

US EPA ARCHIVE DOCUMENT

Table EP8. Chemical-specific Risks and Hazards by Exposure Pathway for Land Application Units (unitless)
 Human Receptors - 2000 meters; Ecological Receptors - 2000 meters

| Chemical Name | CASRN | Protection Group 1 | | | | | | | | | | | | | |
|---------------------------------|-----------|--------------------|---------|----------------|---------|-----------------|---------|----------------|---------|----------------|---------|----------------|---------|----------------|---------|
| | | Air Inhalation | | Soil Ingestion | | Water Ingestion | | Crop Ingestion | | Beef Ingestion | | Milk Ingestion | | Fish Ingestion | |
| | | Risk | HQ | Risk | HQ | Risk | HQ | Risk | HQ | Risk | HQ | Risk | HQ | Risk | HQ |
| Acetonitrile | 75-05-8 | note 2 | < 1E-01 | note 2 | note 3 | note 2 | note 3 | note 2 | note 3 | note 2 | note 3 | note 2 | note 3 | note 2 | note 3 |
| Acrylonitrile | 107-13-1 | < 1E-08 | < 1E-01 | < 1E-08 | < 1E-01 | < 1E-06 | < 1E-01 | 1E-09 | < 1E-01 | 5E-06 | 0.003 | 5E-06 | 0.1 | < 1E-08 | < 1E-01 |
| Aniline | 62-53-3 | note 2 | < 1E-01 | < 1E-08 | note 3 | < 1E-06 | note 3 | < 1E-08 | note 3 | 5E-06 | note 3 | 1E-05 | note 3 | < 1E-08 | note 3 |
| Arsenic | 7440-38-2 | 2E-09 | note 3 | < 1E-08 | < 1E-01 | 6E-09 | < 1E-01 | < 5E-07 | < 1E-01 | 9E-10 | < 1E-01 | 5E-08 | < 1E-01 | < 1E-08 | < 1E-01 |
| Barium | 7440-39-3 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E+00 | note 2 | < 1E-01 |
| Benzene | 71-43-2 | < 5E-07 | note 3 | < 1E-08 | note 3 | 5E-09 | note 3 | 2E-06 | note 3 | < 1E-08 | note 3 | 9E-09 | note 3 | < 1E-08 | note 3 |
| Benzo(a)pyrene | 50-32-8 | note 2 | note 3 | < 1E-08 | note 3 | < 1E-08 | note 3 | < 1E-08 | note 3 | < 1E-05 | note 3 | < 1E-04 | note 3 | < 1E-08 | note 3 |
| Beryllium | 7440-41-7 | < 1E-06 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 |
| Bis-(2-ethylhexyl) phthalate | 117-81-7 | note 2 | note 3 | < 1E-08 | < 1E-01 | < 1E-08 | < 1E-01 | < 1E-08 | < 1E-01 | < 1E-08 | < 1E-01 | < 1E-08 | < 1E-01 | < 1E-08 | < 1E-01 |
| Cadmium | 7440-43-9 | < 1E-08 | note 3 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 |
| Carbon disulfide | 75-15-0 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 |
| Chlorobenzene | 108-90-7 | note 2 | 0.007 | note 2 | < 1E-01 | note 2 | 0.05 | note 2 | 0.007 | note 2 | 0.1 | note 2 | 0.1 | note 2 | < 1E-01 |
| Chloroform | 67-66-3 | 3E-09 | note 3 | < 1E-08 | < 1E-01 | < 1E-08 | < 1E-01 | 1E-09 | < 1E-01 | < 1E-08 | < 1E-01 | < 1E-08 | < 1E-01 | < 1E-08 | < 1E-01 |
| Dibenz[a,h]anthracene | 53-70-3 | note 2 | note 3 | 7E-09 | note 3 | < 1E-08 | note 3 | 8E-07 | note 3 | 9E-05 | note 3 | 1E-04 | note 3 | < 1E-08 | note 3 |
| Dichlorophenoxyacetic acid, 2,4 | 94-75-7 | note 2 | note 3 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | 1 | note 2 | 3 | note 2 | < 1E-01 |
| Divalent Mercury | 7439-97-6 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 |
| Ethylene dibromide | 106-93-4 | < 1E-08 | < 1E-01 | < 1E-08 | note 3 | < 1E-06 | note 3 | < 1E-08 | note 3 | < 5E-06 | note 3 | 6E-07 | note 3 | < 1E-08 | note 3 |
| Lead | 7439-92-1 | note 1 | note 1 | note 1 | note 1 | note 1 | note 1 | note 1 | note 1 | note 1 | note 1 | note 1 | note 1 | note 1 | note 1 |
| Methyl ethyl ketone | 78-93-3 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E+00 | note 2 | < 1E-01 |
| Methyl methacrylate | 80-62-6 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | 0.3 | note 2 | 2 | note 2 | < 1E-01 |
| Methylene chloride | 75-09-2 | 2E-09 | < 1E-01 | < 1E-08 | < 1E-01 | 7E-07 | < 1E-01 | 5E-07 | < 1E-01 | 6E-08 | < 1E-01 | 4E-09 | 0.01 | < 1E-08 | < 1E-01 |
| Nickel [+2] | 7440-02-0 | < 1E-08 | note 3 | note 2 | < 1E-01 | note 2 | 0.01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 |
| Nitrobenzene | 98-95-3 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | 0.8 | note 2 | 0.8 | note 2 | < 1E-01 |
| Pentachlorophenol | 87-86-5 | note 2 | note 3 | < 1E-08 | < 1E-01 | 7E-07 | < 1E-01 | 3E-09 | < 1E-01 | 1E-05 | 0.3 | note 5 | 0.3 | < 1E-08 | < 1E-01 |
| Phenol | 108-95-2 | note 2 | note 3 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 |
| Pyridine | 110-86-1 | note 2 | note 3 | note 2 | < 1E-01 | note 2 | 0.1 | note 2 | < 1E-01 | note 2 | < 1E+00 | note 2 | < 1E+00 | note 2 | < 1E-01 |
| Silver | 7440-22-4 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 |

Table EP8. Chemical-specific Risks and Hazards by Exposure Pathway for Land Application Units (unitless)
 Human Receptors - 2000 meters; Ecological Receptors - 2000 meters

| Chemical Name | CASRN | Protection Group 1 | | | | | | | | | | | | | |
|----------------------------------|-----------|--------------------|---------|----------------|---------|-----------------|---------|----------------|---------|----------------|---------|----------------|---------|----------------|---------|
| | | Air Inhalation | | Soil Ingestion | | Water Ingestion | | Crop Ingestion | | Beef Ingestion | | Milk Ingestion | | Fish Ingestion | |
| | | Risk | HQ | Risk | HQ | Risk | HQ | Risk | HQ | Risk | HQ | Risk | HQ | Risk | HQ |
| Tetrachlorodibenzo-p-dioxin, 2,3 | 1746-01-6 | 7E-07 | note 3 | 2E-09 | < 1E-01 | < 1E-08 | < 1E-01 | 9E-07 | < 1E-01 | 4E-07 | < 1E-01 | 9E-09 | < 1E-01 | < 1E-08 | < 1E-01 |
| Tetrachloroethylene | 127-18-4 | 3E-09 | note 3 | < 1E-08 | < 1E-01 | < 1E-08 | < 1E-01 | < 5E-06 | 0.01 | 6E-07 | < 1E-01 | 6E-07 | 0.02 | < 1E-08 | < 1E-01 |
| Thallium [+1] | 7446-18-6 | note 5 | note 5 | note 5 | note 5 | note 5 | note 5 | note 5 | note 5 | note 5 | note 5 | note 5 | note 5 | note 5 | note 5 |
| Thiram | 137-26-8 | note 2 | note 3 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E+01 | note 2 | < 1E+01 | note 2 | < 1E-01 |
| Toluene | 108-88-3 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | 0.01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 |
| Trichloroethane, 1,1,1- | 71-55-6 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | 0.04 | note 2 | 0.09 | note 2 | 0.8 | note 2 | 0.9 | note 2 | < 1E-01 |
| Trichloroethylene | 79-01-6 | 5E-09 | note 3 | < 1E-08 | note 3 | 5E-07 | note 3 | 7E-07 | note 3 | 9E-09 | note 3 | 7E-07 | note 3 | < 1E-08 | note 3 |
| Vinyl chloride | 75-01-4 | < 1E-08 | note 3 | < 1E-08 | note 3 | < 1E-06 | note 3 | < 1E-06 | note 3 | < 1E-06 | note 3 | 5E-06 | note 3 | < 1E-08 | note 3 |
| Zinc | 7440-66-6 | note 2 | note 3 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 |

- note 1: Human impacts were not evaluated for this chemical due to the lack of human health toxicity values.
- note 2: The risk was not calculated for this chemical because the chemical did not have a cancer slope factor.
- note 3: The hazard was not calculated for this chemical because it did not have a noncancer reference dose or reference concentration.
- note 4: For this chemical, it either lacks a toxicity value for inhalation or ingestion or the inhalation and ingestion pathways are not additive.
- note 5: For this chemical and exposure pathway, the curve could not be used to interpolate a result.
- NA: Not Applicable

