4E+03	9.4E+02
Acetaldehyde	000075-07-0					4.9E+04	3.5E+04	9.8E+03	9.8E+02								
Acetochlor	034256-82-1			5.3E+04	5.3E+03							4.0E+05	4.0E+04			4.7E+04	4.7E+03
Acetone	000067-64-1			1.0E+06	2.7E+05							1.0E+06	1.0E+06			1.0E+06	2.5E+05
Acetone Cyanohydrin	000075-86-5			2.1E+04	2.1E+03			1.0E+06	1.0E+06			1.6E+05	1.6E+04			1.9E+04	1.9E+03
Acetonitrile	000075-05-8			1.6E+05	1.6E+04			1.0E+06	1.0E+06			1.0E+06	1.9E+05			1.5E+05	1.5E+04
Acetophenone ⁽⁹⁾	000098-86-2			1.0E+06	2.7E+05			1.0E+06	1.6E+05			1.0E+06	1.0E+06			9.4E+05	9.4E+04
Acrolein ⁽⁹⁾	000107-02-8			5.3E+04	5.3E+03			4.9E+00	4.9E-01			6.5E+05	6.5E+04			4.9E+00	4.9E-01
Acrylamide	000079-06-1	4.1E+03	4.1E+01	5.3E+03	5.3E+02	1.0E+06	1.0E+06			3.1E+04	3.1E+02	4.0E+04	4.0E+03	3.7E+03	3.7E+01	4.7E+03	4.7E+02
Acrylic Acid	000079-10-7			1.0E+06	1.3E+05			1.0E+06	1.0E+06			1.0E+06	1.0E+06			1.0E+06	1.2E+05
Acrylonitrile	000107-13-1	3.5E+04	3.5E+02	2.7E+04	2.7E+03	1.8E+03	6.8E+01	1.3E+02	1.3E+01	4.2E+05	4.2E+03	3.2E+05	3.2E+04	1.8E+03	5.6E+01	1.3E+02	1.3E+01
Alachlor	015972-60-8	2.3E+05	2.3E+03	2.7E+04	2.7E+03					1.0E+06	1.8E+04	2.0E+05	2.0E+04	2.1E+05	2.1E+03	2.4E+04	2.4E+03
Aldicarb	000116-06-3			2.7E+03	2.7E+02							2.0E+04	2.0E+03			2.4E+03	2.4E+02
Aldicarb Sulfone	001646-88-4			2.7E+03	2.7E+02							2.0E+04	2.0E+03			2.4E+03	2.4E+02
Aldrin	000309-00-2	1.1E+03	1.1E+01	8.0E+01	8.0E+00	1.0E+06	1.0E+06			8.3E+03	8.3E+01	6.1E+02	6.1E+01	9.7E+02	9.7E+00	7.1E+01	7.1E+00
Allyl	074223-64-6			6.7E+05	6.7E+04							1.0E+06	5.1E+05			5.9E+05	5.9E+04
Allyl Alcohol	000107-18-6			1.3E+05	1.3E+04							1.0E+06	1.6E+05			1.2E+05	1.2E+04
Allyl Chloride ⁽⁹⁾	000107-05-1			1.3E+05	1.3E+04			6.3E+02	1.8E+02			1.0E+06	1.6E+05			6.3E+02	1.8E+02
Aluminum	007429-90-5																
Aluminum Phosphide	020859-73-8			1.1E+03	1.1E+02							3.2E+04	3.2E+03			1.0E+03	1.0E+02

Table 3.5a. (continued)

Chemical	CASRN	Ingestion (mg/kg)*				Inhalation (mg/kg)**				Dermal (mg/kg)*				Ingestion + Inhalation + Dermal (mg/kg)**			
		10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Amdro	067485-29-4			8.0E+02	8.0E+01							6.1E+03	6.1E+02			7.1E+02	7.1E+01
Ametryn	000834-12-8			2.4E+05	2.4E+04							1.0E+06	1.8E+05			2.1E+05	2.1E+04
Aminophenol, m-	000591-27-5			1.0E+06	1.9E+05							1.0E+06	1.0E+06			1.0E+06	1.6E+05
Aminopyridine, 4-	000504-24-5			5.3E+02	5.3E+01							4.0E+03	4.0E+02			4.7E+02	4.7E+01
Amtraz	033089-61-1			6.7E+03	6.7E+02							5.1E+04	5.1E+03			5.9E+03	5.9E+02
Ammonia	007664-41-7							1.0E+06	1.0E+06								
Ammonium Sulfamate	007773-06-0			5.3E+05	5.3E+04							1.0E+06	1.0E+06			5.2E+05	5.2E+04
Aniline	000062-53-3	1.0E+06	3.3E+04					1.0E+06	1.0E+06	1.0E+06	2.5E+05			1.0E+06	2.9E+04		
Anthracene	000120-12-7			1.0E+06	8.0E+05							1.0E+06	1.0E+06			1.0E+06	7.3E+05
Antimony (metallic)	007440-36-0			1.1E+03	1.1E+02							3.2E+03	3.2E+02			8.0E+02	8.0E+01
Antimony Pentoxide	001314-60-9			1.3E+03	1.3E+02							4.0E+04	4.0E+03			1.3E+03	1.3E+02
Antimony Potassium Tartrate	000304-61-0			2.4E+03	2.4E+02							7.3E+04	7.3E+03			2.3E+03	2.3E+02
Antimony Tetroxide	001332-81-6			1.1E+03	1.1E+02							3.2E+04	3.2E+03			1.0E+03	1.0E+02
Antimony Trioxide	001309-64-4			1.1E+03	1.1E+02			1.0E+06	1.0E+06			3.2E+04	3.2E+03			1.0E+03	1.0E+02
Apollo	074115-24-5			3.5E+04	3.5E+03							2.6E+05	2.6E+04			3.1E+04	3.1E+03
Aramite	000140-57-8	7.5E+05	7.5E+03	2.7E+05	2.7E+04	1.0E+06	1.0E+06			1.0E+06	5.7E+04	1.0E+06	2.0E+05	6.6E+05	6.6E+03	2.4E+05	2.4E+04
Aroclor 1016	012674-11-2			1.9E+02	1.9E+01							4.2E+02	4.2E+01			1.3E+02	1.3E+01
Aroclor 1221 ⁽¹⁾	011104-28-2	2.4E+03	2.4E+01							5.5E+03	5.5E+01			1.7E+03	1.7E+01		
Aroclor 1232 ⁽¹⁾	011141-16-5	2.4E+03	2.4E+01							5.5E+03	5.5E+01			1.7E+03	1.7E+01		
Aroclor 1242 ⁽¹⁾	053469-21-9	2.4E+03	2.4E+01							5.5E+03	5.5E+01			1.7E+03	1.7E+01		
Aroclor 1248 ⁽¹⁾	012672-29-6	2.4E+03	2.4E+01							5.5E+03	5.5E+01			1.7E+03	1.7E+01		
Aroclor 1254	011097-69-1			1.3E+02	1.3E+01							3.0E+02	3.0E+01			9.2E+01	9.2E+00

Table 3.5a. (continued)

Chemical	CASRN	Ingestion (mg/kg)*				Inhalation (mg/kg)* ^v				Dermal (mg/kg)*				Ingestion + Inhalation + Dermal (mg/kg)* ^v			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Aroclor 1260 ⁽¹⁾	011096-82-5	2.4E+03	2.4E+01							5.5E+03	5.5E+01			1.7E+03	1.7E+01		
Arsenic Salts	NA																
Arsenic, Inorganic	007440-38-2	1.2E+04	1.2E+02	8.0E+02	8.0E+01	1.0E+06	3.8E+05			7.7E+05	7.7E+03	5.0E+04	5.0E+03	1.2E+04	1.2E+02	7.9E+02	7.9E+01
Arsine	007784-42-1							1.0E+06	3.9E+05								
Asbestos	001332-21-4																
Assure	076578-14-8			2.4E+04	2.4E+03							1.8E+05	1.8E+04			2.1E+04	2.1E+03
Asulam	003337-71-1			1.3E+05	1.3E+04							1.0E+06	1.0E+05			1.2E+05	1.2E+04
Atrazine	001912-24-9	8.4E+04	8.4E+02	9.3E+04	9.3E+03					6.4E+05	6.4E+03	7.1E+05	7.1E+04	7.4E+04	7.4E+02	8.2E+04	8.2E+03
Avermectin B1	065195-55-3			1.1E+03	1.1E+02							8.1E+03	8.1E+02			9.4E+02	9.4E+01
Azobenzene	000103-33-3	1.7E+05	1.7E+03			1.0E+06	1.0E+06			1.0E+06	1.3E+04			1.5E+05	1.5E+03		
Barium	007440-39-3			1.9E+05	1.9E+04			1.0E+06	1.0E+06			1.0E+06	2.0E+05			1.7E+05	1.7E+04
Barium Cyanide	000542-62-1			2.7E+05	2.7E+04							1.0E+06	8.1E+05			2.6E+05	2.6E+04
Baygon	000114-26-1			1.1E+04	1.1E+03							8.1E+04	8.1E+03			9.4E+03	9.4E+02
Bayleton	043121-43-3			8.0E+04	8.0E+03							6.1E+05	6.1E+04			7.1E+04	7.1E+03
Baythroid	068359-37-5			6.7E+04	6.7E+03							5.1E+05	5.1E+04			5.9E+04	5.9E+03
Bencfin	001861-40-1			8.0E+05	8.0E+04							1.0E+06	6.1E+05			7.1E+05	7.1E+04
Benomyl	017804-35-2			1.3E+05	1.3E+04							1.0E+06	1.0E+05			1.2E+05	1.2E+04
Bentazon	025057-89-0			6.7E+03	6.7E+02							5.1E+04	5.1E+03			5.9E+03	5.9E+02
Benz[a]anthracene ⁽²⁾	000056-55-3	2.6E+04	2.6E+02			1.0E+06	1.0E+06			1.2E+05	1.2E+03			2.1E+04	2.1E+02		
Benzaldehyde	000100-52-7			1.0E+06	2.7E+05							1.0E+06	1.0E+06			1.0E+06	2.4E+05
Benzene	000071-43-2	6.4E+05	6.4E+03			5.0E+02	5.0E+02			1.0E+06	9.5E+04			5.0E+02	5.0E+02		
Benzene Hexachloride	NA																
Benzene, Ethyldimethyl	NA																

Table 3.5a. (continued)

| Chemical | CASRN | Ingestion (mg/kg)* | | | | Inhalation (mg/kg)* ^y | | | | Dermal (mg/kg)* | | | | Ingestion + Inhalation +
Dermal (mg/kg)* ^y | | | |
|---|-------------|--------------------|------------------|---------|---------|----------------------------------|------------------|------|--------|------------------|------------------|---------|---------|--|------------------|---------|---------|
| | | 10 ⁻⁴ | 10 ⁻⁴ | HQ=1 | HQ=0.1 | 10 ⁻⁴ | 10 ⁻⁴ | HQ=1 | HQ=0.1 | 10 ⁻⁴ | 10 ⁻⁴ | HQ=1 | HQ=0.1 | 10 ⁻⁴ | 10 ⁻⁴ | HI=1 | HI=0.1 |
| Benzene, Ethylmethyl | NA | | | | | | | | | | | | | | | | |
| Benzene, Methylpropenyl | NA | | | | | | | | | | | | | | | | |
| Benzene, Methylpropyl | NA | | | | | | | | | | | | | | | | |
| Benzene, Trimethyl | 025551-13-7 | | | | | | | | | | | | | | | | |
| Benzenethiol | 000108-98-5 | | | 2.7E+02 | 2.7E+01 | | | | | | | 2.0E+03 | 2.0E+02 | | | 2.4E+02 | 2.4E+01 |
| Benzidine | 000092-87-5 | 8.1E+01 | 8.1E-01 | 8.0E+03 | 8.0E+02 | 1.0E+06 | 8.3E+04 | | | 9.8E+02 | 9.8E+00 | 9.7E+04 | 9.7E+03 | 7.5E+01 | 7.5E-01 | 7.4E+03 | 7.4E+02 |
| Benzo[a]pyrene ⁽²⁾ | 000050-32-8 | 2.6E+03 | 2.6E+01 | | | 1.0E+06 | 1.0E+06 | | | 1.2E+04 | 1.2E+02 | | | 2.1E+03 | 2.1E+01 | | |
| Benzo[b]fluoranthene ⁽²⁾ | 000205-99-2 | 2.6E+04 | 2.6E+02 | | | 1.0E+06 | 1.0E+06 | | | 1.2E+05 | 1.2E+03 | | | 2.1E+04 | 2.1E+02 | | |
| Benzo[g,h,i]perylene | 000191-24-2 | | | | | | | | | | | | | | | | |
| Benzo[k]fluoranthene ⁽²⁾ | 000207-08-9 | 2.6E+05 | 2.6E+03 | | | 1.0E+06 | 1.0E+06 | | | 1.0E+06 | 1.2E+04 | | | 2.1E+05 | 2.1E+03 | | |
| Benzoic Acid | 000065-85-0 | | | 1.0E+06 | 1.0E+06 | | | | | | | 1.0E+06 | 1.0E+06 | | | 1.0E+06 | 1.0E+06 |
| Benzotrichloride | 000098-07-7 | 1.4E+03 | 1.4E+01 | | | | | | | 1.1E+04 | 1.1E+02 | | | 1.3E+03 | 1.3E+01 | | |
| Benzyl Alcohol | 000100-51-6 | | | 1.0E+06 | 2.7E+05 | | | | | | | 1.0E+06 | 1.0E+06 | | | 1.0E+06 | 2.4E+05 |
| Benzyl Chloride | 000100-44-7 | 1.1E+05 | 1.1E+03 | | | | | | | 1.0E+06 | 1.3E+04 | | | 1.0E+05 | 1.0E+03 | | |
| Beryllium | 007440-41-7 | 4.3E+03 | 4.3E+01 | 1.3E+04 | 1.3E+03 | 1.0E+06 | 1.0E+06 | | | 6.6E+03 | 6.6E+01 | 2.0E+04 | 2.0E+03 | 2.6E+03 | 2.6E+01 | 8.0E+03 | 8.0E+02 |
| Bidrin | 000141-66-2 | | | 2.7E+02 | 2.7E+01 | | | | | | | 2.0E+03 | 2.0E+02 | | | 2.4E+02 | 2.4E+01 |
| Biphenanthrin | 082657-04-3 | | | 4.0E+04 | 4.0E+03 | | | | | | | 3.0E+05 | 3.0E+04 | | | 3.5E+04 | 3.5E+03 |
| Biphenyl, 1,1'- | 000092-52-4 | | | 1.3E+05 | 1.3E+04 | | | | | | | 1.0E+06 | 1.0E+05 | | | 1.2E+05 | 1.2E+04 |
| Bis(2-chloro-1-methylethyl)ether
(Technical) | 000108-60-1 | 2.7E+05 | 2.7E+03 | | | 3.5E+02 | 3.5E+02 | | | 1.0E+06 | 3.2E+04 | | | 3.5E+02 | 3.5E+02 | | |
| Bis(2-chloroethoxy)methane | 000111-91-1 | | | | | | | | | | | | | | | | |
| Bis(2-chloroethyl)ether | 000111-44-4 | 1.7E+04 | 1.7E+02 | | | 6.4E+02 | 6.4E+02 | | | 2.1E+05 | 2.1E+03 | | | 6.4E+02 | 1.3E+02 | | |

Table 3.5a. (continued)

Chemical	CASRN	Ingestion (mg/kg)*				Inhalation (mg/kg)* ^y				Dermal (mg/kg)*				Ingestion + Inhalation + Dermal (mg/kg)* ^z			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Bis(2-chloroisopropyl)ether	039638-32-9			1.1E+05	1.1E+04							8.1E+05	8.1E+04			9.4E+04	9.4E+03
Bis(2-ethylhexyl)phthalate ¹⁰	000117-81-7	1.0E+06	1.3E+04	5.3E+04	5.3E+03					1.0E+06	3.8E+04	1.5E+05	1.5E+04	9.9E+05	9.9E+03	4.0E+04	4.0E+03
Bis(chloromethyl)ether	000542-88-1	8.5E+01	8.5E-01			2.3E+02	2.3E+00			1.0E+03	1.0E+01			5.8E+01	5.8E-01		
Bisphenol A	000080-05-7			1.0E+06	1.6E+05							1.0E+06	1.0E+06			1.0E+06	1.4E+05
Boron And Borates Only	007440-42-8			2.4E+05	2.4E+04			1.0E+06	1.0E+06			1.0E+06	1.0E+06			2.4E+05	2.4E+04
Boron Trifluoride	007637-07-2							1.0E+06	1.0E+06								
Bromochloromethane	000074-97-5																
Bromodichloromethane	000075-27-4	3.0E+05	3.0E+03	5.3E+04	5.3E+03					1.0E+06	4.5E+04	7.9E+05	7.9E+04	2.8E+05	2.8E+03	5.0E+04	5.0E+03
Bromodiphenyl Ether, p-	000101-55-3																
Bromoform	000075-25-2	1.0E+06	2.4E+04	5.3E+05	5.3E+04	1.0E+06	1.0E+06			1.0E+06	2.1E+05	1.0E+06	4.9E+05	1.0E+06	2.1E+04	4.8E+05	4.8E+04
Bromomethane ¹⁰	000074-83-9			1.2E+04	1.2E+03			3.4E+02	3.4E+02			4.5E+05	4.5E+04			3.4E+02	3.4E+02
Bromophos	002104-96-3			1.3E+05	1.3E+04							1.0E+06	1.0E+05			1.2E+05	1.2E+04
Bromotrichloromethane	000075-62-7																
Bromoxynil	001689-84-5			5.3E+04	5.3E+03							4.0E+05	4.0E+04			4.7E+04	4.7E+03
Bromoxynil Octanoate	001689-99-2			5.3E+04	5.3E+03							4.0E+05	4.0E+04			4.7E+04	4.7E+03
Butadiene, 1,3-	000106-99-0					3.2E+02	1.5E+01										
Butanol, N-	000071-36-3			1.0E+06	2.7E+05							1.0E+06	1.0E+06			1.0E+06	2.4E+05
Butanone-2, 4-chloro-4,4-difluoro	NA																
Butyl Benzyl Phthalate	000085-68-7			1.0E+06	5.3E+05							1.0E+06	1.0E+06			1.0E+06	4.8E+05
Butylate	002008-41-5			1.3E+05	1.3E+04							1.0E+06	1.0E+05			1.2E+05	1.2E+04
Butylchloride, t-	000507-20-0																

Table 3.5a. (continued)

Chemical	CASRN	Ingestion (mg/kg)*				Inhalation (mg/kg)**				Dermal (mg/kg)*				Ingestion + Inhalation + Dermal (mg/kg)†**			
		10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Butylphthalyl Butylglycolate	000085-70-1			1.0E+06	2.7E+05							1.0E+06	1.0E+06			1.0E+06	2.4E+05
Cacodylic Acid	000075-60-5			8.0E+04	8.0E+03							6.1E+05	6.1E+04			7.1E+04	7.1E+03
Cadmium (Diet)	007440-43-9			2.7E+03	2.7E+02	1.0E+06	1.0E+06					4.0E+02	4.0E+01			3.5E+02	3.5E+01
Calcium Cyanide	000592-01-8			1.1E+05	1.1E+04							1.0E+06	3.2E+05			1.0E+05	1.0E+04
Caprolactam	000105-60-2			1.0E+06	1.3E+05							1.0E+06	1.0E+06			1.0E+06	1.2E+05
Captafol	002425-06-1	1.0E+06	2.2E+04	5.3E+03	5.3E+02					1.0E+06	1.6E+05	4.0E+04	4.0E+03	1.0E+06	1.9E+04	4.7E+03	4.7E+02
Captan	000133-06-2	1.0E+06	5.3E+04	3.5E+05	3.5E+04					1.0E+06	4.0E+05	1.0E+06	2.6E+05	1.0E+06	4.7E+04	3.1E+05	3.1E+04
Carbaryl	000063-25-2			2.7E+05	2.7E+04							1.0E+06	2.0E+05			2.4E+05	2.4E+04
Carbazole	000086-74-8	9.3E+05	9.3E+03							1.0E+06	9.9E+04			8.5E+05	8.5E+03		
Carbofuran	001563-66-2			1.3E+04	1.3E+03							1.0E+05	1.0E+04			1.2E+04	1.2E+03
Carbon Disulfide	000075-15-0			2.7E+05	2.7E+04			1.7E+03	3.6E+02			1.0E+05	1.0E+04			1.7E+03	3.4E+02
Carbon Tetrachloride ⁽⁹⁾	000056-23-5	1.4E+05	1.4E+03	6.3E+03	6.3E+02	1.0E+03	1.0E+03			1.0E+06	1.4E+04	1.8E+05	1.8E+04	1.0E+03	7.2E+02	1.0E+03	6.1E+02
Carbosulfan	055285-14-8			2.7E+04	2.7E+03							2.0E+05	2.0E+04			2.4E+04	2.4E+03
Carboxin	005234-68-4			2.7E+05	2.7E+04							1.0E+06	2.0E+05			2.4E+05	2.4E+04
Chloral	000075-87-6			5.3E+04	5.3E+03							4.0E+05	4.0E+04			4.7E+04	4.7E+03
Chloramben	000133-90-4			4.0E+04	4.0E+03							3.0E+05	3.0E+04			3.5E+04	3.5E+03
Chloranil	000118-75-2	4.6E+04	4.6E+02							3.5E+05	3.5E+03			4.1E+04	4.1E+02		
Chlordane ⁽⁹⁾	000057-74-9	1.4E+04	1.4E+02	1.6E+02	1.6E+01	1.0E+06	1.0E+06			1.1E+05	1.1E+03	1.2E+03	1.2E+02	1.3E+04	1.3E+02	1.4E+02	1.4E+01
Chloride	016887-00-6																
Chlorimuron, Ethyl-	090982-32-4			5.3E+04	5.3E+03							4.0E+05	4.0E+04			4.7E+04	4.7E+03
Chlorine	007782-50-5			2.7E+05	2.7E+04							1.0E+06	8.1E+05			2.6E+05	2.6E+04
Chlorine Dioxide	010049-04-4							1.0E+06	1.0E+06								

Table 3.5a. (continued)

Chemical	CASRN	Ingestion (mg/kg)*				Inhalation (mg/kg)* ^v				Dermal (mg/kg)*				Ingestion + Inhalation + Dermal (mg/kg)* ^v			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Chlorite (Sodium Salt)	007758-19-2																
Chloro-1,1-difluoroethane, 1-	000075-68-3							1.0E+06	1.0E+06								
Chloro-1,3-butadiene, 2-	000126-99-8			5.3E+04	5.3E+03			1.7E+03	1.7E+03			4.0E+05	4.0E+04			1.7E+03	1.7E+03
Chloro-2-methylaniline HCl, 4-	003165-93-3	4.1E+04	4.1E+02							3.1E+05	3.1E+03			3.6E+04	3.6E+02		
Chloro-2-methylaniline, 4-	000095-69-2	3.2E+04	3.2E+02							2.4E+05	2.4E+03			2.8E+04	2.8E+02		
Chloroacetic Acid	000079-11-8			5.3E+04	5.3E+03							4.0E+05	4.0E+04			4.7E+04	4.7E+03
Chloroacetophenone, 2-	000532-27-4							1.0E+06	2.3E+05								
Chloroaniline, p-	000106-47-8			1.1E+04	1.1E+03							8.1E+04	8.1E+03			9.4E+03	9.4E+02
Chlorobenzene ⁽⁹⁾	000108-90-7			5.3E+05	5.3E+04			5.1E+02	5.1E+02			1.0E+06	2.5E+05			5.1E+02	5.1E+02
Chlorobenzilate	000510-15-6	6.9E+04	6.9E+02	5.3E+04	5.3E+03	1.0E+06	1.0E+06			5.2E+05	5.2E+03	4.0E+05	4.0E+04	6.1E+04	6.1E+02	4.7E+04	4.7E+03
Chlorobenzoic Acid, p-	000074-11-3			1.0E+06	5.3E+05							1.0E+06	1.0E+06			1.0E+06	4.7E+05
Chlorobenzotrifluoride, 4-	000098-56-6			5.3E+05	5.3E+04							1.0E+06	4.0E+05			4.7E+05	4.7E+04
Chlorobutane, 1-	000109-69-3			1.0E+06	2.4E+05							1.0E+06	1.0E+06			1.0E+06	2.1E+05
Chlorobutane, 2-	000078-86-4																
Chlorocyclopentadiene	041851-50-7																
Chlorodibromoethane	073506-94-2	2.2E+05	2.2E+03							1.0E+06	2.7E+04			2.0E+05	2.0E+03		
Chlorodifluoromethane	000075-45-6							1.0E+06	1.0E+06								
Chloroform ⁽⁹⁾	000067-66-3	1.0E+06	3.1E+04	2.7E+04	2.7E+03	1.5E+03	9.8E+02			1.0E+06	9.3E+04	8.1E+04	8.1E+03	1.5E+03	9.4E+02	1.5E+03	1.5E+03
Chloromethane ⁽⁹⁾	000074-87-3	1.0E+06	1.4E+04			1.2E+03	1.2E+03	1.2E+03	1.2E+03	1.0E+06	1.7E+05			1.2E+03	1.2E+03		
Chloromethyl Methyl Ether	000107-30-2																
Chloronaphthalene, Beta-	000091-58-7			2.1E+05	2.1E+04							1.0E+06	2.6E+05			2.0E+05	2.0E+04
Chloronitrobenzene, o-	000088-73-3	7.5E+05	7.5E+03							1.0E+06	9.1E+04			6.9E+05	6.9E+03		

Table 3.5a. (continued)

| Chemical | CASRN | Ingestion (mg/kg)* | | | | Inhalation (mg/kg)** | | | | Dermal (mg/kg)* | | | | Ingestion + Inhalation +
Dermal (mg/kg)** | | | |
|-------------------------------------|-------------|--------------------|------------------|---------|---------|----------------------|------------------|---------|---------|------------------|------------------|---------|---------|--|------------------|---------|---------|
| | | 10 ⁻⁴ | 10 ⁻⁶ | HQ=1 | HQ=0.1 | 10 ⁻⁴ | 10 ⁻⁶ | HQ=1 | HQ=0.1 | 10 ⁻⁴ | 10 ⁻⁶ | HQ=1 | HQ=0.1 | 10 ⁻⁴ | 10 ⁻⁶ | HI=1 | HI=0.1 |
| Chloronitrobenzene, p- | 000121-73-3 | 1.0E+06 | 1.0E+04 | | | | | | | 1.0E+06 | 1.3E+05 | | | 9.6E+05 | 9.6E+03 | | |
| Chlorophenol, 2- | 000095-57-8 | | | 1.3E+05 | 1.3E+04 | | | | | | | 1.0E+06 | 1.0E+05 | | | 1.2E+05 | 1.2E+04 |
| Chlorophenyl Methyl
Sulfide, p- | 000123-09-1 | | | | | | | | | | | | | | | | |
| Chlorophenyl Methyl
Sulfoxide | 000934-73-6 | | | | | | | | | | | | | | | | |
| Chloropropane, 2- | 000075-29-6 | | | | | | | 1.6E+03 | 1.6E+03 | | | | | | | | |
| Chlorothalonil | 001897-45-6 | 1.0E+06 | 1.7E+04 | 4.0E+04 | 4.0E+03 | | | | | 1.0E+06 | 1.3E+05 | 3.0E+05 | 3.0E+04 | 1.0E+06 | 1.5E+04 | 3.5E+04 | 3.5E+03 |
| Chlorotoluene, o- | 000095-49-8 | | | 5.3E+05 | 5.3E+04 | | | | | | | 1.0E+06 | 6.5E+05 | | | 4.9E+05 | 4.9E+04 |
| Chlorpropham | 000101-21-3 | | | 5.3E+05 | 5.3E+04 | | | | | | | 1.0E+06 | 4.0E+05 | | | 4.7E+05 | 4.7E+04 |
| Chlorpyrifos | 002921-88-2 | | | 8.0E+03 | 8.0E+02 | | | | | | | 6.1E+04 | 6.1E+03 | | | 7.1E+03 | 7.1E+02 |
| Chlorpyrifos Methyl | 005598-13-0 | | | 2.7E+04 | 2.7E+03 | | | | | | | 2.0E+05 | 2.0E+04 | | | 2.4E+04 | 2.4E+03 |
| Chlorsulfuron | 064902-72-3 | | | 1.3E+05 | 1.3E+04 | | | | | | | 1.0E+06 | 1.0E+05 | | | 1.2E+05 | 1.2E+04 |
| Chlorthiophos | 060238-56-4 | | | 2.1E+03 | 2.1E+02 | | | | | | | 1.6E+04 | 1.6E+03 | | | 1.9E+03 | 1.9E+02 |
| Chromium (III) (Insoluble
Salts) | 016065-83-1 | | | 1.0E+06 | 2.7E+05 | | | | | | | 1.0E+06 | 2.0E+05 | | | 1.0E+06 | 1.1E+05 |
| Chromium (VI) ^(b) | 018540-29-9 | | | 5.3E+04 | 5.3E+03 | 1.0E+06 | 4.7E+05 | | | | | 1.6E+05 | 1.6E+04 | | | 4.0E+04 | 4.0E+03 |
| Chromium Salts | NA | | | | | | | | | | | | | | | | |
| Chrysene ^(b) | 000218-01-9 | 1.0E+06 | 2.6E+04 | | | 1.0E+06 | 1.0E+06 | | | 1.0E+06 | 1.2E+05 | | | 1.0E+06 | 2.1E+04 | | |
| Cobalt | 007440-48-4 | | | | | | | | | | | | | | | | |
| Coke Oven Emissions | 008007-45-2 | | | | | 1.0E+06 | 1.0E+06 | | | | | | | | | | |
| Copper | 007440-50-8 | | | | | | | | | | | | | | | | |
| Copper Cyanide | 000544-92-3 | | | 1.3E+05 | 1.3E+04 | | | | | | | 1.0E+06 | 4.0E+05 | | | 1.3E+05 | 1.3E+04 |
| Creosote | 008001-58-9 | | | | | | | | | | | | | | | | |
| Cresol, m- | 000108-39-4 | | | 1.0E+06 | 1.3E+05 | | | | | | | 1.0E+06 | 1.0E+06 | | | 1.0E+06 | 1.2E+05 |

Table 3.5a. (continued)

| Chemical | CASRN | Ingestion (mg/kg)* | | | | Inhalation (mg/kg)* ^v | | | | Dermal (mg/kg)* | | | | Ingestion + Inhalation +
Dermal (mg/kg)* ^{iv} | | | |
|---|-------------|--------------------|------------------|---------|---------|----------------------------------|------------------|---------|---------|------------------|------------------|---------|---------|---|------------------|---------|---------|
| | | 10 ⁻⁴ | 10 ⁻⁴ | HQ=1 | HQ=0.1 | 10 ⁻⁴ | 10 ⁻⁴ | HQ=1 | HQ=0.1 | 10 ⁻⁴ | 10 ⁻⁴ | HQ=1 | HQ=0.1 | 10 ⁻⁴ | 10 ⁻⁴ | HI=1 | HI=0.1 |
| Cresol, o- | 000095-48-7 | | | 1.0E+06 | 1.3E+05 | | | | | | | 1.0E+06 | 1.0E+06 | | | 1.0E+06 | 1.2E+05 |
| Cresol, p- | 000106-44-5 | | | 1.3E+04 | 1.3E+03 | | | | | | | 1.3E+05 | 1.3E+04 | | | 1.2E+04 | 1.2E+03 |
| Crotonaldehyde | 000123-73-9 | 9.8E+03 | 9.8E+01 | | | | | | | 7.4E+04 | 7.4E+02 | | | 8.7E+03 | 8.7E+01 | | |
| Cumene | 000098-82-8 | | | 1.0E+06 | 1.1E+05 | | | 3.5E+02 | 3.5E+02 | | | 1.0E+06 | 8.1E+05 | | | 3.5E+02 | 3.5E+02 |
| Cyanazine | 021725-46-2 | 2.2E+04 | 2.2E+02 | 5.3E+03 | 5.3E+02 | | | | | 1.7E+05 | 1.7E+03 | 4.0E+04 | 4.0E+03 | 2.0E+04 | 2.0E+02 | 4.7E+03 | 4.7E+02 |
| Cyanide (CN-) | 000057-12-5 | | | 5.3E+04 | 5.3E+03 | | | | | | | 1.4E+05 | 1.4E+04 | | | 3.8E+04 | 3.8E+03 |
| Cyanogen | 000460-19-5 | | | 1.1E+05 | 1.1E+04 | | | | | | | 1.0E+06 | 1.3E+05 | | | 9.8E+04 | 9.8E+03 |
| Cyanogen Bromide | 000506-68-3 | | | 2.4E+05 | 2.4E+04 | | | | | | | 1.0E+06 | 2.9E+05 | | | 2.2E+05 | 2.2E+04 |
| Cyanogen Chloride | 000506-77-4 | | | 1.3E+05 | 1.3E+04 | | | | | | | 1.0E+06 | 1.6E+05 | | | 1.2E+05 | 1.2E+04 |
| Cyclohexane, 1,2,3,4,5-pentabromo-6-chloro- | 000087-84-3 | 8.1E+05 | 8.1E+03 | | | | | | | 1.0E+06 | 6.2E+04 | | | 7.2E+05 | 7.2E+03 | | |
| Cyclohexanone | 000108-94-1 | | | 1.0E+06 | 1.0E+06 | | | | | | | 1.0E+06 | 1.0E+06 | | | 1.0E+06 | 1.0E+06 |
| Cyclohexylamine | 000108-91-8 | | | 8.0E+05 | 8.0E+04 | | | | | | | 1.0E+06 | 6.1E+05 | | | 7.1E+05 | 7.1E+04 |
| Cyclopentadiene | 000542-92-7 | | | | | | | 1.0E+06 | 1.0E+06 | | | | | | | | |
| Cyhalothrin/karate | 068085-85-8 | | | 1.3E+04 | 1.3E+03 | | | | | | | 1.0E+05 | 1.0E+04 | | | 1.2E+04 | 1.2E+03 |
| Cypermethrin | 052315-07-8 | | | 2.7E+04 | 2.7E+03 | | | | | | | 2.0E+05 | 2.0E+04 | | | 2.4E+04 | 2.4E+03 |
| Cyromazine | 066215-27-8 | | | 2.0E+04 | 2.0E+03 | | | | | | | 1.5E+05 | 1.5E+04 | | | 1.8E+04 | 1.8E+03 |
| DDD | 000072-54-8 | 7.8E+04 | 7.8E+02 | | | | | | | 8.3E+05 | 8.3E+03 | | | 7.1E+04 | 7.1E+02 | | |
| DDE | 000072-55-9 | 5.5E+04 | 5.5E+02 | | | | | | | 5.8E+05 | 5.8E+03 | | | 5.0E+04 | 5.0E+02 | | |
| DDT | 000050-29-3 | 5.5E+04 | 5.5E+02 | 1.3E+03 | 1.3E+02 | 1.0E+06 | 1.0E+06 | | | 5.8E+05 | 5.8E+03 | 1.4E+04 | 1.4E+03 | 5.0E+04 | 5.0E+02 | 1.2E+03 | 1.2E+02 |
| Dacthal | 001861-32-1 | | | 2.7E+04 | 2.7E+03 | | | | | | | 2.0E+05 | 2.0E+04 | | | 2.4E+04 | 2.4E+03 |
| Dalapon | 000075-99-0 | | | 8.0E+04 | 8.0E+03 | | | | | | | 6.1E+05 | 6.1E+04 | | | 7.1E+04 | 7.1E+03 |
| Decabromodiphenyl Ether | 001163-19-5 | | | 2.7E+04 | 2.7E+03 | | | | | | | 2.0E+05 | 2.0E+04 | | | 2.4E+04 | 2.4E+03 |

Table 3.5a. (continued)

Chemical	CASRN	Ingestion (mg/kg)*				Inhalation (mg/kg)**				Dermal (mg/kg)*				Ingestion + Inhalation + Dermal (mg/kg)**			
		10 ⁻⁴	10 ⁻⁴	10 ⁻⁴	10 ⁻⁴	10 ⁻⁴	10 ⁻⁴	10 ⁻⁴	10 ⁻⁴	10 ⁻⁴	10 ⁻⁴	10 ⁻⁴	10 ⁻⁴	10 ⁻⁴	10 ⁻⁴	10 ⁻⁴	10 ⁻⁴
Demeton	000065-48-3																
Di(2-ethylhexyl)adipate	000103-23-1																
Diallate	002303-16-4																
Diazinon	000333-41-5																
Dibenz[a,h]anthracene ^{6b}	000053-70-3																
Dibromo-3-chloropropane, 1,2-	000096-12-8																
Dibromobenzene, 1,4-	000106-37-6																
Dibromochloromethane	000124-48-1																
Dibromodichloromethane	000594-18-3																
Dibromodiphenyl Ether, p,p'-	002050-47-7																
Dibromomethane, 1,2-	000106-93-4																
Dibromomethane (Methylene Bromide)	000074-95-3																
Dibutyl Phthalate	000084-74-2																
Dicamba	001918-00-9																
Dichloro-2-butene, 1,4-	000764-41-0																
Dichloroacetic Acid																	
Dichlorobenzene, 1,2- ^{6b}	000095-50-1																
Dichlorobenzene, 1,3-	000541-73-1																
Dichlorobenzene, 1,4-	000106-46-7																
Dichlorobenzidine, 3,3'-	000091-94-1																
Dichlorodifluoromethane	000075-71-8																
Dichloroethane, 1,1-	000075-34-3																

Table 3.5a. (continued)

| Chemical | CASRN | Ingestion (mg/kg)* | | | | Inhalation (mg/kg)* ^y | | | | Dermal (mg/kg)* | | | | Ingestion + Inhalation +
Dermal (mg/kg)* ^y | | | |
|---|-------------|--------------------|------------------|---------|---------|----------------------------------|------------------|---------|---------|------------------|------------------|---------|---------|--|------------------|---------|---------|
| | | 10 ⁻⁴ | 10 ⁻⁶ | HQ=1 | HQ=0.1 | 10 ⁻⁴ | 10 ⁻⁶ | HQ=1 | HQ=0.1 | 10 ⁻⁴ | 10 ⁻⁶ | HQ=1 | HQ=0.1 | 10 ⁻⁴ | 10 ⁻⁶ | HI=1 | HI=0.1 |
| Dichloroethane, 1,2- | 000107-06-2 | 2.0E+05 | 2.0E+03 | | | 6.7E+02 | 6.7E+02 | | | 1.0E+06 | 3.1E+04 | | | 6.7E+02 | 6.7E+02 | | |
| Dichloroethylene, 1,1- | 000075-35-4 | 3.1E+04 | 3.1E+02 | 2.4E+04 | 2.4E+03 | 1.2E+03 | 2.4E+01 | | | 4.7E+05 | 4.7E+03 | 3.6E+05 | 3.6E+04 | 1.2E+03 | 2.2E+01 | 1.2E+03 | 1.2E+03 |
| Dichloroethylene, 1,2-
(Mixed Isomers) | 000540-59-0 | | | 2.4E+04 | 2.4E+03 | | | | | | | 2.9E+05 | 2.9E+04 | | | 2.2E+04 | 2.2E+03 |
| Dichloroethylene, 1,2-cis- | 000156-59-2 | | | 2.7E+05 | 2.7E+04 | | | | | | | 1.0E+06 | 4.0E+05 | | | 2.5E+05 | 2.5E+04 |
| Dichloroethylene, 1,2-trans- | 000156-60-5 | | | 5.3E+05 | 5.3E+04 | | | | | | | 1.0E+06 | 8.1E+05 | | | 5.0E+05 | 5.0E+04 |
| Dichlorophenol, 2,4- | 000120-83-2 | | | 8.0E+03 | 8.0E+02 | | | | | | | 9.9E+04 | 9.9E+03 | | | 7.4E+03 | 7.4E+02 |
| Dichlorophenoxy Acetic
Acid, 2,4- | 000094-75-7 | | | 2.7E+04 | 2.7E+03 | | | | | | | 2.0E+05 | 2.0E+04 | | | 2.4E+04 | 2.4E+03 |
| Dichlorophenoxy)butyric
Acid, 4-(2,4- | 000094-82-6 | | | 2.1E+05 | 2.1E+04 | | | | | | | 1.0E+06 | 1.6E+05 | | | 1.9E+05 | 1.9E+04 |
| Dichloropropane, 1,2- | 000078-87-5 | 2.7E+05 | 2.7E+03 | | | | | 4.8E+02 | 4.8E+02 | 1.0E+06 | 3.1E+04 | | | 4.8E+02 | 4.8E+02 | | |
| Dichloropropanol, 2,3- | 000616-23-9 | | | 8.0E+03 | 8.0E+02 | | | | | | | 6.1E+04 | 6.1E+03 | | | 7.1E+03 | 7.1E+02 |
| Dichloropropene, 1,3- | 000542-75-6 | 1.0E+05 | 1.0E+03 | 8.0E+03 | 8.0E+02 | 3.7E+03 | 2.8E+03 | 3.7E+03 | 3.0E+03 | 8.7E+05 | 8.7E+03 | 6.7E+04 | 6.7E+03 | 3.7E+03 | 7.0E+02 | 3.7E+03 | 5.8E+02 |
| Dichlorvos | 000062-73-7 | 6.4E+04 | 6.4E+02 | 1.3E+03 | 1.3E+02 | | | 1.0E+06 | 1.0E+06 | 4.9E+05 | 4.9E+03 | 1.0E+04 | 1.0E+03 | 5.7E+04 | 5.7E+02 | 1.2E+03 | 1.2E+02 |
| Dicofol | 000115-32-2 | | | | | | | | | | | | | | | | |
| Dicyclopentadiene | 000077-73-6 | | | 8.0E+05 | 8.0E+04 | | | 7.4E+02 | 5.3E+02 | | | 1.0E+06 | 6.1E+05 | | | 7.4E+02 | 5.2E+02 |
| Dieldrin | 000060-57-1 | 1.2E+03 | 1.2E+01 | 1.3E+02 | 1.3E+01 | 1.0E+06 | 1.0E+06 | | | 8.8E+03 | 8.8E+01 | 1.0E+03 | 1.0E+02 | 1.0E+03 | 1.0E+01 | 1.2E+02 | 1.2E+01 |
| Diethyl Phthalate | 000084-66-2 | | | 1.0E+06 | 1.0E+06 | | | | | | | 1.0E+06 | 1.0E+06 | | | 1.0E+06 | 1.0E+06 |
| Diethyl-p-
nitrophenylphosphate | 000311-45-5 | | | | | | | | | | | | | | | | |
| Diethylene Glycol
Dinitrate (DEGDN) | 000693-21-0 | | | | | | | | | | | | | | | | |
| Diethylene Glycol
Monobutyl Ether | 000112-34-5 | | | | | | | 1.0E+06 | 1.0E+06 | | | | | | | | |

Table 3.5a. (continued)

Chemical	CASRN	Ingestion (mg/kg) ^a				Inhalation (mg/kg) ^a				Dermal (mg/kg) ^a				Ingestion + Inhalation + Dermal (mg/kg) ^a			
		10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Diethylene Glycol Monoethyl Ether	000111-90-0			1.0E+06	1.0E+06							1.0E+06	1.0E+06			1.0E+06	1.0E+06
Diethylformamide	000617-84-5			2.9E+04	2.9E+03							2.2E+05	2.2E+04			2.6E+04	2.6E+03
Diethylstilbesterol	000056-53-1	4.0E+00	4.0E-02			1.0E+06	3.9E+04			3.0E+01	3.0E-01			3.5E+00	3.5E-02		
Difenzoquat	043222-48-6			2.1E+05	2.1E+04							1.0E+06	1.6E+05			1.9E+05	1.9E+04
Diffubenzuron	035367-38-5			5.3E+04	5.3E+03							4.0E+05	4.0E+04			4.7E+04	4.7E+03
Difluoroethane, 1,1-	000075-37-6							1.0E+06	1.0E+06								
Diisopropyl Methylphosphonate	001445-75-6			2.1E+05	2.1E+04							1.0E+06	1.6E+05			1.9E+05	1.9E+04
Dimethipin	055290-64-7			5.3E+04	5.3E+03							4.0E+05	4.0E+04			4.7E+04	4.7E+03
Dimethoate	000060-51-5			5.3E+02	5.3E+01							4.0E+03	4.0E+02			4.7E+02	4.7E+01
Dimethoxybenzidine, 3,3'-	000119-90-4	1.0E+06	1.3E+04							1.0E+06	1.0E+05			1.0E+06	1.2E+04		
Dimethyl Sulfate	000077-78-1																
Dimethylaniline HCl, 2,4-	021436-96-4	3.2E+04	3.2E+02							2.4E+05	2.4E+03			2.8E+04	2.8E+02		
Dimethylaniline, 2,4-	000095-68-1	2.5E+04	2.5E+02							1.9E+05	1.9E+03			2.2E+04	2.2E+02		
Dimethylaniline, N,N-	000121-69-7			5.3E+04	5.3E+03							4.0E+05	4.0E+04			4.7E+04	4.7E+03
Dimethylbenzidine, 3,3'-	000119-93-7	2.0E+03	2.0E+01							1.5E+04	1.5E+02			1.8E+03	1.8E+01		
Dimethylethyl Lead	107584-40-7																
Dimethylformamide	000068-12-2			1.0E+06	2.7E+05			1.0E+06	1.0E+06			1.0E+06	1.0E+06			1.0E+06	2.3E+05
Dimethylhydrazine, 1,1- ^(b)	000057-14-7	7.2E+03	7.2E+01			1.0E+06	1.0E+06			5.4E+04	5.4E+02			6.3E+03	6.3E+01		
Dimethylhydrazine, 1,2-	000540-73-8																
Dimethylphenol, 2,4-	000105-67-9			5.3E+05	5.3E+04							1.0E+06	4.0E+05			4.7E+05	4.7E+04
Dimethylphenol, 2,6-	000576-26-1			1.6E+04	1.6E+03							1.2E+05	1.2E+04			1.4E+04	1.4E+03
Dimethylphenol, 3,4-	000095-65-8			2.7E+04	2.7E+03							2.0E+05	2.0E+04			2.4E+04	2.4E+03

Table 3.5a. (continued)

| Chemical | CASRN | Ingestion (mg/kg) ^a | | | | Inhalation (mg/kg) ^b | | | | Dermal (mg/kg) ^c | | | | Ingestion + Inhalation +
Dermal (mg/kg) ^{d,e} | | | |
|--------------------------------------|-------------|--------------------------------|------------------|---------|---------|---------------------------------|------------------|------|--------|-----------------------------|------------------|---------|---------|---|------------------|---------|---------|
| | | 10 ⁻⁴ | 10 ⁻⁶ | HQ=1 | HQ=0.1 | 10 ⁻⁴ | 10 ⁻⁶ | HQ=1 | HQ=0.1 | 10 ⁻⁴ | 10 ⁻⁶ | HQ=1 | HQ=0.1 | 10 ⁻⁴ | 10 ⁻⁶ | HI=1 | HI=0.1 |
| Dimethylphthalate ^f | 000131-11-3 | | | 1.0E+06 | 1.0E+06 | | | | | | | 1.0E+06 | 1.0E+06 | | | 1.0E+06 | 1.0E+06 |
| Dimethylterephthalate | 000120-61-6 | | | 2.7E+05 | 2.7E+04 | | | | | | | 1.0E+06 | 2.0E+05 | | | 2.4E+05 | 2.4E+04 |
| Dinitro-o-cresol, 4,6- | 000534-52-1 | | | | | | | | | | | | | | | | |
| Dinitro-o-cyclohexyl
Phenol, 4,6- | 000131-89-5 | | | 5.3E+03 | 5.3E+02 | | | | | | | 4.0E+04 | 4.0E+03 | | | 4.7E+03 | 4.7E+02 |
| Dinitrobenzene, 1,2- | 000528-29-0 | | | 1.1E+04 | 1.1E+03 | | | | | | | 1.5E+05 | 1.5E+04 | | | 9.9E+03 | 9.9E+02 |
| Dinitrobenzene, 1,3- | 000099-65-0 | | | 2.7E+03 | 2.7E+02 | | | | | | | 2.6E+04 | 2.6E+03 | | | 2.4E+03 | 2.4E+02 |
| Dinitrobenzene, 1,4- | 000100-25-4 | | | 1.1E+04 | 1.1E+03 | | | | | | | 8.1E+04 | 8.1E+03 | | | 9.4E+03 | 9.4E+02 |
| Dinitrophenol, 2,4- | 000051-28-5 | | | 5.3E+03 | 5.3E+02 | | | | | | | 8.1E+04 | 8.1E+03 | | | 5.0E+03 | 5.0E+02 |
| Dinitrotoluene, 2,4- | 000121-14-2 | 2.7E+04 | 2.7E+02 | 5.3E+03 | 5.3E+02 | | | | | 3.5E+05 | 3.5E+03 | 6.9E+04 | 6.9E+03 | 2.5E+04 | 2.5E+02 | 4.9E+03 | 4.9E+02 |
| Dinitrotoluene, 2,6- | 000606-20-2 | 2.7E+04 | 2.7E+02 | 2.7E+04 | 2.7E+03 | | | | | 3.5E+05 | 3.5E+03 | 3.4E+05 | 3.4E+04 | 2.5E+04 | 2.5E+02 | 2.5E+04 | 2.5E+03 |
| Dinitrotoluene, 2-Amino-
4,6- | 035572-78-2 | | | | | | | | | | | | | | | | |
| Dinoseb | 000088-85-7 | | | 2.7E+03 | 2.7E+02 | | | | | | | 2.0E+04 | 2.0E+03 | | | 2.4E+03 | 2.4E+02 |
| Dioxane, 1,4- | 000123-91-1 | 1.0E+06 | 1.7E+04 | | | | | | | 1.0E+06 | 2.1E+05 | | | 1.0E+06 | 1.6E+04 | | |
| Diphenamid | 000957-51-7 | | | 8.0E+04 | 8.0E+03 | | | | | | | 6.1E+05 | 6.1E+04 | | | 7.1E+04 | 7.1E+03 |
| Diphenylamine | 000122-39-4 | | | 6.7E+04 | 6.7E+03 | | | | | | | 5.1E+05 | 5.1E+04 | | | 5.9E+04 | 5.9E+03 |
| Diphenylhydrazine, 1,2- | 000122-66-7 | 2.3E+04 | 2.3E+02 | | | 1.0E+06 | 1.0E+06 | | | 1.8E+05 | 1.8E+03 | | | 2.1E+04 | 2.1E+02 | | |
| Diquat | 000085-00-7 | | | 5.9E+03 | 5.9E+02 | | | | | | | 4.4E+04 | 4.4E+03 | | | 5.2E+03 | 5.2E+02 |
| Direct Black 38 | 001937-37-7 | 2.2E+03 | 2.2E+01 | | | | | | | 1.6E+04 | 1.6E+02 | | | 1.9E+03 | 1.9E+01 | | |
| Direct Blue 6 | 002602-46-2 | 2.3E+03 | 2.3E+01 | | | | | | | 1.7E+04 | 1.7E+02 | | | 2.0E+03 | 2.0E+01 | | |
| Direct Brown 95 | 016071-86-6 | 2.0E+03 | 2.0E+01 | | | | | | | 1.5E+04 | 1.5E+02 | | | 1.8E+03 | 1.8E+01 | | |
| Direct Sky Blue | 002610-05-1 | | | | | | | | | | | | | | | | |
| Disulfoton | 000298-04-4 | | | 1.1E+02 | 1.1E+01 | | | | | | | 8.1E+02 | 8.1E+01 | | | 9.4E+01 | 9.4E+00 |

Table 3.5a. (continued)

| Chemical | CASRN | Ingestion (mg/kg)* | | | | Inhalation (mg/kg)** | | | | Dermal (mg/kg)* | | | | Ingestion + Inhalation +
Dermal (mg/kg)** | | | |
|---------------------------------|-------------|--------------------|------------------|---------|---------|----------------------|------------------|---------|---------|------------------|------------------|---------|---------|--|------------------|---------|---------|
| | | 10 ⁻⁴ | 10 ⁻⁴ | HQ=1 | HQ=0.1 | 10 ⁻⁴ | 10 ⁻⁴ | HQ=1 | HQ=0.1 | 10 ⁻⁴ | 10 ⁻⁴ | HQ=1 | HQ=0.1 | 10 ⁻⁴ | 10 ⁻⁴ | HI=1 | HI=0.1 |
| Diuron | 000330-54-1 | | | 5.3E+03 | 5.3E+02 | | | | | | | 4.0E+04 | 4.0E+03 | | | 4.7E+03 | 4.7E+02 |
| Dodine | 002439-10-3 | | | 1.1E+04 | 1.1E+03 | | | | | | | 8.1E+04 | 8.1E+03 | | | 9.4E+03 | 9.4E+02 |
| EPTC | 000759-94-4 | | | 6.7E+04 | 6.7E+03 | | | | | | | 5.1E+05 | 5.1E+04 | | | 5.9E+04 | 5.9E+03 |
| Endosulfan | 000115-29-7 | | | 1.6E+04 | 1.6E+03 | | | | | | | 1.2E+05 | 1.2E+04 | | | 1.4E+04 | 1.4E+03 |
| Endothall | 000145-73-3 | | | 5.3E+04 | 5.3E+03 | | | | | | | 4.0E+05 | 4.0E+04 | | | 4.7E+04 | 4.7E+03 |
| Endrin | 000072-20-8 | | | 8.0E+02 | 8.0E+01 | | | | | | | 2.4E+02 | 2.4E+01 | | | 1.9E+02 | 1.9E+01 |
| Epichlorohydrin | 000106-89-8 | 1.0E+06 | 1.9E+04 | 5.3E+03 | 5.3E+02 | 3.2E+03 | 3.2E+03 | 3.2E+03 | 1.7E+03 | 1.0E+06 | 2.3E+05 | 6.5E+04 | 6.5E+03 | 3.2E+03 | 3.2E+03 | 3.2E+03 | 3.8E+02 |
| Epoxybutane, 1,2- | 000106-88-7 | | | | | | | 1.0E+06 | 1.0E+06 | | | | | | | | |
| Ethephon | 016672-87-0 | | | 1.3E+04 | 1.3E+03 | | | | | | | 1.0E+05 | 1.0E+04 | | | 1.2E+04 | 1.2E+03 |
| Ethion | 000563-12-2 | | | 1.3E+03 | 1.3E+02 | | | | | | | 1.0E+04 | 1.0E+03 | | | 1.2E+03 | 1.2E+02 |
| Ethoxyethanol Acetate, 2- | 000111-15-9 | | | 8.0E+05 | 8.0E+04 | | | | | | | 1.0E+06 | 6.1E+05 | | | 7.1E+05 | 7.1E+04 |
| Ethoxyethanol, 2- | 000110-80-5 | | | 1.0E+06 | 1.3E+05 | | | 1.0E+06 | 1.0E+06 | | | 1.0E+06 | 1.0E+06 | | | 1.0E+06 | 1.2E+05 |
| Ethyl Acetate | 000141-78-6 | | | 1.0E+06 | 1.0E+06 | | | | | | | 1.0E+06 | 1.0E+06 | | | 1.0E+06 | 1.0E+06 |
| Ethyl Acrylate | 000140-88-5 | 3.9E+05 | 3.9E+03 | | | | | | | 1.0E+06 | 2.9E+04 | | | 3.4E+05 | 3.4E+03 | | |
| Ethyl Chloride | 000075-00-3 | | | | | | | 1.5E+02 | 1.5E+02 | | | | | | | | |
| Ethyl Ether | 000060-29-7 | | | 1.0E+06 | 5.3E+05 | | | | | | | 1.0E+06 | 1.0E+06 | | | 1.0E+06 | 4.9E+05 |
| Ethyl Methacrylate | 000097-63-2 | | | 2.4E+05 | 2.4E+04 | | | | | | | 1.0E+06 | 2.9E+05 | | | 2.2E+05 | 2.2E+04 |
| Ethyl-p-nitrophenyl Phosphonate | 002104-64-5 | | | 2.7E+01 | 2.7E+00 | | | | | | | 2.0E+02 | 2.0E+01 | | | 2.4E+01 | 2.4E+00 |
| Ethylbenzene ⁽⁹⁾ | 000100-41-4 | | | 2.6E+05 | 2.6E+04 | | | 4.7E-01 | 4.7E-01 | | | 1.0E+06 | 3.8E+05 | | | 4.7E-01 | 4.7E-01 |
| Ethylene Cyanohydrin | 000109-78-4 | | | 8.0E+05 | 8.0E+04 | | | | | | | 1.0E+06 | 6.1E+05 | | | 7.1E+05 | 7.1E+04 |
| Ethylene Diamine | 000107-15-3 | | | 5.3E+05 | 5.3E+04 | | | | | | | 1.0E+06 | 4.0E+05 | | | 4.7E+05 | 4.7E+04 |
| Ethylene Glycol | 000107-21-1 | | | 1.0E+06 | 5.3E+05 | | | | | | | 1.0E+06 | 1.0E+06 | | | 1.0E+06 | 4.7E+05 |

Table 3.5a. (continued)

Chemical	CASRN	Ingestion (mg/kg)*				Inhalation (mg/kg)* ^v				Dermal (mg/kg)*				Ingestion + Inhalation + Dermal (mg/kg)* ^v			
		10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Ethylene Glycol Monobutyl Ether	000111-76-2							1.0E+06	1.0E+06								
Ethylene Oxide	000075-21-8	1.8E+04	1.8E+02			2.5E+04	2.5E+02			2.2E+05	2.2E+03			1.0E+04	1.0E+02		
Ethylene Thiourea	000096-45-7	1.7E+05	1.7E+03	2.1E+02	2.1E+01					1.0E+06	1.3E+04	1.6E+03	1.6E+02	1.5E+05	1.5E+03	1.9E+02	1.9E+01
Ethylphthalyl Ethyl Glycolate	000084-72-0			1.0E+06	8.0E+05							1.0E+06	1.0E+06			1.0E+06	7.1E+05
Express	101200-48-0			2.1E+04	2.1E+03							1.6E+05	1.6E+04			1.9E+04	1.9E+03
Fenamiphos	022224-92-6			6.7E+02	6.7E+01							5.1E+03	5.1E+02			5.9E+02	5.9E+01
Fenpropathrin	039515-41-8			6.7E+04	6.7E+03							5.1E+05	5.1E+04			5.9E+04	5.9E+03
Fluometuron	002164-17-2			3.5E+04	3.5E+03							2.6E+05	2.6E+04			3.1E+04	3.1E+03
Fluoranthene	000206-44-0			1.0E+06	1.1E+05							1.0E+06	5.0E+05			8.8E+05	8.8E+04
Fluorene	000086-73-7			1.0E+06	1.1E+05							1.0E+06	8.1E+05			9.4E+05	9.4E+04
Fluoride	007782-41-4			1.6E+05	1.6E+04							1.0E+06	1.0E+06			1.6E+05	1.6E+04
Fluridone	059756-60-4			2.1E+05	2.1E+04							1.0E+06	1.6E+05			1.9E+05	1.9E+04
Flurprimidol	056425-91-3			5.3E+04	5.3E+03							4.0E+05	4.0E+04			4.7E+04	4.7E+03
Flutolanil	066332-96-5			1.6E+05	1.6E+04							1.0E+06	1.2E+05			1.4E+05	1.4E+04
Fluvalinate	069409-94-5			2.7E+04	2.7E+03							2.0E+05	2.0E+04			2.4E+04	2.4E+03
Folpet	000133-07-3	1.0E+06	5.3E+04	2.7E+05	2.7E+04					1.0E+06	4.0E+05	1.0E+06	2.0E+05	1.0E+06	4.7E+04	2.4E+05	2.4E+04
Fomesafen	072178-02-0	9.8E+04	9.8E+02							7.4E+05	7.4E+03			8.7E+04	8.7E+02		
Fonofos	000944-22-9			5.3E+03	5.3E+02							4.0E+04	4.0E+03			4.7E+03	4.7E+02
Formaldehyde	000050-00-0			5.3E+05	5.3E+04	1.0E+06	1.0E+06					1.0E+06	6.5E+05			4.9E+05	4.9E+04
Formic Acid	000064-18-6			1.0E+06	5.3E+05							1.0E+06	1.0E+06			1.0E+06	4.7E+05
Fosetyl-AL	039148-24-8			1.0E+06	8.0E+05							1.0E+06	1.0E+06			1.0E+06	7.1E+05
Furan	000110-00-9			2.7E+04	2.7E+03							2.0E+05	2.0E+04			2.4E+04	2.4E+03

Table 3.5a. (continued)

