

TREATED GROUNDWATER FROM INVESTIGATION
AND/OR CLEANUP OF VOLATILE ORGANIC
COMPOUNDS-CONTAMINATED SITES TO SURFACE WATERS

ORDER NO. R4-2013-0043
NPDES NO. CAG914001

ATTACHMENT E – SCREENING LEVELS FOR GENERAL PERMITS

SCREENING LEVELS FOR GENERAL PERMITS
(screening to be conducted on untreated groundwater sample prior to issuance of permit)

| POLLUTANT | MUN ^(a) | Others ^(b) | Minimum Levels | POLLUTANT | MUN ^(a) | Others ^(b) | Minimum Levels |
|------------------------------------|--------------------|-----------------------|----------------|----------------------------------|--------------------|-----------------------|----------------|
| | (µg/L) | (µg/L) | (µg/L) | | (µg/L) | (µg/L) | (µg/L) |
| VOLATILE ORGANICS | | | | METALS⁽¹⁾ | | | |
| 1,1 Dichloroethane | 5 | 5 | 1 | Antimony (Sb) | 14 | 4300 | 5 |
| 1,1 Dichloroethylene | 0.057 | 3.2 | 0.5 | Arsenic (As) | 50 | 36 | 10 |
| 1,1,1 Trichloroethane | 200 | 200 | 2 | Beryllium (Be) | 4 | -- | 0.5 |
| 1,1,2 Trichloroethane | 0.60 | 42 | 0.5 | Cadmium (Cd) | 2.4 | 9.4 | 0.5 |
| 1,1,2,2 Tetrachloroethane | 0.17 | 1 | 0.5 | Chromium III (Cr ³⁺) | 50 | -- | 10 |
| 1,2 Dichlorobenzene | 600 | 600 | 0.5 | Chromium VI (Cr ⁶⁺) | 11 | 50 | 5 |
| 1,2 Dichloroethane | 0.38 | 99 | 0.5 | Copper (Cu) | 9.4 | 3.7 | 0.5 |
| 1,2 Dichloropropane | 0.52 | 39 | 0.5 | Cyanide (CN) | 5.2 | -- | 5 |
| 1,2-Trans Dichloroethylene | 10 | 10 | 1 | Lead (Pb) | 3.2 | 8.5 | 0.5 |
| 1,3 Dichlorobenzene | 400 | 2600 | 2 | Mercury (Hg) | 0.050 | 0.051 | 0.2 |
| 1,3 Dichloropropylene | 0.5 | 0.5 | 0.5 | Nickel (Ni) | 52 | 8.3 | 1 |
| 1,4 Dichlorobenzene | 5 | 0.5 | 0.5 | Selenium (Se) | 5.0 | 71 | 2 |
| 2-Chloroethyl vinyl ether | -- | -- | 1 | Silver (Ag) | 4 | 2.2 | 0.25 |
| Acetone | 700 | 700 | na | Thallium (Ti) | 1.7 | 6.3 | 1 |
| Acrolein | 100 | 100 | 5 | Zinc (Zn) | 122 | 86 | 20 |
