









IDEM Published Levels Table 1 Human Health: Standard Exposure Scenarios	Medium >	SOIL			GROUNDWATER	INDOOR AIR		SOIL GAS OR CONDUIT VAPOR					
	Type >	Long Term		Short Term	Long Term	Long Term		Subslab/Deep Exterior/Conduit			Shallow Exterior/Utility Corridor		
	Land Use >	Res	Com	Exc	Res	Res	Com	Res	Com	Large Com	Res	Com	Large Com
	Units/Q >	mg/kg Q	mg/kg Q	mg/kg Q	µg/L Q	µg/m <sup>3</sup> Q	µg/m <sup>3</sup> Q	µg/m <sup>3</sup> Q	µg/m <sup>3</sup> Q	µg/m <sup>3</sup> Q	µg/m <sup>3</sup> Q	µg/m <sup>3</sup> Q	µg/m <sup>3</sup> Q
Diphenyl Sulfone	127-63-9	7.E+01 N	7.E+02 N	1.E+03 N	2.E+01 N								
Diphenylamine	122-39-4	9.E+03 N	8.E+04 N	1.E+05 L	1.E+03 N								
Diphenylhydrazine, 1,2-	122-66-7	1.E+01 C	3.E+01 C	2.E+03 C	8.E-01 C								
Diquat	2764-72-9	2.E+02 N	2.E+03 N	4.E+03 N	2.E+01 M								
Direct Black 38	1937-37-7	1.E+00 C	3.E+00 C	2.E+02 C	1.E-01 C								
Direct Blue 6	2602-46-2	1.E+00 C	3.E+00 C	2.E+02 C	1.E-01 C								
Direct Brown 95	16071-86-6	1.E+00 C	3.E+00 C	2.E+02 C	1.E-01 C								
Disulfoton	298-04-4	4.E+00 N	3.E+01 N	7.E+01 N	5.E-01 N								
Dithiane, 1,4-	505-29-3	1.E+03 N	1.E+04 N	2.E+04 N	2.E+02 N								
Diuron	330-54-1	2.E+02 N	2.E+03 N	3.E+03 N	4.E+01 N								
Dodine	2439-10-3	2.E+03 N	2.E+04 N	3.E+04 N	4.E+02 N								
Endosulfan	115-29-7	7.E+02 N	7.E+03 N	1.E+04 N	1.E+02 N								
Endosulfan Sulfate	1031-07-8	5.E+02 N	5.E+03 N	1.E+04 N	1.E+02 N								
Endothall	145-73-3	2.E+03 N	2.E+04 N	3.E+04 N	1.E+02 M								
Endrin	72-20-8	3.E+01 N	3.E+02 N	5.E+02 N	2.E+00 M								
Epichlorohydrin	106-89-8			4.E+02 N	2.E+00 N	1.E+00 N	4.E+00 N	3.E+01 N	1.E+02 N	1.E+03 N	1.E+01 N	4.E+01 N	4.E+02 N
Epoxybutane, 1,2-	106-88-7			4.E+03 N	4.E+01 N	2.E+01 N	9.E+01 N	7.E+02 N	3.E+03 N	3.E+04 N	2.E+02 N	9.E+02 N	9.E+03 N
EPTC	759-94-4	5.E+03 N	6.E+04 N	1.E+05 N	8.E+02 N								
Ethanol, 2-(2-methoxyethoxy)-	111-77-3	4.E+03 N	3.E+04 N	7.E+04 N	8.E+02 N								
Ethephon	16672-87-0	4.E+03 N	4.E+03 N	9.E+03 N	1.E+02 N								
Ethion	563-12-2	4.E+01 N	4.E+02 N	9.E+02 N	4.E+00 N								
Ethoxyethanol Acetate, 2-	111-15-9			2.E+04 S	1.E+02 N	6.E+01 N	3.E+02 N	2.E+03 N	9.E+03 N	9.E+04 N	6.E+02 N	3.E+03 N	3.E+04 N
