

US EPA ARCHIVE DOCUMENT

Table EP3. Chemical-specific Risks and Hazards by Exposure Pathway for Semi-solids Category (unitless)
 Human Receptors - 500 meters; Ecological Receptors - 2000 meters

		Protection Group 1													
		Air Inhalation		Soil Ingestion		Water Ingestion		Crop Ingestion		Beef Ingestion		Milk Ingestion		Fish Ingestion	
Chemical Name	CASRN	Risk	HQ	Risk	HQ	Risk	HQ	Risk	HQ	Risk	HQ	Risk	HQ	Risk	HQ
Acetonitrile	75-05-8	note 2	0.08	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	2E-09	< 1E-01	< 1E-08	< 1E-01	< 1E-06	< 1E-01	1E-08	< 1E-01	6E-07	< 1E-01	6E-07	< 1E-01	< 1E-08	< 1E-01
Aniline	62-53-3	note 2	0.03	< 1E-08	note 3	< 1E-06	note 3	9E-09	note 3	3E-09	note 3	7E-09	note 3	< 1E-08	note 3
Arsenic	7440-38-2	< 1E-08	note 3	< 1E-08	< 1E-01	< 1E-06	0.003	< 1E-08	< 1E-01	< 1E-08	< 1E-01	< 1E-08	< 1E-01	< 1E-08	< 1E-01
Barium	7440-39-3	note 2	< 1E-01	note 2	< 1E-01	note 2	0.1	note 2	< 1E-01	note 2	< 1E-01	note 2	< 1E-01	note 2	< 1E-01
Benzene	71-43-2	3E-07	note 3	< 1E-08	note 3	< 1E-08	note 3	9E-07	note 3	8E-09	note 3	8E-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	< 5E-06	note 3	< 1E-05	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	0.009	note 2	0.05	note 2	0.05	note 2	< 1E-01
Chlorobenzene	108-90-7	note 2	0.03	note 2	< 1E-01	note 2	0.02	note 2	0.09	note 2	0.06	note 2	0.6	note 2	< 1E-01
Chloroform	67-66-3	1E-08	note 3	< 1E-08	< 1E-01	1E-08	< 1E-01	9E-09	< 1E-01	2E-06	0.2	6E-06	0.2	< 1E-08	< 1E-01
Dibenz[a,h]anthracene	53-70-3	note 2	note 3	< 1E-08	note 3	< 1E-08	note 3	< 1E-08	note 3	< 1E-08	note 3	< 1E-08	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	< 1E-01	note 2	0.01	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	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
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	0.01	note 2	< 1E-01	note 2	< 1E-01	note 2	0.09	note 2	< 1E-01	note 2	< 1E-01	note 2	< 1E-01
Methyl methacrylate	80-62-6	note 2	0.06	note 2	< 1E-01	note 2	< 1E-01	note 2	0.06	note 2	0.02	note 2	0.02	note 2	< 1E-01
Methylene chloride	75-09-2	7E-09	< 1E-01	< 1E-08	< 1E-01	8E-09	< 1E-01	2E-06	0.004	8E-07	< 1E-01	8E-07	0.05	< 1E-08	< 1E-01
Nickel [+2]	7440-02-0	< 1E-08	note 3	note 2	< 1E-01	note 2	0.1	note 2	< 1E-01	note 2	< 1E-01	note 2	< 1E-01	note 2	< 1E-01
Nitrobenzene	98-95-3	note 2	0	note 2	< 1E-01	note 2	0.07	note 2	0.09	note 2	0.4	note 2	0.4	note 2	< 1E-01
Pentachlorophenol	87-86-5	note 2	note 3	< 1E-08	< 1E-01	1E-06	< 1E-01	< 1E-08	< 1E-01	4E-09	< 1E-01	< 1E-08	< 1E-01	< 1E-08	< 1E-01
Phenol	108-95-2	note 2	note 3	note 2	< 1E-01	note 2	0.09	note 2	0.08	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-01	note 2	0.09	note 2	< 1E-01	note 2	0.04	note 2	< 1E-01
Silver	7440-22-4	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

Table EP3. Chemical-specific Risks and Hazards by Exposure Pathway for Semi-solids Category (unitless)
 Human Receptors - 500 meters; Ecological Receptors - 2000 meters