Table EP8. Chemical-specific Risks and Hazards by Exposure Pathway for Land Application Units (unitless)
 Human Receptors - 2000 meters; Ecological Receptors - 2000 meters

| Chemical Name | CASRN | Protection Group 1 | | | | | | | | | | | |
|---------------------------------|-----------|--------------------|---------|-------------|----|----------------|---------|---------------|---------|--------------------|---------|-------------------|---------|
| | | Shower Inhalation | | Breast Milk | | All Inhalation | | All Ingestion | | All Ingest & Inhal | | Groundwater Total | |
| | | Risk | HQ | Risk | HQ | Risk | HQ | Risk | HQ | Risk | HQ | Risk | HQ |
| Acetonitrile | 75-05-8 | note 2 | < 1E-01 | NA | NA | note 2 | < 1E-01 | note 2 | note 3 | note 4 | note 4 | note 4 | note 4 |
| Acrylonitrile | 107-13-1 | 2E-07 | < 1E-01 | NA | NA | 8E-08 | < 1E-01 | < 1E-06 | < 1E-01 | note 4 | note 4 | note 4 | note 4 |
| Aniline | 62-53-3 | note 2 | < 1E-01 | NA | NA | note 2 | < 1E-01 | < 1E-06 | note 3 | note 4 | note 4 | note 4 | note 4 |
| Arsenic | 7440-38-2 | < 1E-08 | note 3 | NA | NA | 2E-09 | note 3 | 3E-07 | < 1E-01 | note 4 | note 4 | note 4 | note 4 |
| Barium | 7440-39-3 | note 2 | < 1E-01 | NA | NA | note 2 | < 1E-01 | note 2 | < 1E-01 | note 4 | note 4 | note 4 | note 4 |
| Benzene | 71-43-2 | < 1E-08 | note 3 | NA | NA | < 5E-07 | note 3 | 1E-06 | note 3 | < 1E-06 | note 4 | 1E-08 | note 4 |
| Benzo(a)pyrene | 50-32-8 | note 2 | note 3 | NA | NA | note 2 | note 3 | < 5E-07 | note 3 | note 4 | note 4 | note 4 | note 4 |
| Beryllium | 7440-41-7 | < 1E-08 | < 1E-01 | NA | NA | < 1E-06 | < 1E-01 | note 2 | < 1E-01 | note 4 | note 4 | note 4 | note 4 |
| Bis-(2-ethylhexyl) phthalate | 117-81-7 | note 2 | note 3 | NA | NA | note 2 | note 3 | < 1E-08 | < 1E-01 | note 4 | note 4 | note 4 | note 4 |
| Cadmium | 7440-43-9 | < 1E-08 | note 3 | NA | NA | < 1E-08 | note 3 | note 2 | < 1E-01 | note 4 | note 4 | note 4 | note 4 |
| Carbon disulfide | 75-15-0 | note 2 | < 1E-01 | NA | NA | note 2 | < 1E-01 | note 2 | < 1E-01 | note 4 | note 4 | note 4 | note 4 |
| Chlorobenzene | 108-90-7 | note 2 | 0.02 | NA | NA | note 2 | 0.02 | note 2 | 0.05 | note 4 | < 1E-01 | note 4 | < 1E-01 |
| Chloroform | 67-66-3 | < 1E-06 | note 3 | NA | NA | < 1E-06 | note 3 | < 1E-08 | < 1E-01 | < 1E-06 | note 4 | < 1E-06 | note 4 |
| Dibenz[a,h]anthracene | 53-70-3 | note 2 | note 3 | NA | NA | note 2 | note 3 | < 1E-06 | note 3 | note 4 | note 4 | note 4 | note 4 |
| Dichlorophenoxyacetic acid, 2,4 | 94-75-7 | note 2 | note 3 | NA | NA | note 2 | note 3 | note 2 | < 1E-01 | note 4 | note 4 | note 4 | note 4 |
| Divalent Mercury | 7439-97-6 | note 2 | < 1E-01 | NA | NA | note 2 | < 1E-01 | note 2 | < 1E-01 | note 4 | note 4 | note 4 | note 4 |
| Ethylene dibromide | 106-93-4 | < 1E-08 | < 1E-01 | NA | NA | < 1E-08 | < 1E-01 | 1E-06 | note 3 | note 4 | note 4 | note 4 | note 4 |
| Lead | 7439-92-1 | note 1 | note 1 | NA | NA | note 1 | note 1 | note 1 | note 1 | note 1 | note 1 | note 1 | note 1 |
| Methyl ethyl ketone | 78-93-3 | note 2 | < 1E-01 | NA | NA | note 2 | < 1E-01 | note 2 | < 1E-01 | note 4 | < 1E-01 | note 4 | < 1E-01 |
| Methyl methacrylate | 80-62-6 | note 2 | 0.02 | NA | NA | note 2 | 0.02 | note 2 | < 1E-01 | note 4 | note 4 | note 4 | note 4 |
| Methylene chloride | 75-09-2 | < 5E-07 | < 1E-01 | NA | NA | 8E-08 | < 1E-01 | 7E-07 | < 1E-01 | < 1E-06 | < 1E-01 | < 1E-06 | < 1E-01 |
| Nickel [+2] | 7440-02-0 | < 1E-08 | note 3 | NA | NA | < 1E-08 | note 3 | note 2 | 0.01 | note 4 | note 4 | note 4 | note 4 |
| Nitrobenzene | 98-95-3 | note 2 | < 1E-01 | NA | NA | note 2 | < 1E-01 | note 2 | < 1E-01 | note 4 | < 1E-01 | note 4 | < 1E-01 |
| Pentachlorophenol | 87-86-5 | note 2 | note 3 | NA | NA | note 2 | note 3 | < 1E-06 | < 1E-01 | note 4 | note 4 | note 4 | note 4 |
| Phenol | 108-95-2 | note 2 | note 3 | NA | NA | note 2 | note 3 | note 2 | < 1E-01 | note 4 | note 4 | note 4 | note 4 |
| Pyridine | 110-86-1 | note 2 | note 3 | NA | NA | note 2 | note 3 | note 2 | 0.1 | note 4 | note 4 | note 4 | note 4 |
| Silver | 7440-22-4 | note 2 | < 1E-01 | NA | NA | note 2 | < 1E-01 | note 2 | < 1E-01 | note 4 | note 4 | note 4 | note 4 |

Table EP8. Chemical-specific Risks and Hazards by Exposure Pathway for Land Application Units (unitless)
 Human Receptors - 2000 meters; Ecological Receptors - 2000 meters

| | | Protection Group 1 | | | | | | | | | | | |
|----------------------------------|-----------|--------------------|---------|-------------|---------|----------------|---------|---------------|---------|--------------------|--------|-------------------|--------|
| | | Shower Inhalation | | Breast Milk | | All Inhalation | | All Ingestion | | All Ingest & Inhal | | Groundwater Total | |
| Chemical Name | CASRN | Risk | HQ | Risk | HQ | Risk | HQ | Risk | HQ | Risk | HQ | Risk | HQ |
| Tetrachlorodibenzo-p-dioxin, 2,3 | 1746-01-6 | < 1E-08 | note 3 | NA | < 1E-01 | 7E-07 | note 3 | 9E-07 | < 1E-01 | 9E-07 | note 4 | < 1E-08 | note 4 |
| Tetrachloroethylene | 127-18-4 | 7E-10 | note 3 | NA | NA | 4E-09 | note 3 | < 1E-06 | < 1E-01 | < 1E-06 | note 4 | < 5E-07 | note 4 |
| Thallium [+1] | 7446-18-6 | note 5 | note 5 | NA | NA | note 5 | note 5 | note 5 | note 5 | note 5 | note 5 | note 5 | note 5 |
| Thiram | 137-26-8 | note 2 | note 3 | NA | NA | note 2 | note 3 | note 2 | < 1E-01 | note 4 | note 4 | note 4 | note 4 |
| Toluene | 108-88-3 | note 2 | < 1E-01 | NA | NA | note 2 | < 1E-01 | note 2 | < 1E-01 | note 4 | note 4 | note 4 | note 4 |
| Trichloroethane, 1,1,1- | 71-55-6 | note 2 | < 1E-01 | NA | NA | note 2 | < 1E-01 | note 2 | < 1E-01 | note 4 | note 4 | note 4 | note 4 |
| Trichloroethylene | 79-01-6 | 5E-07 | note 3 | NA | NA | 5E-07 | note 3 | 7E-07 | note 3 | note 4 | note 4 | note 4 | note 4 |
| Vinyl chloride | 75-01-4 | 4E-07 | note 3 | NA | NA | 5E-07 | note 3 | 1E-06 | note 3 | 1E-06 | note 4 | < 1E-06 | note 4 |
| Zinc | 7440-66-6 | note 2 | note 3 | NA | NA | note 2 | note 3 | note 2 | < 1E-01 | note 4 | note 4 | note 4 | note 4 |

- note 1: Human impacts were not evaluated for this chemical due to the lack of human health toxicity values.
- note 2: The risk was not calculated for this chemical because the chemical did not have a cancer slope factor.
- note 3: The hazard was not calculated for this chemical because it did not have a noncancer reference dose or reference concentration.
- note 4: For this chemical, it either lacks a toxicity value for inhalation or ingestion or the inhalation and ingestion pathways are not additive.
- note 5: For this chemical and exposure pathway, the curve could not be used to interpolate a result.
- NA: Not Applicable

