

**HAZARD RANKING SYSTEM**  
Hazardous Substance Benchmarks

Substance Name	CAS Number	Ground Water/Surface Water Pathway			Surface Water Pathway			Surface Water Pathway			
		Drinking Water			Food Chain			Environmental			
		MCL/MCLG (mg/L)	Reference Dose Screen Conc. (mg/L)	Cancer Risk Screen Conc. (mg/L)	FDAAL (ppm)	Ref. Dose Screen Conc. (mg/kg)	Cancer Risk Screen Conc. (mg/kg)	Acute CMC (µg/L)		Chronic CCC (µg/L)	
							Fresh	Salt	Fresh	Salt	
Acenaphthene	000083-32-9	...	9E-01	...	...	8E+01	...	...	...	...	...
Acenaphthylene	000208-96-8	...	...	...	...	...	...	...	...	...	...
Acetone	000067-64-1	...	1E+01	...	...	1E+03	...	...	...	...	...
Acrolein	000107-02-8	...	7E-03	...	...	6E-01	...	3.0E+00	...	3.0E+00	...
Acrylamide	000079-06-1	...	3E-02	4E-05	...	2E+00	6E-03	...	...	...	...
Alachlor	015972-60-8	2E-03	1E-01	1E-03	...	1E+01	5E-02	...	...	...	...
Aldrin	000309-00-2	...	4E-04	3.9E-06	2E-02	4E-02	1.8E-04	3.0E+00	1.3E+00	...	...
Aluminum	007429-90-5	...	1E+01	...	...	1E+03	...	7.5E+02	7.5E+02	8.7E+01	8.7E+01
Americium	007440-35-9	...	...	...	...	...	...	...	...	...	...
Ammonia	007664-41-7	...	...	...	...	...	...	...	...	...	...
Aniline	000062-53-3	...	1E-01	1.1E-02	...	9E+00	5.5E-01	...	...	...	...
Anthracene	000120-12-7	...	4E+00	...	...	4E+02	...	...	...	...	...
Antimony	007440-36-0	6E-03	6E-03	...	...	5E-01	...	...	...	...	...
Arsenic	007440-38-2	1E-02	4E-03	4.4E-05	...	4E-01	2.1E-03	3.4E+02	6.9E+01	1.5E+02	3.6E+01

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(mg/L)	(mg/L)	(mg/L)	(ppm)	(mg/kg)	(mg/kg)	Fresh	Salt	Fresh	Salt		
Asbestos	001332-21-4	...	...	3.5E-01	...	...	1.6E+01	...	...	...	...
Atrazine	001912-24-9	3E-03	5.4E-01	2.92E-04	...	4.7E+01	1.37E-02	...	...	...	...
Barium	007440-39-3	2E+00	3E+00	...	...	2E+02	...	...	...	...	...
Benz(a)anthracene	000056-55-3	...	...	2.9E-05	...	...	4.3E-03	...	...	...	...
Benzene	000071-43-2	5E-03	6E-02	1.2E-03	...	5E+00	5.7E-02	...	...	...	...
Benzidine	000092-87-5	...	4E-02	9.3E-08	...	4E+00	1.3E-05	...	...	...	...
Benzo(a)pyrene	000050-32-8	2E-04	...	2.9E-06	...	...	4.3E-04	...	...	...	...
Benzo(g,h,i)perylene	000191-24-2	...	...	...	...	...	...	...	...	...	...
Benzo(j,k)fluorene (Fluoranthene)	000206-44-0	...	6E-01	...	...	5E+01	...	...	...	...	...
Benzo(k)fluoranthene	000207-08-9	...	...	2.9E-04	...	...	4.3E-02	...	...	...	...
Beryllium	007440-41-7	4E-03	3E-02	...	...	2E+00	...	...	...	...	...
Bis(2-ethylhexyl) phthalate	000117-81-7	...	3E-01	1.5E-03	...	2E+01	2.2E-01	...	...	...	...
Boron	007440-42-8	...	3E+00	...	...	2E+02	...	...	...	...	...
Bromodichloromethane	000075-27-4	...	3E-01	1.0E-03	...	2E+01	5.0E-02	...	...	...	...

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(mg/L)	(mg/L)	(mg/L)	(ppm)	(mg/kg)	(mg/kg)	Fresh	Salt	Fresh	Salt		
Butylbenzyl phthalate	000085-68-7	...	3E+00	3.5E-02	...	2E+02	1.6E+00	...	...	...	...
Cadmium	007440-43-9	5E-03	7E-03	...	...	6E-01	...	2.0E+00	4.0E+01	2.5E-01	8.8E+00
Carbazole	000086-74-8	...	...	3E-03	...	...	1E-01	...	...	...	...
Carbon Disulfide	000075-15-0	...	1E+00	...	...	1E+02	...	...	...	...	...
Carbon Tetrachloride	000056-23-5	5E-03	6E-02	9E-04	...	5E+00	4E-02	...	...	...	...
Cesium	007440-46-2	...	...	...	...	...	...	...	...	...	...
Chlordane	012789-03-6	2E-03	7E-03	1.9E-04	3E-01	6E-01	9.0E-03	2.4E+00	9.0E-02	4.3E-03	4.0E-03
Chlordane, alpha-	005103-71-9	...	7E-03	1.9E-04	...	6E-01	9.0E-03	2.4E+00	9.0E-02	4.3E-03	4.0E-03
Chlordane, gamma-	005103-74-2	2E-03	7E-03	1.9E-04	3E-01	6E-01	9.0E-03	2.4E+00	9.0E-02	4.3E-03	4.0E-03
Chlorobenzene	000108-90-7	1E-01	3E-01	...	...	2E+01	...	...	...	...	...
Chloroform	000067-66-3	...	1E-01	2.1E-03	...	1E+01	1.0E-01	...	...	...	...
Chromium	007440-47-3	1E-01	4E-02	...	...	4E+00	...	...	...	...	...
Chromium(III)	016065-83-1	1E-01	2.3E+01	...	...	2.0E+03	...	5.7E+02	5.7E+02	7.4E+01	7.4E+01
Chromium(VI)	018540-29-9	1E-01	4E-02	4E-05	...	4E+00	6E-03	1.6E+01	1.1E+03	1.1E+01	5.0E+01

