## Table G: Soil Screening Levels for Leaching Concerns

| | | | | | Target Groundwater Concentrations | | Soil Leaching Screening Levels | |
|---|---|---|---|---|---|---|---|---|
| Chemical | Organic Carbon Coefficient (Koc) ($cm^3/g$) | Henry's Law Constant (H) ($atm\text{-}m^3/mole\text{-}^oK$) | Dilution/ Atenuation Factor (DAF) | Saturation Limit (mg/kg) | Target Groundwater Concentration (Drinking Water Resource) (Table F-1a) (µg/L) | Target Groundwater Concentration (NON-Drinking Water Resource) (Table F-1b) (µg/L) | Soil Leaching Screening Level (Drinking Water Resource) (mg/kg) | Soil Leaching Screening Level (NON-Drinking Water Resource) (mg/kg) |
| Dibromochloromethane | 4.68E+02 | 8.50E-04 | 8.30E+01 | 1.3E+04 | 1.0E+02 | 1.7E+02 | 8.3E+00 | 1.4E+01 |
| 1,2-dibromo-3-chloropropane | 1.30E+02 | 1.47E-04 | 2.25E+01 | 1.1E+03 | 2.0E-01 | 2.0E-01 | 4.5E-03 | 4.5E-03 |
| 1,2-Dibromoethane | 2.81E+01 | 3.20E-04 | 6.65E+00 | 9.2E+02 | 5.0E-02 | 1.5E+02 | 3.3E-04 | 1.0E+00 |
| 1,2-Dichlorobenzene | 6.17E+02 | 1.90E-03 | 1.14E+02 | 6.0E+02 | 1.0E+01 | 1.4E+01 | 1.1E+00 | 1.6E+00 |
| 1,3-Dichlorobenzene | 6.17E+02 | 1.90E-03 | 1.14E+02 | 6.0E+02 | 6.5E+01 | 6.5E+01 | 7.4E+00 | 7.4E+00 |
| 1,4-Dichlorobenzene | 6.17E+02 | 2.43E-03 | 1.18E+02 | 2.8E+02 | 5.0E+00 | 1.5E+01 | 5.9E-01 | 1.8E+00 |
| 3,3-Dichlorobenzidine | 1.60E+03 | 8.33E-07 | 2.66E+02 | 3.0E+01 | 2.9E-02 | 2.5E+02 | 7.7E-03 | 6.6E+01 |
| Dichlorodiphenyldichloroethane (DDD) | 7.80E+05 | 7.96E-06 | 1.29E+05 | 7.5E+02 | 1.0E-03 | 1.0E-03 | 7.5E+02 | 7.5E+02 |
| Dichlorodiphenyldichloroethene (DDE) | 4.40E+06 | 6.80E-05 | 7.30E+05 | 1.1E+03 | 1.0E-03 | 1.0E-03 | 1.1E+03 | 1.1E+03 |
| Dichlorodiphenyltrichloroethane (DDT) | 2.40E+05 | 3.89E-05 | 3.98E+04 | 4.3E+00 | 1.0E-03 | 1.0E-03 | 4.3E+00 | 4.3E+00 |
| 1,1-Dichloroethane | 3.16E+01 | 5.62E-03 | 4.01E+01 | 1.7E+03 | 5.0E+00 | 4.7E+01 | 2.0E-01 | 1.9E+00 |
| 1,2-Dichloroethane | 1.74E+01 | 9.79E-04 | 8.97E+00 | 1.8E+03 | 5.0E-01 | 2.0E+02 | 4.5E-03 | 1.8E+00 |
| 1,1-Dichloroethene | 5.89E+01 | 2.61E-02 | 1.72E+02 | 1.5E+03 | 6.0E+00 | 2.5E+01 | 1.0E+00 | 4.3E+00 |
| *cis*-1,2-Dichloroethene | 3.55E+01 | 4.08E-03 | 3.12E+01 | 1.2E+03 | 6.0E+00 | 5.9E+02 | 1.9E-01 | 1.8E+01 |
| *trans*-1,2-Dichloroethene | 5.25E+01 | 9.38E-03 | 6.69E+01 | 3.1E+03 | 1.0E+01 | 5.9E+02 | 6.7E-01 | 3.9E+01 |
| 2,4-Dichlorophenol | 6.00E+03 | 2.80E-06 | 9.96E+02 | 1.6E+05 | 3.0E-01 | 3.0E+00 | 3.0E-01 | 3.0E+00 |
| 1,2-Dichloropropane | 4.37E+01 | 2.80E-03 | 2.46E+01 | 1.1E+03 | 5.0E+00 | 1.0E+02 | 1.2E-01 | 2.5E+00 |
| 1,3-Dichloropropene | 4.57E+01 | 1.77E-02 | 1.17E+02 | 1.4E+03 | 5.0E-01 | 2.4E+01 | 5.9E-02 | 2.9E+00 |
| Dieldrin | 7.40E+03 | 5.84E-05 | 1.23E+03 | 8.3E+00 | 1.9E-03 | 1.9E-03 | 2.3E-03 | 2.3E-03 |
| Diethyl phthalate | 1.40E+02 | 1.14E-06 | 2.32E+01 | 8.4E+02 | 1.5E+00 | 1.5E+00 | 3.5E-02 | 3.5E-02 |
| Dimethyl phthalate | 1.40E+02 | 1.05E-07 | 2.32E+01 | 4.7E+03 | 1.5E+00 | 1.5E+00 | 3.5E-02 | 3.5E-02 |
| 2,4-Dimethylphenol | 4.00E+01 | 1.70E-05 | 6.75E+00 | 2.7E+03 | 1.0E+02 | 1.1E+02 | 6.7E-01 | 7.4E-01 |
| 2,4-Dinitrophenol | 1.70E+01 | 6.45E-10 | 2.82E+00 | 1.1E+03 | 1.5E+01 | 1.5E+01 | 4.2E-02 | 4.2E-02 |
| 2,4-Dinitrotoluene | 4.50E+01 | 4.50E-06 | 7.50E+00 | 1.0E+02 | 5.1E-02 | 1.2E+02 | 3.9E-04 | 8.6E-01 |
| 1,4-Dioxane | 3.50E+00 | 3.00E-06 | 6.00E-01 | 1.2E+05 | 3.0E+00 | 5.0E+04 | 1.8E-03 | 3.0E+01 |
| Dioxin (2,3,7,8-TCDD) | | 8.10E-05 | | 1.1E+06 | 1.0E-06 | 1.0E-06 | | |
| Endosulfan | 3.20E+03 | 1.00E-05 | 5.31E+02 | 2.9E+00 | 8.7E-03 | 8.7E-03 | 4.6E-03 | 4.6E-03 |
| Endrin | 1.70E+03 | 7.51E-06 | 2.82E+02 | 2.7E+00 | 2.3E-03 | 2.3E-03 | 6.5E-04 | 6.5E-04 |
| Ethylbenzene | 3.63E+02 | 7.88E-03 | 1.09E+02 | 4.0E+02 | 3.0E+01 | 4.3E+01 | 3.3E+00 | 4.7E+00 |
| Fluoranthene | 3.80E+04 | 6.50E-06 | 6.31E+03 | 6.0E+01 | 8.0E+00 | 8.0E+00 | 6.0E+01 | 6.0E+01 |
| Fluorene | 1.38E+04 | 7.70E-05 | 2.29E+03 | 1.6E+02 | 3.9E+00 | 3.9E+00 | 8.9E+00 | 8.9E+00 |
| Heptachlor | 2.20E+04 | 1.48E-03 | 3.66E+03 | 7.4E+00 | 3.6E-03 | 3.6E-03 | 1.3E-02 | 1.3E-02 |
| Heptachlor epoxide | 2.30E+04 | 3.16E-05 | 3.82E+03 | 4.8E+01 | 3.6E-03 | 3.6E-03 | 1.4E-02 | 1.4E-02 |
| Hexachlorobenzene | 1.20E+06 | 1.70E-03 | 1.99E+05 | 7.9E+02 | 1.0E+00 | 3.7E+00 | 7.9E+02 | 7.9E+02 |
| Hexachlorobutadiene | 2.90E+04 | 2.56E-02 | 4.97E+03 | 3.5E+02 | 4.5E-01 | 9.3E-01 | 2.2E+00 | 4.6E+00 |
| γ-Hexachlorocyclohexane (Lindane) | 3.70E+03 | 4.93E-07 | 6.14E+02 | 1.6E+02 | 1.6E-02 | 1.6E-02 | 9.8E-03 | 9.8E-03 |
| Hexachloroethane | 2.00E+04 | 9.85E-03 | 3.38E+03 | 6.0E+03 | 9.0E-01 | 1.2E+01 | 3.0E+00 | 4.1E+01 |
| Indeno(1,2,3-c,d)pyrene | 1.60E+06 | 6.95E-08 | 2.66E+05 | 5.1E+00 | 4.8E-02 | 4.8E-02 | 1.3E+01 | 1.3E+01 |
| Lead | | | | | 2.5E+00 | 2.5E+00 | | |
| Mercury (elemental) | | | | | 2.5E-02 | 2.5E-02 | | |

# Table G: Soil Screening Levels for Leaching Concerns

| | | | | | Target Groundwater Concentrations | | Soil Leaching Screening Levels | |
|---|---|---|---|---|---|---|---|---|
| Chemical | Organic Carbon Coefficient (Koc) ($cm^3/g$) | Henry's Law Constant (H) ($atm\text{-}m^3/mole\text{-}^oK$) | Dilution/ Atenuation Factor (DAF) | Saturation Limit (mg/kg) | Target Groundwater Concentration (Drinking Water Resource) (Table F-1a) (µg/L) | Target Groundwater Concentration (NON-Drinking Water Resource) (Table F-1b) (µg/L) | Soil Leaching Screening Level (Drinking Water Resource) (mg/kg) | Soil Leaching Screening Level (NON-Drinking Water Resource) (mg/kg) |
| Methoxychlor | 7.90E+04 | 1.58E-05 | 1.31E+04 | 1.9E+01 | 3.0E-03 | 3.0E-03 | 1.9E+01 | 1.9E+01 |
| Methylene chloride | 1.11E+01 | 2.19E-03 | 1.54E+01 | 2.4E+03 | 5.0E+00 | 2.2E+03 | 7.7E-02 | 3.4E+01 |
| Methyl ethyl ketone | 4.50E+00 | 2.74E-05 | 9.17E-01 | 3.4E+04 | 4.2E+03 | 1.4E+04 | 3.9E+00 | 1.3E+01 |
| Methyl isobutyl ketone | 1.34E+02 | 1.40E-04 | 2.31E+01 | 1.7E+04 | 1.2E+02 | 1.7E+02 | 2.8E+00 | 3.9E+00 |
| Methyl mercury | | | | | 3.0E-03 | 3.0E-03 | | |
| 2-Methylnaphthalene | 7.20E+02 | 2.90E-04 | 1.21E+02 | 1.1E+02 | 2.1E+00 | 2.1E+00 | 2.5E-01 | 2.5E-01 |
| *tert*-Butyl methyl ether | 6.00E+00 | 5.87E-04 | 4.64E+00 | 2.1E+04 | 5.0E+00 | 1.8E+03 | 2.3E-02 | 8.4E+00 |
| Molybdenum | | | | | 3.5E+01 | 2.4E+02 | | |
| Naphthalene | 1.19E+03 | 4.83E-04 | 2.01E+02 | 2.2E+02 | 1.7E+01 | 2.4E+01 | 3.4E+00 | 4.8E+00 |
| Nickel | | | | | 8.2E+00 | 8.2E+00 | | |
| Pentachlorophenol | 3.20E+04 | 2.80E-06 | 5.31E+03 | 2.7E+06 | 1.0E+00 | 7.9E+00 | 2.7E+06 | 2.7E+06 |
| Perchlorate | | | | | 6.0E+00 | 6.0E+02 | | |
| Phenanthrene | 1.40E+04 | 3.93E-05 | 2.32E+03 | 6.9E+01 | 4.6E+00 | 4.6E+00 | 1.1E+01 | 1.1E+01 |
| Phenol | 9.10E+01 | 1.30E-06 | 1.51E+01 | 5.2E+04 | 5.0E+00 | 2.6E+02 | 7.6E-02 | 3.9E+00 |
| Polychlorinated biphenyls (PCBs) | 3.30E+04 | 5.20E-04 | 5.48E+03 | 6.3E+00 | 1.4E-02 | 1.4E-02 | 6.3E+00 | 6.3E+00 |
| Pyrene | 1.05E+05 | 1.10E-05 | 1.74E+04 | 8.5E+01 | 2.0E+00 | 2.0E+00 | 8.5E+01 | 8.5E+01 |
| Selenium | | | | | 5.0E+00 | 5.0E+00 | | |
| Silver | | | | | 1.9E-01 | 1.9E-01 | | |
| Styrene | 7.76E+02 | 2.75E-03 | 1.46E+02 | 1.5E+03 | 1.0E+01 | 1.0E+02 | 1.5E+00 | 1.5E+01 |
| *tert*-Butyl alcohol | 3.70E+01 | 1.17E-05 | 6.21E+00 | 3.2E+05 | 1.2E+01 | 1.8E+04 | 7.5E-02 | 1.1E+02 |
| 1,1,1,2-Tetrachloroethane | 9.37E+01 | 3.45E-04 | 1.77E+01 | 2.0E+03 | 1.3E+00 | 9.3E+02 | 2.4E-02 | 1.6E+01 |
| 1,1,2,2-Tetrachloroethane | 9.37E+01 | 3.45E-04 | 1.77E+01 | 2.0E+03 | 1.0E+00 | 1.9E+02 | 1.8E-02 | 3.4E+00 |
| Tetrachloroethene | 1.55E+02 | 1.84E-02 | 1.40E+02 | 2.3E+02 | 5.0E+00 | 1.2E+02 | 7.0E-01 | 1.7E+01 |
| Thallium | | | | | 2.0E+00 | 4.0E+00 | | |
| Toluene | 1.82E+02 | 6.64E-03 | 7.14E+01 | 6.5E+02 | 4.0E+01 | 1.3E+02 | 2.9E+00 | 9.3E+00 |
| Toxaphene | 4.90E+03 | 2.10E-01 | 2.12E+03 | 9.3E+01 | 2.0E-04 | 2.0E-04 | 4.2E-04 | 4.2E-04 |
| TPH (gasolines) | 5.00E+03 | 7.20E-04 | 8.34E+02 | 4.5E+03 | 1.0E+02 | 2.1E+02 | 8.3E+01 | 1.8E+02 |
| TPH (middle distillates) | 5.00E+03 | 7.20E-04 | 8.34E+02 | 1.5E+02 | 1.0E+02 | 2.1E+02 | 8.3E+01 | 1.8E+02 |
| TPH (residual fuels) | | | | 1.5E+02 | 1.0E+02 | 2.1E+02 | | |
| 1,2,4-Trichlorobenzene | 1.78E+03 | 1.42E-03 | 3.04E+02 | 3.2E+03 | 5.0E+00 | 2.5E+01 | 1.5E+00 | 7.6E+00 |
| 1,1,1-Trichloroethane | 1.10E+02 | 1.72E-02 | 1.25E+02 | 1.2E+03 | 6.2E+01 | 6.2E+01 | 7.8E+00 | 7.8E+00 |
| 1,1,2-Trichloroethane | 5.01E+01 | 9.13E-04 | 1.40E+01 | 1.8E+03 | 5.0E+00 | 3.5E+02 | 7.0E-02 | 4.8E+00 |
| Trichloroethene | 1.66E+02 | 1.03E-02 | 9.15E+01 | 1.3E+03 | 5.0E+00 | 3.6E+02 | 4.6E-01 | 3.3E+01 |
| 2,4,5-Trichlorophenol | 8.90E+01 | 2.18E-04 | 1.61E+01 | 7.6E+02 | 1.1E+01 | 1.1E+01 | 1.8E-01 | 1.8E-01 |
| 2,4,6-Trichlorophenol | 2.00E+03 | 4.00E-06 | 3.32E+02 | 9.7E+03 | 7.0E-01 | 9.7E+01 | 2.3E-01 | 3.2E+01 |
| Vanadium | | | | | 1.5E+01 | 1.9E+01 | | |
| Vinyl chloride | 1.86E+01 | 2.70E-02 | 1.71E+02 | 1.2E+03 | 5.0E-01 | 3.8E+00 | 8.5E-02 | 6.6E-01 |
| Xylenes | 4.07E+02 | 7.34E-03 | 1.13E+02 | 4.2E+02 | 2.0E+01 | 1.0E+02 | 2.3E+00 | 1.1E+01 |
| Zinc | | | | | 8.1E+01 | 8.1E+01 | | |

# Table G: Soil Screening Levels for Leaching Concerns

| | | | | | Target Groundwater Concentrations. | | Soil Leaching Screening Levels | |
|---|---|---|---|---|---|---|---|---|
| | Organic Carbon Coefficient (Koc) | Henry's Law Constant (H) | Dilution/ Atenuation Factor (DAF) | Saturation Limit | Target Groundwater Concentration (Drinking Water Resource) (Table F-1a) | Target Groundwater Concentration (NON-Drinking Water Resource) (Table F-1b) | Soil Leaching Screening Level (Drinking Water Resource) | Soil Leaching Screening Level (NON-Drinking Water Resource) |
| Chemical. | ($cm^3/g$) | ($atm\text{-}m^3/mole\text{-}^oK$) | | (mg/kg) | (µg/L) | (µg/L) | (mg/kg) | (mg/kg) |

**Notes:**

Soil leaching equation from Ontario MOEE guidance (see text).

Groundwater Category Drinking Water Resource - protective of groundwater that is a source of drinking water AND protective of discharge of groundwater to a surface water and subsequent impact on aquatic life.

Groundwater Category NON-Drinking Water Resource - protective of discharge of impacted groundwater to surface water and subsequent impact on aquatic life.

#: Leaching model used considered to be excessively conservative for highly sorptive chemicals. For chemicals with koc values greater than 30,000 $cm^3/g$, theoretical soil saturation level ("sat") used in place of leaching model screening level if higher (see text). Soil saturation levels calculated using equation presented in USEPA Region 9 PRG guidance (USEPA 2004, see Appendix 2). Exceptions include bis(2-ethylhexyl)phthalate and pentachlorophenol (see text).

TPH -Total Petroleum Hydrocarbons. See text for discussion of different TPH categories.

Physical-Chemical constants for chemicals from USEPA Region 9 (USEPA 2004) or Ontario MOEE (MOEE 1996) when not available unless otherwise noted (see also Table J).

Physical-Chemical constants for TPH (gasolines and middle distillates) based on constants developed for C11 to C22 aromatic carbon range fraction by Massachusetts DEP and used to develop RBSLs for leaching of TPH in general from soil (MADEP 1997). Soil leaching level rounded to nearest hundred.

Target groundwater concentrations from Table F-1a and F-1b.

Target groundwater concentration and corresponding soil leaching levels for TPH based on criteria in Board Order 99-045 for San Francisco Airport (RWQCBSF, 1999).

Screening Levels for TPH (gasolines) and TPH (middle distilates) rounded to nearest 100 mg/kg.

TPH (residual fuels) soil screening level for leaching from California Regional Water Board, Region 4 - drinking water protection, C23-C32 carbon range (RWQCBLA 1996).

Screening levels for perchlorate calculated using leaching equation in USEPA Soil Screening Guidance and assumed Dilution/Attenuation Factor of 20 (see text).

# Table K-1. Direct Exposure Soil Screening Levels
## [1]Residential Exposure Scenario

| Chemical | Final Screening Level (mg/kg) | Basis | Carcinogens (Risk = $10^{-6}$) (mg/kg) | Noncarcinogens [2](HQ = 0.2) (mg/kg) | Noncarcinogens (HQ = 1.0) (mg/kg) | Saturation (mg/kg) |
|---|---|---|---|---|---|---|
| Acenaphthene | 5.0E+02 | noncarcinogenic effects | - | 5.0E+02 | 2.5E+03 | N/A |
| Acenaphthylene | 3.4E+02 | noncarcinogenic effects | - | 3.4E+02 | 1.7E+03 | N/A |
| Acetone | 2.8E+03 | noncarcinogenic effects | - | 2.8E+03 | 1.4E+04 | 1.0E+05 |
| Aldrin | 3.2E-02 | carcinogenic effects | 3.2E-02 | 4.1E-01 | 2.1E+00 | N/A |
| Anthracene | 3.1E+03 | noncarcinogenic effects | - | 3.1E+03 | 1.6E+04 | N/A |
| Antimony | 6.3E+00 | noncarcinogenic effects | - | 6.3E+00 | 3.1E+01 | N/A |
| Arsenic | 3.9E-01 | carcinogenic effects | 3.9E-01 | 4.3E+00 | 2.2E+01 | N/A |
| Barium | 3.0E+03 | noncarcinogenic effects | - | 3.0E+03 | 1.5E+04 | N/A |
| Benzene | 1.2E-01 | carcinogenic effects | 1.2E-01 | 4.7E+00 | 2.4E+01 | 8.7E+02 |
| Benzo(a)anthracene | 3.8E-01 | carcinogenic effects | 3.8E-01 | 3.4E+02 | 1.7E+03 | N/A |
| Benzo(b)fluoranthene | 3.8E-01 | carcinogenic effects | 3.8E-01 | 3.4E+02 | 1.7E+03 | N/A |
| Benzo(k)fluoranthene | 3.8E-01 | carcinogenic effects | 3.8E-01 | 3.4E+02 | 1.7E+03 | N/A |
| Benzo(g,h,i)perylene | 3.4E+02 | noncarcinogenic effects | - | 3.4E+02 | 1.7E+03 | N/A |
| Benzo(a)pyrene | 3.8E-02 | carcinogenic effects | 3.8E-02 | 3.4E+02 | 1.7E+03 | N/A |
| Beryllium | 3.1E+01 | noncarcinogenic effects | 1.1E+03 | 3.1E+01 | 1.5E+02 | N/A |
| 1,1-Biphenyl | 6.1E+02 | noncarcinogenic effects | - | 6.1E+02 | 3.1E+03 | N/A |
| Bis(2-chloroethyl) ether | 1.5E-01 | carcinogenic effects | 1.5E-01 | - | - | 9.6E+03 |
| Bis(2-chloroisopropyl) ether | 3.4E-02 | carcinogenic effects | 3.4E-02 | 1.4E+02 | 7.0E+02 | 7.9E+02 |
| Bis(2-ethylhexyl) phthalate | 3.5E+01 | carcinogenic effects | 3.5E+01 | 2.4E+02 | 1.2E+03 | N/A |
| Boron | 3.1E+03 | noncarcinogenic effects | - | 3.1E+03 | 1.6E+04 | N/A |
| Bromodichloromethane | 5.7E-01 | carcinogenic effects | 5.7E-01 | 3.1E+01 | 1.6E+02 | 3.0E+03 |
| Bromoform (Tribromomethane) | 8.1E+01 | carcinogenic effects | 8.1E+01 | 3.1E+02 | 1.6E+03 | N/A |
| Bromomethane | 7.0E-01 | noncarcinogenic effects | - | 7.0E-01 | 3.5E+00 | 3.1E+03 |
| Cadmium | 1.7E+00 | carcinogenic effects | 1.7E+00 | 7.8E+00 | 3.9E+01 | N/A |
| Carbon tetrachloride | 2.0E-02 | carcinogenic effects | 2.0E-02 | 3.4E+00 | 1.7E+01 | 1.1E+03 |
| Chlordane | 4.4E-01 | carcinogenic effects | 4.4E-01 | 7.0E+00 | 3.5E+01 | N/A |
| p-Chloroaniline | 6.3E+01 | noncarcinogenic effects | - | 6.3E+01 | 3.1E+02 | N/A |
| Chlorobenzene | 1.6E+02 | noncarcinogenic effects | - | 1.6E+02 | 8.0E+02 | 6.8E+02 |
| Chloroethane | 1.0E+01 | noncarcinogenic effects | 2.2E+02 | 1.0E+01 | 5.1E+01 | 1.6E+03 |
| Chloroform | 6.8E-01 | carcinogenic effects | 6.8E-01 | 3.9E+01 | 1.9E+02 | 2.9E+03 |
| Chloromethane | 7.7E+00 | noncarcinogenic effects | - | 7.7E+00 | 3.8E+01 | 4.1E+03 |
| 2-Chlorophenol | 7.6E+00 | noncarcinogenic effects | - | 7.6E+00 | 3.8E+01 | 5.5E+04 |
| Chromium (total) | - | - | - | - | - | N/A |
| Chromium III | 2.3E+04 | noncarcinogenic effects | - | 2.3E+04 | 1.2E+05 | N/A |
| Chromium VI | 9.4E+00 | noncarcinogenic effects | 1.7E+01 | 9.4E+00 | 4.7E+01 | N/A |
| Chrysene | 6.2E+01 | carcinogenic effects | 6.2E+01 | 3.4E+02 | 1.7E+03 | N/A |

## Table K-1. Direct Exposure Soil Screening Levels
## [1]Residential Exposure Scenario

| Chemical | Final Screening Level (mg/kg) | Basis | Carcinogens (Risk = $10^{-6}$) (mg/kg) | Noncarcinogens [2](HQ = 0.2) (mg/kg) | Noncarcinogens (HQ = 1.0) (mg/kg) | Saturation (mg/kg) |
|---|---|---|---|---|---|---|
| Cobalt | 2.8E+02 | noncarcinogenic effects | 9.1E+02 | 2.8E+02 | 1.4E+03 | N/A |
| Copper | 6.3E+03 | noncarcinogenic effects | - | 6.3E+03 | 3.1E+04 | N/A |
| Cyanide | 3.4E+01 | noncarcinogenic effects | - | 3.4E+01 | 1.7E+02 | N/A |
| Dibenz(a,h)anthracene | 6.2E-02 | carcinogenic effects | 6.2E-02 | 3.4E+02 | 1.7E+03 | N/A |
| Dibromochloromethane | 7.6E+00 | carcinogenic effects | 7.6E+00 | 3.1E+02 | 1.6E+03 | N/A |
| 1,2-dibromo-3-chloropropane | 9.1E-02 | carcinogenic effects | 9.1E-02 | 2.4E+04 | 1.2E+05 | N/A |
| 1,2-Dibromoethane | 1.9E-02 | carcinogenic effects | 1.9E-02 | 5.3E+00 | 2.6E+01 | N/A |
| 1,2-Dichlorobenzene | 1.3E+02 | noncarcinogenic effects | - | 1.3E+02 | 6.5E+02 | 6.0E+02 |
| 1,3-Dichlorobenzene | 6.5E+01 | noncarcinogenic effects | - | 6.5E+01 | 3.3E+02 | 6.0E+02 |
| 1,4-Dichlorobenzene | 1.2E+00 | carcinogenic effects | 1.2E+00 | 2.4E+02 | 1.2E+03 | N/A |
| 3,3-Dichlorobenzidine | 5.3E-01 | carcinogenic effects | 5.3E-01 | - | - | N/A |
| Dichlorodiphenyldichloroethane (DDD) | 2.4E+00 | carcinogenic effects | 2.4E+00 | 7.2E+00 | 3.6E+01 | N/A |
| Dichlorodiphenyldichloroethene (DDE) | 1.7E+00 | carcinogenic effects | 1.7E+00 | 7.2E+00 | 3.6E+01 | N/A |
| Dichlorodiphenyltrichloroethane (DDT) | 1.7E+00 | carcinogenic effects | 1.7E+00 | 7.2E+00 | 3.6E+01 | N/A |
| 1,1-Dichloroethane | 2.2E+00 | carcinogenic effects | 2.2E+00 | 7.8E+01 | 3.9E+02 | 1.7E+03 |
| 1,2-Dichloroethane | 2.2E-01 | carcinogenic effects | 2.2E-01 | 1.4E+00 | 6.8E+00 | 1.8E+03 |
| 1,1-Dichloroethene | 1.9E+01 | noncarcinogenic effects | - | 1.9E+01 | 9.7E+01 | 1.5E+03 |
| *cis*-1,2-Dichloroethene | 6.5E+00 | noncarcinogenic effects | - | 6.5E+00 | 3.2E+01 | 1.2E+03 |
| *trans*-1,2-Dichloroethene | 1.0E+01 | noncarcinogenic effects | - | 1.0E+01 | 5.1E+01 | 3.1E+03 |
| 2,4-Dichlorophenol | 4.7E+01 | noncarcinogenic effects | - | 4.7E+01 | 2.3E+02 | N/A |
| 1,2-Dichloropropane | 4.6E-01 | carcinogenic effects | 4.6E-01 | 9.1E-01 | 4.6E+00 | 1.1E+03 |
| 1,3-Dichloropropene | 1.7E-01 | carcinogenic effects | 1.7E-01 | 2.5E+00 | 1.3E+01 | 1.4E+03 |
| Dieldrin | 3.4E-02 | carcinogenic effects | 3.4E-02 | 6.9E-01 | 3.4E+00 | N/A |
| Diethyl phthalate | 9.8E+03 | noncarcinogenic effects | - | 9.8E+03 | 4.9E+04 | N/A |
| Dimethyl phthalate | 1.2E+05 | noncarcinogenic effects | - | 1.2E+05 | 6.1E+05 | N/A |
| 2,4-Dimethylphenol | 3.1E+02 | noncarcinogenic effects | - | 3.1E+02 | 1.6E+03 | N/A |
| 2,4-Dinitrophenol | 3.1E+02 | noncarcinogenic effects | - | 3.1E+02 | 1.6E+03 | N/A |
| 2,4-Dinitrotoluene | 9.4E-01 | carcinogenic effects | 9.4E-01 | 3.1E+01 | 1.6E+02 | N/A |
| 1,4-Dioxane | 2.4E+01 | carcinogenic effects | 2.4E+01 | 3.5E+08 | 1.8E+09 | N/A |
| Dioxin (2,3,7,8-TCDD) | 4.5E-06 | carcinogenic effects | 4.5E-06 | - | - | N/A |
| Endosulfan | 8.2E+01 | noncarcinogenic effects | - | 8.2E+01 | 4.1E+02 | N/A |
| Endrin | 4.1E+00 | noncarcinogenic effects | - | 4.1E+00 | 2.1E+01 | N/A |
| Ethylbenzene | 2.3E+00 | carcinogenic effects | 2.3E+00 | 2.4E+02 | 1.2E+03 | 4.0E+02 |
| Fluoranthene | 4.6E+02 | noncarcinogenic effects | - | 4.6E+02 | 2.3E+03 | N/A |
| Fluorene | 3.9E+02 | noncarcinogenic effects | - | 3.9E+02 | 1.9E+03 | N/A |
| Heptachlor | 1.2E-01 | carcinogenic effects | 1.2E-01 | 6.9E+00 | 3.4E+01 | N/A |

