March 2008

Table A-3: Residential Risk Based Generic Cleanup Numbers (GCNs) for Ohio Hazardous Waste Closures

CONTAMINANT	1 Calculated Soil Saturation Limit (SAT) (mg/kg)	2 Single Chemical Noncancer Direct Contact Soil (mg/kg)	3 Single Chemical Cancer Direct Contact Soil (mg/kg)	4 Single Chemical Direct Contact Soil (mg/kg)		5 Single Chemical Noncancer Protective Of Ground Water (1 DAF) (mg/kg)	6 Single Chemical Cancer Protective Of Ground Water (1 DAF) (mg/kg)	7 Single Chemical Protective Of Ground Water (1 DAF) (mg/kg)		8 Single Chemical Noncancer Protective Of Ground Water (20 DAF) (mg/kg)	9 Single Chemical Cancer Protective Of Ground Water (20 DAF) (mg/kg)	10 Single Chemical Protective Of Ground Water (20 DAF) (mg/kg)		11 Solubility (SOL) (mg/l)	12 Single Chemical Noncancer Ground Water Concentration (mg/l)	13 Single Chemical Cancer Ground Water Concentration (mg/l)	14 Single Chemical Ground Water Concentration (mg/l)	
Acenaphthene	4.20E+01	2.84E+03		4.20E+01	sat	4.80E+00		4.80E+00	nc	9.60E+01		4.20E+01	sat	4.24E+00	4.80E-01		4.80E-01	nc
Acetone	1.01E+05	4.87E+04		4.87E+04	nc	1.62E+00		1.62E+00	nc	3.25E+01		3.25E+01	nc	1.00E+06	8.07E+00		8.07E+00	nc
Acetonitrile	1.32E+05	4.76E+02		4.76E+02	nc	8.44E-03		8.44E-03	nc	1.69E-01		1.69E-01	nc	1.00E+06	3.64E-02		3.64E-02	nc
Acetophenone	7.36E+02	3.77E-01		3.77E-01	nc	2.68E-06		2.68E-06	nc	5.37E-05		5.37E-05	nc	6.13E+03	1.22E-05		1.22E-05	nc
Acrolein	2.27E+04	7.29E-02		7.29E-02	nc	2.51E-06		2.51E-06	nc	5.03E-05		5.03E-05	nc	2.12E+05	1.22E-05		1.22E-05	nc
Acrylonitrile	1.23E+04	9.38E+00	2.61E+00	2.61E+00	ca	3.01E-04	9.86E-05	9.86E-05	ca	6.02E-03	1.97E-03	1.97E-03	ca	7.35E+04	1.13E-03	3.70E-04	3.70E-04	ca
Aldrin	1.76E+01	1.49E+00	2.30E-01	2.30E-01	ca	9.75E-03	9.17E-04	9.17E-04	ca	1.95E-01	1.83E-02	1.83E-02	ca	1.80E-01	9.99E-05	9.40E-06	9.40E-06	ca
Aluminum		1.99E+04		1.99E+04	nc	4.71E-01		4.71E-01	nc	9.41E+00		9.41E+00	nc		2.06E+00		2.06E+00	nc
Aluminum phosphide		8.02E+00		8.02E+00	nc	1.88E-04		1.88E-04	nc	3.76E-03		3.76E-03	nc	1.92E+05	8.23E-04		8.23E-04	nc
Aniline	6.87E+03	3.46E+02	6.87E+02	3.46E+02	nc	3.07E-02	3.32E-02	3.07E-02	nc	6.15E-01	6.64E-01	6.15E-01	nc	3.66E+04	1.07E-01	1.15E-01	1.07E-01	nc
Anthracene	2.56E+00	1.42E+04		2.56E+00	sat	9.85E+01		2.56E+00	sat	1.97E+03		2.56E+00	sat	4.34E-02	1.66E+00		4.34E-02	sol
Antimony		3.07E+01		3.07E+01	nc	5.41E-03		5.41E-03	nc	1.08E-01		1.08E-01	nc		1.20E-04		1.20E-04	nc
Aroclor 1016	3.09E+01	3.63E+00	2.06E+00	2.06E+00	ca	2.74E-02	8.73E-03	8.73E-03	ca	5.49E-01	1.75E-01	1.75E-01	ca	9.06E-01	8.02E-04	2.55E-04	2.55E-04	ca
Aroclor 1221	7.51E+00		1.94E+00	1.94E+00	ca		1.69E-03	1.69E-03	ca		3.39E-02	3.39E-02	ca	5.90E-01		1.32E-04	1.32E-04	ca
Aroclor 1232	2.91E+01		2.06E+00	2.06E+00	ca		4.11E-03	4.11E-03	ca		8.23E-02	8.23E-02	ca	1.45E+00		2.04E-04	2.04E-04	ca
Aroclor 1242	1.41E+01		2.06E+00	2.06E+00	ca		5.65E-03	5.65E-03	ca		1.13E-01	1.13E-01	ca	7.03E-01		2.80E-04	2.80E-04	ca
Aroclor 1248	8.55E-01		2.06E+00	8.55E-01	sat		3.83E-03	3.83E-03	ca		7.66E-02	7.66E-02	ca	1.70E-02		7.60E-05	7.60E-05	ca
Aroclor 1254	5.96E+00	1.04E+00	2.06E+00	1.04E+00	nc	7.07E-03	8.41E-03	7.07E-03	nc	1.41E-01	1.68E-01	1.41E-01	nc	7.00E-02	8.29E-05	9.87E-05	8.29E-05	nc
Aroclor 1260	1.12E+01		2.06E+00	2.06E+00	ca		3.71E-02	3.71E-02	ca		7.43E-01	7.43E-01	ca	2.70E-02		8.97E-05	8.97E-05	ca
Arsenic		2.15E+01	3.87E+00	3.87E+00	ca	1.17E-01	1.12E-02	1.12E-02	ca	2.35E+00	2.25E-01	2.25E-01	ca		4.66E-03	4.46E-04	4.46E-04	ca
Barium and compounds		5.17E+03		5.17E+03	nc	4.12E+01		4.12E+01	nc	8.25E+02		8.25E+02	nc		1.00E+00		1.00E+00	nc
Benz[a]anthracene	7.48E+00		5.12E+00	5.12E+00	ca	-	1.27E-01	1.27E-01	ca		2.54E+00	2.54E+00	ca	9.40E-03		1.60E-04	1.60E-04	ca
Benzene	4.55E+02	3.25E+01	6.31E+00	6.31E+00	ca	4.67E-03	1.10E-03	1.10E-03	ca	9.34E-02	2.20E-02	2.20E-02	ca	1.75E+03	1.38E-02	3.27E-03	3.27E-03	ca
Benzidine	1.82E+05	1.49E+02	1.70E-02	1.70E-02	ca	2.10E+01	1.31E-03	1.31E-03	ca	4.20E+02	2.62E-02	1.70E-02	dc	4.00E+02	4.62E-02	2.89E-06	2.89E-06	ca
Benzo[a]pyrene	3.30E+00		5.12E-01	5.12E-01	ca		2.50E-02	2.50E-02	ca		5.00E-01	5.00E-01	ca	1.62E-03		1.23E-05	1.23E-05	ca
Benzo[b]fluoranthene	3.69E+00		5.12E+00	3.69E+00	sat		2.67E-01	2.67E-01	ca		5.35E+00	3.69E+00	sat	1.50E-03		1.09E-04	1.09E-04	ca
Benzo[k]fluoranthene	1.97E+00		5.12E+01	1.97E+00	sat		2.67E+00	1.97E+00	sat		5.35E+01	1.97E+00	sat	8.00E-04		1.09E-03	8.00E-04	sol
Benzoic acid	3.54E+02	1.98E+05		3.54E+02	sat	1.17E+01		1.17E+01	nc	2.35E+02		2.35E+02	nc	3.50E+03	5.83E+01		5.83E+01	nc
Beryllium		1.11E+02	1.09E+04	1.11E+02	nc	1.27E+01		1.27E+01	nc	2.55E+02		1.11E+02	dc		1.61E-02		1.61E-02	nc
Bis(2-chloro-1-methylethyl)ether	3.31E+02	1.98E+03	2.96E+01	2.96E+01	ca	1.67E-01	7.53E-04	7.53E-04	ca	3.35E+00	1.51E-02	1.51E-02	ca	1.70E+03	5.69E-01	2.56E-03	2.56E-03	ca
Bis(2-chloroethyl)ether	2.26E+03		3.56E+00	3.56E+00	ca		2.13E-05	2.13E-05	ca		4.26E-04	4.26E-04	ca	1.72E+04	-	9.23E-05	9.23E-05	ca
Bis(2-ethylhexyl)phthalate	1.03E+04	7.24E+02	2.02E+02	2.02E+02	ca	5.01E+02	8.78E+01	8.78E+01	ca	1.00E+04	1.76E+03	2.02E+02	dc	3.40E-01	1.66E-02	2.91E-03	2.91E-03	ca
Bromodichloromethane	1.50E+03	1.48E+03	9.69E+01	9.69E+01	ca	9.30E-02	3.25E-03	3.25E-03	ca	1.86E+00	6.50E-02	6.50E-02	ca	6.74E+03	2.95E-01	1.03E-02	1.03E-02	ca
Bromoform	8.63E+02	1.48E+03	7.61E+02	7.61E+02	ca	1.14E-01	3.12E-02	3.12E-02	ca	2.29E+00	6.25E-01	6.25E-01	ca	3.10E+03	3.04E-01	8.31E-02	8.31E-02	ca
Butanol	8.43E+03	7.39E+03		7.39E+03	nc	3.25E-01		3.25E-01	nc	6.50E+00		6.50E+00	nc	7.40E+04	1.52E+00		1.52E+00	nc
n-Butylbenzene	6.92E+01	7.39E+02		6.92E+01	sat	2.38E-01		2.38E-01	nc	4.77E+00		4.77E+00	nc	1.18E+01	4.03E-02		4.03E-02	nc
sec-Butylbenzene	7.99E+01	7.39E+02		7.99E+01	sat	1.48E-01		1.48E-01	nc	2.95E+00		2.95E+00	nc	1.76E+01	3.23E-02		3.23E-02	nc
tert-Butylbenzene	1.36E+02	7.39E+02		1.36E+02	sat	2.49E-01		2.49E-01	nc	4.99E+00		4.99E+00	nc	2.95E+01	5.37E-02		5.37E-02	nc
Butyl benzyl phthalate	3.10E+02	9.90E+03		3.10E+02	sat	2.28E+02		2.28E+02	nc	4.55E+03		3.10E+02	sat	2.69E+00	1.98E+00		1.98E+00	nc
Cadmium and compounds**		6.35E+01	1.45E+04	6.35E+01	nc	4.66E-01		4.66E-01	nc	9.32E+00		9.32E+00	nc		6.19E-03		6.19E-03	nc
Carbazole	5.15E+01		1.87E+02	5.15E+01	sat		1.65E-01	1.65E-01	ca		3.29E+00	3.29E+00	ca	7.48E+00		2.36E-02	2.36E-02	ca
Carbon disulfide	5.04E+02	3.52E+02		3.52E+02	nc	1.30E-01		1.30E-01	nc	2.59E+00		2.59E+00	nc	1.19E+03	3.25E-01		3.25E-01	nc
Carbon tetrachloride	5.40E+02	1.77E+00	2.49E+00	1.77E+00	nc	7.13E-04	1.04E-03	7.13E-04	nc	1.43E-02	2.09E-02	1.43E-02	nc	7.93E+02	1.09E-03	1.59E-03	1.09E-03	nc
Chlordane	1.34E+01	3.42E+01	1.58E+01	1.34E+01	sat	9.48E-01	2.49E-01	2.49E-01	ca	1.90E+01	4.98E+00	4.98E+00	ca	5.60E-02	3.95E-03	1.04E-03	1.04E-03	ca
p-Chloroaniline	1.23E+03	1.98E+02		1.98E+02	nc	1.95E-02		1.95E-02	nc	3.90E-01		3.90E-01	nc	5.30E+03	5.86E-02		5.86E-02	nc
Chlorobenzene	2.67E+02	1.48E+02		1.48E+02	nc	1.93E-02		1.93E-02	nc	3.86E-01		3.86E-01	nc	4.72E+02	2.97E-02		2.97E-02	nc
Chlorobenzilate	2.30E+01	9.90E+01		2.30E+01	sat	5.27E-02		5.27E-02	nc	1.05E+00		1.05E+00	nc	1.00E+01	2.20E-02		2.20E-02	nc
Chloroethane	1.34E+03	5.28E+03	2.07E+03	1.34E+03	sat	8.55E-01	6.23E-02	6.23E-02	ca	1.71E+01	1.25E+00	1.25E+00	ca	5.74E+03	2.97E+00	2.17E-01	2.17E-01	ca
Chloroform	1.64E+03	2.64E+02	2.20E+00	2.20E+00	ca	2.56E-02	4.47E-04	4.47E-04	ca	5.12E-01	8.94E-03	8.94E-03	ca	7.92E+03	8.75E-02	1.53E-03	1.53E-03	ca
Chloromethane	1.04E+03	5.54E+01		5.54E+01	nc	1.43E-02		1.43E-02	nc	2.85E-01		2.85E-01	nc	5.32E+03	5.50E-02		5.50E-02	nc
2-Chloronaphthalene	7.14E+01	3.96E+03		7.14E+01	sat	3.80E+00		3.80E+00	nc	7.61E+01		7.14E+01	sat	1.17E+01	6.13E-01		6.13E-01	nc
2-Chlorophenol	1.93E+04	2.48E+02		2.48E+02	nc	6.92E-02		6.92E-02	nc	1.38E+00		1.38E+00	nc	2.20E+04	7.08E-02		7.08E-02	nc
Chromium III		9.59E+04		9.59E+04	nc	2.80E+07		9.59E+04	dc	5.60E+08		9.59E+04	dc		1.56E+01		1.56E+01	nc
Chromium VI		2.10E+02	2.18E+03	2.10E+02	nc	5.90E-01		5.90E-01	nc	1.18E+01		1.18E+01	nc		3.07E-02		3.07E-02	nc
Chrysene	1.27E+00		5.12E+02	1.27E+00	sat		1.27E+01	1.27E+00	sat		2.54E+02	1.27E+00	sat	1.60E-03		1.60E-02	1.60E-03	sol
Cobalt		1.37E+03	9.33E+03	1.37E+03	nc	1.39E+01		1.39E+01	nc	2.79E+02		2.79E+02	nc		3.08E-01		3.08E-01	nc
Copper		2.86E+03		2.86E+03	nc	1.99E+01		1.99E+01	nc	3.98E+02		3.98E+02	nc		5.63E-01		5.63E-01	nc
Cyanide, Free	2.91E+05	1.54E+03		1.54E+03	nc	8.83E-02		8.83E-02	nc	1.77E+00		1.77E+00	nc	1.00E+06	3.03E-01		3.03E-01	nc
Cyclohexane	8.62E+01	2.32E+03		8.62E+01	sat	3.85E+00		3.85E+00	nc	7.70E+01		7.70E+01	nc	5.50E+01	3.66E+00		3.66E+00	nc
Dalapon	5.29E+04	1.49E+03		1.49E+03	nc	8.90E-06		8.90E-06	nc	1.78E-04		1.78E-04	nc	5.02E+05	4.33E-05		4.33E-05	nc
Dibenz[ah]anthracene	1.89E+01		5.12E-01	5.12E-01	ca		5.71E-02	5.71E-02	ca		1.14E+00	5.12E-01	dc	2.49E-03		7.51E-06	7.51E-06	ca
Dibenzofuran	3.59E+01	1.90E+02		3.59E+01	sat	2.59E-01		2.59E-01	nc	5.17E+00		5.17E+00	nc	4.22E+00	3.01E-02		3.01E-02	nc

