TREATMENT STANDARDS FOR HAZARDOUS WASTES—Continued

[Note: NA means not applicable]

Waste code	Waste description and treatment/Regulatory subcategory [1]	Regulated hazardous constituent		Wastewaters	Nonwastewaters
		Common name	CAS [2] number	Concentration [3] in mg/L; or Technology Code [4]	Concentration [5] in mg/kg unless noted as "mg/L TCLP"; or Technology Code [4]
U194	n-Propylamine	n-Propylamine	107–10–8	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U196	Pyridine	Pyridine	110–86–1	0.014	16
U197	p-Benzoquinone	p-Benzoquinone	106–51–4	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U200	Reserpine	Reserpine	50–55–5	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U201	Resorcinol	Resorcinol	108–46–3	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U203	Safrole	Safrole	94–59–7	0.081	22
U204	Selenium dioxide	Selenium	7782–49–2	0.82	5.7 mg/L TCLP
U205	Selenium sulfide	Selenium	7782–49–2	0.82	5.7 mg/L TCLP
U206	Streptozotocin	Streptozotocin	18883–66–4	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U207	1,2,4,5-Tetrachlorobenzene	1,2,4,5-Tetrachlorobenzene	95–94–5	0.055	14
U208	1,1,1,2-Tetrachloroethane	1,1,1,2-Tetrachloroethane	630–20–6	0.057	6.0
U209	1,1,2,2-Tetrachloroethane	1,1,2,2-Tetrachloroethane	79–34–5	0.057	6.0
U210	Tetrachloroethylene	Tetrachloroethylene	127–18–4	0.056	6.0
U211	Carbon tetrachloride	Carbon tetrachloride	56–23–5	0.057	6.0

U213	Tetrahydrofuran	Tetrahydrofuran	109–99–9	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U214	Thallium (I) acetate	Thallium (measured in wastewaters only)	7440–28–0	1.4	RTHRM; or STABL
U215	Thallium (I) carbonate	Thallium (measured in wastewaters only)	7440–28–0	1.4	RTHRM; or STABL
U216	Thallium (I) chloride	Thallium (measured in wastewaters only)	7440–28–0	1.4	RTHRM; or STABL
U217	Thallium (I) nitrate	Thallium (measured in wastewaters only)	7440–28–0	1.4	RTHRM; or STABL
U218	Thioacetamide	Thioacetamide	62–55–5	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U219	Thiourea	Thiourea	62–56–6	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U220	Toluene	Toluene	108–88–3	0.080	10
U221	Toluenediamine	Toluenediamine	25376–45–8	CARBN; or CMBST	CMBST
U222	o-Toluidine hydrochloride	o-Toluidine hydrochloride	636–21–5	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U223	Toluene diisocyanate	Toluene diisocyanate	26471–62–5	CARBN; or CMBST	CMBST
U225	Bromoform (Tribromomethane)	Bromoform (Tribromomethane)	75–25–2	0.63	15
U226	1,1,1-Trichloroethane	1,1,1-Trichloroethane	71–55–6	0.054	6.0
U227	1,1,2-Trichloroethane	1,1,2-Trichloroethane	79–00–5	0.054	6.0
U228	Trichloroethylene	Trichloroethylene	79–01–6	0.054	6.0
U234	1,3,5-Trinitrobenzene	1,3,5-Trinitrobenzene	99–35–4	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U235	tris-(2,3-Dibromopropyl)-phosphate	tris-(2,3-Dibromopropyl)-phosphate	126–72–7	0.11	0.10

TREATMENT STANDARDS FOR HAZARDOUS WASTES—Continued

[Note: NA means not applicable]

Waste code	Waste description and treatment/Regulatory subcategory [1]	Regulated hazardous constituent		Wastewaters	Nonwastewaters
		Common name	CAS [2] number	Concentration [3] in mg/L; or Technology Code [4]	Concentration [5] in mg/kg unless noted as "mg/L TCLP"; or Technology Code [4]
U236	Trypan Blue	Trypan Blue	72–57–1	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U237	Uracil mustard	Uracil mustard	66–75–1	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U238	Urethane (Ethyl carbamate)	Urethane (Ethyl carbamate)	51–79–6	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U239	Xylenes	Xylenes-mixed isomers (sum of o-, m-, and p-xylene concentrations)	1330–20–7	0.32	30
U240	2,4-D (2,4-Dichlorophenoxyacetic acid)	2,4-D(2,4-Dichlorophenoxyacetic acid)	94–75–7	0.72	10
	2,4-D (2,4-Dichlorophenoxyacetic acid) salts and esters		NA	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U243	Hexachloropropylene	Hexachloropropylene	1888–71–7	0.035	30
U244	Thiram	Thiram	137–26–8	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U246	Cyanogen bromide	Cyanogen bromide	506–68–3	CHOXD; WETOX; or CMBST	CHOXD; WETOX; or CMBST
U247	Methoxychlor	Methoxychlor	72–43–5	0.25	0.18
U248	Warfarin, & salts, when present at concentrations of 0.3% or less	Warfarin	81–81–2	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U249	Zinc phosphide, Zn_3P_2, when present at concentrations of 10% or less	Zinc Phosphide	1314–84–7	CHOXD; CHRED; or CMBST	CHOXD; CHRED; or CMBST

U271	Benomyl [10]	Benomyl	17804–35–2	0.056; or CMBST, CHOXD, BIODG or CARBN	1.4; or CMBST
U278	Bendiocarb [10]	Bendiocarb	22781–23–3	0.056; or CMBST, CHOXD, BIODG or CARBN	1.4; or CMBST
U279	Carbaryl [10]	Carbaryl	63–25–2	0.006; or CMBST, CHOXD, BIODG or CARBN	0.14; or CMBST
U280	Barban [10]	Barban	101–27–9	0.056; or CMBST, CHOXD, BIODG or CARBN	1.4; or CMBST
U328	o-Toluidine	o-Toluidine	95–53–4	CMBST; or CHOXD fb (BIODG or CARBN); or BIODG fb CARBN	CMBST
U353	p-Toluidine	p-Toluidine	106–49–0	CMBST; or CHOXD fb (BIODG or CARBN); or BIODG fb CARBN	CMBST
U359	2-Ethoxyethanol	2-Ethoxyethanol	110–80–5	CMBST; or CHOXD fb (BIODG or CARBN); or BIODG fb CARBN	CMBST
U364	Bendiocarb phenol [10]	Bendiocarb phenol	22961–82–6	0.056; or CMBST, CHOXD, BIODG or CARBN	1.4; or CMBST
U367	Carbofuran phenol [10]	Carbofuran phenol	1563–38–8	0.056; or CMBST, CHOXD, BIODG or CARBN	1.4; or CMBST
U372	Carbendazim [10]	Carbendazim	10605–21–7	0.056; or CMBST, CHOXD, BIODG or CARBN	1.4; or CMBST
U373	Propham [10]	Propham	122–42–9	0.056; or CMBST, CHOXD, BIODG or CARBN	1.4; or CMBST
U387	Prosulfocarb [10]	Prosulfocarb	52888–80–9	0.042; or CMBST, CHOXD, BIODG or CARBN	1.4; or CMBST
U389	Triallate [10]	Triallate	2303–17–5	0.042; or CMBST, CHOXD, BIODG or CARBN	1.4; or CMBST
U394	A2213 [10]	A2213	30558–43–1	0.042; or CMBST, CHOXD, BIODG or CARBN	1.4; or CMBST

TREATMENT STANDARDS FOR HAZARDOUS WASTES—Continued

[Note: NA means not applicable]

Waste code	Waste description and treatment/Regulatory subcategory [1]	Regulated hazardous constituent		Wastewaters	Nonwastewaters
		Common name	CAS [2] number	Concentration [3] in mg/L; or Technology Code [4]	Concentration [5] in mg/kg unless noted as "mg/L TCLP"; or Technology Code [4]
U395	Diethylene glycol, dicarbamate [10]	Diethylene glycol, dicarbamate	5952–26–1	0.056; or CMBST, CHOXD, BIODG or CARBN	1.4; or CMBST
U404	Triethylamine [10]	Triethylamine	121–44–8	0.081; or CMBST, CHOXD, BIODG or CARBN	1.5; or CMBST
U409	Thiophanate-methyl [10]	Thiophanate-methyl	23564–05–8	0.056; or CMBST, CHOXD, BIODG or CARBN	1.4; or CMBST
U410	Thiodicarb [10]	Thiodicarb	59669–26–0	0.019; or CMBST, CHOXD, BIODG or CARBN	1.4; or CMBST
U411	Propoxur [10]	Propoxur	114–26–1	0.056; or CMBST, CHOXD, BIODG or CARBN	1.4; or CMBST

FOOTNOTES TO TREATMENT STANDARD TABLE 268.40

1 The waste descriptions provided in this table do not replace waste descriptions in 40 CFR 261. Descriptions of Treatment/Regulatory Subcategories are provided, as needed, to distinguish between applicability of different standards.

2 CAS means Chemical Abstract Services. When the waste code and/or regulated constituents are described as a combination of a chemical with its salts and/or esters, the CAS number is given for the parent compound only.

3 Concentration standards for wastewaters are expressed in mg/L and are based on analysis of composite samples.

4 All treatment standards expressed as a Technology Code or combination of Technology Codes are explained in detail in 40 CFR 268.42 Table 1—Technology Codes and Descriptions of Technology-Based Standards.

5 Except for Metals (EP or TCLP) and Cyanides (Total and Amenable) the nonwastewater treatment standards expressed as a concentration were established, in part, based upon incineration in units operated in accordance with the technical requirements of 40 CFR Part 264 Subpart O or Part 265 Subpart O, or based upon combustion in fuel substitution units operating in accordance with applicable technical requirements. A facility may comply with these treatment standards according to provisions in 40 CFR 268.40(d). All concentration standards for nonwastewaters are based on analysis of grab samples.

6 [Reserved]

7 Both Cyanides (Total) and Cyanides (Amenable) for nonwastewaters are to be analyzed using Method 9010C or 9012B, found in "Test Methods' for Evaluating Solid Waste, Physical/Chemical Methods." EPA Publication SW–846, as incorporated by reference in 40 CFR 260.11, with a sample size of 10 grams and a distillation time of one hour and 15 minutes.

8 These wastes, when rendered nonhazardous and then subsequently managed in CWA, or CWA-equivalent systems are not subject to treatment standards. (See § 268.1(c0(3) and (4)).

9 These wastes, when rendered nonhazardous and then subsequently injected in a Class SDWA well, are not subject to treatment standards. (See § 148.1(d)).

10 The treatment standard for this waste may be satisfied by either meeting the constituent concentrations in this table or by treating the waste by the specified technologies: combustion, as defined by the technology code CMBST at § 268.42 Table 1 of this Part, for nonwastewaters; and biodegradation as defined by the technology code BIODG, carbon adsorption as defined by the technology code CARBN, chemical oxidation as defined by the technology code CHOXD, or combustion as defined as technology code CMBST at § 268.42 Table 1 of this Part, for wastewaters.

11 For these wastes, the definition of CMBST is limited to: (1) combustion units operating under 40 CFR 266, (2) combustion units permitted under 40 CFR Part 264, Subpart O, or (3) combustion units operating under 40 CFR 265, Subpart O, which have obtained a determination of equivalent treatment under 268.42(b).

12 Disposal of K175 wastes that have complied with all applicable 40 CFR 268.40 treatment standards must also be macroencapsulated in accordance with 40 CFR 268.45 Table 1 unless the waste is placed in:
(1) A Subtitle C monofill containing only K175 wastes that meet all applicable 40 CFR 268.40 treatment standards; or
(2) A dedicated Subtitle C landfill cell in which all other wastes being co-disposed are at pH≤6.0.

[59 FR 48046, Sept. 19, 1994]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting § 268.40, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at *www.govinfo.gov*.

§ 268.41 Treatment standards expressed as concentrations in waste extract.

For the requirements previously found in this section and for treatment standards in Table CCWE—Constituent Concentrations in Waste Extracts, refer to § 268.40.

[59 FR 48103, Sept. 19, 1994]

§ 268.42 Treatment standards expressed as specified technologies.

NOTE: For the requirements previously found in this section in Table 2—Technology-Based Standards By RCRA Waste Code, and Table 3—Technology-Based Standards for Specific Radioactive Hazardous Mixed Waste, refer to § 268.40.

(a) The following wastes in the table in § 268.40 "Treatment Standards for Hazardous Wastes," for which standards are expressed as a treatment method rather than a concentration level, must be treated using the technology or technologies specified in the table entitled "Technology Codes and Description of Technology-Based Standards" in this section.

TABLE 1—TECHNOLOGY CODES AND DESCRIPTION OF TECHNOLOGY-BASED STANDARDS

Technology code	Description of technology-based standards
ADGAS:	Venting of compressed gases into an absorbing or reacting media (*i.e.*, solid or liquid)—venting can be accomplished through physical release utilizing valves/piping; physical penetration of the container; and/or penetration through detonation.
AMLGM:	Amalgamation of liquid, elemental mercury contaminated with radioactive materials utilizing inorganic reagents such as copper, zinc, nickel, gold, and sulfur that result in a nonliquid, semi-solid amalgam and thereby reducing potential emissions of elemental mercury vapors to the air.
BIODG:	Biodegradation of organics or non-metallic inorganics (*i.e.*, degradable inorganics that contain the elements of phosphorus, nitrogen, and sulfur) in units operated under either aerobic or anaerobic conditions such that a surrogate compound or indicator parameter has been substantially reduced in concentration in the residuals (e.g., Total Organic Carbon can often be used as an indicator parameter for the biodegradation of many organic constituents that cannot be directly analyzed in wastewater residues).
CARBN:	Carbon adsorption (granulated or powdered) of non-metallic inorganics, organo-metallics, and/or organic constituents, operated such that a surrogate compound or indicator parameter has not undergone breakthrough (e.g., Total Organic Carbon can often be used as an indicator parameter for the adsorption of many organic constituents that cannot be directly analyzed in wastewater residues). Breakthrough occurs when the carbon has become saturated with the constituent (or indicator parameter) and substantial change in adsorption rate associated with that constituent occurs.
CHOXD:	Chemical or electrolytic oxidation utilizing the following oxidation reagents (or waste reagents) or combinations of reagents: (1) Hypochlorite (e.g., bleach); (2) chlorine; (3) chlorine dioxide; (4) ozone or UV (ultraviolet light) assisted ozone; (5) peroxides; (6) persulfates; (7) perchlorates; (8) permangantes; and/or (9) other oxidizing reagents of equivalent efficiency, performed in units operated such that a surrogate compound or indicator parameter has been substantially reduced in concentration in the residuals (e.g., Total Organic Carbon can often be used as an indicator parameter for the oxidation of many organic constituents that cannot be directly analyzed in wastewater residues). Chemical oxidation specifically includes what is commonly referred to as alkaline chlorination.
CHRED:	Chemical reduction utilizing the following reducing reagents (or waste reagents) or combinations of reagents: (1) Sulfur dioxide; (2) sodium, potassium, or alkali salts or sulfites, bisulfites, metabisulfites, and polyethylene glycols (e.g., NaPEG and KPEG); (3) sodium hydrosulfide; (4) ferrous salts; and/or (5) other reducing reagents of equivalent efficiency, performed in units operated such that a surrogate compound or indicator parameter has been substantially reduced in concentration in the residuals (e.g., Total Organic Halogens can often be used as an indicator parameter for the reduction of many halogenated organic constituents that cannot be directly analyzed in wastewater residues). Chemical reduction is commonly used for the reduction of hexavalent chromium to the trivalent state.
CMBST:	High temperature organic destruction technologies, such as combustion in incinerators, boilers, or industrial furnaces operated in accordance with the applicable requirements of 40 CFR part 264, subpart O, or 40 CFR part 265, subpart O, or 40 CFR part 266, subpart H, and in other units operated in accordance with applicable technical operating requirements; and certain non-combustive technologies, such as the Catalytic Extraction Process.
DEACT:	Deactivation to remove the hazardous characteristics of a waste due to its ignitability, corrosivity, and/or reactivity.
FSUBS:	Fuel substitution in units operated in accordance with applicable technical operating requirements.
HLVIT:	Vitrification of high level mixed radioactive wastes in units in compliance with all applicable radioactive protection requirements under control of the Nuclear Regulatory Commission.
IMERC:	Incineration of wastes containing organics and mercury in units operated in accordance with the technical operating requirements of 40 CFR part 264 subpart 0 and part 265 subpart 0. All wastewater and nonwastewater residues derived from this process must then comply with the corresponding treatment standards per waste code with consideration of any applicable subcategories (e.g., High or Low Mercury Subcategories).
INCIN:	Incineration in units operated in accordance with the technical operating requirements of 40 CFR part 264 subpart 0 and part 265 subpart 0.
LLEXT:	Liquid-liquid extraction (often referred to as solvent extraction) of organics from liquid wastes into an immiscible solvent for which the hazardous constituents have a greater solvent affinity, resulting in an extract high in organics that must undergo either incineration, reuse as a fuel, or other recovery/reuse and a raffinate (extracted liquid waste) proportionately low in organics that must undergo further treatment as specified in the standard.

Universal Treatment Standards

UNIVERSAL TREATMENT STANDARDS

[Note: NA means not applicable]

Regulated constituent common name	CAS [1] number	Wastewater standard	Nonwastewater standard
		Concentration [2] in mg/l	Concentration [3] in mg/kg unless noted as "mg/l TCLP"
Organic Constituents			
Acenaphthylene	208–96–8	0.059	3.4
Acenaphthene	83–32–9	0.059	3.4
Acetone	67–64–1	0.28	160
Acetonitrile	75–05–8	5.6	38
Acetophenone	96–86–2	0.010	9.7
2-Acetylaminofluorene	53–96–3	0.059	140
Acrolein	107–02–8	0.29	NA
Acrylamide	79–06–1	19	23
Acrylonitrile	107–13–1	0.24	84
Aldrin	309–00–2	0.021	0.066
4-Aminobiphenyl	92–67–1	0.13	NA
Aniline	62–53–3	0.81	14
o-Anisidine (2-methoxyaniline)	90–04–0	0.010	0.66
Anthracene	120–12–7	0.059	3.4
Aramite	140–57–8	0.36	NA
alpha-BHC	319–84–6	0.00014	0.066
beta-BHC	319–85–7	0.00014	0.066
delta-BHC	319–86–8	0.023	0.066
gamma-BHC	58–89–9	0.0017	0.066
Benzene	71–43–2	0.14	10
Benz(a)anthracene	56–55–3	0.059	3.4
Benzal chloride	98–87–3	0.055	6.0
Benzo(b)fluoranthene (difficult to distinguish from benzo(k)fluoranthene)	205–99–2	0.11	6.8
Benzo(k)fluoranthene (difficult to distinguish from benzo(b)fluoranthene)	207–08–9	0.11	6.8
Benzo(g,h,i)perylene	191–24–2	0.0055	1.8
Benzo(a)pyrene	50–32–8	0.061	3.4
Bromodichloromethane	75–27–4	0.35	15
Bromomethane/Methyl bromide	74–83–9	0.11	15
4-Bromophenyl phenyl ether	101–55–3	0.055	15
n-Butyl alcohol	71–36–3	5.6	2.6
Butyl benzyl phthalate	85–68–7	0.017	28
2-sec-Butyl-4,6-dinitrophenol/Dinoseb	88–85–7	0.066	2.5
Carbon disulfide	75–15–0	3.8	4.8 mg/l TCLP

UNIVERSAL TREATMENT STANDARDS—Continued

[Note: NA means not applicable]

Regulated constituent common name	CAS [1] number	Wastewater standard	Nonwastewater standard
		Concentration [2] in mg/l	Concentration [3] in mg/kg unless noted as "mg/l TCLP"
Carbon tetrachloride	56–23–5	0.057	6.0
Chlordane (alpha and gamma isomers)	57–74–9	0.0033	0.26
p-Chloroaniline	106–47–8	0.46	16
Chlorobenzene	108–90–7	0.057	6.0
Chlorobenzilate	510–15–6	0.10	NA
2-Chloro-1,3-butadiene	126–99–8	0.057	0.28
Chlorodibromomethane	124–48–1	0.057	15
Chloroethane	75–00–3	0.27	6.0
bis(2-Chloroethoxy)methane	111–91–1	0.036	7.2
bis(2-Chloroethyl)ether	111–44–4	0.033	6.0
Chloroform	67–66–3	0.046	6.0
bis(2-Chloroisopropyl)ether	39638–32–9	0.055	7.2
p-Chloro-m-cresol	59–50–7	0.018	14
2-Chloroethyl vinyl ether	110–75–8	0.062	NA
Chloromethane/Methyl chloride	74–87–3	0.19	30
2-Chloronaphthalene	91–58–7	0.055	5.6
2-Chloropchenol	95–57–8	0.044	5.7
3-Chloropropylene	107–05–1	0.036	30
Chrysene	218–01–9	0.059	3.4
p-Cresidine	120–71–8	0.010	0.66
o-Cresol	95–48–7	0.11	5.6
m-Cresol (difficult to distinguish from p-cresol)	108–39–4	0.77	5.6
p-Cresol (difficult to distinguish from m-cresol)	106–44–5	0.77	5.6
Cyclohexanone	108–94–1	0.36	0.75 mg/l TCLP
o,p′-DDD	53–19–0	0.023	0.087
p,p′-DDD	72–54–8	0.023	0.087
o,p′-DDE	3424–82–6	0.031	0.087
p,p′-DDE	72–55–9	0.031	0.087
o,p′-DDT	789–02–6	0.0039	0.087
p,p′-DDT	50–29–3	0.0039	0.087
Dibenz(a,h)anthracene	53–70–3	0.055	8.2
Dibenz(a,e)pyrene	192–65–4	0.061	NA
1,2-Dibromo-3-chloropropane	96–12–8	0.11	15
1,2-Dibromoethane/Ethylene dibromide	106–93–4	0.028	15

UNIVERSAL TREATMENT STANDARDS—Continued

[Note: NA means not applicable]

Regulated constituent common name	CAS [1] number	Wastewater standard	Nonwastewater standard
		Concentration [2] in mg/l	Concentration [3] in mg/kg unless noted as "mg/l TCLP"
Dibromomethane	74–95–3	0.11	15
m-Dichlorobenzene	541–73–1	0.036	6.0
o-Dichlorobenzene	95–50–1	0.088	6.0
p-Dichlorobenzene	106–46–7	0.090	6.0
Dichlorodifluoromethane	75–71–8	0.23	7.2
1,1-Dichloroethane	75–34–3	0.059	6.0
1,2-Dichloroethane	107–06–2	0.21	6.0
1,1-Dichloroethylene	75–35–4	0.025	6.0
trans-1,2-Dichloroethylene	156–60–5	0.054	30
2,4-Dichlorophenol	120–83–2	0.044	14
2,6-Dichlorophenol	87–65–0	0.044	14
2,4-Dichlorophenoxyacetic acid/2,4-D	94–75–7	0.72	10
1,2-Dichloropropane	78–87–5	0.85	18
cis-1,3-Dichloropropylene	10061–01–5	0.036	18
trans-1,3-Dichloropropylene	10061–02–6	0.036	18
Dieldrin	60–57–1	0.017	0.13
Diethyl phthalate	84–66–2	0.20	28
p-Dimethylaminoazobenzene	60–11–7	0.13	NA
2,4-Dimethylaniline (2,4-xylidine)	95–68–1	0.010	0.66
2,4-Dimethyl phenol	105–67–9	0.036	14
Dimethyl phthalate	131–11–3	0.047	28
Di-n-butyl phthalate	84–74–2	0.057	28
1,4-Dinitrobenzene	100–25–4	0.32	2.3
4,6-Dinitro-o-cresol	534–52–1	0.28	160
2,4-Dinitrophenol	51–28–5	0.12	160
2,4-Dinitrotoluene	121–14–2	0.32	140
2,6-Dinitrotoluene	606–20–2	0.55	28
Di-n-octyl phthalate	117–84–0	0.017	28
Di-n-propylnitrosamine	621–64–7	0.40	14
1,4-Dioxane	123–91–1	12.0	170
Diphenylamine (difficult to distinguish from diphenylnitrosamine)	122–39–4	0.92	13
Diphenylnitrosamine (difficult to distinguish from diphenylamine)	86–30–6	0.92	13
1,2-Diphenylhydrazine	122–66–7	0.087	NA
Disulfoton	298–04–4	0.017	6.2

UNIVERSAL TREATMENT STANDARDS—Continued

[Note: NA means not applicable]

Regulated constituent common name	CAS [1] number	Wastewater standard	Nonwastewater standard
		Concentration [2] in mg/l	Concentration [3] in mg/kg unless noted as "mg/l TCLP"
Endosulfan I	959–98–8	0.023	0.066
Endosulfan II	33213–65–9	0.029	0.13
Endosulfan sulfate	1031–07–8	0.029	0.13
Endrin	72–20–8	0.0028	0.13
Endrin aldehyde	7421–93–4	0.025	0.13
Ethyl acetate	141–78–6	0.34	33
Ethyl benzene	100–41–4	0.057	10
Ethyl cyanide/Propanenitrile	107–12–0	0.24	360
Ethyl ether	60–29–7	0.12	160
bis(2-Ethylhexyl)phthalate	117–81–7	0.28	28
Ethyl methacrylate	97–63–2	0.14	160
Ethylene oxide	75–21–8	0.12	NA
Famphur	52–85–7	0.017	15
Fluoranthene	206–44–0	0.068	3.4
Fluorene	86–73–7	0.059	3.4
Heptachlor	76–44–8	0.0012	0.066
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (1,2,3,4,6,7,8-HpCDD)	35822–46–9	0.000035	.0025
1,2,3,4,6,7,8-Heptachlorodibenzofluran (1,2,3,4,6,7,8-HpCDF)	67562–39–4	0.000035	.0025
1,2,3,4,7,8,9–Heptachlorodibenzofluran (1,2,3,4,7,8,9–HpCDF)	55673–89–7	0.000035	.0025
Heptachlor epoxide	1024–57–3	0.016	0.066
Hexachlorobenzene	118–74–1	0.055	10
Hexachlorobutadiene	87–68–3	0.055	5.6
Hexachlorocyclopentadiene	77–47–4	0.057	2.4
HxCDDs (All Hexachlorodibenzo-p-dioxins)	NA	0.000063	0.001
HxCDFs (All Hexachlorodibenzofurans)	NA	0.000063	0.001
Hexachloroethane	67–72–1	0.055	30
Hexachloropropylene	1888–71–7	0.035	30
Indeno(1,2,3-c,d) pyrene	193–39–5	0.0055	3.4
Iodomethane	74–88–4	0.19	65
Isobutyl alcohol	78–83–1	5.6	170
Isodrin	465–73–6	0.021	0.066
Isosafrole	120–58–1	0.081	2.6
Kepone	143–50–0	0.0011	0.13
Methacrylonitrile	126–98–7	0.24	84

UNIVERSAL TREATMENT STANDARDS—Continued

[Note: NA means not applicable]

Regulated constituent common name	CAS [1] number	Wastewater standard	Nonwastewater standard
		Concentration [2] in mg/l	Concentration [3] in mg/kg unless noted as "mg/l TCLP"
Methanol	67–56–1	5.6	0.75 mg/l TCLP
Methapyrilene	91–80–5	0.081	1.5
Methoxychlor	72–43–5	0.25	0.18
3-Methylcholanthrene	56–49–5	0.0055	15
4,4-Methylene bis(2-chloroaniline)	101–14–4	0.50	30
Methylene chloride	75–09–2	0.089	30
Methyl ethyl ketone	78–93–3	0.28	36
Methyl isobutyl ketone	108–10–1	0.14	33
Methyl methacrylate	80–62–6	0.14	160
Methyl methanesulfonate	66–27–3	0.018	NA
Methyl parathion	298–00–0	0.014	4.6
Naphthalene	91–20–3	0.059	5.6
2-Naphthylamine	91–59–8	0.52	NA
o-Nitroaniline	88–74–4	0.27	14
p-Nitroaniline	100–01–6	0.028	28
Nitrobenzene	98–95–3	0.068	14
5-Nitro-o-toluidine	99–55–8	0.32	28
o-Nitrophenol	88–75–5	0.028	13
p-Nitrophenol	100–02–7	0.12	29
N-Nitrosodiethylamine	55–18–5	0.40	28
N-Nitrosodimethylamine	62–75–9	0.40	2.3
N-Nitroso-di-n-butylamine	924–16–3	0.40	17
N-Nitrosomethylethylamine	10595–95–6	0.40	2.3
N-Nitrosomorpholine	59–89–2	0.40	2.3
N-Nitrosopiperidine	100–75–4	0.013	35
N-Nitrosopyrrolidine	930–55–2	0.013	35
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	3268–87–9	0.000063	0.005
1,2,3,4,6,7,8,9-Octachlorodibenzofluran (OCDF)	39001–02–0	0.000063	0.005
Parathion	56–38–2	0.014	4.6
Total PCBs (sum of all PCB isomers, or all Aroclors) [8]	1336–36–3	0.10	10
Pentachlorobenzene	608–93–5	0.055	10
PeCDDs (All Pentachlorodibenzo-p-dioxins)	NA	0.000063	0.001
PeCDFs (All Pentachlorodibenzofurans)	NA	0.000035	0.001
Pentachloroethane	76–01–7	0.055	6.0

UNIVERSAL TREATMENT STANDARDS—Continued

[Note: NA means not applicable]

Regulated constituent common name	CAS [1] number	Wastewater standard	Nonwastewater standard
		Concentration [2] in mg/l	Concentration [3] in mg/kg unless noted as "mg/l TCLP"
Pentachloronitrobenzene	82–68–8	0.055	4.8
Pentachlorophenol	87–86–5	0.089	7.4
Phenacetin	62–44–2	0.081	16
Phenanthrene	85–01–8	0.059	5.6
Phenol	108–95–2	0.039	6.2
1,3-Phenylenediamine Phorate	108–45–2 298–02–2	0.010 0.021	0.66 4.6
Phthalic acid	100–21–0	0.055	28
Phthalic anhydride	85–44–9	0.055	28
Pronamide	23950–58–5	0.093	1.5
Pyrene	129–00–0	0.067	8.2
Pyridine	110–86–1	0.014	16
Safrole	94–59–7	0.081	22
Silvex/2,4,5-TP	93–72–1	0.72	7.9
1,2,4,5-Tetrachlorobenzene	95–94–3	0.055	14
TCDDs (All Tetrachlorodibenzo-p-dioxins)	NA	0.000063	0.001
TCDFs (All Tetrachlorodibenzofurans)	NA	0.000063	0.001
1,1,1,2-Tetrachloroethane	630–20–6	0.057	6.0
1,1,2,2-Tetrachloroethane	79–34–5	0.057	6.0
Tetrachloroethylene	127–18–4	0.056	6.0
2,3,4,6-Tetrachlorophenol	58–90–2	0.030	7.4
Toluene	108–88–3	0.080	10
Toxaphene	8001–35–2	0.0095	2.6
Tribromomethane/Bromoform	75–25–2	0.63	15
1,2,4-Trichlorobenzene	120–82–1	0.055	19
1,1,1-Trichloroethane	71–55–6	0.054	6.0
1,1,2-Trichloroethane	79–00–5	0.054	6.0
Trichloroethylene	79–01–6	0.054	6.0
Trichlorofluoromethane	75–69–4	0.020	30
2,4,5-Trichlorophenol	95–95–4	0.18	7.4
2,4,6-Trichlorophenol	88–06–2	0.035	7.4
2,4,5-Trichlorophenoxyacetic acid/2,4,5-T	93–76–5	0.72	7.9
1,2,3-Trichloropropane	96–18–4	0.85	30
1,1,2-Trichloro-1,2,2-trifluoroethane	76–13–1	0.057	30

UNIVERSAL TREATMENT STANDARDS—Continued

[Note: NA means not applicable]

Regulated constituent common name	CAS [1] number	Wastewater standard	Nonwastewater standard
		Concentration [2] in mg/l	Concentration [3] in mg/kg unless noted as "mg/l TCLP"
tris-(2,3-Dibromopropyl) phosphate	126–72–7	0.11	0.10
Vinyl chloride	75–01–4	0.27	6.0
Xylenes-mixed isomers (sum of o-, m-, and p-xylene concentrations)	1330–20–7	0.32	30
Inorganic Constituents			
Antimony	7440–36–0	1.9	1.15 mg/l TCLP
Arsenic	7440–38–2	1.4	5.0 mg/l TCLP
Barium	7440–39–3	1.2	21 mg/l TCLP
Beryllium	7440–41–7	0.82	1.22 mg/l TCLP
Cadmium	7440–43–9	0.69	0.11 mg/l TCLP
Chromium (Total)	7440–47–3	2.77	0.60 mg/l TCLP
Cyanides (Total) [4]	57–12–5	1.2	590
Cyanides (Amenable) [4]	57–12–5	0.86	30
Fluoride [5]	16984–48–8	35	NA
Lead	7439–92–1	0.69	0.75 mg/l TCLP
Mercury—Nonwastewater from Retort	7439–97–6	NA	0.20 mg/l TCLP
Mercury—All Others	7439–97–6	0.15	0.025 mg/l TCLP
Nickel	7440–02–0	3.98	11 mg/l TCLP
Selenium [7]	7782–49–2	0.82	5.7 mg/l TCLP
Silver	7440–22–4	0.43	0.14 mg/l TCLP
Sulfide [5]	18496–25–8	14	NA
Thallium	7440–28–0	1.4	0.20 mg/l TCLP
Vanadium [5]	7440–62–2	4.3	1.6 mg/l TCLP
Zinc [5]	7440–66–6	2.61	4.3 mg/l TCLP

FOOTNOTES TO TABLE UTS

1 CAS means Chemical Abstract Services. When the waste code and/or regulated constituents are described as a combination of a chemical with it's salts and/or esters, the CAS number is given for the parent compound only.

2 Concentration standards for wastewaters are expressed in mg/l and are based on analysis of composite samples.

3 Except for Metals (EP or TCLP) and Cyanides (Total and Amenable) the nonwastewater treatment standards expressed as a concentration were established, inpart, based upon incineration in units operated in accordance with the technical requirements of 40 CFR part 264, subpart O or 40 CFR part 265, subpart O, or based upon combustion in fuel substitution units operating in accordance with applicable technical requirements. A facility may comply with these treatment standards according to provisions in 40 CFR 268.40(d). All concentration standards for nonwastewaters are based on analysis of grab samples.

FOOTNOTES TO TABLE UTS—Continued

4 Both Cyanides (Total) and Cyanides (Amenable) for nonwastewaters are to be analyzed using Method 9010C or 9012B, found in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW–846, as incorporated by reference in 40 CFR 260.11, with a sample size of 10 grams and a distillation time of one hour and 15 minutes.

5 These constituents are not "underlying hazardous constituents" in characteristic wastes, according to the definition at § 268.2(i).

6 [Reserved]

7 This constituent is not an underlying hazardous constituent as defined at § 268.2(i) of this Part because its UTS level is greater than its TC level, thus a treatment selenium waste would always be characteristically hazardous, unless it is treated to below its characteristic level.

8 This standard is temporarily deferred for soil exhibiting a hazardous characteristic due to D004–D011 only.

[59 FR 48103, Sept. 19, 1994, as amended at 60 FR 302, Jan. 3, 1995; 61 FR 15654, Apr. 8, 1996; 61 FR 33690, June 28, 1996; 62 FR 7596, Feb. 19, 1997; 63 FR 24626, May 4, 1998; 63 FR 28739, May 26, 1998; 63 FR 47417, Sept. 4, 1998; 64 FR 25417, May 11, 1999; 65 FR 14475, Mar. 17, 2000; 70 FR 34590, June 14, 2005; 70 FR 9178, Feb. 24, 2005; 71 FR 40279, July 14, 2006; 75 FR 13008, Mar. 18, 2010; 76 FR 34156, June 13, 2011]

§ 268.49 Alternative LDR treatment standards for contaminated soil.

(a) *Applicability.* You must comply with LDRs prior to placing soil that exhibits a characteristic of hazardous waste, or exhibited a characteristic of hazardous waste at the time it was generated, into a land disposal unit. The following chart describes whether you must comply with LDRs prior to placing soil contaminated by listed hazardous waste into a land disposal unit:

If LDRs	And if LDRs	And if	Then you
Applied to the listed waste when it contaminated the soil*.	Apply to the listed waste now.	.....	Must comply with LDRs
Didn't apply to the listed waste when it contaminated the soil*.	Apply to the listed waste now.	The soil is determined to contain the listed waste when the soil is first generated.	Must comply with LDRs.
Didn't apply to the listed waste when it contaminated the soil*.	Apply to the listed waste now.	The soil is determined not to contain the listed waste when the soil is first generated.	Needn't comply with LDRs.
Didn't apply to the listed waste when it contaminated the soil*.	Don't apply to the listed waste now.	.....	Needn't comply with LDRs.

* For dates of LDR applicability, see 40 CFR Part 268 Appendix VII. To determine the date any given listed hazardous waste contaminated any given volume of soil, use the last date any given listed hazardous waste was placed into any given land disposal unit or, in the case of an accidental spill, the date of the spill.

(b) Prior to land disposal, contaminated soil identified by paragraph (a) of this section as needing to comply with LDRs must be treated according to the applicable treatment standards specified in paragraph (c) of this section or according to the Universal Treatment Standards specified in 40 CFR 268.48 applicable to the contaminating listed hazardous waste and/or the applicable characteristic of hazardous waste if the soil is characteristic. The treatment standards specified in paragraph (c) of this section and the Universal Treatment Standards may be modified through a treatment variance approved in accordance with 40 CFR 268.44.

(c) *Treatment standards for contaminated soils.* Prior to land disposal, contaminated soil identified by paragraph (a) of this section as needing to comply with LDRs must be treated according to all the standards specified in this paragraph or according to the Universal Treatment Standards specified in 40 CFR 268.48.