Table EP8. Chemical-specific Risks and Hazards by Exposure Pathway for Land Application Units (unitless)
 Human Receptors - 2000 meters; Ecological Receptors - 2000 meters

| Chemical Name | CASRN | Protection Group 2 | | | | | | | | | | | | | |
|---------------------------------|-----------|--------------------|---------|----------------|---------|-----------------|---------|----------------|---------|----------------|---------|----------------|---------|----------------|---------|
| | | Air Inhalation | | Soil Ingestion | | Water Ingestion | | Crop Ingestion | | Beef Ingestion | | Milk Ingestion | | Fish Ingestion | |
| | | Risk | HQ | Risk | HQ | Risk | HQ | Risk | HQ | Risk | HQ | Risk | HQ | Risk | HQ |
| Acetonitrile | 75-05-8 | note 2 | 0.06 | note 2 | note 3 | note 2 | note 3 | note 2 | note 3 | note 2 | note 3 | note 2 | note 3 | note 2 | note 3 |
| Acrylonitrile | 107-13-1 | < 1E-08 | < 1E-01 | < 1E-08 | < 1E-01 | < 1E-06 | 0 | 1E-09 | < 1E-01 | 5E-06 | 0.003 | 5E-06 | 0.1 | < 1E-08 | < 1E-01 |
| Aniline | 62-53-3 | note 2 | < 1E-01 | < 1E-08 | note 3 | < 1E-06 | note 3 | < 1E-08 | note 3 | 5E-06 | note 3 | 1E-05 | note 3 | < 1E-08 | note 3 |
| Arsenic | 7440-38-2 | 2E-09 | note 3 | < 1E-08 | < 1E-01 | 5E-09 | < 1E-01 | < 5E-07 | < 1E-01 | 9E-10 | < 1E-01 | 6E-08 | < 1E-01 | < 1E-08 | < 1E-01 |
| Barium | 7440-39-3 | note 2 | 0.04 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E+00 | note 2 | < 1E-01 |
| Benzene | 71-43-2 | < 5E-07 | note 3 | < 1E-08 | note 3 | < 1E-08 | note 3 | 2E-06 | note 3 | < 1E-08 | note 3 | 9E-09 | note 3 | < 1E-08 | note 3 |
| Benzo(a)pyrene | 50-32-8 | note 2 | note 3 | < 1E-08 | note 3 | < 1E-08 | note 3 | < 1E-08 | note 3 | < 1E-05 | note 3 | < 1E-04 | note 3 | < 1E-08 | note 3 |
| Beryllium | 7440-41-7 | < 1E-08 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 |
| Bis-(2-ethylhexyl) phthalate | 117-81-7 | note 2 | note 3 | < 1E-08 | < 1E-01 | < 1E-08 | < 1E-01 | < 1E-08 | < 1E-01 | < 1E-08 | < 1E-01 | < 1E-08 | < 1E-01 | < 1E-08 | < 1E-01 |
| Cadmium | 7440-43-9 | < 1E-08 | note 3 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 |
| Carbon disulfide | 75-15-0 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 |
| Chlorobenzene | 108-90-7 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | 0.8 | note 2 | < 1E-01 | note 2 | 4 | note 2 | 4 | note 2 | < 1E-01 |
| Chloroform | 67-66-3 | 2E-09 | note 3 | < 1E-08 | < 1E-01 | < 1E-08 | < 1E-01 | 1E-09 | < 1E-01 | < 1E-08 | < 1E-01 | < 1E-08 | < 1E-01 | < 1E-08 | < 1E-01 |
| Dibenz[a,h]anthracene | 53-70-3 | note 2 | note 3 | < 1E-08 | note 3 | < 1E-08 | note 3 | < 1E-06 | note 3 | < 1E-04 | note 3 | < 1E-04 | note 3 | < 1E-08 | note 3 |
| Dichlorophenoxyacetic acid, 2,4 | 94-75-7 | note 2 | note 3 | note 2 | < 1E-01 | note 2 | < 1E+00 | note 2 | < 1E-01 | note 2 | 6 | note 2 | 7 | note 2 | < 1E-01 |
| Divalent Mercury | 7439-97-6 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 |
| Ethylene dibromide | 106-93-4 | < 1E-08 | < 1E-01 | < 1E-08 | note 3 | < 1E-06 | note 3 | < 1E-08 | note 3 | < 5E-06 | note 3 | 6E-07 | note 3 | < 1E-08 | note 3 |
| Lead | 7439-92-1 | note 1 | note 1 | note 1 | note 1 | note 1 | note 1 | note 1 | note 1 | note 1 | note 1 | note 1 | note 1 | note 1 | note 1 |
| Methyl ethyl ketone | 78-93-3 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E+00 | note 2 | < 1E-01 |
| Methyl methacrylate | 80-62-6 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E+00 | note 2 | < 1E-01 | note 2 | < 1E+01 | note 2 | < 1E+01 | note 2 | < 1E-01 |
| Methylene chloride | 75-09-2 | 7E-09 | < 1E-01 | < 1E-08 | < 1E-01 | 9E-07 | < 1E-01 | 8E-07 | < 1E-01 | 3E-07 | < 1E-01 | 9E-09 | 0.05 | < 1E-08 | < 1E-01 |
| Nickel [+2] | 7440-02-0 | < 1E-08 | note 3 | note 2 | < 1E-01 | note 2 | 0.01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 |
| Nitrobenzene | 98-95-3 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E+00 | note 2 | < 1E-01 | note 2 | 1 | note 2 | 1 | note 2 | < 1E-01 |
| Pentachlorophenol | 87-86-5 | note 2 | note 3 | < 1E-08 | < 1E-01 | 8E-07 | < 1E-01 | 4E-09 | < 1E-01 | 2E-05 | 0.5 | note 5 | 0.5 | < 1E-08 | < 1E-01 |
| Phenol | 108-95-2 | note 2 | note 3 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 |
| Pyridine | 110-86-1 | note 2 | note 3 | note 2 | < 1E-01 | note 2 | < 1E+00 | note 2 | < 1E-01 | note 2 | < 1E+00 | note 2 | < 1E+00 | note 2 | < 1E-01 |
| Silver | 7440-22-4 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 |

Table EP8. Chemical-specific Risks and Hazards by Exposure Pathway for Land Application Units (unitless)
 Human Receptors - 2000 meters; Ecological Receptors - 2000 meters

| Chemical Name | CASRN | Protection Group 2 | | | | | | | | | | | | | |
|----------------------------------|-----------|--------------------|---------|----------------|---------|-----------------|---------|----------------|---------|----------------|---------|----------------|---------|----------------|---------|
| | | Air Inhalation | | Soil Ingestion | | Water Ingestion | | Crop Ingestion | | Beef Ingestion | | Milk Ingestion | | Fish Ingestion | |
| | | Risk | HQ | Risk | HQ | Risk | HQ | Risk | HQ | Risk | HQ | Risk | HQ | Risk | HQ |
| Tetrachlorodibenzo-p-dioxin, 2,3 | 1746-01-6 | < 1E-06 | note 3 | 1E-10 | < 1E-01 | < 1E-08 | < 1E-01 | < 1E-06 | < 1E-01 | 5E-07 | < 1E-01 | 1E-08 | < 1E-01 | < 1E-08 | < 1E-01 |
| Tetrachloroethylene | 127-18-4 | 3E-09 | note 3 | < 1E-08 | < 1E-01 | 9E-09 | < 1E-01 | 5E-06 | 0.04 | 7E-07 | < 1E-01 | 8E-07 | 0.04 | < 1E-08 | < 1E-01 |
| Thallium [+1] | 7446-18-6 | note 2 | note 3 | note 2 | < 1E-01 | note 2 | 1 | note 2 | < 1E-01 | note 2 | note 5 | note 2 | note 5 | note 2 | < 1E-01 |
| Thiram | 137-26-8 | note 2 | note 3 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E+01 | note 2 | < 1E+01 | note 2 | < 1E-01 |
| Toluene | 108-88-3 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | 0.02 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 |
| Trichloroethane, 1,1,1- | 71-55-6 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | 0.2 | note 2 | 0.9 | note 2 | 1 | note 2 | < 1E-01 |
| Trichloroethylene | 79-01-6 | 5E-09 | note 3 | < 1E-08 | note 3 | 5E-07 | note 3 | 7E-07 | note 3 | 9E-09 | note 3 | 7E-07 | note 3 | < 1E-08 | note 3 |
| Vinyl chloride | 75-01-4 | < 1E-08 | note 3 | < 1E-08 | note 3 | 9E-07 | note 3 | < 1E-06 | note 3 | < 1E-06 | note 3 | 5E-06 | note 3 | < 1E-08 | note 3 |
| Zinc | 7440-66-6 | note 2 | note 3 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 |

- note 1: Human impacts were not evaluated for this chemical due to the lack of human health toxicity values.
- note 2: The risk was not calculated for this chemical because the chemical did not have a cancer slope factor.
- note 3: The hazard was not calculated for this chemical because it did not have a noncancer reference dose or reference concentration.
- note 4: For this chemical, it either lacks a toxicity value for inhalation or ingestion or the inhalation and ingestion pathways are not additive.
- note 5: For this chemical and exposure pathway, the curve could not be used to interpolate a result.
- NA: Not Applicable