Chemical	CASRN	Ingestion (mg/kg)*				Inhalation (mg/kg)* ^u				Dermal (mg/kg)*				Ingestion + Inhalation + Dermal (mg/kg)* ^u			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Furazolidone	000067-45-8	4.9E+03	4.9E+01							3.7E+04	3.7E+02			4.3E+03	4.3E+01		
Furfural	000098-01-1			8.0E+04	8.0E+03			1.0E+06	1.0E+06			6.1E+05	6.1E+04			7.1E+04	7.1E+03
Furium	000531-82-8	3.7E+02	3.7E+00							2.8E+03	2.8E+01			3.3E+02	3.3E+00		
Furmecycloz	060568-05-0	6.2E+05	6.2E+03							1.0E+06	4.7E+04			5.5E+05	5.5E+03		
Glufosinate, Ammonium	077182-82-2			1.1E+03	1.1E+02							8.1E+03	8.1E+02			9.4E+02	9.4E+01
Glycidyl	000765-34-4			1.1E+04	1.1E+03			1.0E+06	1.0E+06			8.1E+04	8.1E+03			9.4E+03	9.4E+02
Glyphosate	001071-83-6			2.7E+05	2.7E+04							1.0E+06	2.0E+05			2.4E+05	2.4E+04
Goal	042874-03-3			8.0E+03	8.0E+02							6.1E+04	6.1E+03			7.1E+03	7.1E+02
Haloxyp, Methyl	069806-40-2			1.3E+02	1.3E+01							1.0E+03	1.0E+02			1.2E+02	1.2E+01
Harmony	079277-27-3			3.5E+04	3.5E+03							2.6E+05	2.6E+04			3.1E+04	3.1E+03
Heptachlor	000076-44-8	4.1E+03	4.1E+01	1.3E+03	1.3E+02	1.0E+06	1.0E+06			4.5E+04	4.5E+02	1.5E+04	1.5E+03	3.8E+03	3.8E+01	1.2E+03	1.2E+02
Heptachlor Epoxide	001024-57-3	2.0E+03	2.0E+01	3.5E+01	3.5E+00	1.0E+06	1.0E+06			2.2E+04	2.2E+02	3.8E+02	3.8E+01	1.9E+03	1.9E+01	3.2E+01	3.2E+00
Heptane, N-	000142-82-5																
Hexabromobenzene	000087-82-1			5.3E+04	5.3E+03							4.0E+05	4.0E+04			4.7E+04	4.7E+03
Hexachlorobenzene ⁽⁶⁾	000118-74-1	1.2E+04	1.2E+02	2.1E+03	2.1E+02	1.0E+06	1.0E+06			1.4E+05	1.4E+03	2.6E+04	2.6E+03	1.1E+04	1.1E+02	2.0E+03	2.0E+02
Hexachlorobutadiene ⁽⁶⁾	000087-68-3	2.4E+05	2.4E+03	1.8E+03	1.8E+02	1.0E+06	1.0E+06			1.0E+06	2.9E+04	1.4E+04	1.4E+03	2.2E+05	2.2E+03	1.6E+03	1.6E+02
Hexachlorocyclohexane, Alpha-	000319-84-6	3.0E+03	3.0E+01			1.0E+06	1.0E+06			4.4E+04	4.4E+02			2.8E+03	2.8E+01		
Hexachlorocyclohexane, Beta-	000319-85-7	1.0E+04	1.0E+02			1.0E+06	1.0E+06			1.4E+05	1.4E+03			9.7E+03	9.7E+01		
Hexachlorocyclohexane, Delta-	000319-86-8																
Hexachlorocyclohexane, Epsilon	006108-10-7																
Hexachlorocyclohexane, Gamma-	000058-89-9	1.4E+04	1.4E+02	8.0E+03	8.0E+02					2.1E+05	2.1E+03	1.2E+05	1.2E+04	1.3E+04	1.3E+02	7.5E+03	7.5E+02

Table 3.5a. (continued)

Chemical	CASRN	Ingestion (mg/kg)*				Inhalation (mg/kg)*				Dermal (mg/kg)*				Ingestion + Inhalation + Dermal (mg/kg)* [†]			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Hexachlorocyclohexane, Technical	000608-73-1	1.0E+04	1.0E+02			1.0E+06	1.0E+06			7.9E+04	7.9E+02			9.1E+03	9.1E+01		
Hexachlorocyclopentadiene	000077-47-4			1.9E+05	1.9E+04			1.0E+06	1.0E+06			1.0E+06	1.4E+05			1.6E+05	1.6E+04
Hexachlorodibenzo-p-dioxin, Mixture	019408-74-3	3.0E+00	3.0E-02			4.2E+05	4.2E+03			2.3E+01	2.3E-01			2.7E+00	2.7E-02		
Hexachloroethane	000067-72-1	1.0E+06	1.3E+04	2.7E+04	2.7E+03	1.0E+06	1.0E+06			1.0E+06	1.6E+05	2.0E+05	2.0E+04	1.0E+06	1.2E+04	2.4E+04	2.4E+03
Hexachlorophene	000070-30-4			8.0E+03	8.0E+02							6.1E+04	6.1E+03			7.1E+03	7.1E+02
Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	000121-82-4	1.7E+05	1.7E+03	8.0E+03	8.0E+02					1.0E+06	2.6E+04	1.2E+05	1.2E+04	1.6E+05	1.6E+03	7.5E+03	7.5E+02
Hexamethylene Diisocyanate, 1,6-	000822-06-0							7.8E+05	7.8E+04								
Hexane, N-	000110-54-3			1.0E+06	1.6E+05			9.1E+01	9.1E+01			1.0E+06	1.0E+06			9.1E+01	9.1E+01
Hexanone, 2-	000591-78-6																
Hexazinone	051235-04-2			8.8E+04	8.8E+03							6.7E+05	6.7E+04			7.8E+04	7.8E+03
HpCDD, 2,3,7,8-(⁴⁰)	037871-00-4	1.2E+01	1.2E-01			1.0E+06	1.3E+04			3.1E+01	3.1E-01			8.9E+00	8.9E-02		
HpCDF, 2,3,7,8-(⁴⁰)	038998-75-3	1.2E+01	1.2E-01			1.0E+06	1.3E+04			9.4E+01	9.4E-01			1.1E+01	1.1E-01		
HxCDD, 2,3,7,8-(⁴⁰)	034465-46-8	1.2E+00	1.2E-02			1.3E+05	1.3E+03			3.1E+00	3.1E-02			8.9E-01	8.9E-03		
HxCDF, 2,3,7,8-(⁴⁰)	055684-94-1	1.2E+00	1.2E-02			1.3E+05	1.3E+03			9.4E+00	9.4E-02			1.1E+00	1.1E-02		
Hydrazine	000302-01-2	6.2E+03	6.2E+01			1.0E+06	1.0E+06			4.7E+04	4.7E+02			5.5E+03	5.5E+01		
Hydrazine Sulfate	010034-93-2	6.2E+03	6.2E+01			1.0E+06	1.0E+06			4.7E+04	4.7E+02			5.5E+03	5.5E+01		
Hydrogen Chloride	007647-01-0							1.0E+06	1.0E+06								
Hydrogen Cyanide	000074-90-8			5.3E+04	5.3E+03			1.0E+06	1.0E+06			1.0E+06	1.4E+05			5.1E+04	5.1E+03
Hydrogen Sulfide	007783-06-4			8.0E+04	8.0E+03			1.0E+06	1.0E+06			1.0E+06	2.4E+05			7.7E+04	7.7E+03
Hydroquinone	000123-31-9			1.0E+06	1.1E+05							1.0E+06	8.1E+05			9.4E+05	9.4E+04
Imazalil	035554-44-0			3.5E+04	3.5E+03							2.6E+05	2.6E+04			3.1E+04	3.1E+03

Table 3.5a. (continued)

Chemical	CASRN	Ingestion (mg/kg)*				Inhalation (mg/kg)* ^v				Dermal (mg/kg)*				Ingestion + Inhalation + Dermal (mg/kg)* ^v			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Imazaquin	081335-37-7			6.7E+05	6.7E+04							1.0E+06	5.1E+05			5.9E+05	5.9E+04
Indeno[1,2,3-cd]pyrene ⁽²⁾	000193-39-5	2.6E+04	2.6E+02			1.0E+06	1.0E+06			1.2E+05	1.2E+03			2.1E+04	2.1E+02		
Iprodione	036734-19-7			1.1E+05	1.1E+04							8.1E+05	8.1E+04			9.4E+04	9.4E+03
Iron	007439-89-6																
Isobutyl Alcohol	000078-83-1			1.0E+06	8.0E+05							1.0E+06	1.0E+06			1.0E+06	7.4E+05
Isophorone	000078-59-1	1.0E+06	2.0E+05	1.0E+06	5.3E+05					1.0E+06	1.0E+06	1.0E+06	1.0E+06	1.0E+06	1.7E+05	1.0E+06	4.7E+05
Isopropalin	033820-53-0			4.0E+05	4.0E+04							1.0E+06	3.0E+05			3.5E+05	3.5E+04
Isopropanol	000067-63-0																
Isopropyl Methyl Phosphonic Acid	001832-54-8			2.7E+05	2.7E+04							1.0E+06	2.0E+05			2.4E+05	2.4E+04
Isoxaben	082558-50-7			1.3E+05	1.3E+04							1.0E+06	1.0E+05			1.2E+05	1.2E+04
Karate	091465-08-6			1.3E+04	1.3E+03							1.0E+05	1.0E+04			1.2E+04	1.2E+03
Kerb	023950-58-5			2.0E+05	2.0E+04							1.0E+06	1.5E+05			1.8E+05	1.8E+04
Lactofen	077501-63-4			5.3E+03	5.3E+02							4.0E+04	4.0E+03			4.7E+03	4.7E+02
Lead Alkyls	NA																
Lead And Compounds	007439-92-1																
Linuron	000330-55-2			5.3E+03	5.3E+02							4.0E+04	4.0E+03			4.7E+03	4.7E+02
Lithium	007439-93-2																
Londax	083055-99-6			5.3E+05	5.3E+04							1.0E+06	4.0E+05			4.7E+05	4.7E+04
MCPA	000094-74-6			1.3E+03	1.3E+02							1.0E+04	1.0E+03			1.2E+03	1.2E+02
MCPB	000094-81-5			2.7E+05	2.7E+04							1.0E+06	2.0E+05			2.4E+05	2.4E+04
MCPP	000093-65-2			2.7E+04	2.7E+03							2.0E+05	2.0E+04			2.4E+04	2.4E+03
Magnesium	007439-95-4																

Table 3.5a. (continued)

Chemical	CASRN	Ingestion (mg/kg)*				Inhalation (mg/kg)* ^v				Dermal (mg/kg)*				Ingestion + Inhalation + Dermal (mg/kg)* ^v			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Malathion	000121-75-5			5.3E+04	5.3E+03							4.0E+05	4.0E+04			4.7E+04	4.7E+03
Maleic Anhydride	000108-31-6			2.7E+05	2.7E+04							1.0E+06	2.0E+05			2.4E+05	2.4E+04
Maleic Hydrazide	000123-33-1			1.0E+06	1.3E+05							1.0E+06	1.0E+06			1.0E+06	1.2E+05
Malononitrile	000109-77-3			5.3E+02	5.3E+01							6.5E+03	6.5E+02			4.9E+02	4.9E+01
Mancozeb	008018-01-7			8.0E+04	8.0E+03							6.1E+05	6.1E+04			7.1E+04	7.1E+03
Maneb	012427-38-2			1.3E+05	1.3E+04							1.0E+06	1.0E+05			1.2E+05	1.2E+04
Manganese (Water)	007439-96-5			1.3E+04	1.3E+03			1.0E+06	3.9E+05			8.1E+04	8.1E+03			1.1E+04	1.1E+03
Mephosfolan	000950-10-7			2.4E+03	2.4E+02							1.8E+04	1.8E+03			2.1E+03	2.1E+02
Mepiquat Chloride	024307-26-4			8.0E+04	8.0E+03							6.1E+05	6.1E+04			7.1E+04	7.1E+03
Mercuric Chloride	007487-94-7			8.0E+02	8.0E+01							2.4E+04	2.4E+03			7.7E+02	7.7E+01
Mercury (elemental)	007439-97-6			8.0E+02	8.0E+01			1.0E+06	1.0E+06			1.2E+01	1.2E+00			1.2E+01	1.2E+00
Mercury, Inorganic Salt	007439-97-6			8.0E+02	8.0E+01			1.0E+06	1.0E+06			8.5E+03	8.5E+02			7.3E+02	7.3E+01
Merphos	000150-50-5			8.0E+02	8.0E+01							6.1E+03	6.1E+02			7.1E+02	7.1E+01
Merphos Oxide	000078-48-8			8.0E+02	8.0E+01							6.1E+03	6.1E+02			7.1E+02	7.1E+01
Metalaxyl	057837-19-1			1.6E+05	1.6E+04							1.0E+06	1.2E+05			1.4E+05	1.4E+04
Methacrylonitrile	000126-98-7			2.7E+03	2.7E+02			1.2E+04	1.5E+03			3.2E+04	3.2E+03			2.1E+03	2.1E+02
Methamidophos	010265-92-6			1.3E+02	1.3E+01							1.0E+03	1.0E+02			1.2E+02	1.2E+01
Methanol	000067-56-1			1.0E+06	1.0E+06							1.0E+06	1.0E+06			1.0E+06	1.0E+06
Methidathion	000950-37-8			2.7E+03	2.7E+02							2.0E+04	2.0E+03			2.4E+03	2.4E+02
Methomyl	016752-77-5			6.7E+04	6.7E+03							5.1E+05	5.1E+04			5.9E+04	5.9E+03
Methoxy-5-nitroaniline, 2-	000099-59-2	4.1E+05	4.1E+03							1.0E+06	3.1E+04			3.6E+05	3.6E+03		
Methoxychlor	000072-43-5			1.3E+04	1.3E+03							1.0E+05	1.0E+04			1.2E+04	1.2E+03

Table 3.5a. (continued)

Chemical	CASRN	Ingestion (mg/kg) ^a						Inhalation (mg/kg) ^a			Dermal (mg/kg) ^a			Ingestion + Inhalation + Dermal (mg/kg) ^{a,b}		
		10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Methoxyethanol, 2-	000109-86-4			2.7E+04	2.7E+03		1.0E+06	1.0E+06			2.0E+05	2.0E+04	2.4E+04	2.4E+03	4.7E+04	4.7E+03
Methyl Acetate	000079-20-9			1.0E+06	1.0E+06			1.0E+06	1.0E+06		1.0E+06	1.0E+06	1.0E+06	1.0E+06	1.0E+06	1.0E+06
Methyl Acrylate	000096-33-3			8.0E+04	8.0E+03						6.1E+05	6.1E+04	7.1E+04	7.1E+03		
Methyl Ethyl Ketone	000078-93-3			1.0E+06	5.3E+05		9.2E+03	9.2E+03			1.0E+06	1.0E+06	9.2E+03	9.2E+03		
Methyl Isobutyl Ketone	000108-10-1			1.0E+06	2.1E+05		7.0E+02	7.0E+02			1.0E+06	1.0E+06	7.0E+02	7.0E+02		
Methyl Mercury	022967-92-6			2.7E+02	2.7E+01						3.6E+03	3.6E+02	2.5E+02	2.5E+02		
Methyl Methacrylate	000080-62-6			2.1E+05	2.1E+04						1.0E+06	2.6E+05	2.0E+05	2.0E+04		
Methyl Parathion	000298-00-0			5.3E+03	5.3E+02						4.0E+04	4.0E+03	4.7E+03	4.7E+02		
Isomers)	025013-15-4			1.6E+04	1.6E+03		1.0E+06	1.0E+06			1.9E+05	1.9E+04	1.5E+04	1.5E+03		
Methyl hydrazine ^(b)	000060-34-4	1.7E+04	1.7E+02						1.3E+05	1.3E+03		1.5E+04	1.5E+02			
Methyl tert-Butyl Ether (MTBE)	001634-04-4						1.0E+06	1.0E+06								
Methyl-5-Nitroaniline, 2-	000099-55-8	5.6E+05	5.6E+03						1.0E+06	4.3E+04		5.0E+05	5.0E+03			
Methylaniline Hydrochloride, 2-	000636-21-5	1.0E+05	1.0E+03						7.9E+05	7.9E+03		9.1E+04	9.1E+02			
Methylcyclohexane	000108-87-2						2.4E+02	2.4E+02								
Methylene Chloride	000075-09-2	1.0E+06	2.5E+04	1.6E+05	1.6E+04	1.0E+03	1.0E+03	1.0E+03	1.0E+06	3.6E+05	1.0E+06	2.3E+05	1.0E+03	1.0E+03	1.0E+03	1.0E+03
Methylene-bis(2-chloroaniline), 4,4'-	000101-14-4	1.4E+05	1.4E+03	1.9E+03	1.9E+02	1.0E+06	1.0E+06		1.0E+06	1.1E+04	1.4E+04	1.3E+05	1.3E+03	1.6E+03	1.6E+02	
Methylene-bis(N,N-dimethyl) Aniline, 4,4'-	000101-61-1	4.1E+05	4.1E+03						1.0E+06	3.1E+04		3.6E+05	3.6E+03			
Methylenbisbenzennamine ^(b) , 4,4'-	000101-77-9	7.5E+04	7.5E+02							5.7E+05	5.7E+03	6.6E+04	6.6E+02			

Nonradionuclides/soil/excavation

Table 3.5a. (continued)

Chemical	CASRN	Ingestion (mg/kg)*				Inhalation (mg/kg)*				Dermal (mg/kg)*				Ingestion + Inhalation + Dermal (mg/kg)*†‡			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Methylenediphenyl Isocyanate, 4,4'-	000101-68-8							1.0E+06	1.6E+05								
Methylstyrene, Alpha-	000098-83-9			1.0E+06	1.9E+05							1.0E+06	1.0E+06			1.0E+06	1.7E+05
Methyltriethyl Lead	001762-28-3																
Metolachlor	051218-45-2			4.0E+05	4.0E+04							1.0E+06	3.0E+05			3.5E+05	3.5E+04
Metribuzin ⁽⁹⁾	021087-64-9			6.7E+04	6.7E+03							5.1E+05	5.1E+04			5.9E+04	5.9E+03
Mirex ⁽⁹⁾	002385-85-5	1.0E+04	1.0E+02	5.3E+02	5.3E+01					7.9E+04	7.9E+02	4.0E+03	4.0E+02	9.1E+03	9.1E+01	4.7E+02	4.7E+01
Molinate	002212-67-1			5.3E+03	5.3E+02							4.0E+04	4.0E+03			4.7E+03	4.7E+02
Molybdenum	007439-98-7			1.3E+04	1.3E+03							7.7E+05	7.7E+04			1.3E+04	1.3E+03
Monochloramine	010599-90-3			2.7E+05	2.7E+04							1.0E+06	2.0E+05			2.4E+05	2.4E+04
Monochlorobutanes	025154-42-1			1.0E+06	1.1E+05							1.0E+06	8.1E+05			9.4E+05	9.4E+04
Naled	000300-76-5			5.3E+03	5.3E+02							4.0E+04	4.0E+03			4.7E+03	4.7E+02
Naphthalene ⁽⁹⁾	000091-20-3			9.5E+04	9.5E+03							1.0E+06	1.2E+05			8.8E+04	8.8E+03
Naphthalene, 1-Methyl	000090-12-0																
Naphthalene, 2-Methyl	000091-57-6																
Napropamide	015299-99-7			2.7E+05	2.7E+04							1.0E+06	2.0E+05			2.4E+05	2.4E+04
Niagara Blue 4B	002429-74-5																
Nickel Carbonyl	013463-39-3																
Nickel Refinery Dust	NA					1.0E+06	1.0E+06										
Nickel Soluble Salts	007440-02-0			5.3E+04	5.3E+03							1.0E+06	2.2E+05			5.2E+04	5.2E+03
Nickel Subsulfide	012035-72-2					1.0E+06	1.0E+06										
Nitrapyrin ⁽⁹⁾	001929-82-4			4.0E+03	4.0E+02							3.0E+04	3.0E+03			3.5E+03	3.5E+02
Nitrate	014797-55-8			1.0E+06	4.3E+05							1.0E+06	1.0E+06			1.0E+06	4.2E+05

Table 3.5a. (continued)

Chemical	CASRN	Ingestion (mg/kg) ^a				Inhalation (mg/kg) ^a				Dermal (mg/kg) ^a				Ingestion + Inhalation + Dermal (mg/kg) ^{a,v}			
		10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Nitric Oxide ^(b)	010102-43-9			2.7E+05	2.7E+04							1.0E+06	8.1E+05			2.6E+05	2.6E+04
Nitrite	014797-65-0			2.7E+05	2.7E+04							1.0E+06	1.0E+06			2.6E+05	2.6E+04
Nitroaniline, 2-	000088-74-4							9.6E+01	9.6E+01								
Nitrobenzene	000098-95-3			1.3E+04	1.3E+03			3.2E+02	1.5E+02			2.0E+05	2.0E+04			3.2E+02	1.3E+02
Nitrofurantoin	000067-20-9			1.0E+06	1.9E+05							1.0E+06	1.0E+06			1.0E+06	1.6E+05
Nitrofurazone	000059-87-0	1.2E+04	1.2E+02							9.4E+04	9.4E+02			1.1E+04	1.1E+02		
Nitrogen Dioxide ^(b)	010102-44-0			1.0E+06	2.7E+05							1.0E+06	1.0E+06			1.0E+06	2.6E+05
Nitroguanidine	000556-88-7			2.7E+05	2.7E+04							1.0E+06	2.0E+05			2.4E+05	2.4E+04
Nitrophenol, 4-	000100-02-7																
Nitropropane, 2- ^(b)	000079-46-9	2.0E+03	2.0E+01			4.4E+03	4.4E+01	1.5E+04	3.4E+03	2.4E+04	2.4E+02			1.3E+03	1.3E+01		
Nitroso-N-ethylurea, N-	000759-73-9	1.3E+02	1.3E+00							1.0E+03	1.0E+01			1.2E+02	1.2E+00		
Nitroso-N-methylurea, N-	000684-93-5																
Nitroso-di-N-butylamine, N-	000924-16-3	3.5E+03	3.5E+01			1.5E+03	3.2E+02			4.2E+04	4.2E+02			1.5E+03	2.9E+01		
Nitroso-di-N-propylamine, N-	000621-64-7	2.7E+03	2.7E+01							1.0E+04	1.0E+02			2.1E+03	2.1E+01		
Nitrosodiethanolamine, N-	001116-54-7	6.7E+03	6.7E+01							5.1E+04	5.1E+02			5.9E+03	5.9E+01		
Nitrosodiethylamine, N-	000055-18-5	1.2E+02	1.2E+00			1.0E+06	1.3E+05			9.4E+02	9.4E+00			1.1E+02	1.1E+00		
Nitrosodimethylamine, N-	000062-75-9	3.7E+02	3.7E+00			1.0E+06	3.8E+05			2.8E+03	2.8E+01			3.2E+02	3.2E+00		
Nitrosodiphenylamine, N-	000086-30-6	1.0E+06	3.8E+04							1.0E+06	1.4E+05			1.0E+06	3.0E+04		
Nitrosomethylethylamine, N-	010595-95-6	8.5E+02	8.5E+00							6.4E+03	6.4E+01			7.5E+02	7.5E+00		
Nitrosomethylvinylamine, N-	004549-40-0																
Nitrosopyrrolidine, N-	000930-55-2	8.9E+03	8.9E+01			1.0E+06	1.0E+06			6.7E+04	6.7E+02			7.8E+03	7.8E+01		

Table 3.5a. (continued)

Chemical	CASRN	Ingestion (mg/kg)*				Inhalation (mg/kg)* ^v				Dermal (mg/kg)*				Ingestion + Inhalation + Dermal (mg/kg)* ^v			
		10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Nitrotoluene, 4-Amino-2-	000119-32-4																
Nitrotoluene, m-	000099-08-1			2.7E+05	2.7E+04							1.0E+06	2.0E+05			2.4E+05	2.4E+04
Nitrotoluene, o-	000088-72-2			2.7E+05	2.7E+04							1.0E+06	2.0E+05			2.4E+05	2.4E+04
Nitrotoluene, p-	000099-99-0			2.7E+05	2.7E+04							1.0E+06	2.0E+05			2.4E+05	2.4E+04
Norflurazon	027314-13-2			1.1E+05	1.1E+04							8.1E+05	8.1E+04			9.4E+04	9.4E+03
Nustar	085509-19-9			1.9E+03	1.9E+02							1.4E+04	1.4E+03			1.6E+03	1.6E+02
OCDD ^(d)	003268-87-9	1.2E+02	1.2E+00			1.0E+06	1.3E+05			3.1E+02	3.1E+00			8.9E+01	8.9E-01		
OCDF ^(d)	039001-02-0	1.2E+02	1.2E+00			1.0E+06	1.3E+05			9.4E+02	9.4E+00			1.1E+02	1.1E+00		
Octabromodiphenyl Ether	032536-52-0			8.0E+04	8.0E+03							6.1E+05	6.1E+04			7.1E+04	7.1E+03
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetra (HMX)	002691-41-0			1.3E+05	1.3E+04							3.0E+05	3.0E+04			9.2E+04	9.2E+03
Octamethylpyrophosphoramide	000152-16-9			5.3E+03	5.3E+02							4.0E+04	4.0E+03			4.7E+03	4.7E+02
Octyl Phthalate, di-N-	000117-84-0			5.3E+04	5.3E+03							7.3E+05	7.3E+04			5.0E+04	5.0E+03
Oryzalin	019044-88-3			1.3E+05	1.3E+04							1.0E+06	1.0E+05			1.2E+05	1.2E+04
Oxadiazon	019666-30-9			1.3E+04	1.3E+03							1.0E+05	1.0E+04			1.2E+04	1.2E+03
Oxamyl	023135-22-0			6.7E+04	6.7E+03							5.1E+05	5.1E+04			5.9E+04	5.9E+03
Paclobutrazol	076738-62-0			3.5E+04	3.5E+03							2.6E+05	2.6E+04			3.1E+04	3.1E+03
Paraquat	001910-42-5			1.2E+04	1.2E+03							9.1E+04	9.1E+03			1.1E+04	1.1E+03
Parathion	000056-38-2			1.6E+04	1.6E+03							1.2E+05	1.2E+04			1.4E+04	1.4E+03
PeCDD, 2,3,7,8- ^(d)	036088-22-9	2.5E-01	2.5E-03			2.6E+04	2.6E+02			6.3E-01	6.3E-03			1.8E-01	1.8E-03		
PeCDF, 1,2,3,7,8- ^(d)	057117-41-6	2.5E-01	2.5E-03			2.6E+04	2.6E+02			1.9E+00	1.9E-02			2.2E-01	2.2E-03		
PeCDF, 2,3,4,7,8- ^(d)	057117-31-4	2.5E+00	2.5E-02			2.6E+05	2.6E+03			1.9E+01	1.9E-01			2.2E+00	2.2E-02		
Pebulate	001114-71-2			1.3E+05	1.3E+04							1.0E+06	1.0E+05			1.2E+05	1.2E+04

Table 3.5a. (continued)

Chemical	CASRN	Ingestion (mg/kg)*				Inhalation (mg/kg)* ^v				Dermal (mg/kg)*				Ingestion + Inhalation + Dermal (mg/kg)* ^{u,v}			
		10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HI=1	HI=0.1
Pendimethalin	040487-42-1			1.1E+05	1.1E+04							8.1E+05	8.1E+04			9.4E+04	9.4E+03
Pentabromodiphenyl Ether	032534-81-9			5.3E+04	5.3E+03							4.0E+05	4.0E+04			4.7E+04	4.7E+03
Pentachlorobenzene	000608-93-5			2.1E+04	2.1E+03							1.6E+05	1.6E+04			1.9E+04	1.9E+03
Pentachlorocyclopentadiene	025329-35-5																
Pentachloronitrobenzene	000082-68-8	7.2E+04	7.2E+02	8.0E+03	8.0E+02					8.7E+05	8.7E+03	6.1E+04	6.1E+03	6.6E+04	6.6E+02	7.1E+03	7.1E+02
Pentachlorophenol	000087-86-5	1.6E+05	1.6E+03	8.0E+04	8.0E+03					1.0E+06	2.4E+04	1.0E+06	1.2E+05	1.5E+05	1.5E+03	7.5E+04	7.5E+03
Pentyl Alcohol, N-	000071-41-0																
Permethrin	052645-53-1			1.3E+05	1.3E+04							1.0E+06	1.0E+05			1.2E+05	1.2E+04
Phenanthrene	000085-01-8																
Phenmedipham	013684-63-4			6.7E+05	6.7E+04							1.0E+06	5.1E+05			5.9E+05	5.9E+04
Phenol	000108-95-2			1.0E+06	1.6E+05							1.0E+06	1.0E+06			1.0E+06	1.5E+05
Phenylenediamine, m-	000108-45-2			1.6E+05	1.6E+04							1.0E+06	1.2E+05			1.4E+05	1.4E+04
Phenylenediamine, o-	000095-54-5	4.0E+05	4.0E+03							1.0E+06	3.0E+04			3.5E+05	3.5E+03		
Phenylenediamine, p-	000106-50-3			5.1E+05	5.1E+04							1.0E+06	3.8E+05			4.5E+05	4.5E+04
Phenylmercuric Acetate	000062-38-4			2.1E+02	2.1E+01							1.6E+03	1.6E+02			1.9E+02	1.9E+01
Phenylphenol, 2-	000090-43-7	1.0E+06	9.6E+04							1.0E+06	7.3E+05			1.0E+06	8.5E+04		
Phorate	000298-02-2			5.3E+02	5.3E+01							4.0E+03	4.0E+02			4.7E+02	4.7E+01
Phosmet	000732-11-6			5.3E+04	5.3E+03							4.0E+05	4.0E+04			4.7E+04	4.7E+03
Phosphine	007803-51-2			8.0E+02	8.0E+01			1.0E+06	1.0E+06			2.4E+04	2.4E+03			7.7E+02	7.7E+01
Phosphoric Acid	007664-38-2							1.0E+06	1.0E+06								
Phthalic Acid, P-	000100-21-0			1.0E+06	2.7E+05							1.0E+06	1.0E+06			1.0E+06	2.4E+05
Phthalic Anhydride	000085-44-9			1.0E+06	5.3E+05			1.0E+06	1.0E+06			1.0E+06	1.0E+06			1.0E+06	4.7E+05

Table 3.5a. (continued)

Chemical	CASRN	Ingestion (mg/kg)*			Inhalation (mg/kg)*			Dermal (mg/kg)*			Ingestion + Inhalation + Dermal (mg/kg)*		
		10 ⁻⁴	10 ⁻⁵	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁵	HQ=1	10 ⁻⁴	10 ⁻⁵	10 ⁻⁴	10 ⁻⁵	HQ=1
Picloram	001918-02-1			1.9E+05	1.9E+04			1.0E+06	1.4E+05		1.6E+04	1.6E+05	HI=0.1
Pitniphos, Methyl	029232-93-7			2.7E+04	2.7E+03			2.0E+05	2.0E+04		2.4E+04	2.4E+03	
Polybrominated Biphenyls	NA	2.1E+03	2.1E+01	1.9E+02	1.9E+01			2.6E+03	2.6E+02	2.0E+03	1.7E+02	2.0E+01	1.7E+01
Polychlorinated Biphenyls	001336-36-3	2.4E+03	2.4E+01							1.7E+03	1.7E+01		
Potassium Cyanide	000151-50-8			1.3E+05	1.3E+04			4.0E+05	4.0E+04		1.0E+05	1.0E+04	
Potassium Silver Cyanide	000506-61-6			5.3E+05	5.3E+04			1.0E+06	1.0E+06		5.2E+05	5.2E+04	
Prochloraz	067747-09-5	1.2E+05	1.2E+03	2.4E+04	2.4E+03			1.8E+05	1.8E+04	1.1E+05	2.1E+04	2.1E+03	
Proflutrin	026399-36-0			1.6E+04	1.6E+03			1.2E+05	1.2E+04		1.4E+04	1.4E+03	
Prometon	001610-18-0			4.0E+04	4.0E+03			3.0E+05	3.0E+04		3.5E+04	3.5E+03	
Prometryn	007287-19-6			1.1E+04	1.1E+03			8.1E+04	8.1E+03		9.4E+03	9.4E+02	
Propachlor	001918-16-7			3.5E+05	3.5E+04			1.0E+06	2.6E+05		3.1E+05	3.1E+04	
Propargile	002312-35-8			5.3E+04	5.3E+03			4.0E+05	4.0E+04		4.7E+04	4.7E+03	
Propargyl Alcohol	000107-19-7			5.3E+03	5.3E+02			6.5E+04	6.5E+03		4.9E+03	4.9E+02	
Propazine	000139-40-2			5.3E+04	5.3E+03			4.0E+05	4.0E+04		4.7E+04	4.7E+03	
Propham	000122-42-9			5.3E+04	5.3E+03			4.0E+05	4.0E+04		4.7E+04	4.7E+03	
Propiconazole	060207-90-1			3.5E+04	3.5E+03			2.6E+05	2.6E+04		3.1E+04	3.1E+03	
Propylene Glycol	000057-55-6			1.0E+06	1.0E+06			1.0E+06	1.0E+06		1.0E+06	1.0E+06	
Propylene Glycol Monoethyl Ether	001569-02-4			1.0E+06	1.0E+06			1.0E+06	1.0E+06		1.0E+06	1.0E+06	
Propylene Glycol Monomethyl Ether	000107-98-2			1.0E+06	1.0E+06			1.0E+06	1.0E+06		1.0E+06	1.0E+06	
Propylene Oxide	000075-56-9	7.8E+04	7.8E+02			2.2E+04	2.2E+04			9.4E+05	9.4E+03		
Pursuit	081335-77-5												

Nonradionuclides/soil/excavation

Table 3.5a. (continued)

Chemical	CASRN	Ingestion (mg/kg)*				Inhalation (mg/kg)**				Dermal (mg/kg)*				Ingestion + Inhalation + Dermal (mg/kg)*†‡			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Pydrin	051630-58-1			6.7E+04	6.7E+03							5.1E+05	5.1E+04			5.9E+04	5.9E+03
Pyrene	000129-00-0			8.0E+05	8.0E+04							1.0E+06	3.8E+05			6.6E+05	6.6E+04
Pyridine	000110-86-1			2.7E+04	2.7E+03							2.0E+05	2.0E+04			2.4E+04	2.4E+03
Quinalphos	013593-03-8			1.3E+03	1.3E+02							1.0E+04	1.0E+03			1.2E+03	1.2E+02
Quinoline	000091-22-5	1.6E+03	1.6E+01							1.2E+04	1.2E+02			1.4E+03	1.4E+01		
Refractory Ceramic Fibers	NA																
Resmethrin	010453-86-8			8.0E+04	8.0E+03							6.1E+05	6.1E+04			7.1E+04	7.1E+03
Ronnel	000299-84-3			1.3E+05	1.3E+04							1.0E+06	1.0E+05			1.2E+05	1.2E+04
Rotenone	000083-79-4			1.1E+04	1.1E+03							8.1E+04	8.1E+03			9.4E+03	9.4E+02
Savay	078587-05-0			6.7E+04	6.7E+03							5.1E+05	5.1E+04			5.9E+04	5.9E+03
Selenious Acid	007783-00-8			1.3E+04	1.3E+03							1.8E+05	1.8E+04			1.2E+04	1.2E+03
Selenite	014124-67-5																
Selenium	007782-49-2			1.3E+04	1.3E+03							8.9E+05	8.9E+04			1.3E+04	1.3E+03
Selenium Sulfide	007446-34-6																
Selenourea	000630-10-4			1.3E+04	1.3E+03							1.0E+05	1.0E+04			1.2E+04	1.2E+03
Sethoxydim	074051-80-2			2.4E+05	2.4E+04							1.0E+06	1.8E+05			2.1E+05	2.1E+04
Silver	007440-22-4			1.3E+04	1.3E+03							3.6E+05	3.6E+04			1.3E+04	1.3E+03
Silver Cyanide	000506-64-9			2.7E+05	2.7E+04							1.0E+06	8.1E+05			2.6E+05	2.6E+04
Simazine	000122-34-9	1.6E+05	1.6E+03	1.3E+04	1.3E+03					1.0E+06	1.2E+04	1.0E+05	1.0E+04	1.4E+05	1.4E+03	1.2E+04	1.2E+03
Sodium	007440-23-5																
Sodium Acifluorfen	062476-59-9			3.5E+04	3.5E+03							2.6E+05	2.6E+04			3.1E+04	3.1E+03
Sodium Azide	026628-22-8			1.1E+04	1.1E+03							3.2E+05	3.2E+04			1.0E+04	1.0E+03
Sodium Cyanide	000143-33-9			1.1E+05	1.1E+04							3.2E+05	3.2E+04			8.0E+04	8.0E+03

Table 3.5a. (continued)

Chemical	CASRN	Ingestion (mg/kg)*				Inhalation (mg/kg)*v				Dermal (mg/kg)*				Ingestion + Inhalation + Dermal (mg/kg)*v			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Sodium Diethyldithiocarbamate	000148-18-5	6.9E+04	6.9E+02	8.0E+05	8.0E+04					5.2E+05	5.2E+03	1.0E+06	6.1E+05	6.1E+04	6.1E+02	7.1E+05	7.1E+04
Sodium Fluoroacetate	000062-74-8			5.3E+01	5.3E+00							4.0E+02	4.0E+01			4.7E+01	4.7E+00
Sodium Metavanadate	013718-26-8			2.7E+04	2.7E+03							8.1E+05	8.1E+04			2.6E+04	2.6E+03
Stirofos (Tetrachlorovinphos)	000961-11-5	7.8E+05	7.8E+03	8.0E+04	8.0E+03					1.0E+06	5.9E+04	6.1E+05	6.1E+04	6.9E+05	6.9E+03	7.1E+04	7.1E+03
Strontium, Stable	007440-24-6			1.0E+06	1.6E+05							1.0E+06	1.0E+06			1.0E+06	1.5E+05
Strychnine	000057-24-9			8.0E+03	8.0E+02							6.1E+04	6.1E+03			7.1E+03	7.1E+02
Styrene ⁽⁹⁾	000100-42-5			5.3E+05	5.3E+04			6.7E+02	6.7E+02			1.0E+06	6.5E+05			6.7E+02	6.7E+02
Sulfate	014808-79-8																
Sythane	088671-89-0			6.7E+04	6.7E+03							5.1E+05	5.1E+04			5.9E+04	5.9E+03
TCDD, 2,3,7,8-(10)	001746-01-6	1.2E-01	1.2E-03			1.3E+04	1.3E+02			3.1E-01	3.1E-03			8.9E-02	8.9E-04		
TCDF, 2,3,7,8-(10)	051207-31-9	1.2E+00	1.2E-02			1.3E+05	1.3E+03			9.4E+00	9.4E-02			1.1E+00	1.1E-02		
TCMTB	021564-17-0			8.0E+05	8.0E+04							1.0E+06	6.1E+05			7.1E+05	7.1E+04
Tebuthiuron	034014-18-1			1.9E+05	1.9E+04							1.0E+06	1.4E+05			1.6E+05	1.6E+04
Temephos	003383-96-8			5.3E+05	5.3E+04							1.0E+06	4.0E+05			4.7E+05	4.7E+04
Terbacil	005902-51-2			3.5E+04	3.5E+03							2.6E+05	2.6E+04			3.1E+04	3.1E+03
Terbufos	013071-79-9			6.7E+01	6.7E+00							5.1E+02	5.1E+01			5.9E+01	5.9E+00
Terbutryn	000886-50-0			2.7E+03	2.7E+02							2.0E+04	2.0E+03			2.4E+03	2.4E+02
Tetrabutyl Lead	001920-90-7																
Tetrachlorobenzene, 1,2,4,5-	000095-94-3			8.0E+03	8.0E+02							6.1E+04	6.1E+03			7.1E+03	7.1E+02
Tetrachloroethane, 1,1,1,2-	000630-20-6	7.2E+05	7.2E+03	8.0E+04	8.0E+03	7.7E+02	7.7E+02			1.0E+06	8.7E+04	9.7E+05	9.7E+04	7.7E+02	7.7E+02	7.7E+02	7.7E+02
Tetrachloroethane, 1,1,2,2-	000079-34-5	9.3E+04	9.3E+02			1.1E+03	1.1E+03			9.9E+05	9.9E+03			1.1E+03	6.1E+02		

Table 3.5a. (continued)

Chemical	CASRN	Ingestion (mg/kg) ^a					Inhalation (mg/kg) ^a					Dermal (mg/kg) ^a					Ingestion + Inhalation + Dermal (mg/kg) ^{a,b}				
		10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴	10 ⁻⁴	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁴
Tetrachloroethylene ^c	000127-18-4	3.6E+05	3.6E+03	2.7E+05	2.7E+04	1.2E+02	1.2E+02		1.0E+06	5.4E+04	1.0E+06	4.0E+05	1.2E+02	1.2E+02	1.2E+02	1.2E+02	1.2E+02	1.2E+02	1.2E+02	1.2E+02	1.2E+02
Tetrachlorophenol, 2,3,4,6-	000058-90-2			8.0E+05	8.0E+04						1.0E+06	6.1E+05					7.1E+05				
Tetrachloroethane, p-alpha, alpha, alpha-	005216-25-1	9.3E+02	9.3E+00						1.1E+04	1.1E+02			8.6E+02	8.6E+00							
Tetraethyl Dithiopyrophosphate	003689-24-5			1.3E+04	1.3E+03						1.0E+05	1.0E+04					1.2E+04				
Tetraethyl Lead	000078-00-2																				
Tetrafluoroethane, 1,1,1,2-	000811-97-2						1.1E+02	1.1E+02													
Tetramethyl Lead	000075-74-1																				
Tetrapropyl Lead	003440-75-3																				
Thallic Oxide ^c	001314-32-5		1.9E+03	1.9E+02							1.4E+03	1.4E+02					8.0E+02	8.0E+01			
Thallium (I) Nitrate	010102-45-1		2.4E+03	2.4E+02							7.3E+04	7.3E+03					2.3E+03	2.3E+02			
Thallium (Soluble Salts)	007440-28-0																				
Thallium Acetate	000563-68-8		2.4E+03	2.4E+02							1.8E+04	1.8E+03					2.1E+03	2.1E+02			
Thallium Carbonate	006533-73-9		2.1E+03	2.1E+02							1.6E+04	1.6E+03					1.9E+03	1.9E+02			
Thallium Chloride	007791-12-0		2.1E+03	2.1E+02							6.5E+04	6.5E+03					2.1E+03	2.1E+02			
Thallium Selenite ^c	012039-52-0		2.4E+02	2.4E+01							7.3E+03	7.3E+02					2.3E+02	2.3E+01			
Thallium Sulfate	007446-18-6		2.1E+03	2.1E+02							6.5E+04	6.5E+03					2.1E+03	2.1E+02			
Thiobencarb	028249-77-6		2.7E+04	2.7E+03							2.0E+05	2.0E+04					2.4E+04	2.4E+03			
Thiofanox	039196-18-4		8.0E+02	8.0E+01							6.1E+03	6.1E+02					7.1E+02	7.1E+01			
Thiophanate Methyl	023564-05-8		2.1E+05	2.1E+04							1.0E+06	1.6E+05					1.9E+05	1.9E+04			
Thiram	000137-26-8		1.6E+04	1.6E+03							1.2E+05	1.2E+04					1.4E+04	1.4E+03			
Thorium	007440-29-1																				

Nonradionuclides/soil/excavation

Table 3.5a. (continued)

Chemical	CASRN	Ingestion (mg/kg)*				Inhalation (mg/kg)* ^v				Dermal (mg/kg)*				Ingestion + Inhalation + Dermal (mg/kg)* ^v			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Tin	007440-31-5			1.0E+06	1.6E+05							1.0E+06	1.0E+06			1.0E+06	1.5E+05
Titanium	007440-32-6																
Toluene ^{d9}	000108-88-3			1.0E+06	5.3E+05			2.5E+02	2.5E+02			1.0E+06	1.0E+06			2.5E+02	2.5E+02
Toluene diisocyanate mixture (TDI)	026471-62-5							1.0E+06	5.5E+05								
Toluene-2,4-diamine	000095-80-7	5.8E+03	5.8E+01							4.4E+04	4.4E+02			5.1E+03	5.1E+01		
Toluene-2,5-diamine	000095-70-5			1.0E+06	1.6E+05							1.0E+06	1.0E+06			1.0E+06	1.4E+05
Toluene-2,6-diamine	000823-40-5			5.3E+05	5.3E+04							1.0E+06	4.0E+05			4.7E+05	4.7E+04
Toluidine, o- (Methylaniline, 2-)	000095-53-4	7.8E+04	7.8E+02							5.9E+05	5.9E+03			6.9E+04	6.9E+02		
Toluidine, p-	000106-49-0	9.8E+04	9.8E+02							7.4E+05	7.4E+03			8.7E+04	8.7E+02		
Toxaphene	008001-35-2	1.7E+04	1.7E+02			1.0E+06	1.0E+06			1.3E+05	1.3E+03			1.5E+04	1.5E+02		
Tralofmethrin	066841-25-6			2.0E+04	2.0E+03							1.5E+05	1.5E+04			1.8E+04	1.8E+03
Triallate	002303-17-5			3.5E+04	3.5E+03							2.6E+05	2.6E+04			3.1E+04	3.1E+03
Triasulfuron	082097-50-5			2.7E+04	2.7E+03							2.0E+05	2.0E+04			2.4E+04	2.4E+03
Tribromobenzene, 1,2,4-	000615-54-3			1.3E+05	1.3E+04							1.0E+06	1.0E+05			1.2E+05	1.2E+04
Tribromochloromethane	000594-15-0																
Tribromodiphenyl Ether	049690-94-0																
Tributyltin Oxide	000056-35-9			8.0E+01	8.0E+00							6.1E+02	6.1E+01			7.1E+01	7.1E+00
Trichloro-1,2,2-trifluoroethane, 1,1,2-	000076-13-1			1.0E+06	8.0E+05			2.1E+02	2.1E+02			1.0E+06	1.0E+06			2.1E+02	2.1E+02
Trichloro-2'-hydroxydiphenylether	003380-34-5			1.0E+06	1.0E+06												
Trichloroacetic Acid																	
Trichloroaniline HCl, 2,4,6-	033663-50-2	6.4E+05	6.4E+03							1.0E+06	4.9E+04			5.7E+05	5.7E+03		

Table 3.5a. (continued)

Chemical	CASRN	Ingestion (mg/kg)*				Inhalation (mg/kg)* ^v				Dermal (mg/kg)*				Ingestion + Inhalation + Dermal (mg/kg)* ^{u,v}			
		10 ⁻⁴	10 ⁻³	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻³	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻³	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻³	HI=1	HI=0.1
Trichloroaniline, 2,4,6-	000634-93-5	5.5E+05	5.5E+03							1.0E+06	4.2E+04			4.8E+05	4.8E+03		
Trichlorobenzene, 1,2,4-	000120-82-1			2.7E+04	2.7E+03			8.3E+02	8.3E+02			3.9E+05	3.9E+04			8.3E+02	8.3E+02
Trichloroethane, 1,1,1- ^(b)	000071-55-6			2.4E+05	2.4E+04			7.3E+02	7.3E+02			1.0E+06	3.3E+05			7.3E+02	7.3E+02
Trichloroethane, 1,1,2-	000079-00-5	3.3E+05	3.3E+03	1.1E+05	1.1E+04	8.5E+02	8.5E+02			1.0E+06	4.0E+04	1.0E+06	1.3E+05	8.5E+02	8.5E+02	8.5E+02	8.5E+02
Trichloroethylene ^(b)	000079-01-6	1.0E+06	1.7E+04			4.5E+02	4.5E+02			1.0E+06	3.9E+04			4.5E+02	4.5E+02		
Trichlorofluoromethane	000075-69-4			1.0E+06	1.9E+05			7.1E+02	7.1E+02			1.0E+06	6.5E+05			7.1E+02	7.1E+02
Trichlorophenol, 2,4,5-	000095-95-4			1.0E+06	2.7E+05							1.0E+06	1.0E+06			1.0E+06	2.4E+05
Trichlorophenol, 2,4,6-	000088-06-2	1.0E+06	1.7E+04			1.0E+06	1.0E+06			1.0E+06	1.3E+05			1.0E+06	1.5E+04		
Trichlorophenoxy) Propionic Acid, 2(2,4,5-	000093-72-1			2.1E+04	2.1E+03							1.6E+05	1.6E+04			1.9E+04	1.9E+03
Trichlorophenoxyacetic Acid, 2,4,5-	000093-76-5			2.7E+05	2.7E+04							1.0E+06	2.0E+05			2.4E+05	2.4E+04
Trichloropropane, 1,1,2-	000598-77-6			1.3E+05	1.3E+04							1.0E+06	1.0E+05			1.2E+05	1.2E+04
Trichloropropane, 1,2,3-	000096-18-4	2.7E+03	2.7E+01	1.6E+05	1.6E+04					3.2E+04	3.2E+02	1.0E+06	1.9E+05	2.5E+03	2.5E+01	1.5E+05	1.5E+04
Trichloropropene, 1,2,3-	000096-19-5			1.3E+04	1.3E+03							1.0E+05	1.0E+04			1.2E+04	1.2E+03
Trichlorotoluene, 2,3,6-	002077-46-5			1.3E+02	1.3E+01												
Trichlorotoluene, alpha 2,6-	002014-83-7			1.3E+02	1.3E+01												
Tridipane	058138-08-2			8.0E+03	8.0E+02							6.1E+04	6.1E+03			7.1E+03	7.1E+02
Triethyl Lead	005224-23-7																
Triethylamine	000121-44-8							2.1E+04	2.1E+03								
Trifluralin	001582-09-8	1.0E+06	2.4E+04	2.0E+04	2.0E+03					1.0E+06	1.8E+05	1.5E+05	1.5E+04	1.0E+06	2.1E+04	1.8E+04	1.8E+03
Trimethyl Lead	007442-13-9																
Trimethyl Phosphate	000512-56-1	5.0E+05	5.0E+03							1.0E+06	3.8E+04			4.4E+05	4.4E+03		
Trimethylethyl Lead	001762-26-1																

Table 3.5a. (continued)

Chemical	CASRN	Ingestion (mg/kg)*				Inhalation (mg/kg)**				Dermal (mg/kg)*				Ingestion + Inhalation + Dermal (mg/kg)**			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Trinitrobenzene, 1,3,5-	000099-35-4			1.3E+03	1.3E+02							1.3E+04	1.3E+03			1.2E+03	1.2E+02
Trinitrophenylmethylnitramine	000479-45-8			2.7E+05	2.7E+04							1.0E+06	2.0E+05			2.4E+05	2.4E+04
Trinitrotoluene, 2,4,6-	000118-96-7	6.2E+05	6.2E+03	1.3E+03	1.3E+02					1.0E+06	5.7E+04	1.2E+04	1.2E+03	5.6E+05	5.6E+03	1.2E+03	1.2E+02
Tripropyl Lead	006618-03-7																
Uranium (Soluble Salts)	NA			8.0E+03	8.0E+02							1.0E+06	1.0E+05			7.9E+03	7.9E+02
Vanadium Pentoxide	001314-62-1			2.4E+04	2.4E+03							7.3E+05	7.3E+04			2.3E+04	2.3E+03
Vanadium Sulfate	036907-42-3			5.3E+04	5.3E+03							1.0E+06	1.6E+05			5.2E+04	5.2E+03
Vanadium, Metallic	007440-62-2			1.9E+04	1.9E+03							2.8E+04	2.8E+03			1.1E+04	1.1E+03
Vanadyl Sulfate	027774-13-6			5.3E+04	5.3E+03							1.0E+06	1.6E+05			5.2E+04	5.2E+03
Vernolate	001929-77-7			2.7E+04	2.7E+03							2.0E+05	2.0E+04			2.4E+04	2.4E+03
Vinclozolin	050471-44-8			6.7E+04	6.7E+03							5.1E+05	5.1E+04			5.9E+04	5.9E+03
Vinyl Acetate	000108-05-4			1.0E+06	2.7E+05			7.8E+02	7.8E+02			1.0E+06	1.0E+06			7.8E+02	7.8E+02
Vinyl Bromide	000593-60-2					4.2E+03	5.7E+02	7.7E+02	7.7E+01								
Vinyl Chloride ⁽⁶⁾	000075-01-4	9.8E+03	9.8E+01			1.3E+01	1.3E-01			1.5E+05	1.5E+03			1.3E+01	1.3E-01		
Warfarin	000081-81-2			8.0E+02	8.0E+01							6.1E+03	6.1E+02			7.1E+02	7.1E+01
White Phosphorus	007723-14-0			5.3E+01	5.3E+00							1.6E+03	1.6E+02			5.2E+01	5.2E+00
Xylene, Mixture ⁽⁶⁾	001330-20-7			9.5E+05	9.5E+04							1.0E+06	1.0E+06			8.9E+05	8.9E+04
Xylene, p- ⁽⁶⁾	000106-42-3			7.1E+05	7.1E+04												
Xylene, m- ⁽⁶⁾	000108-38-3			1.8E+05	1.8E+04							1.0E+06	2.2E+05			1.6E+05	1.6E+04
Xylene, o- ⁽⁶⁾	000095-47-6			1.0E+06	5.3E+05							1.0E+06	1.0E+06			1.0E+06	4.9E+05
Zinc (Metallic)	007440-66-6			8.0E+05	8.0E+04							1.0E+06	1.0E+06			7.7E+05	7.7E+04
Zinc Cyanide	000557-21-1			1.3E+05	1.3E+04							1.0E+06	4.0E+05			1.3E+05	1.3E+04

Table 3.5a. (continued)

Chemical	CASRN	Ingestion (mg/kg)*				Inhalation (mg/kg)*†				Dermal (mg/kg)*				Ingestion + Inhalation + Dermal (mg/kg)*†‡			
		10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HQ=1	HQ=0.1	10 ⁻⁴	10 ⁻⁶	HI=1	HI=0.1
Zinc Phosphide	001314-84-7			8.0E+03	8.0E+02							2.4E+05	2.4E+04			7.7E+03	7.7E+02
Zinc	012122-67-7			1.3E+05	1.3E+04							1.0E+06	1.0E+05			1.2E+05	1.2E+04
Zirconium	007440-67-7																

Notes:

- * By definition, 1 kg = 1.0E + 06 mg. Therefore, a limit of 1.0E + 06 mg/kg was used for any PRG that was calculated to be above this limit.
- † If slope factors and/or reference doses were available for only one pathway (i.e., ingestion, dermal, OR inhalation), the total for ingestion plus inhalation plus dermal was not calculated.
- ‡ The volatilization factor 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 volatilization factor 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) The same oral slope factor as used for polychlorinated biphenyls.
 - (2) The PRG was calculated considering *Supplemental Guidance from RAGS: Region 4 Bulletins, Human Health Risk Assessment* (Interim 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.
 - (3) The toxicity values for trichloroethylene have been withdrawn from IRIS and HEAST pending further investigation. However, the most recent toxicity values have been used to calculate the PRG.
 - (4) The PRG was calculated considering *Supplemental Guidance from RAGS: Region 4 Bulletins, Human Health Risk Assessment* (Interim Guidance) from EPA (November 1995). The slope factors for chemicals so marked indicate that a TEF methodology was used for chlorinated dioxin and furan congeners based on each compound's relative potency to the potency of 2,3,7,8-tetrachlorodibenzodioxin (TCDD). The following TEFs were used to convert each slope factor to an equivalent slope factor of 2,3,7,8-TCDD: (1) 2,3,7,8-TCDD, TEF = 1.0; (2) 2,3,7,8-PeCDD, TEF = 0.5; (3) 2,3,7,8-HxCDD, TEF = 0.1; (4) 2,3,7,8-HpCDD, TEF = 0.01; (5) OCDD, TEF = 0.001; (6) 2,3,7,8-TCDF, TEF = 0.1; (7) 1,2,3,7,8-PeCDF, TEF = 0.5; (8) 2,3,4,7,8-PeCDF, TEF = 0.05; (9) 2,3,7,8-HxCDF, TEF = 0.1; (10) 2,3,7,8-HpCDF, TEF = 0.01; and (11) OCDF, TEF = 0.001.
 - (5) Toxicity values for these chemicals have been withdrawn from IRIS and HEAST pending further investigation. However, the most recent toxicity values have been used to calculate the PRG.
 - (6) Toxicity values for these chemicals were obtained from the Superfund Health Risk Technical Support Center.