## Table K-1. Direct Exposure Soil Screening Levels
## [1]Residential Exposure Scenario

| Chemical | Final Screening Level (mg/kg) | Basis | Carcinogens (Risk = $10^{-6}$) (mg/kg) | Noncarcinogens [2](HQ = 0.2) (mg/kg) | Noncarcinogens (HQ = 1.0) (mg/kg) | Saturation (mg/kg) |
|---|---|---|---|---|---|---|
| Heptachlor epoxide | 6.1E-02 | carcinogenic effects | 6.1E-02 | 1.8E-01 | 8.9E-01 | N/A |
| Hexachlorobenzene | 3.4E-01 | carcinogenic effects | 3.4E-01 | 1.1E+01 | 5.5E+01 | N/A |
| Hexachlorobutadiene | 3.1E+00 | noncarcinogenic effects | 8.2E+00 | 3.1E+00 | 1.6E+01 | N/A |
| γ-Hexachlorocyclohexane (Lindane) | 4.1E+00 | noncarcinogenic effects | - | 4.1E+00 | 2.1E+01 | N/A |
| Hexachloroethane | 1.2E+01 | noncarcinogenic effects | 1.2E+01 | 1.2E+01 | 6.1E+01 | N/A |
| Indeno(1,2,3-c,d)pyrene | 6.2E-01 | carcinogenic effects | 6.2E-01 | 3.4E+02 | 1.7E+03 | N/A |
| Lead | 2.6E+02 | noncarcinogenic effects | - | 2.6E+02 | 2.6E+02 | N/A |
| Mercury (elemental) | 1.3E+00 | noncarcinogenic effects | - | 1.3E+00 | 6.7E+00 | N/A |
| Methoxychlor | - | - | - | - | - | N/A |
| Methylene chloride | 7.2E+00 | carcinogenic effects | 7.2E+00 | 7.0E+01 | 3.5E+02 | 2.4E+03 |
| Methyl ethyl ketone | 4.3E+03 | noncarcinogenic effects | - | 4.3E+03 | 2.1E+04 | 3.4E+04 |
| Methyl isobutyl ketone | 3.1E+03 | noncarcinogenic effects | - | 3.1E+03 | 1.6E+04 | 1.7E+04 |
| Methyl mercury | 1.2E+00 | noncarcinogenic effects | - | 1.2E+00 | 6.1E+00 | N/A |
| 2-Methylnaphthalene | 4.6E+01 | noncarcinogenic effects | - | 4.6E+01 | 2.3E+02 | N/A |
| *tert*-Butyl methyl ether | 3.0E+01 | carcinogenic effects | 3.0E+01 | 1.1E+03 | 5.6E+03 | 2.1E+04 |
| Molybdenum | 7.8E+01 | noncarcinogenic effects | - | 7.8E+01 | 3.9E+02 | N/A |
| Naphthalene | 1.3E+00 | carcinogenic effects | 1.3E+00 | 6.1E+00 | 3.1E+01 | N/A |
| Nickel | 3.0E+02 | noncarcinogenic effects | - | 3.0E+02 | 1.5E+03 | N/A |
| Pentachlorophenol | 3.0E+00 | carcinogenic effects | 3.0E+00 | 2.8E+01 | 1.4E+02 | N/A |
| Perchlorate | 1.1E+01 | noncarcinogenic effects | - | 1.1E+01 | 5.5E+01 | N/A |
| Phenanthrene | 3.4E+02 | noncarcinogenic effects | - | 3.4E+02 | 1.7E+03 | N/A |
| Phenol | 4.7E+03 | noncarcinogenic effects | - | 4.7E+03 | 2.3E+04 | N/A |
| Polychlorinated biphenyls (PCBs) | 2.2E-01 | carcinogenic effects | 2.2E-01 | 2.2E-01 | 1.1E+00 | N/A |
| Pyrene | 6.9E+02 | noncarcinogenic effects | - | 6.9E+02 | 3.4E+03 | N/A |
| Selenium | 7.8E+01 | noncarcinogenic effects | - | 7.8E+01 | 3.9E+02 | N/A |
| Silver | 7.8E+01 | noncarcinogenic effects | - | 7.8E+01 | 3.9E+02 | N/A |
| Styrene | 5.0E+02 | noncarcinogenic effects | - | 5.0E+02 | 2.5E+03 | 1.5E+03 |
| *tert*-Butyl alcohol | 3.2E+05 | saturation limit | - | - | - | 3.2E+05 |
| 1,1,1,2-Tetrachloroethane | 2.0E+00 | carcinogenic effects | 2.0E+00 | 4.7E+02 | 2.3E+03 | 2.0E+03 |
| 1,1,2,2-Tetrachloroethane | 2.7E-01 | carcinogenic effects | 2.7E-01 | 1.4E+02 | 7.0E+02 | 2.0E+03 |
| Tetrachloroethene | 3.7E-01 | carcinogenic effects | 3.7E-01 | 4.3E+01 | 2.2E+02 | 2.3E+02 |
| Thallium | 1.3E+00 | noncarcinogenic effects | - | 1.3E+00 | 6.3E+00 | N/A |
| Toluene | 6.3E+01 | noncarcinogenic effects | - | 6.3E+01 | 3.2E+02 | 6.5E+02 |
| Toxaphene | 4.6E-01 | carcinogenic effects | 4.6E-01 | - | - | N/A |
| TPH (gasolines) | 1.1E+02 | noncarcinogenic effects | - | 1.1E+02 | 5.4E+02 | 4.5E+03 |
| TPH (middle distillates) | 1.1E+02 | noncarcinogenic effects | - | 1.1E+02 | 5.4E+02 | N/A |

## Table K-1. Direct Exposure Soil Screening Levels
## [1]Residential Exposure Scenario

| Chemical | Final Screening Level (mg/kg) | Basis | Carcinogens (Risk = $10^{-6}$) (mg/kg) | Noncarcinogens [2](HQ = 0.2) (mg/kg) | Noncarcinogens (HQ = 1.0) (mg/kg) | Saturation (mg/kg) |
|---|---|---|---|---|---|---|
| TPH (residual fuels) | 3.7E+02 | noncarcinogenic effects | - | 3.7E+02 | 1.8E+03 | N/A |
| 1,2,4-Trichlorobenzene | 7.9E+00 | noncarcinogenic effects | 1.8E+02 | 7.9E+00 | 3.9E+01 | N/A |
| 1,1,1-Trichloroethane | 2.8E+02 | noncarcinogenic effects | - | 2.8E+02 | 1.4E+03 | 1.2E+03 |
| 1,1,2-Trichloroethane | 5.0E-01 | carcinogenic effects | 5.0E-01 | 5.1E+00 | 2.5E+01 | 1.8E+03 |
| Trichloroethene | 1.9E+00 | carcinogenic effects | 1.9E+00 | 4.5E+00 | 2.2E+01 | 1.3E+03 |
| 2,4,5-Trichlorophenol | 4.0E+02 | noncarcinogenic effects | - | 4.0E+02 | 2.0E+03 | N/A |
| 2,4,6-Trichlorophenol | 1.6E+00 | noncarcinogenic effects | 5.8E+01 | 1.6E+00 | 7.8E+00 | N/A |
| Vanadium | 1.6E+01 | noncarcinogenic effects | - | 1.6E+01 | 7.8E+01 | N/A |
| Vinyl chloride | 2.2E-02 | carcinogenic effects | 2.2E-02 | 7.0E+00 | 3.5E+01 | 1.2E+03 |
| Xylenes | 3.1E+01 | noncarcinogenic effects | - | 3.1E+01 | 1.5E+02 | 4.2E+02 |
| Zinc | 4.7E+03 | noncarcinogenic effects | - | 4.7E+03 | 2.3E+04 | N/A |

Primary source: USEPA Region 9 Preliminary Remediation Goals (PRGs, USEPA 2004), modified as noted below. See text for discussion.

Notes:

1. "Residential" screening levels generally considered adequate for other sensitive uses (e.g., day-care centers, hospitals, etc.).

See text for equations and assumptions used in models.

Final screening level is lowest of individual screening levels for carcinogenic effects and noncarcinogenic effects (based on HQ=0.2).

workers if lower (see Table K-3). Saturation limit used as upper limit for volatile organic compounds that are liquid at ambient conditions (see text).

Carcinogens: Based on target cancer risk of $10^{-6}$; modified with respect to CalEPA/OEHHA slope factors when available (marked by "*"). Screening levels for PCBs based on updated USEPA slope factors as presented in USEPA Region 9 Preliminary Remediation Goals document (USEPA 2004).

Noncarcinogens: Adjusted to target hazard quotient of 0.2 for use in tables for all chemicals. Screening levels based on hazard quotient of 1.0 provided for reference.

Saturation: Theoretical soil saturation level in the absence of free product; calculated for volatile organic compounds that are liquids under ambient conditions (refer to Table J).

TPH:Total Petroleum Hydrocarbons. See text for discussion of different TPH categories. Direct exposure screening levels after Massachusetts Department of Environmental Protection (see text).

Direct-exposure screening level for lead from Office of Human Hazard Evaluation CHHSLs (CalEPA 2004b).

# Table K-3. Direct Exposure Soil Screening Levels
## Construction/Trench Worker Exposure Scenario

| Chemical | Final Screening Level (mg/kg) | Basis | Carcinogens (Risk = $10^{-6}$) (mg/kg) | Noncarcinogens HQ = 0.2 (mg/kg) | Noncarcinogens (HQ = 1.0) (mg/kg) | Saturation (mg/kg) |
|---|---|---|---|---|---|---|
| Acenaphthene | 1.7E+04 | noncarcinogenic effects | - | 1.7E+04 | 8.3E+04 | N/A |
| Acenaphthylene | 1.1E+04 | noncarcinogenic effects | - | 1.1E+04 | 5.3E+04 | N/A |
| Acetone | 1.0E+05 | saturation limit | - | 1.2E+05 | 5.9E+05 | 1.0E+05 |
| Aldrin | 1.5E+00 | carcinogenic effects | 1.5E+00 | 1.6E+01 | 7.8E+01 | N/A |
| Anthracene | 1.0E+05 | noncarcinogenic effects | - | 1.0E+05 | 5.0E+05 | N/A |
| Antimony | 3.1E+02 | noncarcinogenic effects | - | 3.1E+02 | 1.5E+03 | N/A |
| Arsenic | 1.5E+01 | carcinogenic effects | 1.5E+01 | 1.8E+02 | 9.2E+02 | N/A |
| Barium | 2.6E+03 | noncarcinogenic effects | - | 2.6E+03 | 1.3E+04 | N/A |
| Benzene | 1.2E+01 | carcinogenic effects | 1.2E+01 | 1.9E+02 | 9.7E+02 | 8.7E+02 |
| Benzo(a)anthracene | 1.5E+01 | carcinogenic effects | 1.5E+01 | 1.1E+04 | 5.3E+04 | N/A |
| Benzo(b)fluoranthene | 1.5E+01 | carcinogenic effects | 1.5E+01 | 1.1E+04 | 5.3E+04 | N/A |
| Benzo(k)fluoranthene | 1.5E+01 | carcinogenic effects | 1.5E+01 | 1.1E+04 | 5.3E+04 | N/A |
| Benzo(g,h,i)perylene | 1.1E+04 | noncarcinogenic effects | - | 1.1E+04 | 5.3E+04 | N/A |
| Benzo(a)pyrene | 1.5E+00 | carcinogenic effects | 1.5E+00 | 1.1E+04 | 5.3E+04 | N/A |
| Beryllium | 9.8E+01 | noncarcinogenic effects | 1.1E+02 | 9.8E+01 | 4.9E+02 | N/A |
| 1,1-Biphenyl | 2.0E+04 | noncarcinogenic effects | - | 2.0E+04 | 1.0E+05 | N/A |
| Bis(2-chloroethyl) ether | 1.3E+01 | carcinogenic effects | 1.3E+01 | - | - | 9.6E+03 |
| Bis(2-chloroisopropyl) ether | 3.0E+00 | carcinogenic effects | 3.0E+00 | 6.0E+03 | 3.0E+04 | 7.9E+02 |
| Bis(2-ethylhexyl) phthalate | 1.4E+03 | carcinogenic effects | 1.4E+03 | 8.0E+03 | 4.0E+04 | N/A |
| Boron | 6.3E+04 | noncarcinogenic effects | - | 6.3E+04 | 3.1E+05 | N/A |
| Bromodichloromethane | 5.3E+01 | carcinogenic effects | 5.3E+01 | 1.3E+03 | 6.5E+03 | 3.0E+03 |
| Bromoform (Tribromomethane) | 4.8E+03 | carcinogenic effects | 4.8E+03 | 1.5E+04 | 7.4E+04 | N/A |
| Bromomethane | 2.9E+01 | noncarcinogenic effects | - | 2.9E+01 | 1.4E+02 | 3.1E+03 |
| Cadmium | 3.9E+01 | carcinogenic effects | 3.9E+01 | 3.8E+02 | 1.9E+03 | N/A |
| Carbon tetrachloride | 1.9E+00 | carcinogenic effects | 1.9E+00 | 1.5E+02 | 7.4E+02 | 1.1E+03 |
| Chlordane | 2.1E+01 | carcinogenic effects | 2.1E+01 | 2.6E+02 | 1.3E+03 | N/A |
| *p*-Chloroaniline | 3.1E+03 | noncarcinogenic effects | - | 3.1E+03 | 1.5E+04 | N/A |
| Chlorobenzene | 6.8E+02 | saturation limit | - | 7.2E+03 | 3.6E+04 | 6.8E+02 |
| Chloroethane | 4.2E+02 | noncarcinogenic effects | 1.3E+04 | 4.2E+02 | 2.1E+03 | 1.6E+03 |
| Chloroform | 6.3E+01 | carcinogenic effects | 6.3E+01 | 1.7E+03 | 8.3E+03 | 2.9E+03 |
| Chloromethane | 3.1E+02 | noncarcinogenic effects | - | 3.1E+02 | 1.6E+03 | 4.1E+03 |
| 2-Chlorophenol | 3.2E+02 | noncarcinogenic effects | - | 3.2E+02 | 1.6E+03 | 5.5E+04 |
| Chromium (total) | - | - | - | - | - | N/A |

## Table K-3. Direct Exposure Soil Screening Levels
## Construction/Trench Worker Exposure Scenario

| Chemical | Final Screening Level (mg/kg) | Basis | Carcinogens (Risk = $10^{-6}$) (mg/kg) | Noncarcinogens HQ = 0.2 (mg/kg) | Noncarcinogens (HQ = 1.0) (mg/kg) | Saturation (mg/kg) |
|---|---|---|---|---|---|---|
| Chromium III | 1.2E+06 | noncarcinogenic effects | - | 1.2E+06 | 5.8E+06 | N/A |
| Chromium VI | 5.3E-01 | noncarcinogenic effects | 1.8E+00 | 5.3E-01 | 2.6E+00 | N/A |
| Chrysene | 2.4E+03 | carcinogenic effects | 2.4E+03 | 1.1E+04 | 5.3E+04 | N/A |
| Cobalt | 9.4E+01 | carcinogenic effects | 9.4E+01 | 1.0E+02 | 5.2E+02 | N/A |
| Copper | 3.1E+05 | noncarcinogenic effects | - | 3.1E+05 | 1.5E+06 | N/A |
| Cyanide | 1.3E+03 | noncarcinogenic effects | - | 1.3E+03 | 6.7E+03 | N/A |
| Dibenz(a,h)anthracene | 2.4E+00 | carcinogenic effects | 2.4E+00 | 1.1E+04 | 5.3E+04 | N/A |
| Dibromochloromethane | 4.6E+02 | carcinogenic effects | 4.6E+02 | 1.5E+04 | 7.7E+04 | N/A |
| 1,2-dibromo-3-chloropropane | 5.3E+00 | carcinogenic effects | 5.3E+00 | 1.1E+03 | 5.3E+03 | N/A |
| 1,2-Dibromoethane | 1.7E+00 | carcinogenic effects | 1.7E+00 | 2.2E+02 | 1.1E+03 | N/A |
| 1,2-Dichlorobenzene | 6.0E+02 | saturation limit | - | 5.4E+03 | 2.7E+04 | 6.0E+02 |
| 1,3-Dichlorobenzene | 6.0E+02 | saturation limit | - | 2.7E+03 | 1.4E+04 | 6.0E+02 |
| 1,4-Dichlorobenzene | 1.1E+02 | carcinogenic effects | 1.1E+02 | 1.1E+04 | 5.5E+04 | N/A |
| 3,3-Dichlorobenzidine | 3.1E+01 | carcinogenic effects | 3.1E+01 | - | - | N/A |
| Dichlorodiphenyldichloroethane (DDD) | 1.2E+02 | carcinogenic effects | 1.2E+02 | 3.0E+02 | 1.5E+03 | N/A |
| Dichlorodiphenyldichloroethene (DDE) | 8.7E+01 | carcinogenic effects | 8.7E+01 | 3.0E+02 | 1.5E+03 | N/A |
| Dichlorodiphenyltrichloroethane (DDT) | 8.7E+01 | carcinogenic effects | 8.7E+01 | 3.0E+02 | 1.5E+03 | N/A |
| 1,1-Dichloroethane | 2.0E+02 | carcinogenic effects | 2.0E+02 | 3.2E+03 | 1.6E+04 | 1.7E+03 |
| 1,2-Dichloroethane | 2.1E+01 | carcinogenic effects | 2.1E+01 | 5.6E+01 | 2.8E+02 | 1.8E+03 |
| 1,1-Dichloroethene | 8.0E+02 | noncarcinogenic effects | - | 8.0E+02 | 4.0E+03 | 1.5E+03 |
| *cis*-1,2-Dichloroethene | 2.7E+02 | noncarcinogenic effects | - | 2.7E+02 | 1.3E+03 | 1.2E+03 |
| *trans*-1,2-Dichloroethene | 4.2E+02 | noncarcinogenic effects | - | 4.2E+02 | 2.1E+03 | 3.1E+03 |
| 2,4-Dichlorophenol | 2.2E+03 | noncarcinogenic effects | - | 2.2E+03 | 1.1E+04 | N/A |
| 1,2-Dichloropropane | 3.7E+01 | noncarcinogenic effects | 4.3E+01 | 3.7E+01 | 1.9E+02 | 1.1E+03 |
| 1,3-Dichloropropene | 1.6E+01 | carcinogenic effects | 1.6E+01 | 1.0E+02 | 5.2E+02 | 1.4E+03 |
| Dieldrin | 1.6E+00 | carcinogenic effects | 1.6E+00 | 2.6E+01 | 1.3E+02 | N/A |
| Diethyl phthalate | 3.2E+05 | noncarcinogenic effects | - | 3.2E+05 | 1.6E+06 | N/A |
| Dimethyl phthalate | 4.0E+06 | noncarcinogenic effects | - | 4.0E+06 | 2.0E+07 | N/A |
| 2,4-Dimethylphenol | 1.5E+04 | noncarcinogenic effects | - | 1.5E+04 | 7.7E+04 | N/A |
| 2,4-Dinitrophenol | 1.1E+04 | noncarcinogenic effects | - | 1.1E+04 | 5.4E+04 | N/A |
| 2,4-Dinitrotoluene | 5.6E+01 | carcinogenic effects | 5.6E+01 | 1.5E+03 | 7.4E+03 | N/A |
| 1,4-Dioxane | 1.4E+03 | carcinogenic effects | 1.4E+03 | 1.6E+07 | 7.9E+07 | N/A |
| Dioxin (2,3,7,8-TCDD) | 2.3E-04 | carcinogenic effects | 2.3E-04 | - | - | N/A |

# Table K-3. Direct Exposure Soil Screening Levels
## Construction/Trench Worker Exposure Scenario

| Chemical | Final Screening Level (mg/kg) | Basis | Carcinogens (Risk = $10^{-6}$) (mg/kg) | Noncarcinogens HQ = 0.2 (mg/kg) | Noncarcinogens (HQ = 1.0) (mg/kg) | Saturation (mg/kg) |
|---|---|---|---|---|---|---|
| Endosulfan | 3.1E+03 | noncarcinogenic effects | - | 3.1E+03 | 1.6E+04 | N/A |
| Endrin | 1.6E+02 | noncarcinogenic effects | - | 1.6E+02 | 7.8E+02 | N/A |
| Ethylbenzene | 2.1E+02 | carcinogenic effects | 2.1E+02 | 9.9E+03 | 4.9E+04 | 4.0E+02 |
| Fluoranthene | 1.4E+04 | noncarcinogenic effects | - | 1.4E+04 | 7.0E+04 | N/A |
| Fluorene | 1.2E+04 | noncarcinogenic effects | - | 1.2E+04 | 6.2E+04 | N/A |
| Heptachlor | 5.8E+00 | carcinogenic effects | 5.8E+00 | 2.6E+02 | 1.3E+03 | N/A |
| Heptachlor epoxide | 2.9E+00 | carcinogenic effects | 2.9E+00 | 6.8E+00 | 3.4E+01 | N/A |
| Hexachlorobenzene | 1.6E+01 | carcinogenic effects | 1.6E+01 | 4.2E+02 | 2.1E+03 | N/A |
| Hexachlorobutadiene | 1.5E+02 | noncarcinogenic effects | 4.8E+02 | 1.5E+02 | 7.4E+02 | N/A |
| γ-Hexachlorocyclohexane (Lindane) | 1.6E+02 | noncarcinogenic effects | - | 1.6E+02 | 8.0E+02 | N/A |
| Hexachloroethane | 4.0E+02 | noncarcinogenic effects | 5.1E+02 | 4.0E+02 | 2.0E+03 | N/A |
| Indeno(1,2,3-c,d)pyrene | 2.4E+01 | carcinogenic effects | 2.4E+01 | 1.1E+04 | 5.3E+04 | N/A |
| Lead | 7.5E+02 | noncarcinogenic effects | - | 7.5E+02 | 7.5E+02 | N/A |
| Mercury (elemental) | 5.8E+01 | noncarcinogenic effects | - | 5.8E+01 | 2.9E+02 | N/A |
| Methoxychlor | - | - | - | - | - | N/A |
| Methylene chloride | 6.3E+02 | carcinogenic effects | 6.3E+02 | 2.9E+03 | 1.4E+04 | 2.4E+03 |
| Methyl ethyl ketone | 3.4E+04 | saturation limit | - | 1.9E+05 | 9.5E+05 | 3.4E+04 |
| Methyl isobutyl ketone | 1.7E+04 | saturation limit | - | 1.3E+05 | 6.6E+05 | 1.7E+04 |
| Methyl mercury | 4.1E+01 | noncarcinogenic effects | - | 4.1E+01 | 2.0E+02 | N/A |
| 2-Methylnaphthalene | 1.4E+03 | noncarcinogenic effects | - | 1.4E+03 | 7.2E+03 | N/A |
| *tert*-Butyl methyl ether | 2.8E+03 | carcinogenic effects | 2.8E+03 | 4.6E+04 | 2.3E+05 | 2.1E+04 |
| Molybdenum | 3.9E+03 | noncarcinogenic effects | - | 3.9E+03 | 1.9E+04 | N/A |
| Naphthalene | 1.3E+02 | carcinogenic effects | 1.3E+02 | 2.5E+02 | 1.2E+03 | N/A |
| Nickel | 2.6E+02 | noncarcinogenic effects | - | 2.6E+02 | 1.3E+03 | N/A |
| Pentachlorophenol | 9.9E+01 | carcinogenic effects | 9.9E+01 | 7.2E+02 | 3.6E+03 | N/A |
| Perchlorate | 5.4E+02 | noncarcinogenic effects | - | 5.4E+02 | 2.7E+03 | N/A |
| Phenanthrene | 1.1E+04 | noncarcinogenic effects | - | 1.1E+04 | 5.3E+04 | N/A |
| Phenol | 2.3E+05 | noncarcinogenic effects | - | 2.3E+05 | 1.2E+06 | N/A |
| Polychlorinated biphenyls (PCBs) | 6.7E+00 | noncarcinogenic effects | 8.4E+00 | 6.7E+00 | 3.4E+01 | N/A |
| Pyrene | 2.1E+04 | noncarcinogenic effects | - | 2.1E+04 | 1.0E+05 | N/A |
| Selenium | 3.9E+03 | noncarcinogenic effects | - | 3.9E+03 | 1.9E+04 | N/A |
| Silver | 3.9E+03 | noncarcinogenic effects | - | 3.9E+03 | 1.9E+04 | N/A |
| Styrene | 1.5E+03 | saturation limit | - | 2.1E+04 | 1.0E+05 | 1.5E+03 |

## Table K-3. Direct Exposure Soil Screening Levels
## Construction/Trench Worker Exposure Scenario

| Chemical | Final Screening Level (mg/kg) | Basis | Carcinogens (Risk = $10^{-6}$) (mg/kg) | Noncarcinogens HQ = 0.2 (mg/kg) | Noncarcinogens (HQ = 1.0) (mg/kg) | Saturation (mg/kg) |
|---|---|---|---|---|---|---|
| *tert*-Butyl alcohol | 3.2E+05 | saturation limit | - | - | - | 3.2E+05 |
| 1,1,1,2-Tetrachloroethane | 1.9E+02 | carcinogenic effects | 1.9E+02 | 2.3E+04 | 1.2E+05 | 2.0E+03 |
| 1,1,2,2-Tetrachloroethane | 2.4E+01 | carcinogenic effects | 2.4E+01 | 5.9E+03 | 3.0E+04 | 2.0E+03 |
| Tetrachloroethene | 3.0E+01 | carcinogenic effects | 3.0E+01 | 1.8E+03 | 9.2E+03 | 2.3E+02 |
| Thallium | 6.2E+01 | noncarcinogenic effects | - | 6.2E+01 | 3.1E+02 | N/A |
| Toluene | 6.5E+02 | saturation limit | - | 2.6E+03 | 1.3E+04 | 6.5E+02 |
| Toxaphene | 2.2E+01 | carcinogenic effects | 2.2E+01 | - | - | N/A |
| TPH (gasolines) | 4.2E+03 | noncarcinogenic effects | - | 4.2E+03 | 2.1E+04 | 4.5E+03 |
| TPH (middle distillates) | 4.2E+03 | noncarcinogenic effects | - | 4.2E+03 | 2.1E+04 | N/A |
| TPH (residual fuels) | 1.2E+04 | noncarcinogenic effects | - | 1.2E+04 | 5.8E+04 | N/A |
| 1,2,4-Trichlorobenzene | 3.2E+02 | noncarcinogenic effects | 1.1E+04 | 3.2E+02 | 1.6E+03 | N/A |
| 1,1,1-Trichloroethane | 1.2E+03 | saturation limit | - | 1.1E+04 | 5.7E+04 | 1.2E+03 |
| 1,1,2-Trichloroethane | 4.6E+01 | carcinogenic effects | 4.6E+01 | 2.1E+02 | 1.1E+03 | 1.8E+03 |
| Trichloroethene | 1.7E+02 | carcinogenic effects | 1.7E+02 | 2.2E+02 | 1.1E+03 | 1.3E+03 |
| 2,4,5-Trichlorophenol | 1.7E+04 | noncarcinogenic effects | - | 1.7E+04 | 8.5E+04 | N/A |
| 2,4,6-Trichlorophenol | 7.7E+01 | noncarcinogenic effects | 3.4E+03 | 7.7E+01 | 3.9E+02 | N/A |
| Vanadium | 7.7E+02 | noncarcinogenic effects | - | 7.7E+02 | 3.9E+03 | N/A |
| Vinyl chloride | 2.0E+00 | carcinogenic effects | 2.0E+00 | 3.0E+02 | 1.5E+03 | 1.2E+03 |
| Xylenes | 4.2E+02 | saturation limit | - | 1.3E+03 | 6.3E+03 | 4.2E+02 |
| Zinc | 2.3E+05 | noncarcinogenic effects | - | 2.3E+05 | 1.2E+06 | N/A |

Primary source: USEPA Region 9 Preliminary Remediation Goals (PRGs, USEPA 2004), modified as noted below. See text for discussion.

Notes:

See text for equations and assumptions used in models.

Final screening level is lowest of individual screening levels for carcinogenic effects and noncarcinogenic effects (based on HQ=0.2) or screening level for construction/trench workers if lower (see Table K-3). Saturation limit used as upper limit for volatile organic compounds that are liquid at ambient conditions (see text).

Carcinogens: Based on target cancer risk of $10^{-6}$, modified with respct to CalEPA/OEHHA slope factors when available (marked by "*"). Screening levels for PCBs based on updated USEPA slope factors as presented in USEPA Region 9 Preliminary Remediation Goals document (USEPA 2004).

Noncarcinogens: Adjusted to target hazard quotient of 0.2 for use in tables for all chemicals. Screening levels based on hazard quotient of 1.0 provided for reference

Saturation: Theoretical soil saturation level in the absence of free product; calculated for volatile organic compounds that are liquids under ambient conditions (refer to Table J).

TPH:Total Petroleum Hydrocarbons. See text for discussion of different TPH categories.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

October 1, 2002

Subject: Region 9 PRGs Table 2002 Update

From: Stanford J. Smucker, Ph.D.
Regional Toxicologist (SFD-8-B)
Technical Support Team

To: PRGs Table Users

With this cover letter, we announce the update to the Region 9 PRGs table for 2002. The PRGs table contains over 600 preliminary remediation goals (PRGs) for contaminants in soil, air, and tap water. Region 9 PRGs are risk-based concentrations that are intended to assist risk assessors and others in initial screening-level evaluations of environmental measurements.