		Protection Group 1													
		Air Inhalation		Soil Ingestion		Water Ingestion		Crop Ingestion		Beef Ingestion		Milk Ingestion		Fish Ingestion	
Chemical Name	CASRN	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	3E-009	< 1E-01	< 1E-08	< 1E-01	3E-07	< 1E-01	1E-08	< 1E-01	9E-09	< 1E-01	< 1E-08	< 1E-01
Tetrachloroethylene	127-18-4	3E-09	note 3	< 1E-08	< 1E-01	1E-09	< 1E-01	2E-06	0.003	2E-07	< 1E-01	7E-07	< 1E-01	< 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	0	note 2	< 1E-01	note 2	< 1E-01	note 2	0.08	note 2	< 1E-01	note 2	< 1E-01	note 2	< 1E-01
Trichloroethane, 1,1,1-	71-55-6	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
Trichloroethylene	79-01-6	9E-09	note 3	< 1E-08	note 3	6E-09	note 3	6E-07	note 3	2E-06	note 3	6E-06	note 3	< 1E-08	note 3
Vinyl chloride	75-01-4	< 1E-08	note 3	< 1E-08	note 3	< 1E-06	note 3	3E-06	note 3	7E-06	note 3	7E-06	note 3	< 1E-08	note 3
Zinc	7440-66-6	note 2	note 3	note 2	< 1E-01	note 2	0.02	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 EP3. Chemical-specific Risks and Hazards by Exposure Pathway for Semi-solids Category (unitless)
 Human Receptors - 500 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	2E-07	< 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	0.04	< 1E-06	note 3	note 4	note 4	note 4	note 4
Arsenic	7440-38-2	< 1E-08	note 3	NA	NA	< 1E-08	note 3	< 1E-06	0.003	note 4	note 4	note 4	note 4
Barium	7440-39-3	note 2	< 1E-01	NA	NA	note 2	< 1E-01	note 2	0.1	note 4	note 4	note 4	note 4
Benzene	71-43-2	< 1E-08	note 3	NA	NA	3E-07	note 3	9E-07	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	< 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	0.01	note 4	note 4	note 4	note 4
Chlorobenzene	108-90-7	note 2	< 1E-01	NA	NA	note 2	0.03	note 2	0.09	note 4	< 1E-01	note 4	0.03
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-08	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	note 5	note 5	NA	NA	note 5	note 5	note 5	note 5	note 5	note 5	note 5	note 5
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	0.01	note 2	0.09	note 4	< 1E-01	note 4	< 1E-01
Methyl methacrylate	80-62-6	note 2	0.005	NA	NA	note 2	0.06	note 2	< 1E-01	note 4	note 4	note 4	note 4
Methylene chloride	75-09-2	7E-09	< 1E-01	NA	NA	8E-09	< 1E-01	< 1E-06	< 1E-01	< 1E-06	< 1E-01	8E-09	< 1E-01
Nickel [+2]	7440-02-0	< 1E-08	note 3	NA	NA	< 1E-08	note 3	note 2	0.1	note 4	note 4	note 4	note 4
Nitrobenzene	98-95-3	note 2	< 1E-01	NA	NA	note 2	< 1E-01	note 2	0.09	note 4	< 1E-01	note 4	0.07
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 5	note 5	NA	NA	note 5	note 5	note 5	note 5	note 5	note 5	note 5	note 5

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 Human Receptors - 500 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	1E-06	note 3	7E-07	< 1E-01	< 1E-06	note 4	< 1E-08	note 4
Tetrachloroethylene	127-18-4	< 1E-08	note 3	NA	NA	3E-09	note 3	1E-06	< 1E-01	1E-06	note 4	1E-09	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	0.08	note 4	note 4	note 4	note 4
Trichloroethane, 1,1,1-	71-55-6	note 5	note 5	NA	NA	note 5	note 5	note 5	note 5	note 5	note 5	note 5	note 5
Trichloroethylene	79-01-6	6E-09	note 3	NA	NA	9E-09	note 3	5E-07	note 3	note 4	note 4	note 4	note 4
Vinyl chloride	75-01-4	< 5E-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	0.02	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 EP3. Chemical-specific Risks and Hazards by Exposure Pathway for Semi-solids Category (unitless)
 Human Receptors - 500 meters; Ecological Receptors - 2000 meters