Table EP8. Chemical-specific Risks and Hazards by Exposure Pathway for Land Application Units (unitless)
 Human Receptors - 2000 meters; Ecological Receptors - 2000 meters

| Chemical Name | CASRN | Protection Group 2 | | | | | | | | | | | |
|---------------------------------|-----------|--------------------|---------|-------------|----|----------------|---------|---------------|---------|--------------------|---------|-------------------|---------|
| | | Shower Inhalation | | Breast Milk | | All Inhalation | | All Ingestion | | All Ingest & Inhal | | Groundwater Total | |
| | | Risk | HQ | Risk | HQ | Risk | HQ | Risk | HQ | Risk | HQ | Risk | HQ |
| Acetonitrile | 75-05-8 | note 2 | < 1E+00 | NA | NA | note 2 | < 1E+00 | note 2 | note 3 | note 4 | note 4 | note 4 | note 4 |
| Acrylonitrile | 107-13-1 | 1E-07 | < 1E-01 | NA | NA | 8E-08 | < 1E-01 | < 1E-06 | < 1E-01 | note 4 | note 4 | note 4 | note 4 |
| Aniline | 62-53-3 | note 2 | < 1E-01 | NA | NA | note 2 | < 1E-01 | < 1E-06 | note 3 | note 4 | note 4 | note 4 | note 4 |
| Arsenic | 7440-38-2 | < 1E-08 | note 3 | NA | NA | 2E-09 | note 3 | 2E-07 | < 1E-01 | note 4 | note 4 | note 4 | note 4 |
| Barium | 7440-39-3 | note 2 | < 1E-01 | NA | NA | note 2 | 0.04 | note 2 | < 1E-01 | note 4 | note 4 | note 4 | note 4 |
| Benzene | 71-43-2 | < 1E-08 | note 3 | NA | NA | < 5E-07 | note 3 | 9E-07 | note 3 | < 1E-06 | note 4 | 3E-09 | note 4 |
| Benzo(a)pyrene | 50-32-8 | note 2 | note 3 | NA | NA | note 2 | note 3 | < 1E-08 | note 3 | note 4 | note 4 | note 4 | note 4 |
| Beryllium | 7440-41-7 | < 1E-08 | < 1E-01 | NA | NA | < 1E-08 | < 1E-01 | note 2 | < 1E-01 | note 4 | note 4 | note 4 | note 4 |
| Bis-(2-ethylhexyl) phthalate | 117-81-7 | note 2 | note 3 | NA | NA | note 2 | note 3 | < 1E-08 | < 1E-01 | note 4 | note 4 | note 4 | note 4 |
| Cadmium | 7440-43-9 | < 1E-08 | note 3 | NA | NA | < 1E-08 | note 3 | note 2 | < 1E-01 | note 4 | note 4 | note 4 | note 4 |
| Carbon disulfide | 75-15-0 | note 2 | < 1E-01 | NA | NA | note 2 | < 1E-01 | note 2 | < 1E-01 | note 4 | note 4 | note 4 | note 4 |
| Chlorobenzene | 108-90-7 | note 2 | 0.7 | NA | NA | note 2 | 0.8 | note 2 | 0.9 | note 4 | < 1E+00 | note 4 | < 1E+00 |
| Chloroform | 67-66-3 | < 1E-06 | note 3 | NA | NA | < 1E-06 | note 3 | < 1E-08 | < 1E-01 | < 1E-06 | note 4 | < 1E-06 | note 4 |
| Dibenz[a,h]anthracene | 53-70-3 | note 2 | note 3 | NA | NA | note 2 | note 3 | < 1E-06 | note 3 | note 4 | note 4 | note 4 | note 4 |
| Dichlorophenoxyacetic acid, 2,4 | 94-75-7 | note 2 | note 3 | NA | NA | note 2 | note 3 | note 2 | < 1E+00 | note 4 | note 4 | note 4 | note 4 |
| Divalent Mercury | 7439-97-6 | note 2 | < 1E-01 | NA | NA | note 2 | < 1E-01 | note 2 | < 1E-01 | note 4 | note 4 | note 4 | note 4 |
| Ethylene dibromide | 106-93-4 | 6E-09 | < 1E-01 | NA | NA | 7E-09 | < 1E-01 | 1E-06 | note 3 | note 4 | note 4 | note 4 | note 4 |
| Lead | 7439-92-1 | note 1 | note 1 | NA | NA | note 1 | note 1 | note 1 | note 1 | note 1 | note 1 | note 1 | note 1 |
| Methyl ethyl ketone | 78-93-3 | note 2 | < 1E-01 | NA | NA | note 2 | < 1E-01 | note 2 | < 1E-01 | note 4 | < 1E-01 | note 4 | < 1E-01 |
| Methyl methacrylate | 80-62-6 | note 2 | < 1E+00 | NA | NA | note 2 | < 1E+00 | note 2 | < 1E+00 | note 4 | note 4 | note 4 | note 4 |
| Methylene chloride | 75-09-2 | < 5E-07 | < 1E-01 | NA | NA | 4E-07 | < 1E-01 | 9E-07 | < 1E-01 | < 1E-06 | < 1E-01 | 1E-06 | < 1E-01 |
| Nickel [+2] | 7440-02-0 | < 1E-08 | note 3 | NA | NA | < 1E-08 | note 3 | note 2 | 0.01 | note 4 | note 4 | note 4 | note 4 |
| Nitrobenzene | 98-95-3 | note 2 | 0.005 | NA | NA | note 2 | 0.005 | note 2 | < 1E+00 | note 4 | < 1E+00 | note 4 | < 1E+00 |
| Pentachlorophenol | 87-86-5 | note 2 | note 3 | NA | NA | note 2 | note 3 | < 1E-06 | < 1E-01 | note 4 | note 4 | note 4 | note 4 |
| Phenol | 108-95-2 | note 2 | note 3 | NA | NA | note 2 | note 3 | note 2 | < 1E-01 | note 4 | note 4 | note 4 | note 4 |
| Pyridine | 110-86-1 | note 2 | note 3 | NA | NA | note 2 | note 3 | note 2 | < 1E+00 | note 4 | note 4 | note 4 | note 4 |
| Silver | 7440-22-4 | note 2 | < 1E-01 | NA | NA | note 2 | < 1E-01 | note 2 | < 1E-01 | note 4 | note 4 | note 4 | note 4 |

Table EP8. Chemical-specific Risks and Hazards by Exposure Pathway for Land Application Units (unitless)
 Human Receptors - 2000 meters; Ecological Receptors - 2000 meters

| | | Protection Group 2 | | | | | | | | | | | |
|----------------------------------|-----------|--------------------|---------|-------------|---------|----------------|---------|---------------|---------|--------------------|--------|-------------------|--------|
| | | Shower Inhalation | | Breast Milk | | All Inhalation | | All Ingestion | | All Ingest & Inhal | | Groundwater Total | |
| Chemical Name | CASRN | Risk | HQ | Risk | HQ | Risk | HQ | Risk | HQ | Risk | HQ | Risk | HQ |
| Tetrachlorodibenzo-p-dioxin, 2,3 | 1746-01-6 | < 1E-08 | note 3 | NA | < 1E-01 | < 1E-06 | note 3 | 9E-07 | < 1E-01 | < 1E-06 | note 4 | < 1E-08 | note 4 |
| Tetrachloroethylene | 127-18-4 | 1E-09 | note 3 | NA | NA | 6E-09 | note 3 | < 1E-06 | < 1E-01 | < 1E-06 | note 4 | 4E-07 | note 4 |
| Thallium [+1] | 7446-18-6 | note 2 | note 3 | NA | NA | note 2 | note 3 | note 2 | 1 | note 4 | note 4 | note 4 | note 4 |
| Thiram | 137-26-8 | note 2 | note 3 | NA | NA | note 2 | note 3 | note 2 | < 1E-01 | note 4 | note 4 | note 4 | note 4 |
| Toluene | 108-88-3 | note 2 | < 1E-01 | NA | NA | note 2 | < 1E-01 | note 2 | < 1E-01 | note 4 | note 4 | note 4 | note 4 |
| Trichloroethane, 1,1,1- | 71-55-6 | note 2 | < 1E-01 | NA | NA | note 2 | < 1E-01 | note 2 | 0.7 | note 4 | note 4 | note 4 | note 4 |
| Trichloroethylene | 79-01-6 | 5E-07 | note 3 | NA | NA | 5E-07 | note 3 | 7E-07 | note 3 | note 4 | note 4 | note 4 | note 4 |
| Vinyl chloride | 75-01-4 | 3E-07 | note 3 | NA | NA | 4E-07 | note 3 | 1E-06 | note 3 | 1E-06 | note 4 | 9E-07 | note 4 |
| Zinc | 7440-66-6 | note 2 | note 3 | NA | NA | note 2 | note 3 | note 2 | < 1E-01 | note 4 | note 4 | note 4 | note 4 |

- note 1: Human impacts were not evaluated for this chemical due to the lack of human health toxicity values.
- note 2: The risk was not calculated for this chemical because the chemical did not have a cancer slope factor.
- note 3: The hazard was not calculated for this chemical because it did not have a noncancer reference dose or reference concentration.
- note 4: For this chemical, it either lacks a toxicity value for inhalation or ingestion or the inhalation and ingestion pathways are not additive.
- note 5: For this chemical and exposure pathway, the curve could not be used to interpolate a result.
- NA: Not Applicable