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

| Chemical [†] | CASRN | Ingestion
(pCi/g) | | Inhalation
(pCi/g) | | External Exposure
(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 | 7.3E+04 | 7.3E+02 | 2.6E+08 | 2.6E+06 | 8.8E+05 | 8.8E+03 | 6.8E+04 | 6.8E+02 |
| Ac-227 | 014952-40-0 | 3.0E+04 | 3.0E+02 | 1.5E+07 | 1.5E+05 | 2.9E+08 | 2.9E+06 | 3.0E+04 | 3.0E+02 |
| Ac-227+D | 014952-40-0 | 1.7E+04 | 1.7E+02 | 1.4E+07 | 1.4E+05 | 1.1E+04 | 1.1E+02 | 6.8E+03 | 6.8E+01 |
| Ac-228 | 014331-83-0 | 6.4E+06 | 6.4E+04 | 3.3E+10 | 3.3E+08 | 2.1E+03 | 2.1E+01 | 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 | 1.1E+14 | 1.1E+12 | 1.2E+05 | 1.2E+03 | 1.2E+05 | 1.2E+03 |
| Ag-108m | 014391-65-2 | 1.7E+06 | 1.7E+04 | 1.5E+10 | 1.5E+08 | 1.2E+03 | 1.2E+01 | 1.2E+03 | 1.2E+01 |
| Ag-108m+D | 014391-65-2 | 1.7E+06 | 1.7E+04 | 1.5E+10 | 1.5E+08 | 1.2E+03 | 1.2E+01 | 1.2E+03 | 1.2E+01 |
| Ag-109m | 014378-38-2 | 3.8E+10 | 3.8E+08 | 3.1E+15 | 3.1E+13 | 5.9E+06 | 5.9E+04 | 5.9E+06 | 5.9E+04 |
| Ag-110 | 014391-76-5 | 4.3E+09 | 4.3E+07 | 3.4E+14 | 3.4E+12 | 6.1E+04 | 6.1E+02 | 6.1E+04 | 6.1E+02 |
| Ag-110m | 014391-76-5 | 1.2E+06 | 1.2E+04 | 3.3E+10 | 3.3E+08 | 6.5E+02 | 6.5E+00 | 6.5E+02 | 6.5E+00 |
| Ag-111 | 015760-04-0 | 1.5E+06 | 1.5E+04 | 2.0E+11 | 2.0E+09 | 8.0E+04 | 8.0E+02 | 7.6E+04 | 7.6E+02 |
| Am-241 | 014596-10-2 | 3.2E+04 | 3.2E+02 | 2.8E+07 | 2.8E+05 | 1.5E+06 | 1.5E+04 | 3.1E+04 | 3.1E+02 |
| Am-242 | 013981-54-9 | 7.1E+06 | 7.1E+04 | 1.0E+11 | 1.0E+09 | 1.2E+06 | 1.2E+04 | 1.0E+06 | 1.0E+04 |
| Am-242m | 013981-54-9 | 3.6E+04 | 3.6E+02 | 3.1E+07 | 3.1E+05 | 7.8E+07 | 7.8E+05 | 3.6E+04 | 3.6E+02 |
| Am-243 | 014993-75-0 | 3.2E+04 | 3.2E+02 | 2.8E+07 | 2.8E+05 | 2.8E+05 | 2.8E+03 | 2.9E+04 | 2.9E+02 |
| Am-243+D | 014993-75-0 | 3.1E+04 | 3.1E+02 | 2.8E+07 | 2.8E+05 | 2.6E+04 | 2.6E+02 | 1.4E+04 | 1.4E+02 |

Table 3.5b. (continued)

| Chemical [†] | CASRN | Ingestion
(pCi/g) | | Inhalation
(pCi/g) | | External Exposure
(pCi/g) ^{††} | | Ingestion + Inhalation +
External Exposure
(pCi/g) ^{†††} | |
|-----------------------|-------------|----------------------|------------------|-----------------------|------------------|--|------------------|---|------------------|
| | | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ |
| Ar-41 | 014163-25-8 | | | 2.3E+15 | 2.3E+13 | | | | |
| At-217 | 017239-90-6 | 1.2E+12 | 1.2E+10 | 2.1E+15 | 2.1E+13 | 7.9E+06 | 7.9E+04 | 7.9E+06 | 7.9E+04 |
| Au-196 | 014914-16-0 | 8.0E+06 | 8.0E+04 | 1.0E+12 | 1.0E+10 | 4.9E+03 | 4.9E+01 | 4.9E+03 | 4.9E+01 |
| Au-198 | 010043-49-0 | 2.0E+06 | 2.0E+04 | 2.9E+11 | 2.9E+09 | 5.0E+03 | 5.0E+01 | 5.0E+03 | 5.0E+01 |
| Ba-131 | 014914-75-1 | 6.1E+06 | 6.1E+04 | 2.2E+12 | 2.2E+10 | 5.4E+03 | 5.4E+01 | 5.4E+03 | 5.4E+01 |
| Ba-133 | 013981-41-4 | 3.9E+06 | 3.9E+04 | 2.7E+11 | 2.7E+09 | 7.5E+03 | 7.5E+01 | 7.5E+03 | 7.5E+01 |
| Ba-133m | 013981-41-4 | 3.8E+06 | 3.8E+04 | 1.9E+12 | 1.9E+10 | 6.8E+04 | 6.8E+02 | 6.7E+04 | 6.7E+02 |
| Ba-137m | 013981-97-0 | 4.3E+09 | 4.3E+07 | 6.8E+14 | 6.8E+12 | 3.1E+03 | 3.1E+01 | 3.1E+03 | 3.1E+01 |
| Ba-139 | 014378-25-7 | 3.4E+07 | 3.4E+05 | 7.0E+12 | 7.0E+10 | 8.2E+04 | 8.2E+02 | 8.2E+04 | 8.2E+02 |
| Ba-140 | 014798-08-4 | 8.8E+05 | 8.8E+03 | 3.4E+11 | 3.4E+09 | 1.1E+04 | 1.1E+02 | 1.1E+04 | 1.1E+02 |
| Be-7 | 013966-02-4 | 1.2E+08 | 1.2E+06 | 6.0E+12 | 6.0E+10 | 4.0E+04 | 4.0E+02 | 4.0E+04 | 4.0E+02 |
| Bi-206 | 015776-19-9 | 1.5E+06 | 1.5E+04 | 2.1E+11 | 2.1E+09 | 5.7E+02 | 5.7E+00 | 5.7E+02 | 5.7E+00 |
| Bi-207 | 013982-38-2 | 2.1E+06 | 2.1E+04 | 1.1E+11 | 1.1E+09 | 1.2E+03 | 1.2E+01 | 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 | 6.2E+11 | 6.2E+09 | 4.6E+04 | 4.6E+02 | 4.6E+04 | 4.6E+02 |
| Bi-212 | 014913-49-6 | 1.7E+07 | 1.7E+05 | 2.9E+10 | 2.9E+08 | 1.0E+04 | 1.0E+02 | 1.0E+04 | 1.0E+02 |
| Bi-213 | 015776-20-2 | 2.4E+07 | 2.4E+05 | 3.5E+10 | 3.5E+08 | 1.5E+04 | 1.5E+02 | 1.5E+04 | 1.5E+02 |

Table 3.5b. (continued)

| Chemical [†] | CASRN | Ingestion
(pCi/g) | | Inhalation
(pCi/g) | | External Exposure
(pCi/g) ^{††} | | Ingestion + Inhalation +
External Exposure
(pCi/g) ^{†††} | |
|-----------------------|-------------|----------------------|------------------|-----------------------|------------------|--|------------------|---|------------------|
| | | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ |
| Bi-214 | 014733-03-0 | 5.3E+07 | 5.3E+05 | 7.3E+10 | 7.3E+08 | 1.1E+03 | 1.1E+01 | 1.1E+03 | 1.1E+01 |
| Br-82 | 014686-69-2 | 7.3E+06 | 7.3E+04 | 1.4E+12 | 1.4E+10 | 6.8E+02 | 6.8E+00 | 6.8E+02 | 6.8E+00 |
| C-11 | 014333-33-6 | 2.3E+08 | 2.3E+06 | 3.2E+13 | 3.2E+11 | 1.9E+03 | 1.9E+01 | 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 |
| 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 | 4.3E+11 | 4.3E+09 | 1.8E+15 | 1.8E+13 | 5.2E+06 | 5.2E+04 |
| Ca-47 | 001439-99-2 | 1.6E+06 | 1.6E+04 | 2.1E+11 | 2.1E+09 | 1.7E+03 | 1.7E+01 | 1.7E+03 | 1.7E+01 |
| Cd-109 | 014109-32-1 | 1.3E+06 | 1.3E+04 | 5.8E+10 | 5.8E+08 | 1.2E+07 | 1.2E+05 | 1.2E+06 | 1.2E+04 |
| Cd-115 | 014336-68-6 | 1.4E+06 | 1.4E+04 | 2.2E+11 | 2.2E+09 | 9.7E+03 | 9.7E+01 | 9.7E+03 | 9.7E+01 |
| Cd-115m | 014336-68-6 | 7.3E+05 | 7.3E+03 | 6.3E+10 | 6.3E+08 | 8.0E+04 | 8.0E+02 | 7.2E+04 | 7.2E+02 |
| Ce-141 | 013967-74-3 | 2.7E+06 | 2.7E+04 | 2.5E+11 | 2.5E+09 | 4.9E+04 | 4.9E+02 | 4.8E+04 | 4.8E+02 |
| Ce-143 | 014119-19-8 | 1.8E+06 | 1.8E+04 | 2.8E+11 | 2.8E+09 | 9.3E+03 | 9.3E+01 | 9.3E+03 | 9.3E+01 |
| Ce-144 | 014762-78-8 | 3.5E+05 | 3.5E+03 | 9.9E+09 | 9.9E+07 | 2.7E+05 | 2.7E+03 | 1.5E+05 | 1.5E+03 |
| Ce-144+D | 014762-78-8 | 3.5E+05 | 3.5E+03 | 9.9E+09 | 9.9E+07 | 4.4E+04 | 4.4E+02 | 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 | 6.6E+12 | 6.6E+10 | 1.1E+03 | 1.1E+01 | 1.1E+03 | 1.1E+01 |
| Cm-242 | 015510-73-3 | 2.7E+05 | 2.7E+03 | 3.4E+08 | 3.4E+06 | 2.9E+08 | 2.9E+06 | 2.7E+05 | 2.7E+03 |

Table 3.5b. (continued)

| Chemical [†] | CASRN | Ingestion
(pCi/g) | | Inhalation
(pCi/g) | | External Exposure
(pCi/g) ^{††} | | Ingestion + Inhalation +
External Exposure
(pCi/g) ^{†††} | |
|-----------------------|-------------|----------------------|------------------|-----------------------|------------------|--|------------------|---|------------------|
| | | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ |
| Cm-243 | 015757-87-6 | 4.2E+04 | 4.2E+02 | 3.7E+07 | 3.7E+05 | 4.0E+04 | 4.0E+02 | 2.0E+04 | 2.0E+02 |
| Cm-243+D | 015757-87-6 | 4.1E+04 | 4.1E+02 | 3.7E+07 | 3.7E+05 | 4.0E+04 | 4.0E+02 | 2.0E+04 | 2.0E+02 |
| Cm-244 | 013981-15-2 | 4.9E+04 | 4.9E+02 | 4.4E+07 | 4.4E+05 | 3.3E+08 | 3.3E+06 | 4.9E+04 | 4.9E+02 |
| Cm-245 | 015621-76-8 | 3.1E+04 | 3.1E+02 | 2.7E+07 | 2.7E+05 | 1.2E+05 | 1.2E+03 | 2.5E+04 | 2.5E+02 |
| Cm-246 | 015757-90-1 | 3.1E+04 | 3.1E+02 | 2.7E+07 | 2.7E+05 | 3.8E+08 | 3.8E+06 | 3.1E+04 | 3.1E+02 |
| Cm-247 | 015758-32-4 | 3.4E+04 | 3.4E+02 | 3.0E+07 | 3.0E+05 | 6.6E+03 | 6.6E+01 | 5.5E+03 | 5.5E+01 |
| Cm-248 | 015758-33-5 | 8.0E+03 | 8.0E+01 | 7.3E+06 | 7.3E+04 | 4.7E+08 | 4.7E+06 | 7.9E+03 | 7.9E+01 |
| Co-57 | 013981-50-5 | 1.1E+07 | 1.1E+05 | 3.7E+11 | 3.7E+09 | 3.3E+04 | 3.3E+02 | 3.3E+04 | 3.3E+02 |
| Co-58 | 013981-38-9 | 3.7E+06 | 3.7E+04 | 2.1E+11 | 2.1E+09 | 1.8E+03 | 1.8E+01 | 1.8E+03 | 1.8E+01 |
| Co-58m | 013981-38-9 | 1.1E+08 | 1.1E+06 | 1.2E+13 | 1.2E+11 | 2.1E+08 | 2.1E+06 | 7.3E+07 | 7.3E+05 |
| Co-60 | 010198-40-0 | 5.5E+05 | 5.5E+03 | 1.6E+10 | 1.6E+08 | 7.0E+02 | 7.0E+00 | 7.0E+02 | 7.0E+00 |
| Cr-51 | 014392-02-0 | 7.5E+07 | 7.5E+05 | 6.2E+12 | 6.2E+10 | 6.7E+04 | 6.7E+02 | 6.7E+04 | 6.7E+02 |
| Cs-131 | 014914-76-2 | 5.8E+07 | 5.8E+05 | 1.0E+13 | 1.0E+11 | 2.9E+06 | 2.9E+04 | 2.8E+06 | 2.8E+04 |
| Cs-134 | 013967-70-9 | 2.2E+05 | 2.2E+03 | 3.7E+10 | 3.7E+08 | 1.2E+03 | 1.2E+01 | 1.2E+03 | 1.2E+01 |
| Cs-134m | 013967-70-9 | 2.3E+08 | 2.3E+06 | 3.5E+13 | 3.5E+11 | 3.5E+05 | 3.5E+03 | 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 | 2.3E+11 | 2.3E+09 | 8.4E+02 | 8.4E+00 | 8.4E+02 | 8.4E+00 |

Table 3.5b. (continued)

| Chemical [†] | CASRN | Ingestion
(pCi/g) | | Inhalation
(pCi/g) | | External Exposure
(pCi/g) ^{††} | | Ingestion + Inhalation +
External Exposure
(pCi/g) ^{†††} | |
|-----------------------|-------------|----------------------|------------------|-----------------------|------------------|--|------------------|---|------------------|
| | | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ |
| 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 | 5.6E+10 | 5.6E+08 | 3.3E+03 | 3.3E+01 | 3.2E+03 | 3.2E+01 |
| Cs-138 | 015758-29-9 | 5.9E+07 | 5.9E+05 | 8.2E+12 | 8.2E+10 | 7.2E+02 | 7.2E+00 | 7.2E+02 | 7.2E+00 |
| Cu-64 | 013981-25-4 | 2.0E+07 | 2.0E+05 | 2.6E+12 | 2.6E+10 | 1.0E+04 | 1.0E+02 | 1.0E+04 | 1.0E+02 |
| Dy-165 | 013967-64-1 | 3.2E+07 | 3.2E+05 | 4.8E+12 | 4.8E+10 | 1.1E+05 | 1.1E+03 | 1.1E+05 | 1.1E+03 |
| Dy-166 | 015840-01-4 | 1.1E+06 | 1.1E+04 | 1.4E+11 | 1.4E+09 | 2.5E+05 | 2.5E+03 | 2.0E+05 | 2.0E+03 |
| Er-169 | 015840-13-8 | 4.9E+06 | 4.9E+04 | 7.1E+11 | 7.1E+09 | 1.0E+09 | 1.0E+07 | 4.9E+06 | 4.9E+04 |
| Er-171 | 014391-45-8 | 6.4E+06 | 6.4E+04 | 1.4E+12 | 1.4E+10 | 6.6E+03 | 6.6E+01 | 6.6E+03 | 6.6E+01 |
| Eu-152 | 014683-23-9 | 1.8E+06 | 1.8E+04 | 1.4E+10 | 1.4E+08 | 1.7E+03 | 1.7E+01 | 1.7E+03 | 1.7E+01 |
| Eu-154 | 015585-10-1 | 1.1E+06 | 1.1E+04 | 1.2E+10 | 1.2E+08 | 1.5E+03 | 1.5E+01 | 1.5E+03 | 1.5E+01 |
| Eu-155 | 014391-16-3 | 6.3E+06 | 6.3E+04 | 1.1E+11 | 1.1E+09 | 1.1E+05 | 1.1E+03 | 1.1E+05 | 1.1E+03 |
| Eu-156 | 014280-35-4 | 9.6E+05 | 9.6E+03 | 1.2E+11 | 1.2E+09 | 1.3E+03 | 1.3E+01 | 1.3E+03 | 1.3E+01 |
| F-18 | 013981-56-1 | 9.6E+07 | 9.6E+05 | 1.6E+13 | 1.6E+11 | 2.0E+03 | 2.0E+01 | 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+11 | 1.5E+09 | 1.5E+03 | 1.5E+01 | 1.5E+03 | 1.5E+01 |
| Fr-221 | 015756-41-9 | 7.2E+07 | 7.2E+05 | 1.3E+11 | 1.3E+09 | 1.0E+05 | 1.0E+03 | 1.0E+05 | 1.0E+03 |
| Fr-223 | 015756-98-6 | 2.3E+07 | 2.3E+05 | 1.8E+12 | 1.8E+10 | 1.6E+05 | 1.6E+03 | 1.6E+05 | 1.6E+03 |

Table 3.5b. (continued)

| Chemical [†] | CASRN | Ingestion
(pCi/g) | | Inhalation
(pCi/g) | | External Exposure
(pCi/g) ^{††} | | Ingestion + Inhalation +
External Exposure
(pCi/g) ^{†††} | |
|-----------------------|-------------|----------------------|------------------|-----------------------|------------------|--|------------------|---|------------------|
| | | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ |
| Ga-67 | 014119-09-6 | 1.2E+07 | 1.2E+05 | 2.1E+12 | 2.1E+10 | 1.9E+04 | 1.9E+02 | 1.9E+04 | 1.9E+02 |
| Ga-72 | 013982-22-4 | 2.2E+06 | 2.2E+04 | 4.9E+11 | 4.9E+09 | 6.1E+02 | 6.1E+00 | 6.1E+02 | 6.1E+00 |
| Gd-153 | 014276-65-4 | 7.9E+06 | 7.9E+04 | 3.3E+11 | 3.3E+09 | 9.5E+04 | 9.5E+02 | 9.4E+04 | 9.4E+02 |
| Gd-159 | 014041-42-0 | 4.0E+06 | 4.0E+04 | 8.6E+11 | 8.6E+09 | 7.1E+04 | 7.1E+02 | 7.0E+04 | 7.0E+02 |
| Ge-71 | 014374-81-3 | 8.8E+08 | 8.8E+06 | 1.8E+13 | 1.8E+11 | 4.4E+08 | 4.4E+06 | 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 | 1.5E+12 | 1.5E+10 | 1.3E+05 | 1.3E+03 | 1.2E+05 | 1.2E+03 |
| Hg-203 | 013982-78-0 | 3.9E+06 | 3.9E+04 | 3.5E+11 | 3.5E+09 | 1.1E+04 | 1.1E+02 | 1.1E+04 | 1.1E+02 |
| Ho-166 | 013967-65-2 | 1.4E+06 | 1.4E+04 | 2.6E+11 | 2.6E+09 | 9.8E+04 | 9.8E+02 | 9.2E+04 | 9.2E+02 |
| I-122 | 018287-75-7 | 4.8E+08 | 4.8E+06 | 4.8E+13 | 4.8E+11 | 2.0E+03 | 2.0E+01 | 2.0E+03 | 2.0E+01 |
| I-123 | 015715-08-9 | 1.9E+07 | 1.9E+05 | 3.6E+12 | 3.6E+10 | 2.7E+04 | 2.7E+02 | 2.7E+04 | 2.7E+02 |
| I-125 | 014158-31-7 | 4.0E+05 | 4.0E+03 | 6.3E+10 | 6.3E+08 | 2.9E+06 | 2.9E+04 | 3.5E+05 | 3.5E+03 |
| I-126 | 014158-32-8 | 2.2E+05 | 2.2E+03 | 3.4E+10 | 3.4E+08 | 4.6E+03 | 4.6E+01 | 4.5E+03 | 4.5E+01 |
| I-129 | 015046-84-1 | 5.7E+04 | 5.7E+02 | 8.8E+09 | 8.8E+07 | 2.5E+06 | 2.5E+04 | 5.5E+04 | 5.5E+02 |
| I-130 | 014914-02-4 | 2.1E+06 | 2.1E+04 | 4.1E+11 | 4.1E+09 | 8.6E+02 | 8.6E+00 | 8.6E+02 | 8.6E+00 |
| I-131 | 010043-66-0 | 2.9E+05 | 2.9E+03 | 4.6E+10 | 4.6E+08 | 5.5E+03 | 5.5E+01 | 5.4E+03 | 5.4E+01 |
| I-132 | 014683-16-0 | 1.6E+07 | 1.6E+05 | 3.0E+12 | 3.0E+10 | 7.8E+02 | 7.8E+00 | 7.8E+02 | 7.8E+00 |

Table 3.5b. (continued)

| Chemical [†] | CASRN | Ingestion
(pCi/g) | | Inhalation
(pCi/g) | | External Exposure
(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-133 | 014834-67-4 | 9.8E+05 | 9.8E+03 | 1.8E+11 | 1.8E+09 | 3.1E+03 | 3.1E+01 | 3.1E+03 | 3.1E+01 |
| I-134 | 014914-27-3 | 4.5E+07 | 4.5E+05 | 7.8E+12 | 7.8E+10 | 6.7E+02 | 6.7E+00 | 6.7E+02 | 6.7E+00 |
| I-135 | 014834-68-5 | 4.6E+06 | 4.6E+04 | 9.1E+11 | 9.1E+09 | 1.1E+03 | 1.1E+01 | 1.1E+03 | 1.1E+01 |
| In-113m | 014885-78-0 | 1.3E+08 | 1.3E+06 | 1.9E+13 | 1.9E+11 | 8.8E+03 | 8.8E+01 | 8.8E+03 | 8.8E+01 |
| In-114 | 013981-55-0 | 2.3E+09 | 2.3E+07 | 1.8E+14 | 1.8E+12 | 6.1E+04 | 6.1E+02 | 6.1E+04 | 6.1E+02 |
| In-114m | 013981-55-0 | 5.1E+05 | 5.1E+03 | 4.2E+10 | 4.2E+08 | 3.4E+04 | 3.4E+02 | 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 | 6.1E+12 | 6.1E+10 | 1.6E+04 | 1.6E+02 | 1.6E+04 | 1.6E+02 |
| Ir-190 | 014981-91-0 | 2.1E+06 | 2.1E+04 | 2.4E+11 | 2.4E+09 | 1.5E+03 | 1.5E+01 | 1.5E+03 | 1.5E+01 |
| Ir-194 | 014158-35-1 | 1.5E+06 | 1.5E+04 | 2.6E+11 | 2.6E+09 | 2.2E+04 | 2.2E+02 | 2.1E+04 | 2.1E+02 |
| K-40 | 013966-00-2 | 8.3E+05 | 8.3E+03 | 1.4E+11 | 1.4E+09 | 1.1E+04 | 1.1E+02 | 1.1E+04 | 1.1E+02 |
| K-42 | 014378-21-3 | 8.1E+06 | 8.1E+04 | 1.4E+12 | 1.4E+10 | 6.3E+03 | 6.3E+01 | 6.3E+03 | 6.3E+01 |
| 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 | | | | |

Table 3.5b. (continued)

| Chemical [†] | CASRN | Ingestion
(pCi/g) | | Inhalation
(pCi/g) | | External Exposure
(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-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 | 2.1E+11 | 2.1E+09 | 7.5E+02 | 7.5E+00 | 7.5E+02 | 7.5E+00 |
| Lu-177 | 014265-75-9 | 3.5E+06 | 3.5E+04 | 4.9E+11 | 4.9E+09 | 9.5E+04 | 9.5E+02 | 9.2E+04 | 9.2E+02 |
| Mn-52 | 014092-99-0 | 1.7E+06 | 1.7E+04 | 2.4E+11 | 2.4E+09 | 5.1E+02 | 5.1E+00 | 5.1E+02 | 5.1E+00 |
| Mn-54 | 013966-31-9 | 5.3E+06 | 5.3E+04 | 2.9E+11 | 2.9E+09 | 2.1E+03 | 2.1E+01 | 2.1E+03 | 2.1E+01 |
| Mn-56 | 014681-52-8 | 1.2E+07 | 1.2E+05 | 2.1E+12 | 2.1E+10 | 9.8E+02 | 9.8E+00 | 9.8E+02 | 9.8E+00 |
| Mo-99 | 014119-15-4 | 4.6E+06 | 4.6E+04 | 2.4E+11 | 2.4E+09 | 1.3E+04 | 1.3E+02 | 1.3E+04 | 1.3E+02 |
| Na-22 | 013966-32-0 | 1.3E+06 | 1.3E+04 | 2.2E+11 | 2.2E+09 | 8.4E+02 | 8.4E+00 | 8.4E+02 | 8.4E+00 |
| Na-24 | 013982-04-2 | 7.5E+06 | 7.5E+04 | 1.4E+12 | 1.4E+10 | 3.9E+02 | 3.9E+00 | 3.9E+02 | 3.9E+00 |
| Nb-93m | 007440-03-1 | 1.6E+07 | 1.6E+05 | 2.5E+11 | 2.5E+09 | 1.9E+08 | 1.9E+06 | 1.4E+07 | 1.4E+05 |
| Nb-94 | 014681-63-1 | 1.5E+06 | 1.5E+04 | 1.3E+10 | 1.3E+08 | 1.1E+03 | 1.1E+01 | 1.1E+03 | 1.1E+01 |
| Nb-95 | 013967-76-5 | 4.6E+06 | 4.6E+04 | 3.4E+11 | 3.4E+09 | 2.3E+03 | 2.3E+01 | 2.3E+03 | 2.3E+01 |
| Nb-95m | 013967-76-5 | 3.4E+06 | 3.4E+04 | 4.8E+11 | 4.8E+09 | 7.9E+04 | 7.9E+02 | 7.7E+04 | 7.7E+02 |
| Nb-97 | 018496-04-3 | 6.0E+07 | 6.0E+05 | 5.0E+12 | 5.0E+10 | 2.7E+03 | 2.7E+01 | 2.7E+03 | 2.7E+01 |
| Nb-97m | 018496-04-3 | 3.2E+09 | 3.2E+07 | 3.2E+14 | 3.2E+12 | 2.5E+03 | 2.5E+01 | 2.5E+03 | 2.5E+01 |
| Nd-147 | 014269-74-0 | 1.8E+06 | 1.8E+04 | 2.2E+11 | 2.2E+09 | 2.1E+04 | 2.1E+02 | 2.1E+04 | 2.1E+02 |

Table 3.5b. (continued)

| Chemical [†] | CASRN | Ingestion
(pCi/g) | | Inhalation
(pCi/g) | | External Exposure
(pCi/g) ^{††} | | Ingestion + Inhalation +
External Exposure
(pCi/g) ^{†††} | |
|-----------------------|-------------|----------------------|------------------|-----------------------|------------------|--|------------------|---|------------------|
| | | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ |
| Nd-149 | 015749-81-2 | 2.3E+07 | 2.3E+05 | 2.5E+12 | 2.5E+10 | 6.3E+03 | 6.3E+01 | 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 | 3.0E+12 | 3.0E+10 | 3.2E+03 | 3.2E+01 | 3.2E+03 | 3.2E+01 |
| Np-236 | 015700-36-4 | 1.1E+07 | 1.1E+05 | 2.8E+11 | 2.8E+09 | 7.4E+04 | 7.4E+02 | 7.4E+04 | 7.4E+02 |
| Np-237 | 013994-20-2 | 3.5E+04 | 3.5E+02 | 3.1E+07 | 3.1E+05 | 9.1E+05 | 9.1E+03 | 3.4E+04 | 3.4E+02 |
| Np-237+D | 013994-20-2 | 3.5E+04 | 3.5E+02 | 3.1E+07 | 3.1E+05 | 1.5E+04 | 1.5E+02 | 1.0E+04 | 1.0E+02 |
| Np-238 | 015766-25-3 | 2.3E+06 | 2.3E+04 | 2.3E+11 | 2.3E+09 | 3.5E+03 | 3.5E+01 | 3.5E+03 | 3.5E+01 |
| Np-239 | 013968-59-7 | 2.4E+06 | 2.4E+04 | 4.4E+11 | 4.4E+09 | 2.8E+04 | 2.8E+02 | 2.8E+04 | 2.8E+02 |
| Np-240 | 015690-84-3 | 5.9E+07 | 5.9E+05 | 8.2E+12 | 8.2E+10 | 1.9E+03 | 1.9E+01 | 1.9E+03 | 1.9E+01 |
| Np-240m | 015690-84-3 | 4.3E+08 | 4.3E+06 | 3.8E+13 | 3.8E+11 | 6.5E+03 | 6.5E+01 | 6.5E+03 | 6.5E+01 |
| Os-185 | 015766-50-4 | 5.8E+06 | 5.8E+04 | 2.3E+11 | 2.3E+09 | 2.8E+03 | 2.8E+01 | 2.8E+03 | 2.8E+01 |
| Os-191 | 014119-24-5 | 3.4E+06 | 3.4E+04 | 4.0E+11 | 4.0E+09 | 7.8E+04 | 7.8E+02 | 7.7E+04 | 7.7E+02 |
| Os-191m | 014119-24-5 | 2.1E+07 | 2.1E+05 | 3.2E+12 | 3.2E+10 | 2.1E+06 | 2.1E+04 | 1.9E+06 | 1.9E+04 |
| Os-193 | 016057-77-5 | 2.4E+06 | 2.4E+04 | 4.0E+11 | 4.0E+09 | 3.8E+04 | 3.8E+02 | 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 |
| P-33 | 015749-66-3 | 1.3E+07 | 1.3E+05 | 2.7E+12 | 2.7E+10 | | | 1.3E+07 | 1.3E+05 |

Table 3.5b. (continued)

| Chemical [†] | CASRN | Ingestion
(pCi/g) | | Inhalation
(pCi/g) | | External Exposure
(pCi/g) ^{††} | | Ingestion + Inhalation +
External Exposure
(pCi/g) ^{†††} | |
|-----------------------|-------------|----------------------|------------------|-----------------------|------------------|--|------------------|---|------------------|
| | | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ |
| Pa-231 | 014331-85-2 | 7.0E+04 | 7.0E+02 | 4.4E+07 | 4.4E+05 | 2.5E+05 | 2.5E+03 | 5.5E+04 | 5.5E+02 |
| Pa-233 | 013981-14-1 | 2.2E+06 | 2.2E+04 | 2.2E+11 | 2.2E+09 | 1.5E+04 | 1.5E+02 | 1.5E+04 | 1.5E+02 |
| Pa-234 | 015100-28-4 | 4.9E+06 | 4.9E+04 | 8.2E+11 | 8.2E+09 | 1.0E+03 | 1.0E+01 | 1.0E+03 | 1.0E+01 |
| Pa-234m | 015100-28-4 | 2.2E+09 | 2.2E+07 | 1.7E+14 | 1.7E+12 | 1.7E+05 | 1.7E+03 | 1.7E+05 | 1.7E+03 |
| Pb-203 | 014687-25-3 | 1.0E+07 | 1.0E+05 | 3.5E+12 | 3.5E+10 | 1.1E+04 | 1.1E+02 | 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 | 6.4E+08 | 6.4E+06 | 6.1E+07 | 6.1E+05 | 1.5E+04 | 1.5E+02 |
| Pb-210+D | 014255-04-0 | 1.0E+04 | 1.0E+02 | 2.8E+08 | 2.8E+06 | 4.7E+07 | 4.7E+05 | 1.0E+04 | 1.0E+02 |
| Pb-211 | 015816-77-0 | 3.1E+07 | 3.1E+05 | 1.0E+11 | 1.0E+09 | 3.7E+04 | 3.7E+02 | 3.7E+04 | 3.7E+02 |
| Pb-212 | 015092-94-1 | 5.8E+05 | 5.8E+03 | 2.8E+10 | 2.8E+08 | 2.3E+04 | 2.3E+02 | 2.2E+04 | 2.2E+02 |
| Pb-214 | 015067-28-4 | 3.5E+07 | 3.5E+05 | 1.7E+11 | 1.7E+09 | 9.7E+03 | 9.7E+01 | 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 | 9.9E+11 | 9.9E+09 | 1.3E+07 | 1.3E+05 | 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 | 5.4E+11 | 5.4E+09 | 2.8E+06 | 2.8E+04 | 1.5E+06 | 1.5E+04 |
| Pm-147 | 014380-75-7 | 7.4E+06 | 7.4E+04 | 1.4E+11 | 1.4E+09 | 1.1E+09 | 1.1E+07 | 7.3E+06 | 7.3E+04 |

Table 3.5b. (continued)

| Chemical [†] | CASRN | Ingestion
(pCi/g) | | Inhalation
(pCi/g) | | External Exposure
(pCi/g) ^{††} | | Ingestion + Inhalation +
External Exposure
(pCi/g) ^{†††} | |
|-----------------------|-------------|----------------------|------------------|-----------------------|------------------|--|------------------|---|------------------|
| | | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ |
| Pm-148 | 014683-19-3 | 7.2E+05 | 7.2E+03 | 1.0E+11 | 1.0E+09 | 3.1E+03 | 3.1E+01 | 3.1E+03 | 3.1E+01 |
| Pm-148m | 014683-19-3 | 1.0E+06 | 1.0E+04 | 3.6E+10 | 3.6E+08 | 9.3E+02 | 9.3E+00 | 9.3E+02 | 9.3E+00 |
| Pm-149 | 015765-31-8 | 1.9E+06 | 1.9E+04 | 3.0E+11 | 3.0E+09 | 1.9E+05 | 1.9E+03 | 1.7E+05 | 1.7E+03 |
| Po-210 | 013981-52-7 | 3.2E+04 | 3.2E+02 | 5.0E+08 | 5.0E+06 | 2.1E+08 | 2.1E+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 | 1.4E+19 | 1.4E+17 | 5.8E+07 | 5.8E+05 | 5.8E+07 | 5.8E+05 |
| Po-214 | 015735-67-8 | 4.9E+14 | 4.9E+12 | 3.9E+17 | 3.9E+15 | 2.1E+07 | 2.1E+05 | 2.1E+07 | 2.1E+05 |
| Po-215 | 015706-52-2 | 2.1E+13 | 2.1E+11 | 2.4E+16 | 2.4E+14 | 1.3E+07 | 1.3E+05 | 1.3E+07 | 1.3E+05 |
| Po-216 | 015756-58-8 | 1.2E+11 | 1.2E+09 | 3.6E+14 | 3.6E+12 | 1.2E+08 | 1.2E+06 | 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 | 2.6E+11 | 2.6E+09 | 2.9E+04 | 2.9E+02 | 2.9E+04 | 2.9E+02 |
| Pr-143 | 014981-79-4 | 1.6E+06 | 1.6E+04 | 1.9E+11 | 1.9E+09 | 2.0E+11 | 2.0E+09 | 1.6E+06 | 1.6E+04 |
| Pr-144 | 014119-05-2 | 1.3E+08 | 1.3E+06 | 8.2E+12 | 8.2E+10 | 5.1E+04 | 5.1E+02 | 5.1E+04 | 5.1E+02 |
| Pr-144m | 014119-05-2 | 3.2E+08 | 3.2E+06 | 1.9E+13 | 1.9E+11 | 3.7E+06 | 3.7E+04 | 3.7E+06 | 3.7E+04 |
| Pt-191 | 015706-36-2 | 6.9E+06 | 6.9E+04 | 2.6E+12 | 2.6E+10 | 1.0E+04 | 1.0E+02 | 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 | 1.9E+12 | 1.9E+10 | 9.2E+05 | 9.2E+03 | 7.5E+05 | 7.5E+03 |

Table 3.5b. (continued)

| Chemical [†] | CASRN | Ingestion
(pCi/g) | | Inhalation
(pCi/g) | | External Exposure
(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-197 | 015735-74-7 | 4.9E+06 | 4.9E+04 | 2.4E+12 | 2.4E+10 | 2.2E+05 | 2.2E+03 | 2.1E+05 | 2.1E+03 |
| Pt-197m | 015735-74-7 | 3.2E+07 | 3.2E+05 | 1.1E+13 | 1.1E+11 | 4.1E+04 | 4.1E+02 | 4.1E+04 | 4.1E+02 |
| Pu-236 | 015411-92-4 | 1.4E+05 | 1.4E+03 | 8.0E+07 | 8.0E+05 | 2.9E+08 | 2.9E+06 | 1.4E+05 | 1.4E+03 |
| Pu-238 | 013981-16-3 | 3.5E+04 | 3.5E+02 | 3.9E+07 | 3.9E+05 | 3.5E+08 | 3.5E+06 | 3.5E+04 | 3.5E+02 |
| Pu-239 | 015117-48-3 | 3.3E+04 | 3.3E+02 | 3.9E+07 | 3.9E+05 | 5.4E+08 | 5.4E+06 | 3.3E+04 | 3.3E+02 |
| Pu-240 | 014119-33-6 | 3.3E+04 | 3.3E+02 | 3.9E+07 | 3.9E+05 | 3.7E+08 | 3.7E+06 | 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 | 2.8E+07 | 2.8E+05 | 1.5E+06 | 1.5E+04 | 3.1E+04 | 3.1E+02 |
| Pu-242 | 013982-10-0 | 3.5E+04 | 3.5E+02 | 4.1E+07 | 4.1E+05 | 4.4E+08 | 4.4E+06 | 3.5E+04 | 3.5E+02 |
| Pu-243 | 015706-37-3 | 2.8E+07 | 2.8E+05 | 4.0E+12 | 4.0E+10 | 3.6E+05 | 3.6E+03 | 3.6E+05 | 3.6E+03 |
| Pu-244 | 014119-34-7 | 3.3E+04 | 3.3E+02 | 4.0E+07 | 4.0E+05 | 5.3E+08 | 5.3E+06 | 3.3E+04 | 3.3E+02 |
| Pu-244+D | 014119-34-7 | 3.3E+04 | 3.3E+02 | 4.0E+07 | 4.0E+05 | 1.9E+03 | 1.9E+01 | 1.8E+03 | 1.8E+01 |
| Ra-223 | 015623-45-7 | 4.5E+04 | 4.5E+02 | 3.0E+08 | 3.0E+06 | 2.8E+04 | 2.8E+02 | 1.7E+04 | 1.7E+02 |
| Ra-224 | 013233-32-4 | 7.0E+04 | 7.0E+02 | 4.8E+08 | 4.8E+06 | 2.8E+05 | 2.8E+03 | 5.6E+04 | 5.6E+02 |
| Ra-224 ⁽¹⁾ | 013233-32-4 | 7.0E+04 | 7.0E+02 | 4.2E+05 | 4.2E+03 | 2.8E+05 | 2.8E+03 | 4.9E+04 | 4.9E+02 |
| Ra-225 | 013981-53-8 | 6.6E+04 | 6.6E+02 | 4.5E+08 | 4.5E+06 | 4.0E+06 | 4.0E+04 | 6.5E+04 | 6.5E+02 |
| Ra-226 | 013982-63-3 | 3.5E+04 | 3.5E+02 | 3.9E+08 | 3.9E+06 | 5.2E+05 | 5.2E+03 | 3.3E+04 | 3.3E+02 |

Table 3.5b. (continued)

| Chemical [†] | CASRN | Ingestion
(pCi/g) | | Inhalation
(pCi/g) | | External Exposure
(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-226 ⁽²⁾ | 013982-63-3 | 3.5E+04 | 3.5E+02 | 2.6E+02 | 2.6E+00 | 5.2E+05 | 5.2E+03 | 2.6E+02 | 2.6E+00 |
| Ra-226+D | 013982-63-3 | 3.5E+04 | 3.5E+02 | 3.9E+08 | 3.9E+06 | 1.0E+03 | 1.0E+01 | 9.9E+02 | 9.9E+00 |
| Ra-226+D ⁽²⁾ | 013982-63-3 | 3.5E+04 | 3.5E+02 | 2.6E+02 | 2.6E+00 | 1.0E+03 | 1.0E+01 | 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 | 1.1E+09 | 1.1E+07 | 2.1E+03 | 2.1E+01 | 2.0E+03 | 2.0E+01 |
| Rb-82 | 014391-63-0 | 9.9E+08 | 9.9E+06 | 9.2E+13 | 9.2E+11 | 1.8E+03 | 1.8E+01 | 1.8E+03 | 1.8E+01 |
| Rb-86 | 014932-53-7 | 1.5E+06 | 1.5E+04 | 2.5E+11 | 2.5E+09 | 1.8E+04 | 1.8E+02 | 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 | 7.9E+12 | 7.9E+10 | 2.6E+03 | 2.6E+01 | 2.6E+03 | 2.6E+01 |
| Rb-89 | 014191-65-2 | 1.2E+08 | 1.2E+06 | 1.5E+13 | 1.5E+11 | 8.1E+02 | 8.1E+00 | 8.1E+02 | 8.1E+00 |
| Rh-103m | 007440-16-6 | 1.3E+09 | 1.3E+07 | 8.4E+13 | 8.4E+11 | 1.2E+08 | 1.2E+06 | 1.1E+08 | 1.1E+06 |
| Rh-105 | 014913-89-4 | 5.4E+06 | 5.4E+04 | 8.8E+11 | 8.8E+09 | 2.7E+04 | 2.7E+02 | 2.7E+04 | 2.7E+02 |
| Rh-105m | 014913-89-4 | 9.6E+09 | 9.6E+07 | 1.2E+15 | 1.2E+13 | 3.0E+05 | 3.0E+03 | 3.0E+05 | 3.0E+03 |
| Rh-106 | 014234-34-5 | 2.9E+09 | 2.9E+07 | 2.3E+14 | 2.3E+12 | 9.0E+03 | 9.0E+01 | 9.0E+03 | 9.0E+01 |
| Rn-219 | 014835-02-0 | | | 1.6E+13 | 1.6E+11 | 4.0E+04 | 4.0E+02 | 4.0E+04 | 4.0E+02 |
| Rn-220 | 022481-48-7 | | | 5.6E+12 | 5.6E+10 | 3.6E+06 | 3.6E+04 | 3.6E+06 | 3.6E+04 |
| Rn-222+D | 014859-67-7 | | | 1.4E+11 | 1.4E+09 | | | | |

Table 3.5b. (continued)

| Chemical [†] | CASRN | Ingestion
(pCi/g) | | Inhalation
(pCi/g) | | External Exposure
(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-103 | 013968-53-1 | 3.1E+06 | 3.1E+04 | 2.3E+11 | 2.3E+09 | 4.0E+03 | 4.0E+01 | 4.0E+03 | 4.0E+01 |
| Ru-105 | 014331-95-4 | 9.1E+06 | 9.1E+04 | 1.3E+12 | 1.3E+10 | 2.4E+03 | 2.4E+01 | 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 | 9.3E+09 | 9.3E+07 | 9.0E+03 | 9.0E+01 | 8.8E+03 | 8.8E+01 |
| Ru-97 | 015758-35-7 | 1.8E+07 | 1.8E+05 | 2.6E+12 | 2.6E+10 | 1.5E+04 | 1.5E+02 | 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 | 2.0E+11 | 2.0E+09 | 4.3E+03 | 4.3E+01 | 4.2E+03 | 4.2E+01 |
| Sb-124 | 014683-10-4 | 9.7E+05 | 9.7E+03 | 8.1E+10 | 8.1E+08 | 9.3E+02 | 9.3E+00 | 9.3E+02 | 9.3E+00 |
| Sb-125 | 014234-35-6 | 3.5E+06 | 3.5E+04 | 2.1E+11 | 2.1E+09 | 5.1E+03 | 5.1E+01 | 5.1E+03 | 5.1E+01 |
| Sb-125+D | 014234-35-6 | 2.9E+06 | 2.9E+04 | 1.8E+11 | 1.8E+09 | 5.1E+03 | 5.1E+01 | 5.1E+03 | 5.1E+01 |
| Sb-126 | 015756-32-8 | 1.1E+06 | 1.1E+04 | 1.3E+11 | 1.3E+09 | 6.6E+02 | 6.6E+00 | 6.6E+02 | 6.6E+00 |
| Sb-126m | 015756-32-8 | 1.4E+08 | 1.4E+06 | 1.7E+13 | 1.7E+11 | 1.2E+03 | 1.2E+01 | 1.2E+03 | 1.2E+01 |
| Sb-127 | 013968-50-8 | 1.2E+06 | 1.2E+04 | 1.8E+11 | 1.8E+09 | 2.9E+03 | 2.9E+01 | 2.8E+03 | 2.8E+01 |
| Sb-129 | 014331-88-5 | 5.6E+06 | 5.6E+04 | 1.2E+12 | 1.2E+10 | 1.2E+03 | 1.2E+01 | 1.2E+03 | 1.2E+01 |
| Sc-46 | 013967-63-0 | 1.8E+06 | 1.8E+04 | 8.2E+10 | 8.2E+08 | 8.7E+02 | 8.7E+00 | 8.7E+02 | 8.7E+00 |
| Sc-47 | 014391-96-9 | 3.5E+06 | 3.5E+04 | 5.3E+11 | 5.3E+09 | 2.7E+04 | 2.7E+02 | 2.7E+04 | 2.7E+02 |
| Sc-48 | 014391-86-7 | 1.6E+06 | 1.6E+04 | 2.6E+11 | 2.6E+09 | 5.2E+02 | 5.2E+00 | 5.2E+02 | 5.2E+00 |

Table 3.5b. (continued)

| Chemical [†] | CASRN | Ingestion
(pCi/g) | | Inhalation
(pCi/g) | | External Exposure
(pCi/g) ^{††} | | Ingestion + Inhalation +
External Exposure
(pCi/g) ^{†††} | |
|-----------------------|-------------|----------------------|------------------|-----------------------|------------------|--|------------------|---|------------------|
| | | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ |
| Se-75 | 014265-71-5 | 1.6E+06 | 1.6E+04 | 2.2E+11 | 2.2E+09 | 7.7E+03 | 7.7E+01 | 7.7E+03 | 7.7E+01 |
| Si-31 | 014276-49-4 | 2.1E+07 | 2.1E+05 | 3.3E+12 | 3.3E+10 | 2.0E+06 | 2.0E+04 | 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+11 | 2.3E+09 | 2.3E+10 | 2.3E+08 | 2.3E+07 | 2.3E+05 |
| Sm-153 | 015766-00-4 | 2.6E+06 | 2.6E+04 | 4.9E+11 | 4.9E+09 | 1.5E+05 | 1.5E+03 | 1.4E+05 | 1.4E+03 |
| Sn-113 | 013966-06-8 | 2.8E+06 | 2.8E+04 | 1.6E+11 | 1.6E+09 | 2.3E+06 | 2.3E+04 | 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 | 9.0E+10 | 9.0E+08 | 5.7E+03 | 5.7E+01 | 5.6E+03 | 5.6E+01 |
| Sn-126 | 015832-50-5 | 4.9E+05 | 4.9E+03 | 2.5E+10 | 2.5E+08 | 2.1E+05 | 2.1E+03 | 1.5E+05 | 1.5E+03 |
| Sr-82 | 014809-50-8 | 4.0E+05 | 4.0E+03 | 1.2E+11 | 1.2E+09 | 7.6E+07 | 7.6E+05 | 4.0E+05 | 4.0E+03 |
| Sr-85 | 013967-73-2 | 7.4E+06 | 7.4E+04 | 9.4E+11 | 9.4E+09 | 4.4E+03 | 4.4E+01 | 4.4E+03 | 4.4E+01 |
| Sr-85m | 013967-73-2 | 5.8E+08 | 5.8E+06 | 1.5E+14 | 1.5E+12 | 1.3E+04 | 1.3E+02 | 1.3E+04 | 1.3E+02 |
| Sr-89 | 014158-27-1 | 1.0E+06 | 1.0E+04 | 2.9E+11 | 2.9E+09 | 1.3E+07 | 1.3E+05 | 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 | 1.4E+12 | 1.4E+10 | 2.6E+03 | 2.6E+01 | 2.6E+03 | 2.6E+01 |

Table 3.5b. (continued)

| Chemical [†] | CASRN | Ingestion
(pCi/g) | | Inhalation
(pCi/g) | | External Exposure
(pCi/g) ^{††} | | Ingestion + Inhalation +
External Exposure
(pCi/g) ^{†††} | |
|-----------------------|-------------|----------------------|------------------|-----------------------|------------------|--|------------------|---|------------------|
| | | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ |
| Sr-92 | 014928-29-1 | 5.1E+06 | 5.1E+04 | 2.3E+12 | 2.3E+10 | 1.3E+03 | 1.3E+01 | 1.3E+03 | 1.3E+01 |
| Ta-182 | 013982-00-8 | 1.5E+06 | 1.5E+04 | 6.5E+10 | 6.5E+08 | 1.5E+03 | 1.5E+01 | 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 | 9.4E+10 | 9.4E+08 | 1.7E+03 | 1.7E+01 | 1.7E+03 | 1.7E+01 |
| Tc-95 | 014809-56-4 | 1.5E+08 | 1.5E+06 | 3.2E+13 | 3.2E+11 | 2.5E+03 | 2.5E+01 | 2.5E+03 | 2.5E+01 |
| Tc-95m | 014809-56-4 | 8.4E+06 | 8.4E+04 | 5.1E+11 | 5.1E+09 | 3.3E+03 | 3.3E+01 | 3.3E+03 | 3.3E+01 |
| Tc-96 | 014808-44-7 | 4.6E+06 | 4.6E+04 | 5.5E+11 | 5.5E+09 | 7.3E+02 | 7.3E+00 | 7.3E+02 | 7.3E+00 |
| Tc-96m | 014808-44-7 | 4.0E+08 | 4.0E+06 | 4.7E+13 | 4.7E+11 | 8.9E+04 | 8.9E+02 | 8.9E+04 | 8.9E+02 |
| Tc-97 | 015759-35-0 | 6.6E+07 | 6.6E+05 | 3.1E+12 | 3.1E+10 | 2.7E+07 | 2.7E+05 | 1.9E+07 | 1.9E+05 |
| Tc-97m | 015759-35-0 | 8.7E+06 | 8.7E+04 | 5.5E+11 | 5.5E+09 | 2.6E+07 | 2.6E+05 | 6.5E+06 | 6.5E+04 |
| Tc-99 | 014133-76-7 | 7.4E+06 | 7.4E+04 | 3.7E+11 | 3.7E+09 | 1.1E+10 | 1.1E+08 | 7.4E+06 | 7.4E+04 |
| Tc-99m | 014133-76-7 | 1.9E+08 | 1.9E+06 | 3.1E+13 | 3.1E+11 | 2.7E+04 | 2.7E+02 | 2.7E+04 | 2.7E+02 |
| Te-125m | 014390-73-9 | 4.2E+06 | 4.2E+04 | 3.8E+11 | 3.8E+09 | 3.2E+06 | 3.2E+04 | 1.8E+06 | 1.8E+04 |
| Te-127 | 013981-49-2 | 1.2E+07 | 1.2E+05 | 2.5E+12 | 2.5E+10 | 4.2E+05 | 4.2E+03 | 4.1E+05 | 4.1E+03 |
| Te-127m | 013981-49-2 | 1.7E+06 | 1.7E+04 | 8.2E+10 | 8.2E+08 | 9.6E+06 | 9.6E+04 | 1.5E+06 | 1.5E+04 |
| Te-129 | 014269-71-7 | 7.0E+07 | 7.0E+05 | 7.3E+12 | 7.3E+10 | 4.7E+04 | 4.7E+02 | 4.7E+04 | 4.7E+02 |
| Te-129m | 014269-71-7 | 8.9E+05 | 8.9E+03 | 8.1E+10 | 8.1E+08 | 9.9E+04 | 9.9E+02 | 8.9E+04 | 8.9E+02 |

Table 3.5b. (continued)

| Chemical [†] | CASRN | Ingestion
(pCi/g) | | Inhalation
(pCi/g) | | External Exposure
(pCi/g) ^{††} | | Ingestion + Inhalation +
External Exposure
(pCi/g) ^{†††} | |
|-----------------------|-------------|----------------------|------------------|-----------------------|------------------|--|------------------|---|------------------|
| | | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ |
| Te-131 | 014683-12-6 | 2.7E+07 | 2.7E+05 | 4.3E+12 | 4.3E+10 | 5.1E+03 | 5.1E+01 | 5.1E+03 | 5.1E+01 |
| Te-131m | 014683-12-6 | 1.2E+06 | 1.2E+04 | 1.3E+11 | 1.3E+09 | 1.3E+03 | 1.3E+01 | 1.3E+03 | 1.3E+01 |
| Te-132 | 014234-28-7 | 8.5E+05 | 8.5E+03 | 1.3E+11 | 1.3E+09 | 1.6E+04 | 1.6E+02 | 1.6E+04 | 1.6E+02 |
| Th-227 | 015623-47-9 | 2.6E+05 | 2.6E+03 | 2.5E+08 | 2.5E+06 | 3.9E+04 | 3.9E+02 | 3.4E+04 | 3.4E+02 |
| Th-228 | 014274-82-9 | 1.7E+05 | 1.7E+03 | 1.1E+07 | 1.1E+05 | 1.3E+07 | 1.3E+05 | 1.6E+05 | 1.6E+03 |
| Th-228+D | 014274-82-9 | 4.5E+04 | 4.5E+02 | 1.1E+07 | 1.1E+05 | 6.9E+03 | 6.9E+01 | 6.0E+03 | 6.0E+01 |
| Th-229 | 015594-54-4 | 1.8E+05 | 1.8E+03 | 1.4E+07 | 1.4E+05 | 1.2E+05 | 1.2E+03 | 7.1E+04 | 7.1E+02 |
| Th-229+D | 015594-54-4 | 2.9E+04 | 2.9E+02 | 1.3E+07 | 1.3E+05 | 1.1E+04 | 1.1E+02 | 8.2E+03 | 8.2E+01 |
| Th-230 | 014269-63-7 | 2.8E+05 | 2.8E+03 | 6.2E+07 | 6.2E+05 | 1.6E+08 | 1.6E+06 | 2.8E+05 | 2.8E+03 |
| Th-231 | 014932-40-2 | 5.8E+06 | 5.8E+04 | 9.7E+11 | 9.7E+09 | 3.3E+06 | 3.3E+04 | 2.1E+06 | 2.1E+04 |
| Th-232 | 007440-29-1 | 3.2E+05 | 3.2E+03 | 5.5E+07 | 5.5E+05 | 3.5E+08 | 3.5E+06 | 3.2E+05 | 3.2E+03 |
| Th-234 | 015065-10-8 | 5.4E+05 | 5.4E+03 | 5.6E+10 | 5.6E+08 | 2.0E+06 | 2.0E+04 | 4.2E+05 | 4.2E+03 |
| Tl-202 | 015720-57-7 | 1.0E+07 | 1.0E+05 | 1.8E+12 | 1.8E+10 | 4.8E+03 | 4.8E+01 | 4.8E+03 | 4.8E+01 |
| Tl-204 | 013968-51-9 | 5.3E+06 | 5.3E+04 | 9.3E+11 | 9.3E+09 | 7.8E+06 | 7.8E+04 | 3.2E+06 | 3.2E+04 |
| Tl-208 | 014913-50-9 | 6.0E+08 | 6.0E+06 | 7.9E+13 | 7.9E+11 | 4.7E+02 | 4.7E+00 | 4.7E+02 | 4.7E+00 |
| Tl-209 | 015690-73-0 | 7.4E+08 | 7.4E+06 | 9.6E+13 | 9.6E+11 | 8.7E+02 | 8.7E+00 | 8.7E+02 | 8.7E+00 |
| Tm-170 | 013981-30-1 | 1.4E+06 | 1.4E+04 | 9.7E+10 | 9.7E+08 | 1.8E+06 | 1.8E+04 | 7.8E+05 | 7.8E+03 |

Table 3.5b. (continued)

| Chemical [†] | CASRN | Ingestion
(pCi/g) | | Inhalation
(pCi/g) | | External Exposure
(pCi/g) ^{††} | | Ingestion + Inhalation +
External Exposure
(pCi/g) ^{†††} | |
|-----------------------|-------------|----------------------|------------------|-----------------------|------------------|--|------------------|---|------------------|
| | | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ |
| Tm-171 | 014333-45-0 | 1.8E+07 | 1.8E+05 | 5.8E+11 | 5.8E+09 | 2.2E+07 | 2.2E+05 | 9.8E+06 | 9.8E+04 |
| U-232 | 014158-29-3 | 1.3E+05 | 1.3E+03 | 2.0E+07 | 2.0E+05 | 2.0E+08 | 2.0E+06 | 1.3E+05 | 1.3E+03 |
| U-233 | 013968-55-3 | 2.3E+05 | 2.3E+03 | 7.6E+07 | 7.6E+05 | 1.9E+08 | 1.9E+06 | 2.3E+05 | 2.3E+03 |
| U-234 | 013966-29-5 | 2.3E+05 | 2.3E+03 | 7.7E+07 | 7.7E+05 | 3.2E+08 | 3.2E+06 | 2.3E+05 | 2.3E+03 |
| U-235 | 015117-96-1 | 2.3E+05 | 2.3E+03 | 8.2E+07 | 8.2E+05 | 2.6E+04 | 2.6E+02 | 2.3E+04 | 2.3E+02 |
| U-235+D | 015117-96-1 | 2.2E+05 | 2.2E+03 | 8.2E+07 | 8.2E+05 | 2.6E+04 | 2.6E+02 | 2.3E+04 | 2.3E+02 |
| U-236 | 013982-70-2 | 2.5E+05 | 2.5E+03 | 8.1E+07 | 8.1E+05 | 4.0E+08 | 4.0E+06 | 2.5E+05 | 2.5E+03 |
| U-237 | 014269-75-1 | 2.6E+06 | 2.6E+04 | 3.4E+11 | 3.4E+09 | 5.0E+04 | 5.0E+02 | 4.9E+04 | 4.9E+02 |
| U-238 | 007440-61-1 | 2.4E+05 | 2.4E+03 | 8.6E+07 | 8.6E+05 | 4.6E+08 | 4.6E+06 | 2.4E+05 | 2.4E+03 |
| U-238+D | 007440-61-1 | 1.7E+05 | 1.7E+03 | 8.6E+07 | 8.6E+05 | 1.3E+05 | 1.3E+03 | 7.3E+04 | 7.3E+02 |
| U-240 | 015687-53-3 | 1.9E+06 | 1.9E+04 | 3.2E+11 | 3.2E+09 | 6.3E+07 | 6.3E+05 | 1.8E+06 | 1.8E+04 |
| V-48 | 014331-97-6 | 1.4E+06 | 1.4E+04 | 1.6E+11 | 1.6E+09 | 6.1E+02 | 6.1E+00 | 6.1E+02 | 6.1E+00 |
| W-181 | 015749-46-9 | 3.8E+07 | 3.8E+05 | 1.3E+13 | 1.3E+11 | 3.2E+05 | 3.2E+03 | 3.2E+05 | 3.2E+03 |
| W-185 | 014932-41-3 | 5.1E+06 | 5.1E+04 | 2.5E+12 | 2.5E+10 | 1.4E+08 | 1.4E+06 | 4.9E+06 | 4.9E+04 |
| W-187 | 014983-48-3 | 4.2E+06 | 4.2E+04 | 2.0E+12 | 2.0E+10 | 4.2E+03 | 4.2E+01 | 4.2E+03 | 4.2E+01 |
| Xe-122 | 015151-09-4 | | | 3.5E+14 | 3.5E+12 | | | | |
| Xe-123 | 015700-10-4 | | | 1.2E+15 | 1.2E+13 | | | | |

Table 3.5b. (continued)

| Chemical ^f | CASRN | Ingestion
(pCi/g) | | Inhalation
(pCi/g) | | External Exposure
(pCi/g) ^{††} | | Ingestion + Inhalation +
External Exposure
(pCi/g) ^{†††} | |
|-----------------------|-------------|----------------------|------------------|-----------------------|------------------|--|------------------|---|------------------|
| | | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ | 10 ⁻⁴ | 10 ⁻⁶ |
| 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 | 5.8E+10 | 5.8E+08 | 4.9E+05 | 4.9E+03 | 3.0E+05 | 3.0E+03 |
| Y-91m | 014234-24-3 | 2.8E+08 | 2.8E+06 | 3.6E+13 | 3.6E+11 | 3.6E+03 | 3.6E+01 | 3.6E+03 | 3.6E+01 |
| Y-92 | 015751-59-4 | 5.3E+06 | 5.3E+04 | 6.7E+11 | 6.7E+09 | 7.0E+03 | 7.0E+01 | 7.0E+03 | 7.0E+01 |
| Y-93 | 014981-70-5 | 1.8E+06 | 1.8E+04 | 3.1E+11 | 3.1E+09 | 2.0E+04 | 2.0E+02 | 2.0E+04 | 2.0E+02 |
| Zn-65 | 013982-39-3 | 1.0E+06 | 1.0E+04 | 1.1E+11 | 1.1E+09 | 3.0E+03 | 3.0E+01 | 3.0E+03 | 3.0E+01 |
| Zn-69 | 013982-23-5 | 1.7E+08 | 1.7E+06 | 1.0E+13 | 1.0E+11 | 3.4E+08 | 3.4E+06 | 1.1E+08 | 1.1E+06 |

Table 3.5b. (continued)

| Chemical [†] | CASRN | Ingestion
(pCi/g) | | Inhalation
(pCi/g) | | External Exposure
(pCi/g) ^{††} | | Ingestion + Inhalation +
External Exposure
(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 | 9.2E+11 | 9.2E+09 | 4.8E+03 | 4.8E+01 | 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 | 1.7E+11 | 1.7E+09 | 2.4E+03 | 2.4E+01 | 2.4E+03 | 2.4E+01 |
| Zr-97 | 014928-30-4 | 1.0E+06 | 1.0E+04 | 2.3E+11 | 2.3E+09 | 1.0E+04 | 1.0E+02 | 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, then no external exposure slope factors were available or the external exposure slope factor was equal to 0.00E+00 (resulting in an undefined PRG for the external exposure pathway for soil under excavation land use).
- ††† If slope factors and/or reference doses were available for only one pathway (i.e., ingestion, inhalation, OR external exposure), the total for ingestion plus inhalation plus external exposure was not calculated.
- (1) The default volatilization factor of 200 for Ra-224 was calculated as the ratio of the average Ra-224 background concentration in soil to the average Rn-220 background concentration in air. Inhalation slope factor values are for Rn-222 plus decay products (i.e., Rn-222+D) formed from the radioactive decay of Ra-226 and for Rn-220+D from the decay of Ra-224. Slope factor values were taken from Table 4a of EPA's *Health Effects Assessment Summary Tables* (HEAST 1992).
- (2) The default volatilization factor of 8 for Ra-226 was calculated as the ratio of the average natural background concentration of Ra-226 in soil to the corresponding average natural background concentration of Rn-222 in air. Inhalation slope factor values are for Rn-222 plus decay products (i.e., Rn-222+D) formed from the radioactive decay of Ra-226 and for Rn-220+D from the decay of Ra-224. Slope factor values were taken from Table 4a of EPA's *Health Effects Assessment Summary Tables* (HEAST 1992).