Groundwater and Surface Water Cleanup Target Levels

Table I
Groundwater and Surface Water Cleanup Target Levels

Contaminants	CAS#s	Groundwater Criteria (ug/L)	Freshwater Surface Water Criteria (ug/L)	Marine Surface Water Criteria (ug/L)	Groundwater of Low Yield/Poor Quality Criteria (ug/L)	Target Organs/Systems or Effects†
Acenaphthene	83-32-9	20 Minimum Criteria Organoleptic	3 Toxicity Criteria	3 Toxicity Criteria	200	-Liver
Acenaphthylene	208-96-8	210 Minimum Criteria Systemic Toxicant	**	**	2100	-Liver
Acephate	30560-19-1	4 Minimum Criteria Carcinogen	190 Toxicity Criteria	190 Toxicity Criteria	40	-Carcinogen -Neurological
Acetone	67-64-1	6300 Minimum Criteria Systemic Toxicant	1700 Toxicity Criteria	1700 Toxicity Criteria	63000	-Kidney -Liver -Neurological
Acetonitrile	75-05-8	42 Minimum Criteria Systemic Toxicant	20000 Toxicity Criteria	20000 Toxicity Criteria	420	-Mortality
Acetophenone	98-86-2	700 Minimum Criteria Systemic Toxicant	7800 Toxicity Criteria	7800 Toxicity Criteria	7000	-None Specified
Acifluorfen, sodium [or Blazer]	62476-59-9	1 Minimum Criteria Carcinogen	190 Toxicity Criteria	190 Toxicity Criteria	10	-Kidney
Acrolein	107-02-8	3.5 Minimum Criteria Systemic Toxicant	0.4 Toxicity Criteria	0.4 Toxicity Criteria	35	-Nasal
Acrylamide	79-06-1	0.008 Minimum Criteria Carcinogen	0.3 Human Health	0.3 Human Health	0.08	-Carcinogen -Neurological
Acrylic acid	79-10-7	3500 Minimum Criteria Systemic Toxicant	NA	NA	35000	-Developmental
Acrylonitrile	107-13-1	0.06 Minimum Criteria Carcinogen	0.2 Human Health	0.2 Human Health	0.6	-Carcinogen -Nasal -Reproductive
Alachlor	15972-60-8	* Primary Standard	0.5 Human Health	0.5 Human Health	***	-Blood -Carcinogen
Aldicarb [or Temik]	116-06-3	7 Minimum Criteria Systemic Toxicant	0.9 Toxicity Criteria	0.9 Toxicity Criteria	70	-Neurological
Aldicarb sulfone	1646-88-4	7 Minimum Criteria Systemic Toxicant	46 Toxicity Criteria	46 Toxicity Criteria	70	-Neurological

Table I
Groundwater and Surface Water Cleanup Target Levels

Contaminants	CAS#s	Groundwater Criteria (ug/L)	Freshwater Surface Water Criteria (ug/L)	Marine Surface Water Criteria (ug/L)	Groundwater of Low Yield/Poor Quality Criteria (ug/L)	Target Organs/Systems or Effects†
Aldicarb sulfoxide	1646-87-3	7 Minimum Criteria Systemic Toxicant	4.2 Toxicity Criteria	4.2 Toxicity Criteria	70	-Neurological
Aldrin	309-00-2	0.002 Minimum Criteria Carcinogen	**	**	0.02	-Carcinogen -Liver
Ally [or Metsulfuron, methyl]	74223-64-6	1800 Minimum Criteria Systemic Toxicant	NA	NA	18000	-Body Weight
Allyl alcohol	107-18-6	35 Minimum Criteria Systemic Toxicant	5 Toxicity Criteria	5 Toxicity Criteria	350	-Kidney -Liver
Allyl chloride	107-05-1	35# Minimum Criteria Systemic Toxicant	NA	NA	350	-Neurological
Aluminum	7429-90-5	* Secondary Standard	13 Toxicity Criteria	**	***	-Body Weight
Aluminum phosphide	20859-73-8	2.8 Minimum Criteria Systemic Toxicant	6.5 Toxicity Criteria	6.5 Toxicity Criteria	28	-Body Weight
Ametryn	834-12-8	63 Minimum Criteria Systemic Toxicant	6.2 Toxicity Criteria	6.2 Toxicity Criteria	630	-Liver
Ammonia (a)	7664-41-7	2800 Minimum Criteria Systemic Toxicant	**	NA	28000	-Respiratory
Ammonium sulfamate	7773-06-0	1400 Minimum Criteria Systemic Toxicant	10000 Toxicity Criteria	10000 Toxicity Criteria	14000	-Body Weight
Anilazine [or Dyrene]	101-05-3	2.8 Minimum Criteria Systemic Toxicant	NA	NA	28	-None Specified
Aniline	62-53-3	6.1 Minimum Criteria Carcinogen	4 Toxicity Criteria	4 Toxicity Criteria	61	-Blood -Carcinogen -Spleen
Anthracene	120-12-7	2100 Minimum Criteria Systemic Toxicant	0.3 Toxicity Criteria	0.3 Toxicity Criteria	21000	-None Specified
Antimony	7440-36-0	* Primary Standard	**	**	***	-Blood

Table I
Groundwater and Surface Water Cleanup Target Levels

Contaminants	CAS#s	Groundwater Criteria (ug/L)	Freshwater Surface Water Criteria (ug/L)	Marine Surface Water Criteria (ug/L)	Groundwater of Low Yield/Poor Quality Criteria (ug/L)	Target Organs/Systems or Effects†
Aramite	140-57-8	1.4 Minimum Criteria Carcinogen	3 Toxicity Criteria	3 Toxicity Criteria	14	-Carcinogen
Aroclor mixture [see PCBs]						
Arsenic	NOCAS	* Primary Standard	**	**	***	-Carcinogen -Cardiovascular -Skin
Atrazine	1912-24-9	* Primary Standard	1.9 Human Health	1.9 Human Health	***	-Carcinogen -Cardiovascular
Azinphos, methyl [see Guthion]						
Azobenzene	103-33-3	0.3 Minimum Criteria Carcinogen	3.6 Human Health	3.6 Human Health	3	-Carcinogen
Barium (soluble salts)	7440-39-3	* Primary Standard	NA	NA	***	-Cardiovascular
Baygon [or Propoxur]	114-26-1	28 Minimum Criteria Systemic Toxicant	0.4 Toxicity Criteria	0.4 Toxicity Criteria	280	-Blood -Neurological
Bayleton	43121-43-3	210 Minimum Criteria Systemic Toxicant	500 Toxicity Criteria	500 Toxicity Criteria	2100	-Blood
Benomyl	17804-35-2	35# Minimum Criteria Systemic Toxicant	0.3 Toxicity Criteria	0.3 Toxicity Criteria	350	-Developmental
Bensulide	741-58-2	46 Minimum Criteria Systemic Toxicant	NA	NA	460	-None Specified
Bentazon	25057-89-0	210 Minimum Criteria Systemic Toxicant	NA	NA	2100	-Blood
Benzaldehyde	100-52-7	700 Minimum Criteria Systemic Toxicant	54 Toxicity Criteria	54 Toxicity Criteria	7000	-Gastrointestinal -Kidney
Benzene	71-43-2	* Primary Standard	**	**	***	-Blood -Carcinogen

Table I
Groundwater and Surface Water Cleanup Target Levels

Contaminants	CAS#s	Groundwater Criteria (ug/L)	Freshwater Surface Water Criteria (ug/L)	Marine Surface Water Criteria (ug/L)	Groundwater of Low Yield/Poor Quality Criteria (ug/L)	Target Organs/Systems or Effects†
Benzenethiol	108-98-5	0.07 Minimum Criteria Systemic Toxicant	NA	NA	0.7	-Liver
Benzidine	92-87-5	0.0002 Minimum Criteria Carcinogen	0.0002 Human Health	0.0002 Human Health	0.002	-Carcinogen -Liver -Neurological
Benzo(a)anthracene	56-55-3	0.05 Minimum Criteria Carcinogen	**	**	0.5	-Carcinogen
Benzo(a)pyrene	50-32-8	* Primary Standard	**	**	***	-Carcinogen
Benzo(b)fluoranthene	205-99-2	0.05 Minimum Criteria Carcinogen	**	**	0.5	-Carcinogen
Benzo(g,h,i)perylene	191-24-2	210 Minimum Criteria Systemic Toxicant	**	**	2100	-Neurological
Benzo(k)fluoranthene	207-08-9	0.5 Minimum Criteria Carcinogen	**	**	5	-Carcinogen
Benzoic acid	65-85-0	28000 Minimum Criteria Systemic Toxicant	9000 Toxicity Criteria	9000 Toxicity Criteria	280000	-None Specified
Benzotrichloride	98-07-7	0.003 Minimum Criteria Carcinogen	0.002 Human Health	0.002 Human Health	0.03	-Carcinogen
Benzyl alcohol	100-51-6	2100 Minimum Criteria Systemic Toxicant	500 Toxicity Criteria	500 Toxicity Criteria	21000	-Gastrointestinal
Benzyl chloride	100-44-7	0.2 Minimum Criteria Carcinogen	2 Human Health	2 Human Health	2	-Carcinogen
Beryllium	7440-41-7	* Primary Standard	**	**	***	-Carcinogen -Gastrointestinal -Respiratory
Beta radiation	NOCAS	* Primary Standard	NA	NA	***	-Carcinogen
BHC, alpha- [see Hexachlorocyclohexane, alpha-] (b)						

Table I

Groundwater and Surface Water Cleanup Target Levels

Contaminants	CAS#s	Groundwater Criteria (ug/L)	Freshwater Surface Water Criteria (ug/L)	Marine Surface Water Criteria (ug/L)	Groundwater of Low Yield/Poor Quality Criteria (ug/L)	Target Organs/Systems or Effects†
BHC, beta- [see Hexachlorocyclohexane, beta-] (b)						
BHC, delta- [see Hexachlorocyclohexane, delta-] (b)						
BHC, gamma- [see Hexachlorocyclohexane, gamma-] (b)						
BHC, technical [see Hexachlorocyclohexane, technical] (b)						
Bidrin [or Dicrotophos]	141-66-2	0.7 Minimum Criteria Systemic Toxicant	22 Toxicity Criteria	22 Toxicity Criteria	7	-Developmental
Bioallethrin	28057-48-9	35 Minimum Criteria Systemic Toxicant	NA	NA	350	-Liver
Biphenyl, 1,1- [or Diphenyl]	92-52-4	0.5 Minimum Criteria Organoleptic	18 Toxicity Criteria	18 Toxicity Criteria	5	-Kidney
Bis(2-chloro-1-metylethyl)ether [see Bis(2-chloroisopropyl)ether]						
Bis(2-chloroethyl)ether	111-44-4	0.03 Minimum Criteria Carcinogen	0.5 Human Health	0.5 Human Health	0.3	-Carcinogen
Bis(2-chloroisopropyl)ether [or Bis(2chloro-1-metylethyl)ether]	39638-32-9	0.5 Minimum Criteria Carcinogen	23 Human Health	23 Human Health	5	-Blood -Carcinogen
Bis(2-ethylhexyl)adipate	103-23-1	* Primary Standard	33 Toxicity Criteria	33 Toxicity Criteria	***	-Body Weight -Carcinogen
Bis(2-ethylhexyl)phthalate [or DEHP]	117-81-7	* Primary Standard	2.2 Human Health	2.2 Human Health	***	-Carcinogen -Liver
Bisphenol A	80-05-7	350 Minimum Criteria Systemic Toxicant	55 Toxicity Criteria	55 Toxicity Criteria	3500	-Body Weight
Blazer [see Acifluorfen, sodium]						

Table I

Groundwater and Surface Water Cleanup Target Levels

Contaminants	CAS#s	Groundwater Criteria (ug/L)	Freshwater Surface Water Criteria (ug/L)	Marine Surface Water Criteria (ug/L)	Groundwater of Low Yield/Poor Quality Criteria (ug/L)	Target Organs/Systems or Effects†
Boron	7440-42-8	1400 Minimum Criteria Systemic Toxicant	NA	NA	14000	-Reproductive -Respiratory
Bravo [see Chlorothalonil]						
Bromacil	314-40-9	70# Minimum Criteria Systemic Toxicant	97 Toxicity Criteria	97 Toxicity Criteria	700	-Body Weight
Bromate	15541-45-4	0.05 Minimum Criteria Carcinogen	NA	**	0.5	-Carcinogen -Kidney
Bromochloromethane	74-97-5	91 Minimum Criteria Systemic Toxicant	NA	NA	910	-None Specified
Bromodichloromethane	75-27-4	0.6 Minimum Criteria Carcinogen	**	**	6	-Carcinogen -Kidney
Bromoform	75-25-2	4.4 Minimum Criteria Carcinogen	**	**	44	-Carcinogen -Liver
Bromomethane [or Methyl bromide]	74-83-9	9.8 Minimum Criteria Systemic Toxicant	35 Toxicity Criteria	35 Toxicity Criteria	98	-Gastrointestinal -Respiratory
Bromoxynil	1689-84-5	140 Minimum Criteria Systemic Toxicant	NA	NA	1400	-None Specified
Bromoxynil octanoate	1689-99-2	140 Minimum Criteria Systemic Toxicant	NA	NA	1400	-Neurological
Butane	106-97-8	9100 Minimum Criteria Systemic Toxicant	NA	NA	91000	-Neurological -Respiratory
Butanol, n-	71-36-3	700 Minimum Criteria Systemic Toxicant	25000 Toxicity Criteria	25000 Toxicity Criteria	7000	-Neurological
Butanol, tert- [see Butyl alcohol, tert-]						
Butanone, 2- [see Methyl ethyl ketone]						

Table I

Groundwater and Surface Water Cleanup Target Levels

Contaminants	CAS#s	Groundwater Criteria	Freshwater Surface Water Criteria	Marine Surface Water Criteria	Groundwater of Low Yield/Poor Quality Criteria	Target Organs/Systems or Effects†
		(ug/L)	(ug/L)	(ug/L)	(ug/L)	
Butyl acetate, n-	123-86-4	43 Minimum Criteria Organoleptic	1000 Toxicity Criteria	1000 Toxicity Criteria	430	-None Specified
Butyl alcohol, tert- [or Butanol, tert-]	75-65-0	1400 Minimum Criteria Systemic Toxicant	NA	NA	14000	-Kidney -Neurological
Butyl benzyl phthalate	85-68-7	140# Minimum Criteria Systemic Toxicant	26 Toxicity Criteria	26 Toxicity Criteria	1400	-Liver
Butylate	2008-41-5	350 Minimum Criteria Systemic Toxicant	11 Toxicity Criteria	11 Toxicity Criteria	3500	-Liver
Butylphthalyl butylglycolate	85-70-1	7000 Minimum Criteria Systemic Toxicant	NA	NA	70000	-None Specified
Cadmium	7440-43-9	* Primary Standard	**	**	***	-Carcinogen -Kidney
Calcium cyanide	592-01-8	280 Minimum Criteria Systemic Toxicant	NA	NA	2800	-Neurological -Thyroid
Captafol	2425-06-1	4.1 Minimum Criteria Carcinogen	0.9 Toxicity Criteria	0.9 Toxicity Criteria	41	-Carcinogen -Kidney
Captan	133-06-2	10 Minimum Criteria Carcinogen	1.9 Toxicity Criteria	1.9 Toxicity Criteria	100	-Body Weight -Carcinogen
Carbaryl [or Sevin]	63-25-2	700 Minimum Criteria Systemic Toxicant	0.06 Toxicity Criteria	0.06 Toxicity Criteria	7000	-Kidney -Liver
Carbazole	86-74-8	1.8 Minimum Criteria Carcinogen	47 Toxicity Criteria	47 Toxicity Criteria	18	-Carcinogen
Carbofuran	1563-66-2	* Primary Standard	0.1 Toxicity Criteria	0.1 Toxicity Criteria	***	-Neurological -Reproductive
Carbon disulfide	75-15-0	700 Minimum Criteria Systemic Toxicant	110 Toxicity Criteria	110 Toxicity Criteria	7000	-Developmental -Neurological
Carbon tetrachloride	56-23-5	* Primary Standard	**	**	***	-Carcinogen -Liver

Table I

Groundwater and Surface Water Cleanup Target Levels

Contaminants	CAS#s	Groundwater Criteria	Freshwater Surface Water Criteria	Marine Surface Water Criteria	Groundwater of Low Yield/Poor Quality Criteria	Target Organs/Systems or Effects†
		(ug/L)	(ug/L)	(ug/L)	(ug/L)	
Carbophenothion [or Trithion]	786-19-6	0.9 Minimum Criteria Systemic Toxicant	0.1 Toxicity Criteria	0.1 Toxicity Criteria	9	-Neurological
Carboxin	5234-68-4	700 Minimum Criteria Systemic Toxicant	60 Toxicity Criteria	60 Toxicity Criteria	7000	-Body Weight
CFC 113 [see Trichloro-1,2,2trifluoroethane, 1,1,2-]						-Adrenals
Chloral hydrate	302-17-0	70# Minimum Criteria Systemic Toxicant	NA	NA	700	-Gastrointestinal -Neurological
Chloramben	133-90-4	110 Minimum Criteria Systemic Toxicant	NA	NA	1100	-Liver
Chlordane (total)	(g)	* Primary Standard	**	**	***	-Carcinogen -Liver
Chloride	16887-00-6	* Secondary Standard	NA	**	***	-None Specified
Chlorine	7782-50-5	700 Minimum Criteria Systemic Toxicant	**	**	7000	-Respiratory
Chlorine cyanide [or Cyanogen chloride]	506-77-4	350 Minimum Criteria Systemic Toxicant	1.4 Toxicity Criteria	1.4 Toxicity Criteria	3500	-Neurological -Thyroid
Chlorite (sodium salt) [or Sodium chlorite]	7758-19-2	210 Minimum Criteria Systemic Toxicant	29 Toxicity Criteria	29 Toxicity Criteria	2100	-Developmental -Neurological
Chloro-1,3-butadiene [or Chloroprene]	126-99-8	140 Minimum Criteria Systemic Toxicant	NA	NA	1400	-Hair Loss -Nasal
Chloro-3-methylphenol, 4- [see Chlorom-cresol, p-]						
Chloroacetic acid	79-11-8	14 Minimum Criteria Systemic Toxicant	2500 Human Health	2500 Human Health	140	-Cardiovascular
Chloroaniline, p-	106-47-8	28 Minimum Criteria Systemic Toxicant	2.5 Toxicity Criteria	2.5 Toxicity Criteria	280	-Spleen

Table I
Groundwater and Surface Water Cleanup Target Levels

Contaminants	CAS#s	Groundwater Criteria (ug/L)	Freshwater Surface Water Criteria (ug/L)	Marine Surface Water Criteria (ug/L)	Groundwater of Low Yield/Poor Quality Criteria (ug/L)	Target Organs/Systems or Effects†
Chlorobenzene	108-90-7	* Primary Standard	17 Toxicity Criteria	17 Toxicity Criteria	***	-Liver
Chlorobenzilate	510-15-6	0.1 Minimum Criteria Carcinogen	0.02 Human Health	0.02 Human Health	1	-Body Weight -Carcinogen
Chloroethane [see Ethyl chloride]						
Chloroform	67-66-3	70 Minimum Criteria Systemic Toxicant	**	**	700	-Carcinogen -Liver
Chloro-m-cresol, p- [or Chloro-3methylphenol, 4-]	59-50-7	63 Minimum Criteria Systemic Toxicant	100 Toxicity Criteria	100 Toxicity Criteria	630	-Body Weight
Chloromethane [see Methyl chloride]						
Chloronaphthalene, beta-	91-58-7	560 Minimum Criteria Systemic Toxicant	1600 Human Health	1600 Human Health	5600	-Liver -Respiratory
Chloronitrobenzene, p-	100-00-5	1.9 Minimum Criteria Carcinogen	110 Toxicity Criteria	110 Toxicity Criteria	19	-Carcinogen
Chlorophenol, 2-	95-57-8	35 Minimum Criteria Systemic Toxicant	130 Toxicity Criteria	130 Toxicity Criteria	350	-Reproductive
Chlorophenol, 3-	108-43-0	0.1 Minimum Criteria Organoleptic	170 Toxicity Criteria	170 Toxicity Criteria	1	-Reproductive
Chlorophenol, 4-	106-48-9	0.1 Minimum Criteria Organoleptic	180 Toxicity Criteria	180 Toxicity Criteria	1	-Reproductive
Chloropicrin	76-06-2	7.3 Minimum Criteria Organoleptic	NA	NA	73	-None Specified
Chloroprene [see Chloro-1,3butadiene]						
Chlorothalonil [or Bravo]	1897-45-6	3.2 Minimum Criteria Carcinogen	0.8 Toxicity Criteria	0.8 Toxicity Criteria	32	-Carcinogen -Kidney

Table I
Groundwater and Surface Water Cleanup Target Levels

Contaminants	CAS#s	Groundwater Criteria (ug/L)	Freshwater Surface Water Criteria (ug/L)	Marine Surface Water Criteria (ug/L)	Groundwater of Low Yield/Poor Quality Criteria (ug/L)	Target Organs/Systems or Effects†
Chlorotoluene, o-	95-49-8	140 Minimum Criteria Systemic Toxicant	390 Toxicity Criteria	390 Toxicity Criteria	1400	-Body Weight
Chlorotoluene, p-	106-43-4	140 Minimum Criteria Systemic Toxicant	NA	NA	1400	-None Specified
Chlorpropham	101-21-3	1400 Minimum Criteria Systemic Toxicant	190 Toxicity Criteria	190 Toxicity Criteria	14000	-Bone Marrow -Kidney -Liver -Spleen
Chlorpyrifos	2921-88-2	21 Minimum Criteria Systemic Toxicant	0.002 Toxicity Criteria	0.002 Toxicity Criteria	210	-Neurological
Chlorpyrifos, methyl	5598-13-0	70 Minimum Criteria Systemic Toxicant	0.04 Toxicity Criteria	0.04 Toxicity Criteria	700	-Reproductive
Chlorsulfuron	64902-72-3	350 Minimum Criteria Systemic Toxicant	16 Toxicity Criteria	16 Toxicity Criteria	3500	-Body Weight
Chromium (hexavalent)	18540-29-9	*	**	**	***	-Carcinogen -Respiratory
Chromium (total)	NOCAS	* Primary Standard	11 (f)	50 (f)	***	-Carcinogen
Chromium (trivalent)	16065-83-1	*	**	520 Toxicity Criteria (e)	***	-None Specified
Chrysene	218-01-9	4.8 Minimum Criteria Carcinogen	**	**	48	-Carcinogen
Cobalt	7440-48-4	140 Minimum Criteria Systemic Toxicant	NA	NA	1400	-Cardiovascular -Immunological -Neurological -Reproductive
Copper	7440-50-8	* Secondary Standard	**	**	***	-Gastrointestinal
Copper cyanide	544-92-3	35 Minimum Criteria Systemic Toxicant	NA	NA	350	-Kidney
Coumaphos	56-72-4	1.8 Minimum Criteria Systemic Toxicant	0.004 Toxicity Criteria	0.004 Toxicity Criteria	18	-Neurological

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Groundwater and Surface Water Cleanup Target Levels

Contaminants	CAS#s	Groundwater Criteria (ug/L)	Freshwater Surface Water Criteria (ug/L)	Marine Surface Water Criteria (ug/L)	Groundwater of Low Yield/Poor Quality Criteria (ug/L)	Target Organs/Systems or Effects†
Cresol, m- [see Methylphenol, 3-]						
Cresol, o- [see Methylphenol, 2-]						
Cresol, p- [see Methylphenol, 4-]						
Crotonaldehyde	123-73-9	0.02 Minimum Criteria Carcinogen	NA	NA	0.2	-Carcinogen
Cumene [or Isopropyl benzene]	98-82-8	0.8 Minimum Criteria Organoleptic	260 Toxicity Criteria	260 Toxicity Criteria	8	-Adrenals -Kidney
Cyanazine	21725-46-2	0.04 Minimum Criteria Carcinogen	5.5 Toxicity Criteria	5.5 Toxicity Criteria	0.4	-Carcinogen
Cyanide, free	57-12-5	* Primary Standard	**	**	***	-Neurological -Thyroid
Cyanogen	460-19-5	280 Minimum Criteria Systemic Toxicant	NA	NA	2800	-Neurological -Thyroid
Cyanogen chloride [see Chlorine cyanide]						
Cycloate	1134-23-2	35 Minimum Criteria Systemic Toxicant	130 Toxicity Criteria	130 Toxicity Criteria	350	-Neurological
Cyclohexanone	108-94-1	35000 Minimum Criteria Systemic Toxicant	26000 Toxicity Criteria	26000 Toxicity Criteria	350000	
Cyclohexylamine	108-91-8	1400 Minimum Criteria Systemic Toxicant	4000 Toxicity Criteria	4000 Toxicity Criteria	14000	-Reproductive
Cyhalothrin [or Karate]	68085-85-8	35 Minimum Criteria Systemic Toxicant	18 Human Health	18 Human Health	350	-Developmental
Cypermethrin	52315-07-8	7# Minimum Criteria Systemic Toxicant	0.0005 Toxicity Criteria	0.0005 Toxicity Criteria	70	-Gastrointestinal

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Groundwater and Surface Water Cleanup Target Levels

Contaminants	CAS#s	Groundwater Criteria (ug/L)	Freshwater Surface Water Criteria (ug/L)	Marine Surface Water Criteria (ug/L)	Groundwater of Low Yield/Poor Quality Criteria (ug/L)	Target Organs/Systems or Effects†
Dacthal [or DCPA]	1861-32-1	70 Minimum Criteria Systemic Toxicant	310 Toxicity Criteria	310 Toxicity Criteria	700	-Eye -Kidney -Liver -Respiratory -Thyroid
Dalapon	75-99-0	* Primary Standard	5000 Toxicity Criteria	5000 Toxicity Criteria	***	-Kidney
DB, 2,4- [see Dichlorophenoxy butyric acid, 2,4-]						
DBCP, 1,2- [see Dibromo-3chloropropane, 1,2-]						
DCPA [see Dacthal]						
DDD, 4,4'- [see Dichlorodiphenyldichloroethane, p,p']						
DDE, 4,4'- [see Dichlorodiphenyldichloroethylene, p,p'-]						
DDT, 4,4'- [see Dichlorodiphenyltrichloroethane, p,p'-]						
Decabromodiphenyl ether	1163-19-5	7# Minimum Criteria Systemic Toxicant	NA	NA	70	-None Specified
DEET	134-62-3	6300 Minimum Criteria Systemic Toxicant	NA	NA	63000	-Body Weight
DEHP [see Bis(2-ethylhexyl)phthalate]						
Demeton	8065-48-3	0.3 Minimum Criteria Systemic Toxicant	**	**	3	-Eye -Neurological
Diallate	2303-16-4	0.6 Minimum Criteria Carcinogen	NA	NA	6	-Carcinogen -None Specified
Diazinon	333-41-5	6.3 Minimum Criteria Systemic Toxicant	0.002 Toxicity Criteria	0.002 Toxicity Criteria	63	-Neurological

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Groundwater and Surface Water Cleanup Target Levels

Contaminants	CAS#s	Groundwater Criteria (ug/L)	Freshwater Surface Water Criteria (ug/L)	Marine Surface Water Criteria (ug/L)	Groundwater of Low Yield/Poor Quality Criteria (ug/L)	Target Organs/Systems or Effects†
Dibenz(a,h)anthracene	53-70-3	0.005 Minimum Criteria Carcinogen	**	**	0.05	-Carcinogen
Dibenzofuran	132-64-9	28 Minimum Criteria Systemic Toxicant	67 Toxicity Criteria	67 Toxicity Criteria	280	-None Specified
Dibromo-3-chloropropane, 1,2- [or DBCP, 1,2-]	96-12-8	* Primary Standard	NA	NA	***	-Carcinogen -Reproductive
Dibromobenzene, 1,4-	106-37-6	70 Minimum Criteria Systemic Toxicant	240 Human Health	240 Human Health	700	-Liver
Dibromochloromethane	124-48-1	0.4 Minimum Criteria Carcinogen	**	**	4	-Carcinogen -Liver
Dibromoethane, 1,2- [or EDB]	106-93-4	* Primary Standard	13 Toxicity Criteria	13 Toxicity Criteria	***	-Carcinogen -Reproductive
Dibutyl phthalate	84-74-2	700 Minimum Criteria Systemic Toxicant	23 Toxicity Criteria	23 Toxicity Criteria	7000	-Mortality
Dicamba	1918-00-9	210 Minimum Criteria Systemic Toxicant	200 Toxicity Criteria	200 Toxicity Criteria	2100	-Developmental
Dichloroacetic acid	79-43-6	0.7 Minimum Criteria Carcinogen	1200 Toxicity Criteria	1200 Toxicity Criteria	7	-Carcinogen -Liver -Neurological -Reproductive
Dichloroacetonitrile	3018-12-0	5.6# Minimum Criteria Systemic Toxicant	NA	NA	56	-None Specified
Dichlorobenzene, 1,2-	95-50-1	* Primary Standard	99 Toxicity Criteria	99 Toxicity Criteria	***	-Body Weight
Dichlorobenzene, 1,3-	541-73-1	210 Minimum Criteria Systemic Toxicant	85 Toxicity Criteria	85 Toxicity Criteria	2100	-None Specified
Dichlorobenzene, 1,4-	106-46-7	* Primary Standard	3 Human Health	3 Human Health	***	-Carcinogen -Liver
Dichlorobenzidine, 3,3'-	91-94-1	0.08 Minimum Criteria Carcinogen	0.03 Human Health	0.03 Human Health	0.8	-Carcinogen

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Groundwater and Surface Water Cleanup Target Levels

Contaminants	CAS#s	Groundwater Criteria (ug/L)	Freshwater Surface Water Criteria (ug/L)	Marine Surface Water Criteria (ug/L)	Groundwater of Low Yield/Poor Quality Criteria (ug/L)	Target Organs/Systems or Effects†
Dichlorobenzophenone, 4,4'-	90-98-2	210 Minimum Criteria Systemic Toxicant	1600 Human Health	1600 Human Health	2100	-None Specified
Dichlorodifluoromethane	75-71-8	1400 Minimum Criteria Systemic Toxicant	NA	NA	14000	-Liver
Dichlorodiphenyldichloroethane, p,p'- [or DDD, 4,4'-]	72-54-8	0.1 Minimum Criteria Carcinogen	0.0003 Human Health	0.0003 Human Health	1	-Carcinogen
Dichlorodiphenyldichloroethylene, p,p'- [or DDE, 4,4'-]	72-55-9	0.1 Minimum Criteria Carcinogen	0.0002 Human Health	0.0002 Human Health	1	-Carcinogen
Dichlorodiphenyltrichloroethane, p,p'- [or DDT, 4,4'-]	50-29-3	0.1 Minimum Criteria Carcinogen	**	**	1	-Carcinogen -Liver
Dichloroethane, 1,1-	75-34-3	70# Minimum Criteria Systemic Toxicant	NA	NA	700	-Kidney
Dichloroethane, 1,2- [or EDC]	107-06-2	* Primary Standard	37 Human Health	37 Human Health	***	-Carcinogen -None Specified
Dichloroethene, 1,1-	75-35-4	* Primary Standard	**	**	***	-Liver
Dichloroethene, 1,2- (mixture)	540-59-0	63 Minimum Criteria Systemic Toxicant	7000 Toxicity Criteria	7000 Toxicity Criteria	630	-Blood -Liver
Dichloroethene, cis-1,2-	156-59-2	* Primary Standard	NA	NA	***	-Blood
Dichloroethene, trans-1,2-	156-60-5	* Primary Standard	11000 Toxicity Criteria	11000 Toxicity Criteria	***	-Blood -Liver
Dichlorophenol, 2,3-	576-24-9	0.04 Minimum Criteria Organoleptic	56 Toxicity Criteria	56 Toxicity Criteria	0.4	-Immunological
Dichlorophenol, 2,4-	120-83-2	0.3 Minimum Criteria Organoleptic	13 Toxicity Criteria	13 Toxicity Criteria	3	-Immunological
Dichlorophenol, 2,5-	583-78-8	0.5 Minimum Criteria Organoleptic	90 Toxicity Criteria	90 Toxicity Criteria	5	-Immunological

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Contaminants	CAS#s	Groundwater Criteria (ug/L)	Freshwater Surface Water Criteria (ug/L)	Marine Surface Water Criteria (ug/L)	Groundwater of Low Yield/Poor Quality Criteria (ug/L)	Target Organs/Systems or Effects†
Dichlorophenol, 2,6-	87-65-0	0.2 Minimum Criteria Organoleptic	73 Toxicity Criteria	73 Toxicity Criteria	2	-Immunological
Dichlorophenol, 3,4-	95-77-2	0.3 Minimum Criteria Organoleptic	61 Toxicity Criteria	61 Toxicity Criteria	3	-Immunological
Dichlorophenoxy acetic acid, 2,4-	94-75-7	* Primary Standard	80 Toxicity Criteria	80 Toxicity Criteria	***	-Blood -Kidney -Liver
Dichlorophenoxy butyric acid, 2,4- [or DB, 2,4-]	94-82-6	56 Minimum Criteria Systemic Toxicant	NA	NA	560	-Blood -Cardiovascular
Dichloropropane, 1,2-	78-87-5	* Primary Standard	14 Human Health	14 Human Health	***	-Carcinogen -Nasal
Dichloropropene, 1,3-	542-75-6	0.4 Minimum Criteria Carcinogen	12 Toxicity Criteria	12 Toxicity Criteria	4	-Carcinogen -Gastrointestinal -Nasal
Dichlorprop	120-36-5	35 Minimum Criteria Systemic Toxicant	42 Toxicity Criteria	42 Toxicity Criteria	350	-None Specified
Dichlorvos	62-73-7	0.1 Minimum Criteria Carcinogen	0.005 Toxicity Criteria	0.005 Toxicity Criteria	1	-Carcinogen -Neurological
Dicofol [or Kelthane]	115-32-2	0.08 Minimum Criteria Carcinogen	0.006 Human Health	0.006 Human Health	0.8	-Adrenals -Carcinogen
Dicrotophos [see Bidrin]						
Dieldrin	60-57-1	0.002 Minimum Criteria Carcinogen	**	**	0.02	-Carcinogen -Liver
Diethyl phthalate	84-66-2	5600 Minimum Criteria Systemic Toxicant	380 Toxicity Criteria	380 Toxicity Criteria	56000	-Body Weight
Diethylene glycol, monoethyl ether	111-90-0	14000 Minimum Criteria Systemic Toxicant	170000 Toxicity Criteria	170000 Toxicity Criteria	140000	-Kidney
Diethylstilbestrol	56-53-1	0.000007 Minimum Criteria Carcinogen	NA	NA	0.00007	-Carcinogen

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Contaminants	CAS#s	Groundwater Criteria (ug/L)	Freshwater Surface Water Criteria (ug/L)	Marine Surface Water Criteria (ug/L)	Groundwater of Low Yield/Poor Quality Criteria (ug/L)	Target Organs/Systems or Effects†
Diisopropyl methylphosphonate	1445-75-6	560 Minimum Criteria Systemic Toxicant	13000 Toxicity Criteria	13000 Toxicity Criteria	5600	-None Specified
Dimethoate	60-51-5	1.4 Minimum Criteria Systemic Toxicant	0.1 Toxicity Criteria	0.1 Toxicity Criteria	14	-Neurological
Dimethoxybenzidine, 3,3'-	119-90-4	2.5 Minimum Criteria Carcinogen	NA	NA	25	-Carcinogen
Dimethrin	70-38-2	2100 Minimum Criteria Systemic Toxicant	1.1 Toxicity Criteria	1.1 Toxicity Criteria	21000	-Liver
Dimethylaniline, 2,4-	95-68-1	0.05 Minimum Criteria Carcinogen	1700 Toxicity Criteria	1700 Toxicity Criteria	0.5	-Blood -Carcinogen -Spleen
Dimethylaniline, N,N-	121-69-7	14 Minimum Criteria Systemic Toxicant	1700 Toxicity Criteria	1700 Toxicity Criteria	140	-Spleen
Dimethylbenzidine, 3,3'-	119-93-7	0.004 Minimum Criteria Carcinogen	NA	NA	0.04	-Carcinogen
Dimethylformamide, N,N-	68-12-2	700 Minimum Criteria Systemic Toxicant	50000 Toxicity Criteria	50000 Toxicity Criteria	7000	-Gastrointestinal -Liver
Dimethylphenol, 2,4-	105-67-9	140 Minimum Criteria Systemic Toxicant	160 Toxicity Criteria	160 Toxicity Criteria	1400	-Blood -Neurological
Dimethylphenol, 2,6-	576-26-1	4.2 Minimum Criteria Systemic Toxicant	560 Toxicity Criteria	560 Toxicity Criteria	42	-Kidney -Liver -Spleen
Dimethylphenol, 3,4-	95-65-8	7 Minimum Criteria Systemic Toxicant	380 Human Health	380 Human Health	70	-Kidney -Liver -Spleen
Dimethylphthalate	131-11-3	70000 Minimum Criteria Systemic Toxicant	1400 Toxicity Criteria	1400 Toxicity Criteria	700000	-Kidney
Dinitrobenzene, 1,2- (o)	528-29-0	2.8 Minimum Criteria Systemic Toxicant	30 Toxicity Criteria	30 Toxicity Criteria	28	-Spleen
Dinitrobenzene, 1,3- (m)	99-65-0	0.7 Minimum Criteria Systemic Toxicant	72 Toxicity Criteria	72 Toxicity Criteria	7	-Spleen

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Groundwater and Surface Water Cleanup Target Levels

Contaminants	CAS#s	Groundwater Criteria (ug/L)	Freshwater Surface Water Criteria (ug/L)	Marine Surface Water Criteria (ug/L)	Groundwater of Low Yield/Poor Quality Criteria (ug/L)	Target Organs/Systems or Effects†
Dinitrobenzene, 1,4- (p)	100-25-4	2.8 Minimum Criteria Systemic Toxicant	30 Toxicity Criteria	30 Toxicity Criteria	28	-Spleen
Dinitro-o-cyclohexylphenol	131-89-5	14 Minimum Criteria Systemic Toxicant	NA	NA	140	-Eye
Dinitrophenol, 2,4-	51-28-5	14 Minimum Criteria Systemic Toxicant	3 Toxicity Criteria	3 Toxicity Criteria	140	-Eye
Dinitrotoluene, 2,4-	121-14-2	0.05 Minimum Criteria Carcinogen	**	**	0.5	-Carcinogen -Liver -Neurological
Dinitrotoluene, 2,6-	606-20-2	0.05 Minimum Criteria Carcinogen	0.7 Human Health	0.7 Human Health	0.5	-Blood -Carcinogen -Kidney -Neurological
Di-n-octylphthalate	117-84-0	140 Minimum Criteria Systemic Toxicant	NA	NA	1400	-Kidney -Liver
Dinoseb	88-85-7	* Primary Standard	5.9 Toxicity Criteria	5.9 Toxicity Criteria	***	-Developmental
Dioxane, 1,4-	123-91-1	3.2 Minimum Criteria Carcinogen	120 Human Health	120 Human Health	32	-Carcinogen
Dioxins, as total 2,3,7,8-TCDD equivalents (c)	1746-01-6	* Primary Standard	0.000000005 Human Health	0.000000005 Human Health	***	-Carcinogen
Diphenamid	957-51-7	210 Minimum Criteria Systemic Toxicant	1600 Toxicity Criteria	1600 Toxicity Criteria	2100	-Liver
Diphenyl [see Biphenyl, 1,1-]						
Diphenylamine, N,N-	122-39-4	180 Minimum Criteria Systemic Toxicant	NA	NA	1800	-Kidney -Liver
Diphenylhydrazine, 1,2-	122-66-7	0.04 Minimum Criteria Carcinogen	0.2 Human Health	0.2 Human Health	0.4	-Carcinogen
Diquat	85-00-7	* Primary Standard	1.5 Toxicity Criteria	1.5 Toxicity Criteria	***	-Eye

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Contaminants	CAS#s	Groundwater Criteria (ug/L)	Freshwater Surface Water Criteria (ug/L)	Marine Surface Water Criteria (ug/L)	Groundwater of Low Yield/Poor Quality Criteria (ug/L)	Target Organs/Systems or Effects†
Disulfoton	298-04-4	0.3 Minimum Criteria Systemic Toxicant	0.3 Toxicity Criteria	0.3 Toxicity Criteria	3	-Neurological
Diuron	330-54-1	14 Minimum Criteria Systemic Toxicant	8 Toxicity Criteria	8 Toxicity Criteria	140	-Blood
Dyrene [see Anilazine]						
EDB [see Dibromoethane, 1,2-]						
EDC [see Dichloroethane, 1,2-]						
Endosulfan (alpha+beta+sulfate)	115-29-7	42 Minimum Criteria Systemic Toxicant	**	**	420	-Cardiovascular -Kidney
Endothall	145-73-3	* Primary Standard	110 Toxicity Criteria	110 Toxicity Criteria	***	-Gastrointestinal
Endrin	72-20-8	* Primary Standard	**	**	***	-Liver
EPEG [see Ethylphthalyl ethylglycolate]						
Epichlorohydrin	106-89-8	3.5 Minimum Criteria Carcinogen	130 Human Health	130 Human Health	35	-Carcinogen -Kidney -Nasal
EPN [see Ethyl p-nitrophenyl phenylphosphorothioate]						
EPTC [see Ethyl dipropylthiocarbamate, S-]						
Ethanol	64-17-5	10000 Minimum Criteria Organoleptic	NA	NA	100000	-Developmental
Ethion	563-12-2	3.5 Minimum Criteria Systemic Toxicant	0.007 Toxicity Criteria	0.007 Toxicity Criteria	35	-Neurological