		Protection Group 2													
		Air Inhalation		Soil Ingestion		Water Ingestion		Crop Ingestion		Beef Ingestion		Milk Ingestion		Fish Ingestion	
Chemical Name	CASRN	Risk	HQ	Risk	HQ	Risk	HQ	Risk	HQ	Risk	HQ	Risk	HQ	Risk	HQ
Acetonitrile	75-05-8	note 2	0.7	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	2E-09	< 1E-01	< 1E-08	< 1E-01	< 1E-06	< 1E-01	9E-09	< 1E-01	6E-07	< 1E-01	6E-07	< 1E-01	< 1E-08	< 1E-01
Aniline	62-53-3	note 2	< 1E-01	< 1E-08	note 3	< 1E-06	note 3	9E-09	note 3	3E-09	note 3	7E-09	note 3	< 1E-08	note 3
Arsenic	7440-38-2	< 1E-08	note 3	< 1E-08	< 1E-01	< 1E-06	0.003	< 1E-08	< 1E-01	< 1E-08	< 1E-01	< 1E-08	< 1E-01	< 1E-08	< 1E-01
Barium	7440-39-3	note 2	0.01	note 2	< 1E-01	note 2	0.9	note 2	< 1E-01	note 2	< 1E-01	note 2	< 1E-01	note 2	< 1E-01
Benzene	71-43-2	4E-07	note 3	< 1E-08	note 3	< 1E-08	note 3	1E-06	note 3	6E-07	note 3	6E-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	< 5E-06	note 3	< 1E-05	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+00	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	0.2	note 2	0.7	note 2	0.7	note 2	< 1E-01
Chlorobenzene	108-90-7	note 2	0.7	note 2	< 1E-01	note 2	0.7	note 2	0.8	note 2	4	note 2	8	note 2	< 1E-01
Chloroform	67-66-3	9E-09	note 3	< 1E-08	< 1E-01	1E-08	< 1E-01	9E-09	< 1E-01	2E-06	0.3	6E-06	0.3	< 1E-08	< 1E-01
Dibenz[a,h]anthracene	53-70-3	note 2	note 3	< 1E-08	note 3	< 1E-08	note 3	< 1E-08	note 3	< 1E-08	note 3	< 1E-08	note 3	< 1E-08	note 3
Dichlorophenoxyacetic acid, 2,4	94-75-7	note 2	note 3	note 2	< 1E-01	note 2	1	note 2	< 1E-01	note 2	< 1E-01	note 2	0.4	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	2E-10	< 1E-01	< 1E-08	note 3	< 1E-06	note 3	1E-06	note 3	6E-06	note 3	2E-05	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+00	note 2	< 1E-01	note 2	< 1E-01	note 2	< 1E-01
Methyl methacrylate	80-62-6	note 2	0.5	note 2	< 1E-01	note 2	< 1E+00	note 2	0.2	note 2	0.6	note 2	0.6	note 2	< 1E-01
Methylene chloride	75-09-2	4E-09	< 1E-01	< 1E-08	< 1E-01	8E-09	< 1E-01	1E-06	0.004	8E-07	< 1E-01	8E-07	0.06	< 1E-08	< 1E-01
Nickel [+2]	7440-02-0	< 1E-08	note 3	note 2	< 1E-01	note 2	0.6	note 2	< 1E-01	note 2	< 1E-01	note 2	< 1E-01	note 2	< 1E-01
Nitrobenzene	98-95-3	note 2	0.06	note 2	< 1E-01	note 2	< 1E+00	note 2	0.7	note 2	1	note 2	1	note 2	< 1E-01
Pentachlorophenol	87-86-5	note 2	note 3	< 1E-08	< 1E-01	1E-06	< 1E-01	3E-09	< 1E-01	5E-09	< 1E-01	< 1E-08	< 1E-01	< 1E-08	< 1E-01
Phenol	108-95-2	note 2	note 3	note 2	< 1E-01	note 2	0.9	note 2	0.9	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	0.3	note 2	0.03	note 2	0.3	note 2	< 1E-01
Silver	7440-22-4	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

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 Human Receptors - 500 meters; Ecological Receptors - 2000 meters