| Acrylonitrile | 0.059 | 0.66 | 2.0 | PESTICIDES AND PCBs | | | |
| Benzene | 1.0 | 1 | 0.5 | 4,4'-DDD | 0.00083 | 0.00084 | 0.05 |
| Bromoform | 4.3 | 360 | 0.5 | 4,4'-DDE | 0.00059 | 0.00059 | 0.05 |
| Carbon Tetrachloride | 0.25 | 0.5 | 0.5 | 4,4'-DDT | 0.00059 | 0.00059 | 0.01 |
| Chlorobenzene | 30 | 21000 | 2 | Alpha-Endosulfan | 0.056 | 0.0087 | 0.02 |
| Chlorodibromo-methane | 0.401 | 34 | 0.5 | Alpha-BHC | 0.0039 | 0.013 | 0.01 |
| Chloroethane | 100 | 100 | 2 | Aldrin | 0.00013 | 0.00014 | 0.005 |
| Chloroform | 100 | 100 | 2 | Beta-Endosulfan | 0.056 | 0.0087 | 0.01 |
| Dichlorobromo-methane | 0.56 | 46 | 0.5 | beta-BHC | 0.014 | 0.046 | 0.005 |
| Ethylbenzene | 700 | 700 | 2 | Chlordane | 0.00057 | 0.00059 | 0.1 |
| Ethylene Dibromide | 0.05 | 0.05 | na | delta-BHC | -- | -- | 0.005 |
| Methyl Bromide | 10 | 4000 | 2.0 | Dieldrin | 0.00014 | 0.00014 | 0.01 |
| Methyl Chloride | 3 | 3 | 0.5 | Endosulfan Sulfate | 110 | 240 | 0.05 |
| Methyl ethyl ketone | 700 | 700 | na | Endrin | 0.036 | 0.0023 | 0.01 |
| Methyl tertiary butyl ether (MTBE) | 5 | 5 | na | Endrin Aldehyde | 0.76 | 0.81 | 0.01 |
| Methylene Chloride | 4.7 | 1600 | 0.5 | Heptachlor | 0.00021 | 0.00021 | 0.01 |
| Tetrachloroethylene | 0.8 | 8.85 | 0.5 | Heptachlor Epoxide | 0.0001 | 0.00011 | 0.01 |
| Toluene | 150 | 150 | 2 | gamma-BHC | 0.019 | 0.063 | 0.02 |
| Trichloroethylene | 2.7 | 5 | 0.5 | PCB 1016 | 0.00017 | 0.00017 | 0.5 |
| Vinyl Chloride | 0.5 | 0.5 | 0.5 | PCB 1221 | 0.00017 | 0.00017 | 0.5 |
| Xylenes | 1750 | 1750 | na | PCB 1232 | 0.00017 | 0.00017 | 0.5 |
| | | | | PCB 1242 | 0.00017 | 0.00017 | 0.5 |
| | | | | PCB 1248 | 0.00017 | 0.00017 | 0.5 |
| | | | | PCB 1254 | 0.00017 | 0.00017 | 0.5 |
| | | | | PCB 1260 | 0.00017 | 0.00017 | 0.5 |
| | | | | Toxaphene | 0.00073 | 0.00075 | 0.5 |

