Note: The metals framework reference section is currently undergoing review, and revisions are anticipated.

7. REFERENCES


11/24/2004 Peer Review Draft

DISCLAIMER: This information is distributed solely for the purpose of peer review under applicable information quality guidelines. It has not been formally disseminated by the EPA and should not be construed to represent any Agency determination or policy.
Note: The metals framework reference section is currently undergoing review, and revisions are anticipated.


ATSDR (Agency for Toxic Substance and Disease Registry). (1995) Multiple lead and cadmium exposure study with biological markers incorporated. Atlanta, GA.

ATSDR (1999a) Toxicological profile for Lead. Atlanta, GA

ATSDR (1999b) Toxicological profile for Mercury. Atlanta, GA.

ATSDR (2003) Toxicological profile for Nickel, Draft for Public Comment, Atlanta, GA.


11/24/2004 Peer Review Draft

DISCLAIMER: This information is distributed solely for the purpose of peer review under applicable information quality guidelines. It has not been formally disseminated by the EPA and should not be construed to represent any Agency determination or policy.


Bell, PF; Adamu, CA; Mulchi, CL; McIntosh, M; Chaney, RL. (1988) Residual effects of land applied municipal sludge on tobacco. I: Effects on heavy metals concentrations in soils and plants. Tob. Sci. 32:33-38.


Note: The metals framework reference section is currently undergoing review, and revisions are anticipated.


Berry, WJ; Hansen, DJ; Mahony, JD; et al. (1996) Predicting the toxicity of metal-spiked laboratory sediments using acid-volatile sulfide and interstitial water normalizations. Environ Toxicol Chem 15:2067–2079.


Bogunil, R; Faller, Pl; Binz, PA; Vasak, M; Charnock, JM; and Garner, CD. (1998) Structural characterization of Cu(I) and Zn(II) sites in neuronal-growth-inhibitory factor by extended X-ray absorption fine structure (EXAS). Eur J. Biochem. 255:172-177.


Note: The metals framework reference section is currently undergoing review, and revisions are anticipated.


Note: The metals framework reference section is currently undergoing review, and revisions are anticipated.


Calabrese, EJ; Stanek, EJ, III; Pekow, P; et al. (1997) Soil ingestion estimates for children residing on a Superfund site. Ecotoxicol Environ Safety 36:258–268.


Campbell, PGC; Hontela, A; Rasmussen, JB; Giguère, A; Gravel, A; Kraemer, L; Kovesces, J; Lacroix, A; Levesque, H; Sherwood, G. (2003) Differentiating between direct (physiological) and food-chain mediated (bioenergetic) effects on fish in metal-impacted lakes. Human Ecol Risk Assess 9: 847-866.


Note: The metals framework reference section is currently undergoing review, and revisions are anticipated.

EPA lead risk assessment spreadsheet model for predicting blood lead in children and adults. Available at: http://www.dtsc.ca.gov/docs/sppt/herd/ledspred.html


Cataldo, DA; Wildung, RE. (1978) Soil and plant factors influencing the accumulation of heavy metals by plants. Environ Health Perspect 27:149–159.


Chaney, RL; Ryan, JA. (1994) Risk-based standards for arsenic, lead and cadmium in urban soils. Frankfurt, Germany: DECHMEA.


11/24/2004 Peer Review Draft
DISCLAIMER: This information is distributed solely for the purpose of peer review under applicable information quality guidelines. It has not been formally disseminated by the EPA and should not be construed to represent any Agency determination or policy.
Note: The metals framework reference section is currently undergoing review, and revisions are anticipated.


Chen, CY; Folt, CL. Bioaccumulation and diminution of arsenic and lead in a freshwater food web. Environmental Science & Technology. 34(18):3878-3884.


11/24/2004 Peer Review Draft
DISCLAIMER: This information is distributed solely for the purpose of peer review under applicable information quality guidelines. It has not been formally disseminated by the EPA and should not be construed to represent any Agency determination or policy.


11/24/2004 Peer Review Draft

DISCLAIMER: This information is distributed solely for the purpose of peer review under applicable information quality guidelines. It has not been formally disseminated by the EPA and should not be construed to represent any Agency determination or policy.
Note: The metals framework reference section is currently undergoing review, and revisions are anticipated.

Dabeka RW; McKenzie, AD; Lacroix, GM; Cleroux, C; Bowe, S; Graham, RA; Conacher, HBS; Verdier, P. (1993) Survey of arsenic in total diet food composites and estimation of the dietary intake of arsenic by Canadian adults and children. Journal of AOAC International 76:14-25.