		Protection Group 2													
		Air Inhalation		Soil Ingestion		Water Ingestion		Crop Ingestion		Beef Ingestion		Milk Ingestion		Fish Ingestion	
Chemical Name	CASRN	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-08	< 1E-01	< 1E-08	< 1E-01	1E-08	< 1E-01	7E-07	< 1E-01	2E-07	< 1E-01	< 1E-08	< 1E-01
Tetrachloroethylene	127-18-4	1E-09	note 3	< 1E-08	< 1E-01	1E-09	< 1E-01	1E-06	0.004	3E-07	< 1E-01	8E-07	< 1E-01	< 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	0.04	note 2	0.04	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	0.04	note 2	< 1E-01	note 2	< 1E-01	note 2	< 1E-01
Trichloroethane, 1,1,1-	71-55-6	note 2	0.006	note 2	< 1E-01	note 2	0.06	note 2	1	note 2	0.03	note 2	0.03	note 2	< 1E-01
Trichloroethylene	79-01-6	9E-09	note 3	< 1E-08	note 3	6E-09	note 3	5E-07	note 3	2E-06	note 3	6E-06	note 3	< 1E-08	note 3
Vinyl chloride	75-01-4	< 1E-08	note 3	< 1E-08	note 3	< 1E-06	note 3	3E-06	note 3	7E-06	note 3	7E-06	note 3	< 1E-08	note 3
Zinc	7440-66-6	note 2	note 3	note 2	< 1E-01	note 2	0.02	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 EP3. Chemical-specific Risks and Hazards by Exposure Pathway for Semi-solids Category (unitless)
 Human Receptors - 500 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	2E-07	< 1E-01	NA	NA	2E-07	< 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	0.02	< 1E-06	note 3	note 4	note 4	note 4	note 4
Arsenic	7440-38-2	< 1E-08	note 3	NA	NA	< 1E-08	note 3	< 1E-06	0.003	note 4	note 4	note 4	note 4
Barium	7440-39-3	note 2	< 1E-01	NA	NA	note 2	0.01	note 2	0.9	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	5E-11	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+00	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	0.2	note 4	note 4	note 4	note 4
Chlorobenzene	108-90-7	note 2	0.3	NA	NA	note 2	0.7	note 2	0.8	note 4	< 1E+00	note 4	0.8
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-08	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-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+00	note 4	< 1E+00	note 4	< 1E-01
Methyl methacrylate	80-62-6	note 2	0.3	NA	NA	note 2	0.5	note 2	< 1E+00	note 4	note 4	note 4	note 4
Methylene chloride	75-09-2	7E-09	< 1E-01	NA	NA	7E-09	< 1E-01	< 1E-06	< 1E-01	< 1E-06	< 1E-01	8E-09	< 1E-01
Nickel [+2]	7440-02-0	< 1E-08	note 3	NA	NA	< 1E-08	note 3	note 2	0.6	note 4	note 4	note 4	note 4
Nitrobenzene	98-95-3	note 2	0	NA	NA	note 2	0.06	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+00	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+00	note 4	note 4	note 4	note 4

Table EP3. Chemical-specific Risks and Hazards by Exposure Pathway for Semi-solids Category (unitless)
 Human Receptors - 500 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	4E-07	< 1E-01	< 1E-06	note 4	< 1E-08	note 4
Tetrachloroethylene	127-18-4	< 1E-08	note 3	NA	NA	1E-09	note 3	< 1E-06	< 1E-01	< 1E-06	note 4	1E-09	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	0.03	note 4	note 4	note 4	note 4
Trichloroethane, 1,1,1-	71-55-6	note 2	< 1E-01	NA	NA	note 2	0.006	note 2	1	note 4	note 4	note 4	note 4
Trichloroethylene	79-01-6	6E-09	note 3	NA	NA	9E-09	note 3	4E-07	note 3	note 4	note 4	note 4	note 4
Vinyl chloride	75-01-4	< 1E-08	note 3	NA	NA	< 1E-08	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	0.02	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 EP3. Chemical-specific Risks and Hazards by Exposure Pathway for Semi-solids Category (unitless)
Human Receptors - 500 meters; Ecological Receptors - 2000 meters