Table 3.6a. Toxicity values used in calculating risk-based Preliminary Remediation Goals (nonradionuclides)

Chemical	CASRN	Oral Chronic RfD (mg/kg-day)	Dermal Chronic RfD (mg/kg-day)	Oral Sub-chronic RfD (mg/kg-day)	Dermal Sub-chronic RfD (mg/kg-day)	Inhalation Chronic RfD (mg/kg-day) ^f	Inhalation Sub-chronic RfD (mg/kg-day) ^f	Oral Slope Factor (mg/kg-day) ⁻¹	Inhalation Slope Factor (mg/kg-day) ⁻¹	Dermal Slope Factor (mg/kg-day) ⁻¹	GI Absorption Factor	Dermal Absorption Factor	Date Toxicity Value Withdrawn from IRIS/HEAST
ALAR	001596-84-5	1.5E-01 ^a	7.5E-02								0.50	0.010	
Acenaphthene	000083-32-9	6.0E-02 ^a	1.9E-02	6.0E-01 ^b	1.9E-01						0.31	0.010	
Acenaphthylene	000208-96-8										0.31	0.010	
Acephate	030560-19-1	4.0E-03 ^a	2.0E-03	4.0E-03 ^b	2.0E-03			8.7E-03 ^a		1.7E-02	0.50	0.010	
Acetaldehyde	000075-07-0					2.6E-03 ^a			7.7E-03 ^a		0.80	0.010	
Acetochlor	034256-82-1	2.0E-02 ^a	1.0E-02								0.50	0.010	
Acetone	000067-64-1	1.0E-01 ^a	8.3E-02	1.0E+00 ^b	8.3E-01						0.83	0.010	
Acetone Cyanohydrin	000075-86-5	8.0E-04 ^b	4.0E-04	8.0E-03 ^b	4.0E-03	2.9E-03 ^{b,c}	2.9E-02 ^{b,c}				0.50	0.010	
Acetonitrile	000075-05-8	6.0E-03 ^a	4.8E-03	6.0E-02 ^b	4.8E-02	1.4E-02 ^{b,c}	1.4E-01 ^{b,c}				0.80	0.010	
Acetophenone ⁽⁵⁾	000098-86-2	1.0E-01 ^a	8.0E-02	1.0E+00 ^b	5.0E-01	5.7E-06 ^w					0.80	0.010	9/93
Acrolein ⁽⁶⁾	000107-02-8	2.0E-02 ^b	1.6E-02			5.7E-06 ^a					0.80	0.010	
Acrylamide	000079-06-1	2.0E-04 ^a	1.0E-04	2.0E-03 ^b	1.0E-03			4.5E+00 ^a	4.5E+00 ^b	9.0E+00	0.50	0.010	
Acrylic Acid	000079-10-7	5.0E-01 ^a	2.5E-01	5.0E-01 ^b	2.5E-01	2.9E-04 ^a	8.6E-04 ^b				0.50	0.010	
Acrylonitrile	000107-13-1	1.0E-03 ^b	8.0E-04	1.0E-02 ^b	8.0E-03	5.7E-04 ^a		5.4E-01 ^a	2.4E-01 ^b	6.8E-01	0.80	0.010	
Alachlor	015972-60-8	1.0E-02 ^a	5.0E-03	1.0E-02 ^b	5.0E-03			8.0E-02 ^b		1.6E-01	0.50	0.010	
Aldicarb	000116-06-3	1.0E-03 ^a	5.0E-04	1.0E-03 ^b	5.0E-04						0.50	0.010	
Aldicarb Sulfone	001646-88-4	1.0E-03 ^a	5.0E-04								0.50	0.010	
Aldrin	000309-00-2	3.0E-05 ^a	1.5E-05	3.0E-05 ^b	1.5E-05			1.7E+01 ^a	1.7E+01 ^b	3.4E+01	0.50	0.010	
Allyl	074223-64-6	2.5E-01 ^a	1.3E-01								0.50	0.010	

Table 3.6a. (continued)

Chemical	CASRN	Oral Chronic RfD (mg/kg-day)	Dermal Chronic RfD (mg/kg-day)	Oral Sub-chronic RfD (mg/kg-day)	Dermal Sub-chronic RfD (mg/kg-day)	Inhalation Chronic RfD (mg/kg-day) [†]	Inhalation Sub-chronic RfD (mg/kg-day) [†]	Oral Slope Factor (mg/kg-day) ⁻¹	Inhalation Slope Factor (mg/kg-day) ⁻¹	Dermal Slope Factor (mg/kg-day) ⁻¹	GI Absorption Factor	Dermal Absorption Factor	Date Toxicity Value Withdrawn from IRIS/HEAST
Allyl Alcohol	000107-18-6	5.0E-03 ^a	4.0E-03	5.0E-02 ^b	4.0E-02						0.80	0.010	
Allyl Chloride ⁽⁹⁾	000107-05-1	5.0E-02 ^w	4.0E-02			2.9E-04 ^a	2.9E-03 ^b				0.80	0.010	9/93
Aluminum	007429-90-5										0.10	0.001	
Aluminum Phosphide	020859-73-8	4.0E-04 ^a	8.0E-05	4.0E-04 ^b	8.0E-05						0.20	0.001	
Amdro	067485-29-4	3.0E-04 ^a	1.5E-04								0.50	0.010	
Ametryn	000834-12-8	9.0E-03 ^a	4.5E-03	9.0E-02 ^b	4.5E-02						0.50	0.010	
Aminophenol, m-	000591-27-5	7.0E-02 ^b	3.5E-02	7.0E-01 ^b	3.5E-01						0.50	0.010	
Aminopyridine, 4-	000504-24-5	2.0E-05 ^b	1.0E-05	2.0E-04 ^b	1.0E-04						0.50	0.010	
Amitraz	033089-61-1	2.5E-03 ^a	1.3E-03								0.50	0.010	
Ammonia	007664-41-7					2.9E-02 ^a	2.9E-02 ^b				0.20	0.001	
Ammonium Sulfamate	007773-06-0	2.0E-01 ^a	4.0E-02								0.20	0.001	
Aniline	000062-53-3					2.9E-04 ^a	2.9E-03 ^b	5.7E-03 ^a		1.1E-02	0.50	0.010	
Anthracene	000120-12-7	3.0E-01 ^a	2.3E-01	3.0E+00 ^b	2.3E+00						0.76	0.010	
Antimony (metallic)	007440-36-0	4.0E-04 ^a	8.0E-06	4.0E-04 ^b	8.0E-06						0.02	0.001	
Antimony Pentoxide	001314-60-9	5.0E-04 ^b	1.0E-04	5.0E-04 ^c	1.0E-04						0.20	0.001	
Antimony Potassium Tartrate	000304-61-0	9.0E-04 ^b	1.8E-04	9.0E-04 ^b	1.8E-04						0.20	0.001	
Antimony Tetroxide	001332-81-6	4.0E-04 ^b	8.0E-05	4.0E-04 ^b	8.0E-05						0.20	0.001	
Antimony Trioxide	001309-64-4	4.0E-04 ^b	8.0E-05	4.0E-04 ^b	8.0E-05	5.7E-05 ^a					0.20	0.001	
Apollo	074115-24-5	1.3E-02 ^a	6.5E-03								0.50	0.010	

Table 3.6a. (continued)

Chemical	CASRN	Oral Chronic RfD (mg/kg-day)	Dermal Chronic RfD (mg/kg-day)	Oral Sub-chronic RfD (mg/kg-day)	Dermal Sub-chronic RfD (mg/kg-day)	Inhalation Chronic RfD (mg/kg-day) ⁱ	Inhalation Sub-chronic RfD (mg/kg-day) ⁱ	Oral Slope Factor (mg/kg-day) ⁻¹	Inhalation Slope Factor (mg/kg-day) ⁻¹	Dermal Slope Factor (mg/kg-day) ⁻¹	GI Absorption Factor	Dermal Absorption Factor	Date Toxicity Value Withdrawn from IRIS/HEAST
Aramite	000140-57-8	5.0E-02b	2.5E-02	1.0E-01 ^b	5.0E-02			2.5E-02 ^a	2.5E-02 ^b	5.0E-02	0.50	0.010	
Aroclor 1016	012674-11-2	7.0E-05 ^a	6.3E-05								0.90	0.060	
Aroclor 1221 ⁽¹⁾	011104-28-2							7.7E+00 ⁽²⁾		8.6E+00	0.90	0.060	
Aroclor 1232 ⁽¹⁾	011141-16-5							7.7E+00 ⁽²⁾		8.6E+00	0.90	0.060	
Aroclor 1242 ⁽¹⁾	053469-21-9							7.7E+00 ⁽²⁾		8.6E+00	0.90	0.060	
Aroclor 1248 ⁽¹⁾	012672-29-6							7.7E+00 ⁽²⁾		8.6E+00	0.90	0.060	
Aroclor 1254	011097-69-1	2.0E-05 ^a	1.8E-05	5.0E-05 ^b	4.5E-05						0.90	0.060	
Aroclor 1260 ⁽¹⁾	011096-82-5							7.7E+00 ⁽²⁾		8.6E+00	0.90	0.060	
Arsenic Salts	NA										0.80	0.001	
Arsenic, Inorganic	007440-38-2	3.0E-04 ^a	1.2E-04	3.0E-04 ^b	1.2E-04			1.5E+00 ^a	5.0E+01 ^b	3.7E+00	0.41	0.001	
Arsine	007784-42-1					1.4E-05 ^a					0.20	0.001	
Asbestos	001332-21-4										0.20	0.001	
Assure	076578-14-8	9.0E-03 ^a	4.5E-03								0.50	0.010	
Asulam	003337-71-1	5.0E-02 ^a	2.5E-02								0.50	0.010	
Atrazine	001912-24-9	3.5E-02 ^a	1.8E-02	3.5E-02 ^b	1.8E-02			2.2E-01 ^b		4.4E-01	0.50	0.010	
Avermectin B1	065195-55-3	4.0E-04 ^a	2.0E-04								0.50	0.010	
Azobenzene	000103-33-3							1.1E-01 ^a	1.1E-01 ^b	2.2E-01	0.50	0.010	
Barium	007440-39-3	7.0E-02 ^a	4.9E-03	7.0E-02 ^b	4.9E-03	1.4E-04 ^{bc}	1.4E-03 ^{bc}				0.07	0.001	
Barium Cyanide	000542-62-1	1.0E-01 ^b	2.0E-02	1.0E-01 ^b	2.0E-02						0.20	0.001	

Table 3.6a. (continued)

| Chemical | CASRN | Oral
Chronic
RD
(mg/kg-
day) | Dermal
Chronic
RD
(mg/kg-
day) | Oral Sub-
chronic
RD
(mg/kg-
day) | Dermal
Sub-
chronic
RD
(mg/kg-
day) | Inhalation
Chronic
RD
(mg/kg-
day) ¹ | Inhalation
Sub-
chronic
RD
(mg/kg-
day) ¹ | Oral
Slope
Factor
(mg/kg-
day) ¹ | Oral
Slope
Factor
(mg/kg-
day) ¹ | Inhalation
Slope
Factor
(mg/kg-
day) ¹ | Dermal
Slope
Factor
(mg/kg-
day) ¹ | GI
Absorp-
tion
Factor | Dermal
Absorp-
tion
Factor | Date Toxicity
Value
Withdrawn
from
IRIS/HEAST |
|-------------------------------------|-------------|--|--|---|--|---|---|---|---|---|---|---------------------------------|-------------------------------------|---|
| Baygon | 000114-26-1 | 4.0E-03 ^a | 2.0E-03 | | | | | | | | | 0.50 | 0.010 | |
| Bayleton | 043121-43-3 | 3.0E-02 ^a | 1.5E-02 | | | | | | | | | 0.50 | 0.010 | |
| Baythroid | 068359-37-5 | 2.5E-02 ^a | 1.3E-02 | | | | | | | | | 0.50 | 0.010 | |
| Benflin | 001861-40-1 | 3.0E-01 ^a | 1.5E-01 | 3.0E-01 ^b | 1.5E-01 | | | | | | | 0.50 | 0.010 | |
| Benomyl | 017804-35-2 | 5.0E-02 ^a | 2.5E-02 | | | | | | | | | 0.50 | 0.010 | |
| Benazon | 025057-89-0 | 2.5E-03 ^a | 1.3E-03 | | | | | | | | | 0.50 | 0.010 | |
| Benz[a]anthracene ⁽²⁾ | 000056-55-3 | | | | | | | 7.3E-01 ^a | 3.1E-01 ^(a) | 2.4E+00 | | 0.31 | 0.010 | |
| Benzaldehyde | 000100-52-7 | 1.0E-01 ^a | 8.0E-02 | 1.0E+00 ^b | 5.0E-01 | | | | | | | 0.80 | 0.010 | |
| Benzene | 000071-43-2 | | | | | | | 2.9E-02 ^a | 2.9E-02 ^b | 3.0E-02 | | 0.97 | 0.010 | |
| Benzene Hexachloride | NA | | | | | | | | | | | 0.97 | 0.010 | |
| Benzene, Ethyldimethyl | NA | | | | | | | | | | | 0.97 | 0.010 | |
| Benzene, Ethylmethyl | NA | | | | | | | | | | | 0.97 | 0.010 | |
| Benzene, Methylpropenyl | NA | | | | | | | | | | | 0.97 | 0.010 | |
| Benzene, Methylpropyl | NA | | | | | | | | | | | 0.97 | 0.010 | |
| Benzene, Trimethyl | 025551-13-7 | | | | | | | | | | | 0.97 | 0.010 | |
| Benzenethiol | 000108-98-5 | 1.0E-05 ^b | 5.0E-06 | 1.0E-04 ^b | 5.0E-05 | | | | | | | 0.50 | 0.010 | |
| Benzidine | 000092-87-5 | 3.0E-03 ^a | 2.4E-03 | 3.0E-03 ^b | 2.4E-03 | | | 2.3E+02 ^a | 2.3E+02 ^b | 2.9E+02 | | 0.80 | 0.010 | |
| Benz[a]pyrene ⁽²⁾ | 000050-32-8 | | | | | | | 7.3E+00 ^a | 3.1E+00 ^(a) | 2.4E+01 | | 0.31 | 0.010 | |
| Benzo[b]fluoranthene ⁽²⁾ | 000205-99-2 | | | | | | | 7.3E-01 ^a | 3.1E-01 ^(a) | 2.4E+00 | | 0.31 | 0.010 | |

Toxicity values used in PRGs calculations/nonradionuclides

Table 3.6a. (continued)

Chemical	CASRN	Oral Chronic RfD (mg/kg-day)	Dermal Chronic RfD (mg/kg-day)	Oral Sub-chronic RfD (mg/kg-day)	Dermal Sub-chronic RfD (mg/kg-day)	Inhalation Chronic RfD (mg/kg-day) ¹	Inhalation Sub-chronic RfD (mg/kg-day) ¹	Oral Slope Factor (mg/kg-day) ⁻¹	Inhalation Slope Factor (mg/kg-day) ⁻¹	Dermal Slope Factor (mg/kg-day) ⁻¹	GI Absorption Factor	Dermal Absorption Factor	Date Toxicity Value Withdrawn from IRIS/HEAST
Benzo[g,h,i]perylene	000191-24-2										0.31	0.010	
Benzo[k]fluoranthene ⁽²⁾	000207-08-9							7.3E-02 ^a	3.1E-02 ⁽²⁾	2.4E-01	0.31	0.010	
Benzoic Acid	000065-85-0	4.0E+00 ^a	4.0E+00	4.0E+00 ^b	4.0E+00						1.00	0.010	
Benzotrichloride	000098-07-7							1.3E+01 ^a		2.6E+01	0.50	0.010	
Benzyl Alcohol	000100-51-6	3.0E-01 ^b	2.0E-01	1.0E+00 ^b	6.6E-01						0.66	0.010	
Benzyl Chloride	000100-44-7							1.7E-01 ^a		2.1E-01	0.80	0.010	
Beryllium	007440-41-7	5.0E-03 ^a	5.0E-05	5.0E-03 ^b	5.0E-05			4.3E+00 ^a	8.4E+00 ^b	4.3E+02	0.01	0.001	
Bidrin	000141-66-2	1.0E-04 ^a	5.0E-05								0.50	0.010	
Biphenthrin	082657-04-3	1.5E-02 ^a	7.5E-03								0.50	0.010	
Biphenyl, 1,1'-	000092-52-4	5.0E-02 ^a	2.5E-02	5.0E-02 ^b	2.5E-02						0.50	0.010	
Bis(2-chloro-1-methylethyl)ether (Technical)	000108-60-1							7.0E-02 ^b	3.5E-02 ^b	8.8E-02	0.80	0.010	
Bis(2-chloroethoxy)methane	000111-91-1										0.50	0.010	
Bis(2-chloroethyl)ether	000111-44-4							1.1E+00 ^a	1.1E+00 ^b	1.4E+00	0.80	0.010	
Bis(2-chloroisopropyl)ether	039638-32-9	4.0E-02 ^a	3.2E-02	4.0E-02 ^b	2.0E-02						0.80	0.010	
Bis(2-ethylhexyl)phthalate ⁽⁶⁾	000117-81-7	2.0E-02 ^a	3.8E-03	2.0E-02 ^{b*}	3.8E-03			1.4E-02 ^a		7.4E-02	0.19	0.010	
Bis(chloromethyl)ether	000542-88-1							2.2E+02 ^a	2.2E+02 ^b	2.8E+02	0.80	0.010	
Bisphenol A	000080-05-7	5.0E-02 ^a	2.5E-02	6.0E-01 ^b	3.0E-01						0.50	0.010	
Boron And Borates Only	007440-42-8	9.0E-02 ^a	8.1E-02	9.0E-02 ^b	8.1E-02	5.7E-03 ^b	5.7E-03 ^b				0.90	0.001	

Table 3.6a. (continued)

Chemical	CASRN	Oral Chronic RfD (mg/kg-day)	Dermal Chronic RfD (mg/kg-day)	Oral Sub-chronic RfD (mg/kg-day)	Dermal Sub-chronic RfD (mg/kg-day)	Inhalation Chronic RfD (mg/kg-day) [†]	Inhalation Sub-chronic RfD (mg/kg-day) [†]	Oral Slope Factor (mg/kg-day) ⁻¹	Inhalation Slope Factor (mg/kg-day) ⁻¹	Dermal Slope Factor (mg/kg-day) ⁻¹	GI Absorption Factor	Dermal Absorption Factor	Date Toxicity Value Withdrawn from IRIS/HEAST
Boron Trifluoride	007637-07-2					2.0E-04 ^b	2.0E-03 ^b				0.20	0.001	
Bromochloromethane	000074-97-5										0.80	0.010	
Bromodichloromethane	000075-27-4	2.0E-02 ^a	2.0E-02	2.0E-02 ^b	2.0E-02			6.2E-02 ^a		6.3E-02	0.98	0.010	
Bromodiphenyl Ether, p-	000101-55-3										0.50	0.010	
Bromoform	000075-25-2	2.0E-02 ^a	1.2E-02	2.0E-01 ^b	1.2E-01			7.9E-03 ^a	3.9E-03 ^b	1.3E-02	0.60	0.010	
Bromomethane ⁽⁶⁾	000074-83-9	1.4E-03 ^a	1.1E-03	4.7E-03 ^{ba}	1.1E-02	1.4E-03 ^a	4.8E-02 ^{ba}				0.80	0.010	
Bromophos	002104-96-3	5.0E-03 ^b	2.5E-03	5.0E-02 ^b	2.5E-02						0.50	0.010	
Bromotrichloromethane	000075-62-7										0.80	0.010	
Bromoxynil	001689-84-5	2.0E-02 ^a	1.0E-02	2.0E-02 ^b	1.0E-02						0.50	0.010	
Bromoxynil Octanoate	001689-99-2	2.0E-02 ^a	1.0E-02	2.0E-02 ^b	1.0E-02						0.50	0.010	
Butadiene, 1,3-	000106-99-0								1.8E+00 ^b		0.80	0.010	
Butanol, N-	000071-36-3	1.0E-01 ^a	5.0E-02	1.0E+00 ^b	5.0E-01						0.50	0.010	
Butanone-2, 4-chloro-4,4-difluoro	NA										0.80	0.010	
Butyl Benzyl Phthlate	000085-68-7	2.0E-01 ^a	1.2E-01	2.0E+00 ^b	1.2E+00						0.61	0.010	
Butylate	002008-41-5	5.0E-02 ^a	2.5E-02	5.0E-02 ^b	2.5E-02						0.50	0.010	
Butylchloride, t-	000507-20-0										0.50	0.010	
Butylphthalyl Butylglycolate	000085-70-1	1.0E+00 ^a	5.0E-01								0.50	0.010	
Cacodylic Acid	000075-60-5	3.0E-03 ^b	1.5E-03	3.0E-02 ^b	1.5E-02						0.50	0.010	

3-800

Table 3.6a. (continued)

Chemical	CASRN	Oral Chronic RfD (mg/kg-day)	Dermal Chronic RfD (mg/kg-day)	Oral Sub-chronic RfD (mg/kg-day)	Dermal Sub-chronic RfD (mg/kg-day)	Inhalation Chronic RfD (mg/kg-day) ⁱ	Inhalation Sub-chronic RfD (mg/kg-day) ⁱ	Oral Slope Factor (mg/kg-day) ⁻¹	Inhalation Slope Factor (mg/kg-day) ⁻¹	Dermal Slope Factor (mg/kg-day) ⁻¹	GI Absorption Factor	Dermal Absorption Factor	Date Toxicity Value Withdrawn from IRIS/HEAST
Cadmium (Diet)	007440-43-9	1.0E-03 ^a	1.0E-05						6.1E+00 ^b		0.01	0.010	
Cadmium (Water)	007440-43-9	5.0E-04 ^a	5.0E-06						6.1E+00 ^b		0.01	0.010	
Calcium Cyanide	000592-01-8	4.0E-02 ^a	8.0E-03	4.0E-02 ^b	8.0E-03						0.20	0.001	
Caprolactam	000105-60-2	5.0E-01 ^a	2.5E-01	5.0E-01 ^b	2.5E-01						0.50	0.010	
Captafol	002425-06-1	2.0E-03 ^a	1.0E-03	2.0E-03 ^b	1.0E-03			8.6E-03 ^b		1.7E-02	0.50	0.010	
Captan	000133-06-2	1.3E-01 ^a	6.5E-02	1.3E-01 ^b	6.5E-02			3.5E-03 ^b		7.0E-03	0.50	0.010	
Carbaryl	000063-25-2	1.0E-01 ^a	5.0E-02	1.0E-01 ^b	5.0E-02						0.50	0.010	
Carbazole	000086-74-8							2.0E-02 ^b		2.9E-02	0.70	0.010	
Carbofuran	001563-66-2	5.0E-03 ^a	2.5E-03	5.0E-03 ^b	2.5E-03						0.50	0.010	
Carbon Disulfide	000075-15-0	1.0E-01 ^a	6.3E-02	1.0E-01 ^b	6.3E-02	2.0E-01 ^a	2.9E-03 ^b				0.63	0.250	
Carbon Tetrachloride ⁽⁶⁾	000056-23-5	7.0E-04 ^a	4.6E-04	2.4E-03 ^{b*}	4.6E-03			1.3E-01 ^a	5.3E-02 ^b	2.0E-01	0.65	0.010	
Carbosulfan	055285-14-8	1.0E-02 ^a	5.0E-03								0.50	0.010	
Carboxin	005234-68-4	1.0E-01 ^a	5.0E-02								0.50	0.010	
Chloral	000075-87-6	2.0E-03 ^a	1.0E-03	2.0E-02 ^b	1.0E-02						0.50	0.010	
Chloramben	000133-90-4	1.5E-02 ^a	7.5E-03								0.50	0.010	
Chloranil	000118-75-2							4.0E-01 ^b		8.1E-01	0.50	0.010	
Chlordane ⁽⁶⁾	000057-74-9	6.0E-05 ^a	3.0E-05	6.0E-05 ^b	3.0E-05			1.3E+00 ^a	1.3E+00 ^b	2.6E+00	0.50	0.010	
Chloride	016887-00-6										1.00	0.001	
Chlorimuron, Ethyl-	090982-32-4	2.0E-02 ^a	1.0E-02								0.50	0.010	

Table 3.6a. (continued)

| Chemical | CASRN | Oral
Chronic
RfD
(mg/kg-
day) | Dermal
Chronic
RfD
(mg/kg-
day) | Oral Sub-
chronic
RfD
(mg/kg-
day) | Dermal
Sub-
chronic
RfD
(mg/kg-
day) | Inhalation
Chronic
RfD
(mg/kg-
day) [†] | Inhalation
Sub-
chronic
RfD
(mg/kg-
day) [†] | Oral
Slope
Factor
(mg/kg-
day) ⁻¹ | Inhalation
Slope
Factor
(mg/kg-
day) ⁻¹ | Dermal
Slope
Factor
(mg/kg-
day) ⁻¹ | GI
Absorp-
tion
Factor | Dermal
Absorp-
tion
Factor | Date Toxicity
Value
Withdrawn
from
IRIS/HEAST |
|--------------------------------|-------------|---|---|--|---|--|--|--|--|--|---------------------------------|-------------------------------------|---|
| Chlorine | 007782-50-5 | 1.0E-01 ^a | 2.0E-02 | | | | | | | | 0.20 | 0.001 | |
| Chlorine Dioxide | 010049-04-4 | | | | | 5.7E-05 ^a | | | | | 0.50 | 0.010 | |
| Chlorite (Sodium Salt) | 007758-19-2 | | | | | | | | | | 0.20 | 0.001 | |
| Chloro-1,1-difluoroethane, 1- | 000075-68-3 | | | | | 1.4E+01 ^a | | | | | 0.80 | 0.010 | |
| Chloro-1,3-butadiene, 2- | 000126-99-8 | 2.0E-02 ^{bc} | 1.6E-02 | 2.0E-02 ^{bc} | 1.0E-02 | 2.0E-03 ^b | 2.0E-02 ^b | | | | 0.80 | 0.010 | |
| Chloro-2-methylaniline HCl, 4- | 003165-93-3 | | | | | | | 4.6E-01 ^b | | 9.2E-01 | 0.50 | 0.010 | |
| Chloro-2-methylaniline, 4- | 000095-69-2 | | | | | | | 5.8E-01 ^b | | 1.2E+00 | 0.50 | 0.010 | |
| Chloroacetic Acid | 000079-11-8 | 2.0E-03 ^b | 1.0E-03 | 2.0E-02 ^b | 1.0E-02 | | | | | | 0.50 | 0.010 | |
| Chloroacetophenone, 2- | 000532-27-4 | | | | | 8.6E-06 ^a | | | | | 0.50 | 0.010 | |
| Chloroaniline, p- | 000106-47-8 | 4.0E-03 ^a | 2.0E-03 | 4.0E-03 ^b | 2.0E-03 | | | | | | 0.50 | 0.010 | |
| Chlorobenzene ⁽⁶⁾ | 000108-90-7 | 2.0E-02 ^a | 6.2E-03 | 2.0E-01 ^{bc} | 6.2E-02 | 5.7E-03 ^{bc} | | | | | 0.31 | 0.010 | |
| Chlorobenzilate | 000510-15-6 | 2.0E-02 ^a | 1.0E-02 | 2.0E-02 ^b | 1.0E-02 | | | 2.7E-01 ^b | 2.7E-01 ^b | 5.4E-01 | 0.50 | 0.010 | |
| Chlorobenzoic Acid, p- | 000074-11-3 | 2.0E-01 ^b | 1.0E-01 | 2.0E+00 ^b | 1.0E+00 | | | | | | 0.50 | 0.010 | |
| Chlorobenzotrifluoride, 4- | 000098-56-6 | 2.0E-02 ^b | 1.0E-02 | 2.0E-01 ^b | 1.0E-01 | | | | | | 0.50 | 0.010 | |
| Chlorobutane, 1- | 000109-69-3 | 4.0E-01 ^b | 3.2E-01 | 9.0E-01 ^b | 4.5E-01 | | | | | | 0.80 | 0.010 | |
| Chlorobutane, 2- | 000078-86-4 | | | | | | | | | | 0.50 | 0.010 | |
| Chlorocyclopentadiene | 041851-50-7 | | | | | | | | | | 0.50 | 0.010 | |
| Chlorodibromoethane | 073506-94-2 | | | | | | | 8.4E-02 ^b | | 1.1E-01 | 0.80 | 0.010 | |
| Chlorodifluoromethane | 000075-45-6 | | | | | 1.4E+01 ^a | | | | | 0.80 | 0.010 | |

Table 3.6a. (continued)

Chemical	CASRN	Oral Chronic RfD (mg/kg-day)	Dermal Chronic RfD (mg/kg-day)	Oral Sub-chronic RfD (mg/kg-day)	Dermal Sub-chronic RfD (mg/kg-day)	Inhalation Chronic RfD (mg/kg-day) ¹	Inhalation Sub-chronic RfD (mg/kg-day) ¹	Oral Slope Factor (mg/kg-day) ⁻¹	Inhalation Slope Factor (mg/kg-day) ⁻¹	Dermal Slope Factor (mg/kg-day) ⁻¹	GI Absorption Factor	Dermal Absorption Factor	Date Toxicity Value Withdrawn from IRIS/HEAST
Chloroform ⁽⁶⁾	000067-66-3	1.0E-02 ^a	2.0E-03	1.0E-02 ^{ba}	2.0E-03			6.1E-03 ^a	8.1E-02 ^b	3.1E-02	0.20	0.010	
Chloromethane ⁽⁶⁾	000074-87-3						2.6E+00 ^a	1.3E-02 ^b	6.3E-03 ^b	1.6E-02	0.80	0.010	
Chloromethyl Methyl Ether	000107-30-2										0.50	0.010	
Chloronaphthalene, Beta-	000091-58-7	8.0E-02 ^a	6.4E-02								0.80	0.010	
Chloronitrobenzene, o-	000088-73-3							2.5E-02 ^b		3.1E-02	0.80	0.010	
Chloronitrobenzene, p-	000121-73-3							1.8E-02 ^b		2.3E-02	0.80	0.010	
Chlorophenol, 2-	000095-57-8	5.0E-03 ^a	4.0E-03	5.0E-02 ^b	2.5E-02						0.80	0.010	
Chlorophenyl Methyl Sulfide, p-	000123-09-1										0.50	0.010	
Chlorophenyl Methyl Sulfoxide	000934-73-6										0.50	0.010	
Chloropropane, 2-	000075-29-6					2.9E-02 ^b	2.9E-01 ^b				0.80	0.010	
Chlorothalonil	001897-45-6	1.5E-02 ^a	7.5E-03	1.5E-02 ^b	7.5E-03			1.1E-02 ^b		2.2E-02	0.50	0.010	
Chlorotoluene, o-	000095-49-8	2.0E-02 ^a	1.6E-02	2.0E-01 ^b	1.6E-01						0.80	0.010	
Chlorpropham	000101-21-3	2.0E-01 ^a	1.0E-01								0.50	0.010	
Chlorpyrifos	002921-88-2	3.0E-03 ^a	1.5E-03	3.0E-03 ^b	1.5E-03						0.50	0.010	
Chlorpyrifos Methyl	005598-13-0	1.0E-02 ^b	5.0E-03	1.0E-02 ^b	5.0E-03						0.50	0.010	
Chlorsulfuron	064902-72-3	5.0E-02 ^a	2.5E-02								0.50	0.010	
Chlorthiophos	060238-56-4	8.0E-04 ^b	4.0E-04	8.0E-04 ^b	4.0E-04						0.50	0.010	

Table 3.6a. (continued)

Chemical	CASRN	Oral Chronic RfD (mg/kg-day)	Dermal Chronic RfD (mg/kg-day)	Oral Sub-chronic RfD (mg/kg-day)	Dermal Sub-chronic RfD (mg/kg-day)	Inhalation Chronic RfD (mg/kg-day) ⁱ	Inhalation Sub-chronic RfD (mg/kg-day) ⁱ	Oral Slope Factor (mg/kg-day) ⁻¹	Inhalation Slope Factor (mg/kg-day) ⁻¹	Dermal Slope Factor (mg/kg-day) ⁻¹	GI Absorption Factor	Dermal Absorption Factor	Date Toxicity Value Withdrawn from IRIS/HEAST
Chromium (III) (Insoluble Salts)	016065-83-1	1.0E+00 ^a	5.0E-03	1.0E+00 ^b	5.0E-03						0.01	0.001	
Chromium (VI) ⁽⁶⁾	018540-29-9	5.0E-03 ^a	1.0E-04	2.0E-02 ^{b,c}	4.0E-04				4.1E+01 ^b		0.02	0.001	
Chromium Salts	NA										0.02	0.001	
Chrysene ⁽²⁾	000218-01-9							7.3E-03 ^a	3.1E-03 ⁽²⁾	2.4E-02	0.31	0.010	
Cobalt	007440-48-4										0.80	0.001	
Coke Oven Emissions	008007-45-2								2.2E+00 ^b		0.50	0.010	
Copper	007440-50-8										0.30	0.001	
Copper Cyanide	000544-92-3	5.0E-03 ^a	1.0E-03	5.0E-02 ^b	1.0E-02						0.20	0.001	
Creosote	008001-58-9										0.50	0.010	
Cresol, m-	000108-39-4	5.0E-02 ^a	2.5E-02	5.0E-01 ^b	2.5E-01						0.50	0.010	
Cresol, o-	000095-48-7	5.0E-02 ^a	2.5E-02	5.0E-01 ^b	2.5E-01						0.50	0.010	
Cresol, p-	000106-44-5	5.0E-03 ^b	3.3E-03	5.0E-03 ^b	3.3E-03						0.65	0.010	
Crotonaldehyde	000123-73-9							1.9E+00 ^b		3.8E+00	0.50	0.010	
Cumene	000098-82-8	4.0E-02 ^a	3.2E-02	4.0E-01 ^b	2.0E-01	2.6E-03 ^b	2.6E-02 ^b				0.80	0.010	
Cyanazine	021725-46-2	2.0E-03 ^b	1.0E-03	2.0E-03 ^b	1.0E-03			8.4E-01 ^b		1.7E+00	0.50	0.010	
Cyanide (CN-)	000057-12-5	2.0E-02 ^a	3.4E-03	2.0E-02 ^b	3.4E-03						0.17	0.010	
Cyanogen	000460-19-5	4.0E-02 ^a	3.2E-02	4.0E-02 ^b	3.2E-02						0.80	0.010	
Cyanogen Bromide	000506-68-3	9.0E-02 ^a	7.2E-02	9.0E-02 ^b	7.2E-02						0.80	0.010	

Table 3.6a. (continued)

Chemical	CASRN	Oral Chronic RfD (mg/kg-day)	Dermal Chronic RfD (mg/kg-day)	Oral Sub-chronic RfD (mg/kg-day)	Dermal Sub-chronic RfD (mg/kg-day)	Inhalation Chronic RfD (mg/kg-day) ⁱ	Inhalation Sub-chronic RfD (mg/kg-day) ⁱ	Oral Slope Factor (mg/kg-day) ⁻¹	Inhalation Slope Factor (mg/kg-day) ⁻¹	Dermal Slope Factor (mg/kg-day) ⁻¹	GI Absorption Factor	Dermal Absorption Factor	Date Toxicity Value Withdrawn from IRIS/HEAST
Cyanogen Chloride	000506-77-4	5.0E-02 ^a	4.0E-02								0.80	0.010	
Cyclohexane, 1,2,3,4,5-pentabromo-6-chloro-	000087-84-3							2.3E-02 ^b		4.6E-02	0.50	0.010	
Cyclohexanone	000108-94-1	5.0E+00 ^a	4.0E+00								0.80	0.010	
Cyclohexylamine	000108-91-8	2.0E-01 ^a	1.0E-01	3.0E-01 ^b	1.5E-01						0.50	0.010	
Cyclopentadiene	000542-92-7						8.6E-01 ^{b,c}				0.50	0.010	
Cyhalothrin/karate	068085-85-8	5.0E-03 ^a	2.5E-03								0.50	0.010	
Cypermethrin	052315-07-8	1.0E-02 ^a	5.0E-03								0.50	0.010	
Cyromazine	066215-27-8	7.5E-03 ^a	3.8E-03								0.50	0.010	
DDD	000072-54-8							2.4E-01 ^a		3.4E-01	0.70	0.010	
DDE	000072-55-9							3.4E-01 ^a		4.9E-01	0.70	0.010	
DDT	000050-29-3	5.0E-04 ^a	3.5E-04	5.0E-04 ^b	3.5E-04			3.4E-01 ^a	3.4E-01 ^b	4.9E-01	0.70	0.010	
Dacthal	001861-32-1	1.0E-02 ^a	5.0E-03	1.0E-02 ^b	5.0E-03						0.50	0.010	
Dalapon	000075-99-0	3.0E-02 ^a	1.5E-02	3.0E-02 ^b	1.5E-02						0.50	0.010	
Decabromodiphenyl Ether	001163-19-5	1.0E-02 ^a	8.0E-03	1.0E-02 ^b	5.0E-03						0.80	0.010	
Demeton	008065-48-3	4.0E-05 ^a	2.0E-05								0.50	0.010	
Di(2-ethylhexyl)adipate	000103-23-1	6.0E-01 ^a	3.0E-01					1.2E-03 ^a		2.4E-03	0.50	0.010	
Diallate	002303-16-4							6.1E-02 ^b		7.6E-02	0.80	0.010	
Diazinon	000333-41-5	9.0E-04 ^b	4.5E-04	9.0E-04 ^b	4.5E-04						0.50	0.010	

Table 3.6a. (continued)

Chemical	CASRN	Oral Chronic RfD (mg/kg-day)	Dermal Chronic RfD (mg/kg-day)	Oral Sub-chronic RfD (mg/kg-day)	Dermal Sub-chronic RfD (mg/kg-day)	Inhalation Chronic RfD (mg/kg-day) ⁱ	Inhalation Sub-chronic RfD (mg/kg-day) ⁱ	Oral Slope Factor (mg/kg-day) ⁱ	Inhalation Slope Factor (mg/kg-day) ⁱ	Dermal Slope Factor (mg/kg-day) ⁱ	GI Absorption Factor	Dermal Absorption Factor	Date Toxicity Value Withdrawn from IRIS/HEAST
Dibenz[a,h]anthracene ⁽²⁾	000053-70-3							7.3E+00 ^a	3.1E+00 ⁽²⁾	2.4E+01	0.31	0.010	
Dibromo-3-chloropropane, 1,2-	000096-12-8					5.7E-05 ^a		1.4E+00 ^b	2.4E-03 ^b	1.8E+00	0.80	0.010	
Dibromobenzene, 1,4-	000106-37-6	1.0E-02 ^a	8.0E-03	1.0E-01 ^b	5.0E-02						0.80	0.010	
Dibromochloromethane	000124-48-1	2.0E-02 ^a	1.2E-02	2.0E-01 ^b	1.2E-01			8.4E-02 ^a		1.4E-01	0.60	0.010	
Dibromodichloromethane	000594-18-3										0.50	0.010	
Dibromodiphenyl Ether, p,p'-	002050-47-7										0.50	0.010	
Dibromoethane, 1,2-	000106-93-4					5.7E-05 ^b	5.7E-04 ^b	8.5E+01 ^a	7.6E-01 ^b	1.1E+02	0.80	0.010	
Dibromomethane (Methylene Bromide)	000074-95-3	1.0E-02 ^{bc}	8.0E-03	1.0E-01 ^{bc}	8.0E-02						0.80	0.010	
Dibutyl Phthalate	000084-74-2	1.0E-01 ^a	1.0E-01	1.0E+00 ^b	1.0E+00						1.00	0.010	
Dicamba	001918-00-9	3.0E-02 ^a	1.5E-02	3.0E-02 ^b	1.5E-02						0.50	0.010	
Dichloro-2-butene, 1,4-	000764-41-0								9.3E+00 ^b		0.80	0.010	
Dichloroacetic Acid											0.50	0.010	
Dichlorobenzene, 1,2- ⁽³⁾	000095-50-1	9.0E-02 ^a	7.2E-02	9.0E-01 ^w		5.7E-02 ^{bc}	5.7E-01 ^{bc}				0.80	0.010	9/95
Dichlorobenzene, 1,3-	000541-73-1										0.80	0.010	
Dichlorobenzene, 1,4-	000106-46-7					2.3E-01 ^a	7.1E-01 ^b	2.4E-02 ^b		2.7E-02	0.90	0.010	
Dichlorobenzidine, 3,3'-	000091-94-1							4.5E-01 ^a		9.0E-01	0.50	0.010	
Dichlorodifluoromethane	000075-71-8	2.0E-01 ^b	4.6E-02	9.0E-01 ^b	2.1E-01	5.7E-02 ^{bc}	5.7E-01 ^{bc}				0.23	0.010	
Dichloroethane, 1,1-	000075-34-3	1.0E-01 ^b	1.0E-01	1.0E+00 ^b	1.0E+00	1.4E-01 ^{bc}	1.4E+00 ^{bc}				1.00	0.010	

Toxicity values used in PRGs calculations/nonradionuclides

Table 3.6a. (continued)

Chemical	CASRN	Oral Chronic RfD (mg/kg-day)	Dermal Chronic RfD (mg/kg-day)	Oral Sub-chronic RfD (mg/kg-day)	Dermal Sub-chronic RfD (mg/kg-day)	Inhalation Chronic RfD (mg/kg-day) ¹	Inhalation Sub-chronic RfD (mg/kg-day) ¹	Oral Slope Factor (mg/kg-day) ⁻¹	Inhalation Slope Factor (mg/kg-day) ⁻¹	Dermal Slope Factor (mg/kg-day) ⁻¹	GI Absorption Factor	Dermal Absorption Factor	Date Toxicity Value Withdrawn from IRIS/HEAST
Dichloroethane, 1,2-	000107-06-2							9.1E-02 ^a	9.1E-02 ^b	9.1E-02	1.00	0.010	
Dichloroethylene, 1,1-	000075-35-4	9.0E-03 ^a	9.0E-03	9.0E-03 ^b	9.0E-03			6.0E-01 ^a	1.2E+00 ^b	6.0E-01	1.00	0.010	
Dichloroethylene, 1,2- (Mixed Isomers)	000540-59-0	9.0E-03 ^b	7.2E-03	9.0E-03 ^b	7.2E-03						0.80	0.010	
Dichloroethylene, 1,2-cis-	000156-59-2	1.0E-02 ^b	1.0E-02	1.0E-01 ^b	1.0E-01						1.00	0.010	
Dichloroethylene, 1,2-trans-	000156-60-5	2.0E-02 ^a	2.0E-02	2.0E-01 ^b	2.0E-01						1.00	0.010	
Dichlorophenol, 2,4-	000120-83-2	3.0E-03 ^a	2.5E-03	3.0E-03 ^b	2.5E-03						0.82	0.010	
Dichlorophenoxy Acetic Acid, 2,4-	000094-75-7	1.0E-02 ^a	8.0E-03	1.0E-02 ^b	5.0E-03						0.80	0.010	
Dichlorophenoxy)butyric Acid, 4-(2,4-	000094-82-6	8.0E-03 ^a	4.0E-03	8.0E-02 ^b	4.0E-02						0.50	0.010	
Dichloropropane, 1,2-	000078-87-5					1.1E-03 ^a	3.7E-03 ^b	6.8E-02 ^b		9.2E-02	0.74	0.010	
Dichloropropanol, 2,3-	000616-23-9	3.0E-03 ^a	1.5E-03								0.50	0.010	
Dichloropropene, 1,3-	000542-75-6	3.0E-04 ^a	1.7E-04	3.0E-03 ^b	1.7E-03	5.7E-03 ^a	5.7E-03 ^b	1.8E-01 ^b	1.3E-01 ^b	3.3E-01	0.55	0.010	
Dichlorvos	000062-73-7	5.0E-04 ^a	2.5E-04			1.4E-04 ^a		2.9E-01 ^a		5.8E-01	0.50	0.010	
Dicofol	000115-32-2										0.50	0.010	
Dicyclopentadiene	000077-73-6	3.0E-02 ^b	2.4E-02	3.0E-01 ^b	1.5E-01	5.7E-05 ^{b,c}	5.7E-04 ^{b,c}				0.80	0.010	
Dieldrin	000060-57-1	5.0E-05 ^a	2.5E-05	5.0E-05 ^b	2.5E-05			1.6E+01 ^a	1.6E+01 ^b	3.2E+01	0.50	0.010	
Diethyl Phthalate	000084-66-2	8.0E-01 ^a	7.2E-01	8.0E+00 ^b	7.2E+00						0.90	0.010	
Diethyl-p-nitrophenylphosphate	000311-45-5										0.50	0.010	

Table 3.6a. (continued)

Chemical	CASRN	Oral Chronic RfD (mg/kg-day)	Dermal Chronic RfD (mg/kg-day)	Oral Sub-chronic RfD (mg/kg-day)	Dermal Sub-chronic RfD (mg/kg-day)	Inhalation Chronic RfD (mg/kg-day) [†]	Inhalation Sub-chronic RfD (mg/kg-day) [†]	Oral Slope Factor (mg/kg-day) ⁻¹	Inhalation Slope Factor (mg/kg-day) ⁻¹	Dermal Slope Factor (mg/kg-day) ⁻¹	GI Absorption Factor	Dermal Absorption Factor	Date Toxicity Value Withdrawn from IRIS/HEAST
Diethylene Glycol Dinitrate (DEGDN)	000693-21-0										0.50	0.010	
Diethylene Glycol Monobutyl Ether	000112-34-5					5.7E-03 ^b	5.7E-02 ^b				0.50	0.010	
Diethylene Glycol Monoethyl Ether	000111-90-0	2.0E+00 ^b	1.0E+00	5.0E+00 ^b	2.5E+00						0.50	0.010	
Diethylformamide	000617-84-5	1.1E-02 ^b	5.5E-03	1.1E-02 ^b	5.5E-03						0.50	0.010	
Diethylstilbesterol	000056-53-1							4.7E+03 ^b	4.9E+02 ^b	9.4E+03	0.50	0.010	
Difenzoquat	043222-48-6	8.0E-02 ^a	4.0E-02								0.50	0.010	
Diflubenzuron	035367-38-5	2.0E-02 ^a	1.0E-02								0.50	0.010	
Difluoroethane, 1,1-	000075-37-6					1.1E+01 ^a					0.80	0.010	
Diisopropyl Methylphosphonate	001445-75-6	8.0E-02 ^a	4.0E-02								0.50	0.010	
Dimethipin	055290-64-7	2.0E-02 ^a	1.0E-02								0.50	0.010	
Dimethoate	000060-51-5	2.0E-04 ^a	1.0E-04	2.0E-04 ^b	1.0E-04						0.50	0.010	
Dimethoxybenzidine, 3,3'-	000119-90-4							1.4E-02 ^b		2.8E-02	0.50	0.010	
Dimethyl Sulfate	000077-78-1										0.50	0.010	
Dimethylaniline HCl, 2,4-	021436-96-4							5.8E-01 ^b		1.2E+00	0.50	0.010	
Dimethylaniline, 2,4-	000095-68-1							7.5E-01 ^b		1.5E+00	0.50	0.010	
Dimethylaniline, N,N-	000121-69-7	2.0E-03 ^a	1.0E-03	2.0E-02 ^b	1.0E-02						0.50	0.010	
Dimethylbenzidine, 3,3'-	000119-93-7							9.2E+00 ^b		1.8E+01	0.50	0.010	

Toxicity values used in PRGs calculations/nonradionuclides

Table 3.6a. (continued)

Chemical	CASRN	Oral Chronic RfD (mg/kg-day)	Dermal Chronic RfD (mg/kg-day)	Oral Sub-chronic RfD (mg/kg-day)	Dermal Sub-chronic RfD (mg/kg-day)	Inhalation Chronic RfD (mg/kg-day) ^f	Inhalation Sub-chronic RfD (mg/kg-day) ^f	Oral Slope Factor (mg/kg-day) ⁻¹	Inhalation Slope Factor (mg/kg-day) ⁻¹	Dermal Slope Factor (mg/kg-day) ⁻¹	GI Absorption Factor	Dermal Absorption Factor	Date Toxicity Value Withdrawn from IRIS/HEAST
Dimethylethyl Lead	107584-40-7										0.50	0.010	
Dimethylformamide	000068-12-2	1.0E-01 ^b	5.0E-02	1.0E+00 ^b	5.0E-01	8.6E-03 ^a	8.6E-03 ^b				0.50	0.010	
Dimethylhydrazine, 1,1- ⁽⁵⁾	000057-14-7							2.6E+00 ^w	3.5E+00 ^w	5.2E+00	0.50	0.010	7/94
Dimethylhydrazine, 1,2-	000540-73-8										0.50	0.010	
Dimethylphenol, 2,4-	000105-67-9	2.0E-02 ^a	1.6E-02	2.0E-01 ^b	1.0E-01						0.80	0.010	
Dimethylphenol, 2,6-	000576-26-1	6.0E-04 ^a	3.0E-04	6.0E-03 ^b	3.0E-03						0.50	0.010	
Dimethylphenol, 3,4-	000095-65-8	1.0E-03 ^a	5.0E-04	1.0E-02 ^b	5.0E-03						0.50	0.010	
Dimethylphthalate ⁽⁵⁾	000131-11-3	1.0E+01 ^w	9.0E+00								0.90	0.010	11/94
Dimethylterephthalate	000120-61-6	1.0E-01 ^a	5.0E-02	1.0E-01 ^b	5.0E-02						0.50	0.010	
Dinitro-o-cresol, 4,6-	000534-52-1										1.00	0.010	
Dinitro-o-cyclohexyl Phenol, 4,6-	000131-89-5	2.0E-03 ^a	1.0E-03								0.50	0.010	
Dinitrobenzene, 1,2-	000528-29-0	4.0E-04 ^b	3.7E-04	4.0E-03 ^b	3.7E-03						0.93	0.010	
Dinitrobenzene, 1,3-	000099-65-0	1.0E-04 ^a	6.5E-05	1.0E-03 ^b	6.5E-04						0.65	0.010	
Dinitrobenzene, 1,4-	000100-25-4	4.0E-04 ^b	2.0E-04	4.0E-03 ^b	2.0E-03						0.50	0.010	
Dinitrophenol, 2,4-	000051-28-5	2.0E-03 ^a	2.0E-03	2.0E-03 ^b	2.0E-03						1.00	0.010	
Dinitrotoluene, 2,4-	000121-14-2	2.0E-03 ^a	1.7E-03	2.0E-03 ^b	1.7E-03			6.8E-01 ^u		8.0E-01	0.85	0.010	
Dinitrotoluene, 2,6-	000606-20-2	1.0E-03 ^b	8.5E-04	1.0E-02 ^b	8.5E-03			6.8E-01 ^u		8.0E-01	0.85	0.010	
Dinitrotoluene, 2-Amino-4,6-	035572-78-2										0.50	0.010	

Table 3.6a. (continued)

Chemical	CASRN	Oral Chronic RfD (mg/kg-day)	Dermal Chronic RfD (mg/kg-day)	Oral Sub-chronic RfD (mg/kg-day)	Dermal Sub-chronic RfD (mg/kg-day)	Inhalation Chronic RfD (mg/kg-day) ⁱ	Inhalation Sub-chronic RfD (mg/kg-day) ⁱ	Oral Slope Factor (mg/kg-day) ⁻¹	Inhalation Slope Factor (mg/kg-day) ⁻¹	Dermal Slope Factor (mg/kg-day) ⁻¹	GI Absorption Factor	Dermal Absorption Factor	Date Toxicity Value Withdrawn from IRIS/HEAST
Dinoseb	000088-85-7	1.0E-03 ^a	5.0E-04	1.0E-03 ^b	5.0E-04						0.50	0.010	
Dioxane, 1,4-	000123-91-1							1.1E-02 ^a		1.4E-02	0.80	0.010	
Diphenamid	000957-51-7	3.0E-02 ^a	1.5E-02								0.50	0.010	
Diphenylamine	000122-39-4	2.5E-02 ^a	1.3E-02	2.5E-02 ^b	1.3E-02						0.50	0.010	
Diphenylhydrazine, 1,2-	000122-66-7							8.0E-01 ^a	8.0E-01 ^b	1.6E+00	0.50	0.010	
Diquat	000085-00-7	2.2E-03 ^a	1.1E-03								0.50	0.010	
Direct Black 38	001937-37-7							8.6E+00 ^b		1.7E+01	0.50	0.010	
Direct Blue 6	002602-46-2							8.1E+00 ^b		1.6E+01	0.50	0.010	
Direct Brown 95	016071-86-6							9.3E+00 ^b		1.9E+01	0.50	0.010	
Direct Sky Blue	002610-05-1										0.50	0.010	
Disulfoton	000298-04-4	4.0E-05 ^a	2.0E-05	4.0E-05 ^b	2.0E-05						0.50	0.010	
Diuron	000330-54-1	2.0E-03 ^a	1.0E-03								0.50	0.010	
Dodine	002439-10-3	4.0E-03 ^a	2.0E-03								0.50	0.010	
EPTC	000759-94-4	2.5E-02 ^a	1.3E-02	2.5E-02 ^b	1.3E-02						0.50	0.010	
Endosulfan	000115-29-7	6.0E-03 ^a	3.0E-03	6.0E-03 ^b	3.0E-03						0.50	0.010	
Endothall	000145-73-3	2.0E-02 ^a	1.0E-02	2.0E-02 ^b	1.0E-02						0.50	0.010	
Endrin	000072-20-8	3.0E-04 ^a	6.0E-06	3.0E-04 ^b	6.0E-06						0.02	0.010	
Epichlorohydrin	000106-89-8	2.0E-03 ^b	1.6E-03	2.0E-03 ^b	1.6E-03	2.9E-04 ^a	2.9E-03 ^b	9.9E-03 ^a	4.2E-03 ^b	1.2E-02	0.80	0.010	
Epoxybutane, 1,2-	000106-88-7					5.7E-03 ^a					0.50	0.010	

Table 3.6a. (continued)

Chemical	CASRN	Oral Chronic RfD (mg/kg-day)	Dermal Chronic RfD (mg/kg-day)	Oral Sub-chronic RfD (mg/kg-day)	Dermal Sub-chronic RfD (mg/kg-day)	Inhalation Chronic RfD (mg/kg-day) ⁱ	Inhalation Sub-chronic RfD (mg/kg-day) ⁱ	Oral Slope Factor (mg/kg-day) ⁻¹	Inhalation Slope Factor (mg/kg-day) ⁻¹	Dermal Slope Factor (mg/kg-day) ⁻¹	GI Absorption Factor	Dermal Absorption Factor	Date Toxicity Value Withdrawn from IRIS/HEAST
Ethephon	016672-87-0	5.0E-03 ^a	2.5E-03								0.50	0.010	
Ethion	000563-12-2	5.0E-04 ^a	2.5E-04								0.50	0.010	
Ethoxyethanol Acetate, 2-	000111-15-9	3.0E-01 ^{b,c}	1.5E-01	3.0E-01 ^{b,c}	1.5E-01						0.50	0.010	
Ethoxyethanol, 2-	000110-80-5	4.0E-01 ^b	2.0E-01	5.0E-01 ^b	2.5E-01	5.7E-02 ^a	5.7E-01 ^b				0.50	0.010	
Ethyl Acetate	000141-78-6	9.0E-01 ^a	7.2E-01	9.0E+00 ^b	7.2E+00						0.80	0.010	
Ethyl Acrylate	000140-88-5							4.8E-02 ^b		9.6E-02	0.50	0.010	
Ethyl Chloride	000075-00-3					2.9E+00 ^a	2.9E+00 ^b				0.80	0.010	
Ethyl Ether	000060-29-7	2.0E-01 ^a	1.6E-01	2.0E+00 ^b	1.6E+00						0.80	0.010	
Ethyl Methacrylate	000097-63-2	9.0E-02 ^b	7.2E-02	9.0E-02 ^b	7.2E-02						0.80	0.010	
Ethyl-p-nitrophenyl Phosphonate	002104-64-5	1.0E-05 ^a	5.0E-06								0.50	0.010	
Ethylbenzene ⁽⁶⁾	000100-41-4	1.0E-01 ^a	9.7E-02	9.7E-02 ^a	9.4E-02	2.9E-01 ^a					0.97	0.010	
Ethylene Cyanohydrin	000109-78-4	3.0E-01 ^b	1.5E-01	3.0E-01 ^b	1.5E-01						0.50	0.010	
Ethylene Diamine	000107-15-3	2.0E-02 ^b	1.0E-02	2.0E-01 ^b	1.0E-01						0.50	0.010	
Ethylene Glycol	000107-21-1	2.0E+00 ^a	1.0E+00	2.0E+00 ^b	1.0E+00						0.50	0.010	
Ethylene Glycol Monobutyl Ether	000111-76-2					5.7E-03 ^b	5.7E-02 ^b				0.50	0.010	
Ethylene Oxide	000075-21-8							1.0E+00 ^b	3.5E-01 ^b	1.3E+00	0.80	0.010	
Ethylene Thiourea	000096-45-7	8.0E-05 ^a	4.0E-05	8.0E-05 ^b	4.0E-05			1.1E-01 ^b		2.2E-01	0.50	0.010	
Ethylphthalyl Ethyl Glycolate	000084-72-0	3.0E+00 ^a	1.5E+00								0.50	0.010	

Table 3.6a. (continued)

Chemical	CASRN	Oral Chronic RfD (mg/kg-day)	Dermal Chronic RfD (mg/kg-day)	Oral Sub-chronic RfD (mg/kg-day)	Dermal Sub-chronic RfD (mg/kg-day)	Inhalation Chronic RfD (mg/kg-day) ⁱ	Inhalation Sub-chronic RfD (mg/kg-day) ⁱ	Oral Slope Factor (mg/kg-day) ⁻¹	Inhalation Slope Factor (mg/kg-day) ⁻¹	Dermal Slope Factor (mg/kg-day) ⁻¹	GI Absorption Factor	Dermal Absorption Factor	Date Toxicity Value Withdrawn from IRIS/HEAST
Express	101200-48-0	8.0E-03 ^a	4.0E-03								0.50	0.010	
Fenamiphos	022224-92-6	2.5E-04 ^a	1.3E-04								0.50	0.010	
Fenpropathrin	039515-41-8	2.5E-02 ^a	1.3E-02								0.50	0.010	
Fluometuron	002164-17-2	1.3E-02 ^a	6.5E-03								0.50	0.010	
Fluoranthene	000206-44-0	4.0E-02 ^a	1.2E-02	4.0E-01 ^b	1.2E-01						0.31	0.010	
Fluorene	000086-73-7	4.0E-02 ^a	3.2E-02	4.0E-01 ^b	2.0E-01						0.80	0.010	
Fluoride	007782-41-4	6.0E-02 ^a	5.8E-02	6.0E-02 ^b	5.8E-02						0.97	0.001	
Fluridone	059756-60-4	8.0E-02 ^a	4.0E-02	8.0E-02 ^b	4.0E-02						0.50	0.010	
Flurprimidol	056425-91-3	2.0E-02 ^a	1.0E-02								0.50	0.010	
Flutolanil	066332-96-5	6.0E-02 ^a	3.0E-02								0.50	0.010	
Fluvalinate	069409-94-5	1.0E-02 ^a	5.0E-03								0.50	0.010	
Folpet	000133-07-3	1.0E-01 ^a	5.0E-02	1.0E-01 ^b	5.0E-02			3.5E-03 ^a		7.0E-03	0.50	0.010	
Fomesafen	072178-02-0							1.9E-01 ^a		3.8E-01	0.50	0.010	
Fonofos	000944-22-9	2.0E-03 ^a	1.0E-03								0.50	0.010	
Formaldehyde	000050-00-0	2.0E-01 ^a	1.6E-01	2.0E-01 ^b	1.6E-01				4.5E-02 ^b		0.80	0.010	
Formic Acid	000064-18-6	2.0E+00 ^b	1.0E+00	2.0E+00 ^b	1.0E+00						0.50	0.010	
Fosetyl-AL	039148-24-8	3.0E+00 ^a	1.5E+00								0.50	0.010	
Furan	000110-00-9	1.0E-03 ^a	8.0E-04	1.0E-02 ^b	5.0E-03						0.80	0.010	
Furazolidone	000067-45-8							3.8E+00 ^b		7.6E+00	0.50	0.010	

3-812

Table 3.6a. (continued)

Chemical	CASRN	Oral Chronic RfD (mg/kg-day)	Dermal Chronic RfD (mg/kg-day)	Oral Sub-chronic RfD (mg/kg-day)	Dermal Sub-chronic RfD (mg/kg-day)	Inhalation Chronic RfD (mg/kg-day) ⁱ	Inhalation Sub-chronic RfD (mg/kg-day) ^j	Oral Slope Factor (mg/kg-day) ⁻¹	Inhalation Slope Factor (mg/kg-day) ⁻¹	Dermal Slope Factor (mg/kg-day) ⁻¹	GI Absorption Factor	Dermal Absorption Factor	Date Toxicity Value Withdrawn from IRIS/HEAST
Furfural	000098-01-1	3.0E-03 ^a	1.5E-03	3.0E-02 ^b	1.5E-02	1.4E-02 ^{b,c}	1.4E-01 ^{b,c}				0.50	0.010	
Furium	000531-82-8							5.0E+01 ^b		1.0E+02	0.50	0.010	
Furmecyclohex	060568-05-0							3.0E-02 ^a		6.0E-02	0.50	0.010	
Glufosinate, Ammonium	077182-82-2	4.0E-04 ^a	2.0E-04								0.50	0.010	
Glycidyl	000765-34-4	4.0E-04 ^a	2.0E-04	4.0E-03 ^b	2.0E-03	2.9E-04 ^b	2.9E-03 ^b				0.50	0.010	
Glyphosate	001071-83-6	1.0E-01 ^a	5.0E-02								0.50	0.010	
Goal	042874-03-3	3.0E-03 ^a	1.5E-03								0.50	0.010	
Haloxypol, Methyl	069806-40-2	5.0E-05 ^a	2.5E-05								0.50	0.010	
Harmony	079277-27-3	1.3E-02 ^a	6.5E-03								0.50	0.010	
Heptachlor	000076-44-8	5.0E-04 ^a	3.6E-04	5.0E-04 ^b	3.6E-04			4.5E+00 ^a	4.5E+00 ^b	6.3E+00	0.72	0.010	
Heptachlor Epoxide	001024-57-3	1.3E-05 ^a	9.4E-06	1.3E-05 ^b	9.4E-06			9.1E+00 ^a	9.1E+00 ^b	1.3E+01	0.72	0.010	
Heptane, N-	000142-82-5										0.80	0.010	
Hexabromobenzene	000087-82-1	2.0E-03 ^a	1.6E-03	2.0E-02 ^b	1.0E-02						0.80	0.010	
Hexachlorobenzene ⁽⁶⁾	000118-74-1	8.0E-04 ^a	6.4E-04					1.6E+00 ^a	1.6E+00 ^b	2.0E+00	0.80	0.010	
Hexachlorobutadiene ⁽⁶⁾	000087-68-3	2.0E-04 ^b	1.6E-04	6.7E-04 ^a	3.3E-04			7.8E-02 ^a	7.8E-02 ^b	9.8E-02	0.80	0.010	
Hexachlorocyclohexane, Alpha-	000319-84-6							6.3E+00 ^a	6.3E+00 ^b	6.5E+00	0.97	0.010	
Hexachlorocyclohexane, Beta-	000319-85-7							1.8E+00 ^a	1.8E+00 ^b	2.0E+00	0.91	0.010	
Hexachlorocyclohexane, Delta-	000319-86-8										0.50	0.010	

Table 3.6a. (continued)

Chemical	CASRN	Oral Chronic RfD (mg/kg-day)	Dermal Chronic RfD (mg/kg-day)	Oral Sub-chronic RfD (mg/kg-day)	Dermal Sub-chronic RfD (mg/kg-day)	Inhalation Chronic RfD (mg/kg-day) ^f	Inhalation Sub-chronic RfD (mg/kg-day) ^f	Oral Slope Factor (mg/kg-day) ⁻¹	Inhalation Slope Factor (mg/kg-day) ⁻¹	Dermal Slope Factor (mg/kg-day) ⁻¹	GI Absorption Factor	Dermal Absorption Factor	Date Toxicity Value Withdrawn from IRIS/HEAST
Hexachlorocyclohexane, Epsilon	006108-10-7										0.50	0.010	
Hexachlorocyclohexane, Gamma-	000058-89-9	3.0E-04 ^a	2.9E-04	3.0E-03 ^b	2.9E-03			1.3E+00 ^b		1.3E+00	0.97	0.010	
Hexachlorocyclohexane, Technical	000608-73-1							1.8E+00 ^a	1.8E+00 ^b	3.6E+00	0.50	0.010	
Hexachlorocyclopentadiene	000077-47-4	7.0E-03 ^a	5.6E-03	7.0E-02 ^b	3.5E-02	2.0E-05 ^b	2.0E-04 ^b				0.80	0.010	
Hexachlorodibenzo-p-dioxin, Mixture	019408-74-3							6.2E+03 ^a	4.6E+03 ^a	1.2E+04	0.50	0.010	
Hexachloroethane	000067-72-1	1.0E-03 ^a	8.0E-04	1.0E-02 ^b	5.0E-03			1.4E-02 ^a	1.4E-02 ^b	1.8E-02	0.80	0.010	
Hexachlorophene	000070-30-4	3.0E-04 ^d	1.5E-04	3.0E-03 ^b	1.5E-03						0.50	0.010	
Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	000121-82-4	3.0E-03 ^a	3.0E-03	3.0E-03 ^b	3.0E-03			1.1E-01 ^a		1.1E-01	1.00	0.010	
Hexamethylene Diisocyanate, 1,6-	000822-06-0					2.9E-06 ^a					0.50	0.010	
Hexane, N-	000110-54-3	6.0E-02 ^b	4.8E-02	6.0E-01 ^b	4.8E-01	5.7E-02 ^a	5.7E-02 ^b				0.80	0.010	
Hexanone, 2-	000591-78-6										0.66	0.010	
Hexazinone	051235-04-2	3.3E-02 ^a	1.7E-02								0.50	0.010	
HpCDD, 2,3,7,8-(⁴)	037871-00-4							1.5E+03 ⁽²⁾	1.5E+03 ⁽²⁾	3.0E+03	0.50	0.030	
HpCDF, 2,3,7,8-(⁴)	038998-75-3							1.5E+03 ⁽²⁾	1.5E+03 ⁽²⁾	3.0E+03	0.50	0.010	
HxCDD, 2,3,7,8-(⁴)	034465-46-8							1.5E+04 ⁽²⁾	1.5E+04 ⁽²⁾	3.0E+04	0.50	0.030	
HxCDF, 2,3,7,8-(⁴)	055684-94-1							1.5E+04 ⁽²⁾	1.5E+04 ⁽²⁾	3.0E+04	0.50	0.010	