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Contaminants	CAS#s	Groundwater Criteria (ug/L)	Freshwater Surface Water Criteria (ug/L)	Marine Surface Water Criteria (ug/L)	Groundwater of Low Yield/Poor Quality Criteria (ug/L)	Target Organs/Systems or Effects†
Ethoprop	13194-48-4	0.7 Minimum Criteria Systemic Toxicant	0.3 Toxicity Criteria	0.3 Toxicity Criteria	7	-Neurological
Ethoxyethanol acetate, 2-	111-15-9	2100 Minimum Criteria Systemic Toxicant	2000 Toxicity Criteria	2000 Toxicity Criteria	21000	-Developmental
Ethoxyethanol, 2-	110-80-5	2800 Minimum Criteria Systemic Toxicant	NA	NA	28000	-Reproductive
Ethyl acetate	141-78-6	6300 Minimum Criteria Systemic Toxicant	6300 Toxicity Criteria	6300 Toxicity Criteria	63000	-Body Weight
Ethyl acrylate	140-88-5	0.4 Minimum Criteria Organoleptic	130 Toxicity Criteria	130 Toxicity Criteria	4	-Carcinogen
Ethyl chloride [or Chloroethane]	75-00-3	12 Minimum Criteria Carcinogen	NA	NA	120	-Carcinogen -Developmental
Ethyl dipropylthiocarbamate, S- [or EPTC]	759-94-4	180 Minimum Criteria Systemic Toxicant	240 Toxicity Criteria	240 Toxicity Criteria	1800	-Cardiovascular
Ethyl ether	60-29-7	750 Minimum Criteria Organoleptic	130000 Toxicity Criteria	130000 Toxicity Criteria	7500	-Body Weight
Ethyl methacrylate	97-63-2	630 Minimum Criteria Systemic Toxicant	NA	NA	6300	-Kidney
Ethyl p-nitrophenyl phenylphosphorothioate [or EPN]	2104-64-5	0.07 Minimum Criteria Systemic Toxicant	0.02 Toxicity Criteria	0.02 Toxicity Criteria	0.7	-Neurological
Ethylbenzene	100-41-4	* Secondary Standard	610 Toxicity Criteria	610 Toxicity Criteria	***	-Developmental -Kidney -Liver
Ethylene diamine	107-15-3	140 Minimum Criteria Systemic Toxicant	800 Toxicity Criteria	800 Toxicity Criteria	1400	-Blood -Cardiovascular
Ethylene glycol	107-21-1	14000 Minimum Criteria Systemic Toxicant	16000 Toxicity Criteria	16000 Toxicity Criteria	140000	-Kidney
Ethylene oxide	75-21-8	0.03 Minimum Criteria Carcinogen	4200 Toxicity Criteria	4200 Toxicity Criteria	0.3	-Carcinogen

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Groundwater and Surface Water Cleanup Target Levels

Contaminants	CAS#s	Groundwater Criteria (ug/L)	Freshwater Surface Water Criteria (ug/L)	Marine Surface Water Criteria (ug/L)	Groundwater of Low Yield/Poor Quality Criteria (ug/L)	Target Organs/Systems or Effects†
Ethylene thiourea [or ETU]	96-45-7	0.3 Minimum Criteria Carcinogen	1300 Toxicity Criteria	1300 Toxicity Criteria	3	-Carcinogen -Thyroid
Ethylphthalyl ethylglycolate [or EPEG]	84-72-0	21000 Minimum Criteria Systemic Toxicant	NA	NA	210000	-Kidney
ETU [see Ethylene thiourea]						
Famphur	52-85-7	3.5 Minimum Criteria Systemic Toxicant	NA	NA	35	-Blood
Fenamiphos	22224-92-6	1.8 Minimum Criteria Systemic Toxicant	0.2 Toxicity Criteria	0.2 Toxicity Criteria	18	-Neurological
Fensulfothion	115-90-2	1.8 Minimum Criteria Systemic Toxicant	0.5 Toxicity Criteria	0.5 Toxicity Criteria	18	-Neurological
Fenvalerate [see Pydrin]						
Fluometuron	2164-17-2	91 Minimum Criteria Systemic Toxicant	190 Toxicity Criteria	190 Toxicity Criteria	910	-None Specified
Fluoranthene	206-44-0	280 Minimum Criteria Systemic Toxicant	0.3 Toxicity Criteria	0.3 Toxicity Criteria	2800	-Blood -Kidney -Liver
Fluorene	86-73-7	280 Minimum Criteria Systemic Toxicant	30 Toxicity Criteria	30 Toxicity Criteria	2800	-Blood
Fluoride	7782-41-4	* Secondary Standard	**	**	***	-Teeth mottling
Fluoridone	59756-60-4	560 Minimum Criteria Systemic Toxicant	110 Toxicity Criteria	110 Toxicity Criteria	5600	-Kidney -Reproductive
Fonofos	944-22-9	14 Minimum Criteria Systemic Toxicant	0.1 Toxicity Criteria	0.1 Toxicity Criteria	140	-Liver -Neurological
Formaldehyde	50-00-0	600 Minimum Criteria Organoleptic	110 Toxicity Criteria	110 Toxicity Criteria	6000	-Carcinogen -Gastrointestinal

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Groundwater and Surface Water Cleanup Target Levels

Contaminants	CAS#s	Groundwater Criteria (ug/L)	Freshwater Surface Water Criteria (ug/L)	Marine Surface Water Criteria (ug/L)	Groundwater of Low Yield/Poor Quality Criteria (ug/L)	Target Organs/Systems or Effects†
Formic acid	64-18-6	14000 Minimum Criteria Systemic Toxicant	4500 Toxicity Criteria	4500 Toxicity Criteria	140000	-Body Weight
Furan	110-00-9	7 Minimum Criteria Systemic Toxicant	NA	NA	70	-Liver
Furfural	98-01-1	21 Minimum Criteria Systemic Toxicant	650 Toxicity Criteria	650 Toxicity Criteria	210	-Liver -Nasal
Glycidaldehyde	765-34-4	2.8 Minimum Criteria Systemic Toxicant	NA	NA	28	-Adrenals -Blood -Kidney
Glyphosate [or Roundup]	1071-83-6	* Primary Standard	120 Toxicity Criteria	120 Toxicity Criteria	***	-Kidney
Gross alpha radiation	14127-62-9	* Primary Standard	**	**	***	-Carcinogen
Guthion [or Methyl azinphos]	86-50-0	11 Minimum Criteria Systemic Toxicant	**	**	110	-Neurological
Heptachlor	76-44-8	* Primary Standard	**	**	***	-Carcinogen -Liver
Heptachlor epoxide	1024-57-3	* Primary Standard	0.00004 Human Health	0.00004 Human Health	***	-Carcinogen -Liver
Hexachloro-1,3-butadiene	87-68-3	0.4 Minimum Criteria Carcinogen	**	**	4	-Carcinogen -Kidney
Hexachlorobenzene	118-74-1	* Primary Standard	0.0003 Human Health	0.0003 Human Health	***	-Carcinogen -Liver
Hexachlorocyclohexane, alpha- [or BHC, alpha-]	319-84-6	0.006 Minimum Criteria Carcinogen	0.005 Human Health	0.005 Human Health	0.06	-Carcinogen
Hexachlorocyclohexane, beta- [BHC, beta-]	319-85-7	0.02 Minimum Criteria Carcinogen	**	**	0.2	-Carcinogen
Hexachlorocyclohexane, delta- [or BHC, delta-]	319-86-8	2.1 Minimum Criteria Systemic Toxicant	NA	NA	21	-Kidney -Liver

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Groundwater and Surface Water Cleanup Target Levels

Contaminants	CAS#s	Groundwater Criteria (ug/L)	Freshwater Surface Water Criteria (ug/L)	Marine Surface Water Criteria (ug/L)	Groundwater of Low Yield/Poor Quality Criteria (ug/L)	Target Organs/Systems or Effects†
Hexachlorocyclohexane, gamma- [or Lindane or BHC, gamma-]	58-89-9	* Primary Standard	**	**	***	-Carcinogen -Kidney -Liver
Hexachlorocyclohexane, technical [or BHC, technical]	608-73-1	0.02 Minimum Criteria Carcinogen	0.02 Toxicity Criteria	0.02 Toxicity Criteria	0.2	-Carcinogen
Hexachlorocyclopentadiene	77-47-4	* Primary Standard	3 Toxicity Criteria	3 Toxicity Criteria	***	-Gastrointestinal
Hexachlorodibenzo-p-dioxin (mixture)	19408-74-3	0.000006 Minimum Criteria Carcinogen	NA	NA	0.00006	-Carcinogen
Hexachloroethane	67-72-1	2.5 Minimum Criteria Carcinogen	3.3 Human Health	3.3 Human Health	25	-Carcinogen -Kidney
Hexachlorophene	70-30-4	2.1 Minimum Criteria Systemic Toxicant	1.1 Toxicity Criteria	1.1 Toxicity Criteria	21	-Neurological
Hexahydro-1,3,5-trinitro-1,3,5-triazine [or RDX]	121-82-4	0.3 Minimum Criteria Carcinogen	180 Toxicity Criteria	180 Toxicity Criteria	3	-Carcinogen -Reproductive
Hexane, n-	110-54-3	6 Minimum Criteria Organoleptic	3400 Toxicity Criteria	3400 Toxicity Criteria	60	-Neurological
Hexanone, 2- [or Methyl butyl ketone]	591-78-6	280 Minimum Criteria Systemic Toxicant	NA	NA	2800	-None Specified
Hexazinone	51235-04-2	230 Minimum Criteria Systemic Toxicant	25000 Human Health	25000 Human Health	2300	-Body Weight
HMX [see Octahydro-1,3,5,7-tetranitrotetrazocine]						
Hydrogen cyanide (as Cyanide)	74-90-8	140 Minimum Criteria Systemic Toxicant	3.5 Toxicity Criteria	3.5 Toxicity Criteria	1400	-Neurological -Thyroid
Hydrogen sulfide	7783-06-4	21 Minimum Criteria Systemic Toxicant	0.1 Toxicity Criteria	0.1 Toxicity Criteria	210	-Gastrointestinal -Nasal
Hydroquinone	123-31-9	280 Minimum Criteria Systemic Toxicant	4.5 Toxicity Criteria	4.5 Toxicity Criteria	2800	-Blood

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Contaminants	CAS#s	Groundwater Criteria (ug/L)	Freshwater Surface Water Criteria (ug/L)	Marine Surface Water Criteria (ug/L)	Groundwater of Low Yield/Poor Quality Criteria (ug/L)	Target Organs/Systems or Effects†
Indeno(1,2,3-cd)pyrene	193-39-5	0.05 Minimum Criteria Carcinogen	**	**	0.5	-Carcinogen
Iprodione	36734-19-7	280 Minimum Criteria Systemic Toxicant	150 Toxicity Criteria	150 Toxicity Criteria	2800	-Blood
Iron	7439-89-6	* Secondary Standard	**	**	***	-Gastrointestinal
Isobutyl alcohol	78-83-1	2100 Minimum Criteria Systemic Toxicant	47000 Toxicity Criteria	47000 Toxicity Criteria	21000	-Neurological
Isophorone	78-59-1	37 Minimum Criteria Carcinogen	650 Toxicity Criteria	650 Toxicity Criteria	370	-Carcinogen -None Specified
Isopropyl benzene [see Cumene]						
Kelthane [see Dicofol]						
Kepone	143-50-0	0.004 Minimum Criteria Carcinogen	NA	NA	0.04	-Carcinogen
Lead	7439-92-1	* Primary Standard	**	**	***	-Neurological
Limonene	138-86-3	700 Minimum Criteria Systemic Toxicant	NA	NA	7000	-Kidney -Liver
Lindane [see Hexachlorocyclohexane, gamma-]						
Linuron	330-55-2	1.4# Minimum Criteria Systemic Toxicant	45 Toxicity Criteria	45 Toxicity Criteria	14	-Blood
Lithium	7439-93-2	140 Minimum Criteria Systemic Toxicant	NA	NA	1400	-None Specified
Malathion	121-75-5	140 Minimum Criteria Systemic Toxicant	**	**	1400	-Neurological

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Contaminants	CAS#s	Groundwater Criteria (ug/L)	Freshwater Surface Water Criteria (ug/L)	Marine Surface Water Criteria (ug/L)	Groundwater of Low Yield/Poor Quality Criteria (ug/L)	Target Organs/Systems or Effects†
Maleic anhydride	108-31-6	700 Minimum Criteria Systemic Toxicant	NA	NA	7000	-Kidney
Maleic hydrazide	123-33-1	3500 Minimum Criteria Systemic Toxicant	750 Toxicity Criteria	750 Toxicity Criteria	35000	-Kidney
Mancozeb	8018-01-7	210 Minimum Criteria Systemic Toxicant	3.5 Toxicity Criteria	3.5 Toxicity Criteria	2100	-Thyroid
Maneb	12427-38-2	35 Minimum Criteria Systemic Toxicant	5.5 Toxicity Criteria	5.5 Toxicity Criteria	350	-Thyroid
Manganese	7439-96-5	50 Secondary Standard	NA	NA	500	-Neurological
MCPA [see Methyl-4-chlorophenoxy acetic acid, 2-]						
MCPP [see Propionic acid, 2-(2methyl-4-chlorophenoxy)]						
Mercuric chloride (as Mercury)	7487-94-7	0.2# Minimum Criteria Systemic Toxicant	0.05 Toxicity Criteria	0.05 Toxicity Criteria	2	-Immunological -Kidney
Mercury	7439-97-6	* Primary Standard	**	**	***	-Neurological
Mercury, methyl- [see Methylmercury]						
Merphos	150-50-5	0.2 Minimum Criteria Systemic Toxicant	NA	NA	2	-Neurological
Merphos oxide	78-48-8	0.2 Minimum Criteria Systemic Toxicant	0.2 Toxicity Criteria	0.2 Toxicity Criteria	2	-Neurological
Metalaxyl	57837-19-1	420 Minimum Criteria Systemic Toxicant	37 Toxicity Criteria	37 Toxicity Criteria	4200	-Blood -Liver -Neurological
Methacrylonitrile	126-98-7	0.7 Minimum Criteria Systemic Toxicant	NA	NA	7	-Liver

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Contaminants	CAS#s	Groundwater Criteria (ug/L)	Freshwater Surface Water Criteria (ug/L)	Marine Surface Water Criteria (ug/L)	Groundwater of Low Yield/Poor Quality Criteria (ug/L)	Target Organs/Systems or Effects†
Methamidophos	10265-92-6	0.4 Minimum Criteria Systemic Toxicant	0.00001 Toxicity Criteria	0.00001 Toxicity Criteria	4	-Neurological
Methanol	67-56-1	3500 Minimum Criteria Systemic Toxicant	45000 Toxicity Criteria	45000 Toxicity Criteria	35000	-Developmental -Eye -Neurological
Methidathion	950-37-8	0.7# Minimum Criteria Systemic Toxicant	0.03 Toxicity Criteria	0.03 Toxicity Criteria	7	-Liver
Methomyl	16752-77-5	180 Minimum Criteria Systemic Toxicant	1 Toxicity Criteria	1 Toxicity Criteria	1800	-Kidney -Spleen
Methoxy-5-nitroaniline, 2-	99-59-2	0.8 Minimum Criteria Carcinogen	NA	NA	8	-Carcinogen
Methoxychlor	72-43-5	* Primary Standard	**	**	***	-Developmental -Reproductive
Methoxyethanol, 2-	109-86-4	7 Minimum Criteria Systemic Toxicant	NA	NA	70	-Reproductive
Methyl acetate	79-20-9	3000 Minimum Criteria Organoleptic	NA	NA	30000	-Liver
Methyl acrylate	96-33-3	210 Minimum Criteria Systemic Toxicant	NA	NA	2100	-None Specified
Methyl azinphos [see Guthion]						
Methyl bromide [see Bromomethane]						
Methyl butyl ketone [see Hexanone, 2-]						
Methyl chloride [or Chloromethane]	74-87-3	2.7 Minimum Criteria Carcinogen	**	**	27	-Carcinogen -Neurological
Methyl chloroform [see Trichloroethane, 1,1,1-]						

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Contaminants	CAS#s	Groundwater Criteria (ug/L)	Freshwater Surface Water Criteria (ug/L)	Marine Surface Water Criteria (ug/L)	Groundwater of Low Yield/Poor Quality Criteria (ug/L)	Target Organs/Systems or Effects†
Methyl ethyl ketone [or Butanone, 2-]	78-93-3	4200 Minimum Criteria Systemic Toxicant	120000 Toxicity Criteria	120000 Toxicity Criteria	42000	-Developmental
Methyl isobutyl ketone [or MIBK]	108-10-1	560 Minimum Criteria Systemic Toxicant	23000 Toxicity Criteria	23000 Toxicity Criteria	5600	-Kidney -Liver
Methyl methacrylate	80-62-6	25 Minimum Criteria Organoleptic	6500 Toxicity Criteria	6500 Toxicity Criteria	250	-Nasal
Methyl parathion [or Parathion, methyl]	298-00-0	1.8 Minimum Criteria Systemic Toxicant	0.01 Toxicity Criteria	0.01 Toxicity Criteria	18	-Blood -Neurological
Methyl tert-butyl ether [or MTBE]	1634-04-4	20 Minimum Criteria Organoleptic	34000 Toxicity Criteria	34000 Toxicity Criteria	200	-Eye -Kidney -Liver
Methyl-4-chlorophenoxy acetic acid, 2- [or MCPA]	94-74-6	3.5 Minimum Criteria Systemic Toxicant	72 Toxicity Criteria	72 Toxicity Criteria	35	-Kidney -Liver
Methyl-5-nitroaniline, 2-	99-55-8	1.1 Minimum Criteria Carcinogen	NA	NA	11	-Carcinogen
Methylaniline, 2-	95-53-4	0.1 Minimum Criteria Carcinogen	26 Toxicity Criteria	26 Toxicity Criteria	1	-Carcinogen
Methylene bis(2-chloroaniline), 4,4-	101-14-4	0.3 Minimum Criteria Carcinogen	NA	NA	3	-Carcinogen -Liver -Bladder
Methylene bromide	74-95-3	70 Minimum Criteria Systemic Toxicant	NA	NA	700	-Blood
Methylene chloride	75-09-2	* Primary Standard	**	**	***	-Carcinogen -Liver
Methylmercury [or Mercury, methyl]	22967-92-6	0.07# Minimum Criteria Systemic Toxicant	NA	NA	0.7	-Neurological
Methylnaphthalene, 1-	90-12-0	28 Minimum Criteria Systemic Toxicant	95 Toxicity Criteria	95 Toxicity Criteria	280	-Nasal
Methylnaphthalene, 2-	91-57-6	28 Minimum Criteria Systemic Toxicant	30 Toxicity Criteria	30 Toxicity Criteria	280	-Nasal

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Contaminants	CAS#s	Groundwater Criteria (ug/L)	Freshwater Surface Water Criteria (ug/L)	Marine Surface Water Criteria (ug/L)	Groundwater of Low Yield/Poor Quality Criteria (ug/L)	Target Organs/Systems or Effects†
Methylphenol, 2- [or Cresol, o-]	95-48-7	35# Minimum Criteria Systemic Toxicant	250 Toxicity Criteria	250 Toxicity Criteria	350	-Neurological
Methylphenol, 3- [or Cresol, m-]	108-39-4	35# Minimum Criteria Systemic Toxicant	450 Toxicity Criteria	450 Toxicity Criteria	350	-Neurological
Methylphenol, 4- [or Cresol, p-]	106-44-5	3.5# Minimum Criteria Systemic Toxicant	70 Toxicity Criteria	70 Toxicity Criteria	35	-Neurological -Respiratory
Metolachlor	51218-45-2	110# Minimum Criteria Systemic Toxicant	1.1 Toxicity Criteria	1.1 Toxicity Criteria	1100	-Body Weight
Metribuzin	21087-64-9	180 Minimum Criteria Systemic Toxicant	64 Toxicity Criteria	64 Toxicity Criteria	1800	-Kidney -Liver
Metsulfuron, methyl [see Ally]						
Mevinphos	7786-34-7	1.8 Minimum Criteria Systemic Toxicant	0.05 Toxicity Criteria	0.05 Toxicity Criteria	18	-Neurological
MIBK [see Methyl isobutyl ketone]						
Mirex	2385-85-5	1.4 Minimum Criteria Systemic Toxicant	**	**	14	-Liver -Thyroid
Molinate	2212-67-1	14 Minimum Criteria Systemic Toxicant	17 Toxicity Criteria	17 Toxicity Criteria	140	-Reproductive
Molybdenum	7439-98-7	35 Minimum Criteria Systemic Toxicant	NA	NA	350	-Gout
MTBE [see Methyl tert-butyl ether]						
Naled	300-76-5	14 Minimum Criteria Systemic Toxicant	0.02 Toxicity Criteria	0.02 Toxicity Criteria	140	-Neurological
Naphthalene	91-20-3	14# Minimum Criteria Systemic Toxicant	26 Toxicity Criteria	26 Toxicity Criteria	140	-Nasal

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Contaminants	CAS#s	Groundwater Criteria (ug/L)	Freshwater Surface Water Criteria (ug/L)	Marine Surface Water Criteria (ug/L)	Groundwater of Low Yield/Poor Quality Criteria (ug/L)	Target Organs/Systems or Effects†
Naphthylamine, 2-	91-59-8	0.0003 Minimum Criteria Carcinogen	NA	NA	0.003	-Carcinogen
Napropamide	15299-99-7	700 Minimum Criteria Systemic Toxicant	210 Toxicity Criteria	210 Toxicity Criteria	7000	-Body Weight
Nickel	7440-02-0	* Primary Standard	**	**	***	-Body Weight
Nickel subsulfide	12035-72-2	* Primary Standard	**	**	***	-Carcinogen
Nitrate	14797-55-8	* Primary Standard	NA	NA	***	-Blood
Nitrate+Nitrite	NOCAS	* Primary Standard	NA	NA	***	-Blood
Nitrite	14797-65-0	* Primary Standard	NA	NA	***	-Blood
Nitroaniline, m-	99-09-2	1.7 Minimum Criteria Carcinogen	NA	NA	17	-Blood -Carcinogen
Nitroaniline, o-	88-74-4	21 Minimum Criteria Systemic Toxicant	NA	NA	210	-Blood
Nitroaniline, p-	100-01-6	1.7 Minimum Criteria Carcinogen	1200 Toxicity Criteria	1200 Toxicity Criteria	17	-Blood -Carcinogen
Nitrobenzene	98-95-3	3.5 Minimum Criteria Systemic Toxicant	90 Toxicity Criteria	90 Toxicity Criteria	35	-Adrenals -Blood -Kidney -Liver
Nitrophenol, 4-	100-02-7	56 Minimum Criteria Systemic Toxicant	55 Toxicity Criteria	55 Toxicity Criteria	560	-None Specified
Nitroso-di-ethylamine, N-	55-18-5	0.0002 Minimum Criteria Carcinogen	0.008 Human Health	0.008 Human Health	0.002	-Carcinogen
Nitroso-dimethylamine, N-	62-75-9	0.0007 Minimum Criteria Carcinogen	3 Human Health	3 Human Health	0.007	-Carcinogen

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Nitroso-di-n-butylamine, N-	924-16-3	0.006 Minimum Criteria Carcinogen	0.04 Human Health	0.04 Human Health	0.06	-Carcinogen
Nitroso-di-n-propylamine, N-	621-64-7	0.005 Minimum Criteria Carcinogen	0.5 Human Health	0.5 Human Health	0.05	-Carcinogen
Nitroso-diphenylamine, N-	86-30-6	7.1 Minimum Criteria Carcinogen	6 Human Health	6 Human Health	71	-Carcinogen
Nitroso-N-methylethylamine, N-	10595-95-6	0.002 Minimum Criteria Carcinogen	0.06 Human Health	0.06 Human Health	0.02	-Carcinogen
Nitrosopyrrolidine, N-	930-55-2	0.02 Minimum Criteria Carcinogen	NA	NA	0.2	-Carcinogen
Nitrotoluene, m-	99-08-1	140 Minimum Criteria Systemic Toxicant	380 Toxicity Criteria	380 Toxicity Criteria	1400	-Spleen
Nitrotoluene, o-	88-72-2	70 Minimum Criteria Systemic Toxicant	550 Toxicity Criteria	550 Toxicity Criteria	700	-Spleen
Nitrotoluene, p-	99-99-0	70 Minimum Criteria Systemic Toxicant	550 Toxicity Criteria	550 Toxicity Criteria	700	-Spleen
Nonylphenol	25154-52-3	8.4 Minimum Criteria Systemic Toxicant	5.9 Toxicity Criteria	1.4 Toxicity Criteria	84	-Kidney
Norflurazon	27314-13-2	280 Minimum Criteria Systemic Toxicant	NA	NA	2800	-Kidney -Liver -Thyroid
Octahydro-1,3,5,7-tetranitrotetrazocine [or HMX]	2691-41-0	350 Minimum Criteria Systemic Toxicant	1300 Toxicity Criteria	1300 Toxicity Criteria	3500	-Blood -Liver
Octamethylpyrophosphoramide	152-16-9	14 Minimum Criteria Systemic Toxicant	NA	NA	140	-Neurological
Oryzalin	19044-88-3	35# Minimum Criteria Systemic Toxicant	NA	NA	350	-Adrenals -Blood -Kidney -Liver
Oxadiazon	19666-30-9	35 Minimum Criteria Systemic Toxicant	44 Toxicity Criteria	44 Toxicity Criteria	350	-Liver

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Oxamyl	23135-22-0	* Primary Standard	8.5 Toxicity Criteria	8.5 Toxicity Criteria	***	-Body Weight
Paraquat	1910-42-5	3.2# Minimum Criteria Systemic Toxicant	47 Toxicity Criteria	47 Toxicity Criteria	32	-Respiratory
Parathion	56-38-2	4.2# Minimum Criteria Systemic Toxicant	**	**	42	-Neurological
Parathion, methyl [see Methyl parathion]						
PCBs [or Aroclor mixture]	1336-36-3	* Primary Standard	**	**	***	-Carcinogen -Immunological
PCE [see Tetrachloroethene]						
Pebulate	1114-71-2	350 Minimum Criteria Systemic Toxicant	310 Toxicity Criteria	310 Toxicity Criteria	3500	-Blood
Pendimethalin	40487-42-1	280 Minimum Criteria Systemic Toxicant	10 Toxicity Criteria	10 Toxicity Criteria	2800	-Liver
Pentachlorobenzene	608-93-5	5.6 Minimum Criteria Systemic Toxicant	1.7 Human Health	1.7 Human Health	56	-Kidney -Liver
Pentachloronitrobenzene	82-68-8	0.1 Minimum Criteria Carcinogen	0.02 Human Health	0.02 Human Health	1	-Carcinogen -Liver
Pentachlorophenol	87-86-5	* Primary Standard	**	**	***	-Carcinogen -Kidney -Liver
Perchlorate	7601-90-3	4 Minimum Criteria Systemic Toxicant	NA	NA	40	-Thyroid
Permethrin	52645-53-1	350 Minimum Criteria Systemic Toxicant	0.001 Toxicity Criteria	0.001 Toxicity Criteria	3500	-Liver
Phenanthrene	85-01-8	210 Minimum Criteria Systemic Toxicant	**	**	2100	-Kidney

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Phenmedipham [or Betanal]	13684-63-4	1800 Minimum Criteria Systemic Toxicant	200 Toxicity Criteria	200 Toxicity Criteria	18000	-None Specified
Phenol	108-95-2	10 Minimum Criteria Organoleptic	6.5 Toxicity Criteria	6.5 Toxicity Criteria	100	-Developmental
Phenylenediamine, m-	108-45-2	42 Minimum Criteria Systemic Toxicant	NA	NA	420	-Liver
Phenylenediamine, p-	106-50-3	1300 Minimum Criteria Systemic Toxicant	NA	NA	13000	-Whole Body
Phenylphenol, 2-	90-43-7	18 Minimum Criteria Carcinogen	36 Toxicity Criteria	36 Toxicity Criteria	180	-Carcinogen
Phorate	298-02-2	1.4 Minimum Criteria Systemic Toxicant	0.005 Toxicity Criteria	0.005 Toxicity Criteria	14	-Neurological
Phosmet	732-11-6	140 Minimum Criteria Systemic Toxicant	0.1 Toxicity Criteria	0.1 Toxicity Criteria	1400	-Liver -Neurological
Phosphine	7803-51-2	2.1 Minimum Criteria Systemic Toxicant	NA	NA	21	-Body Weight
Phthalic anhydride	85-44-9	14000 Minimum Criteria Systemic Toxicant	NA	NA	140000	-Kidney -Nasal -Respiratory
Picloram	1918-02-1	* Primary Standard	70 Toxicity Criteria	70 Toxicity Criteria	***	-Liver
Polychlorinated dibenzo-p-dioxins [see Dioxins]						
Polycyclic Aromatic Hydrocarbons (PAHs)			**	**		-Various Endpoints
Potassium cyanide	151-50-8	350 Minimum Criteria Systemic Toxicant	5.5 Toxicity Criteria	5.5 Toxicity Criteria	3500	-Neurological -Thyroid
Profluralin	26399-36-0	42 Minimum Criteria Systemic Toxicant	NA	NA	420	-None Specified

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Prometon	1610-18-0	110 Minimum Criteria Systemic Toxicant	600 Toxicity Criteria	600 Toxicity Criteria	1100	-None Specified
Prometryn	7287-19-6	28 Minimum Criteria Systemic Toxicant	21 Toxicity Criteria	21 Toxicity Criteria	280	-Bone Marrow -Kidney -Liver
Pronamide	23950-58-5	53# Minimum Criteria Systemic Toxicant	NA	NA	530	-None Specified
Propachlor	1918-16-7	91 Minimum Criteria Systemic Toxicant	12 Toxicity Criteria	12 Toxicity Criteria	910	-Liver
Propanil	709-98-8	35 Minimum Criteria Systemic Toxicant	20 Toxicity Criteria	20 Toxicity Criteria	350	-Spleen
Propargite	2312-35-8	140 Minimum Criteria Systemic Toxicant	1.6 Toxicity Criteria	1.6 Toxicity Criteria	1400	-None Specified
Propazine	139-40-2	14# Minimum Criteria Systemic Toxicant	190 Toxicity Criteria	190 Toxicity Criteria	140	-Body Weight
Propham	122-42-9	140 Minimum Criteria Systemic Toxicant	500 Toxicity Criteria	500 Toxicity Criteria	1400	-Neurological
Propiconazole	60207-90-1	91 Minimum Criteria Systemic Toxicant	26 Toxicity Criteria	26 Toxicity Criteria	910	-Gastrointestinal
Propionic acid, 2-(2-methyl-4chlorophenoxy) [or MCPP]	93-65-2	7 Minimum Criteria Systemic Toxicant	NA	NA	70	-Kidney
Propoxur [see Baygon]						
Propylene glycol	57-55-6	140000 Minimum Criteria Systemic Toxicant	36000 Toxicity Criteria	36000 Toxicity Criteria	1400000	-Blood -Bone Marrow
Propylene glycol monomethyl ether	107-98-2	4900 Minimum Criteria Systemic Toxicant	NA	NA	49000	-Kidney -Liver -Neurological
Propylene oxide	75-56-9	0.1 Minimum Criteria Carcinogen	NA	NA	1	-Carcinogen -Nasal -Respiratory

Table I
Groundwater and Surface Water Cleanup Target Levels

Contaminants	CAS#s	Groundwater Criteria (ug/L)	Freshwater Surface Water Criteria (ug/L)	Marine Surface Water Criteria (ug/L)	Groundwater of Low Yield/Poor Quality Criteria (ug/L)	Target Organs/Systems or Effects†
Pydrin [or Fenvalerate]	51630-58-1	180 Minimum Criteria Systemic Toxicant	0.0004 Toxicity Criteria	0.0004 Toxicity Criteria	1800	-Neurological
Pyrene	129-00-0	210 Minimum Criteria Systemic Toxicant	0.3 Toxicity Criteria	0.3 Toxicity Criteria	2100	-Kidney
Pyridine	110-86-1	7 Minimum Criteria Systemic Toxicant	1300 Toxicity Criteria	1300 Toxicity Criteria	70	-Liver
Quinoline	91-22-5	0.01 Minimum Criteria Carcinogen	NA	NA	0.1	-Carcinogen
Radium, 226 and 228 (combined)	7440-14-4	* Primary Standard	**	**	***	-Carcinogen
RDX [see Hexahydro-1,3,5-trinitro1,3,5-triazine]						
Resmethrin	10453-86-8	210 Minimum Criteria Systemic Toxicant	0.003 Toxicity Criteria	0.003 Toxicity Criteria	2100	-Reproductive
Ronnel	299-84-3	350 Minimum Criteria Systemic Toxicant	0.06 Toxicity Criteria	0.06 Toxicity Criteria	3500	-Liver
Rotenone	83-79-4	28 Minimum Criteria Systemic Toxicant	0.1 Toxicity Criteria	0.1 Toxicity Criteria	280	-Developmental
Roundup [see Glyphosate]						
Selenious acid (as Selenium)	7783-00-8	35 Minimum Criteria Systemic Toxicant	40 Toxicity Criteria	40 Toxicity Criteria	350	-Hair Loss -Neurological -Skin
Selenium	7782-49-2	* Primary Standard	**	**	***	-Hair Loss -Neurological -Skin
Sevin [see Carbaryl]						
Silver	7440-22-4	* Secondary Standard	**	0.4 Toxicity Criteria (e)	***	-Skin

Table I
Groundwater and Surface Water Cleanup Target Levels

Contaminants	CAS#s	Groundwater Criteria (ug/L)	Freshwater Surface Water Criteria (ug/L)	Marine Surface Water Criteria (ug/L)	Groundwater of Low Yield/Poor Quality Criteria (ug/L)	Target Organs/Systems or Effects†
Silvex [see Trichlorophenoxy propionic acid]						
Simazine	122-34-9	* Primary Standard	7.3 Human Health	7.3 Human Health	***	-Blood -Carcinogen
Sodium	7440-23-5	* Primary Standard	NA	NA	***	-None Specified
Sodium chlorite [see Chlorite (sodium salt)]						
Sodium cyanide (as Cyanide)	143-33-9	280 Minimum Criteria Systemic Toxicant	3.8 Toxicity Criteria	3.8 Toxicity Criteria	2800	-Neurological
Strontium	7440-24-6	4200 Minimum Criteria Systemic Toxicant	NA	NA	42000	-Bone
Strychnine	57-24-9	2.1 Minimum Criteria Systemic Toxicant	38 Toxicity Criteria	38 Toxicity Criteria	21	-Mortality
Styrene	100-42-5	* Primary Standard	460 Toxicity Criteria	460 Toxicity Criteria	***	-Blood -Liver -Neurological
Sulfate	14808-79-8	* Secondary Standard	NA	NA	***	-None Specified
TCDD, 2,3,7,8- [see Dioxins, as total 2,3,7,8-TCDD equivalents]						
TCE [see Trichloroethene]						
TCMTB [see Thiocyanomethylthiobenzothiazole, 2-]						
TDS [see Total dissolved solids]						
Tebuthiuron	34014-18-1	490 Minimum Criteria Systemic Toxicant	310 Toxicity Criteria	310 Toxicity Criteria	4900	-Body Weight

Table I
Groundwater and Surface Water Cleanup Target Levels

Contaminants	CAS#s	Groundwater Criteria (ug/L)	Freshwater Surface Water Criteria (ug/L)	Marine Surface Water Criteria (ug/L)	Groundwater of Low Yield/Poor Quality Criteria (ug/L)	Target Organs/Systems or Effects†
Temephos	3383-96-8	140 Minimum Criteria Systemic Toxicant	0.002 Toxicity Criteria	0.002 Toxicity Criteria	1400	-None Specified
Temik [see Aldicarb]						
Terbacil	5902-51-2	91 Minimum Criteria Systemic Toxicant	2500 Toxicity Criteria	2500 Toxicity Criteria	910	-Liver -Thyroid
Terbufos	13071-79-9	0.2 Minimum Criteria Systemic Toxicant	0.01 Toxicity Criteria	0.01 Toxicity Criteria	2	-Neurological
Terbutryn	886-50-0	7 Minimum Criteria Systemic Toxicant	3.1 Toxicity Criteria	3.1 Toxicity Criteria	70	-Blood
Tetrachlorobenzene, 1,2,4,5-	95-94-3	2.1 Minimum Criteria Systemic Toxicant	1.6 Human Health	1.6 Human Health	21	-Kidney
Tetrachloroethane, 1,1,1,2-	630-20-6	1.3 Minimum Criteria Carcinogen	NA	NA	13	-Carcinogen -Kidney -Liver
Tetrachloroethane, 1,1,2,2-	79-34-5	0.2 Minimum Criteria Carcinogen	**	**	2	-Carcinogen -Liver
Tetrachloroethene [or PCE]	127-18-4	* Primary Standard	**	**	***	-Carcinogen -Liver
Tetrachlorophenol, 2,3,4,6-	58-90-2	210 Minimum Criteria Systemic Toxicant	4.5 Toxicity Criteria	4.5 Toxicity Criteria	2100	-Liver
Tetraethyl dithiopyrophosphate	3689-24-5	3.5 Minimum Criteria Systemic Toxicant	0.01 Toxicity Criteria	0.01 Toxicity Criteria	35	-Bone Marrow -Neurological
Thallium	7440-28-0	* Primary Standard	**	**	***	-Hair Loss -Liver
Thallium sulfate (as Thallium)	7446-18-6	0.6 Minimum Criteria Systemic Toxicant	26 Toxicity Criteria	26 Toxicity Criteria	6	-Blood -Hair Loss -Liver
Thiobencarb	28249-77-6	70 Minimum Criteria Systemic Toxicant	NA	NA	700	-Kidney

Table I
Groundwater and Surface Water Cleanup Target Levels

Contaminants	CAS#s	Groundwater Criteria (ug/L)	Freshwater Surface Water Criteria (ug/L)	Marine Surface Water Criteria (ug/L)	Groundwater of Low Yield/Poor Quality Criteria (ug/L)	Target Organs/Systems or Effects†
Thiocyanomethylthio-benzothiazole, 2- [or TCMTB]	21564-17-0	2.8# Minimum Criteria Systemic Toxicant	0.4 Toxicity Criteria	0.4 Toxicity Criteria	28	-Gastrointestinal
Thiram	137-26-8	35 Minimum Criteria Systemic Toxicant	0.2 Toxicity Criteria	0.2 Toxicity Criteria	350	-Neurological
Tin	7440-31-5	4200 Minimum Criteria Systemic Toxicant	NA	NA	42000	-Kidney -Liver
Titanium Dioxide	13463-67-7	28000 Minimum Criteria Systemic Toxicant	NA	NA	280000	
Toluene	108-88-3	* Secondary Standard	480 Toxicity Criteria	480 Toxicity Criteria	***	-Kidney -Liver -Neurological
Toluene-2,4-diamine	95-80-7	0.01 Minimum Criteria Carcinogen	NA	NA	0.1	-Carcinogen
Toluidine, p-	106-49-0	0.2 Minimum Criteria Carcinogen	NA	NA	2	-Carcinogen
Total dissolved solids [or TDS]	C-010	* Secondary Standard	NA	NA	***	-None Specified
Toxaphene	8001-35-2	* Primary Standard	**	**	***	-Carcinogen -Developmental
Triallate	2303-17-5	91 Minimum Criteria Systemic Toxicant	65 Toxicity Criteria	65 Toxicity Criteria	910	-Liver -Spleen
Tributyltin oxide	56-35-9	2.1 Minimum Criteria Systemic Toxicant	0.05 Toxicity Criteria	0.05 Toxicity Criteria	21	-Immunological
Trichloro-1,2,2-trifluoroethane, 1,1,2- [or CFC 113]	76-13-1	210000 Minimum Criteria Systemic Toxicant	NA	NA	2100000	-Neurological
Trichloroacetic acid	76-03-9	9.1 Minimum Criteria Systemic Toxicant	100000 Toxicity Criteria	100000 Toxicity Criteria	91	-None Specified
Trichlorobenzene, 1,2,3-	87-61-6	70 Minimum Criteria Systemic Toxicant	85 Toxicity Criteria	85 Toxicity Criteria	700	-Adrenals

Table I
Groundwater and Surface Water Cleanup Target Levels

Contaminants	CAS#s	Groundwater Criteria (ug/L)	Freshwater Surface Water Criteria (ug/L)	Marine Surface Water Criteria (ug/L)	Groundwater of Low Yield/Poor Quality Criteria (ug/L)	Target Organs/Systems or Effects†
Trichlorobenzene, 1,2,4-	120-82-1	* Primary Standard	23 Toxicity Criteria	23 Toxicity Criteria	***	-Adrenals
Trichlorobenzene, 1,3,5-	108-70-3	40 Minimum Criteria Systemic Toxicant	NA	NA	400	-None Specified
Trichloroethane, 1,1,1- [or Methyl chloroform]	71-55-6	* Primary Standard	270 Toxicity Criteria	270 Toxicity Criteria	***	-None Specified
Trichloroethane, 1,1,2-	79-00-5	* Primary Standard	16 Human Health	16 Human Health	***	-Carcinogen -Liver
Trichloroethene [or TCE]	79-01-6	* Primary Standard	**	**	***	-Carcinogen -None Specified
Trichlorofluoromethane	75-69-4	2100 Minimum Criteria Systemic Toxicant	NA	NA	21000	-Cardiovascular -Kidney -Respiratory
Trichlorophenol, 2,4,5-	95-95-4	1 Minimum Criteria Organoleptic	23 Toxicity Criteria	23 Toxicity Criteria	10	-Kidney -Liver
Trichlorophenol, 2,4,6-	88-06-2	3.2 Minimum Criteria Carcinogen	**	**	32	-Carcinogen
Trichlorophenoxy acetic acid, 2,4,5-	93-76-5	70 Minimum Criteria Systemic Toxicant	140 Toxicity Criteria	140 Toxicity Criteria	700	-Kidney
Trichlorophenoxy propionic acid, 2, (2, 4, 5-) [or Silvex]	93-72-1	* Primary Standard	NA	NA	***	-Liver
Trichloropropane, 1,1,2-	598-77-6	35 Minimum Criteria Systemic Toxicant	NA	NA	350	-Kidney -Liver -Thyroid
Trichloropropane, 1,2,3-	96-18-4	0.02 Minimum Criteria Carcinogen	0.2 Human Health	0.2 Human Health	0.2	-Carcinogen -Kidney -Liver
Trichloropropene, 1,2,3-	96-19-5	35 Minimum Criteria Systemic Toxicant	NA	NA	350	-Eye
Trifluralin	1582-09-8	4.5 Minimum Criteria Carcinogen	0.2 Human Health	0.2 Human Health	45	-Blood -Carcinogen -Liver

Table I
Groundwater and Surface Water Cleanup Target Levels

Contaminants	CAS#s	Groundwater Criteria (ug/L)	Freshwater Surface Water Criteria (ug/L)	Marine Surface Water Criteria (ug/L)	Groundwater of Low Yield/Poor Quality Criteria (ug/L)	Target Organs/Systems or Effects†
Trimethyl phosphate	512-56-1	0.9 Minimum Criteria Carcinogen	NA	NA	9	-Carcinogen
Trimethylbenzene, 1,2,3-	526-73-8	10 Minimum Criteria Organoleptic	NA	NA	100	-None Specified
Trimethylbenzene, 1,2,4-	95-63-6	10 Minimum Criteria Organoleptic	220 Toxicity Criteria	220 Toxicity Criteria	100	-None Specified
Trimethylbenzene, 1,3,5-	108-67-8	10 Minimum Criteria Organoleptic	220 Toxicity Criteria	220 Toxicity Criteria	100	-None Specified
Trinitrobenzene, 1,3,5-	99-35-4	210 Minimum Criteria Systemic Toxicant	19 Toxicity Criteria	19 Toxicity Criteria	2100	-Blood -Spleen
Trinitrophenylmethylnitramine	479-45-8	70 Minimum Criteria Systemic Toxicant	NA	NA	700	-Kidney -Liver -Spleen
Trinitrotoluene, 2,4,6-	118-96-7	1.2 Minimum Criteria Carcinogen	49 Toxicity Criteria	49 Toxicity Criteria	12	-Carcinogen -Liver
Trithion [see Carbophenothion]						
TRPH	NOCAS	5000 Minimum Criteria	5000 NA	5000 NA	50000	-Multiple Endpoints Mixed Contaminants
Uranium, soluble salts	7440-61-1	21 Minimum Criteria Systemic Toxicant	NA	NA	210	-Kidney
Vanadium	7440-62-2	49 Minimum Criteria Systemic Toxicant	NA	NA	490	-Hair Loss
Vanadium pentoxide (as Vanadium)	1314-62-1	63 Minimum Criteria Systemic Toxicant	13 Toxicity Criteria	13 Toxicity Criteria	630	-Hair Loss
Vernam	1929-77-7	7 Minimum Criteria Systemic Toxicant	12 Toxicity Criteria	12 Toxicity Criteria	70	-Body Weight
Vinyl acetate	108-05-4	88 Minimum Criteria Organoleptic	700 Toxicity Criteria	700 Toxicity Criteria	880	-Kidney -Nasal

Table I
Groundwater and Surface Water Cleanup Target Levels

Contaminants	CAS#s	Groundwater Criteria (ug/L)	Freshwater Surface Water Criteria (ug/L)	Marine Surface Water Criteria (ug/L)	Groundwater of Low Yield/Poor Quality Criteria (ug/L)	Target Organs/Systems or Effects†
Vinyl chloride (d)	75-01-4	* Primary Standard	2.4 Human Health	2.4 Human Health	***	-Carcinogen -Liver
White phosphorus	7723-14-0	0.1 Minimum Criteria Systemic Toxicant	NA	**	1	-Maternal Death -Reproductive
Xylenes, total	1330-20-7	* Secondary Standard	370 Toxicity Criteria	370 Toxicity Criteria	***	-Neurological
Zinc	7440-66-6	* Secondary Standard	**	**	***	-Blood
Zinc chloride	7646-85-7	2100 Minimum Criteria Systemic Toxicant	1.5 Toxicity Criteria	1.5 Toxicity Criteria	21000	-Blood
Zinc phosphide	1314-84-7	2.1 Minimum Criteria Systemic Toxicant	NA	NA	21	-Body Weight
Zineb	12122-67-7	350 Minimum Criteria Systemic Toxicant	14 Toxicity Criteria	14 Toxicity Criteria	3500	-Thyroid

Table I
Groundwater and Surface Water Cleanup Target Levels

Contaminants	CAS#s	Groundwater Criteria	Freshwater Surface Water Criteria	Marine Surface Water Criteria	Groundwater of Low Yield/Poor Quality Criteria	Target Organs/Systems or Effects†
		(ug/L)	(ug/L)	(ug/L)	(ug/L)	

† = These default Target Organ(s)/Systems or Effects are those reported to occur at the doses used to derive the reference dose. Non-default Target Organ(s)/Systems or Effects may be justified through a detailed toxicological analysis of the chemicals present at a specific site.