		Protection Group 3													
		Air Inhalation		Soil Ingestion		Water Ingestion		Crop Ingestion		Beef Ingestion		Milk Ingestion		Fish Ingestion	
Chemical Name	CASRN	Risk	HQ	Risk	HQ	Risk	HQ	Risk	HQ	Risk	HQ	Risk	HQ	Risk	HQ
Acetonitrile	75-05-8	note 2	0.7	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-07	< 1E-01	< 1E-08	< 1E-01	< 1E-05	0.2	3E-06	0.05	9E-07	< 1E-01	9E-07	< 1E-01	< 1E-08	< 1E-01
Aniline	62-53-3	note 2	0.8	< 1E-08	note 3	< 1E-05	note 3	1E-06	note 3	6E-07	note 3	7E-07	note 3	< 1E-08	note 3
Arsenic	7440-38-2	3E-09	note 3	9E-10	< 1E-01	8E-06	0.07	7E-07	< 1E-01	< 1E-08	< 1E-01	< 1E-08	< 1E-01	< 1E-08	< 1E-01
Barium	7440-39-3	note 2	0.01	note 2	< 1E-01	note 2	0.9	note 2	< 1E-01	note 2	< 1E-01	note 2	< 1E-01	note 2	< 1E-01
Benzene	71-43-2	7E-06	note 3	< 1E-08	note 3	9E-09	note 3	1E-05	note 3	4E-05	note 3	4E-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	< 5E-06	note 3	< 1E-05	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+00	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	0.2	note 2	0.7	note 2	0.7	note 2	< 1E-01
Chlorobenzene	108-90-7	note 2	0.7	note 2	< 1E-01	note 2	0.7	note 2	0.8	note 2	4	note 2	8	note 2	< 1E-01
Chloroform	67-66-3	6E-06	note 3	< 1E-08	< 1E-01	2E-06	0.08	3E-06	0.4	4E-06	0.9	9E-06	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-08	note 3	< 1E-08	note 3	< 1E-08	note 3	< 1E-08	note 3
Dichlorophenoxyacetic acid, 2,4	94-75-7	note 2	note 3	note 2	< 1E-01	note 2	1	note 2	< 1E-01	note 2	< 1E-01	note 2	0.4	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-09	< 1E-01	< 1E-08	note 3	< 1E-05	note 3	8E-06	note 3	7E-06	note 3	3E-05	note 3	< 1E-08	note 3
Lead	7439-92-1	note 2	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+00	note 2	< 1E-01	note 2	< 1E-01	note 2	< 1E-01
Methyl methacrylate	80-62-6	note 2	0.5	note 2	< 1E-01	note 2	< 1E+00	note 2	0.2	note 2	0.6	note 2	0.6	note 2	< 1E-01
Methylene chloride	75-09-2	9E-07	< 1E-01	< 1E-08	< 1E-01	4E-06	0.07	1E-05	0.6	9E-06	0.08	9E-06	0.8	< 1E-08	< 1E-01
Nickel [+2]	7440-02-0	< 1E-08	note 3	note 2	< 1E-01	note 2	0.6	note 2	< 1E-01	note 2	< 1E-01	note 2	< 1E-01	note 2	< 1E-01
Nitrobenzene	98-95-3	note 2	0.06	note 2	< 1E-01	note 2	< 1E+00	note 2	0.7	note 2	1	note 2	1	note 2	< 1E-01
Pentachlorophenol	87-86-5	note 2	note 3	< 1E-08	< 1E-01	< 1E-05	0.07	2E-07	< 1E-01	5E-07	< 1E-01	1E-06	< 1E-01	< 1E-08	< 1E-01
Phenol	108-95-2	note 2	note 3	note 2	< 1E-01	note 2	0.9	note 2	0.9	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	0.3	note 2	0.03	note 2	0.3	note 2	< 1E-01
Silver	7440-22-4	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

Table EP3. Chemical-specific Risks and Hazards by Exposure Pathway for Semi-solids Category (unitless)
 Human Receptors - 500 meters; Ecological Receptors - 2000 meters