March 2008

Table A-3: Residential Risk Based Generic Cleanup Numbers (GCNs) for Ohio Hazardous Waste Closures

CONTAMINANT	1 Calculated Soil Saturation Limit (SAT) (mg/kg)	2 Single Chemical Noncancer Direct Contact Soil (mg/kg)	3 Single Chemical Cancer Direct Contact Soil (mg/kg)	4 Single Chemical Direct Contact Soil (mg/kg)		5 Single Chemical Noncancer Protective Of Ground Water (1 DAF) (mg/kg)	6 Single Chemical Cancer Protective Of Ground Water (1 DAF) (mg/kg)	7 Single Chemical Protective Of Ground Water (1 DAF) (mg/kg)		8 Single Chemical Noncancer Protective Of Ground Water (20 DAF) (mg/kg)	9 Single Chemical Cancer Protective Of Ground Water (20 DAF) (mg/kg)	10 Single Chemical Protective Of Ground Water (20 DAF) (mg/kg)		11 Solubility (SOL) (mg/l)	12 Single Chemical Noncancer Ground Water Concentration (mg/l)	13 Single Chemical Cancer Ground Water Concentration (mg/l)	14 Single Chemical Ground Water Concentration (mg/l)	
Dibromochloromethane	6.04E+02	1.48E+03	7.15E+01	7.15E+01	ca	9.91E-02	2.55E-03	2.55E-03	ca	1.98E+00	5.10E-02	5.10E-02	ca	2.60E+03	3.01E-01	7.75E-03	7.75E-03	ca
1,2-Dibromoethane	5.20E+02	6.41E+02	1.62E-01	1.62E-01	ca	3.04E-02	1.17E-05	1.17E-05	ca	6.07E-01	2.33E-04	2.33E-04	ca	3.91E+03	1.32E-01	5.07E-05	5.07E-05	ca
Dichloroacetic acid	2.16E+04	1.98E+02	7.83E+01	7.83E+01	ca	2.16E-02	4.64E-03	4.64E-03	ca	4.31E-01	9.28E-02	9.28E-02	ca	8.63E+04	6.16E-02	1.33E-02	1.33E-02	ca
1,2-Dichlorobenzene	2.10E+02	1.90E+02		1.90E+02	nc	2.60E-02		2.60E-02	nc	5.19E-01		5.19E-01	nc	1.56E+02	1.80E-02		1.80E-02	nc
1,3-Dichlorobenzene	9.02E+01	6.65E+01		6.65E+01	nc	6.82E-03		6.82E-03	nc	1.36E-01		1.36E-01	nc	1.25E+02	8.42E-03		8.42E-03	nc
1,4-Dichlorobenzene	9.98E+01	1.52E+03	3.41E+01	3.41E+01	ca	3.02E-01	6.58E-03	6.58E-03	ca	6.03E+00	1.32E-01	1.32E-01	ca	7.38E+01	2.09E-01	4.56E-03	4.56E-03	ca
3,3-Dichlorobenzidine	4.81E+00		8.70E+00	4.81E+00	sat		2.15E-03	2.15E-03	ca		4.30E-02	4.30E-02	ca	3.11E+00		1.31E-03	1.31E-03	ca
Dichlorodifluoromethane	7.10E+02	1.00E+02		1.00E+02	nc	2.00E-01		2.00E-01	nc	4.00E+00		4.00E+00	nc	2.80E+02	1.17E-01		1.17E-01	nc
(DDD) Dichlorodiphenyldichloroethane	1.80E+02		2.34E+01	2.34E+01	ca		1.74E+00	1.74E+00	ca		3.48E+01	2.34E+01	dc	9.00E-02		8.71E-04	8.71E-04	ca
(DDE) Dichlorodiphenyldichloroethene	1.07E+03		1.65E+01	1.65E+01	ca		2.45E+00	2.45E+00	ca		4.90E+01	1.65E+01	dc	1.20E-01		2.74E-04	2.74E-04	ca
(DDT) Dichlorodiphenyltrichloroethane	1.32E+02	3.48E+01	1.65E+01	1.65E+01	ca	9.89E+00	2.78E+00	2.78E+00	ca	1.98E+02	5.56E+01	1.65E+01	dc	2.50E-02	1.88E-03	5.29E-04	5.29E-04	ca
1,1-Dichloroethane	1.04E+03	5.01E+02		5.01E+02	nc	7.14E-02		7.14E-02	nc	1.43E+00		1.43E+00	nc	5.06E+03	2.52E-01		2.52E-01	nc
1,2-Dichloroethane	1.21E+03	8.48E+00	2.75E+00	2.75E+00	ca	7.09E-04	2.77E-04	2.77E-04	ca	1.42E-02	5.53E-03	5.53E-03	ca	8.52E+03	2.98E-03	1.16E-03	1.16E-03	ca
1,1-Dichloroethylene	9.39E+02	1.23E+02		1.23E+02	nc	4.24E-02		4.24E-02	nc	8.49E-01		8.49E-01	nc	2.25E+03	1.03E-01		1.03E-01	nc
1,2-Dichloroethylene (cis)	7.08E+02	7.39E+02		7.08E+02	sat	4.06E-02		4.06E-02	nc	8.11E-01		8.11E-01	nc	3.50E+03	1.42E-01		1.42E-01	nc
1,2-Dichloroethylene (trans)	1.74E+03	6.88E+01		6.88E+01	nc	1.25E-02		1.25E-02	nc	2.50E-01		2.50E-01	nc	6.30E+03	3.70E-02		3.70E-02	nc
1,2-Dichloroethylene (mixture)	2.56E+03	1.17E+02		1.17E+02	nc	2.58E-02		2.58E-02	nc	5.15E-01		5.15E-01	nc	3.50E+03	3.21E-02		3.21E-02	nc
2,4-Dichlorophenol	1.77E+03	1.49E+02		1.49E+02	nc	1.82E-02		1.82E-02	nc	3.63E-01		3.63E-01	nc	4.50E+03	3.68E-02		3.68E-02	nc
(2,4-D) 2,4-Dichlorophenoxyacetic acid	9.48E+01	6.74E+02		9.48E+01	sat	3.58E-02		3.58E-02	nc	7.16E-01		7.16E-01	nc	6.77E+02	1.49E-01		1.49E-01	nc
1,2-Dichloropropane	1.04E+03	6.28E+00	8.84E+01	6.28E+00	nc	7.61E-04	2.95E-03	7.61E-04	nc	1.52E-02	5.91E-02	1.52E-02	nc	4.40E+03	2.35E-03	9.12E-03	2.35E-03	nc
1,3-Dichloropropene	9.15E+02	1.62E+01	7.66E+00	7.66E+00	ca	4.20E-03	1.30E-03	1.30E-03	ca	8.40E-02	2.59E-02	2.59E-02	ca	2.80E+03	1.19E-02	3.66E-03	3.66E-03	ca
Dieldrin	8.37E+00	2.48E+00	2.45E-01	2.45E-01	ca	2.19E-02	1.23E-03	1.23E-03	ca	4.37E-01	2.46E-02	2.46E-02	ca	1.95E-01	5.08E-04	2.86E-05	2.86E-05	ca
Diethyl phthalate	7.30E+02	3.96E+04		7.30E+02	sat	9.23E+00		9.23E+00	nc	1.85E+02		1.85E+02	nc	1.08E+03	1.19E+01		1.19E+01	nc
Dimethyl phthalate	4.64E+02	4.95E+05		4.64E+02	sat	3.31E+01		3.31E+01	nc	6.63E+02		4.64E+02	sat	4.00E+03	1.53E+02		1.53E+02	nc
N,N-Dimethylformamide	1.14E+05	4.95E+03		4.95E+03	nc	3.34E-01		3.34E-01	nc	6.68E+00		6.68E+00	nc	1.00E+06	1.56E+00		1.56E+00	nc
2,4-Dimethylphenol	4.08E+03	9.90E+02		9.90E+02	nc	1.67E-01		1.67E-01	nc	3.35E+00		3.35E+00	nc	7.87E+03	2.71E-01		2.71E-01	nc
Di-n-butyl phthalate	7.60E+02	4.95E+03		7.60E+02	sat	6.50E+01		6.50E+01	nc	1.30E+03		7.60E+02	sat	1.12E+01	9.55E-01		9.55E-01	nc
meta-Dinitrobenzene	2.00E+02	4.95E+00		4.95E+00	nc	7.64E-04		7.64E-04	nc	1.53E-02		1.53E-02	nc	5.00E+02	1.53E-03		1.53E-03	nc
ortho-Dinitrobenzene	8.35E+01	4.95E+00		4.95E+00	nc	9.89E-04		9.89E-04	nc	1.98E-02		1.98E-02	nc	1.52E+02	1.52E-03		1.52E-03	nc
2,4-Dinitrophenol	2.79E+02	9.83E+01		9.83E+01	nc	6.13E-03		6.13E-03	nc	1.23E-01		1.23E-01	nc	2.79E+03	3.07E-02		3.07E-02	nc
2,4-Dinitrotoluene	7.86E+01	9.94E+01	5.78E+00	5.78E+00	ca	1.17E-02	5.89E-04	3.73E-04	ca	2.35E-01	1.18E-02	7.46E-03	ca	2.70E+02	3.00E-02	9.54E-04	9.54E-04	ca
2,6-Dinitrotoluene	4.34E+01	4.91E+01	5.71E+00	5.71E+00	ca	5.12E-03	3.25E-04	3.25E-04	ca	1.02E-01	6.50E-03	6.50E-03	ca	1.82E+02	1.51E-02	9.60E-04	9.60E-04	ca
Di-n-octyl phthalate	2.44E+01	1.98E+03		2.44E+01	sat	2.46E+01		2.44E+01	sat	4.91E+02		2.44E+01	sat	2.00E-02	2.01E-02		2.00E-02	sol
1,4-Dioxane	1.02E+05		4.88E+02	4.88E+02	ca		1.23E-02	1.23E-02	ca		2.47E-01	2.47E-01	ca	1.00E+06		6.09E-02	6.09E-02	ca
Endosulfan II	2.23E+00	2.97E+02		2.23E+00	sat	3.98E-01		3.98E-01	nc	7.96E+00		2.23E+00	sat	5.10E-01	8.89E-02		8.89E-02	nc
Endrin	6.18E+00	1.49E+01		6.18E+00	sat	8.71E-02		8.71E-02	nc	1.74E+00		1.74E+00	nc	2.50E-01	3.51E-03		3.51E-03	nc
Ethylbenzene	1.50E+02	1.83E+03		1.50E+02	sat	3.60E-01		3.60E-01	nc	7.19E+00		7.19E+00	nc	1.69E+02	3.77E-01		3.77E-01	nc
Ethylene glycol	1.02E+05	1.48E+05		1.02E+05	sat	6.31E+00		6.31E+00	nc	1.26E+02		1.26E+02	nc	1.00E+06	3.12E+01		3.12E+01	nc
Fluoranthene	4.41E+01	1.90E+03		4.41E+01	sat	3.20E+01		3.20E+01	nc	6.40E+02		4.41E+01	sat	2.06E-01	1.49E-01		1.49E-01	nc
Fluorene	5.48E+01	1.90E+03		5.48E+01	sat	7.65E+00		7.65E+00	nc	1.53E+02		5.48E+01	sat	1.98E+00	2.75E-01		2.75E-01	nc
Fluoride		4.68E+03		4.68E+03	nc	2.13E-01		2.13E-01	nc	4.26E+00		4.26E+00	nc	1.69E+00	9.32E-01		9.32E-01	nc
Formaldehyde	6.96E+04	1.48E+04	2.01E+06	1.48E+04	nc	8.37E-01		8.37E-01	nc	1.67E+01		1.67E+01	nc	4.00E+05	3.05E+00		3.05E+00	nc
Formic acid	1.02E+05	9.90E+04		9.90E+04	nc	6.29E+00		6.29E+00	nc	1.26E+02		1.26E+02	nc	1.00E+06	3.11E+01		3.11E+01	nc
Heptachlor	5.10E+02	2.48E+01	8.70E-01	8.70E-01	ca	6.70E+00	1.41E-01	1.41E-01	ca	1.34E+02	2.82E+00	8.70E-01	dc	1.80E-01	2.37E-03	4.99E-05	4.99E-05	ca
Heptachlor Epoxide	3.33E+01	6.44E-01	4.30E-01	4.30E-01	ca	2.66E-02	9.93E-03	9.93E-03	ca	5.31E-01	1.99E-01	1.99E-01	ca	2.00E-01	1.59E-04	5.96E-05	5.96E-05	ca
Hexachloro-1,3-butadiene	2.77E+01	9.90E+00	5.02E+01	9.90E+00	nc	1.65E-02	4.87E-02	1.65E-02	nc	3.29E-01	9.75E-01	3.29E-01	nc	2.54E+00	1.50E-03	4.44E-03	1.50E-03	nc
Hexachlorobenzene	6.83E+02	3.96E+01	2.45E+00	2.45E+00	ca	2.70E-01	1.01E-02	1.01E-02	ca	5.40E+00	2.03E-01	2.03E-01	ca	6.20E+00	2.45E-03	9.21E-05	9.21E-05	ca
a-Hexachlorocyclohexane	5.12E+00	3.96E+02	6.22E-01	6.22E-01	ca	2.87E-01	2.50E-04	2.50E-04	ca	5.75E+00	4.99E-03	4.99E-03	ca	2.00E+00	1.08E-01	9.38E-05	9.38E-05	ca
b-Hexachlorocyclohexane	6.29E-01		2.18E+00	6.29E-01	sat		8.92E-04	8.92E-04	ca		1.78E-02	1.78E-02	ca	2.40E-01		3.28E-04	3.28E-04	ca
Hexachlorocyclopentadiene	7.21E+02	2.96E+02		2.96E+02	nc	1.16E+01		1.16E+01	nc	2.32E+02		2.32E+02	nc	1.80E+00	2.89E-02		2.89E-02	nc
Hexachloroethane	1.84E+02	4.95E+01	2.80E+02	4.95E+01	nc	4.12E-02	1.32E-01	4.12E-02	nc	8.25E-01	2.64E+00	8.25E-01	nc	5.00E+01	1.09E-02	3.49E-02	1.09E-02	nc
n-Hexane	1.35E+02	1.70E+02		1.35E+02	sat	2.94E+00		2.94E+00	nc	5.88E+01		5.88E+01	nc	9.50E+00	4.24E-01		4.24E-01	nc
Hydrogen sulfide	7.76E+02	7.18E-01		7.18E-01	nc	3.16E-04		3.16E-04	nc	6.33E-03		6.33E-03	nc	3.98E+03	1.22E-03		1.22E-03	nc
Indeno[1,2,3-cd]pyrene	1.53E-01		5.12E+00	1.53E-01	sat		5.39E-01	1.53E-01	sat		1.08E+01	1.53E-01	sat	2.20E-05		7.76E-05	2.20E-05	sol
Iron		2.31E+04		2.31E+04	nc	2.04E+00		2.04E+00	nc	4.09E+01		4.09E+01	nc		4.54E+00		4.54E+00	nc
Isobutyl alcohol	1.90E+04	2.22E+04		1.90E+04	sat	1.48E+00		1.48E+00	nc	2.97E+01		2.97E+01	nc	8.50E+04	4.58E+00		4.58E+00	nc
Isophorone	2.32E+03	9.90E+03	4.12E+03	2.32E+03	sat	8.78E-01		2.00E-01	ca	1.76E+01		3.99E+00	ca	1.20E+04	2.99E+00	6.80E-01	6.80E-01	ca
Isopropylbenzene	4.28E+01	7.39E+03		4.28E+01	sat	3.34E-01		3.34E-01	nc	6.68E+00		6.68E+00	nc	2.34E+01	1.78E-01		1.78E-01	nc
Lead	See Closure Plan Review Guidance																	
Lindane	1.65E+01	1.90E+01	3.92E+00	3.92E+00	ca	9.72E-03	1.09E-03	1.09E-03	ca	1.94E-01	2.18E-02	2.18E-02	ca	7.30E+00	4.12E-03	4.61E-04	4.61E-04	ca
Manganese		7.60E+03		7.60E+03	nc	1.23E+02		1.23E+02	nc	2.45E+03		2.45E+03	nc	8.72E+04	1.88E+00		1.88E+00	nc
MCPA	1.26E+02	2.48E+01		2.48E+01	nc	1.92E-03		1.92E-03	nc	3.85E-02		3.85E-02	nc	6.30E+02	6.41E-03		6.41E-03	nc

