

US EPA ARCHIVE DOCUMENT

Table PG3. Chemical-specific Waste Concentrations for Surface Impoundments (mg/l)
 Human Receptors - 500 meters; Ecological Receptors - 2000 meters

| Chemical Name | CASRN | Protection Group 1 | | | Protection Group 2 | | | Protection Group 3 | | | Protection Group 4 | | |
|----------------------------------|-----------|--------------------|--------|--------|--------------------|--------|--------|--------------------|--------|--------|--------------------|--------|--------|
| | | HH | Eco | Lowest | HH | Eco | Lowest | HH | Eco | Lowest | HH | Eco | Lowest |
| Acetonitrile | 75-05-8 | 30 | note 1 | 30 | 800 | note 1 | 800 | 800 | note 1 | 800 | 1000 | note 1 | 1000 |
| Acrylonitrile | 107-13-1 | 0.005 | note 1 | 0.005 | 0.01 | note 1 | 0.01 | 0.7 | note 1 | 0.7 | 1 | note 1 | 1 |
| Aniline | 62-53-3 | 0.4 | 1000 | 0.4 | 0.8 | 1000 | 0.8 | 8 | 1000 | 8 | 8 | 1000 | 8 |
| Arsenic | 7440-38-2 | 0.003 | 0.3 | 0.003 | 0.006 | 0.6 | 0.006 | 0.3 | 0.6 | 0.3 | 0.4 | 10 | 0.4 |
| Barium | 7440-39-3 | 4 | 700 | 4 | 80 | 1000 | 80 | 80 | 1000 | 80 | 200 | 1000 | 200 |
| Benzene | 71-43-2 | 0.07 | 20 | 0.07 | 0.4 | 40 | 0.4 | 30 | 40 | 30 | 40 | 100 | 40 |
| Benzo(a)pyrene | 50-32-8 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 |
| Beryllium | 7440-41-7 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| Bis-(2-ethylhexyl) phthalate | 117-81-7 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| Cadmium | 7440-43-9 | 0.03 | 10 | 0.03 | 0.5 | 10 | 0.5 | 0.5 | 10 | 0.5 | 0.7 | 10 | 0.7 |
| Carbon disulfide | 75-15-0 | 5 | 10 | 5 | 100 | 30 | 30 | 100 | 30 | 30 | 100 | 100 | 100 |
| Chlorobenzene | 108-90-7 | 0.7 | 100 | 0.7 | 40 | 100 | 40 | 40 | 100 | 40 | 40 | 100 | 40 |
| Chloroform | 67-66-3 | 0.3 | 3 | 0.3 | 0.7 | 8 | 0.7 | 8 | 8 | 8 | 9 | 300 | 9 |
| Dibenz[a,h]anthracene | 53-70-3 | 0.0001 | 0.0001 | 0.0001 | 0.0001 | 0.0001 | 0.0001 | 0.0001 | 0.0001 | 0.0001 | 0.0001 | 0.0001 | 0.0001 |
| Dichlorophenoxyacetic acid, 2,4- | 94-75-7 | 0.3 | note 1 | 0.3 | 6 | note 1 | 6 | 6 | note 1 | 6 | 8 | note 1 | 8 |
| Divalent Mercury | 7439-97-6 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| Ethylene dibromide | 106-93-4 | 0.0002 | note 1 | 0.0002 | 0.0005 | note 1 | 0.0005 | 0.02 | note 1 | 0.02 | 0.07 | note 1 | 0.07 |
| Lead | 7439-92-1 | note 2 | 2 | 2 | note 2 | 3 | 3 | note 2 | 3 | 3 | note 2 | 40 | 40 |
| Methyl ethyl ketone | 78-93-3 | 80 | 2000 | 80 | 7000 | 6000 | 6000 | 7000 | 6000 | 6000 | 10000 | 10000 | 10000 |
| Methyl methacrylate | 80-62-6 | 70 | note 1 | 70 | 1000 | note 1 | 1000 | 1000 | note 1 | 1000 | 1000 | note 1 | 1000 |
| Methylene chloride | 75-09-2 | 0.5 | 1000 | 0.5 | 1 | 1000 | 1 | 100 | 1000 | 100 | 200 | 1000 | 200 |
| Nickel [+2] | 7440-02-0 | 0.6 | 1000 | 0.6 | 40 | 1000 | 40 | 40 | 1000 | 40 | 50 | 1000 | 50 |
| Nitrobenzene | 98-95-3 | 0.04 | 100 | 0.04 | 0.9 | 100 | 0.9 | 0.9 | 100 | 0.9 | 1 | 100 | 1 |
| Pentachlorophenol | 87-86-5 | 0.3 | 1 | 0.3 | 0.6 | 1 | 0.6 | 1 | 1 | 1 | 1 | 1 | 1 |
| Phenol | 108-95-2 | 400 | 4000 | 400 | 8000 | 10000 | 8000 | 8000 | 10000 | 8000 | 10000 | 10000 | 10000 |
| Pyridine | 110-86-1 | 0.05 | 10 | 0.05 | 0.9 | 10 | 0.9 | 0.9 | 10 | 0.9 | 3 | 10 | 3 |
| Silver | 7440-22-4 | note 4 | 4000 | note 4 | 6 | 10000 | 6 | 6 | 10000 | 6 | 8 | 10000 | 8 |