(a) = Applies to water with Municipal and Domestic Supply (MUN) (indicated with E and I in the Basin Plan) beneficial uses designations.

(b) = Applies to all other receiving waters

(1) = Metals concentrations are expressed as total recoverable.

| POLLUTANT | MUN ^(a) | Others ^(b) | Minimum Levels | POLLUTANT | MUN ^(a) | Others ^(b) | Minimum Levels |
|---------------------------------|--------------------|-----------------------|----------------|---|--------------------|-----------------------|----------------|
| | (µg/L) | (µg/L) | (µg/L) | | (µg/L) | (µg/L) | (µg/L) |
| SEMI – VOLATILE ORGANICS | | | | SEMI – VOLATILE ORGANICS (continued) | | | |
| 1,2 Diphenylhydrazine | 0.040 | 0.54 | 1 | Dibenzo(a,h)-anthracene | 0.0044 | 0.049 | 0.1 |
| 1,2,4 Trichlorobenzene | 70 | -- | 5 | Diethyl phthalate | 23000 | 120000 | 10 |
| 2 Chlorophenol | 120 | 400 | 5 | Dimethyl phthalate | 313000 | 2900000 | 10 |
| 2,4 Dichlorophenol | 93 | 790 | 5 | di-n-Butyl phthalate | 2700 | 12000 | 10 |
| 2,4 Dimethylphenol | 540 | 2300 | 2 | di-n-Octyl phthalate | -- | -- | 10 |
| 2,4 Dinitrophenol | 70 | 14000 | 5 | Fluoranthene | 300 | 370 | 10 |
| 2,4 Dinitrotoluene | 0.11 | 9.1 | 5 | Fluorene | 1300 | 14000 | 10 |
| 2,4,6 Trichlorophenol | 2.1 | 6.5 | 10 | Hexachlorobenzene | 0.00075 | 0.00077 | 1 |
| 2,6 Dinitrotoluene | -- | -- | 5 | Hexachlorobutadiene | 0.44 | 50 | 1 |
| 2-Nitrophenol | -- | -- | 10 | Hexachloro-cyclopentadiene | 50 | 17000 | 5 |
| 2-Chloronaphthalene | 1700 | 4300 | 10 | Hexachloroethane | 1.9 | 8.9 | 1 |
| 3,3' Dichlorobenzidine | 0.04 | 0.077 | 5 | Indeno(1,2,3,cd)-pyrene | 0.0044 | 0.049 | 0.05 |
| 3-Methyl-4-Chlorophenol | -- | -- | 1 | Isophorone | 8.4 | 600 | 1 |
| 2-Methyl-4,6-Dinitrophenol | 13 | 765 | 5 | N-Nitrosodimethyl amine (NDMA) | 0.00069 | 8.1 | 5 |
| 4-Nitrophenol | -- | -- | 5 | N-Nitroso-di-n-propyl amine | 0.005 | 1.4 | 5 |
| 4-Bromophenyl phenyl ether | -- | -- | 5 | N-Nitrosodiphenyl amine | 5.0 | 16 | 1 |
| 4-Chlorophenyl phenyl ether | -- | -- | 5 | Naphthalene | 21 | -- | 10 |
| Acenaphthene | 1200 | 2700 | 1 | Nitrobenzene | 17 | 1900 | 10 |
| Acenaphthylene | -- | -- | 10 | Pentachlorophenol | 0.28 | 7.9 | 1 |
| Anthracene | 9600 | 110000 | 5 | Phenanthrene | -- | -- | 5 |
| Benzidine | 0.00012 | 0.00054 | 5 | Phenol | 21000 | 4600000 | 50 |
| Benzo (a) Anthracene | 0.0044 | 0.049 | 5 | Pyrene | 960 | 11000 | 10 |
| Benzo (a) Pyrene | 0.0044 | 0.049 | 2 | MISCELLANEOUS | | | |
| Benzo (b) Fluoranthene | 0.0044 | 0.049 | 10 | Asbestos (in fibers/L k.s.) | 7000000 | 7000000 | |
| Benzo (g,h,i) Perylene | -- | -- | 5 | Di-isopropyl ether (DIPE) | 0.8 | 0.8 | 2 |
| Benzo (k) Fluoranthene | 0.0044 | 0.049 | 2 | 1,4-Dioxane | 3 | 3 | |
| Bis (2-Chloroethoxyl) methane | -- | -- | 5 | Ethanol | 1000 | 1000 | 1000 |
| Bis(2-Chloroethyl) ether | 0.031 | 1.4 | 1 | Ethyl tertiary butyl ether (ETBE) | 2 | 2 | 2 |
| Bis(2-Chloroisopropyl) ether | 1400 | 170000 | 10 | Methanol | 1000 | 1000 | 1000 |
| Bis(2-Ethylhexyl) phthalate | 1.8 | 5.9 | 5 | Methyl tertiary butyl ether (MTBE) | 5 | 5 | |
| Butyl benzyl phthalate | 3000 | 5200 | 10 | Perchlorate | 6 | 6 | |
| Chrysene | 0.0044 | 0.049 | 5 | 2,3,7,8-TCDD (Dioxin) | 1.3E-08 | 1.3E-08 | 1.0E-05 |
| | | | | Tertiary amyl methyl ether (TAME) | 2 | 2 | 2 |
| | | | | Tertiary butyl alcohol (TBA) | 12 | 12 | 10 |
| | | | | Total petroleum hydrocarbons | 100 | 100 | |

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