March 2008

Table A-3: Residential Risk Based Generic Cleanup Numbers (GCNs) for Ohio Hazardous Waste Closures

CONTAMINANT	1 Calculated Soil Saturation Limit (SAT) (mg/kg)	2 Single Chemical Noncancer Direct Contact Soil (mg/kg)	3 Single Chemical Cancer Direct Contact Soil (mg/kg)	4 Single Chemical Direct Contact Soil (mg/kg)		5 Single Chemical Noncancer Protective Of Ground Water (1 DAF) (mg/kg)	6 Single Chemical Cancer Protective Of Ground Water (1 DAF) (mg/kg)	7 Single Chemical Protective Of Ground Water (1 DAF) (mg/kg)		8 Single Chemical Noncancer Protective Of Ground Water (20 DAF) (mg/kg)	9 Single Chemical Cancer Protective Of Ground Water (20 DAF) (mg/kg)	10 Single Chemical Protective Of Ground Water (20 DAF) (mg/kg)		11 Solubility (SOL) (mg/l)	12 Single Chemical Noncancer Ground Water Concentration (mg/l)	13 Single Chemical Cancer Ground Water Concentration (mg/l)	14 Single Chemical Ground Water Concentration (mg/l)	
MCPP	1.70E+02	4.95E+01		4.95E+01	nc	4.03E-03		4.03E-03	nc	8.06E-02		8.06E-02	nc	8.60E+02	1.36E-02		1.36E-02	nc
Mercury and compounds	3.13E+00	6.68E+00		3.13E+00	sat	6.94E-02		6.94E-02	nc	1.39E+00		1.39E+00	nc	6.00E-02	1.33E-03		1.33E-03	nc
Methacrylonitrile	5.43E+03	7.39E+00		7.39E+00	nc	4.78E-04		4.78E-04	nc	9.55E-03		9.55E-03	nc	2.54E+04	1.53E-03		1.53E-03	nc
Methanol	1.02E+05	3.70E+04		3.70E+04	nc	1.57E+00		1.57E+00	nc	3.15E+01		3.15E+01	nc	1.00E+06	7.79E+00		7.79E+00	nc
Methoxychlor	8.80E+00	2.48E+02		8.80E+00	sat	9.89E+00		8.80E+00	sat	1.98E+02		8.80E+00	sat	4.50E-02	5.06E-02		4.50E-02	sol
Methyl bromide	2.57E+03	3.87E+00		3.87E+00	nc	6.38E-04		6.38E-04	nc	1.28E-02		1.28E-02	nc	1.52E+04	2.62E-03		2.62E-03	nc
Methyl ethyl ketone	5.59E+04	2.32E+04		2.32E+04	nc	5.94E-01		5.94E-01	nc	1.19E+01		1.19E+01	nc	3.53E+05	2.30E+00		2.30E+00	nc
Methylene chloride	1.82E+03	9.34E+02	9.02E+01	9.02E+01	ca	8.78E-02	9.46E-03	9.46E-03	ca	1.76E+00	1.89E-01	1.89E-01	ca	1.30E+04	3.80E-01	4.09E-02	4.09E-02	ca
Methyl isobutyl ketone	6.59E+03	5.01E+03		5.01E+03	nc	3.24E-01		3.24E-01	nc	6.49E+00		6.49E+00	nc	1.90E+04	7.27E-01		7.27E-01	nc
Methyl tert-butyl ether	5.94E+03	5.09E+03		5.09E+03	nc	3.45E-01		3.45E-01	nc	6.91E+00		6.91E+00	nc	5.10E+04	1.61E+00		1.61E+00	nc
Methylmethacrylate	4.65E+03	4.22E+03		4.22E+03	nc	1.64E-01		1.64E-01	nc	3.28E+00		3.28E+00	nc	1.59E+04	4.19E-01		4.19E-01	nc
1-Methylnaphthalene	1.21E+02	3.32E+03		1.21E+02	sat	2.59E+00		2.59E+00	nc	5.17E+01		5.17E+01	nc	2.58E+01	5.39E-01		5.39E-01	nc
2-Methylnaphthalene	2.19E+02	1.90E+02		1.90E+02	nc	2.79E-01		2.79E-01	nc	5.58E+00		5.58E+00	nc	2.46E+01	3.10E-02		3.10E-02	nc
2-Methylphenol	7.34E+03	2.48E+03		2.48E+03	nc	2.70E-01		2.70E-01	nc	5.40E+00		5.40E+00	nc	2.60E+04	7.07E-01		7.07E-01	nc
4-Methylphenol	2.42E+04	2.48E+02		2.48E+02	nc	7.60E-02		7.60E-02	nc	1.52E+00		1.52E+00	nc	2.50E+04	7.12E-02		7.12E-02	nc
Mirex	4.08E+03	9.90E+00		9.90E+00	nc	1.42E+02		9.90E+00	dc	2.84E+03		9.90E+00	dc	8.50E-02	2.96E-03		2.96E-03	nc
Naphthalene	1.27E+02	6.90E+01		6.90E+01	nc	7.63E-03		7.63E-03	nc	1.53E-01		1.53E-01	nc	3.10E+01	1.82E-03		1.82E-03	nc
Nickel (soluble salts)		1.42E+03		1.42E+03	nc	1.97E+01		1.97E+01	nc	3.95E+02		3.95E+02	nc	4.22E+05	3.03E-01		3.03E-01	nc
Nickel Refinery Dust			1.09E+05	1.09E+05	ca			1.09E+05	dc			1.09E+05	dc				0.00E+00	nc
2-Nitroaniline	3.02E+02	1.48E+02		1.48E+02	nc	1.35E-02		1.35E-02	nc	2.71E-01		2.71E-01	nc	1.47E+03	4.43E-02		4.43E-02	nc
Nitrobenzene	4.79E+02	1.51E+01		1.51E+01	nc	3.44E-04		3.44E-04	nc	6.88E-03		6.88E-03	nc	2.09E+03	1.05E-03		1.05E-03	nc
N-Nitrosodi-n-propylamine	1.46E+03		5.59E-01	5.59E-01	ca		2.32E-05	2.32E-05	ca		4.63E-04	4.63E-04	ca	9.89E+03		9.34E-05	9.34E-05	ca
N-Nitrosodiphenylamine	9.41E+01	9.90E+02	7.99E+02	9.41E+01	sat	7.26E-01	3.26E-01	3.26E-01	ca	1.45E+01	6.51E+00	6.51E+00	ca	3.51E+01	2.61E-01	1.17E-01	1.17E-01	ca
Pentachlorobenzene	1.40E-01	3.96E+01		1.40E-01	sat	7.98E-04		7.98E-04	nc	1.60E-02		1.60E-02	nc	1.33E+00	3.94E-03		3.94E-03	nc
Pentachloronitrobenzene	2.21E+01	1.49E+02		2.21E+01	sat	1.47E+00		1.47E+00	nc	2.94E+01		2.21E+01	sat	5.50E-01	3.66E-02		3.66E-02	nc
Pentachlorophenol	2.50E+03	1.20E+03	2.61E+01	2.61E+01	ca	3.22E-01	4.12E-03	4.12E-03	ca	6.44E+00	8.24E-02	8.24E-02	ca	1.95E+03	2.33E-01	2.98E-03	2.98E-03	ca
Phenol	1.30E+04	1.49E+04		1.30E+04	sat	1.14E+00		1.14E+00	nc	2.28E+01		2.28E+01	nc	8.28E+04	4.43E+00		4.43E+00	nc
Polychlorinated Biphenyls (PCBs)	4.33E+01	1.04E+00	2.06E+00	1.04E+00	nc	7.88E-03	9.19E-03	7.88E-03	nc	1.58E-01	1.84E-01	1.58E-01	nc	7.00E-01	1.27E-04	1.48E-04	1.27E-04	nc
n-Propylbenzene	3.59E+01	7.39E+02		3.59E+01	sat	1.24E-01		1.24E-01	nc	2.48E+00		2.48E+00	nc	2.34E+01	7.79E-02		7.79E-02	nc
Pyrene	2.84E+01	1.42E+03		2.84E+01	sat	2.39E+01		2.39E+01	nc	4.78E+02		2.84E+01	sat	1.35E-01	1.14E-01		1.14E-01	nc
Pyridine	2.00E+05	4.74E+01		4.74E+01	nc	4.62E-03		4.62E-03	nc	9.23E-02		9.23E-02	nc	1.00E+06	1.54E-02		1.54E-02	nc
Quinoline	6.34E+04		1.25E+00	1.25E+00	ca		4.33E-05	4.33E-05	ca		8.66E-04	8.66E-04	ca	6.00E+05		2.11E-04	2.11E-04	ca
Selenium		3.87E+02		3.87E+02	nc	4.01E-01		4.01E-01	nc	8.01E+00		8.01E+00	nc		7.65E-02		7.65E-02	nc
Silver		3.65E+02		3.65E+02	nc	6.58E-01		6.58E-01	nc	1.32E+01		1.32E+01	nc		7.74E-02		7.74E-02	nc
Silver Cyanide		7.29E+03		7.29E+03	nc	2.81E-01		4.81E-02	sol	5.61E+00		9.61E-01	sol	2.30E-01	1.34E+00		2.30E-01	sol
Silvex	7.42E+02	3.96E+02		3.96E+02	nc	5.59E-01		5.59E-01	nc	1.12E+01		1.12E+01	nc	1.40E+02	1.04E-01		1.04E-01	nc
Styrene	5.19E+02	4.29E+03		5.19E+02	sat	8.46E-01		8.46E-01	nc	1.69E+01		1.69E+01	nc	3.10E+02	4.80E-01		4.80E-01	nc
2,3,7,8 -TCDD (Dioxin)	9.26E-02		3.58E-05	3.58E-05	ca		2.20E-06	2.20E-06	ca		4.40E-05	3.58E-05	dc	1.93E-05		4.58E-10	4.58E-10	ca
1,2,4,5-Tetrachlorobenzene	1.96E+00	1.49E+01		1.96E+00	sat	6.62E-03		6.62E-03	nc	1.32E-01		1.32E-01	nc	5.95E-01	1.96E-03		1.96E-03	nc
1,1,1,2-Tetrachloroethane	1.01E+03	2.22E+03	2.28E+01	2.28E+01	ca	3.92E-01	4.01E-03	4.01E-03	ca	7.84E+00	8.02E-02	8.02E-02	ca	1.10E+03	3.89E-01	3.98E-03	3.98E-03	ca
1,1,2,2-Tetrachloroethane	8.95E+02	4.44E+03	4.11E+00	4.11E+00	ca		2.07E-04	2.07E-04	ca		4.14E-03	4.14E-03	ca	2.97E+03		5.17E-04	5.17E-04	ca
Tetrachloroethylene (PCE)	1.10E+02	4.26E+01	4.86E+01	4.26E+01	nc	1.19E-02	5.59E-03	5.59E-03	ca	2.38E-01	1.12E-01	1.12E-01	ca	2.00E+02	2.07E-02	9.71E-03	9.71E-03	ca
2,3,4,6-Tetrachlorophenol	1.27E+03	1.49E+04		1.27E+03	sat	3.15E+01		3.15E+01	nc	6.29E+02		6.29E+02	nc	1.00E+02	2.46E+00		2.46E+00	nc
Tetrahydrofuran	4.10E+04	1.75E+03	1.23E+02	1.23E+02	ca	4.10E-02	3.61E-03	3.61E-03	ca	8.20E-01	7.22E-02	7.22E-02	ca	3.00E+05	1.74E-01	1.53E-02	1.53E-02	ca
Thallium		6.24E+00		6.24E+00	nc	8.85E-02		8.85E-02	nc	1.77E+00		1.77E+00	nc		1.24E-03		1.24E-03	nc
Toluene	2.71E+02	3.54E+03		2.71E+02	sat	4.03E-01		4.03E-01	nc	8.05E+00		8.05E+00	nc	5.26E+02	6.85E-01		6.85E-01	nc
Toxaphene	3.80E+02	4.95E+01	3.56E+00	3.56E+00	ca	5.63E+00	2.29E-01	2.29E-01	ca	1.13E+02	4.58E+00	3.56E+00	dc	7.40E-01	1.09E-02	4.45E-04	4.45E-04	ca
1,1,2-Trichloro-1,2,2-trifluoroethane	8.14E+02	2.26E+04		8.14E+02	sat	4.77E+01		4.77E+01	nc	9.53E+02		8.14E+02	sat	1.70E+02	1.76E+01		1.76E+01	nc
1,2,4-Trichlorobenzene	1.10E-01	6.93E+01		1.10E-01	sat	8.92E-03		8.92E-03	nc	1.78E-01		1.10E-01	sat	3.00E-02	2.37E-03		2.37E-03	nc
1,1,1-Trichloroethane	6.01E+02	1.96E+03		6.01E+02	sat	4.85E-01		4.85E-01	nc	9.70E+00		9.70E+00	nc	1.33E+03	1.01E+00		1.01E+00	nc
1,1,2-Trichloroethane	9.16E+02	2.96E+02	7.21E+00	7.21E+00	ca	1.75E-02	5.67E-04	5.67E-04	ca	3.50E-01	1.13E-02	1.13E-02	ca	4.42E+03	5.77E-02	1.87E-03	1.87E-03	ca
Trichloroethylene (TCE)	5.62E+02	2.84E+01	3.43E+01	2.84E+01	nc	6.24E-03	8.49E-03	6.24E-03	nc	1.25E-01	1.70E-01	1.25E-01	nc	1.10E+03	1.10E-02	1.49E-02	1.10E-02	nc
Trichlorofluoromethane	1.04E+03	3.41E+02		3.41E+02	nc	2.86E-01		2.86E-01	nc	5.71E+00		5.71E+00	nc	1.00E+03	3.87E-01		3.87E-01	nc
2,4,5-Trichlorophenol	3.96E+03	4.95E+03		3.96E+03	sat	3.29E+00		3.29E+00	nc	6.59E+01		6.59E+01	nc	1.20E+03	9.69E-01		9.69E-01	nc
2,4,6-Trichlorophenol	6.90E+02		3.56E+02	3.56E+02	ca		4.22E-02	4.22E-02	ca		8.44E-01	8.44E-01	ca	8.00E+02		4.39E-02	4.39E-02	ca
2,4,5 -Trichlorophenoxyacetic acid (2,4,5-T)	1.26E+02	4.95E+02		1.26E+02	sat	6.68E-02		6.68E-02	nc	1.34E+00		1.34E+00	nc	2.68E+02	1.17E-01		1.17E-01	nc
1,2,3-Trichloropropane	4.49E+02	9.55E+01	8.58E-01	8.58E-01	ca	3.96E-03	3.14E-05	3.14E-05	ca	7.93E-02	6.29E-04	6.29E-04	ca	1.75E+03	1.12E-02	8.85E-05	8.85E-05	ca
Triethylamine	2.33E+04	6.34E+01		6.34E+01	nc	1.78E-03		1.78E-03	nc	3.55E-02		3.55E-02	nc	7.37E+04	4.28E-03		4.28E-03	nc
1,2,4-Trimethylbenzene	9.05E+01	2.21E+01		2.21E+01	nc	5.98E-03		5.98E-03	nc	1.20E-01		1.20E-01	nc	5.70E+01	3.60E-03		3.60E-03	nc
1,3,5-Trimethylbenzene	7.17E+01	1.79E+01		1.79E+01	nc	5.59E-03		5.59E-03	nc	1.12E-01		1.12E-01	nc	4.82E+01	3.61E-03		3.61E-03	nc
1,3,5-Trinitrobenzene	1.08E+02	1.49E+03		1.08E+02	sat	1.90E-01		1.90E-01	nc	3.80E+00		3.80E+00	nc	3.50E+02	4.66E-01		4.66E-01	nc
Vanadium		6.33E+02		6.33E+02	nc	6.98E+00		6.98E+00	nc	1.40E+02		1.40E+02	nc		1.12E-01		1.12E-01	nc

March 2008

Table A-3: Residential Risk Based Generic Cleanup Numbers (GCNs) for Ohio Hazardous Waste Closures

CONTAMINANT	1 Calculated Soil Saturation Limit (SAT) (mg/kg)	2 Single Chemical Noncancer Direct Contact Soil (mg/kg)	3 Single Chemical Cancer Direct Contact Soil (mg/kg)	**4** **Single Chemical Direct Contact Soil** **(mg/kg)**		5 Single Chemical Noncancer Protective Of Ground Water (1 DAF) (mg/kg)	6 Single Chemical Cancer Protective Of Ground Water (1 DAF) (mg/kg)	**7** **Single Chemical Protective Of Ground Water (1 DAF)** **(mg/kg)**		8 Single Chemical Noncancer Protective Of Ground Water (20 DAF) (mg/kg)	9 Single Chemical Cancer Protective Of Ground Water (20 DAF) (mg/kg)	**10** **Single Chemical Protective Of Ground Water (20 DAF)** **(mg/kg)**		11 Solubility (SOL) (mg/l)	12 Single Chemical Noncancer Ground Water Concentration (mg/l)	13 Single Chemical Cancer Ground Water Concentration (mg/l)	**14** **Single Chemical Ground Water Concentration** **(mg/l)**	
Vinyl acetate	2.29E+03	4.22E+02		**4.22E+02**	**nc**	2.57E-02		**2.57E-02**	**nc**	5.14E-01		**5.14E-01**	**nc**	2.00E+04	1.21E-01		**1.21E-01**	**nc**
Vinyl chloride	9.49E+02	3.86E+01	1.48E+00	**1.48E+00**	**ca**	8.46E-03	1.34E-04	**1.34E-04**	**ca**	1.69E-01	2.67E-03	**2.67E-03**	**ca**	2.76E+03	2.54E-02	4.01E-04	**4.01E-04**	**ca**
Xylene (mixed)	1.70E+02	2.70E+02		**1.70E+02**	**sat**	6.22E-02		**6.22E-02**	**nc**	1.24E+00		**1.24E+00**	**nc**	1.75E+02	5.95E-02		**5.95E-02**	**nc**
m-Xylene	1.56E+02	1.06E+02		**1.06E+02**	**nc**	6.16E-02		**6.16E-02**	**nc**	1.23E+00		**1.23E+00**	**nc**	1.61E+02	5.93E-02		**5.93E-02**	**nc**
o-Xylene	1.54E+02	2.68E+02		**1.54E+02**	**sat**	5.59E-02		**5.59E-02**	**nc**	1.12E+00		**1.12E+00**	**nc**	1.78E+02	5.92E-02		**5.92E-02**	**nc**
p-Xylene	1.73E+02	2.44E+02		**1.73E+02**	**sat**	5.95E-02		**5.95E-02**	**nc**	1.19E+00		**1.19E+00**	**nc**	1.85E+02	5.92E-02		**5.92E-02**	**nc**
Zinc		2.31E+04		**2.31E+04**	**nc**	2.87E+02		**2.87E+02**	**nc**	5.73E+03		**5.73E+03**	**nc**		4.60E+00		**4.60E+00**	**nc**

Please note that toxicity information may have been updated since this table was published, and a more current version of this table may be available on DHWM's website.