As their name implies, Region 9 PRGs may also be viewed as preliminary cleanup goals for an individual chemical, but in this context, they are best viewed as dynamic and subject to change because they are generic and based on direct contact exposures which may not address site-specific conditions and/or indirect exposure pathways at sites (See Exhibit 1-1 in "Region 9 PRGs Table Users Guide/Technical Background Document"). Also for planning purposes, these human health based PRGs should always be considered in conjunction with ARAR-based PRGs (e.g. MCLs), ecological benchmarks, and "background" conditions before establishing a final cleanup level for a particular site.

You can find the PRGs 2002 table, InterCalc tables, "Region 9 PRGs Table Users Guide/Technical Background Document", and additional helpful toxicological and risk assessment information at:

**http://www.epa.gov/region09/waste/sfund/prg/**.

We view risk-based PRGs as "evergreen". Ongoing changes to the PRGs reflect continuing improvements in our scientific knowledge base and state-of-the-art approaches to risk assessment. In the new *Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites* (Supplemental SSL Guidance, EPA 2001a), two different soil ingestion rates are assumed for non-construction workers: 100 mg/day is assumed for outdoor workers whereas 50 mg/day is assumed for indoor workers. The default value of 100 mg/day for outdoor workers is also recommended by EPA's Technical Review Workgroup for Lead (TRW), and it reflects increased exposures to soils for outdoor workers relative to their indoor counterparts. For more on this, please see Section 4.1 of the "Region 9 PRGs Table Users Guide/Technical Background Document" or refer to the Supplemental SSL Guidance available at the following website:

http://www.epa.gov/superfund/resources/soil/index.htm

Because the Region 9 PRGs are generic and intended for screening sites early in the investigation process (often before site-specific information is available), we have chosen to use the 100 mg/day soil ingestion (i.e. outdoor worker) assumption to calculate industrial soil PRGs. Please note that previous issues of the Region 9 PRGs table assumed 50 mg/day soil ingestion rate for workers. This change in soil ingestion rates is reflected in a somewhat lower (more stringent) industrial soils PRG for many contaminants. The appropriateness of this assumption for a particular site may be evaluated when additional information becomes available regarding site conditions or site development.

In addition to changes in exposure factor assumptions, several chemicals have new or revised toxicity values that results in changes to the PRG calculations. To facilitate the users review, chemicals with new and revised toxicological criteria are presented in bold in the 2002 table and also listed here for convenience: **acetonitrile, benzyl chloride, boron, bromate, 1,3-butadiene, 1-butanol, butylbenzenes, cacodylic acid, cadmium (California State value), chloroform, chloronitrobenzenes, chrysene (California State value), cobalt, 1,2-dibromo-3-chloropropane (California State value), 1,1-dichloroethylene, diethylene glycol ethers, diethylformamide, dinitrobenzenes, di-n-octyl phthalate, diphenyl sulfone, ethylbenzene, HCH, hexachlorocyclopentadiene, kepone, lead (California State value), MTBE, 2-nitroaniline, carcinogenic PAHs, perchlorate, polychlorinated terphenyls, benzo(k)fluoranthene (California State value), propylbenzene, propylene glycol, quinoline, tetrachloroethylene, tetrahydrofuran, thiocyanate, 1,1,1-trichloroethane, trichloroethylene, 2,4,6-trichlorophenol, 1,2,3-trichloropropane, triphenylphosphine oxide, tris(2-chloroethyl) phosphate, vinyl chloride, and xylene.**

Also in this update to the "Region 9 PRGs Table User's Guide/Technical Background Document", we have added a brief discussion of special case chemicals for which an alternate approach was applied in the derivation of the Region 9 PRGs (Section 2.3). Increasingly, chemical-specific approaches are being used that do not lend themselves to a single PRG model. Special case chemicals that are discussed include: cadmium, chromium 6, lead, manganese, nitrate/nitrite, thallium, and vinyl chloride.

Finally it should be recognized by all that use the PRGs table that not all PRG values in the table are "created equal". For some chemicals, a robust data set exists upon which the toxicological criteria are based whereas for others, there may be relatively few studies that form the basis of the PRG calculation. Also, PRGs for some chemicals are based on withdrawn toxicity values or route-extrapolated values. Withdrawn and route-extrapolated numbers are shown in the table because we still need to deal with these contaminants during the long delays before replacement numbers are ready. Please consult with your toxicologist or agency risk assessor to best address potential uncertainties associated with chemical-specific PRGs, especially if the chemical is a risk driver at your site.

As with any risk-based tool, there exists the potential for misuse. We try to highlight potential problems in Section 3.8. However, it should be noted that the use of PRGs at a particular site becomes the responsibility of the user. It is recommended that the user verify the numbers with an agency toxicologist or risk assessor because the toxicity / exposure information in the table may contain errors or default assumptions that need to be refined based on further evaluation. If you find an error please send me a note via email at smucker.stan@epa.gov.

Key: SFo,i=Cancer Slope Factor oral, inhalation RfDo,i=Reference Dose oral, inhalation I=IRIS p=PPRTV c=California EPA n=NCEA h=HEAST x=Withdrawn r=Route-extrapolation ca=Cancer PRG nc=Noncancer PRG ca* (where: nc PRG < 100X ca PRG) ca** (where nc PRG < 10X ca PRG) +++=Non-Standard Method Applied (See User's Guide) sat=Soil Saturation (See User's Guide) max=Ceiling limit (See User's Guide) DAF=Dilution Attenuation Factor (See User's Guide) CAS=Chemical Abstract Services

| TOXICITY VALUES | | | | | | | | | | | CONTAMINANT | PRELIMINARY REMEDIATION GOALS (PRGs) "Direct Contact Exposure Pathways" | | | | | | | | SOIL SCREENING LEVELS "Migration to Ground Water" | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SFo 1/(mg/kg-d) | | RfDo (mg/kg-d) | | SFi 1/(mg/kg-d) | | RfDi (mg/kg-d) | | V O C | skin abs. soil | CAS No. | | Residential Soil (mg/kg) | | Industrial Soil (mg/kg) | | Ambient Air (ug/m^3) | | Tap Water (ug/l) | | DAF 20 (mg/kg) | DAF 1 (mg/kg) |
| 8.7E-03 | I | 4.0E-03 | I | 8.7E-03 | r | 4.0E-03 | r | | 0.1 | 30560-19-1 | Acephate | 5.6E+01 | ca** | 2.0E+02 | ca* | 7.7E-01 | ca* | 7.7E+00 | ca* | | |
| | | | | 7.7E-03 | I | 2.6E-03 | I | y | | 75-07-0 | Acetaldehyde | 1.1E+01 | ca** | 2.3E+01 | ca** | 8.7E-01 | ca* | 1.7E+00 | ca | | |
| | | 2.0E-02 | I | | | 2.0E-02 | r | | 0.1 | 34256-82-1 | Acetochlor | 1.2E+03 | nc | 1.2E+04 | nc | 7.3E+01 | nc | 7.3E+02 | nc | | |
| | | 9.0E-01 | I | | | 9.0E-01 | r | y | | 67-64-1 | Acetone | 1.4E+04 | nc | 5.4E+04 | nc | 3.3E+03 | nc | 5.5E+03 | nc | 1.6E+01 | 8.0E-01 |
| | | 8.0E-04 | h | | | 8.0E-04 | r | | 0.1 | 75-86-5 | Acetone cyanohydrin | 4.9E+01 | nc | 4.9E+02 | nc | 2.9E+00 | nc | 2.9E+01 | nc | | |
| | | 1.7E-02 | r | | | 1.7E-02 | I | y | | 75-05-8 | Acetonitrile | 4.2E+02 | nc | 1.8E+03 | nc | 6.2E+01 | nc | 1.0E+02 | nc | | |
| | | 5.0E-04 | I | | | 5.7E-06 | I | y | | 107-02-8 | Acrolein | 1.0E-01 | nc | 3.4E-01 | nc | 2.1E-02 | nc | 4.2E-02 | nc | | |
| 4.5E+00 | I | 2.0E-04 | I | 4.5E+00 | I | 2.0E-04 | r | | 0.1 | 79-06-1 | Acrylamide | 1.1E-01 | ca | 3.8E-01 | ca | 1.5E-03 | ca | 1.5E-02 | ca | | |
| | | 5.0E-01 | I | | | 2.9E-04 | I | | 0.1 | 79-10-7 | Acrylic acid | 2.9E+04 | nc | 1.0E+05 | max | 1.0E+00 | nc | 1.8E+04 | nc | | |
| 5.4E-01 | I | 1.0E-03 | h | 2.4E-01 | I | 5.7E-04 | I | y | | 107-13-1 | Acrylonitrile | 2.1E-01 | ca* | 4.9E-01 | ca* | 2.8E-02 | ca* | 3.9E-02 | ca* | | |
| 1.0E+00 | r | | | 1.0E+00 | c | | | y | | | "CAL-Modified PRG" | 5.5E-02 | ca | 1.2E-01 | ca | 6.7E-03 | ca | 1.1E-02 | ca | | |
| 8.1E-02 | h | 1.0E-02 | I | 8.0E-02 | r | 1.0E-02 | r | | 0.1 | 15972-60-8 | Alachlor | 6.0E+00 | ca | 2.1E+01 | ca | 8.4E-02 | ca | 8.4E-01 | ca | | |
| | | 1.5E-01 | I | | | 1.5E-01 | r | | 0.1 | 1596-84-5 | Alar | 9.2E+03 | nc | 9.2E+04 | nc | 5.5E+02 | nc | 5.5E+03 | nc | | |
| | | 1.0E-03 | I | | | 1.0E-03 | r | | 0.1 | 116-06-3 | Aldicarb | 6.1E+01 | nc | 6.2E+02 | nc | 3.7E+00 | nc | 3.6E+01 | nc | | |
| | | 1.0E-03 | I | | | 1.0E-03 | r | | 0.1 | 1646-88-4 | Aldicarb sulfone | 6.1E+01 | nc | 6.2E+02 | nc | 3.7E+00 | nc | 3.6E+01 | nc | | |
| 1.7E+01 | I | 3.0E-05 | I | 1.7E+01 | I | 3.0E-05 | r | | 0.1 | 309-00-2 | Aldrin | 2.9E-02 | ca* | 1.0E-01 | ca | 3.9E-04 | ca | 4.0E-03 | ca | 5.0E-01 | 2.0E-02 |
| | | 2.5E-01 | I | | | 2.5E-01 | r | | 0.1 | 74223-64-6 | Ally | 1.5E+04 | nc | 1.0E+05 | max | 9.1E+02 | nc | 9.1E+03 | nc | | |
| | | 5.0E-03 | I | | | 5.0E-03 | r | | 0.1 | 107-18-6 | Allyl alcohol | 3.1E+02 | nc | 3.1E+03 | nc | 1.8E+01 | nc | 1.8E+02 | nc | | |
| | | 2.9E-04 | r | | | 2.9E-04 | I | | 0.1 | 107-05-1 | Allyl chloride | 1.7E+01 | nc | 1.8E+02 | nc | 1.0E+00 | nc | 1.0E+01 | nc | | |
| | | 1.0E+00 | p | | | 1.4E-03 | p | | | 7429-90-5 | Aluminum | 7.6E+04 | nc | 1.0E+05 | max | 5.1E+00 | nc | 3.6E+04 | nc | | |
| | | 4.0E-04 | I | | | | | | | 20859-73-8 | Aluminum phosphide | 3.1E+01 | nc | 4.1E+02 | nc | | | 1.5E+01 | nc | | |
| | | 3.0E-04 | I | | | 3.0E-04 | r | | 0.1 | 67485-29-4 | Amdro | 1.8E+01 | nc | 1.8E+02 | nc | 1.1E+00 | nc | 1.1E+01 | nc | | |
| | | 9.0E-03 | I | | | 9.0E-03 | r | | 0.1 | 834-12-8 | Ametryn | 5.5E+02 | nc | 5.5E+03 | nc | 3.3E+01 | nc | 3.3E+02 | nc | | |
| | | 2.0E-04 | n | | | 2.0E-04 | r | | 0.1 | 1321-12-6 | Aminodinitrotoluene | 1.2E+01 | nc | 1.2E+02 | nc | 7.3E-01 | nc | 7.3E+00 | nc | | |
| | | 7.0E-02 | h | | | 7.0E-02 | r | | 0.1 | 591-27-5 | m-Aminophenol | 4.3E+03 | nc | 4.3E+04 | nc | 2.6E+02 | nc | 2.6E+03 | nc | | |
| | | 2.0E-05 | h | | | 2.0E-05 | r | | 0.1 | 504-24-5 | 4-Aminopyridine | 1.2E+00 | nc | 1.2E+01 | nc | 7.3E-02 | nc | 7.3E-01 | nc | | |
| | | 2.5E-03 | I | | | 2.5E-03 | r | | 0.1 | 33089-61-1 | Amitraz | 1.5E+02 | nc | 1.5E+03 | nc | 9.1E+00 | nc | 9.1E+01 | nc | | |
| | | | | | | 2.9E-02 | I | | | 7664-41-7 | Ammonia | | | | | 1.0E+02 | nc | | | | |
| | | 2.0E-01 | I | | | | | | 0.1 | 7773-06-0 | Ammonium sulfamate | 1.2E+04 | nc | 1.0E+05 | max | | | 7.3E+03 | nc | | |
| 5.7E-03 | I | 7.0E-03 | p | 5.7E-03 | r | 2.9E-04 | I | | 0.1 | 62-53-3 | Aniline | 8.5E+01 | ca** | 3.0E+02 | ca* | 1.0E+00 | nc | 1.2E+01 | ca* | | |
| | | 4.0E-04 | I | | | | | | | 7440-36-0 | Antimony and compounds | 3.1E+01 | nc | 4.1E+02 | nc | | | 1.5E+01 | nc | 5.0E+00 | 3.0E-01 |
| | | 1.3E-02 | I | | | 1.3E-02 | r | | 0.1 | 74115-24-5 | Apollo | 7.9E+02 | nc | 8.0E+03 | nc | 4.7E+01 | nc | 4.7E+02 | nc | | |
| 2.5E-02 | I | 5.0E-02 | h | 2.5E-02 | I | 5.0E-02 | r | | 0.1 | 140-57-8 | Aramite | 1.9E+01 | ca | 6.9E+01 | ca | 2.7E-01 | ca | 2.7E+00 | ca | | |
| 1.5E+00 | I | 3.0E-04 | I | 1.5E+01 | I | | | | 0.03 | 7440-38-2 | Arsenic | 3.9E-01 | ca* | 1.6E+00 | ca | 4.5E-04 | ca | 4.5E-02 | ca | 2.9E+01 | 1.0E+00 |
| 9.5E+00 | c | | | 1.2E+01 | c | | | | 0.03 | | "CAL-Modified PRG" | 6.2E-02 | ca | 2.5E-01 | ca | 5.6E-04 | ca | 7.1E-03 | ca | | |
| | | | | | | 1.4E-05 | I | | | 7784-42-1 | Arsine (see arsenic for cancer endpoint) | | | | | 5.2E-02 | nc | | | | |
| | | 9.0E-03 | I | | | 9.0E-03 | r | | 0.1 | 76578-14-8 | Assure | 5.5E+02 | nc | 5.5E+03 | nc | 3.3E+01 | nc | 3.3E+02 | nc | | |
| | | 5.0E-02 | I | | | 5.0E-02 | r | | 0.1 | 3337-71-1 | Asulam | 3.1E+03 | nc | 3.1E+04 | nc | 1.8E+02 | nc | 1.8E+03 | nc | | |
| 2.2E-01 | h | 3.5E-02 | I | 2.2E-01 | r | 3.5E-02 | r | | 0.1 | 1912-24-9 | Atrazine | 2.2E+00 | ca | 7.8E+00 | ca | 3.1E-02 | ca | 3.0E-01 | ca | | |
| | | 4.0E-04 | I | | | 4.0E-04 | r | | 0.1 | 71751-41-2 | Avermectin B1 | 2.4E+01 | nc | 2.5E+02 | nc | 1.5E+00 | nc | 1.5E+01 | nc | | |
| 1.1E-01 | I | | | 1.1E-01 | I | | | | 0.1 | 103-33-3 | Azobenzene | 4.4E+00 | ca | 1.6E+01 | ca | 6.2E-02 | ca | 6.1E-01 | ca | | |
| | | 7.0E-02 | I | | | 1.4E-04 | h | | | 7440-39-3 | Barium and compounds | 5.4E+03 | nc | 6.7E+04 | nc | 5.2E-01 | nc | 2.6E+03 | nc | 1.6E+03 | 8.2E+01 |

Key : SFo,I=Cancer Slope Factor oral, Inhalation RfDo,I=Reference Dose oral, Inhalation I=IRIS p=PPRTV c=California EPA n=NCEA h=HEAST x=Withdrawn r=Route-extrapolation ca=Cancer PRG nc= Noncancer PRG ca* (where: nc PRG < 100X ca PRG)
ca** (where nc PRG < 10X ca PRG) ++++=Non-Standard Method Applied (See User's Guide) sat=Soil Saturation (See User's Guide) max=Ceiling limit (See User's Guide) DAF=Dilution Attenuation Factor (See User's Guide) CAS=Chemical Abstract Services

| TOXICITY VALUES | | | | | | | | | | CONTAMINANT | PRELIMINARY REMEDIATION GOALS (PRGs) "Direct Contact Exposure Pathways" | | | | | | | | SOIL SCREENING LEVELS "Migration to Ground Water" | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SFo 1/(mg/kg-d) | | RfDo (mg/kg-d) | | SFi 1/(mg/kg-d) | | RfDi (mg/kg-d) | | V O C | skin. abs. sols | CAS No. | | Residential Soil (mg/kg) | | Industrial Soil (mg/kg) | | Ambient Air (ug/m^3) | | Tap Water (ug/l) | | DAF 20 (mg/kg) | DAF 1 (mg/kg) |
| | | 4.0E-03 | I | | | 4.0E-03 | r | | 0.1 | 114-26-1 | Baygon | 2.4E+02 | nc | 2.5E+03 | nc | 1.5E+01 | nc | 1.5E+02 | nc | | |
| | | 3.0E-02 | I | | | 3.0E-02 | r | | 0.1 | 43121-43-3 | Bayleton | 1.8E+03 | nc | 1.8E+04 | nc | 1.1E+02 | nc | 1.1E+03 | nc | | |
| | | 2.5E-02 | I | | | 2.5E-02 | r | | 0.1 | 68359-37-5 | Baythroid | 1.5E+03 | nc | 1.5E+04 | nc | 9.1E+01 | nc | 9.1E+02 | nc | | |
| | | 3.0E-01 | I | | | 3.0E-01 | r | | 0.1 | 1861-40-1 | Benefin | 1.8E+04 | nc | 1.0E+05 | max | 1.1E+03 | nc | 1.1E+04 | nc | | |
| | | 5.0E-02 | I | | | 5.0E-02 | r | | 0.1 | 17804-35-2 | Benomyl | 3.1E+03 | nc | 3.1E+04 | nc | 1.8E+02 | nc | 1.8E+03 | nc | | |
| | | 3.0E-02 | i | | | 3.0E-02 | r | | 0.1 | 25057-89-0 | Bentazon | 1.8E+03 | nc | 1.8E+04 | nc | 1.1E+02 | nc | 1.1E+03 | nc | | |
| | | 1.0E-01 | I | | | 1.0E-01 | r | | 0.1 | 100-52-7 | Benzaldehyde | 6.1E+03 | nc | 6.2E+04 | nc | 3.7E+02 | nc | 3.6E+03 | nc | | |
| 5.5E-02 | I | 4.0E-03 | I | 2.7E-02 | I | 8.6E-03 | I | y | | 71-43-2 | Benzene | 6.4E-01 | ca* | 1.4E+00 | ca* | 2.5E-01 | ca | 3.5E-01 | ca | 3.0E-02 | 2.0E-03 |
| 2.3E+02 | I | 3.0E-03 | I | 2.3E+02 | I | 3.0E-03 | r | | 0.1 | 92-87-5 | Benzidine | 2.1E-03 | ca | 7.5E-03 | ca | 2.9E-05 | ca | 2.9E-04 | ca | | |
| | | 4.0E+00 | I | | | 4.0E+00 | r | | 0.1 | 65-85-0 | Benzoic acid | 1.0E+05 | max | 1.0E+05 | max | 1.5E+04 | nc | 1.5E+05 | nc | 4.0E+02 | 2.0E+01 |
| 1.3E+01 | I | | | 1.3E+01 | r | | | | 0.1 | 98-07-7 | Benzotrichloride | 3.7E-02 | ca | 1.3E-01 | ca | 5.2E-04 | ca | 5.2E-03 | ca | | |
| | | 3.0E-01 | h | | | 3.0E-01 | r | | 0.1 | 100-51-6 | Benzyl alcohol | 1.8E+04 | nc | 1.0E+05 | max | 1.1E+03 | nc | 1.1E+04 | nc | | |
| 1.7E-01 | I | 2.9E-03 | r | 1.7E-01 | r | 2.9E-03 | n | y | | 100-44-7 | Benzyl chloride | 8.9E-01 | ca* | 2.2E+00 | ca | 4.0E-02 | ca | 6.6E-02 | ca | | |
| | | 2.0E-03 | I | 8.4E+00 | I | 5.7E-06 | I | | | 7440-41-7 | Beryllium and compounds | 1.5E+02 | nc | 1.9E+03 | ca** | 8.0E-04 | ca* | 7.3E+01 | nc | 6.3E+01 | 3.0E+00 |
| | | 1.0E-04 | I | | | 1.0E-04 | r | | 0.1 | 141-66-2 | Bidrin | 6.1E+00 | nc | 6.2E+01 | nc | 3.7E-01 | nc | 3.6E+00 | nc | | |
| | | 1.5E-02 | I | | | 1.5E-02 | r | | 0.1 | 82657-04-3 | Biphenthrin (Talstar) | 9.2E+02 | nc | 9.2E+03 | nc | 5.5E+01 | nc | 5.5E+02 | nc | | |
| | | 5.0E-02 | I | | | 5.0E-02 | r | y | | 92-52-4 | 1,1-Biphenyl | 3.0E+03 | nc | 2.3E+04 | nc | 1.8E+02 | nc | 3.0E+02 | nc | | |
| 1.1E+00 | I | | | 1.1E+00 | I | | | y | | 111-44-4 | Bis(2-chloroethyl)ether | 2.2E-01 | ca | 5.8E-01 | ca | 6.1E-03 | ca | 1.0E-02 | ca | 4.0E-04 | 2.0E-05 |
| 7.0E-02 | x | 4.0E-02 | I | 3.5E-02 | x | 4.0E-02 | r | y | | 108-60-1 | Bis(2-chloroisopropyl)ether | 2.9E+00 | ca | 7.4E+00 | ca | 1.9E-01 | ca | 2.7E-01 | ca | | |
| 2.2E+02 | I | | | 2.2E+02 | I | | | y | | 542-88-1 | Bis(chloromethyl)ether | 1.9E-04 | ca | 4.3E-04 | ca | 3.1E-05 | ca | 5.2E-05 | ca | | |
| 7.0E-02 | x | 4.0E-02 | I | 3.5E-02 | x | 4.0E-02 | r | y | | 108-60-1 | Bis(2-chloro-1-methylethyl)ether | 2.9E+00 | ca | 7.4E+00 | ca | 1.9E-01 | ca | 2.7E-01 | ca | | |
| 1.4E-02 | I | 2.0E-02 | I | 1.4E-02 | r | 2.0E-02 | r | | 0.1 | 117-81-7 | Bis(2-ethylhexyl)phthalate (DEHP) | 3.5E+01 | ca* | 1.2E+02 | ca | 4.8E-01 | ca | 4.8E+00 | ca | | |
| | | 5.0E-02 | I | | | 5.0E-02 | r | | 0.1 | 80-05-7 | Bisphenol A | 3.1E+03 | nc | 3.1E+04 | nc | 1.8E+02 | nc | 1.8E+03 | nc | | |
| | | 2.00E-01 | I | | | 5.7E-03 | h | | | 7440-42-8 | Boron | 1.6E+04 | nc | 1.0E+05 | max | 2.1E+01 | nc | 7.3E+03 | nc | | |
| | | | | | | 2.0E-04 | h | | | 7637-07-2 | Boron trifluoride | | | | | 7.3E-01 | nc | | | | |
| 7.0E-01 | I | 4.0E-03 | I | 7.0E-01 | r | 4.0E-03 | r | | 0.1 | 15541-45-4 | Bromate | 6.9E-01 | ca | 2.5E+00 | ca | 9.6E-03 | ca | 9.6E-02 | ca | | |
| | | 2.0E-02 | p | | | 2.9E-03 | p | y | | 108-86-1 | Bromobenzene | 2.8E+01 | nc | 9.2E+01 | nc | 1.0E+01 | nc | 2.0E+01 | nc | | |
| 6.2E-02 | I | 2.0E-02 | I | 6.2E-02 | r | 2.0E-02 | r | y | | 75-27-4 | Bromodichloromethane | 8.2E-01 | ca | 1.8E+00 | ca | 1.1E-01 | ca | 1.8E-01 | ca | 6.0E-01 | 3.0E-02 |
| 7.9E-03 | I | 2.0E-02 | i | 3.9E-03 | I | 2.0E-02 | r | | 0.1 | 75-25-2 | Bromoform (tribromomethane) | 6.2E+01 | ca* | 2.2E+02 | ca* | 1.7E+00 | ca* | 8.5E+00 | ca* | 8.0E-01 | 4.0E-02 |
| | | 1.4E-03 | I | | | 1.4E-03 | I | y | | 74-83-9 | Bromomethane (Methyl bromide) | 3.9E+00 | nc | 1.3E+01 | nc | 5.2E+00 | nc | 8.7E+00 | nc | 2.0E-01 | 1.0E-02 |
| | | 5.0E-03 | h | | | 5.0E-03 | r | | 0.1 | 2104-96-3 | Bromophos | 3.1E+02 | nc | 3.1E+03 | nc | 1.8E+01 | nc | 1.8E+02 | nc | | |
| | | 2.0E-02 | I | | | 2.0E-02 | r | | 0.1 | 1689-84-5 | Bromoxynil | 1.2E+03 | nc | 1.2E+04 | nc | 7.3E+01 | nc | 7.3E+02 | nc | | |
| | | 2.0E-02 | I | | | 2.0E-02 | r | | 0.1 | 1689-99-2 | Bromoxynil octanoate | 1.2E+03 | nc | 1.2E+04 | nc | 7.3E+01 | nc | 7.3E+02 | nc | | |
| 1.1E-01 | r | 5.7E-04 | r | 1.1E-01 | I | 5.7E-04 | I | y | | 106-99-0 | 1,3-Butadiene | 5.8E-02 | ca* | 1.2E-01 | ca* | 6.1E-02 | ca* | 1.0E-01 | ca* | | |
| 6.0E-01 | r | 5.7E-03 | r | 6.0E-01 | c | 5.7E-03 | c | y | | 106-99-0 | "CAL-Modified PRG" | 1.1E-02 | ca | 2.3E-02 | ca | 1.1E-02 | ca | 1.9E-02 | ca | | |
| | | 1.0E-01 | I | | | 2.6E-03 | n | | 0.1 | 71-36-3 | 1-Butanol | 6.1E+03 | nc | 6.1E+04 | nc | 9.5E+00 | nc | 3.6E+03 | nc | 1.7E+01 | 9.0E-01 |
| | | 5.0E-02 | I | | | 5.0E-02 | r | | 0.1 | 2008-41-5 | Butylate | 3.1E+03 | nc | 3.1E+04 | nc | 1.8E+02 | nc | 1.8E+03 | nc | | |
| | | 4.0E-02 | n | | | 4.0E-02 | r | y | | 104-51-8 | n-Butylbenzene | 2.4E+02 | sat | 2.4E+02 | sat | 1.5E+02 | nc | 2.4E+02 | nc | | |
| | | 4.0E-02 | n | | | 4.0E-02 | r | y | | 135-98-8 | sec-Butylbenzene | 2.2E+02 | sat | 2.2E+02 | sat | 1.5E+02 | nc | 2.4E+02 | nc | | |
| | | 4.0E-02 | n | | | 4.0E-02 | r | y | | 98-06-6 | tert-Butylbenzene | 3.9E+02 | sat | 3.9E+02 | sat | 1.5E+02 | nc | 2.4E+02 | nc | | |
| | | 2.0E-01 | I | | | 2.0E-01 | r | | 0.1 | 85-68-7 | Butyl benzyl phthalate | 1.2E+04 | nc | 1.0E+05 | max | 7.3E+02 | nc | 7.3E+03 | nc | 9.3E+02 | 8.1E+02 |
| | | 1.0E+00 | I | | | 1.0E+00 | r | | 0.1 | 85-70-1 | Butylphthalyl butylglycolate | 6.1E+04 | nc | 1.0E+05 | max | 3.7E+03 | nc | 3.6E+04 | nc | | |

