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ENTERED

Date: DEC 15 2009
Refer To: EP2009-0673

James Bearzi, Bureau Chief
Hazardous Waste Bureau
New Mexico Environment Department
2905 Rodeo Park Drive East, Building 1
Santa Fe, NM 87505-6303

DEC 2009

Subject: Submittal of the ECORISK Database, Release 2.4

Dear Mr. Bearzi:

Enclosed please find two hard copies with electronic files of the updates/revisions to the Los Alamos National Laboratory's ECORISK Database for your review. The Environmental Programs (EP) Directorate maintains and updates the database to ensure the ecological screening levels (ESLs) used to assess potential ecological risk at sites are representative and current. The updates to the database reflect work done in response to the New Mexico Environment Department's (NMED's) comments over the past year on investigation reports. Starting in January 2010, EP intends to use the ESLs presented in this release in reports submitted to the NMED-Hazardous Waste Bureau.

If you have any questions, please contact Richard Mirenda at (505) 665-6953 (rmirenda@lanl.gov).

Sincerely,

Michael J. Graham, Associate Director
Environmental Programs
Los Alamos National Laboratory

32306

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MG/DG/DM/RM:acm

Attachment: ECORISK Database, Release 2.4 (LA-UR-09-7834)

Cy: (w/att.)
RPF, MS M707 (2 CDs)

Cy: (w/o att.)
Tom Skibitski, NMED-OB, Santa Fe, NM
Steve Yanicak, NMED-DOE-OB, MS M894
David Gregory, DOE-LASO, MS A316
Annette Russell, DOE-LASO (date-stamped letter emailed)
Rich Mirenda, EP-EDA, MS M992
Ellen Louderbough, LC-LESH, MS A187
Craig Eberhart, EP-EDA, MS M992
Alison Dorries, EP-WES, MS M996
David McInroy, EP-CAP, MS M992
Michael J. Graham, ADEP, MS M991
IRM-RMMSO, MS A150 (date-stamped letter emailed)

TO VIEW THE DATABASE THAT ACCOMPANIES THIS DOCUMENT PLEASE CALL THE HAZARDOUS WASTE BUREAU AT 505-476-6000 TO MAKE AN APPOINMENT

December 2009

To Whom It May Concern:

Enclosed is a CD-ROM that contains files for the Los Alamos National Laboratory (LANL) Ecorisk Database Release 2.4 (December 2009).

The CD-ROM contains the following folder and files:

- **ECORISK_R2.4_112409.MDB**: A MS Office Access XP/2003 file that is the Ecorisk Database Release 2.4.
- **CoverLetterR2.4_112409.doc**: The cover letter you are currently reading.
- **ESLHistorySummary112409.doc**: A document describing all LANL Ecological Screening Level (ESL) changes since the beta release of the Ecorisk Database to the latest release. This file can be accessed either directly from the CD or from within the database on the 'Main Menu' screen under the 'Supplemental Reports' section.
- **ESLs_R2.4.xls**: A MS Office Excel (XP) file that contains all ESLs from the Ecorisk Database Release 2.4. This file can be accessed either directly from the CD or from within the database on the 'Main Menu' screen under the 'Supplemental Reports' section.
- **NMWQCC2002_NMAC_20_6_4.pdf**: The State of New Mexico standards for interstate and intrastate surface waters. These values may be useful for local risk assessments. Acrobat Reader software is needed to view this file.
- **GMMTRVDerivationMethods090104b.doc**: Explanations of the content of Toxicity Reference Value (TRV) Summary Reports associated with Geometric Mean (GMM) TRVs derived by LANL based on reviews of primary toxicity studies. This file can be accessed either directly from the CD or from within the database on the 'Main Menu' screen under the 'Supplemental Reports' section.
- **TRVs_Methods_LANL&EcoSSLData.doc**: A document that explains the methods used to derive TRVs for PAHs and DDT and metabolites using both US Environmental Protection Agency (EPA) Ecological Soil Screening Level (EcoSSL) and LANL data. This file can be accessed either directly from the CD or from within the database on the 'Main Menu' screen under the 'Supplemental Reports' section.
- **Interim_SoilESLs_R2.4_111309.xls**: A MS Office Excel (XP) file that contains the interim ESLs and surrogate ESLs that accompany the Ecorisk Database Release 2.4. This file can be accessed either directly from the CD or from within the database on the 'Main Menu' screen under the 'Supplemental Reports' section.
- **EcoriskDbR2.4_ToxicityData _ResourceSummary_SoilESLs_112409.xls**: A MS Office Excel (XP) file that contains the search results for toxicity data, as well as the TRVs identified for Ecorisk Database Release 2.4. This file can be accessed either directly from the CD or from within the database on the 'Main Menu' screen under the 'Supplemental Reports' section.

Installation of Program:

A directory folder of C:/EcoriskDb must be created in the user's hard drive, and ALL of the files in the CD-ROM must be saved to this location. This is necessary in order to ensure functionality of links to outside files from within the database. If you have files for a previous version of the Ecorisk Database already in this folder, you must delete or move the old files prior to installation. The database file cannot be opened directly from the CD-ROM due to the user-level security component of the database structure. Once the file has been copied to C:/EcoriskDb, please make sure that the read-only file property is NOT checked for the database (.mdb) file.

Data Issues:
In this release of the database, ESLs/TRVs were added for chemicals for which no toxicity data was previously available. Online toxicity databases were searched for relevant existing TRVs or for primary toxicity data and/or references from which TRVs could be derived for these chemicals (see EcoriskDbR2.4_ToxicityData_ResourceSummary_SoilESLs_112409.xls for details of search results). Of those 40 chemicals of concern, 11 chemicals now have LANL peer reviewed/ approved TRVs/ESLs incorporated into this release of the database, 5 chemicals have interim ESLs/ TRVs because LANL peer reviewed/ approved values could not be obtained in time for this release of the database (see Interim_SoilESLs_R2.4_111309.xls), 13 chemicals have surrogate ESLs/TRVs (see Interim_SoilESLs_R2.4_111309.xls) based on chemicals already in the database, and the remaining 12 chemicals still have no ESL at this time. Note – The sum of the numbers adds up to 41 instead of 40 because Hexanone[2-] has both an incorporated ESL (for birds) and an interim ESL (for mammals). Also, the interim and surrogate ESLs are not available in the database search options. These values must be obtained from the supplemental files on the CD.

Please refer to the ESL History Summary Report (ESLHistorySummary112409.htm) for a synopsis of the changes made to the data in the Ecorisk Database since the last release. This file can be accessed either directly from the CD or from within the database on the 'Main Menu' screen under the 'Supplemental Reports' section. Please refer to the 'What's New' screen in the database for specific details on value changes.

Interface Issues:
Added "Supplemental Reports" links to the "Main Menu" screen to allow access to supplemental files on the Ecorisk Database CD from within the database interface.

Note, when using the report option in the database, you will receive a blank report if there is no data for the report criteria you selected. You will also receive a blank report if you do not provide all the report criteria.

Other Issues:
This database is a work in progress and although we have reviewed the data within it extensively, we still recommend that you verify the data before use by referring to the actual references cited. The project may be able to assist you in obtaining copies of some of the harder to find documents cited in the database.

Contact Information:
Please contact Rich Mirenda at rmirenda@lanl.gov if you have any trouble with your copy of the database or if you have any questions and/or comments about the database.

We encourage you to provide feedback on the database.

Thank you,
The Ecorisk Database Team

NATIONAL INFORMATION SYSTEM FOR THE REGIONAL IPM CENTERS
OPP Pesticide Ecotoxicity Database

http://www.ipmcenters.org/Ecotox/Details.cfm?RecordID=14600
Details

Pesticide: Diphenylamine
Shaughness: 038501
CAS_NO: 122-39-4
Type of Pesticide: Fungicide
Type of Organism: Aves
Common Name: Bobwhite quail
Scientific Name: Colinus virginianus
Age: 22WKS
Guideline: [71-1] Avian Acute Oral-Game Bird or Waterfowl using TGAI or TEP (FIFRA 158.490)
Test Type: [O] Oral gavage or capsule administration of the toxicant
% AI: 100
Study Length: 14 D
Dose Type: [LD50] 50% Lethality from oral dose or acute dermal application
TGL: >
Toxicity: 2250
Tox Level: [MGK] milligrams/kg body wt(acute oral toxicity studies)
95% Confidence Levels: N.A.
Curve Slope: N.A.
NGL:
NOEL: 1350
Study Date: 1995
Review Date: 1996
Category: C
EPA Identification: 43878901
Laboratory: Wildlife International Inc., MD
Reviewer: KBN
Batch Number:
Eggs Laid:
% Eggs Cracked:
% Eggs Viable:
% Live Embryos:
% Egg Hatch:
14 Day Survive:
Growth Effect:

http://www.ipmcenters.org/Ecotox/Details.cfm?RecordID=14598
Details

Pesticide: Diphenylamine
Shaughness: 038501
CAS_NO: 122-39-4
Type of Pesticide: Fungicide
Type of Organism: Aves
Common Name: Mallard duck
Scientific Name: Anas platyrhynchos
Age: 10 D
Guideline: [71-2b]
Test Type: [D] Administration of the toxicant ad libitum in the diet
% AI: 100
Study Length: 8 D
Dose Type: [LC50] 50% Lethal Concentration in diet or water
TGL: >
Toxicity: 5205 ?
Tox Level: [PPM] Parts Per Million
95% Confidence Levels: N.A.
Curve Slope: N.A.
NGL:
NOEL: 5205
Study Date: 1995
Review Date: 1996
Category: C
EPA Identification: 43879101
Laboratory: Wildlife International Inc., MD
Reviewer: KBN
Batch Number:
Eggs Laid:
% Eggs Cracked:
% Eggs Viable:
% Live Embryos:
% Egg Hatch:
14 Day Survive:
Growth Effect:

Species	Chemical	Endpoint type	Endpoint description	Endpoint Value	Exposure Range	Reference	
Mallard duck	IRON (elemental)	TOX-Non-Repro-Subletha/-cellular/biochemical effects	serum glutamic pyruvic transaminase activity vs controls	increased @ 8 mfour iron shot	field study	Rozman, Robert S., Louis N. Locke and S. Finley McClure III. 1975. Enzyme changes in mallard ducks fed iron or lead shot. Avian Dis. 19(3):435-445.	no
Mallard duck	IRON (elemental)	TOX-Non-Repro-Subletha/-organ/system effects	incidence of hemosiderosis in liver vs controls	increased with all treatments	field study	Rozman, Robert S., Louis N. Locke and S. Finley McClure III. 1975. Enzyme changes in mallard ducks fed iron or lead shot. Avian Dis. 19(3):435-445.	no
Mallard duck	IRON (elemental)	TOX-Non-Repro-Subletha/-organ/system effects	incidence of inclusion bodies in kidney vs controls	increased @ 8 mfour iron shot	field study	Rozman, Robert S., Louis N. Locke and S. Finley McClure III. 1975. Enzyme changes in mallard ducks fed iron or lead shot. Avian Dis. 19(3):435-445.	no
Mallard duck	IRON (elemental)	TOX-Non-Repro-Subletha/-cellular/biochemical effects	serum enzyme levels versus controls (at 30 or 60 d post dose)	no effect	field study	Rozman, Robert S., Louis N. Locke and S. Finley McClure III. 1975. Enzyme changes in mallard ducks fed iron or lead shot. Avian Dis. 19(3):435-445.	no
Mallard duck	IRON COMPOUNDS	TOX-MORT - dose-response data	mean survival times compared among lead, iron and bismuth dosed birds	no differences	field study	Sanderson, Glen C., William L. Anderson, George L. Foley, Stephen P. Havens, Loretta M. Skowron, Jeffrey W. Brawn, Gale D. Taylor and James W. Seets. 1998. Effects of lead, iron, and bismuth allow shot embedded in the breast muscles of game-farm mallards. J. Wildl. Dis. 34:688-697.	
Mallard duck	IRON COMPOUNDS	TOX-Non-Repro-Subletha/-whole animal	mean body weight and organ weights compared among lead, iron and bismuth-dosed birds	no differences	field study	Sanderson, Glen C., William L. Anderson, George L. Foley, Stephen P. Havens, Loretta M. Skowron, Jeffrey W. Brawn, Gale D. Taylor and James W. Seets. 1998. Effects of lead, iron, and bismuth allow shot embedded in the breast muscles of game-farm mallards. J. Wildl. Dis. 34:688-697.	
Mallard duck	IRON COMPOUNDS	TOX-Non-Repro-Subletha/-cellular/biochemical effects	mean hematocrit values compared among lead, iron and bismuth dosed birds	no differences	field study	Sanderson, Glen C., William L. Anderson, George L. Foley, Stephen P. Havens, Loretta M. Skowron, Jeffrey W. Brawn, Gale D. Taylor and James W. Seets. 1998. Effects of lead, iron, and bismuth allow shot embedded in the breast muscles of game-farm mallards. J. Wildl. Dis. 34:688-697.	no
Mallard duck	IRON COMPOUNDS	TOX-EXP IND - accumulation	mean(SE) wet wt concentration of bismuth in organs	130(10.1) ppm in kidneys, 0.19(0.06) ppm in liver	field study	Sanderson, Glen C., William L. Anderson, George L. Foley, Stephen P. Havens, Loretta M. Skowron, Jeffrey W. Brawn, Gale D. Taylor and James W. Seets. 1998. Effects of lead, iron, and bismuth allow shot embedded in the breast muscles of game-farm mallards. J. Wildl. Dis. 34:688-697.	no
Mallard duck	IRON COMPOUNDS	TOX-MORT - dose-response data	mortality versus controls	no effect	field study	Sanderson, Glen C., William L. Anderson, George L. Foley, Loretta M. Skowron, Jeffrey D. Brawn and James W. Seets. 1997. Acute toxicity of ingested bismuth alloy shot in game-farm mallards. Ill. Nat. Hist. Survey Bull. 35:185-215.	
Mallard duck	IRON COMPOUNDS	TOX-Non-Repro-Subletha/-whole animal	body weight, organ weights (liver, kidney, gonads, gizzard) or hematocrit versus controls	no effect	field study	Sanderson, Glen C., William L. Anderson, George L. Foley, Loretta M. Skowron, Jeffrey D. Brawn and James W. Seets. 1997. Acute toxicity of ingested bismuth alloy shot in game-farm mallards. Ill. Nat. Hist. Survey Bull. 35:185-215.	
Mallard duck	IRON COMPOUNDS	TOX-EXP IND - accumulation	mean(SE) wet wt Bi concentration in organs of Bi-treated birds	6.86(0.98) ppm, kidneys; 2.22(0.49)2 ppm, liver; 0.46(0.277) ppm, gonads	field study	Sanderson, Glen C., William L. Anderson, George L. Foley, Loretta M. Skowron, Jeffrey D. Brawn and James W. Seets. 1997. Acute toxicity of ingested bismuth alloy shot in game-farm mallards. Ill. Nat. Hist. Survey Bull. 35:185-215.	no
Mallard duck	IRON COMPOUNDS	TOX-EXP IND - accumulation	mean(SE) wet wt Fe concentration in organs of Fe-treated birds	145(6.0) ppm, kidneys; 1186(72) ppm, liver; 32.1(6.3) ppm, gonads	field study	Sanderson, Glen C., William L. Anderson, George L. Foley, Loretta M. Skowron, Jeffrey D. Brawn and James W. Seets. 1997. Acute toxicity of ingested bismuth alloy shot in game-farm mallards. Ill. Nat. Hist. Survey Bull. 35:185-215.	no
Mallard duck	IRON COMPOUNDS	TOX-Non-Repro-Subletha/-cellular/biochemical effects	histopathological lesions in gonads, liver, kidneys versus controls	no effect	field study	Sanderson, Glen C., William L. Anderson, George L. Foley, Loretta M. Skowron, Jeffrey D. Brawn and James W. Seets. 1997. Acute toxicity of ingested bismuth alloy shot in game-farm mallards. Ill. Nat. Hist. Survey Bull. 35:185-215.	no
Mallard duck	IRON COMPOUNDS	TOX-MORT - dose-response data	mortality versus controls	increased with Pb, no effect with Fe or Bi	field study	Sanderson, Glen C., William L. Anderson, George L. Foley, Karen L. Duncan, Loretta M. Skowron, Jeffrey D. Brawn and James W. Seets. 1997. Toxicity of ingested bismuth alloy shot in game-farm mallards: Chronic health effects and effects on reproduction. Ill. Nat. Hist. Survey Bull. 35:217-252.	
Mallard duck	IRON COMPOUNDS	TOX-Non-Repro-Subletha/-whole animal	body weight, gonad weight, hematocrit versus controls	decreased with Pb; no effect with Fe or Bi	field study	Sanderson, Glen C., William L. Anderson, George L. Foley, Karen L. Duncan, Loretta M. Skowron, Jeffrey D. Brawn and James W. Seets. 1997. Toxicity of ingested bismuth alloy shot in game-farm mallards: Chronic health effects and effects on reproduction. Ill. Nat. Hist. Survey Bull. 35:217-252.	
Mallard duck	IRON COMPOUNDS	TOX-Non-Repro-Subletha/-organ/system effects	gizzard and kidney weight versus controls	increased with Pb; no effect with Fe or Bi	field study	Sanderson, Glen C., William L. Anderson, George L. Foley, Karen L. Duncan, Loretta M. Skowron, Jeffrey D. Brawn and James W. Seets. 1997. Toxicity of ingested bismuth alloy shot in game-farm mallards: Chronic health effects and effects on reproduction. Ill. Nat. Hist. Survey Bull. 35:217-252.	no
Mallard duck	IRON COMPOUNDS	TOX-Non-Repro-Subletha/-organ/system effects	liver weight versus controls (females only)	decreased with Pb	field study	Sanderson, Glen C., William L. Anderson, George L. Foley, Karen L. Duncan, Loretta M. Skowron, Jeffrey D. Brawn and James W. Seets. 1997. Toxicity of ingested bismuth alloy shot in game-farm mallards: Chronic health effects and effects on reproduction. Ill. Nat. Hist. Survey Bull. 35:217-252.	no
Mallard duck	IRON COMPOUNDS	TOX-REPRO - physiology	onset of lay and time to lay 21 eggs versus controls	no effect with Fe or Bi	field study	Sanderson, Glen C., William L. Anderson, George L. Foley, Karen L. Duncan, Loretta M. Skowron, Jeffrey D. Brawn and James W. Seets. 1997. Toxicity of ingested bismuth alloy shot in game-farm mallards: Chronic health effects and effects on reproduction. Ill. Nat. Hist. Survey Bull. 35:217-252.	
Mallard duck	IRON COMPOUNDS	TOX-REPRO - physiology	weight of eggs that hatched versus controls	increased with Fe	field study	Sanderson, Glen C., William L. Anderson, George L. Foley, Karen L. Duncan, Loretta M. Skowron, Jeffrey D. Brawn and James W. Seets. 1997. Toxicity of ingested bismuth alloy shot in game-farm mallards: Chronic health effects and effects on reproduction. Ill. Nat. Hist. Survey Bull. 35:217-252.	
Mallard duck	IRON COMPOUNDS	TOX-REPRO - physiology	weight of eggs that did not hatch versus controls	increased with Bi	field study	Sanderson, Glen C., William L. Anderson, George L. Foley, Karen L. Duncan, Loretta M. Skowron, Jeffrey D. Brawn and James W. Seets. 1997. Toxicity of ingested bismuth alloy shot in game-farm mallards: Chronic health effects and effects on reproduction. Ill. Nat. Hist. Survey Bull. 35:217-252.	
Mallard duck	IRON COMPOUNDS	TOX-REPRO - reproductive success	weight of hatchlings versus controls	decreased with Bi	field study	Sanderson, Glen C., William L. Anderson, George L. Foley, Karen L. Duncan, Loretta M. Skowron, Jeffrey D. Brawn and James W. Seets. 1997. Toxicity of ingested bismuth alloy shot in game-farm mallards: Chronic health effects and effects on reproduction. Ill. Nat. Hist. Survey Bull. 35:217-252.	
Mallard duck	IRON COMPOUNDS	TOX-REPRO - reproductive success	survival to 7 d, organ histopathology, hematocrit, sex ratios, kidney or liver weights of ducklings versus controls	no effect with Fe or Bi	field study	Sanderson, Glen C., William L. Anderson, George L. Foley, Karen L. Duncan, Loretta M. Skowron, Jeffrey D. Brawn and James W. Seets. 1997. Toxicity of ingested bismuth alloy shot in game-farm mallards: Chronic health effects and effects on reproduction. Ill. Nat. Hist. Survey Bull. 35:217-252.	
Mallard duck	IRON COMPOUNDS	TOX-REPRO - reproductive success	egg weight, eggshell thickness, fertility, hatchability versus controls	no effect with Fe or Bi	field study	Sanderson, Glen C., William L. Anderson, George L. Foley, Karen L. Duncan, Loretta M. Skowron, Jeffrey D. Brawn and James W. Seets. 1997. Toxicity of ingested bismuth alloy shot in game-farm mallards: Chronic health effects and effects on reproduction. Ill. Nat. Hist. Survey Bull. 35:217-252.	
Mallard duck	IRON COMPOUNDS	TOX-Non-Repro-Subletha/-cellular/biochemical effects	histopathology of kidney, liver testis, heart, lung versus controls	no effect with Fe or Bi	field study	Sanderson, Glen C., William L. Anderson, George L. Foley, Karen L. Duncan, Loretta M. Skowron, Jeffrey D. Brawn and James W. Seets. 1997. Toxicity of ingested bismuth alloy shot in game-farm mallards: Chronic health effects and effects on reproduction. Ill. Nat. Hist. Survey Bull. 35:217-252.	no
Mallard duck	IRON COMPOUNDS	TOX-EXP IND - accumulation	mean(SE) wet wt concentrations of Pb in Pb-dosed birds	213(27.1) ppm, kidney; 91(4.55) ppm, liver; 9.8(3.22) ppm, ovary; 3.49(0.61) ppm, testis	field study	Sanderson, Glen C., William L. Anderson, George L. Foley, Karen L. Duncan, Loretta M. Skowron, Jeffrey D. Brawn and James W. Seets. 1997. Toxicity of ingested bismuth alloy shot in game-farm mallards: Chronic health effects and effects on reproduction. Ill. Nat. Hist. Survey Bull. 35:217-252.	no
Mallard duck	IRON COMPOUNDS	TOX-EXP IND - accumulation	mean(SE) wet wt concentrations of Fe in Fe-dosed birds	237(17.2) ppm, kidney; 1938(233) ppm, liver; 80.6(6.86) ppm, ovary; 13.1(1.29) ppm, testis	field study	Sanderson, Glen C., William L. Anderson, George L. Foley, Karen L. Duncan, Loretta M. Skowron, Jeffrey D. Brawn and James W. Seets. 1997. Toxicity of ingested bismuth alloy shot in game-farm mallards: Chronic health effects and effects on reproduction. Ill. Nat. Hist. Survey Bull. 35:217-252.	no
Mallard duck	IRON COMPOUNDS	TOX-EXP IND - accumulation	mean(SE) wet wt concentrations of Bi in Bi-dosed birds	1.54(0.280) ppm, kidney; 0.637(0.134) ppm, liver; 0.042(0.007) ppm, ovary; 0.098(0.042) ppm, testis	field study	Sanderson, Glen C., William L. Anderson, George L. Foley, Karen L. Duncan, Loretta M. Skowron, Jeffrey D. Brawn and James W. Seets. 1997. Toxicity of ingested bismuth alloy shot in game-farm mallards: Chronic health effects and effects on reproduction. Ill. Nat. Hist. Survey Bull. 35:217-252.	no
Western Toad	IRON SULFATE	TOX-MORT - dose-response data		increase @ 30-288 mg/l	field study	Porter, Kenneth R and Dean E. Hendrson. 1976. Toxicity of mine drainage to embryonic and larval boreal toads (Bufoniae Bufo boreas). Copeia. 1976(2):327-331.	no
Pacific Treefrog	NITRATE, SODIUM	TOX-MORT - toxicity benchmarks	10-d LC50 for embryos	578.0mg NO3-N/L	field study	Schuytema, G.S. and A.V. Nebeker. 1999. Comparative effects of ammonium and nitrate compounds on Pacific treefrog and African clawed frog embryos. Arch. Environ. Contam. Toxicol. 36:200-206.	no
Pacific Treefrog	NITRATE, SODIUM	TOX-REPRO - development	LOAEL for body weight and length	111.0mg NO3-N/L	field study	Schuytema, G.S. and A.V. Nebeker. 1999. Comparative effects of ammonium and nitrate compounds on Pacific treefrog and African clawed frog embryos. Arch. Environ. Contam. Toxicol. 36:200-206.	no
Pacific Treefrog	NITRATE, SODIUM	TOX-REPRO - development	NOAEL for body weight and length	56.7mg NO3-N/L	field study	Schuytema, G.S. and A.V. Nebeker. 1999. Comparative effects of ammonium and nitrate compounds on Pacific treefrog and African clawed frog embryos. Arch. Environ. Contam. Toxicol. 36:200-206.	no
American Kestrel	HEPTACHLOR EPOXIDE	TOX-MORT - mortality in the field	occurrence of wild birds dying diagnosed with organochlorine poisoning	increased	field study	Okoniewski, Joseph C. and Elizabeth Novesky. 1993. Bird poisonings with cyclodienes in suburbia: Links to historic use on turf. J. Wildl. Manage. 57(2):630-635.	
Double-crested Cormorant	HEPTACHLOR EPOXIDE	TOX-REPRO - reproductive success	percent of eggs lost or broken before hatching in contaminated colonies	95%	field study	Weseloh, D. Vaughn, Stanley M. Teeple, and Michael Gilbertson. 1983. Double-crested cormorants of the Great Lakes: egg-laying parameters, reproductive failure, and contaminant residues in eggs, Lake Huron 1972-1973. Can. J. Zool. 61:427-436.	
Double-crested Cormorant	HEPTACHLOR EPOXIDE	TOX-REPRO - physiology	eggshell thickness compared with pre-1947 eggshells in contaminated colonies	23.9% thinner	field study	Weseloh, D. Vaughn, Stanley M. Teeple, and Michael Gilbertson. 1983. Double-crested cormorants of the Great Lakes: egg-laying parameters, reproductive failure, and contaminant residues in eggs, Lake Huron 1972-1973. Can. J. Zool. 61:427-436.	no
Double-crested Cormorant	HEPTACHLOR EPOXIDE	TOX-REPRO - reproductive success	mean hatching success in contaminated colonies	2.40%	field study	Weseloh, D. Vaughn, Stanley M. Teeple, and Michael Gilbertson. 1983. Double-crested cormorants of the Great Lakes: egg-laying parameters, reproductive failure, and contaminant residues in eggs, Lake Huron 1972-1973. Can. J. Zool. 61:427-436.	
Double-crested Cormorant	HEPTACHLOR EPOXIDE	TOX-REPRO - reproductive success	fledging success (young/nest) in contaminated colonies	0.06-0.11 (1972); 0.3 (1973)	field study	Weseloh, D. Vaughn, Stanley M. Teeple, and Michael Gilbertson. 1983. Double-crested cormorants of the Great Lakes: egg-laying parameters, reproductive failure, and contaminant residues in eggs, Lake Huron 1972-1973. Can. J. Zool. 61:427-436.	
Great Horned Owl	HEPTACHLOR EPOXIDE	TOX-REPRO - physiology	eggshell thickness compared to pre-1946 museum specimens	no effect	field study	Seidensticker, John C. and Harry V. Reynolds. 1971. The nesting, reproductive performance, and chlorinated hydrocarbon residues in the red-tailed hawk and great horned owl in south-central Montana. Wilson Bull. 83(4):458-418.	no
Great Horned Owl	HEPTACHLOR EPOXIDE	TOX-REPRO - physiology	eggshell thickness index compared with reference eggs	5%-decrease	field study	Springer, Mark A. 1980. Pesticide levels, egg and eggshell parameters of great horned owls. Ohio J. Sci. 80(4):184-187.	no
Great Horned Owl	HEPTACHLOR EPOXIDE	TOX-MORT - mortality in the field	mortality due to pesticide exposure based on history, ante-mortem signs, and gross pathology	increased	field study	Stone, Ward B. and Joseph C. Okoniewski. 1998. Organochlorine pesticide-related mortalities of raptors and other birds in New York, 1982-1986, Ch. 42. In: Cade, Tom J., James H. Enderson, Carl G. Thelander, and Clayton White, eds. Peregrine Falcon Populations: Their Management and Recovery. The Peregrine Fund, Inc. p.429-438.	
Great Horned Owl	HEPTACHLOR EPOXIDE	TOX-MORT - mortality in the field	occurrence of wild birds dying diagnosed with organochlorine poisoning	increased	field study	Okoniewski, Joseph C. and Elizabeth Novesky. 1993. Bird poisonings with cyclodienes in suburbia: Links to historic use on turf. J. Wildl. Manage. 57(2):630-635.	
Great Horned Owl	HEPTACHLOR EPOXIDE	TOX-MORT - mortality in the field	occurrence of mortality as a result of organochlorine poisoning	increased	field study	Blue, Lawrence J. and Charles J. Henny. 1993. First records of chlordane-related mortality in wild birds. J. Wildl. Manage. 47(1):196-198.	
Peregrine Falcon	HEPTACHLOR EPOXIDE	TOX-MORT - dose-response data	concentrations in brain associated with mortality (various raptor species)	review	field study	Peakall, David B., David G. Noble, John E. Elliot, James D. Somers, and Gary Erickson. 1990. Environmental contaminants in Canadian peregrine falcons, Falco peregrinus: a toxicological assessment. Can. Field Nat. 104(2):244-254.	
Peregrine Falcon	HEPTACHLOR EPOXIDE	TOX-REPRO - reproductive success	concentrations in eggs associated with reduced reproduction (various raptor species)	review	field study	Peakall, David B., David G. Noble, John E. Elliot, James D. Somers, and Gary Erickson. 1990. Environmental contaminants in Canadian peregrine falcons, Falco peregrinus: a toxicological assessment. Can. Field Nat. 104(2):244-254.	
Peregrine Falcon	HEPTACHLOR EPOXIDE	TOX-REPRO - physiology	percent eggshell thinning (as indicated by Ratcliffe Index) compared to pre-1947 eggs	12.10%	2.2 kg/ha	Gilroy, Merle J., and John H. Barclay. 1988. DDE residues and eggshell characteristics of reestablished peregrines in the eastern United States, Ch. 39. In: Cade, Tom J., James H. Enderson, Carl G. Thelander, and Clayton White, eds. Peregrine Falcon Populations: Their Management and Recovery. The Peregrine Fund, Inc. p.603-611.	no
Peregrine Falcon	HEPTACHLOR EPOXIDE	TOX-REPRO - reproductive success	number of viable eggs or young versus "normal" nest success	no effect	field study	Enderson, James H. and Daniel D. Berger. 1968. Chlorinated hydrocarbons in peregrines and their prey species from northern Canada. Condor. 70(2):149-153.	
Peregrine Falcon	HEPTACHLOR EPOXIDE	TOX-REPRO - physiology	mean eggshell thinning compared to "pre-pesticide" reference eggs	15.80%	0, 25, 50,100, 250, 500 ug/kg body weight	Court, G.S., C.C. Gates, D.A. Boag, J.O. Machell, D.M. Bradley, A.C. Fraser, J.R. Patterson, G.B. Stenhouse, and L.W. Oliphant. 1990. A toxicological assessment of peregrine falcons, Falco peregrinus tundrius, breeding in the Kewatin District of the Northwest Territories, Canada. Can. Field Nat. 104(2):255-272.	no
Peregrine Falcon	HEPTACHLOR EPOXIDE	TOX-EXP IND - accumulation	log-log relationship between DDE in plasma of female birds and DDE in eggs	log DDE in eggs = 0.9723 + 0.8506(log DDE in plasma); r = 0.44	2.2 kg/ha	Court, G.S., C.C. Gates, D.A. Boag, J.O. Machell, D.M. Bradley, A.C. Fraser, J.R. Patterson, G.B. Stenhouse, and L.W. Oliphant. 1990. A toxicological assessment of peregrine falcons, Falco peregrinus tundrius, breeding in the Kewatin District of the Northwest Territories, Canada. Can. Field Nat. 104(2):255-272.	no
Peregrine Falcon	HEPTACHLOR EPOXIDE	TOX-EXP IND - accumulation	range of concentrations in eggs (ppm, wet wt)	0.9-7.2 (DDT); 10.4-41.8 (DDE); 0.9-9.4 (DDD); 0.3-2.0 (dieldrin); 0.2-1.2 (heptachlor epoxide)	field study	Enderson, James H. and Daniel D. Berger. 1968. Chlorinated hydrocarbons in peregrines and their prey species from northern Canada. Condor. 70(2):149-153.	no
Peregrine Falcon	HEPTACHLOR EPOXIDE	TOX-EXP IND - accumulation	mean residue concentrations in fat (ppm, wet wt)	37.3 (DDT), 284 (DDE), 36.5 (DDD), 3.3 (dieldrin), 4.4 (heptachlor epoxide)	2.2 kg/ha	Enderson, James H. and Daniel D. Berger. 1968. Chlorinated hydrocarbons in peregrines and their prey species from northern Canada. Condor. 70(2):149-153.	no
Peregrine Falcon	HEPTACHLOR EPOXIDE	TOX-REPRO - physiology	correlation of heptachlor epoxide concentration in eggs and eggshell thickness	negative correlation	field study	Enderson, James H., Gerald R. Craig, William A. Burnham, and Daniel D. Berger. 1982. Eggshell thinning and organochlorine residues in Rocky Mountain peregrines, Falco peregrinus, and their prey. Can. Field Nat. 96(2):255-264.	no
Peregrine Falcon	HEPTACHLOR EPOXIDE	TOX-POP - size effects	concentrations in eggs associated with population recovery	15 ppm DDE, 0.7 ppm heptachlor epoxide	field study	Newton, I., J.A. Bogan, and M.B. Hawes. 1989. Organochlorines and mercury in the eggs of British peregrines Falco peregrinus. Ibis. 131:353-376.	

CAS Number	Chemical Name	Species Group	Species Scientific Name	Species Common Name	Endpoint	Observed Response Op	Observed Response	Observed Response Min Op	Observed Response Min	Observed Response Max Op	Observed Response Max	Result Statistical Method	Observed Response Value	Observed Response Units	Effect	Effect Measurement	Response Site	Response Site Description	Exposure Duration Op (Days)	Exposure Duration (Days)	Exposure Duration Min Op (Days)	Exposure Duration Min (Days)	Exposure Duration Max Op (Days)	Exposure Duration Max (Days)	Exposure Duration Unit (Days)	Exposure Type	Chemical Analysis Method	Dose Number	Result Sample Unit	Result Sample Number	Statistical Significance	Significance Level	Significance Description	Dose Mean Op	Dose Mean	Dose Min Op	Dose Min	Dose Max Op	Dose Max	Dose Stat Method	Dose Value	Dose Units	Media Type	Test Location	Reference Number	Source	Author	Title	Publication Year	Useable Data	Data Retrieval Date
74839	Methyl bromide	Flowers, Trees,	Acroptilon picris	Knapweed	NR		0		NR		NR	NR	NR	org	POP	ABND	WO	Whole Organism		547.92		NR		NR	d	DA	U	NR	OR	NR	NR	NR	Not reported		NR		200		300	NR	NR	ml/m2	UKN	FieldU	42101	Herb.Agric. :112-117	Batyuk, V.P., and M.Y. Palienko	Application of Certain Halogen-Containing Co	1962	No, endpoint NR (not reported).	6/23/2009
74839	Methyl bromide	Flowers, Trees,	Lycopersicon sp.	Tomato	NR		84		NR		NR	NR	NR	%	POP	BMAS	SD	Seed		NR		0.25		0.416666667	d	FU	U	9	SD	NR	NR	NR	Not reported		0		NR		NR	NR	NR	g/m3	FLT	Lab	41329	Seed Sci.Technol. 10:95-104	Kononkov, P.F., and I.D. Kuznetsov	The Effect of Fumigants on Germination of Se	1982	No, exposure media type FLT (filter paper).	6/23/2009
74839	Methyl bromide	Flowers, Trees,	Lycopersicon sp.	Tomato	NR		84		NR		NR	NR	NR	%	POP	BMAS	SD	Seed		NR		0.25		0.416666667	d	FU	U	9	SD	NR	NR	NR	Not reported		NR		30		100	NR	NR	g/m3	FLT	Lab	41329	Seed Sci.Technol. 10:95-104	Kononkov, P.F., and I.D. Kuznetsov	The Effect of Fumigants on Germination of Se	1982	No, exposure media type FLT (filter paper).	6/23/2009
74839	Methyl bromide	Flowers, Trees,	Allium sp.	Wild onion	NR		NR		1.7		2.2	NR	NR	kg/m2	POP	BMAS	BB	Bulb		NR		0.5		0.833333333	d	FU	U	9	SL	NR	NR	NR	Not reported		0		NR		NR	NR	NR	g/m3	FLT	Lab	41329	Seed Sci.Technol. 10:95-104	Kononkov, P.F., and I.D. Kuznetsov	The Effect of Fumigants on Germination of Se	1982	No, exposure media type FLT (filter paper).	6/23/2009
74839	Methyl bromide	Flowers, Trees,	Allium sp.	Wild onion	NR		NR		1.8		2.2	NR	NR	kg/m2	POP	BMAS	BB	Bulb		NR		0.5		0.833333333	d	FU	U	9	SL	NR	NR	NR	Not reported		NR		30		100	NR	NR	g/m3	FLT	Lab	41329	Seed Sci.Technol. 10:95-104	Kononkov, P.F., and I.D. Kuznetsov	The Effect of Fumigants on Germination of Se	1982	No, exposure media type FLT (filter paper).	6/23/2009
74839	Methyl bromide	Flowers, Trees,	Allium sp.	Wild onion	NR		NR		1.7		2.2	NR	NR	kg/m2	POP	BMAS	BB	Bulb		NR		0.5		0.833333333	d	FU	U	9	SL	NR	NR	NR	Not reported		0		NR		NR	NR	NR	g/m3	FLT	Lab	41329	Seed Sci.Technol. 10:95-104	Kononkov, P.F., and I.D. Kuznetsov	The Effect of Fumigants on Germination of Se	1982	No, exposure media type FLT (filter paper).	6/23/2009
74839	Methyl bromide	Flowers, Trees,	Allium sp.	Wild onion	NR		NR		1.8		2.2	NR	NR	kg/m2	POP	BMAS	BB	Bulb		NR		0.5		0.833333333	d	FU	U	9	SL	NR	NR	NR	Not reported		NR		30		100	NR	NR	g/m3	FLT	Lab	41329	Seed Sci.Technol. 10:95-104	Kononkov, P.F., and I.D. Kuznetsov	The Effect of Fumigants on Germination of Se	1982	No, exposure media type FLT (filter paper).	6/23/2009
74839	Methyl bromide	Flowers, Trees,	Cucumis sativus	Cucumber	NR		NR		20		25	NR	NR	kg/m2	POP	BMAS	FR	Fruit		NR		0.5		0.833333333	d	FU	U	9	SL	NR	NR	NR	Not reported		0		NR		NR	NR	NR	g/m3	FLT	Lab	41329	Seed Sci.Technol. 10:95-104	Kononkov, P.F., and I.D. Kuznetsov	The Effect of Fumigants on Germination of Se	1982	No, exposure media type FLT (filter paper).	6/23/2009
74839	Methyl bromide	Flowers, Trees,	Cucumis sativus	Cucumber	NR		NR		20		25	NR	NR	kg/m2	POP	BMAS	FR	Fruit		NR		0.5		0.833333333	d	FU	NR	9	SL	NR	NR	NR	Not reported		0		NR		NR	NR	NR	g/m3	FLT	Lab	41329	Seed Sci.Technol. 10:95-104	Kononkov, P.F., and I.D. Kuznetsov	The Effect of Fumigants on Germination of Se	1982	No, exposure media type FLT (filter paper).	6/23/2009
74839	Methyl bromide	Flowers, Trees,	Cucumis sativus	Cucumber	NR		NR		23		29	NR	NR	kg/m2	POP	BMAS	FR	Fruit		NR		0.5		0.833333333	d	FU	NR	9	SL	NR	NR	NR	Not reported		NR		30		100	NR	NR	g/m3	FLT	Lab	41329	Seed Sci.Technol. 10:95-104	Kononkov, P.F., and I.D. Kuznetsov	The Effect of Fumigants on Germination of Se	1982	No, exposure media type FLT (filter paper).	6/23/2009
74839	Methyl bromide	Flowers, Trees,	Cucumis sativus	Cucumber	NR		NR		20		25	NR	NR	kg/m2	POP	BMAS	FR	Fruit		NR		0.5		0.833333333	d	FU	NR	9	SL	NR	NR	NR	Not reported		0		NR		NR	NR	NR	g/m3	FLT	Lab	41329	Seed Sci.Technol. 10:95-104	Kononkov, P.F., and I.D. Kuznetsov	The Effect of Fumigants on Germination of Se	1982	No, exposure media type FLT (filter paper).	6/23/2009
74839	Methyl bromide	Flowers, Trees,	Cucumis sativus	Cucumber	NR		NR		23		29	NR	NR	kg/m2	POP	BMAS	FR	Fruit		NR		0.5		0.833333333	d	FU	NR	9	SL	NR	NR	NR	Not reported		NR		30		100	NR	NR	g/m3	FLT	Lab	41329	Seed Sci.Technol. 10:95-104	Kononkov, P.F., and I.D. Kuznetsov	The Effect of Fumigants on Germination of Se	1982	No, exposure media type FLT (filter paper).	6/23/2009
74839	Methyl bromide	Flowers, Trees,	Lycopersicon sp.	Tomato	NR		NR		3		4	NR	NR	kg/m2	POP	BMAS	FR	Fruit		NR		0.5		0.833333333	d	FU	U	9	SL	NR	NR	NR	Not reported		0		NR		NR	NR	NR	g/m3	FLT	Lab	41329	Seed Sci.Technol. 10:95-104	Kononkov, P.F., and I.D. Kuznetsov	The Effect of Fumigants on Germination of Se	1982	No, exposure media type FLT (filter paper).	6/23/2009
74839	Methyl bromide	Flowers, Trees,	Lycopersicon sp.	Tomato	NR		NR		5		6	NR	NR	kg/m2	POP	BMAS	FR	Fruit		NR		0.5		0.833333333	d	FU	U	9	SL	NR	NR	NR	Not reported		NR		30		100	NR	NR	g/m3	FLT	Lab	41329	Seed Sci.Technol. 10:95-104	Kononkov, P.F., and I.D. Kuznetsov	The Effect of Fumigants on Germination of Se	1982	No, exposure media type FLT (filter paper).	6/23/2009
74839	Methyl bromide	Flowers, Trees,	Lycopersicon sp.	Tomato	NR		NR		3		4	NR	NR	kg/m2	POP	BMAS	FR	Fruit		NR		0.5		0.833333333	d	FU	U	9	SL	NR	NR	NR	Not reported		0		NR		NR	NR	NR	g/m3	FLT	Lab	41329	Seed Sci.Technol. 10:95-104	Kononkov, P.F., and I.D. Kuznetsov	The Effect of Fumigants on Germination of Se	1982	No, exposure media type FLT (filter paper).	6/23/2009
74839	Methyl bromide	Flowers, Trees,	Lycopersicon sp.	Tomato	NR		NR		5		6	NR	NR	kg/m2	POP	BMAS	FR	Fruit		NR		0.5		0.833333333	d	FU	U	9	SL	NR	NR	NR	Not reported		NR		30		100	NR	NR	g/m3	FLT	Lab	41329	Seed Sci.Technol. 10:95-104	Kononkov, P.F., and I.D. Kuznetsov	The Effect of Fumigants on Germination of Se	1982	No, exposure media type FLT (filter paper).	6/23/2009
74839	Methyl bromide	Flowers, Trees,	Cucumis sativus	Cucumber	NR		26		NR		NR	NR	NR	kg/m2	POP	BMAS	FR	Fruit		NR		0.25		0.416666667	d	FU	U	9	SL	NR	NR	NR	Not reported		0		NR		NR	NR	NR	g/m3	FLT	Lab	41329	Seed Sci.Technol. 10:95-104	Kononkov, P.F., and I.D. Kuznetsov	The Effect of Fumigants on Germination of Se	1982	No, exposure media type FLT (filter paper).	6/23/2009
74839	Methyl bromide	Flowers, Trees,	Cucumis sativus	Cucumber	NR		30		NR		NR	NR	NR	kg/m2	POP	BMAS	FR	Fruit		NR		0.25		0.416666667	d	FU	U	9	SL	NR	NR	NR	Not reported		NR		30		100	NR	NR	g/m3	FLT	Lab	41329	Seed Sci.Technol. 10:95-104	Kononkov, P.F., and I.D. Kuznetsov	The Effect of Fumigants on Germination of Se	1982	No, exposure media type FLT (filter paper).	6/23/2009
74839	Methyl bromide	Flowers, Trees,	Cucumis sativus	Cucumber	NR		26		NR		NR	NR	NR	kg/m2	POP	BMAS	FR	Fruit		NR		0.25		0.416666667	d	FU	U	9	SL	NR	NR	NR	Not reported		0		NR		NR	NR	NR	g/m3	FLT	Lab	41329	Seed Sci.Technol. 10:95-104	Kononkov, P.F., and I.D. Kuznetsov	The Effect of Fumigants on Germination of Se	1982	No, exposure media type FLT (filter paper).	6/23/2009
74839	Methyl bromide	Flowers, Trees,	Cucumis sativus	Cucumber	NR		30		NR		NR	NR	NR	kg/m2	POP	BMAS	FR	Fruit		NR		0.25		0.416666667	d	FU	U	9	SL	NR	NR	NR	Not reported		NR		30		100	NR	NR	g/m3	FLT	Lab	41329	Seed Sci.Technol. 10:95-104	Kononkov, P.F., and I.D. Kuznetsov	The Effect of Fumigants on Germination of Se	1982	No, exposure media type FLT (filter paper).	6/23/2009
74839	Methyl bromide	Flowers, Trees,	Cucumis sativus	Cucumber	NR		26		NR		NR	NR	NR	kg/m2	POP	BMAS	FR	Fruit		NR		0.25		0.416666667	d	FU	U	9	SL	NR	NR	NR	Not reported		0		NR		NR	NR	NR	g/m3	FLT	Lab	41329	Seed Sci.Technol. 10:95-104	Kononkov, P.F., and I.D. Kuznetsov	The Effect of Fumigants on Germination of Se	1982	No, exposure media type FLT (filter paper).	6/23/2009
74839	Methyl bromide	Flowers, Trees,	Cucumis sativus	Cucumber	NR		30		NR		NR	NR	NR	kg/m2	POP	BMAS	FR	Fruit		NR		0.25		0.416666667	d	FU	U	9	SL	NR	NR	NR	Not reported		NR		30		100	NR	NR	g/m3	FLT	Lab	41329	Seed Sci.Technol. 10:95-104	Kononkov, P.F., and I.D. Kuznetsov	The Effect of Fumigants on Germination of Se	1982	No, exposure media type FLT (filter paper).	6/23/2009
74839	Methyl bromide	Flowers, Trees,	Cucumis sativus	Cucumber	NR		NR		23		29	NR	NR	kg/m2	POP	BMAS	FR	Fruit		NR		0.5		0.833333333	d	FU	U	9	SL	NR	NR	NR	Not reported		NR		30		100	NR	NR	g/m3	FLT	Lab	41329	Seed Sci.Technol. 10:95-104	Kononkov, P.F., and I.D. Kuznetsov	The Effect of Fumigants on Germination of Se	1982	No, exposure media type FLT (filter paper).	6/23/2009
74839	Methyl bromide	Flowers, Trees,	Beta vulgaris	Sugar Beet	NR		NR		1.9		2.2	NR	NR	kg/m2	POP	BMAS	RO	Root		NR		0.5		0.833333333	d	FU	U	9	SL	NR	NR	NR	Not reported		0		NR		NR	NR	NR	g/m3	ART	Lab	41329	Seed Sci.Technol. 10:95-104	Kononkov, P.F., and I.D. Kuznetsov	The Effect of Fumigants on Germination of Se	1982	No, exposure type (route) FU (fumigation).	6/23/2009
74839	Methyl bromide	Flowers, Trees,	Beta vulgaris	Sugar Beet	NR		NR		1.8		2.3	NR	NR	kg/m2	POP	BMAS	RO	Root		NR		0.5		0.833333333	d	FU	U	9	SL	NR	NR	NR	Not reported		NR		30		100	NR	NR	g/m3	ART	Lab	41329	Seed Sci.Technol. 10:95-104	Kononkov, P.F., and I.D. Kuznetsov	The Effect of Fumigants on Germination of Se	1982	No, exposure type (route) FU (fumigation).	6/23/2009
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

CAS Number	Chemical Name	Species Group	Species Scientific Name	Species Common Name	Endpoint	Observed Response Op	Observed Response	Observed Response Min Op	Observed Response Min	Observed Response Max Op	Observed Response Max	Result Statistical Method	Observed Response Value	Observed Response Units	Effect	Effect Measurement	Response Site	Response Site Description	Exposure Duration Op (Days)	Exposure Duration (Days)	Exposure Duration Min Op (Days)	Exposure Duration Min (Days)	Exposure Duration Max Op (Days)	Exposure Duration Max (Days)	Exposure Duration Unit (Days)	Exposure Type	Chemical Analysis Method	Dose Number	Result Sample Unit	Result Sample Number	Statistical Significance	Significance Level	Significance Description	Dose Mean Op	Dose Mean	Dose Min Op	Dose Min	Dose Max Op	Dose Max	Dose Stat Method	Dose Value	Dose Units	Media Type	Test Location	Reference Number	Source	Author	Title	Publication Year	Useable Data	Data Retrieval Date
118741	Hexachlorobenzen	Birds	Coturnix japonica	Japanese quail	NOEL	+	1		NR		NR	NR	NR	ppm	MPH	WGHT	OG	Organ		90		NR		NR	d	OR	NR	5	FM	NR	NR	NR	Not reported		NR		NR		NR	NR	NR	NR	NR	Lab	35506	Toxicol.Appl.Pharmacol. 18:944-957	Vos, J.G., H.L. Van der Maas, A. Musch, and	Toxicity of Hexachlorobenzene in Japanese Q	1971	No, effect MPH (morphology).	6/23/2009
118741	Hexachlorobenzen	Birds	Coturnix japonica	Japanese quail	NOEL	+	500		NR		NR	NR	NR	mg/kg	GRO	WGHT	WO	Whole Organism		5		NR		NR	d	OR	NR	2	FM	NR	NR	NR	Not reported		NR		NR		NR	NR	NR	NR	NR	Lab	35081	J.Toxicol.Environ.Health 15:93-108	Carpenter, H.M., D.E. Williams, and D.R. Buh	A Comparison of the Effects of Hexachlorober	1985	Yes.	6/23/2009
118741	Hexachlorobenzen	Birds	Coturnix japonica	Japanese quail	NR		74		NR		NR	NR	NR	%	REP	FERT	EG	Egg		90		NR		NR	d	FD	U	2	EG	101	NR	NR	Not reported		0		NR		NR	NR	NR	ppm	NR	Lab	35430	Toxicol.Appl.Pharmacol. 30(2):255-265	Schwetz, B.A., J. Norris, R. Kociba, P.A. Kee	Reproduction Study of Japanese Quail Fed H	1974	No, endpoint NR (not reported).	6/23/2009
118741	Hexachlorobenzen	Birds	Coturnix japonica	Japanese quail	NR		92		NR		NR	NR	NR	%	REP	FERT	EG	Egg		90		NR		NR	d	FD	U	2	EG	96	SIG	P<0.05	Significant		20		NR		NR	NR	NR	ppm	NR	Lab	35430	Toxicol.Appl.Pharmacol. 30(2):255-265	Schwetz, B.A., J. Norris, R. Kociba, P.A. Kee	Reproduction Study of Japanese Quail Fed H	1974	No, endpoint NR (not reported).	6/23/2009
118741	Hexachlorobenzen	Birds	Coturnix japonica	Japanese quail	NR		86		NR		NR	NR	NR	%	REP	FERT	EG	Egg		90		NR		NR	d	FD	U	2	EG	106	NR	NR	Not reported		0		NR		NR	NR	NR	ppm	NR	Lab	35430	Toxicol.Appl.Pharmacol. 30(2):255-265	Schwetz, B.A., J. Norris, R. Kociba, P.A. Kee	Reproduction Study of Japanese Quail Fed H	1974	No, endpoint NR (not reported).	6/23/2009
118741	Hexachlorobenzen	Birds	Coturnix japonica	Japanese quail	NR		84		NR		NR	NR	NR	%	REP	FERT	EG	Egg		90		NR		NR	d	FD	U	2	EG	92	NOSIG	P<0.05	No significance		20		NR		NR	NR	NR	ppm	NR	Lab	35430	Toxicol.Appl.Pharmacol. 30(2):255-265	Schwetz, B.A., J. Norris, R. Kociba, P.A. Kee	Reproduction Study of Japanese Quail Fed H	1974	No, endpoint NR (not reported).	6/23/2009
118741	Hexachlorobenzen	Birds	Coturnix japonica	Japanese quail	NR		83		NR		NR	NR	NR	%	REP	FERT	EG	Egg		90		NR		NR	d	FD	U	2	EG	103	NR	NR	Not reported		0		NR		NR	NR	NR	ppm	NR	Lab	35430	Toxicol.Appl.Pharmacol. 30(2):255-265	Schwetz, B.A., J. Norris, R. Kociba, P.A. Kee	Reproduction Study of Japanese Quail Fed H	1974	No, endpoint NR (not reported).	6/23/2009
118741	Hexachlorobenzen	Birds	Coturnix japonica	Japanese quail	NR		73		NR		NR	NR	NR	%	REP	FERT	EG	Egg		90		NR		NR	d	FD	U	2	EG	83	NOSIG	P<0.05	No significance		20		NR		NR	NR	NR	ppm	NR	Lab	35430	Toxicol.Appl.Pharmacol. 30(2):255-265	Schwetz, B.A., J. Norris, R. Kociba, P.A. Kee	Reproduction Study of Japanese Quail Fed H	1974	No, endpoint NR (not reported).	6/23/2009
118741	Hexachlorobenzen	Birds	Coturnix japonica	Japanese quail	NR		85		NR		NR	NR	NR	%	MOR	HTCH	EG	Egg		90		NR		NR	d	FD	U	2	EG	101	NR	NR	Not reported		0		NR		NR	NR	NR	ppm	NR	Lab	35430	Toxicol.Appl.Pharmacol. 30(2):255-265	Schwetz, B.A., J. Norris, R. Kociba, P.A. Kee	Reproduction Study of Japanese Quail Fed H	1974	No, endpoint NR (not reported).	6/23/2009
118741	Hexachlorobenzen	Birds	Coturnix japonica	Japanese quail	NR		83		NR		NR	NR	NR	%	MOR	HTCH	EG	Egg		90		NR		NR	d	FD	U	2	EG	96	NOSIG	P<0.05	No significance		20		NR		NR	NR	NR	ppm	NR	Lab	35430	Toxicol.Appl.Pharmacol. 30(2):255-265	Schwetz, B.A., J. Norris, R. Kociba, P.A. Kee	Reproduction Study of Japanese Quail Fed H	1974	No, endpoint NR (not reported).	6/23/2009
118741	Hexachlorobenzen	Birds	Coturnix japonica	Japanese quail	NR		81		NR		NR	NR	NR	%	MOR	HTCH	EG	Egg		90		NR		NR	d	FD	U	2	EG	106	NR	NR	Not reported		0		NR		NR	NR	NR	ppm	NR	Lab	35430	Toxicol.Appl.Pharmacol. 30(2):255-265	Schwetz, B.A., J. Norris, R. Kociba, P.A. Kee	Reproduction Study of Japanese Quail Fed H	1974	No, endpoint NR (not reported).	6/23/2009
118741	Hexachlorobenzen	Birds	Coturnix japonica	Japanese quail	NR		90		NR		NR	NR	NR	%	MOR	HTCH	EG	Egg		90		NR		NR	d	FD	U	2	EG	92	NOSIG	P<0.05	No significance		20		NR		NR	NR	NR	ppm	NR	Lab	35430	Toxicol.Appl.Pharmacol. 30(2):255-265	Schwetz, B.A., J. Norris, R. Kociba, P.A. Kee	Reproduction Study of Japanese Quail Fed H	1974	No, endpoint NR (not reported).	6/23/2009
118741	Hexachlorobenzen	Birds	Coturnix japonica	Japanese quail	NR		76		NR		NR	NR	NR	%	MOR	HTCH	EG	Egg		90		NR		NR	d	FD	U	2	EG	103	NR	NR	Not reported		0		NR		NR	NR	NR	ppm	NR	Lab	35430	Toxicol.Appl.Pharmacol. 30(2):255-265	Schwetz, B.A., J. Norris, R. Kociba, P.A. Kee	Reproduction Study of Japanese Quail Fed H	1974	No, endpoint NR (not reported).	6/23/2009
118741	Hexachlorobenzen	Birds	Coturnix japonica	Japanese quail	NR		81		NR		NR	NR	NR	%	MOR	HTCH	EG	Egg		90		NR		NR	d	FD	U	2	EG	83	NOSIG	P<0.05	No significance		20		NR		NR	NR	NR	ppm	NR	Lab	35430	Toxicol.Appl.Pharmacol. 30(2):255-265	Schwetz, B.A., J. Norris, R. Kociba, P.A. Kee	Reproduction Study of Japanese Quail Fed H	1974	No, endpoint NR (not reported).	6/23/2009
118741	Hexachlorobenzen	Birds	Coturnix japonica	Japanese quail	NR	+	36		NR		NR	NR	NR	%	MOR	HTCH	NR	Not Reported		90		NR		NR	d	OR	U	5	FM	NR	NR	NR	Not reported		0		NR		NR	NR	NR	ppm	NR	Lab	35506	Toxicol.Appl.Pharmacol. 18:944-957	Vos, J.G., H.L. Van der Maas, A. Musch, and	Toxicity of Hexachlorobenzene in Japanese Q	1971	No, endpoint NR (not reported).	6/23/2009
118741	Hexachlorobenzen	Birds	Coturnix japonica	Japanese quail	NR	+	47		NR		NR	NR	NR	%	MOR	HTCH	NR	Not Reported		90		NR		NR	d	OR	U	5	FM	NR	NR	NR	Not reported		0		NR		NR	NR	NR	ppm	NR	Lab	35506	Toxicol.Appl.Pharmacol. 18:944-957	Vos, J.G., H.L. Van der Maas, A. Musch, and	Toxicity of Hexachlorobenzene in Japanese Q	1971	No, endpoint NR (not reported).	6/23/2009
118741	Hexachlorobenzen	Birds	Coturnix japonica	Japanese quail	NR	+	40		NR		NR	NR	NR	%	MOR	HTCH	NR	Not Reported		90		NR		NR	d	OR	U	5	FM	NR	NR	NR	Not reported		0		NR		NR	NR	NR	ppm	NR	Lab	35506	Toxicol.Appl.Pharmacol. 18:944-957	Vos, J.G., H.L. Van der Maas, A. Musch, and	Toxicity of Hexachlorobenzene in Japanese Q	1971	No, endpoint NR (not reported).	6/23/2009
118741	Hexachlorobenzen	Birds	Coturnix japonica	Japanese quail	NR	+	69		NR		NR	NR	NR	%	MOR	HTCH	NR	Not Reported		90		NR		NR	d	OR	U	5	FM	NR	NR	NR	Not reported		1		NR		NR	NR	NR	ppm	NR	Lab	35506	Toxicol.Appl.Pharmacol. 18:944-957	Vos, J.G., H.L. Van der Maas, A. Musch, and	Toxicity of Hexachlorobenzene in Japanese Q	1971	No, endpoint NR (not reported).	6/23/2009
118741	Hexachlorobenzen	Birds	Coturnix japonica	Japanese quail	NR	+	59		NR		NR	NR	NR	%	MOR	HTCH	NR	Not Reported		90		NR		NR	d	OR	U	5	FM	NR	NR	NR	Not reported		1		NR		NR	NR	NR	ppm	NR	Lab	35506	Toxicol.Appl.Pharmacol. 18:944-957	Vos, J.G., H.L. Van der Maas, A. Musch, and	Toxicity of Hexachlorobenzene in Japanese Q	1971	No, endpoint NR (not reported).	6/23/2009
118741	Hexachlorobenzen	Birds	Coturnix japonica	Japanese quail	NR	+	62		NR		NR	NR	NR	%	MOR	HTCH	NR	Not Reported		90		NR		NR	d	OR	U	5	FM	NR	NR	NR	Not reported		1		NR		NR	NR	NR	ppm	NR	Lab	35506	Toxicol.Appl.Pharmacol. 18:944-957	Vos, J.G., H.L. Van der Maas, A. Musch, and	Toxicity of Hexachlorobenzene in Japanese Q	1971	No, endpoint NR (not reported).	6/23/2009
118741	Hexachlorobenzen	Birds	Coturnix japonica	Japanese quail	NR	+	59		NR		NR	NR	NR	%	MOR	HTCH	NR	Not Reported		90		NR		NR	d	OR	U	5	FM	NR	NR	NR	Not reported		5		NR		NR	NR	NR	ppm	NR	Lab	35506	Toxicol.Appl.Pharmacol. 18:944-957	Vos, J.G., H.L. Van der Maas, A. Musch, and	Toxicity of Hexachlorobenzene in Japanese Q	1971	No, endpoint NR (not reported).	6/23/2009
118741	Hexachlorobenzen	Birds	Coturnix japonica	Japanese quail	NR	+	56		NR		NR	NR	NR	%	MOR	HTCH	NR	Not Reported		90		NR		NR	d	OR	U	5	FM	NR	NR	NR	Not reported		5		NR		NR	NR	NR	ppm	NR	Lab	35506	Toxicol.Appl.Pharmacol. 18:944-957	Vos, J.G., H.L. Van der Maas, A. Musch, and	Toxicity of Hexachlorobenzene in Japanese Q	1971	No, endpoint NR (not reported).	6/23/2009
118741	Hexachlorobenzen	Birds	Coturnix japonica	Japanese quail	NR	+	57		NR		NR	NR	NR	%	MOR	HTCH	NR	Not Reported		90		NR		NR	d	OR	U	5	FM	NR	NR	NR	Not reported		5		NR		NR	NR	NR	ppm	NR	Lab	35506	Toxicol.Appl.Pharmacol. 18:944-957	Vos, J.G., H.L. Van der Maas, A. Musch, and	Toxicity of Hexachlorobenzene in Japanese Q	1971	No, endpoint NR (not reported).	6/23/2009
118741	Hexachlorobenzen	Birds	Coturnix japonica	Japanese quail	NR	+	27		NR		NR	NR	NR	%	MOR	HTCH	NR	Not Reported		90		NR		NR	d	OR	U	5	FM	NR	NR	NR	Not reported		20		NR		NR	NR	NR	ppm	NR	Lab	35506	Toxicol.Appl.Pharmacol. 18:944-957	Vos, J.G., H.L. Van der Maas, A. Musch, and	Toxicity of Hexachlorobenzene in Japanese Q	1971	No, endpoint NR (not reported).	6/23/2009
118741	Hexachlorobenzen	Birds	Coturnix japonica	Japanese quail	NR	+	39		NR		NR	NR	NR	%	MOR	HTCH	NR	Not Reported		90		NR		NR	d	OR	U	5	FM	NR	NR	NR	Not reported		20		NR		NR	NR	NR	ppm	NR	Lab	35506	Toxicol.Appl.Pharmacol. 18:944-957	Vos, J.G., H.L. Van der Maas, A. Musch, and	Toxicity of Hexachlorobenzene in Japanese Q	1971	No, endpoint NR (not reported).	6/23/2009

CAS Number	Chemical Name	Species Group	Species Scientific Name	Species Common Name	Endpoint	Observed Response Op	Observed Response	Observed Response Min Op	Observed Response Min	Observed Response Max Op	Observed Response Max	Result Statistical Method	Observed Response Value	Observed Response Units	Effect	Effect Measurement	Response Site	Response Site Description	Exposure Duration Op (Days)	Exposure Duration (Days)	Exposure Duration Min Op (Days)	Exposure Duration Min (Days)	Exposure Duration Max Op (Days)	Exposure Duration Max (Days)	Exposure Duration Unit (Days)	Exposure Type	Chemical Analysis Method	Dose Number	Result Sample Unit	Result Sample Number	Statistical Significance	Significance Level	Significance Description	Dose Mean Op	Dose Mean	Dose Min Op	Dose Min	Dose Max Op	Dose Max	Dose Stat Method	Dose Value	Dose Units	Media Type	Test Location	Reference Number	Source	Author	Title	Publication Year	Useable Data	Data Retrieval Date
7439987	Molybdenum	Mammals	Mus musculus	House mouse	NR		238		NR		NR	NR	NR	org	REP	PROG	NR	Not Reported	~	160		NR		NR	d	DR	U	2	FM	5	NOSIG	P<0.05	No significance		10		NR		NR	NR	NR	ppm	NR	Lab	57253	Arch.Environ.Health 23(2):102-106	Schroeder, H.A., and M. Mitchener	Toxic Effects of Trace Elements on the Repro	1971	No, exposure type (route) DR (drinking water).	6/23/2009
7439987	Molybdenum	Mammals	Mus musculus	House mouse	NR		242		NR		NR	NR	NR	org	REP	PROG	NR	Not Reported	~	160		NR		NR	d	DR	U	2	FM	NR	NOSIG	P<0.05	No significance		10		NR		NR	NR	NR	ppm	NR	Lab	57253	Arch.Environ.Health 23(2):102-106	Schroeder, H.A., and M. Mitchener	Toxic Effects of Trace Elements on the Repro	1971	No, exposure type (route) DR (drinking water).	6/23/2009
7439987	Molybdenum	Mammals	Mus musculus	House mouse	NR		123		NR		NR	NR	NR	org	REP	PROG	NR	Not Reported	~	160		NR		NR	d	DR	U	2	FM	NR	NOSIG	P<0.05	No significance		10		NR		NR	NR	NR	ppm	NR	Lab	57253	Arch.Environ.Health 23(2):102-106	Schroeder, H.A., and M. Mitchener	Toxic Effects of Trace Elements on the Repro	1971	No, exposure type (route) DR (drinking water).	6/23/2009
7439987	Molybdenum	Mammals	Mus musculus	House mouse	NR		0.94		NR		NR	NR	NR	ML:FM	POP	SEXR	NR	Not Reported	~	160		NR		NR	d	DR	U	2	FM	5	NR	NR	Not reported		0.45		NR		NR	NR	NR	ppm	NR	Lab	57253	Arch.Environ.Health 23(2):102-106	Schroeder, H.A., and M. Mitchener	Toxic Effects of Trace Elements on the Repro	1971	No, exposure type (route) DR (drinking water).	6/23/2009
7439987	Molybdenum	Mammals	Mus musculus	House mouse	NR		1.03		NR		NR	NR	NR	ML:FM	POP	SEXR	NR	Not Reported	~	160		NR		NR	d	DR	U	2	FM	NR	NR	NR	Not reported		0.45		NR		NR	NR	NR	ppm	NR	Lab	57253	Arch.Environ.Health 23(2):102-106	Schroeder, H.A., and M. Mitchener	Toxic Effects of Trace Elements on the Repro	1971	No, exposure type (route) DR (drinking water).	6/23/2009
7439987	Molybdenum	Mammals	Mus musculus	House mouse	NR		1		NR		NR	NR	NR	ML:FM	POP	SEXR	NR	Not Reported	~	160		NR		NR	d	DR	U	2	FM	NR	NR	NR	Not reported		0.45		NR		NR	NR	NR	ppm	NR	Lab	57253	Arch.Environ.Health 23(2):102-106	Schroeder, H.A., and M. Mitchener	Toxic Effects of Trace Elements on the Repro	1971	No, exposure type (route) DR (drinking water).	6/23/2009
7439987	Molybdenum	Mammals	Mus musculus	House mouse	NR		1.05		NR		NR	NR	NR	ML:FM	POP	SEXR	NR	Not Reported	~	160		NR		NR	d	DR	U	2	FM	5	NR	NR	Not reported		10		NR		NR	NR	NR	ppm	NR	Lab	57253	Arch.Environ.Health 23(2):102-106	Schroeder, H.A., and M. Mitchener	Toxic Effects of Trace Elements on the Repro	1971	No, exposure type (route) DR (drinking water).	6/23/2009
7439987	Molybdenum	Mammals	Mus musculus	House mouse	NR		1.32		NR		NR	NR	NR	ML:FM	POP	SEXR	NR	Not Reported	~	160		NR		NR	d	DR	U	2	FM	NR	NR	NR	Not reported		10		NR		NR	NR	NR	ppm	NR	Lab	57253	Arch.Environ.Health 23(2):102-106	Schroeder, H.A., and M. Mitchener	Toxic Effects of Trace Elements on the Repro	1971	No, exposure type (route) DR (drinking water).	6/23/2009
7439987	Molybdenum	Mammals	Mus musculus	House mouse	NR		0.9		NR		NR	NR	NR	ML:FM	POP	SEXR	NR	Not Reported	~	160		NR		NR	d	DR	U	2	FM	NR	NR	NR	Not reported		10		NR		NR	NR	NR	ppm	NR	Lab	57253	Arch.Environ.Health 23(2):102-106	Schroeder, H.A., and M. Mitchener	Toxic Effects of Trace Elements on the Repro	1971	No, exposure type (route) DR (drinking water).	6/23/2009
7439987	Molybdenum	Mammals	Mus musculus	House mouse	NR		0		NR		NR	NR	NR	org	MPH	SIZE	NR	Not Reported	~	160		NR		NR	d	DR	U	2	FM	5	NR	NR	Not reported		0.45		NR		NR	NR	NR	ppm	NR	Lab	57253	Arch.Environ.Health 23(2):102-106	Schroeder, H.A., and M. Mitchener	Toxic Effects of Trace Elements on the Repro	1971	No, exposure type (route) DR (drinking water).	6/23/2009
7439987	Molybdenum	Mammals	Mus musculus	House mouse	NR		2		NR		NR	NR	NR	org	MPH	SIZE	NR	Not Reported	~	160		NR		NR	d	DR	U	2	FM	NR	NR	NR	Not reported		0.45		NR		NR	NR	NR	ppm	NR	Lab	57253	Arch.Environ.Health 23(2):102-106	Schroeder, H.A., and M. Mitchener	Toxic Effects of Trace Elements on the Repro	1971	No, exposure type (route) DR (drinking water).	6/23/2009
7439987	Molybdenum	Mammals	Mus musculus	House mouse	NR		0		NR		NR	NR	NR	org	MPH	SIZE	NR	Not Reported	~	160		NR		NR	d	DR	U	2	FM	NR	NR	NR	Not reported		0.45		NR		NR	NR	NR	ppm	NR	Lab	57253	Arch.Environ.Health 23(2):102-106	Schroeder, H.A., and M. Mitchener	Toxic Effects of Trace Elements on the Repro	1971	No, exposure type (route) DR (drinking water).	6/23/2009
7439987	Molybdenum	Mammals	Mus musculus	House mouse	NR		0		NR		NR	NR	NR	org	MPH	SIZE	NR	Not Reported	~	160		NR		NR	d	DR	U	2	FM	5	NOSIG	P<0.05	No significance		10		NR		NR	NR	NR	ppm	NR	Lab	57253	Arch.Environ.Health 23(2):102-106	Schroeder, H.A., and M. Mitchener	Toxic Effects of Trace Elements on the Repro	1971	No, exposure type (route) DR (drinking water).	6/23/2009
7439987	Molybdenum	Mammals	Mus musculus	House mouse	NR		2		NR		NR	NR	NR	org	MPH	SIZE	NR	Not Reported	~	160		NR		NR	d	DR	U	2	FM	NR	NOSIG	P<0.05	No significance		10		NR		NR	NR	NR	ppm	NR	Lab	57253	Arch.Environ.Health 23(2):102-106	Schroeder, H.A., and M. Mitchener	Toxic Effects of Trace Elements on the Repro	1971	No, exposure type (route) DR (drinking water).	6/23/2009
7439987	Molybdenum	Mammals	Mus musculus	House mouse	NR		11		NR		NR	NR	NR	org	MPH	SIZE	NR	Not Reported	~	160		NR		NR	d	DR	U	2	FM	NR	SIG	P<0.0001	Significant		10		NR		NR	NR	NR	ppm	NR	Lab	57253	Arch.Environ.Health 23(2):102-106	Schroeder, H.A., and M. Mitchener	Toxic Effects of Trace Elements on the Repro	1971	No, exposure type (route) DR (drinking water).	6/23/2009
7439987	Molybdenum	Mammals	Mus musculus	House mouse	NR		64		NR		NR	NR	NR	d	REP	TFPG	NR	Not Reported	~	160		NR		NR	d	DR	U	2	FM	5	NR	NR	Not reported		0.45		NR		NR	NR	NR	ppm	NR	Lab	57253	Arch.Environ.Health 23(2):102-106	Schroeder, H.A., and M. Mitchener	Toxic Effects of Trace Elements on the Repro	1971	No, exposure type (route) DR (drinking water).	6/23/2009
7439987	Molybdenum	Mammals	Mus musculus	House mouse	NR		64		NR		NR	NR	NR	d	REP	TFPG	NR	Not Reported	~	160		NR		NR	d	DR	U	2	FM	NR	NR	NR	Not reported		0.45		NR		NR	NR	NR	ppm	NR	Lab	57253	Arch.Environ.Health 23(2):102-106	Schroeder, H.A., and M. Mitchener	Toxic Effects of Trace Elements on the Repro	1971	No, exposure type (route) DR (drinking water).	6/23/2009
7439987	Molybdenum	Mammals	Mus musculus	House mouse	NR		62		NR		NR	NR	NR	d	REP	TFPG	NR	Not Reported	~	160		NR		NR	d	DR	U	2	FM	NR	NR	NR	Not reported		0.45		NR		NR	NR	NR	ppm	NR	Lab	57253	Arch.Environ.Health 23(2):102-106	Schroeder, H.A., and M. Mitchener	Toxic Effects of Trace Elements on the Repro	1971	No, exposure type (route) DR (drinking water).	6/23/2009
7439987	Molybdenum	Mammals	Mus musculus	House mouse	NR		64.4		NR		NR	NR	NR	d	REP	TFPG	NR	Not Reported	~	160		NR		NR	d	DR	U	2	FM	5	NR	NR	Not reported		10		NR		NR	NR	NR	ppm	NR	Lab	57253	Arch.Environ.Health 23(2):102-106	Schroeder, H.A., and M. Mitchener	Toxic Effects of Trace Elements on the Repro	1971	No, exposure type (route) DR (drinking water).	6/23/2009
7439987	Molybdenum	Mammals	Mus musculus	House mouse	NR		66		NR		NR	NR	NR	d	REP	TFPG	NR	Not Reported	~	160		NR		NR	d	DR	U	2	FM	NR	NR	NR	Not reported		10		NR		NR	NR	NR	ppm	NR	Lab	57253	Arch.Environ.Health 23(2):102-106	Schroeder, H.A., and M. Mitchener	Toxic Effects of Trace Elements on the Repro	1971	No, exposure type (route) DR (drinking water).	6/23/2009
7439987	Molybdenum	Mammals	Mus musculus	House mouse	NR		79		NR		NR	NR	NR	d	REP	TFPG	NR	Not Reported	~	160		NR		NR	d	DR	U	2	FM	NR	NR	NR	Not reported		10		NR		NR	NR	NR	ppm	NR	Lab	57253	Arch.Environ.Health 23(2):102-106	Schroeder, H.A., and M. Mitchener	Toxic Effects of Trace Elements on the Repro	1971	No, exposure type (route) DR (drinking water).	6/23/2009
14797558	Nitrate	Flowers, Trees,	Pinus resinosa	norway pine	NR		100		NR		NR	NR	NR	% of CNTL	GRO	LGTH	RD	Radicle		NR		5		21	d	DA	U	8	NR	NR	NR	NR	Not reported		0		NR		NR	NR	NR	ppm	FLT	Lab	44439	Can.J.For.Res. 13:233-238	Patterson, W.A.III, and J.J. Olson	Effects of Heavy Metals on Radicle Growth of	1983	No, exposure media type FLT (filter paper).	6/23/2009
14797558	Nitrate	Flowers, Trees,	Pinus resinosa	norway pine	NR		109		NR		NR	NR	NR	% of CNTL	GRO	LGTH	RD	Radicle		NR		5		21	d	DA	U	8	NR	NR	NOSIG	P<0.10	No significance		0.5		NR		NR	NR	NR	ppm	FLT	Lab	44439	Can.J.For.Res. 13:233-238	Patterson, W.A.III, and J.J. Olson	Effects of Heavy Metals on Radicle Growth of	1983	No, exposure media type FLT (filter paper).	6/23/2009
14797558	Nitrate	Flowers, Trees,	Pinus resinosa	norway pine	NR		88		NR		NR	NR	NR	% of CNTL	GRO	LGTH	RD	Radicle		NR		5		21	d	DA	U	8	NR	NR	NOSIG	P<0.10	No significance		1		NR		NR	NR	NR	ppm	FLT	Lab	44439	Can.J.For.Res. 13:233-238	Patterson, W.A.III, and J.J. Olson	Effects of Heavy Metals on Radicle Growth of	1983	No, exposure media type FLT (filter paper).	6/23/2009
14797558	Nitrate	Flowers, Trees,	Pinus resinosa	norway pine	NR		130		NR		NR	NR	NR	% of CNTL	GRO	LGTH	RD	Radicle		NR		5		21	d	DA	U	8	NR	NR	NOSIG	P<0.10	No significance		5		NR		NR	NR	NR	ppm	FLT	Lab	44439	Can.J.For.Res. 13:233-238	Patterson, W.A.III, and J.J. Olson	Effects of Heavy Metals on Radicle Growth of	1983	No, exposure media type FLT (filter paper).	6/23/2009
14797558	Nitrate	Flowers, Trees,	Pinus resinosa	norway pine	NR		117		NR		NR	NR	NR	% of CNTL	GRO	LGTH	RD	Radicle		NR		5		21	d	DA	U	8	NR	NR	NOSIG	P<0.10	No significance		10		NR		NR	NR	NR	ppm	FLT	Lab	44439	Can.J.For.Res. 13:233-238	Patterson, W.A.III, and J.J. Olson	Effects of Heavy Metals on Radicle Growth of	1983	No, exposure media type FLT (filter paper).	6/23/2009
14797558	Nitrate	Flowers, Trees,	Pinus resinosa	norway pine	NR		91		NR		NR	NR	NR	% of CNTL	GRO	LGTH	RD	Radicle		NR		5		21	d	DA	U	8	NR	NR	NOSIG	P<0.10	No significance		20		NR		NR	NR	NR	ppm	FLT	Lab	44439	Can.J.For.Res. 13:233-238	Patterson, W.A.III, and J.J. Olson	Effects of Heavy Metals on Radicle Growth of	1983	No, exposure media type FLT (filter paper).	6/23/2009
14797558	Nitrate	Flowers, Trees,	Pinus resinosa	norway pine	NR		88		NR		NR	NR	NR	% of CNTL	GRO	LGTH	RD	Radicle		NR		5		21	d	DA	U	8	NR	NR	NOSIG	P<0.10	No significance		50		NR		NR	NR	NR	ppm	FLT	Lab	44439	Can.J.For.Res. 13:233-238	Patterson, W.A.III, and J.J. Olson	Effects of Heavy Metals on Radicle Growth of	1983	No, exposure media type FLT (filter paper).	6/23/2009
14797558	Nitrate	Flowers, Trees,	Pinus resinosa	norway pine	NR		80		NR		NR	NR	NR	% of CNTL	GRO	LGTH	RD	Radicle		NR		5		21	d	DA	U	8	NR	NR	NOSIG	P<0.10	No significance		100		NR		NR	NR	NR	ppm	FLT	Lab	44439	Can.J.For.Res. 13:233-238	Patterson, W.A.III, and J.J. Olson	Effects of Heavy Metals on Radicle Growth of	1983	No, exposure media type FLT (filter paper).	6/23/2009
74884	Iodomethane	Worms	Eisenia fetida	earthworm	LC50		NR		100		1000	NR	NR	AI ug/cm2	MOR	MORT	NR	Not Reported		2		NR		NR	d	DA	U	6	AD	100	NR	NR	Not reported		NR		NR		NR	NR	NR	NR	FLT	Lab	40531	Environ.Toxicol.Chem. 3(1):67-78	Roberts, B.L., and H.W. Dorough	Relative Toxicities of Chemicals to the Earthw	1984	No, exposure medium is FLT (filter paper).	8/3/2009
111444	1,1'-Oxybis(2-chlor	Worms	Eisenia fetida	earthworm	LC50		19		18		20	CI	NR	ug/cm2	MOR	MORT	NR	Not Reported		2		NR		NR	d	DM	U	>=6	NR	NR	NR	NR	Not reported		NR		NR		NR	NR	NR	ug/cm2	FLT	Lab	40495	J.Environ.Qual. 14(3):383-388 (OECDG Data	Neuhauser, E.F., R.C. Loehr, M.R. Malecki, D	The Toxicity of Selected Organic Chemicals t	1985	No, exposure medium is FLT (filter paper).	8/3/2009
111444	1,1'-Oxybis(2-chlor	Worms	Eisenia fetida	earthworm	LC50		19		18		20	CI	NR	ug/cm2	MOR	MORT	NR	Not Reported		2		NR		NR	d	DA	U	>=5	NR	NR	NR	NR	Not reported		NR		NR		NR	NR	NR	NR	FLT	Lab	40578	In: J.K.Petros,Jr., W.J.Lacy, and R.A.Conway	Neuhauser, E.F., R.C. Loehr, and M.R. Malec	Contact and Artificial Soil Tests Using Earthw	1986	No, exposure medium is FLT (filter paper).	8/3/2009

	Bird or Mammal :	Invertebrate or Plant:
Chronic	> 90 days	> 6 days
Subchronic	14 to 90 days	3 to 6 days
Acute	< 14 days	< 3 days

Gallegos, PL, and J Lutz. 2005. Primary Toxicity Study Evaluation Methods Used to Develop Los Alamos National Laboratory Toxicity Reference Values. Environmental Programs Directorate, Waste and Environmental Services Division, Los Alamos, NM. (unpublishe

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Type of effect level available	UF applied to derive a TRV that is a Chronic NOAEL (NOEC)-based EL:
C-CL or chronic NOAEL (NOEC)	1
C-CL or chronic LOAEL (LOEC)	10
C-CL or chronic LD50 (LC50)	100
C-CL or chronic ED50 (EC50)	100
Subchronic NOAEL (NOEC)	10
Subchronic LOAEL (LOEC)	100
Subchronic LD50 (LC50)	100
Subchronic ED50 (EC50)	100
Acute or Single Dose NOAEL (NOEC)	100
Acute or Single Dose LOAEL (LOEC)	100
Acute or Single Dose LD50 (LC50)	100
Acute or Single Dose ED50 (EC50)	100

Gallegos, PL, and J Lutz. 2005. Primary Toxicity Study Evaluation Methods Used to Develop Los Alamos National Laboratory Toxicity Reference Values. Environmental Programs Directorate, Waste and Environmental Services Division, Los Alamos, NM. (unpublishe

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CASRN	Chemical	LANL PTSE	EPA ECOTOX	ORNL Wildlife	ORNL Plants	ORNL Invertebrates	ABC Birds	Cal/Ecotox	ERED	IPM Centers	USACHPPM	ATSDR	IRIS	TOXNET_DARTIETIC	TOXNET_TOXLINE
618-87-1	Dinitroaniline[3,5-]	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	0 applicable abstracts out of 35 abstracts reviewed
591-78-6	Hexanone[2-]	Bird and Mammal Data. No Data for Plants and Worms.	No Applicable Data for Plants - 2 results reported; agar is the exposure medium - not an ecologically relevant exposure medium. No Bird, Mammal or Worm data for chemical in database.	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	10 applicable references from 16 pages of references reviewed. 2 of 5 mammal papers reviewed have applicable data. 1 of 1 bird papers have applicable data. 4 other papers have been requested from LANL Research Library.	Chemical Not In Database	0 applicable abstracts out of 13 abstracts reviewed.	3 applicable abstracts out of 645 abstracts reviewed. 3 of 3 mammal papers reviewed have applicable data.
88-74-4	Nitroaniline[2-]	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	1 applicable abstract out of first 100 titles reviewed. Paper was not found in LANL Research Library.
75-69-4	Trichlorofluoromethane	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	1 applicable abstract out of 1 abstract reviewed. Paper has not been requested yet.	0 applicable abstracts out of 11 abstracts reviewed	1 applicable abstract out of 1612 abstracts reviewed. No usable mammal data found in paper reviewed.
106-47-8	Chloroaniline[4-]	Chemical Not In Database	Interim ESL data for Plants and Worms. 17 results reported for plants. 17 results used. 3 results reported for worms. 3 results used. No Bird or Mammal data for chemical in database.	Chemical Not In Database	No Applicable Data for Plants- exposure medium a solution, not considered an ecologically relevant exposure medium for soil TRV.	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	No applicable data; aquatic only.	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Literature Search In Progress	0 applicable abstracts out of 6 abstracts reviewed	Literature Search In Progress
100-42-5	Styrene	Chemical Not In Database	Interim ESL data for Worms. 9 results reported for worms. 3 results used. 6 results excluded because endpoint NR (not reported). No Applicable Data for Plants - 4 results reported. 2 results excluded because the exposure medium is HYP (hyroponic)- not an ecologically relevant exposure medium. 2 results excluded because the exposure duration is NR (not reported). No Bird or Mammal data for chemical in database.	Chemical Not In Database	See worksheet 'Interim TRVs'. Interim ESL data for Plants.	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Literature Search In Progress	Literature Search In Progress	Literature Search In Progress
100-51-6	Benzyl alcohol	Chemical Not In Database	No Applicable Data for Plants - 2 results reported; agar is the exposure medium - not an ecologically relevant exposure medium. No Bird, Mammal or Worm data for chemical in database.	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Literature Search Not Started	Literature Search Not Started
319-86-8	BHC[delta-]	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Literature Search Not Started	Literature Search Not Started
74-83-9	Bromomethane	Chemical Not In Database	No Applicable Data for Plants - 56 results reported. 56 results not used. 55 results excluded because the exposure route is FU (fumigation) - not an ecologically relevant exposure route. 1 result excluded because endpoint is NR (not reported). No Bird, Mammal or Worm data for chemical in database.	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Literature Search In Progress	Human Health oral RfD for epithelial hyperplasia of the forestomach based on gavage study in rats - body weight changes were measured - POTENTIALLY APPLICABLE data in Danse, L.H.J.C., F.L. van Velsen and C.A. van der Heijden. 1984. Methylbromide: Carcinogenic effects in the rat forestomach. Toxicol. Appl. Pharmacol. 72: 262-271.	Literature Search Not Started	Literature Search Not Started
86-74-8	Carbazole	Chemical Not In Database	No Applicable Data for Birds, Mammals, Plants, or Worms. 2 results reported for molluscs - not a relevant test species.	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	No Applicable Data; Aquatic Only.	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Literature Search Not Started	Literature Search Not Started
75-15-0	Carbon disulfide	Chemical Not In Database	Interim ESL data for Mammals. 90 results reported. 32 results used. 20 results not used because exposure route IP (intraperitoneal) - not ecologically relevant exposure route. 5 results not used because exposure route TP (topical, general) - also not an ecologically relevant exposure route. 15 results not used because effect is MPH (morphology) - not ecologically relevant effect. 5 results not used because endpoint not reported. 8 results not used because a single endpoint value not reported. 5 results not used because reported in units of mmol/kg. No Applicable Plant Data 23 results reported. 23 results not used. 23 results excluded because exposure route is SO (soaked or dipped) - not an ecologically relevant exposure route. No Bird or Worm data for this chemical in database. 62 results reported for Insects/Spiders - not relevant test species.	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Literature Search In Progress	No Applicable Data. Human Health oral RfD based on inhalation study in rabbits - Not an Applicable Exposure Route	Literature Search Not Started	Literature Search Not Started
74-87-3	Chloromethane	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Literature Search Not Started	Literature Search Not Started
91-58-7	Chloronaphthalene[2-]	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Literature Search Not Started	Literature Search Not Started
95-50-1	Dichlorobenzene[1,2-]	Chemical Not In Database	Interim ESL data for Mammal. 13 results reported. 1 result used. 10 results not used because exposure route IP (intraperitoneal) - not an ecologically relevant exposure route. 1 result not used because effect is MPH (morphology) - not an ecologically relevant effect. 1 result not used because endpoint not reported. No Applicable Plant Data - 2 results reported, but exposure medium hydroponic - Not a ecologically relevant exposure medium. No Applicable Worm Data - 2 results reported, but exposure medium filter paper - Not an ecologically relevant exposure medium. No Bird data for this chemical in database. 2 results reported for Fungi - not a relevant test species.	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	No Applicable Data; Aquatic Only.	Chemical Not In Database	Chemical Not In Database	Literature Search In Progress	Chemical Not In Database	Literature Search Not Started	Literature Search Not Started
541-73-1	Dichlorobenzene[1,3-]	Chemical Not In Database	Interim ESL data for Mammal. 6 results reported. 2 results used. 2 results not used because exposure route IP (intraperitoneal) - not an ecologically relevant exposure route. 2 results not used because effect is MPH (morphology) - not an ecologically relevant effect. No Bird, Plant or Worm data for this chemical in database.	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	No Applicable Data; Aquatic Only.	Chemical Not In Database	Chemical Not In Database	Literature Search In Progress	Literature Search In Progress	Literature Search Not Started	Literature Search Not Started
1031-07-8	Endosulfan sulfate	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	No Applicable Data	Chemical Not In Database	Literature Search In Progress	Chemical Not In Database	Literature Search Not Started	Literature Search Not Started
7421-93-4	Endrin aldehyde	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	No Applicable Data	Chemical Not In Database	Literature Search In Progress	Chemical Not In Database	Literature Search Not Started	Literature Search Not Started
53494-70-5	Endrin ketone	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	No Applicable Data	Chemical Not In Database	Literature Search In Progress	Chemical Not In Database	Literature Search Not Started	Literature Search Not Started
100-41-4	Ethylbenzene	Chemical Not In Database	See worksheet "ECOTOX062309". No Applicable Data for Plants - 1 result reported. 1 result enot used. 1 result excluded because exposure route is SO (soaked or dipped) - not an ecologically relevant exposure route. No Applicable Data for Worms - 2 results reported, but exposure medium is filter paper - not an ecologically relevant exposure medium. No Bird or Mammal data for chemical in database.	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Literature Search In Progress	Literature Search In Progress	Literature Search Not Started	Literature Search Not Started
1024-57-3	Heptachlor epoxide	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	See worksheet "Cal/Ecotox". American kestrel, Double-crested Cormorant, Great Horned Owl, Peregrine Falcon	No Applicable Data; Aquatic Only.	No Applicable Data	Chemical Not In Database	Literature Search In Progress	Literature Search In Progress	Literature Search Not Started	Literature Search Not Started
118-74-1	Hexachlorobenzene	Chemical Not In Database	Interim ESL data for Bird, Mammal, Plant and Worm. 174 results reported for birds. 1 result used. 84 results not used because the effect is MPH (morphology) - not an ecologically relevant effect. 84 results excluded because endpoint not reported. 4 results excluded because dose units ppm. 3 results excluded because LC50s. 91 results reported for mammals. 1 result used. 6 results not used because the effect is MPH (morphology) - not an ecologically relevant effect. 84 results excluded because endpoint not reported. 25 results reported for plants. 21 results used. 2 results excluded because exposure duration not reported. 2 results excluded because LC50s for GRO (growth) and an LC50 should be for mortality. 2 results reported for worms. 1 result used. 1 result excluded because exposure medium FLT (filter paper) - not an ecologically relevant exposure.	No Applicable Data for Birds - data reported without a literature source. No Mammal data.	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Peakall, David B., David G. Noble, John E. Elliot, James D. Somers, and Gary Erickson. 1990. Environmental contaminants in Canadian peregrine falcons, Falco peregrinus: a toxicological assessment. Can. Field Nat. 104(2): 244-254. reproductive success - concentrations in eggs associated with reduced reproduction (various raptor species) AND Weseloh, D. Vaughn, Stanley M. Teeple, and Michael Gilbertson. 1983. Double-crested cormorants of the Great Lakes: egg-laying parameters, reproductive failure, and contaminant residues in eggs, Lake Huron 1972-1973. Can. J. Zool. 61:427-436.reproductive success	No applicable data; aquatic only.	No Applicable Data	Chemical Not In Database	Literature Search In Progress	HH oral RfD for liver effects in a chronic feeding study in rats - pup mortality measured POTENTIALLY APPLICABLE data in Arnold, D.L., C.A. Moodie, S.M. Charbonneau, et al. 1985. Long-term toxicity of hexachlorobenzene in the rat and the effect of dietary Vitamin A. Fd. Chem. Toxic. 23(9): 779-792.	Literature Search Not Started	Literature Search Not Started