3-814

Table 3.6a. (continued)

Chemical	CASRN	Oral Chronic RfD (mg/kg-day)	Dermal Chronic RfD (mg/kg-day)	Oral Sub-chronic RfD (mg/kg-day)	Dermal Sub-chronic RfD (mg/kg-day)	Inhalation Chronic RfD (mg/kg-day) ¹	Inhalation Sub-chronic RfD (mg/kg-day) ¹	Oral Slope Factor (mg/kg-day) ⁻¹	Inhalation Slope Factor (mg/kg-day) ⁻¹	Dermal Slope Factor (mg/kg-day) ⁻¹	GI Absorption Factor	Dermal Absorption Factor	Date Toxicity Value Withdrawn from IRIS/HEAST
Hydrazine	000302-01-2							3.0E+00 ^a	1.7E+01 ^b	6.0E+00	0.50	0.010	
Hydrazine Sulfate	010034-93-2							3.0E+00 ^a	1.7E+01 ^b	6.0E+00	0.50	0.010	
Hydrogen Chloride	007647-01-0					5.7E-03 ^a					0.20	0.001	
Hydrogen Cyanide	000074-90-8	2.0E-02 ^a	3.4E-03			8.6E-04 ^a					0.17	0.001	
Hydrogen Sulfide	007783-06-4	3.0E-03 ^a	6.0E-04	3.0E-02 ^b	6.0E-03	2.9E-04 ^a	2.6E-03 ^b				0.20	0.001	
Hydroquinone	000123-31-9	4.0E-02 ^b	2.0E-02	4.0E-01 ^b	2.0E-01						0.50	0.010	
Imazalil	035554-44-0	1.3E-02 ^a	6.5E-03								0.50	0.010	
Imazaquin	081335-37-7	2.5E-01 ^a	1.3E-01								0.50	0.010	
Indeno[1,2,3-cd]pyrene ⁽³⁾	000193-39-5							7.3E-01 ^a	3.1E-01 ⁽²⁾	2.4E+00	0.31	0.010	
Iprodione	036734-19-7	4.0E-02 ^a	2.0E-02								0.50	0.010	
Iron	007439-89-6										0.15	0.001	
Isobutyl Alcohol	000078-83-1	3.0E-01 ^a	2.4E-01	3.0E+00 ^b	2.4E+00						0.80	0.010	
Isophorone	000078-59-1	2.0E-01 ^a	1.0E-01	2.0E+00 ^b	1.0E+00			9.5E-04 ^a		1.9E-03	0.50	0.010	
Isopropalin	033820-53-0	1.5E-02 ^a	7.5E-03	1.5E-01 ^b	7.5E-02						0.50	0.010	
Isopropanol	000067-63-0										1.00	0.010	
Isopropyl Methyl Phosphonic Acid	001832-54-8	1.0E-01 ^a	5.0E-02								0.50	0.010	
Isoxaben	082558-50-7	5.0E-02 ^a	2.5E-02								0.50	0.010	
Karate	091465-08-6	5.0E-03 ^a	2.5E-03								0.50	0.010	

Table 3.6a. (continued)

Chemical	CASRN	Oral Chronic RfD (mg/kg-day)	Dermal Chronic RfD (mg/kg-day)	Oral Sub-chronic RfD (mg/kg-day)	Dermal Sub-chronic RfD (mg/kg-day)	Inhalation Chronic RfD (mg/kg-day) [†]	Inhalation Sub-chronic RfD (mg/kg-day) [†]	Oral Slope Factor (mg/kg-day) ⁻¹	Inhalation Slope Factor (mg/kg-day) ⁻¹	Dermal Slope Factor (mg/kg-day) ⁻¹	GI Absorption Factor	Dermal Absorption Factor	Date Toxicity Value Withdrawn from IRIS/HEAST
Kerb	023950-58-5	7.5E-02 ^a	3.8E-02	7.5E-02 ^b	3.8E-02						0.50	0.010	
Lactofen	077501-63-4	2.0E-03 ^a	1.0E-03								0.50	0.010	
Lead Alkyls	NA										0.50	0.010	
Lead And Compounds	007439-92-1										0.15	0.001	
Linuron	000330-55-2	2.0E-03 ^a	1.0E-03	2.0E-03 ^b	1.0E-03						0.50	0.010	
Lithium	007439-93-2										0.80	0.001	
Londax	083055-99-6	2.0E-01 ^a	1.0E-01								0.50	0.010	
MCPA	000094-74-6	5.0E-04 ^a	2.5E-04	5.0E-04 ^b	2.5E-04						0.50	0.010	
MCPB	000094-81-5	1.0E-02 ^a	5.0E-03	1.0E-01 ^b	5.0E-02						0.50	0.010	
MCPD	000093-65-2	1.0E-03 ^a	5.0E-04	1.0E-02 ^b	5.0E-03						0.50	0.010	
Magnesium	007439-95-4										0.20	0.001	
Malathion	000121-75-5	2.0E-02 ^a	1.0E-02	2.0E-02 ^b	1.0E-02						0.50	0.010	
Maleic Anhydride	000108-31-6	1.0E-01 ^a	5.0E-02	1.0E-01 ^b	5.0E-02						0.50	0.010	
Maleic Hydrazide	000123-33-1	5.0E-01 ^a	2.5E-01	5.0E-01 ^b	2.5E-01						0.50	0.010	
Malononitrile	000109-77-3	2.0E-05 ^b	1.6E-05	2.0E-04 ^b	1.6E-04						0.80	0.010	
Mancozeb	008018-01-7	3.0E-02 ^b	1.5E-02	3.0E-02 ^b	1.5E-02						0.50	0.010	
Maneb	012427-38-2	5.0E-03 ^a	2.5E-03	5.0E-02 ^b	2.5E-02						0.50	0.010	
Manganese (Diet)	007439-96-5	1.4E-01 ^{nm}	5.6E-03	1.4E-01 ^b	5.6E-03	1.4E-05 ^a					0.04	0.001	
Manganese (Water)	007439-96-5	4.7E-02 ^{nm}	1.9E-03	5.0E-03 ^b	2.0E-04	1.4E-05 ^a					0.04	0.001	

Table 3.6a. (continued)

Chemical	CASRN	Oral Chronic RfD (mg/kg-day)	Dermal Chronic RfD (mg/kg-day)	Oral Sub-chronic RfD (mg/kg-day)	Dermal Sub-chronic RfD (mg/kg-day)	Inhalation Chronic RfD (mg/kg-day) ¹	Inhalation Sub-chronic RfD (mg/kg-day) ¹	Oral Slope Factor (mg/kg-day) ⁻¹	Inhalation Slope Factor (mg/kg-day) ⁻¹	Dermal Slope Factor (mg/kg-day) ⁻¹	GI Absorption Factor	Dermal Absorption Factor	Date Toxicity Value Withdrawn from IRIS/HEAST
Mephosfolan	000950-10-7	9.0E-05 ^b	4.5E-05	9.0E-04 ^b	4.5E-04						0.50	0.010	
Mepiquat Chloride	024307-26-4	3.0E-02 ^a	1.5E-02								0.50	0.010	
Mercuric Chloride	007487-94-7	3.0E-04 ^a	6.0E-05	3.0E-04 ^b	6.0E-05						0.20	0.001	
Mercury (elemental)	007439-97-6	3.0E-04 ^b	3.0E-08	3.0E-04 ^b	3.0E-08	8.6E-05 ^a	8.6E-05 ^b				0.00	0.001	
Mercury, Inorganic Salt	007439-97-6	3.0E-04 ^b	2.1E-05	3.0E-04 ^b	2.1E-05	8.6E-05 ^a	8.6E-05 ^b				0.07	0.001	
Merphos	000150-50-5	3.0E-05 ^a	1.5E-05	3.0E-04 ^b	1.5E-04						0.50	0.010	
Merphos Oxide	000078-48-8	3.0E-05 ^a	1.5E-05	3.0E-04 ^b	1.5E-04						0.50	0.010	
Metalaxyl	057837-19-1	6.0E-02 ^a	3.0E-02								0.50	0.010	
Methacrylonitrile	000126-98-7	1.0E-04 ^a	8.0E-05	1.0E-03 ^b	8.0E-04	2.0E-04 ^{b,c}	2.0E-03 ^{b,c}				0.80	0.010	
Methamidophos	010265-92-6	5.0E-05 ^a	2.5E-05								0.50	0.010	
Methanol	000067-56-1	5.0E-01 ^a	4.0E-01	5.0E+00 ^b	2.5E+00						0.80	0.010	
Methidathion	000950-37-8	1.0E-03 ^a	5.0E-04								0.50	0.010	
Methomyl	016752-77-5	2.5E-02 ^a	1.3E-02	2.5E-02 ^b	1.3E-02						0.50	0.010	
Methoxy-5-nitroaniline, 2-	000099-59-2							4.6E-02 ^b		9.2E-02	0.50	0.010	
Methoxychlor	000072-43-5	5.0E-03 ^a	2.5E-03	5.0E-03 ^b	2.5E-03						0.50	0.010	
Methoxyethanol Acetate, 2-	000110-49-6	2.0E-03 ^{b,c}	1.0E-03	2.0E-02 ^{b,c}	1.0E-02						0.50	0.010	
Methoxyethanol, 2-	000109-86-4	1.0E-03 ^{b,c}	5.0E-04	1.0E-02 ^{b,c}	5.0E-03	5.7E-03 ^a	5.7E-02 ^b				0.50	0.010	
Methyl Acetate	000079-20-9	1.0E+00 ^b	5.0E-01	1.0E+01 ^b	5.0E+00						0.50	0.010	
Methyl Acrylate	000096-33-3	3.0E-02 ^{b,c}	1.5E-02	3.0E-02 ^{b,c}	1.5E-02						0.50	0.010	

Table 3.6a. (continued)

Chemical	CASRN	Oral Chronic RfD (mg/kg-day)	Dermal Chronic RfD (mg/kg-day)	Oral Sub-chronic RfD (mg/kg-day)	Dermal Sub-chronic RfD (mg/kg-day)	Inhalation Chronic RfD (mg/kg-day) [†]	Inhalation Sub-chronic RfD (mg/kg-day) [†]	Oral Slope Factor (mg/kg-day) ⁻¹	Inhalation Slope Factor (mg/kg-day) ⁻¹	Dermal Slope Factor (mg/kg-day) ⁻¹	GI Absorption Factor	Dermal Absorption Factor	Date Toxicity Value Withdrawn from IRIS/HEAST
Methyl Ethyl Ketone	000078-93-3	6.0E-01 ^a	4.8E-01	2.0E+00 ^b	1.6E+00	2.9E-01 ^a	2.9E-01 ^b				0.80	0.010	
Methyl Isobutyl Ketone	000108-10-1	8.0E-02 ^b	6.4E-02	8.0E-01 ^b	6.4E-01	2.3E-02 ^{b,c}	2.3E-01 ^{b,c}				0.80	0.010	
Methyl Mercury	022967-92-6	1.0E-04 ^a	9.0E-05	1.0E-04 ^b	9.0E-05						0.90	0.010	
Methyl Methacrylate	000080-62-6	8.0E-02 ^b	6.4E-02	8.0E-02 ^b	6.4E-02						0.80	0.010	
Methyl Parathion	000298-00-0	2.5E-04 ^a	1.3E-04	2.0E-03 ^b	1.0E-03						0.50	0.010	
Methyl Styrene (Mixed Isomers)	025013-15-4	6.0E-03 ^{b,c}	4.8E-03	6.0E-03 ^{b,c}	4.8E-03	1.1E-02 ^{b,c}	1.1E-02 ^{b,c}				0.80	0.010	
Methyl hydrazine ⁽⁵⁾	000060-34-4							1.1E+00 ^w		2.2E+00	0.50	0.010	7/94
Methyl tert-Butyl Ether (MTBE)	001634-04-4					8.6E-01 ^a					0.80	0.010	
Methyl-5-Nitroaniline, 2-	000099-55-8							3.3E-02 ^b		6.6E-02	0.50	0.010	
Methylaniline Hydrochloride, 2-	000636-21-5							1.8E-01 ^b		3.6E-01	0.50	0.010	
Methylcyclohexane	000108-87-2					8.6E-01 ^b	8.6E-01 ^b				0.80	0.010	
Methylene Chloride	000075-09-2	6.0E-02 ^a	5.7E-02	6.0E-02 ^b	5.7E-02	8.6E-01 ^b	8.6E-01 ^b	7.5E-03 ^a	1.6E-03 ^a	7.9E-03	0.95	0.010	
Methylene-bis(2-chloroaniline), 4,4'-	000101-14-4	7.0E-04 ^b	3.5E-04	7.0E-04 ^b	3.5E-04			1.3E-01 ^b	1.3E-01 ^b	2.6E-01	0.50	0.010	
Methylene-bis(N,N-dimethyl) Aniline, 4,4'-	000101-61-1							4.6E-02 ^a		9.2E-02	0.50	0.010	
Methylenebisbenzenamine, 4,4' ⁽⁵⁾	000101-77-9							2.5E-01 ^w		5.0E-01	0.50	0.010	2/94

Table 3.6a. (continued)

Chemical	CASRN	Oral Chronic RfD (mg/kg-day)	Dermal Chronic RfD (mg/kg-day)	Oral Sub-chronic RfD (mg/kg-day)	Dermal Sub-chronic RfD (mg/kg-day)	Inhalation Chronic RfD (mg/kg-day) ¹	Inhalation Sub-chronic RfD (mg/kg-day) ¹	Oral Slope Factor (mg/kg-day) ⁻¹	Inhalation Slope Factor (mg/kg-day) ⁻¹	Dermal Slope Factor (mg/kg-day) ⁻¹	GI Absorption Factor	Dermal Absorption Factor	Date Toxicity Value Withdrawn from IRIS/HEAST
Methylenediphenyl Isocyanate, 4,4'-	000101-68-8					5.7E-06 ^a	5.7E-06 ^b				0.80	0.010	
Methylstyrene, Alpha-	000098-83-9	7.0E-02 ^{bc}	5.6E-02	7.0E-01 ^{bc}	5.6E-01						0.80	0.010	
Methyltriethyl Lead	001762-28-3										0.50	0.010	
Metolachlor	051218-45-2	1.5E-01 ^a	7.5E-02	1.5E-01 ^b	7.5E-02						0.50	0.010	
Metribuzin ⁽⁵⁾	021087-64-9	2.5E-02 ^a	1.3E-02	2.5E-02 ^w							0.50	0.010	9/95
Mirex ⁽⁵⁾	002385-85-5	2.0E-04 ^a	1.0E-04	2.0E-04 ^b	1.0E-04			1.8E+00 ^w		3.6E+00	0.50	0.010	2/94
Molinate	002212-67-1	2.0E-03 ^a	1.0E-03	2.0E-03 ^b	1.0E-03						0.50	0.010	
Molybdenum	007439-98-7	5.0E-03 ^a	1.9E-03	5.0E-03 ^b	1.9E-03						0.38	0.001	
Monochloramine	010599-90-3	1.0E-01 ^a	5.0E-02	1.0E-01 ^b	5.0E-02						0.50	0.010	
Monochlorobutanes	025154-42-1	4.0E-01 ^b	2.0E-01								0.50	0.010	
Naled	000300-76-5	2.0E-03 ^a	1.0E-03								0.50	0.010	
Naphthalene ⁽⁶⁾	000091-20-3	3.6E-02 ^e	2.9E-02								0.80	0.010	
Naphthalene, 1-Methyl	000090-12-0										0.80	0.010	
Naphthalene, 2-Methyl	000091-57-6										0.80	0.010	
Napropamide	015299-99-7	1.0E-01 ^a	5.0E-02								0.50	0.010	
Niagara Blue 4B	002429-74-5										0.50	0.010	
Nickel Carbonyl	013463-39-3										0.50	0.010	
Nickel Refinery Dust	NA								8.4E-01b		0.20	0.001	

Table 3.6a. (continued)

Chemical	CASRN	Oral Chronic RfD (mg/kg-day)	Dermal Chronic RfD (mg/kg-day)	Oral Sub-chronic RfD (mg/kg-day)	Dermal Sub-chronic RfD (mg/kg-day)	Inhalation Chronic RfD (mg/kg-day) ^f	Inhalation Sub-chronic RfD (mg/kg-day) ^f	Oral Slope Factor (mg/kg-day) ⁻¹	Inhalation Slope Factor (mg/kg-day) ⁻¹	Dermal Slope Factor (mg/kg-day) ⁻¹	GI Absorption Factor	Dermal Absorption Factor	Date Toxicity Value Withdrawn from IRIS/HEAST
Nickel Soluble Salts	007440-02-0	2.0E-02 ^a	5.4E-03	2.0E-02 ^b	5.4E-03						0.27	0.001	
Nickel Subsulfide	012035-72-2								1.7E+00 ^b		0.20	0.001	
Nitrapyrin ⁽⁵⁾	001929-82-4	1.5E-03 ^w	7.5E-04								0.50	0.010	9/93
Nitrate	014797-55-8	1.6E+00 ^a	8.0E-01								0.50	0.001	
Nitric Oxide ⁽⁵⁾	010102-43-9	1.0E-01 ^w	2.0E-02								0.20	0.001	11/94
Nitrite	014797-65-0	1.0E-01 ^a	5.0E-02	1.0E-01 ^b	5.0E-02						0.50	0.001	
Nitroaniline, 2-	000088-74-4					5.7E-05 ^b	5.7E-04 ^b				0.80	0.010	
Nitrobenzene	000098-95-3	5.0E-04 ^a	4.9E-04	5.0E-03 ^b	4.9E-03	5.7E-04 ^{b,c}	5.7E-03 ^{b,c}				0.97	0.010	
Nitrofurantoin	000067-20-9	7.0E-02 ^b	3.5E-02	7.0E-01 ^b	3.5E-01						0.50	0.010	
Nitrofurazone	000059-87-0							1.5E+00 ^b		3.0E+00	0.50	0.010	
Nitrogen Dioxide ⁽⁵⁾	010102-44-0	1.0E+00 ^{w1}	8.0E-01	1.0E+00 ^{w2}							0.20	0.001	11/94, 11/95
Nitroguanidine	000556-88-7	1.0E-01 ^a	5.0E-02								0.50	0.010	
Nitrophenol, 4-	000100-02-7										1.00	0.010	
Nitropropane, 2- ⁽⁵⁾	000079-46-9					5.7E-03 ^a	5.7E-03 ^b	9.5E+00 ^w	9.4E+00 ^b	1.2E+01	0.80	0.010	5/95
Nitroso-N-ethylurea, N-	000759-73-9							1.4E+02 ^b		2.8E+02	0.50	0.010	
Nitroso-N-methylurea, N-	000684-93-5										0.50	0.010	
Nitroso-di-N-butylamine, N-	000924-16-3							5.4E+00 ^a	5.4E+00 ^b	6.8E+00	0.80	0.010	
Nitroso-di-N-propylamine, N-	000621-64-7							7.0E+00 ^a		2.8E+01	0.25	0.010	
Nitrosodiethanolamine, N-	001116-54-7							2.8E+00 ^a		5.6E+00	0.50	0.010	

Table 3.6a. (continued)

Chemical	CASRN	Oral Chronic RfD (mg/kg-day)	Dermal Chronic RfD (mg/kg-day)	Oral Sub-chronic RfD (mg/kg-day)	Dermal Sub-chronic RfD (mg/kg-day)	Inhalation Chronic RfD (mg/kg-day) [†]	Inhalation Sub-chronic RfD (mg/kg-day) [†]	Oral Slope Factor (mg/kg-day) ⁻¹	Inhalation Slope Factor (mg/kg-day) ⁻¹	Dermal Slope Factor (mg/kg-day) ⁻¹	GI Absorption Factor	Dermal Absorption Factor	Date Toxicity Value Withdrawn from IRIS/HEAST
Nitrosodiethylamine, N-	000055-18-5							1.5E+02 ^a	1.5E+02 ^b	3.0E+02	0.50	0.010	
Nitrosodimethylamine, N-	000062-75-9							5.1E+01 ^a	5.1E+01 ^b	1.0E+02	0.50	0.010	
Nitrosodiphenylamine, N-	000086-30-6							4.9E-03 ^a		2.0E-02	0.25	0.010	
Nitrosomethylethylamine, N-	010595-95-6							2.2E+01 ^a		4.4E+01	0.50	0.010	
Nitrosomethylvinylamine, N-	004549-40-0										0.50	0.010	
Nitrosopyrrolidine, N-	000930-55-2							2.1E+00 ^a	2.1E+00 ^b	4.2E+00	0.50	0.010	
Nitrotoluene, 4-Amino-2-	000119-32-4										0.50	0.010	
Nitrotoluene, m-	000099-08-1	1.0E-02 ^b	8.0E-03	1.0E-01 ^b	5.0E-02						0.80	0.010	
Nitrotoluene, o-	000088-72-2	1.0E-02 ^b	8.0E-03	1.0E-01 ^b	5.0E-02						0.80	0.010	
Nitrotoluene, p-	000099-99-0	1.0E-02 ^b	8.0E-03	1.0E-01 ^b	5.0E-02						0.80	0.010	
Norflurazon	027314-13-2	4.0E-02 ^a	2.0E-02								0.50	0.010	
Nustar	085509-19-9	7.0E-04 ^a	3.5E-04								0.50	0.010	
OCDD ⁽⁴⁾	003268-87-9							1.5E+02 ⁽²⁾	1.5E+02 ⁽²⁾	3.0E+02	0.50	0.030	
OCDF ⁽⁴⁾	039001-02-0							1.5E+02 ⁽²⁾	1.5E+02 ⁽²⁾	3.0E+02	0.50	0.010	
Octabromodiphenyl Ether	032536-52-0	3.0E-03 ^a	1.5E-03	3.0E-02 ^b	1.5E-02						0.50	0.010	
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetra (HMX)	002691-41-0	5.0E-02 ^a	7.5E-03								0.15	0.010	
Octamethylpyrophosphoramide	000152-16-9	2.0E-03 ^b	1.0E-03	2.0E-03 ^b	1.0E-03						0.50	0.010	
Octyl Phthalate, di-N-	000117-84-0	2.0E-02 ^b	1.8E-02	2.0E-02 ^b	1.8E-02						0.90	0.010	

Table 3.6a. (continued)

Chemical	CASRN	Oral Chronic RfD (mg/kg-day)	Dermal Chronic RfD (mg/kg-day)	Oral Sub-chronic RfD (mg/kg-day)	Dermal Sub-chronic RfD (mg/kg-day)	Inhalation Chronic RfD (mg/kg-day) ⁱ	Inhalation Sub-chronic RfD (mg/kg-day) ⁱ	Oral Slope Factor (mg/kg-day) ⁻¹	Inhalation Slope Factor (mg/kg-day) ⁻¹	Dermal Slope Factor (mg/kg-day) ⁻¹	GI Absorption Factor	Dermal Absorption Factor	Date Toxicity Value Withdrawn from IRIS/HEAST
Oryzalin	019044-88-3	5.0E-02 ^a	2.5E-02								0.50	0.010	
Oxadiazon	019666-30-9	5.0E-03 ^a	2.5E-03								0.50	0.010	
Oxamyl	023135-22-0	2.5E-02 ^a	1.3E-02								0.50	0.010	
Paclobutrazol	076738-62-0	1.3E-02 ^a	6.5E-03								0.50	0.010	
Paraquat	001910-42-5	4.5E-03 ^a	2.3E-03								0.50	0.010	
Parathion	000056-38-2	6.0E-03 ^b	3.0E-03	6.0E-03 ^b	3.0E-03						0.50	0.010	
PeCDD, 2,3,7,8-(⁴)	036088-22-9							7.5E+04 ⁽²⁾	7.5E+04 ⁽²⁾	1.5E+05	0.50	0.030	
PeCDF, 1,2,3,7,8-(⁴)	057117-41-6							7.5E+04 ⁽²⁾	7.5E+04 ⁽²⁾	1.5E+05	0.50	0.010	
PeCDF, 2,3,4,7,8-(⁴)	057117-31-4							7.5E+03 ⁽²⁾	7.5E+03 ⁽²⁾	1.5E+04	0.50	0.010	
Pebulate	001114-71-2	5.0E-02 ^b	2.5E-02	5.0E-02 ^b	2.5E-02						0.50	0.010	
Pendimethalin	040487-42-1	4.0E-02 ^a	2.0E-02	4.0E-02 ^b	2.0E-02						0.50	0.010	
Pentabromodiphenyl Ether	032534-81-9	2.0E-03 ^a	1.0E-03	2.0E-02 ^b	1.0E-02						0.50	0.010	
Pentachlorobenzene	000608-93-5	8.0E-04 ^a	6.4E-04	8.0E-03 ^b	4.0E-03						0.80	0.010	
Pentachlorocyclopentadiene	025329-35-5										0.50	0.010	
Pentachloronitrobenzene	000082-68-8	3.0E-03 ^a	2.4E-03	3.0E-03 ^b	1.5E-03			2.6E-01 ^b		3.3E-01	0.80	0.010	
Pentachlorophenol	000087-86-5	3.0E-02 ^a	3.0E-02	3.0E-02 ^b	3.0E-02			1.2E-01 ^a		1.2E-01	1.00	0.010	
Pentyl Alcohol, N-	000071-41-0										0.50	0.010	
Permethrin	052645-53-1	5.0E-02 ^a	2.5E-02								0.50	0.010	
Phenanthrene	000085-01-8										0.73	0.010	

Table 3.6a. (continued)

Chemical	CASRN	Oral Chronic RfD (mg/kg-day)	Dermal Chronic RfD (mg/kg-day)	Oral Sub-chronic RfD (mg/kg-day)	Dermal Sub-chronic RfD (mg/kg-day)	Inhalation Chronic RfD (mg/kg-day) ⁱ	Inhalation Sub-chronic RfD (mg/kg-day) ⁱ	Oral Slope Factor (mg/kg-day) ⁻¹	Inhalation Slope Factor (mg/kg-day) ⁻¹	Dermal Slope Factor (mg/kg-day) ⁻¹	GI Absorption Factor	Dermal Absorption Factor	Date Toxicity Value Withdrawn from IRIS/HEAST
Phenmedipham	013684-63-4	2.5E-01 ^a	1.3E-01								0.50	0.010	
Phenol	000108-95-2	6.0E-01 ^a	5.4E-01	6.0E-01 ^b	5.4E-01						0.90	0.010	
Phenylenediamine, m-	000108-45-2	6.0E-03 ^a	3.0E-03	6.0E-02 ^b	3.0E-02						0.50	0.010	
Phenylenediamine, o-	000095-54-5							4.7E-02 ^b		9.4E-02	0.50	0.010	
Phenylenediamine, p-	000106-50-3	1.9E-01 ^b	9.5E-02								0.50	0.010	
Phenylmercuric Acetate	000062-38-4	8.0E-05 ^a	4.0E-05	8.0E-05 ^b	4.0E-05						0.50	0.010	
Phenylphenol, 2-	000090-43-7							1.9E-03 ^b		3.9E-03	0.50	0.010	
Phorate	000298-02-2	2.0E-04 ^b	1.0E-04	2.0E-04 ^b	1.0E-04						0.50	0.010	
Phosmet	000732-11-6	2.0E-02 ^a	1.0E-02								0.50	0.010	
Phosphine	007803-51-2	3.0E-04 ^a	6.0E-05	3.0E-04 ^b	6.0E-05	8.6E-05 ^a	8.6E-05 ^b				0.20	0.001	
Phosphoric Acid	007664-38-2					2.9E-03 ^a					0.20	0.001	
Phthalic Acid, P-	000100-21-0	1.0E+00 ^b	5.0E-01	1.0E+00 ^b	5.0E-01						0.50	0.010	
Phthalic Anhydride	000085-44-9	2.0E+00 ^a	1.0E+00	2.0E+00 ^b	1.0E+00	3.4E-02 ^b	3.4E-02 ^b				0.50	0.010	
Picloram	001918-02-1	7.0E-02 ^a	3.5E-02								0.50	0.010	
Pirimiphos, Methyl	029232-93-7	1.0E-02 ^a	5.0E-03								0.50	0.010	
Polybrominated Biphenyls	NA	7.0E-06 ^b	6.5E-06	7.0E-05 ^b	6.5E-05			8.9E+00 ^b		9.6E+00	0.93	0.010	
Polychlorinated Biphenyls	001336-36-3							7.7E+00 ^a		8.6E+00	0.90	0.060	
Potassium Cyanide	000151-50-8	5.0E-02 ^a	4.0E-02	5.0E-02 ^b	1.0E-02						0.80	0.010	
Potassium Silver Cyanide	000506-61-6	2.0E-01 ^a	4.0E-02	2.0E-01 ^b	4.0E-02						0.20	0.001	

Table 3.6a. (continued)

Chemical	CASRN	Oral Chronic RfD (mg/kg-day)	Dermal Chronic RfD (mg/kg-day)	Oral Sub-chronic RfD (mg/kg-day)	Dermal Sub-chronic RfD (mg/kg-day)	Inhalation Chronic RfD (mg/kg-day) [†]	Inhalation Sub-chronic RfD (mg/kg-day) [†]	Oral Slope Factor (mg/kg-day) ⁻¹	Inhalation Slope Factor (mg/kg-day) ⁻¹	Dermal Slope Factor (mg/kg-day) ⁻¹	GI Absorption Factor	Dermal Absorption Factor	Date Toxicity Value Withdrawn from IRIS/HEAST
Prochloraz	067747-09-5	9.0E-03 ^a	4.5E-03					1.5E-01 ^a		3.0E-01	0.50	0.010	
Profluralin	026399-36-0	6.0E-03 ^b	3.0E-03	6.0E-03 ^b	3.0E-03						0.50	0.010	
Prometon	001610-18-0	1.5E-02 ^a	7.5E-03								0.50	0.010	
Prometryn	007287-19-6	4.0E-03 ^a	2.0E-03								0.50	0.010	
Propachlor	001918-16-7	1.3E-02 ^a	6.5E-03	1.3E-01 ^b	6.5E-02						0.50	0.010	
Propanil	000709-98-8	5.0E-03 ^a	2.5E-03								0.50	0.010	
Propargite	002312-35-8	2.0E-02 ^a	1.0E-02								0.50	0.010	
Propargyl Alcohol	000107-19-7	2.0E-03 ^a	1.6E-03								0.80	0.010	
Propazine	000139-40-2	2.0E-02 ^a	1.0E-02	2.0E-02 ^b	1.0E-02						0.50	0.010	
Propham	000122-42-9	2.0E-02 ^a	1.0E-02								0.50	0.010	
Propiconazole	060207-90-1	1.3E-02 ^a	6.5E-03								0.50	0.010	
Propylene Glycol	000057-55-6	2.0E+01 ^b	1.0E+01	3.0E+01 ^b	1.5E+01						0.50	0.010	
Propylene Glycol Monoethyl Ether	001569-02-4	7.0E-01 ^b	3.5E-01	7.0E+00 ^b	3.5E+00						0.50	0.010	
Propylene Glycol Monomethyl Ether	000107-98-2	7.0E-01 ^b	3.5E-01	7.0E+00 ^b	3.5E+00	5.7E-01 ^a	5.7E+00 ^b				0.50	0.010	
Propylene Oxide	000075-56-9					8.6E-03 ^a	8.6E-03 ^b	2.4E-01 ^a	1.3E-02 ^b	3.0E-01	0.80	0.010	
Pursuit	081335-77-5	2.5E-01 ^a	1.3E-01								0.50	0.010	
Pydrin	051630-58-1	2.5E-02 ^a	1.3E-02								0.50	0.010	
Pyrene	000129-00-0	3.0E-02 ^a	9.3E-03	3.0E-01 ^b	9.3E-02						0.31	0.010	

3-824

Table 3.6a. (continued)

Chemical	CASRN	Oral Chronic RfD (mg/kg-day)	Dermal Chronic RfD (mg/kg-day)	Oral Sub-chronic RfD (mg/kg-day)	Dermal Sub-chronic RfD (mg/kg-day)	Inhalation Chronic RfD (mg/kg-day) ^f	Inhalation Sub-chronic RfD (mg/kg-day) ^f	Oral Slope Factor (mg/kg-day) ⁻¹	Inhalation Slope Factor (mg/kg-day) ⁻¹	Dermal Slope Factor (mg/kg-day) ⁻¹	GI Absorption Factor	Dermal Absorption Factor	Date Toxicity Value Withdrawn from IRIS/HEAST
Pyridine	000110-86-1	1.0E-03 ^a	5.0E-04	1.0E-02 ^b	5.0E-03						0.50	0.010	
Quinalphos	013593-03-8	5.0E-04 ^a	2.5E-04								0.50	0.010	
Quinoline	000091-22-5							1.2E+01 ^b		2.4E+01	0.50	0.010	
Refractory Ceramic Fibers	NA										0.50	0.010	
Resmethrin	010453-86-8	3.0E-02 ^a	1.5E-02								0.50	0.010	
Ronnel	000299-84-3	5.0E-02 ^b	2.5E-02	5.0E-02 ^b	2.5E-02						0.50	0.010	
Rotenone	000083-79-4	4.0E-03 ^a	2.0E-03								0.50	0.010	
Savey	078587-05-0	2.5E-02 ^a	1.3E-02								0.50	0.010	
Selenious Acid	007783-00-8	5.0E-03 ^a	4.4E-03	5.0E-03 ^b	4.4E-03						0.87	0.010	
Selenite	014124-67-5										0.70	0.010	
Selenium	007782-49-2	5.0E-03 ^a	2.2E-03	5.0E-03 ^b	2.2E-03						0.44	0.001	
Selenium Sulfide	007446-34-6										0.20	0.001	
Selenourca	000630-10-4	5.0E-03 ^b	2.5E-03	5.0E-03 ^b	2.5E-03						0.50	0.010	
Sethoxydim	074051-80-2	9.0E-02 ^a	4.5E-02								0.50	0.010	
Silver	007440-22-4	5.0E-03 ^a	9.0E-04	5.0E-03 ^b	9.0E-04						0.18	0.001	
Silver Cyanide	000506-64-9	1.0E-01 ^a	2.0E-02	1.0E-01 ^b	2.0E-02						0.20	0.001	
Simazine	000122-34-9	5.0E-03 ^a	2.5E-03	5.0E-03 ^b	2.5E-03			1.2E-01 ^b		2.4E-01	0.50	0.010	
Sodium	007440-23-5										1.00	0.001	
Sodium Acifluorfen	062476-59-9	1.3E-02 ^a	6.5E-03								0.50	0.010	

Table 3.6a. (continued)

Chemical	CASRN	Oral Chronic RfD (mg/kg-day)	Dermal Chronic RfD (mg/kg-day)	Oral Sub-chronic RfD (mg/kg-day)	Dermal Sub-chronic RfD (mg/kg-day)	Inhalation Chronic RfD (mg/kg-day) ¹	Inhalation Sub-chronic RfD (mg/kg-day) ¹	Oral Slope Factor (mg/kg-day) ⁻¹	Inhalation Slope Factor (mg/kg-day) ⁻¹	Dermal Slope Factor (mg/kg-day) ⁻¹	GI Absorption Factor	Dermal Absorption Factor	Date Toxicity Value Withdrawn from IRIS/HEAST
Sodium Azide	026628-22-8	4.0E-03 ^a	8.0E-04								0.20	0.001	
Sodium Cyanide	000143-33-9	4.0E-02 ^a	3.2E-02	4.0E-02 ^b	8.0E-03						0.80	0.010	
Sodium Diethyldithiocarbamate	000148-18-5	3.0E-02 ^a	1.5E-02	3.0E-01 ^b	1.5E-01			2.7E-01 ^b		5.4E-01	0.50	0.010	
Sodium Fluoroacetate	000062-74-8	2.0E-05 ^a	1.0E-05								0.50	0.010	
Sodium Metavanadate	013718-26-8	1.0E-03 ^b	2.0E-04	1.0E-02 ^b	2.0E-03						0.20	0.001	
Stirofos (Tetrachlorovinphos)	000961-11-5	3.0E-02 ^a	1.5E-02	3.0E-02 ^b	1.5E-02			2.4E-02 ^b		4.8E-02	0.50	0.010	
Strontium, Stable	007440-24-6	6.0E-01 ^a	1.2E-01	6.0E-01 ^b	1.2E-01						0.20	0.001	
Strychnine	000057-24-9	3.0E-04 ^a	1.5E-04	3.0E-03 ^b	1.5E-03						0.50	0.010	
Styrene ⁽⁶⁾	000100-42-5	2.0E-01 ^a	1.6E-01			2.9E-01 ^a	8.6E-01 ^b				0.80	0.010	
Sulfate	014808-79-8										0.20	0.001	
Systhane	088671-89-0	2.5E-02 ^a	1.3E-02								0.50	0.010	
TCDD, 2,3,7,8- ⁽⁴⁾	001746-01-6							1.5E+05 ^b	1.5E+05 ^b	3.0E+05	0.50	0.030	
TCDF, 2,3,7,8- ⁽⁴⁾	051207-31-9							1.5E+04 ⁽²⁾	1.5E+04 ⁽²⁾	3.0E+04	0.50	0.010	
TCMTB	021564-17-0	3.0E-02 ^b	1.5E-02	3.0E-01 ^b	1.5E-01						0.50	0.010	
Tebuthiuron	034014-18-1	7.0E-02 ^a	3.5E-02								0.50	0.010	
Temephos	003383-96-8	2.0E-02 ^b	1.0E-02	2.0E-01 ^b	1.0E-01						0.50	0.010	
Terbacil	005902-51-2	1.3E-02 ^a	6.5E-03								0.50	0.010	
Terbufos	013071-79-9	2.5E-05 ^b	1.3E-05	2.5E-05 ^b	1.3E-05						0.50	0.010	

Table 3.6a. (continued)

Chemical	CASRN	Oral Chronic RfD (mg/kg-day)	Dermal Chronic RfD (mg/kg-day)	Oral Sub-chronic RfD (mg/kg-day)	Dermal Sub-chronic RfD (mg/kg-day)	Inhalation Chronic RfD (mg/kg-day) ⁱ	Inhalation Sub-chronic RfD (mg/kg-day) ⁱ	Oral Slope Factor (mg/kg-day) ⁻¹	Inhalation Slope Factor (mg/kg-day) ⁻¹	Dermal Slope Factor (mg/kg-day) ⁻¹	GI Absorption Factor	Dermal Absorption Factor	Date Toxicity Value Withdrawn from IRIS/HEAST
Terbutryn	000886-50-0	1.0E-03 ^a	5.0E-04								0.50	0.010	
Tetrabutyl Lead	001920-90-7										0.50	0.010	
Tetrachlorobenzene, 1,2,4,5-	000095-94-3	3.0E-04 ^a	2.4E-04	3.0E-03 ^b	1.5E-03						0.80	0.010	
Tetrachloroethane, 1,1,1,2-	000630-20-6	3.0E-02 ^a	2.4E-02	3.0E-02 ^b	2.4E-02			2.6E-02 ^a	2.6E-02 ^b	3.3E-02	0.80	0.010	
Tetrachloroethane, 1,1,2,2-	000079-34-5							2.0E-01 ^a	2.0E-01 ^b	2.9E-01	0.70	0.010	
Tetrachloroethylene ⁽⁶⁾	000127-18-4	1.0E-02 ^a	1.0E-02	1.0E-01 ^b	1.0E-01			5.2E-02 ^a	2.0E-03 ^a	5.2E-02	1.00	0.010	
Tetrachlorophenol, 2,3,4,6-	000058-90-2	3.0E-02 ^a	1.5E-02	3.0E-01 ^b	1.5E-01						0.50	0.010	
Tetrachlorotoluene, p- alpha, alpha, alpha-	005216-25-1							2.0E+01 ^b		2.5E+01	0.80	0.010	
Tetraethyl Dithiopyrophosphate	003689-24-5	5.0E-04 ^a	2.5E-04	5.0E-03 ^b	2.5E-03						0.50	0.010	
Tetraethyl Lead	000078-00-2										0.50	0.010	
Tetrafluoroethane, 1,1,1,2-	000811-97-2					2.3E+01 ^a					0.80	0.010	
Tetramethyl Lead	000075-74-1										0.50	0.010	
Tetrapropyl Lead	003440-75-3										0.50	0.010	
Thallic Oxide ⁽⁵⁾	001314-32-5	7.0E-05 ^w	3.5E-05	7.0E-04 ^w							0.50	0.010	5/95
Thallium (I) Nitrate	010102-45-1	9.0E-05 ^a	1.8E-05	9.0E-04 ^b	1.8E-04						0.20	0.001	
Thallium (Soluble Salts)	007440-28-0										0.15	0.001	
Thallium Acetate	000563-68-8	9.0E-05 ^a	4.5E-05	9.0E-04 ^b	4.5E-04						0.50	0.010	
Thallium Carbonate	006533-73-9	8.0E-05 ^a	4.0E-05	8.0E-04 ^b	4.0E-04						0.50	0.010	

Table 3.6a. (continued)

Chemical	CASRN	Oral Chronic RfD (mg/kg-day)	Dermal Chronic RfD (mg/kg-day)	Oral Sub-chronic RfD (mg/kg-day)	Dermal Sub-chronic RfD (mg/kg-day)	Inhalation Chronic RfD (mg/kg-day) [†]	Inhalation Sub-chronic RfD (mg/kg-day) [†]	Oral Slope Factor (mg/kg-day) ⁻¹	Inhalation Slope Factor (mg/kg-day) ⁻¹	Dermal Slope Factor (mg/kg-day) ⁻¹	GI Absorption Factor	Dermal Absorption Factor	Date Toxicity Value Withdrawn from IRIS/HEAST
Thallium Chloride	007791-12-0	8.0E-05 ^a	1.6E-05	8.0E-04 ^b	1.6E-04						0.20	0.001	
Thallium Selenite ⁽⁵⁾	012039-52-0	9.0E-05 ^w	1.8E-05								0.20	0.001	9/93
Thallium Sulfate	007446-18-6	8.0E-05 ^a	1.6E-05	8.0E-04 ^b	1.6E-04						0.20	0.001	
Thiobencarb	028249-77-6	1.0E-02 ^a	5.0E-03								0.50	0.010	
Thiofanox	039196-18-4	3.0E-04 ^b	1.5E-04	3.0E-04 ^b	1.5E-04						0.50	0.010	
Thiophanate, Methyl	023564-05-8	8.0E-02 ^a	4.0E-02								0.50	0.010	
Thiram	000137-26-8	5.0E-03 ^a	2.5E-03	6.0E-03 ^b	3.0E-03						0.50	0.010	
Thorium	007440-29-1										0.01	0.001	
Tin	007440-31-5	6.0E-01 ^b	6.0E-02	6.0E-01 ^b	6.0E-02						0.10	0.001	
Titanium	007440-32-6										0.03	0.001	
Toluene ⁽⁶⁾	000108-88-3	2.0E-01 ^a	1.6E-01	2.0E+00 ^b	1.6E+00	1.1E-01 ^a	3.2E-01 ^{ba}				0.80	0.010	
Toluene diisocyanate mixture (TDI)	026471-62-5					2.0E-05 ^a					0.80	0.010	
Toluene-2,4-diamine	000095-80-7							3.2E+00 ^b		6.4E+00	0.50	0.010	
Toluene-2,5-diamine	000095-70-5	6.0E-01 ^b	3.0E-01	6.0E-01 ^b	3.0E-01						0.50	0.010	
Toluene-2,6-diamine	000823-40-5	2.0E-01 ^b	1.0E-01	2.0E-01 ^b	1.0E-01						0.50	0.010	
Toluidine, o- (Methylaniline, 2-)	000095-53-4							2.4E-01 ^b		4.8E-01	0.50	0.010	
Toluidine, p-	000106-49-0							1.9E-01 ^b		3.8E-01	0.50	0.010	
Toxaphene	008001-35-2							1.1E+00 ^a	1.1E+00 ^b	2.2E+00	0.50	0.010	

Table 3.6a. (continued)

Chemical	CASRN	Oral Chronic RfD (mg/kg-day)	Dermal Chronic RfD (mg/kg-day)	Oral Sub-chronic RfD (mg/kg-day)	Dermal Sub-chronic RfD (mg/kg-day)	Inhalation Chronic RfD (mg/kg-day) ⁱ	Inhalation Sub-chronic RfD (mg/kg-day) ⁱ	Oral Slope Factor (mg/kg-day) ⁻¹	Inhalation Slope Factor (mg/kg-day) ⁻¹	Dermal Slope Factor (mg/kg-day) ⁻¹	GI Absorption Factor	Dermal Absorption Factor	Date Toxicity Value Withdrawn from IRIS/HEAST
Tralomethrin	066841-25-6	7.5E-03 ^a	3.8E-03								0.50	0.010	
Triallate	002303-17-5	1.3E-02 ^a	6.5E-03	1.3E-02 ^b	6.5E-03						0.50	0.010	
Triasulfuron	082097-50-5	1.0E-02 ^a	5.0E-03								0.50	0.010	
Tribromobenzene, 1,2,4-	000615-54-3	5.0E-03 ^a	4.0E-03	5.0E-02 ^b	2.5E-02						0.80	0.010	
Tribromochloromethane	000594-15-0										0.50	0.010	
Tribromodiphenyl Ether	049690-94-0										0.50	0.010	
Tributyltin Oxide	000056-35-9	3.0E-05 ^a	1.5E-05								0.50	0.010	
Trichloro-1,2,2-trifluoroethane, 1,1,2-	000076-13-1	3.0E+01 ^a	2.4E+01	3.0E+00 ^b	2.4E+00	8.6E+00 ^b	8.6E+00 ^b				0.80	0.010	
Trichloro-2'-hydroxydiphenylether	003380-34-5			4.0E+00 ^b							0.50	0.010	
Trichloroacetic Acid											0.50	0.010	
Trichloroaniline HCl, 2,4,6-	033663-50-2							2.9E-02 ^b		5.8E-02	0.50	0.010	
Trichloroaniline, 2,4,6-	000634-93-5							3.4E-02 ^b		6.8E-02	0.50	0.010	
Trichlorobenzene, 1,2,4-	000120-82-1	1.0E-02 ^a	9.7E-03	1.0E-02 ^b	9.7E-03	5.7E-02 ^b	5.7E-01 ^b				0.97	0.010	
Trichloroethane, 1,1,1- ⁽³⁾	000071-55-6	9.0E-02 ^{a,w}	8.1E-02			2.9E-01 ^a					0.90	0.010	9/93
Trichloroethane, 1,1,2-	000079-00-5	4.0E-03 ^a	3.2E-03	4.0E-02 ^b	3.2E-02			5.7E-02 ^a	5.7E-02 ^b	7.0E-02	0.81	0.010	
Trichloroethylene ⁽³⁾	000079-01-6							1.1E-02 ^a	6.0E-03 ^a	7.3E-02	0.15	0.010	
Trichlorofluoromethane	000075-69-4	3.0E-01 ^a	6.9E-02	7.0E-01 ^b	1.6E-01	2.0E-01 ^{b,c}	2.0E+00 ^{b,c}				0.23	0.010	
Trichlorophenol, 2,4,5-	000095-95-4	1.0E-01 ^a	8.0E-02	1.0E+00 ^b	5.0E-01						0.80	0.010	

Table 3.6a. (continued)

Chemical	CASRN	Oral Chronic RfD (mg/kg-day)	Dermal Chronic RfD (mg/kg-day)	Oral Sub-chronic RfD (mg/kg-day)	Dermal Sub-chronic RfD (mg/kg-day)	Inhalation Chronic RfD (mg/kg-day) [†]	Inhalation Sub-chronic RfD (mg/kg-day) [†]	Oral Slope Factor (mg/kg-day) ⁻¹	Inhalation Slope Factor (mg/kg-day) ⁻¹	Dermal Slope Factor (mg/kg-day) ⁻¹	GI Absorption Factor	Dermal Absorption Factor	Date Toxicity Value Withdrawn from IRIS/HEAST
Trichlorophenol, 2,4,6-	000088-06-2							1.1E-02 ^a	1.0E-02 ^b	2.2E-02	0.50	0.010	
Trichlorophenoxy Propionic Acid, 2(2,4,5-	000093-72-1	8.0E-03 ^a	4.0E-03	8.0E-03 ^b	4.0E-03						0.50	0.010	
Trichlorophenoxyacetic Acid, 2,4,5-	000093-76-5	1.0E-02 ^a	5.0E-03	1.0E-01 ^b	5.0E-02						0.50	0.010	
Trichloropropane, 1,1,2-	000598-77-6	5.0E-03 ^a	4.0E-03	5.0E-02 ^b	2.5E-02						0.80	0.010	
Trichloropropane, 1,2,3-	000096-18-4	6.0E-03 ^a	4.8E-03	6.0E-02 ^b	4.8E-02			7.0E+00 ^b		8.8E+00	0.80	0.010	
Trichloropropene, 1,2,3-	000096-19-5	5.0E-03 ^b	4.0E-03	5.0E-03 ^b	2.5E-03						0.80	0.010	
Trichlorotoluene, 2,3,6-	002077-46-5			5.0E-05 ^b							0.50	0.010	
Trichlorotoluene, alpha 2,6-	002014-83-7			5.0E-05 ^b							0.50	0.010	
Tridiphan	058138-08-2	3.0E-03 ^a	1.5E-03								0.50	0.010	
Triethyl Lead	005224-23-7										0.50	0.010	
Triethylamine	000121-44-8					2.0E-03 ^a					0.80	0.010	
Trifluralin	001582-09-8	7.5E-03 ^a	3.8E-03	7.5E-03 ^b	3.8E-03			7.7E-03 ^a		1.5E-02	0.50	0.010	
Trimethyl Lead	007442-13-9										0.50	0.010	
Trimethyl Phosphate	000512-56-1							3.7E-02 ^b		7.4E-02	0.50	0.010	
Trimethylethyl Lead	001762-26-1										0.50	0.010	
Trinitrobenzene, 1,3,5-	000099-35-4	5.0E-05 ^a	3.3E-05	5.0E-04 ^b	3.3E-04						0.65	0.010	
Trinitrophenylmethylnitramine	000479-45-8	1.0E-02 ^b	5.0E-03	1.0E-01 ^b	5.0E-02						0.50	0.010	
Trinitrotoluene, 2,4,6-	000118-96-7	5.0E-04 ^a	3.0E-04	5.0E-04 ^b	3.0E-04			3.0E-02 ^a		5.0E-02	0.60	0.010	

Table 3.6a. (continued)

Chemical	CASRN	Oral Chronic RfD (mg/kg-day)	Dermal Chronic RfD (mg/kg-day)	Oral Sub-chronic RfD (mg/kg-day)	Dermal Sub-chronic RfD (mg/kg-day)	Inhalation Chronic RfD (mg/kg-day) ⁱ	Inhalation Sub-chronic RfD (mg/kg-day) ⁱ	Oral Slope Factor (mg/kg-day) ⁻¹	Inhalation Slope Factor (mg/kg-day) ⁻¹	Dermal Slope Factor (mg/kg-day) ⁻¹	GI Absorption Factor	Dermal Absorption Factor	Date Toxicity Value Withdrawn from IRIS/HEAST
Tripropyl Lead	006618-03-7										0.50	0.010	
Uranium (Soluble Salts)	NA	3.0E-03 ^a	2.6E-03								0.85	0.001	
Vanadium Pentoxide	001314-62-1	9.0E-03 ^a	1.8E-03	9.0E-03 ^b	1.8E-03						0.20	0.001	
Vanadium Sulfate	036907-42-3	2.0E-02 ^b	4.0E-03	2.0E-02 ^b	4.0E-03						0.20	0.001	
Vanadium, Metallic	007440-62-2	7.0E-03 ^b	7.0E-05	7.0E-03 ^b	7.0E-05						0.01	0.001	
Vanadyl Sulfate	027774-13-6	2.0E-02 ^b	4.0E-03								0.20	0.001	
Vernolate	001929-77-7	1.0E-03 ^a	5.0E-04	1.0E-02 ^b	5.0E-03						0.50	0.010	
Vinclozolin	050471-44-8	2.5E-02 ^a	1.3E-02								0.50	0.010	
Vinyl Acetate	000108-05-4	1.0E+00 ^b	6.5E-01	1.0E+00 ^b	6.5E-01	5.7E-02 ^a	5.7E-02 ^b				0.65	0.010	
Vinyl Bromide	000593-60-2					8.6E-04 ^a	8.6E-04 ^b		1.1E-01 ^b		0.80	0.010	
Vinyl Chloride ⁽⁶⁾	000075-01-4							1.9E+00 ^b	3.0E-01 ^b	1.9E+00	1.00	0.010	
Warfarin	000081-81-2	3.0E-04 ^a	1.5E-04	3.0E-04 ^b	1.5E-04						0.50	0.010	
White Phosphorus	007723-14-0	2.0E-05 ^a	4.0E-06								0.20	0.001	
Xylene, Mixture ⁽⁶⁾	001330-20-7	2.0E+00 ^a	1.8E+00	3.6E-01 ^a	3.3E-01						0.92	0.010	
Xylene, P- ⁽⁶⁾	000106-42-3			2.7E-01 ^a							0.80	0.010	
Xylene, m- ⁽⁶⁾	000108-38-3	2.0E+00 ^b	1.6E+00	6.7E-02 ^a	5.3E-02						0.80	0.010	
Xylene, o- ⁽⁶⁾	000095-47-6	2.0E+00 ^b	1.6E+00								0.80	0.010	
Zinc (Metallic)	007440-66-6	3.0E-01 ^a	6.0E-02	3.0E-01 ^b	6.0E-02						0.20	0.001	
Zinc Cyanide	000557-21-1	5.0E-02 ^a	1.0E-02	5.0E-02 ^b	1.0E-02						0.20	0.001	

Table 3.6a. (continued)

Chemical	CASRN	Oral Chronic RfD (mg/kg-day)	Dermal Chronic RfD (mg/kg-day)	Oral Sub-chronic RfD (mg/kg-day)	Dermal Sub-chronic RfD (mg/kg-day)	Inhalation Chronic RfD (mg/kg-day) [†]	Inhalation Sub-chronic RfD (mg/kg-day) [†]	Oral Slope Factor (mg/kg-day) ⁻¹	Inhalation Slope Factor (mg/kg-day) ⁻¹	Dermal Slope Factor (mg/kg-day) ⁻¹	GI Absorption Factor	Dermal Absorption Factor	Date Toxicity Value Withdrawn from IRIS/HEAST
Zinc Phosphide	001314-84-7	3.0E-04 ^a	6.0E-05	3.0E-03 ^b	6.0E-04						0.20	0.001	
Zineb	012122-67-7	5.0E-02 ^a	2.5E-02	5.0E-02 ^b	2.5E-02						0.50	0.010	
Zirconium	007440-67-7										0.80	0.001	

Notes:

- † The RfD value for inhalation exposure is generally reported as a concentration in air (RfC) 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/540/1-89/002, December 1989).
- a Source: Integrated Risk Information System (IRIS)
- b Source: Health and Environmental Effects Summary Table (HEAST) 1995
- c This value was derived from methodology that is not current with the interim inhalation methodology used by the RfD/RfC Work Group (see HEAST Table 2 for details).
- d Lead alkyls—See IRIS cover sheet for further explanation.
- e Contact the Superfund Health Risk Technical Support Center: (513) 569-7300.
- f HEAST concluded that toxicity data were inadequate for calculation of oral RfDs for copper and substituted the current drinking water standard (MCLG) of 1.3 mg/L.
- g Listed as "Dinitrotoluene mixture, 2,4-/2,6-" in IRIS. The value is based on a study using technical grade DNT.
- m IRIS no longer separates manganese values for chronic oral RfDs into water and diet RfDs. The chronic oral RfD is now for the total oral intake of manganese. HEAST manganese values remain separated into subchronic oral RfD (water) and subchronic oral RfD (diet). Since it was necessary to keep the RfD categories for both diet and water on the table to list HEAST values, the IRIS chronic oral RfD for water was changed from 5.00E-03 to 1.40E-01 (the new manganese value for total oral intake) and footnoted "m."
- r The PRG was calculated considering *Supplemental Guidance from RAGS: Region 4 Bulletins, Human Health Risk Assessment* (Interim Guidance) [received February 11, 1992, (benzo[a]pyrene) and November 1995(dioxins and furans)]. 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. In addition, the slope factors for chemicals so marked indicate that a TEF methodology was used for chlorinated dioxin and furan congeners based on each compound's relative potency to the potency of 2,3,7,8-tetrachlorodibenzodioxin (TCDD). The following TEFs were used to convert each slope factor to an equivalent slope factor of 2,3,7,8-TCDD: (1) 2,3,7,8-TCDD, TEF = 1.0; (2) 2,3,7,8-PeCDD, TEF = 0.5; (3) 2,3,7,8-HxCDD, TEF = 0.1; (4) 2,3,7,8-HpCDD, TEF = 0.01; (5) OCDD, TEF = 0.001; (6) 2,3,7,8-TCDF, TEF = 0.1; (7) 1,2,3,7,8-PeCDF, TEF = 0.5; (8) 2,3,4,7,8-PeCDF, TEF = 0.05; (9) 2,3,7,8-HxCDF, TEF = 0.1; (10) 2,3,7,8-HpCDF, TEF = 0.01; and (11) OCDF, TEF = 0.001.
- u The SFI was calculated from inhalation unit risk as described in *Supplemental Guidance from RAGS: Region 4 Bulletins, Human Health Risk Assessment* (Interim Guidance) (November 1995).
- w The toxicity value was withdrawn.
- (1) The same oral slope factor as used for polychlorinated biphenyls.
- (2) The PRG was calculated considering *Supplemental Guidance from RAGS: Region 4 Bulletins, Human Health Risk Assessment* (Interim Guidance) [received February 11, 1992, (benzo[a]pyrene) and November 1995(dioxins and furans)]. 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. In addition, the slope factors for chemicals so marked indicate that a TEF methodology was used for chlorinated dioxin and furan

Table 3.6a. (continued)

congeners based on each compound's relative potency to the potency of 2,3,7,8-tetrachlorodibenzodioxin (TCDD). The following TEFs were used to convert each slope factor to an equivalent slope factor of 2,3,7,8-TCDD: (1) 2,3,7,8-TCDD, TEF = 1.0; (2) 2,3,7,8-PeCDD, TEF = 0.5; (3) 2,3,7,8-HxCDD, TEF = 0.1; (4) 2,3,7,8-HpCDD, TEF = 0.01; (5) OCDD, TEF = 0.001; (6) 2,3,7,8-TCDF, TEF = 0.1; (7) 1,2,3,7,8-PeCDF, TEF = 0.5; (8) 2,3,4,7,8-PeCDF, TEF = 0.05; (9) 2,3,7,8-HxCDF, TEF = 0.1; (10) 2,3,7,8-HpCDF, TEF = 0.01; and (11) OCDF, TEF = 0.001.

- (3) The toxicity values for trichloroethylene have been withdrawn from IRIS and HEAST pending further investigation. However, the most recent toxicity values have been used to calculate the PRG.
- (4) The PRG was calculated considering *Supplemental Guidance from RAGS: Region 4 Bulletins, Human Health Risk Assessment* (Interim Guidance) from EPA (November 1995). The slope factors for chemicals so marked indicate that a TEF methodology was used for chlorinated dioxin and furan congeners based on each compound's relative potency to the potency of 2,3,7,8-tetrachlorodibenzodioxin (TCDD). The following TEFs were used to convert each slope factor to an equivalent slope factor of 2,3,7,8-TCDD: (1) 2,3,7,8-TCDD, TEF = 1.0; (2) 2,3,7,8-PeCDD, TEF = 0.5; (3) 2,3,7,8-HxCDD, TEF = 0.1; (4) 2,3,7,8-HpCDD, TEF = 0.01; (5) OCDD, TEF = 0.001; (6) 2,3,7,8-TCDF, TEF = 0.1; (7) 1,2,3,7,8-PeCDF, TEF = 0.5; (8) 2,3,4,7,8-PeCDF, TEF = 0.05; (9) 2,3,7,8-HxCDF, TEF = 0.1; (10) 2,3,7,8-HpCDF, TEF = 0.01; and (11) OCDF, TEF = 0.001.
- (5) Toxicity values for these chemicals have been withdrawn from IRIS and HEAST pending further investigation. However, the most recent toxicity values have been used to calculate the PRG.
- (6) Toxicity values for these chemicals were obtained from the Superfund Health Risk Technical Support Center.