		Protection Group 3													
		Air Inhalation		Soil Ingestion		Water Ingestion		Crop Ingestion		Beef Ingestion		Milk Ingestion		Fish Ingestion	
Chemical Name	CASRN	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-08	< 1E-01	< 1E-08	< 1E-01	< 1E-06	< 1E-01	< 1E-06	< 1E-01	< 5E-07	< 1E-01	< 1E-08	< 1E-01
Tetrachloroethylene	127-18-4	5E-07	note 3	< 1E-08	< 1E-01	5E-07	< 1E-01	1E-05	0.8	7E-06	0.4	3E-05	0.4	< 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	0.04	note 2	0.04	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	0.04	note 2	< 1E-01	note 2	< 1E-01	note 2	< 1E-01
Trichloroethane, 1,1,1-	71-55-6	note 2	0.006	note 2	< 1E-01	note 2	0.06	note 2	1	note 2	0.03	note 2	0.03	note 2	< 1E-01
Trichloroethylene	79-01-6	9E-09	note 3	< 1E-08	note 3	6E-09	note 3	5E-07	note 3	2E-06	note 3	6E-06	note 3	< 1E-08	note 3
Vinyl chloride	75-01-4	8E-07	note 3	< 1E-08	note 3	6E-06	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	0.02	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 EP3. Chemical-specific Risks and Hazards by Exposure Pathway for Semi-solids Category (unitless)
 Human Receptors - 500 meters; Ecological Receptors - 2000 meters

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	0.2	note 4	note 4	note 4	note 4
Aniline	62-53-3	note 2	0.09	NA	NA	note 2	0.8	< 1E-05	note 3	note 4	note 4	note 4	note 4
Arsenic	7440-38-2	< 1E-08	note 3	NA	NA	3E-09	note 3	8E-06	0.07	note 4	note 4	note 4	note 4
Barium	7440-39-3	note 2	< 1E-01	NA	NA	note 2	0.01	note 2	0.9	note 4	note 4	note 4	note 4
Benzene	71-43-2	9E-09	note 3	NA	NA	7E-06	note 3	1E-05	note 3	< 1E-05	note 4	1E-08	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+00	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	0.2	note 4	note 4	note 4	note 4
Chlorobenzene	108-90-7	note 2	0.3	NA	NA	note 2	0.7	note 2	0.8	note 4	< 1E+00	note 4	0.8
Chloroform	67-66-3	< 1E-05	note 3	NA	NA	< 1E-05	note 3	3E-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	< 1E-08	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+00	note 4	< 1E+00	note 4	< 1E-01
Methyl methacrylate	80-62-6	note 2	0.3	NA	NA	note 2	0.5	note 2	< 1E+00	note 4	note 4	note 4	note 4
Methylene chloride	75-09-2	9E-07	< 1E-01	NA	NA	9E-07	< 1E-01	1E-05	0.6	< 1E-05	6E-001	4E-06	0.07
Nickel [+2]	7440-02-0	< 1E-08	note 3	NA	NA	< 1E-08	note 3	note 2	0.6	note 4	note 4	note 4	note 4
Nitrobenzene	98-95-3	note 2	0	NA	NA	note 2	0.06	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	0.07	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+00	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+00	note 4	note 4	note 4	note 4

Table EP3. Chemical-specific Risks and Hazards by Exposure Pathway for Semi-solids Category (unitless)
 Human Receptors - 500 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	< 1E-05	note 4	< 1E-08	note 4
Tetrachloroethylene	127-18-4	1E-09	note 3	NA	NA	5E-07	note 3	< 1E-05	0.8	< 1E-05	note 4	5E-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	0.03	note 4	note 4	note 4	note 4
Trichloroethane, 1,1,1-	71-55-6	note 2	< 1E-01	NA	NA	note 2	0.006	note 2	1	note 4	note 4	note 4	note 4
Trichloroethylene	79-01-6	6E-09	note 3	NA	NA	9E-09	note 3	4E-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	< 1E-05	note 3	< 1E-05	note 4	7E-06	note 4
Zinc	7440-66-6	note 2	note 3	NA	NA	note 2	note 3	note 2	0.02	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 EP3. Chemical-specific Risks and Hazards by Exposure Pathway for Semi-solids Category (unitless)
Human Receptors - 500 meters; Ecological Receptors - 2000 meters