CASRN	Chemical	LANL PTSE	EPA ECOTOX	ORNL Wildlife	ORNL Plants	ORNL Invertebrates	ABC Birds	CalEcotox	ERED	IPM Centers	USACHPPM	ATSDR	IRIS	TOXNET_DARTIETIC	TOXNET_TOXLINE
7439-89-6	Iron	Chemical Not In Database	No Applicable Data for Birds - 1 result reported; erpoint NR. No Applicable Data for Plants - 2 results reported; AQU (aqueous/hydroponic) is the exposure medium - not an ecologically relevant exposure medium. No Mammal or Worm data for chemical in database.	Chemical Not In Database	No Applicable Data for Plants- exposure medium a solution, not considered an ecologically relevant exposure medium for soil TRV.	Chemical Not In Database	Chemical Not In Database	Iron COMPOUNDS, Iron SULFATE, IRON (elemental), see worksheet "CalEcotox". No applicable data for Iron SULFATE, IRON (elemental). Data for Mallard Duck for Iron COMPOUNDS.	No Applicable Data; Aquatic Only.	Iron sulfate, No Applicable Data	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Literature Search Not Started	Literature Search Not Started
98-82-8	Isopropylbenzene	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Literature Search Not Started	Literature Search Not Started
99-87-6	Isopropyltoluene[4-]	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Literature Search Not Started	Literature Search Not Started
7439-93-2	Lithium	Mammal Data. No Applicable Data for Birds - data reported is for drinking water exposure medium - not considered an ecologically relevant exposure medium for a soil TRV. No Plant or Worm Data.	Chemical Not In Database	Mammal Data - not used because LANL PTSE data available. No Applicable Data for Birds - data reported without a literature source.	See worksheet 'Interim TRVs'. Interim ESL data for Plants.	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Lithium hypochlorite and Lithium perfluorooctane sulfonate in Birds - Not Applicable Data (these compounds act as pesticides, looking for toxicity of Lithium alone)	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Literature Search Not Started	Literature Search Not Started
95-48-7	Methylphenol[2-]	Chemical Not In Database	Interim ESL data for Plant. 12 results reported for plants. 5 results used. 4 results excluded because the exposure medium HYP (hydroponic) - not an ecologically relevant exposure. 1 result excluded because the exposure medium AGR (agar) - not an ecologically relevant exposure. 2 results excluded because the exposure duration NR (not reported). No Bird, Mammal or Worm data for chemical in database.	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Literature Search In Progress	Literature Search Not Started	Literature Search Not Started
108-39-4	Methylphenol[3-]	Chemical Not In Database	Interim ESL data for Plant. 12 results reported for plants. 5 results used. 4 results excluded because the exposure medium HYP (hydroponic) - not an ecologically relevant exposure. 1 result excluded because the exposure medium AGR (agar) - not an ecologically relevant exposure. 2 results excluded because the exposure duration NR (not reported). No Bird, Mammal or Worm data for chemical in database.	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Literature Search In Progress	Literature Search Not Started	Literature Search Not Started
106-44-5	Methylphenol[4-]	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	No Applicable Data; Aquatic Only.	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Literature Search In Progress	Literature Search Not Started	Literature Search Not Started
7439-98-7	Molybdenum	Chemical Not In Database	No Applicable Data for Mammals - 66 results reported; DR (drinking water) is the exposure route - not an ecologically relevant exposure medium. No Bird, Plant or Worm data for chemical in database.	Bird Data. No Applicable Data for Mammals - drinking water is the exposure medium - not an ecologically relevant exposure medium for food TRV.	See worksheet 'Interim TRVs'. Interim ESL data for Plants.	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	No Applicable Data; Aquatic Only.	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	No Applicable Data. Human Health oral RfD based on study in humans measuring changes in serum uric acid levels - Not an Applicable Test Species or Ecologically Relevant Effect.	Literature Search Not Started	Literature Search Not Started
14797-55-8	Nitrate (expressed as NO3)	Chemical Not In Database	No Applicable Data for Plants - 8 results reported; exposure medium FLT (filter paper) - not an ecologically relevant exposure medium. No Bird, Mammal or Worm data for chemical in database.	No Applicable Data for Mammals - drinking water is the exposure medium - not an ecologically relevant exposure medium for food TRV. No Applicable Data for Birds - Data is reported without a literature source.	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Sodium nitrate only, see worksheet "CalEcotox" - No Applicable Data	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	No Applicable Data. Human Health oral RfD based on study in humans measuring early clinical signs of methemoglobinemia in excess of 10% - Not an Applicable Test Species or Ecologically Relevant Effect.	Literature Search Not Started	Literature Search Not Started
103-65-1	N-propylbenzene	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	No Applicable Data; Aquatic Only.	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Literature Search Not Started	Literature Search Not Started
14797-73-0	Perchlorate	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	No Applicable Data; Aquatic Only.	Chemical Not In Database	Literature Search In Progresss	Literature Search In Progress	No Applicable Data. Human Health oral RfD based on study in humans measuring radioactive iodide uptake inhibition (RAIU) in the thyroid - Not an Applicable Test Species or Ecologically Relevant Effect.	Literature Search Not Started	Literature Search Not Started
95-63-6	Trimethylbenzene[1,2,4-]	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Literature Search Not Started	Literature Search Not Started
108-67-8	Trimethylbenzene[1,3,5-]	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Literature Search Not Started	Literature Search Not Started
75-01-4	Vinyl chloride	Chemical Not In Database	Chemical Not In Database	Mammal Data. No Bird Data.	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Literature Search In Progress	HH oral RfD for liver cell polymorphism in a chronic feeding study in rats - body weight and mortality were measured - POTENTIALLY APPLICABLE data in: TII, HP; Immel, HR; Feron, VJ. (1983) Lifespan oral carcinogenicity study of vinyl chloride in rats. Final report. CIVO Institutes. TNO Report No. V 83.285/291099. TSCATS Document FYI-AX-0184-0353, Fiche No. 0353 and TII, HP; Feron, VJ; Immel, HR. (1991) Lifetime (149-week) oral carcinogenicity study of vinyl chloride in rats. Food Chem Toxicol 29:713-718.	Literature Search Not Started	Literature Search Not Started
111-44-4	Bis(2-chloroethyl)ether	Chemical Not In Database	No Applicable Data for Worms - 2 results reported; FLT (filter paper) is the exposure medium - not an ecologically relevant exposure medium. No Bird, Mammal or Plant data for chemical in database.	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	No Bird, Mammal, Plant or Worm data for chemical in database.	Chemical Not In Database	Chemical Not In Database	Literature Search In Progress	Literature Search In Progress	Chemical Not In Database	Literature Search Not Started
122-39-4	Diphenylamine	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	See worksheet "IPM Diphenylamine", "Interim TRVs", "IPM Graph Data" and "Diphenylamine Bird Graph". Interim ESL data for bird. 2 results reported for Bird. 1 result used. 1 result excluded because units mg/kg food - not a body weight normalized dose. No Mammal, Plant or Worm data for chemical in database.	Chemical Not In Database	Chemical Not In Database	Literature Search In Progress	Literature Search In Progress	Literature Search In Progress
74-88-4	Iodomethane	Chemical Not In Database	No Applicable Data for Worms - 2 results reported; FLT (filter paper) is the exposure medium - not an ecologically relevant exposure medium. No Bird, Mammal or Plant data for chemical in database.	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	See worksheet "IPM Iodomethane", "Interim TRVs", "IPM Graph Data" and "Iodomethane Bird Graph". Interim ESL data for bird. 2 results reported for Bird. 1 result used. 1 result excluded because exposure route is inhalation - not an ecologically relevant exposure route for soil ESL. No Mammal, Plant or Worm data for chemical in database.	Chemical Not In Database	Chemical Not In Database	Literature Search In Progress	Literature Search In Progress	Literature Search In Progress
3058-38-6	TATB (triaminotrinitrobenzene)	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	0 applicable titles out of 1 title reviewed
1330-78-5	Tris(o-cresyl) phosphate	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	No Bird, Mammal, Plant or Worm data for chemical in database.	Chemical Not In Database	Chemical Not In Database	Chemical Not In Database	Literature Search In Progress	Literature Search In Progress

Chemical of Concern	Receptor Group	TRV	Units	Description	Data Source	Status
Benzyl alcohol (Benzenemethanol)	Bird			None. No data.		
Benzyl alcohol (Benzenemethanol)	Mammal			None. No data.		
Benzyl alcohol (Benzenemethanol)	Plant			None. No applicable data.		
Benzyl alcohol (Benzenemethanol)	Worm			None. No data.		
BHC[delta-]	Bird			None. No data.		
BHC[delta-]	Mammal			None. No data.		
BHC[delta-]	Plant			None. No data.		
BHC[delta-]	Worm			None. No data.		
Bis(2-chloroethyl)ether	Bird			None. No data.		
Bis(2-chloroethyl)ether	Mammal			None. No data.		
Bis(2-chloroethyl)ether	Plant			None. No data.		
Bis(2-chloroethyl)ether	Worm			None. No applicable data.		
Bromomethane	Bird			None. No data.		
Bromomethane	Mammal			None. No data.		
Bromomethane	Plant			None. No applicable data.		
Bromomethane	Worm			None. No data.		
Carbazole	Bird			None. No applicable data.		
Carbazole	Mammal			None. No applicable data.		
Carbazole	Plant			None. No applicable data.		
Carbazole	Worm			None. No applicable data.		
Carbon Disulfide	Bird			None. No data.		
Carbon Disulfide	Plant			None. No applicable data.		
Carbon Disulfide	Worm			None. No data.		
Chloroaniline[4-]	Bird			None. No data.		
Chloroaniline[4-]	Mammal			None. No applicable data.		
Chloromethane	Bird			None. No data.		
Chloromethane	Mammal			None. No data.		
Chloromethane	Plant			None. No data.		
Chloromethane	Worm			None. No data.		
Chloronaphthalene[2-]	Bird			None. No data.		
Chloronaphthalene[2-]	Mammal			None. No data.		
Chloronaphthalene[2-]	Plant			None. No data.		
Chloronaphthalene[2-]	Worm			None. No data.		
Dichlorobenzene[1,2-]	Bird			None. No data.		
Dichlorobenzene[1,2-]	Plant			None. No applicable data.		
Dichlorobenzene[1,2-]	Worm			None. No applicable data.		
Dichlorobenzene[1,3-]	Bird			None. No data.		
Dichlorobenzene[1,3-]	Plant			None. No data.		
Dichlorobenzene[1,3-]	Worm			None. No data.		
Dinitroaniline[3,5-]	Bird			None. No data.		
Dinitroaniline[3,5-]	Mammal			None. No data.		
Dinitroaniline[3,5-]	Plant			None. No data.		
Dinitroaniline[3,5-]	Worm			None. No data.		
Diphenylamine	Bird	22.5	mg/kg/d	This chronic NOAEL for mortality is equal to 22.5 mg/kg bw/d and is based on a subchronic LD50 of 2250 mg/kg bw. Out of 3 results reported, 2 results were used. 1 result was excluded because units mg/kg food for an LC50 - not a body weight normalized dose. The 2 selected results were converted to NOAEL-based ELs using UFs for exposure duration and effect level as appropriate, and the lowest NOAEL-based EL was selected as the TRV. The study design for the selected subchronic LD50 exposed the Bobwhite quail (Colinus virginianus) to the chemical orally (gavage or capsule) for 14 days. The number of dose levels tested was not reported. A UF of 100 is applied to extrapolate from a subchronic LD50 to a chronic NOAEL.	IPM	Review Required - spreadsheet only (no TRV Summary Report until receive and review detailed documentation from IPM under FOIA)
Diphenylamine	Mammal			None. No data.		
Diphenylamine	Plant			None. No data.		
Diphenylamine	Worm			None. No data.		
Endosufan sulfate	Bird			None. No data.		
Endosufan sulfate	Mammal			None. No data.		
Endosufan sulfate	Plant			None. No data.		
Endosufan sulfate	Worm			None. No data.		
Endrin aldehyde	Bird			None. No data.		
Endrin aldehyde	Mammal			None. No data.		
Endrin aldehyde	Plant			None. No data.		
Endrin aldehyde	Worm			None. No data.		
Endrin ketone	Bird			None. No data.		
Endrin ketone	Mammal			None. No data.		
Endrin ketone	Plant			None. No data.		
Endrin ketone	Worm			None. No data.		
Ethylbenzene	Bird			None. No data.		
Ethylbenzene	Mammal			None. No data.		
Ethylbenzene	Plant			None. No applicable data.		
Ethylbenzene	Worm			None. No applicable data.		
Heptachlor epoxide	Bird			None. No data.		
Heptachlor epoxide	Mammal			None. No data.		
Heptachlor epoxide	Plant			None. No data.		
Heptachlor epoxide	Worm			None. No data.		
Hexanone[2-]	Mammal	8.11	mg/kg/d	LANL food TRV = 8.11 mg/kg/d (See GMM TRV report for full details).	LANL	Out for Review
Hexanone[2-]	Plant			None. No applicable data.		
Hexanone[2-]	Worm			None. No data.		
Iodomethane	Bird	0.57	mg/kg/d	This chronic NOAEL for mortality is equal to 0.57 mg/kg bw/d and is based on a subchronic LD50 of 57 mg/kg bw. Out of 2 results reported, 2 results were used. The 2 selected results were converted to NOAEL-based ELs using UFs for exposure duration and effect level as appropriate, and the lowest NOAEL-based EL was selected as the TRV. The study design for the selected subchronic LD50 exposed the Bobwhite quail (Colinus virginianus) to the chemical orally (gavage or capsule) for 14 days. The number of dose levels tested was not reported. A UF of 100 is applied to extrapolate from a subchronic LD50 to a chronic NOAEL.	IPM	Review Required - spreadsheet only (no TRV Summary Report until receive and review detailed documentation from IPM under FOIA)
Iodomethane	Mammal			None. No data.		
Iodomethane	Plant			None. No data.		
Iodomethane	Worm			None. No data.		
Iron	Bird			None. No applicable data.		
Iron	Mammal			None. No data.		
Iron	Plant			None. No applicable data.		
Iron	Worm			None. No applicable data.		
Isopropylbenzene	Bird			None. No data.		

Chemical of Concern	Receptor Group	TRV	Units	Description	Data Source	Status
Isopropylbenzene	Mammal			None. No data.		
Isopropylbenzene	Plant			None. No data.		
Isopropylbenzene	Worm			None. No data.		
Isopropyltoluene[4-]	Bird			None. No data.		
Isopropyltoluene[4-]	Mammal			None. No data.		
Isopropyltoluene[4-]	Plant			None. No data.		
Isopropyltoluene[4-]	Worm			None. No data.		
Lithium	Bird			None. No applicable data.		
Lithium	Mammal	4.99	mg/kg/d	LANL food TRV = 4.99 mg/kg/d (See GMM TRV report for full details).	LANL	Out for Review
Lithium	Worm			None. No data.		
Methylphenol[2-]	Bird			None. No data.		
Methylphenol[2-]	Mammal			None. No data.		
Methylphenol[2-]	Plant	0.67	mg/kg soil	This chronic NOEC for growth is equal to 0.67 mg/kg soil and is based on a chronic EC50. Out of 12 results reported, 5 results were used. 4 results were excluded because the exposure medium was HYP (hydroponic) - not an ecologically relevant exposure. 1 result was excluded because the exposure medium was AGR (agar) - not an ecologically relevant exposure. 2 results were excluded because the exposure duration was NR (not reported). The 5 selected results were converted to a NOEC-based EL using UFs for exposure duration and effect level as appropriate, and the lowest NOEC-based EL in the data set was selected as the TRV. The study design for the selected chronic NOEC exposed lettuce (Lactuca sativa) to the chemical in a soil of unknown type for 7 days. The exposure type is not reported, but is assumed to be uptake from soil. The number of dose levels is NR (not reported).	ECOTOX	Review Required
Methylphenol[2-]	Worm			None. No data.		
Methylphenol[3-]	Bird			None. No data.		
Methylphenol[3-]	Mammal			None. No data.		
Methylphenol[3-]	Plant	0.69	mg/kg soil	This chronic NOEC for growth is equal to 0.69 mg/kg soil and is based on a chronic EC50. Out of 12 results reported, 5 results were used. 4 results were excluded because the exposure medium was HYP (hydroponic) - not an ecologically relevant exposure. 1 result was excluded because the exposure medium was AGR (agar) - not an ecologically relevant exposure. 2 results were excluded because the exposure duration was NR (not reported). The 5 selected results were converted to a NOEC-based EL using UFs for exposure duration and effect level as appropriate, and the lowest NOEC-based EL in the data set was selected as the TRV. The study design for the selected chronic NOEC exposed lettuce (Lactuca sativa) to the chemical in a soil of unknown type for 7 days. The exposure type is not reported, but is assumed to be uptake from soil. The number of dose levels is NR (not reported).	ECOTOX	Review Required
Methylphenol[3-]	Worm			None. No data.		
Methylphenol[4-]	Bird			None. No data.		
Methylphenol[4-]	Mammal			None. No data.		
Methylphenol[4-]	Plant			None. No data.		
Methylphenol[4-]	Worm			None. No data.		
Molybdenum	Mammal			None. No applicable data.		
Molybdenum	Worm			None. No data.		
Nitrate	Bird			None. No applicable data.		
Nitrate	Mammal			None. No applicable data.		
Nitrate	Plant			None. No applicable data.		
Nitrate	Worm			None. No data.		
Nitroaniline[2-]	Bird			None. No data.		
Nitroaniline[2-]	Mammal			None. No data.		
Nitroaniline[2-]	Plant			None. No data.		
Nitroaniline[2-]	Worm			None. No data.		
N-propylbenzene	Bird			None. No data.		
N-propylbenzene	Mammal			None. No data.		
N-propylbenzene	Plant			None. No data.		
N-propylbenzene	Worm			None. No data.		
Perchlorate	Bird			None. No data.		
Perchlorate	Mammal			None. No data.		
Perchlorate	Plant			None. No data.		
Perchlorate	Worm			None. No data.		
Styrene (Ethenylbenzene)	Bird			None. No data.		
Styrene (Ethenylbenzene)	Mammal			None. No data.		
Trichlorofluoromethane	Bird			None. No data.		
Trichlorofluoromethane	Mammal			None. No data.		
Trichlorofluoromethane	Plant			None. No data.		
Trichlorofluoromethane	Worm			None. No data.		
Trimethylbenzene[1,2,4-]	Bird			None. No data.		
Trimethylbenzene[1,2,4-]	Mammal			None. No data.		
Trimethylbenzene[1,2,4-]	Plant			None. No data.		
Trimethylbenzene[1,2,4-]	Worm			None. No data.		
Trimethylbenzene[1,3,5-]	Bird			None. No data.		
Trimethylbenzene[1,3,5-]	Mammal			None. No data.		
Trimethylbenzene[1,3,5-]	Plant			None. No data.		
Trimethylbenzene[1,3,5-]	Worm			None. No data.		
Tris(o-cresyl) phosphate	Bird			None. No applicable data.		
Tris(o-cresyl) phosphate	Mammal			None. No data.		
Tris(o-cresyl) phosphate	Plant			None. No data.		
Tris(o-cresyl) phosphate	Worm			None. No data.		
Vinyl Chloride	Bird			None. No data.		
Vinyl Chloride	Plant			None. No data.		
Vinyl Chloride	Worm			None. No data.		

CASRN	Chemical	Synonyms	Sol ESL Status	Receptors (Toxicity Data Source)	Release 2.0 Status	Literature Search Status
100-51-6	Benzyl alcohol	Benzenemethanol	No ESLs		No ESLs	No applicable data was found for plants. No data was found for birds, mammals or amphibians. TOXNET_DARTBITIC and TOXNET_TOXLINE have not been searched.
319-86-8	BHC[delta-]	Surrogate-BHC[gamma-]			Surrogate-BHC[gamma-]	No data was found for birds, mammals, plants or amphibians. TOXNET_DARTBITIC and TOXNET_TOXLINE have not been searched.
111-44-4	Bis(2-chloroethyl)ether		No ESLs		No ESLs	No applicable data was found for worms. No data was found for birds, mammals or amphibians. TOXNET_DARTBITIC and TOXNET_TOXLINE has not been searched.
74-83-9	Bromomethane	Methyl Bromide	No ESLs		No ESLs	No applicable data was found for plants. Literature searches not started for worms. Literature identified in IRIS has not been reviewed. ATSDR literature search in progress. TOXNET_DARTBITIC and TOXNET_TOXLINE have not been searched.
86-74-8	Carbazole		No ESLs		No ESLs	No applicable data was found for birds, mammals or amphibians. TOXNET_DARTBITIC and TOXNET_TOXLINE have not been searched.
75-15-0	Carbon disulfide		Interim ESL	Mammal (ECOTOX)	Incorporated	Applicable data for Mammals. No applicable data for plants or worms. No data for birds or amphibians. ATSDR literature search in progress. TOXNET_DARTBITIC and TOXNET_TOXLINE have not been searched.
108-47-8	Chlorosulfene[1]		Interim ESL	Earthworm (ECOTOX), Plant (ECOTOX)	Incorporated	No applicable data for plants and worms. No data for birds or mammals. IRIS and TOXNET_TOXLINE literature search in progress.
74-97-3	Chlorosulfuric		No ESLs		No ESLs	No applicable data for birds, mammals, plants or worms. ATSDR literature search in progress. TOXNET_DARTBITIC and TOXNET_TOXLINE have not been searched.
91-58-7	Chloronaphthalene[2-]	Surrogate-Naphthalene			Surrogate-Naphthalene	No applicable data for birds, mammals, plants or worms. TOXNET_DARTBITIC and TOXNET_TOXLINE have not been searched.
95-50-1	Dichlorobenzene[1,2-]		Interim ESL	Mammal (ECOTOX)	Incorporated	Applicable data for Mammals. No applicable data for plants or worms. No data for birds or amphibians. ATSDR literature search in progress. TOXNET_DARTBITIC and TOXNET_TOXLINE have not been searched.
541-73-1	Dichlorobenzene[1,3-]		Interim ESL	Mammal (ECOTOX)	Incorporated	Applicable data for mammals. No data for birds, plants and worms. ATSDR and IRIS literature search in progress. TOXNET_DARTBITIC and TOXNET_TOXLINE have not been searched.
618-67-1	Dinitroaniline[2,5-]		No ESLs		No ESLs	Applicable data for mammals. No data for birds, plants and worms.
122-39-4	Diphenylamine		Interim ESL	Bird (PNA)	Interim ESL	Applicable data for birds. No data for mammals, plants or worms. ATSDR, TOXNET_DARTBITIC and TOXNET_TOXLINE literature searches in progress.
1031-07-8	Endosulfan sulfate	Surrogate-Endosulfan			Surrogate-Endosulfan	No applicable data for birds. No data for mammals, plants or worms. ATSDR literature search in progress. TOXNET_DARTBITIC and TOXNET_TOXLINE have not been searched.
7421-93-4	Endrin aldehyde	Surrogate-Endrin			Surrogate-Endrin	No applicable data for birds. No data for mammals, plants or worms. ATSDR literature search in progress. TOXNET_DARTBITIC and TOXNET_TOXLINE have not been searched.
53494-70-5	Endrin ketone	Surrogate-Endrin			Surrogate-Endrin	No applicable data for birds. No data for mammals, plants or worms. ATSDR literature search in progress. TOXNET_DARTBITIC and TOXNET_TOXLINE have not been searched.
100-41-4	Ethylbenzene	Surrogate-Benzene			Surrogate-Benzene	No applicable data for plants or worms. No data for birds or mammals. ATSDR and California literature searches in progress. TOXNET_DARTBITIC and TOXNET_TOXLINE have not been searched.
1024-57-3	Heptachlor epoxide	Surrogate-Heptachlor			Surrogate-Heptachlor	No data was found for mammals, plants, birds or amphibians. ATSDR and California for birds has not been reviewed. ATSDR and IRIS literature searches in progress. TOXNET_DARTBITIC and TOXNET_TOXLINE have not been searched.
118-74-1	Hexachlorobenzene		Interim ESL	Earthworm (ECOTOX), Bird (ECOTOX), Mammal (ECOTOX), Plant (ECOTOX)	Incorporated	Applicable data for birds, mammals, plants and worms. Literature identified in IRIS has not been reviewed. ATSDR reviewed. ATSDR literature search in progress. TOXNET_DARTBITIC and TOXNET_TOXLINE have not been searched.
591-78-6	Hexanone[2-]	Methyl n-Butyl Ketone,	Interim ESL	Bird (LOAEL)	Incorporated	Applicable data for birds and mammals. No applicable data for plants. No data for amphibians. ATSDR and IRIS reviewed. TOXNET_DARTBITIC and TOXNET_TOXLINE has not been reviewed.
591-78-6	Hexanone[2-]	Methyl n-Butyl Ketone,	Interim ESL	Mammal (LOAEL)	Interim ESL	Applicable data for birds and mammals. No applicable data for plants. No data for amphibians. ATSDR and IRIS reviewed. Literature identified in ATSDR and TOXNET_TOXLINE has not been reviewed.
74-90-8	Hydrocyanic acid		Interim ESL	Bird (PNA)	Interim ESL	Applicable data for birds. No applicable data for plants. No data for mammals or worms. Literature searches in progress for TOXNET_DARTBITIC and TOXNET_TOXLINE.
PE	Iron		Use EcoSSL report	Plant (EcoSSL)	Incorporated	Directly superceded by EPA EcoSSL report for iron. Refer to http://www.epa.gov/ecotox/ecossl/pdf/iron_hq_hon.pdf.
98-82-8	Isopropylbenzene	Surrogate-Benzene			Surrogate-Benzene	No applicable data for birds, mammals, plants or worms. TOXNET_DARTBITIC and TOXNET_TOXLINE have not been searched.
99-87-6	Isopropyltoluene[4-]	Surrogate-Toluene			Surrogate-Toluene	No applicable data for birds, mammals, plants or worms. TOXNET_DARTBITIC and TOXNET_TOXLINE have not been searched.
Li	Lithium		Interim ESL	Mammal (LOAEL), Plant (ORNL)	Incorporated	Applicable data for mammals and plants. No applicable data for birds. No data for worms. Literature searches not started for TOXNET_DARTBITIC and TOXNET_TOXLINE.
95-48-7	Methylphenol[2-]	o-cresol	Interim ESL	Plant (ECOTOX)	Interim ESL	Applicable data for plants. No data for birds, mammals or worms. Literature searches in progress for IRIS. Literature searches not started for TOXNET_DARTBITIC and TOXNET_TOXLINE.
108-39-4	Methylphenol[3-]		Interim ESL	Plant (ECOTOX)	Interim ESL	Applicable data for plants. No data for birds, mammals or worms. Literature searches not started for IRIS. Literature searches not started for TOXNET_DARTBITIC and TOXNET_TOXLINE.
106-44-5	Methylphenol[4-]	Surrogate-Phenol			Surrogate-Phenol	No data for birds, mammals, plants or worms. Literature searches not started for IRIS. Literature searches not started for TOXNET_DARTBITIC and TOXNET_TOXLINE.
MO	Molybdenum		Interim ESL	Bird (ORNL), Plant (ORNL)	Incorporated	Applicable data for birds and plants. No applicable data for mammals. No data for worms. Literature searches not started for TOXNET_DARTBITIC and TOXNET_TOXLINE.
14797-65-0	Nitrite (expressed as NO2)		No ESLs		No ESLs	No applicable data for birds, mammals or plants. No data for worms. Literature searches not started for TOXNET_DARTBITIC and TOXNET_TOXLINE.
88-74-4	Nitroaniline[2-]		No ESLs		No ESLs	No data for birds, mammals, plants or worms. Literature identified in TOXNET_TOXLINE has not been reviewed.
103-65-1	N-propylbenzene	Surrogate-Benzene			Surrogate-Benzene	No data for birds, mammals, plants or worms. Literature searches not started for TOXNET_DARTBITIC and TOXNET_TOXLINE.
14797-73-0	Perchlorate		No ESLs		No ESLs	No data for birds, mammals, plants or worms. Literature searches not started for USGAPPRA and ATSDR. Literature searches not started for TOXNET_DARTBITIC and TOXNET_TOXLINE.
100-42-5	Styrene	Ethenylbenzene	Interim ESL	Earthworm (ECOTOX), Plant (ORNL)	Incorporated	Applicable data for plants and worms. No data for birds or mammals. Literature identified in ATSDR, IRIS, IRIS, TOXNET_DARTBITIC and TOXNET_TOXLINE.
30560-19-1	TX7B (Acetamiprid/acetamiprid)		No ESLs		No ESLs	No applicable data for mammals. No data for birds, plants and worms.
75-69-4	Trichlorofluoromethane	Freon 11,	No ESLs		No ESLs	Applicable data for birds, plants and worms. Literature identified in IRIS and TOXNET_TOXLINE has not been reviewed.
95-63-6	Trimethylbenzene[1,2,4-]	Surrogate-Benzene			Surrogate-Benzene	No data for birds, mammals, plants and worms. Literature searches not started for TOXNET_DARTBITIC and TOXNET_TOXLINE.
108-67-8	Trimethylbenzene[1,3,5-]	Surrogate-Benzene			Surrogate-Benzene	No data for birds, mammals, plants and worms. Literature searches not started for TOXNET_DARTBITIC and TOXNET_TOXLINE.
1330-78-5	Tris(o-cresyl) phosphate		No ESLs		No ESLs	No applicable data for birds. No data for mammals, plants or worms. Literature searches in progress for TOXNET_DARTBITIC and TOXNET_TOXLINE.
75-01-4	Vinyl chloride		Interim ESL	Mammal (ORNL)	Incorporated	Applicable data for mammals. No data for birds, plants or worms. Literature identified in IRIS has not been reviewed. ATSDR and TOXNET_TOXLINE literature search in progress. TOXNET_DARTBITIC and TOXNET_TOXLINE have not been searched.

On-line Database	URL	Data Provided for ESL Development	Database Description
CEE-TV	http://www.pwrc.usgs.gov/contaminants-online/pages/CEETV/CEETVintro.htm	Not Evaluated. Residue and biomarker data reported, but no data for deriving ingested dose. No plant and worm data.	USGS Contaminant Exposure and Effects-Terrestrial Vertebrates database (CEE-TV) contains contaminant exposure and effects information for terrestrial vertebrates (birds, mammals, amphibians and reptiles) that reside in estuarine and coastal habitats along the Atlantic, Gulf and Pacific Coasts including Alaska and Hawaii and in the Great Lakes Region.
EPA OPPALB	http://www.epa.gov/oppefed1/ecorisk_ders/aquatic_life_benchmark.htm	Not Evaluated. Aquatic Data ONLY.	USEPA Office of Pesticide Programs' Aquatic Life Benchmarks.
EXTOXNET	http://extoxnet.orst.edu/	Not Evaluated. Risk Assessment Definitions ONLY.	The EXtension TOXicology NETwork sponsored by the University of California-Davis, Oregon State University, Michigan State University, Cornell University, and the University of Idaho. No toxicity data, only risk assessment definitions. Resource not evaluated.
PAN	http://www.pesticideinfo.org/Search_Ecotoxicity.jsp	Not Evaluated. Aquatic Data ONLY.	The Pesticide Action Network (PAN) Pesticide Database is your one-stop location for toxicity and regulatory information for pesticides. The PAN Pesticide Database brings together a diverse array of information on pesticides from many different sources, providing human toxicity (chronic and acute), ecotoxicity and regulatory information for about 6,400 pesticide active ingredients and their transformation products, as well as adjuvants and solvents used in pesticide products. Only aquatic ecotoxicity data reported.
TOXNET_ ITER	http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?iter	Not Evaluated. Reports cite IRIS and ATSDR for non-cancer toxicity data.	TOXNET (TOXicology Data NETwork) is a cluster of databases covering toxicology, hazardous chemicals, environmental health and related areas. It is managed by the Toxicology and Environmental Health Information Program (TEHIP) in the Division of Specialized Information Services (SIS) of the National Library of Medicine (NLM). International Toxicity Estimates for Risk (ITER) - Risk information for over 600 chemicals from authoritative groups worldwide.
USGS	http://www.pwrc.usgs.gov/wwtc/	Not Evaluated. Links to other databases ONLY.	USGS Whole Wildlife Toxicology Catalog with website links to 40+ databases. No queries performed from this URL or from links not subsequently identified for investigation.
EPA ECOTOX	http://cfpub.epa.gov/ecotox/	Toxicity Values for Birds, Mammals, Plants and Worms.	USEPA ECOTOX Database. The ECOTOX (ECOTOXicology) database provides single chemical toxicity information for aquatic and terrestrial life. Values reported include LC50s, NOEC, LOEC, LOEL, NOEL, ED50, etc. Toxicity data for available substances is reported in worksheet "ECOTOX." Only terrestrial data for Growth, Mortality, Reproduction and Population queried from database. Searched by CASRN.
ORNL Invertebrates	http://www.esd.ornl.gov/programs/ecorisk/documents/tm85r3.pdf	Toxicity Values for Worms.	The ORNL (Oak Ridge National Laboratory) ecotoxicological screening benchmarks for earthworms and microbes/microbial procesess are concentrations of chemicals in soil that are believed to represent acceptable concentrations with respect to selected ecological receptors.The benchmarks are based on NOECs and LOECs, which are reported for soil exposures to earthworm and microbes/ microbial processes. See PDF resource downloadable from website.
ORNL Plants	http://www.esd.ornl.gov/programs/ecorisk/documents/tm85r3.pdf	Toxicity Values for Plants.	The ORNL (Oak Ridge National Laboratory) ecotoxicological screening benchmarks for terrestrial plants are concentrations of chemicals in soil or solution that are believed to represent acceptable concentrations with respect to selected ecological receptors. The benchmarks are based on NOECs and LOECs, which are reported for soil or solution exposures to plants. See PDF resource downloadable from website.
ORNL Wildlife	http://www.esd.ornl.gov/programs/ecorisk/documents/tm86r3.pdf	Toxicity Values for Birds and Mammals.	The ORNL (Oak Ridge National Laboratory) ecotoxicological screening benchmarks for wildlife are concentrations of chemicals in ambient media that are believed to represent acceptable concentrations with respect to selected ecological receptors. The benchmarks are based on NOAELs and LOAELs, which are reported for oral exposures in birds and mammals. See PDF resource downloadable from website.

On-line Database	URL	Data Provided for ESL Development	Database Description
LANL PTSE (New Values)	Not available	Toxicity Values for Birds, Mammals, Plants and Worms.	The LANL (los Alamos National Laboratory) Ecorisk Database contains Ecological Screening Levels for aquatic and terrestrial receptors in soil, sediment, water and air. The LANL ESLs are based on TRVs, which are derived using the Primary Toxicty Study Evaluaion Process. TRVs reported are chronic NOAELs/NOECs for terrestrial birds, mammals, plants and earthworms.
ABC Birds	http://www.abcbirds.org/abcprograms/policy/pesticides/aims/aims/toxicity.cfm	Toxicity Values for Birds.	The American Bird Conservancy (ABC) Pesticide Toxicity Database contains acute pesticide toxicty data in birds.
Cal/Ecotox	http://www.oehha.org/cal_ecotox/default.htm	Toxicity Data for Birds and Mammals for Oral Non-cancer Toxicity Data. References also reported.	The California OHHEA (Office of Environmental Health Hazard Assessment) Wildlife Biology, Exposure Factor, and Toxicity Database (Cal/Ecotox) is a compilation of physiological and ecological parameters and toxicity data for a number of California fish and wildlife. Species, chemical, endpoint type, endpoint description, endpoint value, endpoint range, study description and reference are reported. Data for chemicals of interest reported in worksheet "CalEcotox".
ERED	http://el.erdc.usace.army.mil/ered/Index.cfm	Toxicity Values for Birds.	The U.S. Army Corps of Engineers/U.S. Environmental Protection Agency Environmental Residue-Effects Database (ERED) is a compilation of data, taken from the literature, where biological effects (e.g., reduced survival, growth, etc.) and tissue contaminant concentrations were simultaneously measured in the same organism. Currently, the database is limited to those instances where biological effects observed in an organism are linked to a specific contaminant within its tissues.
IPM Centers	http://www.ipmcenters.org/Ecotox/DataAccess.cfm	Toxicity Values for Birds, Mammals, Plants and Worms.	USEPA NATIONAL INFORMATION SYSTEM FOR THE REGIONAL IPM (Integrated Pest Management) Centers OPP Pesticide Ecotoxicity Database. The Ecological Fate and Effects Division of the USEPA Office of Pesticide Programs is continuing efforts to update the database with all EPA reviewed ecotoxicity endpoints for pesticides registered or previously registered in the U.S. Toxicity data on over 800 active ingredients, metabolites, and multi- ingredient formulations are presently included in the database. The toxicity data inputed into the database is compiled from actual studies reviewed by EPA in conjunction with pesticide registration or reregistration and studies performed by USEPA, USDA and USFWS laboratories which have been reviewed by Agency biologists and judged acceptable for use in the ecological risk assessment process. The database presently contains over 21,000 records for acute and chronic toxicity endpoints on terrestrial and aquatic plants, aquatic invertebrates, terrestrial invertebrates, insects, amphibians, fish, birds, reptiles, and wild mammals. The database is presented in Microsoft ACCESS and contains 35 fields per record entry. Each record entry summ
USACHPPM	http://chppm-www.apgea.army.mil/erawg/tox/index.htm	Toxicity Values for Birds and Mammals.	USACHPPM (US Army Center for Health Promotion and Preventive Medicine) complete chemical toxicological assessments/profiles for wildife with reference list.
ATSDR	http://www.atsdr.cdc.gov/	Reference Titles for Mammal Oral Non-cancer Toxicity Data.	ATSDR (Agency for Toxic Substances and Disease Registry) Toxicological Profiles for human health. These profiles succinctly characterize the toxicologic and adverse health effects information for a hazardous substance. Each peer-reviewed profile identifies and reviews the key literature that describes a hazardous substance's toxicologic properties. Other pertinent literature is also presented, but is described in less detail than the key studies. The references are generally for mammalian studies all routes.

On-line Database	URL	Data Provided for ESL Development	Database Description
IRIS	http://www.epa.gov/ncea/iris/search_keyword.htm	Reference Abstracts for Mammals for Oral Non-cancer Toxicity Data.	The USEPA Integrated Risk Information System (IRIS) is an electronic database containing information on human health effects that may result from exposure to various substances in the environment. IRIS is prepared and maintained by the EPA's National Center for Environmental Assessment (NCEA) within the Office of Research and Development (ORD). Noncancer effects: Oral reference doses and inhalation reference concentrations (RfDs and RfCs, respectively) for effects known or assumed to be produced through a nonlinear (possibly threshold) mode of action. In most instances, RfDs and RfCs are developed for the noncarcinogenic effects of substances. Cancer effects: Descriptors that characterize the weight of evidence for human carcinogenicity, oral slope factors, and oral and inhalation unit risks for carcinogenic effects. Where a nonlinear mode of action is established, RfD and RfC values may be used. Primary toxicty study references for mammalian test species are reported.
TOXNET_DART/ETIC	http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?DARTETIC	Reference Abstracts for Mammals for Oral Non-cancer Toxicity Data.	TOXNET (TOXicology Data NETwork) is a cluster of databases covering toxicology, hazardous chemicals, environmental health and related areas. It is managed by the Toxicology and Environmental Health Information Program (TEHIP) in the Division of Specialized Information Services (SIS) of the National Library of Medicine (NLM). DART®/ETIC (Development and Reproductive Toxicology/Environmental Teratology Information Center) is a bibliographic database covering literature on reproductive and developmental toxicology. DART is managed by NLM and funded by the EPA, the National Institute of Environmental Health Sciences (NIEHS) and NLM. DART/ETIC contains references to reproductive and developmental toxicology literature published since 1965.
TOXNET_TOXLINE	http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?TOXLINE	Reference Abstracts for Mammals for Oral Non-cancer Toxicity Data.	TOXNET (TOXicology Data NETwork) is a cluster of databases covering toxicology, hazardous chemicals, environmental health and related areas. It is managed by the Toxicology and Environmental Health Information Program (TEHIP) in the Division of Specialized Information Services (SIS) of the National Library of Medicine (NLM). TOXLINE® is a bibliographic database providing comprehensive coverage of the biochemical, pharmacological, physiological, and toxicological effects of drugs and other chemicals from 1965 to the present. TOXLINE contains over 3 million citations, almost all with abstracts and/or index terms and CAS Registry Numbers.

Worksheet	Description
ChemicalSummary	This worksheet provides the chemical name/ common synonyms and CASRN for chemicals of concern. The following attributes are also reported for each of the chemicals of concern: the status of the soil ESL (no ESL, Interim ESL, surrogate ESL), the ESL receptor(s), the data source for the ESL(s), the status of the ESL for release 2.4 (R2.4) of the Ecorisk Database, and the status of the overall toxicity data literature search.
DatabaseDescriptions	This worksheet provides the name and URL of the on-line database/data source along with a general description of the database and the data provided for ESL development.
LiteratureSearchResultsSummary	This worksheet provides a summary of the search results for each chemical for each of the on-line databases/ data sources.
Interim TRVs	This worksheet contains the interim TRVs derived from primary toxicity data retrieved from the on-line databases/ data sources.
Exposure Duration Categories	This worksheet provides the definitions applied to primary toxicity values to categorize them by exposure duration and determine the application of uncertainty factors to extrapolate from a single dose, acute or subchronic exposure to a chronic exposure.
Uncertainty Factors	This worksheet provides the definitions of the uncertainty factors applied to primary toxicity values to extrapolate from a single dose, acute or subchronic exposure to a chronic exposure, as well as to extrapolate from LC50/LD50, EC50/ED50, or LOAEL/LOEC endpoints to NOAEL/NOEC endpoints.
ECOTOX	This worksheet contains the data retrieved from the EPA ECOTOX on-line database for the chemicals of concern along with a reason for inclusion/ exclusion from consideration for an interim TRV..
CalEcotox	This worksheet contains the data retrieved from the EPA CalEcotox on-line database for the chemicals of concern.
IPM Diphenylamine	This worksheet contains the data retrieved from the IPM on-line database for Diphenylamine.
IPM Iodomethane	This worksheet contains the data retrieved from the IPM on-line database for Iodomethane.
IPM Tris(o-cresyl) phospahte	This worksheet contains the data retrieved from the IPM on-line database for Tris(o-cresyl) phosphate.

NATIONAL INFORMATION SYSTEM FOR THE REGIONAL IPM CENTERS
OPP Pesticide Ecotoxicity Database
http://www.ipmcenters.org/Ecotox/Details.cfm?RecordID=22434
Details

Pesticide: Iodomethane
Shaughness: 000011
CAS_NO: 74-88-4
Type of Pesticide: Fumigant
Type of Organism: Aves
Common Name: Bobwhite quail
Scientific Name: Colinus virginianus
Age: 19 wk
Guideline: [71-1] Avian Acute Oral-Game Bird or Waterfowl using TGAI or TEP (FIFRA 158.490)
Test Type: [O] Oral gavage or capsule administration of the toxicant
% AI: 99.7
Study Length: 14 D
Dose Type: [LD50] 50% Lethality from oral dose or acute dermal application
TGL:
Toxicity: 57
Tox Level: [MGK] milligrams/kg body wt(acute oral toxicity studies)
95% Confidence Levels: 40-80
Curve Slope: N.R.
NGL:
NOEL: 20
Study Date: 2001
Review Date: 2002
Category: C
EPA Identification: 45593716
Laboratory: Wildlife International Inc., MD
Reviewer: J. Felkel
Batch Number: 051908
Eggs Laid:
% Eggs Cracked:
% Eggs Viable:
% Live Embryos:
% Egg Hatch:
14 Day Survive:
Growth Effect:

Details
http://www.ipmcenters.org/Ecotox/Details.cfm?RecordID=22437
Pesticide: Iodomethane(acute inhalation study)
Shaughness: 000011
CAS_NO: 74-88-4
Type of Pesticide: Fumigant
Type of Organism: Aves
Common Name: Bobwhite quail
Scientific Name: Colinus virginianus
Age: 24 wk
Guideline: [N.A.]
Test Type: [IH]
% AI: 99.7
Study Length: 14 D
Dose Type: [LC50] 50% Lethal Concentration in diet or water
TGL:
Toxicity: 395
Tox Level: [PPM] Parts Per Million
95% Confidence Levels: 317-414
Curve Slope: N.R.
NGL:
NOEL: 344
Study Date: 2002
Review Date: 2002
Category: S
EPA Identification: 45593717
Laboratory: WIL Research Laboratories, Ashland, Ohio
Reviewer: J. Felkel
Batch Number: 051908
Eggs Laid:
% Eggs Cracked:
% Eggs Viable:
% Live Embryos:
% Egg Hatch:
14 Day Survive:
Growth Effect:

Los Alamos National Laboratory

Environmental Stewardship Division

Environmental Remediation and Surveillance Program

Ecorisk Database Release 2.4 (December 2009)

ESL History Summary by Ecorisk Database Release

(Draft December 2009)*

**** If you have a specific question(s) that this document does not address adequately, you may contact the database manager for additional help answering your question(s).***

Table 1. ESL Changes by Ecorisk Database Release
- **October 1998 – Beta Release**
- **June 1999 – Release 1.0**
- **April 2000 – Release 1.1**
- **September 2000 – Release 1.2**
- **September 2001 – Release 1.3**
- **March 2002 – Release 1.4**
- **September 2002 – Release 1.5**
- **November 2003 – Release 2.0**
- **September 2004 – Release 2.1**
- **September 2005 – Release 2.2**
- **October 2008 – Release 2.3**
- **December 2009 – Release 2.4**

Table 2. Beta Release (October 1998) List of Soil ESLs for Bird Receptors
Table 3. Beta Release (October 1998) List of Soil ESLs for Mammalian Receptors
Table 4. Beta Release (October 1998) List of Soil ESLs for Earthworm Receptor
Table 5. Beta Release (October 1998) List of Soil ESLs for Generic Plant Receptor
Table 6. Beta Release (October 1998) List of Sediment and Water ESLs for Aquatic Community Organism Receptors
References

Tables

Table 1. ESL Changes by Ecorisk Database Release

Ecorisk Database Release	ESL Changes

Table 1. ESL Changes by Ecorisk Database Release

Ecorisk Database Release	ESL Changes
October 1998 – Beta Release	Original ESL models were as follows: Soil ESLs for Bird Receptors: American kestrel (Avian intermediate carnivore), American kestrel (Avian top carnivore), American robin (Avian insectivore) for 46 non-radionuclides and 18 radionuclides (See Table 2). Soil ESLs for Mammalian Receptors: Deer mouse (Mammalian omnivore), Desert cottontail (Mammalian herbivore), Red fox (Mammalian top carnivore), Vagrant shrew (Mammalian insectivore) for 102 non-radionuclides and 18 radionuclides (See Table 3). Soil ESLs for Invertebrate Receptor: Earthworm (Soil-dwelling invertebrate) for 37 non-radionuclides and 18 radionuclides (See Table 4). Soil ESLs for Plant Receptor: Generic plant (Terrestrial autotroph - producer) for 41 non-radionuclides and 18 radionuclides (See Table 5). Sediment and Water ESLs for 12 radionuclides for Aquatic Community Organism Receptors: Aquatic snails (Aquatic herbivore - grazer), Daphnids (Aquatic omnivore/ herbivore), Fish (Aquatic intermediate carnivore), and Algae (Aquatic autotroph – producer). (See Table 6). BACK TO TOP
June 1999 – Release 1.0	Addition of sediment ESLs for 19 radionuclides and or 49 non-radionuclides for the new bird receptor, Violet-green Swallow (Avian aerial insectivore). Addition of sediment ESLs for 19 radionuclides and or 106 non-radionuclides for the new Mammal receptor, Occult little brown myotis bat (Mammalian aerial insectivore). Addition of 85 sediment ESLs for non-radionuclides ESLs for the new aquatic community organism receptor. Addition of 7 radionuclides (Cesium-134, Cobalt-60, Europium-152, Radium-228, Sodium-22, Thorium-228, Thorium-230) for sediment and water for aquatic community organism receptors. Addition of non-radionuclide and radionuclide ESLs (19 rad, 48 non-rad) for soil for the new Bird receptors, American robin (Avian omnivore) and American robin

Table 1. ESL Changes by Ecorisk Database Release

Ecorisk Database Release	ESL Changes
	(Avian herbivore). Addition of non-radionuclide and radionuclide ESLs for water for all bird (19 rad, 48 non-rad) and mammal (19 rad, 106 non-rad) receptors. Addition of 3 ESLs for soil for Boron, Fluoride and Radium-228 for all applicable bird receptors. Addition of 3 ESLs for soil for Boron, Fluoride, Strontium (stable), Dichlorobenzene[1,4-], and Radium-228 for all applicable mammal receptors. Addition of 2 ESLs for soil for Trinitrotoluene[2,4,6-], and Radium-228 for the earthworm receptor. Addition of 3 ESLs for soil for Amino-2, 6-dinitrotoluene[4-], Boron, and Radium-228 for the generic plant receptor. Numerous ESL updates. Documentation of specific reasons for updates not available at this time. General documentation of reasons for ESL updates indicated that the radionuclide ESL models underwent extensive revisions and the non-radionuclide ESLs were multiplied by a factor of 0.3 per the recommendation of NMED. BACK TO TOP

Table 1. ESL Changes by Ecorisk Database Release

Ecorisk Database Release	ESL Changes
April 2000 – Release 1.1	Addition of 5 ESLs for water for Tetrachlorodibenzodioxin[2,3,7,8-], Dinitrotoluene[2,6-], Fluoride, Pentachloronitrobenzene, and Dichloroethene[1,1-] for the aquatic community organism receptor. Addition of soil and water ESLs for Dinitrobenzene[1,3-] for all applicable bird receptors. Addition of a soil ESL for Dibenzofuran for the desert cottontail receptor. Deletion of sediment ESLs for Butanone[2-], Chloroform, Dichloroethane[1,2-], Dichloroethene[cis-1,2-], Dinitrotoluene[2,6-], and Nitrobenzene for the aquatic community organism receptor. The Chloroform ESL was deleted because the toxicity data it was based on was deemed unsuitable. Reasons for other deletions not available at this time. Deletion of water ESL for Dichloroethene[cis-1,2-] for the aquatic community organism. Reason for deletion not available at this time. Numerous ESL updates. Documentation of specific reasons for ESL updates is not available at his time. General reasons for ESL updates are described below. Some ESLs were updated based on reasons documented in the December 1999 Interim ESLs memorandum (Ref ID 1484) and included: 1) the 0.3 factor was removed from the non-radionuclide ESL equations, 2) a correction to the water ESLs to account for a units conversion problem was made (values were multiplied by 1000), 3) all ESL values were rounded down to two significant figures and 4) the aquatic community organism receptor ESL for chlordane was revised. Some ESLs were updated due to the availability of new PTSE derived CS TRVs to replace secondary data source TRVs in ESL calculations. PTSE CS TRVs derived included Amino-2,6-dinitrotoluene[4-]/ Plant, Amino-4,6-dinitrotoluene[2-]/ Plant, Boron/ Bird, /Mammal and /Plant; Chromium (total)/ Bird and /Mammal, Fluoride/ Bird and / Mammal, Manganese/ Bird, / Mammal and / Plant; Nitroglycerine/ Mammal, Strontium (stable)/ Mammal, Trinitrotoluene[2,4,6-]/ Earthworm, /Mammal and /Plant; Uranium/ Bird, / Mammal and / Plant; and Vanadium/ Bird and / Mammal. Some ESLs were updated due to quality assurance issues including correction of errors in ESL calculations/parameters, rounding of values or reporting of data.

Table 1. ESL Changes by Ecorisk Database Release

Ecorisk Database Release	ESL Changes
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Table 1. ESL Changes by Ecorisk Database Release

Ecorisk Database Release	ESL Changes
September 2000 – Release 1.2	Addition of soil, sediment and water ESLs for Dichloroethane[1,2-] for all applicable bird and mammal receptors because new PTSE derived TRVs were available. Addition of soil, sediment and water ESLs for Lead-210, Neptunium-237, Thorium-229, Uranium-233, and Uranium-236 for all applicable bird, mammal, earthworm, generic plant and aquatic community organism receptors. Addition of soil ESLs for HMX and RDX for the earthworm receptor. Reason for addition not available at this time. Addition of a water ESL for Dinitrobenzene[1,3-] for the aquatic community organism receptor. Reason for addition not available at this time. Deletion of soil, sediment and water ESLs for Chloro-3-methylphenol[4-] for all applicable bird, mammal, and aquatic community organism receptors. Reasons for deletions not available at this time. Deletion of soil, sediment and water ESLs for Tetrachloroethane[1,1,2,2-] for all applicable mammal, and aquatic community organism receptors. Reasons for deletions not available at this time. Deletion of sediment ESLs for Dinitrobenzene[1,3-], Iron, Polychlorinated Biphenyls, Dimethyl Phthalate, and Phenol for the aquatic community organism receptor. Deletion of water ESLs for Calcium, Nitrate (expressed as NO3), and Dichloroethene[1,1-] for the aquatic community organism receptor. Reasons for deletions not available at this time. Deletion of the soil ESL or Dibenzofuran for the desert cottontail receptor. Reason for deletion not available at this time. Numerous ESL updates. Some ESLs were updated because new PTSE derived CS TRVs were available to replace secondary data source TRVs. PTSE CS TRVs available included Acetone/Bird, Barium Bird, Barium/Mammal, Barium/Plant, HMX/Invertebrate, HMX/Mammal, Lead/Mammal, Lead/Bird, Lead/Invertebrate, Lead/Plant, RDX/Invertebrate, RDX/Mammal, Silver/Bird, Silver/Plant,1,3,5-Trinitrobenzene/ Mammal, Thallium/Plant, Zinc/Bird, Zinc Invertebrate.

Table 1. ESL Changes by Ecorisk Database Release

Ecorisk Database Release	ESL Changes
	Other ESLs were updated for quality assurance issues including correction of errors in ESL calculations/parameters, rounding of values or reporting of data. BACK TO TOP

Table 1. ESL Changes by Ecorisk Database Release

Ecorisk Database Release	ESL Changes
September 2001 – Release 1.3	Addition of soil ESL for Chromium (total) for the earthworm receptor due to the availability of a new internally approved secondary data source TRV. Addition of soil ESL for DDT[4,4'-] for the generic plant receptor due to the availability of a new internally approved secondary data source TRV. Addition of water ESL for Dichloroethene[1,1-] for the aquatic community organism receptor due to the availability of a new internally approved secondary data source TRV. Numerous ESL updates. Some ESLs were updated because new PTSE derived CS TRVs were available to replace secondary data source TRVs. PTSE CS TRVs available included DDE[4,4'-]/Bird, DDE[4,4'-]/Mammal, DDT[4,4'-]/Bird, DDT[4,4'-]/Mammal, DDT[4,4'-]/Plant, Aroclor-1016, Aroclor-1242, Aroclor-1248, Aroclor-1254 and Aroclor-1260/Mammal; Aroclor-1242, Aroclor-1248, Aroclor-1254 and Aroclor-1260/Bird; and Aroclor-1254/Plant. Other ESLs were updated for quality assurance issues including correction of errors in ESL calculations/parameters, rounding of values or reporting of data. BACK TO TOP
March 2002 – Release 1.4	Numerous ESL updates. Radionuclide ESLs, except Tritium, were updated due to revision of TF_plant and TF_invert from a dry weight basis to a fresh weight basis assuming 85% and 61% moisture content of plant and invertebrate diets, respectively (Ref ID 0561). This revision was required for units to cancel correctly in the ESL model equations. Radionuclide ESLs for Tritium were updated due to revision of TF_plant and TF_invert to assume equilibrium between the tritium in soil moisture and tissue waters. The value is calculated by dividing the moisture in tissues by the moisture in soil where 61% moisture content of invertebrates is based on beetles (Ref ID 0561, Table 4-1, p. 4-13) and 85% moisture content of plant material is based on leaves (Ref ID 0561, Table 4-2, p.4-14) and soil moisture of 10% is based on an average soil moisture found in the Los Alamos area. This revision was required for units to cancel correctly in the ESL model equations.

Table 1. ESL Changes by Ecorisk Database Release

Ecorisk Database Release	ESL Changes
	Radionuclide ESLs were also updated due to the revision of TF_flesh, which was revised because it is calculated from TF_plant and TF_invert, which were revised as explained above. This revision was required for units to cancel correctly in the ESL model equations. Radionuclide ESLs were also update due to the revision of all receptor intake rates from a dry weight basis to a fresh weight basis where the moisture content of invertebrates is assumed to be 61% (beetles (Ref ID 0561, Table 4-1, p. 4-13)), of plant materials is assumed to be 85% (leaves (Ref ID 0561, Table 4-2, p.4-14)), and flesh is assumed to be 68% (mammals - mice, voles, rabbits (Ref ID 0561,Table 4-1, p. 4-13). This revision was required for units to cancel correctly in the ESL model equations. Radionuclide ESLs were also updated due to the replacement of TF_beef with TF_blood in ESL models. TF(blood) is calculated by multiplying TF(beef) by I(food) or in the case of water intake, I(water). TF(blood) is required in all radionuclide ESL models for wildlife, and TF(beef) was used as a surrogate measure to estimate body burdens for internal dose calculations. TF(beef) has been replaced by TF(blood) in all these models so that the units in these models cancel properly. Internal dose calculations require a TF that models the transfer of radionuclides from food to blood. Other reasons for ESL updates include the rounding of ESL model parameters to 3 significant digits for reporting consistency as well addressing quality assurance issues. BACK TO TOP

Table 1. ESL Changes by Ecorisk Database Release

Ecorisk Database Release	ESL Changes
September 2002 – Release 1.5	Addition of soil, sediment and water ESLs for Trinitrotoluene[2,4,6-] for all applicable bird receptors due to the availability of a new PTSE derived CS TRV. Addition of soil ESL for Tetrachloroethene for the generic plant receptor due to the availability of a new PTSE derived CS TRV. Numerous ESL updates. Some ESLs were updated due to the availability of new PTSE derived CS TRVs to replace secondary data source TRVs in ESL calculations. Applicable PTSE TRVs derived included Tetrachlorodibenzodioxin[2,3,7,8-]/Bird, Mammal, and Plant; Antimony/Mammal, Cadmium/Bird, Mammal and Invertebrate; Copper/Bird and Mammal; Mercury (inorganic) /Bird, Mammal and Invertebrate; Nickel /Bird, Mammal and Invertebrate; Selenim/Invertebrate, Zinc/Mammal and Plant; Tetrachloroethene/Mammal, Trichloroethane[1,1,1-]/Mammal, Trichloroethene/Mammal, and Xylene (total)/Bird. Some ESLs were updated due to quality assurance issues for TRVs. Specific details of issues are not available at this time. BACK TO TOP
November 2003 – Release 2.0	Addition of soil ESLs for Antimony, Barium, and Beryllium for the earthworm receptor due to the availability of EPA Eco-SSL TRVs. Deletion of the soil ESL for Trinitrotoluene[2,4,6-] for the earthworm receptor because the toxicity data it was based on was deemed unsuitable. Deletion of soil ESLs for Aluminum for all applicable bird, mammal and generic plant receptors because EPA Eco-SSL uses a soil pH of less than 5.5 as an indicator of toxicity instead of an Aluminum soil concentration. Numerous ESL updates. Some ESLs were updated due to the availability of new PTSE derived GMM TRVs to replace PTSE derived CS TRVs or secondary data source TRVs in ESL calculations. Applicable PTSE GMM TRVs included, Aroclor-1016, Aroclor-1242, Aroclor-1254, Aroclor-1260, DDT[4,4'-], Di-n-Butyl Phthalate, Nickel, RDX, and Tetrachlorodibenzodioxin[2,3,7,8-] for food exposure for Mammals; Antimony, Cadmium, and Lead for drinking water exposure for Mammals; Aroclor-1260,

Table 1. ESL Changes by Ecorisk Database Release

Ecorisk Database Release	ESL Changes
	Barium, Boron, Copper, DDE[4,4'-], Nickel, and Zinc for food exposure for Birds; Aroclor-1254, Boron, and Di-n-Butyl Phthalate for soil exposure for Plants; and Zinc for soil exposure for Invertebrates. Some ESLs were updated due to the availability of EPA Eco-SSL TRVs to replace PTSE or secondary data source TRVs in ESL calculations. Applicable EPA Eco-SSL TRVs available included Antimony, Barium, Beryllium, Cadmium, Cobalt, Lead, and Dieldrin for food exposure for Mammals; Cadmium, Cobalt, Lead, and Dieldrin for food exposures for Birds; Antimony, Barium, Beryllium, Cadmium, and Lead for soil exposure for Invertebrates; and Cadmium, Cobalt, and Lead for soil exposure for Plants. Some ESLs were updated due to the availability of EPA NRWQC CCC TRVs to replace other secondary data source TRVs. Applicable EPA NRWQC CCC TRVs available included Selenium and Mercury (inorganic) for water exposure for the aquatic community organism receptor. Other ESLs were updated due to addressing data quality assurance issues or because the previously used toxicity data the ESLs were based on was deemed unsuitable and was revised appropriately to make it suitable. Specific details of issues are not available at this time. BACK TO TOP

Table 1. ESL Changes by Ecorisk Database Release

Ecorisk Database Release	ESL Changes
September 2004 – Release 2.1	A mammalian screening receptor used in soil and water ESL models for a mammalian insectivore in the database has changed. The vagrant shrew (*Sorex vagrans*) in New Mexico has been reclassified as the montane shrew, also known as the dusky shrew, (*Sorex monticolus*) by Eastern New Mexico University (see http://fwie.fw.vt.edu/states/nmex_main/species/050725.htm for more information). However, this the ESLs for the vagrant shrew are applicable to the montane shrew because the short-tailed shrew data that was used as surrogates for parameters in the vagrant shrew ESL models are applicable for the montane shrew as a mammalian insectivore. As a result, only the ESL screening receptor common and scientific name has changed. Addition of soil ESL for HMX for the generic plant receptor due to the availability of a new Tier 2 TRV (PTSE GMM TRV). Addition of soil ESL for Trinitrotoluene[2,4,6-] for the earthworm receptor due to the availability of a new Tier 3 TRV (PTSE CS TRV). Addition of sediment and soil ESLs for RDX for all applicable bird receptors due to the availability of a new Tier 2 TRV (PTSE GMM TRV). Addition of sediment, soil and water ESLs for Thallium for all applicable bird receptors due to the availability of a newly approved Tier 4 TRV (secondary data source CS TRV). Addition of 16 air ESLs for Acetone, Benzene, Carbon, Tetrachloride, Chloroform, Chloromethane, Dichlorodifluoromethane, Dichloroethane[1,1-], Dichloroethane[1,2-], Dichloroethene[1,1-], Methylene Chloride, Tetrachloroethene, Toluene, Trichloroethane[1,1,1-], Trichloroethene, Trichlorofluoromethane, and Xylene (Total) for the new Mammal receptor, Botta's Pocket Gopher (Burrowing mammal). These ESL were added due to the availability of new Tier 2 TRVs (PTSE GMM TRVs). Deletion of sediment, soil and water ESLs for Tetrachlorodibenzodioxin[2,3,7,8-] for all applicable bird receptors due to discontinued use of previous Tier 3 (CS) TRV that was deemed unsuitable because it was based on an non-oral exposure (i.p. injection). Numerous ESL updates. Naphthalene soil and sediment ESLs for all applicable bird receptors updated due to the previous Tier 4 TRV (secondary data source CS TRV) being replaced by a new Tier 2 TRV (PTSE GMM TRV).

Table 1. ESL Changes by Ecorisk Database Release

Ecorisk Database Release	ESL Changes
	Chromium (+6) soil, sediment and water ESLs for all applicable bird receptors updated due to the previous Tier 4 (CS) TRV being replaced by a new Tier 3 TRV (PTSE CS TRV). Chromium (total) soil, sediment and water ESLs are based on Chromium (+6) toxicity data and because the oral chromium (+6) TRV for birds was updated (see previous paragraph), the corresponding chromium (total) ESLs for birds were updated accordingly based on the new chromium (+6) data. HMX soil ESL for the earthworm receptor updated due to the previous Tier 3 TRV (PTSE CS TRV) being replaced by a new Tier 2 TRV (PTSE GMM TRV). RDX soil ESL for the earthworm receptor updated due to the previous Tier 3 TRV (PTSE CS TRV) being replaced by a new Tier 3 TRV (PTSE CS TRV). Trinitrotoluene[2,4,6-] soil ESL for the generic plant receptor updated due to the Tier 3 TRV (PTSE CS TRV) being replaced by a new Tier 2 TRV (PTSE GMM TRV). Plutonium-241 water ESL for the vagrant shrew receptor updated due to the revision of the ESL model parameter, TF_blood, which was corrected for a previous rounding error. All ESL for radionuclides in sediment for aquatic receptors were revised based on the guidance of DOE-STD-1153-2002 to not include internal dose for aquatic organisms exposed to radionuclides in sediment. The ESL model parameter, DCF_int_fw, was set to 0 to incorporate this guidance. BACK TO TOP

Table 1. ESL Changes by Ecorisk Database Release

Ecorisk Database Release	ESL Changes
September 2005 – Release 2.2	**New ESLs** Sediment and water ESLs for iron for aquatic community organisms due to this analyte being added as a new LANL exposure concern. Water ESLs for perchlorate ion for mammalian and avian receptors due to development of a New Tier 2 (GMM) TRV and New Tier 3 (CS) TRV, respectively. Soil and sediment ESLs for mammalian receptors for BHC[alpha-] due to the development of a New Tier 3 (CS) TRV. Soil ESLs for the earthworm for fluoranthene, phenanthrene and pyrene due to the development of New Tier 3 (CS) TRVs. Soil ESL for the generic plant for naphthalene due to the development of a New Tier 3 (CS) TRV. **ESL Updates** Revision of various Transfer Factors (TF) for soil-to-plant and soil-to invertebrate for both inorganic and organic analytes based on the most current EPA EcoSSL bioaccumulation data or models (Ref ID 1401), which resulted in the revision of the calculated soil-to-flesh TF and as well as numerous ESL updates. Inorganic TFs were replaced with more comprehensive empirical values, median values from the empirical data set. Organic TFs for soil-to-invertebrates were revised based on a more appropriate bioaccumulation model (BAFww = (Kww/Kd)/0.16 where logKww = 0.87*logKow-2.0 and Kd = foc*Koc where foc is 1%, or 0.01.) cited in the 2005 EPA EcoSSL bioaccumulation data report (REF ID1401, Table 5 and dry to fresh weight ratio (0.16) for earthworms from Ref ID 1574), except for Dieldrin, DDT[4,4'-], and DDE[4,4'-], which were based on the median of comprehensive empirical data sets. Organic TFs for soil-to-plants were revised based on a more appropriate bioaccumulation model (BAF=10^(-0.4057LogKow+1.781) r2 =0.3226, n=228,p<0.0001) cited in the 2005 EPA EcoSSL bioaccumulation data report (REF ID1401). Furthermore, various TRVs were also updated and this contributed to the ESL updates. TRV updates include replacement of: Tier 1 TRVs with new Tier 1 TRVs from EPA from EcoSSL 2005 data Tier 3 or 4 TRVs with new Tier 1 TRVs from EPA EcoSSL 2005 data Tier 3 or 4 TRVs with new Tier 2 TRVs Tier 3 TRVs with a more appropriate Tier 3 TRVs Below is a list of the 99 analytes updated grouped based on type of revisions* A.) TF

Table 1. ESL Changes by Ecorisk Database Release

Ecorisk Database Release	ESL Changes
	revisions only, B.) TF and TRV revisions, and C.) TRV revisions only. **Detailed information on changes available from the "What's New In this Release" screen in the Ecorisk Database - section Change Type, ESLs, Update).* **A.) TF REVISONS ONLY** **HIGH EXPLOSIVES/ Sediment and Soil ESLs** Amino-2,6-dinitrotoluene[4-] Amino-4,6-dinitrotoluene[2-] Dinitrobenzene[1,3-] Dinitrotoluene[2,4-] Dinitrotoluene[2,6-] HMX Nitroglycerine Nitrotoluene[2-] Nitrotoluene[3-] Nitrotoluene[4-] PETN RDX Tetryl Trinitrobenzene[1,3,5-] Trinitrotoluene[2,4,6-] **INORGANICS/ Sediment and Soil ESLs** Aluminum (sediment) Arsenic Barium Cadmium Chromium (total) Copper Manganese Mercury (inorganic) Nickel Selenium (soil) Silver Strontium (stable) Uranium Zinc **POLYAROMATIC HYDROCARBONS/ Sediment and Soil ESLs** Acenaphthene Acenaphthylene Anthracene Benzo(a)anthracene (soil) Benzo(a)pyrene (soil) Benzo(b)fluoranthene (soil) Benzo(g,h,i)perylene Benzo(k)fluoranthene (soil) Chrysene (soil) Dibenzo(a,h)anthracene (soil)

Table 1. ESL Changes by Ecorisk Database Release

Ecorisk Database Release	ESL Changes
	Fluoranthene
	Fluorene
	Indeno(1,2,3-cd)pyrene (soil)
	Methylnaphthalene[2-]
	Naphthalene
	Phenanthrene (soil)
	Pyrene
	POLYCHLORINATED BIPHENYLS/ Soil ESLs
	Aroclor-1016
	Aroclor-1242
	Aroclor-1248
	Aroclor-1254
	Aroclor-1260
	PESTICIDES/ Sediment and Soil ESLs
	BHC[beta-]
	BHC[gamma-]
	Chlordane[alpha-]
	Chlordane[gamma-]
	DDE[4,4'-]
	DDT[4,4'-]
	Dieldrin
	Endosulfan
	Endrin
	Heptachlor (soil)
	Kepone
	Methoxychlor[4,4'-]
	Toxaphene (Technical Grade)
	SEMI-VOLATILE ORGANIC COMPOUNDS/ Sediment and Soil ESLs
	Benzoic Acid
	Bis(2-ethylhexyl)phthalate
	Butyl Benzyl Phthalate
	Chlorobenzene
	Chlorophenol[2-]
	Dimethyl Phthalate
	Di-n-Butyl Phthalate
	Di-n-octylphthalate
	Nitrobenzene
	Pentachloronitrobenzene
	Phenol
	VOLATILE ORGANIC COMPOUNDS/ Sediment and Soil ESLs
	Acetone
	Benzene
	Butanone[2-]
	Chloroform
	Dichlorobenzene[1,4-]
	Dichloroethane[1,1-]
	Dichloroethane[1,2-]
	Dichloroethene[1,1-]
	Dichloroethene[cis/trans-1,2-]

Table 1. ESL Changes by Ecorisk Database Release

Ecorisk Database Release	ESL Changes
	Methylene Chloride Tetrachloroethene Toluene Trichlorobenzene[1,2,4-] Trichloroethane[1,1,1-] Trichloroethene Xylene (Total) **B.) TF REVISIONS & TRV REVISIONS** **INORGANICS/ Sediment and Soil ESLs** Antimony (sediment) Barium Beryllium Cadmium Chromium (total) Cobalt Lead Vanadium **PESTICIDES/ Sediment and Soil ESLs** DDT[4,4'-] Dieldrin **SEMI-VOLATILE ORGANIC COMPOUNDS/ Sediment and Soil ESLs** Pentachlorophenol **C.) TRV REVISIONS ONLY** **DIOXIN/FURANS/ Soil ESLs** Tetrachlorodibenzodioxin[2,3,7,8-] **INORGANICS/ Sediment, Soil and Water ESLs** Antimony (soil) Arsenic (soil) Barium (soil) Cadmium (soil) Chromium (total) (soil and water) Chromium(+6) Lead (soil) Vanadium (soil) **POLYAROMATIC HYDROCARBONS/ Sediment and Soil ESLs** Fluorene (soil) **SEMI-VOLATILE ORGANIC COMPOUNDS/ Sediment and Soil ESLs** Pentachlorophenol Other Changes: Documentation and value for DCF_int_fw for aquatic receptors (algae, aquatic snail, daphnid and generic fish) for water Rad ESL model. This change did not affect ESLs, it was only a documentation error after from the previous release that was made after ESLs had been calculated. Added TF_beef_fw for BHC[alpha-]. Needed to calculate ESL for this new

Table 1. ESL Changes by Ecorisk Database Release

Ecorisk Database Release	ESL Changes
	exposure concern. BACK TO TOP

Table 1. ESL Changes by Ecorisk Database Release

Ecorisk Database Release	ESL Changes
October 2008 – Release 2.3	**New ESLs** Soil and Sediment ESLs for DDD[4,4'-] [a], Diethyl Phthalate, Methyl-2-pentanone[4-], Methylphenol[2-], and Aldrin due to these analytes being added as a new LANL exposure concerns. Soil ESLs for Manganese and Anthracene [a] for the earthworm due to availability of New Tier 1 TRV and New Tier 2 (GMM) TRV, respectively. **ESL Updates** Revision of the equation used to calculate the Transfer Factor (TF) for soil-to-flesh for both inorganic and organic analytes, which resulted in the revision of the calculated soil-to-flesh TF and as well as numerous ESL updates. The equation is now: TF_flesh_dw equals TF_beef_fw * [I_foodcomposite_fw * MAX(TF_plant_dw * {1 - MC_plant}, TF_invert_dw * {1 - MC_invert}) + I_soilcomposite_dw]/ (1-MC_flesh) Previous equation: TF_flesh_dw equals TF_beef_fw * [I_foodcomposite_fw * If(TF_invert_dw > TF_plant_dw, TF_invert_dw * {1 - MC_invert}, TF_plant_dw * (1-MC_plant)) + I_soilcomposite_dw]/ (1-MC_flesh) Where: I_soilcomposite_dw is the maximum dry weight intake of soil (0.00281 kg-dry soil/d) for prey species (American robin, deer mouse, desert cottontail and shrew) of the red fox and American kestrel MAX is maximum MC_plant is the moisture content of plant matter, which is assumed to be 85% (leaves (Ref ID 0561, Table 4-2, p.4-14)) MC_invert is the moisture content of invertebrates, which is assumed to be 61% (beetles (Ref ID 0561, Table 4-1, p. 4-13)) MC_flesh is the moisture content of flesh, which is assumed to be 68% (mammals - mice, voles, rabbits and birds – passerines (Ref ID 0561, Table 4-1, p. 4-13) TF_beef_fw is the food to beef transfer factor (mg-COPC/kg-fresh beef per mg-COPC/d) Furthermore, various TRVs were also updated and this contributed to the ESL updates. TRV updates include replacement of: Tier 1 TRVs with new Tier 1 TRVs from EPA from EcoSSL 2005 data Tier 3 or 4 TRVs with new Tier 1 TRVs from EPA EcoSSL 2005 data Tier 3 or 4 TRVs with new Tier 2 TRVs

Table 1. ESL Changes by Ecorisk Database Release

Ecorisk Database Release	ESL Changes
	Tier 3 TRVs with a more appropriate Tier 3 TRVs Below is a list of the analytes updated grouped based on type of revisions* A.) TF revisions only, B.) TF and TRV revisions and C.) TRV revisions only. **Detailed information on changes available from the "What's New In this Release" screen in the Ecorisk Database - section Change Type, ESLs, Update).* **A.) TF REVISONS ONLY** **HIGH EXPLOSIVES** Nitrotoluene[3-] (soil) RDX (soil) **INORGANICSs** Barium (soil) Cyanide (total) (soil) **POLYAROMATIC HYDROCARBONS** Benzo(a)anthracene (soil) Chrysene (soil) **SEMI-VOLATILE ORGANIC COMPOUNDS** Carbazole (soil) **VOLATILE ORGANIC COMPOUNDS** Chloroform (soil) Dichloroethane[1,1-] (soil) **B.) TF REVISIONS & TRV REVISIONS** **NONE** **C.) TRV REVISIONS ONLY** **INORGANICS** Chromium(+6) (sediment, soil) Copper (sediment, soil) Manganese (sediment, soil) Nickel (sediment, soil) Selenium (sediment, soil) Silver (sediment, soil) Zinc (sediment, soil) **POLYAROMATIC HYDROCARBONS** [a] Benzo(a)pyrene (sediment, soil) Fluoranthene (soil) Fluorene (soil) Naphthalene (sediment, soil) Phenanthrene soil) Pyrene (soil) **PESTICIDES** [a] DDE[4,4'-] (sediment, soil) DDT[4,4'-] (sediment, soil)

Table 1. ESL Changes by Ecorisk Database Release

Ecorisk Database Release	ESL Changes
	[a] TRVs developed for PAHs and DDT and metabolites DDE and DDD were done according to the following methods: TRVs_Methods_LANL&EcoSSLData Other Changes: Updated documentation for Aluminum ESL for soil by removing an ESL value of > 5 and indicating in notes "pH dependent. Aluminum is identified as a COPC only at sites where the soil pH is less than 5.5. Added TF_plant_dw, TF_invert_dw, TF_beef_fw and TF_flesh_dw for DDD[4,4'-], Diethyl Phthalate, Methyl-2-pentanone[4-], Methylphenol[2-], and Aldrin. Needed to calculate ESLs for these new LANL exposure concerns. Updated interface screens:
	Brand new Anayte Search menu screen with concise instructions that shows menu for searching for ESLs by analyte and accessed via the updated Main Menu screen. Contains the same buttons that were originally on old Main Menu screen and leads to the same Analyte Search Result screens.
	Brand new Contact Information screen that shows point of contact information for Ecorisk Db. Accessed via a button on the updated Home screen.
	Updated Home screen to reduce clutter of information. Contains button to access contact information, ESL search menus and report menus, what's new in this release information, and a button to exit the Db.
	Updated Main Menu screen to reduce clutter of information. Contains button to new screens that show ESL search menus (by analyte or by screening receptor), and summary and custom report menus. Also contains buttons to see the existing screens for ESL radionuclide and non-radionuclide model information.
	Updated Custom Report Menu screen that now has a design similar to the other search menus (e.g., Screening Receptor Search menu) and concise instructions. Contains the same buttons that were on Old Main Menu screen. Accessed via the updated Main Menu screen.
	Updated Primary Toxicty Study (PTS) Description screen that now shows vertical scroll bars that were missing in some fields. Recommended update.
	Updated Primary Toxicity Value (PTV) Evaluation screen that now shows more information to aid in understanding better how the PTV confidence ratings are determined. More specifically, this form now shows Maximum weighted scores for the different exposure scenarios (i.e., bird or mammal, oral ingestion; mammal, inhalation; and plant or invertebrate). Recommended update.
	Brand new Screening Receptor Search menu screen with concise instructions that shows menu for searching for ESLs by screening receptor and accessed via the updated Main Menu screen. Contains the same buttons that were originally on old main Menu screen and leads to the same Receptor Search Result screens.
	Brand new Summary Reports Menu screen with concise instructions that shows menu for summary reports and accessed via the updated Main Menu Screen. Contains the same buttons that were originally on old main Menu screen but improved in presentation.

Table 1. ESL Changes by Ecorisk Database Release

Ecorisk Database Release	ESL Changes
	Updated Select TRV Summary Report Criteria screen in which redundancy was removed (the same sentence was repeated twice). Recommended update.
	Updated Weighting Factor Description screen that now explains in more detail what is done with the weighting factors and why. Recommended update.
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Table 1. ESL Changes by Ecorisk Database Release

Ecorisk Database Release	ESL Changes
December 2009 – Release 2.4	In this release of the database, ESLs/TRVs were added for chemicals for which no toxicity data was previously available. Online toxicity databases were searched for relevant existing TRVs or for primary toxicity data and/or references from which TRVs could be derived for these chemicals (see EcoriskDbR2.4_ToxicityData_ResourceSummary_SoilESLs_112409.xls for details of search results). Of those 40 chemicals of concern, 11 chemicals now have LANL peer reviewed/ approved TRVs/ESLs incorporated into this release of the database, 5 chemicals have interim ESLs/ TRVs because LANL peer reviewed/ approved values could not be obtained in time for this release of the database (see Interim_SoilESLs_R2.4_111309.xls), 13 chemicals have surrogate ESLs/TRVs (see Interim_SoilESLs_R2.4_111309.xls) based on chemicals already in the database, and the remaining 12 chemicals still have no ESL at this time. Note – The sum of the numbers adds up to 41 instead of 40 because Hexanone[2-] has both an incorporated ESL (for birds) and an interim ESL (for mammals). Below is a summary of the ESLs/ TRVs incorporated into Release 2.4 of the Ecorisk Database, as well as other relevant data or interface changes. **New ESLs** Soil and Sediment ESLs for birds due to availability of new TRVs: • Molybdenum • Hexachlorobenzene • Hexanone[2-] Soil and Sediment ESLs for mammals due to availability of new TRVs: • Lithium • Carbon Disulfide • Hexachlorobenzene • Dichlorobenzene[1,2-] • Dichlorobenzene[1,3-] • Vinyl Chloride Soil ESL for earthworm due to availability of new TRVs: • Chloroaniline[4-] • Hexachlorobenzene • Styrene Soil ESL for plant due to availability of new TRVs: • Chloroaniline[4-] • Hexachlorobenzene • Styrene Alternative screening approach for Iron for plant based on EPA EcoSSL's report • See http://www.epa.gov/ecotox/ecossl/pdf/eco-ssl_iron.pdf Sediement ESL for aquatic community organism due to availability of a new

Table 1. ESL Changes by Ecorisk Database Release

Ecorisk Database Release	ESL Changes
	TRVs: • Molybdenum **ESL Updates** Soil ESLs for deer mouse, desert cottontail and red fox due to TF updates: • Methylphenol[2-] **New TRVs** Tier 2 (Geometric Mean) oral diet TRVs from LANL were developed with the PTSE Process for the following chemicals and receptor groups: • Lithium/ mammal Tier 3 (Critical Study) oral diet TRVs from LANL were developed with the PTSE Process for the following chemicals and receptor groups: • Hexanone[2-]/ bird Tier 4 (based on secondary data) oral diet TRVs from ORNL were identified for the following chemicals and receptor groups: • Lithium/ plant • Molybdenum/ plant • Molybdenum/ bird • Styrene/ earthworm • Vinyl Chloride/ mammal Tier 4 (based on secondary data) oral diet TRVs from EPA ECOTOX were identified for the following chemicals and receptor groups: • Carbon Disulfide/ mammal • Chloroaniline[4-]/ earthworm • Chloroaniline[4-]/ plant • Dichlorobenzene[1,2-]/ mammal • Dichlorobenzene[1,3-]/ mammal • Hexachlorobenzene/ bird • Hexachlorobenzene/ mammal • Hexachlorobenzene/ earthworm • Hexachlorobenzene/ plant • Styrene/ plant **TRV Updates** The use status of various TRVs changed for the following reasons: • Vinyl chloride/ mammal oral diet TRV records deleted due to availability of updated toxicity information for oral diet TRV from same data source (ORNL).