* = As provided in Chapter 62-520, F.A.C.

** = As provided in Chapter 62-302, F.A.C.

*** = Equal to 10 times the value provided in Chapter 62-520, F.A.C.

= Groundwater CTLs for class C carcinogens with no cancer slope factor were developed using the reference dose divided by a factor of 10, as described in the February 2005 'Final Technical Report: Development of Cleanup Target Levels (CTLs) for Chapter 62-777, F.A.C.'

(a) = Freshwater surface water criterion for ammonia based on unionized ammonia only. All other water criteria for ammonia are based on total ammonia.

(b) = The common name BHC is a misnomer for hexachlorocyclohexane.

(c) = Criteria for Dioxins, as total 2,3,7,8-TCDD equivalents should be compared to the total dioxin equivalents for chlorinated dioxin and dibenzofuran congeners using the approach described in the February 2005 'Final Technical Report: Development of Cleanup Target Levels (CTLs) for Chapter 62-777, F.A.C.'

(d) = Surface water values protective of human health for Vinyl chloride calculated assuming continuous lifetime exposure from birth as described in the February 2005 'Final Technical Report: Development of Cleanup Target Levels (CTLs) for Chapter 62-777, F.A.C.'

(e) = Criteria for these metals are measured as total recoverable metal. However, they may be applied as dissolved metals when, as part of a permit application, a dissolved metals translator has been established according to the procedures described in the document, "Guidance for Establishing a Metals Translator", Florida Department of Environmental Protection, December 17, 2001.

(f) = In the absence of concentration data specific for the III and VI valence states of chromium, total chromium concentrations in surface water should be compared to the criteria for Chromium (hexavalent).

(g) = 12789-03-6 or 57-74-9

Toxicity Criteria = 1/20 of applicable LC50 data.

Organoleptic = Pertaining to or perceived by a sensory organ (i.e., color, taste or odor).

NA = Not available at time of Rule adoption.

None Specified = Target organ(s) not available at time of Rule adoption.

Note: Freshwater and marine surface waters, and groundwater at the point of discharge into surface water shall pass acute and chronic toxicity bioassay tests: The user should consult the standard definitions for acute and chronic toxicity given in FAC 62-302.200(1) and FAC 62-302.200(4), respectively.

Note: If more than one contaminant is present at a site, the GCTL values are to be modified, if necessary, such that the sum of the hazard quotients for non-carcinogenic contaminants affecting the same organ(s) is 1 or less. For carcinogens, the GCTL values shall be modified such that the cumulative lifetime risk level posed by the contaminants is 1.0E-06, as presented in Figure 10 of the February 2005 'Final Technical Report: Development of Cleanup Target Levels (CTLs) for Chapter 62-777, F.A.C.' However, GCTLs for primary and secondary standards shall not be modified.

Drinking Water Standards

EPA National Primary Drinking Water Standards

	Contaminant	MCL or TT1 (mg/L)2	Potential health effects from exposure above the MCL	Common sources of contaminant in drinking water	Public Health Goal
OC	Acrylamide	TT8	Nervous system or blood problems;	Added to water during sewage/wastewater increased risk of cancer treatment	zero
OC	Alachlor	0.002	Eye, liver, kidney or spleen problems; anemia; increased risk of cancer	Runoff from herbicide used on row crops	zero
R	Alpha particles	15 picocuries per Liter (pCi/L)	Increased risk of cancer	Erosion of natural deposits of certain minerals that are radioactive and may emit a form of radiation known as alpha radiation	zero
IOC	Antimony	0.006	Increase in blood cholesterol; decrease in blood sugar	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder	0.006
IOC	Arsenic	0.010 as of 1/23/06	Skin damage or problems with circulatory systems, and may have increased risk of getting cancer	Erosion of natural deposits; runoff from orchards, runoff from glass & electronics production wastes	0
IOC	Asbestos (fibers >10 micrometers)	7 million fibers per Liter (MFL)	Increased risk of developing benign intestinal polyps	Decay of asbestos cement in water mains; erosion of natural deposits	7 MFL
OC	Atrazine	0.003	Cardiovascular system or reproductive problems	Runoff from herbicide used on row crops	0.003
IOC	Barium	2	Increase in blood pressure	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits	2
OC	Benzene	0.005	Anemia; decrease in blood platelets; increased risk of cancer	Discharge from factories; leaching from gas storage tanks and landfills	zero
OC	Benzo(a)pyrene (PAHs)	0.0002	Reproductive difficulties; increased risk of cancer	Leaching from linings of water storage tanks and distribution lines	zero
IOC	Beryllium	0.004	Intestinal lesions	Discharge from metal refineries and coal-burning factories; discharge from electrical, aerospace, and defense industries	0.004
R	Beta particles and photon emitters	4 millirems per year	Increased risk of cancer	Decay of natural and man-made deposits of certain minerals that are radioactive and may emit forms of radiation known as photons and beta radiation	zero
DBP	Bromate	0.010	Increased risk of cancer	Byproduct of drinking water disinfection	zero
IOC	Cadmium	0.005	Kidney damage	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints	0.005
OC	Carbofuran	0.04	Problems with blood, nervous system, or reproductive system	Leaching of soil fumigant used on rice and alfalfa	0.04
OC	Carbon tetrachloride	0.005	Liver problems; increased risk of cancer	Discharge from chemical plants and other industrial activities	zero
D	Chloramines (as Cl2)	MRDL=4.01	Eye/nose irritation; stomach discomfort, anemia	Water additive used to control microbes	MRDLG=41

	Contaminant	MCL or TT1 (mg/L)2	Potential health effects from exposure above the MCL	Common sources of contaminant in drinking water	Public Health Goal
OC	Chlordane	0.002	Liver or nervous system problems; increased risk of cancer	Residue of banned termiticide	zero

LEGEND

1

D Dinsinfectant

DBP Disinfection Byproduct

IOC Inorganic Chemical

M Microorganism

OC Organic Chemical

R Radionuclides

D	Chlorine (as Cl2)	MRDL=4.01	Eye/nose irritation; stomach discomfort	Water additive used to control microbes	MRDLG=41
D	Chlorine dioxide (as ClO2)	MRDL=0.81	Anemia; infants & young children: nervous system effects	Water additive used to control microbes	MRDLG=0.81
DBP	Chlorite	1.0	Anemia; infants & young children: nervous system effects	Byproduct of drinking water disinfection	0.8
OC	Chlorobenzene	0.1	Liver or kidney problems	Discharge from chemical and agricultural chemical factories	0.1
IOC	Chromium (total)	0.1	Allergic dermatitis	Discharge from steel and pulp mills; erosion of natural deposits	0.1
IOC	Copper	TT7; Action Level = 1.3	Short term exposure: Gastrointestinal distress. Long term exposure: Liver or kidney damage. People with Wilson's Disease should consult their personal doctor if the amount of copper in their water exceeds the action level	Corrosion of household plumbing systems; erosion of natural deposits	1.3
M	*Cryptosporidium*	TT3	Gastrointestinal illness (e.g., diarrhea, vomiting, cramps)	Human and animal fecal waste	zero
IOC	Cyanide (as free cyanide)	0.2	Nerve damage or thyroid problems	Discharge from steel/metal factories; discharge from plastic and fertilizer factories	0.2
OC	2,4-D	0.07	Kidney, liver, or adrenal gland problems	Runoff from herbicide used on row crops	0.07
OC	Dalapon	0.2	Minor kidney changes	Runoff from herbicide used on rights of way	0.2
OC	1,2-Dibromo-3-chloropropa ne (DBCP)	0.0002	Reproductive difficulties; increased risk of cancer	Runoff/leaching from soil fumigant used on soybeans, cotton, pineapples, and orchards	zero
OC	o-Dichlorobenzene	0.6	Liver, kidney, or circulatory system problems	Discharge from industrial chemical factories	0.6
OC	p-Dichlorobenzene	0.075	Anemia; liver, kidney or spleen damage; changes in blood	Discharge from industrial chemical factories	0.075
OC	1,2-Dichloroethane	0.005	Increased risk of cancer	Discharge from industrial chemical factories	zero
OC	1,1-Dichloroethylene	0.007	Liver problems	Discharge from industrial chemical factories	0.007
OC	cis-1,2-Dichloroethylene	0.07	Liver problems	Discharge from industrial chemical factories	0.07
OC	trans-1,2-Dichloroethylene	0.1	Liver problems	Discharge from industrial chemical factories	0.1
OC	Dichloromethane	0.005	Liver problems; increased risk of cancer	Discharge from drug and chemical factories	zero
OC	1,2-Dichloropropane	0.005	Increased risk of cancer	Discharge from industrial chemical factories	zero
OC	Di(2-ethylhexyl) adipate	0.4	Weight loss, live problems, or possible reproductive difficulties	Discharge from chemical factories	0.4
OC	Di(2-ethylhexyl) phthalate	0.006	Reproductive difficulties; liver problems; increased risk of cancer	Discharge from rubber and chemical factories	zero
OC	Dinoseb	0.007	Reproductive difficulties	Runoff from herbicide used on soybeans and vegetables	0.007
OC	Dioxin (2,3,7,8-TCDD)	0.00000003	Reproductive difficulties; increased risk of cancer	Emissions from waste incineration and other combustion; discharge from chemical factories	zero
OC	Diquat	0.02	Cataracts	Runoff from herbicide use	0.02
OC	Endothall	0.1	Stomach and intestinal problems	Runoff from herbicide use	0.1

LEGEND

D Dinsinfectant

DBP Disinfection Byproduct

IOC Inorganic Chemical

M Microorganism

OC Organic Chemical

R Radionuclides

	Contaminant	MCL or TT1 (mg/L)2	Potential health effects from exposure above the MCL	Common sources of contaminant in drinking water	Public Health Goal
OC	Endrin	0.002	Liver problems	Residue of banned insecticide	0.002
OC	Epichlorohydrin	TT8	Increased cancer risk, and over a long period of time, stomach problems	Discharge from industrial chemical factories; an impurity of some water treatment chemicals	zero
OC	Ethylbenzene	0.7	Liver or kidneys problems	Discharge from petroleum refineries	0.7
OC	Ethylene dibromide	0.00005	Problems with liver, stomach, reproductive system, or kidneys; increased risk of cancer	Discharge from petroleum refineries	zero
IOC	Fluoride	4.0	Bone disease (pain and tenderness of the bones); Children may get mottled teeth	Water additive which promotes strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories	4.0
M	*Giardia lamblia*	TT[3]	Gastrointestinal illness (e.g., diarrhea, vomiting, cramps)	Human and animal fecal waste	zero
OC	Glyphosate	0.7	Kidney problems; reproductive difficulties	Runoff from herbicide use	0.7
DBP	Haloacetic acids (HAA5)	0.060	Increased risk of cancer	Byproduct of drinking water disinfection	n/a6
OC	Heptachlor	0.0004	Liver damage; increased risk of cancer	Residue of banned termiticide	zero
OC	Heptachlor epoxide	0.0002	Liver damage; increased risk of cancer	Breakdown of heptachlor	zero
M	Heterotrophic plate count (HPC)	TT[3]	HPC has no health effects; it is an analytic method used to measure the variety of bacteria that are common in water. The lower the concentration of bacteria in drinking water, the better maintained the water system is.	HPC measures a range of bacteria that are naturally present in the environment	n/a
OC	Hexachlorobenzene	0.001	Liver or kidney problems; reproductive difficulties; increased risk of cancer	Discharge from metal refineries and agricultural chemical factories	zero
OC	Hexachlorocyclopentadien e	0.05	Kidney or stomach problems	Discharge from chemical factories	0.05
IOC	Lead	TT[7]; Action Level = 0.015	Infants and children: Delays in physical or mental development; children could show slight deficits in attention span and learning abilities; Adults: Kidney problems; high blood pressure	Corrosion of household plumbing systems; erosion of natural deposits	zero
M	*Legionella*	TT[3]	Legionnaire's Disease, a type of pneumonia	Found naturally in water; multiplies in heating systems	zero
OC	Lindane	0.0002	Liver or kidney problems	Runoff/leaching from insecticide used on cattle, lumber, gardens	0.0002
IOC	Mercury (inorganic)	0.002	Kidney damage	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills and croplands	0.002
OC	Methoxychlor	0.04	Reproductive difficulties	Runoff/leaching from insecticide used on fruits, vegetables, alfalfa, livestock	0.04
IOC	Nitrate (measured as Nitrogen)	10	Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome.	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits	10
IOC	Nitrite (measured as Nitrogen)	1	Infants below the age of six months who drink water containing nitrite in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome.	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits	1

LEGEND

D Dinsinfectant

DBP Disinfection Byproduct

IOC Inorganic Chemical

M Microorganism

OC Organic Chemical

R Radionuclides

	Contaminant	MCL or TT1 (mg/L)2	Potential health effects from exposure above the MCL	Common sources of contaminant in drinking water	Public Health Goal
OC	Oxamyl (Vydate)	0.2	Slight nervous system effects	Runoff/leaching from insecticide used on apples, potatoes, and tomatoes	0.2
OC	Pentachlorophenol	0.001	Liver or kidney problems; increased cancer risk	Discharge from wood preserving factories	zero
OC	Picloram	0.5	Liver problems	Herbicide runoff	0.5
OC	Polychlorinated biphenyls (PCBs)	0.0005	Skin changes; thymus gland problems; immune deficiencies; reproductive or nervous system difficulties; increased risk of cancer	Runoff from landfills; discharge of waste chemicals	zero
R	Radium 226 and Radium 228 (combined)	5 pCi/L	Increased risk of cancer	Erosion of natural deposits	zero
IOC	Selenium	0.05	Hair or fingernail loss; numbness in fingers or toes; circulatory problems	Discharge from petroleum refineries; erosion of natural deposits; discharge from mines	0.05
OC	Simazine	0.004	Problems with blood	Herbicide runoff	0.004
OC	Styrene	0.1	Liver, kidney, or circulatory system problems	Discharge from rubber and plastic factories; leaching from landfills	0.1
OC	Tetrachloroethylene	0.005	Liver problems; increased risk of cancer	Discharge from factories and dry cleaners	zero
IOC	Thallium	0.002	Hair loss; changes in blood; kidney, intestine, or liver problems	Leaching from ore-processing sites; discharge from electronics, glass, and drug factories	0.0005
OC	Toluene	1	Nervous system, kidney, or liver problems	Discharge from petroleum factories	1
M	Total Coliforms (including fecal coliform and *E. coli*)	5.0%4	Not a health threat in itself; it is used to indicate whether other potentially harmful bacteria may be present5	Coliforms are naturally present in the environment as well as feces; fecal coliforms and *E. coli* only come from human and animal fecal waste.	zero
DBP	Total Trihalomethanes (TTHMs)	0.10 0.080 after 12/31/03	Liver, kidney or central nervous system problems; increased risk of cancer	Byproduct of drinking water disinfection	n/a[6]
OC	Toxaphene	0.003	Kidney, liver, or thyroid problems; increased risk of cancer	Runoff/leaching from insecticide used on cotton and cattle	zero
OC	2,4,5-TP (Silvex)	0.05	Liver problems	Residue of banned herbicide	0.05
OC	1,2,4-Trichlorobenzene	0.07	Changes in adrenal glands	Discharge from textile finishing factories	0.07
OC	1,1,1-Trichloroethane	0.2	Liver, nervous system, or circulatory problems	Discharge from metal degreasing sites and other factories	0.20
OC	1,1,2-Trichloroethane	0.005	Liver, kidney, or immune system problems	Discharge from industrial chemical factories	0.003
OC	Trichloroethylene	0.005	Liver problems; increased risk of cancer	Discharge from metal degreasing sites and other factories	zero
M	Turbidity	TT[3]	Turbidity is a measure of the cloudiness of water. It is used to indicate water quality and filtration effectiveness (e.g., whether disease-causing organisms are present). Higher turbidity levels are often associated with higher levels of disease-causing micro-organisms such as viruses, parasites and some bacteria. These organisms can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.	Soil runoff	n/a
R	Uranium	30 ug/L as of 12/08/03	Increased risk of cancer, kidney toxicity	Erosion of natural deposits	zero

LEGEND

D Dinsinfectant
DBP Disinfection Byproduct
IOC Inorganic Chemical
M Microorganism
OC Organic Chemical
R Radionuclides

	Contaminant	MCL or TT1 (mg/L)2	Potential health effects from exposure above the MCL	Common sources of contaminant in drinking water	Public Health Goal
OC	Vinyl chloride	0.002	Increased risk of cancer	Leaching from PVC pipes; discharge from plastic factories	zero
M	Viruses (enteric)	TT3	Gastrointestinal illness (e.g., diarrhea, vomiting, cramps)	Human and animal fecal waste	zero
OC	Xylenes (total)	10	Nervous system damage	Discharge from petroleum factories; discharge from chemical factories	10

NOTES

1 Definitions

- Maximum Contaminant Level Goal (MCLG)—The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety and are non-enforceable public health goals.
- Maximum Contaminant Level (MCL)—The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to MCLGs as feasible using the best available treatment technology and taking cost into consideration. MCLs are enforceable standards.
- Maximum Residual Disinfectant Level Goal (MRDLG)—The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
- Maximum Residual Disinfectant Level (MRDL)—The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
- Treatment Technique (TT)—A required process intended to reduce the level of a contaminant in drinking water.

2 Units are in milligrams per liter (mg/L) unless otherwise noted. Milligrams per liter are equivalent to parts per million (ppm).

3 EPA's surface water treatment rules require systems using surface water or ground water under the direct influence of surface water to (1) disinfect their water, and (2) filter their water or meet criteria for avoiding filtration so that the following contaminants are controlled at the following levels:

- *Cryptosporidium* (as of 1/1/02 for systems serving >10,000 and 1/14/05 for systems serving <10,000) 99% removal.
- *Giardia lamblia*: 99.9% removal/inactivation • Viruses: 99.99% removal/inactivation
- *Legionella:* No limit, but EPA believes that if *Giardia* and viruses are removed/inactivated, *Legionella* will also be controlled.
- Turbidity: At no time can turbidity (cloudiness of water) go above 5 nephelolometric turbidity units (NTU); systems that filter must ensure that the turbidity go no higher than 1 NTU (0.5 NTU for conventional or direct filtration) in at least 95% of the daily samples in any month. As of January 1, 2002, for systems servicing >10,000, and January 14, 2005, for systems servicing <10,000, turbidity may never exceed 1 NTU, and must not exceed 0.3 NTU in 95% of daily samples in any month.
- HPC: No more than 500 bacterial colonies per milliliter
- Long Term 1 Enhanced Surface Water Treatment (Effective Date: January 14, 2005); Surface water systems or (GWUDI) systems serving fewer than 10,000 people must comply with the applicable Long Term 1 Enhanced Surface Water Treatment Rule provisions (e.g. turbidity standards, individual filter monitoring, *Cryptosporidium* removal requirements, updated watershed control requirements for unfiltered systems).
- Filter Backwash Recycling: The Filter Backwash Recycling Rule requires systems that recycle to return specific recycle flows through all processes of the system's existing conventional or direct filtration system or at an alternate location approved by the state.

4 No more than 5.0% samples total coliform-positive in a month. (For water systems that collect fewer than 40 routine samples per month, no more than one sample can be total coliform-positive per month.) Every sample that has total coliform must be analyzed for either fecal coliforms or *E. coli* if two consecutive TC-positive samples, and one is also positive for *E. coli* fecal coliforms, system has an acute MCL violation.

5 Fecal coliform and *E. coli* are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Disease-causing microbes (pathogens) in these wastes can cause diarrhea, cramps, nausea, headaches, or other symptoms. These pathogens may pose a special health risk for infants, young children, and people with severely compromised immune systems.

6 Although there is no collective MCLG for this contaminant group, there are individual MCLGs for some of the individual contaminants:

- Haloacetic acids: dichloroacetic acid (zero); trichloroacetic acid (0.3 mg/L)
- Trihalomethanes: bromodichloromethane (zero); bromoform (zero); dibromochloromethane (0.06 mg/L)

7 Lead and copper are regulated by a Treatment Technique that requires systems to control the corrosiveness of their water. If more than 10% of tap water samples exceed the action level, water systems must take additional steps. For copper, the action level is 1.3 mg/L, and for lead is 0.015 mg/L.

8 Each water system must certify, in writing, to the state (using third-party or manufacturers certification) that when it uses acrylamide and/or epichlorohydrin to treat water, the combination (or product) of dose and monomer level does not exceed the levels specified, as follows: Acrylamide = 0.05% dosed at 1 mg/L (or equivalent); Epichlorohydrin = 0.01% dosed at 20 mg/L (or equivalent).

LEGEND

5

D	Dinsinfectant	IOC	Inorganic Chemical	OC	Organic Chemical
DBP	Disinfection Byproduct	M	Microorganism	R	Radionuclides

National Secondary Drinking Water Standards

National Secondary Drinking Water Standards are non-enforceable guidelines regulating contaminants that may cause cosmetic effects (such as skin or tooth discoloration) or aesthetic effects (such as taste, odor, or color) in drinking water. EPA recommends secondary standards to water systems but does not require systems to comply. However, states may choose to adopt them as enforceable standards.

Contaminant	Secondary Standard
Aluminum	0.05 to 0.2 mg/L
Chloride	250 mg/L
Color	15 (color units)
Copper	1.0 mg/L
Corrosivity	noncorrosive
Fluoride	2.0 mg/L
Foaming Agents	0.5 mg/L
Iron	0.3 mg/L
Manganese	0.05 mg/L
Odor	3 threshold odor number
pH	6.5-8.5
Silver	0.10 mg/L
Sulfate	250 mg/L
Total Dissolved Solids	500 mg/L
Zinc	5 mg/L

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www.epa.gov/safewater
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Soil Cleanup Target Levels and Acceptable Risk-Based Concentration Equations

Table II
Soil Cleanup Target Levels

Contaminants	CAS#s	Direct Exposure		Leachability Based on Groundwater Criteria	Leachability Based on Freshwater Surface Water Criteria	Leachability Based on Marine Surface Water Criteria	Leachability Based on Groundwater of Low Yield/ Poor Quality	Target Organs/Systems or Effects†
		Residential	Commercial/ Industrial					
		(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	
Acenaphthene	83-32-9	2400	20000	2.1	0.3	0.3	21	-Liver
Acenaphthylene	208-96-8	1800	20000	27	NA	NA	270	-Liver
Acephate	30560-19-1	120	720	0.02	0.8	0.8	0.2	-Carcinogen -Neurological
Acetaldehyde	75-07-0	15	20	NA	NA	NA	NA	-Nasal
Acetone	67-64-1	11000	68000	25	6.8	6.8	250	-Kidney -Liver -Neurological
Acetophenone	98-86-2	3900	32000	3.9	44	44	39	-None Specified
Acifluorfen, sodium [or Blazer]	62476-59-9	28	140	0.1	25	25	1	-Kidney
Acrolein	107-02-8	0.05	0.3	0.01	0.002	0.002	0.1	-Nasal
Acrylamide	79-06-1	0.1	0.4	0.00003	0.001	0.001	0.0003	-Carcinogen -Neurological
Acrylic acid	79-10-7	48	250	14	NA	NA	140	-Developmental
Acrylonitrile	107-13-1	0.3	0.6	0.0003	0.001	0.001	0.003	-Carcinogen -Nasal -Reproductive
Alachlor	15972-60-8	11	44	0.02	0.005	0.005	0.2	-Blood -Carcinogen
Aldicarb [or Temik]	116-06-3	68	920	0.03	0.004	0.004	0.3	-Neurological
Aldrin	309-00-2	0.06	0.3	0.2	0.01	0.01	2	-Carcinogen -Liver
Ally [or Metsulfuron, methyl]	74223-64-6	19000	300000	12	NA	NA	120	-Body Weight
Allyl alcohol	107-18-6	140	970	0.1	0.02	0.02	1	-Kidney -Liver
Allyl chloride	107-05-1	0.5	2.7	0.2	NA	NA	2	-Neurological
Aluminum	7429-90-5	80000	*	***	***	***	***	-Body Weight

Table II
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		Residential	Commercial/ Industrial					
		(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	
Aluminum phosphide	20859-73-8	35	880	***	***	***	***	-Body Weight
Ametryn	834-12-8	670	11000	0.8	0.08	0.08	8	-Liver
Ammonia (a)	7664-41-7	35000	880000	***	***	NA	***	-Respiratory
Aniline	62-53-3	27	150	0.03	0.02	0.02	0.3	-Blood -Carcinogen -Spleen
Anthracene	120-12-7	21000	300000	2500	0.4	0.4	25000	-None Specified
Antimony (b)	7440-36-0	27	370	5.4	3900	3900	54	-Blood
Aroclor mixture [see PCBs]								
Arsenic	NOCAS	2.1	12	***	***	***	***	-Carcinogen -Cardiovascular -Skin
Atrazine	1912-24-9	4.3	19	0.06	0.04	0.04	0.6	-Carcinogen -Cardiovascular
Azinphos, methyl [see Guthion]								
Azobenzene	103-33-3	7.9	31	0.03	0.4	0.4	0.3	-Carcinogen
Barium (soluble salts) (b)	7440-39-3	120**	130000	1600	NA	NA	16000	-Cardiovascular
Baygon [or Propoxur]	114-26-1	280	4100	0.2	0.002	0.002	2	-Blood -Neurological
Bayleton	43121-43-3	2400	46000	4.8	11	11	48	-Blood
Benomyl	17804-35-2	4000	77000	3.1	0.03	0.03	31	-Developmental
Bentazon	25057-89-0	2100	32000	1.2	NA	NA	12	-Blood
Benzaldehyde	100-52-7	3300	24000	4.8	0.4	0.4	48	-Gastrointestinal -Kidney
Benzene	71-43-2	1.2	1.7	0.007	0.5	0.5	0.07	-Blood -Carcinogen

Table II
Soil Cleanup Target Levels

Contaminants	CAS#s	Direct Exposure		Leachability Based on Groundwater Criteria	Leachability Based on Freshwater Surface Water Criteria	Leachability Based on Marine Surface Water Criteria	Leachability Based on Groundwater of Low Yield/ Poor Quality	Target Organs/Systems or Effects†
		Residential	Commercial/ Industrial					
		(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	
Benzenethiol	108-98-5	0.2	1.3	0.001	NA	NA	0.01	-Liver
Benzidine	92-87-5	0.004	0.02	0.00002	0.00002	0.00002	0.0002	-Carcinogen -Liver -Neurological
Benzo(a)anthracene	56-55-3	#	#	0.8	NA	NA	8	-Carcinogen
Benzo(a)pyrene	50-32-8	0.1	0.7	8	NA	NA	80	-Carcinogen
Benzo(b)fluoranthene	205-99-2	#	#	2.4	NA	NA	24	-Carcinogen
Benzo(g,h,i)perylene	191-24-2	2500	52000	32000	NA	NA	320000	-Neurological
Benzo(k)fluoranthene	207-08-9	#	#	24	NA	NA	240	-Carcinogen
Benzoic acid	65-85-0	180000	*	110	36	36	1100	-None Specified
Benzotrichloride	98-07-7	0.04	0.09	0.0001	0.00008	0.00008	0.001	-Carcinogen
Benzyl alcohol	100-51-6	26000	670000	9.5	2.3	2.3	95	-Gastrointestinal
Benzyl chloride	100-44-7	1	1.6	0.002	0.02	0.02	0.02	-Carcinogen
Beryllium (b)	7440-41-7	120	1400	63	2.1	2.1	630	-Carcinogen -Gastrointestinal -Respiratory
Betanal [see Phenmedipham]								
BHC, alpha- [see Hexachlorocyclohexane, alpha-] (f)								
BHC, beta- [see Hexachlorocyclohexane, beta-] (f)								
BHC, delta- [see Hexachlorocyclohexane, delta-] (f)								
BHC, gamma- [see Hexachlorocyclohexane, gamma-] (f)								
Bidrin [or Dicrotophos]	141-66-2	7.4	120	0.005	0.1	0.1	0.05	-Developmental

Table II
Soil Cleanup Target Levels

Contaminants	CAS#s	Direct Exposure		Leachability Based on Groundwater Criteria	Leachability Based on Freshwater Surface Water Criteria	Leachability Based on Marine Surface Water Criteria	Leachability Based on Groundwater of Low Yield/ Poor Quality	Target Organs/Systems or Effects†
		Residential	Commercial/ Industrial					
		(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	
Biphenyl, 1,1- [or Diphenyl]	92-52-4	3000	34000	0.2	5.8	5.8	2	-Kidney
Bis(2-chloro-1-metylethyl)ether [see Bis(2-chloroisopropyl)ether]								
Bis(2-chloroethoxy)methane	111-91-1	250	5700	63	NA	NA	630	-Liver
Bis(2-chloroethyl)ether	111-44-4	0.3	0.5	0.0001	0.002	0.002	0.001	-Carcinogen
Bis(2-chloroisopropyl)ether [or Bis(2-chloro-1-metylethyl)ether]	39638-32-9	6	12	0.009	0.4	0.4	0.09	-Blood -Carcinogen
Bis(2-ethylhexyl)adipate	103-23-1	620	1900	780	64	64	7800	-Body Weight -Carcinogen
Bis(2-ethylhexyl)phthalate [or DEHP]	117-81-7	72	390	3600	1300	1300	36000	-Carcinogen -Liver
Bisphenol A	80-05-7	4000	79000	11	1.7	1.7	110	-Body Weight
Blazer [see Acifluorfen, sodium]								
Boron	7440-42-8	17000	430000	***	NA	NA	***	-Reproductive -Respiratory
Bravo [see Chlorothalonil]								
Bromacil	314-40-9	7500	120000	0.5	0.6	0.6	5	-Body Weight
Bromate	15541-45-4	1	2.8	0.0002	NA	460	0.002	-Carcinogen -Kidney
Bromochloromethane	74-97-5	95	530	0.6	NA	NA	6	-None Specified
Bromodichloromethane	75-27-4	1.5	2.2	0.004	0.1	0.1	0.04	-Carcinogen -Kidney
Bromoform	75-25-2	48	93	0.03	2.7	2.7	0.3	-Carcinogen -Liver
Bromomethane [or Methyl bromide]	74-83-9	3.1	16	0.05	0.2	0.2	0.5	-Gastrointestinal -Respiratory
Bromoxynil	1689-84-5	1600	29000	3	NA	NA	30	-None Specified

Table II
Soil Cleanup Target Levels

Contaminants	CAS#s	Direct Exposure		Leachability Based on Groundwater Criteria	Leachability Based on Freshwater Surface Water Criteria	Leachability Based on Marine Surface Water Criteria	Leachability Based on Groundwater of Low Yield/ Poor Quality	Target Organs/Systems or Effects†
		Residential	Commercial/ Industrial					
		(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	
Butanol, n-	71-36-3	2900	21000	3	110	110	30	-Neurological
Butanol, tert- [see Butyl alcohol, tert-]								
Butanone, 2- [see Methyl ethyl ketone]								
Butyl alcohol, tert- [or Butanol, tert-]	75-65-0	3200	19000	5.7	NA	NA	57	-Kidney -Neurological
Butyl benzyl phthalate	85-68-7	17000	380000	310	56	56	3100	-Liver
Butylate	2008-41-5	3200	40000	5.2	0.2	0.2	52	-Liver
Butylphthalyl butylglycolate	85-70-1	84000	*	4200	NA	NA	42000	-None Specified
Cadmium (b,c,h)	7440-43-9	82	1700	7.5	NA	14	75	-Carcinogen -Kidney
Calcium cyanide	592-01-8	3500	88000	***	NA	NA	***	-Neurological -Thyroid
Captafol	2425-06-1	110	570	0.5	0.1	0.1	5	-Carcinogen -Kidney
Captan	133-06-2	230	750	0.1	0.03	0.03	1	-Body Weight -Carcinogen
Carbaryl [or Sevin]	63-25-2	7700	130000	8.7	0.0007	0.0007	87	-Kidney -Liver
Carbazole	86-74-8	49	240	0.2	6.5	6.5	2	-Carcinogen
Carbofuran	1563-66-2	130	910	0.2	0.0006	0.0006	2	-Neurological -Reproductive
Carbon disulfide	75-15-0	270	1500	5.6	0.8	0.8	56	-Developmental -Neurological
Carbon tetrachloride	56-23-5	0.5	0.7	0.04	0.06	0.06	0.4	-Carcinogen -Liver
Carbophenothion [or Trithion]	786-19-6	11	250	13	1.5	1.5	130	-Neurological
Carboxin	5234-68-4	7400	120000	5	0.4	0.4	50	-Body Weight

Table II
Soil Cleanup Target Levels

Contaminants	CAS#s	Direct Exposure		Leachability Based on Groundwater Criteria	Leachability Based on Freshwater Surface Water Criteria	Leachability Based on Marine Surface Water Criteria	Leachability Based on Groundwater of Low Yield/ Poor Quality	Target Organs/Systems or Effects†
		Residential	Commercial/ Industrial					
		(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	
CFC 113 [see Trichloro-1,2,2-trifluoroethane, 1,1,2-]								-Adrenals
Chloral hydrate	302-17-0	5700	62000	0.3	NA	NA	3	-Gastrointestinal -Neurological
Chloramben	133-90-4	960	12000	0.5	NA	NA	5	-Liver
Chlordane (total)	(j)	2.8	14	9.6	0.003	0.003	96	-Carcinogen -Liver
Chlorine cyanide [or Cyanogen chloride]	506-77-4	3100	37000	71	0.3	0.3	710	-Neurological -Thyroid
Chloro-1,1-difluoroethane, 1-	75-68-3	16000	84000	NA	NA	NA	NA	-None Specified
Chloro-1,3-butadiene [or Chloroprene]	126-99-8	3.5	19	1.5	NA	NA	15	-Hair Loss -Nasal
Chloro-3-methylphenol, 4- [see Chloro-m-cresol, p-]								
Chloroacetic acid	79-11-8	130	1700	0.07	13	13	0.7	-Cardiovascular
Chloroaniline, p-	106-47-8	270	3700	0.2	0.02	0.02	2	-Spleen
Chlorobenzene	108-90-7	120	650	1.3	0.2	0.2	13	-Liver
Chlorobenzilate	510-15-6	3.6	18	0.1	0.01	0.01	1	-Body Weight -Carcinogen
Chlorobenzoic acid, p-	74-11-3	16000	290000	28	NA	NA	280	-None Specified
Chlorobenzotrifluoride, 4-	98-56-6	130	710	5.2	NA	NA	52	-Kidney
Chlorobutane, 1-	109-69-3	780	4200	26	NA	NA	260	-Blood -Neurological
Chlorodifluoromethane	75-45-6	16000	82000	NA	NA	NA	NA	-Adrenals -Kidney -Pituitary
Chloroethane [see Ethyl chloride]								
Chloroform	67-66-3	0.4	0.6	0.4	2.8	2.8	4	-Carcinogen -Liver