		Protection Group 4													
		Air Inhalation		Soil Ingestion		Water Ingestion		Crop Ingestion		Beef Ingestion		Milk Ingestion		Fish Ingestion	
Chemical Name	CASRN	Risk	HQ	Risk	HQ	Risk	HQ	Risk	HQ	Risk	HQ	Risk	HQ	Risk	HQ
Acetonitrile	75-05-8	note 2	0.8	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	8E-09	< 1E-01	< 1E-08	< 1E-01	< 1E-05	0.2	2E-06	< 1E-01	9E-07	< 1E-01	9E-07	< 1E-01	< 1E-08	< 1E-01
Aniline	62-53-3	note 2	< 1E+00	< 1E-08	note 3	< 1E-05	note 3	4E-06	note 3	7E-07	note 3	8E-07	note 3	< 1E-08	note 3
Arsenic	7440-38-2	8E-09	note 3	3E-09	< 1E-01	< 1E-05	0.2	1E-06	< 1E-01	< 1E-08	< 1E-01	2E-09	< 1E-01	< 1E-08	< 1E-01
Barium	7440-39-3	note 2	0.06	note 2	< 1E-01	note 2	< 1E+00	note 2	0.03	note 2	< 1E-01	note 2	< 1E-01	note 2	< 1E-01
Benzene	71-43-2	7E-06	note 3	< 1E-08	note 3	8E-09	note 3	1E-05	note 3	4E-05	note 3	4E-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	< 5E-06	note 3	< 1E-05	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+00	note 2	< 1E-01	note 2	< 1E-01	note 2	< 1E-01	note 2	< 1E-01
Carbon disulfide	75-15-0	note 2	0.07	note 2	< 1E-01	note 2	0.4	note 2	0.8	note 2	8	note 2	8	note 2	< 1E-01
Chlorobenzene	108-90-7	note 2	0.7	note 2	< 1E-01	note 2	0.4	note 2	0.8	note 2	4	note 2	8	note 2	< 1E-01
Chloroform	67-66-3	5E-06	note 3	< 1E-08	< 1E-01	1E-06	0.09	4E-06	0.1	5E-06	1	1E-05	1	< 1E-08	< 1E-01
Dibenz[a,h]anthracene	53-70-3	note 2	note 3	< 1E-08	note 3	< 1E-08	note 3	< 1E-08	note 3	< 1E-08	note 3	< 1E-08	note 3	< 1E-08	note 3
Dichlorophenoxyacetic acid, 2,4	94-75-7	note 2	note 3	note 2	< 1E-01	note 2	1	note 2	< 1E-01	note 2	< 1E-01	note 2	0.5	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-09	< 1E-01	< 1E-08	note 3	8E-06	note 3	7E-06	note 3	7E-06	note 3	3E-05	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+00	note 2	< 1E-01	note 2	< 1E-01	note 2	< 1E-01
Methyl methacrylate	80-62-6	note 2	0.9	note 2	< 1E-01	note 2	< 1E+00	note 2	0.8	note 2	0.9	note 2	0.9	note 2	< 1E-01
Methylene chloride	75-09-2	9E-07	< 1E-01	< 1E-08	< 1E-01	9E-07	0.05	3E-05	0.5	1E-05	0.1	1E-05	1	< 1E-08	< 1E-01
Nickel [+2]	7440-02-0	6E-07	note 3	note 2	< 1E-01	note 2	< 1E+00	note 2	0.005	note 2	< 1E-01	note 2	< 1E-01	note 2	< 1E-01
Nitrobenzene	98-95-3	note 2	0.07	note 2	< 1E-01	note 2	< 1E+00	note 2	0.3	note 2	2	note 2	2	note 2	< 1E-01
Pentachlorophenol	87-86-5	note 2	note 3	< 1E-08	< 1E-01	< 1E-05	< 1E-01	< 1E-08	< 1E-01	< 5E-07	< 1E-01	< 1E-06	< 1E-01	< 1E-08	< 1E-01
Phenol	108-95-2	note 2	note 3	note 2	< 1E-01	note 2	< 1E+00	note 2	< 1E+00	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	0.09	note 2	0.03	note 2	0.3	note 2	< 1E-01
Silver	7440-22-4	note 2	< 1E-01	note 2	< 1E-01	note 2	1	note 2	0.05	note 2	< 1E-01	note 2	< 1E-01	note 2	< 1E-01