Table 1. ESL Changes by Ecorisk Database Release

Ecorisk Database Release	ESL Changes
	• Vinyl chloride/ mammal drinking water TRV no longer used because primary toxicity data is for oral diet exposure, which is no longer considered an appropriate TRV surrogate for a drinking water exposure. • Carbon Tetrachloride/ mammal oral TRVs no longer used because currently not an exposure concern for this exposure pathway. • Molybdenum/ aquatic community organism sediment TRV selected for use because this chemical is now a chemical of concern. **New TFs** All New TFs (except where noted otherwise) were acquired for the following chemicals because these chemicals are new exposure concerns: • Carbon Disulfide • Chloroaniline[4-] • Dichlorobenzene[1,2-] • Dichlorobenzene[1,3-] • Hexachlorobenzene • Hexanone[2-] • Styrene • Vinyl Chloride • Lithium (only TF_invert and TF_flesh) • Molybdenum (only TF_invert and TF_flesh) **TF Updates** TFs for the following chemicals were updated: • Methylphenol[2-] – all TFs updated due to availability of more appropriate data • Molybdenum – TF_beef and TF_plant updated due to availability of more appropriate data **Interface Updates** • Added “Other Reports” links to the “Menu” screen to allow access to other files on the Ecorisk Db from within the database interface including;

Table 2. Beta Release (October 1998) List of Soil ESLs for Bird Receptors

Analyte Class	Analyte Group	Analyte Name	Analyte Code	ESL Medium	Receptor Group
NONRAD	D/F	Tetrachlorodibenzodioxin[2,3,7,8-]	1746-01-6	SOIL	Bird
NONRAD	INORG	Aluminum	AL	SOIL	Bird
NONRAD	INORG	Arsenic	AS	SOIL	Bird
NONRAD	INORG	Barium	BA	SOIL	Bird
NONRAD	INORG	Cadmium	CD	SOIL	Bird
NONRAD	INORG	Chromium (total)	CR	SOIL	Bird
NONRAD	INORG	Chromium(+6)	CR(+6)	SOIL	Bird
NONRAD	INORG	Cobalt	CO	SOIL	Bird
NONRAD	INORG	Copper	CU	SOIL	Bird
NONRAD	INORG	Cyanide (total)	CN(-1)	SOIL	Bird
NONRAD	INORG	Lead	PB	SOIL	Bird
NONRAD	INORG	Manganese	MN	SOIL	Bird
NONRAD	INORG	Mercury (inorganic)	HGI	SOIL	Bird
NONRAD	INORG	Mercury (methyl)	HGM	SOIL	Bird
NONRAD	INORG	Nickel	NI	SOIL	Bird
NONRAD	INORG	Selenium	SE	SOIL	Bird
NONRAD	INORG	Silver	AG	SOIL	Bird
NONRAD	INORG	Uranium	U	SOIL	Bird
NONRAD	INORG	Vanadium	V	SOIL	Bird
NONRAD	INORG	Zinc	ZN	SOIL	Bird
NONRAD	PAH	Naphthalene	91-20-3	SOIL	Bird
NONRAD	PCB	Aroclor-1242	53469-21-9	SOIL	Bird
NONRAD	PCB	Aroclor-1248	12672-29-6	SOIL	Bird
NONRAD	PCB	Aroclor-1254	11097-69-1	SOIL	Bird
NONRAD	PCB	Aroclor-1260	11096-82-5	SOIL	Bird
NONRAD	PEST	BHC[beta-]	319-85-7	SOIL	Bird
NONRAD	PEST	BHC[gamma-]	58-89-9	SOIL	Bird
NONRAD	PEST	Chlordane[alpha-]	5103-71-9	SOIL	Bird
NONRAD	PEST	Chlordane[gamma-]	5103-74-2	SOIL	Bird
NONRAD	PEST	DDE[4,4'-]	72-55-9	SOIL	Bird
NONRAD	PEST	DDT[4,4'-]	50-29-3	SOIL	Bird
NONRAD	PEST	Dieldrin	60-57-1	SOIL	Bird
NONRAD	PEST	Endosulfan	115-29-7	SOIL	Bird
NONRAD	PEST	Endrin	72-20-8	SOIL	Bird
NONRAD	PEST	Heptachlor	76-44-8	SOIL	Bird
NONRAD	PEST	Kepone	143-50-0	SOIL	Bird
NONRAD	PEST	Methoxychlor[4,4'-]	72-43-5	SOIL	Bird
NONRAD	PEST	Toxaphene (Technical Grade)	8001-35-2	SOIL	Bird
NONRAD	SVOC	Bis(2-ethylhexyl)phthalate	117-81-7	SOIL	Bird

Table 2. Beta Release (October 1998) List of Soil ESLs for Bird Receptors

Analyte Class	Analyte Group	Analyte Name	Analyte Code	ESL Medium	Receptor Group
NONRAD	SVOC	Chloro-3-methylphenol[4-]	59-50-7	SOIL	Bird
NONRAD	SVOC	Chlorophenol[2-]	95-57-8	SOIL	Bird
NONRAD	SVOC	Di-n-Butyl Phthalate	84-74-2	SOIL	Bird
NONRAD	SVOC	Pentachloronitrobenzene	82-68-8	SOIL	Bird
NONRAD	SVOC	Pentachlorophenol	87-86-5	SOIL	Bird
NONRAD	VOC	Acetone	67-64-1	SOIL	Bird
NONRAD	VOC	Xylene (Total)	1330-20-7	SOIL	Bird
RAD	RAD	Americium-241	AM-241	SOIL	Bird
RAD	RAD	Cesium-134	CS-134	SOIL	Bird
RAD	RAD	Cesium-137 + Barium-137	CS-137/ BA-137	SOIL	Bird
RAD	RAD	Cobalt-60	CO-60	SOIL	Bird
RAD	RAD	Europium-152	EU-152	SOIL	Bird
RAD	RAD	Plutonium-238	PU-238	SOIL	Bird
RAD	RAD	Plutonium-239, 240	PU-239/240	SOIL	Bird
RAD	RAD	Plutonium-241	PU-241	SOIL	Bird
RAD	RAD	Radium-226	RA-226	SOIL	Bird
RAD	RAD	Sodium-22	NA-22	SOIL	Bird
RAD	RAD	Strontium-90 + Yittrium-90	SR-90/ Y-90	SOIL	Bird
RAD	RAD	Thorium-228	TH-228	SOIL	Bird
RAD	RAD	Thorium-230	TH-230	SOIL	Bird
RAD	RAD	Thorium-232	TH-232	SOIL	Bird
RAD	RAD	Tritium	H-3	SOIL	Bird
RAD	RAD	Uranium-234	U-234	SOIL	Bird
RAD	RAD	Uranium-235	U-235	SOIL	Bird
RAD	RAD	Uranium-238	U-238	SOIL	Bird

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Table 3. Beta Release (October 1998) List of Soil ESLs for Mammalian Receptors

Analyte Class	Analyte Group	Analyte Name	Analyte Code	ESL Medium	Receptor Group
NONRAD	D/F	Tetrachlorodibenzodioxin[2,3,7,8-]	1746-01-6	SOIL	Mammal
NONRAD	HE	Amino-2,6-dinitrotoluene[4-]	19406-51-0	SOIL	Mammal
NONRAD	HE	Amino-4,6-dinitrotoluene[2-]	35572-78-2	SOIL	Mammal
NONRAD	HE	Dinitrobenzene[1,3-]	99-65-0	SOIL	Mammal
NONRAD	HE	Dinitrotoluene[2,4-]	121-14-2	SOIL	Mammal
NONRAD	HE	Dinitrotoluene[2,6-]	606-20-2	SOIL	Mammal
NONRAD	HE	HMX	2691-41-0	SOIL	Mammal
NONRAD	HE	Nitroglycerine	55-63-0	SOIL	Mammal
NONRAD	HE	Nitrotoluene[2-]	88-72-2	SOIL	Mammal
NONRAD	HE	Nitrotoluene[3-]	99-08-1	SOIL	Mammal

Table 3. Beta Release (October 1998) List of Soil ESLs for Mammalian Receptors

Analyte Class	Analyte Group	Analyte Name	Analyte Code	ESL Medium	Receptor Group
NONRAD	HE	Nitrotoluene[4-]	99-99-0	SOIL	Mammal
NONRAD	HE	PETN	78-11-5	SOIL	Mammal
NONRAD	HE	RDX	121-82-4	SOIL	Mammal
NONRAD	HE	Tetryl	479-45-8	SOIL	Mammal
NONRAD	HE	Trinitrobenzene[1,3,5-]	99-35-4	SOIL	Mammal
NONRAD	HE	Trinitrotoluene[2,4,6-]	118-96-7	SOIL	Mammal
NONRAD	INORG	Aluminum	AL	SOIL	Mammal
NONRAD	INORG	Antimony	SB	SOIL	Mammal
NONRAD	INORG	Arsenic	AS	SOIL	Mammal
NONRAD	INORG	Barium	BA	SOIL	Mammal
NONRAD	INORG	Beryllium	BE	SOIL	Mammal
NONRAD	INORG	Cadmium	CD	SOIL	Mammal
NONRAD	INORG	Chromium (total)	CR	SOIL	Mammal
NONRAD	INORG	Chromium(+6)	CR(+6)	SOIL	Mammal
NONRAD	INORG	Cobalt	CO	SOIL	Mammal
NONRAD	INORG	Copper	CU	SOIL	Mammal
NONRAD	INORG	Cyanide (total)	CN(-1)	SOIL	Mammal
NONRAD	INORG	Lead	PB	SOIL	Mammal
NONRAD	INORG	Manganese	MN	SOIL	Mammal
NONRAD	INORG	Mercury (inorganic)	HGI	SOIL	Mammal
NONRAD	INORG	Mercury (methyl)	HGM	SOIL	Mammal
NONRAD	INORG	Nickel	NI	SOIL	Mammal
NONRAD	INORG	Selenium	SE	SOIL	Mammal
NONRAD	INORG	Silver	AG	SOIL	Mammal
NONRAD	INORG	Thallium	TL	SOIL	Mammal
NONRAD	INORG	Titanium	TI	SOIL	Mammal
NONRAD	INORG	Uranium	U	SOIL	Mammal
NONRAD	INORG	Vanadium	V	SOIL	Mammal
NONRAD	INORG	Zinc	ZN	SOIL	Mammal
NONRAD	PAH	Acenaphthene	83-32-9	SOIL	Mammal
NONRAD	PAH	Acenaphthylene	208-96-8	SOIL	Mammal
NONRAD	PAH	Anthracene	120-12-7	SOIL	Mammal
NONRAD	PAH	Benzo(a)anthracene	56-55-3	SOIL	Mammal
NONRAD	PAH	Benzo(a)pyrene	50-32-8	SOIL	Mammal
NONRAD	PAH	Benzo(b)fluoranthene	205-99-2	SOIL	Mammal
NONRAD	PAH	Benzo(g,h,i)perylene	191-24-2	SOIL	Mammal
NONRAD	PAH	Benzo(k)fluoranthene	207-08-9	SOIL	Mammal
NONRAD	PAH	Chrysene	218-01-9	SOIL	Mammal
NONRAD	PAH	Dibenzo(a,h)anthracene	53-70-3	SOIL	Mammal
NONRAD	PAH	Fluoranthene	206-44-0	SOIL	Mammal

Table 3. Beta Release (October 1998) List of Soil ESLs for Mammalian Receptors

Analyte Class	Analyte Group	Analyte Name	Analyte Code	ESL Medium	Receptor Group
NONRAD	PAH	Fluorene	86-73-7	SOIL	Mammal
NONRAD	PAH	Indeno(1,2,3-cd)pyrene	193-39-5	SOIL	Mammal
NONRAD	PAH	Methylnaphthalene[2-]	91-57-6	SOIL	Mammal
NONRAD	PAH	Naphthalene	91-20-3	SOIL	Mammal
NONRAD	PAH	Phenanthrene	85-01-8	SOIL	Mammal
NONRAD	PAH	Pyrene	129-00-0	SOIL	Mammal
NONRAD	PCB	Aroclor-1016	12674-11-2	SOIL	Mammal
NONRAD	PCB	Aroclor-1242	53469-21-9	SOIL	Mammal
NONRAD	PCB	Aroclor-1248	12672-29-6	SOIL	Mammal
NONRAD	PCB	Aroclor-1254	11097-69-1	SOIL	Mammal
NONRAD	PCB	Aroclor-1260	11096-82-5	SOIL	Mammal
NONRAD	PEST	BHC[beta-]	319-85-7	SOIL	Mammal
NONRAD	PEST	BHC[gamma-]	58-89-9	SOIL	Mammal
NONRAD	PEST	Chlordane[alpha-]	5103-71-9	SOIL	Mammal
NONRAD	PEST	Chlordane[gamma-]	5103-74-2	SOIL	Mammal
NONRAD	PEST	DDE[4,4'-]	72-55-9	SOIL	Mammal
NONRAD	PEST	DDT[4,4'-]	50-29-3	SOIL	Mammal
NONRAD	PEST	Dieldrin	60-57-1	SOIL	Mammal
NONRAD	PEST	Endosulfan	115-29-7	SOIL	Mammal
NONRAD	PEST	Endrin	72-20-8	SOIL	Mammal
NONRAD	PEST	Heptachlor	76-44-8	SOIL	Mammal
NONRAD	PEST	Kepone	143-50-0	SOIL	Mammal
NONRAD	PEST	Methoxychlor[4,4'-]	72-43-5	SOIL	Mammal
NONRAD	PEST	Toxaphene (Technical Grade)	8001-35-2	SOIL	Mammal
NONRAD	SVOC	Benzoic Acid	65-85-0	SOIL	Mammal
NONRAD	SVOC	Bis(2-ethylhexyl)phthalate	117-81-7	SOIL	Mammal
NONRAD	SVOC	Butyl Benzyl Phthalate	85-68-7	SOIL	Mammal
NONRAD	SVOC	Chloro-3-methylphenol[4-]	59-50-7	SOIL	Mammal
NONRAD	SVOC	Chlorobenzene	108-90-7	SOIL	Mammal
NONRAD	SVOC	Chlorophenol[2-]	95-57-8	SOIL	Mammal
NONRAD	SVOC	Dimethyl Phthalate	131-11-3	SOIL	Mammal
NONRAD	SVOC	Di-n-Butyl Phthalate	84-74-2	SOIL	Mammal
NONRAD	SVOC	Di-n-octylphthalate	117-84-0	SOIL	Mammal
NONRAD	SVOC	Nitrobenzene	98-95-3	SOIL	Mammal
NONRAD	SVOC	Pentachloronitrobenzene	82-68-8	SOIL	Mammal
NONRAD	SVOC	Pentachlorophenol	87-86-5	SOIL	Mammal
NONRAD	SVOC	Phenol	108-95-2	SOIL	Mammal
NONRAD	VOC	Acetone	67-64-1	SOIL	Mammal
NONRAD	VOC	Benzene	71-43-2	SOIL	Mammal
NONRAD	VOC	Butanone[2-]	78-93-3	SOIL	Mammal

Table 3. Beta Release (October 1998) List of Soil ESLs for Mammalian Receptors					
Analyte Class	**Analyte Group**	**Analyte Name**	**Analyte Code**	**ESL Medium**	**Receptor Group**
NONRAD	VOC	Chloroform	67-66-3	SOIL	Mammal
NONRAD	VOC	Dichloroethane[1,1-]	75-34-3	SOIL	Mammal
NONRAD	VOC	Dichloroethene[1,1-]	75-35-4	SOIL	Mammal
NONRAD	VOC	Dichloroethene[cis/trans-1,2-]	540-59-0	SOIL	Mammal
NONRAD	VOC	Methylene Chloride	75-09-2	SOIL	Mammal
NONRAD	VOC	Tetrachloroethane[1,1,2,2-]	79-34-5	SOIL	Mammal
NONRAD	VOC	Tetrachloroethene	127-18-4	SOIL	Mammal
NONRAD	VOC	Toluene	108-88-3	SOIL	Mammal
NONRAD	VOC	Trichlorobenzene[1,2,4-]	120-82-1	SOIL	Mammal
NONRAD	VOC	Trichloroethane[1,1,1-]	71-55-6	SOIL	Mammal
NONRAD	VOC	Trichloroethene	79-01-6	SOIL	Mammal
NONRAD	VOC	Xylene (Total)	1330-20-7	SOIL	Mammal
RAD	RAD	Americium-241	AM-241	SOIL	Mammal
RAD	RAD	Cesium-134	CS-134	SOIL	Mammal
RAD	RAD	Cesium-137 + Barium-137	CS-137/ BA-137	SOIL	Mammal
RAD	RAD	Cobalt-60	CO-60	SOIL	Mammal
RAD	RAD	Europium-152	EU-152	SOIL	Mammal
RAD	RAD	Plutonium-238	PU-238	SOIL	Mammal
RAD	RAD	Plutonium-239, 240	PU-239/240	SOIL	Mammal
RAD	RAD	Plutonium-241	PU-241	SOIL	Mammal
RAD	RAD	Radium-226	RA-226	SOIL	Mammal
RAD	RAD	Sodium-22	NA-22	SOIL	Mammal
RAD	RAD	Strontium-90 + Yittrium-90	SR-90/ Y-90	SOIL	Mammal
RAD	RAD	Thorium-228	TH-228	SOIL	Mammal
RAD	RAD	Thorium-230	TH-230	SOIL	Mammal
RAD	RAD	Thorium-232	TH-232	SOIL	Mammal
RAD	RAD	Tritium	H-3	SOIL	Mammal
RAD	RAD	Uranium-234	U-234	SOIL	Mammal
RAD	RAD	Uranium-235	U-235	SOIL	Mammal
RAD	RAD	Uranium-238	U-238	SOIL	Mammal

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Table 4. Beta Release (October 1998) List of Soil ESLs for Earthworm Receptor					
Analyte Class	**Analyte Class**	**Analyte Class**	**Analyte Class**	**Analyte Class**	**Analyte Class**
NONRAD	D/F	Tetrachlorodibenzodioxin[2,3,7,8-]	1746-01-6	SOIL	Invertebrate
NONRAD	INORG	Arsenic	AS	SOIL	Invertebrate
NONRAD	INORG	Cadmium	CD	SOIL	Invertebrate
NONRAD	INORG	Chromium(+6)	CR(+6)	SOIL	Invertebrate
NONRAD	INORG	Copper	CU	SOIL	Invertebrate

Table 4. Beta Release (October 1998) List of Soil ESLs for Earthworm Receptor					
Analyte Class	**Analyte Class**	**Analyte Class**	**Analyte Class**	**Analyte Class**	**Analyte Class**
NONRAD	INORG	Lead	PB	SOIL	Invertebrate
NONRAD	INORG	Mercury (inorganic)	HGI	SOIL	Invertebrate
NONRAD	INORG	Mercury (methyl)	HGM	SOIL	Invertebrate
NONRAD	INORG	Nickel	NI	SOIL	Invertebrate
NONRAD	INORG	Selenium	SE	SOIL	Invertebrate
NONRAD	INORG	Zinc	ZN	SOIL	Invertebrate
NONRAD	PAH	Fluorene	86-73-7	SOIL	Invertebrate
NONRAD	SVOC	Chlorobenzene	108-90-7	SOIL	Invertebrate
NONRAD	SVOC	Dimethyl Phthalate	131-11-3	SOIL	Invertebrate
NONRAD	SVOC	Nitrobenzene	98-95-3	SOIL	Invertebrate
NONRAD	SVOC	Pentachlorophenol	87-86-5	SOIL	Invertebrate
NONRAD	SVOC	Phenol	108-95-2	SOIL	Invertebrate
NONRAD	VOC	Dichlorobenzene[1,4-]	106-46-7	SOIL	Invertebrate
NONRAD	VOC	Trichlorobenzene[1,2,4-]	120-82-1	SOIL	Invertebrate
RAD	RAD	Americium-241	AM-241	SOIL	Invertebrate
RAD	RAD	Cesium-134	CS-134	SOIL	Invertebrate
RAD	RAD	Cesium-137 + Barium-137	CS-137/ BA-137	SOIL	Invertebrate
RAD	RAD	Cobalt-60	CO-60	SOIL	Invertebrate
RAD	RAD	Europium-152	EU-152	SOIL	Invertebrate
RAD	RAD	Plutonium-238	PU-238	SOIL	Invertebrate
RAD	RAD	Plutonium-239, 240	PU-239/240	SOIL	Invertebrate
RAD	RAD	Plutonium-241	PU-241	SOIL	Invertebrate
RAD	RAD	Radium-226	RA-226	SOIL	Invertebrate
RAD	RAD	Sodium-22	NA-22	SOIL	Invertebrate
RAD	RAD	Strontium-90 + Yittrium-90	SR-90/ Y-90	SOIL	Invertebrate
RAD	RAD	Thorium-228	TH-228	SOIL	Invertebrate
RAD	RAD	Thorium-230	TH-230	SOIL	Invertebrate
RAD	RAD	Thorium-232	TH-232	SOIL	Invertebrate
RAD	RAD	Tritium	H-3	SOIL	Invertebrate
RAD	RAD	Uranium-234	U-234	SOIL	Invertebrate
RAD	RAD	Uranium-235	U-235	SOIL	Invertebrate
RAD	RAD	Uranium-238	U-238	SOIL	Invertebrate

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Table 5. Beta Release (October 1998) List of Soil ESLs for Generic Plant Receptor					
Analyte Class	**Analyte Class**	**Analyte Class**	**Analyte Class**	**Analyte Class**	**Analyte Class**
NONRAD	HE	Amino-4,6-dinitrotoluene[2-]	35572-78-2	SOIL	Plant
NONRAD	HE	RDX	121-82-4	SOIL	Plant
NONRAD	HE	Tetryl	479-45-8	SOIL	Plant

Table 5. Beta Release (October 1998) List of Soil ESLs for Generic Plant Receptor					
Analyte Class	**Analyte Class**	**Analyte Class**	**Analyte Class**	**Analyte Class**	**Analyte Class**
NONRAD	HE	Trinitrotoluene[2,4,6-]	118-96-7	SOIL	Plant
NONRAD	INORG	Aluminum	AL	SOIL	Plant
NONRAD	INORG	Antimony	SB	SOIL	Plant
NONRAD	INORG	Arsenic	AS	SOIL	Plant
NONRAD	INORG	Barium	BA	SOIL	Plant
NONRAD	INORG	Beryllium	BE	SOIL	Plant
NONRAD	INORG	Cadmium	CD	SOIL	Plant
NONRAD	INORG	Chromium (total)	CR	SOIL	Plant
NONRAD	INORG	Chromium(+6)	CR(+6)	SOIL	Plant
NONRAD	INORG	Cobalt	CO	SOIL	Plant
NONRAD	INORG	Copper	CU	SOIL	Plant
NONRAD	INORG	Lead	PB	SOIL	Plant
NONRAD	INORG	Manganese	MN	SOIL	Plant
NONRAD	INORG	Mercury (inorganic)	HGI	SOIL	Plant
NONRAD	INORG	Nickel	NI	SOIL	Plant
NONRAD	INORG	Selenium	SE	SOIL	Plant
NONRAD	INORG	Silver	AG	SOIL	Plant
NONRAD	INORG	Thallium	TL	SOIL	Plant
NONRAD	INORG	Uranium	U	SOIL	Plant
NONRAD	INORG	Vanadium	V	SOIL	Plant
NONRAD	INORG	Zinc	ZN	SOIL	Plant
NONRAD	PAH	Acenaphthene	83-32-9	SOIL	Plant
NONRAD	PAH	Benzo(a)anthracene	56-55-3	SOIL	Plant
NONRAD	PAH	Benzo(b)fluoranthene	205-99-2	SOIL	Plant
NONRAD	PCB	Aroclor-1254	11097-69-1	SOIL	Plant
NONRAD	PEST	BHC[gamma-]	58-89-9	SOIL	Plant
NONRAD	PEST	Chlordane[alpha-]	5103-71-9	SOIL	Plant
NONRAD	PEST	Chlordane[gamma-]	5103-74-2	SOIL	Plant
NONRAD	PEST	Dieldrin	60-57-1	SOIL	Plant
NONRAD	PEST	Endrin	72-20-8	SOIL	Plant
NONRAD	PEST	Heptachlor	76-44-8	SOIL	Plant
NONRAD	SVOC	Dibenzofuran	132-64-9	SOIL	Plant
NONRAD	SVOC	Di-n-Butyl Phthalate	84-74-2	SOIL	Plant
NONRAD	SVOC	Pentachlorophenol	87-86-5	SOIL	Plant
NONRAD	SVOC	Phenol	108-95-2	SOIL	Plant
NONRAD	VOC	Methylene Chloride	75-09-2	SOIL	Plant
NONRAD	VOC	Toluene	108-88-3	SOIL	Plant
NONRAD	VOC	Xylene (Total)	1330-20-7	SOIL	Plant
RAD	RAD	Americium-241	AM-241	SOIL	Plant
RAD	RAD	Cesium-134	CS-134	SOIL	Plant

Table 5. Beta Release (October 1998) List of Soil ESLs for Generic Plant Receptor					
Analyte Class	**Analyte Class**	**Analyte Class**	**Analyte Class**	**Analyte Class**	**Analyte Class**
RAD	RAD	Cesium-137 + Barium-137	CS-137/ BA-137	SOIL	Plant
RAD	RAD	Cobalt-60	CO-60	SOIL	Plant
RAD	RAD	Europium-152	EU-152	SOIL	Plant
RAD	RAD	Plutonium-238	PU-238	SOIL	Plant
RAD	RAD	Plutonium-239, 240	PU-239/240	SOIL	Plant
RAD	RAD	Plutonium-241	PU-241	SOIL	Plant
RAD	RAD	Radium-226	RA-226	SOIL	Plant
RAD	RAD	Sodium-22	NA-22	SOIL	Plant
RAD	RAD	Strontium-90 + Yittrium-90	SR-90/ Y-90	SOIL	Plant
RAD	RAD	Thorium-228	TH-228	SOIL	Plant
RAD	RAD	Thorium-230	TH-230	SOIL	Plant
RAD	RAD	Thorium-232	TH-232	SOIL	Plant
RAD	RAD	Tritium	H-3	SOIL	Plant
RAD	RAD	Uranium-234	U-234	SOIL	Plant
RAD	RAD	Uranium-235	U-235	SOIL	Plant
RAD	RAD	Uranium-238	U-238	SOIL	Plant

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Table 6. Beta Release (October 1998) List of Sediment and Water ESLs for Aquatic Community Organism Receptors					
Analyte Class	**Analyte Class**	**Analyte Class**	**Analyte Class**	**Analyte Class**	**Analyte Class**
RAD	RAD	Americium-241	AM-241	WATER and SEDIMENT	Aquatic
RAD	RAD	Cesium-137 + Barium-137	CS-137/ BA-137	WATER and SEDIMENT	Aquatic
RAD	RAD	Plutonium-238	PU-238	WATER and SEDIMENT	Aquatic
RAD	RAD	Plutonium-239, 240	PU-239/240	WATER and SEDIMENT	Aquatic
RAD	RAD	Plutonium-241	PU-241	WATER and SEDIMENT	Aquatic
RAD	RAD	Radium-226	RA-226	WATER and SEDIMENT	Aquatic
RAD	RAD	Strontium-90 + Yittrium-90	SR-90/ Y-90	WATER and SEDIMENT	Aquatic
RAD	RAD	Thorium-232	TH-232	WATER and SEDIMENT	Aquatic
RAD	RAD	Tritium	H-3	WATER and SEDIMENT	Aquatic
RAD	RAD	Uranium-234	U-234	WATER and	Aquatic

Table 6. Beta Release (October 1998) List of Sediment and Water ESLs for Aquatic Community Organism Receptors					
Analyte Class	**Analyte Class**	**Analyte Class**	**Analyte Class**	**Analyte Class**	**Analyte Class**
				SEDIMENT	
RAD	RAD	Uranium-235	U-235	WATER and SEDIMENT	Aquatic
RAD	RAD	Uranium-238	U-238	WATER and SEDIMENT	Aquatic

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References

Ecorisk Database REF ID 0561
United States Environmental Protection Agency (USEPA). 1993h. Wildlife Exposure Factors Handbook, Vol. I and II. EPA/600/R-93/187. United States Environmental Protection Agency.

Ecorisk Database REF ID 1484
Newell, PG. 1999 (Dec.). Revisions to Ecorisk Database R.1 ESLs. Los Alamos National Laboratory, Environmental Restoration Project, Los Alamos National Laboratory, Los Alamos, NM.

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Analyte Group	Analyte Name	Analyte Code	ESL Medium	ESL Receptor	ESL	Units	Final ESL	Note
Dioxin/ Furan	Tetrachlorodibenzodioxin[2,3,7	1746-01-6	SEDIMENT	Aquatic community organisms - sediment	0.0000088	mg/kg		
Dioxin/ Furan	Tetrachlorodibenzodioxin[2,3,7	1746-01-6	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	0.00000036	mg/kg	FINAL	
Dioxin/ Furan	Tetrachlorodibenzodioxin[2,3,7	1746-01-6	SOIL	Deer mouse (Mammalian omnivore)	0.00000058	mg/kg		
Dioxin/ Furan	Tetrachlorodibenzodioxin[2,3,7	1746-01-6	SOIL	Desert cottontail (Mammalian herbivore)	0.000048	mg/kg		
Dioxin/ Furan	Tetrachlorodibenzodioxin[2,3,7	1746-01-6	SOIL	Earthworm (Soil-dwelling invertebrate)	5	mg/kg		
Dioxin/ Furan	Tetrachlorodibenzodioxin[2,3,7	1746-01-6	SOIL	Montane shrew (Mammalian insectivore)	0.00000029	mg/kg	FINAL	
Dioxin/ Furan	Tetrachlorodibenzodioxin[2,3,7	1746-01-6	SOIL	Red fox (Mammalian top carnivore)	0.0000012	mg/kg		
Dioxin/ Furan	Tetrachlorodibenzodioxin[2,3,7	1746-01-6	WATER	Aquatic community organisms - water	0.0000038	µg/L	FINAL	
Dioxin/ Furan	Tetrachlorodibenzodioxin[2,3,7	1746-01-6	WATER	Deer mouse (water)	0.0052	µg/L		
Dioxin/ Furan	Tetrachlorodibenzodioxin[2,3,7	1746-01-6	WATER	Desert cottontail (water)	0.01	µg/L		
Dioxin/ Furan	Tetrachlorodibenzodioxin[2,3,7	1746-01-6	WATER	Montane shrew (water)	0.0044	µg/L		
Dioxin/ Furan	Tetrachlorodibenzodioxin[2,3,7	1746-01-6	WATER	Occult little brown myotis bat (water)	0.0062	µg/L		
Dioxin/ Furan	Tetrachlorodibenzodioxin[2,3,7	1746-01-6	WATER	Red fox (water)	0.011	µg/L		
High Explosive	Amino-2,6-dinitrotoluene[4-]	19406-51-0	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	1.9	mg/kg	FINAL	
High Explosive	Amino-2,6-dinitrotoluene[4-]	19406-51-0	SOIL	Deer mouse (Mammalian omnivore)	0.73	mg/kg	FINAL	
High Explosive	Amino-2,6-dinitrotoluene[4-]	19406-51-0	SOIL	Desert cottontail (Mammalian herbivore)	1	mg/kg		
High Explosive	Amino-2,6-dinitrotoluene[4-]	19406-51-0	SOIL	Generic plant (Terrestrial autotroph - producer)	80	mg/kg		
High Explosive	Amino-2,6-dinitrotoluene[4-]	19406-51-0	SOIL	Montane shrew (Mammalian insectivore)	1.5	mg/kg		
High Explosive	Amino-2,6-dinitrotoluene[4-]	19406-51-0	SOIL	Red fox (Mammalian top carnivore)	330	mg/kg		
High Explosive	Amino-2,6-dinitrotoluene[4-]	19406-51-0	WATER	Deer mouse (water)	10000	µg/L		
High Explosive	Amino-2,6-dinitrotoluene[4-]	19406-51-0	WATER	Desert cottontail (water)	19000	µg/L		
High Explosive	Amino-2,6-dinitrotoluene[4-]	19406-51-0	WATER	Montane shrew (water)	8600	µg/L	FINAL	
High Explosive	Amino-2,6-dinitrotoluene[4-]	19406-51-0	WATER	Occult little brown myotis bat (water)	12000	µg/L		
High Explosive	Amino-2,6-dinitrotoluene[4-]	19406-51-0	WATER	Red fox (water)	22000	µg/L		
High Explosive	Amino-4,6-dinitrotoluene[2-]	35572-78-2	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	7	mg/kg	FINAL	
High Explosive	Amino-4,6-dinitrotoluene[2-]	35572-78-2	SOIL	Deer mouse (Mammalian omnivore)	2.1	mg/kg	FINAL	
High Explosive	Amino-4,6-dinitrotoluene[2-]	35572-78-2	SOIL	Desert cottontail (Mammalian herbivore)	2.8	mg/kg		
High Explosive	Amino-4,6-dinitrotoluene[2-]	35572-78-2	SOIL	Generic plant (Terrestrial autotroph - producer)	80	mg/kg		
High Explosive	Amino-4,6-dinitrotoluene[2-]	35572-78-2	SOIL	Montane shrew (Mammalian insectivore)	5.4	mg/kg		
High Explosive	Amino-4,6-dinitrotoluene[2-]	35572-78-2	SOIL	Red fox (Mammalian top carnivore)	760	mg/kg		
High Explosive	Amino-4,6-dinitrotoluene[2-]	35572-78-2	WATER	Deer mouse (water)	14000	µg/L		
High Explosive	Amino-4,6-dinitrotoluene[2-]	35572-78-2	WATER	Desert cottontail (water)	28000	µg/L		
High Explosive	Amino-4,6-dinitrotoluene[2-]	35572-78-2	WATER	Montane shrew (water)	12000	µg/L	FINAL	
High Explosive	Amino-4,6-dinitrotoluene[2-]	35572-78-2	WATER	Occult little brown myotis bat (water)	17000	µg/L		
High Explosive	Amino-4,6-dinitrotoluene[2-]	35572-78-2	WATER	Red fox (water)	32000	µg/L		
High Explosive	Dinitrobenzene[1,3-]	99-65-0	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	1.2	mg/kg	FINAL	
High Explosive	Dinitrobenzene[1,3-]	99-65-0	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	2.7	mg/kg		
High Explosive	Dinitrobenzene[1,3-]	99-65-0	SOIL	American kestrel (Avian intermediate carnivore)	12	mg/kg		
High Explosive	Dinitrobenzene[1,3-]	99-65-0	SOIL	American kestrel (Avian top carnivore)	62	mg/kg		
High Explosive	Dinitrobenzene[1,3-]	99-65-0	SOIL	American robin (Avian herbivore)	0.079	mg/kg		
High Explosive	Dinitrobenzene[1,3-]	99-65-0	SOIL	American robin (Avian insectivore)	1.7	mg/kg		
High Explosive	Dinitrobenzene[1,3-]	99-65-0	SOIL	American robin (Avian omnivore)	0.15	mg/kg		
High Explosive	Dinitrobenzene[1,3-]	99-65-0	SOIL	Deer mouse (Mammalian omnivore)	0.073	mg/kg	FINAL	
High Explosive	Dinitrobenzene[1,3-]	99-65-0	SOIL	Desert cottontail (Mammalian herbivore)	0.083	mg/kg		
High Explosive	Dinitrobenzene[1,3-]	99-65-0	SOIL	Montane shrew (Mammalian insectivore)	0.84	mg/kg		
High Explosive	Dinitrobenzene[1,3-]	99-65-0	SOIL	Red fox (Mammalian top carnivore)	32	mg/kg		
High Explosive	Dinitrobenzene[1,3-]	99-65-0	WATER	American kestrel (water)	3500	µg/L		
High Explosive	Dinitrobenzene[1,3-]	99-65-0	WATER	American robin (water)	3000	µg/L		
High Explosive	Dinitrobenzene[1,3-]	99-65-0	WATER	Aquatic community organisms - water	26	µg/L	FINAL	
High Explosive	Dinitrobenzene[1,3-]	99-65-0	WATER	Deer mouse (water)	590	µg/L		
High Explosive	Dinitrobenzene[1,3-]	99-65-0	WATER	Desert cottontail (water)	1100	µg/L		
High Explosive	Dinitrobenzene[1,3-]	99-65-0	WATER	Montane shrew (water)	500	µg/L		
High Explosive	Dinitrobenzene[1,3-]	99-65-0	WATER	Occult little brown myotis bat (water)	710	µg/L		
High Explosive	Dinitrobenzene[1,3-]	99-65-0	WATER	Red fox (water)	1300	µg/L		
High Explosive	Dinitrobenzene[1,3-]	99-65-0	WATER	Violet-green Swallow (water)	1700	µg/L		
High Explosive	Dinitrotoluene[2,4-]	121-14-2	SEDIMENT	Aquatic community organisms - sediment	0.29	mg/kg	FINAL	
High Explosive	Dinitrotoluene[2,4-]	121-14-2	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	3.7	mg/kg		
High Explosive	Dinitrotoluene[2,4-]	121-14-2	SOIL	Deer mouse (Mammalian omnivore)	0.52	mg/kg	FINAL	
High Explosive	Dinitrotoluene[2,4-]	121-14-2	SOIL	Desert cottontail (Mammalian herbivore)	0.62	mg/kg		
High Explosive	Dinitrotoluene[2,4-]	121-14-2	SOIL	Montane shrew (Mammalian insectivore)	2.7	mg/kg		
High Explosive	Dinitrotoluene[2,4-]	121-14-2	SOIL	Red fox (Mammalian top carnivore)	150	mg/kg		
High Explosive	Dinitrotoluene[2,4-]	121-14-2	WATER	Aquatic community organisms - water	310	µg/L	FINAL	
High Explosive	Dinitrotoluene[2,4-]	121-14-2	WATER	Deer mouse (water)	2800	µg/L		
High Explosive	Dinitrotoluene[2,4-]	121-14-2	WATER	Desert cottontail (water)	5500	µg/L		
High Explosive	Dinitrotoluene[2,4-]	121-14-2	WATER	Montane shrew (water)	2400	µg/L		
High Explosive	Dinitrotoluene[2,4-]	121-14-2	WATER	Occult little brown myotis bat (water)	3300	µg/L		
High Explosive	Dinitrotoluene[2,4-]	121-14-2	WATER	Red fox (water)	6200	µg/L		
High Explosive	Dinitrotoluene[2,6-]	606-20-2	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	1.9	mg/kg	FINAL	
High Explosive	Dinitrotoluene[2,6-]	606-20-2	SOIL	Deer mouse (Mammalian omnivore)	0.37	mg/kg	FINAL	
High Explosive	Dinitrotoluene[2,6-]	606-20-2	SOIL	Desert cottontail (Mammalian herbivore)	0.46	mg/kg		
High Explosive	Dinitrotoluene[2,6-]	606-20-2	SOIL	Montane shrew (Mammalian insectivore)	1.4	mg/kg		
High Explosive	Dinitrotoluene[2,6-]	606-20-2	SOIL	Red fox (Mammalian top carnivore)	110	mg/kg		
High Explosive	Dinitrotoluene[2,6-]	606-20-2	WATER	Aquatic community organisms - water	60	µg/L	FINAL	
High Explosive	Dinitrotoluene[2,6-]	606-20-2	WATER	Deer mouse (water)	1800	µg/L		
High Explosive	Dinitrotoluene[2,6-]	606-20-2	WATER	Desert cottontail (water)	3700	µg/L		
High Explosive	Dinitrotoluene[2,6-]	606-20-2	WATER	Montane shrew (water)	1600	µg/L		
High Explosive	Dinitrotoluene[2,6-]	606-20-2	WATER	Occult little brown myotis bat (water)	2200	µg/L		
High Explosive	Dinitrotoluene[2,6-]	606-20-2	WATER	Red fox (water)	4100	µg/L		
High Explosive	HMX	2691-41-0	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	27000	mg/kg	FINAL	
High Explosive	HMX	2691-41-0	SOIL	Deer mouse (Mammalian omnivore)	27	mg/kg	FINAL	
High Explosive	HMX	2691-41-0	SOIL	Desert cottontail (Mammalian herbivore)	29	mg/kg		
High Explosive	HMX	2691-41-0	SOIL	Earthworm (Soil-dwelling invertebrate)	140	mg/kg		
High Explosive	HMX	2691-41-0	SOIL	Generic plant (Terrestrial autotroph - producer)	2700	mg/kg		
High Explosive	HMX	2691-41-0	SOIL	Montane shrew (Mammalian insectivore)	3100	mg/kg		
High Explosive	HMX	2691-41-0	SOIL	Red fox (Mammalian top carnivore)	29000	mg/kg		
High Explosive	HMX	2691-41-0	WATER	Deer mouse (water)	390000	µg/L		
High Explosive	HMX	2691-41-0	WATER	Desert cottontail (water)	770000	µg/L		
High Explosive	HMX	2691-41-0	WATER	Montane shrew (water)	330000	µg/L	FINAL	
High Explosive	HMX	2691-41-0	WATER	Occult little brown myotis bat (water)	470000	µg/L		
High Explosive	HMX	2691-41-0	WATER	Red fox (water)	870000	µg/L		
High Explosive	Nitroglycerine	55-63-0	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	1700	mg/kg	FINAL	
High Explosive	Nitroglycerine	55-63-0	SOIL	Deer mouse (Mammalian omnivore)	71	mg/kg	FINAL	
High Explosive	Nitroglycerine	55-63-0	SOIL	Desert cottontail (Mammalian herbivore)	80	mg/kg		
High Explosive	Nitroglycerine	55-63-0	SOIL	Montane shrew (Mammalian insectivore)	1000	mg/kg		
High Explosive	Nitroglycerine	55-63-0	SOIL	Red fox (Mammalian top carnivore)	28000	mg/kg		
High Explosive	Nitroglycerine	55-63-0	WATER	Deer mouse (water)	500000	µg/L		
High Explosive	Nitroglycerine	55-63-0	WATER	Desert cottontail (water)	990000	µg/L		
High Explosive	Nitroglycerine	55-63-0	WATER	Montane shrew (water)	430000	µg/L	FINAL	
High Explosive	Nitroglycerine	55-63-0	WATER	Occult little brown myotis bat (water)	600000	µg/L		
High Explosive	Nitroglycerine	55-63-0	WATER	Red fox (water)	1100000	µg/L		
High Explosive	Nitrotoluene[2-]	88-72-2	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	5.6	mg/kg	FINAL	
High Explosive	Nitrotoluene[2-]	88-72-2	SOIL	Deer mouse (Mammalian omnivore)	2	mg/kg	FINAL	
High Explosive	Nitrotoluene[2-]	88-72-2	SOIL	Desert cottontail (Mammalian herbivore)	2.8	mg/kg		
High Explosive	Nitrotoluene[2-]	88-72-2	SOIL	Montane shrew (Mammalian insectivore)	4.3	mg/kg		
High Explosive	Nitrotoluene[2-]	88-72-2	SOIL	Red fox (Mammalian top carnivore)	510	mg/kg		
High Explosive	Nitrotoluene[2-]	88-72-2	WATER	Deer mouse (water)	9400	µg/L		
High Explosive	Nitrotoluene[2-]	88-72-2	WATER	Desert cottontail (water)	18000	µg/L		
High Explosive	Nitrotoluene[2-]	88-72-2	WATER	Montane shrew (water)	8000	µg/L	FINAL	
High Explosive	Nitrotoluene[2-]	88-72-2	WATER	Occult little brown myotis bat (water)	11000	µg/L		
High Explosive	Nitrotoluene[2-]	88-72-2	WATER	Red fox (water)	20000	µg/L		
High Explosive	Nitrotoluene[3-]	99-08-1	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	4.9	mg/kg	FINAL	
High Explosive	Nitrotoluene[3-]	99-08-1	SOIL	Deer mouse (Mammalian omnivore)	2.4	mg/kg	FINAL	
High Explosive	Nitrotoluene[3-]	99-08-1	SOIL	Desert cottontail (Mammalian herbivore)	3.9	mg/kg		
High Explosive	Nitrotoluene[3-]	99-08-1	SOIL	Montane shrew (Mammalian insectivore)	3.8	mg/kg		
High Explosive	Nitrotoluene[3-]	99-08-1	SOIL	Red fox (Mammalian top carnivore)	560	mg/kg		
High Explosive	Nitrotoluene[3-]	99-08-1	WATER	Deer mouse (water)	11000	µg/L		
High Explosive	Nitrotoluene[3-]	99-08-1	WATER	Desert cottontail (water)	22000	µg/L		
High Explosive	Nitrotoluene[3-]	99-08-1	WATER	Montane shrew (water)	9600	µg/L	FINAL	
High Explosive	Nitrotoluene[3-]	99-08-1	WATER	Occult little brown myotis bat (water)	13000	µg/L		
High Explosive	Nitrotoluene[3-]	99-08-1	WATER	Red fox (water)	25000	µg/L		
High Explosive	Nitrotoluene[4-]	99-99-0	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	10	mg/kg	FINAL	
High Explosive	Nitrotoluene[4-]	99-99-0	SOIL	Deer mouse (Mammalian omnivore)	4.4	mg/kg	FINAL	
High Explosive	Nitrotoluene[4-]	99-99-0	SOIL	Desert cottontail (Mammalian herbivore)	6.6	mg/kg		
High Explosive	Nitrotoluene[4-]	99-99-0	SOIL	Montane shrew (Mammalian insectivore)	8.1	mg/kg		
High Explosive	Nitrotoluene[4-]	99-99-0	SOIL	Red fox (Mammalian top carnivore)	1100	mg/kg		
High Explosive	Nitrotoluene[4-]	99-99-0	WATER	Deer mouse (water)	20000	µg/L		
High Explosive	Nitrotoluene[4-]	99-99-0	WATER	Desert cottontail (water)	40000	µg/L		
High Explosive	Nitrotoluene[4-]	99-99-0	WATER	Montane shrew (water)	17000	µg/L	FINAL	
High Explosive	Nitrotoluene[4-]	99-99-0	WATER	Occult little brown myotis bat (water)	24000	µg/L		
High Explosive	Nitrotoluene[4-]	99-99-0	WATER	Red fox (water)	45000	µg/L		
High Explosive	PETN	78-11-5	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	120000	mg/kg	FINAL	
High Explosive	PETN	78-11-5	SOIL	Deer mouse (Mammalian omnivore)	8600	mg/kg	FINAL	
High Explosive	PETN	78-11-5	SOIL	Desert cottontail (Mammalian herbivore)	9900	mg/kg		
High Explosive	PETN	78-11-5	SOIL	Montane shrew (Mammalian insectivore)	73000	mg/kg		
High Explosive	PETN	78-11-5	SOIL	Red fox (Mammalian top carnivore)	640000	mg/kg		
High Explosive	PETN	78-11-5	WATER	Deer mouse (water)	30000000	µg/L		
High Explosive	PETN	78-11-5	WATER	Desert cottontail (water)	60000000	µg/L		
High Explosive	PETN	78-11-5	WATER	Montane shrew (water)	26000000	µg/L	FINAL	
High Explosive	PETN	78-11-5	WATER	Occult little brown myotis bat (water)	36000000	µg/L		
High Explosive	PETN	78-11-5	WATER	Red fox (water)	68000000	µg/L		
High Explosive	RDX	121-82-4	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	290	mg/kg		
High Explosive	RDX	121-82-4	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	45	mg/kg	FINAL	
High Explosive	RDX	121-82-4	SOIL	American kestrel (Avian intermediate carnivore)	200	mg/kg		
High Explosive	RDX	121-82-4	SOIL	American kestrel (Avian top carnivore)	1100	mg/kg		
High Explosive	RDX	121-82-4	SOIL	American robin (Avian herbivore)	12	mg/kg		
High Explosive	RDX	121-82-4	SOIL	American robin (Avian insectivore)	22	mg/kg		
High Explosive	RDX	121-82-4	SOIL	American robin (Avian omnivore)	16	mg/kg		
High Explosive	RDX	121-82-4	SOIL	Deer mouse (Mammalian omnivore)	130	mg/kg		
High Explosive	RDX	121-82-4	SOIL	Desert cottontail (Mammalian herbivore)	210	mg/kg		
High Explosive	RDX	121-82-4	SOIL	Earthworm (Soil-dwelling invertebrate)	7.5	mg/kg	FINAL	
High Explosive	RDX	121-82-4	SOIL	Generic plant (Terrestrial autotroph - producer)	100	mg/kg		
High Explosive	RDX	121-82-4	SOIL	Montane shrew (Mammalian insectivore)	150	mg/kg		
High Explosive	RDX	121-82-4	SOIL	Red fox (Mammalian top carnivore)	6800	mg/kg		
High Explosive	RDX	121-82-4	WATER	Deer mouse (water)	52000	µg/L		
High Explosive	RDX	121-82-4	WATER	Desert cottontail (water)	100000	µg/L		
High Explosive	RDX	121-82-4	WATER	Montane shrew (water)	44000	µg/L	FINAL	
High Explosive	RDX	121-82-4	WATER	Occult little brown myotis bat (water)	62000	µg/L		
High Explosive	RDX	121-82-4	WATER	Red fox (water)	110000	µg/L		
High Explosive	Tetryl	479-45-8	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	100	mg/kg	FINAL	
High Explosive	Tetryl	479-45-8	SOIL	Deer mouse (Mammalian omnivore)	0.99	mg/kg	FINAL	
High Explosive	Tetryl	479-45-8	SOIL	Desert cottontail (Mammalian herbivore)	1.1	mg/kg		
High Explosive	Tetryl	479-45-8	SOIL	Generic plant (Terrestrial autotroph - producer)	25	mg/kg		
High Explosive	Tetryl	479-45-8	SOIL	Montane shrew (Mammalian insectivore)	35	mg/kg		
High Explosive	Tetryl	479-45-8	SOIL	Red fox (Mammalian top carnivore)	370	mg/kg		
High Explosive	Tetryl	479-45-8	WATER	Deer mouse (water)	6800	µg/L		
High Explosive	Tetryl	479-45-8	WATER	Desert cottontail (water)	13000	µg/L		
High Explosive	Tetryl	479-45-8	WATER	Montane shrew (water)	5800	µg/L	FINAL	
High Explosive	Tetryl	479-45-8	WATER	Occult little brown myotis bat (water)	8100	µg/L		
High Explosive	Tetryl	479-45-8	WATER	Red fox (water)	15000	µg/L		
High Explosive	Trinitrobenzene[1,3,5-]	99-35-4	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	1300	mg/kg	FINAL	
High Explosive	Trinitrobenzene[1,3,5-]	99-35-4	SOIL	Deer mouse (Mammalian omnivore)	6.6	mg/kg	FINAL	
High Explosive	Trinitrobenzene[1,3,5-]	99-35-4	SOIL	Desert cottontail (Mammalian herbivore)	7.3	mg/kg		
High Explosive	Trinitrobenzene[1,3,5-]	99-35-4	SOIL	Montane shrew (Mammalian insectivore)	400	mg/kg		
High Explosive	Trinitrobenzene[1,3,5-]	99-35-4	SOIL	Red fox (Mammalian top carnivore)	3900	mg/kg		
High Explosive	Trinitrobenzene[1,3,5-]	99-35-4	WATER	Deer mouse (water)	70000	µg/L		
High Explosive	Trinitrobenzene[1,3,5-]	99-35-4	WATER	Desert cottontail (water)	130000	µg/L		
High Explosive	Trinitrobenzene[1,3,5-]	99-35-4	WATER	Montane shrew (water)	60000	µg/L	FINAL	
High Explosive	Trinitrobenzene[1,3,5-]	99-35-4	WATER	Occult little brown myotis bat (water)	84000	µg/L		
High Explosive	Trinitrobenzene[1,3,5-]	99-35-4	WATER	Red fox (water)	150000	µg/L		
High Explosive	Trinitrotoluene[2,4,6-]	118-96-7	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	2500	mg/kg		
High Explosive	Trinitrotoluene[2,4,6-]	118-96-7	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	420	mg/kg	FINAL	
High Explosive	Trinitrotoluene[2,4,6-]	118-96-7	SOIL	American kestrel (Avian intermediate carnivore)	1400	mg/kg		
High Explosive	Trinitrotoluene[2,4,6-]	118-96-7	SOIL	American kestrel (Avian top carnivore)	2700	mg/kg		
High Explosive	Trinitrotoluene[2,4,6-]	118-96-7	SOIL	American robin (Avian herbivore)	6.4	mg/kg	FINAL	
High Explosive	Trinitrotoluene[2,4,6-]	118-96-7	SOIL	American robin (Avian insectivore)	140	mg/kg		
High Explosive	Trinitrotoluene[2,4,6-]	118-96-7	SOIL	American robin (Avian omnivore)	12	mg/kg		
High Explosive	Trinitrotoluene[2,4,6-]	118-96-7	SOIL	Deer mouse (Mammalian omnivore)	80	mg/kg		
High Explosive	Trinitrotoluene[2,4,6-]	118-96-7	SOIL	Desert cottontail (Mammalian herbivore)	90	mg/kg		
High Explosive	Trinitrotoluene[2,4,6-]	118-96-7	SOIL	Earthworm (Soil-dwelling invertebrate)	32	mg/kg		
High Explosive	Trinitrotoluene[2,4,6-]	118-96-7	SOIL	Generic plant (Terrestrial autotroph - producer)	62	mg/kg		
High Explosive	Trinitrotoluene[2,4,6-]	118-96-7	SOIL	Montane shrew (Mammalian insectivore)	920	mg/kg		
High Explosive	Trinitrotoluene[2,4,6-]	118-96-7	SOIL	Red fox (Mammalian top carnivore)	17000	mg/kg		
High Explosive	Trinitrotoluene[2,4,6-]	118-96-7	WATER	American kestrel (water)	81000	µg/L		
High Explosive	Trinitrotoluene[2,4,6-]	118-96-7	WATER	American robin (water)	69000	µg/L		
High Explosive	Trinitrotoluene[2,4,6-]	118-96-7	WATER	Deer mouse (water)	180000	µg/L		
High Explosive	Trinitrotoluene[2,4,6-]	118-96-7	WATER	Desert cottontail (water)	350000	µg/L		
High Explosive	Trinitrotoluene[2,4,6-]	118-96-7	WATER	Montane shrew (water)	150000	µg/L		
High Explosive	Trinitrotoluene[2,4,6-]	118-96-7	WATER	Occult little brown myotis bat (water)	210000	µg/L		
High Explosive	Trinitrotoluene[2,4,6-]	118-96-7	WATER	Red fox (water)	400000	µg/L		
High Explosive	Trinitrotoluene[2,4,6-]	118-96-7	WATER	Violet-green Swallow (water)	40000	µg/L	FINAL	
Inorganic Compound	Aluminum	AL	SEDIMENT	Aquatic community organisms - sediment	58000	mg/kg		
Inorganic Compound	Aluminum	AL	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	280	mg/kg	FINAL	
Inorganic Compound	Aluminum	AL	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	9500	mg/kg		
Inorganic Compound	Aluminum	AL	SOIL	American kestrel (Avian intermediate carnivore)			FINAL	pH dependent. Aluminum is identified as a COPC only at sites where the soil pH is less than 5.5.
Inorganic Compound	Aluminum	AL	SOIL	American kestrel (Avian top carnivore)			FINAL	pH dependent. Aluminum is identified as a COPC only at sites where the soil pH is less than 5.5.
Inorganic Compound	Aluminum	AL	SOIL	American robin (Avian herbivore)			FINAL	pH dependent. Aluminum is identified as a COPC only at sites where the soil pH is less than 5.5.
Inorganic Compound	Aluminum	AL	SOIL	American robin (Avian insectivore)			FINAL	pH dependent. Aluminum is identified as a COPC only at sites where the soil pH is less than 5.5.
Inorganic Compound	Aluminum	AL	SOIL	American robin (Avian omnivore)			FINAL	pH dependent. Aluminum is identified as a COPC only at sites where the soil pH is less than 5.5.
Inorganic Compound	Aluminum	AL	SOIL	Deer mouse (Mammalian omnivore)			FINAL	pH dependent. Aluminum is identified as a COPC only at sites where the soil pH is less than 5.5.
Inorganic Compound	Aluminum	AL	SOIL	Desert cottontail (Mammalian herbivore)			FINAL	pH dependent. Aluminum is identified as a COPC only at sites where the soil pH is less than 5.5.
Inorganic Compound	Aluminum	AL	SOIL	Earthworm (Soil-dwelling invertebrate)			FINAL	pH dependent. Aluminum is identified as a COPC only at sites where the soil pH is less than 5.5.
Inorganic Compound	Aluminum	AL	SOIL	Generic plant (Terrestrial autotroph - producer)			FINAL	pH dependent. Aluminum is identified as a COPC only at sites where the soil pH is less than 5.5.
Inorganic Compound	Aluminum	AL	SOIL	Montane shrew (Mammalian insectivore)			FINAL	pH dependent. Aluminum is identified as a COPC only at sites where the soil pH is less than 5.5.
Inorganic Compound	Aluminum	AL	SOIL	Red fox (Mammalian top carnivore)			FINAL	pH dependent. Aluminum is identified as a COPC only at sites where the soil pH is less than 5.5.
Inorganic Compound	Aluminum	AL	WATER	American kestrel (water)	910000	µg/L		
Inorganic Compound	Aluminum	AL	WATER	American robin (water)	780000	µg/L		
Inorganic Compound	Aluminum	AL	WATER	Aquatic community organisms - water	87	µg/L	FINAL	
Inorganic Compound	Aluminum	AL	WATER	Deer mouse (water)	10000	µg/L		
Inorganic Compound	Aluminum	AL	WATER	Desert cottontail (water)	19000	µg/L		
Inorganic Compound	Aluminum	AL	WATER	Montane shrew (water)	8600	µg/L		
Inorganic Compound	Aluminum	AL	WATER	Occult little brown myotis bat (water)	12000	µg/L		
Inorganic Compound	Aluminum	AL	WATER	Red fox (water)	22000	µg/L		
Inorganic Compound	Aluminum	AL	WATER	Violet-green Swallow (water)	450000	µg/L		
Inorganic Compound	Antimony	SB	SEDIMENT	Aquatic community organisms - sediment	3	mg/kg		
Inorganic Compound	Antimony	SB	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	0.36	mg/kg	FINAL	
Inorganic Compound	Antimony	SB	SOIL	Deer mouse (Mammalian omnivore)	0.48	mg/kg		
Inorganic Compound	Antimony	SB	SOIL	Desert cottontail (Mammalian herbivore)	2.9	mg/kg		
Inorganic Compound	Antimony	SB	SOIL	Earthworm (Soil-dwelling invertebrate)	78	mg/kg		
Inorganic Compound	Antimony	SB	SOIL	Generic plant (Terrestrial autotroph - producer)	0.05	mg/kg	FINAL	
Inorganic Compound	Antimony	SB	SOIL	Montane shrew (Mammalian insectivore)	0.26	mg/kg		
Inorganic Compound	Antimony	SB	SOIL	Red fox (Mammalian top carnivore)	45	mg/kg		
Inorganic Compound	Antimony	SB	WATER	Aquatic community organisms - water	100	µg/L	FINAL	
Inorganic Compound	Antimony	SB	WATER	Deer mouse (water)	810	µg/L		
Inorganic Compound	Antimony	SB	WATER	Desert cottontail (water)	1500	µg/L		
Inorganic Compound	Antimony	SB	WATER	Montane shrew (water)	690	µg/L		
Inorganic Compound	Antimony	SB	WATER	Occult little brown myotis bat (water)	960	µg/L		
Inorganic Compound	Antimony	SB	WATER	Red fox (water)	1700	µg/L		
Inorganic Compound	Arsenic	AS	SEDIMENT	Aquatic community organisms - sediment	12	mg/kg	FINAL	
Inorganic Compound	Arsenic	AS	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	27	mg/kg		
Inorganic Compound	Arsenic	AS	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	35	mg/kg		
Inorganic Compound	Arsenic	AS	SOIL	American kestrel (Avian intermediate carnivore)	160	mg/kg		
Inorganic Compound	Arsenic	AS	SOIL	American kestrel (Avian top carnivore)	1100	mg/kg		
Inorganic Compound	Arsenic	AS	SOIL	American robin (Avian herbivore)	42	mg/kg		
Inorganic Compound	Arsenic	AS	SOIL	American robin (Avian insectivore)	18	mg/kg		
Inorganic Compound	Arsenic	AS	SOIL	American robin (Avian omnivore)	26	mg/kg		
Inorganic Compound	Arsenic	AS	SOIL	Deer mouse (Mammalian omnivore)	32	mg/kg		
Inorganic Compound	Arsenic	AS	SOIL	Desert cottontail (Mammalian herbivore)	160	mg/kg		
Inorganic Compound	Arsenic	AS	SOIL	Earthworm (Soil-dwelling invertebrate)	6.8	mg/kg	FINAL	
Inorganic Compound	Arsenic	AS	SOIL	Generic plant (Terrestrial autotroph - producer)	18	mg/kg		
Inorganic Compound	Arsenic	AS	SOIL	Montane shrew (Mammalian insectivore)	15	mg/kg		
Inorganic Compound	Arsenic	AS	SOIL	Red fox (Mammalian top carnivore)	810	mg/kg		
Inorganic Compound	Arsenic	AS	WATER	American kestrel (water)	42000	µg/L		
Inorganic Compound	Arsenic	AS	WATER	American robin (water)	36000	µg/L		
Inorganic Compound	Arsenic	AS	WATER	Aquatic community organisms - water	150	µg/L	FINAL	
Inorganic Compound	Arsenic	AS	WATER	Deer mouse (water)	660	µg/L		
Inorganic Compound	Arsenic	AS	WATER	Desert cottontail (water)	1200	µg/L		
Inorganic Compound	Arsenic	AS	WATER	Montane shrew (water)	560	µg/L		
Inorganic Compound	Arsenic	AS	WATER	Occult little brown myotis bat (water)	790	µg/L		
Inorganic Compound	Arsenic	AS	WATER	Red fox (water)	1400	µg/L		
Inorganic Compound	Arsenic	AS	WATER	Violet-green Swallow (water)	21000	µg/L		
Inorganic Compound	Barium	BA	SEDIMENT	Aquatic community organisms - sediment	48	mg/kg	FINAL	
Inorganic Compound	Barium	BA	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	3500	mg/kg		
Inorganic Compound	Barium	BA	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	3000	mg/kg		
Inorganic Compound	Barium	BA	SOIL	American kestrel (Avian intermediate carnivore)	11000	mg/kg		
Inorganic Compound	Barium	BA	SOIL	American kestrel (Avian top carnivore)	37000	mg/kg		
Inorganic Compound	Barium	BA	SOIL	American robin (Avian herbivore)	820	mg/kg		
Inorganic Compound	Barium	BA	SOIL	American robin (Avian insectivore)	1000	mg/kg		
Inorganic Compound	Barium	BA	SOIL	American robin (Avian omnivore)	930	mg/kg		
Inorganic Compound	Barium	BA	SOIL	Deer mouse (Mammalian omnivore)	1800	mg/kg		
Inorganic Compound	Barium	BA	SOIL	Desert cottontail (Mammalian herbivore)	3300	mg/kg		
Inorganic Compound	Barium	BA	SOIL	Earthworm (Soil-dwelling invertebrate)	330	mg/kg		
Inorganic Compound	Barium	BA	SOIL	Generic plant (Terrestrial autotroph - producer)	110	mg/kg	FINAL	
Inorganic Compound	Barium	BA	SOIL	Montane shrew (Mammalian insectivore)	1300	mg/kg		
Inorganic Compound	Barium	BA	SOIL	Red fox (Mammalian top carnivore)	41000	mg/kg		
Inorganic Compound	Barium	BA	WATER	American kestrel (water)	760000	µg/L		
Inorganic Compound	Barium	BA	WATER	American robin (water)	650000	µg/L		
Inorganic Compound	Barium	BA	WATER	Aquatic community organisms - water	3.8	µg/L	FINAL	
Inorganic Compound	Barium	BA	WATER	Deer mouse (water)	7200	µg/L		
Inorganic Compound	Barium	BA	WATER	Desert cottontail (water)	14000	µg/L		
Inorganic Compound	Barium	BA	WATER	Montane shrew (water)	6100	µg/L		
Inorganic Compound	Barium	BA	WATER	Occult little brown myotis bat (water)	8600	µg/L		
Inorganic Compound	Barium	BA	WATER	Red fox (water)	16000	µg/L		
Inorganic Compound	Barium	BA	WATER	Violet-green Swallow (water)	380000	µg/L		
Inorganic Compound	Beryllium	BE	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	73	mg/kg	FINAL	
Inorganic Compound	Beryllium	BE	SOIL	Deer mouse (Mammalian omnivore)	56	mg/kg		
Inorganic Compound	Beryllium	BE	SOIL	Desert cottontail (Mammalian herbivore)	170	mg/kg		
Inorganic Compound	Beryllium	BE	SOIL	Earthworm (Soil-dwelling invertebrate)	40	mg/kg		
Inorganic Compound	Beryllium	BE	SOIL	Generic plant (Terrestrial autotroph - producer)	2.5	mg/kg	FINAL	
Inorganic Compound	Beryllium	BE	SOIL	Montane shrew (Mammalian insectivore)	18	mg/kg		
Inorganic Compound	Beryllium	BE	SOIL	Red fox (Mammalian top carnivore)	420	mg/kg		
Inorganic Compound	Beryllium	BE	WATER	Aquatic community organisms - water	5.3	µg/L	FINAL	
Inorganic Compound	Beryllium	BE	WATER	Deer mouse (water)	3400	µg/L		
Inorganic Compound	Beryllium	BE	WATER	Desert cottontail (water)	6800	µg/L		
Inorganic Compound	Beryllium	BE	WATER	Montane shrew (water)	2900	µg/L		
Inorganic Compound	Beryllium	BE	WATER	Occult little brown myotis bat (water)	4100	µg/L		
Inorganic Compound	Beryllium	BE	WATER	Red fox (water)	7600	µg/L		
Inorganic Compound	Boron	B	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	170	mg/kg		
Inorganic Compound	Boron	B	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	10	mg/kg	FINAL	
Inorganic Compound	Boron	B	SOIL	American kestrel (Avian intermediate carnivore)	56	mg/kg		
Inorganic Compound	Boron	B	SOIL	American kestrel (Avian top carnivore)	1400	mg/kg		
Inorganic Compound	Boron	B	SOIL	American robin (Avian herbivore)	2	mg/kg	FINAL	
Inorganic Compound	Boron	B	SOIL	American robin (Avian insectivore)	7.5	mg/kg		
Inorganic Compound	Boron	B	SOIL	American robin (Avian omnivore)	3.2	mg/kg		
Inorganic Compound	Boron	B	SOIL	Deer mouse (Mammalian omnivore)	56	mg/kg		
Inorganic Compound	Boron	B	SOIL	Desert cottontail (Mammalian herbivore)	77	mg/kg		
Inorganic Compound	Boron	B	SOIL	Generic plant (Terrestrial autotroph - producer)	36	mg/kg		
Inorganic Compound	Boron	B	SOIL	Montane shrew (Mammalian insectivore)	120	mg/kg		
Inorganic Compound	Boron	B	SOIL	Red fox (Mammalian top carnivore)	21000	mg/kg		
Inorganic Compound	Boron	B	WATER	American kestrel (water)	440000	µg/L		
Inorganic Compound	Boron	B	WATER	American robin (water)	380000	µg/L		
Inorganic Compound	Boron	B	WATER	Aquatic community organisms - water	540	µg/L	FINAL	
Inorganic Compound	Boron	B	WATER	Deer mouse (water)	140000	µg/L		
Inorganic Compound	Boron	B	WATER	Desert cottontail (water)	280000	µg/L		
Inorganic Compound	Boron	B	WATER	Montane shrew (water)	120000	µg/L		
Inorganic Compound	Boron	B	WATER	Occult little brown myotis bat (water)	170000	µg/L		
Inorganic Compound	Boron	B	WATER	Red fox (water)	320000	µg/L		
Inorganic Compound	Boron	B	WATER	Violet-green Swallow (water)	220000	µg/L		
Inorganic Compound	Cadmium	CD	SEDIMENT	Aquatic community organisms - sediment	0.59	mg/kg		
Inorganic Compound	Cadmium	CD	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	0.33	mg/kg	FINAL	
Inorganic Compound	Cadmium	CD	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	0.38	mg/kg		
Inorganic Compound	Cadmium	CD	SOIL	American kestrel (Avian intermediate carnivore)	2	mg/kg		
Inorganic Compound	Cadmium	CD	SOIL	American kestrel (Avian top carnivore)	580	mg/kg		
Inorganic Compound	Cadmium	CD	SOIL	American robin (Avian herbivore)	4.4	mg/kg		
Inorganic Compound	Cadmium	CD	SOIL	American robin (Avian insectivore)	0.29	mg/kg		
Inorganic Compound	Cadmium	CD	SOIL	American robin (Avian omnivore)	0.54	mg/kg		
Inorganic Compound	Cadmium	CD	SOIL	Deer mouse (Mammalian omnivore)	0.51	mg/kg		
Inorganic Compound	Cadmium	CD	SOIL	Desert cottontail (Mammalian herbivore)	9.9	mg/kg		
Inorganic Compound	Cadmium	CD	SOIL	Earthworm (Soil-dwelling invertebrate)	140	mg/kg		
Inorganic Compound	Cadmium	CD	SOIL	Generic plant (Terrestrial autotroph - producer)	32	mg/kg		
Inorganic Compound	Cadmium	CD	SOIL	Montane shrew (Mammalian insectivore)	0.27	mg/kg	FINAL	
Inorganic Compound	Cadmium	CD	SOIL	Red fox (Mammalian top carnivore)	510	mg/kg		
Inorganic Compound	Cadmium	CD	WATER	American kestrel (water)	12000	µg/L		
Inorganic Compound	Cadmium	CD	WATER	American robin (water)	10000	µg/L		
Inorganic Compound	Cadmium	CD	WATER	Aquatic community organisms - water	0.15	µg/L	FINAL	
Inorganic Compound	Cadmium	CD	WATER	Deer mouse (water)	5600	µg/L		
Inorganic Compound	Cadmium	CD	WATER	Desert cottontail (water)	11000	µg/L		
Inorganic Compound	Cadmium	CD	WATER	Montane shrew (water)	4800	µg/L		
Inorganic Compound	Cadmium	CD	WATER	Occult little brown myotis bat (water)	6700	µg/L		
Inorganic Compound	Cadmium	CD	WATER	Red fox (water)	12000	µg/L		
Inorganic Compound	Cadmium	CD	WATER	Violet-green Swallow (water)	5900	µg/L		
Inorganic Compound	Chloride	CL(-1)	WATER	Aquatic community organisms - water	230000	µg/L	FINAL	
Inorganic Compound	Chromium (total)	CR	SEDIMENT	Aquatic community organisms - sediment	56	mg/kg	FINAL	
Inorganic Compound	Chromium (total)	CR	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	1500	mg/kg		
Inorganic Compound	Chromium (total)	CR	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	1700	mg/kg		
Inorganic Compound	Chromium (total)	CR	SOIL	American kestrel (Avian intermediate carnivore)	7700	mg/kg		
Inorganic Compound	Chromium (total)	CR	SOIL	American kestrel (Avian top carnivore)	37000	mg/kg		
Inorganic Compound	Chromium (total)	CR	SOIL	American robin (Avian herbivore)	1900	mg/kg		
Inorganic Compound	Chromium (total)	CR	SOIL	American robin (Avian insectivore)	830	mg/kg		
Inorganic Compound	Chromium (total)	CR	SOIL	American robin (Avian omnivore)	1100	mg/kg		
Inorganic Compound	Chromium (total)	CR	SOIL	Deer mouse (Mammalian omnivore)	1900	mg/kg		
Inorganic Compound	Chromium (total)	CR	SOIL	Desert cottontail (Mammalian herbivore)	13000	mg/kg		
Inorganic Compound	Chromium (total)	CR	SOIL	Earthworm (Soil-dwelling invertebrate)	2.3	mg/kg	FINAL	
Inorganic Compound	Chromium (total)	CR	SOIL	Generic plant (Terrestrial autotroph - producer)	2.4	mg/kg		
Inorganic Compound	Chromium (total)	CR	SOIL	Montane shrew (Mammalian insectivore)	750	mg/kg		
Inorganic Compound	Chromium (total)	CR	SOIL	Red fox (Mammalian top carnivore)	30000	mg/kg		
Inorganic Compound	Chromium (total)	CR	WATER	American kestrel (water)	100000	µg/L		
Inorganic Compound	Chromium (total)	CR	WATER	American robin (water)	85000	µg/L		
Inorganic Compound	Chromium (total)	CR	WATER	Aquatic community organisms - water	77	µg/L	FINAL	
Inorganic Compound	Chromium (total)	CR	WATER	Deer mouse (water)	1300000	µg/L		
Inorganic Compound	Chromium (total)	CR	WATER	Desert cottontail (water)	2700000	µg/L		
Inorganic Compound	Chromium (total)	CR	WATER	Montane shrew (water)	1100000	µg/L		
Inorganic Compound	Chromium (total)	CR	WATER	Occult little brown myotis bat (water)	1600000	µg/L		
Inorganic Compound	Chromium (total)	CR	WATER	Red fox (water)	3000000	µg/L		
Inorganic Compound	Chromium (total)	CR	WATER	Violet-green Swallow (water)	49000	µg/L		
Inorganic Compound	Chromium(+6)	CR(+6)	SEDIMENT	Aquatic community organisms - sediment	8	mg/kg	FINAL	
Inorganic Compound	Chromium(+6)	CR(+6)	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	960	mg/kg		
Inorganic Compound	Chromium(+6)	CR(+6)	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	680	mg/kg		
Inorganic Compound	Chromium(+6)	CR(+6)	SOIL	American kestrel (Avian intermediate carnivore)	2200	mg/kg		
Inorganic Compound	Chromium(+6)	CR(+6)	SOIL	American kestrel (Avian top carnivore)	5400	mg/kg		
Inorganic Compound	Chromium(+6)	CR(+6)	SOIL	American robin (Avian herbivore)	280	mg/kg		
Inorganic Compound	Chromium(+6)	CR(+6)	SOIL	American robin (Avian insectivore)	190	mg/kg		
Inorganic Compound	Chromium(+6)	CR(+6)	SOIL	American robin (Avian omnivore)	220	mg/kg		
Inorganic Compound	Chromium(+6)	CR(+6)	SOIL	Deer mouse (Mammalian omnivore)	860	mg/kg		
Inorganic Compound	Chromium(+6)	CR(+6)	SOIL	Desert cottontail (Mammalian herbivore)	3200	mg/kg		
Inorganic Compound	Chromium(+6)	CR(+6)	SOIL	Earthworm (Soil-dwelling invertebrate)	0.34	mg/kg	FINAL	
Inorganic Compound	Chromium(+6)	CR(+6)	SOIL	Generic plant (Terrestrial autotroph - producer)	0.35	mg/kg		
Inorganic Compound	Chromium(+6)	CR(+6)	SOIL	Montane shrew (Mammalian insectivore)	280	mg/kg		
Inorganic Compound	Chromium(+6)	CR(+6)	SOIL	Red fox (Mammalian top carnivore)	7200	mg/kg		
Inorganic Compound	Chromium(+6)	CR(+6)	WATER	American kestrel (water)	14000	µg/L		
Inorganic Compound	Chromium(+6)	CR(+6)	WATER	American robin (water)	12000	µg/L		
Inorganic Compound	Chromium(+6)	CR(+6)	WATER	Aquatic community organisms - water	11	µg/L	FINAL	
Inorganic Compound	Chromium(+6)	CR(+6)	WATER	Deer mouse (water)	190000	µg/L		
Inorganic Compound	Chromium(+6)	CR(+6)	WATER	Desert cottontail (water)	380000	µg/L		
Inorganic Compound	Chromium(+6)	CR(+6)	WATER	Montane shrew (water)	160000	µg/L		
Inorganic Compound	Chromium(+6)	CR(+6)	WATER	Occult little brown myotis bat (water)	230000	µg/L		
Inorganic Compound	Chromium(+6)	CR(+6)	WATER	Red fox (water)	430000	µg/L		
Inorganic Compound	Chromium(+6)	CR(+6)	WATER	Violet-green Swallow (water)	7100	µg/L		
Inorganic Compound	Cobalt	CO	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	370	mg/kg		
Inorganic Compound	Cobalt	CO	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	230	mg/kg	FINAL	
Inorganic Compound	Cobalt	CO	SOIL	American kestrel (Avian intermediate carnivore)	930	mg/kg		
Inorganic Compound	Cobalt	CO	SOIL	American kestrel (Avian top carnivore)	3500	mg/kg		
Inorganic Compound	Cobalt	CO	SOIL	American robin (Avian herbivore)	170	mg/kg		
Inorganic Compound	Cobalt	CO	SOIL	American robin (Avian insectivore)	96	mg/kg		
Inorganic Compound	Cobalt	CO	SOIL	American robin (Avian omnivore)	120	mg/kg		
Inorganic Compound	Cobalt	CO	SOIL	Deer mouse (Mammalian omnivore)	400	mg/kg		
Inorganic Compound	Cobalt	CO	SOIL	Desert cottontail (Mammalian herbivore)	1800	mg/kg		
Inorganic Compound	Cobalt	CO	SOIL	Generic plant (Terrestrial autotroph - producer)	13	mg/kg	FINAL	
Inorganic Compound	Cobalt	CO	SOIL	Montane shrew (Mammalian insectivore)	160	mg/kg		
Inorganic Compound	Cobalt	CO	SOIL	Red fox (Mammalian top carnivore)	5400	mg/kg		
Inorganic Compound	Cobalt	CO	WATER	American kestrel (water)	160	µg/L		
Inorganic Compound	Cobalt	CO	WATER	American robin (water)	140	µg/L		
Inorganic Compound	Cobalt	CO	WATER	Aquatic community organisms - water	3	µg/L	FINAL	
Inorganic Compound	Cobalt	CO	WATER	Deer mouse (water)	100	µg/L		
Inorganic Compound	Cobalt	CO	WATER	Desert cottontail (water)	200	µg/L		
Inorganic Compound	Cobalt	CO	WATER	Montane shrew (water)	89	µg/L		
Inorganic Compound	Cobalt	CO	WATER	Occult little brown myotis bat (water)	120	µg/L		
Inorganic Compound	Cobalt	CO	WATER	Red fox (water)	230	µg/L		
Inorganic Compound	Cobalt	CO	WATER	Violet-green Swallow (water)	82	µg/L		
Inorganic Compound	Copper	CU	SEDIMENT	Aquatic community organisms - sediment	28	mg/kg		
Inorganic Compound	Copper	CU	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	54	mg/kg		
Inorganic Compound	Copper	CU	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	23	mg/kg	FINAL	
Inorganic Compound	Copper	CU	SOIL	American kestrel (Avian intermediate carnivore)	110	mg/kg		
Inorganic Compound	Copper	CU	SOIL	American kestrel (Avian top carnivore)	1600	mg/kg		
Inorganic Compound	Copper	CU	SOIL	American robin (Avian herbivore)	38	mg/kg		
Inorganic Compound	Copper	CU	SOIL	American robin (Avian insectivore)	15	mg/kg	FINAL	
Inorganic Compound	Copper	CU	SOIL	American robin (Avian omnivore)	22	mg/kg		
Inorganic Compound	Copper	CU	SOIL	Deer mouse (Mammalian omnivore)	64	mg/kg		
Inorganic Compound	Copper	CU	SOIL	Desert cottontail (Mammalian herbivore)	270	mg/kg		
Inorganic Compound	Copper	CU	SOIL	Earthworm (Soil-dwelling invertebrate)	80	mg/kg		
Inorganic Compound	Copper	CU	SOIL	Generic plant (Terrestrial autotroph - producer)	70	mg/kg		
Inorganic Compound	Copper	CU	SOIL	Montane shrew (Mammalian insectivore)	38	mg/kg		
Inorganic Compound	Copper	CU	SOIL	Red fox (Mammalian top carnivore)	3800	mg/kg		
Inorganic Compound	Copper	CU	WATER	American kestrel (water)	25000	µg/L		
Inorganic Compound	Copper	CU	WATER	American robin (water)	21000	µg/L		
Inorganic Compound	Copper	CU	WATER	Aquatic community organisms - water	5	µg/L	FINAL	
Inorganic Compound	Copper	CU	WATER	Deer mouse (water)	26000	µg/L		
Inorganic Compound	Copper	CU	WATER	Desert cottontail (water)	52000	µg/L		
Inorganic Compound	Copper	CU	WATER	Montane shrew (water)	22000	µg/L		
Inorganic Compound	Copper	CU	WATER	Occult little brown myotis bat (water)	32000	µg/L		
Inorganic Compound	Copper	CU	WATER	Red fox (water)	59000	µg/L		
Inorganic Compound	Copper	CU	WATER	Violet-green Swallow (water)	12000	µg/L		
Inorganic Compound	Cyanide (total)	CN(-1)	SEDIMENT	Aquatic community organisms - sediment	0.1	mg/kg	FINAL	
Inorganic Compound	Cyanide (total)	CN(-1)	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	420	mg/kg		
Inorganic Compound	Cyanide (total)	CN(-1)	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	0.14	mg/kg		
Inorganic Compound	Cyanide (total)	CN(-1)	SOIL	American kestrel (Avian intermediate carnivore)	0.47	mg/kg		
Inorganic Compound	Cyanide (total)	CN(-1)	SOIL	American kestrel (Avian top carnivore)	0.58	mg/kg		
Inorganic Compound	Cyanide (total)	CN(-1)	SOIL	American robin (Avian herbivore)	0.1	mg/kg	FINAL	
Inorganic Compound	Cyanide (total)	CN(-1)	SOIL	American robin (Avian insectivore)	0.1	mg/kg	FINAL	
Inorganic Compound	Cyanide (total)	CN(-1)	SOIL	American robin (Avian omnivore)	0.1	mg/kg	FINAL	
Inorganic Compound	Cyanide (total)	CN(-1)	SOIL	Deer mouse (Mammalian omnivore)	340	mg/kg		
Inorganic Compound	Cyanide (total)	CN(-1)	SOIL	Desert cottontail (Mammalian herbivore)	740	mg/kg		
Inorganic Compound	Cyanide (total)	CN(-1)	SOIL	Montane shrew (Mammalian insectivore)	310	mg/kg		
Inorganic Compound	Cyanide (total)	CN(-1)	SOIL	Red fox (Mammalian top carnivore)	2200	mg/kg		
Inorganic Compound	Cyanide (total)	CN(-1)	WATER	American kestrel (water)	330	µg/L		
Inorganic Compound	Cyanide (total)	CN(-1)	WATER	American robin (water)	280	µg/L		
Inorganic Compound	Cyanide (total)	CN(-1)	WATER	Aquatic community organisms - water	5.2	µg/L	FINAL	
Inorganic Compound	Cyanide (total)	CN(-1)	WATER	Deer mouse (water)	360000	µg/L		
Inorganic Compound	Cyanide (total)	CN(-1)	WATER	Desert cottontail (water)	700000	µg/L		
Inorganic Compound	Cyanide (total)	CN(-1)	WATER	Montane shrew (water)	300000	µg/L		
Inorganic Compound	Cyanide (total)	CN(-1)	WATER	Occult little brown myotis bat (water)	430000	µg/L		
Inorganic Compound	Cyanide (total)	CN(-1)	WATER	Red fox (water)	790000	µg/L		
Inorganic Compound	Cyanide (total)	CN(-1)	WATER	Violet-green Swallow (water)	160	µg/L		
Inorganic Compound	Fluoride	F(-1)	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	160	mg/kg		
Inorganic Compound	Fluoride	F(-1)	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	45	mg/kg	FINAL	
Inorganic Compound	Fluoride	F(-1)	SOIL	American kestrel (Avian intermediate carnivore)	210	mg/kg		
Inorganic Compound	Fluoride	F(-1)	SOIL	American kestrel (Avian top carnivore)	1000	mg/kg		
Inorganic Compound	Fluoride	F(-1)	SOIL	American robin (Avian herbivore)	210	mg/kg		
Inorganic Compound	Fluoride	F(-1)	SOIL	American robin (Avian insectivore)	31	mg/kg	FINAL	
Inorganic Compound	Fluoride	F(-1)	SOIL	American robin (Avian omnivore)	54	mg/kg		
Inorganic Compound	Fluoride	F(-1)	SOIL	Deer mouse (Mammalian omnivore)	240	mg/kg		
Inorganic Compound	Fluoride	F(-1)	SOIL	Desert cottontail (Mammalian herbivore)	3500	mg/kg		
Inorganic Compound	Fluoride	F(-1)	SOIL	Montane shrew (Mammalian insectivore)	120	mg/kg		
Inorganic Compound	Fluoride	F(-1)	SOIL	Red fox (Mammalian top carnivore)	4600	mg/kg		
Inorganic Compound	Fluoride	F(-1)	WATER	American kestrel (water)	100000	µg/L		
Inorganic Compound	Fluoride	F(-1)	WATER	American robin (water)	87000	µg/L		
Inorganic Compound	Fluoride	F(-1)	WATER	Aquatic community organisms - water	1600	µg/L	FINAL	
Inorganic Compound	Fluoride	F(-1)	WATER	Deer mouse (water)	140000	µg/L		
Inorganic Compound	Fluoride	F(-1)	WATER	Desert cottontail (water)	270000	µg/L		
Inorganic Compound	Fluoride	F(-1)	WATER	Montane shrew (water)	110000	µg/L		
Inorganic Compound	Fluoride	F(-1)	WATER	Occult little brown myotis bat (water)	160000	µg/L		
Inorganic Compound	Fluoride	F(-1)	WATER	Red fox (water)	300000	µg/L		
Inorganic Compound	Fluoride	F(-1)	WATER	Violet-green Swallow (water)	50000	µg/L		
Inorganic Compound	Iron	FE	SEDIMENT	Aquatic community organisms - sediment	20	mg/kg	FINAL	
Inorganic Compound	Iron	FE	SOIL	Generic plant (Terrestrial autotroph - producer)			FINAL	Alternative screening level approach for iron for plants. Refer to the USEPA EcoSSL report for iron at the following web address; http://www.epa.gov/ecotox/ecossl/pdf/eco-ssl_iron.pdf.
Inorganic Compound	Iron	FE	WATER	Aquatic community organisms - water	1000	µg/L	FINAL	
Inorganic Compound	Lead	PB	SEDIMENT	Aquatic community organisms - sediment	34	mg/kg		
Inorganic Compound	Lead	PB	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	130	mg/kg		
Inorganic Compound	Lead	PB	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	27	mg/kg	FINAL	
Inorganic Compound	Lead	PB	SOIL	American kestrel (Avian intermediate carnivore)	120	mg/kg		
Inorganic Compound	Lead	PB	SOIL	American kestrel (Avian top carnivore)	810	mg/kg		
Inorganic Compound	Lead	PB	SOIL	American robin (Avian herbivore)	21	mg/kg		
Inorganic Compound	Lead	PB	SOIL	American robin (Avian insectivore)	14	mg/kg	FINAL	
Inorganic Compound	Lead	PB	SOIL	American robin (Avian omnivore)	16	mg/kg		
Inorganic Compound	Lead	PB	SOIL	Deer mouse (Mammalian omnivore)	120	mg/kg		
Inorganic Compound	Lead	PB	SOIL	Desert cottontail (Mammalian herbivore)	370	mg/kg		
Inorganic Compound	Lead	PB	SOIL	Earthworm (Soil-dwelling invertebrate)	1700	mg/kg		
Inorganic Compound	Lead	PB	SOIL	Generic plant (Terrestrial autotroph - producer)	120	mg/kg		
Inorganic Compound	Lead	PB	SOIL	Montane shrew (Mammalian insectivore)	72	mg/kg		
Inorganic Compound	Lead	PB	SOIL	Red fox (Mammalian top carnivore)	3700	mg/kg		