Davis, S; Waller, P; Buschbom, JR; et al. (1990) Quantitative estimates of soil ingestion in normal children between the ages of 2 and 7 years: population-based estimates using aluminum, silicon, and titanium as soil tracer elements. Arch Environ Health 45:112–122.


11/24/2004 Peer Review Draft

DISCLAIMER: This information is distributed solely for the purpose of peer review under applicable information quality guidelines. It has not been formally disseminated by the EPA and should not be construed to represent any Agency determination or policy.
Note: The metals framework reference section is currently undergoing review, and revisions are anticipated.


Di Toro, DM; Fitzpatrick, JJ; Thomann, RV. (1981) Water quality analysis simulation program (WASP) and model verification program (MVP). Hrydroscience Inc. for U.S. EPA. Grosse Ile Laboratory, Grosse Ile, MI (revised in 1983).


Di Toro, DM; McGrath,JA; Hansen, DJ; Berry, WJ; Paquin, PR; Mathew, R; Wu, KB; Santore, RC. (2004) Predicting sediment metal toxicity using a sediment biotic ligand model: (I) single metals. Submitted.

Dlugaszek, M; Fiejka, MA; Graczy, A; et al. (2000) Effects of various aluminum compounds given orally to mice on Al tissue distribution and tissue concentrations of essential elements. Annu Rev Pharmacol Toxicol 86:135–139.


Note: The metals framework reference section is currently undergoing review, and revisions are anticipated.


Note: The metals framework reference section is currently undergoing review, and revisions are anticipated.

University Press, Ames, IA.


Felmy, AR; Brown, SM; Onishi, Y; et al. (1984) MEXAMS: the metals exposure analysis modeling system. U.S. Environmental Protection Agency, Athens, GA. NTIS No. PB84 157155.


FIU (Florida International University), Dietary Reference Intakes (DRIs)/Recommended Dietary Allowances (RDAs) (2004) Dietary Reference Intakes for Older Adults (updated 03/19/04), compiled by the National Policy and Resource Center on Nutrition and Aging, FIU, Miami, FL.


11/24/2004 Peer Review Draft

DISCLAIMER: This information is distributed solely for the purpose of peer review under applicable information quality guidelines. It has not been formally disseminated by the EPA and should not be construed to represent any Agency determination or policy.


11/24/2004 Peer Review Draft

DISCLAIMER: This information is distributed solely for the purpose of peer review under applicable information quality guidelines. It has not been formally disseminated by the EPA and should not be construed to represent any Agency determination or policy.
Note: The metals framework reference section is currently undergoing review, and revisions are anticipated.


Greszta, J. (1982) Correlation between the content of copper, zinc, lead and cadmium in the soil and the content of these metals in the seedlings of selected forest tree species. Frag Flor Geobot 28:(1):29–52.


Gulson, BL; Pounds, JG; Mushak, P; et al. (1999a) Estimation of cumulative lead releases (lead flux) from the maternal skeleton during pregnancy and lactation. J Lab Clin Med 13(6):631–640

Gulson, BL; Mahaffey, KR; Jameson, C; et al. (1999b) Impact of diet on lead in blood and urine in female adults and relevance to mobilization of lead from bone stores. Environ Health Perspect 107(44):257–263.


Gupta, SK; Chen, KY. (1975) Partitioning of trace elements in selective chemical fractions of nearshore sediments.
Note: The metals framework reference section is currently undergoing review, and revisions are anticipated.


Hansen, DJ; Berry, WJ; Mahony, JD; et al. (1996) Predicting the toxicity of metal contaminated field sediments using interstitial water concentrations of metals and acid volatile sulfide normalizations. Environ Toxicol Chem 15:2080–2094.


HydroQual (1997) Documentation for the probabilistic analysis program MONTE. Mahway NJ.


Note: The metals framework reference section is currently undergoing review, and revisions are anticipated.

Ilyin, LA; Ivannikov, AT; Parfenov, YD; Stolyarov, VP. (1975) Strontium absorption through damaged and undamaged human skin. Health Phys 29:75-80.


Note: The metals framework reference section is currently undergoing review, and revisions are anticipated.


Note: The metals framework reference section is currently undergoing review, and revisions are anticipated.

37(14):3239-3240.