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		MCL/MCLG	Reference Dose Screen Conc.	Cancer Risk Screen Conc.	FDAAL	Ref. Dose Screen Conc.	Cancer Risk Screen Conc.	Acute CMC (µg/L)		Chronic CCC (µg/L)	
(mg/L)	(mg/L)	(mg/L)	(ppm)	(mg/kg)	(mg/kg)	Fresh	Salt	Fresh	Salt		
Chrysene	000218-01-9	...	...	2.9E-03	...	...	4.3E-01	...	...	...	...
Cobalt	007440-48-4	...	4E-03	...	...	4E-01	...	...	...	...	...
Copper	007440-50-8	1.3E+00	6E-01	...	...	5E+01	...	2.3E+00	4.8E+00	1.4E+00	3.1E+00
Cumene	000098-82-8	...	1E+00	...	...	1E+02	...	...	...	...	...
Cyanamide	000420-04-2	...	...	...	...	...	...	...	...	...	...
Cyanide	000057-12-5	...	9E-03	...	...	8E-01	...	2.2E+01	1.0E+00	5.2E+00	1.0E+00
DDD	000072-54-8	...	...	2.8E-04	...	...	1.3E-02	...	...	...	...
DDE	000072-55-9	...	...	1.9E-04	5E-02	...	9.2E-03	...	...	...	...
DDT	000050-29-3	...	7E-03	1.9E-04	5E-02	6E-01	9.2E-03	1.1E+00	1.3E-01	1.0E-03	1.0E-03
Di-n-butyl phthalate	000084-74-2	...	1E+00	...	...	1E+02	...	...	...	...	...
Di-n-octyl phthalate	000117-84-0	...	1E-01	...	...	1E+01	...	...	...	...	...
Dibenz(a,h)anthracene	000053-70-3	...	...	2.9E-06	...	...	4.3E-04	...	...	...	...
Dibenzofuran	000132-64-9	...	1E-02	...	...	1E+00	...	...	...	...	...
Dibromo-3-chloropropane, 1,2-	000096-12-8	2E-04	3E-03	2E-05	...	2E-01	3E-03	...	...	...	...

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(mg/L)	(mg/L)	(mg/L)	(ppm)	(mg/kg)	(mg/kg)	Fresh	Salt	Fresh	Salt		
Dibromoethane, 1,2-	000106-93-4	...	1E-01	3E-05	...	1E+01	1E-03	...	...	...	...
Dibutyltin	001002-53-5	...	4E-03	...	...	4E-01	...	...	...	...	...
Dibutyltin dichloride	000683-18-1	...	6.1E-03	...	...	5.2E-01	...	...	...	...	...
Dichlorobenzene, 1,4-	000106-46-7	7.5E-02	1E+00	1.2E-02	...	9E+01	5.8E-01	...	...	...	...
Dichloroethane, 1,1-	000075-34-3	...	3E+00	1.1E-02	...	2E+02	5.5E-01	...	...	...	...
Dichloroethane, 1,2-	000107-06-2	5E-03	9E-02	7.3E-04	...	8E+00	3.4E-02	...	...	...	...
Dichloroethylene, 1,1-	000075-35-4	7E-03	7E-01	...	...	6E+01	...	...	...	...	...
Dichloroethylene, 1,2- (Mixed Isomers)	000540-59-0	...	1E-01	...	...	1E+01	...	...	...	...	...
Dichloroethylene, 1,2-cis-	000156-59-2	7E-02	3E-02	...	...	2E+00	...	...	...	...	...
Dichloroethylene, 1,2-trans-	000156-60-5	1E-01	3E-01	...	...	2E+01	...	...	...	...	...
Dichlorophenol, 2,4-	000120-83-2	...	4E-02	...	...	4E+00	...	...	...	...	...
Dichloropropane, 1,2-	000078-87-5	5E-03	1E+00	1.8E-03	...	1E+02	8.7E-02	...	...	...	...
Dichloropropene, 1,3-	000542-75-6	...	4E-01	6E-04	...	4E+01	3E-02	...	...	...	...
Dieldrin	000060-57-1	...	7E-04	4.2E-06	2E-02	6E-02	1.9E-04	2.4E-01	7.1E-01	5.6E-02	1.9E-03

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							Fresh	Salt	Fresh	Salt	
Diethyl phthalate	000084-66-2	...	1E+01	...	...	1E+03	...	...	...	...	...
Dimethyl phenol, 2,4-	000105-67-9	...	3E-01 *	...	...	2E+01 *	...	...	...	...	...
Dinitrobenzene, 1,3-	000099-65-0	...	1E-03	...	...	1E-01	...	...	...	...	...
Dioxane, 1,4-	000123-91-1	...	4E-01	6E-04	...	4E+01	3E-02	...	...	...	...
Dioxin, 1,4-	000290-67-5	...	...	...	...	...	...	...	...	...	...
Diphenylhydrazine, 1,2-	000122-66-7	...	...	8E-05	...	...	3E-03	...	...	...	...
Disulfoton	000298-04-4	...	6E-04	...	...	5E-02	...	...	...	...	...
Endosulfan (I or II)	000115-29-7	...	9E-02	...	...	8E+00	...	2.2E-01	3.4E-02	5.6E-02	8.7E-03
Endosulfan I	000959-98-8	...	9E-02	...	...	8E+00	...	2.2E-01	3.4E-02	5.6E-02	8.7E-03
Endosulfan II	033213-65-9	...	9E-02	...	...	8E+00	...	2.2E-01	3.4E-02	5.6E-02	8.7E-03
Endrin	000072-20-8	2E-03	4E-03	...	...	4E-01	...	8.6E-02	3.7E-02	3.6E-02	2.3E-03
Endrin aldehyde	007421-93-4	...	...	...	...	...	...	...	...	...	...
Ethyl chloride	000075-00-3	...	...	...	...	...	...	...	...	...	...
Ethylbenzene	000100-41-4	7E-01	1E+00	6.1E-03	...	1E+02	2.8E-01	...	...	...	...

\* Value was modified since the January 2014 publication of SCDM. See Change Control documentation for details (<http://www.epa.gov/superfund/sites/npl/hrsres/tools/changecontrol.pdf>)

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(mg/L)	(mg/L)	(mg/L)	(ppm)	(mg/kg)	(mg/kg)	Fresh	Salt	Fresh	Salt		
Ethylene glycol monobutyl ether (EBGE)	000111-76-2	...	1E+00	...	...	1E+02	...	...	...	...	...
Fluorene	000086-73-7	...	6E-01	...	...	5E+01	...	...	...	...	...
Fluorine	007782-41-4	...	9E-01	...	...	8E+01	...	...	...	...	...
Furfural	000098-01-1	...	4E-02	...	...	4E+00	...	...	...	...	...
Heptachlor	000076-44-8	4E-04	7E-03	1.4E-05	1E-02	6E-01	7.0E-04	5.2E-01	5.3E-02	3.8E-03	3.6E-03
Heptachlor epoxide	001024-57-3	2E-04	2.0E-04	7.3E-06	1E-02	1.7E-02	3.4E-04	5.2E-01	5.3E-02	3.8E-03	3.6E-03
Heptachlorodibenzo-p-dioxin	037871-00-4	...	...	...	...	...	...	...	...	...	...
Heptachlorodibenzo-p-dioxin, 1,2,3,4,6,7,8-	035822-46-9	...	1E-10	5.1E-08	...	9E-09	2.4E-06	...	...	...	...
Heptachlorodibenzofuran, 1,2,3,4,6,7,8-	067562-39-4	...	1E-10	5.1E-08	...	9E-09	2.4E-06	...	...	...	...
Heptachlorodibenzofuran, 1,2,3,4,7,8,9-	055673-89-7	...	1E-10	5.1E-08	...	9E-09	2.4E-06	...	...	...	...
Hexabromobiphenyl (PBB)	036355-01-8	...	...	...	...	...	...	...	...	...	...
Hexachlorobenzene	000118-74-1	1E-03	1E-02	4.2E-05	5E-02	1E+00	1.9E-03	...	...	...	...
Hexachlorobutadiene	000087-68-3	...	1E-02	8.6E-04	...	1E+00	4.0E-02	...	...	...	...
Hexachlorocyclohexane, alpha-	000319-84-6	...	1E-01	1.0E-05	...	1E+01	5.0E-04	...	...	...	...