**** Cadmium- As suggested by IRIS, RfDo=1.0E-03 and Oral Absorbtion Factor=0.025 for soil (food) were also used in calculations.**

Legend:
CA = Caner GCN
NC = Non-Cancer GCN
DC = Direct Contact GCN
SAT = Soil Saturation Limit
SOL = Solublility

Notes:

1 - Calculated soil saturation limit (using method from Soil Screening Guidance: Technical Background Document, U.S. EPA, 1996, equation #9).
2 - Risk-based standard for noncarcinogens for soil, based on a child resident (considers ingestion of soil, inhalation of volatiles and particulates from soil, and dermal contact with soil.)
3 - Risk-based standard for carcinogens for soil, based on an age-adjusted resident (adult + child) (considers ingestion of soil, inhalation of volatiles and particulates from soil, and dermal contact with soil.)
4 - Single chemical cleanup number for ingestion of soil, inhalation of volatiles and particulates for soil, and dermal contact with soil (calculated soil saturation limit is the default value when less than the carcinogen and noncarcinogen standards.)
5 - Risk-based standard for noncarcinogens for soil protective of ground water, based on a child resident (considers ingestion of soil and ground water, inhalation of volatiles and particulates from soil and ground water, and dermal contact with soil and ground water, with a dilution-attenuation factor of one (1 DAF). (See discussion on DAFs in section 2.5.5 of Soil Screening Guidance: Technical Background Document, U.S. EPA, 1996).
6 - Risk-based standard for carcinogens for soil protective of ground water, based on an age-adjusted resident (adult + child) (considers ingestion of soil and ground water, inhalation of volatiles and particulates from soil and ground water, and dermal contact with soil and ground water, with a dilution-attenuation factor of one (1 DAF). (See discussion on DAFs in section 2.5.5 of Soil Screening Guidance: Technical Background Document, U.S. EPA, 1996).
7 - Single chemical cleanup number for ingestion of soil and ground water, inhalation of volatiles and particulates from soil and ground water, and dermal contact with soil and ground water (the direct contact with soil standard from column 4 is the default value when less than the 1 DAF carcinogenic and non-carcinogenic standards.)
8 - Risk-based standard for noncarcinogens for soil protective of ground water, based on a child resident (considers ingestion of soil and ground water, inhalation of volatiles and particulates from soil and ground water, and dermal contact with soil and ground water, with a dilution-attenuation factor of twenty (20 DAF). (See discussion on DAFs in section 2.5.5 of Soil Screening Guidance: Technical Background Document, U.S. EPA, 1996).
9 - Risk-based standard for carcinogens for soil protective of ground water, based on an age-adjusted resident (adult + child) (considers ingestion of soil and ground water, inhalation of volatiles and particulates from soil and ground water, and dermal contact with soil and ground water, with a dilution-attenuation factor of twenty (20 DAF). (See discussion on DAFs in section 2.5.5 of Soil Screening Guidance: Technical Background Document, U.S. EPA, 1996).
10 - Single chemical cleanup number for ingestion of soil and ground water, inhalation of volatiles and particulates from soil and ground water, and dermal contact with soil and ground water (the direct contact with soil standard from column 4 is the default value when less than the 20 DAF carcinogenic and non-carcinogenic standards.)
11- Sources include: Soil Screening Guidance: Technical Background Document, Table 36 (U.S. EPA, 1996), Hazardous Substances Data Base, Physical Properties of Organic Chemicals (Howard and Meylan), CRC Handbook of Chemistry and Physics, and U.S. EPA Region IX table of physical properties.
12 - Risk-based standard for noncarcinogens for ground water, based on a child resident (considers ingestion of ground water, inhalation of volatiles from ground water while showering, and dermal contact with ground water while showering.)
13 - Risk-based standard for carcinogens for ground water, based on an age-adjusted resident (adult + child) (considers ingestion of ground water, inhalation of volatiles from ground water while showering, and dermal contact with ground water while showering.)
14 - Single chemical cleanup number for ingestion of ground water, inhalation of volatiles from ground water while showering, and dermal contact with ground water while showering.

March 2008

Table A-4: MCL-Based Generic Cleanup Numbers

CONTAMINANT	1 Maximum Contaminant Level (MCL) (mg/l)	2 Single Chemical MCL-Based Protective of Ground Water (1 DAF) (mg/kg)	3 Single Chemical MCL-Based Protective of Ground Water (20 DAF) (mg/kg)
Antimony	6.00E-03	2.72E-01	5.43E+00
Arsenic	1.00E-02	NA	NA
Barium and compounds	2.00E+00	NA	NA
Benzene	5.00E-03	1.69E-03	3.38E-02
Benzo[a]pyrene	2.00E-04	4.08E-01	8.16E+00
Beryllium	4.00E-03	3.16E+00	6.32E+01
Bis(2-ethylhexyl)phthalate	6.00E-03	1.81E+02	3.62E+03
Bromodichloromethane	1.00E-01	3.16E-02	6.31E-01
Bromoform	1.00E-01	3.76E-02	7.52E-01
Cadmium and compounds**	5.00E-03	3.77E-01	7.53E+00
Carbon tetrachloride	5.00E-03	3.28E-03	6.56E-02
Chlordane	2.00E-04	4.80E-02	9.61E-01
Chlorobenzene	1.00E-01	6.51E-02	1.30E+00
Chromium III	1.00E-01	NA	NA
Chromium VI	1.00E-01	NA	NA
Cyanide, Free	2.00E-01	5.83E-02	1.17E+00
Dalapon	2.00E-01	4.11E-02	8.22E-01
Dibromochloromethane	1.00E-01	3.29E-02	6.58E-01
1,2-Dibromoethane	5.00E-05	1.15E-05	2.30E-04
Dichloroacetic acid	6.00E-02	2.10E-02	4.20E-01
1,2-Dichlorobenzene	6.00E-01	8.64E-01	1.73E+01
1,4-Dichlorobenzene	7.50E-02	1.08E-01	2.16E+00
1,2-Dichloroethane	5.00E-03	1.19E-03	2.38E-02
1,1-Dichloroethylene	7.00E-03	2.87E-03	5.75E-02
1,2-Dichloroethylene (cis)	7.00E-02	2.00E-02	4.00E-01
1,2-Dichloroethylene (trans)	1.00E-01	3.38E-02	6.77E-01
(2,4-D) 2,4-Dichlorophenoxyacetic acid	7.00E-02	1.68E-02	3.36E-01
1,2-Dichloropropane	5.00E-03	1.62E-03	3.24E-02
Endrin	2.00E-03	4.96E-02	9.92E-01
Ethylbenzene	7.00E-01	6.68E-01	1.34E+01
Fluoride	4.00E+00	NA	NA
Heptachlor	4.00E-04	1.13E+00	2.26E+01
Heptachlor Epoxide	2.00E-04	3.33E-02	6.66E-01
Hexachlorobenzene	1.00E-03	1.10E-01	2.20E+00
Hexachlorocyclopentadiene	5.00E-02	2.00E+01	4.00E+02
Lindane	2.00E-04	4.72E-04	9.44E-03
Mercury and compounds	2.00E-03	1.04E-01	2.09E+00
Methoxychlor	4.00E-02	7.82E+00	1.56E+02
Methylene chloride	5.00E-03	1.16E-03	2.31E-02
Pentachlorophenol	1.00E-03	1.38E-03	2.77E-02
Polychlorinated Biphenyls (PCBs)	5.00E-04	3.10E-02	6.20E-01
Selenium	5.00E-02	2.62E-01	5.23E+00
Silvex	5.00E-02	2.70E-01	5.40E+00
Styrene	1.00E-01	1.76E-01	3.52E+00
2,3,7,8 -TCDD (Dioxin)	3.00E-08	1.44E-04	2.88E-03
Tetrachloroethylene (PCE)	5.00E-03	2.88E-03	5.75E-02
Thallium	2.00E-03	NA	NA
Toluene	1.00E+00	5.88E-01	1.18E+01
Toxaphene	3.00E-03	1.54E+00	3.09E+01
1,2,4-Trichlorobenzene	7.00E-02	2.64E-01	5.27E+00
1,1,1-Trichloroethane	2.00E-01	9.62E-02	1.92E+00
1,1,2-Trichloroethane	5.00E-03	1.52E-03	3.03E-02
Trichloroethylene (TCE)	5.00E-03	2.84E-03	5.69E-02
Vinyl chloride	2.00E-03	6.66E-04	1.33E-02
Xylene (mixed)	1.00E+01	1.04E+01	2.09E+02

Please note that this information may have been updated since this table was published, and a more current version of this table may be available on DHWM's website.

Legend:

MCL = Maximum Contaminant Level

NA = Not Applicable

Notes:

1 - Maximum Contaminant Levels (MCLs) based on federal primary drinking water standards (OAC 3745-81-11 and 3745-81-12).

2 - Single chemical cleanup number for ingestion of soil and ground water based on the Maximum Contaminant Level with no dilution or attenuation.

3 - Single chemical cleanup number for ingestion of soil and ground water based on the Maximum Contaminat Level with some dilution and attenuation.