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

Chemical	CASRN	Permeability Constant (cm/hr) [Kp]	Volatilization Factor (m ³ /kg) [VF]	Soil Saturation Conc. (mg/kg) [CSAT]	Soil-to-Plant Uptake (B _v)	Soil-to-Wet Plant Uptake (B _w)	Bioaccumulation Factor for Fish (L/kg) [BF]	Biotransfer Factor for Beef (day/kg) [F _b]	Biotransfer Factor for Milk (day/kg) [F _m]
ALAR	001596-84-5								
Acenaphthene	000083-32-9	2.5E-01			1.2E-01	2.5E-02	1.1E+03	5.0E-04	1.6E-04
Acenaphthylene	000208-96-8	9.5E-02			2.7E-01	5.5E-02	3.8E+02	1.3E-04	4.0E-05
Acephate	030560-19-1	3.6E-05			1.2E+02	2.4E+01	1.3E-01	3.5E-09	1.1E-09
Acetaldehyde	000075-07-0	7.2E-04	6.0E+04	4.9E+04	5.1E+01	1.0E+01	4.0E-01	1.5E-08	4.8E-09
Acetochlor	034256-82-1								
Acetone	000067-64-1	5.7E-04			5.2E+01	1.1E+01	3.9E-01	1.4E-08	4.5E-09
Acetone Cyanohydrin	000075-86-5								
Acetonitrile	000075-05-8	6.1E-04			6.0E+01	1.2E+01	3.2E-01	1.1E-08	3.6E-09
Acetophenone	000098-86-2	5.7E-03			3.9E+00	8.0E-01	1.2E+01	1.3E-06	4.0E-07
Acrolein	000107-02-8	7.4E-04	1.3E+04	4.8E+03	4.3E+01	8.8E+00	4.9E-01	2.0E-08	6.3E-09
Acrylamide	000079-06-1	2.4E-04			9.3E+01	1.9E+01	1.8E-01	5.3E-09	1.7E-09
Acrylic Acid	000079-10-7	9.0E-04			3.1E+01	6.2E+00	7.8E-01	3.6E-08	1.1E-08
Acrylonitrile	000107-13-1	1.4E-03	3.6E+03	1.8E+03	2.7E+01	5.5E+00	9.1E-01	4.4E-08	1.4E-08
Alachlor	015972-60-8	4.9E-03			7.9E-01	1.6E-01	9.4E+01	2.0E-05	6.3E-06
Aldicarb	000116-06-3	8.4E-04			8.4E+00	1.7E+00	4.3E+00	3.4E-07	1.1E-07
Aldicarb Sulfone	001646-88-4								

3-835

Table 3.6b. (continued)

Chemical	CASRN	Permeability Constant (cm/hr) [Kp]	Volatilization Factor (m ³ /kg) [VF]	Soil Saturation Conc. (mg/kg) [CSAT]	Soil-to-Plant Uptake (B _s)	Soil-to-Wet Plant Uptake (B _w)	Bioaccumulation Factor for Fish (L/kg) [BF]	Biotransfer Factor for Beef (day/kg) [F _b]	Biotransfer Factor for Milk (day/kg) [F _m]
Aldrin	000309-00-2	1.6E-03			6.9E-01	1.4E-01	1.1E+02	2.5E-05	7.9E-06
Ally	074223-64-6	9.2E-06			3.7E+01	7.6E+00	6.0E-01	2.6E-08	8.2E-09
Allyl Alcohol	000107-18-6	5.9E-04			5.1E+01	1.0E+01	4.0E-01	1.5E-08	4.8E-09
Allyl Chloride	000107-05-1	7.0E-03	9.8E+03	6.3E+02	5.9E+00	1.2E+00	6.8E+00	6.3E-07	2.0E-07
Aluminum	007429-90-5	1.0E-03			4.0E-03	1.0E-03		1.5E-03	2.0E-04
Aluminum Phosphide	020859-73-8	1.0E-03							
Amdro	067485-29-4								
Ametryn	000834-12-8	7.3E-04			3.4E+00	7.0E-01	1.4E+01	1.6E-06	5.0E-07
Aminophenol, m-	000591-27-5	5.8E-04			2.9E+01	5.8E+00	8.5E-01	4.1E-08	1.3E-08
Aminopyridine, 4-	000504-24-5	8.0E-04			2.6E+01	5.3E+00	9.6E-01	4.8E-08	1.5E-08
Amitraz	033089-61-1								
Ammonia	007664-41-7	1.5E-03			3.8E+01	7.7E+00	5.9E-01	2.5E-08	7.9E-09
Ammonium Sulfamate	007773-06-0	1.0E-03							
Aniline	000062-53-3	4.1E-02			1.1E+01	2.3E+00	2.8E+00	2.0E-07	6.3E-08
Anthracene	000120-12-7	2.2E-01			1.1E-01	2.2E-02	1.3E+03	6.3E-04	2.0E-04
Antimony (metallic)	007440-36-0	1.0E-03			5.0E-02	1.0E-02	1.0E+02	4.0E-05	2.5E-05
Antimony Pentoxide	001314-60-9	1.0E-03							

3-836

Table 3.6b. (continued)

Chemical	CASRN	Permeability Constant (cm/hr) [Kp]	Volatilization Factor (m ³ /kg) [VF]	Soil Saturation Conc. (mg/kg) [CSAT]	Soil-to-Plant Uptake (B _p)	Soil-to-Wet Plant Uptake (B _w)	Bioaccumulation Factor for Fish (L/kg) [BF]	Biotransfer Factor for Beef (day/kg) [F _b]	Biotransfer Factor for Milk (day/kg) [F _m]
Antimony Potassium Tartrate	000304-61-0	1.0E-03							
Antimony Tetroxide	001332-81-6	1.0E-03							
Antimony Trioxide	001309-64-4	1.0E-03							
Apollo	074115-24-5								
Aramite	000140-57-8								
Aroclor 1016	012674-11-2	7.9E-01		1.4E-02	2.9E-03	1.8E+04	2.0E-02	6.3E-03	
Aroclor 1221 ^(a)	011104-28-2	9.2E-02		1.6E-01	3.2E-02	7.7E+02	3.1E-04	9.9E-05	
Aroclor 1232 ^(a)	011141-16-5	1.4E-02		5.3E-01	1.1E-01	1.6E+02	4.0E-05	1.3E-05	
Aroclor 1242 ^(a)	053469-21-9	3.7E-02		1.6E-01	3.2E-02	7.7E+02	3.1E-04	9.9E-05	
Aroclor 1248 ^(a)	012672-29-6	3.7E-01		1.6E-02	3.3E-03	1.5E+04	1.6E-02	5.0E-03	
Aroclor 1254	011097-69-1	3.5E-01		1.3E-02	2.5E-03	2.1E+04	2.5E-02	7.9E-03	
Aroclor 1260 ^(a)	011096-82-5	1.1E+00		2.9E-03	5.9E-04	1.5E+05	3.1E-01	9.9E-02	
Arsenic Salts	NA	1.0E-03							
Arsenic, Inorganic	007440-38-2	1.0E-03		4.0E-02	1.0E-02		2.0E-03	6.0E-05	
Arsine	007784-42-1	1.0E-03							
Asbestos	001332-21-4	1.0E-03							
Assure	076578-14-8								

Chemical-specific parameters used to calculate PRGs/nonradionuclides

Table 3.6b. (continued)

Chemical	CASRN	Permeability Constant (cm/hr) [Kp]	Volatilization Factor (m ³ /kg) [VF]	Soil Saturation Conc. (mg/kg) [CSAT]	Soil-to-Plant Uptake (B _v)	Soil-to-Wet Plant Uptake (B _w)	Bioaccumulation Factor for Fish (L/kg) [BF]	Biotransfer Factor for Beef (day/kg) [F _b]	Biotransfer Factor for Milk (day/kg) [F _m]
Asulam	003337-71-1								
Atrazine	001912-24-9	7.6E-03			1.0E+00	2.1E-01	6.6E+01	1.3E-05	4.0E-06
Avermectin B1	065195-55-3								
Azobenzene	000103-33-3	7.4E-02			2.4E-01	4.8E-02	4.5E+02	1.6E-04	5.0E-05
Barium	007440-39-3	1.0E-03			1.0E-01	3.0E-03	4.0E+00	2.0E-04	4.8E-04
Barium Cyanide	000542-62-1	1.0E-03							
Baygon	000114-26-1	1.4E-03			4.5E+00	9.1E-01	9.7E+00	1.0E-06	3.1E-07
Bayleton	043121-43-3	1.3E-03			1.8E+00	3.6E-01	3.3E+01	5.0E-06	1.6E-06
Baythroid	068359-37-5								
Benefin	001861-40-1	2.9E-02			8.8E-02	1.8E-02	1.7E+03	8.7E-04	2.7E-04
Benomyl	017804-35-2	1.4E-03			1.8E+00	3.6E-01	3.3E+01	5.0E-06	1.6E-06
Bentazon	025057-89-0	3.9E-04			8.7E+00	1.8E+00	4.0E+00	3.1E-07	9.9E-08
Benz[a]anthracene ⁽²⁾	000056-55-3	8.1E-01			1.9E-02	3.8E-03	1.3E+04	1.3E-02	4.0E-03
Benzaldehyde	000100-52-7	1.8E-02			1.8E+00	3.6E-01	3.3E+01	5.0E-06	1.6E-06
Benzene	000071-43-2	2.1E-02	1.9E+04	5.0E+02	2.3E+00	4.7E-01	2.3E+01	3.1E-06	9.9E-07
Benzene Hexachloride	NA								
Benzene, Ethyldimethyl	NA								

Table 3.6b. (continued)

Chemical	CASRN	Permeability Constant (cm/hr) [Kp]	Volatilization Factor (m ³ /kg) [VF]	Soil Saturation Conc. (mg/kg) [CSAT]	Soil-to-Plant Uptake (B.)	Soil-to-Wet Plant Uptake (B _w)	Bioaccumulation Factor for Fish (L/kg) [BF]	Biotransfer Factor for Beef (day/kg) [F _b]	Biotransfer Factor for Milk (day/kg) [F _m]
Benzene, Ethylmethyl	NA								
Benzene, Methylpropenyl	NA								
Benzene, Methylpropyl	NA								
Benzene, Trimethyl	025551-13-7	9.1E-02			4.1E-01	8.2E-02	2.3E+02	6.3E-05	2.0E-05
Benzenethiol	000108-98-5	2.4E-02			1.3E+00	2.7E-01	4.7E+01	7.9E-06	2.5E-06
Benzidine	000092-87-5	1.3E-03			6.7E+00	1.4E+00	5.7E+00	5.0E-07	1.6E-07
Benzo[a]pyrene ⁽²⁾	000050-32-8	1.2E+00			1.1E-02	2.2E-03	2.5E+04	3.1E-02	9.9E-03
Benzo[b]fluoranthene ⁽²⁾	000205-99-2	1.2E+00			1.1E-02	2.2E-03	2.5E+04	3.1E-02	9.9E-03
Benzo[g,h,i]perylene	000191-24-2	1.8E+00			5.6E-03	1.1E-03	6.1E+04	1.0E-01	3.1E-02
Benzo[k]fluoranthene ⁽²⁾	000207-08-9	6.0E-01			4.3E-03	8.8E-04	8.7E+04	1.6E-01	5.0E-02
Benzoic Acid	000065-85-0	7.3E-03			3.0E+00	6.1E-01	1.6E+01	2.0E-06	6.3E-07
Benzotrichloride	000098-07-7	1.5E-02			7.9E-01	1.6E-01	9.4E+01	2.0E-05	6.3E-06
Benzyl Alcohol	000100-51-6	6.0E-03			8.7E+00	1.8E+00	4.0E+00	3.1E-07	9.9E-08
Benzyl Chloride	000100-44-7	1.4E-02			1.8E+00	3.6E-01	3.3E+01	5.0E-06	1.6E-06
Beryllium	007440-41-7	1.0E-03			1.0E-02	2.5E-03	1.0E+02	1.0E-03	9.0E-07
Bidrin	000141-66-2	2.2E-05			9.4E+01	1.9E+01	1.8E-01	5.2E-09	1.7E-09
Biphenanthrin	082657-04-3								

Table 3.6b. (continued)

Chemical	CASRN	Permeability Constant [Kp] (cm/hr)	Volatilization Factor (m ² /kg) [VF]	Soil Saturation Conc. (mg/kg) [CSAT]	Soil-to-Plant Uptake (B _p)	Soil-to-Wet Plant Uptake (B _w)	Bioaccumulation Factor for Fish (L/kg) [BF]	Biotransfer Factor for Beef [F _B] (day/kg)	Biotransfer Factor for Milk [F _M] (day/kg)
Biphenyl, 1,1'-	000092-52-4	1.8E-01			1.6E-01	3.2E-02	7.7E+02	3.1E-04	9.9E-05
Bis(2-chloro-1-methylethyl) ether (Technical)	000108-60-1	1.2E-02	1.4E+05	3.5E+02	1.2E+00	2.5E-01	5.4E+01	9.5E-06	3.0E-06
Bis(2-chloroethoxy)methane	000111-91-1	1.4E-03			6.7E+00	1.4E+00	5.7E+00	5.0E-07	1.6E-07
Bis(2-chloroethyl) ether	000111-44-4	2.1E-03	1.8E+05	6.4E+02	6.7E+00	1.4E+00	5.7E+00	5.0E-07	1.6E-07
Bis(2-chloroisopropyl) ether	039638-32-9	5.3E-03			2.3E+00	4.7E-01	2.3E+01	3.1E-06	9.9E-07
Bis(2-ethylhexyl) phthalate	000117-81-7	2.3E-02			5.5E-02	1.1E-02	3.1E+03	2.0E-03	6.3E-04
Bis(chloromethyl) ether	000542-88-1	7.1E-04	1.1E+05	9.4E+03	2.3E+01	4.6E+00	1.1E+00	6.0E-08	1.9E-08
Bisphenol A	000080-05-7	2.8E-02			3.1E-01	6.3E-02	3.2E+02	1.0E-04	3.1E-05
Boron And Borates Only	007440-42-8	1.0E-03			4.0E+00	1.0E+00		8.0E-04	1.5E-03
Boron Trifluoride	007637-07-2	1.0E-03							
Bromochloromethane	000074-97-5	3.1E-03			5.9E+00	1.2E+00	6.8E+00	6.3E-07	2.0E-07
Bromodichloromethane	000075-27-4	5.8E-03			2.3E+00	4.7E-01	2.3E+01	3.1E-06	9.9E-07
Bromodiphenyl Ether, p-	000101-55-3	2.4E-01			4.2E-02	8.5E-03	4.4E+03	3.1E-03	9.9E-04
Bromoforn	000075-25-2	2.6E-03			1.5E+00	3.1E-01	3.9E+01	6.3E-06	2.0E-06
Bromomethane	000074-83-9	3.5E-03	3.3E+03	3.4E+02	7.7E+00	1.6E+00	4.8E+00	4.0E-07	1.3E-07
Bromophos	002104-96-3								
Bromotrichloromethane	000075-62-7								

Chemical-specific parameters used to calculate PRGs/nonradionuclides

Table 3.6b. (continued)

Chemical	CASRN	Permeability Constant (cm/hr) [Kp]	Volatilization Factor (m ³ /kg) [VF]	Soil Saturation Conc. (mg/kg) [CSAT]	Soil-to-Plant Uptake (B.)	Soil-to-Wet Plant Uptake (B _w)	Bioaccumulation Factor for Fish (L/kg) [BF]	Biotransfer Factor for Beef (day/kg) [F _b]	Biotransfer Factor for Milk (day/kg) [F _m]
Bromoxynil	001689-84-5	8.7E-05			2.0E+01	4.0E+00	1.4E+00	7.7E-08	2.4E-08
Bromoxynil Octanoate	001689-99-2								
Butadiene, 1,3-	000106-99-0	2.3E-02	6.1E+03	3.2E+02	2.6E+00	5.3E-01	1.9E+01	2.5E-06	7.9E-07
Butanol, N-	000071-36-3	2.5E-03			1.6E+01	3.2E+00	1.8E+00	1.1E-07	3.5E-08
Butanone-2, 4-chloro-4,4-difluoro	NA								
Butyl Benzyl Phthlate	000085-68-7	7.1E-02			5.5E-02	1.1E-02	3.1E+03	2.0E-03	6.3E-04
Butylate	002008-41-5								
Butylchloride, t-	000507-20-0								
Butylphthalyl Butylglycolate	000085-70-1								
Cacodylic Acid	000075-60-5	2.7E-04			3.8E+01	7.7E+00	5.9E-01	2.5E-08	7.9E-09
Cadmium (Diet)	007440-43-9	1.0E-03			5.5E-01	1.4E-01	2.0E+02	4.0E-04	1.0E-03
Cadmium (Water)	007440-43-9	1.0E-03			5.5E-01	1.4E-01	2.0E+02	4.0E-04	1.0E-03
Calcium Cyanide	000592-01-8	1.0E-03							
Caprolactam	000105-60-2	2.8E-04			4.9E+01	9.9E+00	4.2E-01	1.6E-08	5.1E-09
Captafol	002425-06-1	8.6E-04			1.3E+00	2.7E-01	4.8E+01	8.1E-06	2.6E-06
Captan	000133-06-2	1.3E-03			1.8E+00	3.6E-01	3.3E+01	5.0E-06	1.6E-06
Carbaryl	000063-25-2	4.8E-03			1.8E+00	3.6E-01	3.3E+01	5.0E-06	1.6E-06

3-841

Table 3.6b. (continued)

Chemical	CASRN	Permeability Constant [Kp] (cm/hr)	Volatilization Factor [VF] (m ² /kg)	Soil Saturation Conc. [CSAT] (mg/kg)	Soil-to-Plant Uptake (B _s)	Soil-to-Wet Plant Uptake (B _w)	Bioaccumulation Factor for Fish [BF _f] (L/kg)	Biota Transfer Factor for Beef [F _b] (day/kg)	Biota Transfer Factor for Milk [F _m] (day/kg)
Carbazole	000086-74-8	9.1E-02			2.4E-01	4.8E-02	4.5E+02	1.6E-04	5.0E-05
Carbofuran	001563-66-2	1.2E-03			4.5E+00	9.1E-01	9.7E+00	1.0E-06	3.1E-07
Carbon Disulfide	000075-15-0	2.4E-02	2.0E+04	1.7E+03	2.0E+00	4.1E-01	2.8E+01	4.0E-06	1.3E-06
Carbon Tetrachloride	000056-23-5	2.2E-02	1.9E+04	1.0E+03	9.0E-01	1.8E-01	7.9E+01	1.6E-05	5.0E-06
Carbosulfan	055285-14-8								
Carboxin	005234-68-4	2.2E-03			2.3E+00	4.7E-01	2.3E+01	3.1E-06	9.9E-07
Chloral	000075-87-6								
Chloramben	000133-90-4								
Chloranil	000118-75-2								
Chlordane	000057-74-9	5.2E-02			2.5E-02	5.0E-03	8.9E+03	7.9E-03	2.5E-03
Chloride	016887-00-6	1.0E-03							
Chlorimuron, Ethyl-	090982-32-4								
Chlorine	007782-50-5	1.0E-03			7.0E+01	1.8E+01		2.0E-02	1.7E-02
Chlorine Dioxide	010049-04-4								
Chlorite (Sodium Salt)	007758-19-2	1.0E-03							
Chloro-1,1-difluoroethane, 1-	000075-68-3								
Chloro-1,3-butadiene, 2-	000126-99-8	1.0E-02	4.3E+04	1.7E+03	3.4E+00	7.0E-01	1.4E+01	1.6E-06	5.0E-07

Chemical-specific parameters used to calculate PRGs/nonradionuclides

Table 3.6b. (continued)

Chemical	CASRN	Permeability Constant (cm/hr) [Kp]	Volatilization Factor (m ³ /kg) [VF]	Soil Saturation Conc. (mg/kg) [CSAT]	Soil-to-Plant Uptake (B _s)	Soil-to-Wet Plant Uptake (B _w)	Bioaccumulation Factor for Fish (L/kg) [BF]	Biotransfer Factor for Beef (day/kg) [F _B]	Biotransfer Factor for Milk (day/kg) [F _M]
Chloro-2-methylaniline HCl, 4-	003165-93-3								
Chloro-2-methylaniline, 4-	000095-69-2								
Chloroacetic Acid	000079-11-8	3.6E-03			7.7E+00	1.6E+00	4.8E+00	4.0E-07	1.3E-07
Chloroacetophenone, 2-	000532-27-4	6.6E-03			2.3E+00	4.7E-01	2.3E+01	3.1E-06	9.7E-07
Chloroaniline, p-	000106-47-8	3.1E-02			9.0E-01	1.8E-01	7.9E+01	1.6E-05	5.0E-06
Chlorobenzene	000108-90-7	4.1E-02	4.9E+04	5.1E+02	9.0E-01	1.8E-01	7.9E+01	1.6E-05	5.0E-06
Chlorobenzilate	000510-15-6	3.1E-02			9.3E-02	1.9E-02	1.5E+03	7.9E-04	2.5E-04
Chlorobenzoic Acid, p-	000074-11-3	1.7E-02			1.0E+00	2.1E-01	6.6E+01	1.3E-05	4.0E-06
Chlorobenzotrifluoride, 4-	000098-56-6	6.8E-02			2.6E-01	5.2E-02	4.1E+02	1.4E-04	4.3E-05
Chlorobutane, 1-	000109-69-3	3.6E-02			1.2E+00	2.4E-01	5.6E+01	1.0E-05	3.1E-06
Chlorobutane, 2-	000078-86-4								
Chlorocyclopentadiene	041851-50-7								
Chlorodibromoethane	073506-94-2								
Chlorodifluoromethane	000075-45-6	3.3E-03			9.0E+00	1.8E+00	3.9E+00	3.0E-07	9.5E-08
Chloroform	000067-66-3	8.9E-03	1.8E+04	1.5E+03	2.6E+00	5.3E-01	1.9E+01	2.5E-06	7.9E-07
Chloromethane	000074-87-3	4.2E-03	3.3E+03	1.2E+03	1.1E+01	2.3E+00	2.9E+00	2.0E-07	6.4E-08
Chloromethyl Methyl Ether	000107-30-2								

3-843

Table 3.6b. (continued)

Chemical	CASRN	Permeability Constant (cm/hr) [Kp]	Volatilization Factor (m ³ /kg) [VF]	Soil Saturation Conc. (mg/kg) [CSAT]	Soil-to-Plant Uptake (B _s)	Soil-to-Wet Plant Uptake (B _w)	Bioaccumulation Factor for Fish (L/kg) [BF]	Biotransfer Factor for Beef (day/kg) [F _b]	Biotransfer Factor for Milk (day/kg) [F _m]
Chloronaphthalene, Beta-	000091-58-7	1.6E-01			1.6E-01	3.2E-02	7.7E+02	3.1E-04	9.9E-05
Chloronitrobenzene, o-	000088-73-3	7.6E-03			2.0E+00	4.1E-01	2.8E+01	4.0E-06	1.3E-06
Chloronitrobenzene, p-	000121-73-3	1.1E-02			1.5E+00	3.1E-01	3.9E+01	6.3E-06	2.0E-06
Chlorophenol, 2-	000095-57-8	3.3E-02			2.0E+00	4.1E-01	2.8E+01	4.0E-06	1.3E-06
Chlorophenyl Methyl Sulfide, p-	000123-09-1								
Chlorophenyl Methyl Sulfoxide	000934-73-6								
Chloropropane, 2-	000075-29-6		1.5E+04	1.6E+03					
Chlorothalonil	001897-45-6	2.5E-02			2.1E-01	4.2E-02	5.4E+02	2.0E-04	6.3E-05
Chlorotoluene, o-	000095-49-8	8.4E-02			4.1E-01	8.2E-02	2.3E+02	6.3E-05	2.0E-05
Chlorpropham	000101-21-3	1.1E-02			7.9E-01	1.6E-01	9.4E+01	2.0E-05	6.3E-06
Chlorpyrifos	002921-88-2	8.0E-02			3.2E-02	6.5E-03	6.3E+03	5.0E-03	1.6E-03
Chlorpyrifos Methyl	005598-13-0	1.3E-02			1.2E-01	2.5E-02	1.1E+03	5.0E-04	1.6E-04
Chlorsulfuron	064902-72-3	1.4E-06			2.3E+02	4.6E+01	5.6E-02	1.1E-09	3.6E-10
Chlorthiophos	060238-56-4								
Chromium (III) (Insoluble Salts)	016065-83-1	1.0E-03			4.0E-02	1.0E-04	2.0E+02	9.0E-03	1.0E-05
Chromium (VI)	018540-29-9	1.0E-03			4.0E-02	1.0E-04	2.0E+02	9.0E-03	1.0E-05
Chromium Salts	NA	1.0E-03					2.0E+02	9.0E-03	1.0E-05

3-844

Table 3.6b. (continued)

Chemical	CASRN	Permeability Constant (cm/hr) [Kp]	Volatilization Factor (m ³ /kg) [VF]	Soil Saturation Conc. (mg/kg) [CSAT]	Soil-to-Plant Uptake (B _s)	Soil-to-Wet Plant Uptake (B _w)	Bioaccumulation Factor for Fish (L/kg) [BF]	Biotransfer Factor for Beef (day/kg) [F _b]	Biotransfer Factor for Milk (day/kg) [F _m]
Chrysene ⁽²⁾	000218-01-9	8.1E-01			1.9E-02	3.8E-03	1.3E+04	1.3E-02	4.0E-03
Cobalt	007440-48-4	1.0E-03			5.4E-02	2.3E-02	3.0E+02	1.0E-04	7.0E-05
Coke Oven Emissions	008007-45-2	1.6E+00			6.5E-03	1.3E-03	5.1E+04	7.9E-02	2.5E-02
Copper	007440-50-8	1.0E-03			8.0E-01	8.0E-02	2.0E+02	9.0E-03	1.5E-03
Copper Cyanide	000544-92-3	1.0E-03							
Creosote	008001-58-9								
Cresol, m-	000108-39-4	1.5E-02			2.6E+00	5.3E-01	1.9E+01	2.5E-06	7.9E-07
Cresol, o-	000095-48-7	1.6E-02			3.0E+00	6.1E-01	1.6E+01	2.0E-06	6.3E-07
Cresol, p-	000106-44-5	1.8E-02			3.0E+00	6.1E-01	1.6E+01	2.0E-06	6.3E-07
Crotonaldehyde	000123-73-9	1.4E-02			3.4E+00	7.0E-01	1.4E+01	1.6E-06	5.0E-07
Cumene	000098-82-8	1.1E-01	7.0E+04	3.5E+02	3.5E-01	7.2E-02	2.7E+02	7.9E-05	2.5E-05
Cyanazine	021725-46-2	2.4E-03			2.0E+00	4.0E-01	2.9E+01	4.1E-06	1.3E-06
Cyanide (CN-)	000057-12-5	7.5E-03			8.7E+00	1.8E+00	4.0E+00	3.1E-07	9.9E-08
Cyanogen	000460-19-5								
Cyanogen Bromide	000506-68-3								
Cyanogen Chloride	000506-77-4	1.1E-03			2.9E+01	5.9E+00	8.4E-01	4.0E-08	1.3E-08
Cyclohexane, 1,2,3,4,5-pentabromo-6-chloro-	000087-84-3								

3-845

Table 3.6b. (continued)

| Chemical | CASRN | Permeability Constant
(cm/hr)
[Kp] | Volatilization Factor
(m ² /kg)
[VF] | Soil Saturation Conc.
(mg/kg)
[CSAT] | Soil-to-Plant Uptake
(B _s) | Soil-to-Wet Plant Uptake
(B _w) | Bioaccumulation Factor for Fish
(L/kg)
[BF] | Biotransfer Factor for Beef
(day/kg)
[F _B] | Biotransfer Factor for Milk
(day/kg)
[F _M] |
|---|-------------|--|---|--|---|---|---|--|--|
| Cyclohexanone | 000108-94-1 | 1.8E-03 | | | 1.3E+01 | 2.6E+00 | 2.4E+00 | 1.6E-07 | 5.1E-08 |
| Cyclohexylamine | 000108-91-8 | 5.5E-03 | | | 5.1E+00 | 1.0E+00 | 8.1E+00 | 7.9E-07 | 2.5E-07 |
| Cyclopentadiene | 000542-92-7 | 3.2E-02 | | | 1.8E+00 | 3.6E-01 | 3.3E+01 | 5.0E-06 | 1.6E-06 |
| Cyhalothrin/karate | 068085-85-8 | 2.7E-01 | | | 3.8E-03 | 7.7E-04 | 1.0E+05 | 2.0E-01 | 6.3E-02 |
| Cypermethrin | 052315-07-8 | | | | | | | | |
| Cyromazine | 066215-27-8 | | | | | | | | |
| DDD | 000072-54-8 | 2.8E-01 | | | 1.6E-02 | 3.3E-03 | 1.5E+04 | 1.6E-02 | 5.0E-03 |
| DDE | 000072-55-9 | 2.4E-01 | | | 1.9E-02 | 3.8E-03 | 1.3E+04 | 1.3E-02 | 4.0E-03 |
| DDT | 000050-29-3 | 4.3E-01 | | | 7.8E-03 | 1.6E-03 | 4.0E+04 | 5.7E-02 | 1.8E-02 |
| Dacthal | 001861-32-1 | | | | | | | | |
| Dalapon | 000075-99-0 | 9.1E-04 | | | 1.3E+01 | 2.7E+00 | 2.3E+00 | 1.5E-07 | 4.7E-08 |
| Decabromodiphenyl Ether | 001163-19-5 | 1.4E-05 | | | 3.5E-02 | 7.0E-03 | 5.7E+03 | 4.3E-03 | 1.4E-03 |
| Demeton | 008065-48-3 | | | | | | | | |
| Di(2-ethylhexyl)adipate | 000103-23-1 | 3.6E+00 | | | 1.1E-03 | 2.3E-04 | 5.0E+05 | 1.6E+00 | 5.0E-01 |
| Diallylate | 002303-16-4 | 1.4E-04 | | | 1.4E+01 | 2.9E+00 | 2.1E+00 | 1.3E-07 | 4.2E-08 |
| Diazinon | 000333-41-5 | 1.3E-02 | | | 2.4E-01 | 4.8E-02 | 4.5E+02 | 1.6E-04 | 5.0E-05 |
| Di(2,2,4,4-tetrafluoroethyl)anthracene ⁽²⁾ | 000053-70-3 | 2.7E+00 | | | | | | | |

Chemical-specific parameters used to calculate PRGs/nonradionuclides

Table 3.6b. (continued)

Chemical	CASRN	Permeability Constant (cm/hr) [Kp]	Volatilization Factor (m ³ /kg) [VF]	Soil Saturation Conc. (mg/kg) [CSAT]	Soil-to-Plant Uptake (B _s)	Soil-to-Wet Plant Uptake (B _w)	Bioaccumulation Factor for Fish (L/kg) [BF]	Biotransfer Factor for Beef (day/kg) [F _b]	Biotransfer Factor for Milk (day/kg) [F _m]
Dibromo-3-chloropropane, 1,2-	000096-12-8	4.8E-03			1.2E+00	2.4E-01	5.6E+01	1.0E-05	3.1E-06
Dibromobenzene, 1,4-	000106-37-6	3.5E-02			2.4E-01	4.8E-02	4.5E+02	1.6E-04	5.0E-05
Dibromochloromethane	000124-48-1	3.9E-03			2.0E+00	4.1E-01	2.8E+01	4.0E-06	1.3E-06
Dibromodichloromethane	000594-18-3								
Dibromodiphenyl Ether, p,p'-	002050-47-7								
Dibromoethane, 1,2-	000106-93-4	3.3E-03	1.3E+05	5.5E+03	2.6E+00	5.3E-01	1.9E+01	2.5E-06	7.9E-07
Dibromomethane (Methylene Bromide)	000074-95-3	1.2E-03			7.7E+00	1.6E+00	4.8E+00	4.0E-07	1.3E-07
Dibutyl Phthalate	000084-74-2	1.2E-01			5.5E-02	1.1E-02	3.1E+03	2.0E-03	6.3E-04
Dicamba	001918-00-9	1.2E-02			6.9E-01	1.4E-01	1.1E+02	2.5E-05	7.9E-06
Dichloro-2-butene, 1,4-	000764-41-0		1.3E+05	3.9E+03					
Dichloroacetic Acid									
Dichlorobenzene, 1,2-	000095-50-1	6.1E-02	1.6E+05	5.1E+02	4.1E-01	8.2E-02	2.3E+02	6.3E-05	2.0E-05
Dichlorobenzene, 1,3-	000541-73-1	8.7E-02			3.1E-01	6.3E-02	3.2E+02	1.0E-04	3.1E-05
Dichlorobenzene, 1,4-	000106-46-7	6.2E-02	4.0E+04	3.2E+01	4.1E-01	8.2E-02	2.3E+02	6.3E-05	2.0E-05
Dichlorobenzidine, 3,3'-	000091-94-1	1.7E-02			3.5E-01	7.2E-02	2.7E+02	7.9E-05	2.5E-05
Dichlorodifluoromethane	000075-71-8	1.2E-02	1.1E+03	1.0E+03	2.0E+00	4.1E-01	2.8E+01	4.0E-06	1.3E-06
Dichloroethane, 1,1-	000075-34-3	8.9E-03	1.1E+01	1.4E+05	3.4E+00	7.0E-01	1.4E+01	1.6E-06	5.0E-07

3-847

Table 3.6b. (continued)

Chemical	CASRN	Permeability Constant (cm/hr) [Kp]	Volatilization Factor (m ³ /kg) [VF]	Soil Saturation Conc. (mg/kg) [CSAT]	Soil-to-Plant Uptake (B _s)	Soil-to-Wet Plant Uptake (B _w)	Bioaccumulation Factor for Fish (L/kg) [BF]	Biotransfer Factor for Beef (day/kg) [F _b]	Biotransfer Factor for Milk (day/kg) [F _m]
Dichloroethane, 1,2-	000107-06-2	5.3E-03	2.1E+04	6.7E+02	5.1E+00	1.0E+00	8.1E+00	7.9E-07	2.5E-07
Dichloroethylene, 1,1-	000075-35-4	8.9E-03	6.3E+03	1.2E+03	3.4E+00	7.0E-01	1.4E+01	1.6E-06	5.0E-07
Dichloroethylene, 1,2- (Mixed Isomers)	000540-59-0	1.1E-03			2.0E+01	4.1E+00	1.4E+00	7.5E-08	2.4E-08
Dichloroethylene, 1,2-cis-	000156-59-2	1.0E-02			3.0E+00	6.1E-01	1.6E+01	2.0E-06	6.3E-07
Dichloroethylene, 1,2-trans-	000156-60-5	1.1E-03			2.0E+01	4.1E+00	1.4E+00	7.5E-08	2.4E-08
Dichlorophenol, 2,4-	000120-83-2	6.0E-02			7.9E-01	1.6E-01	9.4E+01	2.0E-05	6.3E-06
Dichlorophenoxy Acetic Acid, 2,4-	000094-75-7	5.1E-03			1.3E+00	2.7E-01	4.7E+01	7.9E-06	2.5E-06
Dichlorophenoxy)butyric Acid, 4-(2,4-	000094-82-6	4.5E-03			3.4E-01	6.9E-02	2.8E+02	8.5E-05	2.7E-05
Dichloropropane, 1,2-	000078-87-5	1.0E-02	2.4E+04	4.8E+02	2.6E+00	5.3E-01	1.9E+01	2.5E-06	7.9E-07
Dichloropropanol, 2,3-	000616-23-9								
Dichloropropene, 1,3-	000542-75-6	5.5E-03	8.2E+04	3.7E+03	4.5E+00	9.1E-01	9.7E+00	1.0E-06	3.1E-07
Dichlorvos	000062-73-7	9.5E-04			2.5E+00	5.1E-01	2.1E+01	2.7E-06	8.5E-07
Dicofol	000115-32-2	2.3E-01			1.1E-02	2.2E-03	2.5E+04	3.1E-02	9.9E-03
Dicyclopentadiene	000077-73-6	3.4E-02	1.4E+05	7.4E+02	8.0E-01	1.6E-01	9.3E+01	1.9E-05	6.1E-06
Dieldrin	000060-57-1	1.6E-02			8.2E-02	1.7E-02	1.8E+03	1.0E-03	3.1E-04
Diethyl Phthalate	000084-66-2	4.8E-03			1.3E+00	2.7E-01	4.7E+01	7.9E-06	2.5E-06
Diethyl-p-nitrophenylphosphate	000311-45-5								

3-848

Table 3.6b. (continued)

Chemical	CASRN	Permeability Constant (cm/hr) [Kp]	Volatilization Factor (m ³ /kg) [VF]	Soil Saturation Conc. (mg/kg) [CSAT]	Soil-to-Plant Uptake (B _p)	Soil-to-Wet Plant Uptake (B _w)	Bioaccumulation Factor for Fish (L/kg) [BF]	Biotransfer Factor for Beef (day/kg) [F _b]	Biotransfer Factor for Milk (day/kg) [F _m]
Diethylene Glycol Dinitrate (DEGDN)	000693-21-0								
Diethylene Glycol Monobutyl Ether	000112-34-5	4.4E-05			1.3E+02	2.6E+01	1.2E-01	3.0E-09	9.5E-10
Diethylene Glycol Monoethyl Ether	000111-90-0	2.5E-04			4.2E+01	8.6E+00	5.1E-01	2.1E-08	6.6E-09
Diethylformamide	000617-84-5								
Diethylstilbesterol	000056-53-1	3.5E-01			2.5E-02	5.0E-03	8.9E+03	7.9E-03	2.5E-03
Difenzoquat	043222-48-6								
Diflubenzuron	035367-38-5								
Difluoroethane, 1,1-	000075-37-6	2.6E-03			1.4E+01	2.8E+00	2.2E+00	1.4E-07	4.4E-08
Diisopropyl Methylphosphonate	001445-75-6	8.2E-04			9.6E+00	1.9E+00	3.6E+00	2.7E-07	8.5E-08
Dimethipin	055290-64-7								
Dimethoate	000060-51-5	6.3E-03			1.0E+00	2.1E-01	6.6E+01	1.3E-05	4.0E-06
Dimethoxybenzidine, 3,3'-	000119-90-4	1.0E-03			3.4E+00	7.0E-01	1.4E+01	1.6E-06	5.0E-07
Dimethyl Sulfate	000077-78-1	2.2E-03			7.7E+00	1.6E+00	4.8E+00	4.0E-07	1.3E-07
Dimethylaniline HCl, 2,4-	021436-96-4								
Dimethylaniline, 2,4-	000095-68-1								
Dimethylaniline, N,N-	000121-69-7	2.4E-02			1.2E+00	2.4E-01	5.6E+01	1.0E-05	3.1E-06
Dimethylbenzidine, 3,3'-	000119-93-7	4.4E-03			1.8E+00	3.6E-01	3.3E+01	5.0E-06	1.6E-06

3-849

Table 3.6b. (continued)

| Chemical | CASRN | Permeability Constant
[Kp]
(cm/hr) | Volatilization Factor
[VF]
(m ² /kg) | Soil Saturation Conc.
[CSAT]
(mg/kg) | Soil-to-Plant Uptake
[B]
(B _s) | Soil-to-Wet Plant Uptake
[B _w]
(B _w) | Bioaccumulation Factor for Fish
[BF]
(L/kg) | Biotransfer Factor for Beef
[F _b]
(day/kg) | Biotransfer Factor for Milk
[F _m]
(day/kg) |
|-----------------------------------|-------------|--|---|--|--|--|---|--|--|
| Dimethylethyl Lead | 107584-40-7 | | | | | | | | |
| Dimethylformamide | 000068-12-2 | 1.3E-04 | | | 1.4E+02 | 2.9E+01 | 1.0E-01 | 2.5E-09 | 7.9E-10 |
| Dimethylhydrazine, 1,1- | 000057-14-7 | | | | | | | | |
| Dimethylhydrazine, 1,2- | 000540-73-8 | | | | | | | | |
| Dimethylphenol, 2,4- | 000105-67-9 | 1.1E-01 | | | 1.8E+00 | 3.6E-01 | 3.3E+01 | 5.0E-06 | 1.6E-06 |
| Dimethylphenol, 2,6- | 000576-26-1 | 1.6E-02 | | | 1.6E+00 | 3.3E-01 | 3.7E+01 | 5.7E-06 | 1.8E-06 |
| Dimethylphenol, 3,4- | 000095-65-8 | 4.0E-02 | | | 2.0E+00 | 4.1E-01 | 2.8E+01 | 4.0E-06 | 1.3E-06 |
| Dimethylphthalate | 000131-11-3 | 1.6E-03 | | | 4.5E+00 | 9.1E-01 | 9.7E+00 | 1.0E-06 | 3.1E-07 |
| Dimethylterephthalate | 000120-61-6 | | | | 6.9E-01 | 1.4E-01 | 1.1E+02 | 2.5E-05 | 7.9E-06 |
| Dinitro-o-cresol, 4,6- | 000534-52-1 | 9.8E-03 | | | 1.0E+00 | 2.1E-01 | 6.6E+01 | 1.3E-05 | 4.0E-06 |
| Dinitro-o-cyclohexyl Phenol, 4,6- | 000131-89-5 | 5.5E-07 | | | 1.4E+03 | 2.8E+02 | 5.2E-03 | 5.0E-11 | 1.6E-11 |
| Dinitrobenzene, 1,2- | 000528-29-0 | 2.5E-03 | | | 4.5E+00 | 9.1E-01 | 9.7E+00 | 1.0E-06 | 3.1E-07 |
| Dinitrobenzene, 1,3- | 000099-65-0 | 2.4E-03 | | | 4.5E+00 | 9.1E-01 | 9.7E+00 | 1.0E-06 | 3.1E-07 |
| Dinitrobenzene, 1,4- | 000100-25-4 | 2.1E-03 | | | 5.1E+00 | 1.0E+00 | 8.1E+00 | 7.9E-07 | 2.5E-07 |
| Dinitrophenol, 2,4- | 000051-28-5 | 3.2E-03 | | | 5.1E+00 | 1.0E+00 | 8.1E+00 | 7.9E-07 | 2.5E-07 |
| Dinitrotoluene, 2,4- | 000121-14-2 | 3.8E-03 | | | 2.6E+00 | 5.3E-01 | 1.9E+01 | 2.5E-06 | 7.9E-07 |
| Dinitrotoluene, 2,6- | 000606-20-2 | 2.5E-03 | | | 3.9E+00 | 8.0E-01 | 1.2E+01 | 1.3E-06 | 4.0E-07 |

Chemical-specific parameters used to calculate PRGs/nonradionuclides

Table 3.6b. (continued)

| Chemical | CASRN | Permeability Constant
(cm/hr)
[Kp] | Volatilization Factor
(m ² /kg)
[VF] | Soil Saturation Conc.
(mg/kg)
[CSAT] | Soil-to-Plant Uptake
(B _s) | Soil-to-Wet Plant Uptake
(B _w) | Bioaccumulation Factor for Fish
(L/kg)
[BF] | Biotransfer Factor for Beef
(day/kg)
[F _b] | Biotransfer Factor for Milk
(day/kg)
[F _m] |
|------------------------------|-------------|--|---|--|---|---|---|--|--|
| Dinitrotoluene, 2-Amino-4,6- | 035572-78-2 | | | | | | | | |
| Dinoseb | 000088-85-7 | 2.8E-02 | | | 2.7E-01 | 5.5E-02 | 3.8E+02 | 1.3E-04 | 4.0E-05 |
| Dioxane, 1,4- | 000123-91-1 | 4.0E-04 | | | 5.4E+01 | 1.1E+01 | 3.7E-01 | 1.3E-08 | 4.2E-09 |
| Diphenamid | 000957-51-7 | 2.3E-03 | | | 2.1E+00 | 4.2E-01 | 2.6E+01 | 3.7E-06 | 1.2E-06 |
| Diphenylamine | 000122-39-4 | 5.4E-02 | | | 3.5E-01 | 7.2E-02 | 2.7E+02 | 7.9E-05 | 2.5E-05 |
| Diphenylhydrazine, 1,2- | 000122-66-7 | 1.8E-02 | | | 7.9E-01 | 1.6E-01 | 9.4E+01 | 2.0E-05 | 6.3E-06 |
| Diquat | 000085-00-7 | 1.0E-07 | | | 2.2E+03 | 4.5E+02 | 2.8E-03 | 2.2E-11 | 7.0E-12 |
| Direct Black 38 | 001937-37-7 | | | | | | | | |
| Direct Blue 6 | 002602-46-2 | | | | | | | | |
| Direct Brown 95 | 016071-86-6 | | | | | | | | |
| Direct Sky Blue | 002610-05-1 | | | | | | | | |
| Disulfoton | 000298-04-4 | 2.8E-02 | | | 1.8E-01 | 3.7E-02 | 6.5E+02 | 2.5E-04 | 7.9E-05 |
| Diuron | 000330-54-1 | 6.0E-03 | | | 1.0E+00 | 2.1E-01 | 6.6E+01 | 1.3E-05 | 4.0E-06 |
| Dodine | 002439-10-3 | | | | | | | | |
| EPTC | 000759-94-4 | | | | | | | | |
| Endosulfan | 000115-29-7 | | | | | | | | |
| Endothall | 000145-73-3 | | | | | | | | |

Chemical-specific parameters used to calculate PRGs/nonradionuclides

Table 3.6b. (continued)

Chemical	CASRN	Permeability Constant (cm/hr) [Kp]	Volatilization Factor (m ³ /kg) [VF]	Soil Saturation Conc. (mg/kg) [CSAT]	Soil-to-Plant Uptake (B _v)	Soil-to-Wet Plant Uptake (B _w)	Bioaccumulation Factor for Fish (L/kg) [BF]	Biotransfer Factor for Beef (day/kg) [F _b]	Biotransfer Factor for Milk (day/kg) [F _m]
Endrin	000072-20-8	1.6E-02			8.2E-02	1.7E-02	1.8E+03	1.0E-03	3.1E-04
Epichlorohydrin	000106-89-8	3.7E-04	9.5E+04	3.2E+03	5.0E+01	1.0E+01	4.1E-01	1.5E-08	4.9E-09
Epoxybutane, 1,2-	000106-88-7								
Ethephon	016672-87-0								
Ethion	000563-12-2	3.4E-02			4.3E-02	8.8E-03	4.2E+03	3.0E-03	9.3E-04
Ethoxyethanol Acetate, 2-	000111-15-9	8.6E-04			1.6E+01	3.2E+00	1.8E+00	1.1E-07	3.5E-08
Ethoxyethanol, 2-	000110-80-5	3.0E-04			4.3E+01	8.8E+00	4.9E-01	2.0E-08	6.3E-09
Ethyl Acetate	000141-78-6	2.1E-03			1.3E+01	2.6E+00	2.4E+00	1.6E-07	5.1E-08
Ethyl Acrylate	000140-88-5	4.0E-03			6.7E+00	1.4E+00	5.7E+00	5.0E-07	1.6E-07
Ethyl Chloride	000075-00-3	8.0E-03	1.9E+03	1.5E+02	5.9E+00	1.2E+00	6.8E+00	6.3E-07	2.0E-07
Ethyl Ether	000060-29-7	1.7E-02			1.2E+01	2.3E+00	2.8E+00	1.9E-07	6.1E-08
Ethyl Methacrylate	000097-63-2	8.6E-03			3.0E+00	6.1E-01	1.6E+01	2.0E-06	6.3E-07
Ethyl-p-nitrophenyl Phosphonate	002104-64-5	1.0E-02			2.4E-01	4.8E-02	4.5E+02	1.6E-04	5.0E-05
Ethylbenzene	000100-41-4	7.4E-02	2.1E+04	4.7E-01	6.1E-01	1.2E-01	1.3E+02	3.1E-05	9.9E-06
Ethylene Cyanohydrin	000109-78-4	6.0E-05			2.8E+02	5.7E+01	4.3E-02	7.9E-10	2.5E-10
Ethylene Diamine	000107-15-3	8.9E-04			3.6E+01	7.2E+00	6.4E-01	2.8E-08	8.9E-09
Ethylene Glycol	000107-21-1	3.6E-05			4.8E+02	9.7E+01	2.1E-02	3.1E-10	9.9E-11

Table 3.6b. (continued)

Chemical	CASRN	Permeability Constant (cm/hr) [Kp]	Volatilization Factor (m ² /kg) [VF]	Soil Saturation Conc. (mg/kg) [CSAT]	Soil-to-Plant Uptake (B _s)	Soil-to-Wet Plant Uptake (B _w)	Bioaccumulation Factor for Fish (L/kg) [BF]	Biotransfer Factor for Beef (day/kg) [F _B]	Biotransfer Factor for Milk (day/kg) [F _M]
Ethylene Glycol Monobutyl Ether	000111-76-2	1.2E-02			1.3E+01	2.5E+00	2.5E+00	1.7E-07	5.3E-08
Ethylene Oxide	000075-21-8	6.3E-04	2.0E+04	2.9E+04	5.7E+01	1.1E+01	3.5E-01	1.3E-08	4.0E-09
Ethylene Thiourea	000096-45-7	1.7E-04			9.2E+01	1.9E+01	1.9E-01	5.5E-09	1.7E-09
Ethylphthalyl Ethyl Glycolate	000084-72-0								
Express	101200-48-0								
Fenamiphos	022224-92-6								
Fenpropathrin	039515-41-8								
Fluometuron	002164-17-2	3.7E-03			1.5E+00	3.1E-01	3.9E+01	6.3E-06	2.0E-06
Fluoranthene	000206-44-0	3.6E-01			5.5E-02	1.1E-02	3.1E+03	2.0E-03	6.3E-04
Fluorene	000086-73-7	2.5E-01			1.1E-01	2.2E-02	1.3E+03	6.3E-04	2.0E-04
Fluoride	007782-41-4	1.0E-03							
Fluridone	059756-60-4								
Flurprimidol	056425-91-3								
Flutolanil	066332-96-5								
Fluvalinate	069409-94-5								
Folpet	000133-07-3	4.7E-03			6.1E-01	1.2E-01	1.3E+02	3.1E-05	9.9E-06
Fomesafen	072178-02-0								

3853

Table 3.6b. (continued)

Chemical	CASRN	Permeability Constant (cm/hr) [Kp]	Volatilization Factor (m ³ /kg) [VF]	Soil Saturation Conc. (mg/kg) [CSAT]	Soil-to-Plant Uptake (B _s)	Soil-to-Wet Plant Uptake (B _w)	Bioaccumulation Factor for Fish (L/kg) [BF]	Biotransfer Factor for Beef (day/kg) [F _B]	Biotransfer Factor for Milk (day/kg) [F _M]
Fonofos	000944-22-9	3.8E-02			2.0E-01	4.0E-02	5.8E+02	2.2E-04	6.9E-05
Formaldehyde	000050-00-0	2.2E-03			3.8E+01	7.7E+00	5.9E-01	2.5E-08	7.9E-09
Formic Acid	000064-18-6	4.1E-04			7.8E+01	1.6E+01	2.3E-01	7.2E-09	2.3E-09
Fosetyl-AL	039148-24-8								
Furan	000110-00-9	6.1E-03			6.7E+00	1.4E+00	5.7E+00	5.0E-07	1.6E-07
Furazolidone	000067-45-8	2.5E-04			1.5E+01	3.1E+00	1.9E+00	1.2E-07	3.8E-08
Furfural	000098-01-1	1.1E-01			3.5E-01	7.2E-02	2.7E+02	7.9E-05	2.5E-05
Furium	000531-82-8								
Furmecyclox	060568-05-0								
Glufosinate, Ammonium	077182-82-2								
Glycidyl	000765-34-4	2.1E-04			1.0E+02	2.0E+01	1.6E-01	4.7E-09	1.5E-09
Glyphosate	001071-83-6	1.3E-06			2.1E+03	4.2E+02	3.1E-03	2.5E-11	7.9E-12
Goal	042874-03-3								
Haloxypop, Methyl	069806-40-2								
Harmony	079277-27-3								
Heptachlor	000076-44-8	1.1E-02			1.2E-01	2.5E-02	1.1E+03	5.0E-04	1.6E-04
Heptachlor Epoxide	001024-57-3	5.5E-02			2.8E-02	5.7E-03	7.5E+03	6.3E-03	2.0E-03

Table 3.6b. (continued)

Chemical	CASRN	Permeability Constant (cm/hr) [Kp]	Volatilization Factor (m ³ /kg) [VF]	Soil Saturation Conc. (mg/kg) [CSAT]	Soil-to-Plant Uptake (B _s)	Soil-to-Wet Plant Uptake (B _w)	Bioaccumulation Factor for Fish (L/kg) [BF]	Biotransfer Factor for Beef (day/kg) [F _B]	Biotransfer Factor for Milk (day/kg) [F _M]
Heptane, N-	000142-82-5	1.0E+00			7.1E-02	1.4E-02	2.2E+03	1.3E-03	4.0E-04
Hexabromobenzene	000087-82-1	1.7E-02			1.1E-02	2.3E-03	2.4E+04	2.9E-02	9.3E-03
Hexachlorobenzene	000118-74-1	2.1E-01			3.2E-02	6.5E-03	6.3E+03	5.0E-03	1.6E-03
Hexachlorobutadiene	000087-68-3	1.2E-01			6.2E-02	1.3E-02	2.6E+03	1.6E-03	5.0E-04
Hexachlorocyclohexane, Alpha-	000319-84-6	1.9E-02			2.1E-01	4.2E-02	5.4E+02	2.0E-04	6.3E-05
Hexachlorocyclohexane, Beta-	000319-85-7	2.2E-02			1.8E-01	3.7E-02	6.5E+02	2.5E-04	7.9E-05
Hexachlorocyclohexane, Delta-	000319-86-8	3.1E-03			9.0E-01	1.8E-01	7.9E+01	1.6E-05	5.0E-06
Hexachlorocyclohexane, Epsilon	006108-10-7								
Hexachlorocyclohexane, Gamma-	000058-89-9	1.4E-02			2.7E-01	5.5E-02	3.8E+02	1.3E-04	4.0E-05
Hexachlorocyclohexane, Technical	000608-73-1								
Hexachlorocyclopentadiene	000077-47-4	2.9E-02			1.8E-01	3.7E-02	6.5E+02	2.5E-04	7.9E-05
Hexachlorodibenzo-p-dioxin, Mixture	019408-74-3	4.5E-01			4.9E-03	1.0E-03	7.3E+04	1.3E-01	4.0E-02
Hexachloroethane	000067-72-1	4.2E-02			2.1E-01	4.2E-02	5.4E+02	2.0E-04	6.3E-05
Hexachlorophene	000070-30-4	1.3E+00			1.7E-03	3.4E-04	3.0E+05	7.9E-01	2.5E-01
Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	000121-82-4	1.9E-02			4.6E-01	9.4E-02	1.9E+02	5.0E-05	1.6E-05
Hexamethylene Diisocyanate, 1,6-	000822-06-0								
Hexane, N-	000110-54-3	3.3E-01	6.1E+03	9.1E+01	2.1E-01	4.2E-02	5.4E+02	2.0E-04	6.3E-05

Table 3.6b. (continued)

Chemical	CASRN	Permeability Constant (cm/hr) [Kp]	Volatilization Factor (m ³ /kg) [VF]	Soil Saturation Conc. (mg/kg) [CSAT]	Soil-to-Plant Uptake (B.)	Soil-to-Wet Plant Uptake (B _w)	Bioaccumulation Factor for Fish (L/kg) [BF]	Biotransfer Factor for Beef (day/kg) [F _b]	Biotransfer Factor for Milk (day/kg) [F _m]
Hexanone, 2-	000591-78-6	4.6E-03			5.9E+00	1.2E+00	6.8E+00	6.3E-07	2.0E-07
Hexazinone	051235-04-2	4.1E-08			1.4E+04	2.7E+03	2.7E-04	1.0E-12	3.1E-13
HpCDD, 2,3,7,8-(³)	037871-00-4								
HpCDF, 2,3,7,8-(³)	038998-75-3								
HxCDD, 2,3,7,8-(³)	034465-46-8								
HxCDF, 2,3,7,8-(³)	055684-94-1								
Hydrazine	000302-01-2	4.1E-05			6.3E+02	1.3E+02	1.5E-02	2.0E-10	6.3E-11
Hydrazine Sulfate	010034-93-2	4.1E-05			6.3E+02	1.3E+02	1.5E-02	2.0E-10	6.3E-11
Hydrogen Chloride	007647-01-0	1.0E-03							
Hydrogen Cyanide	000074-90-8	2.4E-03			2.3E+01	4.6E+00	1.1E+00	6.0E-08	1.9E-08
Hydrogen Sulfide	007783-06-4	5.6E-03			1.1E+01	2.2E+00	3.1E+00	2.2E-07	7.0E-08
Hydroquinone	000123-31-9	1.0E-03			1.8E+01	3.7E+00	1.5E+00	8.9E-08	2.8E-08
Imazalil	035554-44-0								
Imazaquin	081335-37-7								
Indeno[1,2,3-cd]pyrene(²)	000193-39-5	1.9E+00			5.6E-03	1.1E-03	6.1E+04	1.0E-01	3.1E-02
Iprodione	036734-19-7								
Iron	007439-89-6	1.0E-03			1.0E-02	4.0E-04	2.0E+02	2.0E-02	3.0E-05

3-856

Table 3.6b. (continued)

Chemical	CASRN	Permeability Constant (cm/hr) [Kp]	Volatilization Factor (m ³ /kg) [VF]	Soil Saturation Conc. (mg/kg) [CSAT]	Soil-to-Plant Uptake (B _s)	Soil-to-Wet Plant Uptake (B _w)	Bioaccumulation Factor for Fish (L/kg) [BF]	Biotransfer Factor for Beef (day/kg) [F _b]	Biotransfer Factor for Milk (day/kg) [F _m]
Isobutyl Alcohol	000078-83-1	2.6E-03			1.3E+01	2.5E+00	2.5E+00	1.7E-07	5.3E-08
Isophorone	000078-59-1	4.4E-03			3.9E+00	8.0E-01	1.2E+01	1.3E-06	4.0E-07
Isopropalin	033820-53-0								
Isopropanol	000067-63-0	8.9E-04			3.6E+01	7.2E+00	6.4E-01	2.8E-08	8.8E-09
Isopropyl Methyl Phosphonic Acid	001832-54-8								
Isoxaben	082558-50-7								
Karate	091465-08-6								
Kerb	023950-58-5								
Lactofen	077501-63-4								
Lead Alkyls	NA								
Lead And Compounds	007439-92-1	1.0E-03			9.0E-02	7.6E-04	3.0E+02	4.0E-04	3.0E-04
Linuron	000330-55-2								
Lithium	007439-93-2	1.0E-03			2.5E-02	6.3E-03		1.0E-02	2.0E-02
Londax	083055-99-6								
MCPA	000094-74-6	4.9E-03			1.8E+00	3.6E-01	3.3E+01	5.0E-06	1.6E-06
MCPB	000094-81-5								
MCPP	000093-65-2	6.6E-03			1.2E+00	2.4E-01	5.6E+01	1.0E-05	3.1E-06

Table 3.6b. (continued)

Chemical	CASRN	Permeability Constant (cm/hr) [Kp]	Volatilization Factor (m ³ /kg) [VF]	Soil Saturation Conc. (mg/kg) [CSAT]	Soil-to-Plant Uptake (B _c)	Soil-to-Wet Plant Uptake (B _w)	Bioaccumulation Factor for Fish (L/kg) [BF]	Biotransfer Factor for Beef (day/kg) [F _B]	Biotransfer Factor for Milk (day/kg) [F _M]
Magnesium	007439-95-4	1.0E-03			1.0E+00	2.5E-01		5.0E-03	4.0E-03
Malathion	000121-75-5	2.1E-03			7.9E-01	1.6E-01	9.4E+01	2.0E-05	6.3E-06
Maleic Anhydride	000108-31-6								
Maleic Hydrazide	000123-33-1	2.1E-04			6.5E+01	1.3E+01	2.9E-01	1.0E-08	3.1E-09
Malononitrile	000109-77-3	8.0E-04			3.6E+01	7.3E+00	6.3E-01	2.7E-08	8.7E-09
Mancozeb	008018-01-7								
Maneb	012427-38-2	4.6E-05			3.8E+01	7.7E+00	5.9E-01	2.5E-08	7.9E-09
Manganese (Diet)	007439-96-5	1.0E-03			6.8E-01	6.9E-02	4.0E+02	5.0E-04	3.0E-05
Manganese (Water)	007439-96-5	1.0E-03			6.8E-01	6.9E-02	4.0E+02	5.0E-04	3.0E-05
Mephosfolan	000950-10-7								
Mepiquat Chloride	024307-26-4								
Mercuric Chloride	007487-94-7	1.0E-03							
Mercury (elemental)	007439-97-6	1.0E-03			1.0E+00	3.0E-01	1.0E+03	1.0E-02	4.7E-04
Mercury, Inorganic Salt	007439-97-6	1.0E-03			1.0E+00	3.0E-01	1.0E+03	1.0E-02	4.7E-04
Merphos	000150-50-5								
Merphos Oxide	000078-48-8	2.6E-01			1.9E-02	3.8E-03	1.3E+04	1.3E-02	4.0E-03
Metalaxyl	057837-19-1								

3-858

Table 3.6b. (continued)