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(mg/L)	(mg/L)	(mg/L)	(ppm)	(mg/kg)	(mg/kg)	Fresh	Salt	Fresh	Salt		
Lindane (Hexachlorocyclohexane, gamma-)	000058-89-9	2E-04	4E-03	6.1E-05	1E-01	4E-01	2.8E-03	9.5E-01	1.6E-01	1.6E-01	...
Manganese	007439-96-5	...	2.1E+00	...	...	1.8E+02	...	...	...	...	...
Mecoprop	000093-65-2	...	1E-02	...	...	1E+00	...	...	...	...	...
Mercury (elemental)	007439-97-6	2E-03	4E-03	...	1E+00	4E-01	...	1.4E+00	1.8E+00	7.7E-01	9.4E-01
Methoxychlor	000072-43-5	4E-02	7E-02	...	...	6E+00	...	...	...	3.0E-02	3.0E-02
Methyl Ethyl Ketone (2-Butanone)	000078-93-3	...	9E+00	...	...	8E+02	...	...	...	...	...
Methyl Parathion	000298-00-0	...	3.9E-03	...	...	3.3E-01	...	...	...	...	...
Methyl isobutyl ketone	000108-10-1	...	1E+00	...	...	1E+02	...	...	...	...	...
Methyl tert-Butyl Ether (MTBE)	001634-04-4	...	...	3.7E-02	...	...	1.7E+00	...	...	...	...
Methyl-4-chlorophenoxyacetic acid, 2- (MCPA)	000094-74-6	...	7E-03	...	...	6E-01	...	...	...	...	...
Methylene Chloride	000075-09-2	5E-03	9E-02	1E-02	...	8E+00	1E+00	...	...	...	...
Methylnaphthalene, 2-	000091-57-6	...	6E-02	...	...	5E+00	...	...	...	...	...
Methylphenol, 4-	000106-44-5	...	1E+00	...	...	1E+02	...	...	...	...	...
Naphthalene	000091-20-3	...	3E-01	...	...	2E+01	...	...	...	...	...



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(mg/L)	(mg/L)	(mg/L)	(ppm)	(mg/kg)	(mg/kg)	Fresh	Salt	Fresh	Salt		
Polychlorinated biphenyls (PCBs)	001336-36-3	5E-04	3E-04	3E-05	3E+00	2E-02	1E-03	...	...	1.4E-02	3.0E-02
Pyrene	000129-00-0	...	4E-01	...	...	4E+01	...	...	...	...	...
Radium	007440-14-4	...	...	...	...	...	...	...	...	...	...
Radon	010043-92-2	...	...	...	...	...	...	...	...	...	...
Selenium	007782-49-2	5E-02	7E-02	...	...	6E+00	...	2.9E+02	2.9E+02	5.0E+00	7.1E+01
Silver	007440-22-4	...	7E-02	...	...	6E+00	...	3.2E+00	1.9E+00	...	...
Strontium	007440-24-6	...	9E+00	...	...	8E+02	...	...	...	...	...
Styrene	000100-42-5	1E-01	3E+00	...	...	2E+02	...	...	...	...	...
Tetrachlorobenzene, 1,2,4,5-	000095-94-3	...	4E-03	...	...	4E-01	...	...	...	...	...
Tetrachlorodibenzo-p-dioxin	041903-57-5	...	...	...	...	...	...	...	...	...	...
Tetrachlorodibenzo-p-dioxin, 2,3,7,8- (TCDD)	001746-01-6	3E-08	1E-08	5.1E-10	...	9E-07 *	2.4E-08	...	...	...	...
Tetrachlorodibenzofuran, 2,3,7,8-	051207-31-9	...	1E-09	5.1E-08	...	9E-08	2.4E-06	...	...	...	...
Tetrachloroethane, 1,1,2,2-	000079-34-5	...	3E-01	3E-04	...	2E+01	1E-02	...	...	...	...
Tetrachloroethylene	000127-18-4	5E-03	9E-02	3.2E-02	...	8E+00	1.5E+00	...	...	...	...

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		MCL/MCLG	Reference Dose Screen Conc.	Cancer Risk Screen Conc.	FDAAL	Ref. Dose Screen Conc.	Cancer Risk Screen Conc.	Acute CMC (µg/L)		Chronic CCC (µg/L)	
(mg/L)	(mg/L)	(mg/L)	(ppm)	(mg/kg)	(mg/kg)	Fresh	Salt	Fresh	Salt		
Tetrahydrothiophene, 1, 1-dioxide	000126-33-0	...	1E-02	...	...	1E+00	...	...	...	...	...
Thallium	007440-28-0	2E-03	1E-04	...	...	1E-02	...	...	...	...	...
Toluene	000108-88-3	1E+00	1E+00	...	...	1E+02	...	...	...	...	...
Toxaphene	008001-35-2	3E-03	3E-02	6.1E-05	...	2E+00	2.8E-03	7.3E-01	2.1E-01	2.0E-04	2.0E-04
Tributyltin	000688-73-3	...	4E-03	...	...	4E-01	...	4.6E-01	4.2E-01	7.2E-02	7.4E-03
Tributyltin chloride	001461-22-9	...	5.1E-03	...	...	4.4E-01	...	...	...	...	...
Tributyltin oxide	000056-35-9	...	4E-03	...	...	4E-01	...	...	...	...	...
Trichlorobenzene, 1,2,4-	000120-82-1	7E-02	1E-01	2.3E-03	...	1E+01	1.0E-01	...	...	...	...
Trichloroethane, 1,1,1-	000071-55-6	2E-01	3E+01	...	...	2E+03	...	...	...	...	...
Trichloroethane, 1,1,2-	000079-00-5	5E-03	6E-02	1.1E-03	...	5E+00	5.5E-02	...	...	...	...
Trichloroethylene	000079-01-6	5E-03	7E-03	1.0E-03	...	6E-01	6.8E-02	...	...	...	...
Trichlorofluoromethane	000075-69-4	...	4E+00	...	...	4E+02	...	...	...	...	...
Trichlorophenol, 2,4,6-	000088-06-2	...	1E-02	6.1E-03	...	1E+00	2.8E-01	...	...	...	...
Trichlorophenoxyacetic acid, 2,4,5- (2,4,5-T)	000093-76-5	...	1E-01	...	...	1E+01	...	...	...	...	...