Ethoxyethanol, 2-	110-80-5			6.E+04 N	8.E+01 N	4.E+01 N	2.E+02 N	1.E+03 N	6.E+03 N	6.E+04 N	4.E+02 N	2.E+03 N	2.E+04 N
Ethyl Acetate	141-78-6			1.E+04 S	1.E+02 N	7.E+01 N	3.E+02 N	2.E+03 N	1.E+04 N	1.E+05 N	7.E+02 N	3.E+03 N	3.E+04 N
Ethyl Acrylate	140-88-5			1.E+03 N	1.E+01 N	8.E+00 N	4.E+01 N	3.E+02 N	1.E+03 N	1.E+04 N	8.E+01 N	4.E+02 N	4.E+03 N
Ethyl Chloride (Chloroethane)	75-00-3			2.E+03 S	8.E+03 N	4.E+03 N	2.E+04 N	1.E+05 N	6.E+05 N	6.E+06 N	4.E+04 N	2.E+05 N	2.E+06 N
Ethyl Ether	60-29-7			1.E+04 S	4.E+03 N								
Ethyl Methacrylate	97-63-2			1.E+03 S	6.E+02 N	3.E+02 N	1.E+03 N	1.E+04 N	4.E+04 N	4.E+05 N	3.E+03 N	1.E+04 N	1.E+05 N
Ethyl Tertiary Butyl Ether (ETBE)	637-92-3			3.E+03 S	7.E+02 C	4.E+02 C	2.E+03 C	1.E+04 C	5.E+04 C	5.E+05 C	4.E+03 C	2.E+04 C	2.E+05 C
Ethylbenzene	100-41-4			5.E+02 S	7.E+02 M	1.E+01 C	5.E+01 C	4.E+02 C	2.E+03 C	2.E+04 C	1.E+02 C	5.E+02 C	5.E+03 C
Ethylene Cyanohydrin	109-78-4	6.E+03 N	6.E+04 N	1.E+05 L	1.E+03 N								
Ethylene Diamine	107-15-3			1.E+05 L	2.E+03 N								
Ethylene Glycol	107-21-1	7.E+04 N	1.E+05 L	1.E+05 L	2.E+04 N								
Ethylene Glycol Monobutyl Ether	111-76-2	9.E+03 N	8.E+04 N	1.E+05 L	2.E+03 N								
Ethylene Oxide	75-21-8			3.E+01 C	7.E-03 C	3.E-03 C	4.E-02 C	1.E-01 C	1.E+00 C	1.E+01 C	3.E-02 C	4.E-01 C	4.E+00 C
Ethylene Thiourea	96-45-7	7.E+00 N	7.E+01 N	1.E+02 N	2.E+00 N								
Ethyleneimine	151-56-4			1.E+01 C	2.E-03 C	2.E-03 C	7.E-03 C	5.E-02 C	2.E-01 C	2.E+00 C	2.E-02 C	7.E-02 C	7.E-01 C
Ethylphthalyl Ethyl Glycolate	84-72-0	1.E+05 L	1.E+05 L	1.E+05 L	6.E+04 N								
Ethyl-p-nitrophenyl Phosphonate	2104-64-5	9.E-01 N	8.E+00 N	2.E+01 N	9.E-02 N								
Fenamiphos	22224-92-6	2.E+01 N	2.E+02 N	4.E+02 N	4.E+00 N								
Fenpropathrin	39515-41-8	2.E+03 N	2.E+04 N	4.E+04 N	6.E+01 N								
Fenvalerate	51630-58-1	2.E+03 N	2.E+04 N	4.E+04 N	5.E+02 N								
Fluometuron	2164-17-2	1.E+03 N	1.E+04 N	2.E+04 N	2.E+02 N								
Fluoranthene	206-44-0	3.E+03 N	3.E+04 N	7.E+04 N	8.E+02 N								
Fluorene	86-73-7	3.E+03 N	3.E+04 N	7.E+04 N	3.E+02 N								
Fluoride	16984-48-8	4.E+03 N	5.E+04 N	8.E+04 N	4.E+03 M								