Chemical	CASRN	Permeability Constant (cm/hr) [Kp]	Volatilization Factor (m ³ /kg) [VF]	Soil Saturation Conc. (mg/kg) [CSAT]	Soil-to-Plant Uptake (B _s)	Soil-to-Wet Plant Uptake (B _w)	Bioaccumulation Factor for Fish (L/kg) [BF]	Biotransfer Factor for Beef (day/kg) [F _B]	Biotransfer Factor for Milk (day/kg) [F _M]
Methacrylonitrile	000126-98-7	1.8E-03	1.1E+05	1.2E+04	1.8E+01	3.7E+00	1.5E+00	8.7E-08	2.7E-08
Methamidophos	010265-92-6	8.9E-05			9.2E+01	1.9E+01	1.9E-01	5.5E-09	1.7E-09
Methanol	000067-56-1	1.6E-03			1.1E+02	2.2E+01	1.5E-01	4.2E-09	1.3E-09
Methidathion	000950-37-8								
Methomyl	016752-77-5	5.2E-04			1.7E+01	3.5E+00	1.7E+00	1.0E-07	3.1E-08
Methoxy-5-nitroaniline, 2-	000099-59-2	2.5E-03			5.1E+00	1.0E+00	8.1E+00	7.9E-07	2.5E-07
Methoxychlor	000072-43-5	2.0E-02			1.1E-01	2.2E-02	1.3E+03	6.3E-04	2.0E-04
Methoxyethanol Acetate, 2-	000110-49-6								
Methoxyethanol, 2-	000109-86-4	1.9E-04			1.1E+02	2.2E+01	1.5E-01	4.2E-09	1.3E-09
Methyl Acetate	000079-20-9	9.0E-04			3.0E+01	6.1E+00	8.1E-01	3.8E-08	1.2E-08
Methyl Acrylate	000096-33-3	1.7E-03			1.6E+01	3.1E+00	1.9E+00	1.2E-07	3.7E-08
Methyl Ethyl Ketone	000078-93-3	1.1E-03	2.5E+04	9.2E+03	2.6E+01	5.4E+00	9.4E-01	4.7E-08	1.5E-08
Methyl Isobutyl Ketone	000108-10-1	3.3E-03	6.5E+04	7.0E+02	7.7E+00	1.6E+00	4.8E+00	4.0E-07	1.3E-07
Methyl Mercury	022967-92-6								
Methyl Methacrylate	000080-62-6	3.9E-03			6.7E+00	1.4E+00	5.7E+00	5.0E-07	1.6E-07
Methyl Parathion	000298-00-0	1.1E-03			3.0E+00	6.1E-01	1.6E+01	2.0E-06	6.3E-07
Methyl Styrene (Mixed Isomers)	025013-15-4	8.7E-02			4.3E-01	8.8E-02	2.1E+02	5.6E-05	1.8E-05

Table 3.6b. (continued)

Chemical	CASRN	Permeability Constant (cm/hr) [Kp]	Volatilization Factor (m ³ /kg) [VF]	Soil Saturation Conc. (mg/kg) [CSAT]	Soil-to-Plant Uptake (B _r)	Soil-to-Wet Plant Uptake (B _w)	Bioaccumulation Factor for Fish (L/kg) [BF]	Biotransfer Factor for Beef (day/kg) [F _B]	Biotransfer Factor for Milk (day/kg) [F _m]
Methyl hydrazine	000060-34-4								
Methyl tert-Butyl Ether (MTBE)	001634-04-4								
Methyl-5-Nitroaniline, 2-	000099-55-8	5.9E-03			2.6E+00	5.3E-01	1.9E+01	2.5E-06	7.9E-07
Methylaniline Hydrochloride, 2-	000636-21-5	2.1E-03			3.8E+01	7.7E+00	5.9E-01	2.5E-08	7.9E-09
Methylcyclohexane	000108-87-2	5.1E-02	1.8E+04	2.4E+02	8.3E-01	1.7E-01	8.8E+01	1.8E-05	5.7E-06
Methylene Chloride	000075-09-2	4.5E-03	9.3E+03	1.0E+03	6.7E+00	1.4E+00	5.7E+00	5.0E-07	1.6E-07
Methylene-bis(2-chloroaniline), 4,4'-	000101-14-4	2.8E-02			2.1E-01	4.2E-02	5.4E+02	2.0E-04	6.3E-05
Methylene-bis(N,N-dimethyl) Aniline, 4,4'-	000101-61-1	1.3E-01			6.2E-02	1.3E-02	2.6E+03	1.6E-03	5.0E-04
Methylenebisbenzenamine, 4,4'-	000101-77-9	1.6E-03			4.5E+00	9.1E-01	9.7E+00	1.0E-06	3.1E-07
Methylenediphenyl Isocyanate, 4,4'-	000101-68-8								
Methylstyrene, Alpha-	000098-83-9	8.7E-02			4.3E-01	8.8E-02	2.1E+02	5.6E-05	1.8E-05
Methyltriethyl Lead	001762-28-3								
Metolachlor	051218-45-2								
Metribuzin	021087-64-9	1.5E-03			3.9E+00	8.0E-01	1.2E+01	1.3E-06	4.0E-07
Mirex	002385-85-5	5.0E-03			3.3E-02	6.7E-03	6.1E+03	4.8E-03	1.5E-03
Molinate	002212-67-1	4.4E-02			3.4E-01	6.9E-02	2.8E+02	8.5E-05	2.7E-05
Molybdenum	007439-98-7	1.0E-03			4.0E-01	8.0E-02	1.0E+01	1.0E-03	1.7E-03

3-860

Table 3.6b. (continued)

Chemical	CASRN	Permeability Constant (cm/hr) [Kp]	Volatilization Factor (m ³ /kg) [VF]	Soil Saturation Conc. (mg/kg) [CSAT]	Soil-to-Plant Uptake (B _i)	Soil-to-Wet Plant Uptake (B _w)	Bioaccumulation Factor for Fish (L/kg) [BF]	Biotransfer Factor for Beef (day/kg) [F _b]	Biotransfer Factor for Milk (day/kg) [F _m]
Monochloramine	010599-90-3								
Monochlorobutanes	025154-42-1								
Naled	000300-76-5	8.8E-04			9.0E-01	1.8E-01	7.9E+01	1.6E-05	5.0E-06
Naphthalene	000091-20-3	6.9E-02			4.6E-01	9.4E-02	1.9E+02	5.0E-05	1.6E-05
Naphthalene, 1-Methyl	000090-12-0								
Naphthalene, 2-Methyl	000091-57-6	1.5E-01			2.1E-01	4.2E-02	5.4E+02	2.0E-04	6.3E-05
Napropamide	015299-99-7	1.2E-04			1.6E+01	3.2E+00	1.9E+00	1.1E-07	3.6E-08
Niagara Blue 4B	002429-74-5								
Nickel Carbonyl	013463-39-3								
Nickel Refinery Dust	NA	1.0E-03							
Nickel Soluble Salts	007440-02-0	1.0E-03			1.8E-01	5.0E-02	1.0E+02	5.0E-03	1.6E-02
Nickel Subsulfide	012035-72-2	1.0E-03							
Nitrapyrin	001929-82-4	1.0E-02			6.9E-01	1.4E-01	1.1E+02	2.5E-05	7.9E-06
Nitrate	014797-55-8	1.0E-03							
Nitric Oxide	010102-43-9	1.0E-03							
Nitrite	014797-65-0	1.0E-03							
Nitroaniline, 2-	000088-74-4	5.2E-03	7.0E+04	9.6E+01	3.4E+00	7.0E-01	1.4E+01	1.6E-06	5.0E-07

Table 3.6b. (continued)

Chemical	CASRN	Permeability Constant (cm/hr) [Kp]	Volatilization Factor (m ³ /kg) [VF]	Soil Saturation Conc. (mg/kg) [CSAT]	Soil-to-Plant Uptake (B _s)	Soil-to-Wet Plant Uptake (B _w)	Bioaccumulation Factor for Fish (L/kg) [BF]	Biotransfer Factor for Beef (day/kg) [F _B]	Biotransfer Factor for Milk (day/kg) [F _M]
Nitrobenzene	000098-95-3	6.9E-03	4.1E+03	3.2E+02	3.4E+00	7.0E-01	1.4E+01	1.6E-06	5.0E-07
Nitrofurantoin	000067-20-9								
Nitrofurazone	000059-87-0								
Nitrogen Dioxide	010102-44-0	1.0E-03							
Nitroguanidine	000556-88-7								
Nitrophenol, 4-	000100-02-7	6.0E-03			3.0E+00	6.1E-01	1.6E+01	2.0E-06	6.3E-07
Nitropropane, 2-	000079-46-9	1.0E-03	9.2E+04	1.5E+04	1.8E+01	3.7E+00	1.5E+00	8.9E-08	2.8E-08
Nitroso-N-ethylurea, N-	000759-73-9	5.4E-04			2.8E+01	5.7E+00	8.8E-01	4.2E-08	1.3E-08
Nitroso-N-methylurea, N-	000684-93-5	4.3E-04			4.0E+01	8.0E+00	5.6E-01	2.3E-08	7.4E-09
Nitroso-di-N-butylamine, N-	000924-16-3	4.8E-03	3.9E+05	1.5E+03	3.0E+00	6.1E-01	1.6E+01	2.0E-06	6.3E-07
Nitroso-di-N-propylamine, N-	000621-64-7	2.8E-03			5.9E+00	1.2E+00	6.8E+00	6.3E-07	2.0E-07
Nitrosodiethanolamine, N-	001116-54-7	5.0E-06			3.2E+02	6.5E+01	3.6E-02	6.3E-10	2.0E-10
Nitrosodiethylamine, N-	000055-18-5	1.2E-03			2.0E+01	4.1E+00	1.4E+00	7.5E-08	2.4E-08
Nitrosodimethylamine, N-	000062-75-9	2.7E-04			8.1E+01	1.6E+01	2.2E-01	6.7E-09	2.1E-09
Nitrosodiphenylamine, N-	000086-30-6	2.0E-02			6.1E-01	1.2E-01	1.3E+02	3.1E-05	9.9E-06
Nitrosomethylethylamine, N-	010595-95-6								
Nitrosomethylvinylamine, N-	004549-40-0	5.7E-04			3.8E+01	7.7E+00	5.9E-01	2.5E-08	7.9E-09

3-862

Table 3.6b. (continued)

Chemical	CASRN	Permeability Constant (cm/hr) [Kp]	Volatilization Factor (m ³ /kg) [VF]	Soil Saturation Conc. (mg/kg) [CSAT]	Soil-to-Plant Uptake (B _s)	Soil-to-Wet Plant Uptake (B _w)	Bioaccumulation Factor for Fish (L/kg) [BF]	Biotransfer Factor for Beef (day/kg) [F _b]	Biotransfer Factor for Milk (day/kg) [F _m]
Nitrosopyrrolidine, N-	000930-55-2	7.7E-05			1.7E+02	3.3E+01	8.6E-02	2.0E-09	6.3E-10
Nitrotoluene, 4-Amino-2-	000119-32-4								
Nitrotoluene, m-	000099-08-1	1.4E-02			1.5E+00	3.1E-01	3.9E+01	6.3E-06	2.0E-06
Nitrotoluene, o-	000088-72-2	1.2E-02			1.8E+00	3.6E-01	3.3E+01	5.0E-06	1.6E-06
Nitrotoluene, p-	000099-99-0	1.4E-02			1.5E+00	3.1E-01	3.9E+01	6.3E-06	2.0E-06
Norflurazon	027314-13-2								
Nustar	085509-19-9								
OCDD ⁽³⁾	003268-87-9				3.1E-04	6.2E-05	2.8E+06	1.5E+01	4.8E+00
OCDF ⁽³⁾	039001-02-0								
Octabromodiphenyl Ether	032536-52-0								
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetra (HMX)	002691-41-0	7.8E-05			1.7E+01	3.5E+00	1.7E+00	9.7E-08	3.1E-08
Octamethylpyrophosphoramide	000152-16-9								
Octyl Phthalate, di-N-	000117-84-0	2.7E+01			1.8E-04	3.6E-05	5.8E+06	4.0E+01	1.3E+01
Oryzalin	019044-88-3								
Oxadiazon	019666-30-9								
Oxamyl	023135-22-0								
Paclobutrazol	076738-62-0								

3-863

Table 3.6b. (continued)

Chemical	CASRN	Permeability Constant (cm/hr) [Kp]	Volatilization Factor (m ³ /kg) [VF]	Soil Saturation Conc. (mg/kg) [CSAT]	Soil-to-Plant Uptake (B _p)	Soil-to-Wet Plant Uptake (B _w)	Bioaccumulation Factor for Fish (L/kg) [BF]	Biotransfer Factor for Beef (day/kg) [F _b]	Biotransfer Factor for Milk (day/kg) [F _m]
Paraquat	001910-42-5	1.4E-07			1.1E+04	2.2E+03	3.7E-04	1.5E-12	4.8E-13
Parathion	000056-38-2	1.7E-02			2.4E-01	4.8E-02	4.5E+02	1.6E-04	5.0E-05
PeCDD, 2,3,7,8-(3)	036088-22-9				6.5E-03	1.3E-03	5.1E+04	7.9E-02	2.5E-02
PeCDF, 1,2,3,7,8-(3)	057117-41-6								
PeCDF, 2,3,4,7,8-(3)	057117-31-4								
Pebulate	001114-71-2								
Pendimethalin	040487-42-1								
Pentabromodiphenyl Ether	032534-81-9								
Pentachlorobenzene	000608-93-5	2.8E-01			3.7E-02	7.4E-03	5.3E+03	4.0E-03	1.3E-03
Pentachlorocyclopentadiene	025329-35-5								
Pentachloronitrobenzene	000082-68-8	5.9E-02			8.2E-02	1.7E-02	1.8E+03	1.0E-03	3.1E-04
Pentachlorophenol	000087-86-5	6.5E-01			1.4E-02	2.9E-03	1.8E+04	2.0E-02	6.3E-03
Pentyl Alcohol, N-	000071-41-0								
Permethrin	052645-53-1	2.4E-03			3.5E-01	7.2E-02	2.7E+02	7.9E-05	2.5E-05
Phenanthrene	000085-01-8	2.7E-01			8.2E-02	1.7E-02	1.8E+03	1.0E-03	3.1E-04
Phenmedipham	013684-63-4	3.4E-06			2.2E+02	4.4E+01	6.1E-02	1.3E-09	4.0E-10
Phenol	000108-95-2	5.5E-03			5.1E+00	1.0E+00	8.1E+00	7.9E-07	2.5E-07

3-864

Table 3.6b. (continued)

Chemical	CASRN	Permeability Constant (cm/hr) [Kp]	Volatilization Factor (m ³ /kg) [VF]	Soil Saturation Conc. (mg/kg) [CSAT]	Soil-to-Plant Uptake (B _s)	Soil-to-Wet Plant Uptake (B _w)	Bioaccumulation Factor for Fish (L/kg) [BF]	Biotransfer Factor for Beef (day/kg) [F _b]	Biotransfer Factor for Milk (day/kg) [F _m]
Phenylenediamine, m-	000108-45-2	1.2E-04			1.0E+02	2.1E+01	1.6E-01	4.4E-09	1.4E-09
Phenylenediamine, o-	000095-54-5	8.6E-04			2.1E+01	4.3E+00	1.3E+00	6.9E-08	2.2E-08
Phenylenediamine, p-	000106-50-3	5.9E-05			1.9E+02	3.8E+01	7.2E-02	1.6E-09	5.0E-10
Phenylmercuric Acetate	000062-38-4								
Phenylphenol, 2-	000090-43-7	2.8E-02			6.1E-01	1.2E-01	1.3E+02	3.1E-05	9.9E-06
Phorate	000298-02-2	7.9E-04			3.9E+00	8.0E-01	1.2E+01	1.3E-06	4.0E-07
Phosmet	000732-11-6	2.1E-03			9.0E-01	1.8E-01	7.9E+01	1.6E-05	5.0E-06
Phosphine	007803-51-2	1.0E-03							
Phosphoric Acid	007664-38-2	1.0E-03							
Phthalic Acid, P-	000100-21-0	3.0E-03			3.9E+00	8.0E-01	1.2E+01	1.3E-06	4.0E-07
Phthalic Anhydride	000085-44-9	8.6E-05			8.7E+01	1.8E+01	2.0E-01	6.0E-09	1.9E-09
Picloram	001918-02-1	1.9E-03			1.5E+00	3.1E-01	3.9E+01	6.3E-06	2.0E-06
Pirimiphos, Methyl	029232-93-7								
Polybrominated Biphenyls	NA								
Polychlorinated Biphenyls	001336-36-3	3.5E-01			1.3E-02	2.5E-03	2.1E+04	2.5E-02	7.9E-03
Potassium Cyanide	000151-50-8	5.1E-04			5.3E+01	1.1E+01	3.8E-01	1.4E-08	4.4E-09
Potassium Silver Cyanide	000506-61-6	1.0E-03							

3-865

Table 3.6b. (continued)

Chemical	CASRN	Permeability Constant (cm/hr) [Kp]	Volatilization Factor (m ³ /kg) [VF]	Soil Saturation Conc. (mg/kg) [CSAT]	Soil-to-Plant Uptake (B _s)	Soil-to-Wet Plant Uptake (B _w)	Bioaccumulation Factor for Fish (L/kg) [BF]	Biotransfer Factor for Beef (day/kg) [F _B]	Biotransfer Factor for Milk (day/kg) [F _m]
Prochloraz	067747-09-5								
Profluralin	026399-36-0								
Prometon	001610-18-0	3.5E-03			1.8E+00	3.6E-01	3.3E+01	5.0E-06	1.6E-06
Prometryn	007287-19-6	3.8E-03			1.3E+00	2.7E-01	4.7E+01	7.9E-06	2.5E-06
Propachlor	001918-16-7								
Propanil	000709-98-8	1.5E-02			5.9E-01	1.2E-01	1.4E+02	3.3E-05	1.0E-05
Propargite	002312-35-8								
Propargyl Alcohol	000107-19-7								
Propazine	000139-40-2	3.8E-03			1.5E+00	3.1E-01	3.9E+01	6.3E-06	2.0E-06
Propham	000122-42-9	2.9E-02			5.3E-01	1.1E-01	1.6E+02	4.0E-05	1.3E-05
Propiconazole	060207-90-1								
Propylene Glycol	000057-55-6	4.1E-05			3.7E+02	7.5E+01	3.0E-02	5.0E-10	1.6E-10
Propylene Glycol Monoethyl Ether	001569-02-4								
Propylene Glycol Monomethyl Ether	000107-98-2	4.0E-04			4.8E+01	9.8E+00	4.3E-01	1.7E-08	5.2E-09
Propylene Oxide	000075-56-9	8.9E-04	6.4E+04	2.8E+04	3.7E+01	7.4E+00	6.2E-01	2.7E-08	8.5E-09
Pursuit	081335-77-5								
Pydrin	051630-58-1	7.2E-03			1.0E-01	2.1E-02	1.3E+03	6.6E-04	2.1E-04

3-866

Table 3.6b. (continued)

Chemical	CASRN	Permeability Constant (cm/hr) [Kp]	Volatilization Factor (m ³ /kg) [VF]	Soil Saturation Conc. (mg/kg) [CSAT]	Soil-to-Plant Uptake (B _s)	Soil-to-Wet Plant Uptake (B _w)	Bioaccumulation Factor for Fish (L/kg) [BF]	Biotransfer Factor for Beef (day/kg) [F _b]	Biotransfer Factor for Milk (day/kg) [F _m]
Pyrene	000129-00-0	3.2E-01			5.5E-02	1.1E-02	3.1E+03	2.0E-03	6.3E-04
Pyridine	000110-86-1	5.3E-03			6.7E+00	1.4E+00	5.7E+00	5.0E-07	1.6E-07
Quinalphos	013593-03-8								
Quinoline	000091-22-5	9.6E-03			2.3E+00	4.7E-01	2.3E+01	3.1E-06	9.9E-07
Refractory Ceramic Fibers	NA								
Resmethrin	010453-86-8								
Ronnel	000299-84-3	8.7E-02			4.2E-02	8.5E-03	4.4E+03	3.1E-03	9.9E-04
Rotenone	000083-79-4	6.1E-03			1.6E-01	3.2E-02	7.7E+02	3.1E-04	9.9E-05
Savey	078587-05-0								
Selenious Acid	007783-00-8								
Selenite	014124-67-5								
Selenium	007782-49-2	1.0E-03			5.0E-01	1.0E-01		1.0E-01	1.0E-02
Selenium Sulfide	007446-34-6	1.0E-03							
Selenourea	000630-10-4								
Sethoxydim	074051-80-2								
Silver	007440-22-4	1.0E-03			1.0E+00	2.2E-05	5.0E+00	3.0E-03	5.0E-05
Silver Cyanide	000506-64-9	1.0E-03							

Table 3.6b. (continued)

Chemical	CASRN	Permeability Constant (cm/hr) [Kp]	Volatilization Factor (m ³ /kg) [VF]	Soil Saturation Conc. (mg/kg) [CSAT]	Soil-to-Plant Uptake (B _s)	Soil-to-Wet Plant Uptake (B _w)	Bioaccumulation Factor for Fish (L/kg) [BF]	Biotransfer Factor for Beef (day/kg) [F _B]	Biotransfer Factor for Milk (day/kg) [F _M]
Simazine	000122-34-9	4.1E-03			2.0E+00	4.1E-01	2.8E+01	4.0E-06	1.3E-06
Sodium	007440-23-5	1.0E-03			2.0E-01	3.0E-02	2.0E+01	8.0E-02	1.6E-02
Sodium Acifluorfen	062476-59-9								
Sodium Azide	026628-22-8	1.0E-03							
Sodium Cyanide	000143-33-9	2.5E-04			1.1E+02	2.3E+01	1.4E-01	3.8E-09	1.2E-09
Sodium Diethyldithiocarbamate	000148-18-5								
Sodium Fluoroacetate	000062-74-8								
Sodium Metavanadate	013718-26-8	1.0E-03							
Stirofos (Tetrachlorovinphos)	000961-11-5								
Strontium, Stable	007440-24-6	1.0E-03			1.1E+00	2.1E-01	6.0E+01	8.0E-03	2.8E-03
Strychnine	000057-24-9	3.9E-04			3.0E+00	6.1E-01	1.6E+01	2.0E-06	6.3E-07
Styrene	000100-42-5	6.7E-01	6.8E+04	6.7E+02	7.9E-01	1.6E-01	9.4E+01	2.0E-05	6.3E-06
Sulfate	014808-79-8	1.0E-03							
Systhane	088671-89-0								
TCDD, 2,3,7,8-(3)	001746-01-6	1.4E+00			4.3E-03	8.8E-04	8.7E+04	1.6E-01	5.0E-02
TCDF, 2,3,7,8-(3)	051207-31-9				1.6E-02	3.2E-03	1.6E+04	1.7E-02	5.2E-03
TCMTB	021564-17-0								

3-868

Table 3.6b. (continued)

Chemical	CASRN	Permeability Constant (cm/hr) [Kp]	Volatilization Factor (m ² /kg) [VF]	Soil Saturation Conc. (mg/kg) [CSAT]	Soil-to-Plant Uptake (B _v)	Soil-to-Wet Plant Uptake (B _w)	Bioaccumulation Factor for Fish (L/kg) [BF]	Biotransfer Factor for Beef (day/kg) [F _b]	Biotransfer Factor for Milk (day/kg) [F _m]
Tebuthiuron	034014-18-1	9.9E-05			3.1E+01	6.3E+00	7.7E-01	3.5E-08	1.1E-08
Temephos	003383-96-8								
Terbacil	005902-51-2								
Terbufos	013071-79-9	1.4E-02			2.8E-01	5.7E-02	3.7E+02	1.2E-04	3.8E-05
Terbutryn	000886-50-0	2.9E-02			2.6E-01	5.2E-02	4.1E+02	1.4E-04	4.3E-05
Tetrabutyl Lead	001920-90-7								
Tetrachlorobenzene, 1,2,4,5-	000095-94-3	1.7E-01			8.2E-02	1.7E-02	1.8E+03	1.0E-03	3.1E-04
Tetrachloroethane, 1,1,1,2-	000630-20-6	2.4E-02	5.3E+04	7.7E+02	6.9E-01	1.4E-01	1.1E+02	2.5E-05	7.9E-06
Tetrachloroethane, 1,1,2,2-	000079-34-5	9.0E-03	9.4E+04	1.1E+03	1.5E+00	3.1E-01	3.9E+01	6.3E-06	2.0E-06
Tetrachloroethylene	000127-18-4	3.7E-01	2.2E+04	1.2E+02	1.2E+00	2.4E-01	5.6E+01	1.0E-05	3.1E-06
Tetrachlorophenol, 2,3,4,6-	000058-90-2	6.0E-02			1.6E-01	3.2E-02	7.7E+02	3.1E-04	9.9E-05
Tetrachlorotoluene, p- alpha, alpha, alpha-	005216-25-1								
Tetraethyl Dithiopyrophosphate	003689-24-5	2.8E-03			6.9E-01	1.4E-01	1.1E+02	2.5E-05	7.9E-06
Tetraethyl Lead	000078-00-2								
Tetrafluoroethane, 1,1,1,2-	000811-97-2	3.6E-03	7.9E+02	1.1E+02	6.9E+00	1.4E+00	5.5E+00	4.7E-07	1.5E-07
Tetramethyl Lead	000075-74-1								
Tetrapropyl Lead	003440-75-3								

3-869

Table 3.6b. (continued)

Chemical	CASRN	Permeability Constant (cm/hr) [Kp]	Volatilization Factor (m ³ /kg) [VF]	Soil Saturation Conc. (mg/kg) [CSAT]	Soil-to-Plant Uptake (B.)	Soil-to-Wet Plant Uptake (B _w)	Bioaccumulation Factor for Fish (L/kg) [BF]	Biotransfer Factor for Beef (day/kg) [F _b]	Biotransfer Factor for Milk (day/kg) [F _m]
Thallic Oxide	001314-32-5								
Thallium (I) Nitrate	010102-45-1	1.0E-03							
Thallium (Soluble Salts)	007440-28-0	1.0E-03			4.0E-03	1.0E-03		4.0E-02	2.0E-03
Thallium Acetate	000563-68-8								
Thallium Carbonate	006533-73-9								
Thallium Chloride	007791-12-0	1.0E-03							
Thallium Selenite	012039-52-0	1.0E-03							
Thallium Sulfate	007446-18-6	1.0E-03							
Thiobencarb	028249-77-6								
Thiofanox	039196-18-4	5.8E-06			3.5E+02	7.2E+01	3.2E-02	5.3E-10	1.7E-10
Thiophanate, Methyl	023564-05-8								
Thiram	000137-26-8								
Thorium	007440-29-1	1.0E-03			1.1E-02	1.4E-04	1.0E+02	1.0E-04	5.0E-06
Tin	007440-31-5	1.0E-03			1.0E+00	3.0E-01	3.0E+03	1.0E-02	1.0E-03
Titanium	007440-32-6	1.0E-03			5.5E-03	1.4E-03		3.0E-02	1.0E-02
Toluene	000108-88-3	4.5E-02	2.5E+04	2.5E+02	1.0E+00	2.1E-01	6.6E+01	1.3E-05	4.0E-06
Toluene diisocyanate mixture (TDI)	026471-62-5	6.1E-02			3.0E-01	6.1E-02	3.3E+02	1.0E-04	3.3E-05

3-870

Table 3.6b. (continued)

Chemical	CASRN	Permeability Constant (cm/hr) [Kp]	Volatilization Factor (m ³ /kg) [VF]	Soil Saturation Conc. (mg/kg) [CSAT]	Soil-to-Plant Uptake (B _v)	Soil-to-Wet Plant Uptake (B _w)	Bioaccumulation Factor for Fish (L/kg) [BF]	Biotransfer Factor for Beef (day/kg) [F _B]	Biotransfer Factor for Milk (day/kg) [F _M]
Toluene-2,4-diamine	000095-80-7	6.0E-04			2.4E+01	4.9E+00	1.1E+00	5.5E-08	1.7E-08
Toluene-2,5-diamine	000095-70-5								
Toluene-2,6-diamine	000823-40-5								
Toluidine, o- (Methylaniline, 2-)	000095-53-4	3.7E-03			6.7E+00	1.4E+00	5.7E+00	5.0E-07	1.6E-07
Toluidine, p-	000106-49-0	1.1E-02			2.6E+00	5.3E-01	1.9E+01	2.5E-06	7.9E-07
Toxaphene	008001-35-2	1.5E-02			6.2E-02	1.3E-02	2.6E+03	1.6E-03	5.0E-04
Tralomethrin	066841-25-6								
Triallate	002303-17-5	1.8E-02			1.9E-01	3.8E-02	6.2E+02	2.4E-04	7.5E-05
Triasulfuron	082097-50-5								
Tribromobenzene, 1,2,4-	000615-54-3								
Tribromochloromethane	000594-15-0								
Tribromodiphenyl Ether	049690-94-0								
Tributyltin Oxide	000056-35-9								
Trichloro-1,2,2-trifluoroethane, 1,1,2-	000076-13-1	9.6E-03	5.8E+03	2.1E+02	1.2E+00	2.4E-01	5.6E+01	1.0E-05	3.1E-06
Trichloro-2'-hydroxydiphenylether	003380-34-5								
Trichloroacetic Acid									
Trichloroaniline HCl, 2,4,6-	033663-50-2								

3-871

Table 3.6b. (continued)

Chemical	CASRN	Permeability Constant (cm/hr) [Kp]	Volatilization Factor (m ³ /kg) [VF]	Soil Saturation Conc. (mg/kg) [CSAT]	Soil-to-Plant Uptake (B _v)	Soil-to-Wet Plant Uptake (B _w)	Bioaccumulation Factor for Fish (L/kg) [BF]	Biotransfer Factor for Beef (day/kg) [F _B]	Biotransfer Factor for Milk (day/kg) [F _M]
Trichloroaniline, 2,4,6-	000634-93-5								
Trichlorobenzene, 1,2,4-	000120-82-1	1.0E-01	3.6E+05	8.3E+02	1.8E-01	3.7E-02	6.5E+02	2.5E-04	7.9E-05
Trichloroethane, 1,1,1-	000071-55-6	1.7E-02	1.7E+04	7.3E+02	1.3E+00	2.7E-01	4.7E+01	7.9E-06	2.5E-06
Trichloroethane, 1,1,2-	000079-00-5	8.4E-03	3.5E+04	8.5E+02	2.6E+00	5.3E-01	1.9E+01	2.5E-06	7.9E-07
Trichloroethylene	000079-01-6	1.6E-02	1.9E+04	4.5E+02	1.5E+00	3.1E-01	3.9E+01	6.3E-06	2.0E-06
Trichlorofluoromethane	000075-69-4	1.7E-02	5.8E+03	7.1E+02	1.3E+00	2.7E-01	4.7E+01	7.9E-06	2.5E-06
Trichlorophenol, 2,4,5-	000095-95-4	5.9E-02			2.4E-01	4.8E-02	4.5E+02	1.6E-04	5.0E-05
Trichlorophenol, 2,4,6-	000088-06-2	5.9E-02			2.7E-01	5.5E-02	3.8E+02	1.3E-04	4.0E-05
Trichlorophenoxy) Propionic Acid, 2(2,4,5-	000093-72-1	2.5E-02			2.1E-01	4.2E-02	5.4E+02	2.0E-04	6.3E-05
Trichlorophenoxyacetic Acid, 2,4,5-	000093-76-5	3.6E-02			1.8E-01	3.7E-02	6.5E+02	2.5E-04	7.9E-05
Trichloropropane, 1,1,2-	000598-77-6								
Trichloropropane, 1,2,3-	000096-18-4	4.4E-01			8.2E-02	1.7E-02	1.8E+03	1.0E-03	3.1E-04
Trichloropropene, 1,2,3-	000096-19-5								
Trichlorotoluene, 2,3,6-	002077-46-5								
Trichlorotoluene, alpha 2,6-	002014-83-7								
Tridipthane	058138-08-2								
Triethyl Lead	005224-23-7								

3-872

Table 3.6b. (continued)

Chemical	CASRN	Permeability Constant (cm/hr) [Kp]	Volatilization Factor (m ³ /kg) [VF]	Soil Saturation Conc. (mg/kg) [CSAT]	Soil-to-Plant Uptake (B _v)	Soil-to-Wet Plant Uptake (B _w)	Bioaccumulation Factor for Fish (L/kg) [BF]	Biotransfer Factor for Beef (day/kg) [F _B]	Biotransfer Factor for Milk (day/kg) [F _M]
Triethylamine	000121-44-8	4.5E-03	1.7E+05	2.2E+04	5.9E+00	1.2E+00	6.8E+00	6.3E-07	2.0E-07
Trifluralin	001582-09-8	9.9E-02			3.2E-02	6.5E-03	6.3E+03	5.0E-03	1.6E-03
Trimethyl Lead	007442-13-9								
Trimethyl Phosphate	000512-56-1								
Trimethylethyl Lead	001762-26-1								
Trinitrobenzene, 1,3,5-	000099-35-4	6.8E-04			7.7E+00	1.6E+00	4.8E+00	4.0E-07	1.3E-07
Trinitrophenylmethylnitramine	000479-45-8	8.9E-04			2.6E+00	5.3E-01	1.9E+01	2.5E-06	7.9E-07
Trinitrotoluene, 2,4,6-	000118-96-7	3.4E-03			1.8E+00	3.6E-01	3.3E+01	5.0E-06	1.6E-06
Tripropyl Lead	006618-03-7								
Uranium (Soluble Salts)	NA	1.0E-03			2.3E-02	6.3E-04	1.0E+01	3.0E-04	4.0E-04
Vanadium Pentoxide	001314-62-1	1.0E-03							
Vanadium Sulfate	036907-42-3	1.0E-03							
Vanadium, Metallic	007440-62-2	1.0E-03			5.5E-03	1.4E-03	1.0E+01	2.5E-03	2.0E-05
Vanadyl Sulfate	027774-13-6	1.0E-03							
Vernolate	001929-77-7								
Vinclozolin	050471-44-8								
Vinyl Acetate	000108-05-4	1.2E-02	1.3E+04	7.8E+02	1.4E+01	2.9E+00	2.1E+00	1.3E-07	4.2E-08

3-873

Table 3.6b. (continued)

Chemical	CASRN	Permeability Constant (cm/hr) [Kp]	Volatilization Factor (m ³ /kg) [VF]	Soil Saturation Conc. (mg/kg) [CSAT]	Soil-to-Plant Uptake (B _v)	Soil-to-Wet Plant Uptake (B _w)	Bioaccumulation Factor for Fish (L/kg) [BF]	Biotransfer Factor for Beef (day/kg) [F _B]	Biotransfer Factor for Milk (day/kg) [F _M]
Vinyl Bromide	000593-60-2	5.5E-03	1.4E+04	4.2E+03	4.5E+00	9.1E-01	9.7E+00	1.0E-06	3.1E-07
Vinyl Chloride	000075-01-4	7.3E-03	8.6E+00	2.7E+03	5.9E+00	1.2E+00	6.8E+00	6.3E-07	2.0E-07
Warfarin	000081-81-2	4.7E-03			5.3E-01	1.1E-01	1.6E+02	4.0E-05	1.3E-05
White Phosphorus	007723-14-0	1.0E-03							
Xylene, Mixture	001330-20-7	9.5E-02			4.6E-01	9.4E-02	1.9E+02	5.0E-05	1.6E-05
Xylene, P-	000106-42-3	8.0E-02			5.3E-01	1.1E-01	1.6E+02	4.0E-05	1.3E-05
Xylene, m-	000108-38-3	8.0E-02			5.3E-01	1.1E-01	1.6E+02	4.0E-05	1.3E-05
Xylene, o-	000095-47-6	8.0E-02			5.3E-01	1.1E-01	1.6E+02	4.0E-05	1.3E-05
Zinc (Metallic)	007440-66-6	1.0E-03			9.9E-01	2.6E-01	1.0E+03	1.0E-01	1.0E-02
Zinc Cyanide	000557-21-1	1.0E-03							
Zinc Phosphide	001314-84-7	1.0E-03							
Zineb	012122-67-7								
Zirconium	007440-67-7	1.0E-03			1.0E-03	1.0E-04	3.0E+02	1.0E-06	5.5E-07

Notes:

- (1) The same oral slope factor as used for polychlorinated biphenyls.
- (2) The PRG was calculated considering *Supplemental Guidance from RAGS: Region 4 Bulletins, Human Health Risk Assessment* (Interim Guidance) (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.

3-874

Table 3.6b. (continued)

- (3) The PRG was calculated considering *Supplemental Guidance from RAGS: Region 4 Bulletins, Human Health Risk Assessment* (Interim Guidance) from EPA (November 1995). The slope factors for chemicals so marked indicate that a TEF methodology was used for chlorinated dioxin and furan congeners based on each compound's relative potency to the potency of 2,3,7,8-tetrachlorodibenzodioxin (TCDD). The following TEFs were used to convert each slope factor to an equivalent slope factor of 2,3,7,8-TCDD: (1) 2,3,7,8-TCDD, TEF = 1.0; (2) 2,3,7,8-PeCDD, TEF = 0.5; (3) 2,3,7,8-HxCDD, TEF = 0.1; (4) 2,3,7,8-HpCDD, TEF = 0.01; (5) OCDD, TEF = 0.001; (6) 2,3,7,8-TCDF, TEF = 0.1; (7) 1,2,3,7,8-PeCDF, TEF = 0.5; (8) 2,3,4,7,8-PeCDF, TEF = 0.05; (9) 2,3,7,8-HxCDF, TEF = 0.1; (10) 2,3,7,8-HpCDF, TEF = 0.01; and (11) OCDF, TEF = 0.001.

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

| Chemical ¹ | CASRN | Ingestion SF
(pCi) ⁻¹ | Inhalation SF
(pCi) ⁻¹ | External Exposure SF
$\frac{\text{g}}{\text{pCi-yr}}$ | Half-life (days)
[T _R] | Soil-to-Plant Uptake (B _r) | Soil-to-Wet Plant Uptake (B _{vw}) | Bioaccumulation Factor for Fish (L/kg) [BF] | Bio-transfer Coefficient for Beef (day/kg) [F _B] | Bio-transfer Coefficient for Milk (day/kg) [F _m] |
|-----------------------|-------------|-------------------------------------|--------------------------------------|--|---------------------------------------|--|---|---|--|--|
| Ac-225 | 014265-85-1 | 1.42E-10 | 4.16E-09 | 7.81E-09 | 1.00E+01 | 3.5E-03 | 8.8E-04 | | 2.5E-05 | 2.0E-05 |
| Ac-227 | 014952-40-0 | 3.52E-10 | 7.08E-08 | 2.35E-11 | 7.96E+03 | 3.5E-03 | 8.8E-04 | | 2.5E-05 | 2.0E-05 |
| Ac-227+D | 014952-40-0 | 6.26E-10 | 7.87E-08 | 5.97E-07 | 7.96E+03 | 2.6E-01 | 1.9E-02 | 4.6E+02 | 4.8E-02 | 2.3E-02 |
| Ac-228 | 014331-83-0 | 1.62E-12 | 3.27E-11 | 3.28E-06 | 2.55E-01 | 3.5E-03 | 8.8E-04 | | 2.5E-05 | 2.0E-05 |
| Ag-105 | 014928-14-4 | 1.63E-12 | 2.33E-12 | | 4.13E+01 | 1.0E+00 | 2.2E-05 | 5.0E+00 | 3.0E-03 | 5.0E-05 |
| Ag-108 | 014391-65-2 | 6.94E-15 | 9.43E-15 | 5.78E-08 | 1.65E-03 | 1.0E+00 | 2.2E-05 | 5.0E+00 | 3.0E-03 | 5.0E-05 |
| Ag-108m | 014391-65-2 | 6.05E-12 | 7.02E-11 | 5.61E-06 | 4.64E+04 | 1.0E+00 | 2.2E-05 | 5.0E+00 | 3.0E-03 | 5.0E-05 |
| Ag-108m+D | 014391-65-2 | 6.05E-12 | 7.02E-11 | 5.61E-06 | 4.64E+04 | 1.0E+00 | 2.2E-05 | 5.0E+00 | 3.0E-03 | 5.0E-05 |
| Ag-109m | 014378-38-2 | 2.71E-16 | 3.46E-16 | 1.16E-09 | 4.58E-04 | 1.0E+00 | 2.2E-05 | 5.0E+00 | 3.0E-03 | 5.0E-05 |
| Ag-110 | 014391-76-5 | 2.44E-15 | 3.16E-15 | 1.13E-07 | 2.85E-04 | 1.0E+00 | 2.2E-05 | 5.0E+00 | 3.0E-03 | 5.0E-05 |
| Ag-110m | 014391-76-5 | 8.43E-12 | 3.21E-11 | 1.05E-05 | 2.50E+02 | 1.0E+00 | 2.2E-05 | 5.0E+00 | 3.0E-03 | 5.0E-05 |
| Ag-111 | 015760-04-0 | 6.83E-12 | 5.24E-12 | 8.51E-08 | 7.46E+00 | 1.0E+00 | 2.2E-05 | 5.0E+00 | 3.0E-03 | 5.0E-05 |
| Am-241 | 014596-10-2 | 3.28E-10 | 3.85E-08 | 4.59E-09 | 1.58E+05 | 1.2E-03 | 2.4E-05 | 3.0E+01 | 4.0E-05 | 1.5E-06 |
| Am-242 | 013981-54-9 | 1.47E-12 | 1.04E-11 | 5.76E-09 | 6.67E-01 | 1.2E-03 | 2.4E-05 | 3.0E+01 | 4.0E-05 | 1.5E-06 |
| Am-242m | 013981-54-9 | 2.92E-10 | 3.49E-08 | 8.76E-11 | 5.55E+04 | 1.2E-03 | 2.4E-05 | 3.0E+01 | 4.0E-05 | 1.5E-06 |
| Am-243 | 014993-75-0 | 3.27E-10 | 3.82E-08 | 2.43E-08 | 2.69E+06 | 1.2E-03 | 2.4E-05 | 3.0E+01 | 4.0E-05 | 1.5E-06 |
| Am-243+D | 014993-75-0 | 3.31E-10 | 3.82E-08 | 2.66E-07 | 2.69E+06 | 7.0E-02 | 2.9E-03 | 6.0E+01 | 1.0E-03 | 6.5E-06 |
| Ar-41 | 014163-25-8 | | 4.71E-16 | | 7.63E-02 | 0.0E+00 | 0.0E+00 | | 0.0E+00 | 0.0E+00 |
| At-217 | 017239-90-6 | 8.99E-18 | 5.14E-16 | 8.71E-10 | 3.74E-07 | 1.0E+00 | 2.5E-01 | | 1.0E-02 | 1.0E-02 |

Table 3.6c. (continued)

| Chemical [†] | CASRN | Ingestion
SF
(pCi) ⁻¹ | Inhalation
SF
(pCi) ⁻¹ | External
Exposure
SF
$\frac{\text{g}}{\text{pCi-yr}}$ | Half-life
(days)
[T _R] | Soil-to-
Plant
Uptake
(B _v) | Soil-to-
Wet Plant
Uptake
(B _{vw}) | Bioaccum-
ulation
Factor for
Fish
(L/kg)
[BF] | Bio-
transfer
Coefficient
for Beef
(day/kg)
[F _B] | Bio-
transfer
Coefficient
for Milk
(day/kg)
[F _m] |
|-----------------------|-------------|--|---|--|--|--|---|--|--|--|
| Au-196 | 014914-16-0 | 1.30E-12 | 1.04E-12 | 1.41E-06 | 6.18E+00 | 4.0E-01 | 1.0E-01 | | 5.0E-03 | 1.0E-05 |
| Au-198 | 010043-49-0 | 5.28E-12 | 3.64E-12 | 1.37E-06 | 2.70E+00 | 4.0E-01 | 1.0E-01 | | 5.0E-03 | 1.0E-05 |
| Ba-131 | 014914-75-1 | 1.70E-12 | 4.79E-13 | 1.27E-06 | 1.18E+01 | 1.0E-01 | 3.0E-03 | 4.0E+00 | 2.0E-04 | 4.8E-04 |
| Ba-133 | 013981-41-4 | 2.70E-12 | 4.03E-12 | 9.15E-07 | 3.83E+03 | 1.0E-01 | 3.0E-03 | 4.0E+00 | 2.0E-04 | 4.8E-04 |
| Ba-133m | 013981-41-4 | 2.76E-12 | 5.60E-13 | 1.00E-07 | 1.62E+00 | 1.0E-01 | 3.0E-03 | 4.0E+00 | 2.0E-04 | 4.8E-04 |
| Ba-137m | 013981-97-0 | 2.43E-15 | 1.57E-15 | 2.21E-06 | 1.77E-03 | 1.0E-01 | 3.0E-03 | 4.0E+00 | 2.0E-04 | 4.8E-04 |
| Ba-139 | 014378-25-7 | 3.04E-13 | 1.53E-13 | 8.35E-08 | 5.77E-02 | 1.0E-01 | 3.0E-03 | 4.0E+00 | 2.0E-04 | 4.8E-04 |
| Ba-140 | 014798-08-4 | 1.18E-11 | 3.17E-12 | 6.00E-07 | 1.28E+01 | 1.0E-01 | 3.0E-03 | 4.0E+00 | 2.0E-04 | 4.8E-04 |
| Be-7 | 013966-02-4 | 8.64E-14 | 1.78E-13 | 1.73E-07 | 5.34E+01 | 1.0E-02 | 2.5E-03 | 1.0E+02 | 1.0E-03 | 9.0E-07 |
| Bi-206 | 015776-19-9 | 7.11E-12 | 5.07E-12 | 1.20E-05 | 6.24E+00 | 3.5E-02 | 8.8E-03 | 1.0E+01 | 4.0E-04 | 5.0E-04 |
| Bi-207 | 013982-38-2 | 5.05E-12 | 9.42E-12 | 5.49E-06 | 1.22E+04 | 3.5E-02 | 8.8E-03 | 1.0E+01 | 4.0E-04 | 5.0E-04 |
| Bi-210 | 014331-79-4 | 7.29E-12 | 5.12E-11 | 0.00E+00 | 5.01E+00 | 3.5E-02 | 8.8E-03 | 1.0E+01 | 4.0E-04 | 5.0E-04 |
| Bi-211 | 015229-37-5 | 1.82E-14 | 1.74E-12 | 1.48E-07 | 1.48E-03 | 3.5E-02 | 8.8E-03 | 1.0E+01 | 4.0E-04 | 5.0E-04 |
| Bi-212 | 014913-49-6 | 6.20E-13 | 3.65E-11 | 6.67E-07 | 4.21E-02 | 3.5E-02 | 8.8E-03 | 1.0E+01 | 4.0E-04 | 5.0E-04 |
| Bi-213 | 015776-20-2 | 4.40E-13 | 3.09E-11 | 4.62E-07 | 3.17E-02 | 3.5E-02 | 8.8E-03 | 1.0E+01 | 4.0E-04 | 5.0E-04 |
| Bi-214 | 014733-03-0 | 1.95E-13 | 1.46E-11 | 6.02E-06 | 1.38E-02 | 3.5E-02 | 8.8E-03 | 1.0E+01 | 4.0E-04 | 5.0E-04 |
| Br-82 | 014686-69-2 | 1.42E-12 | 7.86E-13 | 1.01E-05 | 1.47E+00 | 1.5E+00 | 3.8E-01 | 4.0E+02 | 2.5E-02 | 2.0E-02 |
| C-11 | 014333-33-6 | 4.49E-14 | 3.38E-14 | 3.61E-06 | 1.42E-02 | | | | | |
| C-14 | 014762-75-5 | 1.03E-12 | 6.99E-15 | 0.00E+00 | 2.09E+06 | | | | | |

Table 3.6c. (continued)

| Chemical ¹ | CASRN | Ingestion SF
(pCi) ⁻¹ | Inhalation SF
(pCi) ⁻¹ | External Exposure SF
g
pCi-yr | Half-life
(days)
[T _R] | Soil-to-Plant Uptake
(B _r) | Soil-to-Wet Plant Uptake
(B _{vw}) | Bioaccumulation Factor for Fish
(L/kg)
[BF] | Bio-transfer Coefficient for Beef
(day/kg)
[F _B] | Bio-transfer Coefficient for Milk
(day/kg)
[F _m] |
|-----------------------|-------------|-------------------------------------|--------------------------------------|-------------------------------------|--|---|--|---|--|--|
| C-15 | 015929-23-4 | 6.62E-16 | 8.06E-16 | | 2.84E-05 | | | | | |
| Ca-45 | 013966-05-7 | 2.02E-12 | 2.51E-12 | 3.88E-18 | 1.63E+02 | 3.5E+00 | 8.8E-01 | | 2.0E-03 | 3.0E-03 |
| Ca-47 | 001439-99-2 | 6.66E-12 | 5.22E-12 | 4.12E-06 | 4.54E+00 | 3.5E+00 | 8.8E-01 | | 2.0E-03 | 3.0E-03 |
| Cd-109 | 014109-32-1 | 8.01E-12 | 1.85E-11 | 5.62E-10 | 4.64E+02 | 5.5E-01 | 1.4E-01 | 2.0E+02 | 4.0E-04 | 1.0E-03 |
| Cd-115 | 014336-68-6 | 7.29E-12 | 4.93E-12 | 7.02E-07 | 2.23E+00 | 5.5E-01 | 1.4E-01 | 2.0E+02 | 4.0E-04 | 1.0E-03 |
| Cd-115m | 014336-68-6 | 1.42E-11 | 1.70E-11 | 8.55E-08 | 4.46E+01 | 5.5E-01 | 1.4E-01 | 2.0E+02 | 4.0E-04 | 1.0E-03 |
| Ce-141 | 013967-74-3 | 3.91E-12 | 4.32E-12 | 1.41E-07 | 3.25E+01 | 5.0E-02 | 3.0E-03 | 3.0E+01 | 2.0E-05 | 3.0E-05 |
| Ce-143 | 014119-19-8 | 5.91E-12 | 3.84E-12 | 7.32E-07 | 1.38E+00 | 5.0E-02 | 3.0E-03 | 3.0E+01 | 2.0E-05 | 3.0E-05 |
| Ce-144 | 014762-78-8 | 2.96E-11 | 1.08E-10 | 2.58E-08 | 2.84E+02 | 5.0E-02 | 3.0E-03 | 3.0E+01 | 2.0E-05 | 3.0E-05 |
| Ce-144+D | 014762-78-8 | 2.97E-11 | 1.08E-10 | 1.56E-07 | 2.84E+02 | 9.0E-02 | 7.0E-03 | 2.3E+02 | 6.2E-04 | 7.0E-05 |
| Cl-36 | 013981-43-6 | 2.23E-12 | 1.30E-12 | 0.00E+00 | 1.10E+08 | 7.0E+01 | 1.8E+01 | | 2.0E-02 | 1.7E-02 |
| Cl-38 | 014158-34-0 | 2.07E-13 | 1.63E-13 | 6.47E-06 | 2.58E-02 | 7.0E+01 | 1.8E+01 | | 2.0E-02 | 1.7E-02 |
| Cm-242 | 015510-73-3 | 3.83E-11 | 3.16E-09 | 2.34E-11 | 1.63E+02 | 1.1E-03 | 5.9E-05 | 3.0E+01 | 2.0E-05 | 4.0E-07 |
| Cm-243 | 015757-87-6 | 2.51E-10 | 2.89E-08 | 1.71E-07 | 1.04E+04 | 1.1E-03 | 5.9E-05 | 3.0E+01 | 2.0E-05 | 4.0E-07 |
| Cm-243+D | 015757-87-6 | 2.52E-10 | 2.90E-08 | 1.72E-07 | 1.04E+04 | 4.4E-01 | 2.3E-02 | 9.9E+02 | 4.8E-02 | 5.2E-03 |
| Cm-244 | 013981-15-2 | 2.11E-10 | 2.43E-08 | 2.07E-11 | 6.61E+03 | 1.1E-03 | 5.9E-05 | 3.0E+01 | 2.0E-05 | 4.0E-07 |
| Cm-245 | 015621-76-8 | 3.35E-10 | 3.92E-08 | 5.51E-08 | 3.10E+06 | 1.1E-03 | 5.9E-05 | 3.0E+01 | 2.0E-05 | 4.0E-07 |
| Cm-246 | 015757-90-1 | 3.32E-10 | 3.90E-08 | 1.81E-11 | 1.73E+06 | 1.1E-03 | 5.9E-05 | 3.0E+01 | 2.0E-05 | 4.0E-07 |
| Cm-247 | 015758-32-4 | 3.09E-10 | 3.58E-08 | 1.03E-06 | 5.69E+09 | 1.1E-03 | 5.9E-05 | 3.0E+01 | 2.0E-05 | 4.0E-07 |

Table 3.6c. (continued)

| Chemical [†] | CASRN | Ingestion
SF
(pCi) ⁻¹ | Inhalation
SF
(pCi) ⁻¹ | External
Exposure
SF
$\frac{\text{E}}{\text{pCi-yr}}$ | Half-life
(days)
[T _R] | Soil-to-
Plant
Uptake
(B _r) | Soil-to-
Wet Plant
Uptake
(B _{VW}) | Bioaccum-
ulation
Factor for
Fish
(L/kg)
[BF] | Bio-
transfer
Coefficient
for Beef
(day/kg)
[F _B] | Bio-
transfer
Coefficient
for Milk
(day/kg)
[F _m] |
|-----------------------|-------------|--|---|--|--|--|---|--|--|--|
| Cm-248 | 015758-33-5 | 1.31E-09 | 1.46E-07 | 1.47E-11 | 1.24E+08 | 1.1E-03 | 5.9E-05 | 3.0E+01 | 2.0E-05 | 4.0E-07 |
| Co-57 | 013981-50-5 | 9.71E-13 | 2.88E-12 | 2.07E-07 | 2.71E+02 | 5.4E-02 | 2.3E-02 | 3.0E+02 | 1.0E-04 | 7.0E-05 |
| Co-58 | 013981-38-9 | 2.82E-12 | 5.17E-12 | 3.73E-06 | 7.08E+01 | 5.4E-02 | 2.3E-02 | 3.0E+02 | 1.0E-04 | 7.0E-05 |
| Co-58m | 013981-38-9 | 9.46E-14 | 8.90E-14 | 3.21E-11 | 3.81E-01 | 5.4E-02 | 2.3E-02 | 3.0E+02 | 1.0E-04 | 7.0E-05 |
| Co-60 | 010198-40-0 | 1.89E-11 | 6.88E-11 | 9.76E-06 | 1.92E+03 | 5.4E-02 | 2.3E-02 | 3.0E+02 | 1.0E-04 | 7.0E-05 |
| Cr-51 | 014392-02-0 | 1.38E-13 | 1.74E-13 | 1.02E-07 | 2.77E+01 | 4.0E-02 | 1.0E-04 | 2.0E+02 | 9.0E-03 | 1.0E-05 |
| Cs-131 | 014914-76-2 | 1.80E-13 | 1.06E-13 | 2.34E-09 | 9.69E+00 | 1.1E-01 | 1.4E-02 | 2.0E+03 | 5.0E-02 | 7.9E-03 |
| Cs-134 | 013967-70-9 | 4.73E-11 | 2.89E-11 | 5.88E-06 | 7.52E+02 | 1.1E-01 | 1.4E-02 | 2.0E+03 | 5.0E-02 | 7.9E-03 |
| Cs-134m | 013967-70-9 | 4.54E-14 | 3.10E-14 | 1.96E-08 | 1.21E-01 | 1.1E-01 | 1.4E-02 | 2.0E+03 | 5.0E-02 | 7.9E-03 |
| Cs-135 | 015726-30-4 | 4.53E-12 | 2.71E-12 | 0.00E+00 | 8.40E+08 | 1.1E-01 | 1.4E-02 | 2.0E+03 | 5.0E-02 | 7.9E-03 |
| Cs-136 | 014234-29-8 | 7.74E-12 | 4.65E-12 | 8.13E-06 | 1.32E+01 | 1.1E-01 | 1.4E-02 | 2.0E+03 | 5.0E-02 | 7.9E-03 |
| Cs-137 | 010045-97-3 | 3.16E-11 | 1.91E-11 | 0.00E+00 | 1.10E+04 | 1.1E-01 | 1.4E-02 | 2.0E+03 | 5.0E-02 | 7.9E-03 |
| Cs-137+D | 010045-97-3 | 3.16E-11 | 1.91E-11 | 2.09E-06 | 1.10E+04 | 2.1E-01 | 1.7E-02 | 2.0E+03 | 5.0E-02 | 8.4E-03 |
| Cs-138 | 015758-29-9 | 1.76E-13 | 1.30E-13 | 9.45E-06 | 2.24E-02 | 1.1E-01 | 1.4E-02 | 2.0E+03 | 5.0E-02 | 7.9E-03 |
| Cu-64 | 013981-25-4 | 5.25E-13 | 4.18E-13 | 6.72E-07 | 5.29E-01 | 8.0E-01 | 8.0E-02 | 2.0E+02 | 9.0E-03 | 1.5E-03 |
| Dy-165 | 013967-64-1 | 3.26E-13 | 2.24E-13 | 6.18E-08 | 9.71E-02 | 1.0E-02 | 2.5E-03 | | 5.5E-03 | 2.0E-05 |
| Dy-166 | 015840-01-4 | 9.42E-12 | 7.82E-12 | 2.72E-08 | 3.40E+00 | 1.0E-02 | 2.5E-03 | | 5.5E-03 | 2.0E-05 |
| Er-169 | 015840-13-8 | 2.12E-12 | 1.51E-12 | 6.52E-12 | 9.40E+00 | 1.0E-02 | 2.5E-03 | | 4.0E-03 | 2.0E-05 |
| Er-171 | 014391-45-8 | 1.63E-12 | 7.50E-13 | 1.04E-06 | 3.13E-01 | 1.0E-02 | 2.5E-03 | | 4.0E-03 | 2.0E-05 |

Chemical-specific parameters used in calculating PRGs/radionuclides

Table 3.6c. (continued)

| Chemical ¹ | CASRN | Ingestion
SF
(pCi) ⁻¹ | Inhalation
SF
(pCi) ⁻¹ | External
Exposure
SF
$\frac{\text{g}}{\text{pCi-yr}}$ | Half-life
(days)
[T _{1/2}] | Soil-to-
Plant
Uptake
(B ₁) | Soil-to-
Wet Plant
Uptake
(B _w) | Bioaccum-
ulation
Factor for
Fish
(L/kg)
[BF] | Bio-
transfer
Coefficient
for Beef
(day/kg)
[F _B] | Bio-
transfer
Coefficient
for Milk
(day/kg)
[F _M] |
|-----------------------|-------------|--|---|--|--|--|--|--|--|--|
| Eu-152 | 014683-23-9 | 5.73E-12 | 7.91E-11 | 4.08E-06 | 4.96E+03 | 5.0E-02 | 2.0E-03 | 5.0E+01 | 2.0E-03 | 6.0E-05 |
| Eu-154 | 015585-10-1 | 9.37E-12 | 9.15E-11 | 4.65E-06 | 3.21E+03 | 5.0E-02 | 2.0E-03 | 5.0E+01 | 2.0E-03 | 6.0E-05 |
| Eu-155 | 014391-16-3 | 1.65E-12 | 9.60E-12 | 6.08E-08 | 1.81E+03 | 5.0E-02 | 2.0E-03 | 5.0E+01 | 2.0E-03 | 6.0E-05 |
| Eu-156 | 014280-35-4 | 1.09E-11 | 9.26E-12 | 5.40E-06 | 1.52E+01 | 5.0E-02 | 2.0E-03 | 5.0E+01 | 2.0E-03 | 6.0E-05 |
| F-18 | 013981-56-1 | 1.09E-13 | 6.54E-14 | 3.50E-06 | 7.64E-02 | 6.0E-02 | 1.5E-02 | | 1.5E-01 | 1.0E-03 |
| Fe-55 | 014681-59-5 | 3.51E-13 | 5.60E-13 | 0.00E+00 | 9.86E+02 | 1.0E-02 | 4.0E-04 | 2.0E+02 | 2.0E-02 | 3.0E-05 |
| Fe-59 | 014596-12-4 | 5.87E-12 | 7.08E-12 | 4.63E-06 | 4.46E+01 | 1.0E-02 | 4.0E-04 | 2.0E+02 | 2.0E-02 | 3.0E-05 |
| Fr-221 | 015756-41-9 | 1.45E-13 | 8.02E-12 | 6.74E-08 | 3.33E-03 | 3.0E-02 | 7.5E-03 | | 2.5E-03 | 2.0E-02 |
| Fr-223 | 015756-98-6 | 4.46E-13 | 5.90E-13 | 4.17E-08 | 1.51E-03 | 3.0E-02 | 7.5E-03 | | 2.5E-03 | 2.0E-02 |
| Ga-67 | 014119-09-6 | 8.36E-13 | 5.14E-13 | 3.61E-07 | 3.26E+00 | 1.0E-02 | 3.0E-03 | | 3.0E-04 | 1.0E-05 |
| Ga-72 | 013982-22-4 | 4.77E-12 | 2.17E-12 | 1.12E-05 | 5.88E-01 | 1.0E-02 | 3.0E-03 | | 3.0E-04 | 1.0E-05 |
| Gd-153 | 014276-65-4 | 1.32E-12 | 3.20E-12 | 7.22E-08 | 2.42E+02 | 5.0E-02 | 2.0E-03 | | 2.0E-03 | 6.0E-05 |
| Gd-159 | 014041-42-0 | 2.60E-12 | 1.24E-12 | 9.59E-08 | 7.75E-01 | 5.0E-02 | 2.0E-03 | | 2.0E-03 | 6.0E-05 |
| Ge-71 | 014374-81-3 | 1.18E-14 | 5.84E-14 | 1.56E-11 | 1.18E+01 | 4.0E-01 | 1.0E-01 | | 7.0E-01 | 7.0E-02 |
| H-3 | 010028-17-8 | 7.15E-14 | 9.59E-14 | 0.00E+00 | 4.49E+03 | | | 1.0E+00 | | 1.5E-02 |
| Hg-197 | 013981-51-6 | 1.18E-12 | 6.95E-13 | 5.47E-08 | 2.67E+00 | 1.0E+00 | 3.0E-01 | 1.0E+03 | 1.0E-02 | 4.7E-04 |
| Hg-203 | 013982-78-0 | 2.64E-12 | 3.03E-12 | 6.27E-07 | 4.66E+01 | 1.0E+00 | 3.0E-01 | 1.0E+03 | 1.0E-02 | 4.7E-04 |
| Ho-166 | 013967-65-2 | 7.57E-12 | 4.06E-12 | 6.96E-08 | 1.12E+00 | 1.0E-02 | 2.5E-03 | | 4.5E-03 | 2.0E-05 |
| I-122 | 018287-75-7 | 2.16E-14 | 2.24E-14 | 3.41E-06 | 2.51E-03 | 3.4E-03 | 2.0E-03 | 4.0E+01 | 4.0E-02 | 1.0E-02 |