Inorganic Compound	Lead	PB	WATER	American kestrel (water)	130000	µg/L		
Inorganic Compound	Lead	PB	WATER	American robin (water)	110000	µg/L		
Inorganic Compound	Lead	PB	WATER	Aquatic community organisms - water	1.2	µg/L	FINAL	
Inorganic Compound	Lead	PB	WATER	Deer mouse (water)	5100	µg/L		
Inorganic Compound	Lead	PB	WATER	Desert cottontail (water)	10000	µg/L		
Inorganic Compound	Lead	PB	WATER	Montane shrew (water)	4300	µg/L		
Inorganic Compound	Lead	PB	WATER	Occult little brown myotis bat (water)	6100	µg/L		
Inorganic Compound	Lead	PB	WATER	Red fox (water)	11000	µg/L		
Inorganic Compound	Lead	PB	WATER	Violet-green Swallow (water)	64000	µg/L		
Inorganic Compound	Lithium	LI	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	150	mg/kg	FINAL	
Inorganic Compound	Lithium	LI	SOIL	Deer mouse (Mammalian omnivore)	100	mg/kg		
Inorganic Compound	Lithium	LI	SOIL	Desert cottontail (Mammalian herbivore)	250	mg/kg		
Inorganic Compound	Lithium	LI	SOIL	Generic plant (Terrestrial autotroph - producer)	2	mg/kg	FINAL	
Inorganic Compound	Lithium	LI	SOIL	Montane shrew (Mammalian insectivore)	38	mg/kg		
Inorganic Compound	Lithium	LI	SOIL	Red fox (Mammalian top carnivore)	880	mg/kg		
Inorganic Compound	Manganese	MN	SEDIMENT	Aquatic community organisms - sediment	720	mg/kg	FINAL	
Inorganic Compound	Manganese	MN	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	5300	mg/kg		
Inorganic Compound	Manganese	MN	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	11000	mg/kg		
Inorganic Compound	Manganese	MN	SOIL	American kestrel (Avian intermediate carnivore)	35000	mg/kg		
Inorganic Compound	Manganese	MN	SOIL	American kestrel (Avian top carnivore)	90000	mg/kg		
Inorganic Compound	Manganese	MN	SOIL	American robin (Avian herbivore)	1400	mg/kg		
Inorganic Compound	Manganese	MN	SOIL	American robin (Avian insectivore)	3100	mg/kg		
Inorganic Compound	Manganese	MN	SOIL	American robin (Avian omnivore)	1900	mg/kg		
Inorganic Compound	Manganese	MN	SOIL	Deer mouse (Mammalian omnivore)	1400	mg/kg		
Inorganic Compound	Manganese	MN	SOIL	Desert cottontail (Mammalian herbivore)	2000	mg/kg		
Inorganic Compound	Manganese	MN	SOIL	Earthworm (Soil-dwelling invertebrate)	450	mg/kg		
Inorganic Compound	Manganese	MN	SOIL	Generic plant (Terrestrial autotroph - producer)	220	mg/kg	FINAL	
Inorganic Compound	Manganese	MN	SOIL	Montane shrew (Mammalian insectivore)	1500	mg/kg		
Inorganic Compound	Manganese	MN	SOIL	Red fox (Mammalian top carnivore)	41000	mg/kg		
Inorganic Compound	Manganese	MN	WATER	American kestrel (water)	4800000	µg/L		
Inorganic Compound	Manganese	MN	WATER	American robin (water)	4100000	µg/L		
Inorganic Compound	Manganese	MN	WATER	Aquatic community organisms - water	80	µg/L	FINAL	
Inorganic Compound	Manganese	MN	WATER	Deer mouse (water)	230000	µg/L		
Inorganic Compound	Manganese	MN	WATER	Desert cottontail (water)	450000	µg/L		
Inorganic Compound	Manganese	MN	WATER	Montane shrew (water)	190000	µg/L		
Inorganic Compound	Manganese	MN	WATER	Occult little brown myotis bat (water)	270000	µg/L		
Inorganic Compound	Manganese	MN	WATER	Red fox (water)	510000	µg/L		
Inorganic Compound	Manganese	MN	WATER	Violet-green Swallow (water)	2400000	µg/L		
Inorganic Compound	Mercury (inorganic)	HGI	SEDIMENT	Aquatic community organisms - sediment	0.13	mg/kg		
Inorganic Compound	Mercury (inorganic)	HGI	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	2.2	mg/kg		
Inorganic Compound	Mercury (inorganic)	HGI	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	0.018	mg/kg	FINAL	
Inorganic Compound	Mercury (inorganic)	HGI	SOIL	American kestrel (Avian intermediate carnivore)	0.082	mg/kg		
Inorganic Compound	Mercury (inorganic)	HGI	SOIL	American kestrel (Avian top carnivore)	0.28	mg/kg		
Inorganic Compound	Mercury (inorganic)	HGI	SOIL	American robin (Avian herbivore)	0.07	mg/kg		
Inorganic Compound	Mercury (inorganic)	HGI	SOIL	American robin (Avian insectivore)	0.013	mg/kg	FINAL	
Inorganic Compound	Mercury (inorganic)	HGI	SOIL	American robin (Avian omnivore)	0.022	mg/kg		
Inorganic Compound	Mercury (inorganic)	HGI	SOIL	Deer mouse (Mammalian omnivore)	3	mg/kg		
Inorganic Compound	Mercury (inorganic)	HGI	SOIL	Desert cottontail (Mammalian herbivore)	22	mg/kg		
Inorganic Compound	Mercury (inorganic)	HGI	SOIL	Earthworm (Soil-dwelling invertebrate)	0.05	mg/kg		
Inorganic Compound	Mercury (inorganic)	HGI	SOIL	Generic plant (Terrestrial autotroph - producer)	34	mg/kg		
Inorganic Compound	Mercury (inorganic)	HGI	SOIL	Montane shrew (Mammalian insectivore)	1.7	mg/kg		
Inorganic Compound	Mercury (inorganic)	HGI	SOIL	Red fox (Mammalian top carnivore)	46	mg/kg		
Inorganic Compound	Mercury (inorganic)	HGI	WATER	American kestrel (water)	150	µg/L		
Inorganic Compound	Mercury (inorganic)	HGI	WATER	American robin (water)	130	µg/L		
Inorganic Compound	Mercury (inorganic)	HGI	WATER	Aquatic community organisms - water	0.77	µg/L	FINAL	
Inorganic Compound	Mercury (inorganic)	HGI	WATER	Deer mouse (water)	7400	µg/L		
Inorganic Compound	Mercury (inorganic)	HGI	WATER	Desert cottontail (water)	14000	µg/L		
Inorganic Compound	Mercury (inorganic)	HGI	WATER	Montane shrew (water)	6300	µg/L		
Inorganic Compound	Mercury (inorganic)	HGI	WATER	Occult little brown myotis bat (water)	8800	µg/L		
Inorganic Compound	Mercury (inorganic)	HGI	WATER	Red fox (water)	16000	µg/L		
Inorganic Compound	Mercury (inorganic)	HGI	WATER	Violet-green Swallow (water)	78	µg/L		
Inorganic Compound	Mercury (methyl)	HGM	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	0.0039	mg/kg		
Inorganic Compound	Mercury (methyl)	HGM	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	0.00046	mg/kg	FINAL	
Inorganic Compound	Mercury (methyl)	HGM	SOIL	American kestrel (Avian intermediate carnivore)	0.0021	mg/kg		
Inorganic Compound	Mercury (methyl)	HGM	SOIL	American kestrel (Avian top carnivore)	0.0076	mg/kg		
Inorganic Compound	Mercury (methyl)	HGM	SOIL	American robin (Avian herbivore)	0.075	mg/kg		
Inorganic Compound	Mercury (methyl)	HGM	SOIL	American robin (Avian insectivore)	0.00035	mg/kg	FINAL	
Inorganic Compound	Mercury (methyl)	HGM	SOIL	American robin (Avian omnivore)	0.00071	mg/kg		
Inorganic Compound	Mercury (methyl)	HGM	SOIL	Deer mouse (Mammalian omnivore)	0.0063	mg/kg		
Inorganic Compound	Mercury (methyl)	HGM	SOIL	Desert cottontail (Mammalian herbivore)	2.2	mg/kg		
Inorganic Compound	Mercury (methyl)	HGM	SOIL	Earthworm (Soil-dwelling invertebrate)	2.5	mg/kg		
Inorganic Compound	Mercury (methyl)	HGM	SOIL	Montane shrew (Mammalian insectivore)	0.0031	mg/kg		
Inorganic Compound	Mercury (methyl)	HGM	SOIL	Red fox (Mammalian top carnivore)	0.084	mg/kg		
Inorganic Compound	Mercury (methyl)	HGM	WATER	American kestrel (water)	53	µg/L		
Inorganic Compound	Mercury (methyl)	HGM	WATER	American robin (water)	45	µg/L		
Inorganic Compound	Mercury (methyl)	HGM	WATER	Aquatic community organisms - water	0.0028	µg/L	FINAL	
Inorganic Compound	Mercury (methyl)	HGM	WATER	Deer mouse (water)	160	µg/L		
Inorganic Compound	Mercury (methyl)	HGM	WATER	Desert cottontail (water)	320	µg/L		
Inorganic Compound	Mercury (methyl)	HGM	WATER	Montane shrew (water)	140	µg/L		
Inorganic Compound	Mercury (methyl)	HGM	WATER	Occult little brown myotis bat (water)	200	µg/L		
Inorganic Compound	Mercury (methyl)	HGM	WATER	Red fox (water)	370	µg/L		
Inorganic Compound	Mercury (methyl)	HGM	WATER	Violet-green Swallow (water)	26	µg/L		
Inorganic Compound	Molybdenum	MO	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	27	mg/kg	FINAL	
Inorganic Compound	Molybdenum	MO	SOIL	American kestrel (Avian intermediate carnivore)	130	mg/kg		
Inorganic Compound	Molybdenum	MO	SOIL	American kestrel (Avian top carnivore)	1700	mg/kg		
Inorganic Compound	Molybdenum	MO	SOIL	American robin (Avian herbivore)	19	mg/kg		
Inorganic Compound	Molybdenum	MO	SOIL	American robin (Avian insectivore)	17	mg/kg		
Inorganic Compound	Molybdenum	MO	SOIL	American robin (Avian omnivore)	18	mg/kg		
Inorganic Compound	Molybdenum	MO	SOIL	Generic plant (Terrestrial autotroph - producer)	2	mg/kg	FINAL	
Inorganic Compound	Molybdenum	MO	WATER	Aquatic community organisms - water	230	µg/L	FINAL	
Inorganic Compound	Nickel	NI	SEDIMENT	Aquatic community organisms - sediment	39	mg/kg		
Inorganic Compound	Nickel	NI	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	13	mg/kg	FINAL	
Inorganic Compound	Nickel	NI	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	32	mg/kg		
Inorganic Compound	Nickel	NI	SOIL	American kestrel (Avian intermediate carnivore)	160	mg/kg		
Inorganic Compound	Nickel	NI	SOIL	American kestrel (Avian top carnivore)	2900	mg/kg		
Inorganic Compound	Nickel	NI	SOIL	American robin (Avian herbivore)	160	mg/kg		
Inorganic Compound	Nickel	NI	SOIL	American robin (Avian insectivore)	21	mg/kg		
Inorganic Compound	Nickel	NI	SOIL	American robin (Avian omnivore)	38	mg/kg		
Inorganic Compound	Nickel	NI	SOIL	Deer mouse (Mammalian omnivore)	20	mg/kg		
Inorganic Compound	Nickel	NI	SOIL	Desert cottontail (Mammalian herbivore)	500	mg/kg		
Inorganic Compound	Nickel	NI	SOIL	Earthworm (Soil-dwelling invertebrate)	280	mg/kg		
Inorganic Compound	Nickel	NI	SOIL	Generic plant (Terrestrial autotroph - producer)	38	mg/kg		
Inorganic Compound	Nickel	NI	SOIL	Montane shrew (Mammalian insectivore)	9.7	mg/kg	FINAL	
Inorganic Compound	Nickel	NI	SOIL	Red fox (Mammalian top carnivore)	1200	mg/kg		
Inorganic Compound	Nickel	NI	WATER	American kestrel (water)	230000	µg/L		
Inorganic Compound	Nickel	NI	WATER	American robin (water)	200000	µg/L		
Inorganic Compound	Nickel	NI	WATER	Aquatic community organisms - water	28	µg/L	FINAL	
Inorganic Compound	Nickel	NI	WATER	Deer mouse (water)	360	µg/L		
Inorganic Compound	Nickel	NI	WATER	Desert cottontail (water)	710	µg/L		
Inorganic Compound	Nickel	NI	WATER	Montane shrew (water)	300	µg/L		
Inorganic Compound	Nickel	NI	WATER	Occult little brown myotis bat (water)	430	µg/L		
Inorganic Compound	Nickel	NI	WATER	Red fox (water)	800	µg/L		
Inorganic Compound	Nickel	NI	WATER	Violet-green Swallow (water)	110000	µg/L		
Inorganic Compound	Perchlorate Ion	ClO4(-1)	WATER	American kestrel (water)	2100000	µg/L		
Inorganic Compound	Perchlorate Ion	ClO4(-1)	WATER	American robin (water)	1800000	µg/L		
Inorganic Compound	Perchlorate Ion	ClO4(-1)	WATER	Deer mouse (water)	41000	µg/L		
Inorganic Compound	Perchlorate Ion	ClO4(-1)	WATER	Desert cottontail (water)	80000	µg/L		
Inorganic Compound	Perchlorate Ion	ClO4(-1)	WATER	Montane shrew (water)	35000	µg/L	FINAL	
Inorganic Compound	Perchlorate Ion	ClO4(-1)	WATER	Occult little brown myotis bat (water)	49000	µg/L		
Inorganic Compound	Perchlorate Ion	ClO4(-1)	WATER	Red fox (water)	91000	µg/L		
Inorganic Compound	Perchlorate Ion	ClO4(-1)	WATER	Violet-green Swallow (water)	1000000	µg/L		
Inorganic Compound	Selenium	SE	SEDIMENT	Aquatic community organisms - sediment	1	mg/kg		
Inorganic Compound	Selenium	SE	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	0.9	mg/kg	FINAL	
Inorganic Compound	Selenium	SE	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	1	mg/kg		
Inorganic Compound	Selenium	SE	SOIL	American kestrel (Avian intermediate carnivore)	5.6	mg/kg		
Inorganic Compound	Selenium	SE	SOIL	American kestrel (Avian top carnivore)	97	mg/kg		
Inorganic Compound	Selenium	SE	SOIL	American robin (Avian herbivore)	1	mg/kg		
Inorganic Compound	Selenium	SE	SOIL	American robin (Avian insectivore)	0.75	mg/kg		
Inorganic Compound	Selenium	SE	SOIL	American robin (Avian omnivore)	0.87	mg/kg		
Inorganic Compound	Selenium	SE	SOIL	Deer mouse (Mammalian omnivore)	0.83	mg/kg		
Inorganic Compound	Selenium	SE	SOIL	Desert cottontail (Mammalian herbivore)	2.1	mg/kg		
Inorganic Compound	Selenium	SE	SOIL	Earthworm (Soil-dwelling invertebrate)	4.1	mg/kg		
Inorganic Compound	Selenium	SE	SOIL	Generic plant (Terrestrial autotroph - producer)	0.52	mg/kg	FINAL	
Inorganic Compound	Selenium	SE	SOIL	Montane shrew (Mammalian insectivore)	0.66	mg/kg		
Inorganic Compound	Selenium	SE	SOIL	Red fox (Mammalian top carnivore)	84	mg/kg		
Inorganic Compound	Selenium	SE	WATER	American kestrel (water)	3600	µg/L		
Inorganic Compound	Selenium	SE	WATER	American robin (water)	3100	µg/L		
Inorganic Compound	Selenium	SE	WATER	Aquatic community organisms - water	5	µg/L	FINAL	
Inorganic Compound	Selenium	SE	WATER	Deer mouse (water)	1000	µg/L		
Inorganic Compound	Selenium	SE	WATER	Desert cottontail (water)	2000	µg/L		
Inorganic Compound	Selenium	SE	WATER	Montane shrew (water)	890	µg/L		
Inorganic Compound	Selenium	SE	WATER	Occult little brown myotis bat (water)	1200	µg/L		
Inorganic Compound	Selenium	SE	WATER	Red fox (water)	2300	µg/L		
Inorganic Compound	Selenium	SE	WATER	Violet-green Swallow (water)	1800	µg/L		
Inorganic Compound	Silver	AG	SEDIMENT	Aquatic community organisms - sediment	1	mg/kg	FINAL	
Inorganic Compound	Silver	AG	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	18	mg/kg		
Inorganic Compound	Silver	AG	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	3.6	mg/kg		
Inorganic Compound	Silver	AG	SOIL	American kestrel (Avian intermediate carnivore)	19	mg/kg		
Inorganic Compound	Silver	AG	SOIL	American kestrel (Avian top carnivore)	840	mg/kg		
Inorganic Compound	Silver	AG	SOIL	American robin (Avian herbivore)	11	mg/kg		
Inorganic Compound	Silver	AG	SOIL	American robin (Avian insectivore)	2.6	mg/kg	FINAL	
Inorganic Compound	Silver	AG	SOIL	American robin (Avian omnivore)	4.3	mg/kg		
Inorganic Compound	Silver	AG	SOIL	Deer mouse (Mammalian omnivore)	24	mg/kg		
Inorganic Compound	Silver	AG	SOIL	Desert cottontail (Mammalian herbivore)	150	mg/kg		
Inorganic Compound	Silver	AG	SOIL	Generic plant (Terrestrial autotroph - producer)	560	mg/kg		
Inorganic Compound	Silver	AG	SOIL	Montane shrew (Mammalian insectivore)	14	mg/kg		
Inorganic Compound	Silver	AG	SOIL	Red fox (Mammalian top carnivore)	4100	mg/kg		
Inorganic Compound	Silver	AG	WATER	American kestrel (water)	45000	µg/L		
Inorganic Compound	Silver	AG	WATER	American robin (water)	38000	µg/L		
Inorganic Compound	Silver	AG	WATER	Aquatic community organisms - water	0.36	µg/L	FINAL	
Inorganic Compound	Silver	AG	WATER	Deer mouse (water)	100000	µg/L		
Inorganic Compound	Silver	AG	WATER	Desert cottontail (water)	190000	µg/L		
Inorganic Compound	Silver	AG	WATER	Montane shrew (water)	85000	µg/L		
Inorganic Compound	Silver	AG	WATER	Occult little brown myotis bat (water)	110000	µg/L		
Inorganic Compound	Silver	AG	WATER	Red fox (water)	220000	µg/L		
Inorganic Compound	Silver	AG	WATER	Violet-green Swallow (water)	22000	µg/L		
Inorganic Compound	Strontium (stable)	SR	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	1700	mg/kg	FINAL	
Inorganic Compound	Strontium (stable)	SR	SOIL	Deer mouse (Mammalian omnivore)	96	mg/kg	FINAL	
Inorganic Compound	Strontium (stable)	SR	SOIL	Desert cottontail (Mammalian herbivore)	110	mg/kg		
Inorganic Compound	Strontium (stable)	SR	SOIL	Montane shrew (Mammalian insectivore)	660	mg/kg		
Inorganic Compound	Strontium (stable)	SR	SOIL	Red fox (Mammalian top carnivore)	19000	mg/kg		
Inorganic Compound	Strontium (stable)	SR	WATER	Aquatic community organisms - water	620	µg/L	FINAL	
Inorganic Compound	Strontium (stable)	SR	WATER	Deer mouse (water)	130000	µg/L		
Inorganic Compound	Strontium (stable)	SR	WATER	Desert cottontail (water)	250000	µg/L		
Inorganic Compound	Strontium (stable)	SR	WATER	Montane shrew (water)	110000	µg/L		
Inorganic Compound	Strontium (stable)	SR	WATER	Occult little brown myotis bat (water)	150000	µg/L		
Inorganic Compound	Strontium (stable)	SR	WATER	Red fox (water)	290000	µg/L		
Inorganic Compound	Thallium	TL	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	0.044	mg/kg	FINAL	
Inorganic Compound	Thallium	TL	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	1.3	mg/kg		
Inorganic Compound	Thallium	TL	SOIL	American kestrel (Avian intermediate carnivore)	6.6	mg/kg		
Inorganic Compound	Thallium	TL	SOIL	American kestrel (Avian top carnivore)	75	mg/kg		
Inorganic Compound	Thallium	TL	SOIL	American robin (Avian herbivore)	9.2	mg/kg		
Inorganic Compound	Thallium	TL	SOIL	American robin (Avian insectivore)	0.9	mg/kg		
Inorganic Compound	Thallium	TL	SOIL	American robin (Avian omnivore)	1.6	mg/kg		
Inorganic Compound	Thallium	TL	SOIL	Deer mouse (Mammalian omnivore)	0.068	mg/kg		
Inorganic Compound	Thallium	TL	SOIL	Desert cottontail (Mammalian herbivore)	2.8	mg/kg		
Inorganic Compound	Thallium	TL	SOIL	Generic plant (Terrestrial autotroph - producer)	0.1	mg/kg		
Inorganic Compound	Thallium	TL	SOIL	Montane shrew (Mammalian insectivore)	0.032	mg/kg	FINAL	
Inorganic Compound	Thallium	TL	SOIL	Red fox (Mammalian top carnivore)	2.8	mg/kg		
Inorganic Compound	Thallium	TL	WATER	American kestrel (water)	2900	µg/L		
Inorganic Compound	Thallium	TL	WATER	American robin (water)	2500	µg/L		
Inorganic Compound	Thallium	TL	WATER	Aquatic community organisms - water	18	µg/L	FINAL	
Inorganic Compound	Thallium	TL	WATER	Deer mouse (water)	37	µg/L		
Inorganic Compound	Thallium	TL	WATER	Desert cottontail (water)	73	µg/L		
Inorganic Compound	Thallium	TL	WATER	Montane shrew (water)	31	µg/L		
Inorganic Compound	Thallium	TL	WATER	Occult little brown myotis bat (water)	44	µg/L		
Inorganic Compound	Thallium	TL	WATER	Red fox (water)	82	µg/L		
Inorganic Compound	Thallium	TL	WATER	Violet-green Swallow (water)	1400	µg/L		
Inorganic Compound	Titanium	TI	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	98	mg/kg	FINAL	
Inorganic Compound	Titanium	TI	SOIL	Deer mouse (Mammalian omnivore)	150	mg/kg		
Inorganic Compound	Titanium	TI	SOIL	Desert cottontail (Mammalian herbivore)	5900	mg/kg		
Inorganic Compound	Titanium	TI	SOIL	Montane shrew (Mammalian insectivore)	72	mg/kg	FINAL	
Inorganic Compound	Titanium	TI	SOIL	Red fox (Mammalian top carnivore)	7300	mg/kg		
Inorganic Compound	Titanium	TI	WATER	Deer mouse (water)	83000	µg/L		
Inorganic Compound	Titanium	TI	WATER	Desert cottontail (water)	160000	µg/L		
Inorganic Compound	Titanium	TI	WATER	Montane shrew (water)	70000	µg/L	FINAL	
Inorganic Compound	Titanium	TI	WATER	Occult little brown myotis bat (water)	99000	µg/L		
Inorganic Compound	Titanium	TI	WATER	Red fox (water)	180000	µg/L		
Inorganic Compound	Uranium	U	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	1100	mg/kg	FINAL	
Inorganic Compound	Uranium	U	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	8800	mg/kg		
Inorganic Compound	Uranium	U	SOIL	American kestrel (Avian intermediate carnivore)	21000	mg/kg		
Inorganic Compound	Uranium	U	SOIL	American kestrel (Avian top carnivore)	39000	mg/kg		
Inorganic Compound	Uranium	U	SOIL	American robin (Avian herbivore)	1900	mg/kg		
Inorganic Compound	Uranium	U	SOIL	American robin (Avian insectivore)	1600	mg/kg		
Inorganic Compound	Uranium	U	SOIL	American robin (Avian omnivore)	1700	mg/kg		
Inorganic Compound	Uranium	U	SOIL	Deer mouse (Mammalian omnivore)	750	mg/kg		
Inorganic Compound	Uranium	U	SOIL	Desert cottontail (Mammalian herbivore)	2000	mg/kg		
Inorganic Compound	Uranium	U	SOIL	Generic plant (Terrestrial autotroph - producer)	25	mg/kg	FINAL	
Inorganic Compound	Uranium	U	SOIL	Montane shrew (Mammalian insectivore)	220	mg/kg		
Inorganic Compound	Uranium	U	SOIL	Red fox (Mammalian top carnivore)	4800	mg/kg		
Inorganic Compound	Uranium	U	WATER	American kestrel (water)	650000	µg/L		
Inorganic Compound	Uranium	U	WATER	American robin (water)	550000	µg/L		
Inorganic Compound	Uranium	U	WATER	Aquatic community organisms - water	1.8	µg/L	FINAL	
Inorganic Compound	Uranium	U	WATER	Deer mouse (water)	32000	µg/L		
Inorganic Compound	Uranium	U	WATER	Desert cottontail (water)	62000	µg/L		
Inorganic Compound	Uranium	U	WATER	Montane shrew (water)	27000	µg/L		
Inorganic Compound	Uranium	U	WATER	Occult little brown myotis bat (water)	38000	µg/L		
Inorganic Compound	Uranium	U	WATER	Red fox (water)	70000	µg/L		
Inorganic Compound	Uranium	U	WATER	Violet-green Swallow (water)	320000	µg/L		
Inorganic Compound	Vanadium	V	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	610	mg/kg		
Inorganic Compound	Vanadium	V	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	30	mg/kg	FINAL	
Inorganic Compound	Vanadium	V	SOIL	American kestrel (Avian intermediate carnivore)	84	mg/kg		
Inorganic Compound	Vanadium	V	SOIL	American kestrel (Avian top carnivore)	170	mg/kg		
Inorganic Compound	Vanadium	V	SOIL	American robin (Avian herbivore)	8.9	mg/kg		
Inorganic Compound	Vanadium	V	SOIL	American robin (Avian insectivore)	6.7	mg/kg		
Inorganic Compound	Vanadium	V	SOIL	American robin (Avian omnivore)	7.6	mg/kg		
Inorganic Compound	Vanadium	V	SOIL	Deer mouse (Mammalian omnivore)	480	mg/kg		
Inorganic Compound	Vanadium	V	SOIL	Desert cottontail (Mammalian herbivore)	1500	mg/kg		
Inorganic Compound	Vanadium	V	SOIL	Generic plant (Terrestrial autotroph - producer)	0.025	mg/kg	FINAL	
Inorganic Compound	Vanadium	V	SOIL	Montane shrew (Mammalian insectivore)	140	mg/kg		
Inorganic Compound	Vanadium	V	SOIL	Red fox (Mammalian top carnivore)	3300	mg/kg		
Inorganic Compound	Vanadium	V	WATER	American kestrel (water)	9100	µg/L		
Inorganic Compound	Vanadium	V	WATER	American robin (water)	7800	µg/L		
Inorganic Compound	Vanadium	V	WATER	Aquatic community organisms - water	19	µg/L	FINAL	
Inorganic Compound	Vanadium	V	WATER	Deer mouse (water)	11000	µg/L		
Inorganic Compound	Vanadium	V	WATER	Desert cottontail (water)	21000	µg/L		
Inorganic Compound	Vanadium	V	WATER	Montane shrew (water)	9400	µg/L		
Inorganic Compound	Vanadium	V	WATER	Occult little brown myotis bat (water)	13000	µg/L		
Inorganic Compound	Vanadium	V	WATER	Red fox (water)	24000	µg/L		
Inorganic Compound	Vanadium	V	WATER	Violet-green Swallow (water)	4500	µg/L		
Inorganic Compound	Zinc	ZN	SEDIMENT	Aquatic community organisms - sediment	150	mg/kg		
Inorganic Compound	Zinc	ZN	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	120	mg/kg		
Inorganic Compound	Zinc	ZN	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	65	mg/kg	FINAL	
Inorganic Compound	Zinc	ZN	SOIL	American kestrel (Avian intermediate carnivore)	320	mg/kg		
Inorganic Compound	Zinc	ZN	SOIL	American kestrel (Avian top carnivore)	2400	mg/kg		
Inorganic Compound	Zinc	ZN	SOIL	American robin (Avian herbivore)	350	mg/kg		
Inorganic Compound	Zinc	ZN	SOIL	American robin (Avian insectivore)	48	mg/kg	FINAL	
Inorganic Compound	Zinc	ZN	SOIL	American robin (Avian omnivore)	85	mg/kg		
Inorganic Compound	Zinc	ZN	SOIL	Deer mouse (Mammalian omnivore)	170	mg/kg		
Inorganic Compound	Zinc	ZN	SOIL	Desert cottontail (Mammalian herbivore)	1800	mg/kg		
Inorganic Compound	Zinc	ZN	SOIL	Earthworm (Soil-dwelling invertebrate)	120	mg/kg		
Inorganic Compound	Zinc	ZN	SOIL	Generic plant (Terrestrial autotroph - producer)	160	mg/kg		
Inorganic Compound	Zinc	ZN	SOIL	Montane shrew (Mammalian insectivore)	98	mg/kg		
Inorganic Compound	Zinc	ZN	SOIL	Red fox (Mammalian top carnivore)	6000	mg/kg		
Inorganic Compound	Zinc	ZN	WATER	American kestrel (water)	1000000	µg/L		
Inorganic Compound	Zinc	ZN	WATER	American robin (water)	850000	µg/L		
Inorganic Compound	Zinc	ZN	WATER	Aquatic community organisms - water	66	µg/L	FINAL	
Inorganic Compound	Zinc	ZN	WATER	Deer mouse (water)	660000	µg/L		
Inorganic Compound	Zinc	ZN	WATER	Desert cottontail (water)	1200000	µg/L		
Inorganic Compound	Zinc	ZN	WATER	Montane shrew (water)	560000	µg/L		
Inorganic Compound	Zinc	ZN	WATER	Occult little brown myotis bat (water)	790000	µg/L		
Inorganic Compound	Zinc	ZN	WATER	Red fox (water)	1400000	µg/L		
Inorganic Compound	Zinc	ZN	WATER	Violet-green Swallow (water)	490000	µg/L		
Organic Compound	BHC[alpha-]	319-84-6	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	73	mg/kg	FINAL	
Organic Compound	BHC[alpha-]	319-84-6	SOIL	Deer mouse (Mammalian omnivore)	100	mg/kg		
Organic Compound	BHC[alpha-]	319-84-6	SOIL	Desert cottontail (Mammalian herbivore)	750	mg/kg		
Organic Compound	BHC[alpha-]	319-84-6	SOIL	Montane shrew (Mammalian insectivore)	58	mg/kg	FINAL	
Organic Compound	BHC[alpha-]	319-84-6	SOIL	Red fox (Mammalian top carnivore)	2400	mg/kg		
Organic Compound	Carbon Disulfide	75-15-0	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	1.5	mg/kg	FINAL	
Organic Compound	Carbon Disulfide	75-15-0	SOIL	Deer mouse (Mammalian omnivore)	0.82	mg/kg	FINAL	
Organic Compound	Carbon Disulfide	75-15-0	SOIL	Desert cottontail (Mammalian herbivore)	1.3	mg/kg		
Organic Compound	Carbon Disulfide	75-15-0	SOIL	Montane shrew (Mammalian insectivore)	1.1	mg/kg		
Organic Compound	Carbon Disulfide	75-15-0	SOIL	Red fox (Mammalian top carnivore)	190	mg/kg		
Organic Compound	Chloroaniline[4-]	106-47-8	SOIL	Earthworm (Soil-dwelling invertebrate)	1.8	mg/kg		
Organic Compound	Chloroaniline[4-]	106-47-8	SOIL	Generic plant (Terrestrial autotroph - producer)	1	mg/kg	FINAL	
Organic Compound	DDD[4,4'-]	72-54-8	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	5.1	mg/kg		
Organic Compound	DDD[4,4'-]	72-54-8	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	0.0084	mg/kg	FINAL	
Organic Compound	DDD[4,4'-]	72-54-8	SOIL	American kestrel (Avian intermediate carnivore)	0.027	mg/kg		
Organic Compound	DDD[4,4'-]	72-54-8	SOIL	American kestrel (Avian top carnivore)	0.036	mg/kg		
Organic Compound	DDD[4,4'-]	72-54-8	SOIL	American robin (Avian herbivore)	0.14	mg/kg		
Organic Compound	DDD[4,4'-]	72-54-8	SOIL	American robin (Avian insectivore)	0.0063	mg/kg	FINAL	
Organic Compound	DDD[4,4'-]	72-54-8	SOIL	American robin (Avian omnivore)	0.012	mg/kg		
Organic Compound	DDD[4,4'-]	72-54-8	SOIL	Deer mouse (Mammalian omnivore)	8	mg/kg		
Organic Compound	DDD[4,4'-]	72-54-8	SOIL	Desert cottontail (Mammalian herbivore)	260	mg/kg		
Organic Compound	DDD[4,4'-]	72-54-8	SOIL	Montane shrew (Mammalian insectivore)	4.1	mg/kg		
Organic Compound	DDD[4,4'-]	72-54-8	SOIL	Red fox (Mammalian top carnivore)	28	mg/kg		
Organic Compound	Dichlorobenzene[1,2-]	95-50-1	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	1.1	mg/kg	FINAL	
Organic Compound	Dichlorobenzene[1,2-]	95-50-1	SOIL	Deer mouse (Mammalian omnivore)	1.5	mg/kg		
Organic Compound	Dichlorobenzene[1,2-]	95-50-1	SOIL	Desert cottontail (Mammalian herbivore)	11	mg/kg		
Organic Compound	Dichlorobenzene[1,2-]	95-50-1	SOIL	Montane shrew (Mammalian insectivore)	0.92	mg/kg	FINAL	
Organic Compound	Dichlorobenzene[1,2-]	95-50-1	SOIL	Red fox (Mammalian top carnivore)	73	mg/kg		
Organic Compound	Dichlorobenzene[1,3-]	541-73-1	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	0.92	mg/kg	FINAL	
Organic Compound	Dichlorobenzene[1,3-]	541-73-1	SOIL	Deer mouse (Mammalian omnivore)	1.3	mg/kg		
Organic Compound	Dichlorobenzene[1,3-]	541-73-1	SOIL	Desert cottontail (Mammalian herbivore)	12	mg/kg		
Organic Compound	Dichlorobenzene[1,3-]	541-73-1	SOIL	Montane shrew (Mammalian insectivore)	0.73	mg/kg	FINAL	
Organic Compound	Dichlorobenzene[1,3-]	541-73-1	SOIL	Red fox (Mammalian top carnivore)	54	mg/kg		
Organic Compound	Diethyl Phthalate	84-66-2	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	4500	mg/kg	FINAL	
Organic Compound	Diethyl Phthalate	84-66-2	SOIL	Deer mouse (Mammalian omnivore)	3600	mg/kg		
Organic Compound	Diethyl Phthalate	84-66-2	SOIL	Desert cottontail (Mammalian herbivore)	8000	mg/kg		
Organic Compound	Diethyl Phthalate	84-66-2	SOIL	Generic plant (Terrestrial autotroph - producer)	100	mg/kg	FINAL	
Organic Compound	Diethyl Phthalate	84-66-2	SOIL	Montane shrew (Mammalian insectivore)	3600	mg/kg		
Organic Compound	Diethyl Phthalate	84-66-2	SOIL	Red fox (Mammalian top carnivore)	650000	mg/kg		
Organic Compound	Hexachlorobenzene	118-74-1	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	0.24	mg/kg		
Organic Compound	Hexachlorobenzene	118-74-1	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	0.1	mg/kg	FINAL	
Organic Compound	Hexachlorobenzene	118-74-1	SOIL	American kestrel (Avian intermediate carnivore)	0.56	mg/kg		
Organic Compound	Hexachlorobenzene	118-74-1	SOIL	American kestrel (Avian top carnivore)	82	mg/kg		
Organic Compound	Hexachlorobenzene	118-74-1	SOIL	American robin (Avian herbivore)	100	mg/kg		
Organic Compound	Hexachlorobenzene	118-74-1	SOIL	American robin (Avian insectivore)	0.079	mg/kg	FINAL	
Organic Compound	Hexachlorobenzene	118-74-1	SOIL	American robin (Avian omnivore)	0.15	mg/kg		
Organic Compound	Hexachlorobenzene	118-74-1	SOIL	Deer mouse (Mammalian omnivore)	0.4	mg/kg		
Organic Compound	Hexachlorobenzene	118-74-1	SOIL	Desert cottontail (Mammalian herbivore)	1400	mg/kg		
Organic Compound	Hexachlorobenzene	118-74-1	SOIL	Earthworm (Soil-dwelling invertebrate)	10	mg/kg		
Organic Compound	Hexachlorobenzene	118-74-1	SOIL	Generic plant (Terrestrial autotroph - producer)	10	mg/kg		
Organic Compound	Hexachlorobenzene	118-74-1	SOIL	Montane shrew (Mammalian insectivore)	0.2	mg/kg		
Organic Compound	Hexachlorobenzene	118-74-1	SOIL	Red fox (Mammalian top carnivore)	250	mg/kg		
Organic Compound	Hexanone[2-]	591-78-6	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	0.48	mg/kg	FINAL	
Organic Compound	Hexanone[2-]	591-78-6	SOIL	American kestrel (Avian intermediate carnivore)	2.6	mg/kg		
Organic Compound	Hexanone[2-]	591-78-6	SOIL	American kestrel (Avian top carnivore)	500	mg/kg		
Organic Compound	Hexanone[2-]	591-78-6	SOIL	American robin (Avian herbivore)	0.47	mg/kg		
Organic Compound	Hexanone[2-]	591-78-6	SOIL	American robin (Avian insectivore)	0.36	mg/kg	FINAL	
Organic Compound	Hexanone[2-]	591-78-6	SOIL	American robin (Avian omnivore)	0.41	mg/kg		
Organic Compound	Methyl-2-pentanone[4-]	108-10-1	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	19	mg/kg	FINAL	
Organic Compound	Methyl-2-pentanone[4-]	108-10-1	SOIL	Deer mouse (Mammalian omnivore)	9.8	mg/kg	FINAL	
Organic Compound	Methyl-2-pentanone[4-]	108-10-1	SOIL	Desert cottontail (Mammalian herbivore)	15	mg/kg		
Organic Compound	Methyl-2-pentanone[4-]	108-10-1	SOIL	Montane shrew (Mammalian insectivore)	15	mg/kg		
Organic Compound	Methyl-2-pentanone[4-]	108-10-1	SOIL	Red fox (Mammalian top carnivore)	6600	mg/kg		
Organic Compound	Methylphenol[2-]	95-48-7	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	1900	mg/kg	FINAL	
Organic Compound	Methylphenol[2-]	95-48-7	SOIL	Deer mouse (Mammalian omnivore)	590	mg/kg	FINAL	
Organic Compound	Methylphenol[2-]	95-48-7	SOIL	Desert cottontail (Mammalian herbivore)	800	mg/kg		
Organic Compound	Methylphenol[2-]	95-48-7	SOIL	Montane shrew (Mammalian insectivore)	1300	mg/kg		
Organic Compound	Methylphenol[2-]	95-48-7	SOIL	Red fox (Mammalian top carnivore)	170000	mg/kg		
Organic Compound	Styrene	100-42-5	SOIL	Earthworm (Soil-dwelling invertebrate)	1.2	mg/kg	FINAL	
Organic Compound	Styrene	100-42-5	SOIL	Generic plant (Terrestrial autotroph - producer)	300	mg/kg		
Organic Compound	Vinyl Chloride	75-01-4	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	0.15	mg/kg	FINAL	
Organic Compound	Vinyl Chloride	75-01-4	SOIL	Deer mouse (Mammalian omnivore)	0.13	mg/kg		
Organic Compound	Vinyl Chloride	75-01-4	SOIL	Desert cottontail (Mammalian herbivore)	0.31	mg/kg		
Organic Compound	Vinyl Chloride	75-01-4	SOIL	Montane shrew (Mammalian insectivore)	0.12	mg/kg	FINAL	
Organic Compound	Vinyl Chloride	75-01-4	SOIL	Red fox (Mammalian top carnivore)	130	mg/kg		
Pesticide	Aldrin	309-00-2	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	0.046	mg/kg	FINAL	
Pesticide	Aldrin	309-00-2	SOIL	Deer mouse (Mammalian omnivore)	0.075	mg/kg		
Pesticide	Aldrin	309-00-2	SOIL	Desert cottontail (Mammalian herbivore)	13	mg/kg		
Pesticide	Aldrin	309-00-2	SOIL	Generic plant (Terrestrial autotroph - producer)	0.5	mg/kg		
Pesticide	Aldrin	309-00-2	SOIL	Montane shrew (Mammalian insectivore)	0.037	mg/kg	FINAL	
Pesticide	Aldrin	309-00-2	SOIL	Red fox (Mammalian top carnivore)	0.16	mg/kg		
Pesticide	BHC[beta-]	319-85-7	SEDIMENT	Aquatic community organisms - sediment	0.14	mg/kg	FINAL	
Pesticide	BHC[beta-]	319-85-7	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	0.33	mg/kg		
Pesticide	BHC[beta-]	319-85-7	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	19	mg/kg		
Pesticide	BHC[beta-]	319-85-7	SOIL	American kestrel (Avian intermediate carnivore)	96	mg/kg		
Pesticide	BHC[beta-]	319-85-7	SOIL	American kestrel (Avian top carnivore)	650	mg/kg		
Pesticide	BHC[beta-]	319-85-7	SOIL	American robin (Avian herbivore)	80	mg/kg		
Pesticide	BHC[beta-]	319-85-7	SOIL	American robin (Avian insectivore)	14	mg/kg		
Pesticide	BHC[beta-]	319-85-7	SOIL	American robin (Avian omnivore)	24	mg/kg		
Pesticide	BHC[beta-]	319-85-7	SOIL	Deer mouse (Mammalian omnivore)	0.46	mg/kg		
Pesticide	BHC[beta-]	319-85-7	SOIL	Desert cottontail (Mammalian herbivore)	3.4	mg/kg		
Pesticide	BHC[beta-]	319-85-7	SOIL	Montane shrew (Mammalian insectivore)	0.27	mg/kg	FINAL	
Pesticide	BHC[beta-]	319-85-7	SOIL	Red fox (Mammalian top carnivore)	15	mg/kg		
Pesticide	BHC[beta-]	319-85-7	WATER	American kestrel (water)	310000	µg/L		
Pesticide	BHC[beta-]	319-85-7	WATER	American robin (water)	270000	µg/L		
Pesticide	BHC[beta-]	319-85-7	WATER	Aquatic community organisms - water	2.4	µg/L	FINAL	
Pesticide	BHC[beta-]	319-85-7	WATER	Deer mouse (water)	2100	µg/L		
Pesticide	BHC[beta-]	319-85-7	WATER	Desert cottontail (water)	4100	µg/L		
Pesticide	BHC[beta-]	319-85-7	WATER	Montane shrew (water)	1700	µg/L		
Pesticide	BHC[beta-]	319-85-7	WATER	Occult little brown myotis bat (water)	2500	µg/L		
Pesticide	BHC[beta-]	319-85-7	WATER	Red fox (water)	4600	µg/L		
Pesticide	BHC[beta-]	319-85-7	WATER	Violet-green Swallow (water)	150000	µg/L		
Pesticide	BHC[gamma-]	58-89-9	SEDIMENT	Aquatic community organisms - sediment	0.0028	mg/kg	FINAL	
Pesticide	BHC[gamma-]	58-89-9	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	0.011	mg/kg		
Pesticide	BHC[gamma-]	58-89-9	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	0.28	mg/kg		
Pesticide	BHC[gamma-]	58-89-9	SOIL	American kestrel (Avian intermediate carnivore)	1.4	mg/kg		
Pesticide	BHC[gamma-]	58-89-9	SOIL	American kestrel (Avian top carnivore)	10	mg/kg		
Pesticide	BHC[gamma-]	58-89-9	SOIL	American robin (Avian herbivore)	1.1	mg/kg		
Pesticide	BHC[gamma-]	58-89-9	SOIL	American robin (Avian insectivore)	0.21	mg/kg		
Pesticide	BHC[gamma-]	58-89-9	SOIL	American robin (Avian omnivore)	0.36	mg/kg		
Pesticide	BHC[gamma-]	58-89-9	SOIL	Deer mouse (Mammalian omnivore)	0.016	mg/kg		
Pesticide	BHC[gamma-]	58-89-9	SOIL	Desert cottontail (Mammalian herbivore)	0.12	mg/kg		
Pesticide	BHC[gamma-]	58-89-9	SOIL	Generic plant (Terrestrial autotroph - producer)	0.1	mg/kg		
Pesticide	BHC[gamma-]	58-89-9	SOIL	Montane shrew (Mammalian insectivore)	0.0094	mg/kg	FINAL	
Pesticide	BHC[gamma-]	58-89-9	SOIL	Red fox (Mammalian top carnivore)	0.56	mg/kg		
Pesticide	BHC[gamma-]	58-89-9	WATER	American kestrel (water)	4600	µg/L		
Pesticide	BHC[gamma-]	58-89-9	WATER	American robin (water)	4000	µg/L		
Pesticide	BHC[gamma-]	58-89-9	WATER	Aquatic community organisms - water	0.08	µg/L	FINAL	
Pesticide	BHC[gamma-]	58-89-9	WATER	Deer mouse (water)	73	µg/L		
Pesticide	BHC[gamma-]	58-89-9	WATER	Desert cottontail (water)	140	µg/L		
Pesticide	BHC[gamma-]	58-89-9	WATER	Montane shrew (water)	62	µg/L		
Pesticide	BHC[gamma-]	58-89-9	WATER	Occult little brown myotis bat (water)	88	µg/L		
Pesticide	BHC[gamma-]	58-89-9	WATER	Red fox (water)	160	µg/L		
Pesticide	BHC[gamma-]	58-89-9	WATER	Violet-green Swallow (water)	2300	µg/L		
Pesticide	Chlordane[alpha-]	5103-71-9	SEDIMENT	Aquatic community organisms - sediment	0.0005	mg/kg	FINAL	
Pesticide	Chlordane[alpha-]	5103-71-9	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	0.33	mg/kg		
Pesticide	Chlordane[alpha-]	5103-71-9	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	0.36	mg/kg		
Pesticide	Chlordane[alpha-]	5103-71-9	SOIL	American kestrel (Avian intermediate carnivore)	1	mg/kg		
Pesticide	Chlordane[alpha-]	5103-71-9	SOIL	American kestrel (Avian top carnivore)	1.1	mg/kg		
Pesticide	Chlordane[alpha-]	5103-71-9	SOIL	American robin (Avian herbivore)	19	mg/kg		
Pesticide	Chlordane[alpha-]	5103-71-9	SOIL	American robin (Avian insectivore)	0.28	mg/kg		
Pesticide	Chlordane[alpha-]	5103-71-9	SOIL	American robin (Avian omnivore)	0.55	mg/kg		
Pesticide	Chlordane[alpha-]	5103-71-9	SOIL	Deer mouse (Mammalian omnivore)	0.54	mg/kg		
Pesticide	Chlordane[alpha-]	5103-71-9	SOIL	Desert cottontail (Mammalian herbivore)	57	mg/kg		
Pesticide	Chlordane[alpha-]	5103-71-9	SOIL	Generic plant (Terrestrial autotroph - producer)	2.2	mg/kg		
Pesticide	Chlordane[alpha-]	5103-71-9	SOIL	Montane shrew (Mammalian insectivore)	0.27	mg/kg	FINAL	
Pesticide	Chlordane[alpha-]	5103-71-9	SOIL	Red fox (Mammalian top carnivore)	1.4	mg/kg		
Pesticide	Chlordane[alpha-]	5103-71-9	WATER	American kestrel (water)	17000	µg/L		
Pesticide	Chlordane[alpha-]	5103-71-9	WATER	American robin (water)	15000	µg/L		
Pesticide	Chlordane[alpha-]	5103-71-9	WATER	Aquatic community organisms - water	0.0043	µg/L	FINAL	
Pesticide	Chlordane[alpha-]	5103-71-9	WATER	Deer mouse (water)	6100	µg/L		
Pesticide	Chlordane[alpha-]	5103-71-9	WATER	Desert cottontail (water)	12000	µg/L		
Pesticide	Chlordane[alpha-]	5103-71-9	WATER	Montane shrew (water)	5200	µg/L		
Pesticide	Chlordane[alpha-]	5103-71-9	WATER	Occult little brown myotis bat (water)	7300	µg/L		
Pesticide	Chlordane[alpha-]	5103-71-9	WATER	Red fox (water)	13000	µg/L		
Pesticide	Chlordane[alpha-]	5103-71-9	WATER	Violet-green Swallow (water)	8800	µg/L		
Pesticide	Chlordane[gamma-]	5103-74-2	SEDIMENT	Aquatic community organisms - sediment	0.0005	mg/kg	FINAL	
Pesticide	Chlordane[gamma-]	5103-74-2	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	2.9	mg/kg		
Pesticide	Chlordane[gamma-]	5103-74-2	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	3.1	mg/kg		
Pesticide	Chlordane[gamma-]	5103-74-2	SOIL	American kestrel (Avian intermediate carnivore)	9.2	mg/kg		
Pesticide	Chlordane[gamma-]	5103-74-2	SOIL	American kestrel (Avian top carnivore)	10	mg/kg		
Pesticide	Chlordane[gamma-]	5103-74-2	SOIL	American robin (Avian herbivore)	22	mg/kg		
Pesticide	Chlordane[gamma-]	5103-74-2	SOIL	American robin (Avian insectivore)	2.3	mg/kg		
Pesticide	Chlordane[gamma-]	5103-74-2	SOIL	American robin (Avian omnivore)	4.2	mg/kg		
Pesticide	Chlordane[gamma-]	5103-74-2	SOIL	Deer mouse (Mammalian omnivore)	4.3	mg/kg		
Pesticide	Chlordane[gamma-]	5103-74-2	SOIL	Desert cottontail (Mammalian herbivore)	69	mg/kg		
Pesticide	Chlordane[gamma-]	5103-74-2	SOIL	Generic plant (Terrestrial autotroph - producer)	2.2	mg/kg	FINAL	
Pesticide	Chlordane[gamma-]	5103-74-2	SOIL	Montane shrew (Mammalian insectivore)	2.2	mg/kg	FINAL	
Pesticide	Chlordane[gamma-]	5103-74-2	SOIL	Red fox (Mammalian top carnivore)	12	mg/kg		
Pesticide	Chlordane[gamma-]	5103-74-2	WATER	American kestrel (water)	17000	µg/L		
Pesticide	Chlordane[gamma-]	5103-74-2	WATER	American robin (water)	15000	µg/L		
Pesticide	Chlordane[gamma-]	5103-74-2	WATER	Aquatic community organisms - water	0.0043	µg/L	FINAL	
Pesticide	Chlordane[gamma-]	5103-74-2	WATER	Deer mouse (water)	6100	µg/L		
Pesticide	Chlordane[gamma-]	5103-74-2	WATER	Desert cottontail (water)	12000	µg/L		
Pesticide	Chlordane[gamma-]	5103-74-2	WATER	Montane shrew (water)	5200	µg/L		
Pesticide	Chlordane[gamma-]	5103-74-2	WATER	Occult little brown myotis bat (water)	7300	µg/L		
Pesticide	Chlordane[gamma-]	5103-74-2	WATER	Red fox (water)	13000	µg/L		
Pesticide	Chlordane[gamma-]	5103-74-2	WATER	Violet-green Swallow (water)	8800	µg/L		
Pesticide	DDE[4,4'-]	72-55-9	SEDIMENT	Aquatic community organisms - sediment	0.0022	mg/kg	FINAL	
Pesticide	DDE[4,4'-]	72-55-9	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	4.6	mg/kg		
Pesticide	DDE[4,4'-]	72-55-9	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	0.14	mg/kg		
Pesticide	DDE[4,4'-]	72-55-9	SOIL	American kestrel (Avian intermediate carnivore)	0.34	mg/kg		
Pesticide	DDE[4,4'-]	72-55-9	SOIL	American kestrel (Avian top carnivore)	0.3	mg/kg		
Pesticide	DDE[4,4'-]	72-55-9	SOIL	American robin (Avian herbivore)	5.6	mg/kg		
Pesticide	DDE[4,4'-]	72-55-9	SOIL	American robin (Avian insectivore)	0.11	mg/kg	FINAL	
Pesticide	DDE[4,4'-]	72-55-9	SOIL	American robin (Avian omnivore)	0.21	mg/kg		
Pesticide	DDE[4,4'-]	72-55-9	SOIL	Deer mouse (Mammalian omnivore)	7.3	mg/kg		
Pesticide	DDE[4,4'-]	72-55-9	SOIL	Desert cottontail (Mammalian herbivore)	610	mg/kg		
Pesticide	DDE[4,4'-]	72-55-9	SOIL	Montane shrew (Mammalian insectivore)	3.7	mg/kg		
Pesticide	DDE[4,4'-]	72-55-9	SOIL	Red fox (Mammalian top carnivore)	12	mg/kg		
Pesticide	DDE[4,4'-]	72-55-9	WATER	American kestrel (water)	1000	µg/L		
Pesticide	DDE[4,4'-]	72-55-9	WATER	American robin (water)	920	µg/L		
Pesticide	DDE[4,4'-]	72-55-9	WATER	Aquatic community organisms - water	10	µg/L	FINAL	
Pesticide	DDE[4,4'-]	72-55-9	WATER	Deer mouse (water)	52000	µg/L		
Pesticide	DDE[4,4'-]	72-55-9	WATER	Desert cottontail (water)	100000	µg/L		
Pesticide	DDE[4,4'-]	72-55-9	WATER	Montane shrew (water)	44000	µg/L		
Pesticide	DDE[4,4'-]	72-55-9	WATER	Occult little brown myotis bat (water)	62000	µg/L		
Pesticide	DDE[4,4'-]	72-55-9	WATER	Red fox (water)	110000	µg/L		
Pesticide	DDE[4,4'-]	72-55-9	WATER	Violet-green Swallow (water)	530	µg/L		
Pesticide	DDT[4,4'-]	50-29-3	SEDIMENT	Aquatic community organisms - sediment	0.0015	mg/kg	FINAL	
Pesticide	DDT[4,4'-]	50-29-3	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	0.055	mg/kg		
Pesticide	DDT[4,4'-]	50-29-3	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	0.48	mg/kg		
Pesticide	DDT[4,4'-]	50-29-3	SOIL	American kestrel (Avian intermediate carnivore)	1.2	mg/kg		
Pesticide	DDT[4,4'-]	50-29-3	SOIL	American kestrel (Avian top carnivore)	1.2	mg/kg		
Pesticide	DDT[4,4'-]	50-29-3	SOIL	American robin (Avian herbivore)	28	mg/kg		
Pesticide	DDT[4,4'-]	50-29-3	SOIL	American robin (Avian insectivore)	0.36	mg/kg		
Pesticide	DDT[4,4'-]	50-29-3	SOIL	American robin (Avian omnivore)	0.72	mg/kg		
Pesticide	DDT[4,4'-]	50-29-3	SOIL	Deer mouse (Mammalian omnivore)	0.089	mg/kg		
Pesticide	DDT[4,4'-]	50-29-3	SOIL	Desert cottontail (Mammalian herbivore)	12	mg/kg		
Pesticide	DDT[4,4'-]	50-29-3	SOIL	Generic plant (Terrestrial autotroph - producer)	4.1	mg/kg		
Pesticide	DDT[4,4'-]	50-29-3	SOIL	Montane shrew (Mammalian insectivore)	0.044	mg/kg	FINAL	
Pesticide	DDT[4,4'-]	50-29-3	SOIL	Red fox (Mammalian top carnivore)	0.19	mg/kg		
Pesticide	DDT[4,4'-]	50-29-3	WATER	American kestrel (water)	2000	µg/L		
Pesticide	DDT[4,4'-]	50-29-3	WATER	American robin (water)	1700	µg/L		
Pesticide	DDT[4,4'-]	50-29-3	WATER	Aquatic community organisms - water	0.04	µg/L	FINAL	
Pesticide	DDT[4,4'-]	50-29-3	WATER	Deer mouse (water)	8400	µg/L		
Pesticide	DDT[4,4'-]	50-29-3	WATER	Desert cottontail (water)	16000	µg/L		
Pesticide	DDT[4,4'-]	50-29-3	WATER	Montane shrew (water)	7100	µg/L		
Pesticide	DDT[4,4'-]	50-29-3	WATER	Occult little brown myotis bat (water)	10000	µg/L		
Pesticide	DDT[4,4'-]	50-29-3	WATER	Red fox (water)	18000	µg/L		
Pesticide	DDT[4,4'-]	50-29-3	WATER	Violet-green Swallow (water)	990	µg/L		
Pesticide	Dieldrin	60-57-1	SEDIMENT	Aquatic community organisms - sediment	0.052	mg/kg		
Pesticide	Dieldrin	60-57-1	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	0.0056	mg/kg	FINAL	
Pesticide	Dieldrin	60-57-1	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	0.015	mg/kg		
Pesticide	Dieldrin	60-57-1	SOIL	American kestrel (Avian intermediate carnivore)	0.063	mg/kg		
Pesticide	Dieldrin	60-57-1	SOIL	American kestrel (Avian top carnivore)	0.12	mg/kg		
Pesticide	Dieldrin	60-57-1	SOIL	American robin (Avian herbivore)	0.35	mg/kg		

Pesticide	Dieldrin	60-57-1	SOIL	American robin (Avian insectivore)	0.012	mg/kg		
Pesticide	Dieldrin	60-57-1	SOIL	American robin (Avian omnivore)	0.023	mg/kg		
Pesticide	Dieldrin	60-57-1	SOIL	Deer mouse (Mammalian omnivore)	0.0088	mg/kg		
Pesticide	Dieldrin	60-57-1	SOIL	Desert cottontail (Mammalian herbivore)	0.33	mg/kg		
Pesticide	Dieldrin	60-57-1	SOIL	Generic plant (Terrestrial autotroph - producer)	10	mg/kg		
Pesticide	Dieldrin	60-57-1	SOIL	Montane shrew (Mammalian insectivore)	0.0045	mg/kg	FINAL	
Pesticide	Dieldrin	60-57-1	SOIL	Red fox (Mammalian top carnivore)	0.058	mg/kg		
Pesticide	Dieldrin	60-57-1	WATER	American kestrel (water)	640	µg/L		
Pesticide	Dieldrin	60-57-1	WATER	American robin (water)	550	µg/L		
Pesticide	Dieldrin	60-57-1	WATER	Aquatic community organisms - water	0.056	µg/L	FINAL	
Pesticide	Dieldrin	60-57-1	WATER	Deer mouse (water)	100	µg/L		
Pesticide	Dieldrin	60-57-1	WATER	Desert cottontail (water)	200	µg/L		
Pesticide	Dieldrin	60-57-1	WATER	Montane shrew (water)	89	µg/L		
Pesticide	Dieldrin	60-57-1	WATER	Occult little brown myotis bat (water)	120	µg/L		
Pesticide	Dieldrin	60-57-1	WATER	Red fox (water)	230	µg/L		
Pesticide	Dieldrin	60-57-1	WATER	Violet-green Swallow (water)	310	µg/L		
Pesticide	Endosulfan	115-29-7	SEDIMENT	Aquatic community organisms - sediment	0.006	mg/kg	FINAL	
Pesticide	Endosulfan	115-29-7	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	1.5	mg/kg		
Pesticide	Endosulfan	115-29-7	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	61	mg/kg		
Pesticide	Endosulfan	115-29-7	SOIL	American kestrel (Avian intermediate carnivore)	280	mg/kg		
Pesticide	Endosulfan	115-29-7	SOIL	American kestrel (Avian top carnivore)	1100	mg/kg		
Pesticide	Endosulfan	115-29-7	SOIL	American robin (Avian herbivore)	15	mg/kg		
Pesticide	Endosulfan	115-29-7	SOIL	American robin (Avian insectivore)	40	mg/kg		
Pesticide	Endosulfan	115-29-7	SOIL	American robin (Avian omnivore)	22	mg/kg		
Pesticide	Endosulfan	115-29-7	SOIL	Deer mouse (Mammalian omnivore)	0.64	mg/kg	FINAL	
Pesticide	Endosulfan	115-29-7	SOIL	Desert cottontail (Mammalian herbivore)	0.97	mg/kg		
Pesticide	Endosulfan	115-29-7	SOIL	Montane shrew (Mammalian insectivore)	1	mg/kg		
Pesticide	Endosulfan	115-29-7	SOIL	Red fox (Mammalian top carnivore)	35	mg/kg		
Pesticide	Endosulfan	115-29-7	WATER	American kestrel (water)	83000	µg/L		
Pesticide	Endosulfan	115-29-7	WATER	American robin (water)	71000	µg/L		
Pesticide	Endosulfan	115-29-7	WATER	Aquatic community organisms - water	0.056	µg/L	FINAL	
Pesticide	Endosulfan	115-29-7	WATER	Deer mouse (water)	780	µg/L		
Pesticide	Endosulfan	115-29-7	WATER	Desert cottontail (water)	1500	µg/L		
Pesticide	Endosulfan	115-29-7	WATER	Montane shrew (water)	670	µg/L		
Pesticide	Endosulfan	115-29-7	WATER	Occult little brown myotis bat (water)	940	µg/L		
Pesticide	Endosulfan	115-29-7	WATER	Red fox (water)	1700	µg/L		
Pesticide	Endosulfan	115-29-7	WATER	Violet-green Swallow (water)	41000	µg/L		
Pesticide	Endrin	72-20-8	SEDIMENT	Aquatic community organisms - sediment	0.02	mg/kg		
Pesticide	Endrin	72-20-8	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	0.029	mg/kg		
Pesticide	Endrin	72-20-8	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	0.0019	mg/kg	FINAL	
Pesticide	Endrin	72-20-8	SOIL	American kestrel (Avian intermediate carnivore)	0.0082	mg/kg		
Pesticide	Endrin	72-20-8	SOIL	American kestrel (Avian top carnivore)	0.02	mg/kg		
Pesticide	Endrin	72-20-8	SOIL	American robin (Avian herbivore)	0.049	mg/kg		
Pesticide	Endrin	72-20-8	SOIL	American robin (Avian insectivore)	0.0014	mg/kg	FINAL	
Pesticide	Endrin	72-20-8	SOIL	American robin (Avian omnivore)	0.0028	mg/kg		
Pesticide	Endrin	72-20-8	SOIL	Deer mouse (Mammalian omnivore)	0.046	mg/kg		
Pesticide	Endrin	72-20-8	SOIL	Desert cottontail (Mammalian herbivore)	2	mg/kg		
Pesticide	Endrin	72-20-8	SOIL	Generic plant (Terrestrial autotroph - producer)	0.0034	mg/kg		
Pesticide	Endrin	72-20-8	SOIL	Montane shrew (Mammalian insectivore)	0.023	mg/kg		
Pesticide	Endrin	72-20-8	SOIL	Red fox (Mammalian top carnivore)	0.41	mg/kg		
Pesticide	Endrin	72-20-8	WATER	American kestrel (water)	83	µg/L		
Pesticide	Endrin	72-20-8	WATER	American robin (water)	71	µg/L		
Pesticide	Endrin	72-20-8	WATER	Aquatic community organisms - water	0.036	µg/L	FINAL	
Pesticide	Endrin	72-20-8	WATER	Deer mouse (water)	480	µg/L		
Pesticide	Endrin	72-20-8	WATER	Desert cottontail (water)	940	µg/L		
Pesticide	Endrin	72-20-8	WATER	Montane shrew (water)	410	µg/L		
Pesticide	Endrin	72-20-8	WATER	Occult little brown myotis bat (water)	570	µg/L		
Pesticide	Endrin	72-20-8	WATER	Red fox (water)	1000	µg/L		
Pesticide	Endrin	72-20-8	WATER	Violet-green Swallow (water)	41	µg/L		
Pesticide	Heptachlor	76-44-8	SEDIMENT	Aquatic community organisms - sediment	0.01	mg/kg	FINAL	
Pesticide	Heptachlor	76-44-8	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	0.074	mg/kg		
Pesticide	Heptachlor	76-44-8	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	0.4	mg/kg		
Pesticide	Heptachlor	76-44-8	SOIL	American kestrel (Avian intermediate carnivore)	1.2	mg/kg		
Pesticide	Heptachlor	76-44-8	SOIL	American kestrel (Avian top carnivore)	1.3	mg/kg		
Pesticide	Heptachlor	76-44-8	SOIL	American robin (Avian herbivore)	8.6	mg/kg		
Pesticide	Heptachlor	76-44-8	SOIL	American robin (Avian insectivore)	0.3	mg/kg		
Pesticide	Heptachlor	76-44-8	SOIL	American robin (Avian omnivore)	0.59	mg/kg		
Pesticide	Heptachlor	76-44-8	SOIL	Deer mouse (Mammalian omnivore)	0.11	mg/kg		
Pesticide	Heptachlor	76-44-8	SOIL	Desert cottontail (Mammalian herbivore)	4.9	mg/kg		
Pesticide	Heptachlor	76-44-8	SOIL	Generic plant (Terrestrial autotroph - producer)	0.4	mg/kg		
Pesticide	Heptachlor	76-44-8	SOIL	Montane shrew (Mammalian insectivore)	0.059	mg/kg	FINAL	
Pesticide	Heptachlor	76-44-8	SOIL	Red fox (Mammalian top carnivore)	0.33	mg/kg		
Pesticide	Heptachlor	76-44-8	WATER	American kestrel (water)	7600	µg/L		
Pesticide	Heptachlor	76-44-8	WATER	American robin (water)	6500	µg/L		
Pesticide	Heptachlor	76-44-8	WATER	Aquatic community organisms - water	0.029	µg/L	FINAL	
Pesticide	Heptachlor	76-44-8	WATER	Deer mouse (water)	520	µg/L		
Pesticide	Heptachlor	76-44-8	WATER	Desert cottontail (water)	1000	µg/L		
Pesticide	Heptachlor	76-44-8	WATER	Montane shrew (water)	440	µg/L		
Pesticide	Heptachlor	76-44-8	WATER	Occult little brown myotis bat (water)	620	µg/L		
Pesticide	Heptachlor	76-44-8	WATER	Red fox (water)	1100	µg/L		
Pesticide	Heptachlor	76-44-8	WATER	Violet-green Swallow (water)	3800	µg/L		
Pesticide	Kepone	143-50-0	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	0.027	mg/kg	FINAL	
Pesticide	Kepone	143-50-0	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	1.7	mg/kg		
Pesticide	Kepone	143-50-0	SOIL	American kestrel (Avian intermediate carnivore)	7	mg/kg		
Pesticide	Kepone	143-50-0	SOIL	American kestrel (Avian top carnivore)	14	mg/kg		
Pesticide	Kepone	143-50-0	SOIL	American robin (Avian herbivore)	49	mg/kg		
Pesticide	Kepone	143-50-0	SOIL	American robin (Avian insectivore)	1.3	mg/kg		
Pesticide	Kepone	143-50-0	SOIL	American robin (Avian omnivore)	2.5	mg/kg		
Pesticide	Kepone	143-50-0	SOIL	Deer mouse (Mammalian omnivore)	0.043	mg/kg		
Pesticide	Kepone	143-50-0	SOIL	Desert cottontail (Mammalian herbivore)	2.1	mg/kg		
Pesticide	Kepone	143-50-0	SOIL	Montane shrew (Mammalian insectivore)	0.021	mg/kg	FINAL	
Pesticide	Kepone	143-50-0	SOIL	Red fox (Mammalian top carnivore)	0.3	mg/kg		
Pesticide	Kepone	143-50-0	WATER	American kestrel (water)	70000	µg/L		
Pesticide	Kepone	143-50-0	WATER	American robin (water)	60000	µg/L		
Pesticide	Kepone	143-50-0	WATER	Deer mouse (water)	420	µg/L		
Pesticide	Kepone	143-50-0	WATER	Desert cottontail (water)	820	µg/L		
Pesticide	Kepone	143-50-0	WATER	Montane shrew (water)	350	µg/L	FINAL	
Pesticide	Kepone	143-50-0	WATER	Occult little brown myotis bat (water)	500	µg/L		
Pesticide	Kepone	143-50-0	WATER	Red fox (water)	930	µg/L		
Pesticide	Kepone	143-50-0	WATER	Violet-green Swallow (water)	35000	µg/L		
Pesticide	Methoxychlor[4,4'-]	72-43-5	SEDIMENT	Aquatic community organisms - sediment	0.03	mg/kg	FINAL	
Pesticide	Methoxychlor[4,4'-]	72-43-5	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	6.4	mg/kg		
Pesticide	Methoxychlor[4,4'-]	72-43-5	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	24	mg/kg		
Pesticide	Methoxychlor[4,4'-]	72-43-5	SOIL	American kestrel (Avian intermediate carnivore)	100	mg/kg		
Pesticide	Methoxychlor[4,4'-]	72-43-5	SOIL	American kestrel (Avian top carnivore)	250	mg/kg		
Pesticide	Methoxychlor[4,4'-]	72-43-5	SOIL	American robin (Avian herbivore)	110	mg/kg		
Pesticide	Methoxychlor[4,4'-]	72-43-5	SOIL	American robin (Avian insectivore)	18	mg/kg		
Pesticide	Methoxychlor[4,4'-]	72-43-5	SOIL	American robin (Avian omnivore)	32	mg/kg		
Pesticide	Methoxychlor[4,4'-]	72-43-5	SOIL	Deer mouse (Mammalian omnivore)	9.1	mg/kg		
Pesticide	Methoxychlor[4,4'-]	72-43-5	SOIL	Desert cottontail (Mammalian herbivore)	80	mg/kg		
Pesticide	Methoxychlor[4,4'-]	72-43-5	SOIL	Montane shrew (Mammalian insectivore)	5	mg/kg	FINAL	
Pesticide	Methoxychlor[4,4'-]	72-43-5	SOIL	Red fox (Mammalian top carnivore)	87	mg/kg		
Pesticide	Methoxychlor[4,4'-]	72-43-5	WATER	American kestrel (water)	210000	µg/L		
Pesticide	Methoxychlor[4,4'-]	72-43-5	WATER	American robin (water)	180000	µg/L		
Pesticide	Methoxychlor[4,4'-]	72-43-5	WATER	Aquatic community organisms - water	0.03	µg/L	FINAL	
Pesticide	Methoxychlor[4,4'-]	72-43-5	WATER	Deer mouse (water)	21000	µg/L		
Pesticide	Methoxychlor[4,4'-]	72-43-5	WATER	Desert cottontail (water)	41000	µg/L		
Pesticide	Methoxychlor[4,4'-]	72-43-5	WATER	Montane shrew (water)	17000	µg/L		
Pesticide	Methoxychlor[4,4'-]	72-43-5	WATER	Occult little brown myotis bat (water)	25000	µg/L		
Pesticide	Methoxychlor[4,4'-]	72-43-5	WATER	Red fox (water)	46000	µg/L		
Pesticide	Methoxychlor[4,4'-]	72-43-5	WATER	Violet-green Swallow (water)	100000	µg/L		
Pesticide	Toxaphene (Technical Grade)	8001-35-2	SEDIMENT	Aquatic community organisms - sediment	0.00051	mg/kg	FINAL	
Pesticide	Toxaphene (Technical Grade)	8001-35-2	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	7.4	mg/kg		
Pesticide	Toxaphene (Technical Grade)	8001-35-2	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	5.5	mg/kg		
Pesticide	Toxaphene (Technical Grade)	8001-35-2	SOIL	American kestrel (Avian intermediate carnivore)	21	mg/kg		
Pesticide	Toxaphene (Technical Grade)	8001-35-2	SOIL	American kestrel (Avian top carnivore)	38	mg/kg		
Pesticide	Toxaphene (Technical Grade)	8001-35-2	SOIL	American robin (Avian herbivore)	75	mg/kg		
Pesticide	Toxaphene (Technical Grade)	8001-35-2	SOIL	American robin (Avian insectivore)	4.1	mg/kg	FINAL	
Pesticide	Toxaphene (Technical Grade)	8001-35-2	SOIL	American robin (Avian omnivore)	7.9	mg/kg		
Pesticide	Toxaphene (Technical Grade)	8001-35-2	SOIL	Deer mouse (Mammalian omnivore)	11	mg/kg		
Pesticide	Toxaphene (Technical Grade)	8001-35-2	SOIL	Desert cottontail (Mammalian herbivore)	290	mg/kg		
Pesticide	Toxaphene (Technical Grade)	8001-35-2	SOIL	Montane shrew (Mammalian insectivore)	5.9	mg/kg		
Pesticide	Toxaphene (Technical Grade)	8001-35-2	SOIL	Red fox (Mammalian top carnivore)	68	mg/kg		
Pesticide	Toxaphene (Technical Grade)	8001-35-2	WATER	American kestrel (water)	83000	µg/L		
Pesticide	Toxaphene (Technical Grade)	8001-35-2	WATER	American robin (water)	71000	µg/L		
Pesticide	Toxaphene (Technical Grade)	8001-35-2	WATER	Aquatic community organisms - water	0.0002	µg/L	FINAL	
Pesticide	Toxaphene (Technical Grade)	8001-35-2	WATER	Deer mouse (water)	42000	µg/L		
Pesticide	Toxaphene (Technical Grade)	8001-35-2	WATER	Desert cottontail (water)	82000	µg/L		
Pesticide	Toxaphene (Technical Grade)	8001-35-2	WATER	Montane shrew (water)	35000	µg/L		
Pesticide	Toxaphene (Technical Grade)	8001-35-2	WATER	Occult little brown myotis bat (water)	50000	µg/L		
Pesticide	Toxaphene (Technical Grade)	8001-35-2	WATER	Red fox (water)	93000	µg/L		
Pesticide	Toxaphene (Technical Grade)	8001-35-2	WATER	Violet-green Swallow (water)	41000	µg/L		
Polyaromatic Hydrocarbon	Acenaphthene	83-32-9	SEDIMENT	Aquatic community organisms - sediment	0.62	mg/kg	FINAL	
Polyaromatic Hydrocarbon	Acenaphthene	83-32-9	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	160	mg/kg		
Polyaromatic Hydrocarbon	Acenaphthene	83-32-9	SOIL	Deer mouse (Mammalian omnivore)	160	mg/kg		
Polyaromatic Hydrocarbon	Acenaphthene	83-32-9	SOIL	Desert cottontail (Mammalian herbivore)	490	mg/kg		
Polyaromatic Hydrocarbon	Acenaphthene	83-32-9	SOIL	Generic plant (Terrestrial autotroph - producer)	0.25	mg/kg	FINAL	
Polyaromatic Hydrocarbon	Acenaphthene	83-32-9	SOIL	Montane shrew (Mammalian insectivore)	120	mg/kg		
Polyaromatic Hydrocarbon	Acenaphthene	83-32-9	SOIL	Red fox (Mammalian top carnivore)	6200	mg/kg		
Polyaromatic Hydrocarbon	Acenaphthene	83-32-9	WATER	Aquatic community organisms - water	23	µg/L	FINAL	
Polyaromatic Hydrocarbon	Acenaphthene	83-32-9	WATER	Deer mouse (water)	360000	µg/L		
Polyaromatic Hydrocarbon	Acenaphthene	83-32-9	WATER	Desert cottontail (water)	720000	µg/L		
Polyaromatic Hydrocarbon	Acenaphthene	83-32-9	WATER	Montane shrew (water)	310000	µg/L		
Polyaromatic Hydrocarbon	Acenaphthene	83-32-9	WATER	Occult little brown myotis bat (water)	440000	µg/L		
Polyaromatic Hydrocarbon	Acenaphthene	83-32-9	WATER	Red fox (water)	810000	µg/L		
Polyaromatic Hydrocarbon	Acenaphthylene	208-96-8	SEDIMENT	Aquatic community organisms - sediment	0.044	mg/kg	FINAL	
Polyaromatic Hydrocarbon	Acenaphthylene	208-96-8	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	150	mg/kg		
Polyaromatic Hydrocarbon	Acenaphthylene	208-96-8	SOIL	Deer mouse (Mammalian omnivore)	160	mg/kg		
Polyaromatic Hydrocarbon	Acenaphthylene	208-96-8	SOIL	Desert cottontail (Mammalian herbivore)	500	mg/kg		
Polyaromatic Hydrocarbon	Acenaphthylene	208-96-8	SOIL	Montane shrew (Mammalian insectivore)	120	mg/kg	FINAL	
Polyaromatic Hydrocarbon	Acenaphthylene	208-96-8	SOIL	Red fox (Mammalian top carnivore)	5200	mg/kg		
Polyaromatic Hydrocarbon	Acenaphthylene	208-96-8	WATER	Aquatic community organisms - water	30	µg/L	FINAL	
Polyaromatic Hydrocarbon	Acenaphthylene	208-96-8	WATER	Deer mouse (water)	360000	µg/L		
Polyaromatic Hydrocarbon	Acenaphthylene	208-96-8	WATER	Desert cottontail (water)	720000	µg/L		
Polyaromatic Hydrocarbon	Acenaphthylene	208-96-8	WATER	Montane shrew (water)	310000	µg/L		
Polyaromatic Hydrocarbon	Acenaphthylene	208-96-8	WATER	Occult little brown myotis bat (water)	440000	µg/L		
Polyaromatic Hydrocarbon	Acenaphthylene	208-96-8	WATER	Red fox (water)	810000	µg/L		
Polyaromatic Hydrocarbon	Anthracene	120-12-7	SEDIMENT	Aquatic community organisms - sediment	0.00039	mg/kg	FINAL	
Polyaromatic Hydrocarbon	Anthracene	120-12-7	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	270	mg/kg		
Polyaromatic Hydrocarbon	Anthracene	120-12-7	SOIL	Deer mouse (Mammalian omnivore)	310	mg/kg		
Polyaromatic Hydrocarbon	Anthracene	120-12-7	SOIL	Desert cottontail (Mammalian herbivore)	1100	mg/kg		
Polyaromatic Hydrocarbon	Anthracene	120-12-7	SOIL	Generic plant (Terrestrial autotroph - producer)	6.8	mg/kg	FINAL	
Polyaromatic Hydrocarbon	Anthracene	120-12-7	SOIL	Montane shrew (Mammalian insectivore)	210	mg/kg		
Polyaromatic Hydrocarbon	Anthracene	120-12-7	SOIL	Red fox (Mammalian top carnivore)	5800	mg/kg		
Polyaromatic Hydrocarbon	Anthracene	120-12-7	WATER	Aquatic community organisms - water	0.0013	µg/L	FINAL	
Polyaromatic Hydrocarbon	Anthracene	120-12-7	WATER	Deer mouse (water)	520000	µg/L		
Polyaromatic Hydrocarbon	Anthracene	120-12-7	WATER	Desert cottontail (water)	1000000	µg/L		
Polyaromatic Hydrocarbon	Anthracene	120-12-7	WATER	Montane shrew (water)	440000	µg/L		
Polyaromatic Hydrocarbon	Anthracene	120-12-7	WATER	Occult little brown myotis bat (water)	620000	µg/L		
Polyaromatic Hydrocarbon	Anthracene	120-12-7	WATER	Red fox (water)	1100000	µg/L		
Polyaromatic Hydrocarbon	Benzo(a)anthracene	56-55-3	SEDIMENT	Aquatic community organisms - sediment	0.11	mg/kg	FINAL	
Polyaromatic Hydrocarbon	Benzo(a)anthracene	56-55-3	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	5.9	mg/kg		
Polyaromatic Hydrocarbon	Benzo(a)anthracene	56-55-3	SOIL	Deer mouse (Mammalian omnivore)	3.4	mg/kg		
Polyaromatic Hydrocarbon	Benzo(a)anthracene	56-55-3	SOIL	Desert cottontail (Mammalian herbivore)	6.2	mg/kg		
Polyaromatic Hydrocarbon	Benzo(a)anthracene	56-55-3	SOIL	Generic plant (Terrestrial autotroph - producer)	18	mg/kg		
Polyaromatic Hydrocarbon	Benzo(a)anthracene	56-55-3	SOIL	Montane shrew (Mammalian insectivore)	3	mg/kg	FINAL	
Polyaromatic Hydrocarbon	Benzo(a)anthracene	56-55-3	SOIL	Red fox (Mammalian top carnivore)	32	mg/kg		
Polyaromatic Hydrocarbon	Benzo(a)anthracene	56-55-3	WATER	Aquatic community organisms - water	0.027	µg/L	FINAL	
Polyaromatic Hydrocarbon	Benzo(a)anthracene	56-55-3	WATER	Deer mouse (water)	890	µg/L		
Polyaromatic Hydrocarbon	Benzo(a)anthracene	56-55-3	WATER	Desert cottontail (water)	1700	µg/L		
Polyaromatic Hydrocarbon	Benzo(a)anthracene	56-55-3	WATER	Montane shrew (water)	760	µg/L		
Polyaromatic Hydrocarbon	Benzo(a)anthracene	56-55-3	WATER	Occult little brown myotis bat (water)	1000	µg/L		
Polyaromatic Hydrocarbon	Benzo(a)anthracene	56-55-3	WATER	Red fox (water)	1900	µg/L		
Polyaromatic Hydrocarbon	Benzo(a)pyrene	50-32-8	SEDIMENT	Aquatic community organisms - sediment	0.35	mg/kg	FINAL	
Polyaromatic Hydrocarbon	Benzo(a)pyrene	50-32-8	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	83	mg/kg		
Polyaromatic Hydrocarbon	Benzo(a)pyrene	50-32-8	SOIL	Deer mouse (Mammalian omnivore)	85	mg/kg		
Polyaromatic Hydrocarbon	Benzo(a)pyrene	50-32-8	SOIL	Desert cottontail (Mammalian herbivore)	280	mg/kg		
Polyaromatic Hydrocarbon	Benzo(a)pyrene	50-32-8	SOIL	Montane shrew (Mammalian insectivore)	53	mg/kg	FINAL	
Polyaromatic Hydrocarbon	Benzo(a)pyrene	50-32-8	SOIL	Red fox (Mammalian top carnivore)	380	mg/kg		
Polyaromatic Hydrocarbon	Benzo(a)pyrene	50-32-8	WATER	Aquatic community organisms - water	0.014	µg/L	FINAL	
Polyaromatic Hydrocarbon	Benzo(a)pyrene	50-32-8	WATER	Deer mouse (water)	5200	µg/L		
Polyaromatic Hydrocarbon	Benzo(a)pyrene	50-32-8	WATER	Desert cottontail (water)	10000	µg/L		
Polyaromatic Hydrocarbon	Benzo(a)pyrene	50-32-8	WATER	Montane shrew (water)	4400	µg/L		
Polyaromatic Hydrocarbon	Benzo(a)pyrene	50-32-8	WATER	Occult little brown myotis bat (water)	6200	µg/L		
Polyaromatic Hydrocarbon	Benzo(a)pyrene	50-32-8	WATER	Red fox (water)	11000	µg/L		
Polyaromatic Hydrocarbon	Benzo(b)fluoranthene	205-99-2	SEDIMENT	Aquatic community organisms - sediment	0.24	mg/kg	FINAL	
Polyaromatic Hydrocarbon	Benzo(b)fluoranthene	205-99-2	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	59	mg/kg		
Polyaromatic Hydrocarbon	Benzo(b)fluoranthene	205-99-2	SOIL	Deer mouse (Mammalian omnivore)	52	mg/kg		
Polyaromatic Hydrocarbon	Benzo(b)fluoranthene	205-99-2	SOIL	Desert cottontail (Mammalian herbivore)	130	mg/kg		
Polyaromatic Hydrocarbon	Benzo(b)fluoranthene	205-99-2	SOIL	Generic plant (Terrestrial autotroph - producer)	18	mg/kg	FINAL	
Polyaromatic Hydrocarbon	Benzo(b)fluoranthene	205-99-2	SOIL	Montane shrew (Mammalian insectivore)	38	mg/kg		
Polyaromatic Hydrocarbon	Benzo(b)fluoranthene	205-99-2	SOIL	Red fox (Mammalian top carnivore)	250	mg/kg		
Polyaromatic Hydrocarbon	Benzo(b)fluoranthene	205-99-2	WATER	Aquatic community organisms - water	30	µg/L	FINAL	
Polyaromatic Hydrocarbon	Benzo(b)fluoranthene	205-99-2	WATER	Deer mouse (water)	21000	µg/L		
Polyaromatic Hydrocarbon	Benzo(b)fluoranthene	205-99-2	WATER	Desert cottontail (water)	41000	µg/L		
Polyaromatic Hydrocarbon	Benzo(b)fluoranthene	205-99-2	WATER	Montane shrew (water)	17000	µg/L		
Polyaromatic Hydrocarbon	Benzo(b)fluoranthene	205-99-2	WATER	Occult little brown myotis bat (water)	25000	µg/L		
Polyaromatic Hydrocarbon	Benzo(b)fluoranthene	205-99-2	WATER	Red fox (water)	46000	µg/L		
Polyaromatic Hydrocarbon	Benzo(g,h,i)perylene	191-24-2	SEDIMENT	Aquatic community organisms - sediment	0.29	mg/kg	FINAL	
Polyaromatic Hydrocarbon	Benzo(g,h,i)perylene	191-24-2	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	32	mg/kg		
Polyaromatic Hydrocarbon	Benzo(g,h,i)perylene	191-24-2	SOIL	Deer mouse (Mammalian omnivore)	47	mg/kg		
Polyaromatic Hydrocarbon	Benzo(g,h,i)perylene	191-24-2	SOIL	Desert cottontail (Mammalian herbivore)	540	mg/kg		
Polyaromatic Hydrocarbon	Benzo(g,h,i)perylene	191-24-2	SOIL	Montane shrew (Mammalian insectivore)	24	mg/kg	FINAL	
Polyaromatic Hydrocarbon	Benzo(g,h,i)perylene	191-24-2	SOIL	Red fox (Mammalian top carnivore)	94	mg/kg		
Polyaromatic Hydrocarbon	Benzo(g,h,i)perylene	191-24-2	WATER	Aquatic community organisms - water	30	µg/L	FINAL	
Polyaromatic Hydrocarbon	Benzo(g,h,i)perylene	191-24-2	WATER	Deer mouse (water)	37000	µg/L		
Polyaromatic Hydrocarbon	Benzo(g,h,i)perylene	191-24-2	WATER	Desert cottontail (water)	74000	µg/L		
Polyaromatic Hydrocarbon	Benzo(g,h,i)perylene	191-24-2	WATER	Montane shrew (water)	32000	µg/L		
Polyaromatic Hydrocarbon	Benzo(g,h,i)perylene	191-24-2	WATER	Occult little brown myotis bat (water)	45000	µg/L		
Polyaromatic Hydrocarbon	Benzo(g,h,i)perylene	191-24-2	WATER	Red fox (water)	83000	µg/L		
Polyaromatic Hydrocarbon	Benzo(k)fluoranthene	207-08-9	SEDIMENT	Aquatic community organisms - sediment	0.24	mg/kg	FINAL	
Polyaromatic Hydrocarbon	Benzo(k)fluoranthene	207-08-9	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	93	mg/kg		
Polyaromatic Hydrocarbon	Benzo(k)fluoranthene	207-08-9	SOIL	Deer mouse (Mammalian omnivore)	100	mg/kg		
Polyaromatic Hydrocarbon	Benzo(k)fluoranthene	207-08-9	SOIL	Desert cottontail (Mammalian herbivore)	350	mg/kg		
Polyaromatic Hydrocarbon	Benzo(k)fluoranthene	207-08-9	SOIL	Montane shrew (Mammalian insectivore)	62	mg/kg	FINAL	
Polyaromatic Hydrocarbon	Benzo(k)fluoranthene	207-08-9	SOIL	Red fox (Mammalian top carnivore)	400	mg/kg		
Polyaromatic Hydrocarbon	Benzo(k)fluoranthene	207-08-9	WATER	Aquatic community organisms - water	30	µg/L	FINAL	
Polyaromatic Hydrocarbon	Benzo(k)fluoranthene	207-08-9	WATER	Deer mouse (water)	37000	µg/L		
Polyaromatic Hydrocarbon	Benzo(k)fluoranthene	207-08-9	WATER	Desert cottontail (water)	74000	µg/L		
Polyaromatic Hydrocarbon	Benzo(k)fluoranthene	207-08-9	WATER	Montane shrew (water)	32000	µg/L		
Polyaromatic Hydrocarbon	Benzo(k)fluoranthene	207-08-9	WATER	Occult little brown myotis bat (water)	45000	µg/L		
Polyaromatic Hydrocarbon	Benzo(k)fluoranthene	207-08-9	WATER	Red fox (water)	83000	µg/L		
Polyaromatic Hydrocarbon	Chrysene	218-01-9	SEDIMENT	Aquatic community organisms - sediment	0.5	mg/kg	FINAL	
Polyaromatic Hydrocarbon	Chrysene	218-01-9	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	4.4	mg/kg		
Polyaromatic Hydrocarbon	Chrysene	218-01-9	SOIL	Deer mouse (Mammalian omnivore)	3.1	mg/kg		
Polyaromatic Hydrocarbon	Chrysene	218-01-9	SOIL	Desert cottontail (Mammalian herbivore)	6.5	mg/kg		
Polyaromatic Hydrocarbon	Chrysene	218-01-9	SOIL	Montane shrew (Mammalian insectivore)	2.4	mg/kg	FINAL	
Polyaromatic Hydrocarbon	Chrysene	218-01-9	SOIL	Red fox (Mammalian top carnivore)	25	mg/kg		
Polyaromatic Hydrocarbon	Chrysene	218-01-9	WATER	Aquatic community organisms - water	30	µg/L	FINAL	
Polyaromatic Hydrocarbon	Chrysene	218-01-9	WATER	Deer mouse (water)	890	µg/L		
Polyaromatic Hydrocarbon	Chrysene	218-01-9	WATER	Desert cottontail (water)	1700	µg/L		
Polyaromatic Hydrocarbon	Chrysene	218-01-9	WATER	Montane shrew (water)	760	µg/L		
Polyaromatic Hydrocarbon	Chrysene	218-01-9	WATER	Occult little brown myotis bat (water)	1000	µg/L		
Polyaromatic Hydrocarbon	Chrysene	218-01-9	WATER	Red fox (water)	1900	µg/L		
Polyaromatic Hydrocarbon	Dibenzo(a,h)anthracene	53-70-3	SEDIMENT	Aquatic community organisms - sediment	0.015	mg/kg	FINAL	
Polyaromatic Hydrocarbon	Dibenzo(a,h)anthracene	53-70-3	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	19	mg/kg		
Polyaromatic Hydrocarbon	Dibenzo(a,h)anthracene	53-70-3	SOIL	Deer mouse (Mammalian omnivore)	22	mg/kg		
Polyaromatic Hydrocarbon	Dibenzo(a,h)anthracene	53-70-3	SOIL	Desert cottontail (Mammalian herbivore)	95	mg/kg		
Polyaromatic Hydrocarbon	Dibenzo(a,h)anthracene	53-70-3	SOIL	Montane shrew (Mammalian insectivore)	12	mg/kg	FINAL	
Polyaromatic Hydrocarbon	Dibenzo(a,h)anthracene	53-70-3	SOIL	Red fox (Mammalian top carnivore)	54	mg/kg		
Polyaromatic Hydrocarbon	Dibenzo(a,h)anthracene	53-70-3	WATER	Aquatic community organisms - water	30	µg/L	FINAL	
Polyaromatic Hydrocarbon	Dibenzo(a,h)anthracene	53-70-3	WATER	Deer mouse (water)	7000	µg/L		
Polyaromatic Hydrocarbon	Dibenzo(a,h)anthracene	53-70-3	WATER	Desert cottontail (water)	13000	µg/L		
Polyaromatic Hydrocarbon	Dibenzo(a,h)anthracene	53-70-3	WATER	Montane shrew (water)	5900	µg/L		
Polyaromatic Hydrocarbon	Dibenzo(a,h)anthracene	53-70-3	WATER	Occult little brown myotis bat (water)	8300	µg/L		
Polyaromatic Hydrocarbon	Dibenzo(a,h)anthracene	53-70-3	WATER	Red fox (water)	15000	µg/L		
Polyaromatic Hydrocarbon	Fluoranthene	206-44-0	SEDIMENT	Aquatic community organisms - sediment	2.9	mg/kg	FINAL	
Polyaromatic Hydrocarbon	Fluoranthene	206-44-0	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	28	mg/kg		
Polyaromatic Hydrocarbon	Fluoranthene	206-44-0	SOIL	Deer mouse (Mammalian omnivore)	38	mg/kg		
Polyaromatic Hydrocarbon	Fluoranthene	206-44-0	SOIL	Desert cottontail (Mammalian herbivore)	260	mg/kg		
Polyaromatic Hydrocarbon	Fluoranthene	206-44-0	SOIL	Earthworm (Soil-dwelling invertebrate)	10	mg/kg	FINAL	
Polyaromatic Hydrocarbon	Fluoranthene	206-44-0	SOIL	Montane shrew (Mammalian insectivore)	22	mg/kg		
Polyaromatic Hydrocarbon	Fluoranthene	206-44-0	SOIL	Red fox (Mammalian top carnivore)	360	mg/kg		
Polyaromatic Hydrocarbon	Fluoranthene	206-44-0	WATER	Aquatic community organisms - water	6.1	µg/L	FINAL	
Polyaromatic Hydrocarbon	Fluoranthene	206-44-0	WATER	Deer mouse (water)	65000	µg/L		
Polyaromatic Hydrocarbon	Fluoranthene	206-44-0	WATER	Desert cottontail (water)	120000	µg/L		
Polyaromatic Hydrocarbon	Fluoranthene	206-44-0	WATER	Montane shrew (water)	56000	µg/L		
Polyaromatic Hydrocarbon	Fluoranthene	206-44-0	WATER	Occult little brown myotis bat (water)	78000	µg/L		
Polyaromatic Hydrocarbon	Fluoranthene	206-44-0	WATER	Red fox (water)	140000	µg/L		
Polyaromatic Hydrocarbon	Fluorene	86-73-7	SEDIMENT	Aquatic community organisms - sediment	0.54	mg/kg	FINAL	
Polyaromatic Hydrocarbon	Fluorene	86-73-7	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	320	mg/kg		
Polyaromatic Hydrocarbon	Fluorene	86-73-7	SOIL	Deer mouse (Mammalian omnivore)	340	mg/kg		
Polyaromatic Hydrocarbon	Fluorene	86-73-7	SOIL	Desert cottontail (Mammalian herbivore)	1100	mg/kg		
Polyaromatic Hydrocarbon	Fluorene	86-73-7	SOIL	Earthworm (Soil-dwelling invertebrate)	3.7	mg/kg	FINAL	
Polyaromatic Hydrocarbon	Fluorene	86-73-7	SOIL	Montane shrew (Mammalian insectivore)	250	mg/kg		
Polyaromatic Hydrocarbon	Fluorene	86-73-7	SOIL	Red fox (Mammalian top carnivore)	9300	mg/kg		
Polyaromatic Hydrocarbon	Fluorene	86-73-7	WATER	Aquatic community organisms - water	3.9	µg/L	FINAL	
Polyaromatic Hydrocarbon	Fluorene	86-73-7	WATER	Deer mouse (water)	650000	µg/L		
Polyaromatic Hydrocarbon	Fluorene	86-73-7	WATER	Desert cottontail (water)	1200000	µg/L		
Polyaromatic Hydrocarbon	Fluorene	86-73-7	WATER	Montane shrew (water)	560000	µg/L		
Polyaromatic Hydrocarbon	Fluorene	86-73-7	WATER	Occult little brown myotis bat (water)	780000	µg/L		
Polyaromatic Hydrocarbon	Fluorene	86-73-7	WATER	Red fox (water)	1400000	µg/L		
Polyaromatic Hydrocarbon	Indeno(1,2,3-cd)pyrene	193-39-5	SEDIMENT	Aquatic community organisms - sediment	0.078	mg/kg	FINAL	
Polyaromatic Hydrocarbon	Indeno(1,2,3-cd)pyrene	193-39-5	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	93	mg/kg		
Polyaromatic Hydrocarbon	Indeno(1,2,3-cd)pyrene	193-39-5	SOIL	Deer mouse (Mammalian omnivore)	110	mg/kg		
Polyaromatic Hydrocarbon	Indeno(1,2,3-cd)pyrene	193-39-5	SOIL	Desert cottontail (Mammalian herbivore)	590	mg/kg		
Polyaromatic Hydrocarbon	Indeno(1,2,3-cd)pyrene	193-39-5	SOIL	Montane shrew (Mammalian insectivore)	62	mg/kg	FINAL	
Polyaromatic Hydrocarbon	Indeno(1,2,3-cd)pyrene	193-39-5	SOIL	Red fox (Mammalian top carnivore)	270	mg/kg		
Polyaromatic Hydrocarbon	Indeno(1,2,3-cd)pyrene	193-39-5	WATER	Aquatic community organisms - water	30	µg/L	FINAL	
Polyaromatic Hydrocarbon	Indeno(1,2,3-cd)pyrene	193-39-5	WATER	Deer mouse (water)	37000	µg/L		
Polyaromatic Hydrocarbon	Indeno(1,2,3-cd)pyrene	193-39-5	WATER	Desert cottontail (water)	74000	µg/L		
Polyaromatic Hydrocarbon	Indeno(1,2,3-cd)pyrene	193-39-5	WATER	Montane shrew (water)	32000	µg/L		
Polyaromatic Hydrocarbon	Indeno(1,2,3-cd)pyrene	193-39-5	WATER	Occult little brown myotis bat (water)	45000	µg/L		
Polyaromatic Hydrocarbon	Indeno(1,2,3-cd)pyrene	193-39-5	WATER	Red fox (water)	83000	µg/L		
Polyaromatic Hydrocarbon	Methylnaphthalene[2-]	91-57-6	SEDIMENT	Aquatic community organisms - sediment	0.18	mg/kg	FINAL	
Polyaromatic Hydrocarbon	Methylnaphthalene[2-]	91-57-6	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	3.1	mg/kg		
Polyaromatic Hydrocarbon	Methylnaphthalene[2-]	91-57-6	SOIL	Deer mouse (Mammalian omnivore)	3.8	mg/kg		
Polyaromatic Hydrocarbon	Methylnaphthalene[2-]	91-57-6	SOIL	Desert cottontail (Mammalian herbivore)	16	mg/kg		
Polyaromatic Hydrocarbon	Methylnaphthalene[2-]	91-57-6	SOIL	Montane shrew (Mammalian insectivore)	2.5	mg/kg	FINAL	
Polyaromatic Hydrocarbon	Methylnaphthalene[2-]	91-57-6	SOIL	Red fox (Mammalian top carnivore)	130	mg/kg		
Polyaromatic Hydrocarbon	Methylnaphthalene[2-]	91-57-6	WATER	Aquatic community organisms - water	2	µg/L	FINAL	
Polyaromatic Hydrocarbon	Methylnaphthalene[2-]	91-57-6	WATER	Deer mouse (water)	12000	µg/L		
Polyaromatic Hydrocarbon	Methylnaphthalene[2-]	91-57-6	WATER	Desert cottontail (water)	25000	µg/L		
Polyaromatic Hydrocarbon	Methylnaphthalene[2-]	91-57-6	WATER	Montane shrew (water)	10000	µg/L		
Polyaromatic Hydrocarbon	Methylnaphthalene[2-]	91-57-6	WATER	Occult little brown myotis bat (water)	15000	µg/L		
Polyaromatic Hydrocarbon	Methylnaphthalene[2-]	91-57-6	WATER	Red fox (water)	28000	µg/L		
Polyaromatic Hydrocarbon	Naphthalene	91-20-3	SEDIMENT	Aquatic community organisms - sediment	0.47	mg/kg	FINAL	
Polyaromatic Hydrocarbon	Naphthalene	91-20-3	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	35	mg/kg		
Polyaromatic Hydrocarbon	Naphthalene	91-20-3	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	22	mg/kg		
Polyaromatic Hydrocarbon	Naphthalene	91-20-3	SOIL	American kestrel (Avian intermediate carnivore)	100	mg/kg		
Polyaromatic Hydrocarbon	Naphthalene	91-20-3	SOIL	American kestrel (Avian top carnivore)	590	mg/kg		
Polyaromatic Hydrocarbon	Naphthalene	91-20-3	SOIL	American robin (Avian herbivore)	3.4	mg/kg		
Polyaromatic Hydrocarbon	Naphthalene	91-20-3	SOIL	American robin (Avian insectivore)	16	mg/kg		
Polyaromatic Hydrocarbon	Naphthalene	91-20-3	SOIL	American robin (Avian omnivore)	5.7	mg/kg		
Polyaromatic Hydrocarbon	Naphthalene	91-20-3	SOIL	Deer mouse (Mammalian omnivore)	9.7	mg/kg		
Polyaromatic Hydrocarbon	Naphthalene	91-20-3	SOIL	Desert cottontail (Mammalian herbivore)	12	mg/kg		
Polyaromatic Hydrocarbon	Naphthalene	91-20-3	SOIL	Generic plant (Terrestrial autotroph - producer)	1	mg/kg	FINAL	
Polyaromatic Hydrocarbon	Naphthalene	91-20-3	SOIL	Montane shrew (Mammalian insectivore)	27	mg/kg		
Polyaromatic Hydrocarbon	Naphthalene	91-20-3	SOIL	Red fox (Mammalian top carnivore)	1200	mg/kg		
Polyaromatic Hydrocarbon	Naphthalene	91-20-3	WATER	American kestrel (water)	110	µg/L		
Polyaromatic Hydrocarbon	Naphthalene	91-20-3	WATER	American robin (water)	99	µg/L		
Polyaromatic Hydrocarbon	Naphthalene	91-20-3	WATER	Aquatic community organisms - water	23	µg/L	FINAL	
Polyaromatic Hydrocarbon	Naphthalene	91-20-3	WATER	Deer mouse (water)	2600	µg/L		
Polyaromatic Hydrocarbon	Naphthalene	91-20-3	WATER	Desert cottontail (water)	5100	µg/L		
Polyaromatic Hydrocarbon	Naphthalene	91-20-3	WATER	Montane shrew (water)	2200	µg/L		
Polyaromatic Hydrocarbon	Naphthalene	91-20-3	WATER	Occult little brown myotis bat (water)	3100	µg/L		
Polyaromatic Hydrocarbon	Naphthalene	91-20-3	WATER	Red fox (water)	5800	µg/L		
Polyaromatic Hydrocarbon	Naphthalene	91-20-3	WATER	Violet-green Swallow (water)	57	µg/L		
Polyaromatic Hydrocarbon	Phenanthrene	85-01-8	SEDIMENT	Aquatic community organisms - sediment	0.85	mg/kg	FINAL	
Polyaromatic Hydrocarbon	Phenanthrene	85-01-8	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	14	mg/kg		
Polyaromatic Hydrocarbon	Phenanthrene	85-01-8	SOIL	Deer mouse (Mammalian omnivore)	15	mg/kg		
Polyaromatic Hydrocarbon	Phenanthrene	85-01-8	SOIL	Desert cottontail (Mammalian herbivore)	59	mg/kg		
Polyaromatic Hydrocarbon	Phenanthrene	85-01-8	SOIL	Earthworm (Soil-dwelling invertebrate)	5.5	mg/kg	FINAL	
Polyaromatic Hydrocarbon	Phenanthrene	85-01-8	SOIL	Montane shrew (Mammalian insectivore)	10	mg/kg		
Polyaromatic Hydrocarbon	Phenanthrene	85-01-8	SOIL	Red fox (Mammalian top carnivore)	290	mg/kg		
Polyaromatic Hydrocarbon	Phenanthrene	85-01-8	WATER	Aquatic community organisms - water	6.3	µg/L	FINAL	
Polyaromatic Hydrocarbon	Phenanthrene	85-01-8	WATER	Deer mouse (water)	27000	µg/L		
Polyaromatic Hydrocarbon	Phenanthrene	85-01-8	WATER	Desert cottontail (water)	52000	µg/L		
Polyaromatic Hydrocarbon	Phenanthrene	85-01-8	WATER	Montane shrew (water)	23000	µg/L		
Polyaromatic Hydrocarbon	Phenanthrene	85-01-8	WATER	Occult little brown myotis bat (water)	32000	µg/L		
Polyaromatic Hydrocarbon	Phenanthrene	85-01-8	WATER	Red fox (water)	59000	µg/L		
Polyaromatic Hydrocarbon	Pyrene	129-00-0	SEDIMENT	Aquatic community organisms - sediment	0.57	mg/kg	FINAL	
Polyaromatic Hydrocarbon	Pyrene	129-00-0	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	29	mg/kg		
Polyaromatic Hydrocarbon	Pyrene	129-00-0	SOIL	Deer mouse (Mammalian omnivore)	32	mg/kg		
Polyaromatic Hydrocarbon	Pyrene	129-00-0	SOIL	Desert cottontail (Mammalian herbivore)	110	mg/kg		
Polyaromatic Hydrocarbon	Pyrene	129-00-0	SOIL	Earthworm (Soil-dwelling invertebrate)	10	mg/kg	FINAL	
Polyaromatic Hydrocarbon	Pyrene	129-00-0	SOIL	Montane shrew (Mammalian insectivore)	22	mg/kg		
Polyaromatic Hydrocarbon	Pyrene	129-00-0	SOIL	Red fox (Mammalian top carnivore)	360	mg/kg		
Polyaromatic Hydrocarbon	Pyrene	129-00-0	WATER	Aquatic community organisms - water	30	µg/L	FINAL	
Polyaromatic Hydrocarbon	Pyrene	129-00-0	WATER	Deer mouse (water)	39000	µg/L		
Polyaromatic Hydrocarbon	Pyrene	129-00-0	WATER	Desert cottontail (water)	77000	µg/L		
Polyaromatic Hydrocarbon	Pyrene	129-00-0	WATER	Montane shrew (water)	33000	µg/L		
Polyaromatic Hydrocarbon	Pyrene	129-00-0	WATER	Occult little brown myotis bat (water)	47000	µg/L		
Polyaromatic Hydrocarbon	Pyrene	129-00-0	WATER	Red fox (water)	87000	µg/L		
Polychlorinated Biphenyl	Aroclor-1016	12674-11-2	SEDIMENT	Aquatic community organisms - sediment	0.01	mg/kg	FINAL	
Polychlorinated Biphenyl	Aroclor-1016	12674-11-2	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	1.3	mg/kg		
Polychlorinated Biphenyl	Aroclor-1016	12674-11-2	SOIL	Deer mouse (Mammalian omnivore)	2.1	mg/kg		
Polychlorinated Biphenyl	Aroclor-1016	12674-11-2	SOIL	Desert cottontail (Mammalian herbivore)	48	mg/kg		
Polychlorinated Biphenyl	Aroclor-1016	12674-11-2	SOIL	Montane shrew (Mammalian insectivore)	1	mg/kg	FINAL	
Polychlorinated Biphenyl	Aroclor-1016	12674-11-2	SOIL	Red fox (Mammalian top carnivore)	46	mg/kg		
Polychlorinated Biphenyl	Aroclor-1016	12674-11-2	WATER	Aquatic community organisms - water	0.014	µg/L	FINAL	
Polychlorinated Biphenyl	Aroclor-1016	12674-11-2	WATER	Deer mouse (water)	180	µg/L		
Polychlorinated Biphenyl	Aroclor-1016	12674-11-2	WATER	Desert cottontail (water)	360	µg/L		
Polychlorinated Biphenyl	Aroclor-1016	12674-11-2	WATER	Montane shrew (water)	150	µg/L		
Polychlorinated Biphenyl	Aroclor-1016	12674-11-2	WATER	Occult little brown myotis bat (water)	220	µg/L		
Polychlorinated Biphenyl	Aroclor-1016	12674-11-2	WATER	Red fox (water)	400	µg/L		
Polychlorinated Biphenyl	Aroclor-1242	53469-21-9	SEDIMENT	Aquatic community organisms - sediment	0.031	mg/kg	FINAL	
Polychlorinated Biphenyl	Aroclor-1242	53469-21-9	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	0.48	mg/kg		
Polychlorinated Biphenyl	Aroclor-1242	53469-21-9	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	0.054	mg/kg		
Polychlorinated Biphenyl	Aroclor-1242	53469-21-9	SOIL	American kestrel (Avian intermediate carnivore)	0.26	mg/kg		
Polychlorinated Biphenyl	Aroclor-1242	53469-21-9	SOIL	American kestrel (Avian top carnivore)	1.4	mg/kg		
Polychlorinated Biphenyl	Aroclor-1242	53469-21-9	SOIL	American robin (Avian herbivore)	1	mg/kg		
Polychlorinated Biphenyl	Aroclor-1242	53469-21-9	SOIL	American robin (Avian insectivore)	0.041	mg/kg	FINAL	
Polychlorinated Biphenyl	Aroclor-1242	53469-21-9	SOIL	American robin (Avian omnivore)	0.079	mg/kg		
Polychlorinated Biphenyl	Aroclor-1242	53469-21-9	SOIL	Deer mouse (Mammalian omnivore)	0.76	mg/kg		
Polychlorinated Biphenyl	Aroclor-1242	53469-21-9	SOIL	Desert cottontail (Mammalian herbivore)	30	mg/kg		
Polychlorinated Biphenyl	Aroclor-1242	53469-21-9	SOIL	Montane shrew (Mammalian insectivore)	0.38	mg/kg		
Polychlorinated Biphenyl	Aroclor-1242	53469-21-9	SOIL	Red fox (Mammalian top carnivore)	16	mg/kg		
Polychlorinated Biphenyl	Aroclor-1242	53469-21-9	WATER	American kestrel (water)	830	µg/L		
Polychlorinated Biphenyl	Aroclor-1242	53469-21-9	WATER	American robin (water)	710	µg/L		
Polychlorinated Biphenyl	Aroclor-1242	53469-21-9	WATER	Aquatic community organisms - water	0.06	µg/L	FINAL	
Polychlorinated Biphenyl	Aroclor-1242	53469-21-9	WATER	Deer mouse (water)	490	µg/L		
Polychlorinated Biphenyl	Aroclor-1242	53469-21-9	WATER	Desert cottontail (water)	960	µg/L		
Polychlorinated Biphenyl	Aroclor-1242	53469-21-9	WATER	Montane shrew (water)	420	µg/L		
Polychlorinated Biphenyl	Aroclor-1242	53469-21-9	WATER	Occult little brown myotis bat (water)	590	µg/L		
Polychlorinated Biphenyl	Aroclor-1242	53469-21-9	WATER	Red fox (water)	1000	µg/L		
Polychlorinated Biphenyl	Aroclor-1242	53469-21-9	WATER	Violet-green Swallow (water)	410	µg/L		
Polychlorinated Biphenyl	Aroclor-1248	12672-29-6	SEDIMENT	Aquatic community organisms - sediment	0.031	mg/kg		
Polychlorinated Biphenyl	Aroclor-1248	12672-29-6	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	0.009	mg/kg	FINAL	
Polychlorinated Biphenyl	Aroclor-1248	12672-29-6	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	0.054	mg/kg		
Polychlorinated Biphenyl	Aroclor-1248	12672-29-6	SOIL	American kestrel (Avian intermediate carnivore)	0.2	mg/kg		
Polychlorinated Biphenyl	Aroclor-1248	12672-29-6	SOIL	American kestrel (Avian top carnivore)	0.34	mg/kg		
Polychlorinated Biphenyl	Aroclor-1248	12672-29-6	SOIL	American robin (Avian herbivore)	1	mg/kg		
Polychlorinated Biphenyl	Aroclor-1248	12672-29-6	SOIL	American robin (Avian insectivore)	0.041	mg/kg		
Polychlorinated Biphenyl	Aroclor-1248	12672-29-6	SOIL	American robin (Avian omnivore)	0.079	mg/kg		
Polychlorinated Biphenyl	Aroclor-1248	12672-29-6	SOIL	Deer mouse (Mammalian omnivore)	0.014	mg/kg		
Polychlorinated Biphenyl	Aroclor-1248	12672-29-6	SOIL	Desert cottontail (Mammalian herbivore)	0.59	mg/kg		
Polychlorinated Biphenyl	Aroclor-1248	12672-29-6	SOIL	Montane shrew (Mammalian insectivore)	0.0072	mg/kg	FINAL	
Polychlorinated Biphenyl	Aroclor-1248	12672-29-6	SOIL	Red fox (Mammalian top carnivore)	0.075	mg/kg		
Polychlorinated Biphenyl	Aroclor-1248	12672-29-6	WATER	American kestrel (water)	830	µg/L		
Polychlorinated Biphenyl	Aroclor-1248	12672-29-6	WATER	American robin (water)	710	µg/L		
Polychlorinated Biphenyl	Aroclor-1248	12672-29-6	WATER	Aquatic community organisms - water	0.01	µg/L	FINAL	
Polychlorinated Biphenyl	Aroclor-1248	12672-29-6	WATER	Deer mouse (water)	52	µg/L		
Polychlorinated Biphenyl	Aroclor-1248	12672-29-6	WATER	Desert cottontail (water)	100	µg/L		
Polychlorinated Biphenyl	Aroclor-1248	12672-29-6	WATER	Montane shrew (water)	44	µg/L		
Polychlorinated Biphenyl	Aroclor-1248	12672-29-6	WATER	Occult little brown myotis bat (water)	62	µg/L		
Polychlorinated Biphenyl	Aroclor-1248	12672-29-6	WATER	Red fox (water)	110	µg/L		
Polychlorinated Biphenyl	Aroclor-1248	12672-29-6	WATER	Violet-green Swallow (water)	410	µg/L		
Polychlorinated Biphenyl	Aroclor-1254	11097-69-1	SEDIMENT	Aquatic community organisms - sediment	0.031	mg/kg	FINAL	
Polychlorinated Biphenyl	Aroclor-1254	11097-69-1	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	0.56	mg/kg		
Polychlorinated Biphenyl	Aroclor-1254	11097-69-1	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	0.054	mg/kg		
Polychlorinated Biphenyl	Aroclor-1254	11097-69-1	SOIL	American kestrel (Avian intermediate carnivore)	0.17	mg/kg		
Polychlorinated Biphenyl	Aroclor-1254	11097-69-1	SOIL	American kestrel (Avian top carnivore)	0.22	mg/kg		
Polychlorinated Biphenyl	Aroclor-1254	11097-69-1	SOIL	American robin (Avian herbivore)	1.3	mg/kg		
Polychlorinated Biphenyl	Aroclor-1254	11097-69-1	SOIL	American robin (Avian insectivore)	0.041	mg/kg	FINAL	
Polychlorinated Biphenyl	Aroclor-1254	11097-69-1	SOIL	American robin (Avian omnivore)	0.08	mg/kg		
Polychlorinated Biphenyl	Aroclor-1254	11097-69-1	SOIL	Deer mouse (Mammalian omnivore)	0.88	mg/kg		
Polychlorinated Biphenyl	Aroclor-1254	11097-69-1	SOIL	Desert cottontail (Mammalian herbivore)	52	mg/kg		
Polychlorinated Biphenyl	Aroclor-1254	11097-69-1	SOIL	Generic plant (Terrestrial autotroph - producer)	160	mg/kg		
Polychlorinated Biphenyl	Aroclor-1254	11097-69-1	SOIL	Montane shrew (Mammalian insectivore)	0.44	mg/kg		
Polychlorinated Biphenyl	Aroclor-1254	11097-69-1	SOIL	Red fox (Mammalian top carnivore)	0.15	mg/kg		
Polychlorinated Biphenyl	Aroclor-1254	11097-69-1	WATER	American kestrel (water)	830	µg/L		
Polychlorinated Biphenyl	Aroclor-1254	11097-69-1	WATER	American robin (water)	710	µg/L		
Polychlorinated Biphenyl	Aroclor-1254	11097-69-1	WATER	Aquatic community organisms - water	0.02	µg/L	FINAL	
Polychlorinated Biphenyl	Aroclor-1254	11097-69-1	WATER	Deer mouse (water)	160	µg/L		
Polychlorinated Biphenyl	Aroclor-1254	11097-69-1	WATER	Desert cottontail (water)	310	µg/L		
Polychlorinated Biphenyl	Aroclor-1254	11097-69-1	WATER	Montane shrew (water)	130	µg/L		
Polychlorinated Biphenyl	Aroclor-1254	11097-69-1	WATER	Occult little brown myotis bat (water)	190	µg/L		
Polychlorinated Biphenyl	Aroclor-1254	11097-69-1	WATER	Red fox (water)	360	µg/L		
Polychlorinated Biphenyl	Aroclor-1254	11097-69-1	WATER	Violet-green Swallow (water)	410	µg/L		
Polychlorinated Biphenyl	Aroclor-1260	11096-82-5	SEDIMENT	Aquatic community organisms - sediment	0.031	mg/kg	FINAL	
Polychlorinated Biphenyl	Aroclor-1260	11096-82-5	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	12	mg/kg		
Polychlorinated Biphenyl	Aroclor-1260	11096-82-5	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	1.1	mg/kg		
Polychlorinated Biphenyl	Aroclor-1260	11096-82-5	SOIL	American kestrel (Avian intermediate carnivore)	3.7	mg/kg		
Polychlorinated Biphenyl	Aroclor-1260	11096-82-5	SOIL	American kestrel (Avian top carnivore)	4.6	mg/kg		
Polychlorinated Biphenyl	Aroclor-1260	11096-82-5	SOIL	American robin (Avian herbivore)	46	mg/kg		
Polychlorinated Biphenyl	Aroclor-1260	11096-82-5	SOIL	American robin (Avian insectivore)	0.88	mg/kg		
Polychlorinated Biphenyl	Aroclor-1260	11096-82-5	SOIL	American robin (Avian omnivore)	1.7	mg/kg		
Polychlorinated Biphenyl	Aroclor-1260	11096-82-5	SOIL	Deer mouse (Mammalian omnivore)	20	mg/kg		
Polychlorinated Biphenyl	Aroclor-1260	11096-82-5	SOIL	Desert cottontail (Mammalian herbivore)	3000	mg/kg		
Polychlorinated Biphenyl	Aroclor-1260	11096-82-5	SOIL	Montane shrew (Mammalian insectivore)	10	mg/kg		
Polychlorinated Biphenyl	Aroclor-1260	11096-82-5	SOIL	Red fox (Mammalian top carnivore)	0.14	mg/kg	FINAL	
Polychlorinated Biphenyl	Aroclor-1260	11096-82-5	WATER	American kestrel (water)	8900	µg/L		
Polychlorinated Biphenyl	Aroclor-1260	11096-82-5	WATER	American robin (water)	7600	µg/L		
Polychlorinated Biphenyl	Aroclor-1260	11096-82-5	WATER	Aquatic community organisms - water	10	µg/L	FINAL	
Polychlorinated Biphenyl	Aroclor-1260	11096-82-5	WATER	Deer mouse (water)	160	µg/L		
Polychlorinated Biphenyl	Aroclor-1260	11096-82-5	WATER	Desert cottontail (water)	310	µg/L		
Polychlorinated Biphenyl	Aroclor-1260	11096-82-5	WATER	Montane shrew (water)	130	µg/L		
Polychlorinated Biphenyl	Aroclor-1260	11096-82-5	WATER	Occult little brown myotis bat (water)	190	µg/L		
Polychlorinated Biphenyl	Aroclor-1260	11096-82-5	WATER	Red fox (water)	360	µg/L		
Polychlorinated Biphenyl	Aroclor-1260	11096-82-5	WATER	Violet-green Swallow (water)	4400	µg/L		
Radionuclide	Americium-241	AM-241	SEDIMENT	Algae (Aquatic autotroph - producer) - sediment	66000	pCi/g		
Radionuclide	Americium-241	AM-241	SEDIMENT	Aquatic snails (Aquatic herbivore - grazer) - sediment	66000	pCi/g		
Radionuclide	Americium-241	AM-241	SEDIMENT	Daphnids (Aquatic omnivore/ herbivore) - sediment	66000	pCi/g		
Radionuclide	Americium-241	AM-241	SEDIMENT	Fish (Aquatic intermediate carnivore) - sediment	66000	pCi/g		
Radionuclide	Americium-241	AM-241	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	260	pCi/g		
Radionuclide	Americium-241	AM-241	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	220	pCi/g	FINAL	
Radionuclide	Americium-241	AM-241	SOIL	American kestrel (Avian intermediate carnivore)	35000	pCi/g		
Radionuclide	Americium-241	AM-241	SOIL	American kestrel (Avian top carnivore)	62000	pCi/g		
Radionuclide	Americium-241	AM-241	SOIL	American robin (Avian herbivore)	13000	pCi/g		
Radionuclide	Americium-241	AM-241	SOIL	American robin (Avian insectivore)	4000	pCi/g		
Radionuclide	Americium-241	AM-241	SOIL	American robin (Avian omnivore)	4000	pCi/g		
Radionuclide	Americium-241	AM-241	SOIL	Deer mouse (Mammalian omnivore)	32000	pCi/g		
Radionuclide	Americium-241	AM-241	SOIL	Desert cottontail (Mammalian herbivore)	32000	pCi/g		
Radionuclide	Americium-241	AM-241	SOIL	Earthworm (Soil-dwelling invertebrate)	44	pCi/g	FINAL	
Radionuclide	Americium-241	AM-241	SOIL	Generic plant (Terrestrial autotroph - producer)	21000	pCi/g		
Radionuclide	Americium-241	AM-241	SOIL	Montane shrew (Mammalian insectivore)	31000	pCi/g		
Radionuclide	Americium-241	AM-241	SOIL	Red fox (Mammalian top carnivore)	26000	pCi/g		
Radionuclide	Americium-241	AM-241	WATER	Algae (Aquatic autotroph - producer) - water	5.8	pCi/L	FINAL	
Radionuclide	Americium-241	AM-241	WATER	American kestrel (water)	76000000	pCi/L		
Radionuclide	Americium-241	AM-241	WATER	American robin (water)	75000000	pCi/L		
Radionuclide	Americium-241	AM-241	WATER	Aquatic snails (Aquatic herbivore - grazer) - water	170	pCi/L		
Radionuclide	Americium-241	AM-241	WATER	Daphnids (Aquatic omnivore/ herbivore) - water	170	pCi/L		
Radionuclide	Americium-241	AM-241	WATER	Deer mouse (water)	1300000000	pCi/L		
Radionuclide	Americium-241	AM-241	WATER	Desert cottontail (water)	91000000	pCi/L		
Radionuclide	Americium-241	AM-241	WATER	Fish (Aquatic intermediate carnivore) - water	170	pCi/L		
Radionuclide	Americium-241	AM-241	WATER	Montane shrew (water)	780000000	pCi/L		
Radionuclide	Americium-241	AM-241	WATER	Occult little brown myotis bat (water)	170000000	pCi/L		
Radionuclide	Americium-241	AM-241	WATER	Red fox (water)	5700000	pCi/L		
Radionuclide	Americium-241	AM-241	WATER	Violet-green Swallow (water)	180000000	pCi/L		