Table A-5: Chemical Specific Values for the Generic Cleanup Numbers

CONTAMINANT	Dermal Absorption Factor (unitless)	Oral Absorption Factor (unitless)	Permeability Constant (cm/hr)	Koc (l/kg)	Kd Values (l/kg)	Henry's Law Constant at 25^0 C (atms-m3/mole)	Henry's Law Constant (unitless)	SFo (mg/kg-day)$^{-1}$	Source	RfDo (mg/kg-day)	Source	SFi (mg/kg-day)$^{-1}$	Source	RfDi (mg/kg-day)	Source	Particulate Emission Factor (m^3/kg)	Volatilization Factor (m^3/kg)
Acenaphthene	0.13	0.58	8.39E-02	4.90E+03	9.80E+00	1.55E-04	6.36E-03			6.0E-02	i					1.36E+09	2.85E+05
Acetone	0.01	0.74	5.20E-04	5.75E-01	1.15E-03	3.88E-05	1.59E-03			9.0E-01	i			8.9E+00	a	1.36E+09	1.25E+04
Acetonitrile	0.01	0.5	5.57E-04	1.60E+01	3.20E-02	3.45E-05	1.41E-03							1.7E-02	i	1.36E+09	1.79E+04
Acetophenone	0.10	0.5	3.71E-03	1.00E+01	2.00E-02	1.04E-05	4.26E-04			1.0E-01	i			5.7E-06	w	1.36E+09	4.23E+04
Acrolein	0.01	0.5	7.58E-04	3.00E+00	6.00E-03	1.22E-04	4.99E-03			5.0E-04	i			5.7E-06	i	1.36E+09	8.20E+03
Acrylonitrile	0.01	0.5	1.17E-03	3.30E+01	6.60E-02	1.38E-04	5.66E-03	5.4E-01	i	1.0E-03	h	2.4E-01	i	5.7E-04	i	1.36E+09	1.21E+04
Aldrin	0.10	0.5	2.80E-01	4.87E+04	9.74E+01	1.70E-04	6.97E-03	1.7E+01	i	3.0E-05	i	1.7E+01	i			1.36E+09	nv
Aluminum	0.001	0.001	1.00E-03	1.43E+01	2.86E-02					1.0E+00	n			1.4E-03	n	1.36E+09	
Aluminum phosphide	0.001	0.001	1.00E-03	1.43E+01	2.86E-02					4.0E-04	i					1.36E+09	
Aniline	0.10	0.5	1.87E-03	4.38E+01	8.76E-02	2.02E-06	8.28E-05	5.7E-03	i	7.0E-03	n			2.9E-04	i	1.36E+09	nv
Anthracene	0.13	0.58	1.60E-01	2.95E+04	5.90E+01	6.50E-05	2.67E-03			3.0E-01	i					1.36E+09	7.77E+05
Antimony	0.001	0.15	1.00E-03	1.43E+01	4.50E+01	2.45E-02	1.00E+00			4.0E-04	i			5.7E-05	w	1.36E+09	
Aroclor 1016	0.14	0.8	4.43E-02	1.70E+04	3.40E+01	2.30E-04	9.43E-03	2.0E+00	i	7.0E-05	i	4.0E-01	i			1.36E+09	nv
Aroclor 1221	0.14	0.8	6.67E-02	6.31E+03	1.26E+01	4.10E-04	1.68E-02	2.0E+00	i			4.0E-01	i			1.36E+09	1.96E+05
Aroclor 1232	0.14	0.8	9.09E-02	1.00E+04	2.00E+01	3.10E-04	1.27E-02	2.0E+00	i			4.0E-01	i			1.36E+09	nv
Aroclor 1242	0.14	0.8	2.82E-02	1.00E+04	2.00E+01	3.10E-04	1.27E-02	2.0E+00	i			4.0E-01	i			1.36E+09	nv
Aroclor 1248	0.14	0.8	4.78E-01	2.51E+04	5.02E+01	1.60E-04	6.56E-03	2.0E+00	i			4.0E-01	i			1.36E+09	nv
Aroclor 1254	0.14	0.8	3.36E-01	4.25E+04	8.50E+01	3.40E-04	1.39E-02	2.0E+00	i	2.0E-05	i	4.0E-01	i			1.36E+09	nv
Aroclor 1260	0.14	0.8	3.84E-01	2.07E+05	4.14E+02	7.40E-05	3.03E-03	2.0E+00	i			4.0E-01	i			1.36E+09	nv
Arsenic	0.03	0.95	1.00E-03		2.50E+01			1.5E+00	i	3.0E-04	i	1.5E+01	i			1.36E+09	
Barium and compounds	0.001	0.07	1.00E-03		4.10E+01					7.0E-02	i			1.4E-04	h	1.36E+09	
Benz[a]anthracene	0.13	0.58	4.83E-01	3.98E+05	7.96E+02	3.35E-06	1.37E-04	7.3E-01	n*			7.3E-01	n*			1.36E+09	nv
Benzene	0.01	0.9	1.47E-02	5.89E+01	1.18E-01	5.55E-03	2.28E-01	5.5E-02	i	4.0E-03	i	2.7E-02	i	8.6E-03	i	1.36E+09	2.71E+03
Benzidine	0.10	0.5	1.13E-03	2.27E+05	4.54E+02	5.20E-11	2.13E-09	2.3E+02	i	3.0E-03	i	2.3E+02	i			1.36E+09	nv
Benzo[a]pyrene	0.13	0.58	6.60E-01	1.02E+06	2.04E+03	1.13E-06	4.63E-05	7.3E+00	i			7.3E+00	n*			1.36E+09	nv
Benzo[b]fluoranthene	0.13	0.58	7.57E-01	1.23E+06	2.46E+03	1.11E-04	4.55E-03	7.3E-01	n*			7.3E-01	n*			1.36E+09	nv
Benzo[k]fluoranthene	0.13	0.58	7.57E-01	1.23E+06	2.46E+03	8.29E-07	3.40E-05	7.3E-02	n*			7.3E-02	n*			1.36E+09	nv
Benzoic acid	0.10	0.5	5.54E-03	5.76E-01	1.15E-03	1.54E-06	6.31E-05			4.0E+00	i					1.36E+09	nv
Beryllium	0.001	0.007	1.00E-03		7.90E+02	1.54E-02	6.31E-01			2.0E-03	i	8.4E+00	i	5.7E-03	i	1.36E+09	
Bis(2-chloro-1-methylethyl)ether	0.10	0.5	7.56E-03	4.70E+01	9.40E-02	7.40E-05	3.03E-03	7.0E-02	h	4.0E-02	i	3.5E-02	h			1.36E+09	3.26E+04
Bis(2-chloroethyl)ether	0.10	0.5	1.58E-03	1.55E+01	3.10E-02	1.80E-05	7.38E-04	1.1E+00	i			1.2E+00	i			1.36E+09	3.32E+05
Bis(2-ethylhexyl)phthalate	0.10	0.25	6.77E-01	1.51E+07	3.02E+04	1.02E-07	4.18E-06	1.4E-02	i	2.0E-02	i					1.36E+09	nv
Bromodichloromethane	0.01	0.5	4.66E-03	5.50E+01	1.10E-01	1.60E-03	6.56E-02	6.2E-02	i	2.0E-02	i					1.36E+09	8.20E+03
Bromoform	0.01	0.5	2.17E-03	8.71E+01	1.74E-01	5.35E-04	2.19E-02	7.9E-03	i	2.0E-02	i	3.9E-03	i			1.36E+09	nv
Butanol	0.01	0.5	2.22E-03	6.92E+00	1.38E-02	8.81E-06	3.61E-04			1.0E-01	i					1.36E+09	nv
n-Butylbenzene	0.01	0.5	2.18E-01	2.83E+03	5.66E+00	1.31E-02	5.37E-01			1.0E-02	n					1.36E+09	1.13E+04
sec-Butylbenzene	0.01	0.5	2.91E-01	2.15E+03	4.30E+00	1.86E-02	7.63E-01			1.0E-02	n					1.36E+09	8.27E+03
tert-Butylbenzene	0.01	0.5	1.45E-01	2.20E+03	4.40E+00	1.32E-02	5.41E-01			1.0E-02	n					1.36E+09	1.15E+04
Butyl benzyl phthalate	0.10	0.5	4.42E-02	5.75E+04	1.15E+02	1.26E-06	5.17E-05			2.0E-01	i					1.36E+09	nv
Cadmium and compounds**	0.001	0.025	1.00E-03		7.50E+01	3.08E-02	1.26E+00			5.0E-04	i	6.3E+00	i	5.7E-05	x	1.36E+09	
Carbazole	0.13	0.58	4.30E-02	3.39E+03	6.78E+00	1.53E-08	6.27E-07	2.0E-02	h							1.36E+09	nv
Carbon disulfide	0.01	0.5	1.24E-02	4.57E+01	9.14E-02	3.03E-02	1.24E+00			1.0E-01	i			2.0E-01	i	1.36E+09	1.18E+03
Carbon tetrachloride	0.01	0.85	1.39E-02	1.74E+02	3.48E-01	3.04E-02	1.25E+00	1.3E-01	i	7.0E-04	i	5.3E-02	i	5.7E-04	n	1.36E+09	2.05E+03
Chlordane	0.04	0.8	1.19E-01	1.20E+05	2.40E+02	4.86E-05	1.99E-03	3.5E-01	i	5.0E-04	i	3.5E-01	i	2.0E-04	i	1.36E+09	nv
p-Chloroaniline	0.10	0.5	5.09E-03	6.61E+01	1.32E-01	3.31E-07	1.36E-05			4.0E-03	i					1.36E+09	nv
Chlorobenzene	0.01	0.2	2.87E-02	2.19E+02	4.38E-01	3.70E-03	1.52E-01			2.0E-02	i			1.7E-02	n	1.36E+09	6.23E+03
Chlorobenzilate	0.10	0.5	3.22E-02	1.10E+03	2.20E+00	7.20E-08	2.95E-06			2.0E-03	i					1.36E+09	nv
Chloroethane	0.01	0.5	6.06E-03	2.40E+01	4.80E-02	1.11E-02	4.55E-01	2.9E-03	n	4.0E-01	n			2.9E+00	i	1.36E+09	1.44E+03
Chloroform	0.01	1.0	6.29E-03	3.98E+01	7.96E-02	3.67E-03	1.50E-01	1.0E-02	i	1.0E-02	i	8.1E-02	i	9.8E-02	a	1.36E+09	2.64E+03
Chloromethane	0.01	0.5	3.30E-03	1.40E+01	2.80E-02	8.82E-03	3.62E-01							2.6E-02	i	1.36E+09	1.38E+03
2-Chloronaphthalene	0.10	0.5	7.88E-02	3.00E+03	6.00E+00	3.20E-04	1.31E-02			8.0E-02	i					1.36E+09	1.09E+05
2-Chlorophenol	0.10	0.5	7.93E-03	3.88E+02	7.76E-01	3.91E-04	1.60E-02			5.0E-03	i					1.36E+09	3.00E+04
Chromium III	0.001	0.013	1.00E-03		1.80E+06					1.5E+00	i			1.5E+00	r	1.36E+09	
Chromium VI	0.001	0.025	2.00E-03		1.90E+01					3.0E-03	i	4.2E+01	i	2.9E-05	i	1.36E+09	
Chrysene	0.13	0.58	4.83E-01	3.98E+05	7.96E+02	9.46E-05	3.88E-03	7.3E-03	n*			7.3E-03	n*			1.36E+09	nv