Fluorine (Soluble Fluoride)	7782-41-4	7.E+03 N	7.E+04 N	1.E+05 L	4.E+03 M								
Fluridone	59756-60-4	7.E+03 N	7.E+04 N	1.E+05 L	1.E+03 N								
Flurprimidol	56425-91-3	4.E+03 N	3.E+04 N	7.E+04 N	7.E+02 N								
Flusilazole	85509-19-9	2.E+02 N	2.E+03 N	3.E+03 N	3.E+01 N								
Flutolanil	66332-96-5	4.E+04 N	1.E+05 L	1.E+05 L	8.E+03 N								
Fluvalinate	69409-94-5	9.E+02 N	8.E+03 N	2.E+04 N	2.E+02 N								
Folpet	133-07-3	8.E+03 N	7.E+04 N	1.E+05 L	2.E+03 N								
Fomesafen	72178-02-0	9.E+02 N	8.E+03 N	2.E+04 N	2.E+02 N								
Fonofos	944-22-9	2.E+02 N	2.E+03 N	3.E+03 N	2.E+01 N								
Formaldehyde	50-00-0			2.E+04 N	4.E+00 C	2.E+00 C	9.E+00 C	7.E+01 C	3.E+02 C	3.E+03 C	2.E+01 C	9.E+01 C	9.E+02 C
Formic Acid	64-18-6			7.E+02 N	6.E-01 N	3.E-01 N	1.E+00 N	1.E+01 N	4.E+01 N	4.E+02 N	3.E+00 N	1.E+01 N	1.E+02 N
Fosetyl-AL	39148-24-8	1.E+05 L	1.E+05 L	1.E+05 L	5.E+04 N								
Furan	110-00-9			2.E+03 N	2.E+01 N								
Furazolidone	67-45-8	2.E+00 C	6.E+00 C	3.E+02 C	2.E-01 C								
Furfural	98-01-1			5.E+03 N	4.E+01 N	5.E+01 N	2.E+02 N	2.E+03 N	7.E+03 N	7.E+04 N	5.E+02 N	2.E+03 N	2.E+04 N
Furium	531-82-8	5.E+00 C	2.E+01 C	8.E+02 C	5.E-01 C								
Furmecycloz	60568-05-0	3.E+02 C	8.E+02 C	4.E+04 C	1.E+01 C								
Glufosinate, Ammonium	77182-82-2	5.E+02 N	5.E+03 N	1.E+04 N	1.E+02 N								
Glutaraldehyde	111-30-8	8.E+03 N	7.E+04 N	1.E+05 L	2.E+03 N								
Glycidaldehyde	765-34-4			6.E+02 N	2.E+00 N	1.E+00 N	4.E+00 N	3.E+01 N	1.E+02 N	1.E+03 N	1.E+01 N	4.E+01 N	4.E+02 N
Glyphosate	1071-83-6	9.E+03 N	8.E+04 N	1.E+05 L	7.E+02 M								
Guanidine	113-00-8			2.E+04 N	2.E+02 N								
Guanidine Chloride	50-01-1	2.E+03 N	2.E+04 N	3.E+04 N	4.E+02 N								
Guanidine Nitrate	506-93-4	3.E+03 N	3.E+04 N	5.E+04 N	6.E+02 N								
Haloxypof, Methyl	69806-40-2	4.E+00 N	4.E+01 N	9.E+01 N	8.E-01 N								
Heptachlor	76-44-8	2.E+00 C	6.E+00 C	2.E+02 N	4.E-01 M								
Heptachlor Epoxide	1024-57-3	1.E+00 C	3.E+00 C	3.E+01 N	2.E-01 M								
Heptanal, n-	111-71-7			2.E+02 S	6.E+00 N	3.E+00 N	1.E+01 N	1.E+02 N	4.E+02 N	4.E+03 N	3.E+01 N	1.E+02 N	1.E+03 N
Heptane, n-	142-82-5			6.E+01 S	6.E+00 N	4.E+02 N	2.E+03 N	1.E+04 N	6.E+04 N	6.E+05 N	4.E+03 N	2.E+04 N	2.E+05 N