Radionuclide	Cesium-134	CS-134	SEDIMENT	Algae (Aquatic autotroph - producer) - sediment	2200	pCi/g		
Radionuclide	Cesium-134	CS-134	SEDIMENT	Aquatic snails (Aquatic herbivore - grazer) - sediment	2200	pCi/g		
Radionuclide	Cesium-134	CS-134	SEDIMENT	Daphnids (Aquatic omnivore/ herbivore) - sediment	2200	pCi/g		
Radionuclide	Cesium-134	CS-134	SEDIMENT	Fish (Aquatic intermediate carnivore) - sediment	2200	pCi/g		
Radionuclide	Cesium-134	CS-134	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	1400	pCi/g		
Radionuclide	Cesium-134	CS-134	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	330	pCi/g	FINAL	
Radionuclide	Cesium-134	CS-134	SOIL	American kestrel (Avian intermediate carnivore)	1700	pCi/g		
Radionuclide	Cesium-134	CS-134	SOIL	American kestrel (Avian top carnivore)	1300	pCi/g		
Radionuclide	Cesium-134	CS-134	SOIL	American robin (Avian herbivore)	1900	pCi/g		
Radionuclide	Cesium-134	CS-134	SOIL	American robin (Avian insectivore)	1700	pCi/g		
Radionuclide	Cesium-134	CS-134	SOIL	American robin (Avian omnivore)	1700	pCi/g		
Radionuclide	Cesium-134	CS-134	SOIL	Deer mouse (Mammalian omnivore)	1100	pCi/g		
Radionuclide	Cesium-134	CS-134	SOIL	Desert cottontail (Mammalian herbivore)	1000	pCi/g		
Radionuclide	Cesium-134	CS-134	SOIL	Earthworm (Soil-dwelling invertebrate)	770	pCi/g		
Radionuclide	Cesium-134	CS-134	SOIL	Generic plant (Terrestrial autotroph - producer)	1100	pCi/g		
Radionuclide	Cesium-134	CS-134	SOIL	Montane shrew (Mammalian insectivore)	1100	pCi/g		
Radionuclide	Cesium-134	CS-134	SOIL	Red fox (Mammalian top carnivore)	320	pCi/g	FINAL	
Radionuclide	Cesium-134	CS-134	WATER	Algae (Aquatic autotroph - producer) - water	1900	pCi/L		
Radionuclide	Cesium-134	CS-134	WATER	American kestrel (water)	140000000	pCi/L		
Radionuclide	Cesium-134	CS-134	WATER	American robin (water)	140000000	pCi/L		
Radionuclide	Cesium-134	CS-134	WATER	Aquatic snails (Aquatic herbivore - grazer) - water	9400	pCi/L		
Radionuclide	Cesium-134	CS-134	WATER	Daphnids (Aquatic omnivore/ herbivore) - water	9400	pCi/L		
Radionuclide	Cesium-134	CS-134	WATER	Deer mouse (water)	330000000	pCi/L		
Radionuclide	Cesium-134	CS-134	WATER	Desert cottontail (water)	27000000	pCi/L		
Radionuclide	Cesium-134	CS-134	WATER	Fish (Aquatic intermediate carnivore) - water	470	pCi/L	FINAL	
Radionuclide	Cesium-134	CS-134	WATER	Montane shrew (water)	300000000	pCi/L		
Radionuclide	Cesium-134	CS-134	WATER	Occult little brown myotis bat (water)	990000000	pCi/L		
Radionuclide	Cesium-134	CS-134	WATER	Red fox (water)	7500000	pCi/L		
Radionuclide	Cesium-134	CS-134	WATER	Violet-green Swallow (water)	270000000	pCi/L		
Radionuclide	Cesium-137 + Barium-137	CS-137/ BA-137	SEDIMENT	Algae (Aquatic autotroph - producer) - sediment	5000	pCi/g		
Radionuclide	Cesium-137 + Barium-137	CS-137/ BA-137	SEDIMENT	Aquatic snails (Aquatic herbivore - grazer) - sediment	5000	pCi/g		
Radionuclide	Cesium-137 + Barium-137	CS-137/ BA-137	SEDIMENT	Daphnids (Aquatic omnivore/ herbivore) - sediment	5000	pCi/g		
Radionuclide	Cesium-137 + Barium-137	CS-137/ BA-137	SEDIMENT	Fish (Aquatic intermediate carnivore) - sediment	5000	pCi/g		
Radionuclide	Cesium-137 + Barium-137	CS-137/ BA-137	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	3200	pCi/g		
Radionuclide	Cesium-137 + Barium-137	CS-137/ BA-137	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	720	pCi/g	FINAL	
Radionuclide	Cesium-137 + Barium-137	CS-137/ BA-137	SOIL	American kestrel (Avian intermediate carnivore)	3700	pCi/g		
Radionuclide	Cesium-137 + Barium-137	CS-137/ BA-137	SOIL	American kestrel (Avian top carnivore)	2900	pCi/g		
Radionuclide	Cesium-137 + Barium-137	CS-137/ BA-137	SOIL	American robin (Avian herbivore)	4200	pCi/g		
Radionuclide	Cesium-137 + Barium-137	CS-137/ BA-137	SOIL	American robin (Avian insectivore)	3800	pCi/g		
Radionuclide	Cesium-137 + Barium-137	CS-137/ BA-137	SOIL	American robin (Avian omnivore)	3700	pCi/g		
Radionuclide	Cesium-137 + Barium-137	CS-137/ BA-137	SOIL	Deer mouse (Mammalian omnivore)	2400	pCi/g		
Radionuclide	Cesium-137 + Barium-137	CS-137/ BA-137	SOIL	Desert cottontail (Mammalian herbivore)	2300	pCi/g		
Radionuclide	Cesium-137 + Barium-137	CS-137/ BA-137	SOIL	Earthworm (Soil-dwelling invertebrate)	1700	pCi/g		
Radionuclide	Cesium-137 + Barium-137	CS-137/ BA-137	SOIL	Generic plant (Terrestrial autotroph - producer)	2300	pCi/g		
Radionuclide	Cesium-137 + Barium-137	CS-137/ BA-137	SOIL	Montane shrew (Mammalian insectivore)	2400	pCi/g		
Radionuclide	Cesium-137 + Barium-137	CS-137/ BA-137	SOIL	Red fox (Mammalian top carnivore)	680	pCi/g	FINAL	
Radionuclide	Cesium-137 + Barium-137	CS-137/ BA-137	WATER	Algae (Aquatic autotroph - producer) - water	4600	pCi/L		
Radionuclide	Cesium-137 + Barium-137	CS-137/ BA-137	WATER	American kestrel (water)	310000000	pCi/L		
Radionuclide	Cesium-137 + Barium-137	CS-137/ BA-137	WATER	American robin (water)	310000000	pCi/L		
Radionuclide	Cesium-137 + Barium-137	CS-137/ BA-137	WATER	Aquatic snails (Aquatic herbivore - grazer) - water	23000	pCi/L		
Radionuclide	Cesium-137 + Barium-137	CS-137/ BA-137	WATER	Daphnids (Aquatic omnivore/ herbivore) - water	23000	pCi/L		
Radionuclide	Cesium-137 + Barium-137	CS-137/ BA-137	WATER	Deer mouse (water)	730000000	pCi/L		
Radionuclide	Cesium-137 + Barium-137	CS-137/ BA-137	WATER	Desert cottontail (water)	59000000	pCi/L		
Radionuclide	Cesium-137 + Barium-137	CS-137/ BA-137	WATER	Fish (Aquatic intermediate carnivore) - water	1100	pCi/L	FINAL	
Radionuclide	Cesium-137 + Barium-137	CS-137/ BA-137	WATER	Montane shrew (water)	650000000	pCi/L		
Radionuclide	Cesium-137 + Barium-137	CS-137/ BA-137	WATER	Occult little brown myotis bat (water)	2100000000	pCi/L		
Radionuclide	Cesium-137 + Barium-137	CS-137/ BA-137	WATER	Red fox (water)	16000000	pCi/L		
Radionuclide	Cesium-137 + Barium-137	CS-137/ BA-137	WATER	Violet-green Swallow (water)	580000000	pCi/L		
Radionuclide	Cobalt-60	CO-60	SEDIMENT	Algae (Aquatic autotroph - producer) - sediment	1400	pCi/g		
Radionuclide	Cobalt-60	CO-60	SEDIMENT	Aquatic snails (Aquatic herbivore - grazer) - sediment	1400	pCi/g		
Radionuclide	Cobalt-60	CO-60	SEDIMENT	Daphnids (Aquatic omnivore/ herbivore) - sediment	1400	pCi/g		
Radionuclide	Cobalt-60	CO-60	SEDIMENT	Fish (Aquatic intermediate carnivore) - sediment	1400	pCi/g		
Radionuclide	Cobalt-60	CO-60	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	960	pCi/g		
Radionuclide	Cobalt-60	CO-60	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	210	pCi/g	FINAL	
Radionuclide	Cobalt-60	CO-60	SOIL	American kestrel (Avian intermediate carnivore)	1500	pCi/g		
Radionuclide	Cobalt-60	CO-60	SOIL	American kestrel (Avian top carnivore)	1500	pCi/g		
Radionuclide	Cobalt-60	CO-60	SOIL	American robin (Avian herbivore)	1500	pCi/g		
Radionuclide	Cobalt-60	CO-60	SOIL	American robin (Avian insectivore)	1500	pCi/g		
Radionuclide	Cobalt-60	CO-60	SOIL	American robin (Avian omnivore)	1500	pCi/g		
Radionuclide	Cobalt-60	CO-60	SOIL	Deer mouse (Mammalian omnivore)	760	pCi/g		
Radionuclide	Cobalt-60	CO-60	SOIL	Desert cottontail (Mammalian herbivore)	760	pCi/g		
Radionuclide	Cobalt-60	CO-60	SOIL	Earthworm (Soil-dwelling invertebrate)	550	pCi/g	FINAL	
Radionuclide	Cobalt-60	CO-60	SOIL	Generic plant (Terrestrial autotroph - producer)	750	pCi/g		
Radionuclide	Cobalt-60	CO-60	SOIL	Montane shrew (Mammalian insectivore)	760	pCi/g		
Radionuclide	Cobalt-60	CO-60	SOIL	Red fox (Mammalian top carnivore)	700	pCi/g		
Radionuclide	Cobalt-60	CO-60	WATER	Algae (Aquatic autotroph - producer) - water	760	pCi/L		
Radionuclide	Cobalt-60	CO-60	WATER	American kestrel (water)	1900000000	pCi/L		
Radionuclide	Cobalt-60	CO-60	WATER	American robin (water)	1800000000	pCi/L		
Radionuclide	Cobalt-60	CO-60	WATER	Aquatic snails (Aquatic herbivore - grazer) - water	380	pCi/L	FINAL	
Radionuclide	Cobalt-60	CO-60	WATER	Daphnids (Aquatic omnivore/ herbivore) - water	380	pCi/L	FINAL	
Radionuclide	Cobalt-60	CO-60	WATER	Deer mouse (water)	3900000000	pCi/L		
Radionuclide	Cobalt-60	CO-60	WATER	Desert cottontail (water)	330000000	pCi/L		
Radionuclide	Cobalt-60	CO-60	WATER	Fish (Aquatic intermediate carnivore) - water	2300	pCi/L		
Radionuclide	Cobalt-60	CO-60	WATER	Montane shrew (water)	3700000000	pCi/L		
Radionuclide	Cobalt-60	CO-60	WATER	Occult little brown myotis bat (water)	12000000000	pCi/L		
Radionuclide	Cobalt-60	CO-60	WATER	Red fox (water)	97000000	pCi/L		
Radionuclide	Cobalt-60	CO-60	WATER	Violet-green Swallow (water)	3400000000	pCi/L		
Radionuclide	Europium-152	EU-152	SEDIMENT	Algae (Aquatic autotroph - producer) - sediment	1000	pCi/g		
Radionuclide	Europium-152	EU-152	SEDIMENT	Aquatic snails (Aquatic herbivore - grazer) - sediment	1000	pCi/g		
Radionuclide	Europium-152	EU-152	SEDIMENT	Daphnids (Aquatic omnivore/ herbivore) - sediment	1000	pCi/g		
Radionuclide	Europium-152	EU-152	SEDIMENT	Fish (Aquatic intermediate carnivore) - sediment	1000	pCi/g		
Radionuclide	Europium-152	EU-152	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	74	pCi/g		
Radionuclide	Europium-152	EU-152	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	17	pCi/g	FINAL	
Radionuclide	Europium-152	EU-152	SOIL	American kestrel (Avian intermediate carnivore)	1000	pCi/g		
Radionuclide	Europium-152	EU-152	SOIL	American kestrel (Avian top carnivore)	1000	pCi/g		
Radionuclide	Europium-152	EU-152	SOIL	American robin (Avian herbivore)	1000	pCi/g		
Radionuclide	Europium-152	EU-152	SOIL	American robin (Avian insectivore)	970	pCi/g		
Radionuclide	Europium-152	EU-152	SOIL	American robin (Avian omnivore)	970	pCi/g		
Radionuclide	Europium-152	EU-152	SOIL	Deer mouse (Mammalian omnivore)	530	pCi/g		
Radionuclide	Europium-152	EU-152	SOIL	Desert cottontail (Mammalian herbivore)	530	pCi/g		
Radionuclide	Europium-152	EU-152	SOIL	Earthworm (Soil-dwelling invertebrate)	380	pCi/g	FINAL	
Radionuclide	Europium-152	EU-152	SOIL	Generic plant (Terrestrial autotroph - producer)	520	pCi/g		
Radionuclide	Europium-152	EU-152	SOIL	Montane shrew (Mammalian insectivore)	520	pCi/g		
Radionuclide	Europium-152	EU-152	SOIL	Red fox (Mammalian top carnivore)	500	pCi/g		
Radionuclide	Europium-152	EU-152	WATER	Algae (Aquatic autotroph - producer) - water	100	pCi/L	FINAL	
Radionuclide	Europium-152	EU-152	WATER	American kestrel (water)	220000000	pCi/L		
Radionuclide	Europium-152	EU-152	WATER	American robin (water)	220000000	pCi/L		
Radionuclide	Europium-152	EU-152	WATER	Aquatic snails (Aquatic herbivore - grazer) - water	170	pCi/L		
Radionuclide	Europium-152	EU-152	WATER	Daphnids (Aquatic omnivore/ herbivore) - water	170	pCi/L		
Radionuclide	Europium-152	EU-152	WATER	Deer mouse (water)	1200000000	pCi/L		
Radionuclide	Europium-152	EU-152	WATER	Desert cottontail (water)	90000000	pCi/L		
Radionuclide	Europium-152	EU-152	WATER	Fish (Aquatic intermediate carnivore) - water	1700	pCi/L		
Radionuclide	Europium-152	EU-152	WATER	Montane shrew (water)	830000000	pCi/L		
Radionuclide	Europium-152	EU-152	WATER	Occult little brown myotis bat (water)	1400000000	pCi/L		
Radionuclide	Europium-152	EU-152	WATER	Red fox (water)	12000000	pCi/L		
Radionuclide	Europium-152	EU-152	WATER	Violet-green Swallow (water)	420000000	pCi/L		
Radionuclide	Lead-210	PB-210	SEDIMENT	Algae (Aquatic autotroph - producer) - sediment	9000	pCi/g		
Radionuclide	Lead-210	PB-210	SEDIMENT	Aquatic snails (Aquatic herbivore - grazer) - sediment	9000	pCi/g		
Radionuclide	Lead-210	PB-210	SEDIMENT	Daphnids (Aquatic omnivore/ herbivore) - sediment	9000	pCi/g		
Radionuclide	Lead-210	PB-210	SEDIMENT	Fish (Aquatic intermediate carnivore) - sediment	9000	pCi/g		
Radionuclide	Lead-210	PB-210	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	2500	pCi/g		
Radionuclide	Lead-210	PB-210	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	740	pCi/g	FINAL	
Radionuclide	Lead-210	PB-210	SOIL	American kestrel (Avian intermediate carnivore)	9000	pCi/g		
Radionuclide	Lead-210	PB-210	SOIL	American kestrel (Avian top carnivore)	9000	pCi/g		
Radionuclide	Lead-210	PB-210	SOIL	American robin (Avian herbivore)	7600	pCi/g		
Radionuclide	Lead-210	PB-210	SOIL	American robin (Avian insectivore)	7900	pCi/g		
Radionuclide	Lead-210	PB-210	SOIL	American robin (Avian omnivore)	7500	pCi/g		
Radionuclide	Lead-210	PB-210	SOIL	Deer mouse (Mammalian omnivore)	4500	pCi/g		
Radionuclide	Lead-210	PB-210	SOIL	Desert cottontail (Mammalian herbivore)	4500	pCi/g		
Radionuclide	Lead-210	PB-210	SOIL	Earthworm (Soil-dwelling invertebrate)	2800	pCi/g	FINAL	
Radionuclide	Lead-210	PB-210	SOIL	Generic plant (Terrestrial autotroph - producer)	4200	pCi/g		
Radionuclide	Lead-210	PB-210	SOIL	Montane shrew (Mammalian insectivore)	4500	pCi/g		
Radionuclide	Lead-210	PB-210	SOIL	Red fox (Mammalian top carnivore)	4400	pCi/g		
Radionuclide	Lead-210	PB-210	WATER	Algae (Aquatic autotroph - producer) - water	250	pCi/L	FINAL	
Radionuclide	Lead-210	PB-210	WATER	American kestrel (water)	290000000	pCi/L		
Radionuclide	Lead-210	PB-210	WATER	American robin (water)	280000000	pCi/L		
Radionuclide	Lead-210	PB-210	WATER	Aquatic snails (Aquatic herbivore - grazer) - water	1000	pCi/L		
Radionuclide	Lead-210	PB-210	WATER	Daphnids (Aquatic omnivore/ herbivore) - water	1000	pCi/L		
Radionuclide	Lead-210	PB-210	WATER	Deer mouse (water)	2700000000	pCi/L		
Radionuclide	Lead-210	PB-210	WATER	Desert cottontail (water)	190000000	pCi/L		
Radionuclide	Lead-210	PB-210	WATER	Fish (Aquatic intermediate carnivore) - water	250	pCi/L	FINAL	
Radionuclide	Lead-210	PB-210	WATER	Montane shrew (water)	1600000000	pCi/L		
Radionuclide	Lead-210	PB-210	WATER	Occult little brown myotis bat (water)	1600000000	pCi/L		
Radionuclide	Lead-210	PB-210	WATER	Red fox (water)	17000000	pCi/L		
Radionuclide	Lead-210	PB-210	WATER	Violet-green Swallow (water)	590000000	pCi/L		
Radionuclide	Neptunium-237	NP-237	SEDIMENT	Algae (Aquatic autotroph - producer) - sediment	7600	pCi/g		
Radionuclide	Neptunium-237	NP-237	SEDIMENT	Aquatic snails (Aquatic herbivore - grazer) - sediment	7600	pCi/g		
Radionuclide	Neptunium-237	NP-237	SEDIMENT	Daphnids (Aquatic omnivore/ herbivore) - sediment	7600	pCi/g		
Radionuclide	Neptunium-237	NP-237	SEDIMENT	Fish (Aquatic intermediate carnivore) - sediment	7600	pCi/g		
Radionuclide	Neptunium-237	NP-237	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	13	pCi/g		
Radionuclide	Neptunium-237	NP-237	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	12	pCi/g	FINAL	
Radionuclide	Neptunium-237	NP-237	SOIL	American kestrel (Avian intermediate carnivore)	1900	pCi/g		
Radionuclide	Neptunium-237	NP-237	SOIL	American kestrel (Avian top carnivore)	2000	pCi/g		
Radionuclide	Neptunium-237	NP-237	SOIL	American robin (Avian herbivore)	750	pCi/g		
Radionuclide	Neptunium-237	NP-237	SOIL	American robin (Avian insectivore)	220	pCi/g		
Radionuclide	Neptunium-237	NP-237	SOIL	American robin (Avian omnivore)	220	pCi/g		
Radionuclide	Neptunium-237	NP-237	SOIL	Deer mouse (Mammalian omnivore)	3300	pCi/g		
Radionuclide	Neptunium-237	NP-237	SOIL	Desert cottontail (Mammalian herbivore)	3300	pCi/g		
Radionuclide	Neptunium-237	NP-237	SOIL	Earthworm (Soil-dwelling invertebrate)	50	pCi/g	FINAL	
Radionuclide	Neptunium-237	NP-237	SOIL	Generic plant (Terrestrial autotroph - producer)	2700	pCi/g		
Radionuclide	Neptunium-237	NP-237	SOIL	Montane shrew (Mammalian insectivore)	3200	pCi/g		
Radionuclide	Neptunium-237	NP-237	SOIL	Red fox (Mammalian top carnivore)	470	pCi/g		
Radionuclide	Neptunium-237	NP-237	WATER	Algae (Aquatic autotroph - producer) - water	65	pCi/L		
Radionuclide	Neptunium-237	NP-237	WATER	American kestrel (water)	4100000	pCi/L		
Radionuclide	Neptunium-237	NP-237	WATER	American robin (water)	4000000	pCi/L		
Radionuclide	Neptunium-237	NP-237	WATER	Aquatic snails (Aquatic herbivore - grazer) - water	650	pCi/L		
Radionuclide	Neptunium-237	NP-237	WATER	Daphnids (Aquatic omnivore/ herbivore) - water	650	pCi/L		
Radionuclide	Neptunium-237	NP-237	WATER	Deer mouse (water)	75000000	pCi/L		
Radionuclide	Neptunium-237	NP-237	WATER	Desert cottontail (water)	5100000	pCi/L		
Radionuclide	Neptunium-237	NP-237	WATER	Fish (Aquatic intermediate carnivore) - water	7.9	pCi/L	FINAL	
Radionuclide	Neptunium-237	NP-237	WATER	Montane shrew (water)	43000000	pCi/L		
Radionuclide	Neptunium-237	NP-237	WATER	Occult little brown myotis bat (water)	8900000	pCi/L		
Radionuclide	Neptunium-237	NP-237	WATER	Red fox (water)	310000	pCi/L		
Radionuclide	Neptunium-237	NP-237	WATER	Violet-green Swallow (water)	9900000	pCi/L		
Radionuclide	Plutonium-238	PU-238	SEDIMENT	Algae (Aquatic autotroph - producer) - sediment	400000	pCi/g		
Radionuclide	Plutonium-238	PU-238	SEDIMENT	Aquatic snails (Aquatic herbivore - grazer) - sediment	400000	pCi/g		
Radionuclide	Plutonium-238	PU-238	SEDIMENT	Daphnids (Aquatic omnivore/ herbivore) - sediment	400000	pCi/g		
Radionuclide	Plutonium-238	PU-238	SEDIMENT	Fish (Aquatic intermediate carnivore) - sediment	400000	pCi/g		
Radionuclide	Plutonium-238	PU-238	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	120	pCi/g		
Radionuclide	Plutonium-238	PU-238	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	110	pCi/g	FINAL	
Radionuclide	Plutonium-238	PU-238	SOIL	American kestrel (Avian intermediate carnivore)	32000	pCi/g		
Radionuclide	Plutonium-238	PU-238	SOIL	American kestrel (Avian top carnivore)	130000	pCi/g		
Radionuclide	Plutonium-238	PU-238	SOIL	American robin (Avian herbivore)	8300	pCi/g		
Radionuclide	Plutonium-238	PU-238	SOIL	American robin (Avian insectivore)	2000	pCi/g		
Radionuclide	Plutonium-238	PU-238	SOIL	American robin (Avian omnivore)	2100	pCi/g		
Radionuclide	Plutonium-238	PU-238	SOIL	Deer mouse (Mammalian omnivore)	110000	pCi/g		
Radionuclide	Plutonium-238	PU-238	SOIL	Desert cottontail (Mammalian herbivore)	120000	pCi/g		
Radionuclide	Plutonium-238	PU-238	SOIL	Earthworm (Soil-dwelling invertebrate)	44	pCi/g	FINAL	
Radionuclide	Plutonium-238	PU-238	SOIL	Generic plant (Terrestrial autotroph - producer)	110000	pCi/g		
Radionuclide	Plutonium-238	PU-238	SOIL	Montane shrew (Mammalian insectivore)	92000	pCi/g		
Radionuclide	Plutonium-238	PU-238	SOIL	Red fox (Mammalian top carnivore)	30000	pCi/g		
Radionuclide	Plutonium-238	PU-238	WATER	Algae (Aquatic autotroph - producer) - water	19	pCi/L	FINAL	
Radionuclide	Plutonium-238	PU-238	WATER	American kestrel (water)	37000000	pCi/L		
Radionuclide	Plutonium-238	PU-238	WATER	American robin (water)	37000000	pCi/L		
Radionuclide	Plutonium-238	PU-238	WATER	Aquatic snails (Aquatic herbivore - grazer) - water	170	pCi/L		
Radionuclide	Plutonium-238	PU-238	WATER	Daphnids (Aquatic omnivore/ herbivore) - water	170	pCi/L		
Radionuclide	Plutonium-238	PU-238	WATER	Deer mouse (water)	660000000	pCi/L		
Radionuclide	Plutonium-238	PU-238	WATER	Desert cottontail (water)	45000000	pCi/L		
Radionuclide	Plutonium-238	PU-238	WATER	Fish (Aquatic intermediate carnivore) - water	69	pCi/L		
Radionuclide	Plutonium-238	PU-238	WATER	Montane shrew (water)	380000000	pCi/L		
Radionuclide	Plutonium-238	PU-238	WATER	Occult little brown myotis bat (water)	85000000	pCi/L		
Radionuclide	Plutonium-238	PU-238	WATER	Red fox (water)	2800000	pCi/L		
Radionuclide	Plutonium-238	PU-238	WATER	Violet-green Swallow (water)	89000000	pCi/L		
Radionuclide	Plutonium-239, 240	PU-239/240	SEDIMENT	Algae (Aquatic autotroph - producer) - sediment	710000	pCi/g		
Radionuclide	Plutonium-239, 240	PU-239/240	SEDIMENT	Aquatic snails (Aquatic herbivore - grazer) - sediment	710000	pCi/g		
Radionuclide	Plutonium-239, 240	PU-239/240	SEDIMENT	Daphnids (Aquatic omnivore/ herbivore) - sediment	710000	pCi/g		
Radionuclide	Plutonium-239, 240	PU-239/240	SEDIMENT	Fish (Aquatic intermediate carnivore) - sediment	710000	pCi/g		
Radionuclide	Plutonium-239, 240	PU-239/240	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	120	pCi/g		
Radionuclide	Plutonium-239, 240	PU-239/240	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	110	pCi/g	FINAL	
Radionuclide	Plutonium-239, 240	PU-239/240	SOIL	American kestrel (Avian intermediate carnivore)	34000	pCi/g		
Radionuclide	Plutonium-239, 240	PU-239/240	SOIL	American kestrel (Avian top carnivore)	160000	pCi/g		
Radionuclide	Plutonium-239, 240	PU-239/240	SOIL	American robin (Avian herbivore)	8600	pCi/g		
Radionuclide	Plutonium-239, 240	PU-239/240	SOIL	American robin (Avian insectivore)	2100	pCi/g		
Radionuclide	Plutonium-239, 240	PU-239/240	SOIL	American robin (Avian omnivore)	2100	pCi/g		
Radionuclide	Plutonium-239, 240	PU-239/240	SOIL	Deer mouse (Mammalian omnivore)	150000	pCi/g		
Radionuclide	Plutonium-239, 240	PU-239/240	SOIL	Desert cottontail (Mammalian herbivore)	170000	pCi/g		
Radionuclide	Plutonium-239, 240	PU-239/240	SOIL	Earthworm (Soil-dwelling invertebrate)	47	pCi/g	FINAL	
Radionuclide	Plutonium-239, 240	PU-239/240	SOIL	Generic plant (Terrestrial autotroph - producer)	160000	pCi/g		
Radionuclide	Plutonium-239, 240	PU-239/240	SOIL	Montane shrew (Mammalian insectivore)	110000	pCi/g		
Radionuclide	Plutonium-239, 240	PU-239/240	SOIL	Red fox (Mammalian top carnivore)	33000	pCi/g		
Radionuclide	Plutonium-239, 240	PU-239/240	WATER	Algae (Aquatic autotroph - producer) - water	20	pCi/L	FINAL	
Radionuclide	Plutonium-239, 240	PU-239/240	WATER	American kestrel (water)	38000000	pCi/L		
Radionuclide	Plutonium-239, 240	PU-239/240	WATER	American robin (water)	37000000	pCi/L		
Radionuclide	Plutonium-239, 240	PU-239/240	WATER	Aquatic snails (Aquatic herbivore - grazer) - water	180	pCi/L		
Radionuclide	Plutonium-239, 240	PU-239/240	WATER	Daphnids (Aquatic omnivore/ herbivore) - water	180	pCi/L		
Radionuclide	Plutonium-239, 240	PU-239/240	WATER	Deer mouse (water)	700000000	pCi/L		
Radionuclide	Plutonium-239, 240	PU-239/240	WATER	Desert cottontail (water)	48000000	pCi/L		
Radionuclide	Plutonium-239, 240	PU-239/240	WATER	Fish (Aquatic intermediate carnivore) - water	74	pCi/L		
Radionuclide	Plutonium-239, 240	PU-239/240	WATER	Montane shrew (water)	400000000	pCi/L		
Radionuclide	Plutonium-239, 240	PU-239/240	WATER	Occult little brown myotis bat (water)	81000000	pCi/L		
Radionuclide	Plutonium-239, 240	PU-239/240	WATER	Red fox (water)	2900000	pCi/L		
Radionuclide	Plutonium-239, 240	PU-239/240	WATER	Violet-green Swallow (water)	92000000	pCi/L		
Radionuclide	Plutonium-241	PU-241	SEDIMENT	Algae (Aquatic autotroph - producer) - sediment	760000	pCi/g		
Radionuclide	Plutonium-241	PU-241	SEDIMENT	Aquatic snails (Aquatic herbivore - grazer) - sediment	760000	pCi/g		
Radionuclide	Plutonium-241	PU-241	SEDIMENT	Daphnids (Aquatic omnivore/ herbivore) - sediment	760000	pCi/g		
Radionuclide	Plutonium-241	PU-241	SEDIMENT	Fish (Aquatic intermediate carnivore) - sediment	760000	pCi/g		
Radionuclide	Plutonium-241	PU-241	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	1200000	pCi/g		
Radionuclide	Plutonium-241	PU-241	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	280000	pCi/g	FINAL	
Radionuclide	Plutonium-241	PU-241	SOIL	American kestrel (Avian intermediate carnivore)	730000	pCi/g		
Radionuclide	Plutonium-241	PU-241	SOIL	American kestrel (Avian top carnivore)	730000	pCi/g		
Radionuclide	Plutonium-241	PU-241	SOIL	American robin (Avian herbivore)	720000	pCi/g		
Radionuclide	Plutonium-241	PU-241	SOIL	American robin (Avian insectivore)	660000	pCi/g		
Radionuclide	Plutonium-241	PU-241	SOIL	American robin (Avian omnivore)	670000	pCi/g		
Radionuclide	Plutonium-241	PU-241	SOIL	Deer mouse (Mammalian omnivore)	360000	pCi/g		
Radionuclide	Plutonium-241	PU-241	SOIL	Desert cottontail (Mammalian herbivore)	360000	pCi/g		
Radionuclide	Plutonium-241	PU-241	SOIL	Earthworm (Soil-dwelling invertebrate)	960	pCi/g	FINAL	
Radionuclide	Plutonium-241	PU-241	SOIL	Generic plant (Terrestrial autotroph - producer)	350000	pCi/g		
Radionuclide	Plutonium-241	PU-241	SOIL	Montane shrew (Mammalian insectivore)	360000	pCi/g		
Radionuclide	Plutonium-241	PU-241	SOIL	Red fox (Mammalian top carnivore)	360000	pCi/g		
Radionuclide	Plutonium-241	PU-241	WATER	Algae (Aquatic autotroph - producer) - water	420	pCi/L	FINAL	
Radionuclide	Plutonium-241	PU-241	WATER	American kestrel (water)	1.2E+11	pCi/L		
Radionuclide	Plutonium-241	PU-241	WATER	American robin (water)	1.2E+11	pCi/L		
Radionuclide	Plutonium-241	PU-241	WATER	Aquatic snails (Aquatic herbivore - grazer) - water	3700	pCi/L		
Radionuclide	Plutonium-241	PU-241	WATER	Daphnids (Aquatic omnivore/ herbivore) - water	3700	pCi/L		
Radionuclide	Plutonium-241	PU-241	WATER	Deer mouse (water)	2.5E+11	pCi/L		
Radionuclide	Plutonium-241	PU-241	WATER	Desert cottontail (water)	22000000000	pCi/L		
Radionuclide	Plutonium-241	PU-241	WATER	Fish (Aquatic intermediate carnivore) - water	1500	pCi/L		
Radionuclide	Plutonium-241	PU-241	WATER	Montane shrew (water)	2.4E+11	pCi/L		
Radionuclide	Plutonium-241	PU-241	WATER	Occult little brown myotis bat (water)	8.4E+11	pCi/L		
Radionuclide	Plutonium-241	PU-241	WATER	Red fox (water)	6400000000	pCi/L		
Radionuclide	Plutonium-241	PU-241	WATER	Violet-green Swallow (water)	2.2E+11	pCi/L		
Radionuclide	Radium-226	RA-226	SEDIMENT	Algae (Aquatic autotroph - producer) - sediment	1400	pCi/g		
Radionuclide	Radium-226	RA-226	SEDIMENT	Aquatic snails (Aquatic herbivore - grazer) - sediment	1400	pCi/g		
Radionuclide	Radium-226	RA-226	SEDIMENT	Daphnids (Aquatic omnivore/ herbivore) - sediment	1400	pCi/g		
Radionuclide	Radium-226	RA-226	SEDIMENT	Fish (Aquatic intermediate carnivore) - sediment	1400	pCi/g		
Radionuclide	Radium-226	RA-226	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	0.3	pCi/g		
Radionuclide	Radium-226	RA-226	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	0.21	pCi/g	FINAL	
Radionuclide	Radium-226	RA-226	SOIL	American kestrel (Avian intermediate carnivore)	340	pCi/g		
Radionuclide	Radium-226	RA-226	SOIL	American kestrel (Avian top carnivore)	380	pCi/g		
Radionuclide	Radium-226	RA-226	SOIL	American robin (Avian herbivore)	93	pCi/g		
Radionuclide	Radium-226	RA-226	SOIL	American robin (Avian insectivore)	40	pCi/g		
Radionuclide	Radium-226	RA-226	SOIL	American robin (Avian omnivore)	39	pCi/g		
Radionuclide	Radium-226	RA-226	SOIL	Deer mouse (Mammalian omnivore)	610	pCi/g		
Radionuclide	Radium-226	RA-226	SOIL	Desert cottontail (Mammalian herbivore)	480	pCi/g		
Radionuclide	Radium-226	RA-226	SOIL	Earthworm (Soil-dwelling invertebrate)	8.1	pCi/g	FINAL	
Radionuclide	Radium-226	RA-226	SOIL	Generic plant (Terrestrial autotroph - producer)	200	pCi/g		
Radionuclide	Radium-226	RA-226	SOIL	Montane shrew (Mammalian insectivore)	580	pCi/g		
Radionuclide	Radium-226	RA-226	SOIL	Red fox (Mammalian top carnivore)	83	pCi/g		
Radionuclide	Radium-226	RA-226	WATER	Algae (Aquatic autotroph - producer) - water	0.1	pCi/L	FINAL	
Radionuclide	Radium-226	RA-226	WATER	American kestrel (water)	750000	pCi/L		
Radionuclide	Radium-226	RA-226	WATER	American robin (water)	740000	pCi/L		
Radionuclide	Radium-226	RA-226	WATER	Aquatic snails (Aquatic herbivore - grazer) - water	3.2	pCi/L		
Radionuclide	Radium-226	RA-226	WATER	Daphnids (Aquatic omnivore/ herbivore) - water	3.2	pCi/L		
Radionuclide	Radium-226	RA-226	WATER	Deer mouse (water)	12000000	pCi/L		
Radionuclide	Radium-226	RA-226	WATER	Desert cottontail (water)	850000	pCi/L		
Radionuclide	Radium-226	RA-226	WATER	Fish (Aquatic intermediate carnivore) - water	64	pCi/L		
Radionuclide	Radium-226	RA-226	WATER	Montane shrew (water)	7200000	pCi/L		
Radionuclide	Radium-226	RA-226	WATER	Occult little brown myotis bat (water)	2000000	pCi/L		
Radionuclide	Radium-226	RA-226	WATER	Red fox (water)	55000	pCi/L		
Radionuclide	Radium-226	RA-226	WATER	Violet-green Swallow (water)	1700000	pCi/L		
Radionuclide	Radium-228	RA-228	SEDIMENT	Algae (Aquatic autotroph - producer) - sediment	2800	pCi/g		
Radionuclide	Radium-228	RA-228	SEDIMENT	Aquatic snails (Aquatic herbivore - grazer) - sediment	2800	pCi/g		
Radionuclide	Radium-228	RA-228	SEDIMENT	Daphnids (Aquatic omnivore/ herbivore) - sediment	2800	pCi/g		
Radionuclide	Radium-228	RA-228	SEDIMENT	Fish (Aquatic intermediate carnivore) - sediment	2800	pCi/g		
Radionuclide	Radium-228	RA-228	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	0.77	pCi/g		
Radionuclide	Radium-228	RA-228	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	0.26	pCi/g	FINAL	
Radionuclide	Radium-228	RA-228	SOIL	American kestrel (Avian intermediate carnivore)	500	pCi/g		
Radionuclide	Radium-228	RA-228	SOIL	American kestrel (Avian top carnivore)	550	pCi/g		
Radionuclide	Radium-228	RA-228	SOIL	American robin (Avian herbivore)	120	pCi/g		
Radionuclide	Radium-228	RA-228	SOIL	American robin (Avian insectivore)	55	pCi/g		
Radionuclide	Radium-228	RA-228	SOIL	American robin (Avian omnivore)	52	pCi/g		
Radionuclide	Radium-228	RA-228	SOIL	Deer mouse (Mammalian omnivore)	1000	pCi/g		
Radionuclide	Radium-228	RA-228	SOIL	Desert cottontail (Mammalian herbivore)	690	pCi/g		
Radionuclide	Radium-228	RA-228	SOIL	Earthworm (Soil-dwelling invertebrate)	6.8	pCi/g	FINAL	
Radionuclide	Radium-228	RA-228	SOIL	Generic plant (Terrestrial autotroph - producer)	200	pCi/g		
Radionuclide	Radium-228	RA-228	SOIL	Montane shrew (Mammalian insectivore)	960	pCi/g		
Radionuclide	Radium-228	RA-228	SOIL	Red fox (Mammalian top carnivore)	100	pCi/g		
Radionuclide	Radium-228	RA-228	WATER	Algae (Aquatic autotroph - producer) - water	0.09	pCi/L	FINAL	
Radionuclide	Radium-228	RA-228	WATER	American kestrel (water)	1000000	pCi/L		
Radionuclide	Radium-228	RA-228	WATER	American robin (water)	990000	pCi/L		
Radionuclide	Radium-228	RA-228	WATER	Aquatic snails (Aquatic herbivore - grazer) - water	2.7	pCi/L		
Radionuclide	Radium-228	RA-228	WATER	Daphnids (Aquatic omnivore/ herbivore) - water	2.7	pCi/L		
Radionuclide	Radium-228	RA-228	WATER	Deer mouse (water)	11000000	pCi/L		
Radionuclide	Radium-228	RA-228	WATER	Desert cottontail (water)	760000	pCi/L		
Radionuclide	Radium-228	RA-228	WATER	Fish (Aquatic intermediate carnivore) - water	54	pCi/L		
Radionuclide	Radium-228	RA-228	WATER	Montane shrew (water)	6700000	pCi/L		
Radionuclide	Radium-228	RA-228	WATER	Occult little brown myotis bat (water)	5100000	pCi/L		
Radionuclide	Radium-228	RA-228	WATER	Red fox (water)	64000	pCi/L		
Radionuclide	Radium-228	RA-228	WATER	Violet-green Swallow (water)	2100000	pCi/L		
Radionuclide	Sodium-22	NA-22	SEDIMENT	Algae (Aquatic autotroph - producer) - sediment	18000	pCi/g		
Radionuclide	Sodium-22	NA-22	SEDIMENT	Aquatic snails (Aquatic herbivore - grazer) - sediment	18000	pCi/g		
Radionuclide	Sodium-22	NA-22	SEDIMENT	Daphnids (Aquatic omnivore/ herbivore) - sediment	18000	pCi/g		
Radionuclide	Sodium-22	NA-22	SEDIMENT	Fish (Aquatic intermediate carnivore) - sediment	18000	pCi/g		
Radionuclide	Sodium-22	NA-22	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	49000	pCi/g		
Radionuclide	Sodium-22	NA-22	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	11000	pCi/g	FINAL	
Radionuclide	Sodium-22	NA-22	SOIL	American kestrel (Avian intermediate carnivore)	15000	pCi/g		
Radionuclide	Sodium-22	NA-22	SOIL	American kestrel (Avian top carnivore)	12000	pCi/g		
Radionuclide	Sodium-22	NA-22	SOIL	American robin (Avian herbivore)	17000	pCi/g		
Radionuclide	Sodium-22	NA-22	SOIL	American robin (Avian insectivore)	16000	pCi/g		
Radionuclide	Sodium-22	NA-22	SOIL	American robin (Avian omnivore)	16000	pCi/g		
Radionuclide	Sodium-22	NA-22	SOIL	Deer mouse (Mammalian omnivore)	9000	pCi/g		
Radionuclide	Sodium-22	NA-22	SOIL	Desert cottontail (Mammalian herbivore)	8900	pCi/g		
Radionuclide	Sodium-22	NA-22	SOIL	Earthworm (Soil-dwelling invertebrate)	6500	pCi/g		
Radionuclide	Sodium-22	NA-22	SOIL	Generic plant (Terrestrial autotroph - producer)	8900	pCi/g		
Radionuclide	Sodium-22	NA-22	SOIL	Montane shrew (Mammalian insectivore)	9000	pCi/g		
Radionuclide	Sodium-22	NA-22	SOIL	Red fox (Mammalian top carnivore)	3400	pCi/g	FINAL	
Radionuclide	Sodium-22	NA-22	WATER	Algae (Aquatic autotroph - producer) - water	90000	pCi/L	FINAL	
Radionuclide	Sodium-22	NA-22	WATER	American kestrel (water)	4800000000	pCi/L		
Radionuclide	Sodium-22	NA-22	WATER	American robin (water)	4700000000	pCi/L		
Radionuclide	Sodium-22	NA-22	WATER	Aquatic snails (Aquatic herbivore - grazer) - water	90000	pCi/L	FINAL	
Radionuclide	Sodium-22	NA-22	WATER	Daphnids (Aquatic omnivore/ herbivore) - water	90000	pCi/L	FINAL	
Radionuclide	Sodium-22	NA-22	WATER	Deer mouse (water)	10000000000	pCi/L		
Radionuclide	Sodium-22	NA-22	WATER	Desert cottontail (water)	850000000	pCi/L		
Radionuclide	Sodium-22	NA-22	WATER	Fish (Aquatic intermediate carnivore) - water	90000	pCi/L	FINAL	
Radionuclide	Sodium-22	NA-22	WATER	Montane shrew (water)	9600000000	pCi/L		
Radionuclide	Sodium-22	NA-22	WATER	Occult little brown myotis bat (water)	32000000000	pCi/L		
Radionuclide	Sodium-22	NA-22	WATER	Red fox (water)	240000000	pCi/L		
Radionuclide	Sodium-22	NA-22	WATER	Violet-green Swallow (water)	8800000000	pCi/L		
Radionuclide	Strontium-90 + Yttrium-90	SR-90/ Y-90	SEDIMENT	Algae (Aquatic autotroph - producer) - sediment	3400	pCi/g		
Radionuclide	Strontium-90 + Yttrium-90	SR-90/ Y-90	SEDIMENT	Aquatic snails (Aquatic herbivore - grazer) - sediment	3400	pCi/g		
Radionuclide	Strontium-90 + Yttrium-90	SR-90/ Y-90	SEDIMENT	Daphnids (Aquatic omnivore/ herbivore) - sediment	3400	pCi/g		
Radionuclide	Strontium-90 + Yttrium-90	SR-90/ Y-90	SEDIMENT	Fish (Aquatic intermediate carnivore) - sediment	3400	pCi/g		
Radionuclide	Strontium-90 + Yttrium-90	SR-90/ Y-90	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	230	pCi/g		
Radionuclide	Strontium-90 + Yttrium-90	SR-90/ Y-90	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	150	pCi/g	FINAL	
Radionuclide	Strontium-90 + Yttrium-90	SR-90/ Y-90	SOIL	American kestrel (Avian intermediate carnivore)	2400	pCi/g		
Radionuclide	Strontium-90 + Yttrium-90	SR-90/ Y-90	SOIL	American kestrel (Avian top carnivore)	1900	pCi/g		
Radionuclide	Strontium-90 + Yttrium-90	SR-90/ Y-90	SOIL	American robin (Avian herbivore)	600	pCi/g		
Radionuclide	Strontium-90 + Yttrium-90	SR-90/ Y-90	SOIL	American robin (Avian insectivore)	1500	pCi/g		
Radionuclide	Strontium-90 + Yttrium-90	SR-90/ Y-90	SOIL	American robin (Avian omnivore)	930	pCi/g		
Radionuclide	Strontium-90 + Yttrium-90	SR-90/ Y-90	SOIL	Deer mouse (Mammalian omnivore)	1700	pCi/g		
Radionuclide	Strontium-90 + Yttrium-90	SR-90/ Y-90	SOIL	Desert cottontail (Mammalian herbivore)	1300	pCi/g		
Radionuclide	Strontium-90 + Yttrium-90	SR-90/ Y-90	SOIL	Earthworm (Soil-dwelling invertebrate)	1200	pCi/g		
Radionuclide	Strontium-90 + Yttrium-90	SR-90/ Y-90	SOIL	Generic plant (Terrestrial autotroph - producer)	1300	pCi/g		
Radionuclide	Strontium-90 + Yttrium-90	SR-90/ Y-90	SOIL	Montane shrew (Mammalian insectivore)	1700	pCi/g		
Radionuclide	Strontium-90 + Yttrium-90	SR-90/ Y-90	SOIL	Red fox (Mammalian top carnivore)	560	pCi/g	FINAL	
Radionuclide	Strontium-90 + Yttrium-90	SR-90/ Y-90	WATER	Algae (Aquatic autotroph - producer) - water	570	pCi/L	FINAL	
Radionuclide	Strontium-90 + Yttrium-90	SR-90/ Y-90	WATER	American kestrel (water)	52000000	pCi/L		
Radionuclide	Strontium-90 + Yttrium-90	SR-90/ Y-90	WATER	American robin (water)	51000000	pCi/L		
Radionuclide	Strontium-90 + Yttrium-90	SR-90/ Y-90	WATER	Aquatic snails (Aquatic herbivore - grazer) - water	17000	pCi/L		
Radionuclide	Strontium-90 + Yttrium-90	SR-90/ Y-90	WATER	Daphnids (Aquatic omnivore/ herbivore) - water	17000	pCi/L		
Radionuclide	Strontium-90 + Yttrium-90	SR-90/ Y-90	WATER	Deer mouse (water)	830000000	pCi/L		
Radionuclide	Strontium-90 + Yttrium-90	SR-90/ Y-90	WATER	Desert cottontail (water)	57000000	pCi/L		
Radionuclide	Strontium-90 + Yttrium-90	SR-90/ Y-90	WATER	Fish (Aquatic intermediate carnivore) - water	33000	pCi/L		
Radionuclide	Strontium-90 + Yttrium-90	SR-90/ Y-90	WATER	Montane shrew (water)	480000000	pCi/L		
Radionuclide	Strontium-90 + Yttrium-90	SR-90/ Y-90	WATER	Occult little brown myotis bat (water)	150000000	pCi/L		
Radionuclide	Strontium-90 + Yttrium-90	SR-90/ Y-90	WATER	Red fox (water)	3800000	pCi/L		
Radionuclide	Strontium-90 + Yttrium-90	SR-90/ Y-90	WATER	Violet-green Swallow (water)	120000000	pCi/L		
Radionuclide	Thorium-228	TH-228	SEDIMENT	Algae (Aquatic autotroph - producer) - sediment	1600	pCi/g		
Radionuclide	Thorium-228	TH-228	SEDIMENT	Aquatic snails (Aquatic herbivore - grazer) - sediment	1600	pCi/g		
Radionuclide	Thorium-228	TH-228	SEDIMENT	Daphnids (Aquatic omnivore/ herbivore) - sediment	1600	pCi/g		
Radionuclide	Thorium-228	TH-228	SEDIMENT	Fish (Aquatic intermediate carnivore) - sediment	1600	pCi/g		
Radionuclide	Thorium-228	TH-228	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	1200	pCi/g		
Radionuclide	Thorium-228	TH-228	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	290	pCi/g	FINAL	
Radionuclide	Thorium-228	TH-228	SOIL	American kestrel (Avian intermediate carnivore)	1600	pCi/g		
Radionuclide	Thorium-228	TH-228	SOIL	American kestrel (Avian top carnivore)	1600	pCi/g		
Radionuclide	Thorium-228	TH-228	SOIL	American robin (Avian herbivore)	1500	pCi/g		
Radionuclide	Thorium-228	TH-228	SOIL	American robin (Avian insectivore)	1300	pCi/g		
Radionuclide	Thorium-228	TH-228	SOIL	American robin (Avian omnivore)	1300	pCi/g		
Radionuclide	Thorium-228	TH-228	SOIL	Deer mouse (Mammalian omnivore)	830	pCi/g		
Radionuclide	Thorium-228	TH-228	SOIL	Desert cottontail (Mammalian herbivore)	830	pCi/g		
Radionuclide	Thorium-228	TH-228	SOIL	Earthworm (Soil-dwelling invertebrate)	43	pCi/g	FINAL	
Radionuclide	Thorium-228	TH-228	SOIL	Generic plant (Terrestrial autotroph - producer)	810	pCi/g		
Radionuclide	Thorium-228	TH-228	SOIL	Montane shrew (Mammalian insectivore)	830	pCi/g		
Radionuclide	Thorium-228	TH-228	SOIL	Red fox (Mammalian top carnivore)	820	pCi/g		
Radionuclide	Thorium-228	TH-228	WATER	Algae (Aquatic autotroph - producer) - water	5.9	pCi/L	FINAL	
Radionuclide	Thorium-228	TH-228	WATER	American kestrel (water)	120000000	pCi/L		
Radionuclide	Thorium-228	TH-228	WATER	American robin (water)	120000000	pCi/L		
Radionuclide	Thorium-228	TH-228	WATER	Aquatic snails (Aquatic herbivore - grazer) - water	170	pCi/L		
Radionuclide	Thorium-228	TH-228	WATER	Daphnids (Aquatic omnivore/ herbivore) - water	170	pCi/L		
Radionuclide	Thorium-228	TH-228	WATER	Deer mouse (water)	800000000	pCi/L		
Radionuclide	Thorium-228	TH-228	WATER	Desert cottontail (water)	57000000	pCi/L		
Radionuclide	Thorium-228	TH-228	WATER	Fish (Aquatic intermediate carnivore) - water	170	pCi/L		
Radionuclide	Thorium-228	TH-228	WATER	Montane shrew (water)	520000000	pCi/L		
Radionuclide	Thorium-228	TH-228	WATER	Occult little brown myotis bat (water)	800000000	pCi/L		
Radionuclide	Thorium-228	TH-228	WATER	Red fox (water)	6800000	pCi/L		
Radionuclide	Thorium-228	TH-228	WATER	Violet-green Swallow (water)	230000000	pCi/L		
Radionuclide	Thorium-229	TH-229	SEDIMENT	Algae (Aquatic autotroph - producer) - sediment	3200	pCi/g		
Radionuclide	Thorium-229	TH-229	SEDIMENT	Aquatic snails (Aquatic herbivore - grazer) - sediment	3200	pCi/g		
Radionuclide	Thorium-229	TH-229	SEDIMENT	Daphnids (Aquatic omnivore/ herbivore) - sediment	3200	pCi/g		
Radionuclide	Thorium-229	TH-229	SEDIMENT	Fish (Aquatic intermediate carnivore) - sediment	3200	pCi/g		
Radionuclide	Thorium-229	TH-229	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	120	pCi/g		
Radionuclide	Thorium-229	TH-229	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	110	pCi/g	FINAL	
Radionuclide	Thorium-229	TH-229	SOIL	American kestrel (Avian intermediate carnivore)	2900	pCi/g		
Radionuclide	Thorium-229	TH-229	SOIL	American kestrel (Avian top carnivore)	3100	pCi/g		
Radionuclide	Thorium-229	TH-229	SOIL	American robin (Avian herbivore)	2300	pCi/g		
Radionuclide	Thorium-229	TH-229	SOIL	American robin (Avian insectivore)	1300	pCi/g		
Radionuclide	Thorium-229	TH-229	SOIL	American robin (Avian omnivore)	1300	pCi/g		
Radionuclide	Thorium-229	TH-229	SOIL	Deer mouse (Mammalian omnivore)	1500	pCi/g		
Radionuclide	Thorium-229	TH-229	SOIL	Desert cottontail (Mammalian herbivore)	1500	pCi/g		
Radionuclide	Thorium-229	TH-229	SOIL	Earthworm (Soil-dwelling invertebrate)	47	pCi/g	FINAL	
Radionuclide	Thorium-229	TH-229	SOIL	Generic plant (Terrestrial autotroph - producer)	1500	pCi/g		
Radionuclide	Thorium-229	TH-229	SOIL	Montane shrew (Mammalian insectivore)	1500	pCi/g		
Radionuclide	Thorium-229	TH-229	SOIL	Red fox (Mammalian top carnivore)	1500	pCi/g		
Radionuclide	Thorium-229	TH-229	WATER	Algae (Aquatic autotroph - producer) - water	6.3	pCi/L	FINAL	
Radionuclide	Thorium-229	TH-229	WATER	American kestrel (water)	39000000	pCi/L		
Radionuclide	Thorium-229	TH-229	WATER	American robin (water)	39000000	pCi/L		
Radionuclide	Thorium-229	TH-229	WATER	Aquatic snails (Aquatic herbivore - grazer) - water	180	pCi/L		
Radionuclide	Thorium-229	TH-229	WATER	Daphnids (Aquatic omnivore/ herbivore) - water	180	pCi/L		
Radionuclide	Thorium-229	TH-229	WATER	Deer mouse (water)	720000000	pCi/L		
Radionuclide	Thorium-229	TH-229	WATER	Desert cottontail (water)	49000000	pCi/L		
Radionuclide	Thorium-229	TH-229	WATER	Fish (Aquatic intermediate carnivore) - water	180	pCi/L		
Radionuclide	Thorium-229	TH-229	WATER	Montane shrew (water)	410000000	pCi/L		
Radionuclide	Thorium-229	TH-229	WATER	Occult little brown myotis bat (water)	85000000	pCi/L		
Radionuclide	Thorium-229	TH-229	WATER	Red fox (water)	3000000	pCi/L		
Radionuclide	Thorium-229	TH-229	WATER	Violet-green Swallow (water)	95000000	pCi/L		
Radionuclide	Thorium-230	TH-230	SEDIMENT	Algae (Aquatic autotroph - producer) - sediment	270000	pCi/g		
Radionuclide	Thorium-230	TH-230	SEDIMENT	Aquatic snails (Aquatic herbivore - grazer) - sediment	270000	pCi/g		
Radionuclide	Thorium-230	TH-230	SEDIMENT	Daphnids (Aquatic omnivore/ herbivore) - sediment	270000	pCi/g		
Radionuclide	Thorium-230	TH-230	SEDIMENT	Fish (Aquatic intermediate carnivore) - sediment	270000	pCi/g		
Radionuclide	Thorium-230	TH-230	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	130	pCi/g		
Radionuclide	Thorium-230	TH-230	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	120	pCi/g	FINAL	
Radionuclide	Thorium-230	TH-230	SOIL	American kestrel (Avian intermediate carnivore)	34000	pCi/g		
Radionuclide	Thorium-230	TH-230	SOIL	American kestrel (Avian top carnivore)	120000	pCi/g		
Radionuclide	Thorium-230	TH-230	SOIL	American robin (Avian herbivore)	9000	pCi/g		
Radionuclide	Thorium-230	TH-230	SOIL	American robin (Avian insectivore)	2300	pCi/g		
Radionuclide	Thorium-230	TH-230	SOIL	American robin (Avian omnivore)	2300	pCi/g		
Radionuclide	Thorium-230	TH-230	SOIL	Deer mouse (Mammalian omnivore)	93000	pCi/g		
Radionuclide	Thorium-230	TH-230	SOIL	Desert cottontail (Mammalian herbivore)	96000	pCi/g		
Radionuclide	Thorium-230	TH-230	SOIL	Earthworm (Soil-dwelling invertebrate)	52	pCi/g	FINAL	
Radionuclide	Thorium-230	TH-230	SOIL	Generic plant (Terrestrial autotroph - producer)	27000	pCi/g		
Radionuclide	Thorium-230	TH-230	SOIL	Montane shrew (Mammalian insectivore)	81000	pCi/g		
Radionuclide	Thorium-230	TH-230	SOIL	Red fox (Mammalian top carnivore)	31000	pCi/g		
Radionuclide	Thorium-230	TH-230	WATER	Algae (Aquatic autotroph - producer) - water	6.8	pCi/L	FINAL	
Radionuclide	Thorium-230	TH-230	WATER	American kestrel (water)	42000000	pCi/L		
Radionuclide	Thorium-230	TH-230	WATER	American robin (water)	42000000	pCi/L		
Radionuclide	Thorium-230	TH-230	WATER	Aquatic snails (Aquatic herbivore - grazer) - water	200	pCi/L		
Radionuclide	Thorium-230	TH-230	WATER	Daphnids (Aquatic omnivore/ herbivore) - water	200	pCi/L		
Radionuclide	Thorium-230	TH-230	WATER	Deer mouse (water)	780000000	pCi/L		
Radionuclide	Thorium-230	TH-230	WATER	Desert cottontail (water)	53000000	pCi/L		
Radionuclide	Thorium-230	TH-230	WATER	Fish (Aquatic intermediate carnivore) - water	200	pCi/L		
Radionuclide	Thorium-230	TH-230	WATER	Montane shrew (water)	450000000	pCi/L		
Radionuclide	Thorium-230	TH-230	WATER	Occult little brown myotis bat (water)	90000000	pCi/L		
Radionuclide	Thorium-230	TH-230	WATER	Red fox (water)	3200000	pCi/L		
Radionuclide	Thorium-230	TH-230	WATER	Violet-green Swallow (water)	100000000	pCi/L		
Radionuclide	Thorium-232	TH-232	SEDIMENT	Algae (Aquatic autotroph - producer) - sediment	320000	pCi/g		
Radionuclide	Thorium-232	TH-232	SEDIMENT	Aquatic snails (Aquatic herbivore - grazer) - sediment	320000	pCi/g		
Radionuclide	Thorium-232	TH-232	SEDIMENT	Daphnids (Aquatic omnivore/ herbivore) - sediment	320000	pCi/g		
Radionuclide	Thorium-232	TH-232	SEDIMENT	Fish (Aquatic intermediate carnivore) - sediment	320000	pCi/g		
Radionuclide	Thorium-232	TH-232	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	16	pCi/g		
Radionuclide	Thorium-232	TH-232	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	15	pCi/g	FINAL	
Radionuclide	Thorium-232	TH-232	SOIL	American kestrel (Avian intermediate carnivore)	4600	pCi/g		
Radionuclide	Thorium-232	TH-232	SOIL	American kestrel (Avian top carnivore)	25000	pCi/g		
Radionuclide	Thorium-232	TH-232	SOIL	American robin (Avian herbivore)	1100	pCi/g		
Radionuclide	Thorium-232	TH-232	SOIL	American robin (Avian insectivore)	280	pCi/g		
Radionuclide	Thorium-232	TH-232	SOIL	American robin (Avian omnivore)	280	pCi/g		
Radionuclide	Thorium-232	TH-232	SOIL	Deer mouse (Mammalian omnivore)	29000	pCi/g		
Radionuclide	Thorium-232	TH-232	SOIL	Desert cottontail (Mammalian herbivore)	31000	pCi/g		
Radionuclide	Thorium-232	TH-232	SOIL	Earthworm (Soil-dwelling invertebrate)	6.2	pCi/g	FINAL	
Radionuclide	Thorium-232	TH-232	SOIL	Generic plant (Terrestrial autotroph - producer)	3900	pCi/g		
Radionuclide	Thorium-232	TH-232	SOIL	Montane shrew (Mammalian insectivore)	20000	pCi/g		
Radionuclide	Thorium-232	TH-232	SOIL	Red fox (Mammalian top carnivore)	4600	pCi/g		
Radionuclide	Thorium-232	TH-232	WATER	Algae (Aquatic autotroph - producer) - water	0.81	pCi/L	FINAL	
Radionuclide	Thorium-232	TH-232	WATER	American kestrel (water)	5000000	pCi/L		
Radionuclide	Thorium-232	TH-232	WATER	American robin (water)	5000000	pCi/L		
Radionuclide	Thorium-232	TH-232	WATER	Aquatic snails (Aquatic herbivore - grazer) - water	24	pCi/L		
Radionuclide	Thorium-232	TH-232	WATER	Daphnids (Aquatic omnivore/ herbivore) - water	24	pCi/L		
Radionuclide	Thorium-232	TH-232	WATER	Deer mouse (water)	92000000	pCi/L		
Radionuclide	Thorium-232	TH-232	WATER	Desert cottontail (water)	6300000	pCi/L		
Radionuclide	Thorium-232	TH-232	WATER	Fish (Aquatic intermediate carnivore) - water	24	pCi/L		
Radionuclide	Thorium-232	TH-232	WATER	Montane shrew (water)	53000000	pCi/L		