Chemical-specific parameters used in calculating PRGs/radionuclides

Table 3.6c. (continued)

| Chemical [†] | CASRN | Ingestion
SF
(pCi) ⁻¹ | Inhalation
SF
(pCi) ⁻¹ | External
Exposure
SF
$\frac{\text{g}}{\text{pCi-yr}}$ | Half-life
(days)
[T _R] | Soil-to-
Plant
Uptake
(B _r) | Soil-to-
Wet Plant
Uptake
(B _{vw}) | Bioaccum-
ulation
Factor for
Fish
(L/kg)
[BF] | Bio-
transfer
Coefficient
for Beef
(day/kg)
[F _B] | Bio-
transfer
Coefficient
for Milk
(day/kg)
[F _m] |
|-----------------------|-------------|--|---|--|--|--|---|--|--|--|
| I-123 | 015715-08-9 | 5.42E-13 | 2.94E-13 | 2.52E-07 | 5.46E-01 | 3.4E-03 | 2.0E-03 | 4.0E+01 | 4.0E-02 | 1.0E-02 |
| I-125 | 014158-31-7 | 2.58E-11 | 1.71E-11 | 2.39E-09 | 6.01E+01 | 3.4E-03 | 2.0E-03 | 4.0E+01 | 4.0E-02 | 1.0E-02 |
| I-126 | 014158-32-8 | 4.82E-11 | 3.15E-11 | 1.49E-06 | 1.29E+01 | 3.4E-03 | 2.0E-03 | 4.0E+01 | 4.0E-02 | 1.0E-02 |
| I-129 | 015046-84-1 | 1.84E-10 | 1.22E-10 | 2.69E-09 | 5.73E+09 | 3.4E-03 | 2.0E-03 | 4.0E+01 | 4.0E-02 | 1.0E-02 |
| I-130 | 014914-02-4 | 4.85E-12 | 2.61E-12 | 7.93E-06 | 5.17E-01 | 3.4E-03 | 2.0E-03 | 4.0E+01 | 4.0E-02 | 1.0E-02 |
| I-131 | 010043-66-0 | 3.62E-11 | 2.33E-11 | 1.25E-06 | 8.04E+00 | 3.4E-03 | 2.0E-03 | 4.0E+01 | 4.0E-02 | 1.0E-02 |
| I-132 | 014683-16-0 | 6.62E-13 | 3.52E-13 | 8.75E-06 | 9.58E-02 | 3.4E-03 | 2.0E-03 | 4.0E+01 | 4.0E-02 | 1.0E-02 |
| I-133 | 014834-67-4 | 1.06E-11 | 6.02E-12 | 2.20E-06 | 8.67E-01 | 3.4E-03 | 2.0E-03 | 4.0E+01 | 4.0E-02 | 1.0E-02 |
| I-134 | 014914-27-3 | 2.31E-13 | 1.38E-13 | 1.02E-05 | 3.65E-02 | 3.4E-03 | 2.0E-03 | 4.0E+01 | 4.0E-02 | 1.0E-02 |
| I-135 | 014834-68-5 | 2.27E-12 | 1.18E-12 | 6.23E-06 | 2.75E-01 | 3.4E-03 | 2.0E-03 | 4.0E+01 | 4.0E-02 | 1.0E-02 |
| In-113m | 014885-78-0 | 8.30E-14 | 5.77E-14 | 7.82E-07 | 6.92E-02 | 1.0E-02 | 3.0E-03 | | 4.0E-03 | 2.0E-04 |
| In-114 | 013981-55-0 | 4.53E-15 | 5.81E-15 | 1.13E-07 | 8.32E-04 | 1.0E-02 | 3.0E-03 | | 4.0E-03 | 2.0E-04 |
| In-114m | 013981-55-0 | 2.06E-11 | 2.53E-11 | 2.00E-07 | 4.95E+01 | 1.0E-02 | 3.0E-03 | | 4.0E-03 | 2.0E-04 |
| In-115 | 014191-71-0 | 3.49E-11 | 2.07E-10 | 0.00E+00 | 1.68E+18 | 1.0E-02 | 3.0E-03 | | 4.0E-03 | 2.0E-04 |
| In-115m | 014191-71-0 | 3.42E-13 | 1.75E-13 | 4.29E-07 | 1.82E-01 | 1.0E-02 | 3.0E-03 | | 4.0E-03 | 2.0E-04 |
| Ir-190 | 014981-91-0 | 4.95E-12 | 4.49E-12 | 4.65E-06 | 1.18E+01 | 2.0E-01 | 3.0E-02 | | 2.0E-03 | 2.0E-06 |
| Ir-194 | 014158-35-1 | 7.00E-12 | 4.18E-12 | 3.17E-07 | 8.00E-01 | 2.0E-01 | 3.0E-02 | | 2.0E-03 | 2.0E-06 |
| K-40 | 013966-00-2 | 1.25E-11 | 7.46E-12 | 6.11E-07 | 4.67E+11 | 3.0E+00 | 3.0E-01 | | 2.0E-02 | 7.2E-03 |
| K-42 | 014378-21-3 | 1.29E-12 | 7.56E-13 | 1.09E-06 | 5.17E-01 | 3.0E+00 | 3.0E-01 | | 2.0E-02 | 7.2E-03 |

Table 3.6c. (continued)

| Chemical [†] | CASRN | Ingestion
SF
(pCi) ⁻¹ | Inhalation
SF
(pCi) ⁻¹ | External
Exposure
SF
$\frac{\text{E}}{\text{pCi-yr}}$ | Half-life
(days)
[T _R] | Soil-to-
Plant
Uptake
(B _i) | Soil-to-
Wet Plant
Uptake
(B _{vw}) | Bioaccum-
ulation
Factor for
Fish
(L/kg)
[BF] | Bio-
transfer
Coefficient
for Beef
(day/kg)
[F _B] | Bio-
transfer
Coefficient
for Milk
(day/kg)
[F _m] |
|-----------------------|-------------|--|---|--|--|--|---|--|--|--|
| Kr-83m | 013965-98-5 | | 3.48E-17 | | 7.63E-02 | 0.0E+00 | 0.0E+00 | | 0.0E+00 | 0.0E+00 |
| Kr-85 | 013983-27-2 | | 2.87E-16 | | 3.91E+03 | 0.0E+00 | 0.0E+00 | | 0.0E+00 | 0.0E+00 |
| Kr-85m | 013983-27-2 | | 2.75E-16 | | 1.87E-01 | 0.0E+00 | 0.0E+00 | | 0.0E+00 | 0.0E+00 |
| Kr-87 | 014809-68-8 | | 1.20E-15 | | 5.30E-02 | 0.0E+00 | 0.0E+00 | | 0.0E+00 | 0.0E+00 |
| Kr-88 | 014995-61-0 | | 2.20E-15 | | 1.18E-01 | 0.0E+00 | 0.0E+00 | | 0.0E+00 | 0.0E+00 |
| Kr-89 | 016316-03-3 | | 1.61E-15 | | 2.19E-03 | 0.0E+00 | 0.0E+00 | | 0.0E+00 | 0.0E+00 |
| Kr-90 | 015741-13-6 | | 1.60E-15 | | 3.74E-04 | 0.0E+00 | 0.0E+00 | | 0.0E+00 | 0.0E+00 |
| La-140 | 013981-28-7 | 9.46E-12 | 5.10E-12 | 9.11E-06 | 1.68E+00 | 5.2E-03 | 4.0E-04 | 3.0E+01 | 3.0E-04 | 2.0E-05 |
| Lu-177 | 014265-75-9 | 2.95E-12 | 2.20E-12 | 7.22E-08 | 6.71E+00 | 1.0E-02 | 2.5E-03 | | 4.5E-03 | 2.0E-05 |
| Mn-52 | 014092-99-0 | 6.01E-12 | 4.40E-12 | 1.34E-05 | 5.59E+00 | 6.8E-01 | 6.9E-02 | 4.0E+02 | 5.0E-04 | 3.0E-05 |
| Mn-54 | 013966-31-9 | 1.96E-12 | 3.69E-12 | 3.26E-06 | 3.13E+02 | 6.8E-01 | 6.9E-02 | 4.0E+02 | 5.0E-04 | 3.0E-05 |
| Mn-56 | 014681-52-8 | 8.57E-13 | 5.21E-13 | 6.95E-06 | 1.08E-01 | 6.8E-01 | 6.9E-02 | 4.0E+02 | 5.0E-04 | 3.0E-05 |
| Mo-99 | 014119-15-4 | 2.27E-12 | 4.48E-12 | 5.46E-07 | 2.75E+00 | 4.0E-01 | 8.0E-02 | 1.0E+01 | 1.0E-03 | 1.7E-03 |
| Na-22 | 013966-32-0 | 8.02E-12 | 4.88E-12 | 8.18E-06 | 9.49E+02 | 2.0E-01 | 3.0E-02 | 2.0E+01 | 8.0E-02 | 1.6E-02 |
| Na-24 | 013982-04-2 | 1.38E-12 | 7.51E-13 | 1.77E-05 | 6.25E-01 | 2.0E-01 | 3.0E-02 | 2.0E+01 | 8.0E-02 | 1.6E-02 |
| Nb-93m | 007440-03-1 | 6.64E-13 | 4.33E-12 | 3.64E-11 | 5.33E+03 | 1.0E-01 | 4.3E-03 | 3.0E+02 | 3.0E-07 | 4.1E-07 |
| Nb-94 | 014681-63-1 | 6.91E-12 | 8.20E-11 | 6.08E-06 | 7.41E+06 | 1.0E-01 | 4.3E-03 | 3.0E+02 | 3.0E-07 | 4.1E-07 |
| Nb-95 | 013967-76-5 | 2.25E-12 | 3.11E-12 | 2.94E-06 | 3.51E+01 | 1.0E-01 | 4.3E-03 | 3.0E+02 | 3.0E-07 | 4.1E-07 |
| Nb-95m | 013967-76-5 | 3.06E-12 | 2.25E-12 | 8.71E-08 | 3.61E+00 | 1.0E-01 | 4.3E-03 | 3.0E+02 | 3.0E-07 | 4.1E-07 |

Table 3.6c. (continued)

| Chemical [†] | CASRN | Ingestion
SF
(pCi) ⁻¹ | Inhalation
SF
(pCi) ⁻¹ | External
Exposure
SF
$\frac{\text{g}}{\text{pCi-yr}}$ | Half-life
(days)
[T _R] | Soil-to-
Plant
Uptake
(B _s) | Soil-to-
Wet Plant
Uptake
(B _{vw}) | Bioaccum-
ulation
Factor for
Fish
(L/kg)
[BF] | Bio-
transfer
Coefficient
for Beef
(day/kg)
[F _B] | Bio-
transfer
Coefficient
for Milk
(day/kg)
[F _m] |
|-----------------------|-------------|--|---|--|--|--|---|--|--|--|
| Nb-97 | 018496-04-3 | 1.75E-13 | 2.13E-13 | 2.49E-06 | 5.01E-02 | 1.0E-01 | 4.3E-03 | 3.0E+02 | 3.0E-07 | 4.1E-07 |
| Nb-97m | 018496-04-3 | 3.27E-15 | 3.34E-15 | 2.78E-06 | 6.94E-04 | 1.0E-01 | 4.3E-03 | 3.0E+02 | 3.0E-07 | 4.1E-07 |
| Nd-147 | 014269-74-0 | 5.88E-12 | 4.84E-12 | 3.22E-07 | 1.10E+01 | 2.0E-02 | 2.0E-03 | 1.0E+02 | 3.0E-04 | 2.0E-05 |
| Nd-149 | 015749-81-2 | 4.55E-13 | 4.22E-13 | 1.08E-06 | 7.21E-02 | 2.0E-02 | 2.0E-03 | 1.0E+02 | 3.0E-04 | 2.0E-05 |
| Ni-59 | 014336-70-0 | 1.85E-13 | 4.01E-13 | 0.00E+00 | 2.74E+07 | 1.8E-01 | 5.0E-02 | 1.0E+02 | 5.0E-03 | 1.6E-02 |
| Ni-63 | 013981-37-8 | 5.50E-13 | 1.01E-12 | 0.00E+00 | 3.65E+04 | 1.8E-01 | 5.0E-02 | 1.0E+02 | 5.0E-03 | 1.6E-02 |
| Ni-65 | 014833-49-9 | 5.62E-13 | 3.59E-13 | 2.14E-06 | 1.05E-01 | 1.8E-01 | 5.0E-02 | 1.0E+02 | 5.0E-03 | 1.6E-02 |
| Np-236 | 015700-36-4 | 9.31E-13 | 3.87E-12 | 9.22E-08 | 4.20E+07 | 6.9E-02 | 2.9E-03 | 3.0E+01 | 1.0E-03 | 5.0E-06 |
| Np-237 | 013994-20-2 | 2.95E-10 | 3.45E-08 | 7.56E-09 | 7.81E+08 | 6.9E-02 | 2.9E-03 | 3.0E+01 | 1.0E-03 | 5.0E-06 |
| Np-237+D | 013994-20-2 | 3.00E-10 | 3.45E-08 | 4.62E-07 | 7.81E+08 | 7.2E-02 | 3.5E-03 | 4.0E+01 | 1.0E-03 | 1.0E-05 |
| Np-238 | 015766-25-3 | 4.56E-12 | 4.68E-12 | 1.95E-06 | 2.12E+00 | 6.9E-02 | 2.9E-03 | 3.0E+01 | 1.0E-03 | 5.0E-06 |
| Np-239 | 013968-59-7 | 4.27E-12 | 2.41E-12 | 2.42E-07 | 2.36E+00 | 6.9E-02 | 2.9E-03 | 3.0E+01 | 1.0E-03 | 5.0E-06 |
| Np-240 | 015690-84-3 | 1.77E-13 | 1.31E-13 | 3.65E-06 | 4.51E-02 | 6.9E-02 | 2.9E-03 | 3.0E+01 | 1.0E-03 | 5.0E-06 |
| Np-240m | 015690-84-3 | 2.42E-14 | 2.83E-14 | 1.05E-06 | 5.14E-03 | 6.9E-02 | 2.9E-03 | 3.0E+01 | 1.0E-03 | 5.0E-06 |
| Os-185 | 015766-50-4 | 1.80E-12 | 4.62E-12 | 2.45E-06 | 9.36E+01 | 1.5E-02 | 3.8E-03 | | 4.0E-01 | 5.0E-03 |
| Os-191 | 014119-24-5 | 3.04E-12 | 2.70E-12 | 8.74E-08 | 1.54E+01 | 1.5E-02 | 3.8E-03 | | 4.0E-01 | 5.0E-03 |
| Os-191m | 014119-24-5 | 4.95E-13 | 3.32E-13 | 3.22E-09 | 5.42E-01 | 1.5E-02 | 3.8E-03 | | 4.0E-01 | 5.0E-03 |
| Os-193 | 016057-77-5 | 4.36E-12 | 2.68E-12 | 1.82E-07 | 1.25E+00 | 1.5E-02 | 3.8E-03 | | 4.0E-01 | 5.0E-03 |
| P-32 | 014596-37-3 | 6.11E-12 | 2.93E-12 | 0.00E+00 | 1.43E+01 | 3.0E+00 | 1.0E+00 | 5.0E+04 | 5.0E-02 | 1.6E-02 |

Table 3.6c. (continued)

| Chemical [†] | CASRN | Ingestion
SF
(pCi) ⁻¹ | Inhalation
SF
(pCi) ⁻¹ | External
Exposure
SF
$\frac{\text{g}}{\text{pCi-yr}}$ | Half-life
(days)
[T _R] | Soil-to-
Plant
Uptake
(B _s) | Soil-to-
Wet Plant
Uptake
(B _{vw}) | Bioaccum-
ulation
Factor for
Fish
(L/kg)
[BF] | Bio-
transfer
Coefficient
for Beef
(day/kg)
[F _B] | Bio-
transfer
Coefficient
for Milk
(day/kg)
[F _m] |
|-----------------------|-------------|--|---|--|--|--|---|--|--|--|
| P-33 | 015749-66-3 | 7.81E-13 | 3.96E-13 | 0.00E+00 | 2.54E+01 | 3.0E+00 | 1.0E+00 | 5.0E+04 | 5.0E-02 | 1.6E-02 |
| Pa-231 | 014331-85-2 | 1.49E-10 | 2.42E-08 | 2.71E-08 | 1.36E+07 | 2.5E-03 | 6.3E-04 | 1.0E+01 | 1.0E-05 | 5.0E-06 |
| Pa-233 | 013981-14-1 | 4.69E-12 | 4.92E-12 | 4.54E-07 | 2.70E+01 | 2.5E-03 | 6.3E-04 | 1.0E+01 | 1.0E-05 | 5.0E-06 |
| Pa-234 | 015100-28-4 | 2.13E-12 | 1.30E-12 | 6.60E-06 | 2.79E-01 | 2.5E-03 | 6.3E-04 | 1.0E+01 | 1.0E-05 | 5.0E-06 |
| Pa-234m | 015100-28-4 | 4.77E-15 | 6.27E-15 | 4.05E-08 | 8.13E-04 | 2.5E-03 | 6.3E-04 | 1.0E+01 | 1.0E-05 | 5.0E-06 |
| Pb-203 | 014687-25-3 | 1.03E-12 | 3.10E-13 | 6.40E-07 | 2.17E+00 | 9.0E-02 | 7.6E-04 | 3.0E+02 | 4.0E-04 | 3.0E-04 |
| Pb-209 | 014119-30-3 | 2.09E-13 | 6.85E-14 | 0.00E+00 | 1.35E-01 | 9.0E-02 | 7.6E-04 | 3.0E+02 | 4.0E-04 | 3.0E-04 |
| Pb-210 | 014255-04-0 | 6.75E-10 | 1.67E-09 | 1.12E-10 | 8.14E+03 | 9.0E-02 | 7.6E-04 | 3.0E+02 | 4.0E-04 | 3.0E-04 |
| Pb-210+D | 014255-04-0 | 1.01E-09 | 3.86E-09 | 1.45E-10 | 8.14E+03 | 2.2E-01 | 9.6E-03 | 3.6E+02 | 5.8E-03 | 1.1E-03 |
| Pb-211 | 015816-77-0 | 3.38E-13 | 1.03E-11 | 1.85E-07 | 2.51E-02 | 9.0E-02 | 7.6E-04 | 3.0E+02 | 4.0E-04 | 3.0E-04 |
| Pb-212 | 015092-94-1 | 1.80E-11 | 3.85E-11 | 3.00E-07 | 4.42E-01 | 9.0E-02 | 7.6E-04 | 3.0E+02 | 4.0E-04 | 3.0E-04 |
| Pb-214 | 015067-28-4 | 2.94E-13 | 6.23E-12 | 7.09E-07 | 1.86E-02 | 9.0E-02 | 7.6E-04 | 3.0E+02 | 4.0E-04 | 3.0E-04 |
| Pd-100 | 015690-69-4 | 3.74E-12 | 3.55E-12 | | 3.64E+00 | 1.5E-01 | 3.8E-02 | | 4.0E-03 | 1.0E-02 |
| Pd-101 | 015749-54-9 | 3.74E-13 | 2.29E-13 | | 3.53E-01 | 1.5E-01 | 3.8E-02 | | 4.0E-03 | 1.0E-02 |
| Pd-103 | 014967-68-1 | 1.05E-12 | 1.08E-12 | 5.38E-10 | 1.70E+01 | 1.5E-01 | 3.8E-02 | | 4.0E-03 | 1.0E-02 |
| Pd-107 | 017637-99-9 | 2.09E-13 | 1.46E-12 | 0.00E+00 | 2.37E+09 | 1.5E-01 | 3.8E-02 | | 4.0E-03 | 1.0E-02 |
| Pd-109 | 014981-64-7 | 3.33E-12 | 1.99E-12 | 2.43E-09 | 5.63E-01 | 1.5E-01 | 3.8E-02 | | 4.0E-03 | 1.0E-02 |
| Pm-147 | 014380-75-7 | 1.41E-12 | 7.49E-12 | 6.35E-12 | 9.56E+02 | 1.0E-02 | 2.5E-03 | 3.0E+01 | 5.0E-03 | 2.0E-05 |
| Pm-148 | 014683-19-3 | 1.44E-11 | 1.05E-11 | 2.21E-06 | 5.37E+00 | 1.0E-02 | 2.5E-03 | 3.0E+01 | 5.0E-03 | 2.0E-05 |

Table 3.6c. (continued)

| Chemical [†] | CASRN | Ingestion
SF
(pCi) ⁻¹ | Inhalation
SF
(pCi) ⁻¹ | External
Exposure
SF
$\frac{\text{g}}{\text{pCi-yr}}$ | Half-life
(days)
[T _{1/2}] | Soil-to-
Plant
Uptake
(B _s) | Soil-to-
Wet Plant
Uptake
(B _{VW}) | Bioaccum-
ulation
Factor for
Fish
(L/kg)
[BF] | Bio-
transfer
Coefficient
for Beef
(day/kg)
[F _B] | Bio-
transfer
Coefficient
for Milk
(day/kg)
[F _m] |
|-----------------------|-------------|--|---|--|--|--|---|--|--|--|
| Pm-148m | 014683-19-3 | 9.93E-12 | 2.95E-11 | 7.32E-06 | 4.13E+01 | 1.0E-02 | 2.5E-03 | 3.0E+01 | 5.0E-03 | 2.0E-05 |
| Pm-149 | 015765-31-8 | 5.52E-12 | 3.57E-12 | 3.65E-08 | 2.21E+00 | 1.0E-02 | 2.5E-03 | 3.0E+01 | 5.0E-03 | 2.0E-05 |
| Po-210 | 013981-52-7 | 3.26E-10 | 2.14E-09 | 3.30E-11 | 1.38E+02 | 9.0E-02 | 9.1E-05 | 5.0E+01 | 5.0E-03 | 3.4E-04 |
| Po-212 | 015389-34-1 | 4.51E-23 | 5.93E-21 | 0.00E+00 | 3.45E-12 | 9.0E-02 | 9.1E-05 | 5.0E+01 | 5.0E-03 | 3.4E-04 |
| Po-213 | 015756-57-7 | 6.70E-22 | 7.80E-20 | 1.18E-10 | 4.86E-11 | 9.0E-02 | 9.1E-05 | 5.0E+01 | 5.0E-03 | 3.4E-04 |
| Po-214 | 015735-67-8 | 2.12E-20 | 2.77E-18 | 3.23E-10 | 1.90E-09 | 9.0E-02 | 9.1E-05 | 5.0E+01 | 5.0E-03 | 3.4E-04 |
| Po-215 | 015706-52-2 | 4.99E-19 | 4.48E-17 | 5.11E-10 | 2.06E-08 | 9.0E-02 | 9.1E-05 | 5.0E+01 | 5.0E-03 | 3.4E-04 |
| Po-216 | 015756-58-8 | 8.79E-17 | 2.95E-15 | 5.62E-11 | 1.69E-06 | 9.0E-02 | 9.1E-05 | 5.0E+01 | 5.0E-03 | 3.4E-04 |
| Po-218 | 015422-24-9 | 5.08E-14 | 3.69E-12 | 0.00E+00 | 2.12E-03 | 9.0E-02 | 9.1E-05 | 5.0E+01 | 5.0E-03 | 3.4E-04 |
| Pr-142 | 014191-64-1 | 6.98E-12 | 4.16E-12 | 2.34E-07 | 7.96E-01 | 2.0E-02 | 2.0E-03 | 1.0E+02 | 3.0E-04 | 2.0E-05 |
| Pr-143 | 014981-79-4 | 6.60E-12 | 5.60E-12 | 3.41E-14 | 1.36E+01 | 2.0E-02 | 2.0E-03 | 1.0E+02 | 3.0E-04 | 2.0E-05 |
| Pr-144 | 014119-05-2 | 8.08E-14 | 1.31E-13 | 1.33E-07 | 1.20E-02 | 2.0E-02 | 2.0E-03 | 1.0E+02 | 3.0E-04 | 2.0E-05 |
| Pr-144m | 014119-05-2 | 3.23E-14 | 5.61E-14 | 1.85E-09 | 5.00E-03 | 2.0E-02 | 2.0E-03 | 1.0E+02 | 3.0E-04 | 2.0E-05 |
| Pt-191 | 015706-36-2 | 1.50E-12 | 4.13E-13 | 6.74E-07 | 2.71E+00 | 9.5E-02 | 2.4E-02 | | 4.0E-03 | 5.0E-03 |
| Pt-193 | 015735-70-3 | 1.62E-13 | 7.89E-14 | 0.00E+00 | 1.83E+04 | 9.5E-02 | 2.4E-02 | | 4.0E-03 | 5.0E-03 |
| Pt-193m | 015735-70-3 | 2.51E-12 | 5.76E-13 | 7.44E-09 | 4.33E+00 | 9.5E-02 | 2.4E-02 | | 4.0E-03 | 5.0E-03 |
| Pt-197 | 015735-74-7 | 2.12E-12 | 4.54E-13 | 3.15E-08 | 7.63E-01 | 9.5E-02 | 2.4E-02 | | 4.0E-03 | 5.0E-03 |
| Pt-197m | 015735-74-7 | 3.25E-13 | 1.00E-13 | 1.65E-07 | 6.56E-02 | 9.5E-02 | 2.4E-02 | | 4.0E-03 | 5.0E-03 |
| Pu-236 | 015411-92-4 | 7.68E-11 | 1.34E-08 | 2.32E-11 | 1.04E+03 | 3.4E-04 | 4.9E-06 | 3.0E+01 | 1.0E-05 | 1.1E-06 |

Table 3.6c. (continued)

| Chemical [†] | CASRN | Ingestion
SF
(pCi) ⁻¹ | Inhalation
SF
(pCi) ⁻¹ | External
Exposure
SF
g
pCi-yr | Half-life
(days)
[T _R] | Soil-to-
Plant
Uptake
(B _r) | Soil-to-
Wet Plant
Uptake
(B _{vw}) | Bioaccum-
ulation
Factor for
Fish
(L/kg)
[BF] | Bio-
transfer
Coefficient
for Beef
(day/kg)
[F _B] | Bio-
transfer
Coefficient
for Milk
(day/kg)
[F _m] |
|-----------------------|-------------|--|---|---|--|--|---|--|--|--|
| Pu-238 | 013981-16-3 | 2.95E-10 | 2.74E-08 | 1.94E-11 | 3.20E+04 | 3.4E-04 | 4.9E-06 | 3.0E+01 | 1.0E-05 | 1.1E-06 |
| Pu-239 | 015117-48-3 | 3.16E-10 | 2.78E-08 | 1.26E-11 | 8.80E+06 | 3.4E-04 | 4.9E-06 | 3.0E+01 | 1.0E-05 | 1.1E-06 |
| Pu-240 | 014119-33-6 | 3.15E-10 | 2.78E-08 | 1.87E-11 | 2.40E+06 | 3.4E-04 | 4.9E-06 | 3.0E+01 | 1.0E-05 | 1.1E-06 |
| Pu-241 | 014119-32-5 | 5.20E-12 | 2.81E-10 | 0.00E+00 | 5.26E+03 | 3.4E-04 | 4.9E-06 | 3.0E+01 | 1.0E-05 | 1.1E-06 |
| Pu-241+D | 014119-32-5 | 3.33E-10 | 3.88E-08 | 4.59E-09 | 5.26E+03 | 2.5E-02 | 6.6E-04 | 7.0E+01 | 3.5E-04 | 4.0E-04 |
| Pu-242 | 013982-10-0 | 3.00E-10 | 2.64E-08 | 1.55E-11 | 1.37E+08 | 3.4E-04 | 4.9E-06 | 3.0E+01 | 1.0E-05 | 1.1E-06 |
| Pu-243 | 015706-37-3 | 3.69E-13 | 2.67E-13 | 1.89E-08 | 2.07E-01 | 3.4E-04 | 4.9E-06 | 3.0E+01 | 1.0E-05 | 1.1E-06 |
| Pu-244 | 014119-34-7 | 3.13E-10 | 2.67E-08 | 1.29E-11 | 3.01E+10 | 3.4E-04 | 4.9E-06 | 3.0E+01 | 1.0E-05 | 1.1E-06 |
| Pu-244+D | 014119-34-7 | 3.19E-10 | 2.67E-08 | 3.65E-06 | 3.01E+10 | 9.2E-02 | 3.5E-03 | 7.0E+01 | 1.3E-03 | 4.1E-04 |
| Ra-223 | 015623-45-7 | 2.34E-10 | 3.60E-09 | 2.44E-07 | 1.14E+01 | 8.0E-02 | 9.3E-03 | 5.0E+01 | 9.0E-04 | 1.3E-03 |
| Ra-224 | 013233-32-4 | 1.49E-10 | 2.25E-09 | 2.48E-08 | 3.62E+00 | 8.0E-02 | 9.3E-03 | 5.0E+01 | 9.0E-04 | 1.3E-03 |
| Ra-225 | 013981-53-8 | 1.57E-10 | 2.38E-09 | 1.71E-09 | 1.48E+01 | 8.0E-02 | 9.3E-03 | 5.0E+01 | 9.0E-04 | 1.3E-03 |
| Ra-226 | 013982-63-3 | 2.95E-10 | 2.72E-09 | 1.31E-08 | 5.84E+05 | 8.0E-02 | 9.3E-03 | 5.0E+01 | 9.0E-04 | 1.3E-03 |
| Ra-226+D | 013982-63-3 | 2.96E-10 | 2.75E-09 | 6.74E-06 | 5.84E+05 | 3.9E-01 | 1.9E-02 | 4.6E+02 | 1.2E-02 | 2.8E-03 |
| Ra-228 | 015262-20-1 | 2.46E-10 | 9.61E-10 | 0.00E+00 | 2.10E+03 | 8.0E-02 | 9.3E-03 | 5.0E+01 | 9.0E-04 | 1.3E-03 |
| Ra-228+D | 015262-20-1 | 2.48E-10 | 9.94E-10 | 3.28E-06 | 2.10E+03 | 8.4E-02 | 1.0E-02 | 5.0E+01 | 9.3E-04 | 1.3E-03 |
| Rb-82 | 014391-63-0 | 1.05E-14 | 1.17E-14 | 3.89E-06 | 8.68E-04 | 9.0E-01 | 9.0E-02 | 2.0E+03 | 1.0E-02 | 1.2E-02 |
| Rb-86 | 014932-53-7 | 7.12E-12 | 4.21E-12 | 3.71E-07 | 1.87E+01 | 9.0E-01 | 9.0E-02 | 2.0E+03 | 1.0E-02 | 1.2E-02 |
| Rb-87 | 013982-13-3 | 3.68E-12 | 2.26E-12 | 0.00E+00 | 1.73E+13 | 9.0E-01 | 9.0E-02 | 2.0E+03 | 1.0E-02 | 1.2E-02 |

Table 3.6c. (continued)

| Chemical ¹ | CASRN | Ingestion
SF
(pCi) ⁻¹ | Inhalation
SF
(pCi) ⁻¹ | External
Exposure
SF
$\frac{\text{g}}{\text{pCi-yr}}$ | Half-life
(days)
[T _R] | Soil-to-
Plant
Uptake
(B _s) | Soil-to-
Wet Plant
Uptake
(B _{vw}) | Bioaccum-
ulation
Factor for
Fish
(L/kg)
[BF] | Bio-
transfer
Coefficient
for Beef
(day/kg)
[F _B] | Bio-
transfer
Coefficient
for Milk
(day/kg)
[F _m] |
|-----------------------|-------------|--|---|--|--|--|---|--|--|--|
| Rb-88 | 014928-36-0 | 1.46E-13 | 1.36E-13 | 2.68E-06 | 1.24E-02 | 9.0E-01 | 9.0E-02 | 2.0E+03 | 1.0E-02 | 1.2E-02 |
| Rb-89 | 014191-65-2 | 8.65E-14 | 6.92E-14 | 8.47E-06 | 1.07E-02 | 9.0E-01 | 9.0E-02 | 2.0E+03 | 1.0E-02 | 1.2E-02 |
| Rh-103m | 007440-16-6 | 8.19E-15 | 1.28E-14 | 5.85E-11 | 3.90E-02 | 9.0E-01 | 9.0E-02 | 1.0E+01 | 2.0E-03 | 1.0E-02 |
| Rh-105 | 014913-89-4 | 1.93E-12 | 1.22E-12 | 2.49E-07 | 1.48E+00 | 9.0E-01 | 9.0E-02 | 1.0E+01 | 2.0E-03 | 1.0E-02 |
| Rh-105m | 014913-89-4 | 1.08E-15 | 9.25E-16 | 2.27E-08 | 5.21E-04 | 9.0E-01 | 9.0E-02 | 1.0E+01 | 2.0E-03 | 1.0E-02 |
| Rh-106 | 014234-34-5 | 3.63E-15 | 4.62E-15 | 7.57E-07 | 3.46E-04 | 9.0E-01 | 9.0E-02 | 1.0E+01 | 2.0E-03 | 1.0E-02 |
| Rn-219 | 014835-02-0 | | 6.91E-14 | 1.72E-07 | 4.58E-05 | | | | | |
| Rn-220 | 022481-48-7 | | 1.92E-13 | 1.88E-09 | 6.44E-04 | | | | | |
| Rn-222+D | 014859-67-7 | | 7.57E-12 | | 3.82E+00 | 3.1E-01 | 9.7E-03 | 4.1E+02 | 1.1E-02 | 1.5E-03 |
| Ru-103 | 013968-53-1 | 3.32E-12 | 4.59E-12 | 1.70E-06 | 3.94E+01 | 2.0E-01 | 2.4E-02 | 1.0E+01 | 5.1E-02 | 3.3E-06 |
| Ru-105 | 014331-95-4 | 1.15E-12 | 8.02E-13 | 2.88E-06 | 1.85E-01 | 2.0E-01 | 2.4E-02 | 1.0E+01 | 5.1E-02 | 3.3E-06 |
| Ru-106 | 013967-48-1 | 3.45E-11 | 1.15E-10 | 0.00E+00 | 3.68E+02 | 2.0E-01 | 2.4E-02 | 1.0E+01 | 5.1E-02 | 3.3E-06 |
| Ru-106+D | 013967-48-1 | 3.45E-11 | 1.15E-10 | 7.57E-07 | 3.68E+02 | 1.1E+00 | 1.1E-01 | 2.0E+01 | 5.3E-02 | 1.0E-02 |
| Ru-97 | 015758-35-7 | 5.88E-13 | 4.09E-13 | 4.52E-07 | 2.90E+00 | 2.0E-01 | 2.4E-02 | 1.0E+01 | 5.1E-02 | 3.3E-06 |
| S-35 | 015117-53-0 | 4.16E-13 | 1.85E-13 | 0.00E+00 | 8.74E+01 | 2.0E+00 | 6.0E-01 | 8.0E+02 | 2.0E-01 | 1.6E-02 |
| Sb-122 | 014374-79-9 | 8.81E-12 | 5.46E-12 | 1.61E-06 | 2.70E+00 | 5.0E-02 | 1.0E-02 | 1.0E+02 | 4.0E-05 | 2.5E-05 |
| Sb-124 | 014683-10-4 | 1.07E-11 | 1.32E-11 | 7.35E-06 | 6.02E+01 | 5.0E-02 | 1.0E-02 | 1.0E+02 | 4.0E-05 | 2.5E-05 |
| Sb-125 | 014234-35-6 | 2.97E-12 | 5.20E-12 | 1.34E-06 | 1.01E+03 | 5.0E-02 | 1.0E-02 | 1.0E+02 | 4.0E-05 | 2.5E-05 |
| Sb-125+D | 014234-35-6 | 3.54E-12 | 5.85E-12 | 1.34E-06 | 1.01E+03 | 7.1E+00 | 7.1E-01 | 5.0E+02 | 7.0E-03 | 4.8E-04 |

Table 3.6c. (continued)

| Chemical ¹ | CASRN | Ingestion
SF
(pCi) ⁻¹ | Inhalation
SF
(pCi) ⁻¹ | External
Exposure
SF
g
pCi-yr | Half-life
(days)
[T _{1/2}] | Soil-to-
Plant
Uptake
(B _p) | Soil-to-
Wet Plant
Uptake
(B _{vw}) | Bioaccum-
ulation
Factor for
Fish
(L/kg)
[BF] | Bio-
transfer
Coefficient
for Beef
(day/kg)
[F _b] | Bio-
transfer
Coefficient
for Milk
(day/kg)
[F _m] |
|-----------------------|-------------|--|---|---|--|--|---|--|--|--|
| Sb-126 | 015756-32-8 | 9.73E-12 | 8.41E-12 | 1.03E-05 | 1.24E+01 | 5.0E-02 | 1.0E-02 | 1.0E+02 | 4.0E-05 | 2.5E-05 |
| Sb-126m | 015756-32-8 | 7.28E-14 | 6.43E-14 | 5.78E-06 | 1.32E-02 | 5.0E-02 | 1.0E-02 | 1.0E+02 | 4.0E-05 | 2.5E-05 |
| Sb-127 | 013968-50-8 | 8.48E-12 | 6.05E-12 | 2.40E-06 | 3.85E+00 | 5.0E-02 | 1.0E-02 | 1.0E+02 | 4.0E-05 | 2.5E-05 |
| Sb-129 | 014331-88-5 | 1.86E-12 | 8.60E-13 | 5.56E-06 | 1.83E-01 | 5.0E-02 | 1.0E-02 | 1.0E+02 | 4.0E-05 | 2.5E-05 |
| Sc-46 | 013967-63-0 | 5.73E-12 | 1.31E-11 | 7.89E-06 | 8.38E+01 | 1.0E-02 | 2.0E-03 | 1.0E+02 | 2.0E-03 | 6.0E-05 |
| Sc-47 | 014391-96-9 | 2.95E-12 | 2.01E-12 | 2.50E-07 | 3.42E+00 | 1.0E-02 | 2.0E-03 | 1.0E+02 | 2.0E-03 | 6.0E-05 |
| Sc-48 | 014391-86-7 | 6.65E-12 | 4.20E-12 | 1.31E-05 | 1.82E+00 | 1.0E-02 | 2.0E-03 | 1.0E+02 | 2.0E-03 | 6.0E-05 |
| Se-75 | 014265-71-5 | 6.53E-12 | 4.92E-12 | 8.89E-07 | 1.20E+02 | 5.0E-01 | 1.0E-01 | | 1.0E-01 | 1.0E-02 |
| Si-31 | 014276-49-4 | 5.04E-13 | 3.29E-13 | 3.45E-09 | 1.09E-01 | 3.5E-01 | 8.8E-02 | | 4.0E-05 | 2.0E-05 |
| Sm-147 | 014392-33-7 | 2.51E-11 | 6.93E-09 | 0.00E+00 | 3.87E+13 | 1.0E-02 | 2.5E-03 | | 5.0E-03 | 2.0E-05 |
| Sm-151 | 015715-94-3 | 4.60E-13 | 4.63E-12 | 2.92E-13 | 3.29E+04 | 1.0E-02 | 2.5E-03 | | 5.0E-03 | 2.0E-05 |
| Sm-153 | 015766-00-4 | 4.02E-12 | 2.18E-12 | 4.65E-08 | 1.95E+00 | 1.0E-02 | 2.5E-03 | | 5.0E-03 | 2.0E-05 |
| Sn-113 | 013966-06-8 | 3.72E-12 | 6.61E-12 | 2.96E-09 | 1.15E+02 | 1.0E+00 | 3.0E-01 | 3.0E+03 | 1.0E-02 | 1.0E-03 |
| Sn-121 | 014683-06-8 | 1.22E-12 | 6.13E-13 | | 1.13E+00 | 1.0E+00 | 3.0E-01 | 3.0E+03 | 1.0E-02 | 1.0E-03 |
| Sn-121m | 014683-06-8 | 2.00E-12 | 7.46E-12 | | 2.03E+04 | 1.0E+00 | 3.0E-01 | 3.0E+03 | 1.0E-02 | 1.0E-03 |
| Sn-125 | 014683-08-0 | 1.68E-11 | 1.19E-11 | 1.21E-06 | 9.64E+00 | 1.0E+00 | 3.0E-01 | 3.0E+03 | 1.0E-02 | 1.0E-03 |
| Sn-126 | 015832-50-5 | 2.12E-11 | 4.26E-11 | 3.32E-08 | 3.65E+07 | 1.0E+00 | 3.0E-01 | 3.0E+03 | 1.0E-02 | 1.0E-03 |
| Sr-82 | 014809-50-8 | 2.58E-11 | 8.87E-12 | 9.00E-11 | 2.50E+01 | 1.1E+00 | 2.1E-01 | 6.0E+01 | 8.0E-03 | 2.8E-03 |
| Sr-85 | 013967-73-2 | 1.40E-12 | 1.14E-12 | 1.54E-06 | 6.48E+01 | 1.1E+00 | 2.1E-01 | 6.0E+01 | 8.0E-03 | 2.8E-03 |

Table 3.6c. (continued)

| Chemical [†] | CASRN | Ingestion
SF
(pCi) ⁻¹ | Inhalation
SF
(pCi) ⁻¹ | External
Exposure
SF
$\frac{\text{g}}{\text{pCi-yr}}$ | Half-life
(days)
[T _{1/2}] | Soil-to-
Plant
Uptake
(B _s) | Soil-to-
Wet Plant
Uptake
(B _{vw}) | Bioaccum-
ulation
Factor for
Fish
(L/kg)
[BF] | Bio-
transfer
Coefficient
for Beef
(day/kg)
[F _B] | Bio-
transfer
Coefficient
for Milk
(day/kg)
[F _m] |
|-----------------------|-------------|--|---|--|--|--|---|--|--|--|
| Sr-85m | 013967-73-2 | 1.80E-14 | 7.13E-15 | 5.24E-07 | 4.70E-02 | 1.1E+00 | 2.1E-01 | 6.0E+01 | 8.0E-03 | 2.8E-03 |
| Sr-89 | 014158-27-1 | 1.03E-11 | 3.68E-12 | 5.38E-10 | 5.06E+01 | 1.1E+00 | 2.1E-01 | 6.0E+01 | 8.0E-03 | 2.8E-03 |
| Sr-90 | 010098-97-2 | 4.09E-11 | 5.94E-11 | 0.00E+00 | 1.04E+04 | 1.1E+00 | 2.1E-01 | 6.0E+01 | 8.0E-03 | 2.8E-03 |
| Sr-90+D | 010098-97-2 | 5.59E-11 | 6.93E-11 | 0.00E+00 | 1.04E+04 | 1.1E+00 | 2.1E-01 | 9.0E+01 | 9.0E-03 | 2.8E-03 |
| Sr-91 | 014331-91-0 | 2.82E-12 | 7.79E-13 | 2.67E-06 | 3.96E-01 | 1.1E+00 | 2.1E-01 | 6.0E+01 | 8.0E-03 | 2.8E-03 |
| Sr-92 | 014928-29-1 | 2.03E-12 | 4.70E-13 | 5.20E-06 | 1.13E-01 | 1.1E+00 | 2.1E-01 | 6.0E+01 | 8.0E-03 | 2.8E-03 |
| Ta-182 | 013982-00-8 | 7.03E-12 | 1.65E-11 | 4.66E-06 | 1.15E+02 | 1.0E-02 | 2.5E-03 | 1.0E+02 | 6.0E-04 | 3.0E-06 |
| Tb-158 | 015759-55-4 | 4.20E-12 | 7.04E-11 | | 5.48E+04 | 1.0E-02 | 2.5E-03 | | 4.5E-03 | 2.0E-05 |
| Tb-160 | 013981-29-8 | 7.62E-12 | 1.14E-11 | 4.03E-06 | 7.23E+01 | 1.0E-02 | 2.5E-03 | | 4.5E-03 | 2.0E-05 |
| Tc-95 | 014809-56-4 | 6.81E-14 | 3.38E-14 | 2.72E-06 | 8.33E-01 | 7.6E+01 | 2.1E+02 | 2.0E+01 | 1.0E-04 | 1.4E-04 |
| Tc-95m | 014809-56-4 | 1.24E-12 | 2.10E-12 | 2.08E-06 | 6.10E+01 | 7.6E+01 | 2.1E+02 | 2.0E+01 | 1.0E-04 | 1.4E-04 |
| Tc-96 | 014808-44-7 | 2.28E-12 | 1.94E-12 | 9.36E-06 | 4.28E+00 | 7.6E+01 | 2.1E+02 | 2.0E+01 | 1.0E-04 | 1.4E-04 |
| Tc-96m | 014808-44-7 | 2.61E-14 | 2.26E-14 | 7.72E-08 | 3.58E-02 | 7.6E+01 | 2.1E+02 | 2.0E+01 | 1.0E-04 | 1.4E-04 |
| Tc-97 | 015759-35-0 | 1.58E-13 | 3.44E-13 | 2.49E-10 | 9.49E+08 | 7.6E+01 | 2.1E+02 | 2.0E+01 | 1.0E-04 | 1.4E-04 |
| Tc-97m | 015759-35-0 | 1.20E-12 | 1.96E-12 | 2.67E-10 | 8.90E+01 | 7.6E+01 | 2.1E+02 | 2.0E+01 | 1.0E-04 | 1.4E-04 |
| Tc-99 | 014133-76-7 | 1.40E-12 | 2.89E-12 | 6.19E-13 | 7.77E+07 | 7.6E+01 | 2.1E+02 | 2.0E+01 | 1.0E-04 | 1.4E-04 |
| Tc-99m | 014133-76-7 | 5.58E-14 | 3.49E-14 | 2.51E-07 | 2.51E-01 | 7.6E+01 | 2.1E+02 | 2.0E+01 | 1.0E-04 | 1.4E-04 |
| Te-125m | 014390-73-9 | 2.51E-12 | 2.85E-12 | 2.16E-09 | 5.80E+01 | 7.0E+00 | 7.0E-01 | 4.0E+02 | 7.0E-03 | 4.5E-04 |
| Te-127 | 013981-49-2 | 8.55E-13 | 4.32E-13 | 1.62E-08 | 3.90E-01 | 7.0E+00 | 7.0E-01 | 4.0E+02 | 7.0E-03 | 4.5E-04 |

Table 3.6c. (continued)

| Chemical [†] | CASRN | Ingestion SF
(pCi) ⁻¹ | Inhalation SF
(pCi) ⁻¹ | External Exposure SF
E
pCi-yr | Half-life
(days)
[T _R] | Soil-to-Plant Uptake
(B _r) | Soil-to-Wet Plant Uptake
(B _{VW}) | Bioaccumulation Factor for Fish
(L/kg)
[BF] | Bio-transfer Coefficient for Beef
(day/kg)
[F _B] | Bio-transfer Coefficient for Milk
(day/kg)
[F _M] |
|-----------------------|-------------|-------------------------------------|--------------------------------------|-------------------------------------|--|---|--|---|--|--|
| Te-127m | 013981-49-2 | 6.01E-12 | 1.31E-11 | 7.10E-10 | 1.09E+02 | 7.0E+00 | 7.0E-01 | 4.0E+02 | 7.0E-03 | 4.5E-04 |
| Te-129 | 014269-71-7 | 1.48E-13 | 1.46E-13 | 1.46E-07 | 4.83E-02 | 7.0E+00 | 7.0E-01 | 4.0E+02 | 7.0E-03 | 4.5E-04 |
| Te-129m | 014269-71-7 | 1.17E-11 | 1.33E-11 | 6.92E-08 | 3.36E+01 | 7.0E+00 | 7.0E-01 | 4.0E+02 | 7.0E-03 | 4.5E-04 |
| Te-131 | 014683-12-6 | 3.90E-13 | 2.48E-13 | 1.35E-06 | 1.74E-02 | 7.0E+00 | 7.0E-01 | 4.0E+02 | 7.0E-03 | 4.5E-04 |
| Te-131m | 014683-12-6 | 8.81E-12 | 8.40E-12 | 5.31E-06 | 1.25E+00 | 7.0E+00 | 7.0E-01 | 4.0E+02 | 7.0E-03 | 4.5E-04 |
| Te-132 | 014234-28-7 | 1.22E-11 | 8.38E-12 | 4.31E-07 | 3.26E+00 | 7.0E+00 | 7.0E-01 | 4.0E+02 | 7.0E-03 | 4.5E-04 |
| Th-227 | 015623-47-9 | 4.04E-11 | 4.31E-09 | 1.74E-07 | 1.87E+01 | 1.1E-02 | 1.4E-04 | 1.0E+02 | 1.0E-04 | 5.0E-06 |
| Th-228 | 014274-82-9 | 6.29E-11 | 9.45E-08 | 5.28E-10 | 6.97E+02 | 1.1E-02 | 1.4E-04 | 1.0E+02 | 1.0E-04 | 5.0E-06 |
| Th-228+D | 014274-82-9 | 2.31E-10 | 9.68E-08 | 9.94E-07 | 6.97E+02 | 4.0E-01 | 2.0E-02 | 5.6E+02 | 5.2E-02 | 4.8E-03 |
| Th-229 | 015594-54-4 | 5.65E-11 | 7.60E-08 | 5.94E-08 | 2.68E+06 | 1.1E-02 | 1.4E-04 | 1.0E+02 | 1.0E-04 | 5.0E-06 |
| Th-229+D | 015594-54-4 | 3.56E-10 | 8.26E-08 | 5.99E-07 | 2.68E+06 | 1.4E+00 | 2.9E-01 | 5.2E+02 | 2.0E-02 | 3.3E-02 |
| Th-230 | 014269-63-7 | 3.75E-11 | 1.72E-08 | 4.40E-11 | 2.81E+07 | 1.1E-02 | 1.4E-04 | 1.0E+02 | 1.0E-04 | 5.0E-06 |
| Th-231 | 014932-40-2 | 1.79E-12 | 1.10E-12 | 2.09E-09 | 1.06E+00 | 1.1E-02 | 1.4E-04 | 1.0E+02 | 1.0E-04 | 5.0E-06 |
| Th-232 | 007440-29-1 | 3.28E-11 | 1.93E-08 | 1.97E-11 | 5.15E+12 | 1.1E-02 | 1.4E-04 | 1.0E+02 | 1.0E-04 | 5.0E-06 |
| Th-234 | 015065-10-8 | 1.93E-11 | 1.90E-11 | 3.50E-09 | 2.41E+01 | 1.1E-02 | 1.4E-04 | 1.0E+02 | 1.0E-04 | 5.0E-06 |
| Tl-202 | 015720-57-7 | 1.01E-12 | 6.07E-13 | 1.42E-06 | 1.22E+01 | 4.0E-03 | 1.0E-03 | | 4.0E-02 | 2.0E-03 |
| Tl-204 | 013968-51-9 | 1.97E-12 | 1.15E-12 | 8.72E-10 | 1.38E+03 | 4.0E-03 | 1.0E-03 | | 4.0E-02 | 2.0E-03 |
| Tl-208 | 014913-50-9 | 1.75E-14 | 1.36E-14 | 1.45E-05 | 2.12E-03 | 4.0E-03 | 1.0E-03 | | 4.0E-02 | 2.0E-03 |
| Tl-209 | 015690-73-0 | 1.40E-14 | 1.12E-14 | 7.83E-06 | 1.53E-03 | 4.0E-03 | 1.0E-03 | | 4.0E-02 | 2.0E-03 |

Table 3.6c. (continued)

| Chemical ¹ | CASRN | Ingestion
SF
(pCi) ⁻¹ | Inhalation
SF
(pCi) ⁻¹ | External
Exposure
SF
$\frac{\text{g}}{\text{pCi-yr}}$ | Half-life
(days)
[T _R] | Soil-to-
Plant
Uptake
(B _r) | Soil-to-
Wet Plant
Uptake
(B _{VW}) | Bioaccum-
ulation
Factor for
Fish
(L/kg)
[BF] | Bio-
transfer
Coefficient
for Beef
(day/kg)
[F _B] | Bio-
transfer
Coefficient
for Milk
(day/kg)
[F _m] |
|-----------------------|-------------|--|---|--|--|--|---|--|--|--|
| Tm-170 | 013981-30-1 | 7.50E-12 | 1.10E-11 | 3.84E-09 | 1.29E+02 | 1.0E-02 | 2.5E-03 | | 4.5E-03 | 2.0E-05 |
| Tm-171 | 014333-45-0 | 5.86E-13 | 1.84E-12 | 3.15E-10 | 7.01E+02 | 1.0E-02 | 2.5E-03 | | 4.5E-03 | 2.0E-05 |
| U-232 | 014158-29-3 | 8.12E-11 | 5.29E-08 | 3.42E-11 | 2.63E+04 | 2.3E-02 | 6.3E-04 | 1.0E+01 | 3.0E-04 | 4.0E-04 |
| U-233 | 013968-55-3 | 4.48E-11 | 1.41E-08 | 3.52E-11 | 5.80E+07 | 2.3E-02 | 6.3E-04 | 1.0E+01 | 3.0E-04 | 4.0E-04 |
| U-234 | 013966-29-5 | 4.44E-11 | 1.40E-08 | 2.14E-11 | 8.94E+07 | 2.3E-02 | 6.3E-04 | 1.0E+01 | 3.0E-04 | 4.0E-04 |
| U-235 | 015117-96-1 | 4.52E-11 | 1.30E-08 | 2.63E-07 | 2.57E+11 | 2.3E-02 | 6.3E-04 | 1.0E+01 | 3.0E-04 | 4.0E-04 |
| U-235+D | 015117-96-1 | 4.70E-11 | 1.30E-08 | 2.65E-07 | 2.57E+11 | 3.4E-02 | 7.7E-04 | 1.1E+02 | 4.0E-04 | 4.1E-04 |
| U-236 | 013982-70-2 | 4.21E-11 | 1.32E-08 | 1.72E-11 | 8.54E+09 | 2.3E-02 | 6.3E-04 | 1.0E+01 | 3.0E-04 | 4.0E-04 |
| U-237 | 014269-75-1 | 3.98E-12 | 3.12E-12 | 1.37E-07 | 6.75E+00 | 2.3E-02 | 6.3E-04 | 1.0E+01 | 3.0E-04 | 4.0E-04 |
| U-238 | 007440-61-1 | 4.27E-11 | 1.24E-08 | 1.50E-11 | 1.63E+12 | 2.3E-02 | 6.3E-04 | 1.0E+01 | 3.0E-04 | 4.0E-04 |
| U-238+D | 007440-61-1 | 6.20E-11 | 1.24E-08 | 5.25E-08 | 1.63E+12 | 3.9E-02 | 2.0E-03 | 1.3E+02 | 4.2E-04 | 4.2E-04 |
| U-240 | 015687-53-3 | 5.47E-12 | 3.35E-12 | 1.09E-10 | 5.88E-01 | 2.3E-02 | 6.3E-04 | 1.0E+01 | 3.0E-04 | 4.0E-04 |
| V-48 | 014331-97-6 | 7.56E-12 | 6.84E-12 | 1.12E-05 | 1.60E+01 | 5.5E-03 | 1.4E-03 | 1.0E+01 | 2.5E-03 | 2.0E-05 |
| W-181 | 015749-46-9 | 2.72E-13 | 8.02E-14 | 2.11E-08 | 1.21E+02 | 3.0E+00 | 1.0E-02 | 1.0E+01 | 4.0E-02 | 3.0E-04 |
| W-185 | 014932-41-3 | 2.04E-12 | 4.26E-13 | 5.03E-11 | 7.51E+01 | 3.0E+00 | 1.0E-02 | 1.0E+01 | 4.0E-02 | 3.0E-04 |
| W-187 | 014983-48-3 | 2.46E-12 | 5.29E-13 | 1.63E-06 | 9.92E-01 | 3.0E+00 | 1.0E-02 | 1.0E+01 | 4.0E-02 | 3.0E-04 |
| Xe-122 | 015151-09-4 | | 3.08E-15 | | 8.38E-01 | 0.0E+00 | 0.0E+00 | | 0.0E+00 | 0.0E+00 |
| Xe-123 | 015700-10-4 | | 8.92E-16 | | 8.92E-02 | 0.0E+00 | 0.0E+00 | | 0.0E+00 | 0.0E+00 |
| Xe-125 | 013994-18-8 | | 1.20E-15 | | 7.00E-01 | 0.0E+00 | 0.0E+00 | | 0.0E+00 | 0.0E+00 |

Table 3.6c. (continued)

| Chemical [†] | CASRN | Ingestion SF
(pCi) ⁻¹ | Inhalation SF
(pCi) ⁻¹ | External Exposure SF
$\frac{\text{E}}{\text{pCi-yr}}$ | Half-life (days)
[T _{1/2}] | Soil-to-Plant Uptake (B ₁) | Soil-to-Wet Plant Uptake (B _{vw}) | Bioaccumulation Factor for Fish (L/kg) [BF] | Bio-transfer Coefficient for Beef (day/kg) [F _B] | Bio-transfer Coefficient for Milk (day/kg) [F _m] |
|-----------------------|-------------|-------------------------------------|--------------------------------------|--|---|--|---|---|--|--|
| Xe-127 | 013994-19-9 | | 4.09E-16 | | 3.64E+01 | 0.0E+00 | 0.0E+00 | | 0.0E+00 | 0.0E+00 |
| Xe-129m | 013965-99-6 | | 5.74E-16 | | 8.89E+00 | 0.0E+00 | 0.0E+00 | | 0.0E+00 | 0.0E+00 |
| Xe-131m | 014683-11-5 | | 4.13E-16 | | 1.18E+01 | 0.0E+00 | 0.0E+00 | | 0.0E+00 | 0.0E+00 |
| Xe-133 | 014932-42-4 | | 4.14E-16 | | 5.25E+00 | 0.0E+00 | 0.0E+00 | | 0.0E+00 | 0.0E+00 |
| Xe-133m | 014932-42-4 | | 5.12E-16 | | 2.19E+00 | 0.0E+00 | 0.0E+00 | | 0.0E+00 | 0.0E+00 |
| Xe-135 | 014995-62-1 | | 7.45E-16 | | 3.80E-01 | 0.0E+00 | 0.0E+00 | | 0.0E+00 | 0.0E+00 |
| Xe-135m | 014995-62-1 | | 1.88E-16 | | 1.07E-02 | 0.0E+00 | 0.0E+00 | | 0.0E+00 | 0.0E+00 |
| Xe-137 | 014835-21-3 | | 1.39E-15 | | 2.66E-03 | 0.0E+00 | 0.0E+00 | | 0.0E+00 | 0.0E+00 |
| Xe-138 | 015751-81-2 | | 2.06E-15 | | 9.79E-03 | 0.0E+00 | 0.0E+00 | | 0.0E+00 | 0.0E+00 |
| Y-90 | 010098-91-6 | 1.50E-11 | 9.90E-12 | 0.00E+00 | 2.67E+00 | 1.0E-02 | 1.0E-03 | 3.0E+01 | 1.0E-03 | 2.0E-05 |
| Y-91 | 014234-24-3 | 1.35E-11 | 1.85E-11 | 1.41E-08 | 5.85E+01 | 1.0E-02 | 1.0E-03 | 3.0E+01 | 1.0E-03 | 2.0E-05 |
| Y-91m | 014234-24-3 | 3.69E-14 | 2.99E-14 | 1.90E-06 | 3.45E-02 | 1.0E-02 | 1.0E-03 | 3.0E+01 | 1.0E-03 | 2.0E-05 |
| Y-92 | 015751-59-4 | 1.95E-12 | 1.61E-12 | 9.80E-07 | 1.48E-01 | 1.0E-02 | 1.0E-03 | 3.0E+01 | 1.0E-03 | 2.0E-05 |
| Y-93 | 014981-70-5 | 5.74E-12 | 3.48E-12 | 3.41E-07 | 4.21E-01 | 1.0E-02 | 1.0E-03 | 3.0E+01 | 1.0E-03 | 2.0E-05 |
| Zn-65 | 013982-39-3 | 9.93E-12 | 9.98E-12 | 2.27E-06 | 2.44E+02 | 9.9E-01 | 2.6E-01 | 1.0E+03 | 1.0E-01 | 1.0E-02 |
| Zn-69 | 013982-23-5 | 6.19E-14 | 1.04E-13 | 2.03E-11 | 3.86E-02 | 9.9E-01 | 2.6E-01 | 1.0E+03 | 1.0E-01 | 1.0E-02 |
| Zn-69m | 013982-23-5 | 1.52E-12 | 1.17E-12 | 1.43E-06 | 5.75E-01 | 9.9E-01 | 2.6E-01 | 1.0E+03 | 1.0E-01 | 1.0E-02 |
| Zr-93 | 015751-77-6 | 5.21E-13 | 5.26E-12 | 0.00E+00 | 5.58E+08 | 1.0E-03 | 1.0E-04 | 3.0E+02 | 1.0E-06 | 5.5E-07 |
| Zr-95 | 013967-71-0 | 3.92E-12 | 6.48E-12 | 2.81E-06 | 6.40E+01 | 1.0E-03 | 1.0E-04 | 3.0E+02 | 1.0E-06 | 5.5E-07 |

Table 3.6c. (continued)

| Chemical [†] | CASRN | Ingestion
SF
(pCi) ⁻¹ | Inhalation
SF
(pCi) ⁻¹ | External
Exposure
SF
$\frac{\text{E}}{\text{pCi-yr}}$ | Half-life
(days)
[T _R] | Soil-to-
Plant
Uptake
(B _v) | Soil-to-
Wet Plant
Uptake
(B _{vw}) | Bioaccum-
ulation
Factor for
Fish
(L/kg)
[BF] | Bio-
transfer
Coefficient
for Beef
(day/kg)
[F _B] | Bio-
transfer
Coefficient
for Milk
(day/kg)
[F _m] |
|-----------------------|-------------|--|---|--|--|--|---|--|--|--|
| Zr-97 | 014928-30-4 | 1.04E-11 | 4.73E-12 | 6.85E-07 | 7.04E-01 | 1.0E-03 | 1.0E-04 | 3.0E+02 | 1.0E-06 | 5.5E-07 |

Note:

† 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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