Table II
Soil Cleanup Target Levels

Contaminants	CAS#s	Direct Exposure		Leachability Based on Groundwater Criteria	Leachability Based on Freshwater Surface Water Criteria	Leachability Based on Marine Surface Water Criteria	Leachability Based on Groundwater of Low Yield/ Poor Quality	Target Organs/Systems or Effects†
		Residential	Commercial/ Industrial					
		(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	
Chloro-m-cresol, p- [or Chloro-3-methylphenol, 4-]	59-50-7	600	8000	0.4	0.6	0.6	4	-Body Weight
Chloromethane [see Methyl chloride]								
Chloronaphthalene, beta-	91-58-7	5000	61000	260	740	740	2600	-Liver -Respiratory
Chloronitrobenzene, o-	88-73-3	22	51	0.02	NA	NA	0.2	-Carcinogen
Chloronitrobenzene, p-	100-00-5	31	73	0.03	1.6	1.6	0.3	-Carcinogen
Chlorophenol, 2-	95-57-8	130	860	0.7	2.5	2.5	7	-Reproductive
Chlorophenol, 3-	108-43-0	370	5900	0.002	3.1	3.1	0.02	-Reproductive
Chlorophenol, 4-	106-48-9	330	4400	0.0007	1.2	1.2	0.007	-Reproductive
Chloroprene [see Chloro-1,3-butadiene]								
Chloropropane, 2-	75-29-6	47	250	NA	NA	NA	NA	-Liver
Chlorothalonil [or Bravo]	1897-45-6	88	420	0.2	0.06	0.06	2	-Carcinogen -Kidney
Chlorotoluene, o-	95-49-8	200	1200	2.8	7.7	7.7	28	-Body Weight
Chlorotoluene, p-	106-43-4	170	990	2.5	NA	NA	25	-None Specified
Chlorpropham	101-21-3	16000	310000	51	7	7	510	-Bone Marrow -Kidney -Liver -Spleen
Chlorpyrifos	2921-88-2	250	5000	15	0.001	0.001	150	-Neurological
Chromium (hexavalent) (b)	18540-29-9	210	470	NA	4.2	19	NA	-Carcinogen -Respiratory
Chromium (total) (b,g)	NOCAS	210	470	38	4.2	19	380	-Carcinogen
Chromium (trivalent) (b)	16065-83-1	110000	*	NA	NA	*	NA	-None Specified

Table II
Soil Cleanup Target Levels

Contaminants	CAS#s	Direct Exposure		Leachability Based on Groundwater Criteria	Leachability Based on Freshwater Surface Water Criteria	Leachability Based on Marine Surface Water Criteria	Leachability Based on Groundwater of Low Yield/ Poor Quality	Target Organs/Systems or Effects†
		Residential	Commercial/ Industrial					
		(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	
Chrysene	218-01-9	#	#	77	NA	NA	770	-Carcinogen
Cobalt	7440-48-4	1700	42000	***	NA	NA	***	-Cardiovascular -Immunological -Neurological -Reproductive
Copper	7440-50-8	150**	89000	***	NA	***	***	-Gastrointestinal
Coumaphos	56-72-4	21	450	0.3	0.0007	0.0007	3	-Neurological
Cresol, m- [see Methylphenol, 3-]								
Cresol, o- [see Methylphenol, 2-]								
Cresol, p- [see Methylphenol, 4-]								
Crotonaldehyde	123-73-9	0.6	3.3	0.00008	NA	NA	0.0008	-Carcinogen
Cumene [or Isopropyl benzene]	98-82-8	220	1200	0.2	56	56	2	-Adrenals -Kidney
Cyanide, free (b)	57-12-5	34**	11000	0.8	0.02	0.004	8	-Neurological -Thyroid
Cyanogen	460-19-5	560	3400	57	NA	NA	570	-Neurological -Thyroid
Cyanogen chloride [see Chlorine cyanide]								
Cycloate	1134-23-2	340	4700	0.7	2.5	2.5	7	-Neurological
Cyclohexanone	108-94-1	150000	*	150	110	110	1500	
Cyclohexylamine	108-91-8	18000	440000	7.9	22	22	79	-Reproductive
Cyhalothrin [or Karate]	68085-85-8	420	9600	290	150	150	2900	-Developmental
Cymene, p-	99-87-6	960	5600	NA	NA	NA	NA	-Gastrointestinal -Skin
Cypermethrin	52315-07-8	840	19000	30	0.002	0.002	300	-Gastrointestinal

Table II
Soil Cleanup Target Levels

Contaminants	CAS#s	Direct Exposure		Leachability Based on Groundwater Criteria	Leachability Based on Freshwater Surface Water Criteria	Leachability Based on Marine Surface Water Criteria	Leachability Based on Groundwater of Low Yield/ Poor Quality	Target Organs/Systems or Effects†
		Residential	Commercial/ Industrial					
		(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	
DBCP, 1,2- [see Dibromo-3-chloropropane, 1,2-]								
DDD, 4,4'- [see Dichlorodiphenyldichloroethane, p,p']								
DDE, 4,4'- [see Dichlorodiphenyldichloroethylene, p,p'-]								
DDT, 4,4'- [see Dichlorodiphenyltrichloroethane, p,p'-]								
Decabromodiphenyl ether	1163-19-5	840	19000	9.3	NA	NA	93	-None Specified
DEHP [see Bis(2-ethylhexyl)phthalate]								
Diallate	2303-16-4	16	82	0.6	NA	NA	6	-Carcinogen -None Specified
Diazinon	333-41-5	70	1200	0.2	0.00005	0.00005	2	-Neurological
Dibenz(a,h)anthracene	53-70-3	#	#	0.7	NA	NA	7	-Carcinogen
Dibenzofuran	132-64-9	320	6300	15	36	36	150	-None Specified
Dibromo-3-chloropropane, 1,2- [or DBCP, 1,2-]	96-12-8	0.7	3.8	0.001	NA	NA	0.01	-Carcinogen -Reproductive
Dibromobenzene, 1,4-	106-37-6	430	3600	7.8	27	27	78	-Liver
Dibromochloromethane	124-48-1	1.5	2.3	0.003	0.2	0.2	0.03	-Carcinogen -Liver
Dibromoethane, 1,2- [or EDB]	106-93-4	0.1	0.2	0.0001	0.07	0.07	0.001	-Carcinogen -Reproductive
Dibutyl phthalate	84-74-2	8200	170000	47	1.5	1.5	470	-Mortality
Dicamba	1918-00-9	2300	40000	2.6	2.4	2.4	26	-Developmental
Dichloroacetic acid	79-43-6	21	120	0.005	8.1	8.1	0.05	-Carcinogen -Liver -Neurological -Reproductive
Dichloroacetonitrile	3018-12-0	340	2900	0.03	NA	NA	0.3	-None Specified

Table II
Soil Cleanup Target Levels

Contaminants	CAS#s	Direct Exposure		Leachability Based on Groundwater Criteria	Leachability Based on Freshwater Surface Water Criteria	Leachability Based on Marine Surface Water Criteria	Leachability Based on Groundwater of Low Yield/ Poor Quality	Target Organs/Systems or Effects†
		Residential	Commercial/ Industrial					
		(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	
Dichlorobenzene, 1,2-	95-50-1	880	5000	17	2.8	2.8	170	-Body Weight
Dichlorobenzene, 1,3-	541-73-1	380	2200	7	2.8	2.8	70	-None Specified
Dichlorobenzene, 1,4-	106-46-7	6.4	9.9	2.2	0.09	0.09	22	-Carcinogen -Liver
Dichlorobenzidine, 3,3'-	91-94-1	2.1	9.9	0.003	0.0009	0.0009	0.03	-Carcinogen
Dichlorobenzophenone, 4,4'-	90-98-2	2500	51000	25	190	190	250	-None Specified
Dichlorodifluoromethane	75-71-8	77	410	44	NA	NA	440	-Liver
Dichlorodiphenyldichloroethane, p,p'- [or DDD, 4,4'-]	72-54-8	4.2	22	5.8	0.01	0.01	58	-Carcinogen
Dichlorodiphenyldichloroethylene, p,p'- [or DDE, 4,4'-]	72-55-9	2.9	15	18	0.04	0.04	180	-Carcinogen
Dichlorodiphenyltrichloroethane, p,p'- [or DDT, 4,4'-]	50-29-3	2.9	15	11	0.06	0.06	110	-Carcinogen -Liver
Dichloroethane, 1,1-	75-34-3	390	2100	0.4	NA	NA	4	-Kidney
Dichloroethane, 1,2- [or EDC]	107-06-2	0.5	0.7	0.01	0.2	0.2	0.1	-Carcinogen -None Specified
Dichloroethene, 1,1-	75-35-4	95	510	0.06	0.03	0.03	0.6	-Liver
Dichloroethene, cis-1,2-	156-59-2	33	180	0.4	NA	NA	4	-Blood
Dichloroethene, trans-1,2-	156-60-5	53	290	0.7	75	75	7	-Blood -Liver
Dichlorophenol, 2,3-	576-24-9	230	4100	0.0008	1.2	1.2	0.008	-Immunological
Dichlorophenol, 2,4-	120-83-2	190	2400	0.003	0.1	0.1	0.03	-Immunological
Dichlorophenol, 2,5-	583-78-8	240	4600	0.02	4.3	4.3	0.2	-Immunological
Dichlorophenol, 2,6-	87-65-0	220	3600	0.007	2.5	2.5	0.07	-Immunological

Table II
Soil Cleanup Target Levels

Contaminants	CAS#s	Direct Exposure		Leachability Based on Groundwater Criteria	Leachability Based on Freshwater Surface Water Criteria	Leachability Based on Marine Surface Water Criteria	Leachability Based on Groundwater of Low Yield/ Poor Quality	Target Organs/Systems or Effects†
		Residential	Commercial/ Industrial					
		(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	
Dichlorophenol, 3,4-	95-77-2	230	3700	0.01	2	2	0.1	-Immunological
Dichlorophenoxy acetic acid, 2,4-	94-75-7	770	13000	0.7	0.9	0.9	7	-Blood -Kidney -Liver
Dichloropropane, 1,2-	78-87-5	0.6	0.9	0.03	0.09	0.09	0.3	-Carcinogen -Nasal
Dichloropropene, 1,3-	542-75-6	1.4	2.2	0.002	0.09	0.09	0.02	-Carcinogen -Gastrointestinal -Nasal
Dichlorprop	120-36-5	370	5800	0.3	0.3	0.3	3	-None Specified
Dichlorvos	62-73-7	0.3	0.4	0.0006	0.00002	0.00002	0.006	-Carcinogen -Neurological
Dicofol [or Kelthane]	115-32-2	2.2	11	0.01	0.0008	0.0008	0.1	-Adrenals -Carcinogen
Dicrotophos [see Bidrin]								
Dieldrin	60-57-1	0.06	0.3	0.002	0.0001	0.0001	0.02	-Carcinogen -Liver
Diethyl phthalate	84-66-2	61000	*	86	5.9	5.9	860	-Body Weight
Diethylene glycol, monoethyl ether	111-90-0	130000	*	63	750	750	630	-Kidney
Diisopropyl methylphosphonate	1445-75-6	4500	49000	3.6	85	85	36	-None Specified
Dimethoate	60-51-5	13	170	0.006	0.0004	0.0004	0.06	-Neurological
Dimethoxybenzidine, 3,3'-	119-90-4	69	330	0.2	NA	NA	2	-Carcinogen
Dimethrin	70-38-2	24000	440000	2500	1.3	1.3	25000	-Liver
Dimethylaniline, 2,4-	95-68-1	0.5	1	0.0005	19	19	0.005	-Blood -Carcinogen -Spleen
Dimethylaniline, N,N-	121-69-7	55	380	0.1	12	12	1	-Spleen
Dimethylbenzidine, 3,3'-	119-93-7	0.1	0.6	0.001	NA	NA	0.01	-Carcinogen

Table II
Soil Cleanup Target Levels

Contaminants	CAS#s	Direct Exposure		Leachability Based on Groundwater Criteria	Leachability Based on Freshwater Surface Water Criteria	Leachability Based on Marine Surface Water Criteria	Leachability Based on Groundwater of Low Yield/ Poor Quality	Target Organs/Systems or Effects†
		Residential	Commercial/ Industrial					
		(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	
Dimethylformamide, N,N-	68-12-2	1400	8600	3	210	210	30	-Gastrointestinal -Liver
Dimethylphenol, 2,4-	105-67-9	1300	18000	1.7	1.9	1.9	17	-Blood -Neurological
Dimethylphenol, 2,6-	576-26-1	34	370	0.04	5.2	5.2	0.4	-Kidney -Liver -Spleen
Dimethylphenol, 3,4-	95-65-8	71	1000	0.06	3.4	3.4	0.6	-Kidney -Liver -Spleen
Dimethylphthalate	131-11-3	690000	*	380	7.8	7.8	3800	-Kidney
Dinitrobenzene, 1,2- (o)	528-29-0	23	240	0.01	0.2	0.2	0.1	-Spleen
Dinitrobenzene, 1,3- (m)	99-65-0	5.8	64	0.004	0.4	0.4	0.04	-Spleen
Dinitrobenzene, 1,4- (p)	100-25-4	35	890	0.04	0.4	0.4	0.4	-Spleen
Dinitro-o-cresol, 4,6-	534-52-1	8.4	180	0.4	NA	NA	4	-Metabolic Disorders
Dinitrophenol, 2,4-	51-28-5	110	1200	0.06	0.01	0.01	0.6	-Eye
Dinitrotoluene, 2,4-	121-14-2	1.2	4.3	0.0004	0.07	0.07	0.004	-Carcinogen -Liver -Neurological
Dinitrotoluene, 2,6-	606-20-2	1.2	3.8	0.0004	0.005	0.005	0.004	-Blood -Carcinogen -Kidney -Neurological
Di-n-octylphthalate	117-84-0	1700	39000	480000	NA	NA	4800000	-Kidney -Liver
Dinoseb	88-85-7	65	840	0.03	0.03	0.03	0.3	-Developmental
Dioxane, 1,4-	123-91-1	23	38	0.01	0.5	0.5	0.1	-Carcinogen
Dioxins, as total 2,3,7,8-TCDD equivalents (e)	1746-01-6	0.000007	0.00003	0.003	0.0000006	0.0000006	0.03	-Carcinogen
Diphenamid	957-51-7	2300	41000	2.6	20	20	26	-Liver
Diphenyl [see Biphenyl, 1,1-]								

Table II
Soil Cleanup Target Levels

Contaminants	CAS#s	Direct Exposure		Leachability Based on Groundwater Criteria	Leachability Based on Freshwater Surface Water Criteria	Leachability Based on Marine Surface Water Criteria	Leachability Based on Groundwater of Low Yield/ Poor Quality	Target Organs/Systems or Effects†
		Residential	Commercial/ Industrial					
		(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	
Diphenylamine, N,N-	122-39-4	2000	40000	14	NA	NA	140	-Kidney -Liver
Diphenylhydrazine, 1,2-	122-66-7	1.1	4.8	0.002	0.007	0.007	0.02	-Carcinogen
Diquat	85-00-7	190	4300	800	60	60	8000	-Eye
Disulfoton	298-04-4	3.3	66	0.09	0.1	0.1	0.9	-Neurological
Diuron	330-54-1	150	2300	0.3	0.2	0.2	3	-Blood
EDB [see Dibromoethane, 1,2-]								
EDC [see Dichloroethane, 1,2-]								
Endosulfan (alpha+beta+sulfate)	115-29-7	450	7600	3.8	0.005	0.0008	38	-Cardiovascular -Kidney
Endothall	145-73-3	1800	44000	0.4	0.4	0.4	4	-Gastrointestinal
Endrin	72-20-8	25	510	1	0.001	0.001	10	-Liver
EPEG [see Ethylphthalyl ethylglycolate]								
Epichlorohydrin	106-89-8	14	80	0.03	1.1	1.1	0.3	-Carcinogen -Kidney -Nasal
EPN [see Ethyl p-nitrophenyl phenylphosphorothioate]								
EPTC [see Ethyl dipropylthiocarbamate, S-]								
Ethanol	64-17-5	*	*	40	NA	NA	400	-Developmental
Ethion	563-12-2	42	920	1.7	0.003	0.003	17	-Neurological
Ethoprop	13194-48-4	7.4	120	0.005	0.002	0.002	0.05	-Neurological
Ethoxyethanol acetate, 2-	111-15-9	14000	130000	8.8	8.4	8.4	88	-Developmental

Table II
Soil Cleanup Target Levels

Contaminants	CAS#s	Direct Exposure		Leachability Based on Groundwater Criteria	Leachability Based on Freshwater Surface Water Criteria	Leachability Based on Marine Surface Water Criteria	Leachability Based on Groundwater of Low Yield/ Poor Quality	Target Organs/Systems or Effects†
		Residential	Commercial/ Industrial					
		(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	
Ethoxyethanol, 2-	110-80-5	10000	72000	13	NA	NA	130	-Reproductive
Ethyl acetate	141-78-6	9100	53000	26	26	26	260	-Body Weight
Ethyl acrylate	140-88-5	2	3	0.002	0.6	0.6	0.02	-Carcinogen
Ethyl chloride [or Chloroethane]	75-00-3	3.9	5.4	0.06	NA	NA	0.6	-Carcinogen -Developmental
Ethyl dipropylthiocarbamate, S- [or EPTC]	759-94-4	1400	14000	11	15	15	110	-Cardiovascular
Ethyl ether	60-29-7	260	1400	5	850	850	50	-Body Weight
Ethyl methacrylate	97-63-2	630	3500	3.5	NA	NA	35	-Kidney
Ethyl p-nitrophenyl phenylphosphorothioate [or EPN]	2104-64-5	0.8	18	0.02	0.003	0.003	0.2	-Neurological
Ethylbenzene	100-41-4	1500	9200	0.6	12	12	6	-Developmental -Kidney -Liver
Ethylene diamine	107-15-3	1100	11000	0.6	3.2	3.2	6	-Blood -Cardiovascular
Ethylene glycol	107-21-1	110000	*	56	65	65	560	-Kidney
Ethylene oxide	75-21-8	0.3	0.4	0.0002	20	20	0.002	-Carcinogen
Ethylene thiourea [or ETU]	96-45-7	7	57	0.001	5.6	5.6	0.01	-Carcinogen -Thyroid
Ethylphthalyl ethylglycolate [or EPEG]	84-72-0	260000	*	1200	NA	NA	12000	-Kidney
ETU [see Ethylene thiourea]								
Fenamiphos	22224-92-6	19	340	0.02	0.003	0.003	0.2	-Neurological
Fensulfothion	115-90-2	19	310	0.01	0.004	0.004	0.1	-Neurological
Fenvalerate [see Pydrin]								

Table II
Soil Cleanup Target Levels

Contaminants	CAS#s	Direct Exposure		Leachability Based on Groundwater Criteria	Leachability Based on Freshwater Surface Water Criteria	Leachability Based on Marine Surface Water Criteria	Leachability Based on Groundwater of Low Yield/ Poor Quality	Target Organs/Systems or Effects†
		Residential	Commercial/ Industrial					
		(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	
Fluometuron	2164-17-2	980	16000	0.9	1.8	1.8	9	-None Specified
Fluoranthene	206-44-0	3200	59000	1200	1.3	1.3	12000	-Blood -Kidney -Liver
Fluorene	86-73-7	2600	33000	160	17	17	1600	-Blood
Fluoride	7782-41-4	840**	130000	6000	30000	15000	60000	-Teeth mottling
Fluoridone	59756-60-4	7000	180000	2500	460	460	25000	-Kidney -Reproductive
Fonofos	944-22-9	140	2100	0.4	0.003	0.003	4	-Liver -Neurological
Formaldehyde	50-00-0	23	31	2.4	0.4	0.4	24	-Carcinogen -Gastrointestinal
Furan	110-00-9	4.8	26	0.09	NA	NA	0.9	-Liver
Furfural	98-01-1	190	2400	0.09	2.7	2.7	0.9	-Liver -Nasal
Glycidaldehyde	765-34-4	15	120	0.01	NA	NA	0.1	-Adrenals -Blood -Kidney
Glyphosate [or Roundup]	1071-83-6	8800	220000	3.3	0.5	0.5	33	-Kidney
Guthion [or Methyl azinphos]	86-50-0	120	2400	0.2	0.0002	0.0002	2	-Neurological
Heptachlor	76-44-8	0.2	1	23	0.01	0.01	230	-Carcinogen -Liver
Heptachlor epoxide	1024-57-3	0.1	0.5	0.6	0.0001	0.0001	6	-Carcinogen -Liver
Hexachloro-1,3-butadiene	87-68-3	6.2	13	1	110	110	10	-Carcinogen -Kidney
Hexachlorobenzene	118-74-1	0.4	1.2	2.2	0.0006	0.0006	22	-Carcinogen -Liver
Hexachlorocyclohexane, alpha- [or BHC, alpha-]	319-84-6	0.1	0.6	0.0003	0.0003	0.0003	0.003	-Carcinogen
Hexachlorocyclohexane, beta- [BHC, beta-]	319-85-7	0.5	2.4	0.001	0.003	0.003	0.01	-Carcinogen

Table II
Soil Cleanup Target Levels

Contaminants	CAS#s	Direct Exposure		Leachability Based on Groundwater Criteria	Leachability Based on Freshwater Surface Water Criteria	Leachability Based on Marine Surface Water Criteria	Leachability Based on Groundwater of Low Yield/ Poor Quality	Target Organs/Systems or Effects†
		Residential	Commercial/ Industrial					
		(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	
Hexachlorocyclohexane, delta- [or BHC, delta-]	319-86-8	24	490	0.2	NA	NA	2	-Kidney -Liver
Hexachlorocyclohexane, gamma- [or Lindane or BHC, gamma-]	58-89-9	0.7	2.5	0.009	0.003	0.003	0.09	-Carcinogen -Kidney -Liver
Hexachlorocyclopentadiene	77-47-4	9.5	50	400	24	24	4000	-Gastrointestinal
Hexachloroethane	67-72-1	38	87	0.2	0.2	0.2	2	-Carcinogen -Kidney
Hexachlorophene	70-30-4	26	670	53	26	26	530	-Neurological
Hexahydro-1,3,5-trinitro-1,3,5-triazine [or RDX]	121-82-4	7.7	28	0.002	1.3	1.3	0.02	-Carcinogen -Reproductive
Hexane, n-	110-54-3	680	3900	2.1	1200	1200	21	-Neurological
Hexanone, 2- [or Methyl butyl ketone]	591-78-6	24	130	1.4	NA	NA	14	-None Specified
Hexazinone	51235-04-2	2300	32000	1.1	120	120	11	-Body Weight
Hydroquinone	123-31-9	2600	35000	1.4	0.02	0.02	14	-Blood
Indeno(1,2,3-cd)pyrene	193-39-5	#	#	6.6	NA	NA	66	-Carcinogen
Iron	7439-89-6	53000	*	***	***	***	***	-Gastrointestinal
Isobutyl alcohol	78-83-1	6400	42000	8.9	200	200	89	-Neurological
Isophorone	78-59-1	540	1200	0.2	3.8	3.8	2	-Carcinogen -None Specified
Isopropyl benzene [see Cumene]								
Karate [see Cyhalothrin, lambda]								
Kelthane [see Dicofol]								
Lead (d)	7439-92-1	400	1400	***	NA	***	***	-Neurological

Table II
Soil Cleanup Target Levels

Contaminants	CAS#s	Direct Exposure		Leachability Based on Groundwater Criteria	Leachability Based on Freshwater Surface Water Criteria	Leachability Based on Marine Surface Water Criteria	Leachability Based on Groundwater of Low Yield/ Poor Quality	Target Organs/Systems or Effects†
		Residential	Commercial/ Industrial					
		(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	
Limonene	138-86-3	640	3600	42	NA	NA	420	-Kidney -Liver
Lindane [see Hexachlorocyclohexane, gamma-]								
Linuron	330-55-2	160	3100	0.04	1.4	1.4	0.4	-Blood
Lithium	7439-93-2	1700	44000	***	NA	NA	***	-None Specified
Malathion	121-75-5	1500	24000	4.2	0.003	0.003	42	-Neurological
Maleic anhydride	108-31-6	3200	24000	2.8	NA	NA	28	-Kidney
Maleic hydrazide	123-33-1	1000	5400	16	3.4	3.4	160	-Kidney
Malonitrile	109-77-3	1.2	13	0.0006	NA	NA	0.006	-Liver -Spleen
Maneb	12427-38-2	410	8400	2.9	0.5	0.5	29	-Thyroid
Manganese	7439-96-5	3500	43000	***	NA	NA	***	-Neurological
MCPA [see Methyl-4-chlorophenoxy acetic acid, 2-]								
MCPP [see Propionic acid, 2-(2-methyl-4-chlorophenoxy)]								
Mercury (c)	7439-97-6	3	17	2.1	0.01	0.03	21	-Neurological
Mercury, methyl- [see Methylmercury]								
Merphos	150-50-5	2.5	52	0.5	NA	NA	5	-Neurological
Merphos oxide	78-48-8	2.5	56	0.3	0.3	0.3	3	-Neurological
Methacrylonitrile	126-98-7	1	5.9	0.003	NA	NA	0.03	-Liver
Methamidophos	10265-92-6	3.1	36	0.001	0	0	0.01	-Neurological

Table II
Soil Cleanup Target Levels

Contaminants	CAS#s	Direct Exposure		Leachability Based on Groundwater Criteria	Leachability Based on Freshwater Surface Water Criteria	Leachability Based on Marine Surface Water Criteria	Leachability Based on Groundwater of Low Yield/ Poor Quality	Target Organs/Systems or Effects†
		Residential	Commercial/ Industrial					
		(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	
Methanol	67-56-1	13000	90000	14	180	180	140	-Developmental -Eye -Neurological
Methidathion	950-37-8	68	950	0.003	0.0001	0.0001	0.03	-Liver
Methomyl	16752-77-5	38	200	1.2	0.007	0.007	12	-Kidney -Spleen
Methoxy-5-nitroaniline, 2-	99-59-2	19	71	0.006	NA	NA	0.06	-Carcinogen
Methoxychlor	72-43-5	420	8800	160	0.1	0.1	1600	-Developmental -Reproductive
Methyl acetate	79-20-9	6800	38000	16	NA	NA	160	-Liver
Methyl acrylate	96-33-3	260	1500	0.9	NA	NA	9	-None Specified
Methyl azinphos [see Guthion]								
Methyl bromide [see Bromomethane]								
Methyl butyl ketone [see Hexanone, 2-]								
Methyl chloride [or Chloromethane]	74-87-3	4	5.7	0.01	2.3	2.3	0.1	-Carcinogen -Neurological
Methyl chloroform [see Trichloroethane, 1,1,1-]								
Methyl ethyl ketone [or Butanone, 2-]	78-93-3	16000	110000	17	490	490	170	-Developmental
Methyl isobutyl ketone [or MIBK]	108-10-1	4300	44000	2.6	110	110	26	-Kidney -Liver
Methyl methacrylate	80-62-6	1900	10000	0.1	32	32	1	-Nasal
Methyl parathion [or Parathion, methyl]	298-00-0	20	370	0.06	0.0003	0.0003	0.6	-Blood -Neurological
Methyl styrene (mixed)	25013-15-4	120	770	0.8	NA	NA	8	-Nasal
Methyl styrene, alpha	98-83-9	1500	10000	11	NA	NA	110	-Kidney -Liver

Table II
Soil Cleanup Target Levels

Contaminants	CAS#s	Direct Exposure		Leachability Based on Groundwater Criteria	Leachability Based on Freshwater Surface Water Criteria	Leachability Based on Marine Surface Water Criteria	Leachability Based on Groundwater of Low Yield/ Poor Quality	Target Organs/Systems or Effects†
		Residential	Commercial/ Industrial					
		(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	
Methyl tert-butyl ether [or MTBE]	1634-04-4	4400	24000	0.09	150	150	0.9	-Eye -Kidney -Liver
Methyl-4-chlorophenoxy acetic acid, 2- [or MCPA]	94-74-6	35	500	0.02	0.4	0.4	0.2	-Kidney -Liver
Methylaniline, 2-	95-53-4	2.6	6.4	0.0009	0.2	0.2	0.009	-Carcinogen
Methylene bis(2-chloroaniline), 4,4-	101-14-4	6.4	23	0.001	NA	NA	0.01	-Carcinogen -Liver -Bladder
Methylene bromide	74-95-3	96	550	0.3	NA	NA	3	-Blood
Methylene chloride	75-09-2	17	26	0.02	7.3	7.3	0.2	-Carcinogen -Liver
Methylene diphenyl diisocyanate	101-68-8	400	2100	NA	NA	NA	NA	-Nasal
Methylmercury [or Mercury, methyl]	22967-92-6	1.1	6.1	0.002	NA	NA	0.02	-Neurological
Methylnaphthalene, 1-	90-12-0	200	1800	3.1	10	10	31	-Nasal
Methylnaphthalene, 2-	91-57-6	210	2100	8.5	9.1	9.1	85	-Nasal
Methylphenol, 2- [or Cresol, o-]	95-48-7	2900	31000	0.3	1.9	1.9	3	-Neurological
Methylphenol, 3- [or Cresol, m-]	108-39-4	2900	33000	0.3	3.3	3.3	3	-Neurological
Methylphenol, 4- [or Cresol, p-]	106-44-5	300	3400	0.03	0.5	0.5	0.3	-Neurological -Respiratory
Metolachlor	51218-45-2	12000	200000	1.2	0.01	0.01	12	-Body Weight
Metribuzin	21087-64-9	54	290	2.2	0.8	0.8	22	-Kidney -Liver
Metsulfuron, methyl [see Ally]								
Mevinphos	7786-34-7	18	270	0.01	0.0003	0.0003	0.1	-Neurological
MIBK [see Methyl isobutyl ketone]								

Table II
Soil Cleanup Target Levels

Contaminants	CAS#s	Direct Exposure		Leachability Based on Groundwater Criteria	Leachability Based on Freshwater Surface Water Criteria	Leachability Based on Marine Surface Water Criteria	Leachability Based on Groundwater of Low Yield/ Poor Quality	Target Organs/Systems or Effects†
		Residential	Commercial/ Industrial					
		(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	
Molinate	2212-67-1	120	1300	0.1	0.1	0.1	1	-Reproductive
Molybdenum	7439-98-7	440	11000	***	NA	NA	***	-Gout
MTBE [see Methyl tert-butyl ether]								
Naled	300-76-5	150	2400	0.1	0.0002	0.0002	1	-Neurological
Naphthalene	91-20-3	55	300	1.2	2.2	2.2	12	-Nasal
Nickel (b,c)	7440-02-0	340**	35000	130	NA	11	1300	-Body Weight
Nitrate	14797-55-8	140000	*	***	NA	NA	***	-Blood
Nitrite	14797-65-0	8700	220000	***	NA	NA	***	-Blood
Nitroaniline, m-	99-09-2	21	130	0.01	NA	NA	0.1	-Blood -Carcinogen
Nitroaniline, o-	88-74-4	24	130	0.1	NA	NA	1	-Blood
Nitroaniline, p-	100-01-6	17	96	0.008	5.9	5.9	0.08	-Blood -Carcinogen
Nitrobenzene	98-95-3	18	140	0.02	0.6	0.6	0.2	-Adrenals -Blood -Kidney -Liver
Nitroglycerin	55-63-0	27	54	0.03	NA	NA	0.3	-Carcinogen -Cardiovascular
Nitrophenol, 4-	100-02-7	560	7900	0.3	0.3	0.3	3	-None Specified
Nitroso-di-ethylamine, N-	55-18-5	0.003	0.005	0.000001	0.00003	0.00003	0.00001	-Carcinogen
Nitroso-dimethylamine, N-	62-75-9	0.009	0.02	0.000003	0.01	0.01	0.00003	-Carcinogen
Nitroso-di-n-butylamine, N-	924-16-3	0.05	0.08	0.00009	0.0005	0.0005	0.0009	-Carcinogen
Nitroso-di-n-propylamine, N-	621-64-7	0.08	0.2	0.00005	0.005	0.005	0.0005	-Carcinogen

Table II
Soil Cleanup Target Levels

Contaminants	CAS#s	Direct Exposure		Leachability Based on Groundwater Criteria	Leachability Based on Freshwater Surface Water Criteria	Leachability Based on Marine Surface Water Criteria	Leachability Based on Groundwater of Low Yield/ Poor Quality	Target Organs/Systems or Effects†
		Residential	Commercial/ Industrial					
		(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	
Nitroso-diphenylamine, N-	86-30-6	180	730	0.4	0.3	0.3	4	-Carcinogen
Nitroso-N-methylethylamine, N-	10595-95-6	0.02	0.04	0.000006	0.0002	0.0002	0.00006	-Carcinogen
Nitrotoluene, m-	99-08-1	640	4700	1.4	3.6	3.6	14	-Spleen
Nitrotoluene, o-	88-72-2	400	3300	0.9	7.3	7.3	9	-Spleen
Nitrotoluene, p-	99-99-0	750	12000	0.9	7.3	7.3	9	-Spleen
Nonylphenol	25154-52-3	100	2200	20	14	3.4	200	-Kidney
Octamethylpyrophosphoramide	152-16-9	130	1600	0.06	NA	NA	0.6	-Neurological
Oxamyl	23135-22-0	1700	22000	0.9	0.04	0.04	9	-Body Weight
Paraquat	1910-42-5	340	5500	16	230	230	160	-Respiratory
Parathion	56-38-2	500	11000	1	0.01	0.01	10	-Neurological
Parathion, methyl [see Methyl parathion]								
PCBs [or Aroclor mixture]	1336-36-3	0.5	2.6	17	0.002	0.002	170	-Carcinogen -Immunological
PCE [see Tetrachloroethene]								
Pebulate	1114-71-2	2000	17000	8.5	7.4	7.4	85	-Blood
Pendimethalin	40487-42-1	3200	58000	28	1	1	280	-Liver
Pentachlorobenzene	608-93-5	45	480	3.9	1.2	1.2	39	-Kidney -Liver
Pentachloronitrobenzene	82-68-8	3.3	12	0.2	0.03	0.03	2	-Carcinogen -Liver
Pentachlorophenol	87-86-5	7.2	28	0.03	0.2	0.2	0.3	-Carcinogen -Kidney -Liver

Table II
Soil Cleanup Target Levels

Contaminants	CAS#s	Direct Exposure		Leachability Based on Groundwater Criteria	Leachability Based on Freshwater Surface Water Criteria	Leachability Based on Marine Surface Water Criteria	Leachability Based on Groundwater of Low Yield/ Poor Quality	Target Organs/Systems or Effects†
		Residential	Commercial/ Industrial					
		(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	
Permethrin	52645-53-1	4200	96000	2500	0.007	0.007	25000	-Liver
Phenanthrene	85-01-8	2200	36000	250	NA	NA	2500	-Kidney
Phenmedipham [or Betanal]	13684-63-4	21000	450000	150	18	18	1500	-None Specified
Phenol	108-95-2	500**	220000	0.05	0.03	0.03	0.5	-Developmental
Phenylenediamine, m-	108-45-2	360	4000	0.2	NA	NA	2	-Liver
Phenylenediamine, o-	95-54-5	17	54	0.004	NA	NA	0.04	-Carcinogen
Phenylenediamine, p-	106-50-3	12000	160000	6.2	NA	NA	62	-Whole Body
Phenylphenol, 2-	90-43-7	490	2100	0.4	0.8	0.8	4	-Carcinogen
Phorate	298-02-2	16	320	0.3	0.001	0.001	3	-Neurological
Phosmet	732-11-6	1600	33000	5	0.004	0.004	50	-Liver -Neurological
Phthalic acid, p-	100-21-0	8000	45000	110	NA	NA	1100	-Bladder
Phthalic anhydride	85-44-9	11000	63000	76	NA	NA	760	-Kidney -Nasal -Respiratory
Polychlorinated dibenzo-p-dioxins [see Dioxins]								
Prometon	1610-18-0	1200	23000	2.4	14	14	24	-None Specified
Prometryn	7287-19-6	320	6100	0.7	0.5	0.5	7	-Bone Marrow -Kidney -Liver
Propachlor	1918-16-7	990	17000	1.1	0.1	0.1	11	-Liver
Propanil	709-98-8	390	6700	0.4	0.2	0.2	4	-Spleen
Propazine	139-40-2	1600	28000	0.2	2.7	2.7	2	-Body Weight

Table II
Soil Cleanup Target Levels

Contaminants	CAS#s	Direct Exposure		Leachability Based on Groundwater Criteria	Leachability Based on Freshwater Surface Water Criteria	Leachability Based on Marine Surface Water Criteria	Leachability Based on Groundwater of Low Yield/ Poor Quality	Target Organs/Systems or Effects†
		Residential	Commercial/ Industrial					
		(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	
Propionic acid, 2-(2-methyl-4-chlorophenoxy) [or MCPP]	93-65-2	64	800	0.03	NA	NA	0.3	-Kidney
Propoxur [see Baygon]								
Propylene glycol	57-55-6	*	*	560	140	140	5600	-Blood -Bone Marrow
Propylene glycol monomethyl ether	107-98-2	38000	390000	20	NA	NA	200	-Kidney -Liver -Neurological
Propylene oxide	75-56-9	3.1	9.3	0.0006	NA	NA	0.006	-Carcinogen -Nasal -Respiratory
Pydrin [or Fenvalerate]	51630-58-1	2100	46000	70	0.0001	0.0001	700	-Neurological
Pyrene	129-00-0	2400	45000	880	1.3	1.3	8800	-Kidney
Pyridine	110-86-1	20	130	0.03	5.4	5.4	0.3	-Liver
Quinoline	91-22-5	0.3	1.3	0.0009	NA	NA	0.009	-Carcinogen
RDX [see Hexahydro-1,3,5-trinitro-1,3,5-triazine]								
Resmethrin	10453-86-8	2500	56000	1200	0.01	0.01	12000	-Reproductive
Ronnel	299-84-3	4200	88000	1300	0.2	0.2	13000	-Liver
Roundup [see Glyphosate]								
Selenium (b,c)	7782-49-2	440	11000	5.2	0.5	7.4	52	-Hair Loss -Neurological -Skin
Sevin [see Carbaryl]								
Silver (b)	7440-22-4	410	8200	17	0.01	0.06	170	-Skin
Silvex [see Trichlorophenoxy propionic acid]								
Simazine	122-34-9	7.8	35	0.08	0.1	0.1	0.8	-Blood -Carcinogen

Table II
Soil Cleanup Target Levels

Contaminants	CAS#s	Direct Exposure		Leachability Based on Groundwater Criteria	Leachability Based on Freshwater Surface Water Criteria	Leachability Based on Marine Surface Water Criteria	Leachability Based on Groundwater of Low Yield/ Poor Quality	Target Organs/Systems or Effects†
		Residential	Commercial/ Industrial					
		(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	
Strontium	7440-24-6	52000	*	***	NA	NA	***	-Bone
Strychnine	57-24-9	23	380	0.02	0.3	0.3	0.2	-Mortality
Styrene	100-42-5	3600	23000	3.6	16	16	36	-Blood -Liver -Neurological
TCDD, 2,3,7,8- [see Dioxins, as total 2,3,7,8-TCDD equivalents]								
TCE [see Trichloroethene]								
Temik [see Aldicarb]								
Terbacil	5902-51-2	920	14000	0.5	14	14	5	-Liver -Thyroid
Terbufos	13071-79-9	1.9	29	0.02	0.001	0.001	0.2	-Neurological
Terbutryn	886-50-0	88	2200	0.2	0.09	0.09	2	-Blood
Tetrachlorobenzene, 1,2,4,5-	95-94-3	12	100	0.5	0.4	0.4	5	-Kidney
Tetrachloroethane, 1,1,1,2-	630-20-6	2.9	4.3	0.01	NA	NA	0.1	-Carcinogen -Kidney -Liver
Tetrachloroethane, 1,1,2,2-	79-34-5	0.7	1.2	0.001	0.08	0.08	0.01	-Carcinogen -Liver
Tetrachloroethene [or PCE]	127-18-4	8.8	18	0.03	0.1	0.1	0.3	-Carcinogen -Liver
Tetrachlorophenol, 2,3,4,6-	58-90-2	2100	30000	3.2	0.07	0.07	32	-Liver
Tetraethyl dithiopyrophosphate	3689-24-5	35	510	0.1	0.0004	0.0004	1	-Bone Marrow -Neurological
Thallium	7440-28-0	6.1	150	2.8	9	9	28	-Hair Loss -Liver
Thiobencarb	28249-77-6	810	16000	2.9	NA	NA	29	-Kidney
Thiram	137-26-8	400	7700	1.1	0.005	0.005	11	-Neurological