Table EP8. Chemical-specific Risks and Hazards by Exposure Pathway for Land Application Units (unitless)
 Human Receptors - 2000 meters; Ecological Receptors - 2000 meters

| Chemical Name | CASRN | Protection Group 3 | | | | | | | | | | | | | |
|---------------------------------|-----------|--------------------|---------|----------------|---------|-----------------|---------|----------------|---------|----------------|---------|----------------|---------|----------------|---------|
| | | Air Inhalation | | Soil Ingestion | | Water Ingestion | | Crop Ingestion | | Beef Ingestion | | Milk Ingestion | | Fish Ingestion | |
| | | Risk | HQ | Risk | HQ | Risk | HQ | Risk | HQ | Risk | HQ | Risk | HQ | Risk | HQ |
| Acetonitrile | 75-05-8 | note 2 | 0.06 | note 2 | note 3 | note 2 | note 3 | note 2 | note 3 | note 2 | note 3 | note 2 | note 3 | note 2 | note 3 |
| Acrylonitrile | 107-13-1 | 3E-10 | < 1E-01 | < 1E-08 | < 1E-01 | < 1E-05 | 0.5 | 8E-09 | < 1E-01 | 3E-05 | 0.5 | 3E-05 | 3 | < 1E-08 | < 1E-01 |
| Aniline | 62-53-3 | note 2 | < 1E-01 | < 1E-08 | note 3 | < 1E-05 | note 3 | 5E-09 | note 3 | 2E-05 | note 3 | 6E-05 | note 3 | < 1E-08 | note 3 |
| Arsenic | 7440-38-2 | 2E-09 | note 3 | < 1E-08 | < 1E-01 | 5E-09 | < 1E-01 | < 5E-07 | < 1E-01 | 9E-10 | < 1E-01 | 6E-08 | < 1E-01 | < 1E-08 | < 1E-01 |
| Barium | 7440-39-3 | note 2 | 0.04 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E+00 | note 2 | < 1E-01 |
| Benzene | 71-43-2 | 7E-06 | note 3 | < 1E-08 | note 3 | 7E-07 | note 3 | 3E-05 | note 3 | 4E-07 | note 3 | 9E-07 | note 3 | < 1E-08 | note 3 |
| Benzo(a)pyrene | 50-32-8 | note 2 | note 3 | < 1E-08 | note 3 | < 1E-08 | note 3 | < 1E-08 | note 3 | < 1E-05 | note 3 | < 1E-04 | note 3 | < 1E-08 | note 3 |
| Beryllium | 7440-41-7 | < 1E-08 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 |
| Bis-(2-ethylhexyl) phthalate | 117-81-7 | note 2 | note 3 | < 1E-08 | < 1E-01 | < 1E-08 | < 1E-01 | < 1E-08 | < 1E-01 | < 1E-08 | < 1E-01 | < 1E-08 | < 1E-01 | < 1E-08 | < 1E-01 |
| Cadmium | 7440-43-9 | < 1E-08 | note 3 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 |
| Carbon disulfide | 75-15-0 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 |
| Chlorobenzene | 108-90-7 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | 0.8 | note 2 | < 1E-01 | note 2 | 4 | note 2 | 4 | note 2 | < 1E-01 |
| Chloroform | 67-66-3 | 5E-07 | note 3 | < 1E-08 | < 1E-01 | 1E-06 | 0.09 | < 5E-07 | 0.006 | 9E-07 | 0.09 | 9E-07 | 0.9 | < 1E-08 | < 1E-01 |
| Dibenz[a,h]anthracene | 53-70-3 | note 2 | note 3 | < 1E-08 | note 3 | < 1E-08 | note 3 | < 1E-06 | note 3 | < 1E-04 | note 3 | < 1E-04 | note 3 | < 1E-08 | note 3 |
| Dichlorophenoxyacetic acid, 2,4 | 94-75-7 | note 2 | note 3 | note 2 | < 1E-01 | note 2 | < 1E+00 | note 2 | < 1E-01 | note 2 | 6 | note 2 | 7 | note 2 | < 1E-01 |
| Divalent Mercury | 7439-97-6 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 |
| Ethylene dibromide | 106-93-4 | 4E-10 | < 1E-01 | < 1E-08 | note 3 | 8E-06 | note 3 | < 5E-06 | note 3 | < 5E-06 | note 3 | 9E-07 | note 3 | < 1E-08 | note 3 |
| Lead | 7439-92-1 | note 1 | note 1 | note 1 | note 1 | note 1 | note 1 | note 1 | note 1 | note 1 | note 1 | note 1 | note 1 | note 1 | note 1 |
| Methyl ethyl ketone | 78-93-3 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E+00 | note 2 | < 1E-01 |
| Methyl methacrylate | 80-62-6 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E+00 | note 2 | < 1E-01 | note 2 | < 1E+01 | note 2 | < 1E+01 | note 2 | < 1E-01 |
| Methylene chloride | 75-09-2 | 2E-07 | < 1E-01 | < 1E-08 | < 1E-01 | < 5E-06 | < 1E-01 | 6E-06 | 0.02 | 4E-07 | < 1E-01 | < 1E-06 | 0.09 | < 1E-08 | < 1E-01 |
| Nickel [+2] | 7440-02-0 | < 1E-08 | note 3 | note 2 | < 1E-01 | note 2 | 0.01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 |
| Nitrobenzene | 98-95-3 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E+00 | note 2 | < 1E-01 | note 2 | 1 | note 2 | 1 | note 2 | < 1E-01 |
| Pentachlorophenol | 87-86-5 | note 2 | note 3 | < 1E-08 | < 1E-01 | 9E-06 | < 1E-01 | 5E-07 | < 1E-01 | 5E-05 | 3 | note 5 | 3 | 1E-09 | < 1E-01 |
| Phenol | 108-95-2 | note 2 | note 3 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 |
| Pyridine | 110-86-1 | note 2 | note 3 | note 2 | < 1E-01 | note 2 | < 1E+00 | note 2 | < 1E-01 | note 2 | < 1E+00 | note 2 | < 1E+00 | note 2 | < 1E-01 |
| Silver | 7440-22-4 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 |

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| Chemical Name | CASRN | Protection Group 3 | | | | | | | | | | | | | |
|----------------------------------|-----------|--------------------|---------|----------------|---------|-----------------|---------|----------------|---------|----------------|---------|----------------|---------|----------------|---------|
| | | Air Inhalation | | Soil Ingestion | | Water Ingestion | | Crop Ingestion | | Beef Ingestion | | Milk Ingestion | | Fish Ingestion | |
| | | Risk | HQ | Risk | HQ | Risk | HQ | Risk | HQ | Risk | HQ | Risk | HQ | Risk | HQ |
| Tetrachlorodibenzo-p-dioxin, 2,3 | 1746-01-6 | 5E-06 | note 3 | 1E-09 | < 1E-01 | < 1E-08 | < 1E-01 | 4E-06 | < 1E-01 | 1E-06 | < 1E-01 | 5E-06 | < 1E-01 | < 1E-08 | < 1E-01 |
| Tetrachloroethylene | 127-18-4 | < 5E-07 | note 3 | < 1E-08 | < 1E-01 | 2E-06 | 0.01 | 5E-05 | 0.9 | 9E-06 | 0.07 | 9E-06 | 0.7 | < 1E-08 | < 1E-01 |
| Thallium [+1] | 7446-18-6 | note 2 | note 3 | note 2 | < 1E-01 | note 2 | 1 | note 2 | < 1E-01 | note 2 | note 5 | note 2 | note 5 | note 2 | < 1E-01 |
| Thiram | 137-26-8 | note 2 | note 3 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 0E+00 | note 2 | < 1E+01 | note 2 | < 1E+01 | note 2 | < 1E-01 |
| Toluene | 108-88-3 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | 0.02 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 |
| Trichloroethane, 1,1,1- | 71-55-6 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | 0.2 | note 2 | 0.9 | note 2 | 1 | note 2 | < 1E-01 |
| Trichloroethylene | 79-01-6 | 5E-09 | note 3 | < 1E-08 | note 3 | 5E-07 | note 3 | 7E-07 | note 3 | 9E-09 | note 3 | 7E-07 | note 3 | < 1E-08 | note 3 |
| Vinyl chloride | 75-01-4 | < 5E-07 | note 3 | < 1E-08 | note 3 | 6E-06 | note 3 | 9E-06 | note 3 | 3E-06 | note 3 | 8E-06 | note 3 | < 1E-08 | note 3 |
| Zinc | 7440-66-6 | note 2 | note 3 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 |