Table PG3. Chemical-specific Waste Concentrations for Surface Impoundments (mg/l)
 Human Receptors - 500 meters; Ecological Receptors - 2000 meters

| Chemical Name | CASRN | Protection Group 1 | | | Protection Group 2 | | | Protection Group 3 | | | Protection Group 4 | | |
|---------------------------------------|-----------|--------------------|---------|----------|--------------------|---------|----------|--------------------|---------|---------|--------------------|---------|---------|
| | | HH | Eco | Lowest | HH | Eco | Lowest | HH | Eco | Lowest | HH | Eco | Lowest |
| Tetrachlorodibenzo-p-dioxin, 2,3,7,8- | 1746-01-6 | 0.000002 | 0.00001 | 0.000002 | 0.000005 | 0.00001 | 0.000005 | 0.00001 | 0.00001 | 0.00001 | 0.00001 | 0.00001 | 0.00001 |
| Tetrachloroethylene | 127-18-4 | 0.06 | 100 | 0.06 | 0.1 | 100 | 0.1 | 6 | 100 | 6 | 10 | 100 | 10 |
| Thallium [+1] | 7446-18-6 | 0.003 | 1 | 0.003 | 0.05 | 1 | 0.05 | 0.05 | 1 | 0.05 | 0.05 | 1 | 0.05 |
| Thiram | 137-26-8 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 |
| Toluene | 108-88-3 | 10 | 6 | 6 | 700 | 20 | 20 | 700 | 20 | 20 | 1000 | 400 | 400 |
| Trichloroethane, 1,1,1- | 71-55-6 | note 4 | 20 | note 4 | 70 | 60 | 60 | 70 | 60 | 60 | 100 | 900 | 100 |
| Trichloroethylene | 79-01-6 | 0.5 | 0.3 | 0.3 | 1 | 0.6 | 0.6 | 60 | 0.6 | 0.6 | 70 | 20 | 20 |
| Vinyl chloride | 75-01-4 | 0.004 | 0.2 | 0.004 | 0.008 | 0.4 | 0.008 | 0.5 | 0.4 | 0.4 | 0.6 | 10 | 0.6 |
| Zinc | 7440-66-6 | 30 | 2000 | 30 | 600 | 3000 | 600 | 600 | 3000 | 600 | 700 | 10000 | 700 |

- note 1: Ecological impacts were not evaluated due to the lack of chronic ecological toxicity values.
- note 2: Human impacts were not evaluated due to the lack of human health toxicity values.
- note 3: The values in the highlighted cells are the same as the highest waste concentration evaluated.
- note 4: The lowest concentration run does not meet the protection criteria for this scenario.
- NA: Not Applicable