Key: SFo,I=Cancer Slope Factor oral, Inhalation RfDo,I=Reference Dose oral, Inhalation I=IRIS p=PPRTV c=California EPA n=NCEA h=HEAST x=Withdrawn r=Route-extrapolation ca=Cancer PRG nc= Noncancer PRG ca* (where: nc PRG < 100X ca PRG) ca** (where nc PRG < 10X ca PRG) ++++=Non-Standard Method Applied (See User's Guide). sat=Soil Saturation (See User's Guide) max=Ceiling limit (See User's Guide) DAF=Dilution Attenuation Factor (See User's Guide) CAS=Chemical Abstract Services

| TOXICITY VALUES | | | | | | | | | | | CONTAMINANT | PRELIMINARY REMEDIATION GOALS (PRGs) "Direct Contact Exposure Pathways" | | | | | | | | SOIL SCREENING LEVELS "Migration to Ground Water" | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SFo 1/(mg/kg-d) | | RfDo (mg/kg-d) | | SFi 1/(mg/kg-d) | | RfDi (mg/kg-d) | | V O C | skin abs. soils | CAS No. | | Residential Soil (mg/kg) | | Industrial Soil (mg/kg) | | Ambient Air (ug/m^3) | | Tap Water (ug/l) | | DAF 20 (mg/kg) | DAF 1 (mg/kg) |
| | | 5.0E-04 | I | 6.3E+00 | I | | | | 0.001 | 7440-43-9 | Cadmium and compounds | 3.7E+01 | nc | 4.5E+02 | nc | 1.1E-03 | ca | 1.8E+01 | nc | 8.0E+00 | 4.0E-01 |
| | | 5.0E-01 | I | | | 5.0E-01 | r | | 0.1 | 105-60-2 | Caprolactam | 3.1E+04 | nc | 1.0E+05 | max | 1.8E+03 | nc | 1.8E+04 | nc | | |
| 8.6E-03 | h | 2.0E-03 | I | 6.6E-03 | r | 2.0E-03 | r | | 0.1 | 2425-06-1 | Captafol | 5.7E+01 | ca** | 2.0E+02 | ca** | 7.8E-01 | ca** | 7.8E+00 | ca** | | |
| 3.5E-03 | h | 1.3E-01 | I | 3.5E-03 | r | 1.3E-01 | r | | 0.1 | 133-06-2 | Captan | 1.4E+02 | ca* | 4.9E+02 | ca | 1.9E+00 | ca | 1.9E+01 | ca | | |
| | | 1.0E-01 | I | | | 1.1E-01 | r | | 0.1 | 63-25-2 | Carbaryl | 6.1E+03 | nc | 6.2E+04 | nc | 4.0E+02 | nc | 3.6E+03 | nc | | |
| 2.0E-02 | h | | | 2.0E-02 | r | | | | 0.1 | 86-74-8 | Carbazole | 2.4E+01 | ca | 8.6E+01 | ca | 3.4E-01 | ca | 3.4E+00 | ca | 6.0E-01 | 3.0E-02 |
| | | 5.0E-03 | I | | | 5.0E-03 | r | | 0.1 | 1563-66-2 | Carbofuran | 3.1E+02 | nc | 3.1E+03 | nc | 1.8E+01 | nc | 1.8E+02 | nc | | |
| | | 1.0E-01 | I | | | 2.0E-01 | I | y | | 75-15-0 | Carbon disulfide | 3.6E+02 | nc | 7.2E+02 | sat | 7.3E+02 | nc | 1.0E+03 | nc | 3.2E+01 | 2.0E+00 |
| 1.3E-01 | I | 7.0E-04 | I | 5.3E-02 | I | 7.0E-04 | r | y | | 56-23-5 | Carbon tetrachloride | 2.5E-01 | ca** | 5.5E-01 | ca* | 1.3E-01 | ca* | 1.7E-01 | ca* | 7.0E-02 | 3.0E-03 |
| | | 1.0E-02 | I | | | 1.0E-02 | r | | 0.1 | 55285-14-8 | Carbosulfan | 6.1E+02 | nc | 6.2E+03 | nc | 3.7E+01 | nc | 3.6E+02 | nc | | |
| | | 1.0E-01 | I | | | 1.0E-01 | r | | 0.1 | 5234-68-4 | Carboxin | 6.1E+03 | nc | 6.2E+04 | nc | 3.7E+02 | nc | 3.6E+03 | nc | | |
| | | 1.5E-02 | I | | | 1.5E-02 | r | | 0.1 | 133-90-4 | Chloramben | 9.2E+02 | nc | 9.2E+03 | nc | 5.5E+01 | nc | 5.5E+02 | nc | | |
| 4.0E-01 | h | | | 4.0E-01 | r | | | | 0.1 | 118-75-2 | Chloranil | 1.2E+00 | ca | 4.3E+00 | ca | 1.7E-02 | ca | 1.7E-01 | ca | | |
| 3.5E-01 | I | 5.0E-04 | I | 3.5E-01 | I | 2.0E-04 | I | | 0.04 | 12789-03-6 | Chlordane (technical) | 1.6E+00 | ca* | 6.5E+00 | ca* | 1.9E-02 | ca* | 1.9E-01 | ca* | 1.0E+01 | 5.0E-01 |
| | | 2.0E-02 | r | | | 2.0E-02 | r | | 0.1 | 90982-32-4 | Chlorimuron-ethyl | 1.2E+03 | nc | 1.2E+04 | nc | 7.3E+01 | nc | 7.3E+02 | nc | | |
| | | 1.0E-01 | I | | | 5.7E-05 | n | | | 7782-50-5 | Chlorine | | | | | 2.1E-01 | nc | | | | |
| | | 3.0E-02 | I | | | 5.7E-05 | I | | | 10049-04-4 | Chlorine dioxide | | | | | 2.1E-01 | nc | | | | |
| | | 2.0E-03 | h | | | 2.0E-03 | r | | 0.1 | 79-11-8 | Chloroacetic acid | 1.2E+02 | nc | 1.2E+03 | nc | 7.3E+00 | nc | 7.3E+01 | nc | | |
| | | 8.6E-06 | r | | | 8.6E-06 | I | y | | 532-27-4 | 2-Chloroacetophenone | 3.3E-02 | nc | 1.1E-01 | nc | 3.1E-02 | nc | 5.2E-02 | nc | | |
| | | 4.0E-03 | I | | | 4.0E-03 | r | | 0.1 | 106-47-8 | 4-Chloroaniline | 2.4E+02 | nc | 2.5E+03 | nc | 1.5E+01 | nc | 1.5E+02 | nc | 7.0E-01 | 3.0E-02 |
| | | 2.0E-02 | I | | | 1.7E-02 | n | y | | 108-90-7 | Chlorobenzene | 1.5E+02 | nc | 5.3E+02 | nc | 6.2E+01 | nc | 1.1E+02 | nc | 1.0E+00 | 7.0E-02 |
| 2.7E-01 | h | 2.0E-02 | I | 2.7E-01 | h | 2.0E-02 | r | | 0.1 | 510-15-6 | Chlorobenzilate | 1.8E+00 | ca | 6.4E+00 | ca | 2.5E-02 | ca | 2.5E-01 | ca | | |
| | | 2.0E-01 | h | | | 2.0E-01 | r | | 0.1 | 74-11-3 | p-Chlorobenzoic acid | 1.2E+04 | nc | 1.0E+05 | max | 7.3E+02 | nc | 7.3E+03 | nc | | |
| | | 2.0E-02 | h | | | 2.0E-02 | r | | 0.1 | 98-56-6 | 4-Chlorobenzotrifluoride | 1.2E+03 | nc | 1.2E+04 | nc | 7.3E+01 | nc | 7.3E+02 | nc | | |
| | | 2.0E-02 | h | | | 2.0E-03 | h | y | | 126-99-8 | 2-Chloro-1,3-butadiene | 3.6E+00 | nc | 1.2E+01 | nc | 7.3E+00 | nc | 1.4E+01 | nc | | |
| | | 4.0E-01 | h | | | 4.0E-01 | r | y | | 109-69-3 | 1-Chlorobutane | 4.8E+02 | sat | 4.8E+02 | sat | 1.5E+03 | nc | 2.4E+03 | nc | | |
| | | 1.4E+01 | r | | | 1.4E+01 | I | y | | 75-68-3 | 1-Chloro-1,1-difluoroethane (HCFC-142b) | 3.4E+02 | sat | 3.4E+02 | sat | 5.2E+04 | nc | 8.7E+04 | nc | | |
| | | 1.4E+01 | r | | | 1.4E+01 | I | y | | 75-45-6 | Chlorodifluoromethane | 3.4E+02 | sat | 3.4E+02 | sat | 5.1E+04 | nc | 8.5E+04 | nc | | |
| 2.9E-03 | n | 4.0E-01 | n | 2.9E-03 | r | 2.9E+00 | I | y | | 75-00-3 | Chloroethane | 3.0E+00 | ca | 6.5E+00 | ca | 2.3E+00 | ca | 4.6E+00 | ca | | |
| | | 1.0E-02 | I | 8.1E-02 | I | 1.4E-02 | n | y | | 67-66-3 | Chloroform | 2.2E-01 | ca | 4.7E-01 | ca | 8.3E-02 | ca | 1.7E-01 | ca | 6.0E-01 | 3.0E-02 |
| 3.1E-02 | c | | | 1.9E-02 | c | | | y | | | "CAL-Modified PRG" | 9.4E-01 | ca | 2.0E+00 | ca | 3.5E-01 | ca | 5.3E-01 | ca | | |
| | | 2.6E-02 | r | | | 2.6E-02 | I | y | | 74-87-3 | Chloromethane (methyl chloride) | 4.7E+01 | nc | 1.6E+02 | nc | 9.5E+01 | nc | 1.6E+02 | nc | | |
| 5.8E-01 | h | | | 5.8E-01 | r | | | | 0.1 | 95-69-2 | 4-Chloro-2-methylaniline | 8.4E-01 | ca | 3.0E+00 | ca | 1.2E-02 | ca | 1.2E-01 | ca | | |
| 4.6E-01 | h | | | 4.6E-01 | r | | | | 0.1 | 3165-93-3 | 4-Chloro-2-methylaniline hydrochloride | 1.1E+00 | ca | 3.7E+00 | ca | 1.5E-02 | ca | 1.5E-01 | ca | | |
| | | 8.0E-02 | I | | | 8.0E-02 | r | y | | 91-58-7 | beta-Chloronaphthalene | 4.9E+03 | nc | 2.3E+04 | nc | 2.9E+02 | nc | 4.9E+02 | nc | | |
| 9.7E-03 | p | 1.0E-03 | p | 9.7E-03 | r | 2.0E-05 | p | y | | 88-73-3 | o-Chloronitrobenzene | 1.4E+00 | nc** | 4.5E+00 | nc** | 7.3E-02 | nc** | 1.5E-01 | nc** | | |
| 6.7E-03 | p | 1.0E-03 | p | 6.7E-03 | r | 1.7E-04 | p | y | | 100-00-5 | p-Chloronitrobenzene | 1.0E+01 | nc** | 3.7E+01 | nc** | 6.2E-01 | nc** | 1.2E+00 | nc** | | |
| | | 5.0E-03 | I | | | 5.0E-03 | r | y | | 95-57-8 | 2-Chlorophenol | 6.3E+01 | nc | 2.4E+02 | nc | 1.8E+01 | nc | 3.0E+01 | nc | 4.0E+00 | 2.0E-01 |
| | | 2.9E-02 | r | | | 2.9E-02 | h | y | | 75-29-6 | 2-Chloropropane | 1.7E+02 | nc | 5.9E+02 | nc | 1.0E+02 | nc | 1.7E+02 | nc | | |
| 1.1E-02 | h | 1.5E-02 | I | 1.1E-02 | r | 1.5E-02 | r | | 0.1 | 1897-45-6 | Chlorothalonil | 4.4E+01 | ca* | 1.6E+02 | ca* | 6.1E-01 | ca* | 6.1E+00 | ca* | | |
| | | 2.0E-02 | I | | | 2.0E-02 | r | y | | 95-49-8 | o-Chlorotoluene | 1.6E+02 | nc | 5.6E+02 | nc | 7.3E+01 | nc | 1.2E+02 | nc | | |
| | | 2.0E-01 | I | | | 2.0E-01 | r | | 0.1 | 101-21-3 | Chlorpropham | 1.2E+04 | nc | 1.0E+05 | max | 7.3E+02 | nc | 7.3E+03 | nc | | |

Key: SFo,I=Cancer Slope Factor oral, Inhalation RfDo,I=Reference Dose oral, Inhalation I=IRIS p=PPRTV c=California EPA n=NCEA h=HEAST x=Withdrawn r=Route-extrapolation ca=Cancer PRG nc= Noncancer PRG ca* (where: nc PRG < 100X ca PRG) ca** (where nc PRG < 10X ca PRG) ++++=Non-Standard Method Applied (See User's Guide) sat=Soil Saturation (See User's Guide) max=Ceiling limit (See User's Guide) DAF=Dilution Attenuation Factor (See User's Guide) CAS=Chemical Abstract Services

| TOXICITY VALUES | | | | | | | | | | CONTAMINANT | PRELIMINARY REMEDIATION GOALS (PRGs) "Direct Contact Exposure Pathways" | | | | | | | | SOIL SCREENING LEVELS "Migration to Ground Water" | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SFo 1/(mg/kg-d) | | RfDo (mg/kg-d) | | SFI 1/(mg/kg-d) | | RfDI (mg/kg-d) | | V O C | skin abs. soils | CAS No. | Residential Soil (mg/kg) | | Industrial Soil (mg/kg) | | Ambient Air (ug/m^3) | | Tap Water (ug/l) | | DAF 20 (mg/kg) | DAF 1 (mg/kg) |
| | | 3.0E-03 | I | | | 3.0E-03 | r | | 0.1 | 2921-88-2 | Chlorpyrifos | 1.8E+02 | nc | 1.8E+03 | nc | 1.1E+01 | nc | 1.1E+02 | nc | | |
| | | 1.0E-02 | h | | | 1.0E-02 | r | | 0.1 | 5598-13-0 | Chlorpyrifos-methyl | 6.1E+02 | nc | 6.2E+03 | nc | 3.7E+01 | nc | 3.6E+02 | nc | | |
| | | 5.0E-02 | I | | | 5.0E-02 | r | | 0.1 | 64902-72-3 | Chlorsulfuron | 3.1E+03 | nc | 3.1E+04 | nc | 1.8E+02 | nc | 1.8E+03 | nc | | |
| | | 8.0E-04 | h | | | 8.0E-04 | r | | 0.1 | 60238-56-4 | Chlorthiophos | 4.9E+01 | nc | 4.9E+02 | nc | 2.9E+00 | nc | 2.9E+01 | nc | | |
| | | | | 4.2E+01 | I | | | | | | Total Chromium (1:6 ratio Cr VI:Cr III)+++ | 2.1E+02 | ca | 4.5E+02 | ca | 1.6E-04 | ca | | | 3.8E+01 | 2.0E+00 |
| | | 1.5E+00 | I | | | | | | | 16065-83-1 | Chromium III | 1.0E+05 | max | 1.0E+05 | max | | | 5.5E+04 | nc | | |
| | | 3.0E-03 | I | 2.9E+02 | I | 2.2E-08 | I | | | 18540-29-9 | Chromium VI+++ | 3.0E+01 | ca** | 6.4E+01 | ca | 2.3E-05 | ca | 1.1E+02 | nc | 3.8E+01 | 2.0E+00 |
| | | 2.0E-02 | p | 9.8E+00 | p | 5.7E-06 | p | | | 7440-48-4 | Cobalt | 9.0E+02 | ca** | 1.9E+03 | ca* | 6.9E-04 | ca* | 7.3E+02 | nc | | |
| | | | | 2.2E+00 | I | | | | | 8007-45-2 | Coke Oven Emissions | | | | | 3.1E-03 | ca | | | | |
| | | 4.0E-02 | h | | | | | | | 7440-50-8 | Copper and compounds | 3.1E+03 | nc | 4.1E+04 | nc | | | 1.5E+03 | nc | | |
| 1.9E+00 | h | | | 1.9E+00 | r | | | y | | 123-73-9 | Crotonaldehyde | 5.3E-03 | ca | 1.1E-02 | ca | 3.5E-03 | ca | 5.9E-03 | ca | | |
| | | 1.0E-01 | I | | | 1.1E-01 | I | y | | 98-82-8 | Cumene (isopropylbenzene) | 5.7E+02 | nc | 2.0E+03 | nc | 4.0E+02 | nc | 6.6E+02 | nc | | |
| 8.4E-01 | h | 2.0E-03 | h | 8.4E-01 | r | 2.0E-03 | r | | 0.1 | 21725-46-2 | Cyanazine | 5.8E-01 | ca | 2.1E+00 | ca | 8.0E-03 | ca | 8.0E-02 | ca | | |
| | | 2.0E-02 | I | | | | | | 0.1 | 57-12-5 | Cyanide (free) | 1.2E+03 | nc | 1.2E+04 | nc | | | 7.3E+02 | nc | | |
| | | 2.0E-02 | I | | | 8.6E-04 | I | y | | 74-90-8 | Cyanide (hydrogen) | 1.1E+01 | nc | 3.5E+01 | nc | 3.1E+00 | nc | 6.2E+00 | nc | | |
| | | 4.0E-02 | I | | | 4.0E-02 | r | y | | 460-19-5 | Cyanogen | 1.3E+02 | nc | 4.3E+02 | nc | 1.5E+02 | nc | 2.4E+02 | nc | | |
| | | 9.0E-02 | I | | | 9.0E-02 | r | y | | 506-68-3 | Cyanogen bromide | 2.9E+02 | nc | 9.7E+02 | nc | 3.3E+02 | nc | 5.5E+02 | nc | | |
| | | 5.0E-02 | I | | | 5.0E-02 | r | y | | 506-77-4 | Cyanogen chloride | 1.6E+02 | nc | 5.4E+02 | nc | 1.8E+02 | nc | 3.0E+02 | nc | | |
| | | 1.7E+00 | r | | | 1.7E+00 | I | y | | 110-82-7 | Cyclohexane | 1.4E+02 | sat | 1.4E+02 | sat | 6.2E+03 | nc | 1.0E+04 | nc | | |
| | | 5.0E+00 | I | | | 5.0E+00 | r | | 0.1 | 108-94-1 | Cyclohexanone | 1.0E+05 | max | 1.0E+05 | max | 1.8E+04 | nc | 1.8E+05 | nc | | |
| | | 2.0E-01 | I | | | 2.0E-01 | r | | 0.1 | 108-91-8 | Cyclohexylamine | 1.2E+04 | nc | 1.0E+05 | max | 7.3E+02 | nc | 7.3E+03 | nc | | |
| | | 5.0E-03 | I | | | 5.0E-03 | r | | 0.1 | 68085-85-8 | Cyhalothrin/Karate | 3.1E+02 | nc | 3.1E+03 | nc | 1.8E+01 | nc | 1.8E+02 | nc | | |
| | | 1.0E-02 | I | | | 1.0E-02 | r | | 0.1 | 52315-07-8 | Cypermethrin | 6.1E+02 | nc | 6.2E+03 | nc | 3.7E+01 | nc | 3.6E+02 | nc | | |
| | | 7.5E-03 | I | | | 7.5E-03 | r | | 0.1 | 65215-27-8 | Cyromazine | 4.6E+02 | nc | 4.6E+03 | nc | 2.7E+01 | nc | 2.7E+02 | nc | | |
| | | 1.0E-02 | I | | | 1.0E-02 | r | | 0.1 | 1861-32-1 | Dacthal | 6.1E+02 | nc | 6.2E+03 | nc | 3.7E+01 | nc | 3.6E+02 | nc | | |
| | | 3.0E-02 | I | | | 3.0E-02 | r | | 0.1 | 75-99-0 | Dalapon | 1.8E+03 | nc | 1.8E+04 | nc | 1.1E+02 | nc | 1.1E+03 | nc | | |
| | | 2.5E-02 | I | | | 2.5E-02 | r | | 0.1 | 39615-41-8 | Danitol | 1.5E+03 | nc | 1.5E+04 | nc | 9.1E+01 | nc | 9.1E+02 | nc | | |
| 2.4E-01 | I | | | 2.4E-01 | r | | | | 0.03 | 72-54-8 | DDD | 2.4E+00 | ca | 1.0E+01 | ca | 2.8E-02 | ca | 2.8E-01 | ca | 1.6E+01 | 8.0E-01 |
| 3.4E-01 | I | | | 3.4E-01 | r | | | | 0.03 | 72-55-9 | DDE | 1.7E+00 | ca | 7.0E+00 | ca | 2.0E-02 | ca | 2.0E-01 | ca | 5.4E+01 | 3.0E+00 |
| 3.4E-01 | I | 5.0E-04 | I | 3.4E-01 | I | 5.0E-04 | r | | 0.03 | 50-29-3 | DDT | 1.7E+00 | ca* | 7.0E+00 | ca* | 2.0E-02 | ca* | 2.0E-01 | ca* | 3.2E+01 | 2.0E+00 |
| | | 1.0E-02 | I | | | 1.0E-02 | r | | 0.1 | 1163-19-5 | Decabromodiphenyl ether | 6.1E+02 | nc | 6.2E+03 | nc | 3.7E+01 | nc | 3.6E+02 | nc | | |
| | | 4.0E-05 | I | | | 4.0E-05 | r | | 0.1 | 8065-48-3 | Demeton | 2.4E+00 | nc | 2.5E+01 | nc | 1.5E-01 | nc | 1.5E+00 | nc | | |
| 6.1E-02 | h | | | 6.1E-02 | r | | | | 0.1 | 2303-16-4 | Diallate | 8.0E+00 | ca | 2.8E+01 | ca | 1.1E-01 | ca | 1.1E+00 | ca | | |
| | | 9.0E-04 | h | | | 9.0E-04 | r | | 0.1 | 333-41-5 | Diazinon | 5.5E+01 | nc | 5.5E+02 | nc | 3.3E+00 | nc | 3.3E+01 | nc | | |
| | | 2.0E-03 | n | | | 2.0E-03 | r | y | | 132-64-9 | Dibenzofuran | 1.5E+02 | nc | 1.6E+03 | nc | 7.3E+00 | nc | 1.2E+01 | nc | | |
| | | 1.0E-02 | I | | | 1.0E-02 | r | | 0.1 | 106-37-6 | 1,4-Dibromobenzene | 6.1E+02 | nc | 6.2E+03 | nc | 3.7E+01 | nc | 3.6E+02 | nc | | |
| 8.4E-02 | I | 2.0E-02 | I | 8.4E-02 | r | 2.0E-02 | r | y | | 124-48-1 | Dibromochloromethane | 1.1E+00 | ca | 2.6E+00 | ca | 8.0E-02 | ca | 1.3E-01 | ca | 4.0E-01 | 2.0E-02 |
| 1.4E+00 | h | 5.7E-05 | r | 2.4E-03 | x | 5.7E-05 | I | y | | 96-12-8 | 1,2-Dibromo-3-chloropropane (DBCP) | 4.6E-01 | ca** | 2.0E+00 | ca** | 2.1E-01 | nc | 4.8E-02 | ca** | | |
| 7.0E+00 | c | | | 7.0E+00 | c | | | y | | 96-12-8 | "CAL-Modified PRG" | 3.0E-02 | ca | 7.6E-02 | ca | 9.6E-04 | ca | 1.6E-03 | ca | | |
| 2.0E+00 | I | 9.0E-03 | I | 2.0E+00 | I | 2.6E-03 | I | y | | 106-93-4 | 1,2-Dibromoethane (EDB) | 3.2E-02 | ca | 7.3E-02 | ca | 3.4E-03 | ca | 5.6E-03 | ca | | |
| | | 1.0E-01 | I | | | 1.0E-01 | r | | 0.1 | 84-74-2 | Dibutyl phthalate | 6.1E+03 | nc | 6.2E+04 | nc | 3.7E+02 | nc | 3.6E+03 | nc | 2.3E+03 | 2.7E+02 |
| | | 3.0E-02 | I | | | 3.0E-02 | r | | 0.1 | 1918-00-9 | Dicamba | 1.8E+03 | nc | 1.8E+04 | nc | 1.1E+02 | nc | 1.1E+03 | nc | | |

Key: SFo,i=Cancer Slope Factor oral, inhalation RfDo,i=Reference Dose oral, inhalation i=IRIS p=PPRTV c=California EPA n=NCEA h=HEAST x=Withdrawn r=Route-extrapolation ca=Cancer PRG nc= Noncancer PRG ca* (where: nc PRG < 100X ca PRG) ca** (where nc PRG < 10X ca PRG) ++++=Non-Standard Method Applied (See User's Guide) sat=Soil Saturation (See User's Guide) max=Ceiling limit (See User's Guide) DAF=Dilution Attenuation Factor (See User's Guide) CAS=Chemical Abstract Services

| TOXICITY VALUES | | | | | | | | | | CONTAMINANT | PRELIMINARY REMEDIATION GOALS (PRGs) "Direct Contact Exposure Pathways" | | | | | | | | SOIL SCREENING LEVELS "Migration to Ground Water" | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SFo 1/(mg/kg-d) | | RfDo (mg/kg-d) | | SFi 1/(mg/kg-d) | | RfDi (mg/kg-d) | | V O C | skin abs. tots | CAS No. | Residential Soil (mg/kg) | | Industrial Soil (mg/kg) | | Ambient Air (ug/m^3) | | Tap Water (ug/l) | | DAF 20 (mg/kg) | DAF 1 (mg/kg) |
| | | 9.0E-02 | i | | | 5.7E-02 | h | y | | 95-50-1 | 6.0E+02 | sat | 6.0E+02 | sat | 2.1E+02 | nc | 3.7E+02 | nc | 1.7E+01 | 9.0E-01 |
| | | 3.0E-02 | n | | | 3.0E-02 | r | y | | 541-73-1 | 5.3E+02 | nc | 6.0E+02 | sat | 1.1E+02 | nc | 1.8E+02 | nc | | |
| 2.4E-02 | h | 3.0E-02 | n | 2.2E-02 | n | 2.3E-01 | i | y | | 106-46-7 | 3.4E+00 | ca | 7.9E+00 | ca | 3.1E-01 | ca | 5.0E-01 | ca | 2.0E+00 | 1.0E-01 |
| 4.5E-01 | i | | | 4.5E-01 | r | | | | 0.1 | 91-94-1 | 1.1E+00 | ca | 3.8E+00 | ca | 1.5E-02 | ca | 1.5E-01 | ca | 7.0E-03 | 3.0E-04 |
| | | 3.0E-02 | n | | | 3.0E-02 | r | | 0.1 | 90-98-2 | 1.8E+03 | nc | 1.8E+04 | nc | 1.1E+02 | nc | 1.1E+03 | nc | | |
| 9.3E+00 | r | | | 9.3E+00 | h | | | y | | 764-41-0 | 7.9E-03 | ca | 1.8E-02 | ca | 7.2E-04 | ca | 1.2E-03 | ca | | |
| | | 2.0E-01 | i | | | 5.7E-02 | h | y | | 75-71-8 | 9.4E+01 | nc | 3.1E+02 | nc | 2.1E+02 | nc | 3.9E+02 | nc | | |
| | | 1.0E-01 | h | | | 1.4E-01 | h | y | | 75-34-3 | 5.1E+02 | nc | 1.7E+03 | nc | 5.2E+02 | nc | 8.1E+02 | nc | 2.3E+01 | 1.0E+00 |
| 5.7E-03 | c | | | 5.7E-03 | c | | | y | | "CAL-Modified PRG" | 2.8E+00 | ca | 6.0E+00 | ca | 1.2E+00 | ca | 2.0E+00 | ca | | |
| 9.1E-02 | i | 2.0E-02 | n | 9.1E-02 | i | 1.4E-03 | n | y | | 107-06-2 | 2.8E-01 | ca* | 6.0E-01 | ca* | 7.4E-02 | ca* | 1.2E-01 | ca* | 2.0E-02 | 1.0E-03 |
| | | 5.0E-02 | i | | | 5.7E-02 | i | y | | 75-35-4 | 1.2E+02 | nc | 4.1E+02 | nc | 2.1E+02 | nc | 3.4E+02 | nc | 6.0E-02 | 3.0E-03 |
| | | 1.0E-02 | p | | | 1.0E-02 | r | y | | 156-59-2 | 4.3E+01 | nc | 1.5E+02 | nc | 3.7E+01 | nc | 6.1E+01 | nc | 4.0E-01 | 2.0E-02 |
| | | 2.0E-02 | i | | | 2.0E-02 | r | y | | 156-60-5 | 6.9E+01 | nc | 2.3E+02 | nc | 7.3E+01 | nc | 1.2E+02 | nc | 7.0E-01 | 3.0E-02 |
| | | 3.0E-03 | i | | | 3.0E-03 | r | | 0.1 | 120-83-2 | 1.8E+02 | nc | 1.8E+03 | nc | 1.1E+01 | nc | 1.1E+02 | nc | 1.0E+00 | 5.0E-02 |
| | | 8.0E-03 | i | | | 8.0E-03 | r | | 0.1 | 94-82-6 | 4.9E+02 | nc | 4.9E+03 | nc | 2.9E+01 | nc | 2.9E+02 | nc | | |
| | | 1.0E-02 | i | | | 1.0E-02 | r | | 0.05 | 94-75-7 | 6.9E+02 | nc | 7.7E+03 | nc | 3.7E+01 | nc | 3.6E+02 | nc | | |
| 6.8E-02 | h | 1.1E-03 | r | 6.8E-02 | r | 1.1E-03 | i | y | | 78-87-5 | 3.4E-01 | ca* | 7.4E-01 | ca* | 9.9E-02 | ca* | 1.6E-01 | ca* | 3.0E-02 | 1.0E-03 |
| | | 2.0E-02 | p | | | 2.0E-02 | r | y | | 142-28-9 | 1.0E+02 | nc | 3.6E+02 | nc | 7.3E+01 | nc | 1.2E+02 | nc | | |
| 1.0E-01 | i | 3.0E-02 | i | 1.4E-02 | i | 5.7E-03 | i | y | | 542-75-6 | 7.8E-01 | ca | 1.8E+00 | ca | 4.8E-01 | ca | 4.0E-01 | ca | 4.0E-03 | 2.0E-04 |
| | | 3.0E-03 | i | | | 3.0E-03 | r | | 0.1 | 616-23-9 | 1.8E+02 | nc | 1.8E+03 | nc | 1.1E+01 | nc | 1.1E+02 | nc | | |
| 2.9E-01 | i | 5.0E-04 | i | 2.9E-01 | r | 1.4E-04 | i | | 0.1 | 62-73-7 | 1.7E+00 | ca* | 5.9E+00 | ca* | 2.3E-02 | ca* | 2.3E-01 | ca* | | |
| 4.4E-01 | x | | | 4.4E-01 | r | | | | 0.1 | 115-32-2 | 1.1E+00 | ca | 3.9E+00 | ca | 1.5E-02 | ca | 1.5E-01 | ca | | |
| | | 3.0E-02 | h | | | 5.7E-05 | x | y | | 77-73-6 | 5.4E-01 | nc | 1.8E+00 | nc | 2.1E-01 | nc | 4.2E-01 | nc | | |
| 1.6E+01 | i | 5.0E-05 | i | 1.6E+01 | i | 5.0E-05 | r | | 0.1 | 60-57-1 | 3.0E-02 | ca | 1.1E-01 | ca | 4.2E-04 | ca | 4.2E-03 | ca | 4.0E-03 | 2.0E-04 |
| | | 1.0E-02 | p | | | 5.7E-03 | p | | 0.1 | 112-34-5 | 6.1E+02 | nc | 6.2E+03 | nc | 2.1E+01 | nc | 3.6E+02 | nc | | |
| | | 6.0E-02 | p | | | 8.6E-04 | p | | 0.1 | 111-90-0 | 3.7E+03 | nc | 3.7E+04 | nc | 3.1E+00 | nc | 2.2E+03 | nc | | |
| | | 4.0E-04 | p | | | 4.0E-04 | r | | 0.1 | 617-84-5 | 2.4E+01 | nc | 2.5E+02 | nc | 1.5E+00 | nc | 1.5E+01 | nc | | |
| 1.2E-03 | i | 6.0E-01 | i | 1.2E-03 | r | 6.0E-01 | r | | 0.1 | 103-23-1 | 4.1E+02 | ca | 1.4E+03 | ca | 5.6E+00 | ca | 5.6E+01 | ca | | |
| | | 8.0E-01 | i | | | 8.0E-01 | r | | 0.1 | 84-66-2 | 4.9E+04 | nc | 1.0E+05 | max | 2.9E+03 | nc | 2.9E+04 | nc | | |
| 4.7E+03 | h | | | 4.7E+03 | r | | | | 0.1 | 56-53-1 | 1.0E-04 | ca | 3.7E-04 | ca | 1.4E-06 | ca | 1.4E-05 | ca | | |
| | | 8.0E-02 | i | | | 8.0E-02 | r | | 0.1 | 43222-48-6 | 4.9E+03 | nc | 4.9E+04 | nc | 2.9E+02 | nc | 2.9E+03 | nc | | |
| | | 2.0E-02 | i | | | 2.0E-02 | r | | 0.1 | 35367-38-5 | 1.2E+03 | nc | 1.2E+04 | nc | 7.3E+01 | nc | 7.3E+02 | nc | | |
| | | 1.1E+01 | r | | | 1.1E+01 | i | y | | 75-37-6 | | | | | 4.2E+04 | nc | 6.9E+04 | nc | | |
| | | 2.0E-02 | n | | | 2.0E-02 | r | | 0.1 | 28553-12-0 | 1.2E+03 | nc | 1.2E+04 | nc | 7.3E+01 | nc | 7.3E+02 | nc | | |
| | | | | | | 1.1E-01 | p | | | 108-20-3 | | | | | 4.0E+02 | nc | | | | |
| | | 8.0E-02 | i | | | 8.0E-02 | r | | 0.1 | 1445-75-6 | 4.9E+03 | nc | 4.9E+04 | nc | 2.9E+02 | nc | 2.9E+03 | nc | | |
| | | 2.0E-02 | i | | | 2.0E-02 | r | | 0.1 | 55290-64-7 | 1.2E+03 | nc | 1.2E+04 | nc | 7.3E+01 | nc | 7.3E+02 | nc | | |
| | | 2.0E-04 | i | | | 2.0E-04 | r | | 0.1 | 60-51-5 | 1.2E+01 | nc | 1.2E+02 | nc | 7.3E-01 | nc | 7.3E+00 | nc | | |
| 1.4E-02 | h | | | 1.4E-02 | r | | | | 0.1 | 119-90-4 | 3.5E+01 | ca | 1.2E+02 | ca | 4.8E-01 | ca | 4.8E+00 | ca | | |
| | | 5.7E-06 | r | | | 5.7E-06 | x | y | | 124-40-3 | 6.7E-02 | nc | 2.5E-01 | nc | 2.1E-02 | nc | 3.5E-02 | nc | | |
| | | 2.0E-03 | i | | | 2.0E-03 | r | | 0.1 | 121-69-7 | 1.2E+02 | nc | 1.2E+03 | nc | 7.3E+00 | nc | 7.3E+01 | nc | | |
| 7.5E-01 | h | | | 7.5E-01 | r | | | | 0.1 | 95-68-1 | 6.5E-01 | ca | 2.3E+00 | ca | 9.0E-03 | ca | 9.0E-02 | ca | | |