IDEM Published Levels Table 1 Human Health: Standard Exposure Scenarios	Medium >	SOIL			GROUNDWATER	INDOOR AIR		SOIL GAS OR CONDUIT VAPOR					
	Type >	Long Term		Short Term	Long Term	Long Term		Subslab/Deep Exterior/Conduit			Shallow Exterior/Utility Corridor		
	Land Use >	Res	Com	Exc	Res	Res	Com	Res	Com	Large Com	Res	Com	Large Com
	Units/Q >	mg/kg Q	mg/kg Q	mg/kg Q	µg/L Q	µg/m <sup>3</sup> Q	µg/m <sup>3</sup> Q	µg/m <sup>3</sup> Q	µg/m <sup>3</sup> Q	µg/m <sup>3</sup> Q	µg/m <sup>3</sup> Q	µg/m <sup>3</sup> Q	µg/m <sup>3</sup> Q
Tribufos	78-48-8	2.E+01 N	2.E+02 N	3.E+02 N	6.E-01 N								
Tributyl Phosphate	126-73-8	8.E+02 C	3.E+03 C	2.E+04 N	5.E+01 C								
Tributyltin Compounds	E1790679	3.E+01 N	3.E+02 N	5.E+02 N	6.E+00 N								
Tributyltin Oxide	56-35-9	3.E+01 N	3.E+02 N	5.E+02 N	6.E+00 N								
Trichloramine	10025-85-1				4.E+03 M								
Trichloro-1,2,2-trifluoroethane, 1,1,2-	76-13-1			9.E+02 S	1.E+04 M	5.E+03 N	2.E+04 N	2.E+05 N	7.E+05 N	7.E+06 N	5.E+04 N	2.E+05 N	2.E+06 N
Trichloroacetic Acid	76-03-9	1.E+02 C	3.E+02 C	2.E+04 C	6.E+01 M								
Trichloroaniline HCl, 2,4,6-	33663-50-2	3.E+02 C	8.E+02 C	4.E+04 C	3.E+01 C								
Trichloroaniline, 2,4,6-	634-93-5	3.E+00 N	3.E+01 N	5.E+01 N	4.E-01 N								
Trichlorobenzene, 1,2,3-	87-61-6	9.E+01 N	9.E+02 N	2.E+03 N	7.E+00 N								
Trichlorobenzene, 1,2,4-	120-82-1	8.E+01 N	3.E+02 N	4.E+02 S	7.E+01 M								
Trichloroethane, 1,1,1-	71-55-6			6.E+02 S	2.E+02 M	5.E+03 N	2.E+04 N	2.E+05 N	7.E+05 N	7.E+06 N	5.E+04 N	2.E+05 N	2.E+06 N
Trichloroethane, 1,1,2-	79-00-5			3.E+01 N	5.E+00 M	2.E-01 N	9.E-01 N	7.E+00 N	3.E+01 N	3.E+02 N	2.E+00 N	9.E+00 N	9.E+01 N
Trichloroethylene	79-01-6			1.E+02 N	5.E+00 M	2.E+00 N	9.E+00 N	7.E+01 N	3.E+02 N	3.E+03 N	2.E+01 N	9.E+01 N	9.E+02 N
Trichlorofluoromethane	75-69-4			1.E+03 S	5.E+03 N								
Trichlorophenol, 2,4,5-	95-95-4	9.E+03 N	8.E+04 N	1.E+05 L	1.E+03 N								
Trichlorophenol, 2,4,6-	88-06-2	9.E+01 N	8.E+02 N	2.E+03 N	1.E+01 N								
Trichlorophenoxyacetic Acid, 2,4,5-	93-76-5	9.E+02 N	8.E+03 N	2.E+04 N	2.E+02 N								