Radionuclide	Thorium-232	TH-232	WATER	Occult little brown myotis bat (water)	10000000	pCi/L		
Radionuclide	Thorium-232	TH-232	WATER	Red fox (water)	380000	pCi/L		
Radionuclide	Thorium-232	TH-232	WATER	Violet-green Swallow (water)	12000000	pCi/L		
Radionuclide	Tritium	H-3	SEDIMENT	Algae (Aquatic autotroph - producer) - sediment	660000	pCi/g	FINAL	
Radionuclide	Tritium	H-3	SEDIMENT	Aquatic snails (Aquatic herbivore - grazer) - sediment	660000	pCi/g	FINAL	
Radionuclide	Tritium	H-3	SEDIMENT	Daphnids (Aquatic omnivore/ herbivore) - sediment	660000	pCi/g	FINAL	
Radionuclide	Tritium	H-3	SEDIMENT	Fish (Aquatic intermediate carnivore) - sediment	660000	pCi/g	FINAL	
Radionuclide	Tritium	H-3	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	1300000000	pCi/g		
Radionuclide	Tritium	H-3	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	300000000	pCi/g		
Radionuclide	Tritium	H-3	SOIL	American kestrel (Avian intermediate carnivore)	630000	pCi/g		
Radionuclide	Tritium	H-3	SOIL	American kestrel (Avian top carnivore)	580000	pCi/g		
Radionuclide	Tritium	H-3	SOIL	American robin (Avian herbivore)	300000	pCi/g		
Radionuclide	Tritium	H-3	SOIL	American robin (Avian insectivore)	600000	pCi/g		
Radionuclide	Tritium	H-3	SOIL	American robin (Avian omnivore)	440000	pCi/g		
Radionuclide	Tritium	H-3	SOIL	Deer mouse (Mammalian omnivore)	330000	pCi/g		
Radionuclide	Tritium	H-3	SOIL	Desert cottontail (Mammalian herbivore)	230000	pCi/g		
Radionuclide	Tritium	H-3	SOIL	Earthworm (Soil-dwelling invertebrate)	48000	pCi/g		
Radionuclide	Tritium	H-3	SOIL	Generic plant (Terrestrial autotroph - producer)	36000	pCi/g	FINAL	
Radionuclide	Tritium	H-3	SOIL	Montane shrew (Mammalian insectivore)	340000	pCi/g		
Radionuclide	Tritium	H-3	SOIL	Red fox (Mammalian top carnivore)	190000	pCi/g		
Radionuclide	Tritium	H-3	WATER	Algae (Aquatic autotroph - producer) - water	160000000	pCi/L	FINAL	
Radionuclide	Tritium	H-3	WATER	American kestrel (water)	1.3E+12	pCi/L		
Radionuclide	Tritium	H-3	WATER	American robin (water)	1.3E+12	pCi/L		
Radionuclide	Tritium	H-3	WATER	Aquatic snails (Aquatic herbivore - grazer) - water	160000000	pCi/L	FINAL	
Radionuclide	Tritium	H-3	WATER	Daphnids (Aquatic omnivore/ herbivore) - water	160000000	pCi/L	FINAL	
Radionuclide	Tritium	H-3	WATER	Deer mouse (water)	2.7E+12	pCi/L		
Radionuclide	Tritium	H-3	WATER	Desert cottontail (water)	2.3E+11	pCi/L		
Radionuclide	Tritium	H-3	WATER	Fish (Aquatic intermediate carnivore) - water	160000000	pCi/L	FINAL	
Radionuclide	Tritium	H-3	WATER	Montane shrew (water)	2.6E+12	pCi/L		
Radionuclide	Tritium	H-3	WATER	Occult little brown myotis bat (water)	9E+12	pCi/L		
Radionuclide	Tritium	H-3	WATER	Red fox (water)	68000000000	pCi/L		
Radionuclide	Tritium	H-3	WATER	Violet-green Swallow (water)	2.4E+12	pCi/L		
Radionuclide	Uranium-233	U-233	SEDIMENT	Algae (Aquatic autotroph - producer) - sediment	1000000	pCi/g		
Radionuclide	Uranium-233	U-233	SEDIMENT	Aquatic snails (Aquatic herbivore - grazer) - sediment	1000000	pCi/g		
Radionuclide	Uranium-233	U-233	SEDIMENT	Daphnids (Aquatic omnivore/ herbivore) - sediment	1000000	pCi/g		
Radionuclide	Uranium-233	U-233	SEDIMENT	Fish (Aquatic intermediate carnivore) - sediment	1000000	pCi/g		
Radionuclide	Uranium-233	U-233	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	2700	pCi/g		
Radionuclide	Uranium-233	U-233	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	620	pCi/g	FINAL	
Radionuclide	Uranium-233	U-233	SOIL	American kestrel (Avian intermediate carnivore)	180000	pCi/g		
Radionuclide	Uranium-233	U-233	SOIL	American kestrel (Avian top carnivore)	340000	pCi/g		
Radionuclide	Uranium-233	U-233	SOIL	American robin (Avian herbivore)	54000	pCi/g		
Radionuclide	Uranium-233	U-233	SOIL	American robin (Avian insectivore)	15000	pCi/g		
Radionuclide	Uranium-233	U-233	SOIL	American robin (Avian omnivore)	15000	pCi/g		
Radionuclide	Uranium-233	U-233	SOIL	Deer mouse (Mammalian omnivore)	160000	pCi/g		
Radionuclide	Uranium-233	U-233	SOIL	Desert cottontail (Mammalian herbivore)	170000	pCi/g		
Radionuclide	Uranium-233	U-233	SOIL	Earthworm (Soil-dwelling invertebrate)	51	pCi/g	FINAL	
Radionuclide	Uranium-233	U-233	SOIL	Generic plant (Terrestrial autotroph - producer)	15000	pCi/g		
Radionuclide	Uranium-233	U-233	SOIL	Montane shrew (Mammalian insectivore)	160000	pCi/g		
Radionuclide	Uranium-233	U-233	SOIL	Red fox (Mammalian top carnivore)	57000	pCi/g		
Radionuclide	Uranium-233	U-233	WATER	Algae (Aquatic autotroph - producer) - water	22	pCi/L	FINAL	
Radionuclide	Uranium-233	U-233	WATER	American kestrel (water)	270000000	pCi/L		
Radionuclide	Uranium-233	U-233	WATER	American robin (water)	260000000	pCi/L		
Radionuclide	Uranium-233	U-233	WATER	Aquatic snails (Aquatic herbivore - grazer) - water	190	pCi/L		
Radionuclide	Uranium-233	U-233	WATER	Daphnids (Aquatic omnivore/ herbivore) - water	190	pCi/L		
Radionuclide	Uranium-233	U-233	WATER	Deer mouse (water)	610000000	pCi/L		
Radionuclide	Uranium-233	U-233	WATER	Desert cottontail (water)	50000000	pCi/L		
Radionuclide	Uranium-233	U-233	WATER	Fish (Aquatic intermediate carnivore) - water	39	pCi/L		
Radionuclide	Uranium-233	U-233	WATER	Montane shrew (water)	550000000	pCi/L		
Radionuclide	Uranium-233	U-233	WATER	Occult little brown myotis bat (water)	1800000000	pCi/L		
Radionuclide	Uranium-233	U-233	WATER	Red fox (water)	14000000	pCi/L		
Radionuclide	Uranium-233	U-233	WATER	Violet-green Swallow (water)	500000000	pCi/L		
Radionuclide	Uranium-234	U-234	SEDIMENT	Algae (Aquatic autotroph - producer) - sediment	300000	pCi/g		
Radionuclide	Uranium-234	U-234	SEDIMENT	Aquatic snails (Aquatic herbivore - grazer) - sediment	300000	pCi/g		
Radionuclide	Uranium-234	U-234	SEDIMENT	Daphnids (Aquatic omnivore/ herbivore) - sediment	300000	pCi/g		
Radionuclide	Uranium-234	U-234	SEDIMENT	Fish (Aquatic intermediate carnivore) - sediment	300000	pCi/g		
Radionuclide	Uranium-234	U-234	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	2700	pCi/g		
Radionuclide	Uranium-234	U-234	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	620	pCi/g	FINAL	
Radionuclide	Uranium-234	U-234	SOIL	American kestrel (Avian intermediate carnivore)	120000	pCi/g		
Radionuclide	Uranium-234	U-234	SOIL	American kestrel (Avian top carnivore)	190000	pCi/g		
Radionuclide	Uranium-234	U-234	SOIL	American robin (Avian herbivore)	48000	pCi/g		
Radionuclide	Uranium-234	U-234	SOIL	American robin (Avian insectivore)	14000	pCi/g		
Radionuclide	Uranium-234	U-234	SOIL	American robin (Avian omnivore)	14000	pCi/g		
Radionuclide	Uranium-234	U-234	SOIL	Deer mouse (Mammalian omnivore)	91000	pCi/g		
Radionuclide	Uranium-234	U-234	SOIL	Desert cottontail (Mammalian herbivore)	96000	pCi/g		
Radionuclide	Uranium-234	U-234	SOIL	Earthworm (Soil-dwelling invertebrate)	51	pCi/g	FINAL	
Radionuclide	Uranium-234	U-234	SOIL	Generic plant (Terrestrial autotroph - producer)	14000	pCi/g		
Radionuclide	Uranium-234	U-234	SOIL	Montane shrew (Mammalian insectivore)	94000	pCi/g		
Radionuclide	Uranium-234	U-234	SOIL	Red fox (Mammalian top carnivore)	45000	pCi/g		
Radionuclide	Uranium-234	U-234	WATER	Algae (Aquatic autotroph - producer) - water	22	pCi/L	FINAL	
Radionuclide	Uranium-234	U-234	WATER	American kestrel (water)	270000000	pCi/L		
Radionuclide	Uranium-234	U-234	WATER	American robin (water)	260000000	pCi/L		
Radionuclide	Uranium-234	U-234	WATER	Aquatic snails (Aquatic herbivore - grazer) - water	190	pCi/L		
Radionuclide	Uranium-234	U-234	WATER	Daphnids (Aquatic omnivore/ herbivore) - water	190	pCi/L		
Radionuclide	Uranium-234	U-234	WATER	Deer mouse (water)	610000000	pCi/L		
Radionuclide	Uranium-234	U-234	WATER	Desert cottontail (water)	50000000	pCi/L		
Radionuclide	Uranium-234	U-234	WATER	Fish (Aquatic intermediate carnivore) - water	39	pCi/L		
Radionuclide	Uranium-234	U-234	WATER	Montane shrew (water)	550000000	pCi/L		
Radionuclide	Uranium-234	U-234	WATER	Occult little brown myotis bat (water)	1800000000	pCi/L		
Radionuclide	Uranium-234	U-234	WATER	Red fox (water)	14000000	pCi/L		
Radionuclide	Uranium-234	U-234	WATER	Violet-green Swallow (water)	500000000	pCi/L		
Radionuclide	Uranium-235	U-235	SEDIMENT	Algae (Aquatic autotroph - producer) - sediment	10000	pCi/g		
Radionuclide	Uranium-235	U-235	SEDIMENT	Aquatic snails (Aquatic herbivore - grazer) - sediment	10000	pCi/g		
Radionuclide	Uranium-235	U-235	SEDIMENT	Daphnids (Aquatic omnivore/ herbivore) - sediment	10000	pCi/g		
Radionuclide	Uranium-235	U-235	SEDIMENT	Fish (Aquatic intermediate carnivore) - sediment	10000	pCi/g		
Radionuclide	Uranium-235	U-235	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	3000	pCi/g		
Radionuclide	Uranium-235	U-235	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	670	pCi/g	FINAL	
Radionuclide	Uranium-235	U-235	SOIL	American kestrel (Avian intermediate carnivore)	10000	pCi/g		
Radionuclide	Uranium-235	U-235	SOIL	American kestrel (Avian top carnivore)	10000	pCi/g		
Radionuclide	Uranium-235	U-235	SOIL	American robin (Avian herbivore)	9000	pCi/g		
Radionuclide	Uranium-235	U-235	SOIL	American robin (Avian insectivore)	6400	pCi/g		
Radionuclide	Uranium-235	U-235	SOIL	American robin (Avian omnivore)	6400	pCi/g		
Radionuclide	Uranium-235	U-235	SOIL	Deer mouse (Mammalian omnivore)	5100	pCi/g		
Radionuclide	Uranium-235	U-235	SOIL	Desert cottontail (Mammalian herbivore)	5100	pCi/g		
Radionuclide	Uranium-235	U-235	SOIL	Earthworm (Soil-dwelling invertebrate)	55	pCi/g	FINAL	
Radionuclide	Uranium-235	U-235	SOIL	Generic plant (Terrestrial autotroph - producer)	4000	pCi/g		
Radionuclide	Uranium-235	U-235	SOIL	Montane shrew (Mammalian insectivore)	5100	pCi/g		
Radionuclide	Uranium-235	U-235	SOIL	Red fox (Mammalian top carnivore)	4800	pCi/g		
Radionuclide	Uranium-235	U-235	WATER	Algae (Aquatic autotroph - producer) - water	24	pCi/L	FINAL	
Radionuclide	Uranium-235	U-235	WATER	American kestrel (water)	290000000	pCi/L		
Radionuclide	Uranium-235	U-235	WATER	American robin (water)	290000000	pCi/L		
Radionuclide	Uranium-235	U-235	WATER	Aquatic snails (Aquatic herbivore - grazer) - water	210	pCi/L		
Radionuclide	Uranium-235	U-235	WATER	Daphnids (Aquatic omnivore/ herbivore) - water	210	pCi/L		
Radionuclide	Uranium-235	U-235	WATER	Deer mouse (water)	660000000	pCi/L		
Radionuclide	Uranium-235	U-235	WATER	Desert cottontail (water)	54000000	pCi/L		
Radionuclide	Uranium-235	U-235	WATER	Fish (Aquatic intermediate carnivore) - water	43	pCi/L		
Radionuclide	Uranium-235	U-235	WATER	Montane shrew (water)	600000000	pCi/L		
Radionuclide	Uranium-235	U-235	WATER	Occult little brown myotis bat (water)	2000000000	pCi/L		
Radionuclide	Uranium-235	U-235	WATER	Red fox (water)	15000000	pCi/L		
Radionuclide	Uranium-235	U-235	WATER	Violet-green Swallow (water)	540000000	pCi/L		
Radionuclide	Uranium-236	U-236	SEDIMENT	Algae (Aquatic autotroph - producer) - sediment		pCi/g		No ESL because internal and external exposure is set or calculated as 0 for this radionuclide.
Radionuclide	Uranium-236	U-236	SEDIMENT	Aquatic snails (Aquatic herbivore - grazer) - sediment		pCi/g		No ESL because internal and external exposure is set or calculated as 0 for this radionuclide.
Radionuclide	Uranium-236	U-236	SEDIMENT	Daphnids (Aquatic omnivore/ herbivore) - sediment		pCi/g		No ESL because internal and external exposure is set or calculated as 0 for this radionuclide.
Radionuclide	Uranium-236	U-236	SEDIMENT	Fish (Aquatic intermediate carnivore) - sediment		pCi/g		No ESL because internal and external exposure is set or calculated as 0 for this radionuclide.
Radionuclide	Uranium-236	U-236	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	2900	pCi/g		
Radionuclide	Uranium-236	U-236	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	660	pCi/g	FINAL	
Radionuclide	Uranium-236	U-236	SOIL	American kestrel (Avian intermediate carnivore)	230000	pCi/g		
Radionuclide	Uranium-236	U-236	SOIL	American kestrel (Avian top carnivore)	550000	pCi/g		
Radionuclide	Uranium-236	U-236	SOIL	American robin (Avian herbivore)	61000	pCi/g		
Radionuclide	Uranium-236	U-236	SOIL	American robin (Avian insectivore)	16000	pCi/g		
Radionuclide	Uranium-236	U-236	SOIL	American robin (Avian omnivore)	16000	pCi/g		
Radionuclide	Uranium-236	U-236	SOIL	Deer mouse (Mammalian omnivore)	240000	pCi/g		
Radionuclide	Uranium-236	U-236	SOIL	Desert cottontail (Mammalian herbivore)	280000	pCi/g		
Radionuclide	Uranium-236	U-236	SOIL	Earthworm (Soil-dwelling invertebrate)	54	pCi/g	FINAL	
Radionuclide	Uranium-236	U-236	SOIL	Generic plant (Terrestrial autotroph - producer)	16000	pCi/g		
Radionuclide	Uranium-236	U-236	SOIL	Montane shrew (Mammalian insectivore)	260000	pCi/g		
Radionuclide	Uranium-236	U-236	SOIL	Red fox (Mammalian top carnivore)	69000	pCi/g		
Radionuclide	Uranium-236	U-236	WATER	Algae (Aquatic autotroph - producer) - water	23	pCi/L	FINAL	
Radionuclide	Uranium-236	U-236	WATER	American kestrel (water)	290000000	pCi/L		
Radionuclide	Uranium-236	U-236	WATER	American robin (water)	280000000	pCi/L		
Radionuclide	Uranium-236	U-236	WATER	Aquatic snails (Aquatic herbivore - grazer) - water	210	pCi/L		
Radionuclide	Uranium-236	U-236	WATER	Daphnids (Aquatic omnivore/ herbivore) - water	210	pCi/L		
Radionuclide	Uranium-236	U-236	WATER	Deer mouse (water)	650000000	pCi/L		
Radionuclide	Uranium-236	U-236	WATER	Desert cottontail (water)	53000000	pCi/L		
Radionuclide	Uranium-236	U-236	WATER	Fish (Aquatic intermediate carnivore) - water	42	pCi/L		
Radionuclide	Uranium-236	U-236	WATER	Montane shrew (water)	590000000	pCi/L		
Radionuclide	Uranium-236	U-236	WATER	Occult little brown myotis bat (water)	1900000000	pCi/L		
Radionuclide	Uranium-236	U-236	WATER	Red fox (water)	15000000	pCi/L		
Radionuclide	Uranium-236	U-236	WATER	Violet-green Swallow (water)	530000000	pCi/L		
Radionuclide	Uranium-238	U-238	SEDIMENT	Algae (Aquatic autotroph - producer) - sediment	4300	pCi/g		
Radionuclide	Uranium-238	U-238	SEDIMENT	Aquatic snails (Aquatic herbivore - grazer) - sediment	4300	pCi/g		
Radionuclide	Uranium-238	U-238	SEDIMENT	Daphnids (Aquatic omnivore/ herbivore) - sediment	4300	pCi/g		
Radionuclide	Uranium-238	U-238	SEDIMENT	Fish (Aquatic intermediate carnivore) - sediment	4300	pCi/g		
Radionuclide	Uranium-238	U-238	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	3000	pCi/g		
Radionuclide	Uranium-238	U-238	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	690	pCi/g	FINAL	
Radionuclide	Uranium-238	U-238	SOIL	American kestrel (Avian intermediate carnivore)	4100	pCi/g		
Radionuclide	Uranium-238	U-238	SOIL	American kestrel (Avian top carnivore)	4200	pCi/g		
Radionuclide	Uranium-238	U-238	SOIL	American robin (Avian herbivore)	3900	pCi/g		
Radionuclide	Uranium-238	U-238	SOIL	American robin (Avian insectivore)	3400	pCi/g		
Radionuclide	Uranium-238	U-238	SOIL	American robin (Avian omnivore)	3400	pCi/g		
Radionuclide	Uranium-238	U-238	SOIL	Deer mouse (Mammalian omnivore)	2100	pCi/g		
Radionuclide	Uranium-238	U-238	SOIL	Desert cottontail (Mammalian herbivore)	2100	pCi/g		
Radionuclide	Uranium-238	U-238	SOIL	Earthworm (Soil-dwelling invertebrate)	55	pCi/g	FINAL	
Radionuclide	Uranium-238	U-238	SOIL	Generic plant (Terrestrial autotroph - producer)	1800	pCi/g		
Radionuclide	Uranium-238	U-238	SOIL	Montane shrew (Mammalian insectivore)	2100	pCi/g		
Radionuclide	Uranium-238	U-238	SOIL	Red fox (Mammalian top carnivore)	2000	pCi/g		
Radionuclide	Uranium-238	U-238	WATER	Algae (Aquatic autotroph - producer) - water	24	pCi/L	FINAL	
Radionuclide	Uranium-238	U-238	WATER	American kestrel (water)	300000000	pCi/L		
Radionuclide	Uranium-238	U-238	WATER	American robin (water)	290000000	pCi/L		
Radionuclide	Uranium-238	U-238	WATER	Aquatic snails (Aquatic herbivore - grazer) - water	220	pCi/L		
Radionuclide	Uranium-238	U-238	WATER	Daphnids (Aquatic omnivore/ herbivore) - water	220	pCi/L		
Radionuclide	Uranium-238	U-238	WATER	Deer mouse (water)	680000000	pCi/L		
Radionuclide	Uranium-238	U-238	WATER	Desert cottontail (water)	55000000	pCi/L		
Radionuclide	Uranium-238	U-238	WATER	Fish (Aquatic intermediate carnivore) - water	44	pCi/L		
Radionuclide	Uranium-238	U-238	WATER	Montane shrew (water)	610000000	pCi/L		
Radionuclide	Uranium-238	U-238	WATER	Occult little brown myotis bat (water)	2000000000	pCi/L		
Radionuclide	Uranium-238	U-238	WATER	Red fox (water)	15000000	pCi/L		
Radionuclide	Uranium-238	U-238	WATER	Violet-green Swallow (water)	550000000	pCi/L		
Semivolatile Organic compound	Benzoic Acid	65-85-0	SEDIMENT	Aquatic community organisms - sediment	0.065	mg/kg	FINAL	
Semivolatile Organic compound	Benzoic Acid	65-85-0	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	1.3	mg/kg		
Semivolatile Organic compound	Benzoic Acid	65-85-0	SOIL	Deer mouse (Mammalian omnivore)	1.3	mg/kg		
Semivolatile Organic compound	Benzoic Acid	65-85-0	SOIL	Desert cottontail (Mammalian herbivore)	4.2	mg/kg		
Semivolatile Organic compound	Benzoic Acid	65-85-0	SOIL	Montane shrew (Mammalian insectivore)	1	mg/kg	FINAL	
Semivolatile Organic compound	Benzoic Acid	65-85-0	SOIL	Red fox (Mammalian top carnivore)	350	mg/kg		
Semivolatile Organic compound	Benzoic Acid	65-85-0	WATER	Aquatic community organisms - water	41	µg/L	FINAL	
Semivolatile Organic compound	Benzoic Acid	65-85-0	WATER	Deer mouse (water)	21000	µg/L		
Semivolatile Organic compound	Benzoic Acid	65-85-0	WATER	Desert cottontail (water)	41000	µg/L		
Semivolatile Organic compound	Benzoic Acid	65-85-0	WATER	Montane shrew (water)	17000	µg/L		
Semivolatile Organic compound	Benzoic Acid	65-85-0	WATER	Occult little brown myotis bat (water)	25000	µg/L		
Semivolatile Organic compound	Benzoic Acid	65-85-0	WATER	Red fox (water)	46000	µg/L		
Semivolatile Organic compound	Bis(2-ethylhexyl)phthalate	117-81-7	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	0.74	mg/kg		
Semivolatile Organic compound	Bis(2-ethylhexyl)phthalate	117-81-7	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	0.026	mg/kg	FINAL	
Semivolatile Organic compound	Bis(2-ethylhexyl)phthalate	117-81-7	SOIL	American kestrel (Avian intermediate carnivore)	0.045	mg/kg		
Semivolatile Organic compound	Bis(2-ethylhexyl)phthalate	117-81-7	SOIL	American kestrel (Avian top carnivore)	0.033	mg/kg		
Semivolatile Organic compound	Bis(2-ethylhexyl)phthalate	117-81-7	SOIL	American robin (Avian herbivore)	20	mg/kg		
Semivolatile Organic compound	Bis(2-ethylhexyl)phthalate	117-81-7	SOIL	American robin (Avian insectivore)	0.02	mg/kg	FINAL	
Semivolatile Organic compound	Bis(2-ethylhexyl)phthalate	117-81-7	SOIL	American robin (Avian omnivore)	0.04	mg/kg		
Semivolatile Organic compound	Bis(2-ethylhexyl)phthalate	117-81-7	SOIL	Deer mouse (Mammalian omnivore)	1.1	mg/kg		
Semivolatile Organic compound	Bis(2-ethylhexyl)phthalate	117-81-7	SOIL	Desert cottontail (Mammalian herbivore)	2700	mg/kg		
Semivolatile Organic compound	Bis(2-ethylhexyl)phthalate	117-81-7	SOIL	Montane shrew (Mammalian insectivore)	0.59	mg/kg		
Semivolatile Organic compound	Bis(2-ethylhexyl)phthalate	117-81-7	SOIL	Red fox (Mammalian top carnivore)	1.2	mg/kg		
Semivolatile Organic compound	Bis(2-ethylhexyl)phthalate	117-81-7	WATER	American kestrel (water)	9100	µg/L		
Semivolatile Organic compound	Bis(2-ethylhexyl)phthalate	117-81-7	WATER	American robin (water)	7800	µg/L		
Semivolatile Organic compound	Bis(2-ethylhexyl)phthalate	117-81-7	WATER	Aquatic community organisms - water	32	µg/L	FINAL	
Semivolatile Organic compound	Bis(2-ethylhexyl)phthalate	117-81-7	WATER	Deer mouse (water)	96000	µg/L		
Semivolatile Organic compound	Bis(2-ethylhexyl)phthalate	117-81-7	WATER	Desert cottontail (water)	180000	µg/L		
Semivolatile Organic compound	Bis(2-ethylhexyl)phthalate	117-81-7	WATER	Montane shrew (water)	82000	µg/L		
Semivolatile Organic compound	Bis(2-ethylhexyl)phthalate	117-81-7	WATER	Occult little brown myotis bat (water)	110000	µg/L		
Semivolatile Organic compound	Bis(2-ethylhexyl)phthalate	117-81-7	WATER	Red fox (water)	210000	µg/L		
Semivolatile Organic compound	Bis(2-ethylhexyl)phthalate	117-81-7	WATER	Violet-green Swallow (water)	4500	µg/L		
Semivolatile Organic compound	Butyl Benzyl Phthalate	85-68-7	SEDIMENT	Aquatic community organisms - sediment	13	mg/kg	FINAL	
Semivolatile Organic compound	Butyl Benzyl Phthalate	85-68-7	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	110	mg/kg		
Semivolatile Organic compound	Butyl Benzyl Phthalate	85-68-7	SOIL	Deer mouse (Mammalian omnivore)	160	mg/kg		
Semivolatile Organic compound	Butyl Benzyl Phthalate	85-68-7	SOIL	Desert cottontail (Mammalian herbivore)	2300	mg/kg		
Semivolatile Organic compound	Butyl Benzyl Phthalate	85-68-7	SOIL	Montane shrew (Mammalian insectivore)	90	mg/kg	FINAL	
Semivolatile Organic compound	Butyl Benzyl Phthalate	85-68-7	SOIL	Red fox (Mammalian top carnivore)	1900	mg/kg		
Semivolatile Organic compound	Butyl Benzyl Phthalate	85-68-7	WATER	Aquatic community organisms - water	22	µg/L	FINAL	
Semivolatile Organic compound	Butyl Benzyl Phthalate	85-68-7	WATER	Deer mouse (water)	830000	µg/L		
Semivolatile Organic compound	Butyl Benzyl Phthalate	85-68-7	WATER	Desert cottontail (water)	1600000	µg/L		
Semivolatile Organic compound	Butyl Benzyl Phthalate	85-68-7	WATER	Montane shrew (water)	710000	µg/L		
Semivolatile Organic compound	Butyl Benzyl Phthalate	85-68-7	WATER	Occult little brown myotis bat (water)	1000000	µg/L		
Semivolatile Organic compound	Butyl Benzyl Phthalate	85-68-7	WATER	Red fox (water)	1800000	µg/L		
Semivolatile Organic compound	Chlorobenzene	108-90-7	SEDIMENT	Aquatic community organisms - sediment	0.82	mg/kg	FINAL	
Semivolatile Organic compound	Chlorobenzene	108-90-7	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	54	mg/kg		
Semivolatile Organic compound	Chlorobenzene	108-90-7	SOIL	Deer mouse (Mammalian omnivore)	54	mg/kg		
Semivolatile Organic compound	Chlorobenzene	108-90-7	SOIL	Desert cottontail (Mammalian herbivore)	150	mg/kg		
Semivolatile Organic compound	Chlorobenzene	108-90-7	SOIL	Earthworm (Soil-dwelling invertebrate)	2.4	mg/kg	FINAL	
Semivolatile Organic compound	Chlorobenzene	108-90-7	SOIL	Montane shrew (Mammalian insectivore)	43	mg/kg		
Semivolatile Organic compound	Chlorobenzene	108-90-7	SOIL	Red fox (Mammalian top carnivore)	5500	mg/kg		
Semivolatile Organic compound	Chlorobenzene	108-90-7	WATER	Aquatic community organisms - water	120	µg/L	FINAL	
Semivolatile Organic compound	Chlorobenzene	108-90-7	WATER	Deer mouse (water)	310000	µg/L		
Semivolatile Organic compound	Chlorobenzene	108-90-7	WATER	Desert cottontail (water)	610000	µg/L		
Semivolatile Organic compound	Chlorobenzene	108-90-7	WATER	Montane shrew (water)	260000	µg/L		
Semivolatile Organic compound	Chlorobenzene	108-90-7	WATER	Occult little brown myotis bat (water)	370000	µg/L		
Semivolatile Organic compound	Chlorobenzene	108-90-7	WATER	Red fox (water)	690000	µg/L		
Semivolatile Organic compound	Chlorophenol[2-]	95-57-8	SEDIMENT	Aquatic community organisms - sediment	0.057	mg/kg	FINAL	
Semivolatile Organic compound	Chlorophenol[2-]	95-57-8	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	3	mg/kg		
Semivolatile Organic compound	Chlorophenol[2-]	95-57-8	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	4	mg/kg		
Semivolatile Organic compound	Chlorophenol[2-]	95-57-8	SOIL	American kestrel (Avian intermediate carnivore)	20	mg/kg		
Semivolatile Organic compound	Chlorophenol[2-]	95-57-8	SOIL	American kestrel (Avian top carnivore)	160	mg/kg		
Semivolatile Organic compound	Chlorophenol[2-]	95-57-8	SOIL	American robin (Avian herbivore)	0.39	mg/kg	FINAL	
Semivolatile Organic compound	Chlorophenol[2-]	95-57-8	SOIL	American robin (Avian insectivore)	2.8	mg/kg		
Semivolatile Organic compound	Chlorophenol[2-]	95-57-8	SOIL	American robin (Avian omnivore)	0.69	mg/kg		
Semivolatile Organic compound	Chlorophenol[2-]	95-57-8	SOIL	Deer mouse (Mammalian omnivore)	0.54	mg/kg		
Semivolatile Organic compound	Chlorophenol[2-]	95-57-8	SOIL	Desert cottontail (Mammalian herbivore)	0.68	mg/kg		
Semivolatile Organic compound	Chlorophenol[2-]	95-57-8	SOIL	Montane shrew (Mammalian insectivore)	2.2	mg/kg		
Semivolatile Organic compound	Chlorophenol[2-]	95-57-8	SOIL	Red fox (Mammalian top carnivore)	140	mg/kg		
Semivolatile Organic compound	Chlorophenol[2-]	95-57-8	WATER	American kestrel (water)	9400	µg/L		
Semivolatile Organic compound	Chlorophenol[2-]	95-57-8	WATER	American robin (water)	8000	µg/L		
Semivolatile Organic compound	Chlorophenol[2-]	95-57-8	WATER	Aquatic community organisms - water	43	µg/L	FINAL	
Semivolatile Organic compound	Chlorophenol[2-]	95-57-8	WATER	Deer mouse (water)	2600	µg/L		
Semivolatile Organic compound	Chlorophenol[2-]	95-57-8	WATER	Desert cottontail (water)	5100	µg/L		
Semivolatile Organic compound	Chlorophenol[2-]	95-57-8	WATER	Montane shrew (water)	2200	µg/L		
Semivolatile Organic compound	Chlorophenol[2-]	95-57-8	WATER	Occult little brown myotis bat (water)	3100	µg/L		
Semivolatile Organic compound	Chlorophenol[2-]	95-57-8	WATER	Red fox (water)	5800	µg/L		
Semivolatile Organic compound	Chlorophenol[2-]	95-57-8	WATER	Violet-green Swallow (water)	4600	µg/L		
Semivolatile Organic compound	Dibenzofuran	132-64-9	SEDIMENT	Aquatic community organisms - sediment	2.3	mg/kg	FINAL	
Semivolatile Organic compound	Dibenzofuran	132-64-9	SOIL	Generic plant (Terrestrial autotroph - producer)	6.1	mg/kg	FINAL	
Semivolatile Organic compound	Dibenzofuran	132-64-9	WATER	Aquatic community organisms - water	20	µg/L	FINAL	
Semivolatile Organic compound	Dimethyl Phthalate	131-11-3	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	120	mg/kg	FINAL	
Semivolatile Organic compound	Dimethyl Phthalate	131-11-3	SOIL	Deer mouse (Mammalian omnivore)	46	mg/kg		
Semivolatile Organic compound	Dimethyl Phthalate	131-11-3	SOIL	Desert cottontail (Mammalian herbivore)	67	mg/kg		
Semivolatile Organic compound	Dimethyl Phthalate	131-11-3	SOIL	Earthworm (Soil-dwelling invertebrate)	10	mg/kg	FINAL	
Semivolatile Organic compound	Dimethyl Phthalate	131-11-3	SOIL	Montane shrew (Mammalian insectivore)	97	mg/kg		
Semivolatile Organic compound	Dimethyl Phthalate	131-11-3	SOIL	Red fox (Mammalian top carnivore)	24000	mg/kg		
Semivolatile Organic compound	Dimethyl Phthalate	131-11-3	WATER	Aquatic community organisms - water	330	µg/L	FINAL	
Semivolatile Organic compound	Dimethyl Phthalate	131-11-3	WATER	Deer mouse (water)	430000	µg/L		
Semivolatile Organic compound	Dimethyl Phthalate	131-11-3	WATER	Desert cottontail (water)	850000	µg/L		
Semivolatile Organic compound	Dimethyl Phthalate	131-11-3	WATER	Montane shrew (water)	370000	µg/L		
Semivolatile Organic compound	Dimethyl Phthalate	131-11-3	WATER	Occult little brown myotis bat (water)	520000	µg/L		
Semivolatile Organic compound	Dimethyl Phthalate	131-11-3	WATER	Red fox (water)	960000	µg/L		
Semivolatile Organic compound	Di-n-Butyl Phthalate	84-74-2	SEDIMENT	Aquatic community organisms - sediment	11	mg/kg		
Semivolatile Organic compound	Di-n-Butyl Phthalate	84-74-2	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	230	mg/kg		
Semivolatile Organic compound	Di-n-Butyl Phthalate	84-74-2	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	0.014	mg/kg	FINAL	
Semivolatile Organic compound	Di-n-Butyl Phthalate	84-74-2	SOIL	American kestrel (Avian intermediate carnivore)	0.068	mg/kg		
Semivolatile Organic compound	Di-n-Butyl Phthalate	84-74-2	SOIL	American kestrel (Avian top carnivore)	0.24	mg/kg		
Semivolatile Organic compound	Di-n-Butyl Phthalate	84-74-2	SOIL	American robin (Avian herbivore)	0.39	mg/kg		
Semivolatile Organic compound	Di-n-Butyl Phthalate	84-74-2	SOIL	American robin (Avian insectivore)	0.011	mg/kg	FINAL	
Semivolatile Organic compound	Di-n-Butyl Phthalate	84-74-2	SOIL	American robin (Avian omnivore)	0.021	mg/kg		
Semivolatile Organic compound	Di-n-Butyl Phthalate	84-74-2	SOIL	Deer mouse (Mammalian omnivore)	370	mg/kg		
Semivolatile Organic compound	Di-n-Butyl Phthalate	84-74-2	SOIL	Desert cottontail (Mammalian herbivore)	16000	mg/kg		
Semivolatile Organic compound	Di-n-Butyl Phthalate	84-74-2	SOIL	Generic plant (Terrestrial autotroph - producer)	160	mg/kg		
Semivolatile Organic compound	Di-n-Butyl Phthalate	84-74-2	SOIL	Montane shrew (Mammalian insectivore)	180	mg/kg		
Semivolatile Organic compound	Di-n-Butyl Phthalate	84-74-2	SOIL	Red fox (Mammalian top carnivore)	5000	mg/kg		
Semivolatile Organic compound	Di-n-Butyl Phthalate	84-74-2	WATER	American kestrel (water)	1100	µg/L		
Semivolatile Organic compound	Di-n-Butyl Phthalate	84-74-2	WATER	American robin (water)	1000	µg/L		
Semivolatile Organic compound	Di-n-Butyl Phthalate	84-74-2	WATER	Aquatic community organisms - water	32	µg/L	FINAL	
Semivolatile Organic compound	Di-n-Butyl Phthalate	84-74-2	WATER	Deer mouse (water)	3100000	µg/L		
Semivolatile Organic compound	Di-n-Butyl Phthalate	84-74-2	WATER	Desert cottontail (water)	6100000	µg/L		
Semivolatile Organic compound	Di-n-Butyl Phthalate	84-74-2	WATER	Montane shrew (water)	2600000	µg/L		
Semivolatile Organic compound	Di-n-Butyl Phthalate	84-74-2	WATER	Occult little brown myotis bat (water)	3700000	µg/L		
Semivolatile Organic compound	Di-n-Butyl Phthalate	84-74-2	WATER	Red fox (water)	6900000	µg/L		
Semivolatile Organic compound	Di-n-Butyl Phthalate	84-74-2	WATER	Violet-green Swallow (water)	570	µg/L		
Semivolatile Organic compound	Di-n-octylphthalate	117-84-0	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	1.3	mg/kg	FINAL	
Semivolatile Organic compound	Di-n-octylphthalate	117-84-0	SOIL	Deer mouse (Mammalian omnivore)	2.2	mg/kg		
Semivolatile Organic compound	Di-n-octylphthalate	117-84-0	SOIL	Desert cottontail (Mammalian herbivore)	16000	mg/kg		
Semivolatile Organic compound	Di-n-octylphthalate	117-84-0	SOIL	Montane shrew (Mammalian insectivore)	1.1	mg/kg	FINAL	
Semivolatile Organic compound	Di-n-octylphthalate	117-84-0	SOIL	Red fox (Mammalian top carnivore)	16	mg/kg		
Semivolatile Organic compound	Di-n-octylphthalate	117-84-0	WATER	Aquatic community organisms - water	320	µg/L	FINAL	
Semivolatile Organic compound	Di-n-octylphthalate	117-84-0	WATER	Deer mouse (water)	410000	µg/L		
Semivolatile Organic compound	Di-n-octylphthalate	117-84-0	WATER	Desert cottontail (water)	810000	µg/L		
Semivolatile Organic compound	Di-n-octylphthalate	117-84-0	WATER	Montane shrew (water)	350000	µg/L		
Semivolatile Organic compound	Di-n-octylphthalate	117-84-0	WATER	Occult little brown myotis bat (water)	490000	µg/L		
Semivolatile Organic compound	Di-n-octylphthalate	117-84-0	WATER	Red fox (water)	920000	µg/L		
Semivolatile Organic compound	Nitrobenzene	98-95-3	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	32	mg/kg	FINAL	
Semivolatile Organic compound	Nitrobenzene	98-95-3	SOIL	Deer mouse (Mammalian omnivore)	5.8	mg/kg		
Semivolatile Organic compound	Nitrobenzene	98-95-3	SOIL	Desert cottontail (Mammalian herbivore)	7.2	mg/kg		
Semivolatile Organic compound	Nitrobenzene	98-95-3	SOIL	Earthworm (Soil-dwelling invertebrate)	2.2	mg/kg	FINAL	
Semivolatile Organic compound	Nitrobenzene	98-95-3	SOIL	Montane shrew (Mammalian insectivore)	24	mg/kg		
Semivolatile Organic compound	Nitrobenzene	98-95-3	SOIL	Red fox (Mammalian top carnivore)	2000	mg/kg		
Semivolatile Organic compound	Nitrobenzene	98-95-3	WATER	Aquatic community organisms - water	270	µg/L	FINAL	
Semivolatile Organic compound	Nitrobenzene	98-95-3	WATER	Deer mouse (water)	36000	µg/L		
Semivolatile Organic compound	Nitrobenzene	98-95-3	WATER	Desert cottontail (water)	71000	µg/L		
Semivolatile Organic compound	Nitrobenzene	98-95-3	WATER	Montane shrew (water)	31000	µg/L		
Semivolatile Organic compound	Nitrobenzene	98-95-3	WATER	Occult little brown myotis bat (water)	43000	µg/L		
Semivolatile Organic compound	Nitrobenzene	98-95-3	WATER	Red fox (water)	80000	µg/L		
Semivolatile Organic compound	Pentachloronitrobenzene	82-68-8	SEDIMENT	Aquatic community organisms - sediment	3.6	mg/kg		
Semivolatile Organic compound	Pentachloronitrobenzene	82-68-8	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	14	mg/kg		
Semivolatile Organic compound	Pentachloronitrobenzene	82-68-8	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	0.92	mg/kg	FINAL	
Semivolatile Organic compound	Pentachloronitrobenzene	82-68-8	SOIL	American kestrel (Avian intermediate carnivore)	4.2	mg/kg		
Semivolatile Organic compound	Pentachloronitrobenzene	82-68-8	SOIL	American kestrel (Avian top carnivore)	14	mg/kg		
Semivolatile Organic compound	Pentachloronitrobenzene	82-68-8	SOIL	American robin (Avian herbivore)	22	mg/kg		
Semivolatile Organic compound	Pentachloronitrobenzene	82-68-8	SOIL	American robin (Avian insectivore)	0.7	mg/kg	FINAL	
Semivolatile Organic compound	Pentachloronitrobenzene	82-68-8	SOIL	American robin (Avian omnivore)	1.3	mg/kg		
Semivolatile Organic compound	Pentachloronitrobenzene	82-68-8	SOIL	Deer mouse (Mammalian omnivore)	22	mg/kg		
Semivolatile Organic compound	Pentachloronitrobenzene	82-68-8	SOIL	Desert cottontail (Mammalian herbivore)	880	mg/kg		
Semivolatile Organic compound	Pentachloronitrobenzene	82-68-8	SOIL	Montane shrew (Mammalian insectivore)	11	mg/kg		
Semivolatile Organic compound	Pentachloronitrobenzene	82-68-8	SOIL	Red fox (Mammalian top carnivore)	290	mg/kg		
Semivolatile Organic compound	Pentachloronitrobenzene	82-68-8	WATER	American kestrel (water)	58000	µg/L		
Semivolatile Organic compound	Pentachloronitrobenzene	82-68-8	WATER	American robin (water)	50000	µg/L		
Semivolatile Organic compound	Pentachloronitrobenzene	82-68-8	WATER	Aquatic community organisms - water	10	µg/L	FINAL	
Semivolatile Organic compound	Pentachloronitrobenzene	82-68-8	WATER	Deer mouse (water)	340000	µg/L		
Semivolatile Organic compound	Pentachloronitrobenzene	82-68-8	WATER	Desert cottontail (water)	670000	µg/L		
Semivolatile Organic compound	Pentachloronitrobenzene	82-68-8	WATER	Montane shrew (water)	290000	µg/L		
Semivolatile Organic compound	Pentachloronitrobenzene	82-68-8	WATER	Occult little brown myotis bat (water)	400000	µg/L		
Semivolatile Organic compound	Pentachloronitrobenzene	82-68-8	WATER	Red fox (water)	750000	µg/L		
Semivolatile Organic compound	Pentachloronitrobenzene	82-68-8	WATER	Violet-green Swallow (water)	29000	µg/L		
Semivolatile Organic compound	Pentachlorophenol	87-86-5	SEDIMENT	Aquatic community organisms - sediment	2.4	mg/kg		
Semivolatile Organic compound	Pentachlorophenol	87-86-5	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	1	mg/kg		
Semivolatile Organic compound	Pentachlorophenol	87-86-5	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	0.48	mg/kg	FINAL	
Semivolatile Organic compound	Pentachlorophenol	87-86-5	SOIL	American kestrel (Avian intermediate carnivore)	2	mg/kg		
Semivolatile Organic compound	Pentachlorophenol	87-86-5	SOIL	American kestrel (Avian top carnivore)	5	mg/kg		
Semivolatile Organic compound	Pentachlorophenol	87-86-5	SOIL	American robin (Avian herbivore)	31	mg/kg		
Semivolatile Organic compound	Pentachlorophenol	87-86-5	SOIL	American robin (Avian insectivore)	0.36	mg/kg	FINAL	
Semivolatile Organic compound	Pentachlorophenol	87-86-5	SOIL	American robin (Avian omnivore)	0.72	mg/kg		
Semivolatile Organic compound	Pentachlorophenol	87-86-5	SOIL	Deer mouse (Mammalian omnivore)	1.6	mg/kg		
Semivolatile Organic compound	Pentachlorophenol	87-86-5	SOIL	Desert cottontail (Mammalian herbivore)	170	mg/kg		
Semivolatile Organic compound	Pentachlorophenol	87-86-5	SOIL	Earthworm (Soil-dwelling invertebrate)	31	mg/kg		
Semivolatile Organic compound	Pentachlorophenol	87-86-5	SOIL	Generic plant (Terrestrial autotroph - producer)	5	mg/kg		
Semivolatile Organic compound	Pentachlorophenol	87-86-5	SOIL	Montane shrew (Mammalian insectivore)	0.81	mg/kg		
Semivolatile Organic compound	Pentachlorophenol	87-86-5	SOIL	Red fox (Mammalian top carnivore)	13	mg/kg		
Semivolatile Organic compound	Pentachlorophenol	87-86-5	WATER	American kestrel (water)	27000	µg/L		
Semivolatile Organic compound	Pentachlorophenol	87-86-5	WATER	American robin (water)	23000	µg/L		
Semivolatile Organic compound	Pentachlorophenol	87-86-5	WATER	Aquatic community organisms - water	2.4	µg/L	FINAL	
Semivolatile Organic compound	Pentachlorophenol	87-86-5	WATER	Deer mouse (water)	1200	µg/L		
Semivolatile Organic compound	Pentachlorophenol	87-86-5	WATER	Desert cottontail (water)	2400	µg/L		
Semivolatile Organic compound	Pentachlorophenol	87-86-5	WATER	Montane shrew (water)	1000	µg/L		
Semivolatile Organic compound	Pentachlorophenol	87-86-5	WATER	Occult little brown myotis bat (water)	1500	µg/L		
Semivolatile Organic compound	Pentachlorophenol	87-86-5	WATER	Red fox (water)	2700	µg/L		
Semivolatile Organic compound	Pentachlorophenol	87-86-5	WATER	Violet-green Swallow (water)	13000	µg/L		
Semivolatile Organic compound	Phenol	108-95-2	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	840	mg/kg	FINAL	
Semivolatile Organic compound	Phenol	108-95-2	SOIL	Deer mouse (Mammalian omnivore)	38	mg/kg		
Semivolatile Organic compound	Phenol	108-95-2	SOIL	Desert cottontail (Mammalian herbivore)	43	mg/kg		
Semivolatile Organic compound	Phenol	108-95-2	SOIL	Earthworm (Soil-dwelling invertebrate)	1.8	mg/kg		
Semivolatile Organic compound	Phenol	108-95-2	SOIL	Generic plant (Terrestrial autotroph - producer)	0.79	mg/kg	FINAL	
Semivolatile Organic compound	Phenol	108-95-2	SOIL	Montane shrew (Mammalian insectivore)	550	mg/kg		
Semivolatile Organic compound	Phenol	108-95-2	SOIL	Red fox (Mammalian top carnivore)	17000	mg/kg		
Semivolatile Organic compound	Phenol	108-95-2	WATER	Aquatic community organisms - water	110	µg/L	FINAL	
Semivolatile Organic compound	Phenol	108-95-2	WATER	Deer mouse (water)	310000	µg/L		
Semivolatile Organic compound	Phenol	108-95-2	WATER	Desert cottontail (water)	610000	µg/L		
Semivolatile Organic compound	Phenol	108-95-2	WATER	Montane shrew (water)	260000	µg/L		
Semivolatile Organic compound	Phenol	108-95-2	WATER	Occult little brown myotis bat (water)	370000	µg/L		
Semivolatile Organic compound	Phenol	108-95-2	WATER	Red fox (water)	690000	µg/L		
Volatile Organic Compound	Acetone	67-64-1	AIR	Botta's Pocket Gopher (Burrowing mammal)	530	mg/m^3	FINAL	
Volatile Organic Compound	Acetone	67-64-1	SEDIMENT	Aquatic community organisms - sediment	0.065	mg/kg	FINAL	
Volatile Organic Compound	Acetone	67-64-1	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	19	mg/kg		
Volatile Organic Compound	Acetone	67-64-1	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	230	mg/kg		
Volatile Organic Compound	Acetone	67-64-1	SOIL	American kestrel (Avian intermediate carnivore)	1200	mg/kg		
Volatile Organic Compound	Acetone	67-64-1	SOIL	American kestrel (Avian top carnivore)	30000	mg/kg		
Volatile Organic Compound	Acetone	67-64-1	SOIL	American robin (Avian herbivore)	7.5	mg/kg		
Volatile Organic Compound	Acetone	67-64-1	SOIL	American robin (Avian insectivore)	170	mg/kg		
Volatile Organic Compound	Acetone	67-64-1	SOIL	American robin (Avian omnivore)	14	mg/kg		
Volatile Organic Compound	Acetone	67-64-1	SOIL	Deer mouse (Mammalian omnivore)	1.2	mg/kg	FINAL	
Volatile Organic Compound	Acetone	67-64-1	SOIL	Desert cottontail (Mammalian herbivore)	1.4	mg/kg		
Volatile Organic Compound	Acetone	67-64-1	SOIL	Montane shrew (Mammalian insectivore)	15	mg/kg		
Volatile Organic Compound	Acetone	67-64-1	SOIL	Red fox (Mammalian top carnivore)	2900	mg/kg		
Volatile Organic Compound	Acetone	67-64-1	WATER	American kestrel (water)	1600000	µg/L		
Volatile Organic Compound	Acetone	67-64-1	WATER	American robin (water)	1400000	µg/L		
Volatile Organic Compound	Acetone	67-64-1	WATER	Aquatic community organisms - water	11000	µg/L	FINAL	
Volatile Organic Compound	Acetone	67-64-1	WATER	Deer mouse (water)	52000	µg/L		
Volatile Organic Compound	Acetone	67-64-1	WATER	Desert cottontail (water)	100000	µg/L		
Volatile Organic Compound	Acetone	67-64-1	WATER	Montane shrew (water)	44000	µg/L		
Volatile Organic Compound	Acetone	67-64-1	WATER	Occult little brown myotis bat (water)	62000	µg/L		
Volatile Organic Compound	Acetone	67-64-1	WATER	Red fox (water)	110000	µg/L		
Volatile Organic Compound	Acetone	67-64-1	WATER	Violet-green Swallow (water)	830000	µg/L		
Volatile Organic Compound	Benzene	71-43-2	AIR	Botta's Pocket Gopher (Burrowing mammal)	25	mg/m^3	FINAL	
Volatile Organic Compound	Benzene	71-43-2	SEDIMENT	Aquatic community organisms - sediment	0.057	mg/kg	FINAL	
Volatile Organic Compound	Benzene	71-43-2	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	61	mg/kg		
Volatile Organic Compound	Benzene	71-43-2	SOIL	Deer mouse (Mammalian omnivore)	24	mg/kg	FINAL	
Volatile Organic Compound	Benzene	71-43-2	SOIL	Desert cottontail (Mammalian herbivore)	35	mg/kg		
Volatile Organic Compound	Benzene	71-43-2	SOIL	Montane shrew (Mammalian insectivore)	47	mg/kg		
Volatile Organic Compound	Benzene	71-43-2	SOIL	Red fox (Mammalian top carnivore)	7600	mg/kg		
Volatile Organic Compound	Benzene	71-43-2	WATER	Aquatic community organisms - water	45	µg/L	FINAL	
Volatile Organic Compound	Benzene	71-43-2	WATER	Deer mouse (water)	130000	µg/L		
Volatile Organic Compound	Benzene	71-43-2	WATER	Desert cottontail (water)	270000	µg/L		
Volatile Organic Compound	Benzene	71-43-2	WATER	Montane shrew (water)	110000	µg/L		
Volatile Organic Compound	Benzene	71-43-2	WATER	Occult little brown myotis bat (water)	160000	µg/L		
Volatile Organic Compound	Benzene	71-43-2	WATER	Red fox (water)	300000	µg/L		
Volatile Organic Compound	Butanone[2-]	78-93-3	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	3300	mg/kg	FINAL	
Volatile Organic Compound	Butanone[2-]	78-93-3	SOIL	Deer mouse (Mammalian omnivore)	260	mg/kg	FINAL	
Volatile Organic Compound	Butanone[2-]	78-93-3	SOIL	Desert cottontail (Mammalian herbivore)	420	mg/kg		
Volatile Organic Compound	Butanone[2-]	78-93-3	SOIL	Montane shrew (Mammalian insectivore)	2600	mg/kg		
Volatile Organic Compound	Butanone[2-]	78-93-3	SOIL	Red fox (Mammalian top carnivore)	420000	mg/kg		
Volatile Organic Compound	Butanone[2-]	78-93-3	WATER	Aquatic community organisms - water	20000	µg/L	FINAL	
Volatile Organic Compound	Butanone[2-]	78-93-3	WATER	Deer mouse (water)	9300000	µg/L		
Volatile Organic Compound	Butanone[2-]	78-93-3	WATER	Desert cottontail (water)	18000000	µg/L		
Volatile Organic Compound	Butanone[2-]	78-93-3	WATER	Montane shrew (water)	7900000	µg/L		
Volatile Organic Compound	Butanone[2-]	78-93-3	WATER	Occult little brown myotis bat (water)	11000000	µg/L		
Volatile Organic Compound	Butanone[2-]	78-93-3	WATER	Red fox (water)	20000000	µg/L		
Volatile Organic Compound	Carbon Tetrachloride	56-23-5	AIR	Botta's Pocket Gopher (Burrowing mammal)	5.7	mg/m^3	FINAL	
Volatile Organic Compound	Chloroform	67-66-3	AIR	Botta's Pocket Gopher (Burrowing mammal)	20	mg/m^3	FINAL	
Volatile Organic Compound	Chloroform	67-66-3	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	10	mg/kg	FINAL	
Volatile Organic Compound	Chloroform	67-66-3	SOIL	Deer mouse (Mammalian omnivore)	8	mg/kg	FINAL	
Volatile Organic Compound	Chloroform	67-66-3	SOIL	Desert cottontail (Mammalian herbivore)	17	mg/kg		
Volatile Organic Compound	Chloroform	67-66-3	SOIL	Montane shrew (Mammalian insectivore)	8.2	mg/kg		
Volatile Organic Compound	Chloroform	67-66-3	SOIL	Red fox (Mammalian top carnivore)	2300	mg/kg		
Volatile Organic Compound	Chloroform	67-66-3	WATER	Aquatic community organisms - water	180	µg/L	FINAL	
Volatile Organic Compound	Chloroform	67-66-3	WATER	Deer mouse (water)	78000	µg/L		
Volatile Organic Compound	Chloroform	67-66-3	WATER	Desert cottontail (water)	150000	µg/L		
Volatile Organic Compound	Chloroform	67-66-3	WATER	Montane shrew (water)	67000	µg/L		
Volatile Organic Compound	Chloroform	67-66-3	WATER	Occult little brown myotis bat (water)	94000	µg/L		
Volatile Organic Compound	Chloroform	67-66-3	WATER	Red fox (water)	170000	µg/L		
Volatile Organic Compound	Chloromethane	74-87-3	AIR	Botta's Pocket Gopher (Burrowing mammal)	21	mg/m^3	FINAL	
Volatile Organic Compound	Dichlorobenzene[1,4-]	106-46-7	SEDIMENT	Aquatic community organisms - sediment	0.35	mg/kg	FINAL	
Volatile Organic Compound	Dichlorobenzene[1,4-]	106-46-7	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	1.1	mg/kg		
Volatile Organic Compound	Dichlorobenzene[1,4-]	106-46-7	SOIL	Deer mouse (Mammalian omnivore)	1.5	mg/kg		
Volatile Organic Compound	Dichlorobenzene[1,4-]	106-46-7	SOIL	Desert cottontail (Mammalian herbivore)	11	mg/kg		
Volatile Organic Compound	Dichlorobenzene[1,4-]	106-46-7	SOIL	Earthworm (Soil-dwelling invertebrate)	1.2	mg/kg		
Volatile Organic Compound	Dichlorobenzene[1,4-]	106-46-7	SOIL	Montane shrew (Mammalian insectivore)	0.88	mg/kg	FINAL	
Volatile Organic Compound	Dichlorobenzene[1,4-]	106-46-7	SOIL	Red fox (Mammalian top carnivore)	72	mg/kg		
Volatile Organic Compound	Dichlorobenzene[1,4-]	106-46-7	WATER	Aquatic community organisms - water	15	µg/L	FINAL	
Volatile Organic Compound	Dichlorobenzene[1,4-]	106-46-7	WATER	Deer mouse (water)	13000	µg/L		
Volatile Organic Compound	Dichlorobenzene[1,4-]	106-46-7	WATER	Desert cottontail (water)	25000	µg/L		
Volatile Organic Compound	Dichlorobenzene[1,4-]	106-46-7	WATER	Montane shrew (water)	11000	µg/L		
Volatile Organic Compound	Dichlorobenzene[1,4-]	106-46-7	WATER	Occult little brown myotis bat (water)	15000	µg/L		
Volatile Organic Compound	Dichlorobenzene[1,4-]	106-46-7	WATER	Red fox (water)	29000	µg/L		
Volatile Organic Compound	Dichlorodifluoromethane	75-71-8	AIR	Botta's Pocket Gopher (Burrowing mammal)	2600	mg/m^3	FINAL	
Volatile Organic Compound	Dichloroethane[1,1-]	75-34-3	AIR	Botta's Pocket Gopher (Burrowing mammal)	5600	mg/m^3	FINAL	
Volatile Organic Compound	Dichloroethane[1,1-]	75-34-3	SEDIMENT	Aquatic community organisms - sediment	0.027	mg/kg	FINAL	
Volatile Organic Compound	Dichloroethane[1,1-]	75-34-3	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	370	mg/kg		
Volatile Organic Compound	Dichloroethane[1,1-]	75-34-3	SOIL	Deer mouse (Mammalian omnivore)	210	mg/kg	FINAL	
Volatile Organic Compound	Dichloroethane[1,1-]	75-34-3	SOIL	Desert cottontail (Mammalian herbivore)	370	mg/kg		
Volatile Organic Compound	Dichloroethane[1,1-]	75-34-3	SOIL	Montane shrew (Mammalian insectivore)	290	mg/kg		
Volatile Organic Compound	Dichloroethane[1,1-]	75-34-3	SOIL	Red fox (Mammalian top carnivore)	85000	mg/kg		
Volatile Organic Compound	Dichloroethane[1,1-]	75-34-3	WATER	Aquatic community organisms - water	46	µg/L	FINAL	
Volatile Organic Compound	Dichloroethane[1,1-]	75-34-3	WATER	Deer mouse (water)	2000000	µg/L		
Volatile Organic Compound	Dichloroethane[1,1-]	75-34-3	WATER	Desert cottontail (water)	3900000	µg/L		
Volatile Organic Compound	Dichloroethane[1,1-]	75-34-3	WATER	Montane shrew (water)	1700000	µg/L		
Volatile Organic Compound	Dichloroethane[1,1-]	75-34-3	WATER	Occult little brown myotis bat (water)	2400000	µg/L		
Volatile Organic Compound	Dichloroethane[1,1-]	75-34-3	WATER	Red fox (water)	4400000	µg/L		
Volatile Organic Compound	Dichloroethane[1,2-]	107-06-2	AIR	Botta's Pocket Gopher (Burrowing mammal)	41	mg/m^3	FINAL	
Volatile Organic Compound	Dichloroethane[1,2-]	107-06-2	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	110	mg/kg		
Volatile Organic Compound	Dichloroethane[1,2-]	107-06-2	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	6.3	mg/kg	FINAL	
Volatile Organic Compound	Dichloroethane[1,2-]	107-06-2	SOIL	American kestrel (Avian intermediate carnivore)	33	mg/kg		
Volatile Organic Compound	Dichloroethane[1,2-]	107-06-2	SOIL	American kestrel (Avian top carnivore)	670	mg/kg		
Volatile Organic Compound	Dichloroethane[1,2-]	107-06-2	SOIL	American robin (Avian herbivore)	0.85	mg/kg	FINAL	
Volatile Organic Compound	Dichloroethane[1,2-]	107-06-2	SOIL	American robin (Avian insectivore)	4.6	mg/kg		
Volatile Organic Compound	Dichloroethane[1,2-]	107-06-2	SOIL	American robin (Avian omnivore)	1.4	mg/kg		
Volatile Organic Compound	Dichloroethane[1,2-]	107-06-2	SOIL	Deer mouse (Mammalian omnivore)	27	mg/kg		
Volatile Organic Compound	Dichloroethane[1,2-]	107-06-2	SOIL	Desert cottontail (Mammalian herbivore)	36	mg/kg		
Volatile Organic Compound	Dichloroethane[1,2-]	107-06-2	SOIL	Montane shrew (Mammalian insectivore)	89	mg/kg		
Volatile Organic Compound	Dichloroethane[1,2-]	107-06-2	SOIL	Red fox (Mammalian top carnivore)	14000	mg/kg		
Volatile Organic Compound	Dichloroethane[1,2-]	107-06-2	WATER	American kestrel (water)	38000	µg/L		
Volatile Organic Compound	Dichloroethane[1,2-]	107-06-2	WATER	American robin (water)	32000	µg/L		
Volatile Organic Compound	Dichloroethane[1,2-]	107-06-2	WATER	Aquatic community organisms - water	1100	µg/L	FINAL	
Volatile Organic Compound	Dichloroethane[1,2-]	107-06-2	WATER	Deer mouse (water)	260000	µg/L		
Volatile Organic Compound	Dichloroethane[1,2-]	107-06-2	WATER	Desert cottontail (water)	510000	µg/L		
Volatile Organic Compound	Dichloroethane[1,2-]	107-06-2	WATER	Montane shrew (water)	220000	µg/L		
Volatile Organic Compound	Dichloroethane[1,2-]	107-06-2	WATER	Occult little brown myotis bat (water)	310000	µg/L		
Volatile Organic Compound	Dichloroethane[1,2-]	107-06-2	WATER	Red fox (water)	570000	µg/L		
Volatile Organic Compound	Dichloroethane[1,2-]	107-06-2	WATER	Violet-green Swallow (water)	19000	µg/L		
Volatile Organic Compound	Dichloroethene[1,1-]	75-35-4	AIR	Botta's Pocket Gopher (Burrowing mammal)	5.7	mg/m^3	FINAL	
Volatile Organic Compound	Dichloroethene[1,1-]	75-35-4	SEDIMENT	Aquatic community organisms - sediment	0.24	mg/kg	FINAL	
Volatile Organic Compound	Dichloroethene[1,1-]	75-35-4	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	14	mg/kg		
Volatile Organic Compound	Dichloroethene[1,1-]	75-35-4	SOIL	Deer mouse (Mammalian omnivore)	14	mg/kg		
Volatile Organic Compound	Dichloroethene[1,1-]	75-35-4	SOIL	Desert cottontail (Mammalian herbivore)	40	mg/kg		
Volatile Organic Compound	Dichloroethene[1,1-]	75-35-4	SOIL	Montane shrew (Mammalian insectivore)	11	mg/kg	FINAL	
Volatile Organic Compound	Dichloroethene[1,1-]	75-35-4	SOIL	Red fox (Mammalian top carnivore)	2900	mg/kg		
Volatile Organic Compound	Dichloroethene[1,1-]	75-35-4	WATER	Aquatic community organisms - water	190	µg/L	FINAL	
Volatile Organic Compound	Dichloroethene[1,1-]	75-35-4	WATER	Deer mouse (water)	150000	µg/L		
Volatile Organic Compound	Dichloroethene[1,1-]	75-35-4	WATER	Desert cottontail (water)	300000	µg/L		

Volatile Organic Compound	Dichloroethene[1,1-]	75-35-4	WATER	Montane shrew (water)	130000	µg/L		
Volatile Organic Compound	Dichloroethene[1,1-]	75-35-4	WATER	Occult little brown myotis bat (water)	180000	µg/L		
Volatile Organic Compound	Dichloroethene[1,1-]	75-35-4	WATER	Red fox (water)	340000	µg/L		
Volatile Organic Compound	Dichloroethene[cis/trans-1,2-]	540-59-0	SEDIMENT	Aquatic community organisms - sediment	0.034	mg/kg	FINAL	
Volatile Organic Compound	Dichloroethene[cis/trans-1,2-]	540-59-0	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	29	mg/kg		
Volatile Organic Compound	Dichloroethene[cis/trans-1,2-]	540-59-0	SOIL	Deer mouse (Mammalian omnivore)	25	mg/kg		
Volatile Organic Compound	Dichloroethene[cis/trans-1,2-]	540-59-0	SOIL	Desert cottontail (Mammalian herbivore)	58	mg/kg		
Volatile Organic Compound	Dichloroethene[cis/trans-1,2-]	540-59-0	SOIL	Montane shrew (Mammalian insectivore)	23	mg/kg	FINAL	
Volatile Organic Compound	Dichloroethene[cis/trans-1,2-]	540-59-0	SOIL	Red fox (Mammalian top carnivore)	7100	mg/kg		
Volatile Organic Compound	Dichloroethene[cis/trans-1,2-]	540-59-0	WATER	Aquatic community organisms - water	31	µg/L	FINAL	
Volatile Organic Compound	Dichloroethene[cis/trans-1,2-]	540-59-0	WATER	Deer mouse (water)	230000	µg/L		
Volatile Organic Compound	Dichloroethene[cis/trans-1,2-]	540-59-0	WATER	Desert cottontail (water)	460000	µg/L		
Volatile Organic Compound	Dichloroethene[cis/trans-1,2-]	540-59-0	WATER	Montane shrew (water)	200000	µg/L		
Volatile Organic Compound	Dichloroethene[cis/trans-1,2-]	540-59-0	WATER	Occult little brown myotis bat (water)	280000	µg/L		
Volatile Organic Compound	Dichloroethene[cis/trans-1,2-]	540-59-0	WATER	Red fox (water)	520000	µg/L		
Volatile Organic Compound	Methylene Chloride	75-09-2	AIR	Botta's Pocket Gopher (Burrowing mammal)	1300	mg/m^3	FINAL	
Volatile Organic Compound	Methylene Chloride	75-09-2	SEDIMENT	Aquatic community organisms - sediment	0.38	mg/kg	FINAL	
Volatile Organic Compound	Methylene Chloride	75-09-2	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	11	mg/kg		
Volatile Organic Compound	Methylene Chloride	75-09-2	SOIL	Deer mouse (Mammalian omnivore)	2.6	mg/kg	FINAL	
Volatile Organic Compound	Methylene Chloride	75-09-2	SOIL	Desert cottontail (Mammalian herbivore)	3.4	mg/kg		
Volatile Organic Compound	Methylene Chloride	75-09-2	SOIL	Generic plant (Terrestrial autotroph - producer)	1600	mg/kg		
Volatile Organic Compound	Methylene Chloride	75-09-2	SOIL	Montane shrew (Mammalian insectivore)	9	mg/kg		
Volatile Organic Compound	Methylene Chloride	75-09-2	SOIL	Red fox (Mammalian top carnivore)	1700	mg/kg		
Volatile Organic Compound	Methylene Chloride	75-09-2	WATER	Aquatic community organisms - water	2200	µg/L	FINAL	
Volatile Organic Compound	Methylene Chloride	75-09-2	WATER	Deer mouse (water)	30000	µg/L		
Volatile Organic Compound	Methylene Chloride	75-09-2	WATER	Desert cottontail (water)	60000	µg/L		
Volatile Organic Compound	Methylene Chloride	75-09-2	WATER	Montane shrew (water)	26000	µg/L		
Volatile Organic Compound	Methylene Chloride	75-09-2	WATER	Occult little brown myotis bat (water)	36000	µg/L		
Volatile Organic Compound	Methylene Chloride	75-09-2	WATER	Red fox (water)	68000	µg/L		
Volatile Organic Compound	Tetrachloroethene	127-18-4	AIR	Botta's Pocket Gopher (Burrowing mammal)	73	mg/m^3	FINAL	
Volatile Organic Compound	Tetrachloroethene	127-18-4	SEDIMENT	Aquatic community organisms - sediment	0.53	mg/kg		
Volatile Organic Compound	Tetrachloroethene	127-18-4	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	0.23	mg/kg	FINAL	
Volatile Organic Compound	Tetrachloroethene	127-18-4	SOIL	Deer mouse (Mammalian omnivore)	0.36	mg/kg		
Volatile Organic Compound	Tetrachloroethene	127-18-4	SOIL	Desert cottontail (Mammalian herbivore)	8.8	mg/kg		
Volatile Organic Compound	Tetrachloroethene	127-18-4	SOIL	Generic plant (Terrestrial autotroph - producer)	10	mg/kg		
Volatile Organic Compound	Tetrachloroethene	127-18-4	SOIL	Montane shrew (Mammalian insectivore)	0.18	mg/kg	FINAL	
Volatile Organic Compound	Tetrachloroethene	127-18-4	SOIL	Red fox (Mammalian top carnivore)	31	mg/kg		
Volatile Organic Compound	Tetrachloroethene	127-18-4	WATER	Aquatic community organisms - water	120	µg/L	FINAL	
Volatile Organic Compound	Tetrachloroethene	127-18-4	WATER	Deer mouse (water)	10000	µg/L		
Volatile Organic Compound	Tetrachloroethene	127-18-4	WATER	Desert cottontail (water)	20000	µg/L		
Volatile Organic Compound	Tetrachloroethene	127-18-4	WATER	Montane shrew (water)	8900	µg/L		
Volatile Organic Compound	Tetrachloroethene	127-18-4	WATER	Occult little brown myotis bat (water)	12000	µg/L		
Volatile Organic Compound	Tetrachloroethene	127-18-4	WATER	Red fox (water)	23000	µg/L		
Volatile Organic Compound	Toluene	108-88-3	AIR	Botta's Pocket Gopher (Burrowing mammal)	60	mg/m^3	FINAL	
Volatile Organic Compound	Toluene	108-88-3	SEDIMENT	Aquatic community organisms - sediment	0.67	mg/kg	FINAL	
Volatile Organic Compound	Toluene	108-88-3	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	29	mg/kg		
Volatile Organic Compound	Toluene	108-88-3	SOIL	Deer mouse (Mammalian omnivore)	25	mg/kg		
Volatile Organic Compound	Toluene	108-88-3	SOIL	Desert cottontail (Mammalian herbivore)	61	mg/kg		
Volatile Organic Compound	Toluene	108-88-3	SOIL	Generic plant (Terrestrial autotroph - producer)	200	mg/kg		
Volatile Organic Compound	Toluene	108-88-3	SOIL	Montane shrew (Mammalian insectivore)	23	mg/kg	FINAL	
Volatile Organic Compound	Toluene	108-88-3	SOIL	Red fox (Mammalian top carnivore)	3100	mg/kg		
Volatile Organic Compound	Toluene	108-88-3	WATER	Aquatic community organisms - water	130	µg/L	FINAL	
Volatile Organic Compound	Toluene	108-88-3	WATER	Deer mouse (water)	130000	µg/L		
Volatile Organic Compound	Toluene	108-88-3	WATER	Desert cottontail (water)	260000	µg/L		
Volatile Organic Compound	Toluene	108-88-3	WATER	Montane shrew (water)	110000	µg/L		
Volatile Organic Compound	Toluene	108-88-3	WATER	Occult little brown myotis bat (water)	160000	µg/L		
Volatile Organic Compound	Toluene	108-88-3	WATER	Red fox (water)	300000	µg/L		
Volatile Organic Compound	Trichlorobenzene[1,2,4-]	120-82-1	SEDIMENT	Aquatic community organisms - sediment	9.6	mg/kg		
Volatile Organic Compound	Trichlorobenzene[1,2,4-]	120-82-1	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	0.33	mg/kg	FINAL	
Volatile Organic Compound	Trichlorobenzene[1,2,4-]	120-82-1	SOIL	Deer mouse (Mammalian omnivore)	0.51	mg/kg		
Volatile Organic Compound	Trichlorobenzene[1,2,4-]	120-82-1	SOIL	Desert cottontail (Mammalian herbivore)	11	mg/kg		
Volatile Organic Compound	Trichlorobenzene[1,2,4-]	120-82-1	SOIL	Earthworm (Soil-dwelling invertebrate)	1.2	mg/kg		
Volatile Organic Compound	Trichlorobenzene[1,2,4-]	120-82-1	SOIL	Montane shrew (Mammalian insectivore)	0.27	mg/kg	FINAL	
Volatile Organic Compound	Trichlorobenzene[1,2,4-]	120-82-1	SOIL	Red fox (Mammalian top carnivore)	12	mg/kg		
Volatile Organic Compound	Trichlorobenzene[1,2,4-]	120-82-1	WATER	Aquatic community organisms - water	110	µg/L	FINAL	
Volatile Organic Compound	Trichlorobenzene[1,2,4-]	120-82-1	WATER	Deer mouse (water)	7700	µg/L		
Volatile Organic Compound	Trichlorobenzene[1,2,4-]	120-82-1	WATER	Desert cottontail (water)	15000	µg/L		
Volatile Organic Compound	Trichlorobenzene[1,2,4-]	120-82-1	WATER	Montane shrew (water)	6600	µg/L		
Volatile Organic Compound	Trichlorobenzene[1,2,4-]	120-82-1	WATER	Occult little brown myotis bat (water)	9300	µg/L		
Volatile Organic Compound	Trichlorobenzene[1,2,4-]	120-82-1	WATER	Red fox (water)	17000	µg/L		
Volatile Organic Compound	Trichloroethane[1,1,1-]	71-55-6	AIR	Botta's Pocket Gopher (Burrowing mammal)	240	mg/m^3	FINAL	
Volatile Organic Compound	Trichloroethane[1,1,1-]	71-55-6	SEDIMENT	Aquatic community organisms - sediment	0.17	mg/kg	FINAL	
Volatile Organic Compound	Trichloroethane[1,1,1-]	71-55-6	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	320	mg/kg		
Volatile Organic Compound	Trichloroethane[1,1,1-]	71-55-6	SOIL	Deer mouse (Mammalian omnivore)	400	mg/kg		
Volatile Organic Compound	Trichloroethane[1,1,1-]	71-55-6	SOIL	Desert cottontail (Mammalian herbivore)	1800	mg/kg		
Volatile Organic Compound	Trichloroethane[1,1,1-]	71-55-6	SOIL	Montane shrew (Mammalian insectivore)	260	mg/kg	FINAL	
Volatile Organic Compound	Trichloroethane[1,1,1-]	71-55-6	SOIL	Red fox (Mammalian top carnivore)	50000	mg/kg		
Volatile Organic Compound	Trichloroethane[1,1,1-]	71-55-6	WATER	Aquatic community organisms - water	62	µg/L	FINAL	
Volatile Organic Compound	Trichloroethane[1,1,1-]	71-55-6	WATER	Deer mouse (water)	5200000	µg/L		
Volatile Organic Compound	Trichloroethane[1,1,1-]	71-55-6	WATER	Desert cottontail (water)	10000000	µg/L		
Volatile Organic Compound	Trichloroethane[1,1,1-]	71-55-6	WATER	Montane shrew (water)	4400000	µg/L		
Volatile Organic Compound	Trichloroethane[1,1,1-]	71-55-6	WATER	Occult little brown myotis bat (water)	6200000	µg/L		
Volatile Organic Compound	Trichloroethane[1,1,1-]	71-55-6	WATER	Red fox (water)	11000000	µg/L		
Volatile Organic Compound	Trichloroethene	79-01-6	AIR	Botta's Pocket Gopher (Burrowing mammal)	19	mg/m^3	FINAL	
Volatile Organic Compound	Trichloroethene	79-01-6	SEDIMENT	Aquatic community organisms - sediment	1.6	mg/kg	FINAL	
Volatile Organic Compound	Trichloroethene	79-01-6	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	52	mg/kg		
Volatile Organic Compound	Trichloroethene	79-01-6	SOIL	Deer mouse (Mammalian omnivore)	55	mg/kg		
Volatile Organic Compound	Trichloroethene	79-01-6	SOIL	Desert cottontail (Mammalian herbivore)	170	mg/kg		
Volatile Organic Compound	Trichloroethene	79-01-6	SOIL	Montane shrew (Mammalian insectivore)	42	mg/kg	FINAL	
Volatile Organic Compound	Trichloroethene	79-01-6	SOIL	Red fox (Mammalian top carnivore)	6400	mg/kg		
Volatile Organic Compound	Trichloroethene	79-01-6	WATER	Aquatic community organisms - water	350	µg/L	FINAL	
Volatile Organic Compound	Trichloroethene	79-01-6	WATER	Deer mouse (water)	520000	µg/L		
Volatile Organic Compound	Trichloroethene	79-01-6	WATER	Desert cottontail (water)	1000000	µg/L		
Volatile Organic Compound	Trichloroethene	79-01-6	WATER	Montane shrew (water)	440000	µg/L		
Volatile Organic Compound	Trichloroethene	79-01-6	WATER	Occult little brown myotis bat (water)	620000	µg/L		
Volatile Organic Compound	Trichloroethene	79-01-6	WATER	Red fox (water)	1100000	µg/L		
Volatile Organic Compound	Trichlorofluoromethane	75-69-4	AIR	Botta's Pocket Gopher (Burrowing mammal)	820	mg/m^3	FINAL	
Volatile Organic Compound	Xylene (Total)	1330-20-7	AIR	Botta's Pocket Gopher (Burrowing mammal)	87	mg/m^3	FINAL	
Volatile Organic Compound	Xylene (Total)	1330-20-7	SEDIMENT	Aquatic community organisms - sediment	1.1	mg/kg	FINAL	
Volatile Organic Compound	Xylene (Total)	1330-20-7	SEDIMENT	Occult little brown myotis bat (Mammalian aerial insectivore)	1.8	mg/kg		
Volatile Organic Compound	Xylene (Total)	1330-20-7	SEDIMENT	Violet-green Swallow (Avian aerial insectivore)	54	mg/kg		
Volatile Organic Compound	Xylene (Total)	1330-20-7	SOIL	American kestrel (Avian intermediate carnivore)	280	mg/kg		
Volatile Organic Compound	Xylene (Total)	1330-20-7	SOIL	American kestrel (Avian top carnivore)	3200	mg/kg		
Volatile Organic Compound	Xylene (Total)	1330-20-7	SOIL	American robin (Avian herbivore)	90	mg/kg		
Volatile Organic Compound	Xylene (Total)	1330-20-7	SOIL	American robin (Avian insectivore)	41	mg/kg		
Volatile Organic Compound	Xylene (Total)	1330-20-7	SOIL	American robin (Avian omnivore)	56	mg/kg		
Volatile Organic Compound	Xylene (Total)	1330-20-7	SOIL	Deer mouse (Mammalian omnivore)	2	mg/kg		
Volatile Organic Compound	Xylene (Total)	1330-20-7	SOIL	Desert cottontail (Mammalian herbivore)	7	mg/kg		
Volatile Organic Compound	Xylene (Total)	1330-20-7	SOIL	Generic plant (Terrestrial autotroph - producer)	100	mg/kg		
Volatile Organic Compound	Xylene (Total)	1330-20-7	SOIL	Montane shrew (Mammalian insectivore)	1.4	mg/kg	FINAL	
Volatile Organic Compound	Xylene (Total)	1330-20-7	SOIL	Red fox (Mammalian top carnivore)	130	mg/kg		
Volatile Organic Compound	Xylene (Total)	1330-20-7	WATER	American kestrel (water)	880000	µg/L		
Volatile Organic Compound	Xylene (Total)	1330-20-7	WATER	American robin (water)	760000	µg/L		
Volatile Organic Compound	Xylene (Total)	1330-20-7	WATER	Aquatic community organisms - water	86	µg/L	FINAL	
Volatile Organic Compound	Xylene (Total)	1330-20-7	WATER	Deer mouse (water)	11000	µg/L		
Volatile Organic Compound	Xylene (Total)	1330-20-7	WATER	Desert cottontail (water)	21000	µg/L		
Volatile Organic Compound	Xylene (Total)	1330-20-7	WATER	Montane shrew (water)	9400	µg/L		
Volatile Organic Compound	Xylene (Total)	1330-20-7	WATER	Occult little brown myotis bat (water)	13000	µg/L		
Volatile Organic Compound	Xylene (Total)	1330-20-7	WATER	Red fox (water)	24000	µg/L		
Volatile Organic Compound	Xylene (Total)	1330-20-7	WATER	Violet-green Swallow (water)	440000	µg/L		

Los Alamos National Laboratory

Environmental Stewardship Division

Environmental Remediation and Surveillance Program

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TRV DEVELOPMENT METHODS:

USING THE GEOMETRIC MEAN

DRAFT

September 1, 2004

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Introduction

The ideal GMM TRV* for ecological risk screening assessments is one that is based on a data set representing the most ecologically relevant endpoints (reproduction/development), exposure routes (birds and mammals: oral ingestion via food or drinking water; mammals: inhalation; plants: uptake via seed coat and/or roots; or invertebrates: oral and dermal exposure), exposure media (birds and mammals: food, drinking water, air; plants and invertebrates: soil), exposure period (chronic), and effect levels (NOAEL for birds and mammals or NOEC for plants and invertebrates). A GMM TRV based on these characteristics is protective of wildlife, plant, and invertebrate populations and sensitive individuals because it represents an exposure that is not associated with adverse impacts of low-level, long-term chemical effects (i.e., adverse effects on ability of individuals to develop into viable organisms, search for mates, breed successfully, and produce live and equally viable offspring).

The GMM TRV is derived from a data set of chronic NOAEL (NOEC)-based ELs (see the **Deriving chronic NOAEL (NOEC)-based ELs** section). The suitability of the GMM TRV for the chemical and ecological screening receptor of concern is determined by the following assessments (1) examining the distribution of its data set (see the **Assessing the distribution of the GMM TRV data set** section), (2) comparing it to the lowest chronic LOAEL (LOEC)-based EL derived from the GMM TRV data set (see the **Comparing the GMM TRV to the LOAEL (LOEC)-based ELs** section), and (3) comparing it to TRVs derived by other organizations, if available (see the **Comparing the GMM TRV to other Published TRVs** section). The information gathered from the assessments is used to assign the GMM TRV a confidence rating by scoring various aspects of each of the assessments on how well they meet the ideal GMM TRV criteria (see the **Scoring Criteria and Confidence Ratings** section). Summary tables and graphs are provided in the specific GMM TRV Summary reports for easier distillation of information contained within the GMM TRV data set (see the **Tables and Graphs for GMM TRV Data Set Information** section).

*See the **Acronyms** table (Table 5) for definitions of all acronyms and abbreviations.

Deriving chronic NOAEL (NOEC)-based ELs

The data set used to calculate the GMM TRV (see the **Calculations** section in the specific GMM TRV Summary Report) contains a variety of effect levels (PTVs derived from the PTSE Process as described in Ref ID 1487) ranging from chronic NOAEL (NOEC)/LOAEL (LOEC) pairs to acute, other effect levels such as LC50s or EC20s. The GMM TRV is calculated using chronic NOAEL (NOEC)-based ELs that are either chronic NOAELs (NOECs) or derived from other effect levels. If the effect level (PTV) is an acute or subchronic NOAEL (NOEC), it is extrapolated to a chronic NOAEL (NOEC)-based EL with the application of a UF. If the PTV is a LOAEL (LOEC) or other EL (LC50), it is first extrapolated to a NOAEL with the application of a UF, and then it is extrapolated to a chronic exposure duration if needed. See the **UFs Description** table (Table 4).

Assessing the distribution of the GMM TRV data set

The data set of chronic NOAEL (NOEC)-based ELs is evaluated to determine the type of distribution (e.g., normal, positively skewed, negatively skewed, bimodal) and the variance of the distribution based on the number of GSDs from the GMM. Also, any ELs that may appear to be outliers are discussed (see the *Geometric Standard Deviations and Outliers* section). The

distribution is also evaluated for patterns or trends based on test organisms, exposure durations, original effect level types, or endpoint categories. The distribution and patterns of the ELs in the GMM TRV data set are discussed in the **Data Set Distribution Comments** section and presented in the **Graph of NOAEL-based ELs**, both which can be found in the specific GMM TRV Summary Report**.** The experiment details such as exposure duration, test organism, and original effect level are presented in the **PTVs Considered** table in the specific GMM TRV Summary Report.

Types of Distributions

If the distribution is negatively skewed, there are a larger number of higher values which most likely represent chronic or C-CL NOAELs (NOECs) for ecologically relevant endpoints; therefore, the GMM TRV is influenced by them and more likely to approximate a true NOAEL (NOEC). A negatively skewed distribution, in the purpose of a GMM TRV, is preferred because of this. On the other hand, if the GMM TRV belongs to a positively skewed distribution, this means it is usually biased towards the lower values of the distribution and is therefore protective of the higher ones which are usually associated with chronic or C-CL NOAELs (NOECs). For this reason, a positively skewed distribution is also acceptable because the GMM TRV is overly conservative due to the large number of lower values extrapolated from original effect levels other than chronic NOAELs (NOECs). If the distribution shows a bimodal pattern, this indicates there are two clusters of values according to test organisms, original effect levels, exposure durations, and/or endpoint categories. For example, there may be a large group of ELs associated with acute and subchronic values and another large group of ELs associated with chronic and C-CL values. It becomes difficult to determine if the GMM TRV is appropriate in this case. Revision of the GMM TRV to a subset GMM TRV may be preferred in order to represent the group of values that is more ecologically relevant (e.g., the chronic and C-CL values, which are more likely to represent more ecologically relevant endpoints such as R/D effects).

Geometric Standard Deviations and Outliers

Because the TRV is based on a geometric mean, the spread of data is assessed by calculating the GSD of the GMM TRV. GSDs and outliers are discussed in the assessment of data set distributions in order to 1) describe the variability of the data set, 2) outline any patterns associated with extreme values vs. those within 2 GSDs (e.g., outliers with high values may be associated with chronic durations while those values closer to the GMM are values extrapolated from original PTVs), and 3) provide support to the confidence rating of the GMM TRV where distributions with lower variance have higher confidence (i.e., GMM TRV is a better estimate of the no observed adverse effect level) vs. distributions having higher variance have lower confidence. Some researchers consider any values beyond 2 standard deviations extreme values, or outliers (Ref ID 1486). However, while outliers are described to be observations that do not exist within the characteristic distribution of the data, the decision to keep or remove an outlier often relies on professional judgment based on knowledge of the parameter being studied (Ref IDs 1485 and 1486). Therefore, in GMM TRV data sets, outliers are usable because they have been evaluated and screened in the same rigorous process as all other values derived via the PTSE process (Ref ID 1487). All ELs are based on PTVs derived from the PTSE Process and if a PTV was associated with a low confidence based on lack of or little supporting data, it was eliminated prior to the formulation of the data set used for the calculation of the GMM TRV.

Furthermore, ELs allowed in the data set that have larger values are often associated with chronic or C-CL PTVs whereas the lower ELs allowed in the data set were extrapolated from PTVs that were subchronic or acute NOAELs (NOECs), LOAELs (LOECs), or Other ELs (e.g., LD50s) with the use of UFs. The lower, extrapolated values are accepted in the GMM TRV data set because in screening level ecological risk assessments the use of a TRV that is overly protective, rather than under protective is preferred.

Comparing the GMM TRV to the LOAEL (LOEC)-based ELs

The GMM TRV is compared to the lowest chronic LOAEL (LOEC)-based EL derived from the GMM TRV data set (see the *Deriving chronic LOAEL (LOEC)-based ELs* section) in order to determine whether it may or may not be protective of the most sensitive endpoint in the data set. If it is below the lowest LOAEL (LOEC)-based EL, it is protective of all possible effects in the data set. However, it may be too far below the LOAEL (LOEC)-based EL and some consideration must be taken into account to determine whether or not it is overly protective. On the other hand, if the GMM TRV is above the LOAEL (LOEC)-based EL, further investigation is needed to determine if the GMM TRV may not be protective enough. Examples of information to examine include what endpoint the LOAEL (LOEC) or LOAEL (LOEC)-based EL represents, whether it is more or less ecologically relevant than other endpoints in the data set, if there are other similar endpoints available and how their ELs compare to the GMM TRV, and what original effect level was used to approximate the LOAEL (LOEC)-based EL. The application of UFs may have made the chronic LOAEL (LOEC)-based EL overly conservative; therefore, the GMM TRV may still be protective even though it is above the LOAEL (LOEC)-based EL. This is further strengthened if it can be shown that the GMM TRV includes more ecologically relevant endpoints and chronic exposure durations. The comparison is discussed in the **Lowest LOAEL (LOEC) Comparison** section and presented in the **Graph of LOAEL (LOEC)-based ELs**, both which can be found in the specific GMM TRV Summary Report. Experiment details such as exposure duration, test organism, and original effect level are presented in the **PTVs Considered** table in the specific GMM TRV Summary Report.

Deriving chronic LOAEL (LOEC)-based ELs

The data set may contain a variety of effect levels (PTVs derived from the PTSE Process as described in Ref ID 1487) ranging from chronic NOAEL (NOEC)/LOAEL (LOEC) pairs to acute, other effect levels such as LC50s or EC20s. The extrapolation of NOAELs (NOECs) and other effect levels to chronic LOAEL (LOEC)-based ELs is done to maximize the number of data points that can be compared to the GMM TRV. If the original effect level (PTV) is not a chronic LOAEL (LOEC), it is extrapolated to a chronic LOAEL (LOEC)-based EL by applying standard UFs (see Table 4) or NOAEL (NOEC) to LOAEL (LOEC) ratios that are specific to the exposure scenario of concern (i.e., exposure route, exposure medium, and ecological receptor) See *Explanation of LOAEL (LOEC)/NOAEL (NOEC) Ratios*

Explanation of LOAEL (LOEC)/NOAEL (NOEC) Ratios

If only a chronic NOAEL (NOEC) or chronic NOAEL (NOEC)-based EL extrapolated from an acute or subchronic NOAEL (NOEC) is available, a factor must be applied to derive a LOAEL (LOEC)-based EL from this value. Based on Dourson and Stara (1983; Ref ID 1379), 96% of the ratios between NOAELs (NOECs) and LOAELs (LOECs) for mammals in oral ingestion experiments have values of 5 or less (page 232 and figure 4). However, because this data is only

applicable to oral ingestion exposure in mammals, ratios for the remaining exposure pathways (oral ingestion in birds, oral ingestion and dermal contact in earthworms, uptake via seed coats and/or roots, and inhalation in mammals) were determined from NOAEL (NOEC)/LOAEL (LOEC) pairs specific to each of the exposure pathways. The data used to develop the ratios is from the Ecorisk Database. The smallest and largest ratios developed for each exposure pathway were used to approximate a minimum and maximum LOAEL (LOEC)-based EL, in order to bracket a range of concentrations at which the adverse effects may first be observed. The **PTVs Considered** table in the specific GMM TRV Summary Report presents this data.

Comparing the GMM TRV to other Published TRVs

The GMM TRV is compared to TRVs from other organizations in order to present all available data and to ensure the validity of the GMM TRV in light of this other data. See **LANL CS TRV, ORNL CS TRV, USEPA R6 CS TRV,** and **SNL CS TRV Comparison** sections in the specific GMM TRV Summary Report.

Scoring Criteria and Confidence Ratings

A confidence rating for the GMM TRV indicates how well the GMM TRV represents the ideal GMM TRV, which is representative of the true TRV. The true TRV is the dose rate or concentration that is equivalent to a no adverse effect level for population level effects (i.e., decreased population size) for a particular receptor under a specific exposure scenario to a particular chemical in the real world. The confidence rating for the GMM TRV is based on how well the GMM TRV meets various criteria within specific evaluation categories. A weighted scoring system based on the degree of influence each evaluation category has on the GMM TRV is used to assess the validity of the GMM TRV for estimating the true TRV. The following sections describe the structure of the confidence rating system including descriptions and justifications for the evaluation processes used to assign the confidence ratings.

Confidence Rating System Structure

The first step in assigning a confidence rating to a GMM TRV is to assign a score for each evaluation category listed below. Each evaluation category contains individual criterion associated with ranked scores that reflect how well the GMM TRV data set being evaluated represents the characteristics of the ideal GMM TRV. The higher the score, the better the GMM TRV represents the ideal GMM TRV and thus the true TRV. The possible scores for each evaluation category are presented in *GMM TRV Scoring Criteria_R6b.xls* and the justifications for the scores are presented in the *Justification for Scoring and Weighting Factor Levels* section.

Data Set Evaluation Categories:

1) Number of Experiments
2) Type of Exposure Medium
3) Number of Test Organism Orders
4) Number of Unique Measurements (Endpoints)
5) Type of Endpoint Category
6) Number and Type of Effect Levels
7) Confidence Rating of PTVs Associated with Individual NOAEL (NOEC)-based ELs in GMM TRV Data Set
8) Outlier(s) in Chronic NOAEL (NOEC)-based EL Distribution

9) Chronic NOAEL (NOEC)-based EL Distribution is Bimodal
10) Relationship of GMM TRV to Chronic LOAEL (LOEC)-based ELs
11) Relationship of GMM TRV to Other Published TRVs.

The second step in assigning a confidence rating to a GMM TRV is to calculate a weighted score for each evaluation category by multiplying the individual scores of each evaluation category by the weighting factor of the evaluation category. The weighted score for each evaluation category is based on the weighting factor level assigned to the evaluation category. The weighting factor level is based on the degree of influence the evaluation category has on setting the GMM TRV. The higher the weighting factor, the greater the influence the evaluation category has on setting the GMM TRV. The possible weighting factor levels are presented in Table 1.

Table 1. Weighting Factor Levels.

Weighting Factor Level	Definition	Weighting Factor Applied
Critical	A low score for a critical evaluation category triggers re-investigation of the GMM TRV and possible revision or decision not to use.	2
Non-critical	A high score for a non-critical evaluation category indicates the GMM TRV data set is very robust, highly relevant to the scenario for which the TRV is being developed, or is based primarily on ELs that were not derived by applying UFs to PTVs. A low score rarely influences revision of GMM TRV because it is an added benefit if the evaluation category scores high, but not a requirement.	1

The third step in assigning a confidence rating to a GMM TRV is to calculate a total weighted score for the GMM TRV being evaluated. The total weighted score is equal to the sum of weighted scores of all 11 evaluation categories. The weighting factor levels assigned to each evaluation category are presented in Table 2 and the justifications for them are presented in the *Justification for Scoring and Weighting Factor Levels* section.

Table 2. Weighting Factor Levels Assigned to Evaluation Categories.

Evaluation Category	Weighting Factor Level
Number of Experiments	Non-critical
Type of Exposure Medium	Non-critical
Number of Test Organisms Orders	Non-critical
Number of Unique Measurements (Endpoints)	Non-critical
Type of Endpoint Category	Non-critical
Number and Type of Effect Levels	Non-critical

Confidence Rating of PTVs Associated with Individual NOAEL (NOEC)-based ELs in GMM TRV Data Set	Non-critical
Outlier(s) in Chronic NOAEL (NOEC)-based EL Distribution	Critical
Chronic NOAEL (NOEC)-based EL Distribution is Bimodal	Critical
Relationship of GMM TRV to Chronic LOAEL (LOEC)-based ELs	Critical
Relationship of GMM TRV to Other Published TRVs.	Critical

The fourth step in assigning a confidence rating to a GMM TRV is to determine the percentage the total weighted score is of the maximum total weighted score for the evaluation (i.e., 36.5 points based on summing the highest scores from each evaluation category). The percentage the total weighted score is of the maximum total weighted score is the ultimate basis for assigning the confidence rating of a GMM TRV. Table 3 presents the possible confidence ratings and the corresponding percentage of the maximum total weighted score and the equivalent total weighted score.

Table 3. Confidence Ratings.

Confidence Rating	**% of Maximum Total Weighted Score (%MTWS)**	**Equivalent Total Weighted Score (ETWS)**
High	%MWTS ≥ 75%	27.375 ≤ ETWS ≤ 36.5
Medium	50% ≤ %MTWS < 75%	18.25 ≤ ETWS < 27.375
Low	25% ≤ %MTWS < 50%	9.125 ≤ ETWS < 18.25
Unacceptable	%MTWS ≤ 25%	ETWS ≤ 9.125

Justification for Scoring and Weighting Factor Levels
The following sections provide the justification for the scoring criteria and weighting factor levels of each evaluation category.

Number of Experiments

Justification for Scoring:
The preference is to have a high number of experiments because this reduces the potential for the data set to be biased toward a particular study design. Based on best professional judgment, 10 experiments are considered to provide a more than adequate representation of the toxicity of a chemical for the test organism group of concern. Four to 9 experiments are considered to provide an adequate representation while 3 or fewer experiments are considered to provide a minimal representation of the toxicity of a chemical for the test organism group of concern.

Justification for Weighting Factor Level:
This evaluation category is given a **Non-critical** weighting factor level. This evaluation category has a strong relationship to the robustness of the data set and its ability to represent the ideal GMM TRV; thus the true TRV is estimated. The higher the number of experiments, the more robust the data set. This evaluation category is not, however, a

primary factor for determining whether or not the GMM TRV should be used because a high number of experiments in the data set is not a requirement, but rather an additional benefit for assessing confidence in the TRV.