Key : SFo,I=Cancer Slope Factor oral, inhalation RfDo,I=Reference Dose oral, inhalation I=IRIS p=PPRTV c=California EPA n=NCEA h=HEAST x=Withdrawn r=Route-extrapolation ca=Cancer PRG nc= Noncancer PRG ca* (where: nc PRG < 100X ca PRG)
ca** (where nc PRG < 10X ca PRG) +++=Non-Standard Method Applied (See User's Guide) sat=Soil Saturation (See User's Guide) max=Ceiling limit (See User's Guide) DAF=Dilution Attenuation Factor (See User's Guide) CAS=Chemical Abstract Services

| TOXICITY VALUES | | | | | | | | | CONTAMINANT | PRELIMINARY REMEDIATION GOALS (PRGs) "Direct Contact Exposure Pathways" | | | | | | | | SOIL SCREENING LEVELS "Migration to Ground Water" | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SFo 1/(mg/kg-d) | | RfDo (mg/kg-d) | SFi 1/(mg/kg-d) | | RfDi (mg/kg-d) | | V O C | skin abs. soils | CAS No. | Residential Soil (mg/kg) | | Industrial Soil (mg/kg) | Ambient Air (ug/m^3) | | Tap Water (ug/l) | | DAF 20 (mg/kg) | DAF 1 (mg/kg) |
| 5.6E-01 | h | | 5.6E-01 | r | | | | 0.1 | 21436-96-4 | 8.4E-01 | ca | 3.0E+00 ca | 1.2E-02 | ca | 1.2E-01 | ca | | |
| 2.3E+00 | p | | 2.3E+00 | r | | | | 0.1 | 119-93-7 | 2.1E-01 | ca | 7.5E-01 ca | 2.9E-03 | ca | 2.9E-02 | ca | | |
| | | 1.0E-01 | h | | 8.6E-03 | I | | 0.1 | 68-12-2 | N,N-Dimethylformamide | 6.1E+03 | nc 6.2E+04 nc | 3.1E+01 | nc | 3.6E+03 | nc | | |
| | | 1.0E-03 | n | | 1.0E-03 | r | | 0.1 | 122-09-8 | Dimethylphenethylamine | 6.1E+01 | nc 6.2E+02 nc | 3.7E+00 | nc | 3.6E+01 | nc | | |
| | | 2.0E-02 | I | | 2.0E-02 | r | | 0.1 | 105-67-9 | 2,4-Dimethylphenol | 1.2E+03 | nc 1.2E+04 nc | 7.3E+01 | nc | 7.3E+02 | nc | 9.0E+00 | 4.0E-01 |
| | | 6.0E-04 | I | | 6.0E-04 | r | | 0.1 | 576-26-1 | 2,6-Dimethylphenol | 3.7E+01 | nc 3.7E+02 nc | 2.2E+00 | nc | 2.2E+01 | nc | | |
| | | 1.0E-03 | I | | 1.0E-03 | r | | 0.1 | 95-65-8 | 3,4-Dimethylphenol | 6.1E+01 | nc 6.2E+02 nc | 3.7E+00 | nc | 3.6E+01 | nc | | |
| | | 1.0E+01 | h | | 1.0E+01 | r | | 0.1 | 131-11-3 | Dimethyl phthalate | 1.0E+05 | max 1.0E+05 max | 3.7E+04 | nc | 3.6E+05 | nc | | |
| | | 1.0E-01 | I | | 1.0E-01 | r | | 0.1 | 120-61-6 | Dimethyl terephthalate | 6.1E+03 | nc 6.2E+04 nc | 3.7E+02 | nc | 3.6E+03 | nc | | |
| | | 1.0E-04 | p | | 1.0E-04 | r | | 0.1 | 534-52-1 | 4,6-Dinitro-o-cresol | 6.1E+00 | nc 6.2E+01 nc | 3.7E-01 | nc | 3.6E+00 | nc | | |
| | | 2.0E-03 | I | | 2.0E-03 | r | | 0.1 | 131-89-5 | 4,6-Dinitro-o-cyclohexyl phenol | 1.2E+02 | nc 1.2E+03 nc | 7.3E+00 | nc | 7.3E+01 | nc | | |
| | | 1.0E-04 | p | | 1.0E-04 | r | | 0.1 | 528-29-0 | 1,2-Dinitrobenzene | 6.1E+00 | nc 6.2E+01 nc | 3.7E-01 | nc | 3.6E+00 | nc | | |
| | | 1.0E-04 | I | | 1.0E-04 | r | | 0.1 | 99-65-0 | 1,3-Dinitrobenzene | 6.1E+00 | nc 6.2E+01 nc | 3.7E-01 | nc | 3.6E+00 | nc | | |
| | | 1.0E-04 | p | | 1.0E-04 | r | | 0.1 | 100-25-4 | 1,4-Dinitrobenzene | 6.1E+00 | nc 6.2E+01 nc | 3.7E-01 | nc | 3.6E+00 | nc | | |
| | | 2.0E-03 | I | | 2.0E-03 | r | | 0.1 | 51-28-5 | 2,4-Dinitrophenol | 1.2E+02 | nc 1.2E+03 nc | 7.3E+00 | nc | 7.3E+01 | nc | 3.0E-01 | 1.0E-02 |
| 6.8E-01 | I | | 6.8E-01 | r | | | | 0.1 | 25321-14-6 | Dinitrotoluene mixture | 7.2E-01 | ca 2.5E+00 ca | 9.9E-03 | ca | 9.9E-02 | ca | 8.0E-04 | 4.0E-05 |
| | | 2.0E-03 | I | | 2.0E-03 | r | | 0.1 | 121-14-2 | 2,4-Dinitrotoluene (also see Dinitrotoluene mixture) | 1.2E+02 | nc 1.2E+03 nc | 7.3E+00 | nc | 7.3E+01 | nc | 8.0E-04 | 4.0E-05 |
| | | 1.0E-03 | h | | 1.0E-03 | r | | 0.1 | 606-20-2 | 2,6-Dinitrotoluene (also see Dinitrotoluene mixture) | 6.1E+01 | nc 6.2E+02 nc | 3.7E+00 | nc | 3.6E+01 | nc | 7.0E-04 | 3.0E-05 |
| | | 1.0E-03 | I | | 1.0E-03 | r | | 0.1 | 88-85-7 | Dinoseb | 6.1E+01 | nc 6.2E+02 nc | 3.7E+00 | nc | 3.6E+01 | nc | | |
| | | 4.0E-02 | p | | 4.0E-02 | r | | 0.1 | 117-84-0 | di-n-Octyl phthalate | 2.4E+03 | nc 2.5E+04 nc | 1.5E+02 | nc | 1.5E+03 | nc | 1.0E+04 | 1.0E+04 |
| 1.1E-02 | I | | 1.1E-02 | r | | | | 0.1 | 123-91-1 | 1,4-Dioxane | 4.4E+01 | ca 1.6E+02 ca | 6.1E-01 | ca | 6.1E+00 | ca | | |
| 1.5E+05 | h | | 1.5E+05 | h | | | | 0.03 | 1746-01-6 | Dioxin (2,3,7,8-TCDD)+++ | 3.9E-06 | ca 1.6E-05 ca | 4.5E-08 | ca | 4.5E-07 | ca | | |
| | | 3.0E-02 | I | | 3.0E-02 | r | | 0.1 | 957-51-7 | Diphenamid | 1.8E+03 | nc 1.8E+04 nc | 1.1E+02 | nc | 1.1E+03 | nc | | |
| | | 2.5E-02 | I | | 2.5E-02 | r | | 0.1 | 122-39-4 | Diphenylamine | 1.5E+03 | nc 1.5E+04 nc | 9.1E+01 | nc | 9.1E+02 | nc | | |
| | | 3.0E-04 | p | | 3.0E-04 | r | | 0.1 | 74-31-7 | N,N-Diphenyl-1,4 benzenediamine (DPPD) | 1.8E+01 | nc 1.8E+02 nc | 1.1E+00 | nc | 1.1E+01 | nc | | |
| 8.0E-01 | I | | 8.0E-01 | I | | | | 0.1 | 122-66-7 | 1,2-Diphenylhydrazine | 6.1E-01 | ca 2.2E+00 ca | 8.4E-03 | ca | 8.4E-02 | ca | | |
| | | 3.0E-03 | p | | 3.0E-03 | r | | 0.1 | 127-63-9 | Diphenyl sulfone | 1.8E+02 | nc 1.8E+03 nc | 1.1E+01 | nc | 1.1E+02 | nc | | |
| | | 2.2E-03 | I | | 2.2E-03 | r | | 0.1 | 85-00-7 | Diquat | 1.3E+02 | nc 1.4E+03 nc | 8.0E+00 | nc | 8.0E+01 | nc | | |
| 8.6E+00 | h | | 8.6E+00 | r | | | | 0.1 | 1937-37-7 | Direct black 38 | 5.7E-02 | ca 2.0E-01 ca | 7.8E-04 | ca | 7.8E-03 | ca | | |
| 8.1E+00 | h | | 8.1E+00 | r | | | | 0.1 | 2602-46-2 | Direct blue 6 | 6.0E-02 | ca 2.1E-01 ca | 8.3E-04 | ca | 8.3E-03 | ca | | |
| 9.3E+00 | h | | 9.3E+00 | r | | | | 0.1 | 16071-86-6 | Direct brown 95 | 5.2E-02 | ca 1.9E-01 ca | 7.2E-04 | ca | 7.2E-03 | ca | | |
| | | 4.0E-05 | I | | 4.0E-05 | r | | 0.1 | 298-04-4 | Disulfoton | 2.4E+00 | nc 2.5E+01 nc | 1.5E-01 | nc | 1.5E+00 | nc | | |
| | | 1.0E-02 | I | | 1.0E-02 | r | | 0.1 | 505-29-3 | 1,4-Dithiane | 6.1E+02 | nc 6.2E+03 nc | 3.7E+01 | nc | 3.6E+02 | nc | | |
| | | 2.0E-03 | I | | 2.0E-03 | r | | 0.1 | 330-54-1 | Diuron | 1.2E+02 | nc 1.2E+03 nc | 7.3E+00 | nc | 7.3E+01 | nc | | |
| | | 4.0E-03 | I | | 4.0E-03 | r | | 0.1 | 2439-10-3 | Dodine | 2.4E+02 | nc 2.5E+03 nc | 1.5E+01 | nc | 1.5E+02 | nc | | |
| | | 1.0E-01 | n | | | | | | 7429-91-6 | Dysprosium | 7.8E+03 | nc 1.0E+05 max | | | 3.6E+03 | nc | | |
| | | 6.0E-03 | I | | 6.0E-03 | r | | 0.1 | 115-29-7 | Endosulfan | 3.7E+02 | nc 3.7E+03 nc | 2.2E+01 | nc | 2.2E+02 | nc | 1.8E+01 | 9.0E-01 |
| | | 2.0E-02 | I | | 2.0E-02 | r | | 0.1 | 145-73-3 | Endothall | 1.2E+03 | nc 1.2E+04 nc | 7.3E+01 | nc | 7.3E+02 | nc | | |
| | | 3.0E-04 | I | | 3.0E-04 | r | | 0.1 | 72-20-8 | Endrin | 1.8E+01 | nc 1.8E+02 nc | 1.1E+00 | nc | 1.1E+01 | nc | 1.0E+00 | 5.0E-02 |
| 9.9E-03 | I | 2.0E-03 | h | 4.2E-03 | h | 2.9E-04 | I | y | 106-89-8 | Epichlorohydrin | 7.6E+00 | nc 2.6E+01 nc | 1.0E+00 | nc | 2.0E+00 | nc | | |

Key: SFo,I=Cancer Slope Factor oral, inhalation RfDo,I=Reference Dose oral, inhalation I=IRIS p=PPRTV c=California EPA n=NCEA h=HEAST x=Withdrawn r=Route-extrapolation ca=Cancer PRG nc= Noncancer PRG ca* (where: nc PRG < 100X ca PRG) ca** (where nc PRG <.10X ca PRG) +++=Non-Standard Method Applied (See User's Guide) sat=Soil Saturation (See User's Guide) max=Ceiling limit (See User's Guide) DAF=Dilution Attenuation Factor (See User's Guide) CAS=Chemical Abstract Services

| TOXICITY VALUES | | | | | | | | | CONTAMINANT | PRELIMINARY REMEDIATION GOALS (PRGs) "Direct Contact Exposure Pathways" | | | | | | | | SOIL SCREENING LEVELS "Migration to Ground Water" | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SFo 1/(mg/kg-d) | | RfDo (mg/kg-d) | | SFi 1/(mg/kg-d) | | RfDi (mg/kg-d) | V O C | skin abs. abs | CAS No. | Residential Soil (mg/kg) | | Industrial Soil (mg/kg) | | Ambient Air (ug/m^3) | | Tap Water (ug/l) | | DAF 20 (mg/kg) | DAF 1 (mg/kg) |
| 8.00E-02 | r | | | 8.00E-02 | c | | y | | "CAL-Modified PRG" | 1.3E+00 | nc | 2.9E+00 | nc | 8.4E-02 | nc | 1.4E-01 | nc | | |
| | | 5.7E-03 | r | | | 5.7E-03 | I | 0.1 | 105-58-7 | 3.5E+02 | nc | 3.5E+03 | nc | 2.1E+01 | nc | 2.1E+02 | nc | | |
| | | 2.5E-02 | I | | | 2.5E-02 | r | 0.1 | 759-94-4 | 1.5E+03 | nc | 1.5E+04 | nc | 9.1E+01 | nc | 9.1E+02 | nc | | |
| | | 5.0E-03 | I | | | 5.0E-03 | r | 0.1 | 16672-87-0 | 3.1E+02 | nc | 3.1E+03 | nc | 1.8E+01 | nc | 1.8E+02 | nc | | |
| | | 5.0E-04 | I | | | 5.0E-04 | r | 0.1 | 563-12-2 | 3.1E+01 | nc | 3.1E+02 | nc | 1.8E+00 | nc | 1.8E+01 | nc | | |
| | | 4.0E-01 | h | | | 5.7E-02 | I | 0.1 | 110-80-5 | 2.4E+04 | nc | 1.0E+05 | max | 2.1E+02 | nc | 1.5E+04 | nc | | |
| | | 3.0E-01 | h | | | 3.0E-01 | r | 0.1 | 111-15-9 | 1.8E+04 | nc | 1.0E+05 | max | 1.1E+03 | nc | 1.1E+04 | nc | | |
| | | 9.0E-01 | I | | | 9.0E-01 | r | y | 141-78-6 | 1.9E+04 | nc | 3.7E+04 | sat | 3.3E+03 | nc | 5.5E+03 | nc | | |
| 4.8E-02 | h | | | 4.8E-02 | r | | y | | 140-88-5 | 2.1E-01 | ca | 4.5E-01 | ca | 1.4E-01 | ca | 2.3E-01 | ca | | |
| | | 1.0E-01 | I | | | 2.9E-01 | I | y | 100-41-4 | 4.0E+02 | sat | 4.0E+02 | sat | 1.1E+03 | nc | 1.3E+03 | nc | 1.3E+01 | 7.0E-01 |
| 2.9E-03 | n | 4.0E-01 | n | 2.9E-03 | r | 2.9E+00 | I | y | 75-00-3 | 3.0E+00 | ca | 6.5E+00 | ca | 2.3E+00 | ca | 4.6E+00 | ca | | |
| | | 3.0E-01 | h | | | 3.0E-01 | r | 0.1 | 109-78-4 | 1.8E+04 | nc | 1.0E+05 | max | 1.1E+03 | nc | 1.1E+04 | nc | | |
| | | 9.0E-02 | p | | | 9.0E-02 | r | 0.1 | 107-15-3 | 5.5E+03 | nc | 5.5E+04 | nc | 3.3E+02 | nc | 3.3E+03 | nc | | |
| | | 2.0E+00 | I | | | 2.0E+00 | r | 0.1 | 107-21-1 | 1.0E+05 | max | 1.0E+05 | max | 7.3E+03 | nc | 7.3E+04 | nc | | |
| | | 5.0E-01 | I | | | 3.7E+00 | I | 0.1 | 111-76-2 | 3.1E+04 | nc | 1.0E+05 | max | 1.4E+04 | nc | 1.8E+04 | nc | | |
| 1.0E+00 | h | | | 3.5E-01 | h | | y | | 75-21-8 | 1.4E-01 | ca | 3.4E-01 | ca | 1.9E-02 | ca | 2.4E-02 | ca | | |
| 1.1E-01 | h | 8.0E-05 | I | 1.1E-01 | r | 8.0E-05 | r | 0.1 | 96-45-7 | 4.4E+00 | ca** | 1.6E+01 | ca** | 6.1E-02 | ca** | 6.1E-01 | ca** | | |
| | | 2.0E-01 | I | | | 2.0E-01 | r | y | 60-29-7 | 1.8E+03 | sat | 1.8E+03 | sat | 7.3E+02 | nc | 1.2E+03 | nc | | |
| | | 9.0E-02 | h | | | 9.0E-02 | r | y | 97-63-2 | 1.4E+02 | sat | 1.4E+02 | sat | 3.3E+02 | nc | 5.5E+02 | nc | | |
| | | 1.0E-05 | I | | | 1.0E-05 | r | 0.1 | 2104-64-5 | 6.1E-01 | nc | 6.2E+00 | nc | 3.7E-02 | nc | 3.6E-01 | nc | | |
| | | 3.0E+00 | I | | | 3.0E+00 | r | 0.1 | 84-72-0 | 1.0E+05 | max | 1.0E+05 | max | 1.1E+04 | nc | 1.1E+05 | nc | | |
| | | 8.0E-03 | I | | | 8.0E-03 | r | 0.1 | 101200-48-0 | 4.9E+02 | nc | 4.9E+03 | nc | 2.9E+01 | nc | 2.9E+02 | nc | | |
| | | 2.5E-04 | I | | | 2.5E-04 | r | 0.1 | 22224-92-6 | 1.5E+01 | nc | 1.5E+02 | nc | 9.1E-01 | nc | 9.1E+00 | nc | | |
| | | 1.3E-02 | I | | | 1.3E-02 | r | 0.1 | 2164-17-2 | 7.9E+02 | nc | 8.0E+03 | nc | 4.7E+01 | nc | 4.7E+02 | nc | | |
| | | 6.0E-02 | I | | | | | 0.1 | 16984-48-8 | 3.7E+03 | nc | 3.7E+04 | nc | | | 2.2E+03 | nc | | |
| | | 8.0E-02 | I | | | 8.0E-02 | r | 0.1 | 59756-60-4 | 4.9E+03 | nc | 4.9E+04 | nc | 2.9E+02 | nc | 2.9E+03 | nc | | |
| | | 2.0E-02 | I | | | 2.0E-02 | r | 0.1 | 56425-91-3 | 1.2E+03 | nc | 1.2E+04 | nc | 7.3E+01 | nc | 7.3E+02 | nc | | |
| | | 6.0E-02 | I | | | 6.0E-02 | r | 0.1 | 66332-96-5 | 3.7E+03 | nc | 3.7E+04 | nc | 2.2E+02 | nc | 2.2E+03 | nc | | |
| | | 1.0E-02 | I | | | 1.0E-02 | r | 0.1 | 69409-94-5 | 6.1E+02 | nc | 6.2E+03 | nc | 3.7E+01 | nc | 3.6E+02 | nc | | |
| 3.5E-03 | I | 1.0E-01 | I | 3.5E-03 | r | 1.0E-01 | r | 0.1 | 133-07-3 | 1.4E+02 | ca* | 4.9E+02 | ca | 1.9E+00 | ca | 1.9E+01 | ca | | |
| 1.9E-01 | I | | | 1.9E-01 | r | | | 0.1 | 72178-02-0 | 2.6E+00 | ca | 9.1E+00 | ca | 3.5E-02 | ca | 3.5E-01 | ca | | |
| | | 2.0E-03 | I | | | 2.0E-03 | r | 0.1 | 944-22-9 | 1.2E+02 | nc | 1.2E+03 | nc | 7.3E+00 | nc | 7.3E+01 | nc | | |
| | | 1.5E-01 | I | 4.6E-02 | I | | | 0.1 | 50-00-0 | 9.2E+03 | nc | 1.0E+05 | nc | 1.5E-01 | ca | 5.5E+03 | nc | | |
| | | 2.0E+00 | h | | | 8.6E-04 | p | 0.1 | 64-18-6 | 1.0E+05 | max | 1.0E+05 | max | 3.1E+00 | nc | 7.3E+04 | nc | | |
| | | 3.0E+00 | I | | | 3.0E+00 | r | 0.1 | 39148-24-8 | 1.0E+05 | max | 1.0E+05 | max | 1.1E+04 | nc | 1.1E+05 | nc | | |
| | | 3.0E+01 | I | | | 8.6E+00 | h | y | 76-13-1 | 5.6E+03 | sat | 5.6E+03 | sat | 3.1E+04 | nc | 5.9E+04 | nc | | |
| | | 1.0E-03 | I | | | 1.0E-03 | r | y | 110-00-9 | 2.5E+00 | nc | 8.5E+00 | nc | 3.7E+00 | nc | 6.1E+00 | nc | | |
| 3.8E+00 | h | | | 3.8E+00 | r | | | 0.1 | 67-45-8 | 1.3E-01 | ca | 4.5E-01 | ca | 1.8E-03 | ca | 1.8E-02 | ca | | |
| | | 3.0E-03 | I | | | 1.4E-02 | h | 0.1 | 98-01-1 | 1.8E+02 | nc | 1.8E+03 | nc | 5.2E+01 | nc | 1.1E+02 | nc | | |
| 5.0E+01 | h | | | 5.0E+01 | r | | | 0.1 | 531-82-8 | 9.7E-03 | ca | 3.4E-02 | ca | 1.3E-04 | ca | 1.3E-03 | ca | | |
| 3.0E-02 | I | | | 3.0E-02 | r | | | 0.1 | 60568-05-0 | 1.6E+01 | ca | 5.7E+01 | ca | 2.2E-01 | ca | 2.2E+00 | ca | | |
| | | 4.0E-04 | I | | | 4.0E-04 | r | 0.1 | 77182-82-2 | 2.4E+01 | nc | 2.5E+02 | nc | 1.5E+00 | nc | 1.5E+01 | nc | | |

