

Appendix F. Contaminants of Concern (COCs) and Sources of Toxicological Information and Health Based Standards

Aliphatic and Cyclic Hydrocarbons

Trichloroethene (TCE)
Carbon Tetrachloride
1,2- and 1,1-Dichloroethane
Trans- and Cis-1,2-Dichloroethene
1,1-Dichloroethene (Vinylidene chloride)
Methylene Chloride (Dichloromethane)
Chloromethane (Methyl Chloride)
Methyl Chloroform (1,1,1-TCA)
Tetrachloroethene (Perchloroethene)
Vinyl Chloride (VC)

Aromatic Compounds

Xylene
Toulene
Benzene
Polychlorinated Biphenyls (PCBs)
Bis(2-ethylhexyl)phthlate (DEHP)
Polycyclic Aromatic Hydrocarbons (PAHs)
Benzo(a)pyrene

Nitrogen-Containing Organic Compounds

Hydrazines (MMH, UDMH, and NDMA)

Oxygenated Organic Compounds

Polychlorinated Dibenzo-p-dioxins (PCDDs)
Dibenzofurans (PCDFs)
Perchlorate

Inorganic Compounds

Arsenic
Mercury
Lead
Beryllium
Chromium
Manganese
Nickel
Cadmium
Selenium

Radioactivity

Tritium
Cesium-137
Strontium-90
Plutonium-238
Radium-226, -228
Potassium-40
Thorium-228, -232

The following sources of toxicity information were considered in the evaluation of contaminants of concern:

1. *EPA's Integrated Risk Information System (IRIS)*. IRIS contains reference doses (RfDs), reference concentrations (RfCs), cancer slope factors, drinking water unit risk values, and inhalation unit risk values. IRIS normally represents the official Agency scientific position regarding the toxicity of the chemicals based on the data available at the time of the review. IRIS toxicity assessments have undergone external peer review and thus contain consensus toxicity parameter values. IRIS can be accessed online at: <http://www.epa.gov/iris/>.
2. *California's Environmental Protection Agency (Cal EPA)*. Cal-EPA's recommended toxicity parameter values are available online at <http://www.oehha.ca.gov/risk/chemicalDB//index.asp>. These are peer reviewed and address both cancer and non-cancer effects.
3. *The Agency for Toxic Substances and Disease Registry (ATSDR)*. ATSDR's Minimal Risk Levels (MRLs) are estimates of the daily human exposure to a hazardous substance that are likely to be without appreciable risk of adverse non-cancer health

effects over a specified duration of exposure. The ATSDR MRLs are peer reviewed and are available at <http://www.atsdr.cdc.gov/mrls.html>.

4. *Health Effects Assessment Summary Tables (HEAST)*. Table 4 of HEAST includes peer reviewed radionuclide slope factors which are available on the EPA Office of Radiation and Indoor Air (ORIA) website at: <http://www.epa.gov/radiation/heast/download.htm>. The published radionuclide slope factors have been adopted by EPA in its Preliminary Remediation Goals for Radionuclide Calculator; they are available on EPA's internet website at: <http://epa-prgs.ornl.gov/radionuclides/>. The Soil Screening Guidance for Radionuclide documents are available at: <http://www.epa.gov/superfund/resources/radiation/radssg>.