**HAZARD RANKING SYSTEM**  
Hazardous Substance Benchmarks

Substance Name	CAS Number	Ground Water/Surface Water Pathway			Surface Water Pathway			Surface Water Pathway			
		Drinking Water			Food Chain			Environmental			
		MCL/MCLG	Reference Dose Screen Conc.	Cancer Risk Screen Conc.	FDAAL	Ref. Dose Screen Conc.	Cancer Risk Screen Conc.	Acute CMC (µg/L)		Chronic CCC (µg/L)	
(mg/L)	(mg/L)	(mg/L)	(ppm)	(mg/kg)	(mg/kg)	Fresh	Salt	Fresh	Salt		
Trichloropropane, 1,2,3-	000096-18-4	...	6E-02	7.1E-07	...	5E+00	1.0E-04	...	...	...	...
Trifluralin (Treflan)	001582-09-8	...	1.1E-01	8.7E-03	...	1.0E+01	4.0E-01	...	...	...	...
Trinitrobenzene, 1,3,5-	000099-35-4	...	4E-01	...	...	4E+01	...	...	...	...	...
Uranium	007440-61-1	3E-02	4E-02	...	...	4E+00	...	...	...	...	...
Vanadium	007440-62-2	...	1E-01	...	...	1E+01	...	...	...	...	...
Vinyl Acetate	000108-05-4	...	1E+01	...	...	1E+03	...	...	...	...	...
Vinyl Chloride	000075-01-4	2E-03	4E-02	1.7E-05	...	4E+00	4.3E-03	...	...	...	...
Xylene, P-	000106-42-3	...	3E+00	...	...	2E+02	...	...	...	...	...
Xylene, m-	000108-38-3	...	3E+00	...	...	2E+02	...	...	...	...	...
Xylene, o-	000095-47-6	...	3E+00	...	...	2E+02	...	...	...	...	...
Xylenes	001330-20-7	1E+01	3E+00	...	...	2E+02	...	...	...	...	...
Zinc	007440-66-6	...	4E+00	...	...	4E+02	...	1.2E+02	9.0E+01	1.2E+02	8.1E+01

HAZARD RANKING SYSTEM  
Hazardous Substance Benchmarks

Substance Name	CAS Number	AIR PATHWAY			SOIL PATHWAY	
		NAAQS NESHAPS ( $\mu\text{g}/\text{m}^3$ )	Reference Dose Screen Conc. ( $\text{mg}/\text{m}^3$ )	Cancer Risk Screen Conc. ( $\text{mg}/\text{m}^3$ )	Reference Dose Screen Conc. ( $\text{mg}/\text{kg}$ )	Cancer Risk Screen Conc. ( $\text{mg}/\text{kg}$ )
Acenaphthene	000083-32-9	...	...	...	4E+03	...
Acenaphthylene	000208-96-8	...	...	...	...	...
Acetone	000067-64-1	...	3.1E+01	...	7E+04	...
Acrolein	000107-02-8	...	2E-05	...	3E+01	...
Acrylamide	000079-06-1	...	6E-03	9E-06	1E+02	2E-01
Alachlor	015972-60-8	...	...	...	7E+02	1E+01
Aldrin	000309-00-2	...	...	4.9E-07	2E+00	3.7E-02
Aluminum	007429-90-5	...	5E-03	...	7E+04	...
Americium	007440-35-9	...	...	...	...	...
Ammonia	007664-41-7	...	1E-01	...	...	...
Aniline	000062-53-3	...	1E-03	1.5E-03	5E+02	1.1E+02
Anthracene	000120-12-7	...	...	...	2E+04	...
Antimony	007440-36-0	...	2E-04	...	3E+01	...
Arsenic	007440-38-2	...	1.5E-05	5.6E-07	3E+01	7.1E-01

HAZARD RANKING SYSTEM  
Hazardous Substance Benchmarks

Substance Name	CAS Number	AIR PATHWAY			SOIL PATHWAY	
		NAAQS NESHAPS ( $\mu\text{g}/\text{m}^3$ )	Reference Dose Screen Conc. ( $\text{mg}/\text{m}^3$ )	Cancer Risk Screen Conc. ( $\text{mg}/\text{m}^3$ )	Reference Dose Screen Conc. ( $\text{mg}/\text{kg}$ )	Cancer Risk Screen Conc. ( $\text{mg}/\text{kg}$ )
Asbestos	001332-21-4	...	...	4.5E-06 <sup>A1</sup>	...	3.3E+03
Atrazine	001912-24-9	...	...	...	2.7E+03	2.78E+00
Barium	007440-39-3	...	5E-04	...	1E+04	...
Benz(a)anthracene	000056-55-3	...	...	8.7E-06	...	2.0E-01
Benzene	000071-43-2	...	3E-02	3.1E-04	3E+02	1.1E+01
Benzidine	000092-87-5	...	...	1.4E-08	2E+02	6.4E-04
Benzo(a)pyrene	000050-32-8	...	...	8.7E-07	...	2.0E-02
Benzo(g,h,i)perylene	000191-24-2	...	...	...	...	...
Benzo(j,k)fluorene (Fluoranthene)	000206-44-0	...	...	...	3E+03	...
Benzo(k)fluoranthene	000207-08-9	...	...	8.7E-06	...	2.0E+00
Beryllium	007440-41-7	...	2E-05	1.0E-06	1E+02	...
Bis(2-ethylhexyl) phthalate	000117-81-7	...	...	4.0E-04	1E+03	1.0E+01
Boron	007440-42-8	...	2E-02	...	1E+04	...
Bromodichloromethane	000075-27-4	...	...	6.5E-05	1E+03	1.0E+01