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- note 2: The risk was not calculated for this chemical because the chemical did not have a cancer slope factor.
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| Chemical Name | CASRN | Protection Group 3 | | | | | | | | | | | |
|---------------------------------|-----------|--------------------|---------|-------------|----|----------------|---------|---------------|---------|--------------------|---------|-------------------|---------|
| | | Shower Inhalation | | Breast Milk | | All Inhalation | | All Ingestion | | All Ingest & Inhal | | Groundwater Total | |
| | | Risk | HQ | Risk | HQ | Risk | HQ | Risk | HQ | Risk | HQ | Risk | HQ |
| Acetonitrile | 75-05-8 | note 2 | < 1E+00 | NA | NA | note 2 | < 1E+00 | note 2 | note 3 | note 4 | note 4 | note 4 | note 4 |
| Acrylonitrile | 107-13-1 | 5E-06 | < 1E-01 | NA | NA | 5E-06 | < 1E-01 | < 1E-05 | 0.5 | note 4 | note 4 | note 4 | note 4 |
| Aniline | 62-53-3 | note 2 | < 1E-01 | NA | NA | note 2 | < 1E-01 | < 1E-05 | note 3 | note 4 | note 4 | note 4 | note 4 |
| Arsenic | 7440-38-2 | < 1E-08 | note 3 | NA | NA | 2E-09 | note 3 | 2E-07 | < 1E-01 | note 4 | note 4 | note 4 | note 4 |
| Barium | 7440-39-3 | note 2 | < 1E-01 | NA | NA | note 2 | 0.04 | note 2 | < 1E-01 | note 4 | note 4 | note 4 | note 4 |
| Benzene | 71-43-2 | < 5E-07 | note 3 | NA | NA | 8E-06 | note 3 | < 1E-05 | note 3 | < 1E-05 | note 4 | 7E-07 | note 4 |
| Benzo(a)pyrene | 50-32-8 | note 2 | note 3 | NA | NA | note 2 | note 3 | < 1E-08 | note 3 | note 4 | note 4 | note 4 | note 4 |
| Beryllium | 7440-41-7 | < 1E-08 | < 1E-01 | NA | NA | < 1E-08 | < 1E-01 | note 2 | < 1E-01 | note 4 | note 4 | note 4 | note 4 |
| Bis-(2-ethylhexyl) phthalate | 117-81-7 | note 2 | note 3 | NA | NA | note 2 | note 3 | < 1E-08 | < 1E-01 | note 4 | note 4 | note 4 | note 4 |
| Cadmium | 7440-43-9 | < 1E-08 | note 3 | NA | NA | < 1E-08 | note 3 | note 2 | < 1E-01 | note 4 | note 4 | note 4 | note 4 |
| Carbon disulfide | 75-15-0 | note 2 | < 1E-01 | NA | NA | note 2 | < 1E-01 | note 2 | < 1E-01 | note 4 | note 4 | note 4 | note 4 |
| Chlorobenzene | 108-90-7 | note 2 | 0.7 | NA | NA | note 2 | 0.8 | note 2 | 0.9 | note 4 | < 1E+00 | note 4 | < 1E+00 |
| Chloroform | 67-66-3 | 1E-05 | note 3 | NA | NA | < 1E-05 | note 3 | < 1E-06 | < 1E-01 | < 1E-05 | note 4 | < 1E-05 | note 4 |
| Dibenz[a,h]anthracene | 53-70-3 | note 2 | note 3 | NA | NA | note 2 | note 3 | < 1E-06 | note 3 | note 4 | note 4 | note 4 | note 4 |
| Dichlorophenoxyacetic acid, 2,4 | 94-75-7 | note 2 | note 3 | NA | NA | note 2 | note 3 | note 2 | < 1E+00 | note 4 | note 4 | note 4 | note 4 |
| Divalent Mercury | 7439-97-6 | note 2 | < 1E-01 | NA | NA | note 2 | < 1E-01 | note 2 | < 1E-01 | note 4 | note 4 | note 4 | note 4 |
| Ethylene dibromide | 106-93-4 | < 1E-08 | < 1E-01 | NA | NA | < 1E-08 | < 1E-01 | < 1E-05 | note 3 | note 4 | note 4 | note 4 | note 4 |
| Lead | 7439-92-1 | note 1 | note 1 | NA | NA | note 1 | note 1 | note 1 | note 1 | note 1 | note 1 | note 1 | note 1 |
| Methyl ethyl ketone | 78-93-3 | note 2 | < 1E-01 | NA | NA | note 2 | < 1E-01 | note 2 | < 1E-01 | note 4 | < 1E-01 | note 4 | < 1E-01 |
| Methyl methacrylate | 80-62-6 | note 2 | < 1E+00 | NA | NA | note 2 | < 1E+00 | note 2 | < 1E+00 | note 4 | note 4 | note 4 | note 4 |
| Methylene chloride | 75-09-2 | < 1E-06 | < 1E-01 | NA | NA | < 1E-06 | < 1E-01 | 8E-06 | < 1E-01 | < 1E-05 | < 1E-01 | < 5E-06 | < 1E-01 |
| Nickel [+2] | 7440-02-0 | < 1E-08 | note 3 | NA | NA | < 1E-08 | note 3 | note 2 | 0.01 | note 4 | note 4 | note 4 | note 4 |
| Nitrobenzene | 98-95-3 | note 2 | 0.005 | NA | NA | note 2 | 0.005 | note 2 | < 1E+00 | note 4 | < 1E+00 | note 4 | < 1E+00 |
| Pentachlorophenol | 87-86-5 | note 2 | note 3 | NA | NA | note 2 | note 3 | 1E-05 | 0.02 | note 4 | note 4 | note 4 | note 4 |
| Phenol | 108-95-2 | note 2 | note 3 | NA | NA | note 2 | note 3 | note 2 | < 1E-01 | note 4 | note 4 | note 4 | note 4 |
| Pyridine | 110-86-1 | note 2 | note 3 | NA | NA | note 2 | note 3 | note 2 | < 1E+00 | note 4 | note 4 | note 4 | note 4 |
| Silver | 7440-22-4 | note 2 | < 1E-01 | NA | NA | note 2 | < 1E-01 | note 2 | < 1E-01 | note 4 | note 4 | note 4 | note 4 |

Table EP8. Chemical-specific Risks and Hazards by Exposure Pathway for Land Application Units (unitless)
 Human Receptors - 2000 meters; Ecological Receptors - 2000 meters

| | | Protection Group 3 | | | | | | | | | | | |
|----------------------------------|-----------|--------------------|---------|-------------|---------|----------------|---------|---------------|---------|--------------------|--------|-------------------|--------|
| | | Shower Inhalation | | Breast Milk | | All Inhalation | | All Ingestion | | All Ingest & Inhal | | Groundwater Total | |
| Chemical Name | CASRN | Risk | HQ | Risk | HQ | Risk | HQ | Risk | HQ | Risk | HQ | Risk | HQ |
| Tetrachlorodibenzo-p-dioxin, 2,3 | 1746-01-6 | < 1E-08 | note 3 | NA | < 1E-01 | 5E-06 | note 3 | 1E-06 | < 1E-01 | 5E-06 | note 4 | < 1E-08 | note 4 |
| Tetrachloroethylene | 127-18-4 | 9E-09 | note 3 | NA | NA | < 5E-07 | note 3 | < 1E-05 | 0.7 | < 1E-05 | note 4 | 7E-06 | note 4 |
| Thallium [+1] | 7446-18-6 | note 2 | note 3 | NA | NA | note 2 | note 3 | note 2 | 1 | note 4 | note 4 | note 4 | note 4 |
| Thiram | 137-26-8 | note 2 | note 3 | NA | NA | note 2 | note 3 | note 2 | < 1E-01 | note 4 | note 4 | note 4 | note 4 |
| Toluene | 108-88-3 | note 2 | < 1E-01 | NA | NA | note 2 | < 1E-01 | note 2 | < 1E-01 | note 4 | note 4 | note 4 | note 4 |
| Trichloroethane, 1,1,1- | 71-55-6 | note 2 | < 1E-01 | NA | NA | note 2 | < 1E-01 | note 2 | 0.7 | note 4 | note 4 | note 4 | note 4 |
| Trichloroethylene | 79-01-6 | 5E-07 | note 3 | NA | NA | 5E-07 | note 3 | 7E-07 | note 3 | note 4 | note 4 | note 4 | note 4 |
| Vinyl chloride | 75-01-4 | < 1E-06 | note 3 | NA | NA | < 1E-06 | note 3 | 7E-06 | note 3 | < 1E-05 | note 4 | 6E-06 | note 4 |
| Zinc | 7440-66-6 | note 2 | note 3 | NA | NA | note 2 | note 3 | note 2 | < 1E-01 | note 4 | note 4 | note 4 | note 4 |

- note 1: Human impacts were not evaluated for this chemical due to the lack of human health toxicity values.
- note 2: The risk was not calculated for this chemical because the chemical did not have a cancer slope factor.
- note 3: The hazard was not calculated for this chemical because it did not have a noncancer reference dose or reference concentration.
- note 4: For this chemical, it either lacks a toxicity value for inhalation or ingestion or the inhalation and ingestion pathways are not additive.
- note 5: For this chemical and exposure pathway, the curve could not be used to interpolate a result.
- NA: Not Applicable