LePoire, D; Arnish, J; Gnanapragasam, ES; et al. (2000) Probabilistic modules for the RESRAD and RESRAD-build computer codes. NUREG/CR-XX ANL/EAD/TM-91. Argonne National Laboratory, Argonne, IL.


LePoire, D; Arnish, J; Gnanapragasam, ES; et al. ( 2000) Probabilistic modules for the RESRAD and RESRAD-
Note: The metals framework reference section is currently undergoing review, and revisions are anticipated.

build computer codes. NUREG/CR-XX ANL/EAD/TM-91. Argonne National Laboratory, Argonne, IL.


MacDonald, DD; Carr, RS; Calder, FD; et al. (1996) Development and evaluation of sediment quality guidelines for Florida coastal waters. Ecotoxicol 5:253–278.


11/24/2004 Peer Review Draft

DISCLAIMER: This information is distributed solely for the purpose of peer review under applicable information quality guidelines. It has not been formally disseminated by the EPA and should not be construed to represent any Agency determination or policy.
Note: The metals framework reference section is currently undergoing review, and revisions are anticipated.


Markich, SJ; Brown, PL; Jeffree, RA; et al. (2000) Valve movement responses of Valesunio angasi (Bivalvia: Hyriidae) to manganese and uranium: an exception to the free ion activity model. Aquat Toxicol 51:155–175.


11/24/2004 Peer Review Draft

DISCLAIMER: This information is distributed solely for the purpose of peer review under applicable information quality guidelines. It has not been formally disseminated by the EPA and should not be construed to represent any Agency determination or policy.
Note: The metals framework reference section is currently undergoing review, and revisions are anticipated.


Meyer, JS; Santore, RC; Bobbitt, JP; DeBrey, LD; Boese, CJ; Paquin, PR; Allen, HE; Bergman, HL; DiToro, DM. (1999) Binding of Nickel and Copper to Fish Gills Predicts Toxicity When Water Hardness Varies, But Free-ion Activity Does Not. Environ. Sci. and Technol 33: 913-916.


11/24/2004 Peer Review Draft

DISCLAIMER: This information is distributed solely for the purpose of peer review under applicable information quality guidelines. It has not been formally disseminated by the EPA and should not be construed to represent any Agency determination or policy.
Note: The metals framework reference section is currently undergoing review, and revisions are anticipated.


11/24/2004 Peer Review Draft

DISCLAIMER: This information is distributed solely for the purpose of peer review under applicable information quality guidelines. It has not been formally disseminated by the EPA and should not be construed to represent any Agency determination or policy.
Note: The metals framework reference section is currently undergoing review, and revisions are anticipated.


Nieboer, E; Richardson, DHS. (1980) The replacement of the nondescript term “heavy metals” by a biologically and chemically significant classification of metal ions. Environ Pollut (Series B) 1:3-26.


11/24/2004 Peer Review Draft

DISCLAIMER: This information is distributed solely for the purpose of peer review under applicable information quality guidelines. It has not been formally disseminated by the EPA and should not be construed to represent any Agency determination or policy.
Note: The metals framework reference section is currently undergoing review, and revisions are anticipated.


Note: The metals framework reference section is currently undergoing review, and revisions are anticipated.


Paquin, PR; Gorsuch, JW; Apte, S; Batley, GE; Bowles, KC; Campbell, PGC; Delos, CG; Di Toro, DM; Dwyer, RL; Galvez, F; Gensemer, RW; Goss, GG; Hogstrond, C; Janssen, CR; McGeer, JC; Naddy, RB; Playle, RC; Santore, RC; Schneider, U; Stubblefield, WA; Wood, CM; Wu, KB (2002a) The biotic ligand model: A historical overview. Special Issue: The biotic ligand model for metals–Current research, future directions, regulatory implications. Comp. Biochem. Physiol. C 133:3-35.

Paquin, PR; Zoltay, V; Winfield, RP; et al. (2002b) Extension of the biotic ligand model of acute toxicity to a physiologically-based model of the survival time of rainbow trout (Oncorhynchus mykiss) exposed to silver. Comp Biochem Physiol (Part C) 133:305–343.

Paquin, PR; DiToro, DM; Santore, RC; Trivedi, D; Wu, KB (1999) A biotic ligand model of the acute toxicity of metals. III: Application to fish and daphnia exposure to silver. Office of Water, Office of Research and Development.