HAZARD RANKING SYSTEM  
Hazardous Substance Benchmarks

Substance Name	CAS Number	AIR PATHWAY			SOIL PATHWAY	
		NAAQS NESHAPS ( $\mu\text{g}/\text{m}^3$ )	Reference Dose Screen Conc. ( $\text{mg}/\text{m}^3$ )	Cancer Risk Screen Conc. ( $\text{mg}/\text{m}^3$ )	Reference Dose Screen Conc. ( $\text{mg}/\text{kg}$ )	Cancer Risk Screen Conc. ( $\text{mg}/\text{kg}$ )
Butylbenzyl phthalate	000085-68-7	...	...	...	1E+04	3.3E+02
Cadmium	007440-43-9	...	1E-05	1.3E-06	3E+01	...
Carbazole	000086-74-8	...	...	...	...	3E+01
Carbon Disulfide	000075-15-0	...	7E-01	...	7E+03	...
Carbon Tetrachloride	000056-23-5	...	1E-01	4E-04	3E+02	9E+00
Cesium	007440-46-2	...	...	...	...	...
Chlordane	012789-03-6	...	7E-04	2E-05	3E+01	1.8E+00
Chlordane, alpha-	005103-71-9	...	7E-04	2E-05	3E+01	1.8E+00
Chlordane, gamma-	005103-74-2	...	7E-04	2E-05	3E+01	1.8E+00
Chlorobenzene	000108-90-7	...	5E-02	...	1E+03	...
Chloroform	000067-66-3	...	9E-02	1.0E-04	7E+02	2.0E+01
Chromium	007440-47-3	...	8E-06	...	2E+02	...
Chromium(III)	016065-83-1	...	...	...	1.1E+05	...
Chromium(VI)	018540-29-9	...	8E-06	8.0E-08	2E+02	2E-01



HAZARD RANKING SYSTEM  
Hazardous Substance Benchmarks

Substance Name	CAS Number	AIR PATHWAY			SOIL PATHWAY	
		NAAQS NESHAPS ( $\mu\text{g}/\text{m}^3$ )	Reference Dose Screen Conc. ( $\text{mg}/\text{m}^3$ )	Cancer Risk Screen Conc. ( $\text{mg}/\text{m}^3$ )	Reference Dose Screen Conc. ( $\text{mg}/\text{kg}$ )	Cancer Risk Screen Conc. ( $\text{mg}/\text{kg}$ )
Chrysene	000218-01-9	...	...	8.7E-05	...	2.0E+01
Cobalt	007440-48-4	...	6E-06	2E-07	2E+01	...
Copper	007440-50-8	...	...	...	3E+03	...
Cumene	000098-82-8	...	4E-01	...	7E+03	...
Cyanamide	000420-04-2	...	...	...	...	...
Cyanide	000057-12-5	...	8E-04	...	4E+01	...
DDD	000072-54-8	...	...	...	...	2.6E+00
DDE	000072-55-9	...	...	...	...	1.8E+00
DDT	000050-29-3	...	...	2.5E-05	3E+01	1.8E+00
Di-n-butyl phthalate	000084-74-2	...	...	...	7E+03	...
Di-n-octyl phthalate	000117-84-0	...	...	...	7E+02	...
Dibenz(a,h)anthracene	000053-70-3	...	...	8.7E-07	...	2.0E-02
Dibenzofuran	000132-64-9	...	...	...	7E+01	...
Dibromo-3-chloropropane, 1,2-	000096-12-8	...	2E-04	1E-07	1E+01	1E-01

HAZARD RANKING SYSTEM  
Hazardous Substance Benchmarks

Substance Name	CAS Number	AIR PATHWAY			SOIL PATHWAY	
		NAAQS NESHAPS ( $\mu\text{g}/\text{m}^3$ )	Reference Dose Screen Conc. ( $\text{mg}/\text{m}^3$ )	Cancer Risk Screen Conc. ( $\text{mg}/\text{m}^3$ )	Reference Dose Screen Conc. ( $\text{mg}/\text{kg}$ )	Cancer Risk Screen Conc. ( $\text{mg}/\text{kg}$ )
Dibromoethane, 1,2-	000106-93-4	...	9E-03	4E-06	7E+02	3E-01
Dibutyltin	001002-53-5	...	...	...	2E+01	...
Dibutyltin dichloride	000683-18-1	...	...	...	3.0E+01	...
Dichlorobenzene, 1,4-	000106-46-7	...	8E-01	2.2E-04	5E+03	1.1E+02
Dichloroethane, 1,1-	000075-34-3	...	...	1.5E-03	1E+04	1.1E+02
Dichloroethane, 1,2-	000107-06-2	...	7E-03	9.3E-05	4E+02	7.0E+00
Dichloroethylene, 1,1-	000075-35-4	...	2E-01	...	3E+03	...
Dichloroethylene, 1,2- (Mixed Isomers)	000540-59-0	...	...	...	7E+02	...
Dichloroethylene, 1,2-cis-	000156-59-2	...	...	...	1E+02	...
Dichloroethylene, 1,2-trans-	000156-60-5	...	8E-01 *	...	1E+03	...
Dichlorophenol, 2,4-	000120-83-2	...	...	...	2E+02	...
Dichloropropane, 1,2-	000078-87-5	...	4E-03	2E-04	7E+03	1.7E+01
Dichloropropene, 1,3-	000542-75-6	...	2E-02	6E-04	2E+03	6E+00
Dieldrin	000060-57-1	...	...	5.2E-07	3E+00	4.0E-02

\* Value was modified since the January 2014 publication of SCDM. See Change Control documentation for details (<http://www.epa.gov/superfund/sites/npl/hrsres/tools/changecontrol.pdf>)

HAZARD RANKING SYSTEM  
Hazardous Substance Benchmarks

Substance Name	CAS Number	AIR PATHWAY			SOIL PATHWAY	
		NAAQS NESHAPS ( $\mu\text{g}/\text{m}^3$ )	Reference Dose Screen Conc. ( $\text{mg}/\text{m}^3$ )	Cancer Risk Screen Conc. ( $\text{mg}/\text{m}^3$ )	Reference Dose Screen Conc. ( $\text{mg}/\text{kg}$ )	Cancer Risk Screen Conc. ( $\text{mg}/\text{kg}$ )
Diethyl phthalate	000084-66-2	...	...	...	6E+04	...
Dimethyl phenol, 2,4-	000105-67-9	...	...	...	1E+03 *	...
Dinitrobenzene, 1,3-	000099-65-0	...	...	...	7E+00	...
Dioxane, 1,4-	000123-91-1	...	3E-02	4E-04	2E+03	6E+00
Dioxin, 1,4-	000290-67-5	...	...	...	...	...
Diphenylhydrazine, 1,2-	000122-66-7	...	...	1.1E-05	...	8E-01
Disulfoton	000298-04-4	...	2E-04	...	3E+00	...
Endosulfan (I or II)	000115-29-7	...	...	...	4E+02	...
Endosulfan I	000959-98-8	...	...	...	4E+02	...
Endosulfan II	033213-65-9	...	...	...	4E+02	...
Endrin	000072-20-8	...	...	...	2E+01	...
Endrin aldehyde	007421-93-4	...	...	...	...	...
Ethyl chloride	000075-00-3	...	1E+01	...	...	...
Ethylbenzene	000100-41-4	...	1E+00	9.7E-04	7E+03	5.8E+01