March 2008

Table A-5: Chemical Specific Values for the Generic Cleanup Numbers

CONTAMINANT	Dermal Absorption Factor (unitless)	Oral Absorption Factor (unitless)	Permeability Constant (cm/hr)	Koc (l/kg)	Kd Values (l/kg)	Henry's Law Constant at 25^0 C (atms-m3/mole)	Henry's Law Constant (unitless)	SFo (mg/kg-day)$^{-1}$	Source	RfDo (mg/kg-day)	Source	SFi (mg/kg-day)$^{-1}$	Source	RfDi (mg/kg-day)	Source	Particulate Emission Factor (m^3/kg)	Volatilization Factor (m^3/kg)
Cobalt	0.001	0.18	4.00E-04		4.50E+01					2.0E-02	n	9.8E+00	n	5.7E-06	n	1.36E+09	
Copper	0.001	0.24	1.00E-03		3.50E+01	2.45E-02	1.00E+00			3.7E-02	h					1.36E+09	
Cyanide, Free	0.001	0.2	1.00E-03	2.71E+00	5.42E-03	2.42E-02	9.92E-01			2.0E-02	i					1.36E+09	7.13E+02
Cyclohexane	0.01	0.5	9.98E-02	1.60E+02	3.20E-01	1.50E-01	6.15E+00							1.7E+00	i	1.36E+09	8.69E+02
Dalapon	0.10	0.5	8.21E+02	2.73E+00	5.46E-03	6.30E-08	2.58E-06			3.0E-02	i					1.36E+09	nv
Dibenz[ah]anthracene	0.13	0.58	1.14E+00	3.80E+06	7.60E+03	1.47E-08	6.03E-07	7.3E+00	n*			7.3E+00	n*			1.36E+09	nv
Dibenzofuran	0.13	0.58	9.49E-02	4.20E+03	8.40E+00	2.10E-04	8.61E-03			4.0E-03	x					1.36E+09	1.20E+05
Dibromochloromethane	0.01	0.5	2.92E-03	6.31E+01	1.26E-01	7.83E-04	3.21E-02	8.4E-02	i	2.0E-02	i					1.36E+09	nv
1,2-Dibromoethane	0.01	0.5	2.76E-03	1.40E+01	2.80E-02	6.50E-04	2.67E-02	2.0E+00	i	9.0E-03	i	2.1E+00	i	2.1E+00	i	1.36E+09	5.36E+03
Dichloroacetic acid	0.10	0.5	1.22E-03	7.50E+01	1.50E-01	6.80E-08	2.79E-06	5.0E-02	i	4.0E-03	i					1.36E+09	nv
1,2-Dichlorobenzene	0.01	0.5	4.37E-02	6.17E+02	1.23E+00	1.90E-03	7.79E-02			9.0E-02	i			8.6E-03	n	1.36E+09	1.45E+04
1,3-Dichlorobenzene	0.01	0.5	5.09E-02	3.00E+02	6.00E-01	2.83E-03	1.16E-01			9.0E-04	n					1.36E+09	8.45E+03
1,4-Dichlorobenzene	0.01	1.0	4.31E-02	6.17E+02	1.23E+00	2.43E-03	9.96E-02	2.4E-02	h	3.0E-02	n	2.2E-02	n	2.3E-01	i	1.36E+09	1.29E+04
3,3-Dichlorobenzidine	0.10	0.5	1.26E-02	7.24E+02	1.45E+00	4.00E-09	1.64E-07	4.5E-01	i							1.36E+09	nv
Dichlorodifluoromethane	0.01	0.5	8.88E-03	3.56E+02	7.12E-01	3.43E-01	9.23E+00			2.0E-01	i			5.7E-02	h	1.36E+09	1.13E+03
(DDD) Dichlorodiphenyldichloroethane	0.03	0.7	2.71E-01	1.00E+06	2.00E+03	4.00E-06	1.64E-04	2.4E-01	i							1.36E+09	nv
(DDE) Dichlorodiphenyldichloroethene	0.03	0.7	7.60E-01	4.47E+06	8.94E+03	2.10E-05	8.61E-04	3.4E-01	i							1.36E+09	nv
(DDT) Dichlorodiphenyltrichloroethane	0.03	0.7	3.35E-01	2.63E+06	5.26E+03	8.10E-06	8.61E-04	3.4E-01	i	5.0E-04	i	3.4E-01	i			1.36E+09	nv
1,1-Dichloroethane	0.01	0.5	6.71E-03	3.16E+01	6.32E-02	5.62E-03	2.30E-01			1.0E-01	h			1.4E-01	h	1.36E+09	2.41E+03
1,2-Dichloroethane	0.01	1.0	4.13E-03	1.74E+01	3.48E-02	9.79E-04	4.01E-02	9.1E-02	i	3.0E-02	n	9.1E-02	i	1.4E-03	n	1.36E+09	3.89E+03
1,1-Dichloroethylene	0.01	0.5	1.16E-02	5.89E+01	1.18E-01	2.61E-02	1.07E+00			5.0E-02	i			5.7E-02	i	1.36E+09	1.42E+03
1,2-Dichloroethylene (cis)	0.01	0.5	7.67E-03	3.55E+01	7.10E-02	4.08E-03	1.67E-01			1.0E-02	n					1.36E+09	2.88E+03
1,2-Dichloroethylene (trans)	0.01	0.5	1.06E-02	5.25E+01	1.05E-01	9.38E-03	3.85E-01			2.0E-02	i			2.0E-02	a	1.36E+09	2.31E+03
1,2-Dichloroethylene (mixture)	0.01	0.5	7.67E-03	2.90E+02	5.80E-01	7.30E-03	2.76E-01			9.0E-03	h			2.0E-02	a	1.36E+09	4.53E+03
2,4-Dichlorophenol	0.10	0.5	2.09E-02	1.47E+02	2.94E-01	3.16E-06	1.30E-04			3.0E-03	i					1.36E+09	nv
(2,4-D) 2,4-Dichlorophenoxyacetic acid	0.05	0.9	6.56E-03	2.00E+01	4.00E-02	8.60E-06	4.18E-07			1.0E-02	i					1.36E+09	nv
1,2-Dichloropropane	0.01	0.5	7.37E-03	5.70E+01	1.14E-01	4.90E-03	1.15E-01	6.8E-02	h	9.0E-02	a			1.1E-03	i	1.36E+09	3.66E+03
1,3-Dichloropropene	0.01	0.5	7.92E-03	4.57E+01	9.14E-02	1.77E-02	7.26E-01	1.0E-01	i	3.0E-02	i	1.4E-02	i	5.7E-03	i	1.36E+09	1.83E+03
Dieldrin	0.10	0.5	4.08E-02	2.14E+04	4.28E+01	1.51E-05	6.19E-04	1.6E+01	i	5.0E-05	i	1.6E+01	i			1.36E+09	nv
Diethyl phthalate	0.10	0.5	3.93E-03	2.88E+02	5.76E-01	4.50E-07	1.85E-05			8.0E-01	i					1.36E+09	nv
Dimethyl phthalate	0.10	0.5	1.47E-03	8.00E+00	1.60E-02	2.00E-07	4.31E-06			1.0E+01	h			1.0E+01	h	1.36E+09	nv
N,N-Dimethylformamide	0.10	0.5	1.33E-04	7.00E+00	1.40E-02	7.40E-08	3.03E-06			1.0E-01	h			8.6E-03	i	1.36E+09	nv
2,4-Dimethylphenol	0.10	0.5	1.18E-02	2.09E+02	4.18E-01	2.00E-06	8.20E-05			2.0E-02	i					1.36E+09	nv
Di-n-butyl phthalate	0.10	0.5	4.83E-02	3.39E+04	6.78E+01	9.38E-10	3.85E-08			1.0E-01	i					1.36E+09	nv
meta-Dinitrobenzene	0.10	0.5	1.75E-03	1.50E+02	3.00E-01	4.90E-08	1.53E-05			1.0E-04	i					1.36E+09	nv
ortho-Dinitrobenzene	0.10	0.5	2.00E-03	2.25E+02	4.49E-01	8.39E-08	3.44E-06			1.0E-04	n					1.36E+09	nv
2,4-Dinitrophenol	0.10	0.5	1.56E-03	1.20E-02	2.40E-05	4.43E-07	1.82E-05			2.0E-03	i					1.36E+09	nv
2,4-Dinitrotoluene	0.10	0.5	3.21E-03	9.55E+01	1.91E-01	9.26E-08	3.80E-06	6.8E-01	i	2.0E-03	i					1.36E+09	nv
2,6-Dinitrotoluene	0.10	0.5	2.60E-03	6.92E+01	1.38E-01	7.47E-07	3.06E-05	6.8E-01	i	1.0E-03	h					1.36E+09	nv
Di-n-octyl phthalate	0.10	0.5	2.28E+00	6.10E+05	1.22E+03	6.68E-05	1.82E-05			4.0E-02	n					1.36E+09	nv
1,4-Dioxane	0.03	0.5	3.38E-04	1.23E+00	2.46E-03	4.80E-06	1.97E-04	1.1E-02	i							1.36E+09	nv
Endosulfan II	0.10	0.5	4.24E-03	2.14E+03	4.28E+00	1.12E-05	4.59E-04			6.0E-03	i					1.36E+09	nv
Endrin	0.10	0.5	2.55E-02	1.23E+04	2.46E+01	7.52E-06	3.08E-04			3.0E-04	i					1.36E+09	nv
Ethylbenzene	0.01	0.5	4.76E-02	3.63E+02	7.26E-01	7.88E-03	3.23E-01			1.0E-01	i			2.9E-01	i	1.36E+09	5.36E+03
Ethylene glycol	0.01	0.5	9.01E-05	1.00E+00	2.00E-03	6.00E-08	2.46E-06			2.0E+00	i					1.36E+09	nv
Fluoranthene	0.13	0.58	2.80E-01	1.07E+05	2.14E+02	1.61E-05	6.60E-04			4.0E-02	i					1.36E+09	nv
Fluorene	0.13	0.58	1.12E-01	1.38E+04	2.76E+01	6.36E-05	2.61E-03			4.0E-02	i					1.36E+09	5.08E+05
Fluoride	0.001	0.9	1.00E-03	1.43E+01	2.86E-02					6.0E-02	i					1.36E+09	
Formaldehyde	0.01	0.5	1.83E-03	3.70E+01	7.40E-02	3.40E-07	1.39E-05			2.0E-01	i	4.6E-02	i	2.9E-03	a	1.36E+09	nv
Formic acid	0.10	0.5	3.85E-04	1.00E+00	2.00E-03	1.67E-07	6.85E-06			2.0E+00	h			8.6E+00	n	1.36E+09	nv
Heptachlor	0.10	0.5	1.74E-01	1.41E+06	2.82E+03	1.48E+00	6.07E+01	4.5E+00	i	5.0E-04	i	4.6E+00	i			1.36E+09	nv
Heptachlor Epoxide	0.10	0.5	2.09E-02	8.32E+04	1.66E+02	9.50E-06	3.90E-04	9.1E+00	i	1.3E-05	i	9.1E+00	i			1.36E+09	nv
Hexachloro-1,3-butadiene	0.10	0.5	8.21E-02	5.37E+03	1.07E+01	8.15E-03	3.34E-01	7.8E-02	i	2.0E-04	h	7.7E-02	i			1.36E+09	nv