Table II
Soil Cleanup Target Levels

Contaminants	CAS#s	Direct Exposure		Leachability Based on Groundwater Criteria	Leachability Based on Freshwater Surface Water Criteria	Leachability Based on Marine Surface Water Criteria	Leachability Based on Groundwater of Low Yield/ Poor Quality	Target Organs/Systems or Effects†
		Residential	Commercial/ Industrial					
		(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	
Tin	7440-31-5	47000	880000	***	NA	NA	***	-Kidney -Liver
Toluene	108-88-3	7500	60000	0.5	5.6	5.6	5	-Kidney -Liver -Neurological
Toluene diisocyanate, 2,4/2,6- mixture	26471-62-5	1.3	15	NA	NA	NA	NA	-Respiratory
Toluidine, p-	106-49-0	2.2	4.5	0.0009	NA	NA	0.009	-Carcinogen
Toxaphene	8001-35-2	0.9	4.5	31	0.002	0.002	310	-Carcinogen -Developmental
Triallate	2303-17-5	980	16000	8.4	6	6	84	-Liver -Spleen
Tributyltin oxide	56-35-9	25	570	7.6	0.2	0.2	76	-Immunological
Trichloro-1,2,2-trifluoroethane, 1,1,2- [or CFC 113]	76-13-1	18000	96000	11000	NA	NA	110000	-Neurological
Trichloroacetic acid	76-03-9	770	8800	0.04	400	400	0.4	-None Specified
Trichlorobenzene, 1,2,3-	87-61-6	650	8200	4.6	5.6	5.6	46	-Adrenals
Trichlorobenzene, 1,2,4-	120-82-1	660	8500	5.3	1.7	1.7	53	-Adrenals
Trichlorobenzene, 1,3,5-	108-70-3	260	2300	16	NA	NA	160	-None Specified
Trichloroethane, 1,1,1- [or Methyl chloroform]	71-55-6	730	3900	1.9	2.6	2.6	19	-None Specified
Trichloroethane, 1,1,2-	79-00-5	1.4	2	0.03	0.09	0.09	0.3	-Carcinogen -Liver
Trichloroethene [or TCE]	79-01-6	6.4	9.3	0.03	0.9	0.9	0.3	-Carcinogen -None Specified
Trichlorofluoromethane	75-69-4	270	1500	33	NA	NA	330	-Cardiovascular -Kidney -Respiratory
Trichlorophenol, 2,4,5-	95-95-4	7700	130000	0.07	1.5	1.5	0.7	-Kidney -Liver
Trichlorophenol, 2,4,6-	88-06-2	70	230	0.06	0.1	0.1	0.6	-Carcinogen

Table II
Soil Cleanup Target Levels

Contaminants	CAS#s	Direct Exposure		Leachability Based on Groundwater Criteria	Leachability Based on Freshwater Surface Water Criteria	Leachability Based on Marine Surface Water Criteria	Leachability Based on Groundwater of Low Yield/ Poor Quality	Target Organs/Systems or Effects†
		Residential	Commercial/ Industrial					
		(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	
Trichlorophenoxy acetic acid, 2,4,5-	93-76-5	690	9500	0.4	0.8	0.8	4	-Kidney
Trichlorophenoxy propionic acid, 2, (2, 4, 5-) [or Silvex]	93-72-1	660	14000	5.4	NA	NA	54	-Liver
Trichloropropane, 1,1,2-	598-77-6	76	460	0.3	NA	NA	3	-Kidney -Liver -Thyroid
Trichloropropane, 1,2,3-	96-18-4	0.06	0.1	0.0001	0.001	0.001	0.001	-Carcinogen -Kidney -Liver
Trichloropropene, 1,2,3-	96-19-5	18	98	0.4	NA	NA	4	-Eye
Triethylamine	121-44-8	41	270	NA	NA	NA	NA	-Nasal
Trifluralin	1582-09-8	92	280	3.6	0.2	0.2	36	-Blood -Carcinogen -Liver
Trimethyl phosphate	512-56-1	19	57	0.004	NA	NA	0.04	-Carcinogen
Trimethylbenzene, 1,2,3-	526-73-8	18	96	0.3	NA	NA	3	-None Specified
Trimethylbenzene, 1,2,4-	95-63-6	18	95	0.3	7.2	7.2	3	-None Specified
Trimethylbenzene, 1,3,5-	108-67-8	15	80	0.3	6.7	6.7	3	-None Specified
Trinitrobenzene, 1,3,5-	99-35-4	2000	26000	1	0.09	0.09	10	-Blood -Spleen
Trinitrophenylmethylnitramine	479-45-8	790	15000	1.4	NA	NA	14	-Kidney -Liver -Spleen
Trinitrotoluene, 2,4,6-	118-96-7	28	97	0.006	0.3	0.3	0.06	-Carcinogen -Liver
Trithion [see Carbophenothion]								
TRPH	NOCAS	460	2700	340	340	340	3400	-Multiple Endpoints Mixed Contaminants
Uranium, soluble salts	7440-61-1	110	820	***	NA	NA	***	-Kidney
Vanadium (b)	7440-62-2	67**	10000	980	NA	NA	9800	-Hair Loss

Table II
Soil Cleanup Target Levels

Contaminants	CAS#s	Direct Exposure		Leachability Based on Groundwater Criteria	Leachability Based on Freshwater Surface Water Criteria	Leachability Based on Marine Surface Water Criteria	Leachability Based on Groundwater of Low Yield/ Poor Quality	Target Organs/Systems or Effects†
		Residential	Commercial/ Industrial					
		(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	
Vernam	1929-77-7	51	510	0.1	0.2	0.2	1	-Body Weight
Vinyl acetate	108-05-4	320	1700	0.4	3	3	4	-Kidney -Nasal
Vinyl chloride (i)	75-01-4	0.2	0.8	0.007	0.02	0.02	0.07	-Carcinogen -Liver
Xylenes, total	1330-20-7	130	700	0.2	3.9	3.9	2	-Neurological
Zinc (b,c)	7440-66-6	26000	630000	***	NA	***	***	-Blood
Zinc phosphide	1314-84-7	26	660	***	NA	NA	***	-Body Weight
Zineb	12122-67-7	4100	82000	19	0.7	0.7	190	-Thyroid

Table II
Soil Cleanup Target Levels

Contaminants	CAS#s	Direct Exposure		Leachability Based on Groundwater Criteria	Leachability Based on Freshwater Surface Water Criteria	Leachability Based on Marine Surface Water Criteria	Leachability Based on Groundwater of Low Yield/ Poor Quality	Target Organs/Systems or Effects†
		Residential	Commercial/ Industrial					
		(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	

Values expressed on a dry weight basis and rounded to two significant figures if >1 and to one significant figure if <1.

† = These default Target Organ(s)/Systems or Effects are those reported to occur at the doses used to derive the reference dose. Non-default Target Organ(s)/Systems or Effects may be justified through a detailed toxicological analysis of the chemicals present at a specific site.

* Contaminant is not a health concern for this exposure scenario.

** Direct exposure value based on acute toxicity considerations.

*** Leachability values may be derived using the SPLP Test to calculate site-specific SCTLs or may be determined using TCLP in the event oily wastes are present.

= Site concentrations for carcinogenic polycyclic aromatic hydrocarbons must be converted to Benzo(a)pyrene equivalents before comparison with the appropriate direct exposure SCTL for Benzo(a)pyrene using the approach described in the February 2005 'Final Technical Report: Development of Cleanup Target Levels (CTLs) for Chapter 62-777, F.A.C.'

(a) = See discussion on the development of SCTLs for Ammonia in the February 2005 'Final Technical Report: Development of Cleanup Target Levels (CTLs) for Chapter 62-777, F.A.C.'

(b) = Leachability values derived from USEPA Soil Screening Guidance (1996). These values were derived assuming soil pH 6.8. These leachability values are dependent upon both the metal concentration in soil and soil characteristics. Thus, if site-specific soil characteristics are different than the defaults, these leachability values may not apply. If this is the case, site-specific leachability values should be derived using methods such as TCLP or SPLP.

(c) = Phytotoxicity must be considered.

(d) = Residential direct exposure value from USEPA Revised Interm Soil Guidance for CERCLA Sites and RCRA Corrective Action Facilities. OSWER Directive 9355.4-12 (1994). The industrial direct exposure value was derived using methodologies outlined in USEPA 'Recommendations of the Technical Review Workgroup for Lead for an Interim Approach to Assessing Risks Associated with Adult Exposures to Lead in Soil', December 1996; and in 'Blood Lead Concentrations of U.S. Adult Females: Summary Statistics from Phases 1 and 2 of the NHANES III', March 2002.

(e) = The SCTL for Dioxins, as total 2,3,7,8-TCDD equivalents should be compared to the total dioxin equivalents for chlorinated dioxin and dibenzofuran congeners using the approach described in the February 2005 'Draft Technical Report: Development of Cleanup Target Levels (CTLs) for Chapter 62-777, F.A.C.'

(f) = The common name BHC is a misnomer for hexachlorocyclohexane.

(g) = Unless concentrations for both chromium III and VI are known, total chromium concentrations should by compared with direct exposure SCTLs for chromium VI.

(h) = Residential chronic SCTL for cadmium should be used as a not-to-exceed value because the residential chronic SCTL for cadmium is indistinguishable from the SCTL based on acute toxicity.

(i) = Residential chronic SCTL for vinyl chloride calculated by adding prorated and non-prorated risks, as discussed in the February 2005 'Final Technical Report: Development of Cleanup Target Levels (CTLs) for Chapter 62-777, F.A.C.'

(j) = 12789-03-6 or 57-74-9

Note: If more than one contaminant is present at a site, the direct exposure values are to be modified, if necessary, such that the sum of the hazard quotients for non-carcinogenic contaminants affecting the same organ(s) is 1 or less. For carcinogens, the direct exposure values shall be modified such that the cumulative lifetime risk level posed by the contaminants is 1.0E-06, as presented in Figure 10 of the February 2005 'Final Technical Report: Development of Cleanup Target Levels (CTLs) for Chapter 62-777, F.A.C.'

None Specified = Target organ(s) not determined at time of rule adoption.

NA = Not available at time of rule adoption.

Figure 4
Model Equation for Developing Acceptable Risk-Based Concentrations in Soil.
Acceptable Soil Cleanup Target Levels for Carcinogens

$$SCTL = \frac{TR \times BW \times AT \times RBA}{EF \times ED \times FC \times \left[\left(CSF_o \times IR_o \times 10^{-6} kg/mg \right) + \left(CSF_d \times SA \times AF \times DA \times 10^{-6} kg/mg \right) + \left(CSF_i \times IR_i \times \left(\frac{1}{VF} + \frac{1}{PEF} \right) \right) \right]}$$

SCTL = Soil Cleanup Target Level
TR = target cancer risk (unitless)
BW = body weight (kg)
AT = averaging time (days)
EF = exposure frequency (days/yr)
ED = exposure duration (years)
RBA = relative bioavailability factor (unitless)
FC = fraction from contaminated source (unitless)
IR_O = ingestion rate, oral (mg/day)
SA = surface area of skin exposed (cm^2/day)
AF = adherence factor (mg/cm^2)
DA = dermal absorption (unitless)
IR_I = inhalation rate (m^3/day)
VF = volatilization factor (m^3/kg)
PEF = particulate emission factor (m^3/kg)
CSF = cancer slope factor $(mg/kg\text{-}day)^{-1}$
CSF_O = oral
CSF_d = dermal
CSF_I = inhalation

Sample SCTL Calculation for Direct Exposure (Aggregate Resident): benzene:

$$SCTL = \frac{0.000001 \times 51.9 \times 25500 \times 1.0}{350 \times 30 \times 1.0 \times \left[\left(0.055 \times 120 \times 10^{-6} \right) + \left(\begin{matrix} 0.0611 \\ \times 4810 \times 0.1 \times 0.01 \times 10^{-6} \end{matrix} \right) + \left(0.0273 \times 12.2 \times \left(\frac{1}{3.3572 \times 10^{3}} + \frac{1}{1.24 \times 10^{9}} \right) \right) \right]}$$

$$\text{SCTL} = \frac{1.323}{10500 \times \left[\left(6.6 \times 10^{-6} \right) + \left(2.94 \times 10^{-7} \right) + \left(9.9210 \times 10^{-5} \right) \right]} = \frac{1.323}{10500 \times 1.061 \times 10^{-4}} = \frac{1.323}{1.11405} = 1.2 \text{mg/kg}$$

TR = 0.000001 (unitless)
BW = 51.9 kg
AT = 25500 days
RBA = 1.0
CSF_o = 0.055 $(mg/kg\text{-}day)^{-1}$
CSF_d = 0.0611 $(mg/kg\text{-}day)^{-1}$
CSF_i = 0.0273 $(mg/kg\text{-}day)^{-1}$
EF = 350 days/year
ED = 30 years
FC = 1.0 (unitless)
IRo = 120 mg/day
SA = 4810 cm^2
AF = 0.1 mg/cm^2
DA = 0.01 (unitless)
IRi = 12.2 m^3/day
VF = 3.3572 x 10^3 m^3/kg
PEF = 1.24 x 10^9 m^3/kg

Note: All calculations carried out to 18 decimal places. For simplicity of demonstration, the calculated values above are not shown to the same precision. Final SCTL value is rounded to two significant figures if >1 and to one significant figure if <1.

Figure 5
Model Equation for Developing Acceptable Risk-Based Concentrations in Soil.
Acceptable Soil Cleanup Target Levels for Non-Carcinogens

$$\text{SCTL} = \frac{\text{THI} \times \text{BW} \times \text{AT} \times \text{RBA}}{\text{EF} \times \text{ED} \times \text{FC} \times \left[\left(\frac{1}{\text{RfD}_o} \times \text{IR}_o \times 10^{-6} \text{kg/mg} \right) + \left(\frac{1}{\text{RfD}_d} \times \text{SA} \times \text{AF} \times \text{DA} \times 10^{-6} \text{kg/mg} \right) + \left(\frac{1}{\text{RfD}_i} \times \text{IR}_i \times \left(\frac{1}{\text{VF}} + \frac{1}{\text{PEF}} \right) \right) \right]}$$

SCTL = Soil Cleanup Target Level
THI = target hazard index (unitless)
BW = body weight (kg)
AT = averaging time (days)
EF = exposure frequency (days/yr)
ED = exposure duration (years)
RBA = relative bioavailability factor (unitless)
FC = fraction from contaminated source (unitless)
IR_O = ingestion rate, oral (mg/day)
SA = surface area of skin exposed (cm^2/day)
AF = adherence factor (mg/cm^2)
DA = dermal absorption (unitless)
IR_I = inhalation rate (m^3/day)
VF = volatilization factor (m^3/kg)
PEF = particulate emission factor (m^3/kg)
RfD = reference dose (mg/kg-day)
RfD_O = oral
RfD_d = dermal
RfD_I = inhalation

Sample SCTL Calculation for Direct Exposure (Child Resident): fluorine

$$\text{SCTL} = \frac{1.0 \times 16.8 \times 2190 \times 1.0}{350 \times 6 \times 1.0 \times \left[\left(\frac{1}{0.04} \times 200 \times 10^{-6} \text{kg/mg} \right) + \left(\frac{1}{0.02} \times 2960 \times 0.2 \times 0.01 \times 10^{-6} \text{kg/mg} \right) + \left(\frac{1}{0.02} \times 8.1 \times \left(\frac{1}{2.80802 \times 10^{5}} + \frac{1}{1.24 \times 10^{9}} \right) \right) \right]}$$

$$\text{SCTL} = \frac{36792}{2100 \times \left[\left(5.00 \times 10^{-3} \right) + \left(2.96 \times 10^{-4} \right) + \left(1.4426 \times 10^{-3} \right) \right]} = \frac{36792}{2100 \times 6.7386 \times 10^{-3}} = \frac{36792}{14.151} = 2600 \text{ mg/kg} \ddagger$$

THI = 1.0 (unitless)
BW = 16.8 kg
AT = 2190 days
RBA = 1.0
RfD_o = 0.04 mg/kg-day
RfD_d = 0.02 mg/kg-day
RfD_i = 0.02 mg/kg-day
EF = 350 days/year
ED = 6 years
FC = 1.0 (unitless)
IRo = 200 mg/day
SA = 2960 cm^2
AF = 0.2 mg/cm^2
DA = 0.01 (unitless)
IRi = 8.1 m^3/day
VF = 2.80802 x 10^5 m^3/kg
PEF = 1.24 x 10^9 m^3/kg

Note: All calculations carried out to 18 decimal places. For simplicity of demonstration, the calculated values above are not shown to the same precision. Final SCTL value is rounded to two significant figures if >1 and to one significant figure if <1.

EPA Regional Screening Levels

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (see FQ #31); H = HEAST; F = See FAQ; W = see user guide Section 2.3.5; E = see user guide Section 2.3.6; L = see user's guide Section 5.2; M = mutagen; S = see user's guide Section 5; V = volatile; R = RBA applied (see user's guide Section 5.10) ; c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (see user's guide Section 5.13); s = concentration may exceed Csat (see user's guide Section 5.12)

Toxicity and Chemical-specific Information													Contaminant		Screening Levels												Protection of Ground Water SSLs		
SFO (mg/kg-day)$^{-1}$	key	IUR (ug/m^3)$^{-1}$	key	RfD_o (mg/kg-day)	key	RfC_i (mg/m^3)	key	volatile	mutagen	GIABS	ABS	C_{sat} (mg/kg)	Analyte	CAS No.	Resident Soil (mg/kg)	key	Industrial Soil (mg/kg)	key	Resident Air (ug/m^3)	key	Industrial Air (ug/m^3)	key	Tapwater (ug/L)	key	MCL (ug/L)	Risk-based SSL (mg/kg)	key	MCL-based SSL (mg/kg)
				1.2E-03	O					1	0.1		Acephate	30560-19-1	7.6E+01	n	9.8E+02	n					2.4E+01	n		5.3E-03	n	
		2.2E-06	I			9.0E-03	I	V		1		1.07E+05	Acetaldehyde	75-07-0	1.1E+01	c**	4.9E+01	c**	1.3E+00	c**	5.6E+00	c**	2.6E+00	c**		5.2E-04	c**	
				2.0E-02	I					1	0.1		Acetochlor	34256-82-1	1.3E+03	n	1.6E+04	n					3.5E+02	n		2.8E-01	n	
				9.0E-01	I	3.1E+01	A	V		1		1.14E+05	Acetone	67-64-1	6.1E+04	n	6.7E+05	nms	3.2E+04	n	1.4E+05	n	1.4E+04	n		2.9E+00	n	
						2.0E-03	X			1	0.1		Acetone Cyanohydrin	75-86-5	2.8E+06	nm	1.2E+07	nm	2.1E+00	n	8.8E+00	n						
						6.0E-02	I	V		1		1.28E+05	Acetonitrile	75-05-8	8.1E+02	n	3.4E+03	n	6.3E+01	n	2.6E+02	n	1.3E+02	n		2.6E-02	n	
				1.0E-01	I			V		1		2.52E+03	Acetophenone	98-86-2	7.8E+03	ns	1.2E+05	nms					1.9E+03	n		5.8E-01	n	
3.8E+00	C	1.3E-03	C							1	0.1		Acetylaminofluorene, 2-	53-96-3	1.4E-01	c	6.0E-01	c	2.2E-03	c	9.4E-03	c	1.6E-02	c		7.2E-05	c	
				5.0E-04	I	2.0E-05	I	V		1		2.27E+04	Acrolein	107-02-8	1.4E-01	n	6.0E-01	n	2.1E-02	n	8.8E-02	n	4.2E-02	n		8.4E-06	n	
5.0E-01	I	1.0E-04	I	2.0E-03	I	6.0E-03	I		M	1	0.1		Acrylamide	79-06-1	2.4E-01	c	4.6E+00	c	1.0E-02	c	1.2E-01	c	5.0E-02	c		1.1E-05	c	
				5.0E-01	I	1.0E-03	I	V		1		1.09E+05	Acrylic Acid	79-10-7	9.9E+01	n	4.2E+02	n	1.0E+00	n	4.4E+00	n	2.1E+00	n		4.2E-04	n	
5.4E-01	I	6.8E-05	I	4.0E-02	A	2.0E-03	I	V		1		1.13E+04	Acrylonitrile	107-13-1	2.5E-01	c*	1.1E+00	c*	4.1E-02	c*	1.8E-01	c*	5.2E-02	c*		1.1E-05	c*	
						6.0E-03	P			1	0.1		Adiponitrile	111-69-3	8.5E+06	nm	3.6E+07	nm	6.3E+00	n	2.6E+01	n						
5.6E-02	C			1.0E-02	I					1	0.1		Alachlor	15972-60-8	9.7E+00	c*	4.1E+01	c					1.1E+00	c	2	8.7E-04	c	1.6E-03
				1.0E-03	I					1	0.1		Aldicarb	116-06-3	6.3E+01	n	8.2E+02	n					2.0E+01	n	3	4.9E-03	n	7.5E-04
				1.0E-03	I					1	0.1		Aldicarb Sulfone	1646-88-4	6.3E+01	n	8.2E+02	n					2.0E+01	n	2	4.4E-03	n	4.4E-04
										1	0.1		Aldicarb sulfoxide	1646-87-3											4			8.8E-04
1.7E+01	I	4.9E-03	I	3.0E-05	I			V		1			Aldrin	309-00-2	3.9E-02	c*	1.8E-01	c	5.7E-04	c	2.5E-03	c	9.2E-04	c		1.5E-04	c	
				5.0E-03	I	1.0E-04	X	V		1		1.11E+05	Allyl Alcohol	107-18-6	3.5E+00	n	1.5E+01	n	1.0E-01	n	4.4E-01	n	2.1E-01	n		4.2E-05	n	
2.1E-02	C	6.0E-06	C			1.0E-03	I	V		1		1.42E+03	Allyl Chloride	107-05-1	7.2E-01	c**	3.2E+00	c**	4.7E-01	c**	2.0E+00	c**	7.3E-01	c**		2.3E-04	c**	
				1.0E+00	P	5.0E-03	P			1			Aluminum	7429-90-5	7.7E+04	n	1.1E+06	nm	5.2E+00	n	2.2E+01	n	2.0E+04	n		3.0E+04	n	
				4.0E-04	I					1			Aluminum Phosphide	20859-73-8	3.1E+01	n	4.7E+02	n					8.0E+00	n				
				9.0E-03	I					1	0.1		Ametryn	834-12-8	5.7E+02	n	7.4E+03	n					1.5E+02	n		1.6E-01	n	
2.1E+01	C	6.0E-03	C							1	0.1		Aminobiphenyl, 4-	92-67-1	2.6E-02	c	1.1E-01	c	4.7E-04	c	2.0E-03	c	3.0E-03	c		1.5E-05	c	
				8.0E-02	P					1	0.1		Aminophenol, m-	591-27-5	5.1E+03	n	6.6E+04	n					1.6E+03	n		6.1E-01	n	
				4.0E-03	X					1	0.1		Aminophenol, o-	95-55-6	2.5E+02	n	3.3E+03	n					7.9E+01	n		3.0E-02	n	
				2.0E-02	P					1	0.1		Aminophenol, p-	123-30-8	1.3E+03	n	1.6E+04	n					4.0E+02	n		1.5E-01	n	
				2.5E-03	I					1	0.1		Amitraz	33089-61-1	1.6E+02	n	2.1E+03	n					8.2E+00	n		4.2E+00	n	
						5.0E-01	I	V		1			Ammonia	7664-41-7					5.2E+02	n	2.2E+03	n						
				2.0E-01	I					1			Ammonium Sulfamate	7773-06-0	1.6E+04	n	2.3E+05	nm					4.0E+03	n				
						3.0E-03	X	V		1		1.37E+04	Amyl Alcohol, tert-	75-85-4	8.2E+01	n	3.4E+02	n	3.1E+00	n	1.3E+01	n	6.3E+00	n		1.3E-03	n	
5.7E-03	I	1.6E-06	C	7.0E-03	P	1.0E-03	I			1	0.1		Aniline	62-53-3	9.5E+01	c**	4.0E+02	c*	1.0E+00	n	4.4E+00	n	1.3E+01	c*		4.6E-03	c*	
4.0E-02	P			2.0E-03	X					1	0.1		Anthraquinone, 9,10-	84-65-1	1.4E+01	c**	5.7E+01	c*					1.4E+00	c*		1.4E-02	c*	
				4.0E-04	I					0.15			Antimony (metallic)	7440-36-0	3.1E+01	n	4.7E+02	n					7.8E+00	n	6	3.5E-01	n	2.7E-01
				5.0E-04	H					0.15			Antimony Pentoxide	1314-60-9	3.9E+01	n	5.8E+02	n					9.7E+00	n				
				4.0E-04	H					0.15			Antimony Tetroxide	1332-81-6	3.1E+01	n	4.7E+02	n					7.8E+00	n				
						2.0E-04	I			0.15			Antimony Trioxide	1309-64-4	2.8E+05	nm	1.2E+06	nm	2.1E-01	n	8.8E-01	n						
1.5E+00	I	4.3E-03	I	3.0E-04	I	1.5E-05	C			1	0.03		Arsenic, Inorganic	7440-38-2	6.8E-01	c*R	3.0E+00	cR	6.5E-04	c*	2.9E-03	c*	5.2E-02	c	10	1.5E-03	c	2.9E-01
				3.5E-06	C	5.0E-05	I			1			Arsine	7784-42-1	2.7E-01	n	4.1E+00	n	5.2E-02	n	2.2E-01	n	7.0E-02	n				
				3.6E-02	O					1	0.1		Asulam	3337-71-1	2.3E+03	n	3.0E+04	n					7.2E+02	n		1.8E-01	n	
2.3E-01	C			3.5E-02	I					1	0.1		Atrazine	1912-24-9	2.4E+00	c	1.0E+01	c					3.0E-01	c	3	2.0E-04	c	1.9E-03
8.8E-01	C	2.5E-04	C							1	0.1		Auramine	492-80-8	6.2E-01	c	2.6E+00	c	1.1E-02	c	4.9E-02	c	6.7E-02	c		6.1E-04	c	
				4.0E-04	I					1	0.1		Avermectin B1	65195-55-3	2.5E+01	n	3.3E+02	n					8.0E+00	n		1.4E+01	n	
				3.0E-03	A	1.0E-02	A			1	0.1		Azinphos-methyl	86-50-0	1.9E+02	n	2.5E+03	n	1.0E+01	n	4.4E+01	n	5.6E+01	n		1.7E-02	n	
1.1E-01	I	3.1E-05	I					V		1			Azobenzene	103-33-3	5.6E+00	c	2.6E+01	c	9.1E-02	c	4.0E-01	c	1.2E-01	c		9.3E-04	c	
				1.0E+00	P	7.0E-06	P			1	0.1		Azodicarbonamide	123-77-3	8.6E+03	n	4.0E+04	n	7.3E-03	n	3.1E-02	n	2.0E+04	n		6.8E+00	n	
				2.0E-01	I	5.0E-04	H			0.07			Barium	7440-39-3	1.5E+04	n	2.2E+05	nm	5.2E-01	n	2.2E+00	n	3.8E+03	n	2000	1.6E+02	n	8.2E+01
				5.0E-03	O			V		1			Benfluralin	1861-40-1	3.9E+02	n	5.8E+03	n					2.8E+01	n		9.4E-01	n	
				5.0E-02	I					1	0.1		Benomyl	17804-35-2	3.2E+03	n	4.1E+04	n					9.7E+02	n		8.5E-01	n	
				2.0E-01	I					1	0.1		Bensulfuron-methyl	83055-99-6	1.3E+04	n	1.6E+05	nm					3.9E+03	n		1.0E+00	n	
				3.0E-02	I					1	0.1		Bentazon	25057-89-0	1.9E+03	n	2.5E+04	n					5.7E+02	n		1.2E-01	n	
4.0E-03	P			1.0E-01	I			V		1		1.16E+03	Benzaldehyde	100-52-7	1.7E+02	c*	8.2E+02	c					1.9E+01	c		4.1E-03	c	
5.5E-02	I	7.8E-06	I	4.0E-03	I	3.0E-02	I	V		1		1.82E+03	Benzene	71-43-2	1.2E+00	c*	5.1E+00	c*	3.6E-01	c*	1.6E+00	c*	4.6E-01	c*	5	2.3E-04	c*	2.6E-03
1.0E-01	X			3.0E-04	X					1	0.1		Benzenediamine-2-methyl sulfate, 1,4-	6369-59-1	5.4E+00	c**	2.3E+01	c*					7.8E-01	c**		2.2E-04	c**	
				1.0E-03	P			V		1		1.26E+03	Benzenethiol	108-98-5	7.8E+01	n	1.2E+03	n					1.7E+01	n		1.1E-02	n	
2.3E+02	I	6.7E-02	I	3.0E-03	I				M	1	0.1		Benzidine	92-87-5	5.3E-04	c	1.0E-02	c	1.5E-05	c	1.8E-04	c	1.1E-04	c		2.8E-07	c	
				4.0E+00	I					1	0.1		Benzoic Acid	65-85-0	2.5E+05	nm	3.3E+06	nm					7.5E+04	n		1.5E+01	n	
1.3E+01	I							V		1		3.24E+02	Benzotrichloride	98-07-7	5.3E-02	c	2.5E-01	c					3.0E-03	c		6.6E-06	c	
				1.0E-01	P					1	0.1		Benzyl Alcohol	100-51-6	6.3E+03	n	8.2E+04	n					2.0E+03	n		4.8E-01	n	
1.7E-01	I	4.9E-05	C	2.0E-03	P	1.0E-03	P	V		1		1.46E+03	Benzyl Chloride	100-44-7	1.1E+00	c*	4.8E+00	c*	5.7E-02	c*	2.5E-01	c*	8.9E-02	c*		9.8E-05	c*	
		2.4E-03	I	2.0E-03	I	2.0E-05	I			0.007			Beryllium and compounds	7440-41-7	1.6E+02	n	2.3E+03	n	1.2E-03	c*	5.1E-03	c*	2.5E+01	n	4	1.9E+01	n	3.2E+00
				9.0E-03	P					1	0.1		Bifenox	42576-02-3	5.7E+02	n	7.4E+03	n					1.0E+02	n		7.6E-01	n	
				1.5E-02	I					1	0.1		Biphenthrin	82657-04-3	9.5E+02	n	1.2E+04	n					3.0E+02	n		1.4E+03	n	
8.0E-03	I			5.0E-01	I	4.0E-04	X	V		1			Biphenyl, 1,1'-	92-52-4	4.7E+01	n	2.0E+02	n	4.2E-01	n	1.8E+00	n	8.3E-01	n		8.7E-03	n	
				4.0E-02	I			V		1		1.02E+03	Bis(2-chloro-1-methylethyl) ether	108-60-1	3.1E+03	ns	4.7E+04	ns					7.1E+02	n		2.6E-01	n	
				3.0E-03	P					1	0.1		Bis(2-chloroethoxy)methane	111-91-1	1.9E+02	n	2.5E+03	n					5.9E+01	n		1.3E-02	n	
1.1E+00	I	3.3E-04	I					V		1		5.05E+03	Bis(2-chloroethyl)ether	111-44-4	2.3E-01	c	1.0E+00	c	8.5E-03	c	3.7E-02	c	1.4E-02	c		3.6E-06	c	
2.2E+02	I	6.2E-02	I					V		1		4.22E+03	Bis(chloromethyl)ether	542-88-1	8.3E-05	c	3.6E-04	c	4.5E-05	c	2.0E-04	c	7.2E-05	c		1.7E-08	c	
				5.0E-02	I					1	0.1		Bisphenol A	80-05-7	3.2E+03	n	4.1E+04	n					7.7E+02	n		5.8E+01	n	
				2.0E-01	I	2.0E-02	H			1			Boron And Borates Only	7440-42-8	1.6E+04	n	2.3E+05	nm	2.1E+01	n	8.8E+01	n	4.0E+03	n		1.3E+01	n	
				2.0E+00	P	2.0E-02	P	V		1			Boron Trichloride	10294-34-5	1.6E+05	nm	2.3E+06	nm	2.1E+01	n	8.8E+01	n	4.2E+01	n				

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (see FQ #31); H = HEAST; F = See FAQ; W = see user guide Section 2.3.5; E = see user guide Section 2.3.6; L = see user's guide Section 5.2; M = mutagen; S = see user's guide Section 5; V = volatile; R = RBA applied (see user's guide Section 5.10) ; c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (see user's guide Section 5.13); s = concentration may exceed Csat (see user's guide Section 5.12)