\* Value was modified since the January 2014 publication of SCDM. See Change Control documentation for details (<http://www.epa.gov/superfund/sites/npl/hrsres/tools/changecontrol.pdf>)

HAZARD RANKING SYSTEM  
Hazardous Substance Benchmarks

Substance Name	CAS Number	AIR PATHWAY			SOIL PATHWAY	
		NAAQS NESHAPS ( $\mu\text{g}/\text{m}^3$ )	Reference Dose Screen Conc. ( $\text{mg}/\text{m}^3$ )	Cancer Risk Screen Conc. ( $\text{mg}/\text{m}^3$ )	Reference Dose Screen Conc. ( $\text{mg}/\text{kg}$ )	Cancer Risk Screen Conc. ( $\text{mg}/\text{kg}$ )
Ethylene glycol monobutyl ether (EBGE)	000111-76-2	...	1.6E+00	...	7E+03	...
Fluorene	000086-73-7	...	...	...	3E+03	...
Fluorine	007782-41-4	...	1.3E-02	...	4E+03	...
Furfural	000098-01-1	...	5E-02	...	2E+02	...
Heptachlor	000076-44-8	...	...	1.8E-06	3E+01	1.4E-01
Heptachlor epoxide	001024-57-3	...	...	9.3E-07	1.0E+00	7.0E-02
Heptachlorodibenzo-p-dioxin	037871-00-4	...	...	...	...	...
Heptachlorodibenzo-p-dioxin, 1,2,3,4,6,7,8-	035822-46-9	...	...	6.4E-09	5E-07	4.9E-04
Heptachlorodibenzofuran, 1,2,3,4,6,7,8-	067562-39-4	...	...	6.4E-09	5E-07	4.9E-04
Heptachlorodibenzofuran, 1,2,3,4,7,8,9-	055673-89-7	...	...	6.4E-09	5E-07	4.9E-04
Hexabromobiphenyl (PBB)	036355-01-8	...	...	...	...	...
Hexachlorobenzene	000118-74-1	...	...	5.2E-06	6E+01	4.0E-01
Hexachlorobutadiene	000087-68-3	...	...	1.1E-04	7E+01	8.2E+00
Hexachlorocyclohexane, alpha-	000319-84-6	...	...	1.3E-06	6E+02	1.0E-01

HAZARD RANKING SYSTEM  
Hazardous Substance Benchmarks

Substance Name	CAS Number	AIR PATHWAY			SOIL PATHWAY	
		NAAQS NESHAPS ( $\mu\text{g}/\text{m}^3$ )	Reference Dose Screen Conc. ( $\text{mg}/\text{m}^3$ )	Cancer Risk Screen Conc. ( $\text{mg}/\text{m}^3$ )	Reference Dose Screen Conc. ( $\text{mg}/\text{kg}$ )	Cancer Risk Screen Conc. ( $\text{mg}/\text{kg}$ )
Hexachlorocyclohexane, beta-	000319-85-7	...	...	4.5E-06	4E+01	3.5E-01
Hexachlorodibenzo-p-dioxin, 1,2,3,4,7,8-	039227-28-6	...	...	6.4E-10	5E-06	4.9E-05
Hexachlorodibenzo-p-dioxin, 1,2,3,6,7,8-	057653-85-7	...	...	1.8E-09	5E-06	1.0E-04
Hexachlorodibenzo-p-dioxin, 1,2,3,7,8,9-	019408-74-3	...	...	1.8E-09	5E-06	1.0E-04
Hexachlorodibenzofuran, 1,2,3,4,7,8-	070648-26-9	...	...	6.4E-10	5E-06	4.9E-05
Hexachlorodibenzofuran, 1,2,3,6,7,8-	057117-44-9	...	...	6.4E-10	5E-06	4.9E-05
Hexachlorodibenzofuran, 1,2,3,7,8,9-	072918-21-9	...	...	6.4E-10	5E-06	4.9E-05
Hexachlorodibenzofuran, 2,3,4,6,7,8-	060851-34-5	...	...	6.4E-10	5E-06	4.9E-05
Hydrazine	000302-01-2	...	3E-05	4.9E-07	...	2E-01
Hydrogen sulfide	007783-06-4	...	2E-03	...	2E+03	...
Indeno(1,2,3-cd)pyrene	000193-39-5	...	...	8.7E-06	...	2.0E-01
Iron	007439-89-6	...	...	...	5E+04	...
Lead	007439-92-1	...	...	...	...	...
Lead chromate	007758-97-6	...	...	...	...	...

HAZARD RANKING SYSTEM  
Hazardous Substance Benchmarks

Substance Name	CAS Number	AIR PATHWAY			SOIL PATHWAY	
		NAAQS NESHAPS ( $\mu\text{g}/\text{m}^3$ )	Reference Dose Screen Conc. ( $\text{mg}/\text{m}^3$ )	Cancer Risk Screen Conc. ( $\text{mg}/\text{m}^3$ )	Reference Dose Screen Conc. ( $\text{mg}/\text{kg}$ )	Cancer Risk Screen Conc. ( $\text{mg}/\text{kg}$ )
Lindane (Hexachlorocyclohexane, gamma-)	000058-89-9	...	...	7.8E-06	2E+01	5.8E-01
Manganese	007439-96-5	...	5E-05	...	1.0E+04	...
Mecoprop	000093-65-2	...	...	...	7E+01	...
Mercury (elemental)	007439-97-6	...	3E-04	...	2E+01	...
Methoxychlor	000072-43-5	...	...	...	3E+02	...
Methyl Ethyl Ketone (2-Butanone)	000078-93-3	...	5E+00	...	4E+04	...
Methyl Parathion	000298-00-0	...	...	...	1.9E+01	...
Methyl isobutyl ketone	000108-10-1	...	3E+00	...	6E+03	...
Methyl tert-Butyl Ether (MTBE)	001634-04-4	...	3E+00	9.3E-03	...	3.5E+02
Methyl-4-chlorophenoxyacetic acid, 2- (MCPA)	000094-74-6	...	...	...	3E+01	...
Methylene Chloride	000075-09-2	...	6E-01	9E-02	4E+02	7E+01
Methylnaphthalene, 2-	000091-57-6	...	...	...	3E+02	...
Methylphenol, 4-	000106-44-5	...	6E-01	...	7E+03	...
Naphthalene	000091-20-3	...	3E-03	7.1E-05	1E+03	...