Hexachlorobenzene	0.10	0.5	3.11E-01	5.50E+04	1.10E+02	1.32E-03	5.41E-02	1.6E+00	i	8.0E-04	i	1.6E+00	i			1.36E+09	nv

Table A-5: Chemical Specific Values for the Generic Cleanup Numbers

CONTAMINANT	Dermal Absorption Factor (unitless)	Oral Absorption Factor (unitless)	Permeability Constant (cm/hr)	Koc (l/kg)	Kd Values (l/kg)	Henry's Law Constant at 25^0 C (atms-m3/mole)	Henry's Law Constant (unitless)	SFo (mg/kg-day)$^{-1}$	Source	RfDo (mg/kg-day)	Source	SFi (mg/kg-day)$^{-1}$	Source	RfDi (mg/kg-day)	Source	Particulate Emission Factor (m^3/kg)	Volatilization Factor (m^3/kg)
a-Hexachlorocyclohexane	0.10	0.5	1.20E-02	1.23E+03	2.46E+00	1.06E-05	4.35E-04	6.3E+00	i	8.0E-03	a	6.3E+00	i			1.36E+09	nv
b-Hexachlorocyclohexane	0.10	0.5	1.22E-02	1.26E+03	2.52E+00	7.43E-07	3.05E-05	1.8E+00	i			1.9E+00	i			1.36E+09	nv
Hexachlorocyclopentadiene	0.10	0.5	1.70E-01	2.00E+05	4.00E+02	2.70E-02	1.11E+00			6.0E-03	i			5.7E-05	i	1.36E+09	nv
Hexachloroethane	0.10	0.5	3.27E-02	1.78E+03	3.56E+00	3.89E-03	1.59E-01	1.4E-02	i	1.0E-03	i	1.4E-02	i			1.36E+09	nv
n-Hexane	0.01	0.5	1.96E-01	1.50E+02	3.00E-01	1.83E+00	7.42E+01			1.1E+01	n			2.0E-01	i	1.36E+09	5.45E+02
Hydrogen sulfide	0.001	0.2	1.25E-04	1.43E+01	2.86E-02	2.30E-02	3.55E-01							5.7E-04	i	1.36E+09	8.05E+02
Indeno[1,2,3-cd]pyrene	0.13	0.58	1.10E+00	3.47E+06	6.94E+03	1.60E-06	6.56E-05	7.3E-01	n*			7.3E-01	n*			1.36E+09	nv
Iron	0.001	0.2	1.00E-03		2.50E-01					3.0E-01	n					1.36E+09	
Isobutyl alcohol	0.01	0.5	1.93E-03	6.20E+01	1.24E-01	9.78E-06	4.01E-04			3.0E-01	i					1.36E+09	nv
Isophorone	0.10	0.5	3.53E-03	4.68E+01	9.36E-02	6.64E-06	2.72E-04	9.5E-04	i	2.0E-01	i			2.0E-01	r	1.36E+09	nv
Isopropylbenzene	0.01	0.5	8.76E-02	8.20E+02	1.64E+00	1.15E-02	4.72E-01			1.0E-01	i			1.1E-01	i	1.36E+09	6.56E+03
Lead	See Closure Plane Review Guidance																
Lindane	0.04	0.5	1.06E-02	1.08E+03	2.16E+00	3.50E-06	1.44E-04	1.3E+00	h	3.0E-04	i					1.36E+09	nv
Manganese	0.001	0.04	1.00E-03		6.50E+01					1.4E-01	i			1.4E-05	i	1.36E+09	
MCPA	0.10	0.5	1.67E-02	5.00E+01	1.00E-01	4.80E-10	1.97E-08			5.0E-04	i					1.36E+09	nv
MCPP	0.10	0.5	1.16E-02	4.86E+01	9.72E-02	1.82E-08	7.46E-07			1.0E-03	i					1.36E+09	nv
Mercury and compounds	0.001	0.74	1.00E-03		5.20E+01	1.14E-02	4.67E-01			8.6E-05	r			8.6E-05	i	1.36E+09	nv
Methacrylonitrile	0.01	0.5	1.88E-03	5.60E+01	1.12E-01	2.47E-04	1.01E-02			1.0E-04	i					1.36E+09	1.08E+04
Methanol	0.01	0.5	3.25E-04	1.00E+00	2.00E-03	4.40E-06	1.80E-04			5.0E-01	i					1.36E+09	nv
Methoxychlor	0.10	0.5	4.14E-02	9.77E+04	1.95E+02	1.58E-05	6.48E-04			5.0E-03	i					1.36E+09	nv
Methyl bromide	0.01	0.5	2.84E-03	1.05E+01	2.10E-02	6.24E-03	2.56E-01			1.4E-03	i			1.4E-03	i	1.36E+09	1.84E+03
Methyl ethyl ketone	0.01	0.5	9.72E-04	2.90E+01	5.80E-02	4.70E-05	1.93E-03			6.0E-01	i			1.4E+00	i	1.36E+09	2.17E+04
Methylene chloride	0.01	1.0	3.54E-03	1.17E+01	2.34E-02	2.19E-03	8.98E-02	7.5E-03	i	6.0E-02	i	1.6E-03	i	3.0E-01	a	1.36E+09	2.48E+03
Methyl isobutyl ketone	0.01	0.5	3.19E-03	1.23E+02	2.46E-01	1.38E-04	5.66E-03			8.0E-02	h			8.6E-01	i	1.36E+09	2.42E+04
Methyl tert-butyl ether	0.01	0.5	2.12E-03	6.00E+00	1.20E-02	5.87E-04	2.41E-02			8.6E-01	r			8.6E-01	i	1.36E+09	4.12E+03
Methylmethacrylate	0.01	0.5	3.55E-03	9.50E+01	1.90E-01	3.20E-04	1.31E-02			1.4E+00	i			2.0E-01	i	1.36E+09	1.41E+04
1-Methylnaphthalene	0.13	0.58	9.08E-02	2.30E+03	4.60E+00	5.14E-04	2.11E-02			7.0E-02	a					1.36E+09	6.39E+04
2-Methylnaphthalene	0.13	0.58	8.94E-02	4.40E+03	8.80E+00	5.18E-04	2.12E-02			4.0E-03	i					1.36E+09	8.79E+04
2-Methylphenol	0.10	0.5	8.09E-03	9.12E+01	1.82E-01	1.20E-06	4.92E-05			5.0E-02	i					1.36E+09	nv
4-Methylphenol	0.10	0.5	7.50E-03	4.34E+02	8.68E-01	1.00E-06	4.10E-05			5.0E-03	h					1.36E+09	nv
Mirex	0.10	0.5	4.26E-03	2.40E+07	4.80E+04	5.16E-04	2.12E-02			2.0E-04	i					1.36E+09	nv
Naphthalene	0.13	0.58	5.01E-02	2.00E+03	4.00E+00	4.83E-04	1.98E-02			2.0E-02	i			8.6E-04	i	1.36E+09	5.55E+04
Nickel (soluble salts)	0.001	0.04	2.00E-04	1.43E+01	6.50E+01					2.0E-02	i			2.6E-05	a	1.36E+09	
Nickel Refinery Dust	0.001	0.04	2.00E-04		6.50E+01							8.4E-01	i			1.36E+09	
2-Nitroaniline	0.10	0.5	4.44E-03	5.27E+01	1.05E-01	1.81E-08	7.42E-07			3.0E-03	n			2.9E-05	n	1.36E+09	nv
Nitrobenzene	0.10	0.5	5.31E-03	6.46E+01	1.29E-01	2.40E-05	9.84E-04			5.0E-04	i			5.7E-04	h	1.36E+09	4.37E+04
N-Nitrosodi-n-propylamine	0.10	0.5	2.48E-03	2.40E+01	4.80E-02	2.25E-06	9.23E-05	7.0E+00	i							1.36E+09	nv
N-Nitrosodiphenylamine	0.10	0.5	1.50E-02	1.29E+03	2.58E+00	5.00E-06	2.05E-04	4.9E-03	i	2.0E-02	n					1.36E+09	nv
Pentachlorobenzene	0.10	0.5	1.65E-01	3.16E+03	1.42E-06	7.10E-04	2.91E-02			8.0E-04	i					1.36E+09	nv
Pentachloronitrobenzene	0.10	0.5	2.14E-02	2.00E+04	4.00E+01	3.50E-05	1.44E-03			3.0E-03	i					1.36E+09	nv
Pentachlorophenol	0.25	0.76	1.17E-01	5.92E+02	1.18E+00	2.44E-08	1.00E-06	1.2E-01	i	3.0E-02	i					1.36E+09	nv
Phenol	0.10	0.5	4.47E-03	2.88E+01	5.76E-02	3.97E-07	1.63E-05			3.0E-01	i					1.36E+09	nv
Polychlorinated Biphenyls (PCBs)	0.14	0.8	1.77E-01	3.09E+04	6.18E+01	7.36E-04	3.02E-02	2.0E+00	i	2.0E-05	a	4.0E-01	i			1.36E+09	nv
n-Propylbenzene	0.01	0.5	7.64E-02	6.76E+02	1.35E+00	1.05E-02	4.31E-01			1.0E-02	n					1.36E+09	6.71E+03
Pyrene	0.13	0.58	2.75E-01	1.05E+05	2.10E+02	1.10E-05	4.51E-04			3.0E-02	i					1.36E+09	nv
Pyridine	0.13	0.58	1.47E-03	5.00E+01	1.00E-01	1.10E-05	4.51E-04			1.0E-03	i					1.36E+09	5.32E+04
Quinoline	0.13	0.58	6.55E-03	2.84E+00	5.68E-03	1.70E-06	6.97E-05	3.0E+00	i							1.36E+09	nv
Selenium	0.001	0.3	1.00E-03		5.00E+00	9.74E-03	3.99E-01			5.0E-03	i					1.36E+09	
Silver	0.001	0.04	6.00E-05		8.30E+00					5.0E-03	i					1.36E+09	
Silver Cyanide	0.001	0.04	1.00E-03	4.50E+00	9.00E-03					1.0E-01	i					1.36E+09	
Silvex	0.10	0.5	1.58E-02	2.60E+03	5.20E+00	9.06E-09	3.71E-07			8.0E-03	i					1.36E+09	nv
Styrene	0.01	0.5	3.60E-02	7.76E+02	1.55E+00	2.75E-03	1.13E-01			2.0E-01	i			2.9E-01	i	1.36E+09	1.33E+04
2,3,7,8 -TCDD (Dioxin)	0.03	0.5	7.67E-01	2.40E+06	4.80E+03	5.00E-05	2.05E-03	1.5E+05	h			1.5E+05	h			1.36E+09	nv
1,2,4,5-Tetrachlorobenzene	0.10	0.5	1.06E-01	1.59E+03	3.18E+00	1.00E-03	4.10E-02			3.0E-04	i					1.36E+09	nv
1,1,1,2-Tetrachloroethane	0.01	0.5	1.56E-02	3.99E+02	7.98E-01	2.70E-03	1.11E-01	2.6E-02	i	3.0E-02	i	2.6E-02	i			1.36E+09	9.76E+03