Key: SFo,I=Cancer Slope Factor oral, inhalation RfDo,I=Reference Dose oral, inhalation I=IRIS p=PPRTV c=California EPA n=NCEA h=HEAST x=Withdrawn r=Route-extrapolation ca=Cancer PRG nc= Noncancer PRG ca* (where: nc PRG < 100X ca PRG) ca** (where nc PRG < 10X ca PRG) +++=Non-Standard Method Applied (See User's Guide) sat=Soil Saturation (See User's Guide) max=Ceiling limit (See User's Guide) DAF=Dilution Attenuation Factor (See User's Guide) CAS=Chemical Abstract Services

| TOXICITY VALUES | | | | | | | | | | CONTAMINANT | PRELIMINARY REMEDIATION GOALS (PRGs) "Direct Contact Exposure Pathways" | | | | | | | | SOIL SCREENING LEVELS "Migration to Ground Water" | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SFo 1/(mg/kg-d) | | RfDo (mg/kg-d) | | SFi 1/(mg/kg-d) | | RfDi (mg/kg-d) | | V O C | skin abs. factor | CAS No. | | Residential Soil (mg/kg) | | Industrial Soil (mg/kg) | | Ambient Air (ug/m^3) | | Tap Water (ug/l) | | DAF 20 (mg/kg) | DAF 1 (mg/kg) |
| | | 4.0E-04 | I | | | 2.9E-04 | h | | 0.1 | 765-34-4 | Glycidaldehyde | 2.4E+01 | nc | 2.5E+02 | nc | 1.0E+00 | nc | 1.5E+01 | nc | | |
| | | 1.0E-01 | I | | | 1.0E-01 | r | | 0.1 | 1071-83-6 | Glyphosate | 6.1E+03 | nc | 6.2E+04 | nc | 3.7E+02 | nc | 3.6E+03 | nc | | |
| | | 5.0E-05 | I | | | 5.0E-05 | r | | 0.1 | 69808-40-2 | Haloxyfop-methyl | 3.1E+00 | nc | 3.1E+01 | nc | 1.8E-01 | nc | 1.8E+00 | nc | | |
| | | 1.3E-02 | I | | | 1.3E-02 | r | | 0.1 | 79277-27-3 | Harmony | 7.9E+02 | nc | 8.0E+03 | nc | 4.7E+01 | nc | 4.7E+02 | nc | | |
| 4.5E+00 | I | 5.0E-04 | I | 4.6E+00 | I | 5.0E-04 | r | | 0.1 | 76-44-8 | Heptachlor | 1.1E-01 | ca | 3.8E-01 | ca | 1.5E-03 | ca | 1.5E-02 | ca | 2.3E+01 | 1.0E+00 |
| 9.1E+00 | I | 1.3E-05 | I | 9.1E+00 | I | 1.3E-05 | r | | 0.1 | 1024-57-3 | Heptachlor epoxide | 5.3E-02 | ca* | 1.9E-01 | ca* | 7.4E-04 | ca* | 7.4E-03 | ca* | 7.0E-01 | 3.0E-02 |
| | | 2.0E-03 | I | | | 2.0E-03 | r | | 0.1 | 87-82-1 | Hexabromobenzene | 1.2E+02 | nc | 1.2E+03 | nc | 7.3E+00 | nc | 7.3E+01 | nc | | |
| 1.6E+00 | I | 8.0E-04 | I | 1.6E+00 | I | 8.0E-04 | r | | 0.1 | 118-74-1 | Hexachlorobenzene | 3.0E-01 | ca | 1.1E+00 | ca | 4.2E-03 | ca | 4.2E-02 | ca | 2.0E+00 | 1.0E-01 |
| 7.8E-02 | I | 3.0E-04 | n | 7.8E-02 | I | 3.0E-04 | r | | 0.1 | 87-68-3 | Hexachlorobutadiene | 6.2E+00 | ca** | 2.2E+01 | ca** | 8.6E-02 | ca* | 8.6E-01 | ca* | 2.0E+00 | 1.0E-01 |
| 6.3E+00 | I | 5.0E-04 | n | 6.3E+00 | I | 5.0E-04 | r | | 0.04 | 319-84-6 | HCH (alpha) | 9.0E-02 | ca | 3.6E-01 | ca | 1.1E-03 | ca | 1.1E-02 | ca | 5.0E-04 | 3.0E-05 |
| 1.8E+00 | I | 2.0E-04 | n | 1.8E+00 | I | 2.0E-04 | r | | 0.04 | 319-85-7 | HCH (beta) | 3.2E-01 | ca | 1.3E+00 | ca | 3.7E-03 | ca | 3.7E-02 | ca | 3.0E-03 | 1.0E-04 |
| 1.3E+00 | h | 3.0E-04 | I | 1.3E+00 | r | 3.0E-04 | r | | 0.04 | 58-89-9 | HCH (gamma) Lindane | 4.4E-01 | ca* | 1.7E+00 | ca | 5.2E-03 | ca | 5.2E-02 | ca | 9.0E-03 | 5.0E-04 |
| 1.8E+00 | I | | | 1.8E+00 | I | | | | 0.04 | 608-73-1 | HCH-technical | 3.2E-01 | ca | 1.3E+00 | ca | 3.8E-03 | ca | 3.7E-02 | ca | 3.0E-03 | 1.0E-04 |
| | | 6.0E-03 | I | | | 5.7E-05 | I | | 0.1 | 77-47-4 | Hexachlorocyclopentadiene | 3.7E+02 | nc | 3.7E+03 | nc | 2.1E-01 | nc | 2.2E+02 | nc | 4.0E+02 | 2.0E+01 |
| 1.4E-02 | I | 1.0E-03 | I | 1.4E-02 | I | 1.0E-03 | r | | 0.1 | 67-72-1 | Hexachloroethane | 3.5E+01 | ca** | 1.2E+02 | ca** | 4.8E-01 | ca** | 4.8E+00 | ca** | 5.0E-01 | 2.0E-02 |
| | | 3.0E-04 | I | | | 3.0E-04 | r | | 0.1 | 70-30-4 | Hexachlorophene | 1.8E+01 | nc | 1.8E+02 | nc | 1.1E+00 | nc | 1.1E+01 | nc | | |
| 1.1E-01 | I | 3.0E-03 | I | 1.1E-01 | r | 3.0E-03 | r | | 0.1 | 121-82-4 | Hexahydro-1,3,5-trinitro-1,3,5-triazine | 4.4E+00 | ca* | 1.6E+01 | ca | 6.1E-02 | ca | 6.1E-01 | ca | | |
| | | 2.9E-06 | r | | | 2.9E-06 | I | | 0.1 | 822-06-0 | 1,6-Hexamethylene diisocyanate | 1.7E-01 | nc | 1.8E+00 | nc | 1.0E-02 | nc | 1.0E-01 | nc | | |
| | | 1.1E+01 | p | | | 5.7E-02 | I | y | | 110-54-3 | n-Hexane | 1.1E+02 | sat | 1.1E+02 | sat | 2.1E+02 | nc | 4.2E+02 | nc | | |
| | | 3.3E-02 | I | | | 3.3E-02 | r | | 0.1 | 51235-04-2 | Hexazinone | 2.0E+03 | nc | 2.0E+04 | nc | 1.2E+02 | nc | 1.2E+03 | nc | | |
| | | 5.0E-02 | I | | | 5.0E-02 | r | | 0.1 | 2691-41-0 | HMX | 3.1E+03 | nc | 3.1E+04 | nc | 1.8E+02 | nc | 1.8E+03 | nc | | |
| 3.0E+00 | I | | | 1.7E+01 | I | | | | 0.1 | 302-01-2 | Hydrazine, hydrazine sulfate | 1.6E-01 | ca | 5.7E-01 | ca | 3.9E-04 | ca | 2.2E-02 | ca | | |
| 3.0E+00 | n | | | 1.7E+01 | n | | | | 0.1 | 60-34-4 | Hydrazine, monomethyl | 1.6E-01 | ca | 5.7E-01 | ca | 4.0E-04 | ca | 2.2E-02 | ca | | |
| 3.0E+00 | n | | | 1.7E+01 | n | | | | 0.1 | 57-14-7 | Hydrazine, dimethyl | 1.6E-01 | ca | 5.7E-01 | ca | 4.0E-04 | ca | 2.2E-02 | ca | | |
| | | | | | | 5.7E-03 | I | | | 7647-01-0 | Hydrogen chloride | | | | | 2.1E+01 | nc | | | | |
| | | 2.0E-02 | I | | | 8.6E-04 | I | y | | 74-90-8 | Hydrogen cyanide | 1.1E+01 | nc | 3.5E+01 | nc | 3.1E+00 | nc | 6.2E+00 | nc | | |
| | | 3.0E-03 | I | | | 2.9E-04 | I | | | 7783-06-4 | Hydrogen sulfide | | | | | 1.0E+00 | nc | 1.1E+02 | nc | | |
| 5.6E-02 | p | 4.0E-02 | p | 5.6E-02 | r | 4.0E-02 | r | | 0.1 | 123-31-9 | p-Hydroquinone | 8.7E+00 | ca | 3.1E+01 | ca | 1.2E-01 | ca | 1.2E+00 | ca | | |
| | | 1.3E-02 | I | | | 1.3E-02 | r | | 0.1 | 35554-44-0 | Imazalil | 7.9E+02 | nc | 8.0E+03 | nc | 4.7E+01 | nc | 4.7E+02 | nc | | |
| | | 2.5E-01 | I | | | 2.5E-01 | r | | 0.1 | 81335-37-7 | Imazaquin | 1.5E+04 | nc | 1.0E+05 | max | 9.1E+02 | nc | 9.1E+03 | nc | | |
| | | 4.0E-02 | I | | | 4.0E-02 | r | | 0.1 | 36734-19-7 | Iprodione | 2.4E+03 | nc | 2.5E+04 | nc | 1.5E+02 | nc | 1.5E+03 | nc | | |
| | | 3.0E-01 | n | | | | | | | 7439-89-6 | Iron | 2.3E+04 | nc | 1.0E+05 | max | | | 1.1E+04 | nc | | |
| | | 3.0E-01 | I | | | 3.0E-01 | r | y | | 78-83-1 | Isobutanol | 1.3E+04 | nc | 4.0E+04 | sat | 1.1E+03 | nc | 1.8E+03 | nc | | |
| 9.5E-04 | I | 2.0E-01 | I | 9.5E-04 | r | 2.0E-01 | r | | 0.1 | 78-59-1 | Isophorone | 5.1E+02 | ca* | 5.1E+02 | ca* | 7.1E+00 | ca | 7.1E+01 | ca | 5.0E-01 | 3.0E-02 |
| | | 1.5E-02 | I | | | 1.5E-02 | r | | 0.1 | 33820-53-0 | Isopropalin | 9.2E+02 | nc | 9.2E+03 | nc | 5.5E+01 | nc | 5.5E+02 | nc | | |
| | | 1.0E-01 | I | | | 1.1E-01 | r | | 0.1 | 1832-54-8 | Isopropyl methyl phosphonic acid | 6.1E+03 | nc | 6.2E+04 | nc | 4.0E+02 | nc | 3.6E+03 | nc | | |
| | | 5.0E-02 | I | | | 5.0E-02 | r | | 0.1 | 82558-50-7 | Isoxaben | 3.1E+03 | nc | 3.1E+04 | nc | 1.8E+02 | nc | 1.8E+03 | nc | | |
| 8.0E+00 | p | 2.0E-04 | p | 8.0E+00 | r | 2.0E-04 | r | | 0.1 | 143-50-0 | Kepone | 6.1E-02 | ca | 2.2E-01 | ca | 8.4E-04 | ca | 8.4E-03 | ca | | |
| | | 2.0E-03 | I | | | 2.0E-03 | r | | 0.1 | 77501-63-4 | Lactofen | 1.2E+02 | nc | 1.2E+03 | nc | 7.3E+00 | nc | 7.3E+01 | nc | | |
| www.epa.gov/hubcfund/programs/leadfsubk.htm | | | | | | | | | | 7439-92-1 | Lead+++ | 4.0E+02 | nc | 8.0E+02 | nc | | | | | | |
| www.dtsc.ca.gov/ScienceTechnology/ledspread.html | | | | | | | | | | | "CAL-Modified PRG"+++ | 1.5E+02 | nc | | | | | | | | |
| | | 1.0E-07 | I | | | | | | 0.1 | 78-00-2 | Lead (tetraethyl) | 6.1E-03 | nc | 6.2E-02 | nc | | | 3.6E-03 | nc | | |

Key : SFo,I=Cancer Slope Factor oral, inhalation RfDo,I=Reference Dose oral, inhalation I=IRIS p=PPRTV c=California EPA n=NCEA h=HEAST x=Withdrawn r=Route-extrapolation ca=Cancer PRG nc= Noncancer PRG ca* (where: nc PRG < 100X ca PRG) ca** (where nc PRG < 10X ca PRG) ++++=Non-Standard Method Applied (See User's Guide) sat=Soil Saturation (See User's Guide) max=Ceiling limit (See User's Guide) DAF=Dilution Attenuation Factor (See User's Guide) CAS=Chemical Abstract Services

| TOXICITY VALUES | | | | | | | | | CONTAMINANT | PRELIMINARY REMEDIATION GOALS (PRGs) "Direct Contact Exposure Pathways" | | | | | | | | SOIL SCREENING LEVELS "Migration to Ground Water" | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SFo 1/(mg/kg-d) | | RfDo (mg/kg-d) | SFi 1/(mg/kg-d) | | RfDi (mg/kg-d) | V O C | skin abs. soils | CAS No. | | Residential Soil (mg/kg) | | Industrial Soil (mg/kg) | | Ambient Air (ug/m^3) | | Tap Water (ug/l) | | DAF 20 (mg/kg) | DAF 1 (mg/kg) |
| | | 2.0E-03 | i | | 2.0E-03 | r | 0.1 | 330-55-2 | Linuron | 1.2E+02 | nc | 1.2E+03 | nc | 7.3E+00 | nc | 7.3E+01 | nc | | |
| | | 2.0E-02 | x | | | | | 7439-93-2 | Lithium | 1.6E+03 | nc | 2.0E+04 | nc | | | 7.3E+02 | nc | | |
| | | 2.0E-01 | i | | 2.0E-01 | r | 0.1 | 83055-99-6 | Londax | 1.2E+04 | nc | 1.0E+05 | max | 7.3E+02 | nc | 7.3E+03 | nc | | |
| | | 2.0E-02 | i | | 2.0E-02 | r | 0.1 | 121-75-5 | Malathion | 1.2E+03 | nc | 1.2E+04 | nc | 7.3E+01 | nc | 7.3E+02 | nc | | |
| | | 1.0E-01 | i | | 1.0E-01 | r | 0.1 | 108-31-6 | Maleic anhydride | 6.1E+03 | nc | 6.2E+04 | nc | 3.7E+02 | nc | 3.6E+03 | nc | | |
| | | 5.0E-01 | i | | 5.0E-01 | r | y | 123-33-1 | Maleic hydrazide | 1.7E+03 | nc | 2.4E+03 | sat | 1.8E+03 | nc | 3.0E+03 | nc | | |
| | | 1.0E-04 | p | | 1.0E-04 | r | 0.1 | 109-77-3 | Malononitrile | 6.1E+00 | nc | 6.2E+01 | nc | 3.7E-01 | nc | 3.6E+00 | nc | | |
| | | 3.0E-02 | h | | 3.0E-02 | r | 0.1 | 8018-01-7 | Mancozeb | 1.8E+03 | nc | 1.8E+04 | nc | 1.1E+02 | nc | 1.1E+03 | nc | | |
| 6.0E-02 | o | 5.0E-03 | i | 6.0E-02 | r | 5.0E-03 | r | 0.1 | 12427-38-2 | Maneb | 8.1E+00 | ca* | 2.9E+01 | ca | 1.1E-01 | ca | 1.1E+00 | ca | | |
| | | 2.4E-02 | i | | 1.4E-05 | i | | 7439-96-5 | Manganese and compounds+++ | 1.8E+03 | nc | 1.9E+04 | nc | 5.1E-02 | nc | 8.8E+02 | nc | | |
| | | 9.0E-05 | h | | 9.0E-05 | r | 0.1 | 950-10-7 | Mephosfolan | 5.5E+00 | nc | 5.5E+01 | nc | 3.3E-01 | nc | 3.3E+00 | nc | | |
| | | 3.0E-02 | i | | 3.0E-02 | r | 0.1 | 24307-26-4 | Mepiquat chloride | 1.8E+03 | nc | 1.8E+04 | nc | 1.1E+02 | nc | 1.1E+03 | nc | | |
| 2.9E-02 | h | 1.0E-01 | n | 2.9E-02 | r | 1.0E-01 | r | 0.1 | 149-30-4 | 2-Mercaptobenzothiazole | 1.7E+01 | ca | 5.9E+01 | ca | 2.3E-01 | ca | 2.3E+00 | ca | | |
| | | 3.0E-04 | i | | | | | 7487-94-7 | Mercury and compounds | 2.3E+01 | nc | 3.1E+02 | nc | | | 1.1E+01 | nc | | |
| | | | | | 8.6E-05 | i | | 7439-97-6 | Mercury (elemental) | | | | | 3.1E-01 | nc | | | | |
| | | 1.0E-04 | i | | | | 0.1 | 22967-92-6 | Mercury (methyl) | 6.1E+00 | nc | 6.2E+01 | nc | | | 3.6E+00 | nc | | |
| | | 3.0E-05 | i | | 3.0E-05 | r | 0.1 | 150-50-5 | Merphos | 1.8E+00 | nc | 1.8E+01 | nc | 1.1E-01 | nc | 1.1E+00 | nc | | |
| | | 3.0E-05 | i | | 3.0E-05 | r | 0.1 | 78-48-8 | Merphos oxide | 1.8E+00 | nc | 1.8E+01 | nc | 1.1E-01 | nc | 1.1E+00 | nc | | |
| | | 6.0E-02 | i | | 6.0E-02 | r | 0.1 | 57837-19-1 | Metalaxyl | 3.7E+03 | nc | 3.7E+04 | nc | 2.2E+02 | nc | 2.2E+03 | nc | | |
| | | 1.0E-04 | i | | 2.0E-04 | h | y | 126-98-7 | Methacrylonitrile | 2.1E+00 | nc | 8.4E+00 | nc | 7.3E-01 | nc | 1.0E+00 | nc | | |
| | | 5.0E-05 | i | | 5.0E-05 | r | 0.1 | 10265-92-6 | Methamidophos | 3.1E+00 | nc | 3.1E+01 | nc | 1.8E-01 | nc | 1.8E+00 | nc | | |
| | | 5.0E-01 | i | | 5.0E-01 | r | 0.1 | 67-56-1 | Methanol | 3.1E+04 | nc | 1.0E+05 | max | 1.8E+03 | nc | 1.8E+04 | nc | | |
| | | 1.0E-03 | i | | 1.0E-03 | r | 0.1 | 950-37-8 | Methidathion | 6.1E+01 | nc | 6.2E+02 | nc | 3.7E+00 | nc | 3.6E+01 | nc | | |
| | | 2.5E-02 | i | | 2.5E-02 | r | y | 16752-77-5 | Methomyl | 4.4E+01 | nc | 1.5E+02 | nc | 9.1E+01 | nc | 1.5E+02 | nc | | |
| | | 5.0E-03 | i | | 5.0E-03 | r | 0.1 | 72-43-5 | Methoxychlor | 3.1E+02 | nc | 3.1E+03 | nc | 1.8E+01 | nc | 1.8E+02 | nc | 1.6E+02 | 8.0E+00 |
| | | 1.0E-03 | h | | 5.7E-03 | i | 0.1 | 109-86-4 | 2-Methoxyethanol | 6.1E+01 | nc | 6.2E+02 | nc | 2.1E+01 | nc | 3.6E+01 | nc | | |
| | | 2.0E-03 | h | | 2.0E-03 | r | 0.1 | 110-49-6 | 2-Methoxyethanol acetate | 1.2E+02 | nc | 1.2E+03 | nc | 7.3E+00 | nc | 7.3E+01 | nc | | |
| 4.5E-02 | h | | | 4.6E-02 | r | | 0.1 | 99-59-2 | 2-Methoxy-5-nitroaniline | 1.1E+01 | ca | 3.7E+01 | ca | 1.5E-01 | ca | 1.5E+00 | ca | | |
| | | 1.0E+00 | h | | 1.0E+00 | r | y | 79-20-9 | Methyl acetate | 2.2E+04 | nc | 9.2E+04 | nc | 3.7E+03 | nc | 6.1E+03 | nc | | |
| | | 3.0E-02 | h | | 3.0E-02 | r | y | 96-33-3 | Methyl acrylate | 7.0E+01 | nc | 2.3E+02 | nc | 1.1E+02 | nc | 1.8E+02 | nc | | |
| 2.4E-01 | h | | | 2.4E-01 | r | | 0.1 | 95-53-4 | 2-Methylaniline (o-toluidine) | 2.0E+00 | ca | 7.2E+00 | ca | 2.8E-02 | ca | 2.8E-01 | ca | | |
| 1.8E-01 | h | | | 1.8E-01 | r | | 0.1 | 636-21-5 | 2-Methylaniline hydrochloride | 2.7E+00 | ca | 9.6E+00 | ca | 3.7E-02 | ca | 3.7E-01 | ca | | |
| | | 5.0E-04 | i | | 5.0E-04 | r | 0.1 | 94-74-6 | 2-Methyl-4-chlorophenoxyacetic acid | 3.1E+01 | nc | 3.1E+02 | nc | 1.8E+00 | nc | 1.8E+01 | nc | | |
| | | 1.0E-02 | i | | 1.0E-02 | r | 0.1 | 94-81-5 | 4-(2-Methyl-4-chlorophenoxy) butyric acid | 6.1E+02 | nc | 6.2E+03 | nc | 3.7E+01 | nc | 3.6E+02 | nc | | |
| | | 1.0E-03 | i | | 1.0E-03 | r | 0.1 | 93-65-2 | 2-(2-Methyl-4-chlorophenoxy) propionic acid | 6.1E+01 | nc | 6.2E+02 | nc | 3.7E+00 | nc | 3.6E+01 | nc | | |
| | | 1.0E-03 | i | | 1.0E-03 | r | 0.1 | 15484-77-8 | 2-(2-Methyl-1,4-chlorophenoxy) propionic acid | 6.1E+01 | nc | 6.2E+02 | nc | 3.7E+00 | nc | 3.6E+01 | nc | | |
| | | 8.6E-01 | r | | 8.6E-01 | h | y | 108-87-2 | Methylcyclohexane | 2.6E+03 | nc | 8.7E+03 | nc | 3.1E+03 | nc | 5.2E+03 | nc | | |
| 2.5E-01 | h | | | 2.5E-01 | r | | 0.1 | 101-77-9 | 4,4'-Methylenebisbenzeneamine | 1.9E+00 | ca | 6.9E+00 | ca | 2.7E-02 | ca | 2.7E-01 | ca | | |
| 1.3E-01 | h | 7.0E-04 | h | 1.3E-01 | h | 7.0E-04 | r | 0.1 | 101-14-4 | 4,4'-Methylene bis(2-chloroaniline) | 3.7E+00 | ca* | 1.3E+01 | ca* | 5.2E-02 | ca* | 5.2E-01 | ca* | |
| 4.6E-02 | i | | | 4.6E-02 | r | | | 0.1 | 101-61-1 | 4,4'-Methylene bis(N,N'-dimethyl)aniline | 1.1E+01 | ca | 3.7E+01 | ca | 1.5E-01 | ca | 1.5E+00 | ca | | |
| | | 1.0E-02 | h | | 1.0E-02 | r | y | | 74-95-3 | Methylene bromide | 6.7E+01 | nc | 2.3E+02 | nc | 3.7E+01 | nc | 6.1E+01 | nc | | |
| 7.5E-03 | i | 6.0E-02 | i | 1.6E-03 | i | 8.6E-01 | h | y | 75-09-2 | Methylene chloride | 9.1E+00 | ca | 2.1E+01 | ca | 4.1E+00 | ca | 4.3E+00 | ca | 2.0E-02 | 1.0E-03 |

Key : SFo,I=Cancer Slope Factor oral, Inhalation RfDo,I=Reference Dose oral, Inhalation I=IRIS p=PPRTV c=California EPA n=NCEA h=HEAST x=Withdrawn r=Route-extrapolation ca=Cancer PRG nc= Noncancer PRG ca* (where: nc PRG < 100X ca PRG)
ca** (where nc PRG < 10X ca PRG) ++++=Non-Standard Method Applied (See User's Guide) sat=Soil Saturation (See User's Guide) max=Ceiling limit (See User's Guide) DAF=Dilution Attenuation Factor (See User's Guide) CAS=Chemical Abstract Services

| TOXICITY VALUES | | | | | | | | | CONTAMINANT | PRELIMINARY REMEDIATION GOALS (PRGs) "Direct Contact Exposure Pathways" | | | | | | | | SOIL SCREENING LEVELS "Migration to Ground Water" | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SFo 1/(mg/kg-d) | | RfDo (mg/kg-d) | | SFi 1/(mg/kg-d) | | RfDi (mg/kg-d) | | V O C | skin abs. soils | CAS No. | | Residential Soil (mg/kg) | | Industrial Soil (mg/kg) | | Ambient Air (ug/m^3) | | Tap Water (ug/l) | | DAF 20 (mg/kg) | DAF 1 (mg/kg) |
| | | 1.7E-04 | r | | | 1.7E-04 | I | | 0.1 | 101-68-8 | 4,4'-Methylene diphenyl diisocyanate | 1.0E+01 | nc | 1.0E+02 | nc | 6.2E-01 | nc | 6.2E+00 | nc | | |
| | | 6.0E-01 | I | | | 1.4E+00 | I | y | | 78-93-3 | Methyl ethyl ketone (2-Butanone) | 2.2E+04 | nc | 1.1E+05 | nc | 5.1E+03 | nc | 7.0E+03 | nc | | |
| | | 6.0E-02 | h | | | 8.6E-01 | I | y | | 108-10-1 | Methyl isobutyl ketone | 5.3E+03 | nc | 4.7E+04 | nc | 3.1E+03 | nc | 2.0E+03 | nc | | |
| | | 5.7E-04 | r | | | 5.7E-04 | n | | 0.1 | 74-93-1 | Methyl Mercaptan | 3.5E+01 | nc | 3.5E+02 | nc | 2.1E+00 | nc | 2.1E+01 | nc | | |
| | | 1.4E+00 | I | | | 2.0E-01 | I | y | | 80-62-6 | Methyl methacrylate | 2.2E+03 | nc | 2.7E+03 | sat | 7.3E+02 | nc | 1.4E+03 | nc | | |
| 3.3E-02 | h | | | 3.3E-02 | r | | | | 0.1 | 99-65-8 | 2-Methyl-5-nitroaniline | 1.5E+01 | ca | 5.2E+01 | ca | 2.0E-01 | ca | 2.0E+00 | ca | | |
| | | 2.5E-04 | I | | | 2.5E-04 | r | | 0.1 | 298-00-0 | Methyl parathion | 1.5E+01 | nc | 1.5E+02 | nc | 9.1E-01 | nc | 9.1E+00 | nc | | |
| | | 5.0E-02 | I | | | 5.0E-02 | r | | 0.1 | 95-48-7 | 2-Methylphenol | 3.1E+03 | nc | 3.1E+04 | nc | 1.8E+02 | nc | 1.8E+03 | nc | 1.5E+01 | 8.0E-01 |
| | | 5.0E-02 | I | | | 5.0E-02 | r | | 0.1 | 108-39-4 | 3-Methylphenol | 3.1E+03 | nc | 3.1E+04 | nc | 1.8E+02 | nc | 1.8E+03 | nc | | |
| | | 5.0E-03 | h | | | 5.0E-03 | r | | 0.1 | 106-44-5 | 4-Methylphenol | 3.1E+02 | nc | 3.1E+03 | nc | 1.8E+01 | nc | 1.8E+02 | nc | | |
| | | 2.0E-02 | p | | | 2.0E-02 | r | | 0.1 | 993-13-6 | Methyl phosphonic acid | 1.2E+03 | nc | 1.2E+04 | nc | 7.3E+01 | nc | 7.3E+02 | nc | | |
| | | 6.0E-03 | h | | | 1.1E-02 | h | y | | 25013-15-4 | Methyl styrene (mixture) | 1.3E+02 | nc | 5.4E+02 | nc | 4.2E+01 | nc | 6.0E+01 | nc | | |
| | | 7.0E-02 | h | | | 7.0E-02 | r | y | | 98-83-9 | Methyl styrene (alpha) | 6.8E+02 | sat | 6.8E+02 | sat | 2.6E+02 | nc | 4.3E+02 | nc | | |
| 1.8E-03 | c | 8.6E-01 | r | 9.1E-04 | c | 8.6E-01 | I | y | | 1634-04-4 | Methyl tertbutyl ether (MTBE) | 3.2E+01 | ca | 7.0E+01 | ca | 7.4E+00 | ca | 1.1E+01 | ca | | |
| | | 1.5E-01 | I | | | 1.5E-01 | r | | 0.1 | 51218-45-2 | Metolacior (Dual) | 9.2E+03 | nc | 9.2E+04 | nc | 5.5E+02 | nc | 5.5E+03 | nc | | |
| | | 2.5E-02 | I | | | 2.5E-02 | r | | 0.1 | 21087-64-9 | Metribuzin. | 1.5E+03 | nc | 1.5E+04 | nc | 9.1E+01 | nc | 9.1E+02 | nc | | |
| 1.6E+00 | x | 2.0E-04 | I | 1.6E+00 | r | 2.0E-04 | r | | 0.1 | 2385-85-5 | Mirex | 2.7E-01 | ca* | 9.6E-01 | ca | 3.7E-03 | ca | 3.7E-02 | ca | | |
| | | 2.0E-03 | I | | | 2.0E-03 | r | | 0.1 | 2212-67-1 | Molinate | 1.2E+02 | nc | 1.2E+03 | nc | 7.3E+00 | nc | 7.3E+01 | nc | | |
| | | 5.0E-03 | I | | | | | | | 7439-98-7 | Molybdenum | 3.9E+02 | nc | 5.1E+03 | nc | | | 1.8E+02 | nc | | |
| | | 1.0E-01 | I | | | 1.0E-01 | r | | 0.1 | 10599-90-3 | Monochloramine | 6.1E+03 | nc | 6.2E+04 | nc | 3.7E+02 | nc | 3.6E+03 | nc | | |
| | | 2.0E-03 | I | | | 2.0E-03 | r | | 0.1 | 300-76-5 | Naled | 1.2E+02 | nc | 1.2E+03 | nc | 7.3E+00 | nc | 7.3E+01 | nc | | |
| | | 1.0E-01 | I | | | 1.0E-01 | r | | 0.1 | 15299-99-7 | Napropamide | 6.1E+03 | nc | 6.2E+04 | nc | 3.7E+02 | nc | 3.6E+03 | nc | | |
| | | 2.0E-02 | I | | | | | | | 7440-02-0 | Nickel (soluble salts) | 1.6E+03 | nc | 2.0E+04 | nc | | | 7.3E+02 | nc | 1.3E+02 | 7.0E+00 |
| | | | | 8.4E-01 | I | | | | | | Nickel refinery dust | | | | | 8.0E-03 | ca | | | | |
| | | | | 1.7E+00 | I | | | | | 12035-72-2 | Nickel subsulfide | | | 1.1E+04 | ca | 4.0E-03 | ca | | | | |
| Tap Water PRG Based on Infant NOAEL (see IRIS) | | | | | | | | | | 14797-55-8 | Nitrate+++ | | | | | | | 1.0E+04 | nc | | |
| Tap Water PRG Based on Infant NOAEL (see IRIS) | | | | | | | | | | 14797-65-0 | Nitrite+++ | | | | | | | 1.0E+03 | nc | | |
| | | 3.0E-03 | p | | | 3.0E-05 | p | | 0.1 | 88-74-4 | 2-Nitroaniline | 1.8E+02 | nc | 1.8E+03 | nc | 1.1E-01 | nc | 1.1E+02 | nc | | |
| 2.1E-02 | p | 3.0E-04 | p | 2.1E-02 | r | 3.0E-04 | p | | 0.1 | 99-09-2 | 3-Nitroaniline | 1.8E+01 | nc | 8.2E+01 | ca** | 3.2E-01 | ca** | 3.2E+00 | ca** | | |
| 2.1E-02 | p | 3.0E-03 | p | 2.1E-02 | r | 1.0E-03 | p | | 0.1 | 100-01-6 | 4-Nitroaniline | 2.3E+01 | ca** | 8.2E+01 | ca* | 3.2E-01 | ca* | 3.2E+00 | ca* | | |
| | | 5.0E-04 | I | | | 5.7E-04 | h | y | | 98-95-3 | Nitrobenzene | 2.0E+01 | nc | 1.0E+02 | nc | 2.1E+00 | nc | 3.4E+00 | nc | 1.0E-01 | 7.0E-03 |
| | | 7.0E-02 | h | | | 7.0E-02 | r | | 0.1 | 67-20-9 | Nitrofurantoin | 4.3E+03 | nc | 4.3E+04 | nc | 2.6E+02 | nc | 2.6E+03 | nc | | |
| 1.5E+00 | h | | | 1.5E+00 | r | | | | 0.1 | 59-87-0 | Nitrofurazone | 3.2E-01 | ca | 1.1E+00 | ca | 4.5E-03 | ca | 4.5E-02 | ca | | |
| 1.4E-02 | h | | | 1.4E-02 | r | | | | 0.1 | 55-63-0 | Nitroglycerin | 3.5E+01 | ca | 1.2E+02 | ca | 4.8E-01 | ca | 4.8E+00 | ca | | |
| | | 1.0E-01 | I | | | 1.0E-01 | r | | 0.1 | 556-88-7 | Nitroguanidine | 6.1E+03 | nc | 6.2E+04 | nc | 3.7E+02 | nc | 3.6E+03 | nc | | |
| 9.4E+00 | r | 5.7E-03 | r | 9.4E+00 | h | 5.7E-03 | I | y | | 79-46-9 | 2-Nitropropane | | | | | 7.2E-04 | ca | 1.2E-03 | ca | | |
| 5.4E+00 | I | | | 5.8E+00 | I | | | y | | 924-16-3 | N-Nitrosodi-n-butylamine | 2.4E-02 | ca | 5.8E-02 | ca | 1.2E-03 | ca | 2.0E-03 | ca | | |
| 2.8E+00 | I | | | 2.8E+00 | r | | | | 0.1 | 1116-54-7 | N-Nitrosodiethanolamine | 1.7E-01 | ca | 6.2E-01 | ca | 2.4E-03 | ca | 2.4E-02 | ca | | |
| 1.5E+02 | I | | | 1.5E+02 | I | | | | 0.1 | 55-18-5 | N-Nitrosodiethylamine | 3.2E-03 | ca | 1.1E-02 | ca | 4.5E-05 | ca | 4.5E-04 | ca | | |
| 5.1E+01 | I | 8.0E-06 | p | 4.9E+01 | I | 8.0E-06 | r | | 0.1 | 62-75-9 | N-Nitrosodimethylamine | 9.5E-03 | ca* | 3.4E-02 | ca | 1.4E-04 | ca | 1.3E-03 | ca | | |
| 4.9E-03 | I | 2.0E-02 | p | 4.9E-03 | r | 2.0E-02 | r | | 0.1 | 86-30-6 | N-Nitrosodiphenylamine | 9.9E+01 | ca* | 3.5E+02 | ca* | 1.4E+00 | ca* | 1.4E+01 | ca* | 1.0E+00 | 6.0E-02 |
| 7.0E+00 | I | | | 7.0E+00 | r | | | | 0.1 | 621-64-7 | N-Nitroso di-n-propylamine | 6.9E-02 | ca | 2.5E-01 | ca | 9.6E-04 | ca | 9.6E-03 | ca | 5.0E-05 | 2.0E-06 |