**HAZARD RANKING SYSTEM**  
**Hazardous Substance Benchmarks**

Substance Name	CAS Number	AIR PATHWAY			SOIL PATHWAY	
		NAAQS NESHAPS ( $\mu\text{g}/\text{m}^3$ )	Reference Dose Screen Conc. ( $\text{mg}/\text{m}^3$ )	Cancer Risk Screen Conc. ( $\text{mg}/\text{m}^3$ )	Reference Dose Screen Conc. ( $\text{mg}/\text{kg}$ )	Cancer Risk Screen Conc. ( $\text{mg}/\text{kg}$ )
Nickel	007440-02-0	...	9E-05	5.0E-06	1E+03	...
Nitrobenzene	000098-95-3	...	9E-03	6E-05	1E+02	...
Nitrosodimethylamine, N-	000062-75-9	...	4E-05	6.8E-08	6E-01	2.9E-03
Nitrosodiphenylamine, N-	000086-30-6	...	...	9.3E-04	...	1.3E+02
Octachlorodibenzo-p-Dioxin 1,2,3,4,6,7,8,9- (OCDD)	003268-87-9	...	...	2.2E-07	1E-08	1.6E-02
Octachlorodibenzofuran 1,2,3,4, 6,7,8,9-(OCDF)	039001-02-0	...	...	2.2E-07	1E-08	1.6E-02
Pentachlorodibenzo-p-dioxin, 1,2,3,7,8-	040321-76-4	...	...	6.4E-11	5E-05	4.9E-06
Pentachlorodibenzofuran, 1,2,3,7,8-	057117-41-6	...	...	2.2E-09	1E-06	1.6E-04
Pentachlorodibenzofuran, 2,3,4,7,8-	057117-31-4	...	...	2.2E-10	1E-05	1.6E-05
Pentachlorophenol (PCP)	000087-86-5	...	...	4.7E-04	3E+02	1E+00
Perchlorate	014797-73-0	...	...	...	5E+01	...
Phenanthrene	000085-01-8	...	...	...	...	...
Phenol	000108-95-2	...	2E-01	...	2E+04	...
Plutonium	007440-07-5	...	...	...	...	...

HAZARD RANKING SYSTEM  
Hazardous Substance Benchmarks

Substance Name	CAS Number	AIR PATHWAY			SOIL PATHWAY	
		NAAQS NESHAPS ( $\mu\text{g}/\text{m}^3$ )	Reference Dose Screen Conc. ( $\text{mg}/\text{m}^3$ )	Cancer Risk Screen Conc. ( $\text{mg}/\text{m}^3$ )	Reference Dose Screen Conc. ( $\text{mg}/\text{kg}$ )	Cancer Risk Screen Conc. ( $\text{mg}/\text{kg}$ )
Polychlorinated biphenyls (PCBs)	001336-36-3	...	...	2E-05	1E+00	3E-01
Pyrene	000129-00-0	...	...	...	2E+03	...
Radium	007440-14-4	...	...	...	...	...
Radon	010043-92-2	...	...	...	...	...
Selenium	007782-49-2	...	2E-02	...	3E+02	...
Silver	007440-22-4	...	...	...	3E+02	...
Strontium	007440-24-6	...	...	...	4E+04	...
Styrene	000100-42-5	...	1E+00	...	1E+04	...
Tetrachlorobenzene, 1,2,4,5-	000095-94-3	...	...	...	2E+01	...
Tetrachlorodibenzo-p-dioxin	041903-57-5	...	...	...	...	...
Tetrachlorodibenzo-p-dioxin, 2,3,7,8- (TCDD)	001746-01-6	...	...	6.4E-11	5E-05	4.9E-06
Tetrachlorodibenzofuran, 2,3,7,8-	051207-31-9	...	...	6.4E-10	5E-06	4.9E-04
Tetrachloroethane, 1,1,2,2-	000079-34-5	...	...	4.1E-05	1E+03	3E+00
Tetrachloroethylene	000127-18-4	...	4E-02	9.3E-03	4E+02	3.0E+02



HAZARD RANKING SYSTEM  
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Tetrahydrothiophene, 1, 1-dioxide	000126-33-0	...	2E-02	...	7E+01	...
Thallium	007440-28-0	...	...	...	7E-01	...
Toluene	000108-88-3	...	5E+00	...	6E+03	...
Toxaphene	008001-35-2	...	...	7.6E-06	1E+02	5.8E-01
Tributyltin	000688-73-3	...	...	...	2E+01	...
Tributyltin chloride	001461-22-9	...	...	...	2.5E+01	...
Tributyltin oxide	000056-35-9	...	...	...	2E+01	...
Trichlorobenzene, 1,2,4-	000120-82-1	...	2E-03	...	7E+02	2.2E+01
Trichloroethane, 1,1,1-	000071-55-6	...	5E+00	...	1E+05	...
Trichloroethane, 1,1,2-	000079-00-5	...	2E-04	1.5E-04	3E+02	1.1E+01
Trichloroethylene	000079-01-6	...	2E-03	4E-04	3E+01	8.3E+00
Trichlorofluoromethane	000075-69-4	...	7E-01	...	2E+04	...
Trichlorophenol, 2,4,6-	000088-06-2	...	...	7.8E-04	7E+01	5.8E+01
Trichlorophenoxyacetic acid, 2,4,5- (2,4,5-T)	000093-76-5	...	...	...	7E+02	...

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Trichloropropane, 1,2,3-	000096-18-4	...	3E-04	...	3E+02	4.9E-03
Trifluralin (Treflan)	001582-09-8	...	...	...	5.8E+02	8.3E+01
Trinitrobenzene, 1,3,5-	000099-35-4	...	...	...	2E+03	...
Uranium	007440-61-1	...	4E-05	...	2E+02	...
Vanadium	007440-62-2	...	7E-06	2.9E-07	7E+02	...
Vinyl Acetate	000108-05-4	...	2E-01	...	7E+04	...
Vinyl Chloride	000075-01-4	...	1E-01	1.6E-04	2E+02	9.3E-02
Xylene, P-	000106-42-3	...	1E-01	...	1E+04	...
Xylene, m-	000108-38-3	...	1E-01	...	1E+04	...
Xylene, o-	000095-47-6	...	1E-01	...	1E+04	...
Xylenes	001330-20-7	...	1E-01	...	1E+04	...
Zinc	007440-66-6	...	...	...	2E+04	...