Type of Exposure Medium

Justification for Scoring:
The preference is for all the ELs in the data set to be associated with an exposure medium that is equivalent to the exposure medium of concern. However, if the data set is limited (i.e., less than 3 ELs for a particular exposure medium), ELs that have an appropriate surrogate exposure medium (i.e., exposure medium that has the same exposure route as the exposure route of concern) may be used to supplement the data set so that a GMM TRV can be derived. For example, for an oral ingestion via food TRV only food ELs should be used, but if the data set is limited, oral ingestion via drinking water ELs may be used to supplement the data set so that a GMM TRV may be calculated.

Justification for Weighting Factor Level:
This category is given a **Non-critical** weighting factor level. This evaluation category indicates the degree of relevance the data set has to the TRV that is being developed. The higher the degree of relevance, the more closely the GMM TRV represents the ideal GMM TRV; thus the true TRV is estimated. This evaluation category is not, however, a primary factor for determining whether or not the GMM TRV should be used because an exact match on the exposure medium for which the TRV is being developed is not a requirement, but rather an additional benefit for assessing confidence in the TRV. Only the exposure route must match the exposure for which the TRV is being developed. However, the toxicity can vary greatly in different exposure media due to the differences in bioavailability of the chemical in one compared to the other. Therefore, a complete match on the exposure medium is preferred to be able to more accurately estimate the true TRV.

Number of Test Organism Orders

Justification for Scoring:
The preference is to have a high number of test organism orders because this reduces the potential for the data set to be biased toward one order of test organisms. The scoring criteria are based upon the USACHPPM guidance that states that having at least 2 different taxonomic orders in a TRV data set helps define the quality of the data set (Ref ID 1481).

Justification for Weighting Factor Level:
This category is given a **Non-critical** weighting factor level. This evaluation category has a strong relationship to the robustness of the data set and its ability to represent the ideal GMM TRV; thus the true TRV is estimated. The higher the number of test organism orders, the more robust the data set. This evaluation category is not, however, a primary factor for determining whether or not the GMM TRV should be used because a high number of test organism orders in the data set is not a requirement, but rather an additional benefit for assessing confidence in the TRV.

Number of Unique Measurements (Endpoints)

Justification for Scoring:
The preference is to have a high number of unique measurements (endpoints) because this reduces the potential for the data set to be biased toward one type of toxicological effect. Unique measurements are those that represent different parameters of measurement for an endpoint category. For example, the endpoints of "Mortality" and "LC50" may both be categorized as S endpoints because they are both measurements of survival/mortality, but they are each considered a unique measurement because they measure different aspects of survival/mortality. Based on best professional judgment, more than 3 unique measurements are considered to provide a more than adequate representation of the toxicity of a chemical for the test organism group of concern. Three unique measurements are considered to provide an adequate representation while fewer than 3 unique measurements are considered to provide a minimal representation of the toxicity of a chemical for the test organism group of concern.

Justification for Weighting Factor Level:
This category is given a **Non-critical** weighting factor level. This evaluation category is related to the robustness of the data set and its ability to represent the ideal GMM TRV; thus the true TRV is estimated. The higher the number of unique measurements, the more robust the data set. This evaluation category is not, however, a primary factor for determining whether or not the GMM TRV should be used because a high number of unique measurements in the data set is not a requirement, but rather an additional benefit for assessing the validity of the GMM to estimate the true TRV. Furthermore, all the unique measurements that are allowed in the data set are by definition relevant to the TRV being developed for population effects. The relevance of the endpoint category of each unique measurement is scored separately under *Type of Endpoint Category*.

Type of Endpoint Category

Justification for Scoring:
The preference is to have more reproduction and development endpoints followed by survival endpoints and then by adult body weight or size change endpoints because the first category of endpoints is the most ecologically relevant group for determining long-term effects on populations followed by the second and third category.

Justification for Weighting Factor Level
This category is given a **Non-critical** weighting factor level. This evaluation category indicates the degree of relevance the data set has to the effects of concern, population level effects, for which the GMM TRV is being developed. The higher the degree of relevance, the more closely the GMM TRV represents the ideal GMM TRV; thus the true TRV is estimated. This evaluation category is not, however, a primary factor for determining whether or not the GMM TRV should be used because all the endpoint categories considered are ecologically relevant by definition. However, reproduction or development endpoints can more closely approximate population level effects, so having more endpoints in this

category is an added benefit for assessing the validity of the GMM TRV for estimating the true TRV.

Number and Type of Effect Levels of PTVs Associated with the Individual NOAEL (NOEC)-based ELs in the GMM TRV Data Set

Justification for Scoring:
The preference is to have chronic NOAELs (NOECs) with LOAELs (LOECs), followed by chronic NOAELs (NOECs) without LOAELs (LOECs), then by subchronic NOAELs (NOECs) with LOAELs (LOECs), then by subchronic NOAELs (NOECs) without LOAELs (LOECs) and finally by all other ELs. This hierarchy is based on two factors. One factor is whether or not UFs have to be applied to a PTV to extrapolate to a chronic NOAEL (NOEC). Extrapolated values are less preferred because they may be overly conservative, thus less representative of the actual chronic NOAEL (NOEC). The second factor is whether or not there are any NOAELs (NOECs) with accompanying LOAELs (LOECs). NOAELs (NOECs) with LOAEALs (LOECs) are most preferred because these values bracket the range of possible effects better than just a NOAEL (NOEC) or just a LOAEL (LOEC) alone.

Justification for Weighting Factor Level:
This category is given a **Non-critical** weighting factor level. This evaluation category is directly related to the certainty in the GMM TRV. The more ELs in the GMM TRV data set that were extrapolated to chronic NOAEL (NOEC)-based ELs by applying UFs, the greater the level of conservatism that is built into the GMM TRV. Even though being overly conservative is acceptable for screening level ecological risk assessments, it is preferred that TRVs not be overly conservative if more certain data is available. On the other hand, the higher the number of original ELs that are chronic NOAELs (NOECs) in the GMM TRV data set, the higher the confidence that the GMM TRV represents the ideal GMM TRV and thus estimates the true TRV (chronic no observed adverse effect level). A high score in this evaluation category is not required, but is an additional benefit for assessing confidence in the TRV.

Confidence Rating of PTVs Associated with the Individual NOAEL (NOEC)-based ELs in GMM TRV Data Set

Justification for Scoring:
The preference is to have more effect levels (PTVs) with high confidence ratings, followed by those with medium and then by low. A PTV confidence rating indicates to what degree the PTV is ecologically relevant, defensible and well documented based on the PTSE Part 2 Study Evaluation criteria (See Ref ID 1487). Effect levels associated with a low confidence rating are not included in the data set unless the data set is limited (i.e., less than 3 ELs based on PTVs with either a High or Medium confidence rating.).

Justification for Weighting Factor Level:
This category is given a **Non-critical** weighting factor level. This evaluation category indicates the degree of relevance the data set has to the TRV that is being developed. The higher the degree of relevance, the more closely the GMM TRV represents the ideal GMM

TRV; thus the true TRV is estimated. The PTV confidence rating is based upon scoring various study elements that are considered to be relevant for developing a scientifically defensible and ecologically relevant TRV. A high PTV confidence rating indicates the value is highly relevant for deriving a TRV and more likely to accurately estimate the true TRV.

Outliers(s) in the Chronic NOAEL (NOEC)-based EL Distribution

Justification for Scoring:
The data set cannot have invalid outliers (i.e., values associated with error or study designs that do not meet the minimum requirements for deriving a TRV). Invalid outliers must be removed from the data set prior to calculation of the GMM TRV. An invalid outlier is determined by a low confidence rating of a PTV associated with an EL in the data set. However, valid outliers, or extreme values, are allowed (e.g. sensitive species) as long as the data set is not bimodal (see *the Chronic NOAEL (NOEC)-based EL Distribution is Bimodal* section). The GSD is used to determine the variance of the GMM TRV. A lower variance (smaller GSD) indicates that the GMM TRV is more likely to represent the ideal GMM TRV and thus more accurately estimate the true TRV while a high variance (higher GSD) indicates that the GMM TRV is less likely to represent the ideal GMM TRV and thus less accurately estimate the true TRV. In most cases of high variance, the GMM TRV may be overly conservative because the large variance in the values is a result of the averaging of ELs that are based on PTVs other than chronic NOAELs (NOECs) and the application of UFs to extrapolate these values to chronic NOAEL (NOEC)-based ELs. A data set that contains both the smaller, extrapolated values and the non-extrapolated values (i.e., original effect levels that were already chronic NOAELs (NOECs)), leads to a high variance.

Justification for Weighting Factor Level:
This category is given a **Critical** weighting factor level. This evaluation category represents the variance of the GMM TRV dataset, which is important because it indicates how well the GMM TRV represents the ideal GMM TRV; thus how well the GMM TRV estimates the true TRV, which is directly related to the confidence in the GMM TRV. Low variance equals high confidence. High variance equals low confidence and may require reconsideration of the GMM TRV.

Chronic NOAEL (NOEC)-based EL Distribution is Bimodal

Justification for Scoring:
The preference is for the GMM TRV data set not to have a bimodal distribution. A bimodal distribution is determined based on 2 distinct clusters of values associated with different test species, original exposure durations, original effect levels or endpoint categories of each EL in the data set. If a data set is bimodal, best professional judgment must be used to determine if a subset GMM TRV(s) needs to be calculated or if the GMM TRV can be used as is.

Justification for Weighting Factor Level:
This category is given a **Critical** weighting factor level. This evaluation category has a large influence on whether or not the GMM TRV will be used. If the GMM TRV data set is found

to have a bimodal distribution, the GMM TRV may need to be revised in order to represent the most sensitive and/or ecologically relevant distribution (E.g., One distinct cluster is rodent (omnivore) data while the other is mink (carnivore) data. A TRV calculated from rodent data is more appropriate for the omnivorous deer mouse ESL receptors, while a TRV calculated from the mink is more appropriate for carnivorous red fox ESL receptor.)

Relationship of GMM TRV to chronic LOAEL (LOEC)-based ELs

Justification for Scoring:
The preference is that the GMM TRV be below the lowest chronic LOAEL (LOEC)-based EL because that indicates that it is protective of the most sensitive adverse effect in the data set. If the GMM TRV is not below the lowest chronic LOAEL (LOEC)-based EL, the next preference is for it to be no more than 3 times higher than a chronic LOAEL (LOEC)-based EL based on a chronic or C-CL LOAEL (LOEC) for an R/D or less ecologically relevant endpoint. Next preference is that the GMM TRV is not more than 3 times higher than a chronic LOAEL (LOEC)-based EL extrapolated from an original effect level other than a LOAEL. Because some of the chronic LOAEL (LOEC)-based ELs are extrapolated from NOAELs (NOECs) or other effect levels by applying UFs, they may be overly conservative and not represent the true chronic LOAELs (LOECs) for particular endpoints. In such cases, the GMM TRV is considered adequately protective due to the conservatism built into the extrapolated chronic LOAEL (LOEC)-based ELs. Furthermore, the GMM TRV may be considered adequately protective, if it is below the chronic LOAEL (LOEC)-based ELs for the most ecologically relevant endpoints (reproduction and development) even though it may exceed the lowest chronic LOAEL (LOEC)-based EL for an adult body weight or size change endpoint or for a survival endpoint. Another consideration is to determine based on best professional judgment whether or not the GMM TRV is unacceptably higher or lower than the lowest chronic LOAEL (LOEC)-based EL. If the difference is unacceptable, further investigation is warranted to determine if the GMM TRV is inappropriate (i.e., unacceptably over or under conservative). If it is found to be unacceptable, then the GMM TRV may need to be revised.

Justification for Weighting Factor Level:
This category is given a **Critical** weighting factor level. This evaluation category has a large influence on whether or not the GMM TRV will be used. If the difference between the GMM TRV and the lowest chronic LOAEL (LOEC)-based EL is unacceptable, the GMM TRV is unacceptable and an alternative (e.g., a subset GMM TRV, CS TRV) must be sought.

Relationship of GMM TRV to other published TRVs

Justification for Scoring:
It is preferred that any differences between the GMM TRV and other published TRVs be explainable on the basis of the experiments, endpoints, test organisms, and test chemical forms, etc., considered. It is also important that the explanation provide support for or against the use of the GMM TRV. Also to be verified is that the GMM TRV has considered all relevant data. If relevant data has not been considered, the GMM TRV data set may need

to be expanded to include the missing data. If no published TRVs are available for comparison, the GMM TRV is considered to be acceptable.

Justification for Weighting Factor Level:
This category is given a **Critical** weighting factor level. This evaluation category has a large influence on whether or not the GMM TRV will be used. If differences between the GMM TRV and other published TRVs are unacceptable (i.e., unexplainable, error based or lack of data based), the GMM TRV is unacceptable and an alternative (e.g., subset GMM TRV, CS TRV) needs to be considered

Tables and Graphs for GMM TRV Data Set Information
For easier presentation of the data in support of the GMM TRV, the following tables are included in the specific GMM TRV Summary Report: **PTVs Considered**, **Test Organisms**, and **Original Effect Level Types**. The **Graph of NOAEL-based ELs** and **Graph of LOAEL-based ELs** are also included for illustration of the data. In the graphs, the x-axis labels contain coding that indicates the original exposure durations, effect levels, endpoint categories, and test organisms from which the NOAEL (NOEC)- or LOAEL (LOEC)-based ELs are approximated. For example, if a data point is associated with the label "SC L WC Rat" in a NOAEL-based ELs graph, this label indicates that the value is a NOAEL-based EL approximated from a subchronic (SC) LOAEL (L) for weight change (WC) in the rat. Finally, it should be noted that when minimum and maximum LOAEL-based ELs are approximated, the minimum LOAEL-based ELs are used in the graph for LOAEL (LOEC)-based ELs.

Table 4. UF Descriptions.

	UF applied to derive a TRV that is:	
Type of effect level available	Chronic NOAEL-based	Chronic LOAEL-based
C-CL or chronic NOAEL	1	N/A
C-CL or chronic LOAEL	10	1
C-CL or chronic LD50 (or LC50)	100	10
C-CL or chronic ED50 (or EC50)	100	10
Subchronic NOAEL	10	N/A
Subchronic LOAEL	100	10
Subchronic LD50 (or LC50)	100	100
Subchronic ED50 (or EC50)	100	100
Acute or single dose NOAEL	100	N/A
Acute or single dose LOAEL	100	100
Acute or single dose LD50 (or LC50)	100	100
Acute or single dose ED50 (or EC50)	100	100

Table 5. Acronyms.

Acronym	**Word/Phrase**
A	Acute

Acronym	Word/Phrase
AIR	Air
ALL	All
B	Bird
C	Chronic
C-CL	Chronic - Critical Lifestage
CS	Critical Study
D/F	Dioxin/ Furan
DW	Drinking Water exposure medium
DW+F	Drinking water exposure medium plus additional exposure to background in food
EC10	Effective Concentration for 10% of population
EC20	Effective Concentration for 20% of population
EC50	Median Effective Concentration (for 50% of population)
EL	Effect Level
ESL	Ecological Screening Level
F	Food exposure medium
F&DW	Food and drinking water exposure media
F&DW&O	Food and drinking water and other exposure media
F+DW	Food exposure medium plus additional exposure to background in drinking water
GMM	Geometric Mean
GP	Generic plant (Terrestrial autotroph - producer)
GSD	Geometric Standard Deviation
HE	High Explosive
I	Invertebrate
INH	Inhalation exposure route
INORG	Inorganic Compound
L	LOAEL or LOEC
LANL	Los Alamos National Laboratory
LC10	Lethal Concentration for 10% of population
LC20	Lethal Concentration for 20% of population
LC50	Median Lethal Concentration (for 50% of population)
LOAEL	Lowest Observed Adverse Effect Level
LOEC	Lowest Observed Effect Concentration
LOEL	Lowest Observed Effect Level
M	Mammal
N	NOAEL or NOEC
N/A	Not Applicable
NL	NOAEL (or NOEC) and LOAEL (or LOEC)
NLOTH	NOAEL (or NOEC), LOAEL (or LOEC), and other effect level (e.g., LC50, EC50)
NMED	New Mexico Environment Department, inter- and intrastate stream standards
NOAEL	No Observed Adverse Effect Level
NOEC	No Observed Effect Concentration

Acronym	Word/Phrase
NOEL	No Observed Effect Level
NOTH	NOAEL (or NOEC) and other effect level (e.g., LC50, EC50)
NR	Not Reported
OIL	Oil exposure medium
OIL_ACHS	Arachis oil exposure medium
OIL_CORN	Corn oil exposure medium
OIL_O	Other oil exposure medium
OIL_PNT	Peanut oil exposure medium
ORNL	Oak Ridge National Laboratory
OTH	Other
P	Plant
PCB	Polychlorinated Biphenyl
PEST	Pesticide
PTSE	Primary Toxicity Study Evaluation
PTV	Primary Toxicity Value
R/D	Reproduction and Development
R6	Region 6
Ref	Reference
RRES-R	Risk Reduction and Environmental Stewardship - Remediation program
S	Survival
SAND&OM	Sand and Organic Matter mixture exposure medium
SAND_CLTR	Sand culture exposure medium (Solution is washed through silver sand daily)
SC	Subchronic
SD	Single Dose
SLE	Soil and Litter Earthworm
SLERA	Screening Level Ecological Risk Assessment
SNL	Sandia National Laboratory
SOIL&MNU	Soil and Manure mixture exposure medium
SOIL&SAND	Soil and Sand mixture exposure medium
SOIL&SLDG	Soil and Sludge mixture exposure medium
SOLN_O	Other solution exposure medium (assumed)
SOLN_OIL	Oil solution exposure medium (assumed)
SVOC	Semivolatile Organic compound
SzC	Size Change
T&E	Threatened and Endangered (Species)
TB	Terrestrial bird
TM	Terrestrial mammal
TP	Terrestrial plant
TRV	Toxicity Reference Value
UF	Uncertainty Factor
UNK	Unknown
USEPA	United States Environmental Protection Agency
VOC	Volatile Organic Compound
W	Water

Acronym	Word/Phrase
WC	Weight Change

Chemical	Analyte Code	Cas No.	Generic Plant	Earthworm	A. Robin (invert diet)	A. Robin (invert/plant diet)	A. Robin (plant diet)	A. Kestrel (flesh/invert diet)	A. Kestrel (flesh diet)	Desert Cottontail	Deer Mouse	Montane Shrew	Red Fox	Surrogate
Benzyl alcohol	100-51-6	100-51-6												
BHC[delta-]	319-86-8	319-86-8	1.00E-01		2.10E-01	3.60E-01	1.10E+00	1.40E+00	1.00E+01	1.20E-01	1.60E-02	9.40E-03	5.60E-01	BHC[gamma-]
Bis(2-chloroethyl)ether	111-44-4	111-44-4												
Bromomethane	74-83-9	74-83-9												
Carbazole	86-74-8	86-74-8												
Chloromethane	74-87-3	74-87-3												
Chloronaphthalene[2-]	91-58-7	91-58-7	1.00E+00		1.60E+01	5.70E+00	3.40E+00	1.00E+02	5.90E+02	1.20E+01	9.70E+00	2.70E+01	1.20E+03	Naphthalene
Dinitroaniline[3,5-]	618-87-1	618-87-1												
Diphenylamine	122-39-4	122-39-4			1.70E+01	3.00E+01	1.40E+02	1.20E+02	1.10E+04					
Endosulfan sulfate	1031-07-8	1031-07-8			4.00E+01	2.20E+01	1.50E+01	2.80E+02	1.10E+03	9.70E-01	6.40E-01	1.00E+00	3.50E+01	Endosulfan
Endrin aldehyde	7421-93-4	7421-93-4	3.40E-03		1.40E-03	2.80E-03	4.90E-02	8.20E-03	2.00E-02	2.00E+00	4.60E-02	2.30E-02	4.10E-01	Endrin
Endrin ketone	53494-70-5	53494-70-5	3.40E-03		1.40E-03	2.80E-03	4.90E-02	8.20E-03	2.00E-02	2.00E+00	4.60E-02	2.30E-02	4.10E-01	Endrin
Ethylbenzene	100-41-4	100-41-4								3.50E+01	2.40E+01	4.70E+01	7.60E+03	Benzene
Heptachlor epoxide	1024-57-3	1024-57-3	4.00E-01		3.00E-01	5.90E-01	8.60E+00	1.20E+00	1.3	4.90E+00	1.10E-01	5.90E-02	3.30E-01	Heptachlor
Iodomethane	74-88-4	74-88-4			1.70E-01	1.30E-01	1.00E-01	1.20E+00	5.90E+01					
Isopropylbenzene	98-82-8	98-82-8								3.50E+01	2.40E+01	4.70E+01	7.60E+03	Benzene
Isopropyltoluene[4-]	99-87-6	99-87-6	2.00E+02							6.10E+01	2.50E+01	2.30E+01	3.10E+03	Toluene
Methylphenol[2-]	95-48-7	95-48-7	6.70E-01											
Methylphenol[3-]	108-39-4	108-39-4	6.90E-01											
Methylphenol[4-]	106-44-5	106-44-5	7.90E-01	1.80E+00						4.30E+01	3.80E+01	5.50E+02	1.70E+04	Phenol
Nitrate (expressed as NO3)	NO3(-1)	14797-55-8												
Nitroaniline[2-]	88-74-4	88-74-4												
N-propylbenzene	103-65-1	103-65-1								3.50E+01	2.40E+01	4.70E+01	7.60E+03	Benzene
Perchlorate	ClO4(-1)	14797-73-0												
TATB (triaminotrinitrobenzene)	3058-38-6	3058-38-6												
Trichlorofluoromethane	75-69-4	75-69-4												
Trimethylbenzene[1,2,4-]	95-63-6	95-63-6								3.50E+01	2.40E+01	4.70E+01	7.60E+03	Benzene
Trimethylbenzene[1,3,5-]	108-67-8	108-67-8								3.50E+01	2.40E+01	4.70E+01	7.60E+03	Benzene
Tris(o-cresyl) phosphate	1330-78-5	1330-78-5												

Chemical	Analyte Code	Cas No.	Final Soil ESL (mg/kg)	Receptor	Surrogate
Benzyl alcohol	100-51-6	100-51-6			
BHC[delta-]	319-86-8	319-86-8	9.40E-03	Montane shrew (Mammalian insectivore)	BHC[gamma-]
Bis(2-chloroethyl)ether	111-44-4	111-44-4			
Bromomethane	74-83-9	74-83-9			
Carbazole	86-74-8	86-74-8			
Chloromethane	74-87-3	74-87-3			
Chloronaphthalene[2-]	91-58-7	91-58-7	1.00E+00	Generic plant (Terrestrial autotroph - producer)	Naphthalene
Dinitroaniline[3,5-]	618-87-1	618-87-1			
Diphenylamine	122-39-4	122-39-4	1.70E+01	A. Robin (invert diet)	
Endosulfan sulfate	1031-07-8	1031-07-8	6.40E-01	Deer mouse (Mammalian omnivore)	Endosulfan
Endrin aldehyde	7421-93-4	7421-93-4	1.40E-03	American robin (Avian insectivore)	Endrin
Endrin ketone	53494-70-5	53494-70-5	1.40E-03	American robin (Avian insectivore)	Endrin
Ethylbenzene	100-41-4	100-41-4	2.40E+01	Deer mouse (Mammalian omnivore)	Benzene
Heptachlor epoxide	1024-57-3	1024-57-3	5.90E-02	Montane shrew (Mammalian insectivore)	Heptachlor
Iodomethane	74-88-4	74-88-4	1.00E-01	A. Robin (plant diet)	
Isopropylbenzene	98-82-8	98-82-8	2.40E+01	Deer mouse (Mammalian omnivore)	Benzene
Isopropyltoluene[4-]	99-87-6	99-87-6	2.30E+01	Montane shrew (Mammalian insectivore)	Toluene
Methylphenol[2-]	95-48-7	95-48-7	6.70E-01	Generic Plant	
Methylphenol[3-]	108-39-4	108-39-4	6.90E-01	Generic Plant	
Methylphenol[4-]	106-44-5	106-44-5	7.90E-01	Generic plant (Terrestrial autotroph - producer)	Phenol
Nitrate (expressed as NO3)	NO3(-1)	14797-55-8			
Nitroaniline[2-]	88-74-4	88-74-4			
N-propylbenzene	103-65-1	103-65-1	2.40E+01	Deer mouse (Mammalian omnivore)	Benzene
Perchlorate	ClO4(-1)	14797-73-0			
TATB (triaminotrinitrobenzene)	3058-38-6	3058-38-6			
Trichlorofluoromethane	75-69-4	75-69-4			
Trimethylbenzene[1,2,4-]	95-63-6	95-63-6	2.40E+01	Deer mouse (Mammalian omnivore)	Benzene
Trimethylbenzene[1,3,5-]	108-67-8	108-67-8	2.40E+01	Deer mouse (Mammalian omnivore)	Benzene
Tris(o-cresyl) phosphate	1330-78-5	1330-78-5			

Derivation of chemical-specific TRVs for PAHs and DDT & metabolites

Objective

The objective of this process is to develop toxicity reference values (TRVs) for individual polycyclic aromatic hydrocarbons (PAHs) and DDT and metabolites utilizing the toxicity data published in 2007 by the Environmental Protection Agency's (EPA) Ecological Soil Screening Level (EcoSSL) workgroup. These TRVs are used to calculate Los Alamos National Laboratory (LANL)-specific receptor ecological screening levels (ESLs).

Background

The EPA EcoSSL workgroup reviewed the primary literature to develop TRVs and EcoSSLs for high and low molecular weight PAHs (Table 1). This class of organic compounds is grouped into two condensed aromatic ring structures with low molecular weight compounds composed of fewer than four rings and high molecular weight compounds composed of four or more rings. They also developed TRVs and EcoSSLs for DDT and metabolites as a group (Table 2).

In accordance with LANL SLERA methods, LANL generates TRVs for individual chemicals to be used to calculate LANL-specific receptor ecological screening levels (ESLs). Therefore, to remain consistent with the LANL screening level ecological risk assessment (SLERA) methods, the chemical-group TRVs/ ESLs derived by EPA were not adopted. LANL is, however, using the primary toxicity values for birds, mammals, plants and invertebrates (earthworms) for reproduction/ development, growth and survival endpoints that the EPA compiled with EcoSSL methodology to derive LANL TRVs and ESLs per LANL methods.

The EPA generates nationally-accepted EcoSSLs/TRVs through EcoSSL methodology and these toxicity values are considered to have high confidence compared to other sources. Therefore, the EcoSSL dataset is appropriate for use in the LANL Primary Toxicity Study Evaluation (PTSE) method, which is similar in many respects to the EcoSSL method. One notable exception is that LANL uses acute/ subacute and subchronic data by applying exposure duration uncertainty factors to extrapolate to a chronic effect level while EPA excludes these data, even if they have an expectable evaluation score otherwise, in order to focus their efforts on establishing a dose protective of most species from adverse effects associated with long term exposures and sublethal reproductive and growth effects. Another notable exception is that LANL utilizes reproduction/ development, growth and survival endpoints to calculate a TRV while EPA only uses the reproduction/ development and growth endpoints to calculate the TRV and then uses the survival endpoints in a comparative manner to evaluate the protectiveness of the TRV for lethality.

LANL has chosen to include along with chronic studies those of acute, subacute and subchronic duration and to utilize reproduction/ development, growth and survival endpoints to minimize data gaps for toxicological information for chemicals of potential ecological concern (COPECs) in the SLERA process.

The EPA primary toxicity values are used to augment existing LANL primary toxicity values compiled using the LANL PTSE method or to fill data gaps using the LANL PTSE method for LANL COPECs.

Methods

Data Acquisition:

- Primary toxicity values reported in the EPA EcoSSL reports for PAHs (USEPA, 2007a) and DDT and metabolites (USEPA, 2007b) were reviewed.

Data Coding – Effect Levels and Endpoints:

- Selected No effect levels (NOAELs/ NOECs), low effect levels (LOAELs/LOECs), median effect levels (ED50s/ EC50s) and median lethality effect levels (LD50s/LC50s) data for individual PAHs and DDT and metabolites that are LANL COPECs (Table 3) that represented reproduction/ development, growth, or survival endpoints were selected for use in the LANL TRV data set. See Table 4 for a description of endpoint group coding.

Data Coding - Handling of Repetitive Values:

- In the cases where LANL and EPA derived toxicity values from the same reference, the LANL derived value(s) is used. The exception to this rule is if the LANL value is associated with LANL tier 4 TRV data (Table 5). Tier 4 TRV data are not included because this type of toxicity data was taken from secondary data sources other than the nationally accepted EPA EcoSSL documents and is not considered appropriate for deriving higher tier LANL TRVs due to differences in the level of detail in documentation of the TRV derivation process compared to the LANL PTSE Method. Only tier 1, 2 and 3 TRV data are included in the LANL TRV data sets. Table 5 defines the LANL TRV tiers and their hierarchy for use in calculating TRVs/ ESLs.

- Only one effect type per reference per receptor/ COPEC pair is included in the data set. Best professional judgment is used to select the most ecologically relevant and/or sensitive value per ecologically relevant endpoint category per study/ reference. For example, if one experiment had 3 reproduction/development endpoints, 1 survival endpoint, and 1 adult growth endpoint, the most ecologically relevant and/or sensitive reproduction/development endpoint of the 3 available would be included in the data set along with the single survival and single growth change endpoints. This exclusion process minimizes the possibility of a TRV being skewed to the results of any particular study as a result of repetitive values for the same endpoint category within a study.

Normalization of toxicity values to chronic No Effect Levels:

- All toxicity values were normalized to chronic no effect levels (NOAELs/NOECs) using uncertainty factors (UFs) for differences in exposure duration (Table 6) and or effect level per LANL PTSE Methods. Table 7 indicates the UFs applied for various exposure durations and effect level combinations.

- One exposure duration classification that is used that is not necessarily based on the actual chemical administration period is the chronic – critical life stage (C-CL) designation. A C-CL endpoint is equivalent to a chronic exposure endpoint regardless of the actual chemical exposure duration associated with the endpoint because it is more likely to capture effects that reflect critical life stages that are relevant to population success. For the purpose of deriving TRVs, a critical life stage is defined as a life stage associated with a chemical exposure occurring during the reproductive cycle of the test organism and/or during the development of the immature test organism. For an endpoint to be considered development, it has to fall into one of two scenarios in which measurements must reflect either the development of immature organisms that were exposed via parents or the development of immature organisms directly exposed to the chemical.

Calculation of TRV:

- A Tier 2 geometric mean (GMM) TRV was calculated per LANL PTSE methods (Equation 1) when there were 3 or more primary toxicity values for a particular COPEC and receptor group. A critical study (CS) TRV was derived per LANL PTSE methods when there were less than 3 primary toxicity values for a particular COPEC and receptor group.

  Equation 1:
  GMM TRV = nth root of (EL1 x EL2 x EL3 x …ELn)
  where n is greater than or equal to 3 and each EL represents a chronic NOAEL-based EL for an oral ingestion exposure for an ecologically relevant effect (i.e., reproduction or development, survival or adult body weight or size changes)

Results (See individual TRV Summary Reports and supporting PTSE documentation nthe Ecorisk Database)
Table 8 contains TRVs generated through this process.

Summary
Based on the primary toxicity data available in the the EPA EcoSSL 2007 reports for PAHs (USEPA, 2007a) and DDT and metabolites (USEPA, 2007b), LANL was able to augment existing PTSE method derived data sets or fill LANL COPEC TRV data gaps for 10 COPEC/ receptor group pairs. GMM TRVs were derived for 2 high MW PAHs [benzo(a)pyrene/ mammal and pyrene/ invertebrate (earthworm)], 2 low MW PAHs [fluorene/ invertebrate (earthworm), naphthalene/ bird, and naphthalene/ mammal), DDD/ bird, DDD/ mammal, DDE/ bird, DDE/ mammal, DDT/ bird and DDT/ mammal.

References
United States Environmental Protection Agency (USEPA), 2007a (Jun.). Ecological Soil Screening Levels for Polycyclic Aromatic Hydrocarbons (PAHs), Interim Final. OSWER Directive 9285.7-78. US Environmental Protection Agency, Office of Solid Waste and Emergency Response, Washington, D.C.

United States Environmental Protection Agency (USEPA), 2007b (Apr.). Ecological Soil Screening Levels for DDT and Metabolites. OSWER Directive 9285.7-78. US Environmental Protection Agency, Office of Solid Waste and Emergency Response, Washington, D.C.

TABLES

Table 1. EPA EcoSSL TRVs for PAHs

Receptor	Low Molecular Weight TRV	High Molecular Weight TRV
Soil Invertebrate	29 m/kg soil dry wt.	18 mg/kg soil dry wt.
Mammals	170 mg/kg/day	0.615 mg/kg/day
Birds	Not Available	Not Available
Plants	Not Available	Not Available

Table 2. EPA EcoSSL TRVs for DDT and Metabolites

Receptor	DDT& Metabolite TRV
Birds	0.227 mg/kg/day
Mammals	0.147 mg/kg/d
Soil Invertebrate	Not Available
Plants	Not Available

Table 3. EPA EcoSSL toxicity data for PAHs and DDT and metabolites that are LANL COPECs

MW	COPEC	Receptor Group
LMW	Anthracene	P
HMW	Benzo(a)pyrene	M
LMW	Fluoranthene	I
LMW	Fluorene	I
LMW	Naphthalene	M
LMW	Phenanthrene	I
HMW	Pyrene	I
NA	DDT[4,4'-]	B, M
NA	DDE[4,4'-]	B, M
NA	DDD[4,4'-]	B, M
B = bird, H= high, I = invertebrate, L = Low, M = mammal, MW = molecular weight, P = plant		

Table 4. LANL endpoint groups

Endpoint Group	Description
Reproduction/ development (R/D)	Development or mortality measured in juvenile organisms or immature plants that were exposed to the chemical through

	parental exposure because it is considered to be a measurement of the ability of the parents to produce offspring that can develop into reproductive adults. Also, growth of a juvenile organism or immature plant that was directly exposed to the chemical because it reflects the potential for the juvenile or immature plant to develop normally into a reproductive adult.
Survival (S)	Mortality in an adult organism or in a juvenile organism or immature plant directly exposed to the chemical because it is considered a measurement of the ability of the organism to survive to reproductive maturity.
Growth (G)	Weight change (WC) for mature organisms is measured or a change occurs in size (WSz) of a mature organism (e.g., height or root length of plants).

Table 5. LANL TRV tiers and hierarchy for use calculating ESLs

TRV Tier	Description	Hierarchy for Use
1	Nationally accepted TRV (e.g., EPA EcoSSL TRV)	First
2	Geometric Mean (GMM) TRV derived through the primary toxicity evaluation (PTSE) process	Second
3	Critical Study (CS) TRV derived through the primary toxicity evaluation (PTSE) process	Third
4	Secondary source TRV (e.g., ORNL, SNL)	Fourth

Table 6. Exposure Duration Categories and IDs for Birds, Mammals, Earthworms, and Plants

Duration	**Duration ID**	**Birds and Mammals**	**Earthworms and Plants**
Chronic	C	91 days or more	7 days or more
Chronic- critical life stage	C-CL	All R/D endpoints	
Subchronic	SC	14 to 90 days	3 to 6 days
Acute	A	13 days or less	2 days or less
Single dose	SD	One time administration	One time administration

Duration	Duration ID	Birds and Mammals	Earthworms and Plants
Not Reported	NR	Not applicable	Not applicable
R/D = reproduction/ development			

Table 7. Uncertainty Factors Applied to Derive Chronic NOAEL- or NOEC-based Effect Levels

Type of effect level available	UF applied to derive a TRV that is a Chronic NOAEL (NOEC)-based EL:
C-CL or C NOAEL (NOEC)	1
C-CL or C LOAEL (LOEC)	10
C-CL or C LD50 (LC50), ED50 (EC50)	100
SC NOAEL (NOEC)	10
SC LOAEL (LOEC), LD50 (LC50), ED50 (EC50)	100
A or SD NOAEL (NOEC)	100
A or SD LOAEL (LOEC), LD50 (LC50), ED50 (EC50)	100
A = Acute, C = chronic, C-CL = chronic – critical life stage, EC50 = median effective concentration (for 50% of the population), ED50 = median effective dose (for 50% of the population), LC50 = median lethal concentration (for 50% of the population), ED50 = median lethal dose (for 50% of the population), LOAEL = low observed adverse effect level, LOEC = low observed effect concentration, NOAEL = no observed adverse effect level, NOEC = no observed effect concentration, SC = subchronic, SD -= single dose	

Table 8. TRVs

MW	COPEC	Receptor Group	GMM TRV*	CS TRV*
LMW	Anthracene	P	6.88	-
HMW	Benzo(a)pyrene	M	5.58	-
LMW	Fluoranthene	I	10.2	-
LMW	Fluorene	I	3.7	-
LMW	Naphthalene	M	14.3	-
LMW	Phenanthrene	I	5.5	-
HMW	Pyrene	I	10.6	-
NA	DDD	B	0.016	-
NA	DDD	M	5.83	-
NA	DDE	B	0.48	-
NA	DDE	M	9.02	-
NA	DDT	B	2.01	-
NA	DDT	M	-	0.139
B = bird, COPEC = chemical of potential ecological concern, CS = critical study, GMM = geometric mean, H= high, I = invertebrate, L = Low, M =				

mammal, MW = molecular weight, N = number of toxicity values in data set, NA = not applicable, P = plant, TRV = toxicity, * units are mg/kg for receptor groups I and P and mg/kg/d for receptor groups B and M

STATE OF NEW MEXICO

STANDARDS FOR INTERSTATE AND INTRASTATE SURFACE WATERS

20.6.4 NMAC

As amended through October 11, 2002

New Mexico Water Quality Control Commission
Harold Runnels Building
1190 St. Francis Drive, S2064
P.O. Box 26110
Santa Fe, New Mexico 87502
http://www.nmenv.state.nm.us/oots/wqcc.htm

STATE OF NEW MEXICO

STANDARDS FOR INTERSTATE AND INTRASTATE SURFACE WATERS

20.6.4 NMAC

Filed with State Records Center
September 12, 2000
Effective October 11, 2002

New Mexico Water Quality Control Commission
Harold Runnels Building
1190 St. Francis Drive P.O. Box 26110
Santa Fe, New Mexico 87502
http://www.nmenv.state.nm.us/oots/wqcc.htm

Constituent Agencies:

Environment Department
State Engineer Office
Game and Fish Department
Oil Conservation Division
Department of Agriculture
State Parks Division
Soil and Water Conservation Commission
Bureau of Mines and Mineral Resources
Members-at-Large

STANDARDS FOR
INTERSTATE AND INTRASTATE SURFACE WATERS

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TITLE 20 ENVIRONMENTAL PROTECTION
CHAPTER 6 WATER QUALITY
PART 4 STANDARDS FOR INTERSTATE AND INTRASTATE SURFACE WATERS

20.6.4.1 ISSUING AGENCY: Water Quality Control Commission.
[20.6.4.1 NMAC – Rp 20 NMAC 6.1.1001, 10-12-00]

20.6.4.2 SCOPE: Except as otherwise provided by statute or regulation of the water quality control commission, this part governs all surface waters of the state of New Mexico which are subject to the New Mexico Water Quality Act, Sections 74-6-1 through 74-6-17 NMSA 1978.
[20.6.4.2 NMAC – Rp 20 NMAC 6.1.1002, 10-12-00]

20.6.4.3 STATUTORY AUTHORITY: This part is adopted by the water quality control commission pursuant to Subsection C of Section 74-6-4 NMSA 1978.
[20.6.4.3 NMAC – Rp 20 NMAC 6.1.1003, 10-12-00]

20.6.4.4 DURATION: Permanent.
[20.6.4.4 NMAC – Rp 20 NMAC 6.1.1004, 10-12-00]

20.6.4.5 EFFECTIVE DATE: October 12, 2000, unless a later date is indicated in the history note at the end of a section.
[20.6.4.5 NMAC – Rp 20 NMAC 6.1.1005, 10-12-00]

20.6.4.6 OBJECTIVE:

A. The purpose of this part is to establish water quality standards that consist of the designated use or uses of surface waters of the state, the water quality criteria necessary to protect the use or uses, and an antidegradation policy.

B. The state of New Mexico is required under the New Mexico Water Quality Act (Subsection C of Section 74-6-4 NMSA 1978) and the federal Clean Water Act, as amended (33 U.S.C. Section 1251 *et seq.*) to adopt water quality standards that protect the public health or welfare, enhance the quality of water, and are consistent with and serve the purposes of the New Mexico Water Quality Act and the federal Clean Water Act. It is the objective of the federal Clean Water Act to restore and maintain the chemical, physical, and biological integrity of the nation's waters, including those in New Mexico. This part is consistent with Section 101(a)(2) of the federal Clean Water Act, which declares that it is the national goal that wherever attainable, an interim goal of water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water be achieved by July 1, 1983. Agricultural, municipal, domestic and industrial water supply are other essential uses of New Mexico's surface water; however, water contaminants resulting from these activities will not be permitted to lower the quality of surface waters of the state below that which is required for recreation and maintenance of a fishery and protection of wildlife, where practicable.

C. Pursuant to Subsection A of Section 74-6-12 NMSA 1978, this part does not grant to the water quality control commission or to any other entity the power to take away or modify property rights in water.
[20.6.4.6 NMAC – Rp 20 NMAC 6.1.1006, 10-12-00]

20.6.4.7 DEFINITIONS: Terms defined in the New Mexico Water Quality Act, but not defined in this part will have the meaning given in the Water Quality Act.

A. **"acute toxicity"** means toxicity involving a stimulus severe enough to induce a response in 96 hours of exposure or less. Acute toxicity is not always measured in terms of lethality, but may include other toxic effects that occur within a short time period.

B. **"best management practices or BMPs"** means schedules of activities, prohibitions of certain practices, implementation of maintenance procedures, or other measures or practices selected by the state or a designated management agency to achieve control of sources of water pollutants.

C. **"bioaccumulation"** refers to the uptake and retention of a substance by an organism from its surrounding medium and food.

D. **"bioaccumulation factor"** is the ratio of a substance's concentration in tissue versus its concentration in ambient water, in situations where the organism and the food chain are exposed.

E. **"biomonitoring"** means the use of living organisms to test the suitability of effluents for discharge into receiving waters or to test the quality of surface waters of the state.

F. **"cfs"** means cubic feet per second.

G. **"chronic toxicity"** means toxicity involving a stimulus that lingers or continues for a relatively long period relative to the life span of an organism. Chronic effects include, but are not limited to, lethality, growth impairment, behavioral modifications, disease and reduced reproduction.

H. **"classified water of the state"** means a surface water of the state, or reach of a surface water of the state, for which the commission has adopted a segment description, and has designated a use or uses and applicable water quality standards. Segment descriptions, designated use or uses, and water quality standards for classified waters of the state are set forth in this part.

I. **"coldwater fishery"** means a surface water of the state where the water temperature and other characteristics are suitable for the support or propagation or both of coldwater fishes.

J. **"commission"** means the New Mexico water quality control commission.

K. **"criteria"** are elements of state water quality standards, expressed as constituent concentrations, levels, or narrative statements, representing a quality of water that supports a use. When criteria are met, water quality will generally protect the designated use.

L. **"department"** means the New Mexico environment department.

M. **"designated use or uses"** means those uses specified in Sections 20.6.4.101 through 20.6.4.899 NMAC for each surface water of the state whether or not they are being attained.

N. **"dissolved"** means a constituent of a water sample which will pass through a 0.45-micrometer pore-size membrane filter under a pressure differential not exceeding one atmosphere. The "dissolved" fraction is also termed "filterable residue."

O. **"domestic water supply"** means a surface water of the state that may be used for drinking or culinary purposes after disinfection.

P. **"ephemeral stream"** means a stream or reach of a stream that flows briefly only in direct response to precipitation or snowmelt in the immediate locality; its channel bed is always above the water table of the region adjoining the stream and does not support a self-sustaining population of fish.

Q. **"existing use"** means those uses actually attained in a surface water of the state on or after November 28, 1975, whether or not they are included in the water quality standards.

R. **"fecal coliform bacteria"** means the portion of the coliform group which is present in the gut or the feces of warmblooded animals. It generally includes organisms which are capable of producing gas from lactose broth in a suitable culture medium within 24 hours at 44.5 ± 0.2°C.

S. **"fish culture"** means production of coldwater or warmwater fishes in a hatchery or rearing station.

T. **"flow,"** relative to the four definitions of streams herein, means natural flow ensuing from the earth's hydrologic cycle, i.e., atmospheric precipitation resulting in surface and/or ground-water runoff. Natural in-stream flow may be interrupted or eliminated by dams and diversions.

U. **"high quality coldwater fishery"** means a perennial surface water of the state in a minimally disturbed condition which has considerable aesthetic value and is a superior coldwater fishery habitat. A surface water of the state to be so categorized must have water quality, stream bed characteristics, and other attributes of habitat sufficient to protect and maintain a propagating coldwater fishery.

V. **"intermittent stream"** means a stream or reach of a stream that flows only at certain times of the year, such as when it receives flow from springs, melting snow, or localized precipitation.

W. **"interrupted stream"** means a stream that contains perennial reaches with intervening intermittent or ephemeral reaches.

X. **"interstate waters"** means all surface waters of the state which cross or form a part of the border between states.

Y. **"intrastate waters"** means all surface waters of the state which are not interstate waters.

Z. **"irrigation"** means a water of the state used as a supply of water for crops.

AA. **"LC-50"** means the concentration of a substance that is lethal to 50 percent of the test organisms within a defined time period. The length of the time period, which may vary from 24 hours to one week or more, depends on the test method selected to yield the information desired.

BB. **"limited warmwater fishery"** means a surface water of the state where intermittent flow may severely limit the ability of the reach to sustain a natural fish population on a continuous annual basis; or a surface water of the state where historical data indicate that water temperature may routinely exceed 32.2°C (90°F).

CC. **"livestock watering"** means a surface water of the state used as a supply of water for consumption by livestock.

DD. **"marginal coldwater fishery"** means a surface water of the state known to support a coldwater fish population during at least some portion of the year, even though historical data indicate that the maximum temperature in the surface water of the state may exceed 20°C (68°F).

EE. **"micrograms per liter (µg/L)"** means micrograms of solute per liter of solution; equivalent to parts per billion when the specific gravity of the solution = 1.000.

FF. **"milligrams per liter (mg/L)"** means milligrams of solute per liter of solution; equivalent to parts per million when the specific gravity of the solution = 1.000.

GG. **"minimum quantification level"** means the minimum quantification level for a constituent determined by official published documents of the United States environmental protection agency.

HH. **"natural causes"** means those causal agents which would affect water quality and the effect is not caused by human activity but is due to naturally occurring conditions.

II. **"nonpoint source"** means any source of pollutants not regulated as a point source which degrades the quality or adversely affects the biological, chemical, or physical integrity of surface waters of the state.

JJ. **"NTU"** means nephelometric turbidity units based on a standard method using formazin polymer or its equivalent as the standard reference suspension. Nephelometric turbidity measurements expressed in units of NTU are numerically identical to the same measurements expressed in units of FTU (formazin turbidity units).

KK. **"perennial stream"** means a stream or reach of a stream that flows continuously throughout the year in all years; its upper surface, generally, is lower than the water table of the region adjoining the stream.

LL. **"picocurie (pCi)"** means a measure of radioactivity equal to the quantity of a radioactive substance in which the rate of disintegrations is 2.22 per minute.

MM. **"point source"** means any discernible, confined, and discrete conveyance from which pollutants are or may be discharged into a surface water of the state, but does not include return flows from irrigated agriculture.

NN. **"primary contact"** means any recreational or other water use in which there is prolonged and intimate contact with the water, such as swimming and water skiing, involving considerable risk of ingesting water in quantities sufficient to pose a significant health hazard. Primary contact also means any use of surface waters of the state for native American traditional cultural, religious, or ceremonial purposes in which there is intimate contact with the water that involves considerable risk sufficient to pose a significant health risk. The contact may include but is not limited to ingestion or immersion.

OO. **"secondary contact"** means any recreational or other water use in which contact with the water may occur and in which the probability of ingesting appreciable quantities of water is minimal, such as fishing, wading, commercial and recreational boating and any limited seasonal contact.

PP. **"segment"** means a water quality standards segment, the surface waters of which have common hydrologic characteristics or flow regulation regimes, possess common natural physical, chemical, and biological characteristics, and exhibit common reactions to external stresses, such as the discharge of pollutants.

QQ. **"state"** means the state of New Mexico.

RR. **"surface water(s) of the state"** means all interstate waters including interstate wetlands, and all intrastate waters, such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, reservoirs or natural ponds the use, degradation, or destruction of which would affect interstate or foreign commerce. Surface waters of the state also means all tributaries of such waters, including adjacent wetlands, and any manmade bodies of water which were originally created in surface waters of the state or resulted in the impoundment of surface waters of the state. Surface waters of the state does not include private waters that do not combine with other surface or subsurface water or any water under tribal regulatory jurisdiction pursuant to § 518 of the Clean Water Act. Waste treatment systems, including treatment ponds or lagoons designed to meet requirements of the Clean Water Act (other than cooling ponds as defined in 40 CFR 423.11(m) which also meet the criteria of this definition), are not surface waters of the state, unless they were originally created in surface waters of the state or resulted in the impoundment of surface waters of the state.

SS. **"TDS"** means total dissolved solids, also termed "total filterable residue."

TT. **"technology-based controls"** means the application of technology-based effluent limitations as required under Section 301(b) of the federal Clean Water Act.

UU. **"total"** means a constituent of a water sample which is analytically determined without filtration.

VV. **"toxic pollutant"** means those pollutants, or combination of pollutants, including disease-causing agents, which after discharge and upon exposure, ingestion, inhalation or assimilation into any organism, either

directly from the environment or indirectly by ingestion through food chains, will cause death, disease, behavioral malfunctions or physical deformations in such organisms or their offspring.

WW. "turbidity" is an expression of the optical property in water that causes incident light to be scattered or absorbed rather than transmitted in straight lines.

XX. "warmwater fishery" means a surface water of the state where the water temperature and other characteristics are suitable for the support or propagation or both of warmwater fishes.

YY. "water contaminant" means any substance that could alter if discharged or spilled the physical, chemical, biological or radiological qualities of water. "Water contaminant" does not mean source, special nuclear or by-product material as defined by the Atomic Energy Act of 1954, but may include all other radioactive materials, including but not limited to radium and accelerator-produced isotopes.

ZZ. "water pollutant" means a water contaminant in such quantity and of such duration as may with reasonable probability injure human health, animal or plant life or property, or to unreasonably interfere with the public welfare or the use of property.

AAA. "water quality-based controls" means effluent limitations, as provided under Section 301(b)(1)(C) of the federal Clean Water Act, which are developed and imposed on point-source dischargers in order to protect and maintain applicable water quality standards. These controls are more stringent than the technology-based effluent limitations required under other paragraphs of Section 301(b).

BBB. "wetlands" means those areas which are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions in New Mexico. Constructed wetlands used for wastewater treatment purposes are not included in this definition.

CCC. "wildlife habitat" means a surface water of the state used by plants and animals not considered as pathogens, vectors for pathogens or intermediate hosts for pathogens for humans or domesticated livestock and plants.

[20.6.4.7 NMAC – Rp 20 NMAC 6.1.1007, 10-12-00; A, 7-19-01]

20.6.4.8 ANTIDEGRADATION POLICY AND IMPLEMENTATION PLAN:

A. Antidegradation Policy: This antidegradation policy applies to all surface waters of the state.

(1) Existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected in all surface waters of the state.

(2) Where the quality of a surface water of the state exceeds levels necessary to support the propagation of fish, shellfish, and wildlife, and recreation in and on the water, that quality shall be maintained and protected unless the commission finds, after full satisfaction of the intergovernmental coordination and public participation provisions of the state's continuing planning process, that allowing lower water quality is necessary to accommodate important economic and social development in the area in which the water is located. In allowing such degradation or lower water quality, the state shall assure water quality adequate to protect existing uses fully. Further, the state shall assure that there shall be achieved the highest statutory and regulatory requirements for all new and existing point sources and all cost-effective and reasonable BMPs for nonpoint source control. Additionally, the state shall encourage the use of watershed planning as a further means to protect surface waters of the state.

(3) No degradation shall be allowed in high quality waters designated by the commission as outstanding national resource waters (ONRWs). ONRWs may include, but are not limited to, surface waters of the state within national and state monuments, parks, wildlife refuges, waters of exceptional recreational or ecological significance, and waters identified under the Wild and Scenic Rivers Act.

(4) In those cases where potential water quality impairment associated with a thermal discharge is involved, this antidegradation policy and implementing method shall be consistent with Section 316 of the federal Clean Water Act.

(5) In implementing this section, the commission through the appropriate regional offices of the United States environmental protection agency will keep the administrator advised and provided with such information concerning the surface waters of the state as he or she will need to discharge his or her responsibilities under the federal Clean Water Act.

B. Procedures for nominating an ONRW: Any person may nominate a surface water of the state for designation as an ONRW by filing a petition with the commission pursuant to the *Guidelines for water quality control commission regulation hearings*. A petition to classify a surface water of the state as an ONRW shall include:

(1) a map of the surface water of the state, including the location and proposed upstream and downstream boundaries;

(2) a written statement based on scientific principles in support of the nomination, including specific reference to the applicable criteria for ONRW;

(3) supporting scientific evidence demonstrating that one or more of the applicable ONRW criteria listed in Subsection C of this section has been met;

(4) water quality data to establish a baseline for the proposed ONRW;

(5) a discussion of activities that might contribute to the reduction of water quality in the proposed ONRW;

(6) any additional evidence to substantiate such a designation, including an analysis of the economic impact of the designation on the local and regional economy within the state of New Mexico; and

(7) affidavit of publication of notice of the petition in a newspaper of general circulation in the affected counties and in a newspaper of general statewide circulation.

C. Pursuant to a petition filed under Subsection B of this section, the commission may classify a surface water of the state as an ONRW.

D. **Reserved:** This subsection is reserved for a list of waters classified as ONRWs.

E. **Implementation Plan**: The department, acting under authority delegated by the commission, implements the water quality standards, including the antidegradation policy, by describing specific methods and procedures in the continuing planning process and by establishing and maintaining controls on the discharge of pollutants to surface waters of the state. The steps summarized in the following paragraphs, which may not all be applicable in every water pollution control action, list the implementation activities of the department. These implementation activities are supplemented by detailed antidegradation review procedures developed under the state's continuing planning process. The department:

(1) obtains information pertinent to the impact of the effluent on the receiving water and advises the prospective discharger of requirements for obtaining a permit to discharge;

(2) reviews the adequacy of the existing data base, and if additional information is needed, conducts a water quality survey of the receiving water in accordance with an annually reviewed, ranked priority list of surface waters of the state requiring total maximum daily loads pursuant to Section 303(d) of the federal Clean Water Act;

(3) assesses the probable impact of the effluent on the receiving water relative to its attainable or designated uses and numeric and narrative standards;

(4) requires the highest and best degree of wastewater treatment practicable and commensurate with protecting and maintaining the designated uses and existing water quality of surface waters of the state;

(5) develops water quality based effluent limitations and comments on technology based effluent limitations, as appropriate, for inclusion in any federal permit issued to a discharger pursuant to Section 402 of the federal Clean Water Act;

(6) requires that these effluent limitations be included in any such permit as a condition for state certification pursuant to Section 401 of the federal Clean Water Act;

(7) coordinates its water pollution control activities with other constituent agencies of the commission, and with local, state and federal agencies, as appropriate;

(8) develops and pursues inspection and enforcement programs to ensure that dischargers comply with state regulations and standards, and complements EPA's enforcement of federal permits;

(9) ensures that the provisions for public participation required by the New Mexico Water Quality Act and the federal Clean Water Act are followed;

(10) provides continuing technical training for wastewater treatment facility operators through the utility operators training and certification programs;

(11) provides funds to assist the construction of publicly owned wastewater treatment facilities through the wastewater construction program authorized by Section 601 of the federal Clean Water Act, and through funds appropriated by the New Mexico legislature;

(12) conducts water quality surveillance of the surface waters of the state to assess the effectiveness of water pollution controls, determines whether water quality standards are being attained, and proposes amendments to improve water quality standards;

(13) encourages, in conjunction with other state agencies, voluntary implementation of the best management practices set forth in the New Mexico statewide water quality management plan and the nonpoint source management program;

(14) evaluates the effectiveness of BMPs selected to prevent, reduce or abate sources of water pollutants;

(15) develops procedures for assessing use attainment as required by 20.6.4.14 NMAC and establishing site-specific standards; and

(16) develops list of surface waters of the state not attaining designated uses, pursuant to Sections 305(b) and 303(d) of the federal Clean Water Act.

[20.6.4.8 NMAC – Rp 20 NMAC 6.1.1101, 10-12-00]

20.6.4.9 REVIEW OF STANDARDS; NEED FOR ADDITIONAL STUDIES:

A. Section 303(c)(1) of the federal Clean Water Act requires that the state hold public hearings at least once every three years for the purpose of reviewing water quality standards and proposing, as appropriate, necessary revisions to water quality standards.

B. It is recognized that, in some cases, numeric standards have been adopted which reflect use designations rather than existing conditions of surface waters of the state. Narrative standards are required for many constituents because accurate data on background levels are lacking. More intensive water quality monitoring may identify surface waters of the state where existing quality is considerably better than the established standards. When justified by sufficient data and information, the water quality standards will be modified to protect the designated uses which are attainable.

C. It is also recognized that contributions of water contaminants by diffuse nonpoint sources of water pollution may make attainment of certain standards difficult. Revision of these standards may be required as new information is obtained on nonpoint sources and other problems unique to semi-arid regions.

[20.6.4.9 NMAC – Rp 20 NMAC 6.1.1102, 10-12-00]

20.6.4.10 APPLICABILITY OF WATER QUALITY STANDARDS:

A. Livestock Watering and Wildlife Habitat Uses:

(1) When a discharge creates a water which could be used by livestock and/or wildlife in a non-classified, otherwise ephemeral surface water of the state, such water shall be protected for the uses of livestock watering and/or wildlife habitat by the standards applicable to these uses as set forth in 20.6.4.900 NMAC.

(2) Designated uses of such water will be limited to livestock watering and/or wildlife habitat only when such a water does not enter a classified surface water of the state with criteria which are more restrictive than those necessary to protect livestock watering and/or wildlife habitat, except in direct response to precipitation or runoff. The commission shall adopt any additional designated uses for such surface waters of the state by rulemaking proceedings.

(3) When such a water, except in direct response to precipitation or runoff, enters a classified surface water of the state with criteria which are more restrictive than those necessary to protect livestock watering and/or wildlife habitat, the numeric standards established for the classified surface water of the state shall apply at the point such a water enters the classified surface water of the state. If discharge to such waters of the state ceases or is diverted elsewhere, all uses adopted under this section or subsequently under additional rulemaking proceedings for such waters of the state shall be deemed no longer designated, existing, or attainable.

B. Critical Low Flow: The numeric standards set under Subsection F of 20.6.4.12 NMAC, 20.6.4.101 through 20.6.4.899 NMAC and 20.6.4.900 NMAC may not be attainable when streamflow is less than the critical low flow of the stream in question. The critical low flow of a stream at a particular site shall be:

(1) for human health criteria, the harmonic mean flow. "Harmonic mean flow" is the number of daily flow measurements divided by the sum of the reciprocals of the flows. That is, it is the reciprocal of the mean of reciprocals. For ephemeral waters the calculation shall be based upon the nonzero flow intervals and modified by including a factor to adjust for the proportion of intervals with zero flow.

$$\text{Harmonic Mean} = \frac{n}{\sum \frac{1}{x}}$$

$$\text{Modified Harmonic Mean} = \left[\frac{\sum_{i=1}^{Nt-No} \frac{1}{Qi}}{Nt - No}\right] x \left[\frac{Nt - No}{Nt}\right]$$

where: Qi = nonzero flow
Nt = total number of flow values
No = number of zero flow values

(2) for all other narrative and numeric criteria, the minimum average four consecutive day flow which occurs with a frequency of once in three years (4Q3). Critical low-flow numeric values may be determined on an annual, a seasonal or a monthly basis, as appropriate, after due consideration of site-specific conditions.

C. Guaranteed Minimum Flow: On a case-by-case basis and upon consultation with the interstate stream commission, the commission may allow the use of a contractually guaranteed minimum streamflow in lieu of a critical low flow determined under Subsection B of this section. Should drought, litigation or any other reason interrupt or interfere with minimum flows under a guaranteed minimum flow contract for a period of at least thirty consecutive days, such permission, at the sole discretion of the commission, may then be revoked. Any minimum flow specified under such revoked permission shall be superseded by a critical low flow determined under Subsection B of this section. A public notice of the request for a guaranteed minimum flow shall be published in a newspaper of general circulation by the department at least 30 days prior to scheduled action by the commission. These water quality standards do not grant to the commission or any other entity the power to create, take away or modify property rights in water.

D. Mixing Zones: A limited mixing zone, contiguous to a point source wastewater discharge, may be allowed in any stream receiving such a discharge. Mixing zones serve as regions of initial dilution which allow the application of a dilution factor in calculations of effluent limitations. Effluent limitations shall be developed which will protect the most sensitive existing, designated or attainable use of the receiving water.

E. Mixing Zone Limitations: Wastewater mixing zones, in which the numeric standards set under Subsection F of 20.6.4.12 NMAC, 20.6.4.101 through 20.6.4.899 NMAC or 20.6.4.900 NMAC may be exceeded, shall be subject to the following limitations:

(1) Mixing zones are not allowed for discharges to publicly owned lakes, reservoirs, or playas; these effluents shall meet all applicable standards set under Subsection F of 20.6.4.12 NMAC, 20.6.4.101 through 20.6.4.899 NMAC and 20.6.4.900 NMAC at the point of discharge.

(2) The acute numeric standards, as set out in Paragraph (1) of Subsection J, Subsection M, Paragraph (1) of Subsection N, and Paragraph (1) of Subsection O of 20.6.4.900 NMAC, shall be attained at the point of discharge for any discharge to a surface water of the state with a designated fishery use.

(3) The general standards set out in Subsections A, B, C, D, E, G, H, J of 20.6.4.12 NMAC, and the provision set out in Subsection D of 20.6.4.13 NMAC are applicable within mixing zones.

(4) The areal extent and concentration isopleths of a particular mixing zone will depend on site-specific conditions including, but not limited to, wastewater flow, receiving water critical low flow, outfall design, channel characteristics and climatic conditions and, if needed, shall be determined on a case-by-case basis. When the physical boundaries or other characteristics of a particular mixing zone must be known, the methods presented in Section 4.4.5, "Ambient-induced mixing," in "Technical support document for water quality-based toxics control" (March 1991, EPA/505/2-90-001) shall be used.

(5) All applicable water quality standards set under Subsection F of 20.6.4.12 NMAC, 20.6.4.101 through 20.6.4.899 NMAC and 20.6.4.900 NMAC, except Paragraph (1) of Subsection J, acute aquatic life criteria of Subsection M, Paragraph (1) of Subsection N, and Paragraph (1) of Subsection O of 20.6.4.900 NMAC, shall be attained at the boundaries of mixing zones. A continuous zone of passage through or around the mixing zone shall be maintained in which the water quality meets all applicable standards and allows the migration of aquatic life presently common in surface waters of the state with no effect on their populations.

F. Multiple Uses: When a classified water of the state has more than a single designated use, the applicable numeric standards shall be the most stringent of those established for such classified water.

G. Human health standards shall apply to those waters with a designated, existing or attainable fishery use. The human health standards for persistent toxic pollutants, as identified in Subsection M of Section 20.6.4.900 NMAC, shall also apply to all tributaries of waters with a designated, existing or attainable fishery use. [20.6.4.10 NMAC – Rp 20 NMAC 6.1.1103, 10-12-00; A, 10-11-02]

20.6.4.11 COMPLIANCE WITH WATER QUALITY STANDARDS:

A. Compliance with acute water quality standards shall be determined from the analytical results of a single grab sample. Acute standards shall not be exceeded.

B. Compliance with chronic water quality standards shall be determined from the arithmetic mean of the analytical results of samples collected using applicable protocols. Chronic standards shall not be exceeded more than once every three years.

C. Compliance with water quality standards for total ammonia shall be determined by performing the biomonitoring procedures set out in Subsections D and E of 20.6.4.13 NMAC, or by attainment of applicable ammonia standards set out in Subsections N and O of 20.6.4.900 NMAC.

D. Compliance with water quality standards for the protection of human health shall be determined from the analytical results of representative grab samples, as defined in the water quality management plan. Human health standards shall not be exceeded.

E. The commission may establish a numeric water quality standard at a concentration that is below the minimum quantification level. In such cases, the water quality standard is enforceable at the minimum quantification level.

F. In determining compliance with standards for chromium an analysis which measures both the trivalent and hexavalent ions shall be used.

G. For compliance with numeric standards dependent on hardness, hardness (as mg $CaCO_3$/L) shall be determined from a sample taken at the same time that the sample for the water contaminant is taken, or from available verifiable data sources including, but not limited to, the U.S. environmental protection agency's STORET water quality database.

H. The hardness-dependent formulae for metals shall be valid only for hardness values of 0-400 mg/L. For values above 400 mg/L, the value for 400 mg/L shall apply.

I. The total ammonia tables shall be valid only for temperatures of 0 to 30°C and for pH values of 6.5 to 9.0. For temperatures below 0°C, the total ammonia standards for 0°C shall apply; for temperatures above 30°C, the total ammonia standards for 30°C shall apply. For pH values below 6.5, the total ammonia standards for 6.5 shall apply; for pH values above 9.0, the total ammonia standards for 9.0 shall apply.

J. **Compliance Schedules**: It shall be the policy of the commission to allow on a case-by-case basis the inclusion of a schedule of compliance in a national pollutant discharge elimination system (NPDES) permit issued to an existing facility. Such schedule of compliance will be for the purpose of providing a permittee with adequate time to make treatment facility modifications necessary to comply with water quality based permit limitations determined to be necessary to implement new or revised water quality standards. Compliance schedules may be included in NPDES permits at the time of permit renewal or modification and shall be written to require compliance at the earliest practicable time. Compliance schedules shall also specify milestone dates so as to measure progress towards final project completion (e.g., design completion, construction start, construction completion, date of compliance).

[20.6.4.11 NMAC – Rp 20 NMAC 6.1.1104, 10-12-00; A, 10-11-02]

20.6.4.12 **GENERAL STANDARDS:** General standards are established to sustain and protect existing or attainable uses of surface waters of the state. These general standards apply to all surface waters of the state at all times, unless a specified standard is provided elsewhere in this part. Surface waters of the state shall be free of any water contaminant in such quantity and of such duration as may with reasonable probability injure human health, animal or plant life or property, or unreasonably interfere with the public welfare or the use of property. When changes in dissolved oxygen, temperature, dissolved solids, sediment or turbidity in a water of the state is attributable to natural causes or the reasonable operation of irrigation and flood control facilities that are not subject to federal or state water pollution control permitting, numerical standards for temperature, dissolved solids content, dissolved oxygen, sediment or turbidity adopted under the Water Quality Act do not apply. The foregoing provision does not include major reconstruction of storage dams or diversion dams except for emergency actions necessary to protect health and safety of the public, or discharges from municipal separate storm sewers.

A. **Bottom Deposits**: Surface waters of the state shall be free of water contaminants from other than natural causes that will settle and damage or impair the normal growth, function, or reproduction of aquatic life or significantly alter the physical or chemical properties of the bottom.

B. **Floating Solids, Oil and Grease**: Surface waters of the state shall be free of oils, scum, grease and other floating materials resulting from other than natural causes that would cause the formation of a visible sheen or visible deposits on the bottom or shoreline, or would damage or impair the normal growth, function or reproduction of human, animal, plant or aquatic life.

C. **Color**: Color-producing materials resulting from other than natural causes shall not create an aesthetically undesirable condition nor shall color impair the use of the water by desirable aquatic life presently common in surface waters of the state.

D. **Odor and Taste of Fish**: Water contaminants from other than natural causes shall be limited to concentrations that will not impart unpalatable flavor to fish, or result in offensive odor arising in a surface water of the state or otherwise interfere with the reasonable use of the water.

E. **Plant Nutrients**: Plant nutrients from other than natural causes shall not be present in concentrations which will produce undesirable aquatic life or result in a dominance of nuisance species in surface waters of the state.

F. Toxic Pollutants:

(1) Surface waters of the state shall be free of toxic pollutants from other than natural causes in amounts, concentrations or combinations which affect the propagation of fish or which are toxic to humans, livestock or other animals, fish or other aquatic organisms, wildlife using aquatic environments for habitation or aquatic organisms for food, or which will or can reasonably be expected to bioaccumulate in tissues of fish, shellfish and other aquatic organisms to levels which will impair the health of aquatic organisms or wildlife or result in unacceptable tastes, odors or health risks to human consumers of aquatic organisms.

(2) Pursuant to this section, the human health criteria shall be as set out in 20.6.4.900 NMAC. For a toxic pollutant for human health not listed in 20.6.4.900 NMAC, the following provisions shall be applied in accordance with 20.6.4.10, 20.6.4.11 and 20.6.4.13 NMAC.

(a) The human health criterion shall be the recommended human health criterion for "consumption of organisms only" published by the U.S. environmental protection agency pursuant to Section 304(a) of the federal Clean Water Act. In determining such criterion for a cancer-causing toxic pollutant, a cancer risk of 10^{-5} (one cancer per 100,000 exposed persons) shall be used.

(b) When a numeric criterion for the protection of human health has not been published by the U.S. environmental protection agency, a quantifiable criterion may be derived from data available in the U.S. environmental protection agency's Integrated Risk Information System (IRIS).

(3) Pursuant to this section, the chronic aquatic life standard shall be as set out in 20.6.4.900 NMAC. For a toxic pollutant for aquatic life with no chronic standard listed in 20.6.4.900 NMAC, the following provisions shall be applied in sequential order in accordance with 20.6.4.10, 20.6.4.11 and 20.6.4.13 NMAC.

(a) The chronic aquatic life criterion shall be the "freshwater criterion continuous concentration" published by the U.S. environmental protection agency pursuant to Section 304(a) of the federal Clean Water Act;

(b) If the U.S. environmental protection agency has not published a chronic aquatic life criterion, a geometric mean LC-50 value shall be calculated for the particular species, genus or group, which is representative of the form of life to be preserved, using the results of toxicological studies published in scientific journals.

(i) The chronic aquatic life criterion for a toxic pollutant which does not bioaccumulate shall be 10 percent of the calculated geometric mean LC-50 value; and

(ii) The chronic aquatic life criterion for a toxic pollutant which does bioaccumulate shall be: the calculated geometric mean LC-50 adjusted by a bioaccumulation factor for the particular species, genus or group representative of the form of life to be preserved, but when such bioaccumulation factor has not been published, the criterion shall be one percent of the calculated geometric mean LC-50 value.

(4) Pursuant to this section, the acute aquatic life criteria shall be as set out in 20.6.4.900 NMAC. For a toxic pollutant for aquatic life with no acute criterion listed in 20.6.4.900 NMAC, the acute aquatic life criterion shall be the "freshwater criterion maximum concentration" published by the U.S. environmental protection agency pursuant to Section 304(a) of the federal Clean Water Act.

(5) Within 90 days of the issuance of a final NPDES permit containing a numeric criterion selected or calculated pursuant to Paragraph 2, Paragraph 3 or Paragraph 4 of Subsection F of this section, the Department shall petition the Commission to adopt such criterion into these standards.

(6) The use of a piscicide registered under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), 7 U.S.C. Section 136 *et seq.*, and under the New Mexico Pesticide Control Act (NMPCA), Section 76-4-1 *et seq.* NMSA 1978 (1973), shall not be a violation of Subsection F of this section when such use has been approved by the commission. Any person seeking commission approval of the use of a piscicide shall file a written petition with the commission. The petition shall contain, at a minimum, the following information: (1) petitioner's name and address; (2) identity of the piscicide; (3) documentation of registration under FIFRA and NMPCA; (4) target and potential non-target species, including threatened or endangered species; (5) potential environmental consequences and protocols for limiting such impacts; (6) affected surface water of the state; (7) results of pre-treatment survey; (8) evaluation of available alternatives and justification for selecting piscicide use; (9) post-treatment assessment monitoring protocol; and (10) any other information required by the commission. The commission shall review the petition and require a public hearing in the locality affected by the proposed use in accordance with Adjudicatory Procedures, 20.1.3 NMAC. In addition to the public notice requirements in Adjudicatory Procedures, 20.1.3 NMAC, the petitioner shall provide written notice to (1) local political subdivisions; (2) local water planning entities; (3) local conservancy and irrigation districts; and (4) local media outlets, except that the petitioner shall only be required to publish notice in a newspaper of circulation in the locality affected by the proposed use. After a public hearing, the commission may grant the petition in whole or in part, may

grant the petition subject to conditions, or may deny the petition. In granting any petition in whole or part or subject to conditions, the commission shall require the petitioner to implement post-treatment assessment monitoring.

G. Radioactivity: The radioactivity of surface waters of the state shall be maintained at the lowest practical level and shall in no case exceed the standards set forth in the New Mexico Radiation Protection Regulations, 20.3.1.400 through 20.3.1.499 NMAC (5-3-95).

H. Pathogens: Surface waters of the state shall be virtually free of pathogens. In particular, surface waters of the state used for irrigation of table crops such as lettuce shall be virtually free of *Salmonella* and *Shigella* species.

I. Temperature: Maximum temperatures for each classified water of the state have been specified in 20.6.4.101 through 20.6.4.899 NMAC. However, the introduction of heat by other than natural causes shall not increase the temperature, as measured from above the point of introduction, by more than 2.7°C (5°F) in a stream, or more than 1.7°C (3°F) in a lake or reservoir. In no case will the introduction of heat be permitted when the maximum temperature specified for the reach (generally 20°C (68°F) for coldwater fisheries and 32.2°C (90°F) for warmwater fisheries) would thereby be exceeded. These temperature standards shall not apply to impoundments constructed offstream for the purpose of heat disposal. High water temperatures caused by unusually high ambient air temperatures are not violations of these standards.

J. Turbidity: Turbidity attributable to other than natural causes shall not reduce light transmission to the point that the normal growth, function, or reproduction of aquatic life is impaired or that will cause substantial visible contrast with the natural appearance of the water.

K. Salinity: Where existing information is sufficient, numerical standards for TDS (or conductivity), chlorides and sulfates, have been adopted in 20.6.4.101 through 20.6.4.899 NMAC. The following standards apply at the downstream point of the reach in which they are set:

(1) For the tributaries of the Colorado river system, the state of New Mexico will cooperate with the Colorado river basin states and the federal government to support and implement the salinity policy and program outlined in the report "1999 Review, water quality standards for salinity, Colorado river system."

(2) Numeric criteria for salinity are established at three points in the Colorado river basin as follows: below Hoover dam, 723 mg/L; below Parker dam, 747 mg/L; and at Imperial dam, 879 mg/L.

(3) As a part of the program, objectives for New Mexico shall include the elimination of discharges of water containing solids in solution as a result of the use of water to control or convey fly ash from coal-fired electric generators, wherever practicable.

(4) In determining compliance with the numeric criteria hereby adopted, salinity (TDS) shall be determined by either the "calculation method" (sum of constituents) or the filterable residue method. Approved test procedures for these determinations are as set forth in 20.6.4.13 NMAC.

L. Dissolved Gases: Surface waters of the state shall be free of nitrogen and other dissolved gases at levels above 110 percent saturation when this supersaturation is attributable to municipal, industrial or other discharges.

[20.6.4.12 NMAC – Rp 20 NMAC 6.1.1105, 10-12-00; A, 10-11-02]

20.6.4.13 SAMPLING AND ANALYSIS:

A. All methods of sample collection, preservation and analysis used in determining water quality and maintenance of these standards shall be in accordance with approved or accepted test procedures published in "Guidelines establishing test procedures for the analysis of pollutants under the Clean Water Act," 40 CFR Part 136, or any test procedure approved or accepted by EPA using procedures provided in 40 CFR Parts 136.3(d), 136.4, and 136.5. Test procedures approved or accepted under 40 CFR Part 136 are published in the references cited herein and in other references.

(1) "Standard methods for the examination of water and wastewater," American public health association.

(2) "Methods for chemical analysis of water and wastes," U.S. environmental protection agency.

(3) "Methods for determination of inorganic substances in water and fluvial sediments," techniques of water-resource investigations of the U.S. geological survey.

(4) "Methods for the determination of organic substances in water and fluvial sediments," techniques of water-resource investigations of the U.S. geological survey.

B. Bacteriological Surveys: The monthly geometric mean shall be used in assessing attainment of standards when a minimum of five samples is collected in a 30-day period.

C. Sampling Procedures:

(1) Streams: Stream monitoring stations below waste discharges shall be located a sufficient distance downstream to ensure adequate vertical and lateral mixing.

(2) Lakes: Sampling stations in lakes shall be located at least 250 feet from a waste discharge.

(3) Lakes: Except for the restriction specified in Paragraph (2) of this subsection, lake sampling stations shall be located at any site where the attainment of a water quality standard is to be assessed. Water quality measurements taken at intervals in the entire water column at a sampling station shall be averaged for the epilimnion, or in the absence of an epilimnion, for the upper one-third of the water column of the lake to determine attainment of standards, except that attainment of standards for toxic pollutants shall be assessed during periods of complete vertical mixing, e.g., during spring or fall turnover, or by taking depth-integrated composite samples of the water column.

D. Acute toxicity of effluent to aquatic life shall be determined using the procedures specified in U.S. environmental protection agency "Methods for measuring the acute toxicity of effluents to freshwater and marine organisms" (4th Ed., 1991, EPA/600/4-90/027), or latest edition thereof, which is incorporated herein by reference. Acute toxicities of substances shall be determined using at least two species tested in whole effluent and a series of effluent dilutions. Acute toxicity due to discharges shall not occur within the wastewater mixing zone in any surface water of the state with an existing or designated fishery use.

E. Chronic toxicity of effluent or ambient surface waters of the state to aquatic life shall be determined using the procedures specified in U.S. environmental protection agency "Short-term methods for estimating the chronic toxicity of effluents and receiving waters to freshwater organisms" (2nd Ed., 1989, EPA 600/4-89/001), or latest edition thereof, which is incorporated herein by reference. Chronic toxicities of substances shall be determined using at least two species tested in ambient surface water or whole effluent and a series of effluent dilutions. Chronic toxicity due to discharges shall not occur at the critical low flow, or any flow greater than the critical low flow, in any surface water of the state with an existing or designated fishery use more than once every three years.

[20.6.4.13 NMAC – Rp 20 NMAC 6.1.1106, 10-12-00]

20.6.4.14 USE ATTAINABILITY ANALYSIS:

A. A use attainability analysis is a scientific study which shall be conducted only for the purpose of assessing the factors affecting the attainment of a use. Whenever a use attainability analysis is conducted, it shall be subject to the requirements and limitations set forth in 40 CFR Part 131, Water Quality Standards; specifically, Subsections 131.3(g), 131.10(g), 131.10(h) and 131.10(j) shall be applicable as follows:

(1) The department must conduct a use attainability analysis whenever it proposes to classify a surface water of the state with designated uses which do not include the uses specified in Section 101(a)(2) of the federal Clean Water Act. Section 101(a)(2) uses are also specified in Subsection B of 20.6.4.6 NMAC.

(2) A designated use cannot be removed if it is an existing use.

(3) A use attainability analysis or an equivalent study approved by the department and the regional administrator must be conducted to remove any non-existing designated use from any classified waters of the state.

B. Any person proposing to conduct a use attainability analysis or equivalent study shall publish notice of this intent in a newspaper of local and statewide circulation. The cost of publication shall be the responsibility of the person proposing such action. The notice shall describe the surface water of the state and uses to be assessed, identify the persons to contact for complete information, and describe how interested persons can participate in the use attainability analysis or equivalent study.

C. Any person may submit a petition to the department stating that they intend to conduct a use attainability analysis or equivalent study. At a minimum, the department, the New Mexico game and fish department, the state engineer and the U.S. fish and wildlife service shall be consulted during the development of a work plan for such analysis or equivalent study. The petitioner shall develop a work plan to conduct the use attainability analysis or equivalent study and shall submit the work plan to the department and the regional administrator of the EPA for review and approval. A copy of the petition and the work plan must be submitted concurrently to the commission. Upon approval of the work plan by the department and the regional administrator, the petitioner shall conduct the use attainability analysis or equivalent study in accordance with the approved work plan. The cost of such analysis or equivalent study shall be the responsibility of the petitioner.

D. Physical, chemical and biological evaluations of surface waters of the state other than lakes and reservoirs for purposes of use attainability analyses or equivalent studies shall be conducted according to the procedures outlined in the "Technical support manual: waterbody surveys and assessments for conducting use attainability analyses," United States environmental protection agency, office of water, regulations and standards,

Washington, D.C., November 1983, or latest edition thereof, which is incorporated herein by reference, or an alternative equivalent study methodology approved by the department.

E. Physical, chemical and biological evaluations of lakes and reservoirs for purposes of use attainability analyses or equivalent studies shall be conducted according to the procedures outlined in the "Technical support manual: waterbody surveys and assessments for conducting use attainability analyses, volume III: lake systems," United States environmental protection agency, office of water, regulations and standards, Washington, D.C., November 1984, or latest edition thereof, which is incorporated herein by reference, or an alternative equivalent study methodology approved by the department.

F. A use attainability analysis or equivalent study should include any applicable information concerning the following:

(1) identification of existing uses of the surface water of the state to be reviewed which have existed since 1975;

(2) an evaluation of the best water quality attained in the surface water of the state to be reviewed which has existed since 1975;

(3) a technological analysis which identifies available treatment options for point and nonpoint sources to meet applicable water quality standards for the designated uses;

(4) an economic analysis which evaluates social and economic impacts associated with available treatment options;

(5) a physical and biological evaluation of the surface water of the state to be reviewed to identify any factors unrelated to water quality which impair attainment of designated uses and to determine which designated uses are feasible to attain in such surface water of the state given existing physical limitations;

(6) an evaluation of the water chemistry of the surface water of the state to be reviewed to identify chemical constituents which impair the designated uses which are feasible to attain in such water; and

(7) an evaluation of the aquatic and terrestrial biota utilizing the surface water of the state to determine resident species and which species could potentially exist in such water if physical and chemical factors impairing a designated use are corrected.

G. Upon completion of the use attainability analysis or equivalent study, the petitioner shall submit to the department and the commission the data and their findings and conclusions. If the department determines that the analysis or equivalent study was conducted in accordance with the approved work plan and the findings and conclusions are based upon sound scientific rationale, and demonstrates that it is not feasible to attain the designated use, the department shall request authority from the commission to initiate rulemaking proceedings to modify the designated use for the surface water of the state that was reviewed.
[20.6.4.14 NMAC – Rp 20 NMAC 6.1.1107, 10-12-00]

20.6.4.15 – 20.6.4.100: [RESERVED]

20.6.4.101 RIO GRANDE BASIN - The main stem of the Rio Grande from the international boundary and water commission sampling station above American dam upstream to one mile below Percha dam. (Sustained flow in the Rio Grande below Caballo reservoir is dependent on release from Caballo reservoir during the irrigation season; at other times of the year, there may be little or no flow.)

A. Designated Uses: irrigation, limited warmwater fishery, livestock watering, wildlife habitat, and secondary contact.

B. Standards:

(1) In any single sample: pH shall be within the range of 6.6 to 9.0, and temperature shall not exceed 34°C (93.2°F). The use-specific numeric standards set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of fecal coliform bacteria shall not exceed 200/100 mL; no single sample shall exceed 400/100 mL (see Subsection B of 20.6.4.13 NMAC).

(3) At mean monthly flows above 350 cfs, the monthly average concentration for: TDS shall not exceed 2,000 mg/L, sulfate shall not exceed 500 mg/L, and chlorides shall not exceed 400 mg/L.
[20.6.4.101 NMAC – Rp 20 NMAC 6.1.2101, 10-12-00; A, 12-15-01]

20.6.4.102 RIO GRANDE BASIN - The main stem of the Rio Grande from one mile below Percha dam upstream to the headwaters of Caballo reservoir including Caballo reservoir. (Sustained flow in the Rio Grande below Caballo reservoir is dependent on release from Caballo reservoir during the irrigation season; at other times of the year, there may be little or no flow.)

A. **Designated Uses**: irrigation, livestock watering, wildlife habitat, primary contact, and warmwater fishery.

B. **Standards**:

(1) At any sampling site: pH shall be within the range of 6.6 to 9.0, temperature shall not exceed 32.2°C (90°F), and turbidity shall not exceed 50 NTU. The use-specific numeric standards set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of fecal coliform bacteria shall not exceed 100/100 mL; no single sample shall exceed 200/100 mL (see Subsection B of 20.6.4.13 NMAC).

[20.6.4.102 NMAC – Rp 20 NMAC 6.1.2102, 10-12-00]

20.6.4.103 **RIO GRANDE BASIN - The main stem of the Rio Grande from the headwaters of Caballo lake upstream to Elephant Butte dam and perennial reaches of tributaries to the Rio Grande in Sierra and Socorro counties.** (Flow in this reach of the Rio Grande main stem is dependent upon release from Elephant Butte dam.)

A. **Designated Uses**: fish culture, irrigation, livestock watering, wildlife habitat, marginal coldwater fishery, secondary contact, and warmwater fishery.

B. **Standards**:

(1) In any single sample: pH shall be within the range of 6.6 to 9.0, and temperature shall not exceed 25°C (77°F). The use-specific numeric standards set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of fecal coliform bacteria shall not exceed 1,000/100 mL; no single sample shall exceed 2,000/100 mL (see Subsection B of 20.6.4.13 NMAC).

[20.6.4.103 NMAC – Rp 20 NMAC 6.1.2103, 10-12-00]

20.6.4.104 **RIO GRANDE BASIN - Elephant Butte reservoir.**

A. **Designated Uses**: irrigation storage, livestock watering, wildlife habitat, primary contact, and warmwater fishery.

B. **Standards**:

(1) At any sampling site: pH shall be within the range of 6.6 to 9.0, temperature shall not exceed 32.2°C (90°F), and turbidity shall not exceed 50 NTU. The use-specific numeric standards set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of fecal coliform bacteria shall not exceed 100/100 mL; no single sample shall exceed 200/100 mL (see Subsection B of 20.6.4.13 NMAC).

[20.6.4.104 NMAC – Rp 20 NMAC 6.1.2104, 10-12-00]

20.6.4.105 **RIO GRANDE BASIN - The main stem of the Rio Grande from the headwaters of Elephant Butte reservoir upstream to Alameda bridge (Corrales bridge), the Jemez river from the Jemez pueblo boundary upstream to the Rio Guadalupe, and intermittent flow below the perennial reaches of the Rio Puerco and Jemez river which enters the main stem of the Rio Grande.**

A. **Designated Uses**: irrigation, limited warmwater fishery, livestock watering, wildlife habitat, and secondary contact.

B. **Standards**:

(1) In any single sample: pH shall be within the range of 6.6 to 9.0, and temperature shall not exceed 32.2°C (90°F). The use-specific numeric standards set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of fecal coliform bacteria shall not exceed 1,000/100 mL; no single sample shall exceed 2,000/100 mL (see Subsection B of 20.6.4.13 NMAC).

(3) At mean monthly flows above 100 cfs, the monthly average concentration for: TDS shall not exceed 1,500 mg/L, sulfate shall not exceed 500 mg/L, and chloride shall not exceed 250 mg/L.

[20.6.4.105 NMAC – Rp 20 NMAC 6.1.2105, 10-12-00]

20.6.4.106 **RIO GRANDE BASIN - The main stem of the Rio Grande from Alameda bridge (Corrales bridge) upstream to the Angostura diversion works.**

A. **Designated Uses**: irrigation, limited warmwater fishery, livestock watering, wildlife habitat, and secondary contact.

B. **Standards**:

(1) In any single sample: dissolved oxygen shall be greater than 5.0 mg/L, pH shall be within the range of 6.6 to 9.0, and temperature shall be less than 32.2°C (90°F). The use-specific numeric standards set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of fecal coliform bacteria shall not exceed 200/100 mL; no single sample shall exceed 400/100 mL (see Subsection B of 20.6.4.13 NMAC).

(3) At mean monthly flows above 100 cfs, the monthly average concentration for: TDS shall be less than 1,500 mg/L, sulfate shall be less than 500 mg/L, and chloride shall be less than 250 mg/L.

[20.6.4.106 NMAC – Rp 20 NMAC 6.1.2105.1, 10-12-00]

20.6.4.107 RIO GRANDE BASIN - The Jemez river from its confluence with the Rio Guadalupe upstream to state highway 4 near the town of Jemez Springs and perennial reaches of Vallecito creek.

A. **Designated Uses**: coldwater fishery, primary contact, irrigation, livestock watering, and wildlife habitat.

B. **Standards**:

(1) In any single sample: temperature shall not exceed 25°C (77°F), pH shall be within the range of 6.6 to 8.8, and turbidity shall not exceed 25 NTU. The use-specific numeric standards set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of fecal coliform bacteria shall not exceed 200/100 mL; no single sample shall exceed 400/100 mL (see Subsection B of 20.6.4.13 NMAC).

[20.6.4.107 NMAC – Rp 20 NMAC 6.1.2105.5, 10-12-00]

20.6.4.108 RIO GRANDE BASIN - The Jemez river and all its tributaries above state highway 4 near the town of Jemez Springs, and the Guadalupe river and all its tributaries.

A. **Designated Uses**: domestic water supply, fish culture, high quality coldwater fishery, irrigation, livestock watering, wildlife habitat, and secondary contact.

B. **Standards**:

(1) In any single sample: conductivity shall not exceed 400 μmhos, pH shall be within the range of 6.6 to 8.8, temperature shall not exceed 20°C (68°F), and turbidity shall not exceed 25 NTU. The use-specific numeric standards set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of fecal coliform bacteria shall not exceed 100/100 mL; no single sample shall exceed 200/100 mL (see Subsection B of 20.6.4.13 NMAC).

[20.6.4.108 NMAC – Rp 20 NMAC 6.1.2106, 10-12-00]

20.6.4.109 RIO GRANDE BASIN - Perennial reaches of Bluewater creek, Rio Moquino, Seboyeta creek, Rio Paguate, the Rio Puerco within the Santa Fe national forest, and all other perennial reaches of tributaries to the Rio Puerco including the Rio San Jose in Cibola county from the USGS gaging station at Correo upstream to Horace springs.

A. **Designated Uses**: coldwater fishery, domestic water supply, fish culture, irrigation, livestock watering, wildlife habitat, and primary contact.

B. **Standards**:

(1) In any single sample: pH shall be within the range of 6.6 to 8.8, temperature shall not exceed 20°C (68°F), total phosphorus (as P) shall not exceed 0.1 mg/L, and turbidity shall not exceed 25 NTU. The use-specific numeric standards set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of fecal coliform bacteria shall not exceed 100/100 mL; no single sample shall exceed 200/100 mL (see Subsection B of 20.6.4.13 NMAC).