Table EP3. Chemical-specific Risks and Hazards by Exposure Pathway for Semi-solids Category (unitless)
 Human Receptors - 500 meters; Ecological Receptors - 2000 meters

		Protection Group 4													
		Air Inhalation		Soil Ingestion		Water Ingestion		Crop Ingestion		Beef Ingestion		Milk Ingestion		Fish Ingestion	
Chemical Name	CASRN	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-08	< 1E-01	< 1E-08	< 1E-01	< 1E-06	< 1E-01	< 1E-06	< 1E-01	< 5E-07	< 1E-01	< 1E-08	< 1E-01
Tetrachloroethylene	127-18-4	5E-07	note 3	< 1E-08	< 1E-01	5E-07	< 1E-01	3E-05	0.5	8E-06	0.6	4E-05	0.6	< 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	0.04	note 2	0.04	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	0.5	note 2	< 1E-01	note 2	< 1E-01	note 2	0.8	note 2	0.03	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	2	note 2	0.06	note 2	0.06	note 2	< 1E-01
Trichloroethylene	79-01-6	7E-07	note 3	< 1E-08	note 3	8E-07	note 3	8E-06	note 3	2E-05	note 3	2E-05	note 3	< 1E-08	note 3
Vinyl chloride	75-01-4	9E-07	note 3	< 1E-08	note 3	7E-06	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+00	note 2	0.01	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 EP3. Chemical-specific Risks and Hazards by Exposure Pathway for Semi-solids Category (unitless)
 Human Receptors - 500 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	< 5E-06	< 1E-01	NA	NA	< 5E-06	< 1E-01	< 1E-05	0.2	note 4	note 4	note 4	note 4
Aniline	62-53-3	note 2	0.2	NA	NA	note 2	< 1E+00	< 1E-05	note 3	note 4	note 4	note 4	note 4
Arsenic	7440-38-2	< 1E-08	note 3	NA	NA	8E-09	note 3	< 1E-05	0.2	note 4	note 4	note 4	note 4
Barium	7440-39-3	note 2	< 1E-01	NA	NA	note 2	0.06	note 2	< 1E+00	note 4	note 4	note 4	note 4
Benzene	71-43-2	8E-09	note 3	NA	NA	7E-06	note 3	9E-06	note 3	< 1E-05	note 4	9E-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+00	note 4	note 4	note 4	note 4
Carbon disulfide	75-15-0	note 2	< 1E-01	NA	NA	note 2	0.07	note 2	0.7	note 4	note 4	note 4	note 4
Chlorobenzene	108-90-7	note 2	0.1	NA	NA	note 2	0.7	note 2	0.7	note 4	< 1E+00	note 4	0.4
Chloroform	67-66-3	< 1E-05	note 3	NA	NA	< 1E-05	note 3	1E-06	0.09	< 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-08	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	0.8	NA	NA	note 2	0.9	note 2	< 1E+00	note 4	note 4	note 4	note 4
Methylene chloride	75-09-2	9E-07	< 1E-01	NA	NA	9E-07	< 1E-01	1E-05	0.4	< 1E-05	4E-001	3E-06	0.05
Nickel [+2]	7440-02-0	< 1E-08	note 3	NA	NA	6E-07	note 3	note 2	< 1E+00	note 4	note 4	note 4	note 4
Nitrobenzene	98-95-3	note 2	0	NA	NA	note 2	0.07	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	< 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+00	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	1	note 4	note 4	note 4	note 4

Table EP3. Chemical-specific Risks and Hazards by Exposure Pathway for Semi-solids Category (unitless)
 Human Receptors - 500 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
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	2E-09	note 3	NA	NA	5E-07	note 3	< 1E-05	0.4	< 1E-05	note 4	5E-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	0.5	note 2	0.7	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	8E-07	note 3	NA	NA	9E-07	note 3	7E-06	note 3	note 4	note 4	note 4	note 4
Vinyl chloride	75-01-4	< 5E-06	note 3	NA	NA	< 5E-06	note 3	< 1E-05	note 3	< 1E-05	note 4	7E-06	note 4
Zinc	7440-66-6	note 2	note 3	NA	NA	note 2	note 3	note 2	< 1E+00	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.
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- NA: Not Applicable