**HAZARD RANKING SYSTEM**  
Hazardous Substance Benchmarks

Substance Name	CAS Number	DRINKING WATER		FOOD CHAIN	AIR	SOIL		
		MCL (pCi/L)	Cancer Risk Screen Conc. (pCi/L)	Cancer Risk Screen Conc. (pCi/kg)	Cancer Risk Screen Conc. (pCi/m3)	UMTRCA (pCi/kg)	Cancer Risk Soil Ing (pCi/kg)	Cancer Risk Soil Gam (pCi/kg)
Americium 241(radionuclide)	014596-10-2	1.5E+01	5.08E-01	1.31E+01	1.88E-04	...	3.74E+03	3.85E+03
Antimony 125(+D)(radionuclide)	014234-35-6	...	1.03E+01	2.44E+02	2.74E-01	...	...	...
Cadmium 109(radionuclide)	014109-32-1	6E+02	1E+01	2.6E+02	2.41E-01	...	1.13E+06	1.88E+05
Cesium 137(+D)(radionuclide)	010045-97-3	...	1.74E+00	4.71E+01	4.44E-01	...	2.54E+04	6.24E+01
Cobalt 57(radionuclide)	013981-50-5	1E+03	5.08E+01	1.18E+03	2.53E+00	...	7.99E+06	8.15E+03
Cobalt 60(radionuclide)	010198-40-0	1E+02	3.37E+00	7.90E+01	1.47E-01	...	7.89E+04	3.88E+01
Iron 55(radionuclide)	014681-59-5	2E+03	6.13E+01	1.52E+03	6.62E+00	...	2.92E+06	...
Lead 210(+D)(radionuclide)	014255-04-0	...	4.16E-02	5.12E-01	3.80E-04	...	...	...
Manganese 54(radionuclide)	013966-31-9	3E+02	2.32E+01	5.67E+02	8.99E-01	...	3.74E+06	7.29E+02
Nickel 59(radionuclide)	014336-70-0	3E+02	1.93E+02	4.53E+03	2.19E+00	...	1.08E+06	...
Nickel 63(radionuclide)	013981-37-8	5E+01	7.8E+01	1.85E+03	9.16E-01	...	4.93E+05	...
Plutonium 236(radionuclide)	015411-92-4	1.5E+01	7.08E-01	1.77E+01	2.32E-04	...	3.32E+04	6.15E+06
Plutonium 238(radionuclide)	013981-16-3	1.5E+01	4.03E-01	1.04E+01	1.57E-04	...	3.2E+03	1.5E+06
Plutonium 239(radionuclide)	015117-48-3	1.5E+01	3.91E-01	1.01E+01	1.58E-04	...	2.87E+03	5E+05

**HAZARD RANKING SYSTEM**  
Hazardous Substance Benchmarks

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		MCL (pCi/L)	Cancer Risk Screen Conc. (pCi/L)	Cancer Risk Screen Conc. (pCi/kg)	Cancer Risk Screen Conc. (pCi/m3)	UMTRCA (pCi/kg)	Cancer Risk Soil Ing (pCi/kg)	Cancer Risk Soil Gam (pCi/kg)
Plutonium 240(radionuclide)	014119-33-6	1.5E+01	3.91E-01	1.01E+01	1.58E-04	...	2.86E+03	1.44E+06
Plutonium 241 (+D)(radionuclide)	014119-32-5	...	...	...	...	...	...	...
Plutonium 242(radionuclide)	013982-10-0	1.5E+01	4.13E-01	1.06E+01	1.69E-04	...	3.01E+03	1.60E+06
Plutonium 243(radionuclide)	015706-37-3	...	1.11E+02	2.54E+03	1.79E+01	...	2.16E+10	7.0E+07
Plutonium 244(+D)(radionuclide)	014119-34-7	...	3.67E-01	9.2E+00	1.80E-04	...	2.52E+03	6.82E+01
Radium 226(+D)(radionuclide)	013982-63-3	...	1.37E-01	3.42E+00	4.56E-04	5	1.0E+03	1.28E+01
Radium 228(+D)(radionuclide)	015262-20-1	...	5.08E-02	1.23E+00	1.01E-03	5	1.29E+03	3.28E+01
Radon 222(+D)(radionuclide)	014859-67-7	...	...	...	2.9E-01	...	...	2.53E+04
Silver 108m(+D)(radionuclide)	014391-65-2	...	...	...	...	...	...	...
Silver 110m(radionuclide)	014391-76-5	9E+01	5.35E+00	1.28E+02	1.86E-01	...	1.01E+06	1.29E-02
Strontium 90(+D)(radionuclide)	010098-97-2	...	7.1E-01	1.85E+01	4.68E-02	...	7.71E+03	7E+03
Technetium 99(radionuclide)	014133-76-7	9E+02	1.92E+01	4E+02	3.75E-01	...	1.03E+05	1.32E+06
Thallium 204(radionuclide)	013968-51-9	3E+02	9.04E+00	2.13E+02	2.15E+00	...	2.84E+05	2.08E+05
Thorium 227(radionuclide)	015623-47-9	1.5E+01	1.11E+00	2.54E+01	1.50E-04	...	2.34E+06	1.10E+05

**HAZARD RANKING SYSTEM**  
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Substance Name	CAS Number	DRINKING WATER		FOOD CHAIN	AIR	SOIL		
		MCL (pCi/L)	Cancer Risk Screen Conc. (pCi/L)	Cancer Risk Screen Conc. (pCi/kg)	Cancer Risk Screen Conc. (pCi/m3)	UMTRCA (pCi/kg)	Cancer Risk Soil Ing (pCi/kg)	Cancer Risk Soil Gam (pCi/kg)
Thorium 228(+D)(radionuclide)	014274-82-9	...	1E-01	4.17E+00	3.70E-05	...	...	...
Thorium 229(+D)(radionuclide)	015594-54-4	...	1.00E-01	2.46E+00	2.35E-05	...	6.16E+02	8.83E+01
Thorium 230(radionuclide)	014269-63-7	1.5E+01	5.8E-01	1.48E+01	1.85E-04	...	3E+03	1E+05
Thorium 231(radionuclide)	014932-40-2	...	2.39E+01	5.44E+02	3.48E+00	...	8.90E+08	2.96E+07
Thorium 232(radionuclide)	007440-29-1	1.5E+01	5.23E-01	1.32E+01	1.22E-04	...	3.43E+03	2.93E+05
Thorium 234(radionuclide)	015065-10-8	...	2.29E+00	5.1E+01	1.72E-01	...	3.7E+06	2.01E+06
Tritium(radionuclide)	010028-17-8	2E+04	1.04E+03	1.22E+04	9.41E+01	...	7.4E+06	...
Uranium 232(radionuclide)	014158-29-3	2E+01	1.81E-01	4.58E+00	2.71E-04	...	1.59E+03	1.93E+05
Uranium 233(radionuclide)	013968-55-3	2E+01	7.36E-01	1.82E+01	4.56E-04	...	4.9E+03	1.02E+05
Uranium 234(radionuclide)	013966-29-5	2E+01	7.48E-01	1.84E+01	4.64E-04	30	5.02E+03	3.98E+05
Uranium 235(+D)(radionuclide)	015117-96-1	...	7.36E-01	1.80E+01	5.23E-04	...	4.86E+03	1.9E+02
Uranium 236(+D)(radionuclide)	013982-70-2	...	...	...	...	...	...	...
Uranium 238(+D)(radionuclide)	024678-82-8	...	6.07E-01	1.45E+01	5.65E-04	30	3.7E+03	8.98E+02
Zinc 65(radionuclide)	013982-39-3	3E+02	4.52E+00	1.14E+02	9.10E-01	...	1.01E+06	1.32E+03