[20.6.4.109 NMAC – Rp 20 NMAC 6.1.2107, 10-12-00]

20.6.4.110 RIO GRANDE BASIN - The main stem of the Rio Grande from Angostura diversion works upstream to Cochiti dam.

A. **Designated Uses**: irrigation, livestock watering, wildlife habitat, secondary contact, coldwater fishery, and warmwater fishery.

B. **Standards**:

(1) In any single sample: pH shall be within the range of 6.6 to 9.0, and temperature shall not exceed 25°C (77°F). The use-specific numeric standards set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of fecal coliform bacteria shall not exceed 200/100 mL; no single sample shall exceed 400/100 mL (see Subsection B of 20.6.4.13 NMAC).

[20.6.4.110 NMAC – Rp 20 NMAC 6.1.2108, 10-12-00]

20.6.4.111 RIO GRANDE BASIN - Perennial reaches of Las Huertas and San Pedro creeks.

A. **Designated Uses**: coldwater fishery, irrigation, livestock watering, wildlife habitat, and secondary contact.

B. **Standards**:

(1) In any single sample: pH shall be within the range of 6.6 to 8.8, and temperature shall not exceed 25°C (77°F). The use-specific numeric standards set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of fecal coliform bacteria shall not exceed 200/100 mL; no single sample shall exceed 400/100 mL (see Subsection B of 20.6.4.13 NMAC).

[20.6.4.111 NMAC – Rp 20 NMAC 6.1.2108.5, 10-12-00; A, 7-25-01]

20.6.4.112 RIO GRANDE BASIN - Cochiti reservoir.

A. **Designated Uses**: livestock watering, wildlife habitat, warmwater fishery, coldwater fishery, and primary contact.

B. **Standards**:

(1) At any sampling site: pH shall be within the range of 6.6 to 9.0, temperature shall not exceed 25°C (77°F), and turbidity shall not exceed 25 NTU. The use-specific numeric standards set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of fecal coliform bacteria shall not exceed 100/100 mL; no single sample shall exceed 200/100 mL (see Subsection B of 20.6.4.13 NMAC).

[20.6.4.112 NMAC – Rp 20 NMAC 6.1.2109, 10-12-00]

20.6.4.113 RIO GRANDE BASIN - The Santa Fe river and its tributaries from Cochiti reservoir upstream to the outfall of the Santa Fe wastewater treatment facility.

A. **Designated Uses**: irrigation, livestock watering, wildlife habitat, marginal coldwater fishery, secondary contact, and warmwater fishery.

B. **Standards**:

(1) In any single sample: pH shall be within the range of 6.6 to 9.0, temperature shall not exceed 30°C (86°F), turbidity shall not exceed 50 NTU, and dissolved oxygen shall not be less than 4.0 mg/L. Dissolved oxygen shall not be less than 5.0 mg/L as a 24-hour average. Values used in the calculation of the 24-hour average for dissolved oxygen shall not exceed the dissolved oxygen saturation value. For a measured value above the dissolved oxygen saturation value, the dissolved oxygen saturation value will be used in calculating the 24-hour average. The dissolved oxygen saturation value shall be determined from the table set out in Subsection P of 20.6.4.900 NMAC. The use-specific numeric standards set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of fecal coliform bacteria shall not exceed 1,000/100 mL; no single sample shall exceed 2,000/100 mL (see Subsection B of 20.6.4.13 NMAC).

[20.6.4.113 NMAC – Rp 20 NMAC 6.1.2110, 10-12-00; A, 10-11-02]

20.6.4.114 RIO GRANDE BASIN - The main stem of the Rio Grande from the headwaters of Cochiti reservoir upstream to Taos Junction bridge, Embudo creek from its mouth on the Rio Grande upstream to the junction of the Rio Pueblo and the Rio Santa Barbara, the Santa Cruz river below Santa Cruz dam, the Rio Tesuque below the Santa Fe national forest and the Pojoaque river below Nambe dam.

A. **Designated Uses**: irrigation, livestock watering, wildlife habitat, marginal coldwater fishery, primary contact, and warmwater fishery.

B. **Standards**:

(1) In any single sample: pH shall be within the range of 6.6 to 9.0, temperature shall not exceed 22°C (71.6°F), and turbidity shall not exceed 50 NTU. The use-specific numeric standards set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of fecal coliform bacteria shall not exceed 200/100 mL; no single sample shall exceed 400/100 mL (see Subsection B of 20.6.4.13 NMAC).

(3) At mean monthly flows above 100 cfs, the monthly average concentration for: TDS shall not exceed 500 mg/L, sulfate shall not exceed 150 mg/L, and chloride shall not exceed 25 mg/L.

[20.6.4.114 NMAC – Rp 20 NMAC 6.1.2111, 10-12-00]

20.6.4.115 RIO GRANDE BASIN - The perennial reaches of Rio Vallecitos and its tributaries, and Rio del Oso, and El Rito creek above the town of El Rito.

A. Designated Uses: domestic water supply, irrigation, high quality coldwater fishery, livestock watering, wildlife habitat, and secondary contact.

B. Standards:

(1) In any single sample: conductivity shall not exceed 300 μmhos, pH shall be within the range of 6.6 to 8.8, temperature shall not exceed 20°C (68°F), and turbidity shall not exceed 10 NTU. The use-specific numeric standards set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of fecal coliform bacteria shall not exceed 100/100 mL; no single sample shall exceed 200/100 mL (see Subsection B of 20.6.4.13 NMAC).

[20.6.4.115 NMAC – Rp 20 NMAC 6.1.2112, 10-12-00]

20.6.4.116 RIO GRANDE BASIN - The Rio Chama from its mouth on the Rio Grande upstream to Abiquiu reservoir, the Rio Tusas, the Rio Ojo Caliente, Abiquiu creek, and El Rito creek below the town of El Rito.

A. Designated Uses: irrigation, livestock watering, wildlife habitat, coldwater fishery, warmwater fishery, and secondary contact.

B. Standards:

(1) In any single sample: pH shall be within the range of 6.6 to 8.8, and temperature shall not exceed 31°C (87.8°F). The use-specific numeric standards set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of fecal coliform bacteria shall not exceed 1,000/100 mL; no single sample shall exceed 2,000/100 mL (see Subsection B of 20.6.4.13 NMAC).

[20.6.4.116 NMAC – Rp 20 NMAC 6.1.2113, 10-12-00]

20.6.4.117 RIO GRANDE BASIN - Abiquiu reservoir.

A. Designated Uses: irrigation storage, livestock watering, wildlife habitat, primary contact, coldwater fishery, and warmwater fishery.

B. Standards:

(1) At any sampling site: pH shall be within the range of 6.6 to 8.8, and temperature shall not exceed 25°C (77°F). The use-specific numeric standards set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of fecal coliform bacteria shall not exceed 100/100 mL; no single sample shall exceed 200/100 mL (see Subsection B of 20.6.4.13 NMAC).

[20.6.4.117 NMAC – Rp 20 NMAC 6.1.2114, 10-12-00]

20.6.4.118 RIO GRANDE BASIN - The Rio Chama from the headwaters of Abiquiu reservoir upstream to El Vado reservoir and the Rio Gallina and Rio Puerco de Chama north of state highway 96.

A. Designated Uses: irrigation, livestock watering, wildlife habitat, coldwater fishery, warmwater fishery, and secondary contact.

B. Standards:

(1) In any single sample: pH shall be within the range of 6.6 to 8.8, and temperature shall not exceed 26°C (78.8°F). The use-specific numeric standards set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of fecal coliform bacteria shall not exceed 200/100 mL; no single sample shall exceed 400/100 mL (see Subsection B of 20.6.4.13 NMAC).

[20.6.4.118 NMAC – Rp 20 NMAC 6.1.2115, 10-12-00]

20.6.4.119 RIO GRANDE BASIN - All perennial reaches of tributaries to the Rio Chama above Abiquiu dam except the Rio Gallina and Rio Puerco de Chama north of state highway 96 and the main stem of the Rio Chama from the headwaters of El Vado reservoir upstream to the New Mexico-Colorado line.

A. Designated Uses: domestic water supply, fish culture, high quality coldwater fishery, irrigation, livestock watering, wildlife habitat, and secondary contact.

B. Standards:

(1) In any single sample: conductivity shall not exceed 500 µmhos (1,000 µmhos for Coyote creek), pH shall be within the range of 6.6 to 8.8, temperature shall not exceed 20°C (68°F), and turbidity shall not exceed 25 NTU. The use-specific numeric standards set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of fecal coliform bacteria shall not exceed 100/100 mL; no single sample shall exceed 200/100 mL (see Subsection B of 20.6.4.13 NMAC).

[20.6.4.119 NMAC – Rp 20 NMAC 6.1.2116, 10-12-00]

20.6.4.120 RIO GRANDE BASIN - El Vado and Heron reservoirs.

A. Designated Uses: irrigation storage, livestock watering, wildlife habitat, primary contact, and coldwater fishery.

B. Standards:

(1) At any sampling site: pH shall be within the range of 6.6 to 8.8, temperature shall not exceed 20°C (68°F), and turbidity shall not exceed 25 NTU. The use-specific numeric standards set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of fecal coliform bacteria shall not exceed 100/100 mL; no single sample shall exceed 200/100 mL (see Subsection B of 20.6.4.13 NMAC).

[20.6.4.120 NMAC – Rp 20 NMAC 6.1.2117, 10-12-00]

20.6.4.121 RIO GRANDE BASIN - Perennial tributaries to the Rio Grande in Bandelier national monument and their headwaters in Sandoval county, all perennial reaches of tributaries to the Rio Grande in Santa Fe county unless included in other segments.

A. Designated Uses: domestic water supply, high quality coldwater fishery, irrigation, livestock watering, wildlife habitat, municipal and industrial water supply, secondary contact, and primary contact.

B. Standards:

(1) In any single sample: conductivity shall not exceed 300 µmhos, pH shall be within the range of 6.6 to 8.8, temperature shall not exceed 20°C (68°F), and turbidity shall not exceed 10 NTU. The use-specific numeric standards set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of fecal coliform bacteria shall not exceed 100/100 mL; no single sample shall exceed 200/100 mL (see Subsection B of 20.6.4.13 NMAC).

[20.6.4.121 NMAC – Rp 20 NMAC 6.1.2118, 10-12-00]

20.6.4.122 RIO GRANDE BASIN - The main stem of the Rio Grande from Taos Junction bridge upstream to the New Mexico-Colorado line, the Red river from its mouth on the Rio Grande upstream to the mouth of Placer creek, and the Rio Pueblo de Taos from its mouth on the Rio Grande upstream to the mouth of the Rio Grande del Rancho.

A. Designated Uses: coldwater fishery, fish culture, irrigation, livestock watering, wildlife habitat, and primary contact.

B. Standards:

(1) In any single sample: pH shall be within the range of 6.6 to 8.8, temperature shall not exceed 20°C (68°F), and turbidity shall not exceed 50 NTU. The use-specific numeric standards set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of fecal coliform bacteria shall not exceed 100/100 mL; no single sample shall exceed 200/100 mL (see Subsection B of 20.6.4.13 NMAC).

[20.6.4.122 NMAC – Rp 20 NMAC 6.1.2119, 10-12-00]

20.6.4.123 RIO GRANDE BASIN - The Red river upstream of the mouth of Placer creek, all tributaries to the Red river, and all other perennial reaches of tributaries to the Rio Grande in Taos and Rio Arriba counties unless included in other segments.

A. Designated Uses: domestic water supply, fish culture, high quality coldwater fishery, irrigation, livestock watering, wildlife habitat, and secondary contact.

B. Standards:

(1) In any single sample: conductivity shall not exceed 400 µmhos (500 µmhos for the Rio Fernando de Taos), pH shall be within the range of 6.6 to 8.8, temperature shall not exceed 20°C (68°F), and turbidity shall not exceed 25 NTU. The use-specific numeric standards set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of fecal coliform bacteria shall not exceed 100/100 mL; no single sample shall exceed 200/100 mL (see Subsection B of 20.6.4.13 NMAC).

[20.6.4.123 NMAC – Rp 20 NMAC 6.1.2120, 10-12-00]

20.6.4.124 – 20.6.4.200: [RESERVED]

20.6.4.201 PECOS RIVER BASIN - The main stem of the Pecos river from the New Mexico-Texas line upstream to the mouth of the Black river (near Loving).

A. Designated Uses: irrigation, livestock watering, wildlife habitat, secondary contact, and warmwater fishery.

B. Standards:

(1) In any single sample: pH shall be within the range of 6.6 to 9.0 and temperature shall not exceed 32.2°C (90°F). The use-specific numeric standards set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of fecal coliform bacteria shall not exceed 200/100 mL; no single sample shall exceed 400/100 mL (see Subsection B of 20.6.4.13 NMAC).

(3) At all flows above 50 cfs: TDS shall not exceed 20,000 mg/L, sulfate shall not exceed 3,000 mg/L, and chloride shall not exceed 10,000 mg/L.

[20.6.4.201 NMAC – Rp 20 NMAC 6.1.2201, 10-12-00]

20.6.4.202 PECOS RIVER BASIN - The main stem of the Pecos river from the mouth of the Black river upstream to lower Tansil dam (diversion for irrigation frequently limits summer flow in this reach to that contributed by springs along the watercourse), including the Black river, the Delaware river and Blue spring.

A. Designated Uses: industrial water supply, irrigation, livestock watering, wildlife habitat, secondary contact, and warmwater fishery.

B. Standards:

(1) In any single sample: pH shall be within the range of 6.6 to 9.0, and temperature shall not exceed 34°C (93.2°F). The use-specific numeric standards set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of fecal coliform bacteria shall not exceed 200/100 mL; no single sample shall exceed 400/100 mL (see Subsection B of 20.6.4.13 NMAC).

(3) At all flows above 50 cfs: TDS shall not exceed 8,500 mg/L, sulfate shall not exceed 2,500 mg/L, and chloride shall not exceed 3,500 mg/L.

[20.6.4.202 NMAC – Rp 20 NMAC 6.1.2202, 10-12-00]

20.6.4.203 PECOS RIVER BASIN - The main stem of the Pecos river from lower Tansil dam upstream to Avalon dam, including Tansil lake.

A. Designated Uses: industrial water supply, livestock watering, wildlife habitat, primary contact, and warmwater fishery.

B. Standards:

(1) At any sampling site: pH shall be within the range of 6.6 to 9.0, temperature shall not exceed 34°C (93.2°F), and turbidity shall not exceed 25 NTU. The use-specific numeric standards set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of fecal coliform bacteria shall not exceed 100/100 mL; no single sample shall exceed 200/100 mL (see Subsection B of 20.6.4.13 NMAC).

[20.6.4.203 NMAC – Rp 20 NMAC 6.1.2203, 10-12-00]

20.6.4.204 PECOS RIVER BASIN - The main stem of the Pecos river from Avalon dam upstream to Brantley dam, including Avalon reservoir.

A. Designated Uses: irrigation storage, livestock watering, wildlife habitat, secondary contact, and warmwater fishery.

B. Standards:

(1) At any sampling site: pH shall be within the range of 6.6 to 9.0, and temperature shall not exceed 32.2°C (90°F). The use-specific numeric standards set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of fecal coliform bacteria shall not exceed 1,000/100 mL; no single sample shall exceed 2,000/100 mL (see Subsection B of 20.6.4.13 NMAC).

[20.6.4.204 NMAC – Rp 20 NMAC 6.1.2204, 10-12-00]

20.6.4.205 PECOS RIVER BASIN - Brantley reservoir.

A. Designated Uses: irrigation storage, livestock watering, wildlife habitat, primary contact, and warmwater fishery.

B. Standards:

(1) At any sampling site: pH shall be within the range of 6.6 to 9.0, and temperature shall not exceed 32.2°C (90°F). The use-specific numeric standards set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of fecal coliform bacteria shall not exceed 200/100 mL; no single sample shall exceed 400/100 mL (see Subsection B of 20.6.4.13 NMAC).

[20.6.4.205 NMAC – Rp 20 NMAC 6.1.2205, 10-12-00]

20.6.4.206 PECOS RIVER BASIN - The main stem of the Pecos river from the headwaters of Brantley reservoir upstream to Salt creek (near Acme), the Rio Peñasco downstream from state highway 24 near Dunken, any flow at the mouth of the Rio Hondo and any flow from the Rio Felix which enters the main stem of the Pecos river.

A. Designated Uses: irrigation, livestock watering, wildlife habitat, secondary contact, and warmwater fishery.

B. Standards:

(1) In any single sample: pH shall be within the range of 6.6 to 9.0 and temperature shall not exceed 32.2°C (90°F). The use-specific numeric standards set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of fecal coliform bacteria shall not exceed 1,000/100 mL; no single sample shall exceed 2,000/100 mL (see Subsection B of 20.6.4.13 NMAC).

(3) At all flows above 50 cfs: TDS shall not exceed 14,000 mg/L, sulfate shall not exceed 3,000 mg/L, and chloride shall not exceed 6,000 mg/L.

[20.6.4.206 NMAC – Rp 20 NMAC 6.1.2206, 10-12-00]

20.6.4.207 PECOS RIVER BASIN - The main stem of the Pecos river from Salt creek (near Acme) upstream to Sumner dam.

A. Designated Uses: irrigation, limited warmwater fishery, livestock watering, wildlife habitat, and secondary contact.

B. Standards:

(1) In any single sample: pH shall be within the range of 6.6 to 9.0 and temperature shall not exceed 32.2°C (90°F). The use-specific numeric standards set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of fecal coliform bacteria shall not exceed 1,000/100 mL; no single sample shall exceed 2,000/100 mL (see Subsection B of 20.6.4.13 NMAC).

(3) At all flows above 50 cfs: TDS shall not exceed 8,000 mg/L, sulfate shall not exceed 2,500 mg/L, and chloride shall not exceed 4,000 mg/L.

[20.6.4.207 NMAC – Rp 20 NMAC 6.1.2207, 10-12-00]

20.6.4.208 PECOS RIVER BASIN - Perennial reaches of the Rio Peñasco and its tributaries above state highway 24 near Dunken, perennial reaches of the Rio Bonito downstream from state highway 48 (near

Angus), the Rio Ruidoso downstream of the U.S. highway 70 bridge near Seeping Springs lakes, perennial reaches of the Rio Hondo, and Agua Chiquita.

A. Designated Uses: fish culture, irrigation, livestock watering, wildlife habitat, coldwater fishery, and secondary contact.

B. Standards:

(1) In any single sample: pH shall be within the range of 6.6 to 8.8, temperature shall not exceed 30°C (86°F) and total phosphorus (as P) shall be less than 0.1 mg/L. The use-specific numeric standards set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of fecal coliform bacteria shall not exceed 200/100 mL; no single sample shall exceed 400/100 mL (see Subsection B of 20.6.4.13 NMAC).

[20.6.4.208 NMAC – Rp 20 NMAC 6.1.2208, 10-12-00]

20.6.4.209 PECOS RIVER BASIN - Eagle creek above Alto reservoir, the Rio Bonito upstream of state highway 48 (near Angus), and the Rio Ruidoso and its tributaries upstream of the U.S. highway 70 bridge near Seeping Springs lakes.

A. Designated Uses: domestic water supply, fish culture, high quality coldwater fishery, irrigation, livestock watering, wildlife habitat, municipal and industrial water supply, and secondary contact.

B. Standards:

(1) In any single sample: conductivity shall not exceed 600 µmhos in Eagle creek, 1,100 µmhos in Bonito creek, and 1,500 µmhos in the Rio Ruidoso, pH shall be within the range of 6.6 to 8.8, temperature shall not exceed 20°C (68°F), and turbidity shall not exceed 10 NTU. The use-specific numeric standards set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of fecal coliform bacteria shall not exceed 100/100 mL; no single sample shall exceed 200/100 mL (see Subsection B of 20.6.4.13 NMAC).

[20.6.4.209 NMAC – Rp 20 NMAC 6.1.2209, 10-12-00]

20.6.4.210 PECOS RIVER BASIN - Sumner reservoir.

A. Designated Uses: irrigation storage, livestock watering, wildlife habitat, primary contact, and warmwater fishery.

B. Standards:

(1) At any sampling site: pH shall be within the range of 6.6 to 9.0, temperature shall not exceed 32.2°C (90°F), and turbidity shall not exceed 25 NTU. The use-specific numeric standards set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of fecal coliform bacteria shall not exceed 100/100 mL; no single sample shall exceed 200/100 mL (see Subsection B of 20.6.4.13 NMAC).

[20.6.4.210 NMAC – Rp 20 NMAC 6.1.2210, 10-12-00]

20.6.4.211 PECOS RIVER BASIN - The main stem of the Pecos river from the headwaters of Sumner reservoir upstream to Anton Chico.

A. Designated Uses: fish culture, irrigation, limited warmwater fishery, livestock watering, wildlife habitat, and secondary contact.

B. Standards:

(1) In any single sample: pH shall be within the range of 6.6 to 9.0 and temperature shall not exceed 32.2°C (90°F). The use-specific numeric standards set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of fecal coliform bacteria shall not exceed 200/100 mL; no single sample shall exceed 400/100 mL (see Subsection B of 20.6.4.13 NMAC).

(3) At all flows above 50 cfs: TDS shall not exceed 3,000 mg/L, sulfate shall not exceed 2,000 mg/L, and chloride shall not exceed 400 mg/L.

[20.6.4.211 NMAC – Rp 20 NMAC 6.1.2211, 10-12-00]

20.6.4.212 PECOS RIVER BASIN - Perennial tributaries to the main stem of the Pecos river from the headwaters of Sumner reservoir upstream to Santa Rosa dam.

A. Designated Uses: irrigation, coldwater fishery, livestock watering, wildlife habitat, and primary contact.

B. Standards:

(1) In any single sample: pH shall be within the range of 6.6 to 8.8 and temperature shall not exceed 25°C (77°F). The use-specific numeric standards set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of fecal coliform bacteria shall not exceed 200/100 mL; no single sample shall exceed 400/100 mL (see Subsection B of 20.6.4.13 NMAC).

[20.6.4.212 NMAC – Rp 20 NMAC 6.1.2211.1, 10-12-00]

20.6.4.213 PECOS RIVER BASIN - McAllister lake.

A. Designated Uses: coldwater fishery, secondary contact, livestock watering, and wildlife habitat.

B. Standards:

(1) At any sampling site: pH shall be within the range of 6.6 to 8.8 and temperature shall not exceed 25°C (77°F). The use-specific numeric standards set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of fecal coliform bacteria shall not exceed 1,000/100 mL; no single sample shall exceed 2,000/100 mL (see Subsection B of 20.6.4.13 NMAC).

[20.6.4.213 NMAC – Rp 20 NMAC 6.1.2211.3, 10-12-00]

20.6.4.214 PECOS RIVER BASIN - Storrie lake.

A. Designated Uses: coldwater fishery, warmwater fishery, primary contact, livestock watering, wildlife habitat, municipal water supply, and irrigation storage.

B. Standards:

(1) At any sampling site: pH shall be within the range of 6.6 to 8.8, temperature shall not exceed 20°C (68°F), and turbidity shall not exceed 25 NTU. The use-specific numeric standards set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of fecal coliform bacteria shall not exceed 100/100 mL; no single sample shall exceed 200/100 mL (see Subsection B of 20.6.4.13 NMAC).

[20.6.4.214 NMAC – Rp 20 NMAC 6.1.2211.5, 10-12-00]

20.6.4.215 PECOS RIVER BASIN - The Gallinas river and all its tributaries above the diversion for the Las Vegas municipal reservoir and perennial reaches of Tecolote creek and its perennial tributaries.

A. Designated Uses: domestic water supply, high quality coldwater fishery, irrigation, livestock watering, wildlife habitat, municipal and industrial water supply, and secondary contact.

B. Standards:

(1) In any single sample: conductivity shall not exceed 300 µmhos except conductivity shall not exceed 450 µmhos in Wright Canyon creek, pH shall be within the range of 6.6 to 8.8, temperature shall not exceed 20°C (68°F), and turbidity shall not exceed 10 NTU. The use-specific numeric standards set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of fecal coliform bacteria shall not exceed 100/100 mL; no single sample shall exceed 200/100 mL (see Subsection B of 20.6.4.13 NMAC).

[20.6.4.215 NMAC – Rp 20 NMAC 6.1.2212, 10-12-00]

20.6.4.216 PECOS RIVER BASIN - The main stem of the Pecos river from Anton Chico upstream to the southern boundary of the Pecos national historical park, and perennial reaches of the Gallinas river from its mouth upstream to the diversion for the Las Vegas municipal reservoir.

A. Designated Uses: irrigation, livestock watering, wildlife habitat, marginal coldwater fishery, and secondary contact.

B. Standards:

(1) In any single sample: pH shall be within the range of 6.6 to 9.0 and temperature shall not exceed 30°C (86°F). The use-specific numeric standards set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of fecal coliform bacteria shall not exceed 1,000/100 mL; no single sample shall exceed 2,000/100 mL (see Subsection B of 20.6.4.13 NMAC).

(3) At all flows above 10 cfs: TDS shall not exceed 250 mg/L, sulfate shall not exceed 25 mg/L, and chloride shall not exceed 5 mg/L.

[20.6.4.216 NMAC – Rp 20 NMAC 6.1.2213, 10-12-00]

20.6.4.217 PECOS RIVER BASIN - Cow creek and all its tributaries and the main stem of the Pecos river from the southern boundary of the Pecos national historical park upstream to its headwaters, including all tributaries thereto.

A. Designated Uses: domestic water supply, fish culture, high quality coldwater fishery, irrigation, livestock watering, wildlife habitat, and secondary contact.

B. Standards:

(1) In any single sample: conductivity shall not exceed 300 μmhos, pH shall be within the range of 6.6 to 8.8, temperature shall not exceed 20°C (68°F), and turbidity shall not exceed 10 NTU. The use-specific numeric standards set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of fecal coliform bacteria shall not exceed 100/100 mL; no single sample shall exceed 200/100 mL (see Subsection B of 20.6.4.13 NMAC).

[20.6.4.217 NMAC – Rp 20 NMAC 6.1.2214, 10-12-00]

20.6.4.218 – 20.6.4.300: [RESERVED]

20.6.4.301 CANADIAN RIVER BASIN - The main stem of the Canadian river from the New Mexico-Texas line upstream to Ute dam, and any flow which enters the main stem from Revuelto creek.

A. Designated Uses: irrigation, limited warmwater fishery, livestock watering, wildlife habitat, and secondary contact.

B. Standards:

(1) In any single sample: pH shall be within the range of 6.6 to 9.0, temperature shall not exceed 32.2°C (90°F), and TDS shall not exceed 6,500 mg/L at flows above 25 cfs. The use-specific numeric standards set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of fecal coliform bacteria shall not exceed 200/100 mL; no single sample shall exceed 400/100 mL (see Subsection B of 20.6.4.13 NMAC).

[20.6.4.301 NMAC – Rp 20 NMAC 6.1.2301, 10-12-00]

20.6.4.302 CANADIAN RIVER BASIN - Ute reservoir.

A. Designated Uses: livestock watering, wildlife habitat, municipal and industrial water supply, primary contact, and warmwater fishery.

B. Standards:

(1) At any sampling site: pH shall be within the range of 6.6 to 9.0, turbidity shall not exceed 25 NTU and temperature shall not exceed 32.2°C (90°F). The use-specific numeric standards set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of fecal coliform bacteria shall not exceed 100/100 mL; no single sample shall exceed 200/100 mL (see Subsection B of 20.6.4.13 NMAC).

[20.6.4.302 NMAC – Rp 20 NMAC 6.1.2302, 10-12-00]

20.6.4.303 CANADIAN RIVER BASIN - The main stem of the Canadian river from the headwaters of Ute reservoir upstream to Conchas dam, the perennial reaches of Pajarito creek, and Ute creek and its perennial tributaries.

A. Designated Uses: irrigation, limited warmwater fishery, livestock watering, wildlife habitat, and secondary contact.

B. Standards:

(1) In any single sample: pH shall be within the range of 6.6 to 9.0, and temperature shall not exceed 32.2°C (90°F). The use-specific numeric standards set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of fecal coliform bacteria shall not exceed 200/100 mL; no single sample shall exceed 400/100 mL (see Subsection B of 20.6.4.13 NMAC).

[20.6.4.303 NMAC – Rp 20 NMAC 6.1.2303, 10-12-00]

20.6.4.304 CANADIAN RIVER BASIN - Conchas reservoir.

A. Designated Uses: irrigation storage, livestock watering, wildlife habitat, primary contact and warmwater fishery.

B. Standards:

(1) At any sampling site: pH shall be within the range of 6.6 to 9.0, temperature shall not exceed 32.2°C (90°F), and turbidity shall not exceed 25 NTU. The use-specific numeric standards set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of fecal coliform bacteria shall not exceed 100/100 mL; no single sample shall exceed 200/100 mL (see Subsection B of 20.6.4.13 NMAC).

[20.6.4.304 NMAC – Rp 20 NMAC 6.1.2304, 10-12-00]

20.6.4.305 CANADIAN RIVER BASIN - The main stem of the Canadian river from the headwaters of Conchas reservoir upstream to the New Mexico-Colorado line, the Conchas river, the Mora river downstream from the USGS gaging station near Shoemaker, the Vermejo river and perennial reaches of Raton, Chicorica and Uña de Gato creeks.

A. Designated Uses: irrigation, limited warmwater fishery, livestock watering, wildlife habitat, and secondary contact.

B. Standards:

(1) In any single sample: pH shall be within the range of 6.6 to 9.0, temperature shall not exceed 32.2°C (90°F), and TDS shall not exceed 3,500 mg/L at flows above 10 cfs. The use-specific numeric standards set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of fecal coliform bacteria shall not exceed 200/100 mL; no single sample shall exceed 400/100 mL (see Subsection B of 20.6.4.13 NMAC).

[20.6.4.305 NMAC – Rp 20 NMAC 6.1.2305, 10-12-00]

20.6.4.306 CANADIAN RIVER BASIN - The Cimarron river downstream from state highway 21 in Cimarron to the Canadian river and all perennial reaches of tributaries to the Cimarron river downstream from state highway 21 in Cimarron.

A. Designated Uses: irrigation, warmwater fishery, livestock watering, wildlife habitat, and secondary contact.

B. Standards:

(1) In any single sample: pH shall be within the range of 6.6 to 9.0, temperature shall not exceed 32.2°C (90°F), and TDS shall not exceed 3,500 mg/L at flows above 10 cfs. The use-specific numeric standards set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of fecal coliform bacteria shall not exceed 200/100 mL; no single sample shall exceed 400/100 mL (see Subsection B of 20.6.4.13 NMAC).

[20.6.4.306 NMAC – Rp 20 NMAC 6.1.2305.1, 10-12-00; A, 7-19-01]

20.6.4.307 CANADIAN RIVER BASIN - Perennial reaches of the Mora river from the USGS gaging station near Shoemaker upstream to the state highway 434 bridge in Mora, all perennial reaches of tributaries to the Mora river downstream from the USGS gaging station at La Cueva in San Miguel and Mora counties, perennial reaches of Ocate creek and its tributaries downstream of Ocate, and perennial reaches of Rayado creek downstream of Miami lake diversion in Colfax county.

A. Designated Uses: marginal coldwater fishery, warmwater fishery, secondary contact, irrigation, livestock watering, and wildlife habitat.

B. Standards:

(1) At any sampling site: temperature shall not exceed 25°C (77°F), and pH shall be within the range of 6.6 to 9.0. The use-specific numeric standards set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of fecal coliform bacteria shall not exceed 200/100 mL; no single sample shall exceed 400/100 mL (see Subsection B of 20.6.4.13 NMAC).

[20.6.4.307 NMAC – Rp 20 NMAC 6.1.2305.3, 10-12-00]

20.6.4.308 CANADIAN RIVER BASIN - Charette lakes.

A. Designated Uses: coldwater fishery, warmwater fishery, secondary contact, livestock watering, and wildlife habitat.

B. Standards:

(1) At any sampling site: pH shall be within the range of 6.6 to 8.8, and temperature shall not exceed 20°C (68°F). The use-specific numeric standards set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of fecal coliform bacteria shall not exceed 1,000/100 mL; no single sample shall exceed 2,000/100 mL (see Subsection B of 20.6.4.13 NMAC).
[20.6.4.308 NMAC – Rp 20 NMAC 6.1.2305.5, 10-12-00]

20.6.4.309 CANADIAN RIVER BASIN - The Mora river and its tributaries upstream from the state highway 434 bridge in Mora, all tributaries to the Mora river upstream from the USGS gaging station at La Cueva, perennial reaches of Coyote creek and its tributaries, the Cimarron river and its perennial tributaries above state highway 21 in Cimarron, perennial reaches of Rayado creek and its tributaries above Miami lake diversion, Ocate creek and perennial reaches of its tributaries upstream of Ocate, and all other perennial reaches of tributaries to the Canadian river northwest and north of U.S. highway 64 in Colfax county unless included in other segments.

A. **Designated Uses**: domestic water supply, irrigation, high quality coldwater fishery, livestock watering, wildlife habitat, municipal and industrial water supply, and secondary contact.

B. **Standards**:

(1) In any single sample: conductivity shall not exceed 500 μmhos/cm (at 25°C), pH shall be within the range of 6.6 to 8.8, temperature shall not exceed 20°C (68°F), and turbidity shall not exceed 25 NTU. The use-specific numeric standards set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of fecal coliform bacteria shall not exceed 100/100 m/L; no single sample shall exceed 200/100 mL (see Subsection B of 20.6.4.13 NMAC).
[20.6.4.309 NMAC – Rp 20 NMAC 6.1.2306, 10-12-00; A, 7-19-01]

20.6.4.310 – 20.6.4.400: [RESERVED]

20.6.4.401 SAN JUAN RIVER BASIN - The main stem of the San Juan river from the point where the San Juan leaves New Mexico and enters Colorado upstream to U.S. highway 64 at Blanco, and any flow which enters the San Juan river from the Mancos and Chaco rivers.

A. **Designated Uses**: municipal and industrial water supply, irrigation, livestock watering, wildlife habitat, secondary contact, marginal coldwater fishery, and warmwater fishery.

B. **Standards**:

(1) In any single sample: pH shall be within the range of 6.6 to 9.0, and temperature shall not exceed 32.2°C (90°F). The use-specific numeric standards set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of fecal coliform bacteria shall not exceed 200/100 mL; no single sample shall exceed 400/100 mL (see Subsection B of 20.6.4.13 NMAC).
[20.6.4.401 NMAC – Rp 20 NMAC 6.1.2401, 10-12-00]

20.6.4.402 SAN JUAN RIVER BASIN - La Plata river from its confluence with the San Juan river upstream to the New Mexico-Colorado line.

A. **Designated Uses**: irrigation, limited warmwater fishery, marginal coldwater fishery, livestock watering, wildlife habitat, and secondary contact.

B. **Standards**:

(1) In any single sample: pH shall be within the range of 6.6 to 9.0 and temperature shall not exceed 32.2°C (90°F). The use-specific numeric standards set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of fecal coliform bacteria shall not exceed 200/100 mL; no single sample shall exceed 400/100 mL (see Subsection B of 20.6.4.13 NMAC).
[20.6.4.402 NMAC – Rp 20 NMAC 6.1.2402, 10-12-00]

20.6.4.403 SAN JUAN RIVER BASIN - The Animas river from its confluence with the San Juan upstream to U.S. highway 550 at Aztec.

A. **Designated Uses**: municipal and industrial water supply, irrigation, livestock watering, wildlife habitat, marginal coldwater fishery, secondary contact, and warmwater fishery.

B. **Standards**:

(1) In any single sample: pH shall be within the range of 6.6 to 9.0, and temperature shall not exceed 27°C (80.6°F). The use-specific numeric standards set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of fecal coliform bacteria shall not exceed 200/100 mL; no single sample shall exceed 400/100 mL (see Subsection B of 20.6.4.13 NMAC).

[20.6.4.403 NMAC – Rp 20 NMAC 6.1.2403, 10-12-00]

20.6.4.404 SAN JUAN RIVER BASIN - The Animas river from U.S. highway 550 at Aztec upstream to the New Mexico-Colorado line.

A. Designated Uses: coldwater fishery, irrigation, livestock watering, wildlife habitat, municipal and industrial water supply, and secondary contact.

B. Standards:

(1) In any single sample: pH shall be within the range of 6.6 to 8.8, temperature shall not exceed 20°C (68°F), and total phosphorus (as P) shall not exceed 0.1 mg/L. The use-specific numeric standards set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of fecal coliform bacteria shall not exceed 200/100 mL; no single sample shall exceed 400/100 mL (see Subsection B of 20.6.4.13 NMAC).

[20.6.4.404 NMAC – Rp 20 NMAC 6.1.2404, 10-12-00]

20.6.4.405 SAN JUAN RIVER BASIN - The main stem of the San Juan river from U.S. highway 64 at Blanco upstream to the Navajo dam.

A. Designated Uses: high quality coldwater fishery, irrigation, livestock watering, wildlife habitat, municipal and industrial water supply, and secondary contact.

B. Standards:

(1) In any single sample: conductivity shall not exceed 400 μmhos/cm (at 25°C), pH shall be within the range of 6.6 to 8.8, temperature shall not exceed 20°C (68°F), and turbidity shall not exceed 10 NTU. The use-specific numeric standards set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of fecal coliform bacteria shall not exceed 100/100 mL; no single sample shall exceed 200/100 mL (see Subsection B of 20.6.4.13 NMAC).

[20.6.4.405 NMAC – Rp 20 NMAC 6.1.2405, 10-12-00]

20.6.4.406 SAN JUAN RIVER BASIN - Navajo reservoir in New Mexico.

A. Designated Uses: coldwater fishery, warmwater fishery, irrigation storage, livestock watering, wildlife habitat, municipal and industrial water storage, and primary contact.

B. Standards:

(1) At any sampling site: pH shall be within the range of 6.6 to 8.8, temperature shall not exceed 20°C (68°F), total phosphorus (as P) shall not exceed 0.1 mg/L, and turbidity shall not exceed 25 NTU. The use-specific numeric standards set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of fecal coliform bacteria shall not exceed 100/100 mL; no single sample shall exceed 200/100 mL (see Subsection B of 20.6.4.13 NMAC).

[20.6.4.406 NMAC – Rp 20 NMAC 6.1.2406, 10-12-00]

20.6.4.407 SAN JUAN RIVER BASIN - The Navajo and Los Pinos rivers in New Mexico.

A. Designated Uses: coldwater fishery, irrigation, livestock watering, wildlife habitat, and secondary contact.

B. Standards:

(1) In any single sample: pH shall be within the range of 6.6 to 8.8, temperature shall not exceed 20°C (68°F) and total phosphorus (as P) shall not exceed 0.1 mg/L. The use-specific numeric standards set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of fecal coliform bacteria shall not exceed 100/100 mL; no single sample shall exceed 200/100 mL (see Subsection B of 20.6.4.13 NMAC).

[20.6.4.407 NMAC – Rp 20 NMAC 6.1.2407, 10-12-00]

20.6.4.408 – 20.6.4.500: [RESERVED]

20.6.4.501 GILA RIVER BASIN - The main stem of the Gila river from the New Mexico-Arizona line upstream to state highway 464 in Red Rock, and perennial reaches of streams in Hidalgo county.

A. Designated Uses: irrigation, limited warmwater fishery, livestock watering, wildlife habitat, and primary contact.

B. Standards:

(1) In any single sample: pH shall be within the range of 6.6 to 9.0, and temperature shall not exceed 32.2°C (90°F). The use-specific numeric standards set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of fecal coliform bacteria shall not exceed 200/100 mL; no single sample shall exceed 400/100 mL (see Subsection B of 20.6.4.13 NMAC).

[20.6.4.501 NMAC – Rp 20 NMAC 6.1.2501, 10-12-00]

20.6.4.502 GILA RIVER BASIN - The main stem of the Gila river from state highway 464 in Red Rock upstream to Gila hot springs and perennial reaches of tributaries to the Gila river below the town of Cliff.

A. Designated Uses: industrial water supply, irrigation, livestock watering, wildlife habitat, marginal coldwater fishery, primary contact, and warmwater fishery.

B. Standards:

(1) In any single sample: pH shall be within the range of 6.6 to 9.0, and temperature shall not exceed 28°C (82.4°F). The use-specific numeric standards set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of fecal coliform bacteria shall not exceed 200/100 mL; no single sample shall exceed 400/100 mL (see Subsection B of 20.6.4.13 NMAC).

[20.6.4.502 NMAC – Rp 20 NMAC 6.1.2502, 10-12-00]

20.6.4.503 GILA RIVER BASIN - The main stem of the Gila river from Gila hot springs upstream to the headwaters and all perennial tributaries to the Gila river at or above the town of Cliff.

A. Designated Uses: domestic water supply, high quality coldwater fishery, irrigation, livestock watering, wildlife habitat, and secondary contact.

B. Standards:

(1) In any single sample: conductivity shall not exceed 300 μmhos for the main stem of the Gila river above Gila hot springs and 400 μmhos for other reaches, pH shall be within the range of 6.6 to 8.8, temperature shall not exceed 20°C (68°F) except in the east fork of the Gila river and Sapillo creek below Lake Roberts where the temperature shall not exceed 32.2°C (90°F), and turbidity shall not exceed 10 NTU. The use-specific numeric standards set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of fecal coliform bacteria shall not exceed 100/100 mL; no single sample shall exceed 200/100 mL (see Subsection B of 20.6.4.13 NMAC).

[20.6.4.503 NMAC – Rp 20 NMAC 6.1.2503, 10-12-00]

20.6.4.504 GILA RIVER BASIN - Wall lake, Lake Roberts, Bear Canyon lake and Snow lake.

A. Designated Uses: coldwater fishery, irrigation, livestock watering, wildlife habitat, and secondary contact.

B. Standards:

(1) In any single sample: conductivity shall not exceed 300 μmhos, pH shall be within the range of 6.6 to 8.8, temperature shall not exceed 22°C (72°F). The use-specific numeric standards set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of fecal coliform bacteria shall not exceed 200/100 mL; no single sample shall exceed 400/100 mL (see Subsection B of 20.6.4.13 NMAC).

[20.6.4.504 NMAC – Rp 20 NMAC 6.1.2504, 10-12-00]

20.6.4.505 – 20.6.4.600: [RESERVED]

20.6.4.601 SAN FRANCISCO RIVER BASIN - The main stem of the San Francisco river from the New Mexico-Arizona line upstream to state highway 12 at Reserve and perennial reaches of Mule creek.

A. **Designated Uses**: irrigation, limited warmwater and marginal coldwater fishery, livestock watering, wildlife habitat, and secondary contact.

B. **Standards**:

(1) In any single sample: pH shall be within the range of 6.6 to 9.0, and temperature shall not exceed 32.2°C (90°F). The use-specific numeric standards set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of fecal coliform bacteria shall not exceed 200/100 mL; no single sample shall exceed 400/100 mL (see Subsection B of 20.6.4.13 NMAC).

[20.6.4.601 NMAC – Rp 20 NMAC 6.1.2601, 10-12-00]

20.6.4.602 SAN FRANCISCO RIVER BASIN - The main stem of the San Francisco river from state highway 12 at Reserve upstream to the New Mexico-Arizona line.

A. **Designated Uses**: coldwater fishery, irrigation, livestock watering, wildlife habitat, and primary contact.

B. **Standards**:

(1) In any single sample: pH shall be within the range of 6.6 to 8.8, and temperature shall not exceed 25°C (77°F). The use-specific numeric standards set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of fecal coliform bacteria shall not exceed 200/100 mL; no single sample shall exceed 400/100 mL (see Subsection B of 20.6.4.13 NMAC).

[20.6.4.602 NMAC – Rp 20 NMAC 6.1.2602, 10-12-00]

20.6.4.603 SAN FRANCISCO RIVER BASIN - All perennial reaches of tributaries to the San Francisco river at or above the town of Glenwood.

A. **Designated Uses**: domestic water supply, fish culture, high quality coldwater fishery, irrigation, livestock watering, wildlife habitat, and secondary contact.

B. **Standards**:

(1) In any single sample: conductivity shall not exceed 400 μmhos, pH shall be within the range of 6.6 to 8.8, temperature shall not exceed 20°C (68°F) except in Tularosa creek, where the temperature shall not exceed 25°C (77°F), and turbidity shall not exceed 10 NTU. The use-specific numeric standards set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of fecal coliform bacteria shall not exceed 100/100 mL; no single sample shall exceed 200/100 mL (see Subsection B of 20.6.4.13 NMAC).

[20.6.4.603 NMAC – Rp 20 NMAC 6.1.2603, 10-12-00]

20.6.4.604 – 20.6.4.700: [RESERVED]

20.6.4.701 DRY CIMARRON RIVER - Perennial portions of the Dry Cimarron river in Union and Colfax counties and perennial reaches of Oak creek, Long canyon, and Corrumpa and Carrizozo creeks.

A. **Designated Uses**: coldwater fishery, irrigation, livestock watering, wildlife habitat, and secondary contact.

B. **Standards**:

(1) In any single sample: pH shall be within the range of 6.6 to 8.8, temperature shall not exceed 25°C (77°F), TDS shall not exceed 1,200 mg/L, sulfate shall not exceed 600 mg/L, and chloride shall not exceed 40 mg/L. The use-specific numeric standards set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of fecal coliform bacteria shall not exceed 100/100 mL; no single sample shall exceed 200/100 mL (see Subsection B of 20.6.4.13 NMAC).

[20.6.4.701 NMAC – Rp 20 NMAC 6.1.2701, 10-12-00]

20.6.4.702 – 20.6.4.800: [RESERVED]

20.6.4.801 CLOSED BASINS - Rio Tularosa lying east of the old U.S. highway 70 bridge crossing east of Tularosa, and all perennial tributaries to the Tularosa basin except Three Rivers.

A. **Designated Uses**: coldwater fishery, fish culture, irrigation, livestock watering, wildlife habitat, municipal and industrial water supply, and secondary contact.

B. Standards:

(1) In any single sample: pH shall be within the range of 6.6 to 8.8, and temperature shall not exceed 20°C (68°F). The use-specific numeric standards set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of fecal coliform bacteria shall not exceed 100/100 mL; no single sample shall exceed 200/100 mL (see Subsection B of 20.6.4.13 NMAC).

[20.6.4.801 NMAC – Rp 20 NMAC 6.1.2801, 10-12-00]

20.6.4.802 CLOSED BASINS - Perennial reaches of Three Rivers.

A. Designated Uses: irrigation, domestic water supply, high quality coldwater fishery, secondary contact, livestock watering, and wildlife habitat.

B. Standards:

(1) In any single sample: conductivity shall not exceed 500 µmhos, pH shall be within the range of 6.6 to 8.8, temperature shall not exceed 20°C (68°F), and turbidity shall not exceed 10 NTU. The use-specific numeric standards set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of fecal coliform bacteria shall not exceed 100/100 mL; no single sample shall exceed 200/100 mL (see Subsection B of 20.6.4.13 NMAC).

[20.6.4.802 NMAC – Rp 20 NMAC 6.1.2802, 10-12-00]

20.6.4.803 CLOSED BASINS - Perennial reaches of the Mimbres river downstream of the USGS gaging station at Mimbres and all perennial reaches of tributaries thereto.

A. Designated Uses: coldwater fishery, irrigation, livestock watering, wildlife habitat, and secondary contact.

B. Standards:

(1) In any single sample: pH shall be within the range of 6.6 to 8.8, and temperature shall not exceed 20°C (68°F). The use-specific numeric standards set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of fecal coliform bacteria shall not exceed 100/100 mL; no single sample shall exceed 200/100 mL (see Subsection B of 20.6.4.13 NMAC).

[20.6.4.803 NMAC – Rp 20 NMAC 6.1.2803, 10-12-00]

20.6.4.804 CLOSED BASINS - The Mimbres river upstream of the USGS gaging station at Mimbres and all perennial tributaries thereto.

A. Designated Uses: irrigation, domestic water supply, high quality coldwater fishery, livestock watering, wildlife habitat, and secondary contact.

B. Standards:

(1) In any single sample: conductivity shall not exceed 300 µmhos, pH shall be within the range of 6.6 to 8.8, temperature shall not exceed 20°C (68°F), and turbidity shall not exceed 10 NTU. The use-specific numeric standards set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of fecal coliform bacteria shall not exceed 100/100 mL; no single sample shall exceed 200/100 mL (see Subsection B of 20.6.4.13 NMAC).

[20.6.4.804 NMAC – Rp 20 NMAC 6.1.2804, 10-12-00]

20.6.4.805 CLOSED BASINS - Perennial reaches of the Sacramento river (Sacramento-Salt Flat closed basin) and all perennial tributaries thereto.

A. Designated Uses: domestic and municipal water supply, livestock watering, wildlife habitat, marginal coldwater fishery, and secondary contact.

B. Standards:

(1) In any single sample: pH shall be within the range of 6.6 to 9.0, temperature shall not exceed 25°C (77°F), and turbidity shall not exceed 10 NTU. The use-specific numeric standards set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of fecal coliform bacteria shall not exceed 200/100 mL; no single sample shall exceed 400/100 mL (see Subsection B of 20.6.4.13 NMAC).

[20.6.4.805 NMAC – Rp 20 NMAC 6.1.2805, 10-12-00]

20.6.4.806 – 20.6.4.899: [RESERVED]

20.6.4.900 STANDARDS APPLICABLE TO ATTAINABLE OR DESIGNATED USES UNLESS OTHERWISE SPECIFIED IN 20.6.4.101 THROUGH 20.6.4.899 NMAC.

A. Coldwater Fishery: Dissolved oxygen shall not be less than 6.0 mg/L, temperature shall not exceed 20°C (68°F), and pH shall be within the range of 6.6 to 8.8. The acute and chronic aquatic life standards set out in Subsections J and M of this section are applicable to this use. The total ammonia standards set out in Subsection O of this section and the human health standards listed in Subsection M of this section are applicable to this use.

B. Domestic Water Supply: Surface waters of the state designated for use as domestic water supplies shall not contain substances in concentrations that create a lifetime cancer risk of more than one cancer per 100,000 exposed persons. The following numeric standards and those standards listed under domestic water supply in Subsection M of this section shall not be exceeded:

(1)	dissolved nitrate (as N)	10.	mg/L
(2)	radium-226 + radium-228	5.	pCi/L
(3)	strontium-90	8	pCi/L
(4)	tritium	20,000	pCi/L
(5)	gross alpha (including radium-226, but excluding radon and uranium)	15	pCi/L

C. High Quality Coldwater Fishery: Dissolved oxygen shall not be less than 6.0 mg/L, temperature shall not exceed 20°C (68°F), pH shall be within the range of 6.6 to 8.8, turbidity shall not exceed 10 NTU (25 NTU in certain reaches where natural background prevents attainment of lower turbidity), and conductivity (at 25°C) shall not exceed a limit varying between 300 μmhos/cm and 1,500 μmhos/cm depending on the natural background in particular surface waters of the state (the intent of this standard is to prevent excessive increases in dissolved solids which would result in changes in community structure). The acute and chronic aquatic life standards set out in Subsections J and M of this section are applicable to this use. The total ammonia standards set out in Subsection O of this section and the human health standards for pollutants listed in Subsection M of this section are applicable to this use.

D. Irrigation and Irrigation Storage: The monthly geometric mean of fecal coliform bacteria shall not exceed 1,000/100 mL; no single sample shall exceed 2,000/100 mL. The following numeric standards and those standards listed under irrigation in Subsection M of this section shall not be exceeded:

(1)	dissolved selenium	0.13	mg/L
(2)	dissolved selenium in presence of >500 mg/L SO_4	0.25	mg/L

E. Limited Warmwater Fishery: Dissolved oxygen shall not be less than 5 mg/L, pH shall be within the range of 6.6 to 9.0, and on a case by case basis maximum temperatures may exceed 32.2°C. The acute and chronic aquatic life standards set out in Subsections J and M of this section are applicable to this use. The total ammonia standards set out in Subsection N of this section and the human health standards listed in Subsection M of this section are applicable to this use.

F. Marginal Coldwater Fishery: Dissolved oxygen shall not be less than 6 mg/L, on a case by case basis maximum temperatures may exceed 25°C and the pH may range from 6.6 to 9.0. The acute and chronic aquatic life standards set out in Subsections J and M of this section are applicable to this use. The total ammonia standards set out in Subsection O of this section and the human health standards listed in Subsection M of this section are applicable to this use.

G. Primary Contact: The monthly geometric mean of fecal coliform bacteria shall not exceed 200/100 mL, no single sample shall exceed 400/100 mL and pH shall be within the range of 6.6 to 9.0.

H. Warmwater Fishery: Dissolved oxygen shall not be less than 5 mg/L, temperature shall not exceed 32.2°C (90°F), and pH shall be within the range of 6.6 to 9.0. The acute and chronic aquatic life standards set out in Subsections J and M of this section are applicable to this use. The total ammonia standards set out in Subsection N of this section and the human health standards listed in Subsection M of this section are applicable to this use.

I. Fish culture, secondary contact, and municipal and industrial water supply and storage are also designated in particular classified waters of the state where these uses are actually being realized. However, no numeric standards apply uniquely to these uses. Water quality adequate for these uses is ensured by the general standards and numeric standards for bacterial quality, pH, and temperature which are established for all classified waters of the state listed in 20.6.4.101 through 20.6.4.899 NMAC.

J. The following schedule of equations for the determination of numeric standards for the substances listed and those standards listed in Subsection M for aquatic life shall apply to the subcategories of fisheries identified in this section:

(1) Acute standards

(a) dissolved silver $e^{(1.72[\ln(hardness)]-6.6825)}$ µg/L

(b) dissolved cadmium $(e^{(1.128[\ln(hardness)]-3.6867)})cf$ µg/L The hardness-dependent formulae for cadmium must be multiplied by a conversion factor (cf) to be expressed as dissolved values. The acute factor for cadmium is cf = 1.136672 - [(ln hardness)(0.041838)].

(c) dissolved chromium $e^{(0.819[\ln(hardness)]+2.5736)}$ µg/L

(d) dissolved copper $e^{(0.9422[\ln(hardness)]-1.7408)}$ µg/L

(e) dissolved lead $(e^{(1.273[\ln(hardness)]-1.46)})cf$ µg/L The hardness-dependent formulae for lead must be multiplied by a conversion factor (cf) to be expressed as dissolved values. The acute and chronic factor for lead is cf = 1.46203 - [(ln hardness)(0.145712)].

(f) dissolved nickel $e^{(0.8460[\ln(hardness)]+2.253)}$ µg/L

(g) dissolved zinc $e^{(0.8473[\ln(hardness)]+0.8618)}$ µg/L

(2) Chronic standards

(a) dissolved cadmium $(e^{(0.7852[\ln(hardness)]-[2.715])})cf$ µg/L The hardness-dependent formulae for cadmium must be multiplied by a conversion factor (cf) to be expressed as dissolved values. The chronic factor for cadmium is cf = 1.101672 - [(ln hardness)(0.041838)].

(b) dissolved chromium $e^{(0.819[\ln(hardness)]+0.534)}$ µg/L

(c) dissolved copper $e^{(0.8545[\ln(hardness)]-1.7428)}$ µg/L

(d) dissolved lead $(e^{(1.273[\ln(hardness)]-4.705)})cf$ µg/L The hardness-dependent formulae for lead must be multiplied by a conversion factor (cf) to be expressed as dissolved values. The acute and chronic factor for lead is cf = 1.46203 - [(ln hardness)(0.145712)].

(e) dissolved nickel $e^{(0.846[\ln(hardness)]+0.0554)}$ µg/L

(f) dissolved zinc $e^{(0.8473[\ln(hardness)]+0.8699)}$ µg/L

K. Livestock Watering: The following numeric standards and those standards listed in Subsection M for livestock watering shall not be exceeded:

(1) radium-226 + radium-228 30.0 pCi/L

(2) tritium 20,000 pCi/L

(3) total gross alpha (including radium-226, but excluding radon and uranium) 15 pCi/L

L. Wildlife Habitat: Wildlife habitat should be free from any substances at concentrations that are toxic to or will adversely affect plants and animals that use these environments for feeding, drinking, habitat or propagation, or can bioaccumulate and impair the community of animals in a watershed or the ecological integrity of surface waters of the state. In the absence of site-specific information, and subject to the following paragraph, the chronic numeric standards listed in Subsection M for wildlife habitat shall not be exceeded. The discharge of substances which bioaccumulate, in excess of levels listed in Subsection M for wildlife habitat is allowed if, and only to the extent that, the substances are present in the intake waters which are diverted and utilized prior to discharge, and then only if the discharger utilizes best available treatment technology to reduce the amount of bioaccumulating substances which are discharged.

M. Numeric criteria

The following table sets forth the numeric criteria adopted by the commission to protect existing, designated and attainable uses. Additional criteria that are not compatible with this table and are found in Subsections A through L of this section.

	Pollutant total, unless indicated	CAS Number	Domestic Water Supply µg/L	Irrigation µg/L	Livestock Watering µg/L	Wildlife Habitat µg/L	Aquatic Life		Human Health µg/L	Cancer Causing and/or Persistent
							Acute µg/L	Chronic µg/L		
1	Aluminum, dissolved	7429-90-5		5,000	5,000		750	87		
2	Antimony, dissolved	7440-36-0	6						4,300	P
3	Arsenic, dissolved	7440-38-2	50	100	200		340	150	24.2	C,P
4	Barium, dissolved	7440-39-3	2,000							
5	Beryllium, dissolved	7440-41-7	4				130	5.3		
6	Boron, dissolved	7440-42-8		750	5,000					
7	Cadmium, dissolved	7440-43-9	5	10	50		see 20.6.4.900.J	see 20.6.4.900.J		
8	Chlorine residual	7782-50-5				11	19	11		
9	Chromium, dissolved	18540-29-9	100	100	1,000		see 20.6.4.900.J	see 20.6.4.900.J		
10	Cobalt, dissolved	7440-48-4		50	1,000					
11	Copper, dissolved	7440-50-8		200	500		see 20.6.4.900.J	see 20.6.4.900.J		
12	Cyanide, dissolved	57-12-5	200							
13	Cyanide, weak acid dissociable	57-12-5				5.2	22.0	5.2	220,000	
14	Lead, dissolved	7439-92-1	50	5,000	100		see 20.6.4.900.J	see 20.6.4.900.J		
15	Mercury	7439-97-6	2		10	0.77	2.4	0.012		
16	Molybdenum, dissolved	7439-98-7		1,000						
17	Nickel, dissolved	7440-02-0	100				see 20.6.4.900.J	see 20.6.4.900.J	4,600	P
18	Selenium, dissolved	7782-49-2	50	see 20.6.4.900.D	50				11,000	P
19	Selenium, total recoverable	7782-49-2				5.0	20.0	5.0		
20	Silver, dissolved	7440-22-4					see 20.6.4.900.J			
21	Thallium, dissolved	7440-28-0	2						6.3	P
22	Uranium, dissolved	7440-61-1	5,000							

	Pollutant total, unless indicated	CAS Number	Domestic Water Supply µg/L	Irrigation µg/L	Livestock Watering µg/L	Wildlife Habitat µg/L	Aquatic Life		Human Health µg/L	Cancer Causing and/or Persistent
							Acute µg/L	Chronic µg/L		
23	Vanadium, dissolved	7440-62-2		100	100					
24	Zinc, dissolved	7440-66-6		2,000	25,000		see 20.6.4.900.J	see 20.6.4.900.J	69,000	P
25	Acenaphthene	83-32-9							2,700	
26	Acrolein	107-02-8							780	
27	Acrylonitrile	107-13-1							6.6	C
28	Aldrin	309-00-2					3.0		0.0014	C,P
29	Anthracene	120-12-7							110,000	
30	Benzene	71-43-2							710	C
31	Benzidine	92-87-5							0.0054	C
32	Benzo(a)anthracene	56-55-3							0.49	C
33	Benzo(a)pyrene	50-32-8							0.49	C,P
34	Benzo(b)fluoranthene	205-99-2							0.49	C
35	Benzo(k)fluoranthene	207-08-9							0.49	C
36	alpha-BHC	319-84-6							0.13	C
37	beta-BHC	319-85-7							0.46	C
38	Gamma-BHC (Lindane)	58-89-9					0.95		0.63	C
39	Bis(2-chloroethyl) ether	111-44-4							14	C
40	Bis(2-chloroisopropyl) ether	108-60-1							170,000	
41	Bis(2-ethylhexyl) phthalate	117817							59	C
42	Bromoform	75-25-2							3600	C
43	Butylbenzyl phthalate	85-68-7							5,200	
44	Carbon tetrachloride	56-23-5							44	C
45	Chlordane	57-74-9					2.4	0.0043	0.022	C,P
46	Chlorobenzene	108-90-7							21,000	
47	Chlorodibromomethane	124-48-1							340	C
48	Chloroform	67-66-3							4,700	C
49	2-Chloronaphthalene	91-58-7							4,300	
50	2-Chlorophenol	95-57-8							400	
51	Chrysene	218-01-9							0.49	C

	Pollutant total, unless indicated	CAS Number	Domestic Water Supply µg/L	Irrigation µg/L	Livestock Watering µg/L	Wildlife Habitat µg/L	Aquatic Life		Human Health µg/L	Cancer Causing and/or Persistent
							Acute µg/L	Chronic µg/L		
52	4,4'-DDT and derivatives	50-29-3				0.001	1.1	0.001	0.0059	C,P
53	Dibenzo(a,h)anthracene	53-70-3							0.49	C
54	Dibutyl phthalate	84-74-2							12,000	
55	1,2-Dichlorobenzene	95-50-1							17,000	
56	1,3-Dichlorobenzene	541-73-1							2,600	
57	1,4-Dichlorobenzene	106-46-7							2,600	
58	3,3'-Dichlorobenzidine	91-94-1							0.77	C
59	Dichlorobromomethane	75-27-4							460	C
60	1,2-Dichloroethane	107-06-2							990	C
61	1,1-Dichloroethylene	75-35-4							32	C
62	2,4-Dichlorophenol	120-83-2							790	
63	1,2-Dichloropropane	78-87-5							390	C
64	1,3-Dichloropropene	542-75-6							1,700	
65	Dieldrin	60-57-1					0.24	0.056	0.0014	C,P
66	Diethyl phthalate	84-66-2							120,000	
67	Dimethyl phthalate	131-11-3							2,900,000	
68	2,4-Dimethylphenol	105-67-9							2,300	
69	2,4-Dinitrophenol	51-28-5							14,000	
70	2,4-Dinitrotoluene	121-14-2							91	C
71	2,3,7,8-TCDD Dioxin	1746-01-6							1.4E-07	C,P
72	1,2-Diphenylhydrazine	122-66-7							5.4	C
73	alpha-Endosulfan	959-98-8					0.22	0.056	240	
74	beta-Endosulfan	33213-65-9					0.22	0.056	240	
75	Endosulfan sulfate	1031-07-8							240	
76	Endrin	72-20-8					0.086	0.036	0.81	
78	Endrin aldehyde	7421-93-4							0.81	
79	Ethylbenzene	100-41-4							29,000	
80	Fluoranthene	206-44-0							370	
81	Fluorene	86-73-7							14,000	
82	Heptachlor	76-44-8					0.52	0.0038	0.0021	C

	Pollutant total, unless indicated	CAS Number	Domestic Water Supply µg/L	Irrigation µg/L	Livestock Watering µg/L	Wildlife Habitat µg/L	Aquatic Life		Human Health µg/L	Cancer Causing and/or Persistent
							Acute µg/L	Chronic µg/L		
83	Heptachlor epoxide	1024-57-3					0.52	0.0038	0.0011	C
84	Hexachlorobenzene	118-74-1							0.0077	C,P
85	Hexachlorobutadiene	87-68-3							500	C
86	Hexachlorocyclopentadiene	77-47-4							17,000	
87	Hexachloroethane	67-72-1							89	C
88	Ideno(1,2,3-cd)pyrene	193-39-5							0.49	C
89	Isophorone	78-59-1							26,000	C
90	Methyl bromide	74-83-9							4000	
91	2-Methyl-4,6-dinitrophenol	534-52-1							765	
92	Methylene chloride	75-09-2							16,000	C
93	Nitrobenzene	98-95-3							1,900	
94	N-Nitrosodimethylamine	62-75-9							81	C
95	N-Nitrosodi-n-propylamine	621-64-7							14	C
96	N-Nitrosodiphenylamine	86-30-6							160	C
97	PCBs	1336-36-3				0.014		0.014	0.0017	C,P
98	Pentachlorophenol	87-86-5					19	15	82	C
99	Phenol	108-95-2							4,600,000	
100	Pyrene	129-00-0							11,000	
101	1,1,2,2-Tetrachloroethane	79-34-5							110	C
102	Tetrachloroethylene	127-18-4							88.5	C,P
103	Toluene	108-88-3							200,000	
104	Toxaphene	8001-35-2					0.73	0.0002	0.0075	C
105	1,2-Trans-dichloroethylene	156-60-5							140,000	
106	1,2,4-Trichlorobenzene	120-82-1							940	
107	1,1,2-Trichloroethane	79-00-5							420	C
108	Trichloroethylene	79-01-6							810	C
109	2,4,6-Trichlorophenol	88-06-2							65	C
110	Vinyl chloride	75-01-4							5,250	C

N. Total Ammonia (mg/L as N), Warmwater Fisheries:

(1) acute standards

pH

Temperature °C	6.50	6.75	7.00	7.25	7.50	7.75	8.00	8.25	8.50	8.75	9.00
0	29	26	23	19	14	10	6.6	3.7	2.1	1.2	0.70
1	28	26	23	19	14	9.9	6.5	3.7	2.1	1.2	0.70
2	28	26	22	18	14	9.7	6.4	3.6	2.1	1.2	0.69
3	28	25	22	18	14	9.6	6.3	3.6	2.0	1.2	0.69
4	27	25	22	18	14	9.5	6.2	3.5	2.0	1.2	0.69
5	27	25	22	18	13	9.4	6.1	3.5	2.0	1.2	0.68
6	27	24	21	18	13	9.3	6.1	3.5	2.0	1.1	0.68
7	26	24	21	17	13	9.2	6.0	3.4	2.0	1.1	0.68
8	26	24	21	17	13	9.1	6.0	3.4	1.9	1.1	0.68
9	26	24	21	17	13	9.0	5.9	3.4	1.9	1.1	0.68
10	25	23	21	17	13	8.9	5.9	3.3	1.9	1.1	0.68
11	25	23	20	17	13	8.9	5.8	3.3	1.9	1.1	0.68
12	25	23	20	17	13	8.8	5.8	3.3	1.9	1.1	0.69
13	25	23	20	16	12	8.7	5.7	3.3	1.9	1.1	0.69
14	25	23	20	16	12	8.7	5.7	3.3	1.9	1.1	0.70
15	24	23	20	16	12	8.6	5.7	3.3	1.9	1.1	0.70
16	24	22	20	16	12	8.6	5.7	3.3	1.9	1.1	0.71
17	24	22	20	16	12	8.5	5.6	3.2	1.9	1.1	0.72
18	24	22	19	16	12	8.5	5.6	3.2	1.9	1.2	0.73
19	24	22	19	16	12	8.5	5.6	3.2	1.9	1.2	0.74
20	24	22	19	16	12	8.5	5.6	3.2	1.9	1.2	0.75
21	24	22	19	16	12	8.4	5.6	3.2	1.9	1.2	0.77
22	24	22	19	16	12	8.4	5.6	3.3	1.9	1.2	0.78
23	24	22	19	16	12	8.4	5.6	3.3	1.9	1.2	0.80
24	24	22	19	16	12	8.4	5.6	3.3	2.0	1.2	0.81
25	24	22	19	16	12	8.4	5.6	3.3	2.0	1.2	0.83
26	22	20	18	15	11	7.9	5.2	3.1	1.9	1.2	0.80
27	20	19	17	14	10	7.3	4.9	2.9	1.8	1.1	0.76
28	19	18	15	13	9.7	6.9	4.6	2.7	1.7	1.1	0.73
29	18	16	14	12	9.1	6.4	4.3	2.6	1.6	1.0	0.70
30	17	15	13	11	8.5	6.0	4.1	2.4	1.5	0.97	0.68

(2) chronic standards

pH

Temperature °C	6.50	6.75	7.00	7.25	7.50	7.75	8.00	8.25	8.50	8.75	9.00
0	2.5	2.5	2.5	2.5	2.5	2.3	1.5	0.84	0.48	0.28	0.16
1	2.5	2.5	2.5	2.5	2.5	2.3	1.5	0.83	0.47	0.27	0.16
2	2.4	2.4	2.4	2.4	2.4	2.2	1.5	0.82	0.47	0.27	0.16
3	2.4	2.4	2.4	2.4	2.4	2.2	1.4	0.81	0.46	0.27	0.16
4	2.4	2.4	2.4	2.4	2.4	2.2	1.4	0.80	0.46	0.27	0.16
5	2.3	2.3	2.3	2.3	2.3	2.1	1.4	0.80	0.45	0.26	0.16
6	2.3	2.3	2.3	2.3	2.3	2.1	1.4	0.79	0.45	0.26	0.16
7	2.3	2.3	2.3	2.3	2.3	2.1	1.4	0.78	0.45	0.26	0.16
8	2.3	2.3	2.3	2.3	2.3	2.1	1.4	0.77	0.44	0.26	0.15
9	2.2	2.2	2.2	2.2	2.2	2.1	1.3	0.77	0.44	0.26	0.16
10	2.2	2.2	2.2	2.2	2.2	2.0	1.3	0.76	0.44	0.26	0.16
11	2.2	2.2	2.2	2.2	2.2	2.0	1.3	0.76	0.44	0.26	0.16
12	2.2	2.2	2.2	2.2	2.2	2.0	1.3	0.75	0.44	0.26	0.16
13	2.2	2.2	2.2	2.2	2.2	2.0	1.3	0.75	0.43	0.26	0.16
14	2.1	2.1	2.1	2.1	2.2	2.0	1.3	0.75	0.43	0.26	0.16
15	2.1	2.1	2.1	2.1	2.1	2.0	1.3	0.74	0.43	0.26	0.16
16	2.1	2.1	2.1	2.1	2.1	2.0	1.3	0.74	0.43	0.26	0.16
17	2.1	2.1	2.1	2.1	2.1	1.9	1.3	0.74	0.43	0.26	0.16
18	2.1	2.1	2.1	2.1	2.1	1.9	1.3	0.74	0.43	0.26	0.17
19	2.1	2.1	2.1	2.1	2.1	1.9	1.3	0.74	0.44	0.26	0.17
20	2.1	2.1	2.1	2.1	2.1	1.9	1.3	0.74	0.44	0.27	0.17
21	1.9	1.9	1.9	1.9	1.9	1.8	1.2	0.69	0.41	0.25	0.16
22	1.8	1.8	1.8	1.8	1.8	1.7	1.1	0.65	0.38	0.24	0.15
23	1.7	1.7	1.7	1.7	1.7	1.6	1.0	0.60	0.36	0.22	0.15
24	1.6	1.6	1.6	1.6	1.6	1.5	0.97	0.57	0.34	0.21	0.14
25	1.4	1.4	1.5	1.5	1.5	1.4	0.91	0.53	0.32	0.20	0.13
26	1.3	1.3	1.4	1.4	1.4	1.3	0.85	0.50	0.30	0.19	0.13
27	1.3	1.3	1.3	1.3	1.3	1.2	0.79	0.47	0.28	0.18	0.12
28	1.2	1.2	1.2	1.2	1.2	1.1	0.74	0.44	0.27	0.17	0.12
29	1.1	1.1	1.1	1.1	1.1	1.0	0.70	0.41	0.25	0.16	0.11
30	1.0	1.0	1.0	1.0	1.0	0.97	0.65	0.39	0.24	0.16	0.11

O. Total Ammonia (mg/L as N), Coldwater Fisheries:

(1) acute standards

pH

Temperature °C	6.50	6.75	7.00	7.25	7.50	7.75	8.00	8.25	8.50	8.75	9.00
0	29	26	23	19	14	10	6.6	3.7	2.1	1.2	0.70
1	28	26	23	19	14	9.9	6.5	3.7	2.1	1.2	0.70
2	28	26	22	18	14	9.7	6.4	3.6	2.1	1.2	0.69
3	28	25	22	18	14	9.6	6.3	3.6	2.0	1.2	0.69
4	27	25	22	18	14	9.5	6.2	3.5	2.0	1.2	0.69
5	27	25	22	18	13	9.4	6.1	3.5	2.0	1.2	0.68
6	27	24	21	18	13	9.3	6.1	3.5	2.0	1.1	0.68
7	26	24	21	17	13	9.2	6.0	3.4	2.0	1.1	0.68
8	26	24	21	17	13	9.1	6.0	3.4	1.9	1.1	0.68
9	26	24	21	17	13	9.0	5.9	3.4	1.9	1.1	0.68
10	25	23	21	17	13	8.9	5.9	3.3	1.9	1.1	0.68
11	25	23	20	17	13	8.9	5.8	3.3	1.9	1.1	0.68
12	25	23	20	17	13	8.8	5.8	3.3	1.9	1.1	0.69
13	25	23	20	16	12	8.7	5.7	3.3	1.9	1.1	0.69
14	25	23	20	16	12	8.7	5.7	3.3	1.9	1.1	0.70
15	24	23	20	16	12	8.6	5.7	3.3	1.9	1.1	0.70
16	24	22	20	16	12	8.6	5.7	3.3	1.9	1.1	0.71
17	24	22	20	16	12	8.5	5.6	3.2	1.9	1.1	0.72
18	24	22	19	16	12	8.5	5.6	3.2	1.9	1.2	0.73
19	24	22	19	16	12	8.5	5.6	3.2	1.9	1.2	0.74
20	24	22	19	16	12	8.5	5.6	3.2	1.9	1.2	0.75
21	22	20	18	15	11	7.9	5.2	3.0	1.8	1.1	0.71
22	21	19	17	14	10	7.3	4.9	2.8	1.7	1.0	0.68
23	19	18	15	13	9.7	6.8	4.5	2.7	1.6	0.98	0.65
24	18	16	14	12	9.0	6.4	4.2	2.5	1.5	0.93	0.62
25	17	15	13	11	8.4	6.0	4.0	2.3	1.4	0.88	0.59
26	16	14	13	10	7.9	5.6	3.7	2.2	1.3	0.84	0.56
27	14	13	12	9.6	7.3	5.2	3.5	2.1	1.2	0.79	0.54
28	13	12	11	9.0	6.9	4.9	3.3	1.9	1.2	0.76	0.52
29	13	12	10	8.4	6.4	4.6	3.1	1.8	1.1	0.72	0.50
30	12	11	10	7.8	6.0	4.3	2.9	1.7	1.1	0.69	0.48

(2) chronic standards

pH

Temperature °C	6.50	6.75	7.00	7.25	7.50	7.75	8.00	8.25	8.50	8.75	9.00
0	2.5	2.5	2.5	2.5	2.5	2.3	1.5	0.84	0.48	0.28	0.16
1	2.5	2.5	2.5	2.5	2.5	2.3	1.5	0.83	0.47	0.27	0.16
2	2.4	2.4	2.4	2.4	2.4	2.2	1.5	0.82	0.47	0.27	0.16
3	2.4	2.4	2.4	2.4	2.4	2.2	1.4	0.81	0.46	0.27	0.16
4	2.4	2.4	2.4	2.4	2.4	2.2	1.4	0.80	0.46	0.27	0.16
5	2.3	2.3	2.3	2.3	2.3	2.1	1.4	0.80	0.45	0.26	0.16
6	2.3	2.3	2.3	2.3	2.3	2.1	1.4	0.79	0.45	0.26	0.16
7	2.3	2.3	2.3	2.3	2.3	2.1	1.4	0.78	0.45	0.26	0.16
8	2.3	2.3	2.3	2.3	2.3	2.1	1.4	0.77	0.44	0.26	0.15
9	2.2	2.2	2.2	2.2	2.2	2.1	1.3	0.77	0.44	0.26	0.16
10	2.2	2.2	2.2	2.2	2.2	2.0	1.3	0.76	0.44	0.26	0.16
11	2.2	2.2	2.2	2.2	2.2	2.0	1.3	0.76	0.44	0.26	0.16
12	2.2	2.2	2.2	2.2	2.2	2.0	1.3	0.75	0.44	0.26	0.16
13	2.2	2.2	2.2	2.2	2.2	2.0	1.3	0.75	0.43	0.26	0.16
14	2.1	2.1	2.1	2.1	2.2	2.0	1.3	0.75	0.43	0.26	0.16
15	2.1	2.1	2.1	2.1	2.1	2.0	1.3	0.74	0.43	0.26	0.16
16	2.0	2.0	2.0	2.0	2.0	1.8	1.2	0.69	0.40	0.24	0.15
17	1.8	1.8	1.8	1.8	1.8	1.7	1.1	0.64	0.38	0.23	0.14
18	1.7	1.7	1.7	1.7	1.7	1.6	1.0	0.60	0.35	0.21	0.14
19	1.6	1.6	1.6	1.6	1.6	1.5	0.97	0.56	0.33	0.20	0.13
20	1.5	1.5	1.5	1.5	1.5	1.4	0.90	0.52	0.31	0.19	0.12
21	1.4	1.4	1.4	1.4	1.4	1.3	0.84	0.49	0.29	0.18	0.12
22	1.3	1.3	1.3	1.3	1.3	1.2	0.79	0.46	0.27	0.17	0.11
23	1.2	1.2	1.2	1.2	1.2	1.1	0.73	0.43	0.26	0.16	0.10
24	1.1	1.1	1.1	1.1	1.1	1.0	0.69	0.40	0.24	0.15	0.10
25	1.0	1.0	1.0	1.0	1.0	0.96	0.64	0.38	0.23	0.14	0.095
26	0.95	0.95	0.96	0.96	0.97	0.9	0.60	0.35	0.21	0.13	0.091
27	0.89	0.89	0.89	0.90	0.91	0.84	0.56	0.33	0.20	0.13	0.087
28	0.83	0.83	0.83	0.84	0.85	0.79	0.53	0.31	0.19	0.12	0.084
29	0.77	0.78	0.78	0.78	0.79	0.73	0.49	0.29	0.18	0.12	0.080
30	0.72	0.72	0.73	0.73	0.74	0.69	0.46	0.28	0.17	0.11	0.077

P. Dissolved oxygen saturation based on temperature and elevation.

Temperature °C	Elevation (feet) 0	500	1,000	1,500	2,000	2,500	3,000	3,500	4,000	4,500	5,000	5,500	6,000	6,500	7,000	7,500	8,000	8,500	9,000	9,500	10,000
0	14.6	14.3	14.1	13.8	13.6	13.3	13.1	12.8	12.6	12.3	12.1	11.9	11.6	11.4	11.2	11.0	10.8	10.6	10.3	10.1	9.9
1	14.2	13.9	13.7	13.4	13.2	12.9	12.7	12.5	12.2	12.0	11.8	11.5	11.3	11.1	10.9	10.7	10.5	10.3	10.1	9.9	9.7
2	13.8	13.6	13.3	13.1	12.8	12.6	12.4	12.1	11.9	11.7	11.5	11.2	11.0	10.8	10.6	10.4	10.2	10.0	9.8	9.6	9.4
3	13.4	13.2	13.0	12.7	12.5	12.3	12.0	11.8	11.6	11.4	11.1	10.9	10.7	10.5	10.3	10.1	9.9	9.7	9.5	9.3	9.1
4	13.1	12.8	12.6	12.4	12.2	11.9	11.7	11.5	11.3	11.1	10.9	10.7	10.4	10.2	10.0	9.8	9.7	9.5	9.3	9.1	8.9
5	12.7	12.5	12.3	12.1	11.8	11.6	11.4	11.2	11.0	10.8	10.6	10.4	10.2	10.0	9.8	9.6	9.4	9.2	9.0	8.9	8.7
6	12.4	12.2	12.0	11.8	11.5	11.3	11.1	10.9	10.7	10.5	10.3	10.1	9.9	9.7	9.5	9.4	9.2	9.0	8.8	8.6	8.5
7	12.1	11.9	11.7	11.5	11.3	11.1	10.8	10.6	10.4	10.2	10.1	9.9	9.7	9.5	9.3	9.1	8.9	8.8	8.6	8.4	8.2
8	11.8	11.6	11.4	11.2	11.0	10.8	10.6	10.4	10.2	10.0	9.8	9.6	9.4	9.3	9.1	8.9	8.7	8.6	8.4	8.2	8.0
9	11.5	11.3	11.1	10.9	10.7	10.5	10.3	10.1	9.9	9.8	9.6	9.4	9.2	9.0	8.9	8.7	8.5	8.3	8.2	8.0	7.8
10	11.3	11.1	10.9	10.7	10.5	10.3	10.1	9.9	9.7	9.5	9.4	9.2	9.0	8.8	8.7	8.5	8.3	8.1	8.0	7.8	7.7
11	11.0	10.8	10.6	10.4	10.2	10.0	9.9	9.7	9.5	9.3	9.1	9.0	8.8	8.6	8.5	8.3	8.1	8.0	7.8	7.6	7.5
12	10.8	10.6	10.4	10.2	10.0	9.8	9.6	9.5	9.3	9.1	8.9	8.8	8.6	8.4	8.3	8.1	7.9	7.8	7.6	7.5	7.3
13	10.5	10.3	10.1	9.9	9.8	9.6	9.4	9.2	9.1	8.9	8.7	8.6	8.4	8.2	8.1	7.9	7.8	7.6	7.5	7.3	7.2
14	10.3	10.1	9.9	9.7	9.6	9.4	9.2	9.0	8.9	8.7	8.5	8.4	8.2	8.1	7.9	7.7	7.6	7.4	7.3	7.1	7.0
15	10.1	9.9	9.7	9.5	9.3	9.2	9.0	8.8	8.7	8.5	8.4	8.2	8.0	7.9	7.7	7.6	7.4	7.3	7.1	7.0	6.8
16	9.8	9.7	9.5	9.3	9.2	9.0	8.8	8.7	8.5	8.3	8.2	8.0	7.9	7.7	7.6	7.4	7.3	7.1	7.0	6.8	6.7
17	9.6	9.5	9.3	9.1	9.0	8.8	8.6	8.5	8.3	8.2	8.0	7.9	7.7	7.6	7.4	7.3	7.1	7.0	6.8	6.7	6.6
18	9.4	9.3	9.1	8.9	8.8	8.6	8.5	8.3	8.1	8.0	7.8	7.7	7.5	7.4	7.3	7.1	7.0	6.8	6.7	6.6	6.4
19	9.3	9.1	8.9	8.8	8.6	8.4	8.3	8.1	8.0	7.8	7.7	7.5	7.4	7.2	7.1	7.0	6.8	6.7	6.6	6.4	6.3
20	9.1	8.9	8.7	8.6	8.4	8.3	8.1	8.0	7.8	7.7	7.5	7.4	7.2	7.1	7.0	6.8	6.7	6.6	6.4	6.3	6.2
21	8.9	8.7	8.6	8.4	8.3	8.1	8.0	7.8	7.7	7.5	7.4	7.2	7.1	7.0	6.8	6.7	6.6	6.4	6.3	6.2	6.0
22	8.7	8.6	8.4	8.2	8.1	8.0	7.8	7.7	7.5	7.4	7.2	7.1	7.0	6.8	6.7	6.6	6.4	6.3	6.2	6.1	5.9
23	8.6	8.4	8.2	8.1	7.9	7.8	7.7	7.5	7.4	7.2	7.1	7.0	6.8	6.7	6.6	6.4	6.3	6.2	6.1	5.9	5.8
24	8.4	8.2	8.1	7.9	7.8	7.7	7.5	7.4	7.2	7.1	7.0	6.8	6.7	6.6	6.4	6.3	6.2	6.1	5.9	5.8	5.7
25	8.2	8.1	7.9	7.8	7.7	7.5	7.4	7.2	7.1	7.0	6.8	6.7	6.6	6.5	6.3	6.2	6.1	6.0	5.8	5.7	5.6
26	8.1	7.9	7.8	7.7	7.5	7.4	7.2	7.1	7.0	6.8	6.7	6.6	6.5	6.3	6.2	6.1	6.0	5.8	5.7	5.6	5.5
27	7.9	7.8	7.7	7.5	7.4	7.2	7.1	7.0	6.8	6.7	6.6	6.5	6.3	6.2	6.1	6.0	5.9	5.7	5.6	5.5	5.4
28	7.8	7.7	7.5	7.4	7.2	7.1	7.0	6.9	6.7	6.6	6.5	6.4	6.2	6.1	6.0	5.9	5.8	5.6	5.5	5.4	5.3
29	7.7	7.5	7.4	7.3	7.1	7.0	6.9	6.7	6.6	6.5	6.4	6.2	6.1	6.0	5.9	5.8	5.7	5.5	5.4	5.3	5.2
30	7.5	7.4	7.3	7.1	7.0	6.9	6.7	6.6	6.5	6.4	6.3	6.1	6.0	5.9	5.8	5.7	5.6	5.4	5.3	5.2	5.1

[20.6.4.900 NMAC – Rp 20 NMAC 6.1.3100, 10-12-00; A, 10-11-02]

20.6.4.901 PUBLICATION REFERENCES: These documents are intended as guidance and are available for public review during regular business hours at the offices of the surface water quality bureau and the New Mexico environment department public library. Copies of these documents have also been filed with the New Mexico state records center in order to provide greater access to this information.

A. American public health association. 1992. *Standard methods for the examination of water and wastewater, 18th Edition.* Washington, D.C. 1048 p.

B. United States geological survey. 1987. *Methods for determination of inorganic substances in water and fluvial sediments, techniques of water-resource investigations of the United States geological survey.* Washington, D.C. 80 p.

C. United States geological survey. 1987. *Methods for the determination of organic substances in water and fluvial sediments, techniques of water-resource investigations of the U.S. geological survey.* Washington, D.C. 80 p.

D. United States environmental protection agency. 1974. *Methods for chemical analysis of water and wastes.* National environmental research center, Cincinnati, Ohio. (EPA-625-/6-74-003). 298 p.

E. New Mexico water quality control commission. 1978. *(208) state of New Mexico water quality management plan* (updated 1988). Santa Fe, New Mexico. 226. p.

F. Colorado river basin salinity control forum. 1993. *1993 Review, water quality standards for salinity, Colorado river system.* Phoenix, Arizona. 154 p.

G. United States environmental protection agency. 1991. *Methods for measuring the acute toxicity of effluents to freshwater and marine organisms.* Office of research and development, Washington, D.C. (4th Ed., EPA/600/4-90/027). 293 p. http://www.epa.gov/ost/WET/atx.pdf

H. United States environmental protection agency. 1989. *Short-term methods for estimating the chronic toxicity of effluents and receiving waters to freshwater organisms.* Environmental monitoring systems laboratory, Cincinnati, Ohio. (2nd Ed., EPA 600/4-89/001). 250 p. http://www.epa.gov/OST/WET/ctf.pdf

I. Ambient-induced mixing, in United States environmental protection agency. 1991. *Technical support document for water quality-based toxics control.* Office of water, Washington, D.C. (EPA/505/2-90-001). 2 p.

J. United States environmental protection agency. 1983. *Technical support manual: waterbody surveys and assessments for conducting use attainability analyses.* Office of water, regulations and standards, Washington, D.C. 251 p. http://www.epa.gov/OST/library/wqstandards/uaavol123.pdf

K. United States environmental protection agency. 1984. *Technical support manual: waterbody surveys and assessments for conducting use attainability analyses, volume III: lake systems.* Office of water, regulations and standards, Washington, D.C. 208 p. http://www.epa.gov/OST/library/wqstandards/uaavol123.pdf

[20.6.4.901 NMAC – Rp 20 NMAC 6.1.4000, 10-12-00]

HISTORY of 20.6.4 NMAC:

Pre-NMAC History:

Material in the part was derived from that previously filed with the commission of public records - state records center and archives:

WQC 67-1, Water Quality Standards, filed 7-17-67, effective 8-18-67
WQC 67-1, Amendment Nos. 1-6, filed 3-21-68, effective 4-22-68
WQC 67-1, Amendment No. 7, filed 2-27-69, effective 3-30-69
WQC 67-1, Amendment No. 8, filed 7-14-69, effective 8-15-69
WQC 70-1, Water Quality Standards for Intrastate Waters and Tributaries to Interstate Streams, filed July 17, 1970;
WQC 67-1, Amendment Nos. 9 and 10, filed 2-12-71, effective 3-15-71
WQC 67-1, Amendment No. 11, filed 3-4-71, effective 4-5-71
WQC 73-1, New Mexico Water Quality Standards, filed 9-17-73, effective 10-23-73
WQC 73-1, Amendment Nos. 1 and 2, filed 10-3-75, effective 11-4-75
WQC 73-1, Amendment No. 3, filed 1-19-76, effective 2-14-76
WQC 77-2, Amended Water Quality Standards for Interstate and Intrastate Streams in New Mexico, filed 2-24-77, effective 3-11-77
WQC 77-2, Amendment No. 1, filed 3-23-78, effective 4-24-78
WQC 77-2, Amendment No. 2, filed 6-12-79, effective 7-13-79
WQCC 80-1, Water Quality Standards for Interstate and Intrastate Streams in New Mexico, filed 8-28-80, effective 9-28-80

WQCC 81-1, Water Quality Standards for Interstate and Intrastate Streams in New Mexico, filed 5-5-81, effective 6-4-81
WQCC 81-1, Amendment No. 1, filed 5-19-82, effective 6-18-82
WQCC 81-1, Amendment No. 2, filed 6-24-82, effective 7-26-82
WQCC 85-1, Water Quality Standards for Interstate and Intrastate Streams in New Mexico, filed 1-16-85, effective 2-15-85
WQCC 85-1, Amendment No. 1, filed 8-28-87, effective 9-28-87
WQCC 88-1, Water Quality Standards for Interstate and Intrastate Streams in New Mexico, filed 3-24-88, effective 4-25-88
WQCC 91-1, Water Quality Standards for Interstate and Intrastate Streams in New Mexico, filed 5-29-91, effective 6-29-91
WQCC 91-1, Amendment No. 1, filed 10-11-91, effective 11-12-91

History of the Repealed Material:
WQC 67-1, Water Quality Standards, - Superseded, 10-23-73
WQC 73-1, New Mexico Water Quality Standards, - Superseded, 3-11-77
WQC 77-2, Amended Water Quality Standards for Interstate and Intrastate Streams in New Mexico, - Superseded, 9-28-80
WQCC 80-1, Water Quality Standards for Interstate and Intrastate Streams in New Mexico, - Superseded, 6-4-81
WQCC 81-1, Water Quality Standards for Interstate and Intrastate Streams in New Mexico, - Superseded, 2-15-85
WQCC 85-1, Water Quality Standards for Interstate and Intrastate Streams in New Mexico, - Superseded, 4-25-88
WQCC 88-1, Water Quality Standards for Interstate and Intrastate Streams in New Mexico, - Superseded, 6-29-91
WQCC 91-1, Water Quality Standards for Interstate and Intrastate Streams in New Mexico, - Superseded, 1-23-95
20 NMAC 6.1, Standards for Interstate and Intrastate Streams, - Repealed, 2-23-00
20 NMAC 6.1, Standards for Interstate and Intrastate Surface Waters, - Repealed, 10-12-00