11/24/2004 Peer Review Draft

DISCLAIMER: This information is distributed solely for the purpose of peer review under applicable information quality guidelines. It has not been formally disseminated by the EPA and should not be construed to represent any Agency determination or policy.
Note: The metals framework reference section is currently undergoing review, and revisions are anticipated.

(Part B) 3:179–291.


Peijnenburg, WJGM; Baerselman, R; De Groot, AC; et al. (1999a) Relating environmental availability to bioavailability: soil-type dependent metal accumulation in the oligochaete Eisenia andrei. Ecotoxicol Environ Saf 44:294–310.


Pitt, BR; Schwarz, M; Woo, ES; Yee, E; Wasserloos, K; Tran, S; Weng, W; Mannix, RJ; Watkins, SA; Tyurina, YY; Tyurin, VA; Kagan, VE; Lazo, JS. (1997) Overexpression of metallothionein decreases sensitivity of pulmonary endothelial cells to oxidant injury. Am. J. Physiol. 273:856-865.


Posthuma, L; Suter, GW; Traas, TP. eds. (2001). Species Sensitivity Distributions in Ecotoxicology, Lewis CRC-
Note: The metals framework reference section is currently undergoing review, and revisions are anticipated.

Presspublishers, Boca Raton, US.


Ruby, MV; Davis, A; Schoof, R; et al. (1996) Estimation of lead and arsenic bioavailability using a physiologically


Sample, BE; Aplin, MS; Efroymson, RE, Suter, GW; Welsh, CE. (1997). Methods and tools for estimation of the exposure of terrestrial wildlife to contaminants. Oak Ridge National Laboratory. ORNL/TM-13391.


Sample, BE; Beauchamp, JJ; Efroymson, R; Suter, GW. (1999). Literature-derived bioaccumulation models for earthworms: development and validation. Environmental Toxicology and Chemistry. 18: 2110-2120.


Note: The metals framework reference section is currently undergoing review, and revisions are anticipated.


Schecher, WD; McAvoy, DC (1994) MINEQL+: A chemical equilibrium program for personal computers (version 3.01). Environmental Research Software, Hallowell, ME.


Schnoor, JL; Sata, C; McKechnie, D; et al. (1987) Processes, coefficients, and models for simulating toxic organics and heavy metals in surface waters. EPA-600-3-87-015.


Smit, CB; Van Gestel, CM. (1998). Effects of soil type, prepercolation, and ageing on bioaccumulation and toxicity
Note: The metals framework reference section is currently undergoing review, and revisions are anticipated.

of zinc for the springtail *Folsomia candida*. Environmental Toxicology and Chemistry 17, No. 6, pp. 1132–1141.


Suedel, BC; Boracxek, JA; Peddicord, RK; et al. (1994) Trophic transfer and biomagnification potential of contaminants in aquatic ecosystems. Environ Toxicol Chem 136:21–89.

Sullivan, J; Ball, J; Brick, E; et al. (1985) Report of the technical subcommittee on determination of dredge material suitability for in-water disposal. Wisconsin Department of Natural Resources, Madison, WI.


Szebedinszky, C; McGeer, JC; McDonald, DG; et al. (2001) Effects of chronic Cd exposure via the diet or water on internal organ-specific distribution and subsequent gill Cd uptake kinetics in juvenile rainbow trout (Oncorhynchus mykiss). Environ Toxicol Chem 20:597–660.


Tessier, A; Campbell, PGC; Auclair, JC; et al. (1984) Relationships between the partitioning of trace metals in sediments and their accumulation in the tissues of the freshwater mollusc Elliptio complanata in a mining area. Can J Fish Aquat Sci 41:1463–1472.


Note: The metals framework reference section is currently undergoing review, and revisions are anticipated.

Thawley, DG; Pratt, SE; Selby, LA. (1977) Antagonistic effect of zinc on increased urinary delta-aminolevulinic acid excretion in lead intoxicated rats. Environ Res 14:463–475.


Tye, AM; Young, SD; Crout, NMJ; Zhang, H; Preston, S; Barbosa-Jefferson, VL; Davison, W; McGrath, SP; Paton, GI; Kilham, K; Resende, L. (2003) Predicting the activity of Cd2+ and Zn2+ in soil pore water from the radio-labile metal fraction. Geochim. et Cosmochim. Acta 67(3):375-85.


11/24/2004 Peer Review Draft

DISCLAIMER: This information is distributed solely for the purpose of peer review under applicable information quality guidelines. It has not been formally disseminated by the EPA and should not be construed to represent any Agency determination or policy.