Toxicity and Chemical-specific Information												Contaminant		Screening Levels												Protection of Ground Water SSLs		
SFO (mg/kg-day)$^{-1}$	key	IUR (ug/m^3)$^{-1}$	key	RfD_o (mg/kg-day)	key	RfC_i (mg/m^3)	key	volatile	mutagen	GIABS	ABS	C_{sat}	Analyte	CAS No.	Resident Soil (mg/kg)	key	Industrial Soil (mg/kg)	key	Resident Air (ug/m^3)	key	Industrial Air (ug/m^3)	key	Tapwater (ug/L)	key	MCL (ug/L)	Risk-based SSL (mg/kg)	key	MCL-based SSL (mg/kg)
				4.0E-02	C	1.3E-02	C	V		1			Boron Trifluoride	7637-07-2	3.1E+03	n	4.7E+04	n	1.4E+01	n	5.7E+01	n	2.6E+01	n				
7.0E-01	I			4.0E-03	I					1			Bromate	15541-45-4	9.9E-01	c	4.7E+00	c					1.1E-01	c	10	8.5E-04	c	7.7E-02
2.0E+00	X	6.0E-04	X					V		1		2.38E+03	Bromo-2-chloroethane, 1-	107-04-0	2.6E-02	c	1.1E-01	c	4.7E-03	c	2.0E-02	c	7.4E-03	c		2.1E-06	c	
				3.0E-04	X			V		1		8.96E+02	Bromo-3-fluorobenzene, 1-	1073-06-9	2.3E+01	n	3.5E+02	n					4.9E+00	n		4.7E-03	n	
				3.0E-04	X			V		1		3.23E+02	Bromo-4-fluorobenzene, 1-	460-00-4	2.3E+01	n	3.5E+02	ns					4.6E+00	n		4.4E-03	n	
				8.0E-03	I	6.0E-02	I	V		1		6.79E+02	Bromobenzene	108-86-1	2.9E+02	n	1.8E+03	ns	6.3E+01	n	2.6E+02	n	6.2E+01	n		4.2E-02	n	
						4.0E-02	X	V		1		4.04E+03	Bromochloromethane	74-97-5	1.5E+02	n	6.3E+02	n	4.2E+01	n	1.8E+02	n	8.3E+01	n		2.1E-02	n	
6.2E-02	I	3.7E-05	C	2.0E-02	I			V		1		9.32E+02	Bromodichloromethane	75-27-4	2.9E-01	c	1.3E+00	c	7.6E-02	c	3.3E-01	c	1.3E-01	c	80.0(F)	3.6E-05	c	2.2E-02
7.9E-03	I	1.1E-06	I	2.0E-02	I			V		1		9.15E+02	Bromoform	75-25-2	1.9E+01	c*	8.6E+01	c	2.6E+00	c	1.1E+01	c	3.3E+00	c	80.0(F)	8.7E-04	c	2.1E-02
				1.4E-03	I	5.0E-03	I	V		1		3.59E+03	Bromomethane	74-83-9	6.8E+00	n	3.0E+01	n	5.2E+00	n	2.2E+01	n	7.5E+00	n		1.9E-03	n	
				5.0E-03	H			V		1			Bromophos	2104-96-3	3.9E+02	n	5.8E+03	n					3.5E+01	n		1.5E-01	n	
						1.0E-01	A	V		1		9.66E+02	Bromopropane, 1-	106-94-5	2.2E+02	n	9.4E+02	n	1.0E+02	n	4.4E+02	n	2.1E+02	n		6.4E-02	n	
1.0E-01	O			1.5E-02	O					1	0.1		Bromoxynil	1689-84-5	5.3E+00	c	2.2E+01	c					6.1E-01	c		5.2E-04	c	
1.0E-01	O			1.5E-02	O			V		1			Bromoxynil Octanoate	1689-99-2	6.7E+00	c	3.2E+01	c					2.4E-01	c		2.1E-03	c	
3.4E+00	C	3.0E-05	I			2.0E-03	I	V		1		6.67E+02	Butadiene, 1,3-	106-99-0	5.8E-02	c*	2.6E-01	c*	9.4E-02	c*	4.1E-01	c*	1.8E-02	c		9.9E-06	c	
				3.0E-02	O					1	0.1		Butanoic acid, 4-(2,4-dichlorophenoxy)-	94-82-6	1.9E+03	n	2.5E+04	n					4.5E+02	n		4.2E-01	n	
				1.0E-01	I			V		1		7.64E+03	Butanol, N-	71-36-3	7.8E+03	ns	1.2E+05	nms					2.0E+03	n		4.1E-01	n	
				2.0E+00	P	3.0E+01	P	V		1		2.13E+04	Butyl alcohol, sec-	78-92-2	1.3E+05	nms	1.5E+06	nms	3.1E+04	n	1.3E+05	n	2.4E+04	n		5.0E+00	n	
				5.0E-02	I			V		1			Butylate	2008-41-5	3.9E+03	n	5.8E+04	n					4.6E+02	n		4.5E-01	n	
2.0E-04	C	5.7E-08	C							1	0.1		Butylated hydroxyanisole	25013-16-5	2.7E+03	c	1.1E+04	c	4.9E+01	c	2.2E+02	c	1.5E+02	c		2.9E-01	c	
3.6E-03	P			3.0E-01	P					1	0.1		Butylated hydroxytoluene	128-37-0	1.5E+02	c	6.4E+02	c					3.4E+00	c		1.0E-01	c	
				5.0E-02	P			V		1		1.08E+02	Butylbenzene, n-	104-51-8	3.9E+03	ns	5.8E+04	ns					1.0E+03	n		3.2E+00	n	
				1.0E-01	X			V		1		1.45E+02	Butylbenzene, sec-	135-98-8	7.8E+03	ns	1.2E+05	nms					2.0E+03	n		5.9E+00	n	
				1.0E-01	X			V		1		1.83E+02	Butylbenzene, tert-	98-06-6	7.8E+03	ns	1.2E+05	nms					6.9E+02	n		1.6E+00	n	
				2.0E-02	A					1	0.1		Cacodylic Acid	75-60-5	1.3E+03	n	1.6E+04	n					4.0E+02	n		1.1E-01	n	
		1.8E-03	I	1.0E-03	I	1.0E-05	A			0.025	0.001		Cadmium (Diet)	7440-43-9	7.1E+01	n	9.8E+02	n										
		1.8E-03	I	5.0E-04	I	1.0E-05	A			0.05	0.001		Cadmium (Water)	7440-43-9					1.6E-03	c**	6.8E-03	c**	9.2E+00	n	5	6.9E-01	n	3.8E-01
				5.0E-01	I	2.2E-03	C			1	0.1		Caprolactam	105-60-2	3.1E+04	n	4.0E+05	nm	2.3E+00	n	9.6E+00	n	9.9E+03	n		2.5E+00	n	
1.5E-01	C	4.3E-05	C	2.0E-03	I					1	0.1		Captafol	2425-06-1	3.6E+00	c*	1.5E+01	c	6.5E-02	c	2.9E-01	c	4.0E-01	c*		7.1E-04	c*	
2.3E-03	C	6.6E-07	C	1.3E-01	I					1	0.1		Captan	133-06-2	2.4E+02	c*	1.0E+03	c	4.3E+00	c	1.9E+01	c	3.1E+01	c*		2.2E-02	c*	
				1.0E-01	I					1	0.1		Carbaryl	63-25-2	6.3E+03	n	8.2E+04	n					1.8E+03	n		1.7E+00	n	
				5.0E-03	I					1	0.1		Carbofuran	1563-66-2	3.2E+02	n	4.1E+03	n					9.4E+01	n	40	3.7E-02	n	1.6E-02
				1.0E-01	I	7.0E-01	I	V		1		7.38E+02	Carbon Disulfide	75-15-0	7.7E+02	ns	3.5E+03	ns	7.3E+02	n	3.1E+03	n	8.1E+02	n		2.4E-01	n	
7.0E-02	I	6.0E-06	I	4.0E-03	I	1.0E-01	I	V		1		4.58E+02	Carbon Tetrachloride	56-23-5	6.5E-01	c	2.9E+00	c	4.7E-01	c	2.0E+00	c	4.6E-01	c	5	1.8E-04	c	1.9E-03
						1.0E-01	P	V		1		5.89E+03	Carbonyl Sulfide	463-58-1	6.7E+01	n	2.8E+02	n	1.0E+02	n	4.4E+02	n	2.1E+02	n		5.1E-01	n	
				1.0E-02	I					1	0.1		Carbosulfan	55285-14-8	6.3E+02	n	8.2E+03	n					5.1E+01	n		1.2E+00	n	
				1.0E-01	I					1	0.1		Carboxin	5234-68-4	6.3E+03	n	8.2E+04	n					1.9E+03	n		1.0E+00	n	
						9.0E-04	I			1			Ceric oxide	1306-38-3	1.3E+06	nm	5.4E+06	nm	9.4E-01	n	3.9E+00	n						
				1.0E-01	I			V		1			Chloral Hydrate	302-17-0	7.8E+03	n	1.2E+05	nm					2.0E+03	n		4.0E-01	n	
				1.5E-02	I					1	0.1		Chloramben	133-90-4	9.5E+02	n	1.2E+04	n					2.9E+02	n		7.0E-02	n	
4.0E-01	H									1	0.1		Chloranil	118-75-2	1.3E+00	c	5.7E+00	c					1.8E-01	c		1.5E-04	c	
3.5E-01	I	1.0E-04	I	5.0E-04	I	7.0E-04	I	V		1	0.04		Chlordane	12789-03-6	1.7E+00	c*	7.7E+00	c*	2.8E-02	c*	1.2E-01	c*	2.0E-02	c*	2	2.7E-03	c*	2.7E-01
1.0E+01	I	4.6E-03	C	3.0E-04	I					1	0.1		Chlordecone (Kepone)	143-50-0	5.4E-02	c	2.3E-01	c	6.1E-04	c	2.7E-03	c	3.5E-03	c		1.2E-04	c	
				7.0E-04	A					1	0.1		Chlorfenvinphos	470-90-6	4.4E+01	n	5.7E+02	n					1.1E+01	n		3.1E-02	n	
				9.0E-02	O					1	0.1		Chlorimuron, Ethyl-	90982-32-4	5.7E+03	n	7.4E+04	n					1.8E+03	n		6.0E-01	n	
				1.0E-01	I	1.5E-04	A	V		1		2.78E+03	Chlorine	7782-50-5	1.8E-01	n	7.8E-01	n	1.5E-01	n	6.4E-01	n	3.0E-01	n		1.4E-04	n	
				3.0E-02	I	2.0E-04	I	V		1			Chlorine Dioxide	10049-04-4	2.3E+03	n	3.4E+04	n	2.1E-01	n	8.8E-01	n	4.2E-01	n				
				3.0E-02	I					1			Chlorite (Sodium Salt)	7758-19-2	2.3E+03	n	3.5E+04	n					6.0E+02	n	1000			
						5.0E+01	I	V		1		1.15E+03	Chloro-1,1-difluoroethane, 1-	75-68-3	5.4E+04	ns	2.3E+05	nms	5.2E+04	n	2.2E+05	n	1.0E+05	n		5.2E+01	n	
		3.0E-04	I	2.0E-02	H	2.0E-02	I	V		1		7.86E+02	Chloro-1,3-butadiene, 2-	126-99-8	1.0E-02	c	4.4E-02	c	9.4E-03	c	4.1E-02	c	1.9E-02	c		9.8E-06	c	
4.6E-01	H									1	0.1		Chloro-2-methylaniline HCl, 4-	3165-93-3	1.2E+00	c	5.0E+00	c					1.7E-01	c		1.5E-04	c	
1.0E-01	P	7.7E-05	C	3.0E-03	X					1	0.1		Chloro-2-methylaniline, 4-	95-69-2	5.4E+00	c*	2.3E+01	c	3.6E-02	c	1.6E-01	c	7.0E-01	c*		4.0E-04	c*	
2.7E-01	X							V		1		1.18E+04	Chloroacetaldehyde, 2-	107-20-0	2.6E+00	c	1.2E+01	c					2.9E-01	c		5.8E-05	c	
										1	0.1		Chloroacetic Acid	79-11-8											60			1.2E-02
						3.0E-05	I			1	0.1		Chloroacetophenone, 2-	532-27-4	4.3E+04	n	1.8E+05	nm	3.1E-02	n	1.3E-01	n						
2.0E-01	P			4.0E-03	I					1	0.1		Chloroaniline, p-	106-47-8	2.7E+00	c*	1.1E+01	c					3.7E-01	c		1.6E-04	c	
				2.0E-02	I	5.0E-02	P	V		1		7.61E+02	Chlorobenzene	108-90-7	2.8E+02	n	1.3E+03	ns	5.2E+01	n	2.2E+02	n	7.8E+01	n	100	5.3E-02	n	6.8E-02
				1.0E-01	X					1	0.1		Chlorobenzene sulfonic acid, p-	98-66-8	6.3E+03	n	8.2E+04	n					2.0E+03	n		4.7E-01	n	
1.1E-01	C	3.1E-05	C	2.0E-02	I					1	0.1		Chlorobenzilate	510-15-6	4.9E+00	c	2.1E+01	c	9.1E-02	c	4.0E-01	c	3.1E-01	c		1.0E-03	c	
				3.0E-02	X					1	0.1		Chlorobenzoic Acid, p-	74-11-3	1.9E+03	n	2.5E+04	n					5.1E+02	n		1.3E-01	n	
				3.0E-03	P	3.0E-01	P	V		1		2.90E+02	Chlorobenzotrifluoride, 4-	98-56-6	2.1E+02	n	2.5E+03	ns	3.1E+02	n	1.3E+03	n	3.5E+01	n		1.2E-01	n	
				4.0E-02	P			V		1		7.28E+02	Chlorobutane, 1-	109-69-3	3.1E+03	ns	4.7E+04	ns					6.4E+02	n		2.6E-01	n	
						5.0E+01	I	V		1		1.68E+03	Chlorodifluoromethane	75-45-6	4.9E+04	ns	2.1E+05	nms	5.2E+04	n	2.2E+05	n	1.0E+05	n		4.3E+01	n	
				2.0E-02	P			V		1		1.11E+05	Chloroethanol, 2-	107-07-3	1.6E+03	n	2.3E+04	n					4.0E+02	n		8.1E-02	n	
3.1E-02	C	2.3E-05	I	1.0E-02	I	9.8E-02	A	V		1		2.54E+03	Chloroform	67-66-3	3.2E-01	c	1.4E+00	c	1.2E-01	c	5.3E-01	c	2.2E-01	c	80.0(F)	6.1E-05	c	2.2E-02
						9.0E-02	I	V		1		1.32E+03	Chloromethane	74-87-3	1.1E+02	n	4.6E+02	n	9.4E+01	n	3.9E+02	n	1.9E+02	n		4.9E-02	n	
2.4E+00	C	6.9E-04	C					V		1		9.32E+03	Chloromethyl Methyl Ether	107-30-2	2.0E-02	c	8.9E-02	c	4.1E-03	c	1.8E-02	c	6.5E-03	c		1.4E-06	c	
3.0E-01	P			3.0E-03	P	1.0E-05	X			1	0.1		Chloronitrobenzene, o-	88-73-3	1.8E+00	c	7.7E+00	c	1.0E-02	n	4.4E-02	n	2.4E-01	c		2.2E-04	c	
6.0E-02	P			7.0E-04	P	2.0E-03	P			1	0.1		Chloronitrobenzene, p-	100-00-5	9.0E+00	c**	3.8E+01	c*	2.1E+00	n	8.8E+00	n	1.2E+00	c*		1.1E-03	c*	
				5.0E-03	I			V		1		2.74E+04	Chlorophenol, 2-	95-57-8	3.9E+02	n	5.8E+03	n					9.1E+01	n		8.9E-02	n	
						4.0E-04	C	V		1		6.17E+02	Chloropicrin	76-06-2	2.0E+00	n	8.2E+00	n	4.2E-01	n	1.8E+00	n	8.3E-01	n		2.5E-04	n	

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (see FQ #31); H = HEAST; F = See FAQ; W = see user guide Section 2.3.5; E = see user guide Section 2.3.6; L = see user's guide Section 5.2; M = mutagen; S = see user's guide Section 5; V = volatile; R = RBA applied (see user's guide Section 5.10) ; c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (see user's guide Section 5.13); s = concentration may exceed Csat (see user's guide Section 5.12)

Toxicity and Chemical-specific Information													Contaminant		Screening Levels												Protection of Ground Water SSLs		
SFO (mg/kg-day)$^{-1}$	key	IUR (ug/m^3)$^{-1}$	key	RfD_o (mg/kg-day)	key	RfC_i (mg/m^3)	key	volatile	mutagen	GIABS	ABS	C_{sat} (mg/kg)	Analyte	CAS No.	Resident Soil (mg/kg)	key	Industrial Soil (mg/kg)	key	Resident Air (ug/m^3)	key	Industrial Air (ug/m^3)	key	Tapwater (ug/L)	key	MCL (ug/L)	Risk-based SSL (mg/kg)	key	MCL-based SSL (mg/kg)
3.1E-03	C	8.9E-07	C	1.5E-02	I					1	0.1		Chlorothalonil	1897-45-6	1.8E+02	c**	7.4E+02	c*	3.2E+00	c	1.4E+01	c	2.2E+01	c*		5.0E-02	c*	
				2.0E-02	I			V		1		9.07E+02	Chlorotoluene, o-	95-49-8	1.6E+03	ns	2.3E+04	ns					2.4E+02	n		2.3E-01	n	
				2.0E-02	X			V		1		2.53E+02	Chlorotoluene, p-	106-43-4	1.6E+03	ns	2.3E+04	ns					2.5E+02	n		2.4E-01	n	
2.4E+02	C	6.9E-02	C							1	0.1		Chlorozotocin	54749-90-5	2.3E-03	c	9.6E-03	c	4.1E-05	c	1.8E-04	c	3.2E-04	c		7.1E-08	c	
				5.0E-02	O					1	0.1		Chlorpropham	101-21-3	3.2E+03	n	4.1E+04	n					7.1E+02	n		6.4E-01	n	
				1.0E-03	A					1	0.1		Chlorpyrifos	2921-88-2	6.3E+01	n	8.2E+02	n					8.4E+00	n		1.2E-01	n	
				1.0E-02	H					1	0.1		Chlorpyrifos Methyl	5598-13-0	6.3E+02	n	8.2E+03	n					1.2E+02	n		5.4E-01	n	
				5.0E-02	O					1	0.1		Chlorsulfuron	64902-72-3	3.2E+03	n	4.1E+04	n					9.9E+02	n		8.3E-01	n	
				1.0E-02	I					1	0.1		Chlorthal-dimethyl	1861-32-1	6.3E+02	n	8.2E+03	n					1.2E+02	n		1.5E-01	n	
				8.0E-04	H					1	0.1		Chlorthiophos	60238-56-4	5.1E+01	n	6.6E+02	n					2.8E+00	n		7.3E-02	n	
				1.5E+00	I					0.013			Chromium(III), Insoluble Salts	16065-83-1	1.2E+05	nm	1.8E+06	nm					2.2E+04	n		4.0E+07	n	
5.0E-01	C	8.4E-02	S	3.0E-03	I	1.0E-04	I		M	0.025			Chromium(VI)	18540-29-9	3.0E-01	c	6.3E+00	c	1.2E-05	c	1.5E-04	c	3.5E-02	c		6.7E-04	c	
										0.013			Chromium, Total	7440-47-3											100			1.8E+05
				1.3E-02	I					1	0.1		Clofentezine	74115-24-5	8.2E+02	n	1.1E+04	n					2.3E+02	n		1.4E+01	n	
		9.0E-03	P	3.0E-04	P	6.0E-06	P			1			Cobalt	7440-48-4	2.3E+01	n	3.5E+02	n	3.1E-04	c*	1.4E-03	c*	6.0E+00	n		2.7E-01	n	
		6.2E-04	I					V	M	1			Coke Oven Emissions	8007-45-2					1.6E-03	c	2.0E-02	c						
				4.0E-02	H					1			Copper	7440-50-8	3.1E+03	n	4.7E+04	n					8.0E+02	n	1300	2.8E+01	n	4.6E+01
				5.0E-02	I	6.0E-01	C			1	0.1		Cresol, m-	108-39-4	3.2E+03	n	4.1E+04	n	6.3E+02	n	2.6E+03	n	9.3E+02	n		7.4E-01	n	
				5.0E-02	I	6.0E-01	C			1	0.1		Cresol, o-	95-48-7	3.2E+03	n	4.1E+04	n	6.3E+02	n	2.6E+03	n	9.3E+02	n		7.5E-01	n	
				1.0E-01	A	6.0E-01	C			1	0.1		Cresol, p-	106-44-5	6.3E+03	n	8.2E+04	n	6.3E+02	n	2.6E+03	n	1.9E+03	n		1.5E+00	n	
				1.0E-01	A					1	0.1		Cresol, p-chloro-m-	59-50-7	6.3E+03	n	8.2E+04	n					1.4E+03	n		1.7E+00	n	
				1.0E-01	A	6.0E-01	C			1	0.1		Cresols	1319-77-3	6.3E+03	n	8.2E+04	n	6.3E+02	n	2.6E+03	n	1.5E+03	n		1.3E+00	n	
1.9E+00	H			1.0E-03	P			V		1		1.66E+04	Crotonaldehyde, trans-	123-73-9	3.7E-01	c	1.7E+00	c					4.0E-02	c		8.2E-06	c	
				1.0E-01	I	4.0E-01	I	V		1		2.68E+02	Cumene	98-82-8	1.9E+03	ns	9.9E+03	ns	4.2E+02	n	1.8E+03	n	4.5E+02	n		7.4E-01	n	
2.2E-01	C	6.3E-05	C							1	0.1		Cupferron	135-20-6	2.5E+00	c	1.0E+01	c	4.5E-02	c	1.9E-01	c	3.5E-01	c		6.1E-04	c	
8.4E-01	H			2.0E-03	H					1	0.1		Cyanazine	21725-46-2	6.5E-01	c	2.7E+00	c					8.8E-02	c		4.1E-05	c	
													Cyanides															
				1.0E-03	I					1			~Calcium Cyanide	592-01-8	7.8E+01	n	1.2E+03	n					2.0E+01	n				
				5.0E-03	I					1			~Copper Cyanide	544-92-3	3.9E+02	n	5.8E+03	n					1.0E+02	n				
				6.0E-04	I	8.0E-04	S	V		1		9.54E+05	~Cyanide (CN-)	57-12-5	2.3E+01	n	1.5E+02	n	8.3E-01	n	3.5E+00	n	1.5E+00	n	200	1.5E-02	n	2.0E+00
				1.0E-03	I			V		1			~Cyanogen	460-19-5	7.8E+01	n	1.2E+03	n					2.0E+01	n				
				9.0E-02	I			V		1			~Cyanogen Bromide	506-68-3	7.0E+03	n	1.1E+05	nm					1.8E+03	n				
				5.0E-02	I			V		1			~Cyanogen Chloride	506-77-4	3.9E+03	n	5.8E+04	n					1.0E+03	n				
				6.0E-04	I	8.0E-04	I	V		1		1.00E+07	~Hydrogen Cyanide	74-90-8	2.3E+01	n	1.5E+02	n	8.3E-01	n	3.5E+00	n	1.5E+00	n		1.5E-02	n	
				2.0E-03	I					1			~Potassium Cyanide	151-50-8	1.6E+02	n	2.3E+03	n					4.0E+01	n				
				5.0E-03	I					0.04			~Potassium Silver Cyanide	506-61-6	3.9E+02	n	5.8E+03	n					8.2E+01	n				
				1.0E-01	I					0.04			~Silver Cyanide	506-64-9	7.8E+03	n	1.2E+05	nm					1.8E+03	n				
				1.0E-03	I					1			~Sodium Cyanide	143-33-9	7.8E+01	n	1.2E+03	n					2.0E+01	n	200			
				2.0E-04	P					1			~Thiocyanates	E1790664	1.6E+01	n	2.3E+02	n					4.0E+00	n				
				2.0E-04	X			V		1			~Thiocyanic Acid	463-56-9	1.6E+01	n	2.3E+02	n					4.0E+00	n				
				5.0E-02	I					1			~Zinc Cyanide	557-21-1	3.9E+03	n	5.8E+04	n					1.0E+03	n				
						6.0E+00	I	V		1		1.17E+02	Cyclohexane	110-82-7	6.5E+03	ns	2.7E+04	ns	6.3E+03	n	2.6E+04	n	1.3E+04	n		1.3E+01	n	
2.0E-02	X			2.0E-02	X					1	0.1		Cyclohexane, 1,2,3,4,5-pentabromo-6-chloro-	87-84-3	2.7E+01	c*	1.1E+02	c					2.8E+00	c		1.6E-02	c	
				5.0E+00	I	7.0E-01	P	V		1		5.11E+03	Cyclohexanone	108-94-1	2.8E+04	ns	1.3E+05	nms	7.3E+02	n	3.1E+03	n	1.4E+03	n		3.4E-01	n	
				5.0E-03	P	1.0E+00	X	V		1		2.83E+02	Cyclohexene	110-83-8	3.1E+02	ns	3.1E+03	ns	1.0E+03	n	4.4E+03	n	7.0E+01	n		4.6E-02	n	
				2.0E-01	I			V		1		2.93E+05	Cyclohexylamine	108-91-8	1.6E+04	n	2.3E+05	nm					3.8E+03	n		1.0E+00	n	
				2.5E-02	I					1	0.1		Cyfluthrin	68359-37-5	1.6E+03	n	2.1E+04	n					1.2E+02	n		3.1E+01	n	
				1.0E-03	O					1	0.1		Cyhalothrin	68085-85-8	6.3E+01	n	8.2E+02	n					2.0E+01	n		1.4E+01	n	
				5.0E-01	O					1	0.1		Cyromazine	66215-27-8	3.2E+04	n	4.1E+05	nm					9.9E+03	n		2.5E+00	n	
2.4E-01	I	6.9E-05	C	3.0E-05	X					1	0.1		DDD, p,p`- (DDD)	72-54-8	1.9E+00	n	9.6E+00	c**	4.1E-02	c	1.8E-01	c	3.2E-02	c**		7.5E-03	c**	
3.4E-01	I	9.7E-05	C	3.0E-04	X			V		1			DDE, p,p'-	72-55-9	2.0E+00	c*	9.3E+00	c*	2.9E-02	c	1.3E-01	c	4.6E-02	c		1.1E-02	c	
3.4E-01	I	9.7E-05	I	5.0E-04	I					1	0.03		DDT	50-29-3	1.9E+00	c*	8.5E+00	c*	2.9E-02	c	1.3E-01	c	2.3E-01	c*		7.7E-02	c*	
				3.0E-02	I					1	0.1		Dalapon	75-99-0	1.9E+03	n	2.5E+04	n					6.0E+02	n	200	1.2E-01	n	4.1E-02
1.8E-02	C	5.1E-06	C	1.5E-01	I					1	0.1		Daminozide	1596-84-5	3.0E+01	c	1.3E+02	c	5.5E-01	c	2.4E+00	c	4.3E+00	c		9.5E-04	c	
7.0E-04	I			7.0E-03	I					1	0.1		Decabromodiphenyl ether, 2,2',3,3',4,4',5,5',6,6'- (BDE-209)	1163-19-5	4.4E+02	n	3.3E+03	c**					1.1E+02	c**		6.2E+01	c**	
				4.0E-05	I					1	0.1		Demeton	8065-48-3	2.5E+00	n	3.3E+01	n					4.2E-01	n				
1.2E-03	I			6.0E-01	I					1	0.1		Di(2-ethylhexyl)adipate	103-23-1	4.5E+02	c*	1.9E+03	c					6.5E+01	c	400	4.7E+00	c	2.9E+01
6.1E-02	H									1	0.1		Diallate	2303-16-4	8.9E+00	c	3.8E+01	c					5.4E-01	c		8.0E-04	c	
				7.0E-04	A					1	0.1		Diazinon	333-41-5	4.4E+01	n	5.7E+02	n					1.0E+01	n		6.5E-02	n	
				1.0E-02	X			V		1			Dibenzothiophene	132-65-0	7.8E+02	n	1.2E+04	n					6.5E+01	n		1.2E+00	n	
8.0E-01	P	6.0E-03	P	2.0E-04	P	2.0E-04	I	V	M	1		9.79E+02	Dibromo-3-chloropropane, 1,2-	96-12-8	5.3E-03	c	6.4E-02	c	1.7E-04	c	2.0E-03	c	3.3E-04	c	0.2	1.4E-07	c	8.6E-05
				4.0E-04	X			V		1		1.59E+02	Dibromobenzene, 1,3-	108-36-1	3.1E+01	n	4.7E+02	ns					5.3E+00	n		5.1E-03	n	
				1.0E-02	I			V		1			Dibromobenzene, 1,4-	106-37-6	7.8E+02	n	1.2E+04	n					1.3E+02	n		1.2E-01	n	
8.4E-02	I			2.0E-02	I			V		1		8.02E+02	Dibromochloromethane	124-48-1	8.3E+00	c	3.9E+01	c					8.7E-01	c	80.0(F)	2.3E-04	c	2.1E-02
2.0E+00	I	6.0E-04	I	9.0E-03	I	9.0E-03	I	V		1		1.34E+03	Dibromoethane, 1,2-	106-93-4	3.6E-02	c	1.6E-01	c	4.7E-03	c	2.0E-02	c	7.5E-03	c	0.05	2.1E-06	c	1.4E-05
						4.0E-03	X	V		1		2.82E+03	Dibromomethane (Methylene Bromide)	74-95-3	2.4E+01	n	9.9E+01	n	4.2E+00	n	1.8E+01	n	8.3E+00	n		2.1E-03	n	
				3.0E-04	P					1	0.1		Dibutyltin Compounds	E1790660	1.9E+01	n	2.5E+02	n					6.0E+00	n				
				3.0E-02	I					1	0.1		Dicamba	1918-00-9	1.9E+03	n	2.5E+04	n					5.7E+02	n		1.5E-01	n	
		4.2E-03	P					V		1		5.54E+02	Dichloro-2-butene, 1,4-	764-41-0	2.1E-03	c	9.4E-03	c	6.7E-04	c	2.9E-03	c	1.3E-03	c		6.6E-07	c	
		4.2E-03	P					V		1		5.19E+02	Dichloro-2-butene, cis-1,4-	1476-11-5	7.4E-03	c	3.2E-02	c	6.7E-04	c	2.9E-03	c	1.3E-03	c		6.2E-07	c	
		4.2E-03	P					V		1		7.60E+02	Dichloro-2-butene, trans-1,4-	110-57-6	7.4E-03	c	3.2E-02	c	6.7E-04	c	2.9E-03	c	1.3E-03	c		6.2E-07	c	

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SFO (mg/kg-day)$^{-1}$	key	IUR (ug/m^3)$^{-1}$	key	RfD_o (mg/kg-day)	key	RfC_i (mg/m^3)	key	volatile	mutagen	GIABS	ABS	C_{sat} (mg/kg)	Analyte	CAS No.	Resident Soil (mg/kg)	key	Industrial Soil (mg/kg)	key	Resident Air (ug/m^3)	key	Industrial Air (ug/m^3)	key	Tapwater (ug/L)	key	MCL (ug/L)	Risk-based SSL (mg/kg)	key	MCL-based SSL (mg/kg)
5.0E-02	I			4.0E-03	I					1	0.1		Dichloroacetic Acid	79-43-6	1.1E+01	c*	4.6E+01	c*					1.5E+00	c*	60	3.1E-04	c*	1.2E-02
				9.0E-02	I	2.0E-01	H	V		1		3.76E+02	Dichlorobenzene, 1,2-	95-50-1	1.8E+03	ns	9.3E+03	ns	2.1E+02	n	8.8E+02	n	3.0E+02	n	600	3.0E-01	n	5.8E-01
5.4E-03	C	1.1E-05	C	7.0E-02	A	8.0E-01	I	V		1			Dichlorobenzene, 1,4-	106-46-7	2.6E+00	c	1.1E+01	c	2.6E-01	c	1.1E+00	c	4.8E-01	c	75	4.6E-04	c	7.2E-02
4.5E-01	I	3.4E-04	C							1	0.1		Dichlorobenzidine, 3,3'-	91-94-1	1.2E+00	c	5.1E+00	c	8.3E-03	c	3.6E-02	c	1.3E-01	c		8.2E-04	c	
				9.0E-03	X					1	0.1		Dichlorobenzophenone, 4,4'-	90-98-2	5.7E+02	n	7.4E+03	n					7.8E+01	n		4.7E-01	n	
				2.0E-01	I	1.0E-01	X	V		1		8.45E+02	Dichlorodifluoromethane	75-71-8	8.7E+01	n	3.7E+02	n	1.0E+02	n	4.4E+02	n	2.0E+02	n		3.0E-01	n	
5.7E-03	C	1.6E-06	C	2.0E-01	P			V		1		1.69E+03	Dichloroethane, 1,1-	75-34-3	3.6E+00	c	1.6E+01	c	1.8E+00	c	7.7E+00	c	2.8E+00	c		7.8E-04	c	
9.1E-02	I	2.6E-05	I	6.0E-03	X	7.0E-03	P	V		1		2.98E+03	Dichloroethane, 1,2-	107-06-2	4.6E-01	c*	2.0E+00	c*	1.1E-01	c*	4.7E-01	c*	1.7E-01	c*	5	4.8E-05	c*	1.4E-03
				5.0E-02	I	2.0E-01	I	V		1		1.19E+03	Dichloroethylene, 1,1-	75-35-4	2.3E+02	n	1.0E+03	n	2.1E+02	n	8.8E+02	n	2.8E+02	n	7	1.0E-01	n	2.5E-03
				2.0E-03	I			V		1		2.37E+03	Dichloroethylene, 1,2-cis-	156-59-2	1.6E+02	n	2.3E+03	n					3.6E+01	n	70	1.1E-02	n	2.1E-02
				2.0E-02	I			V		1		1.85E+03	Dichloroethylene, 1,2-trans-	156-60-5	1.6E+03	n	2.3E+04	ns					3.6E+02	n	100	1.1E-01	n	3.1E-02
				3.0E-03	I					1	0.1		Dichlorophenol, 2,4-	120-83-2	1.9E+02	n	2.5E+03	n					4.6E+01	n		2.3E-02	n	
				1.0E-02	I					1	0.05		Dichlorophenoxy Acetic Acid, 2,4-	94-75-7	7.0E+02	n	9.6E+03	n					1.7E+02	n	70	4.5E-02	n	1.8E-02
3.7E-02	P	3.7E-06	P	4.0E-02	P	4.0E-03	I	V		1		1.36E+03	Dichloropropane, 1,2-	78-87-5	2.5E+00	c**	1.1E+01	c**	7.6E-01	c**	3.3E+00	c**	8.5E-01	c**	5	2.8E-04	c**	1.7E-03
				2.0E-02	P			V		1		1.49E+03	Dichloropropane, 1,3-	142-28-9	1.6E+03	ns	2.3E+04	ns					3.7E+02	n		1.3E-01	n	
				3.0E-03	I					1	0.1		Dichloropropanol, 2,3-	616-23-9	1.9E+02	n	2.5E+03	n					5.9E+01	n		1.3E-02	n	
1.0E-01	I	4.0E-06	I	3.0E-02	I	2.0E-02	I	V		1		1.57E+03	Dichloropropene, 1,3-	542-75-6	1.8E+00	c*	8.2E+00	c*	7.0E-01	c*	3.1E+00	c*	4.7E-01	c*		1.7E-04	c*	
2.9E-01	I	8.3E-05	C	5.0E-04	I	5.0E-04	I			1	0.1		Dichlorvos	62-73-7	1.9E+00	c*	7.9E+00	c*	3.4E-02	c*	1.5E-01	c*	2.6E-01	c*		8.1E-05	c*	
				3.0E-05	O					1	0.1		Dicrotophos	141-66-2	1.9E+00	n	2.5E+01	n					6.0E-01	n		1.4E-04	n	
				8.0E-02	P	3.0E-04	X	V		1		2.56E+02	Dicyclopentadiene	77-73-6	1.3E+00	n	5.4E+00	n	3.1E-01	n	1.3E+00	n	6.3E-01	n		2.2E-03	n	
1.6E+01	I	4.6E-03	I	5.0E-05	I					1	0.1		Dieldrin	60-57-1	3.4E-02	c*	1.4E-01	c	6.1E-04	c	2.7E-03	c	1.8E-03	c		7.1E-05	c	
		3.0E-04	C			5.0E-03	I			1	0.1		Diesel Engine Exhaust	E17136615					9.4E-03	c	4.1E-02	c						
				2.0E-03	P	2.0E-04	P			1	0.1		Diethanolamine	111-42-2	1.3E+02	n	1.6E+03	n	2.1E-01	n	8.8E-01	n	4.0E+01	n		8.1E-03	n	
				3.0E-02	P	1.0E-04	P			1	0.1		Diethylene Glycol Monobutyl Ether	112-34-5	1.9E+03	n	2.4E+04	n	1.0E-01	n	4.4E-01	n	6.0E+02	n		1.3E-01	n	
				6.0E-02	P	3.0E-04	P			1	0.1		Diethylene Glycol Monoethyl Ether	111-90-0	3.8E+03	n	4.8E+04	n	3.1E-01	n	1.3E+00	n	1.2E+03	n		2.4E-01	n	
				1.0E-03	P			V		1		1.12E+05	Diethylformamide	617-84-5	7.8E+01	n	1.2E+03	n					2.0E+01	n		4.1E-03	n	
3.5E+02	C	1.0E-01	C							1	0.1		Diethylstilbestrol	56-53-1	1.6E-03	c	6.6E-03	c	2.8E-05	c	1.2E-04	c	5.1E-05	c		2.8E-05	c	
				8.3E-02	O					1	0.1		Difenzoquat	43222-48-6	5.2E+03	n	6.8E+04	n					1.7E+03	n		2.6E+02	n	
				2.0E-02	I					1	0.1		Diflubenzuron	35367-38-5	1.3E+03	n	1.6E+04	n					2.9E+02	n		3.3E-01	n	
						4.0E+01	I	V		1		1.43E+03	Difluoroethane, 1,1-	75-37-6	4.8E+04	ns	2.0E+05	nms	4.2E+04	n	1.8E+05	n	8.3E+04	n		2.8E+01	n	
						3.0E+01	X	V		1		6.91E+02	Difluoropropane, 2,2-	420-45-1	2.4E+04	ns	1.0E+05	ns	3.1E+04	n	1.3E+05	n	6.3E+04	n		1.4E+02	n	
4.4E-02	C	1.3E-05	C					V		1			Dihydrosafrole	94-58-6	9.9E+00	c	4.5E+01	c	2.2E-01	c	9.4E-01	c	3.0E-01	c		1.9E-04	c	
						7.0E-01	P	V		1		2.26E+03	Diisopropyl Ether	108-20-3	2.2E+03	n	9.4E+03	ns	7.3E+02	n	3.1E+03	n	1.5E+03	n		3.7E-01	n	
				8.0E-02	I			V		1		5.30E+02	Diisopropyl Methylphosphonate	1445-75-6	6.3E+03	ns	9.3E+04	ns					1.6E+03	n		4.5E-01	n	
				2.2E-02	O					1	0.1		Dimethipin	55290-64-7	1.4E+03	n	1.8E+04	n					4.4E+02	n		9.6E-02	n	
				2.2E-03	O					1	0.1		Dimethoate	60-51-5	1.4E+02	n	1.8E+03	n					4.4E+01	n		9.9E-03	n	
1.6E+00	P									1	0.1		Dimethoxybenzidine, 3,3'-	119-90-4	3.4E-01	c	1.4E+00	c					4.7E-02	c		5.8E-05	c	
1.7E-03	P			6.0E-02	P					1	0.1		Dimethyl methylphosphonate	756-79-6	3.2E+02	c*	1.4E+03	c*					4.6E+01	c*		9.6E-03	c*	
4.6E+00	C	1.3E-03	C							1	0.1		Dimethylamino azobenzene [p-]	60-11-7	1.2E-01	c	5.0E-01	c	2.2E-03	c	9.4E-03	c	5.0E-03	c		2.1E-05	c	
5.8E-01	H									1	0.1		Dimethylaniline HCl, 2,4-	21436-96-4	9.4E-01	c	4.0E+00	c					1.3E-01	c		1.2E-04	c	
2.0E-01	P			2.0E-03	X					1	0.1		Dimethylaniline, 2,4-	95-68-1	2.7E+00	c*	1.1E+01	c					3.7E-01	c		2.1E-04	c	
2.7E-02	P			2.0E-03	I			V		1		8.30E+02	Dimethylaniline, N,N-	121-69-7	2.6E+01	c**	1.2E+02	c*					2.5E+00	c*		9.0E-04	c*	
1.1E+01	P									1	0.1		Dimethylbenzidine, 3,3'-	119-93-7	4.9E-02	c	2.1E-01	c					6.5E-03	c		4.3E-05	c	
				1.0E-01	P	3.0E-02	I	V		1		1.06E+05	Dimethylformamide	68-12-2	2.6E+03	n	1.5E+04	n	3.1E+01	n	1.3E+02	n	6.1E+01	n		1.2E-02	n	
				1.0E-04	X	2.0E-06	X	V		1		1.72E+05	Dimethylhydrazine, 1,1-	57-14-7	5.7E-02	n	2.4E-01	n	2.1E-03	n	8.8E-03	n	4.2E-03	n		9.3E-07	n	
5.5E+02	C	1.6E-01	C					V		1		1.89E+05	Dimethylhydrazine, 1,2-	540-73-8	8.8E-04	c	4.1E-03	c	1.8E-05	c	7.7E-05	c	2.8E-05	c		6.5E-09	c	
				2.0E-02	I					1	0.1		Dimethylphenol, 2,4-	105-67-9	1.3E+03	n	1.6E+04	n					3.6E+02	n		4.2E-01	n	
				6.0E-04	I					1	0.1		Dimethylphenol, 2,6-	576-26-1	3.8E+01	n	4.9E+02	n					1.1E+01	n		1.3E-02	n	
				1.0E-03	I					1	0.1		Dimethylphenol, 3,4-	95-65-8	6.3E+01	n	8.2E+02	n					1.8E+01	n		2.1E-02	n	
4.5E-02	C	1.3E-05	C					V		1		4.73E+02	Dimethylvinylchloride	513-37-1	1.1E+00	c	4.8E+00	c	2.2E-01	c	9.4E-01	c	3.3E-01	c		1.1E-04	c	
				8.0E-05	X					1	0.1		Dinitro-o-cresol, 4,6-	534-52-1	5.1E+00	n	6.6E+01	n					1.5E+00	n		2.6E-03	n	
				2.0E-03	I					1	0.1		Dinitro-o-cyclohexyl Phenol, 4,6-	131-89-5	1.3E+02	n	1.6E+03	n					2.3E+01	n		7.7E-01	n	
				1.0E-04	P					1	0.1		Dinitrobenzene, 1,2-	528-29-0	6.3E+00	n	8.2E+01	n					1.9E+00	n		1.8E-03	n	
				1.0E-04	I					1	0.1		Dinitrobenzene, 1,3-	99-65-0	6.3E+00	n	8.2E+01	n					2.0E+00	n		1.8E-03	n	
				1.0E-04	P					1	0.1		Dinitrobenzene, 1,4-	100-25-4	6.3E+00	n	8.2E+01	n					2.0E+00	n		1.8E-03	n	
				2.0E-03	I					1	0.1		Dinitrophenol, 2,4-	51-28-5	1.3E+02	n	1.6E+03	n					3.9E+01	n		4.4E-02	n	
6.8E-01	I									1	0.1		Dinitrotoluene Mixture, 2,4/2,6-	E1615210	8.0E-01	c	3.4E+00	c					1.1E-01	c		1.5E-04	c	
3.1E-01	C	8.9E-05	C	2.0E-03	I					1	0.102		Dinitrotoluene, 2,4-	121-14-2	1.7E+00	c*	7.4E+00	c	3.2E-02	c	1.4E-01	c	2.4E-01	c		3.2E-04	c	
1.5E+00	P			3.0E-04	X					1	0.099		Dinitrotoluene, 2,6-	606-20-2	3.6E-01	c*	1.5E+00	c					4.9E-02	c		6.7E-05	c	
				2.0E-03	S					1	0.006		Dinitrotoluene, 2-Amino-4,6-	35572-78-2	1.5E+02	n	2.3E+03	n					3.9E+01	n		3.0E-02	n	
				2.0E-03	S					1	0.009		Dinitrotoluene, 4-Amino-2,6-	19406-51-0	1.5E+02	n	2.3E+03	n					3.9E+01	n		3.0E-02	n	
4.5E-01	X			9.0E-04	X					1	0.1		Dinitrotoluene, Technical grade	25321-14-6	1.2E+00	c*	5.1E+00	c					1.0E-01	c		1.4E-04	c	
				1.0E-03	I					1	0.1		Dinoseb	88-85-7	6.3E+01	n	8.2E+02	n					1.5E+01	n	7	1.3E-01	n	6.2E-02
1.0E-01	I	5.0E-06	I	3.0E-02	I	3.0E-02	I	V		1		1.16E+05	Dioxane, 1,4-	123-91-1	5.3E+00	c	2.4E+01	c	5.6E-01	c*	2.5E+00	c*	4.6E-01	c		9.4E-05	c	
6.2E+03	I	1.3E+00	I							1	0.03		Dioxins ~Hexachlorodibenzo-p-dioxin, Mixture		1.0E-04	c	4.7E-04	c	2.2E-06	c	9.4E-06	c	1.3E-05	c		1.7E-05	c	
1.3E+05	C	3.8E+01	C	7.0E-10	I	4.0E-08	C	V		1	0.03		~TCDD, 2,3,7,8-	1746-01-6	4.8E-06	c*	2.2E-05	c*	7.4E-08	c	3.2E-07	c	1.2E-07	c	3.00E-05	5.9E-08	c	1.5E-05
				3.0E-02	I					1	0.1		Diphenamid	957-51-7	1.9E+03	n	2.5E+04	n					5.3E+02	n		5.2E+00	n	
						4.0E-04	X	V		1			Diphenyl Ether	101-84-8	3.4E+01	n	1.4E+02	n	4.2E-01	n	1.8E+00	n	8.3E-01	n		3.4E-03	n	
				8.0E-04	X					1	0.1		Diphenyl Sulfone	127-63-9	5.1E+01	n	6.6E+02	n					1.5E+01	n		3.6E-02	n	
				1.0E-01	O					1	0.1		Diphenylamine	122-39-4	6.3E+03	n	8.2E+04	n					1.3E+03	n		2.3E+00	n	

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (see FQ #31); H = HEAST; F = See FAQ; W = see user guide Section 2.3.5; E = see user guide Section 2.3.6; L = see user's guide Section 5.2; M = mutagen; S = see user's guide Section 5; V = volatile; R = RBA applied (see user's guide Section 5.10) ; c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (see user's guide Section 5.13); s = concentration may exceed Csat (see user's guide Section 5.12)