Trichlorophenoxypropionic acid, -2,4,5	93-72-1	7.E+02 N	7.E+03 N	1.E+04 N	5.E+01 M								
Trichloropropane, 1,1,2-	598-77-6			1.E+03 S	9.E+01 N								
Trichloropropane, 1,2,3-	96-18-4			5.E+01 C	8.E-03 C	3.E-01 N	1.E+00 N	1.E+01 N	4.E+01 N	4.E+02 N	3.E+00 N	1.E+01 N	1.E+02 N
Trichloropropene, 1,2,3-	96-19-5			2.E+01 N	6.E-01 N	3.E-01 N	1.E+00 N	1.E+01 N	4.E+01 N	4.E+02 N	3.E+00 N	1.E+01 N	1.E+02 N
Tricresyl Phosphate (TCP)	1330-78-5	2.E+03 N	2.E+04 N	3.E+04 N	2.E+02 N								
Triphane	58138-08-2	3.E+02 N	3.E+03 N	5.E+03 N	2.E+01 N								
Triethylamine	121-44-8			3.E+03 N	2.E+01 N	7.E+00 N	3.E+01 N	2.E+02 N	1.E+03 N	1.E+04 N	7.E+01 N	3.E+02 N	3.E+03 N
Triethylene Glycol	112-27-6	1.E+05 L	1.E+05 L	1.E+05 L	4.E+04 N								
Trifluoroethane, 1,1,1-	420-46-2			5.E+03 S	4.E+04 N	2.E+04 N	9.E+04 N	7.E+05 N	3.E+06 N	3.E+07 N	2.E+05 N	9.E+05 N	9.E+06 N
Trifluralin	1582-09-8	8.E+02 N	4.E+03 C	1.E+04 N	3.E+01 C								
Trimethyl Phosphate	512-56-1	4.E+02 C	1.E+03 C	2.E+04 N	4.E+01 C								
Trimethylbenzene, 1,2,3-	526-73-8			3.E+02 S	6.E+01 N	6.E+01 N	3.E+02 N	2.E+03 N	9.E+03 N	9.E+04 N	6.E+02 N	3.E+03 N	3.E+04 N
Trimethylbenzene, 1,2,4-	95-63-6			2.E+02 S	6.E+01 N	6.E+01 N	3.E+02 N	2.E+03 N	9.E+03 N	9.E+04 N	6.E+02 N	3.E+03 N	3.E+04 N
Trimethylbenzene, 1,3,5-	108-67-8			2.E+02 S	6.E+01 N	6.E+01 N	3.E+02 N	2.E+03 N	9.E+03 N	9.E+04 N	6.E+02 N	3.E+03 N	3.E+04 N
Trimethylpentene, 2,4,4-	25167-70-8			3.E+01 S	4.E+01 N								
Tri-n-butyltin	688-73-3	3.E+01 N	4.E+02 N	6.E+02 N	4.E+00 N								
Trinitrobenzene, 1,3,5-	99-35-4	3.E+03 N	3.E+04 N	6.E+04 N	6.E+02 N								
Trinitrotoluene, 2,4,6-	118-96-7	5.E+01 N	5.E+02 N	9.E+02 N	1.E+01 N								
Triphenylphosphine Oxide	791-28-6	2.E+03 N	2.E+04 N	3.E+04 N	4.E+02 N								
Tris(1,3-Dichloro-2-propyl) Phosphate	13674-87-8	2.E+03 N	2.E+04 N	3.E+04 N	4.E+02 N								
Tris(1-chloro-2-propyl)phosphate	13674-84-5	9.E+02 N	8.E+03 N	2.E+04 N	2.E+02 N								
Tris(2,3-dibromopropyl)phosphate	126-72-7	4.E+00 C	1.E+01 C	5.E+02 S	7.E-02 C								
Tris(2-chloroethyl)phosphate	115-96-8	4.E+02 C	1.E+03 C	1.E+04 N	4.E+01 C								
Tris(2-ethylhexyl)phosphate	78-42-2	2.E+03 C	7.E+03 C	1.E+05 L	2.E+02 C								