Key: SFo,I=Cancer Slope Factor oral, inhalation RfDo,I=Reference Dose oral, inhalation i=IRIS p=PPRTV c=California EPA n=NCEA h=HEAST x=Withdrawn r=Route-extrapolation ca=Cancer PRG nc= Noncancer PRG ca* (where: nc PRG < 100X ca PRG) ca** (where nc PRG < 10X ca PRG) +++=Non-Standard Method Applied (See User's Guide) sat=Soil Saturation (See User's Guide) max=Ceiling limit (See User's Guide) DAF=Dilution Attenuation Factor (See User's Guide) CAS=Chemical Abstract Services

| TOXICITY VALUES | | | | | | | | | CONTAMINANT | PRELIMINARY REMEDIATION GOALS (PRGs) "Direct Contact Exposure Pathways" | | | | | | | | SOIL SCREENING LEVELS "Migration to Ground Water" | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SFo 1/(mg/kg-d) | | RfDo (mg/kg-d) | | SFi 1/(mg/kg-d) | | RfDi (mg/kg-d) | V O C | skin abs. soil | CAS No. | Residential Soil (mg/kg) | | Industrial Soil (mg/kg) | | Ambient Air (ug/m^3) | | Tap Water (ug/l) | | DAF 20 (mg/kg) | DAF 1 (mg/kg) |
| 2.2E+01 | I | | | 2.2E+01 | r | | | 0.1 | 10595-95-6 | N-Nitroso-N-methylethylamine | 2.2E-02 | ca | 7.8E-02 | ca | 3.1E-04 | ca | 3.1E-03 | ca | | |
| 2.1E+00 | I | | | 2.1E+00 | I | | | 0.1 | 930-55-2 | N-Nitrosopyrrolidine | 2.3E-01 | ca | 8.2E-01 | ca | 3.1E-03 | ca | 3.2E-02 | ca | | |
| | | 2.0E-02 | p | | | 2.0E-02 | r | y | 99-08-1 | m-Nitrotoluene | 7.3E+02 | nc | 1.0E+03 | sat | 7.3E+01 | nc | 1.2E+02 | nc | | |
| 2.3E-01 | p | 1.0E-02 | h | 2.3E-01 | r | 1.0E-02 | r | y | 88-72-2 | o-Nitrotoluene | 8.8E-01 | ca | 2.2E+00 | ca | 2.9E-02 | ca | 4.9E-02 | ca | | |
| 1.7E-02 | p | 1.0E-02 | p | 1.7E-02 | r | 1.0E-02 | r | y | 99-99-0 | p-Nitrotoluene | 1.2E+01 | ca* | 3.0E+01 | ca* | 4.0E-01 | ca* | 6.6E-01 | ca* | | |
| | | 4.0E-02 | I | | | 4.0E-02 | r | 0.1 | 27314-13-2 | Norflurazon | 2.4E+03 | nc | 2.5E+04 | nc | 1.5E+02 | nc | 1.5E+03 | nc | | |
| | | 7.0E-04 | I | | | 7.0E-04 | r | 0.1 | 85509-19-9 | NuStar | 4.3E+01 | nc | 4.3E+02 | nc | 2.6E+00 | nc | 2.6E+01 | nc | | |
| | | 3.0E-03 | I | | | 3.0E-03 | r | 0.1 | 32536-52-0 | Octabromodiphenyl ether | 1.8E+02 | nc | 1.8E+03 | nc | 1.1E+01 | nc | 1.1E+02 | nc | | |
| | | 2.0E-03 | h | | | 2.0E-03 | r | 0.1 | 152-16-9 | Octamethylpyrophosphoramide | 1.2E+02 | nc | 1.2E+03 | nc | 7.3E+00 | nc | 7.3E+01 | nc | | |
| | | 5.0E-02 | I | | | 5.0E-02 | r | 0.1 | 19044-88-3 | Oryzalin | 3.1E+03 | nc | 3.1E+04 | nc | 1.8E+02 | nc | 1.8E+03 | nc | | |
| | | 5.0E-03 | I | | | 5.0E-03 | r | 0.1 | 19666-30-9 | Oxadiazon | 3.1E+02 | nc | 3.1E+03 | nc | 1.8E+01 | nc | 1.8E+02 | nc | | |
| | | 2.5E-02 | I | | | 2.5E-02 | r | 0.1 | 23135-22-0 | Oxamyl | 1.5E+03 | nc | 1.5E+04 | nc | 9.1E+01 | nc | 9.1E+02 | nc | | |
| | | 3.0E-03 | I | | | 3.0E-03 | r | 0.1 | 42874-03-3 | Oxyfluorfen | 1.8E+02 | nc | 1.8E+03 | nc | 1.1E+01 | nc | 1.1E+02 | nc | | |
| | | 1.3E-02 | I | | | 1.3E-02 | r | 0.1 | 76738-62-0 | Paclobutrazol | 7.9E+02 | nc | 8.0E+03 | nc | 4.7E+01 | nc | 4.7E+02 | nc | | |
| | | 4.5E-03 | I | | | 4.5E-03 | r | 0.1 | 4685-14-7 | Paraquat | 2.7E+02 | nc | 2.8E+03 | nc | 1.6E+01 | nc | 1.6E+02 | nc | | |
| | | 6.0E-03 | h | | | 6.0E-03 | r | 0.1 | 56-38-2 | Parathion | 3.7E+02 | nc | 3.7E+03 | nc | 2.2E+01 | nc | 2.2E+02 | nc | | |
| | | 5.0E-02 | h | | | 5.0E-02 | r | 0.1 | 1114-71-2 | Pebulate | 3.1E+03 | nc | 3.1E+04 | nc | 1.8E+02 | nc | 1.8E+03 | nc | | |
| | | 4.0E-02 | I | | | 4.0E-02 | r | 0.1 | 40487-42-1 | Pendimethalin | 2.4E+03 | nc | 2.5E+04 | nc | 1.5E+02 | nc | 1.5E+03 | nc | | |
| 2.3E-02 | h | | | 2.3E-02 | r | | | 0.1 | 87-84-3 | Pentabromo-6-chloro cyclohexane | 2.1E+01 | ca | 7.5E+01 | ca | 2.9E-01 | ca | 2.9E+00 | ca | | |
| | | 2.0E-03 | I | | | 2.0E-03 | r | 0.1 | 32534-81-9 | Pentabromodiphenyl ether | 1.2E+02 | nc | 1.2E+03 | nc | 7.3E+00 | nc | 7.3E+01 | nc | | |
| | | 8.0E-04 | i | | | 8.0E-04 | r | 0.1 | 608-93-5 | Pentachlorobenzene | 4.9E+01 | nc | 4.9E+02 | nc | 2.9E+00 | nc | 2.9E+01 | nc | | |
| 2.6E-01 | h | 3.0E-03 | I | 2.6E-01 | r | 3.0E-03 | r | 0.1 | 82-68-8 | Pentachloronitrobenzene | 1.9E+00 | ca* | 6.6E+00 | ca | 2.6E-02 | ca | 2.6E-01 | ca | | |
| 1.2E-01 | I | 3.0E-02 | I | 1.2E-01 | r | 3.0E-02 | r | 0.25 | 87-86-5 | Pentachlorophenol | 3.0E+00 | ca | 9.0E+00 | ca | 5.6E-02 | ca | 5.6E-01 | ca | 3.0E-02 | 1.0E-03 |
| | | 1.0E-04 | h | | | | | | 7601-90-3 | Perchlorate | 7.8E+00 | ca/nc | 1.0E+02 | ca/nc | | | 3.6E+00 | ca/nc | | |
| | | 5.0E-02 | I | | | 5.0E-02 | r | 0.1 | 52645-53-1 | Permethrin | 3.1E+03 | nc | 3.1E+04 | nc | 1.8E+02 | nc | 1.8E+03 | nc | | |
| | | 2.5E-01 | I | | | 2.5E-01 | r | 0.1 | 13684-63-4 | Phenmedipham | 1.5E+04 | nc | 1.0E+05 | max | 9.1E+02 | nc | 9.1E+03 | nc | | |
| | | 3.0E-01 | I | | | 3.0E-01 | r | 0.1 | 108-95-2 | Phenol | 1.8E+04 | nc | 1.0E+05 | max | 1.1E+03 | nc | 1.1E+04 | nc | 1.0E+02 | 5.0E+00 |
| | | 2.0E-03 | n | | | 2.0E-03 | r | 0.1 | 92-84-2 | Phenothiazine | 1.2E+02 | nc | 1.2E+03 | nc | 7.3E+00 | nc | 7.3E+01 | nc | | |
| | | 6.0E-03 | I | | | 6.0E-03 | r | 0.1 | 108-45-2 | m-Phenylenediamine | 3.7E+02 | nc | 3.7E+03 | nc | 2.2E+01 | nc | 2.2E+02 | nc | | |
| 4.7E-02 | h | | | 4.7E-02 | r | | | 0.1 | 95-54-5 | o-Phenylenediamine | 1.0E+01 | ca | 3.7E+01 | ca | 1.4E-01 | ca | 1.4E+00 | ca | | |
| | | 1.9E-01 | h | | | 1.9E-01 | r | 0.1 | 106-50-3 | p-Phenylenediamine | 1.2E+04 | nc | 1.0E+05 | max | 6.9E+02 | nc | 6.9E+03 | nc | | |
| | | 8.0E-05 | I | | | 8.0E-05 | r | 0.1 | 62-38-4 | Phenylmercuric acetate | 4.9E+00 | nc | 4.9E+01 | nc | 2.9E-01 | nc | 2.9E+00 | nc | | |
| 1.9E-03 | h | | | 1.9E-03 | r | | | 0.1 | 90-43-7 | 2-Phenylphenol | 2.5E+02 | ca | 8.9E+02 | ca | 3.5E+00 | ca | 3.5E+01 | ca | | |
| | | 2.0E-04 | h | | | 2.0E-04 | r | 0.1 | 298-02-2 | Phorate | 1.2E+01 | nc | 1.2E+02 | nc | 7.3E-01 | nc | 7.3E+00 | nc | | |
| | | 2.0E-02 | I | | | 2.0E-02 | r | 0.1 | 732-11-6 | Phosmet | 1.2E+03 | nc | 1.2E+04 | nc | 7.3E+01 | nc | 7.3E+02 | nc | | |
| | | 3.0E-04 | I | | | 8.6E-05 | I | 0.1 | 7803-51-2 | Phosphine | 1.8E+01 | nc | 1.8E+02 | nc | 3.1E-01 | nc | 1.1E+01 | nc | | |
| | | | | | | 2.9E-03 | I | | 7664-38-2 | Phosphoric acid | | | | | 1.0E+01 | nc | | | | |
| | | 2.0E-05 | I | | | | | | 7723-14-0 | Phosphorus (white) | 1.6E+00 | nc | 2.0E+01 | nc | | | 7.3E-01 | nc | | |
| | | 1.0E+00 | h | | | 1.0E+00 | r | 0.1 | 100-21-0 | p-Phthalic acid | 6.1E+04 | nc | 1.0E+05 | max | 3.7E+03 | nc | 3.6E+04 | nc | | |
| | | 2.0E+00 | i | | | 3.4E-02 | h | 0.1 | 85-44-9 | Phthalic anhydride | 1.0E+05 | max | 1.0E+05 | max | 1.2E+02 | nc | 7.3E+04 | nc | | |
| | | 7.0E-02 | I | | | 7.0E-02 | r | 0.1 | 1918-02-1 | Picloram | 4.3E+03 | nc | 4.3E+04 | nc | 2.6E+02 | nc | 2.6E+03 | nc | | |
| | | 1.0E-02 | I | | | 1.0E-02 | r | 0.1 | 29232-93-7 | Pirimiphos-methyl | 6.1E+02 | nc | 6.2E+03 | nc | 3.7E+01 | nc | 3.6E+02 | nc | | |

Key: SFo,I=Cancer Slope Factor oral, Inhalation RfDo,I=Reference Dose oral, Inhalation I=IRIS p=PPRTV c=California EPA n=NCEA h=HEAST x=Withdrawn r=Route-extrapolation ca=Cancer PRG nc= Noncancer PRG ca* (where: nc PRG < 100X ca PRG) ca** (where nc PRG < 10X ca PRG) ++++=Non-Standard Method Applied (See User's Guide) sat=Soil Saturation (See User's Guide) max=Ceiling limit (See User's Guide) DAF=Dilution Attenuation Factor (See User's Guide) CAS=Chemical Abstract Services

| TOXICITY VALUES | | | | | | | | | | CONTAMINANT | PRELIMINARY REMEDIATION GOALS (PRGs) "Direct Contact Exposure Pathways" | | | | | | | | SOIL SCREENING LEVELS "Migration to Ground Water" | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SFo 1/(mg/kg-d) | | RfDo (mg/kg-d) | | SFI 1/(mg/kg-d) | | RfDI (mg/kg-d) | | V O C | skin abs. ecds | CAS No. | | Residential Soil (mg/kg) | | Industrial Soil (mg/kg) | | Ambient Air (ug/m^3) | | Tap Water (ug/l) | | DAF 20 (mg/kg) | DAF 1 (mg/kg) |
| 8.9E+00 | h | 7.0E-06 | h | 8.9E+00 | r | 7.0E-06 | r | | 0.1 | | Polybrominated biphenyls | 5.5E-02 | ca** | 1.9E-01 | ca* | 7.6E-04 | ca* | 7.6E-03 | ca* | | |
| | | | | | | | | | | | Polychlorinated biphenyls (PCBs, see IRIS) | | | | | | | | | | |
| 7.0E-02 | I | 7.0E-05 | I | 7.0E-02 | I | 7.0E-05 | r | | 0.14 | 12674-11-2 | PCBs (unspeciated mixture, low risk, e.g. Aroclor 1016) | 3.9E+00 | nc | 2.1E+01 | ca** | 9.6E-02 | ca** | 9.6E-01 | ca** | | |
| 2.0E+00 | I | 2.0E-05 | I | 2.0E+00 | I | 2.0E-05 | r | | 0.14 | 11097-69-1 | PCBs (unspeciated mixture, high risk, e.g. Aroclor 1254) | 2.2E-01 | ca** | 7.4E-01 | ca* | 3.4E-03 | ca* | 3.4E-02 | ca* | | |
| 4.5E+00 | n | | | 4.5E+00 | r | | | | 0.1 | 61788-33-8 | Polychlorinated terphenyls | 1.1E-01 | ca | 3.8E-01 | ca | 1.5E-03 | ca | 1.5E-02 | ca | | |
| | | | | | | | | | | | Polynuclear aromatic hydrocarbons (PAHs) | | | | | | | | | | |
| | | 6.0E-02 | I | | | 6.0E-02 | r | y | | 83-32-9 | Acenaphthene | 3.7E+03 | nc | 2.9E+04 | nc | 2.2E+02 | nc | 3.7E+02 | nc | 5.7E+02 | 2.9E+01 |
| | | 3.0E-01 | I | | | 3.0E-01 | r | y | | 120-12-7 | Anthracene | 2.2E+04 | nc | 1.0E+05 | max | 1.1E+03 | nc | 1.8E+03 | nc | 1.2E+04 | 5.9E+02 |
| 7.3E-01 | n | | | 7.3E-01 | r | | | | 0.13 | 56-55-3 | Benz[a]anthracene | 6.2E-01 | ca | 2.1E+00 | ca | 9.2E-03 | ca | 9.2E-02 | ca | 2.0E+00 | 8.0E-02 |
| 7.3E-01 | n | | | 7.3E-01 | r | | | | 0.13 | 205-99-2 | Benzo[b]fluoranthene | 6.2E-01 | ca | 2.1E+00 | ca | 9.2E-03 | ca | 9.2E-02 | ca | 5.0E+00 | 2.0E-01 |
| 7.3E-02 | n | | | 7.3E-02 | r | | | | 0.13 | 207-08-9 | Benzo[k]fluoranthene | 6.2E+00 | ca | 2.1E+01 | ca | 9.2E-02 | ca | 9.2E-01 | ca | 4.9E+01 | 2.0E+00 |
| 1.2E+00 | c | | | 3.9E-01 | c | | | | 0.13 | 207-08-9 | "CAL-Modified PRG" | 3.8E-01 | ca | 1.3E+00 | ca | 1.7E-02 | ca | 5.6E-02 | ca | | |
| 7.3E+00 | I | | | 7.3E+00 | r | | | | 0.13 | 50-32-8 | Benzo[a]pyrene | 6.2E-02 | ca | 2.1E-01 | ca | 9.2E-04 | ca | 9.2E-03 | ca | 8.0E+00 | 4.0E-01 |
| 7.3E-03 | n | | | 7.3E-03 | r | | | | 0.13 | 218-01-9 | Chrysene | 6.2E+01 | ca | 2.1E+02 | ca | 9.2E-01 | ca | 9.2E+00 | ca | 1.6E+02 | 8.0E+00 |
| 1.2E-01 | c | | | 3.9E-02 | c | | | | 0.13 | | "CAL-Modified PRG" | 3.8E+00 | ca | 1.3E+01 | ca | 1.7E-01 | ca | 5.6E-01 | ca | | |
| 7.3E+00 | n | | | 7.3E+00 | r | | | | 0.13 | 53-70-3 | Dibenz[ah]anthracene | 6.2E-02 | ca | 2.1E-01 | ca | 9.2E-04 | ca | 9.2E-03 | ca | 2.0E+00 | 8.0E-02 |
| | | 4.0E-02 | I | | | 4.0E-02 | r | | 0.13 | 206-44-0 | Fluoranthene | 2.3E+03 | nc | 2.2E+04 | nc | 1.5E+02 | nc | 1.5E+03 | nc | 4.3E+03 | 2.1E+02 |
| | | 4.0E-02 | I | | | 4.0E-02 | r | y | | 86-73-7 | Fluorene | 2.7E+03 | nc | 2.6E+04 | nc | 1.5E+02 | nc | 2.4E+02 | nc | 5.6E+02 | 2.8E+01 |
| 7.3E-01 | n | | | 7.3E-01 | r | | | | 0.13 | 193-39-5 | Indeno[1,2,3-cd]pyrene | 6.2E-01 | ca | 2.1E+00 | ca | 9.2E-03 | ca | 9.2E-02 | ca | 1.4E+01 | 7.0E-01 |
| | | 2.0E-02 | I | | | 8.6E-04 | I | y | | 91-20-3 | Naphthalene | 5.6E+01 | nc | 1.9E+02 | nc | 3.1E+00 | nc | 6.2E+00 | nc | 8.4E+01 | 4.0E+00 |
| 1.2E-01 | r | | | 1.2E-01 | c | | | | | | "CAL-Modified PRG" | 1.7E+00 | ca | 4.2E+00 | ca | 5.6E-02 | ca | 9.3E-02 | ca | | |
| | | 3.0E-02 | I | | | 3.0E-02 | r | y | | 129-00-0 | Pyrene | 2.3E+03 | nc | 2.9E+04 | nc | 1.1E+02 | nc | 1.8E+02 | nc | 4.2E+03 | 2.1E+02 |
| 1.5E-01 | I | 9.0E-03 | I | 1.5E-01 | r | 9.0E-03 | r | | 0.1 | 67747-09-5 | Prochloraz | 3.2E+00 | ca | 1.1E+01 | ca | 4.5E-02 | ca | 4.5E-01 | ca | | |
| | | 6.0E-03 | h | | | 6.0E-03 | r | | 0.1 | 26399-36-0 | Profluralin | 3.7E+02 | nc | 3.7E+03 | nc | 2.2E+01 | nc | 2.2E+02 | nc | | |
| | | 1.5E-02 | I | | | 1.5E-02 | r | | 0.1 | 1610-18-0 | Prometon | 9.2E+02 | nc | 9.2E+03 | nc | 5.5E+01 | nc | 5.5E+02 | nc | | |
| | | 4.0E-03 | I | | | 4.0E-03 | r | | 0.1 | 7287-19-6 | Prometryn | 2.4E+02 | nc | 2.5E+03 | nc | 1.5E+01 | nc | 1.5E+02 | nc | | |
| | | 7.5E-02 | I | | | 7.5E-02 | r | | 0.1 | 23950-58-5 | Pronamide | 4.6E+03 | nc | 4.6E+04 | nc | 2.7E+02 | nc | 2.7E+03 | nc | | |
| | | 1.3E-02 | I | | | 1.3E-02 | r | | 0.1 | 1918-16-7 | Propachlor | 7.9E+02 | nc | 8.0E+03 | nc | 4.7E+01 | nc | 4.7E+02 | nc | | |
| | | 5.0E-03 | I | | | 5.0E-03 | r | | 0.1 | 709-98-8 | Propanil | 3.1E+02 | nc | 3.1E+03 | nc | 1.8E+01 | nc | 1.8E+02 | nc | | |
| | | 2.0E-02 | I | | | 2.0E-02 | r | | 0.1 | 2312-35-8 | Propargite | 1.2E+03 | nc | 1.2E+04 | nc | 7.3E+01 | nc | 7.3E+02 | nc | | |
| | | 2.0E-03 | I | | | 2.0E-03 | r | | 0.1 | 107-19-7 | Propargyl alcohol | 1.2E+02 | nc | 1.2E+03 | nc | 7.3E+00 | nc | 7.3E+01 | nc | | |
| | | 2.0E-02 | I | | | 2.0E-02 | r | | 0.1 | 139-40-2 | Propazine | 1.2E+03 | nc | 1.2E+04 | nc | 7.3E+01 | nc | 7.3E+02 | nc | | |
| | | 2.0E-02 | I | | | 2.0E-02 | r | | 0.1 | 122-42-9 | Propham | 1.2E+03 | nc | 1.2E+04 | nc | 7.3E+01 | nc | 7.3E+02 | nc | | |
| | | 1.3E-02 | I | | | 1.3E-02 | r | | 0.1 | 60207-90-1 | Propiconazole | 7.9E+02 | nc | 8.0E+03 | nc | 4.7E+01 | nc | 4.7E+02 | nc | | |
| | | | | | | | | | | 98-82-8 | Isopropylbenzene (see Cumene) | | | | | | | | | | |
| | | 4.0E-02 | n | | | 4.0E-02 | r | y | | 103-65-1 | n-Propylbenzene | 2.4E+02 | sat | 2.4E+02 | sat | 1.5E+02 | nc | 2.4E+02 | nc | | |
| | | 5.0E-01 | p | | | 8.6E-04 | p | | 0.1 | 57-55-6 | Propylene glycol | 3.0E+04 | nc | 1.0E+05 | max | 3.1E+00 | nc | 1.8E+04 | nc | | |
| | | 7.0E-01 | h | | | 7.0E-01 | r | | 0.1 | 52125-53-8 | Propylene glycol, monoethyl ether | 4.3E+04 | nc | 1.0E+05 | max | 2.6E+03 | nc | 2.6E+04 | nc | | |
| | | 7.0E-01 | h | | | 5.7E-01 | I | | 0.1 | 107-98-2 | Propylene glycol, monomethyl ether | 4.3E+04 | nc | 1.0E+05 | max | 2.1E+03 | nc | 2.6E+04 | nc | | |
| 2.4E-01 | I | 8.6E-03 | r | 1.3E-02 | I | 8.6E-03 | I | y | | 75-56-9 | Propylene oxide | 1.9E+00 | ca* | 6.6E+00 | ca* | 5.2E-01 | ca* | 2.2E-01 | ca | | |
| | | 2.5E-01 | I | | | 2.5E-01 | r | | 0.1 | 81335-77-5 | Pursuit | 1.5E+04 | nc | 1.0E+05 | max | 9.1E+02 | nc | 9.1E+03 | nc | | |
| | | 2.5E-02 | I | | | 2.5E-02 | r | | 0.1 | 81630-66-1 | Pydrin | 1.5E+03 | nc | 1.5E+04 | nc | 9.1E+01 | nc | 9.1E+02 | nc | | |