March 2008

Table A-5: Chemical Specific Values for the Generic Cleanup Numbers

CONTAMINANT	Dermal Absorption Factor (unitless)	Oral Absorption Factor (unitless)	Permeability Constant (cm/hr)	Koc (l/kg)	Kd Values (l/kg)	Henry's Law Constant at 25^0 C (atms-m3/mole)	Henry's Law Constant (unitless)	SFo $(mg/kg\text{-}day)^{-1}$	Source	RfDo (mg/kg-day)	Source	SFi $(mg/kg\text{-}day)^{-1}$	Source	RfDi (mg/kg-day)	Source	Particulate Emission Factor (m^3/kg)	Volatilization Factor (m^3/kg)
1,1,2,2-Tetrachloroethane	0.01	0.5	6.88E-03	9.93E+01	1.99E-01	3.45E-04	1.41E-02	2.0E-01	i	6.0E-02	n	2.0E-01	i			1.36E+09	1.44E+04
Tetrachloroethylene (PCE)	0.01	0.5	1.08E-02	1.55E+02	3.10E-01	1.84E-02	7.54E-01	5.2E-02	n	1.0E-02	i	2.0E-03	n	1.1E-02	n	1.36E+09	2.53E+03
2,3,4,6-Tetrachlorophenol	0.10	0.5	6.89E-02	6.30E+03	1.26E+01	1.30E-06	5.33E-05			3.0E-01	i					1.36E+09	nv
Tetrahydrofuran	0.01	0.5	1.26E-03	1.80E+01	3.60E-02	7.10E-05	2.91E-03	7.6E-03	n	2.0E-01	n	6.8E-03	n	8.6E-02	n	1.36E+09	1.47E+04
Thallium	0.001	1.0	1.00E-03		7.10E+01					8.0E-05	i					1.36E+09	nv
Toluene	0.01	0.5	3.16E-02	1.82E+02	3.64E-01	6.64E-03	2.72E-01			8.0E-02	i			1.4E+00	i	1.36E+09	3.95E+03
Toxaphene	0.10	0.5	3.25E-02	2.57E+05	5.14E+02	6.00E-06	2.46E-04	1.1E+00	i	1.0E-03	a	1.1E+00	i			1.36E+09	nv
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.01	0.5	1.72E-02	3.16E+02	6.32E-01	5.30E-01	2.17E+01			3.0E+01	i			8.6E+00	h	1.36E+09	1.70E+03
1,2,4-Trichlorobenzene	0.01	0.5	6.77E-02	1.78E+03	3.56E+00	1.42E-03	5.82E-02			1.0E-02	i			1.1E-03	n	1.36E+09	4.29E+04
1,1,1-Trichloroethane	0.01	0.9	1.23E-02	1.10E+02	2.20E-01	1.72E-02	7.05E-01			2.8E-01	n			6.3E-01	n	1.36E+09	2.20E+03
1,1,2-Trichloroethane	0.01	0.5	6.40E-03	5.01E+01	1.00E-01	9.13E-04	3.74E-02	5.7E-02	i	4.0E-03	i	5.6E-02	i			1.36E+09	6.44E+03
Trichloroethylene (TCE)	0.01	0.5	1.79E-02	1.66E+02	3.32E-01	1.03E-02	4.22E-01	1.1E-02	x	6.0E-03	n	6.0E-03	x	6.0E-03	r	1.36E+09	3.24E+03
Trichlorofluoromethane	0.01	0.5	1.26E-02	9.70E+01	1.94E-01	9.70E-02	3.98E+00			3.0E-01	i			2.0E-01	h	1.36E+09	1.11E+03
2,4,5-Trichlorophenol	0.10	0.5	4.66E-02	1.60E+03	3.20E+00	4.33E-06	1.78E-04			1.0E-01	i					1.36E+09	nv
2,4,6-Trichlorophenol	0.10	0.5	3.44E-02	3.81E+02	7.62E-01	7.79E-06	3.19E-04	1.1E-02	i			1.1E-02	i			1.36E+09	nv
2,4,5 -Trichlorophenoxyacetic acid (2,4,5-T)	0.10	0.5	2.57E-02	1.86E+02	3.72E-01	9.40E-11	3.85E-09			1.0E-02	i					1.36E+09	nv
1,2,3-Trichloropropane	0.01	0.5	7.46E-03	7.70E+01	1.54E-01	3.43E-04	1.41E-02	7.0E+00	h	6.0E-03	i			6.0E-03	a	1.36E+09	1.30E+04
Triethylamine	0.01	0.5	3.89E-03	1.07E+02	2.14E-01	1.49E-04	6.11E-03							2.0E-03	i	1.36E+09	2.03E+04
1,2,4-Trimethylbenzene	0.01	0.5	1.05E-01	7.20E+02	1.44E+00	6.16E-03	2.53E-01			5.0E-02	n			1.7E-03	n	1.36E+09	8.38E+03
1,3,5-Trimethylbenzene	0.01	0.5	6.08E-02	6.60E+02	1.32E+00	8.77E-03	3.60E-01			5.0E-02	n			1.7E-03	n	1.36E+09	6.75E+03
1,3,5-Trinitrobenzene	0.10	0.5	5.40E-04	1.04E+02	2.08E-01	3.08E-09	1.26E-07			3.0E-02	i					1.36E+09	nv
Vanadium	0.001	0.026	1.00E-03		6.20E+01					9.0E-03	i					1.36E+09	
Vinyl acetate	0.01	0.5	1.58E-03	5.25E+00	1.05E-02	5.11E-04	2.10E-02			1.0E+00	h			5.7E-02	i	1.36E+09	4.76E+03
Vinyl chloride	0.01	0.5	6.92E-03	1.86E+01	3.72E-02	2.70E-02	1.11E+00	1.4E+00	i	3.0E-03	i	3.1E-02	i	2.9E-02	i	1.36E+09	1.03E+03
Xylene (mixed)	0.01	0.9	5.22E-02	4.10E+02	8.20E-01	7.00E-03	2.87E-01			2.0E-01	i			2.9E-02	i	1.36E+09	6.16E+03
m-Xylene	0.01	0.5	4.69E-02	4.07E+02	8.14E-01	7.34E-03	3.01E-01			2.0E-01	i			2.9E-02	i	1.36E+09	2.38E+03
o-Xylene	0.01	0.5	4.99E-02	3.63E+02	7.26E-01	5.19E-03	2.13E-01			2.0E-01	i			2.9E-02	i	1.36E+09	6.10E+03
p-Xylene	0.01	0.5	4.98E-02	3.89E+02	7.78E-01	7.66E-03	3.14E-01			2.0E-01	i			2.9E-02	i	1.36E+09	5.54E+03
Zinc	0.001	0.2	6.00E-04		6.20E+01	2.45E-02	1.00E+00			3.0E-01	i					1.36E+09	

Please note that toxicity information may have been updated since this table was published, and a more current version of this table may be available on DHWM's website.

**** Cadmium- As suggested by IRIS, RfDo=1.0E-03 and Oral Absorbtion Factor=0.025 for soil (food) were also used in calculations.**

Legend:
a = ATSDR Chronic MRL
i = IRIS
h = HEAST
n = NCEA Provisional value
n*=NCEA RPF*BaP
r = Route Extrapolation
x = Withdrawn value
SFo = Oral Slope Factor
RfDo = Oral Reference Dose
SFi = Inhalation Slope Factor
RfDi = Inhalation Reference Dose