Table EP8. Chemical-specific Risks and Hazards by Exposure Pathway for Land Application Units (unitless)
 Human Receptors - 2000 meters; Ecological Receptors - 2000 meters

| Chemical Name | CASRN | Protection Group 4 | | | | | | | | | | | | | |
|---------------------------------|-----------|--------------------|---------|----------------|---------|-----------------|---------|----------------|---------|----------------|---------|----------------|---------|----------------|---------|
| | | Air Inhalation | | Soil Ingestion | | Water Ingestion | | Crop Ingestion | | Beef Ingestion | | Milk Ingestion | | Fish Ingestion | |
| | | Risk | HQ | Risk | HQ | Risk | HQ | Risk | HQ | Risk | HQ | Risk | HQ | Risk | HQ |
| Acetonitrile | 75-05-8 | note 2 | < 1E-01 | note 2 | note 3 | note 2 | note 3 | note 2 | note 3 | note 2 | note 3 | note 2 | note 3 | note 2 | note 3 |
| Acrylonitrile | 107-13-1 | < 1E-08 | < 1E-01 | < 1E-08 | < 1E-01 | < 1E-05 | 0.2 | 6E-08 | < 1E-01 | 5E-05 | 1 | 5E-05 | 5 | < 1E-08 | < 1E-01 |
| Aniline | 62-53-3 | note 2 | < 1E-01 | < 1E-08 | note 3 | < 1E-05 | note 3 | 8E-09 | note 3 | 7E-05 | note 3 | 9E-05 | note 3 | < 1E-08 | note 3 |
| Arsenic | 7440-38-2 | 7E-07 | note 3 | 9E-09 | < 1E-01 | 1E-05 | 0.1 | 9E-06 | 0.1 | 3E-06 | 0.06 | 5E-06 | 0.09 | 1E-09 | < 1E-01 |
| Barium | 7440-39-3 | note 2 | 0.06 | note 2 | < 1E-01 | note 2 | 0.1 | note 2 | 0.02 | note 2 | 0.4 | note 2 | 4 | note 2 | < 1E-01 |
| Benzene | 71-43-2 | < 5E-06 | note 3 | < 1E-08 | note 3 | < 5E-07 | note 3 | < 1E-05 | note 3 | < 5E-06 | note 3 | < 1E-05 | note 3 | < 1E-08 | note 3 |
| Benzo(a)pyrene | 50-32-8 | note 2 | note 3 | < 1E-08 | note 3 | < 1E-08 | note 3 | < 1E-08 | note 3 | < 1E-05 | note 3 | < 1E-04 | note 3 | < 1E-08 | note 3 |
| Beryllium | 7440-41-7 | < 1E-08 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 |
| Bis-(2-ethylhexyl) phthalate | 117-81-7 | note 2 | note 3 | < 1E-08 | < 1E-01 | < 1E-08 | < 1E-01 | < 1E-08 | < 1E-01 | < 1E-08 | < 1E-01 | < 1E-08 | < 1E-01 | < 1E-08 | < 1E-01 |
| Cadmium | 7440-43-9 | 5E-07 | note 3 | note 2 | < 1E-01 | note 2 | 0 | note 2 | 0.08 | note 2 | < 1E-01 | note 2 | 0.09 | note 2 | < 1E-01 |
| Carbon disulfide | 75-15-0 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | 0.005 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | 0.1 | note 2 | < 1E-01 |
| Chlorobenzene | 108-90-7 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E+00 | note 2 | < 1E-01 | note 2 | < 1E+01 | note 2 | < 1E+01 | note 2 | < 1E-01 |
| Chloroform | 67-66-3 | 9E-07 | note 3 | < 1E-08 | < 1E-01 | 1E-06 | 0.1 | 8E-07 | 0.08 | 9E-06 | 0.8 | 1E-05 | 5 | < 1E-08 | < 1E-01 |
| Dibenz[a,h]anthracene | 53-70-3 | note 2 | note 3 | < 1E-08 | note 3 | < 1E-08 | note 3 | < 5E-07 | note 3 | < 1E-04 | note 3 | < 1E-04 | note 3 | < 1E-08 | note 3 |
| Dichlorophenoxyacetic acid, 2,4 | 94-75-7 | note 2 | note 3 | note 2 | < 1E-01 | note 2 | < 1E+00 | note 2 | < 1E-01 | note 2 | 6 | note 2 | 7 | note 2 | < 1E-01 |
| Divalent Mercury | 7439-97-6 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 |
| Ethylene dibromide | 106-93-4 | 8E-09 | < 1E-01 | < 1E-08 | note 3 | 4E-06 | note 3 | 1E-05 | note 3 | 4E-05 | note 3 | 2E-05 | note 3 | 2E-09 | note 3 |
| Lead | 7439-92-1 | note 1 | note 1 | note 1 | note 1 | note 1 | note 1 | note 1 | note 1 | note 1 | note 1 | note 1 | note 1 | note 1 | note 1 |
| Methyl ethyl ketone | 78-93-3 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E+00 | note 2 | < 1E-01 |
| Methyl methacrylate | 80-62-6 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E+00 | note 2 | < 1E-01 | note 2 | < 1E+01 | note 2 | < 1E+01 | note 2 | < 1E-01 |
| Methylene chloride | 75-09-2 | < 1E-08 | < 1E-01 | < 1E-08 | < 1E-01 | < 1E-05 | 0.2 | 6E-06 | 0.02 | 5E-06 | 0.2 | 7E-06 | 2 | < 1E-08 | < 1E-01 |
| Nickel [+2] | 7440-02-0 | 8E-07 | note 3 | note 2 | < 1E-01 | note 2 | 0.4 | note 2 | 0.05 | note 2 | 0.2 | note 2 | 0.2 | note 2 | < 1E-01 |
| Nitrobenzene | 98-95-3 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E+00 | note 2 | < 1E-01 | note 2 | 5 | note 2 | 5 | note 2 | < 1E-01 |
| Pentachlorophenol | 87-86-5 | note 2 | note 3 | < 1E-08 | < 1E-01 | 5E-06 | 0.001 | 6E-07 | < 1E-01 | 6E-05 | 4 | note 5 | 4 | 2E-09 | < 1E-01 |
| Phenol | 108-95-2 | note 2 | note 3 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 |
| Pyridine | 110-86-1 | note 2 | note 3 | note 2 | < 1E-01 | note 2 | < 1E+00 | note 2 | < 1E-01 | note 2 | 3 | note 2 | 3 | note 2 | < 1E-01 |
| Silver | 7440-22-4 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 |

Table EP8. Chemical-specific Risks and Hazards by Exposure Pathway for Land Application Units (unitless)
 Human Receptors - 2000 meters; Ecological Receptors - 2000 meters

| Chemical Name | CASRN | Protection Group 4 | | | | | | | | | | | | | |
|----------------------------------|-----------|--------------------|---------|----------------|---------|-----------------|---------|----------------|---------|----------------|---------|----------------|---------|----------------|---------|
| | | Air Inhalation | | Soil Ingestion | | Water Ingestion | | Crop Ingestion | | Beef Ingestion | | Milk Ingestion | | Fish Ingestion | |
| | | Risk | HQ | Risk | HQ | Risk | HQ | Risk | HQ | Risk | HQ | Risk | HQ | Risk | HQ |
| Tetrachlorodibenzo-p-dioxin, 2,3 | 1746-01-6 | < 5E-06 | note 3 | 9E-09 | < 1E-01 | < 1E-08 | < 1E-01 | 8E-06 | < 1E-01 | 5E-06 | < 1E-01 | 1E-05 | < 1E-01 | 9E-07 | < 1E-01 |
| Tetrachloroethylene | 127-18-4 | 9E-07 | note 3 | < 1E-08 | < 1E-01 | 1E-08 | < 1E-01 | 9E-05 | < 1E+00 | 7E-05 | 7 | 9E-05 | 7 | 8E-09 | < 1E-01 |
| Thallium [+1] | 7446-18-6 | note 2 | note 3 | note 2 | < 1E-01 | note 2 | < 1E+00 | note 2 | < 1E-01 | note 2 | note 5 | note 2 | note 5 | note 2 | < 1E-01 |
| Thiram | 137-26-8 | note 2 | note 3 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E+01 | note 2 | < 1E+01 | note 2 | < 1E-01 |
| Toluene | 108-88-3 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E-01 |
| Trichloroethane, 1,1,1- | 71-55-6 | note 2 | 0.02 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | < 1E+00 | note 2 | 6 | note 2 | 7 | note 2 | < 1E-01 |
| Trichloroethylene | 79-01-6 | 6E-09 | note 3 | < 1E-08 | note 3 | 7E-07 | note 3 | 8E-07 | note 3 | 3E-06 | note 3 | 8E-06 | note 3 | < 1E-08 | note 3 |
| Vinyl chloride | 75-01-4 | 6E-07 | note 3 | < 1E-08 | note 3 | 1E-05 | note 3 | 1E-05 | note 3 | 3E-05 | note 3 | 3E-05 | note 3 | < 1E-08 | note 3 |
| Zinc | 7440-66-6 | note 2 | note 3 | note 2 | < 1E-01 | note 2 | < 1E-01 | note 2 | 0 | note 2 | 0.003 | note 2 | 0.1 | note 2 | < 1E-01 |

- note 1: Human impacts were not evaluated for this chemical due to the lack of human health toxicity values.
- note 2: The risk was not calculated for this chemical because the chemical did not have a cancer slope factor.
- note 3: The hazard was not calculated for this chemical because it did not have a noncancer reference dose or reference concentration.
- note 4: For this chemical, it either lacks a toxicity value for inhalation or ingestion or the inhalation and ingestion pathways are not additive.
- note 5: For this chemical and exposure pathway, the curve could not be used to interpolate a result.
- NA: Not Applicable