Key: SFo,I=Cancer Slope Factor oral, inhalation RfDo,I=Reference Dose oral, inhalation i=IRIS p=PPRTV c=California EPA n=NCEA h=HEAST x=Withdrawn r=Route-extrapolation ca=Cancer PRG nc=Noncancer PRG ca* (where: nc PRG < 100X ca PRG) ca** (where nc PRG < 10X ca PRG) +++=Non-Standard Method Applied (See User's Guide) sat=Soil Saturation (See User's Guide) max=Ceiling limit (See User's Guide) DAF=Dilution Attenuation Factor (See User's Guide) CAS=Chemical Abstract Services

| TOXICITY VALUES | | | | | | | | | | | CONTAMINANT | PRELIMINARY REMEDIATION GOALS (PRGs) "Direct Contact Exposure Pathways" | | | | | | | | SOIL SCREENING LEVELS "Migration to Ground Water" | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SFo 1/(mg/kg-d) | | RfDo (mg/kg-d) | | SFI 1/(mg/kg-d) | | RfDi (mg/kg-d) | | V O C | skin abs. soils | CAS No. | | Residential Soil (mg/kg) | | Industrial Soil (mg/kg) | | Ambient Air (ug/m^3) | | Tap Water (ug/l) | | DAF 20 (mg/kg) | DAF 1 (mg/kg) |
| | | 1.0E-03 | i | | | 1.0E-03 | r | | 0.1 | 110-86-1 | Pyridine | 6.1E+01 | nc | 6.2E+02 | nc | 3.7E+00 | nc | 3.6E+01 | nc | | |
| | | 5.0E-04 | i | | | 5.0E-04 | r | | 0.1 | 13593-03-8 | Quinalphos | 3.1E+01 | nc | 3.1E+02 | nc | 1.8E+00 | nc | 1.8E+01 | nc | | |
| 3.0E+00 | i | | | 3.0E+00 | r | | | | 0.1 | 91-22-5 | Quinoline | 1.6E-01 | ca | 5.7E-01 | ca | 2.2E-03 | ca | 2.2E-02 | ca | | |
| 1.1E-01 | i | 3.0E-03 | i | 1.1E-01 | r | 3.0E-03 | r | | 0.1 | 121-82-4 | RDX (Cyclonite) | 4.4E+00 | ca* | 1.6E+01 | ca | 6.1E-02 | ca | 6.1E-01 | ca | | |
| | | 3.0E-02 | i | | | 3.0E-02 | r | | 0.1 | 10453-86-8 | Resmethrin | 1.8E+03 | nc | 1.8E+04 | nc | 1.1E+02 | nc | 1.1E+03 | nc | | |
| | | 5.0E-02 | h | | | 5.0E-02 | r | | 0.1 | 299-84-3 | Ronnel | 3.1E+03 | nc | 3.1E+04 | nc | 1.8E+02 | nc | 1.8E+03 | nc | | |
| | | 4.0E-03 | i | | | 4.0E-03 | r | | 0.1 | 83-79-4 | Rotenone | 2.4E+02 | nc | 2.5E+03 | nc | 1.5E+01 | nc | 1.5E+02 | nc | | |
| | | 2.5E-02 | i | | | 2.5E-02 | r | | 0.1 | 78587-05-0 | Savey | 1.5E+03 | nc | 1.5E+04 | nc | 9.1E+01 | nc | 9.1E+02 | nc | | |
| | | 5.0E-03 | i | | | | | | 0.1 | 7783-00-8 | Selenious Acid | 3.1E+02 | nc | 3.1E+03 | nc | | | 1.8E+02 | nc | | |
| | | 5.0E-03 | i | | | | | | | 7782-49-2 | Selenium | 3.9E+02 | nc | 5.1E+03 | nc | | | 1.8E+02 | nc | 5.0E+00 | 3.0E-01 |
| | | 5.0E-03 | h | | | | | | 0.1 | 630-10-4 | Selenourea | 3.1E+02 | nc | 3.1E+03 | nc | | | 1.8E+02 | nc | | |
| | | 9.0E-02 | i | | | 9.0E-02 | r | | 0.1 | 74051-80-2 | Sethoxydim | 5.5E+03 | nc | 5.5E+04 | nc | 3.3E+02 | nc | 3.3E+03 | nc | | |
| | | 5.0E-03 | i | | | | | | | 7440-22-4 | Silver and compounds | 3.9E+02 | nc | 5.1E+03 | nc | | | 1.8E+02 | nc | 3.4E+01 | 2.0E+00 |
| 1.2E-01 | h | 5.0E-03 | i | 1.2E-01 | r | 5.00E-03 | r | | 0.1 | 122-34-9 | Simazine | 4.1E+00 | ca* | 1.4E+01 | ca | 5.6E-02 | ca | 5.6E-01 | ca | | |
| | | 4.0E-03 | i | | | | | | | 26628-22-8 | Sodium azide | | | | | | | | | | |
| 2.7E-01 | h | 3.0E-02 | i | 2.7E-01 | r | 3.0E-02 | r | | 0.1 | 148-18-5 | Sodium diethyldithiocarbamate | 1.8E+00 | ca | 6.4E+00 | ca | 2.5E-02 | ca | 2.5E-01 | ca | | |
| | | 2.0E-05 | i | | | 2.0E-05 | r | | 0.1 | 62-74-8 | Sodium fluoroacetate | 1.2E+00 | nc | 1.2E+01 | nc | 7.3E-02 | nc | 7.3E-01 | nc | | |
| | | 1.0E-03 | h | | | 1.0E-03 | r | | 0.1 | 13718-26-8 | Sodium metavanadate | 6.1E+01 | nc | 6.2E+02 | nc | 3.7E+00 | nc | 3.6E+01 | nc | | |
| | | 6.0E-01 | i | | | | | | | 7440-24-6 | Strontium, stable | 4.7E+04 | nc | 1.0E+05 | max | | | 2.2E+04 | nc | | |
| | | 3.0E-04 | i | | | 3.0E-04 | r | | 0.1 | 57-24-9 | Strychnine | 1.8E+01 | nc | 1.8E+02 | nc | 1.1E+00 | nc | 1.1E+01 | nc | | |
| | | 2.0E-01 | i | | | 2.9E-01 | i | y | | 100-42-5 | Styrene | 1.7E+03 | sat | 1.7E+03 | sat | 1.1E+03 | nc | 1.6E+03 | nc | 4.0E+00 | 2.0E-01 |
| | | 5.0E-03 | p | | | 5.0E-03 | r | | | 80-07-9 | 1,1'-Sulfonylbis (4-chlorobenzene) | 3.9E+02 | nc | 5.1E+03 | nc | 1.8E+01 | nc | 1.8E+02 | nc | | |
| | | 2.5E-02 | i | | | 2.5E-02 | r | | 0.1 | 83671-89-0 | Systhane | 1.5E+03 | nc | 1.5E+04 | nc | 9.1E+01 | nc | 9.1E+02 | nc | | |
| 1.5E+05 | h | | | 1.5E+05 | h | | | | 0.03 | 1746-01-6 | 2,3,7,8-TCDD (dioxin) | 3.9E-06 | ca | 1.6E-05 | ca | 4.5E-08 | ca | 4.5E-07 | ca | | |
| | | 7.0E-02 | i | | | 7.0E-02 | r | | 0.1 | 34014-18-1 | Tebuthiuron | 4.3E+03 | nc | 4.3E+04 | nc | 2.6E+02 | nc | 2.6E+03 | nc | | |
| | | 2.0E-02 | h | | | 2.0E-02 | r | | 0.1 | 3383-96-8 | Temephos | 1.2E+03 | nc | 1.2E+04 | nc | 7.3E+01 | nc | 7.3E+02 | nc | | |
| | | 1.3E-02 | i | | | 1.3E-02 | r | | 0.1 | 5902-51-2 | Terbacil | 7.9E+02 | nc | 8.0E+03 | nc | 4.7E+01 | nc | 4.7E+02 | nc | | |
| | | 2.5E-05 | h | | | 2.5E-05 | r | | 0.1 | 13071-79-9 | Terbufos | 1.5E+00 | nc | 1.5E+01 | nc | 9.1E-02 | nc | 9.1E-01 | nc | | |
| | | 1.0E-03 | i | | | 1.0E-03 | r | | 0.1 | 886-50-0 | Terbutryn | 6.1E+01 | nc | 6.2E+02 | nc | 3.7E+00 | nc | 3.6E+01 | nc | | |
| | | 3.0E-04 | i | | | 3.0E-04 | r | | 0.1 | 95-94-3 | 1,2,4,5-Tetrachlorobenzene | 1.8E+01 | nc | 1.8E+02 | nc | 1.1E+00 | nc | 1.1E+01 | nc | | |
| 2.6E-02 | i | 3.0E-02 | i | 2.6E-02 | i | 3.0E-02 | r | y | | 630-20-6 | 1,1,1,2-Tetrachloroethane | 3.2E+00 | ca | 7.3E+00 | ca | 2.6E-01 | ca | 4.3E-01 | ca | | |
| 2.0E-01 | i | 6.0E-02 | p | 2.0E-01 | i | 6.0E-02 | r | y | | 79-34-5 | 1,1,2,2-Tetrachloroethane | 4.1E-01 | ca | 9.3E-01 | ca | 3.3E-02 | ca | 5.5E-02 | ca | 3.0E-03 | 2.0E-04 |
| 5.4E-01 | c | 1.0E-02 | i | 2.1E-02 | c | 1.0E-02 | c | y | | 127-18-4 | Tetrachloroethylene (PCE) | 4.8E-01 | ca* | 1.3E+00 | ca | 3.2E-01 | ca | 1.0E-01 | ca | 6.0E-02 | 3.0E-03 |
| | | 3.0E-02 | i | | | 3.0E-02 | r | | 0.1 | 58-90-2 | 2,3,4,6-Tetrachlorophenol | 1.8E+03 | nc | 1.8E+04 | nc | 1.1E+02 | nc | 1.1E+03 | nc | | |
| 2.0E+01 | h | | | 2.0E+01 | r | | | | 0.1 | 5216-25-1 | p,a,a,a-Tetrachlorotoluene | 2.4E-02 | ca | 8.6E-02 | ca | 3.4E-04 | ca | 3.4E-03 | ca | | |
| 2.4E-02 | h | 3.0E-02 | i | 2.4E-02 | r | 3.0E-02 | r | | 0.1 | 961-11-5 | Tetrachlorovinphos | 2.0E+01 | ca* | 7.2E+01 | ca | 2.8E-01 | ca | 2.8E+00 | ca | | |
| | | 5.0E-04 | i | | | 5.0E-04 | r | | 0.1 | 3689-24-5 | Tetraethyldithiopyrophosphate | 3.1E+01 | nc | 3.1E+02 | nc | 1.8E+00 | nc | 1.8E+01 | nc | | |
| 7.8E-03 | n | 2.1E-01 | n | 8.8E-03 | n | 8.6E-02 | n | y | | 109-99-9 | Tetrahydrofuran | 9.4E+00 | ca | 2.1E+01 | ca | 9.9E-01 | ca | 1.6E+00 | ca | | |
| | | 6.6E-05 | i | | | | | | | 7440-28-0 | Thallium and compounds+++ | 5.2E+00 | nc | 6.7E+01 | nc | | | 2.4E+00 | nc | | |
| | | 1.0E-02 | i | | | 1.0E-02 | r | | 0.1 | 28249-77-6 | Thiobencarb | 6.1E+02 | nc | 6.2E+03 | nc | 3.7E+01 | nc | 3.6E+02 | nc | | |
| | | 5.0E-02 | n | | | 5.0E-02 | r | | 0.1 | N/A | Thiocyanate | 3.1E+03 | nc | 1.0E+05 | max | 1.8E+02 | nc | 1.8E+03 | nc | | |
| | | 3.0E-04 | h | | | 3.0E-04 | r | | 0.1 | 39196-18-4 | Thiofanox | 1.8E+01 | nc | 1.8E+02 | nc | 1.1E+00 | nc | 1.1E+01 | nc | | |

Key: SFo,I=Cancer Slope Factor oral, inhalation RfDo,I=Reference Dose oral, inhalation I=IRIS p=PPRTV c=California EPA n=NCEA h=HEAST x=Withdrawn r=Route-extrapolation ca=Cancer PRG nc=Noncancer PRG ca* (where: nc PRG < 100X ca PRG) ca** (where nc PRG < 10X ca PRG) +++=Non-Standard Method Applied (See User's Guide) sat=Soil Saturation (See User's Guide) max=Ceiling limit (See User's Guide) DAF=Dilution Attenuation Factor (See User's Guide) CAS=Chemical Abstract Services

| TOXICITY VALUES | | | | | | | | | | CONTAMINANT | PRELIMINARY REMEDIATION GOALS (PRGs) "Direct Contact Exposure Pathways" | | | | | | | | SOIL SCREENING LEVELS "Migration to Ground Water" | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SFo 1/(mg/kg-d) | | RfDo (mg/kg-d) | | SFI 1/(mg/kg-d) | | RfDI (mg/kg-d) | | V O C | skin abs. soils | CAS No. | | Residential Soil (mg/kg) | | Industrial Soil (mg/kg) | | Ambient Air (ug/m^3) | | Tap Water (ug/l) | | DAF 20 (mg/kg) | DAF 1 (mg/kg) |
| | | 8.0E-02 | I | | | 8.0E-02 | r | | 0.1 | 23564-05-8 | Thiophanate-methyl | 4.9E+03 | nc | 4.9E+04 | nc | 2.9E+02 | nc | 2.9E+03 | nc | | |
| | | 5.0E-03 | I | | | 5.0E-03 | r | | 0.1 | 137-26-8 | Thiram | 3.1E+02 | nc | 3.1E+03 | nc | 1.8E+01 | nc | 1.8E+02 | nc | | |
| | | 8.0E-01 | h | | | | | | | 7440-31-5 | Tin (inorganic, also see tributyltin oxide) | 4.7E+04 | nc | 1.0E+05 | max | | | 2.2E+04 | nc | | |
| | | 4.0E+00 | n | | | 8.8E-03 | n | | | 7440-32-6 | Titanium | 1.0E+05 | max | 1.0E+05 | max | 3.1E+01 | nc | 1.5E+05 | nc | | |
| | | 2.0E-01 | I | | | 1.1E-01 | I | y | | 108-88-3 | Toluene | 5.2E+02 | sat | 5.2E+02 | sat | 4.0E+02 | nc | 7.2E+02 | nc | 1.2E+01 | 6.0E-01 |
| 3.2E+00 | h | | | 3.2E+00 | r | | | | 0.1 | 95-80-7 | Toluene-2,4-diamine | 1.5E-01 | ca | 5.4E-01 | ca | 2.1E-03 | ca | 2.1E-02 | ca | | |
| | | 6.0E-01 | h | | | 6.0E-01 | r | | 0.1 | 95-70-5 | Toluene-2,5-diamine | 3.7E+04 | nc | 1.0E+05 | max | 2.2E+03 | nc | 2.2E+04 | nc | | |
| | | 2.0E-01 | h | | | 2.0E-01 | r | | 0.1 | 823-40-5 | Toluene-2,6-diamine | 1.2E+04 | nc | 1.0E+05 | max | 7.3E+02 | nc | 7.3E+03 | nc | | |
| 1.9E-01 | I | | | 1.9E-01 | r | | | | 0.1 | 106-49-0 | p-Toluidine | 2.6E+00 | ca | 9.1E+00 | ca | 3.5E-02 | ca | 3.5E-01 | ca | | |
| 1.1E+00 | I | | | 1.1E+00 | I | | | | 0.1 | 8001-35-2 | Toxaphene | 4.4E-01 | ca | 1.6E+00 | ca | 6.0E-03 | ca | 6.1E-02 | ca | 3.1E+01 | 2.0E+00 |
| | | 7.5E-03 | I | | | 7.5E-03 | r | | 0.1 | 65841-25-6 | Tralomethrin | 4.6E+02 | nc | 4.6E+03 | nc | 2.7E+01 | nc | 2.7E+02 | nc | | |
| | | 1.3E-02 | I | | | 1.3E-02 | r | | 0.1 | 2303-17-5 | Triallate | 7.9E+02 | nc | 8.0E+03 | nc | 4.7E+01 | nc | 4.7E+02 | nc | | |
| | | 1.0E-02 | I | | | 1.0E-02 | r | | 0.1 | 82097-50-5 | Triasulfuron | 6.1E+02 | nc | 6.2E+03 | nc | 3.7E+01 | nc | 3.6E+02 | nc | | |
| | | 5.0E-03 | I | | | 5.0E-03 | r | | 0.1 | 615-54-3 | 1,2,4-Tribromobenzene | 3.1E+02 | nc | 3.1E+03 | nc | 1.8E+01 | nc | 1.8E+02 | nc | | |
| 9.2E-03 | p | 2.0E-01 | p | 9.2E-03 | r | 2.0E-01 | r | | 0.1 | 126-73-8 | Tributyl phosphate | 5.3E+01 | ca | 1.9E+02 | ca | 7.3E-01 | ca | 7.3E+00 | ca | | |
| | | 3.0E-04 | I | | | | | | 0.1 | 56-35-9 | Tributyltin oxide (TBTO) | 1.8E+01 | nc | 1.8E+02 | nc | | | 1.1E+01 | nc | | |
| 3.4E-02 | h | | | 3.4E-02 | r | | | | 0.1 | 634-93-5 | 2,4,6-Trichloroaniline | 1.4E+01 | ca | 5.1E+01 | ca | 2.0E-01 | ca | 2.0E+00 | ca | | |
| 2.9E-02 | h | | | 2.9E-02 | r | | | | 0.1 | 33663-50-2 | 2,4,6-Trichloroaniline hydrochloride | 1.7E+01 | ca | 5.9E+01 | ca | 2.3E-01 | ca | 2.3E+00 | ca | | |
| | | 1.0E-02 | I | | | 1.0E-03 | p | y | | 120-82-1 | 1,2,4-Trichlorobenzene | 6.2E+01 | nc | 2.2E+02 | nc | 3.7E+00 | nc | 7.2E+00 | nc | 5.0E+00 | 3.0E-01 |
| | | 2.8E-01 | n | | | 8.3E-01 | p | y | | 71-55-6 | 1,1,1-Trichloroethane | 1.2E+03 | sat | 1.2E+03 | sat | 2.3E+03 | nc | 3.2E+03 | nc | 2.0E+00 | 1.0E-01 |
| 5.7E-02 | I | 4.0E-03 | I | 5.6E-02 | I | 4.0E-03 | r | y | | 79-00-5 | 1,1,2-Trichloroethane | 7.3E-01 | ca* | 1.6E+00 | ca* | 1.2E-01 | ca | 2.0E-01 | ca | 2.0E-02 | 9.0E-04 |
| 4.0E-01 | n | 3.0E-04 | n | 4.0E-01 | n | 1.0E-02 | n | y | | 79-01-6 | Trichloroethylene (TCE) | 5.3E-02 | ca | 1.1E-01 | ca | 1.7E-02 | ca | 2.8E-02 | ca | 6.0E-02 | 3.0E-03 |
| 1.3E-02 | c | | | 7.0E-03 | c | 1.7E-01 | c | y | | 79-01-6 | "CAL-Modified PRG" | 2.9E+00 | ca | 6.5E+00 | ca | 9.6E-01 | ca | 1.4E+00 | ca | | |
| | | 3.0E-01 | I | | | 2.0E-01 | h | y | | 75-69-4 | Trichlorofluoromethane | 3.9E+02 | nc | 2.0E+03 | sat | 7.3E+02 | nc | 1.3E+03 | nc | | |
| | | 1.0E-01 | I | | | 1.0E-01 | r | | 0.1 | 95-95-4 | 2,4,5-Trichlorophenol | 6.1E+03 | nc | 6.2E+04 | nc | 3.7E+02 | nc | 3.6E+03 | nc | 2.7E+02 | 1.4E+01 |
| 1.1E-02 | I | 1.0E-04 | n | 1.1E-02 | I | 1.0E-04 | r | | 0.1 | 88-06-2 | 2,4,6-Trichlorophenol | 6.1E+00 | nc** | 6.2E+01 | nc** | 3.7E-01 | nc** | 3.6E+00 | nc** | 2.0E-01 | 8.0E-03 |
| 7.0E-02 | c | | | 7.0E-02 | c | | | | 0.1 | 88-06-2 | "CAL-Modified PRG" | 6.9E+00 | ca | 2.5E+01 | ca | 9.6E-02 | ca | 9.6E-01 | ca | | |
| | | 1.0E-02 | I | | | 1.0E-02 | r | | 0.1 | 93-76-5 | 2,4,5-Trichlorophenoxyacetic Acid | 6.1E+02 | nc | 6.2E+03 | nc | 3.7E+01 | nc | 3.6E+02 | nc | | |
| | | 8.0E-03 | I | | | 8.0E-03 | r | | 0.1 | 93-72-1 | 2-(2,4,5-Trichlorophenoxy) propionic acid | 4.9E+02 | nc | 4.9E+03 | nc | 2.9E+01 | nc | 2.9E+02 | nc | | |
| | | 5.0E-03 | I | | | 5.0E-03 | r | y | | 598-77-6 | 1,1,2-Trichloropropane | 7.1E+01 | nc | 2.7E+02 | nc | 1.8E+01 | nc | 3.0E+01 | nc | | |
| 2.0E+00 | n | 6.0E-03 | I | 2.0E+00 | r | 1.4E-03 | n | y | | 96-18-4 | 1,2,3-Trichloropropane | 3.4E-02 | ca | 7.6E-02 | ca | 3.4E-03 | ca | 5.6E-03 | ca | | |
| | | 1.0E-02 | p | | | 3.0E-04 | p | y | | 96-19-5 | 1,2,3-Trichloropropene | 5.2E+00 | nc | 1.7E+01 | nc | 1.1E+00 | nc | 2.2E+00 | nc | | |
| | | 3.0E-03 | I | | | 3.0E-03 | r | | 0.1 | 66138-08-2 | Tridiphane | 1.8E+02 | nc | 1.8E+03 | nc | 1.1E+01 | nc | 1.1E+02 | nc | | |
| | | 2.0E-03 | r | | | 2.0E-03 | I | y | | 121-44-8 | Triethylamine | 2.3E+01 | nc | 8.6E+01 | nc | 7.3E+00 | nc | 1.2E+01 | nc | | |
| 7.7E-03 | I | 7.5E-03 | I | 7.7E-03 | r | 7.5E-03 | r | | 0.1 | 1582-09-8 | Trifluralin | 6.3E+01 | ca** | 2.2E+02 | ca* | 8.7E-01 | ca* | 8.7E+00 | ca* | | |
| | | 1.4E-04 | r | | | 1.4E-04 | n | | 0.1 | 552-30-7 | Trimellitic Anhydride (TMAN) | 8.6E+00 | nc | 8.6E+01 | nc | 5.1E-01 | nc | 5.1E+00 | | | |
| | | 5.0E-02 | p | | | 1.7E-03 | p | y | | 95-63-6 | 1,2,4-Trimethylbenzene | 5.2E+01 | nc | 1.7E+02 | nc | 6.2E+00 | nc | 1.2E+01 | nc | | |
| | | 5.0E-02 | p | | | 1.7E-03 | p | y | | 108-67-8 | 1,3,5-Trimethylbenzene | 2.1E+01 | nc | 7.0E+01 | nc | 6.2E+00 | nc | 1.2E+01 | nc | | |
| 3.7E-02 | h | | | 3.7E-02 | r | | | | 0.1 | 512-56-1 | Trimethyl phosphate | 1.3E+01 | ca | 4.7E+01 | ca | 1.8E-01 | ca | 1.8E+00 | ca | | |
| | | 3.0E-02 | I | | | 3.0E-02 | r | | 0.1 | 99-35-4 | 1,3,5-Trinitrobenzene | 1.8E+03 | nc | 1.8E+04 | nc | 1.1E+02 | nc | 1.1E+03 | nc | | |
| | | 1.0E-02 | h | | | 1.0E-02 | r | | 0.1 | 479-45-8 | Trinitrophenylmethylnitramine | 6.1E+02 | nc | 6.2E+03 | nc | 3.7E+01 | nc | 3.6E+02 | nc | | |
| 3.0E-02 | I | 5.0E-04 | I | 3.0E-02 | r | 5.0E-04 | r | | 0.1 | 118-96-7 | 2,4,6-Trinitrotoluene | 1.6E+01 | ca** | 5.7E+01 | ca** | 2.2E-01 | ca** | 2.2E+00 | ca** | | |

Key: SFo,I=Cancer Slope Factor oral, inhalation RfDo,I=Reference Dose oral, inhalation I=IRIS p=PPRTV c=California EPA n=NCEA h=HEAST x=Withdrawn r=Route-extrapolation ca=Cancer PRG nc= Noncancer PRG ca* (where: nc PRG < 100X ca PRG)
ca** (where nc PRG < 10X ca PRG) ++++=Non-Standard Method Applied (See User's Guide) sat=Soil Saturation (See User's Guide) max=Ceiling limit (See User's Guide) DAF=Dilution Attenuation Factor (See User's Guide) CAS=Chemical Abstract Services

| TOXICITY VALUES | | | | | | | | | CONTAMINANT | PRELIMINARY REMEDIATION GOALS (PRGs) "Direct Contact Exposure Pathways" | | | | | | | | SOIL SCREENING LEVELS "Migration to Ground Water" | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SFo 1/(mg/kg-d) | | RfDo (mg/kg-d) | | SFi 1/(mg/kg-d) | | RfDi (mg/kg-d) | | V O C | skin abs. | CAS No. | | Residential Soil (mg/kg) | | Industrial Soil (mg/kg) | | Ambient Air (ug/m^3) | | Tap Water (ug/l) | | DAF 20 (mg/kg) | DAF 1 (mg/kg) |
| | | 2.0E-02 | p | | | 2.0E-02 | r | | 0.1 | 791-28-6 | Triphenylphosphine oxide | 1.2E+03 | nc | 1.2E+04 | nc | 7.3E+01 | nc | 7.3E+02 | nc | | |
| 1.4E-02 | p | 3.1E-01 | p | 1.4E-02 | r | 3.1E-01 | r | | 0.1 | 115-96-8 | Tris(2-chloroethyl) phosphate | 3.5E+01 | ca | 1.2E+02 | ca | 4.8E-01 | ca | 4.8E+00 | ca | | |
| 3.2E-03 | p | 1.0E-01 | p | 3.2E-03 | r | 1.0E-01 | r | | 0.1 | 78-42-2 | Tris(2-ethylhexyl) phosphate | 1.5E+02 | ca* | 5.4E+02 | ca | 2.1E+00 | ca | 2.1E+01 | ca | | |
| | | 2.0E-04 | n | | | | | | | 7440-61-1 | Uranium (chemical toxicity only) | 1.6E+01 | nc | 2.0E+02 | nc | | | 7.3E+00 | nc | | |
| | | 1.0E-03 | n | | | | | | | 7440-62-2 | Vanadium and compounds | 7.8E+01 | nc | 1.0E+03 | nc | | | 3.6E+01 | nc | 6.0E+03 | 3.0E+02 |
| | | 1.0E-03 | I | | | 1.0E-03 | r | | 0.1 | 1929-77-7 | Vernam | 6.1E+01 | nc | 6.2E+02 | nc | 3.7E+00 | nc | 3.6E+01 | nc | | |
| | | 2.5E-02 | I | | | 2.5E-02 | r | | 0.1 | 50471-44-8 | Vinclozolin | 1.5E+03 | nc | 1.5E+04 | nc | 9.1E+01 | nc | 9.1E+02 | nc | | |
| | | 1.0E+00 | h | | | 5.7E-02 | I | y | | 108-05-4 | Vinyl acetate | 4.3E+02 | nc | 1.4E+03 | nc | 2.1E+02 | nc | 4.1E+02 | nc | 1.7E+02 | 8.0E+00 |
| 1.1E-01 | r | 8.6E-04 | r | 1.1E-01 | h | 8.6E-04 | I | y | | 593-60-2 | Vinyl bromide (bromoethene) | 1.9E-01 | ca* | 4.2E-01 | ca* | 6.1E-02 | ca* | 1.0E-01 | ca* | | |
| 1.5E+00 | I | 3.0E-03 | I | 3.1E-02 | I | 2.9E-02 | I | y | | 75-01-4 | Vinyl chloride (child/adult)+++ | 7.9E-02 | ca | | | 1.1E-01 | ca | 2.0E-02 | ca | 1.0E-02 | 7.0E-04 |
| 7.5E-01 | I | 3.0E-03 | I | 1.6E-02 | I | 2.9E-02 | I | y | | 75-01-4 | Vinyl chloride (adult) | | | 7.5E-01 | ca | | | | | | |
| | | 3.0E-04 | I | | | 3.0E-04 | r | | 0.1 | 81-81-2 | Warfarin | 1.8E+01 | nc | 1.8E+02 | nc | 1.1E+00 | nc | 1.1E+01 | nc | | |
| | | 2.0E-01 | I | | | 2.9E-02 | I | y | 0.1 | 1330-20-7 | Xylenes | 2.7E+02 | nc | 4.2E+02 | sat | 1.1E+02 | nc | 2.1E+02 | nc | 2.1E+02 | 1.0E+01 |
| | | 3.0E-01 | I | | | | | | | 7440-66-6 | Zinc | 2.3E+04 | nc | 1.0E+05 | max | | | 1.1E+04 | nc | 1.2E+04 | 6.2E+02 |
| | | 3.0E-04 | I | | | | | | | 1314-84-7 | Zinc phosphide | 2.3E+01 | nc | 3.1E+02 | nc | | | 1.1E+01 | nc | | |
| | | 5.0E-02 | I | | | 5.0E-02 | r | | 0.1 | 12122-67-7 | Zineb | 3.1E+03 | nc | 3.1E+04 | nc | 1.8E+02 | nc | 1.8E+03 | nc | | |

Federal Register

Thursday,
May 18, 2000

Part III

# Environmental Protection Agency

40 CFR Part 131

Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule

| A | | B Freshwater | | C Saltwater | | D Human Health ($10^{-6}$ risk for carcinogens) For consumption of: | |
|---|---|---|---|---|---|---|---|
| # Compound | CAS Number | Criterion Maximum Conc. [d] B1 | Criterion Continuous Conc. [d] B2 | Criterion Maximum Conc. [d] C1 | Criterion Continuous Conc. [d] C2 | Water & Organisms (µg/L) D1 | Organisms Only (µg/L) D2 |
| 1. Antimony | 7440360 | | | | | 14 a,s | 4300 a,t |
| 2. Arsenic [b] | 7440382 | 340 i,m,w | 150 i,m,w | 69 i,m | 36 i,m | | |
| 3. Beryllium | 7440417 | | | | | n | n |
| 4. Cadmium [b] | 7440439 | 4.3 e,i,m,w,x | 2.2 e,i,m,w | 42 i,m | 9.3 i,m | n | n |
| 5a. Chromium (III) | 16065831 | 550 e,i,m,o | 180 e,i,m,o | | | n | n |
| 5b. Chromium (VI) [b] | 18540299 | 16 i,m,w | 11 i,m,w | 1100 i,m | 50 i,m | n | n |
| 6. Copper [b] | 7440508 | 13 e,i,m,w,x | 9.0 e,i,m,w | 4.8 i,m | 3.1 i,m | 1300 | |
| 7. Lead [b] | 7439921 | 65 e,i,m | 2.5 e,i,m | 210 i,m | 8.1 i,m | n | n |
| 8. Mercury [b] | 7439976 | [Reserved] | [Reserved] | [Reserved] | [Reserved] | 0.050 a | 0.051 a |
| 9. Nickel [b] | 7440020 | 470 e,i,m,w | 52 e,i,m,w | 74 i,m | 8.2 i,m | 610 a | 4600 a |
| 10. Selenium [b] | 7782492 | [Reserved] p | 5.0 q | 290 i,m | 71 i,m | n | n |
| 11. Silver [b] | 7440224 | 3.4 e,i,m | | 1.9 i,m | | | |
| 12. Thallium | 7440280 | | | | | 1.7 a,s | 6.3 a,t |
| 13. Zinc [b] | 7440666 | 120 e,i,m,w,x | 120 e,i,m,w | 90 i,m | 81 i,m | | |
| 14. Cyanide [b] | 57125 | 22 o | 5.2 o | 1 r | 1 r | 700 a | 220,000 a,j |
| 15. Asbestos | 1332214 | | | | | 7,000,000 fibers/L k,s | |
| 16. 2,3,7,8-TCDD (Dioxin) | 1746016 | | | | | 0.000000013 c | 0.000000014 c |
| 17. Acrolein | 107028 | | | | | 320 s | 780 t |
| 18. Acrylonitrile | 107131 | | | | | 0.059 a,c,s | 0.66 a,c,t |
| 19. Benzene | 71432 | | | | | 1.2 a,c | 71 a,c |
| 20. Bromoform | 75252 | | | | | 4.3 a,c | 360 a,c |
| 21. Carbon Tetrachloride | 56235 | | | | | 0.25 a,c,s | 4.4 a,c,t |
| 22. Chlorobenzene | 108907 | | | | | 680 a,s | 21,000 a,j,t |
| 23. Chlorodibromomethane | 124481 | | | | | 0.401 a,c | 34 a,c |
| 24. Chloroethane | 75003 | | | | | | |
| 25. 2-Chloroethylvinyl Ether | 110758 | | | | | | |