Tungsten	7440-33-7	9.E+01 N	9.E+02 N	2.E+03 N	2.E+01 N								
Uranium	7440-61-1	2.E+01 N	2.E+02 N	4.E+02 N	3.E+01 M								
Urethane	51-79-6	2.E+00 C	2.E+01 C	1.E+03 C	3.E-01 C								
Vanadium and Compounds	7440-62-2	5.E+02 N	6.E+03 N	1.E+04 N	9.E+01 N								
Vanadium Pentoxide	1314-62-1	9.E+02 N	8.E+03 N	2.E+04 N	2.E+02 N								
Vernolate	1929-77-7	1.E+02 N	1.E+03 N	2.E+03 N	1.E+01 N								
Vinclozolin	50471-44-8	1.E+02 N	1.E+03 N	2.E+03 N	2.E+01 N								
Vinyl Acetate	108-05-4			3.E+03 S	4.E+02 N	2.E+02 N	9.E+02 N	7.E+03 N	3.E+04 N	3.E+05 N	2.E+03 N	9.E+03 N	9.E+04 N
Vinyl Bromide	593-60-2			1.E+02 N	4.E+00 C	2.E+00 C	8.E+00 C	6.E+01 C	3.E+02 C	3.E+03 C	2.E+01 C	8.E+01 C	8.E+02 C
Vinyl Chloride	75-01-4			1.E+03 C	2.E+00 M	2.E+00 C	3.E+01 C	6.E+01 C	9.E+02 C	9.E+03 C	2.E+01 C	3.E+02 C	3.E+03 C
Warfarin	81-81-2	3.E+01 N	3.E+02 N	5.E+02 N	6.E+00 M								
Xylenes	1330-20-7			3.E+02 S	1.E+04 M	1.E+02 N	4.E+02 N	3.E+03 N	1.E+04 N	1.E+05 N	1.E+03 N	4.E+03 N	4.E+04 N
Zinc and Compounds	7440-66-6	3.E+04 N	1.E+05 L	1.E+05 L	6.E+03 N								
Zinc Cyanide	557-21-1	5.E+03 N	6.E+04 N	1.E+05 N	1.E+03 N								
Zinc Phosphide	1314-84-7	3.E+01 N	4.E+02 N	6.E+02 N	6.E+00 N								
Zinc	12122-67-7	4.E+03 N	4.E+04 N	9.E+04 N	1.E+03 N								
Zirconium	7440-67-7	9.E+00 N	9.E+01 N	2.E+02 N	2.E+00 N								

IDEM derives the levels in Table 1 as described in IDEM's Risk-based Closure Guide Chapter 3 and Appendix A assuming a total HQ of 1 and a risk level of 10<sup>-5</sup>. Exceedance of IDEM's published levels indicates that further evaluation of potential exposure risk is appropriate.

- C = Carcinogenic endpoint
- L = Capped at 100,000 mg/kg (soil direct contact only)
- M = Set to maximum contaminant limit (MCL; ground water only)
- mg/kg = milligrams per kilogram
- N = Noncarcinogenic endpoint
- S = Capped at soil saturation limit
- µg/L = micrograms per liter; µg/m<sup>3</sup> = micrograms per cubic meter

IDEM generally considers shallow soil gas to include samples collected no more than five feet below ground surface, and deep soil gas samples to include samples collected at more than five feet below ground surface.