Table EP8. Chemical-specific Risks and Hazards by Exposure Pathway for Land Application Units (unitless)
 Human Receptors - 2000 meters; Ecological Receptors - 2000 meters

| Chemical Name | CASRN | Protection Group 4 | | | | | | | | | | | |
|---------------------------------|-----------|--------------------|---------|-------------|----|----------------|---------|---------------|---------|--------------------|---------|-------------------|---------|
| | | Shower Inhalation | | Breast Milk | | All Inhalation | | All Ingestion | | All Ingest & Inhal | | Groundwater Total | |
| | | Risk | HQ | Risk | HQ | Risk | HQ | Risk | HQ | Risk | HQ | Risk | HQ |
| Acetonitrile | 75-05-8 | note 2 | < 1E+00 | NA | NA | note 2 | < 1E+00 | note 2 | note 3 | note 4 | note 4 | note 4 | note 4 |
| Acrylonitrile | 107-13-1 | 1E-06 | < 1E-01 | NA | NA | 1E-06 | < 1E-01 | < 1E-05 | 0.2 | note 4 | note 4 | note 4 | note 4 |
| Aniline | 62-53-3 | note 2 | 0.09 | NA | NA | note 2 | 0.08 | < 1E-05 | note 3 | note 4 | note 4 | note 4 | note 4 |
| Arsenic | 7440-38-2 | < 1E-08 | note 3 | NA | NA | 7E-07 | note 3 | 1E-05 | 0.3 | note 4 | note 4 | note 4 | note 4 |
| Barium | 7440-39-3 | note 2 | < 1E-01 | NA | NA | note 2 | 0.06 | note 2 | 0.2 | note 4 | note 4 | note 4 | note 4 |
| Benzene | 71-43-2 | < 1E-08 | note 3 | NA | NA | < 5E-06 | note 3 | < 5E-06 | note 3 | < 1E-05 | note 4 | < 1E-06 | note 4 |
| Benzo(a)pyrene | 50-32-8 | note 2 | note 3 | NA | NA | note 2 | note 3 | < 1E-08 | note 3 | note 4 | note 4 | note 4 | note 4 |
| Beryllium | 7440-41-7 | < 1E-08 | < 1E-01 | NA | NA | < 1E-08 | < 1E-01 | note 2 | < 1E-01 | note 4 | note 4 | note 4 | note 4 |
| Bis-(2-ethylhexyl) phthalate | 117-81-7 | note 2 | note 3 | NA | NA | note 2 | note 3 | < 1E-08 | < 1E-01 | note 4 | note 4 | note 4 | note 4 |
| Cadmium | 7440-43-9 | < 1E-08 | note 3 | NA | NA | 5E-07 | note 3 | note 2 | 0.04 | note 4 | note 4 | note 4 | note 4 |
| Carbon disulfide | 75-15-0 | note 2 | < 1E-01 | NA | NA | note 2 | < 1E-01 | note 2 | 0.01 | note 4 | note 4 | note 4 | note 4 |
| Chlorobenzene | 108-90-7 | note 2 | < 1E-01 | NA | NA | note 2 | < 1E-01 | note 2 | < 1E+00 | note 4 | < 1E+00 | note 4 | < 1E+00 |
| Chloroform | 67-66-3 | 1E-05 | note 3 | NA | NA | 1E-05 | note 3 | 7E-06 | 0.4 | < 1E-05 | note 4 | < 1E-05 | note 4 |
| Dibenz[a,h]anthracene | 53-70-3 | note 2 | note 3 | NA | NA | note 2 | note 3 | < 5E-07 | note 3 | note 4 | note 4 | note 4 | note 4 |
| Dichlorophenoxyacetic acid, 2,4 | 94-75-7 | note 2 | note 3 | NA | NA | note 2 | note 3 | note 2 | < 1E+00 | note 4 | note 4 | note 4 | note 4 |
| Divalent Mercury | 7439-97-6 | note 2 | < 1E-01 | NA | NA | note 2 | < 1E-01 | note 2 | < 1E-01 | note 4 | note 4 | note 4 | note 4 |
| Ethylene dibromide | 106-93-4 | 9E-09 | < 1E-01 | NA | NA | 9E-09 | < 1E-01 | < 1E-05 | note 3 | note 4 | note 4 | note 4 | note 4 |
| Lead | 7439-92-1 | note 1 | note 1 | NA | NA | note 1 | note 1 | note 1 | note 1 | note 1 | note 1 | note 1 | note 1 |
| Methyl ethyl ketone | 78-93-3 | note 2 | < 1E-01 | NA | NA | note 2 | < 1E-01 | note 2 | < 1E-01 | note 4 | < 1E-01 | note 4 | < 1E-01 |
| Methyl methacrylate | 80-62-6 | note 2 | < 1E-01 | NA | NA | note 2 | < 1E-01 | note 2 | < 1E+00 | note 4 | note 4 | note 4 | note 4 |
| Methylene chloride | 75-09-2 | 6E-06 | < 1E-01 | NA | NA | < 5E-06 | < 1E-01 | < 1E-05 | 0.2 | < 1E-05 | 0.2 | < 1E-05 | 0.2 |
| Nickel [+2] | 7440-02-0 | < 1E-08 | note 3 | NA | NA | 8E-07 | note 3 | note 2 | 0.4 | note 4 | note 4 | note 4 | note 4 |
| Nitrobenzene | 98-95-3 | note 2 | 0.01 | NA | NA | note 2 | 0.02 | note 2 | < 1E+00 | note 4 | < 1E+00 | note 4 | < 1E+00 |
| Pentachlorophenol | 87-86-5 | note 2 | note 3 | NA | NA | note 2 | note 3 | < 1E-05 | 0.03 | note 4 | note 4 | note 4 | note 4 |
| Phenol | 108-95-2 | note 2 | note 3 | NA | NA | note 2 | note 3 | note 2 | < 1E-01 | note 4 | note 4 | note 4 | note 4 |
| Pyridine | 110-86-1 | note 2 | note 3 | NA | NA | note 2 | note 3 | note 2 | < 1E+00 | note 4 | note 4 | note 4 | note 4 |
| Silver | 7440-22-4 | note 2 | < 1E-01 | NA | NA | note 2 | < 1E-01 | note 2 | < 1E-01 | note 4 | note 4 | note 4 | note 4 |

Table EP8. Chemical-specific Risks and Hazards by Exposure Pathway for Land Application Units (unitless)
 Human Receptors - 2000 meters; Ecological Receptors - 2000 meters

| | | Protection Group 4 | | | | | | | | | | | |
|----------------------------------|-----------|--------------------|---------|-------------|-----|----------------|---------|---------------|---------|--------------------|--------|-------------------|--------|
| | | Shower Inhalation | | Breast Milk | | All Inhalation | | All Ingestion | | All Ingest & Inhal | | Groundwater Total | |
| Chemical Name | CASRN | Risk | HQ | Risk | HQ | Risk | HQ | Risk | HQ | Risk | HQ | Risk | HQ |
| Tetrachlorodibenzo-p-dioxin, 2,3 | 1746-01-6 | < 1E-08 | note 3 | NA | 0.3 | < 5E-06 | note 3 | 9E-06 | < 1E-01 | 9E-06 | note 4 | < 1E-08 | note 4 |
| Tetrachloroethylene | 127-18-4 | 9E-09 | note 3 | NA | NA | 9E-07 | note 3 | < 1E-05 | 0.9 | < 1E-05 | note 4 | 7E-06 | note 4 |
| Thallium [+1] | 7446-18-6 | note 2 | note 3 | NA | NA | note 2 | note 3 | note 2 | < 1E+00 | note 4 | note 4 | note 4 | note 4 |
| Thiram | 137-26-8 | note 2 | note 3 | NA | NA | note 2 | note 3 | note 2 | < 1E-01 | note 4 | note 4 | note 4 | note 4 |
| Toluene | 108-88-3 | note 2 | < 1E-01 | NA | NA | note 2 | < 1E-01 | note 2 | < 1E-01 | note 4 | note 4 | note 4 | note 4 |
| Trichloroethane, 1,1,1- | 71-55-6 | note 2 | < 1E-01 | NA | NA | note 2 | 0.02 | note 2 | < 1E+00 | note 4 | note 4 | note 4 | note 4 |
| Trichloroethylene | 79-01-6 | 6E-09 | note 3 | NA | NA | 9E-09 | note 3 | 9E-07 | note 3 | note 4 | note 4 | note 4 | note 4 |
| Vinyl chloride | 75-01-4 | 1E-06 | note 3 | NA | NA | 9E-07 | note 3 | < 1E-05 | note 3 | < 1E-05 | note 4 | 1E-05 | note 4 |
| Zinc | 7440-66-6 | note 2 | note 3 | NA | NA | note 2 | note 3 | note 2 | < 1E-01 | note 4 | note 4 | note 4 | note 4 |

- note 1: Human impacts were not evaluated for this chemical due to the lack of human health toxicity values.
- note 2: The risk was not calculated for this chemical because the chemical did not have a cancer slope factor.
- note 3: The hazard was not calculated for this chemical because it did not have a noncancer reference dose or reference concentration.
- note 4: For this chemical, it either lacks a toxicity value for inhalation or ingestion or the inhalation and ingestion pathways are not additive.
- note 5: For this chemical and exposure pathway, the curve could not be used to interpolate a result.
- NA: Not Applicable