7-35
Note: The metals framework reference section is currently undergoing review, and revisions are anticipated.


Wallace, WG; Lee, BG; Luoma, SN. (2003) Subcellular compartmentalization of Cd and Zn in two bivalves. I. Significance of metal-sensitive fractions (MSF) and biologically detoxified metal (BDM). Marine Ecology-Progress Series 249, 183-197.


11/24/2004 Peer Review Draft

DISCLAIMER: This information is distributed solely for the purpose of peer review under applicable information quality guidelines. It has not been formally disseminated by the EPA and should not be construed to represent any Agency determination or policy.


Weis, C; Henningsen, G; Poppenga, R; et al. (1993a) Pharmacokinetics of lead in blood of immature swine following acute oral and iv exposures. Toxicologist 13:175.


Wester RC, Hui X, Barbadillo S, Maibach HI, Lowney YW, Schoof RA, Holm SE, Ruby MV. In vivo percutaneous
Note: The metals framework reference section is currently undergoing review, and revisions are anticipated.


11/24/2004 Peer Review Draft

DISCLAIMER: This information is distributed solely for the purpose of peer review under applicable information quality guidelines. It has not been formally disseminated by the EPA and should not be construed to represent any Agency determination or policy.

7-38
Note: The metals framework reference section is currently undergoing review, and revisions are anticipated.


Zhang, H; Davidson, W; Miller, S; et al. (1995) In situ high resolution measurements of fluxes of Ni, Cu, Fe and Mn and concentrations of Zn and Cd in pore waters by DGT. Geochim Cosmochim Acta 59:4181–4192.

U.S. Environmental Protection Agency:


U.S. EPA. (1989b) Risk assessment guidance for superfund (RAGS); Volume 1: human health evaluation manual (HHEM), (Part A); Interim Final. EPA 540-1-89-002, OSWER 9285.70-02B. Office of Emergency and Remedial
Note: The metals framework reference section is currently undergoing review, and revisions are anticipated.

Response, Washington, DC.


U.S. EPA (1991b) MINTEQA2, A geochemical assessment data base and test cases for environmental systems: Ver. 3.0 user’s manual. EPA/600/3-91/-21. Athens, GA. Allison, JD; Brown, DS; Novo-Gradac, KJ.


U.S. EPA. (1996b) Review of the National Ambient Air Quality Standards for Particulate matter; policy assessment

11/24/2004 Peer Review Draft

DISCLAIMER: This information is distributed solely for the purpose of peer review under applicable information quality guidelines. It has not been formally disseminated by the EPA and should not be construed to represent any Agency determination or policy.
Note: The metals framework reference section is currently undergoing review, and revisions are anticipated.

of scientific and technical information. OAQPS Staff Paper. EPA-452/R-96-013.

U.S. EPA. (1996c) Recommendations of the technical review workgroup for lead for an approach to assessing risks associated with adult exposures to lead in soil. EPA-540-R-03-001.


11/24/2004 Peer Review Draft

DISCLAIMER: This information is distributed solely for the purpose of peer review under applicable information quality guidelines. It has not been formally disseminated by the EPA and should not be construed to represent any Agency determination or policy.

7-41
Note: The metals framework reference section is currently undergoing review, and revisions are anticipated.


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**DISCLAIMER:** This information is distributed solely for the purpose of peer review under applicable information quality guidelines. It has not been formally disseminated by the EPA and should not be construed to represent any Agency determination or policy.
Note: The metals framework reference section is currently undergoing review, and revisions are anticipated.


U.S. EPA. (2002a) Development of a framework for metals assessment and guidance for characterizing and ranking metals; draft action plan. EPA/630/P-02/003A.


U.S. EPA. (2002c) Policy considerations for the application of background data in risk assessment and remedy selection: Role of background in the CERCLA cleanup program. OSWER 9285.6-07P. Office of Emergency and Remedial Response, Washington, DC.


U.S. EPA. (2002e) Child-Specific Exposure Factors Handbook. Interim Final. EPA/600/P-00/002B/01


U.S. EPA. (2002g) Equilibrium partitioning sediment guidelines (ESGs) for the protection of benthic organisms: Metal mixtures (cadmium, copper, lead, nickel, silver and zinc). EPA-822-R-00-005.


11/24/2004 Peer Review Draft

DISCLAIMER: This information is distributed solely for the purpose of peer review under applicable information quality guidelines. It has not been formally disseminated by the EPA and should not be construed to represent any Agency determination or policy.
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