Toxicity and Chemical-specific Information													Contaminant		Screening Levels												Protection of Ground Water SSLs		
SFO (mg/kg-day)$^{-1}$	key	IUR (ug/m^3)$^{-1}$	key	RfD_o (mg/kg-day)	key	RfC_i (mg/m^3)	key	vol	mutagen	GIABS	ABS	C_{sat} (mg/kg)	Analyte	CAS No.	Resident Soil (mg/kg)	key	Industrial Soil (mg/kg)	key	Resident Air (ug/m^3)	key	Industrial Air (ug/m^3)	key	Tapwater (ug/L)	key	MCL (ug/L)	Risk-based SSL (mg/kg)	key	MCL-based SSL (mg/kg)
8.0E-01	I	2.2E-04	I							1	0.1		Diphenylhydrazine, 1,2-	122-66-7	6.8E-01	c	2.9E+00	c	1.3E-02	c	5.6E-02	c	7.8E-02	c		2.5E-04	c	
				2.2E-03	I					1	0.1		Diquat	85-00-7	1.4E+02	n	1.8E+03	n					4.4E+01	n	20	8.3E-01	n	3.7E-01
7.1E+00	C	1.4E-01	C							1	0.1		Direct Black 38	1937-37-7	7.6E-02	c	3.2E-01	c	2.0E-05	c	8.8E-05	c	1.1E-02	c		5.3E+00	c	
7.4E+00	C	1.4E-01	C							1	0.1		Direct Blue 6	2602-46-2	7.3E-02	c	3.1E-01	c	2.0E-05	c	8.8E-05	c	1.1E-02	c		1.7E+01	c	
6.7E+00	C	1.4E-01	C							1	0.1		Direct Brown 95	16071-86-6	8.1E-02	c	3.4E-01	c	2.0E-05	c	8.8E-05	c	1.2E-02	c		1.6E-01	c	
				4.0E-05	I					1	0.1		Disulfoton	298-04-4	2.5E+00	n	3.3E+01	n					5.0E-01	n		9.4E-04	n	
				1.0E-02	I			V		1			Dithiane, 1,4-	505-29-3	7.8E+02	n	1.2E+04	n					2.0E+02	n		9.7E-02	n	
				2.0E-03	I					1	0.1		Diuron	330-54-1	1.3E+02	n	1.6E+03	n					3.6E+01	n		1.5E-02	n	
				2.0E-02	O					1	0.1		Dodine	2439-10-3	1.3E+03	n	1.6E+04	n					4.0E+02	n		2.1E+00	n	
				5.0E-02	O			V		1			EPTC	759-94-4	3.9E+03	n	5.8E+04	n					7.5E+02	n		4.0E-01	n	
				6.0E-03	I			V		1			Endosulfan	115-29-7	4.7E+02	n	7.0E+03	n					1.0E+02	n		1.4E+00	n	
				2.0E-02	I					1	0.1		Endothall	145-73-3	1.3E+03	n	1.6E+04	n					3.8E+02	n	100	9.1E-02	n	2.4E-02
				3.0E-04	I					1	0.1		Endrin	72-20-8	1.9E+01	n	2.5E+02	n					2.3E+00	n	2	9.2E-02	n	8.1E-02
9.9E-03	I	1.2E-06	I	6.0E-03	P	1.0E-03	I	V		1		1.05E+04	Epichlorohydrin	106-89-8	1.9E+01	n	8.2E+01	n	1.0E+00	n	4.4E+00	n	2.0E+00	n		4.5E-04	n	
						2.0E-02	I	V		1		1.53E+04	Epoxybutane, 1,2-	106-88-7	1.6E+02	n	6.7E+02	n	2.1E+01	n	8.8E+01	n	4.2E+01	n		9.2E-03	n	
				4.0E-02	P					1	0.1		Ethanol, 2-(2-methoxyethoxy)-	111-77-3	2.5E+03	n	3.3E+04	n					8.0E+02	n		1.6E-01	n	
				5.0E-03	I					1	0.1		Ethephon	16672-87-0	3.2E+02	n	4.1E+03	n					1.0E+02	n		2.1E-02	n	
				5.0E-04	I					1	0.1		Ethion	563-12-2	3.2E+01	n	4.1E+02	n					4.3E+00	n		8.5E-03	n	
				1.0E-01	P	6.0E-02	P	V		1		2.38E+04	Ethoxyethanol Acetate, 2-	111-15-9	2.6E+03	n	1.4E+04	n	6.3E+01	n	2.6E+02	n	1.2E+02	n		2.5E-02	n	
				9.0E-02	P	2.0E-01	I	V		1		1.06E+05	Ethoxyethanol, 2-	110-80-5	5.2E+03	n	4.7E+04	n	2.1E+02	n	8.8E+02	n	3.4E+02	n		6.8E-02	n	
				9.0E-01	I	7.0E-02	P	V		1		1.08E+04	Ethyl Acetate	141-78-6	6.2E+02	n	2.6E+03	n	7.3E+01	n	3.1E+02	n	1.4E+02	n		3.1E-02	n	
				5.0E-03	P	8.0E-03	P	V		1		2.50E+03	Ethyl Acrylate	140-88-5	4.7E+01	n	2.1E+02	n	8.3E+00	n	3.5E+01	n	1.4E+01	n		3.2E-03	n	
						1.0E+01	I	V		1		2.12E+03	Ethyl Chloride (Chloroethane)	75-00-3	1.4E+04	ns	5.7E+04	ns	1.0E+04	n	4.4E+04	n	2.1E+04	n		5.9E+00	n	
				2.0E-01	I			V		1		1.01E+04	Ethyl Ether	60-29-7	1.6E+04	ns	2.3E+05	nms					3.9E+03	n		8.8E-01	n	
						3.0E-01	P	V		1		1.10E+03	Ethyl Methacrylate	97-63-2	1.8E+03	ns	7.6E+03	ns	3.1E+02	n	1.3E+03	n	6.3E+02	n		1.5E-01	n	
				1.0E-05	I					1	0.1		Ethyl-p-nitrophenyl Phosphonate	2104-64-5	6.3E-01	n	8.2E+00	n					8.9E-02	n		2.8E-03	n	
1.1E-02	C	2.5E-06	C	1.0E-01	I	1.0E+00	I	V		1		4.80E+02	Ethylbenzene	100-41-4	5.8E+00	c	2.5E+01	c	1.1E+00	c	4.9E+00	c	1.5E+00	c	700	1.7E-03	c	7.8E-01
				7.0E-02	P					1	0.1		Ethylene Cyanohydrin	109-78-4	4.4E+03	n	5.7E+04	n					1.4E+03	n		2.8E-01	n	
				9.0E-02	P			V		1		1.89E+05	Ethylene Diamine	107-15-3	7.0E+03	n	1.1E+05	nm					1.8E+03	n		4.1E-01	n	
				2.0E+00	I	4.0E-01	C			1	0.1		Ethylene Glycol	107-21-1	1.3E+05	nm	1.6E+06	nm	4.2E+02	n	1.8E+03	n	4.0E+04	n		8.1E+00	n	
				1.0E-01	I	1.6E+00	I			1	0.1		Ethylene Glycol Monobutyl Ether	111-76-2	6.3E+03	n	8.2E+04	n	1.7E+03	n	7.0E+03	n	2.0E+03	n		4.1E-01	n	
3.1E-01	C	3.0E-03	I			3.0E-02	C	V	M	1		1.21E+05	Ethylene Oxide	75-21-8	2.0E-03	c	2.5E-02	c	3.4E-04	c	4.1E-03	c	6.7E-04	c		1.4E-07	c	
4.5E-02	C	1.3E-05	C	8.0E-05	I					1	0.1		Ethylene Thiourea	96-45-7	5.1E+00	n	5.1E+01	c**	2.2E-01	c	9.4E-01	c	1.6E+00	n		3.6E-04	n	
6.5E+01	C	1.9E-02	C					V		1		1.54E+05	Ethyleneimine	151-56-4	2.7E-03	c	1.2E-02	c	1.5E-04	c	6.5E-04	c	2.4E-04	c		5.2E-08	c	
				3.0E+00	I					1	0.1		Ethylphthalyl Ethyl Glycolate	84-72-0	1.9E+05	nm	2.5E+06	nm					5.8E+04	n		1.3E+02	n	
				2.5E-04	I					1	0.1		Fenamiphos	22224-92-6	1.6E+01	n	2.1E+02	n					4.4E+00	n		4.3E-03	n	
				2.5E-02	I					1	0.1		Fenpropathrin	39515-41-8	1.6E+03	n	2.1E+04	n					6.4E+01	n		2.9E+00	n	
				2.5E-02	I					1	0.1		Fenvalerate	51630-58-1	1.6E+03	n	2.1E+04	n					5.0E+02	n		3.2E+02	n	
				1.3E-02	I					1	0.1		Fluometuron	2164-17-2	8.2E+02	n	1.1E+04	n					2.4E+02	n		1.9E-01	n	
				4.0E-02	C	1.3E-02	C			1			Fluoride	16984-48-8	3.1E+03	n	4.7E+04	n	1.4E+01	n	5.7E+01	n	8.0E+02	n	4000	1.2E+02	n	6.0E+02
				6.0E-02	I	1.3E-02	C			1			Fluorine (Soluble Fluoride)	7782-41-4	4.7E+03	n	7.0E+04	n	1.4E+01	n	5.7E+01	n	1.2E+03	n	4000	1.8E+02	n	6.0E+02
				8.0E-02	I					1	0.1		Fluridone	59756-60-4	5.1E+03	n	6.6E+04	n					1.4E+03	n		1.6E+02	n	
				4.0E-02	O					1	0.1		Flurprimidol	56425-91-3	2.5E+03	n	3.3E+04	n					6.9E+02	n		3.1E+00	n	
				2.0E-03	O					1	0.1		Flusilazole	85509-19-9	1.3E+02	n	1.6E+03	n					3.1E+01	n		5.1E+00	n	
				5.0E-01	O					1	0.1		Flutolanil	66332-96-5	3.2E+04	n	4.1E+05	nm					7.9E+03	n		4.2E+01	n	
				1.0E-02	I					1	0.1		Fluvalinate	69409-94-5	6.3E+02	n	8.2E+03	n					2.0E+02	n		2.9E+02	n	
				9.0E-02	O					1	0.1		Folpet	133-07-3	5.7E+03	n	7.4E+04	n					1.6E+03	n		3.9E-01	n	
				2.5E-03	O					1	0.1		Fomesafen	72178-02-0	1.6E+02	n	2.1E+03	n					4.8E+01	n		1.6E-01	n	
				2.0E-03	I					1	0.1		Fonofos	944-22-9	1.3E+02	n	1.6E+03	n					2.4E+01	n		4.7E-02	n	
		1.3E-05	I	2.0E-01	I	9.8E-03	A	V		1		4.24E+04	Formaldehyde	50-00-0	1.7E+01	c*	7.3E+01	c*	2.2E-01	c*	9.4E-01	c*	4.3E-01	c*		8.7E-05	c*	
				9.0E-01	P	3.0E-04	X	V		1		1.06E+05	Formic Acid	64-18-6	2.9E+01	n	1.2E+02	n	3.1E-01	n	1.3E+00	n	6.3E-01	n		1.3E-04	n	
				2.5E+00	O					1	0.1		Fosetyl-AL	39148-24-8	1.6E+05	nm	2.1E+06	nm					5.0E+04	n		6.6E+02	n	
													Furans																
				1.0E-03	X			V		1	0.03		~Dibenzofuran	132-64-9	7.3E+01	n	1.0E+03	n					7.9E+00	n		1.5E-01	n	
				1.0E-03	I			V		1	0.03	6.22E+03	~Furan	110-00-9	7.3E+01	n	1.0E+03	n					1.9E+01	n		7.3E-03	n	
				9.0E-01	I	2.0E+00	I	V		1	0.03	1.65E+05	~Tetrahydrofuran	109-99-9	1.8E+04	n	9.4E+04	n	2.1E+03	n	8.8E+03	n	3.4E+03	n		7.5E-01	n	
3.8E+00	H									1	0.1		Furazolidone	67-45-8	1.4E-01	c	6.0E-01	c					2.0E-02	c		3.9E-05	c	
				3.0E-03	I	5.0E-02	H	V		1		1.01E+04	Furfural	98-01-1	2.1E+02	n	2.6E+03	n	5.2E+01	n	2.2E+02	n	3.8E+01	n		8.1E-03	n	
1.5E+00	C	4.3E-04	C							1	0.1		Furium	531-82-8	3.6E-01	c	1.5E+00	c	6.5E-03	c	2.9E-02	c	5.1E-02	c		6.8E-05	c	
3.0E-02	I	8.6E-06	C							1	0.1		Furmecyclox	60568-05-0	1.8E+01	c	7.7E+01	c	3.3E-01	c	1.4E+00	c	1.1E+00	c		1.2E-03	c	
				6.0E-03	O					1	0.1		Glufosinate, Ammonium	77182-82-2	3.8E+02	n	4.9E+03	n					1.2E+02	n		2.6E-02	n	
				1.0E-01	A	8.0E-05	C			1	0.1		Glutaraldehyde	111-30-8	6.0E+03	n	7.0E+04	n	8.3E-02	n	3.5E-01	n	2.0E+03	n		4.0E-01	n	
				4.0E-04	I	1.0E-03	H	V		1		1.06E+05	Glycidyl	765-34-4	2.3E+01	n	2.1E+02	n	1.0E+00	n	4.4E+00	n	1.7E+00	n		3.3E-04	n	
				1.0E-01	I					1	0.1		Glyphosate	1071-83-6	6.3E+03	n	8.2E+04	n					2.0E+03	n	700	8.8E+00	n	3.1E+00
				1.0E-02	X			V		1			Guanidine	113-00-8	7.8E+02	n	1.2E+04	n					2.0E+02	n		4.5E-02	n	
				2.0E-02	P					1	0.1		Guanidine Chloride	50-01-1	1.3E+03	n	1.6E+04	n					4.0E+02	n				
				3.0E-02	X					1	0.1		Guanidine Nitrate	506-93-4	1.9E+03	n	2.5E+04	n					6.0E+02	n		1.5E-01	n	
				5.0E-05	I					1	0.1		Haloxyfop, Methyl	69806-40-2	3.2E+00	n	4.1E+01	n					7.6E-01	n		8.4E-03	n	
4.5E+00	I	1.3E-03	I	5.0E-04	I			V		1			Heptachlor	76-44-8	1.3E-01	c	6.3E-01	c	2.2E-03	c	9.4E-03	c	1.4E-03	c	0.4	1.2E-04	c	3.3E-02
9.1E+00	I	2.6E-03	I	1.3E-05	I			V		1			Heptachlor Epoxide	1024-57-3	7.0E-02	c*	3.3E-01	c*	1.1E-03	c	4.7E-03	c	1.4E-03	c*	0.2	2.8E-05	c*	4.1E-03
						3.0E-03	X	V		1		2.09E+02	Heptanal, n-	111-71-7	2.4E+01	n	1.0E+02	n	3.1E+00	n	1.3E+01	n	6.3E+00	n		1.4E-03	n	

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (see FQ #31); H = HEAST; F = See FAQ; W = see user guide Section 2.3.5; E = see user guide Section 2.3.6; L = see user's guide Section 5.2; M = mutagen; S = see user's guide Section 5; V = volatile; R = RBA applied (see user's guide Section 5.10) ; c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (see user's guide Section 5.13); s = concentration may exceed Csat (see user's guide Section 5.12)

Toxicity and Chemical-specific Information												Contaminant		Screening Levels												Protection of Ground Water SSLs		
SFO (mg/kg-day)$^{-1}$	key	IUR (ug/m^3)$^{-1}$	key	RfD_o (mg/kg-day)	key	RfC_i (mg/m^3)	key	volatile	mutagen	GIABS	ABS	C_{sat} (mg/kg)	Analyte	CAS No.	Resident Soil (mg/kg)	key	Industrial Soil (mg/kg)	key	Resident Air (ug/m^3)	key	Industrial Air (ug/m^3)	key	Tapwater (ug/L)	key	MCL (ug/L)	Risk-based SSL (mg/kg)	key	MCL-based SSL (mg/kg)
				3.0E-04	X	4.0E-01	P	V		1		5.79E+01	Heptane, N-	142-82-5	2.2E+01	n	2.9E+02	ns	4.2E+02	n	1.8E+03	n	6.0E+00	n		4.8E-02	n	
				2.0E-03	I			V		1			Hexabromobenzene	87-82-1	1.6E+02	n	2.3E+03	n					4.0E+01	n		2.3E-01	n	
				2.0E-04	I					1	0.1		Hexabromodiphenyl ether, 2,2',4,4',5,5'- (BDE-153)	68631-49-2	1.3E+01	n	1.6E+02	n					4.0E+00	n				
1.6E+00	I	4.6E-04	I	8.0E-04	I			V		1			Hexachlorobenzene	118-74-1	2.1E-01	c	9.6E-01	c	6.1E-03	c	2.7E-02	c	9.8E-03	c	1	1.2E-04	c	1.3E-02
7.8E-02	I	2.2E-05	I	1.0E-03	P			V		1		1.68E+01	Hexachlorobutadiene	87-68-3	1.2E+00	c*	5.3E+00	c	1.3E-01	c	5.6E-01	c	1.4E-01	c*		2.7E-04	c*	
6.3E+00	I	1.8E-03	I	8.0E-03	A					1	0.1		Hexachlorocyclohexane, Alpha-	319-84-6	8.6E-02	c	3.6E-01	c	1.6E-03	c	6.8E-03	c	7.2E-03	c		4.2E-05	c	
1.8E+00	I	5.3E-04	I							1	0.1		Hexachlorocyclohexane, Beta-	319-85-7	3.0E-01	c	1.3E+00	c	5.3E-03	c	2.3E-02	c	2.5E-02	c		1.5E-04	c	
1.1E+00	C	3.1E-04	C	3.0E-04	I					1	0.04		Hexachlorocyclohexane, Gamma- (Lindane)	58-89-9	5.7E-01	c*	2.5E+00	c	9.1E-03	c	4.0E-02	c	4.2E-02	c*	0.2	2.4E-04	c*	1.2E-03
1.8E+00	I	5.1E-04	I							1	0.1		Hexachlorocyclohexane, Technical	608-73-1	3.0E-01	c	1.3E+00	c	5.5E-03	c	2.4E-02	c	2.5E-02	c		1.5E-04	c	
				6.0E-03	I	2.0E-04	I	V		1		1.57E+01	Hexachlorocyclopentadiene	77-47-4	1.8E+00	n	7.5E+00	n	2.1E-01	n	8.8E-01	n	4.1E-01	n	50	1.3E-03	n	1.6E-01
4.0E-02	I	1.1E-05	C	7.0E-04	I	3.0E-02	I	V		1			Hexachloroethane	67-72-1	1.8E+00	c*	8.0E+00	c*	2.6E-01	c	1.1E+00	c	3.3E-01	c*		2.0E-04	c*	
				3.0E-04	I					1	0.1		Hexachlorophene	70-30-4	1.9E+01	n	2.5E+02	n					6.0E+00	n		8.0E+00	n	
8.0E-02	I			4.0E-03	I					1	0.015		Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	121-82-4	8.3E+00	c*	3.8E+01	c					9.7E-01	c*		3.7E-04	c*	
						1.0E-05	I	V		1		3.39E+03	Hexamethylene Diisocyanate, 1,6-	822-06-0	3.1E+00	n	1.3E+01	n	1.0E-02	n	4.4E-02	n	2.1E-02	n		2.1E-04	n	
				4.0E-04	P					1	0.1		Hexamethylphosphoramide	680-31-9	2.5E+01	n	3.3E+02	n					8.0E+00	n		1.8E-03	n	
						7.0E-01	I	V		1		1.41E+02	Hexane, N-	110-54-3	6.1E+02	ns	2.5E+03	ns	7.3E+02	n	3.1E+03	n	1.5E+03	n		1.0E+01	n	
				2.0E+00	P					1	0.1		Hexanedioic Acid	124-04-9	1.3E+05	nm	1.6E+06	nm					4.0E+04	n		9.9E+00	n	
				5.0E-03	I	3.0E-02	I	V		1		3.28E+03	Hexanone, 2-	591-78-6	2.0E+02	n	1.3E+03	n	3.1E+01	n	1.3E+02	n	3.8E+01	n		8.8E-03	n	
				3.3E-02	I					1	0.1		Hexazinone	51235-04-2	2.1E+03	n	2.7E+04	n					6.4E+02	n		3.0E-01	n	
				2.5E-02	I					1	0.1		Hexythiazox	78587-05-0	1.6E+03	n	2.1E+04	n					1.1E+02	n		5.0E-01	n	
				1.7E-02	O					1	0.1		Hydramethylnon	67485-29-4	1.1E+03	n	1.4E+04	n					3.4E+02	n		1.2E+05	n	
3.0E+00	I	4.9E-03	I			3.0E-05	P	V		1		1.12E+05	Hydrazine	302-01-2	3.2E-02	c*	1.4E-01	c*	5.7E-04	c*	2.5E-03	c*	1.1E-03	c*		2.2E-07	c*	
3.0E+00	I	4.9E-03	I							1			Hydrazine Sulfate	10034-93-2	2.3E-01	c	1.1E+00	c	5.7E-04	c	2.5E-03	c	2.6E-02	c				
						2.0E-02	I	V		1			Hydrogen Chloride	7647-01-0	2.8E+07	nm	1.2E+08	nm	2.1E+01	n	8.8E+01	n	4.2E+01	n				
				4.0E-02	C	1.4E-02	C	V		1			Hydrogen Fluoride	7664-39-3	3.1E+03	n	4.7E+04	n	1.5E+01	n	6.1E+01	n	2.8E+01	n				
						2.0E-03	I	V		1			Hydrogen Sulfide	7783-06-4	2.8E+06	nm	1.2E+07	nm	2.1E+00	n	8.8E+00	n	4.2E+00	n				
6.0E-02	P			4.0E-02	P					1	0.1		Hydroquinone	123-31-9	9.0E+00	c	3.8E+01	c					1.3E+00	c		8.7E-04	c	
6.1E-02	O			2.5E-03	O					1	0.1		Imazalil	35554-44-0	8.9E+00	c*	3.8E+01	c*					9.0E-01	c*		1.5E-02	c*	
				2.5E-01	I					1	0.1		Imazaquin	81335-37-7	1.6E+04	n	2.1E+05	nm					4.9E+03	n		2.4E+01	n	
				2.5E+00	O					1	0.1		Imazethapyr	81335-77-5	1.6E+05	nm	2.1E+06	nm					4.7E+04	n		4.1E+01	n	
				1.0E-02	A					1			Iodine	7553-56-2	7.8E+02	n	1.2E+04	n					2.0E+02	n		1.2E+01	n	
				4.0E-02	I					1	0.1		Iprodione	36734-19-7	2.5E+03	n	3.3E+04	n					7.4E+02	n		2.2E-01	n	
				7.0E-01	P					1			Iron	7439-89-6	5.5E+04	n	8.2E+05	nm					1.4E+04	n		3.5E+02	n	
				3.0E-01	I			V		1		1.00E+04	Isobutyl Alcohol	78-83-1	2.3E+04	ns	3.5E+05	nms					5.9E+03	n		1.2E+00	n	
9.5E-04	I			2.0E-01	I	2.0E+00	C			1	0.1		Isophorone	78-59-1	5.7E+02	c*	2.4E+03	c*	2.1E+03	n	8.8E+03	n	7.8E+01	c*		2.6E-02	c*	
				1.5E-02	I			V		1			Isopropalin	33820-53-0	1.2E+03	n	1.8E+04	n					4.0E+01	n		9.2E-01	n	
				2.0E+00	P	2.0E-01	P	V		1		1.09E+05	Isopropanol	67-63-0	5.6E+03	n	2.4E+04	n	2.1E+02	n	8.8E+02	n	4.1E+02	n		8.4E-02	n	
				1.0E-01	I					1	0.1		Isopropyl Methyl Phosphonic Acid	1832-54-8	6.3E+03	n	8.2E+04	n					2.0E+03	n		4.3E-01	n	
				5.0E-02	I					1	0.1		Isoxaben	82558-50-7	3.2E+03	n	4.1E+04	n					7.3E+02	n		2.0E+00	n	
						3.0E-01	A	V		1			JP-7	E1737665	4.3E+08	nm	1.8E+09	nm	3.1E+02	n	1.3E+03	n	6.3E+02	n				
				8.0E-03	O					1	0.1		Lactofen	77501-63-4	5.1E+02	n	6.6E+03	n					1.0E+02	n		4.6E+00	n	
				2.0E-04	X					1	0.1		Lactonitrile	78-97-7	1.3E+01	n	1.6E+02	n					4.0E+00	n		8.1E-04	n	
				5.0E-05	P					1			Lanthanum	7439-91-0	3.9E+00	n	5.8E+01	n					1.0E+00	n				
				2.1E-05	P					1	0.1		Lanthanum Acetate Hydrate	100587-90-4	1.3E+00	n	1.7E+01	n					4.2E-01	n				
				1.9E-05	P					1			Lanthanum Chloride Heptahydrate	10025-84-0	1.5E+00	n	2.2E+01	n					3.7E-01	n				
				2.8E-05	P					1			Lanthanum Chloride, Anhydrous	10099-58-8	2.2E+00	n	3.3E+01	n					5.7E-01	n				
				1.6E-05	P					1			Lanthanum Nitrate Hexahydrate	10277-43-7	1.3E+00	n	1.9E+01	n					3.2E-01	n				
													Lead Compounds															
8.5E-03	C	1.2E-05	C							1			~Lead Phosphate	7446-27-7	8.2E+01	c	3.8E+02	c	2.3E-01	c	1.0E+00	c	9.1E+00	c				
8.5E-03	C	1.2E-05	C							1	0.1		~Lead acetate	301-04-2	6.4E+01	c	2.7E+02	c	2.3E-01	c	1.0E+00	c	9.2E+00	c		1.8E-03	c	
										1			~Lead and Compounds	7439-92-1	4.0E+02	L	8.0E+02	n	1.5E-01	n			1.5E+01	n	15		n	1.4E+01
8.5E-03	C	1.2E-05	C							1	0.1		~Lead subacetate	1335-32-6	6.4E+01	c	2.7E+02	c	2.3E-01	c	1.0E+00	c	9.2E+00	c		2.0E-03	c	
				1.0E-07	I			V		1		2.43E+00	~Tetraethyl Lead	78-00-2	7.8E-03	n	1.2E-01	n					1.3E-03	n		4.7E-06	n	
				5.0E-06	P			V		1		3.83E+02	Lewisite	541-25-3	3.9E-01	n	5.8E+00	n					9.0E-02	n		3.8E-05	n	
				7.7E-03	O					1	0.1		Linuron	330-55-2	4.9E+02	n	6.3E+03	n					1.3E+02	n		1.1E-01	n	
				2.0E-03	P					1			Lithium	7439-93-2	1.6E+02	n	2.3E+03	n					4.0E+01	n		1.2E+01	n	
				5.0E-04	I					1	0.1		MCPA	94-74-6	3.2E+01	n	4.1E+02	n					7.5E+00	n		2.0E-03	n	
				4.4E-03	O					1	0.1		MCPB	94-81-5	2.8E+02	n	3.6E+03	n					6.5E+01	n		2.6E-02	n	
				1.0E-03	I					1	0.1		MCPP	93-65-2	6.3E+01	n	8.2E+02	n					1.6E+01	n		4.7E-03	n	
				2.0E-02	I					1	0.1		Malathion	121-75-5	1.3E+03	n	1.6E+04	n					3.9E+02	n		1.0E-01	n	
				1.0E-01	I	7.0E-04	C			1	0.1		Maleic Anhydride	108-31-6	6.3E+03	n	8.0E+04	n	7.3E-01	n	3.1E+00	n	1.9E+03	n		3.8E-01	n	
				5.0E-01	I					1	0.1		Maleic Hydrazide	123-33-1	3.2E+04	n	4.1E+05	nm					1.0E+04	n		2.1E+00	n	
				1.0E-04	P					1	0.1		Malononitrile	109-77-3	6.3E+00	n	8.2E+01	n					2.0E+00	n		4.1E-04	n	
				3.0E-02	H					1	0.1		Mancozeb	8018-01-7	1.9E+03	n	2.5E+04	n					5.4E+02	n		7.6E-01	n	
				5.0E-03	I					1	0.1		Maneb	12427-38-2	3.2E+02	n	4.1E+03	n					9.8E+01	n		1.4E-01	n	
				1.4E-01	I	5.0E-05	I			1			Manganese (Diet)	7439-96-5														
				2.4E-02	S	5.0E-05	I			0.04			Manganese (Non-diet)	7439-96-5	1.8E+03	n	2.6E+04	n	5.2E-02	n	2.2E-01	n	4.3E+02	n		2.8E+01	n	
				9.0E-05	H					1	0.1		Mephosfolan	950-10-7	5.7E+00	n	7.4E+01	n					1.8E+00	n		2.6E-03	n	
				3.0E-02	I					1	0.1		Mepiquat Chloride	24307-26-4	1.9E+03	n	2.5E+04	n					6.0E+02	n		2.0E-01	n	
1.1E-02	P			4.0E-03	P					1	0.1		Mercaptobenzothiazole, 2-	149-30-4	4.9E+01	c**	2.1E+02	c*					6.3E+00	c*		1.8E-02	c*	
													Mercury Compounds															

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (see FQ #31); H = HEAST; F = See FAQ; W = see user guide Section 2.3.5; E = see user guide Section 2.3.6; L = see user's guide Section 5.2; M = mutagen; S = see user's guide Section 5; V = volatile; R = RBA applied (see user's guide Section 5.10) ; c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (see user's guide Section 5.13); s = concentration may exceed Csat (see user's guide Section 5.12)

Toxicity and Chemical-specific Information												Contaminant		Screening Levels												Protection of Ground Water SSLs		
SFO (mg/kg-day)$^{-1}$	key	IUR (ug/m^3)$^{-1}$	key	RfD_o (mg/kg-day)	key	RfC_i (mg/m^3)	key	volatile	mutagen	GIABS	ABS	C_{sat} (mg/kg)	Analyte	CAS No.	Resident Soil (mg/kg)	key	Industrial Soil (mg/kg)	key	Resident Air (ug/m^3)	key	Industrial Air (ug/m^3)	key	Tapwater (ug/L)	key	MCL (ug/L)	Risk-based SSL (mg/kg)	key	MCL-based SSL (mg/kg)
				3.0E-04	I	3.0E-04	S			0.07			~Mercuric Chloride (and other Mercury salts)	7487-94-7	2.3E+01	n	3.5E+02	n	3.1E-01	n	1.3E+00	n	5.7E+00	n	2			
						3.0E-04	I	V		1		3.13E+00	~Mercury (elemental)	7439-97-6	1.1E+01	ns	4.6E+01	ns	3.1E-01	n	1.3E+00	n	6.3E-01	n	2	3.3E-02	n	1.0E-01
				1.0E-04	I					1			~Methyl Mercury	22967-92-6	7.8E+00	n	1.2E+02	n					2.0E+00	n		1.4E+01	n	
				8.0E-05	I					1	0.1		~Phenylmercuric Acetate	62-38-4	5.1E+00	n	6.6E+01	n					1.6E+00	n		5.0E-04	n	
				3.0E-05	I			V		1			Merphos	150-50-5	2.3E+00	n	3.5E+01	n					6.0E-01	n		5.9E-02	n	
				1.0E-04	O					1	0.1		Merphos Oxide	78-48-8	6.3E+00	n	8.2E+01	n					2.8E-01	n		1.4E-03	n	
				6.0E-02	I					1	0.1		Metalaxyl	57837-19-1	3.8E+03	n	4.9E+04	n					1.2E+03	n		3.3E-01	n	
				1.0E-04	I	3.0E-02	P	V		1		4.58E+03	Methacrylonitrile	126-98-7	7.5E+00	n	1.0E+02	n	3.1E+01	n	1.3E+02	n	1.9E+00	n		4.3E-04	n	
				5.0E-05	I					1	0.1		Methamidophos	10265-92-6	3.2E+00	n	4.1E+01	n					1.0E+00	n		2.1E-04	n	
				2.0E+00	I	2.0E+01	I	V		1		1.06E+05	Methanol	67-56-1	1.2E+05	nms	1.2E+06	nms	2.1E+04	n	8.8E+04	n	2.0E+04	n		4.1E+00	n	
				1.5E-03	O					1	0.1		Methidathion	950-37-8	9.5E+01	n	1.2E+03	n					2.9E+01	n		7.1E-03	n	
				2.5E-02	I					1	0.1		Methomyl	16752-77-5	1.6E+03	n	2.1E+04	n					5.0E+02	n		1.1E-01	n	
4.9E-02	C	1.4E-05	C							1	0.1		Methoxy-5-nitroaniline, 2-	99-59-2	1.1E+01	c	4.7E+01	c	2.0E-01	c	8.8E-01	c	1.5E+00	c		5.3E-04	c	
				5.0E-03	I					1	0.1		Methoxychlor	72-43-5	3.2E+02	n	4.1E+03	n					3.7E+01	n	40	2.0E+00	n	2.2E+00
				8.0E-03	P	1.0E-03	P	V		1		1.15E+05	Methoxyethanol Acetate, 2-	110-49-6	1.1E+02	n	5.1E+02	n	1.0E+00	n	4.4E+00	n	2.1E+00	n		4.2E-04	n	
				5.0E-03	P	2.0E-02	I	V		1		1.06E+05	Methoxyethanol, 2-	109-86-4	3.3E+02	n	3.5E+03	n	2.1E+01	n	8.8E+01	n	2.9E+01	n		5.9E-03	n	
				1.0E+00	X			V		1		2.90E+04	Methyl Acetate	79-20-9	7.8E+04	ns	1.2E+06	nms					2.0E+04	n		4.1E+00	n	
						2.0E-02	P	V		1		6.75E+03	Methyl Acrylate	96-33-3	1.5E+02	n	6.1E+02	n	2.1E+01	n	8.8E+01	n	4.2E+01	n		8.9E-03	n	
				6.0E-01	I	5.0E+00	I	V		1		2.84E+04	Methyl Ethyl Ketone (2-Butanone)	78-93-3	2.7E+04	n	1.9E+05	nms	5.2E+03	n	2.2E+04	n	5.6E+03	n		1.2E+00	n	
		1.0E-03	X	1.0E-03	P	2.0E-05	X	V		1		1.80E+05	Methyl Hydrazine	60-34-4	1.4E-01	c**	6.2E-01	c**	2.8E-03	c**	1.2E-02	c**	5.6E-03	c**		1.3E-06	c**	
						3.0E+00	I	V		1		3.36E+03	Methyl Isobutyl Ketone (4-methyl-2-pentanone)	108-10-1	3.3E+04	ns	1.4E+05	nms	3.1E+03	n	1.3E+04	n	6.3E+03	n		1.4E+00	n	
						1.0E-03	C	V		1		1.01E+04	Methyl Isocyanate	624-83-9	4.6E+00	n	1.9E+01	n	1.0E+00	n	4.4E+00	n	2.1E+00	n		5.9E-04	n	
				1.4E+00	I	7.0E-01	I	V		1		2.36E+03	Methyl Methacrylate	80-62-6	4.4E+03	ns	1.9E+04	ns	7.3E+02	n	3.1E+03	n	1.4E+03	n		3.0E-01	n	
				2.5E-04	I					1	0.1		Methyl Parathion	298-00-0	1.6E+01	n	2.1E+02	n					4.5E+00	n		7.4E-03	n	
				6.0E-02	X					1	0.1		Methyl Phosphonic Acid	993-13-5	3.8E+03	n	4.9E+04	n					1.2E+03	n		2.4E-01	n	
				6.0E-03	H	4.0E-02	H	V		1		3.93E+02	Methyl Styrene (Mixed Isomers)	25013-15-4	3.2E+02	n	2.6E+03	ns	4.2E+01	n	1.8E+02	n	2.3E+01	n		3.8E-02	n	
9.9E-02	C	2.8E-05	C							1	0.1		Methyl methanesulfonate	66-27-3	5.5E+00	c	2.3E+01	c	1.0E-01	c	4.4E-01	c	7.9E-01	c		1.6E-04	c	
1.8E-03	C	2.6E-07	C			3.0E+00	I	V		1		8.87E+03	Methyl tert-Butyl Ether (MTBE)	1634-04-4	4.7E+01	c	2.1E+02	c	1.1E+01	c	4.7E+01	c	1.4E+01	c		3.2E-03	c	
				3.0E-04	X					1	0.1		Methyl-1,4-benzenediamine dihydrochloride, 2-	615-45-2	1.9E+01	n	2.5E+02	n					6.0E+00	n		3.6E-03	n	
						3.0E+00	X	V		1		2.45E+03	Methyl-2-Pentanol, 4-	108-11-2	5.4E+04	ns	2.3E+05	nms	3.1E+03	n	1.3E+04	n	6.3E+03	n		1.4E+00	n	
9.0E-03	P			2.0E-02	X					1	0.1		Methyl-5-Nitroaniline, 2-	99-55-8	6.0E+01	c*	2.6E+02	c*					8.2E+00	c*		4.6E-03	c*	
8.3E+00	C	2.4E-03	C							1	0.1		Methyl-N-nitro-N-nitrosoguanidine, N-	70-25-7	6.5E-02	c	2.8E-01	c	1.2E-03	c	5.1E-03	c	9.4E-03	c		3.2E-06	c	
1.3E-01	C	3.7E-05	C							1	0.1		Methylaniline Hydrochloride, 2-	636-21-5	4.2E+00	c	1.8E+01	c	7.6E-02	c	3.3E-01	c	6.0E-01	c		2.6E-04	c	
				1.0E-02	A					1	0.1		Methylarsonic acid	124-58-3	6.3E+02	n	8.2E+03	n					2.0E+02	n		5.8E-02	n	
				2.0E-04	X					1	0.1		Methylbenzene,1-4-diamine monohydrochloride, 2-	74612-12-7	1.3E+01	n	1.6E+02	n					4.0E+00	n				
1.0E-01	X			3.0E-04	X					1	0.1		Methylbenzene-1,4-diamine sulfate, 2-	615-50-9	5.4E+00	c**	2.3E+01	c*					7.8E-01	c**				
2.2E+01	C	6.3E-03	C						M	1	0.1		Methylcholanthrene, 3-	56-49-5	5.5E-03	c	1.0E-01	c	1.6E-04	c	1.9E-03	c	1.1E-03	c		2.2E-03	c	
2.0E-03	I	1.0E-08	I	6.0E-03	I	6.0E-01	I	V	M	1		3.32E+03	Methylene Chloride	75-09-2	5.7E+01	c**	1.0E+03	c**	1.0E+02	c**	1.2E+03	c**	1.1E+01	c**	5	2.9E-03	c**	1.3E-03
1.0E-01	P	4.3E-04	C	2.0E-03	P				M	1	0.1		Methylene-bis(2-chloroaniline), 4,4'-	101-14-4	1.2E+00	c	2.3E+01	c*	2.4E-03	c	2.9E-02	c	1.6E-01	c		1.8E-03	c	
4.6E-02	I	1.3E-05	C							1	0.1		Methylene-bis(N,N-dimethyl) Aniline, 4,4'-	101-61-1	1.2E+01	c	5.0E+01	c	2.2E-01	c	9.4E-01	c	4.8E-01	c		2.6E-03	c	
1.6E+00	C	4.6E-04	C			2.0E-02	C			1	0.1		Methylenebisbenzenamine, 4,4'-	101-77-9	3.4E-01	c	1.4E+00	c	6.1E-03	c	2.7E-02	c	4.7E-02	c		2.1E-04	c	
						6.0E-04	I			1	0.1		Methylenediphenyl Diisocyanate	101-68-8	8.5E+05	nm	3.6E+06	nm	6.3E-01	n	2.6E+00	n						
				7.0E-02	H			V		1		5.00E+02	Methylstyrene, Alpha-	98-83-9	5.5E+03	ns	8.2E+04	ns					7.8E+02	n		1.2E+00	n	
				1.5E-01	I					1	0.1		Metolachlor	51218-45-2	9.5E+03	n	1.2E+05	nm					2.7E+03	n		3.2E+00	n	
				2.5E-02	I					1	0.1		Metribuzin	21087-64-9	1.6E+03	n	2.1E+04	n					4.9E+02	n		1.5E-01	n	
				2.5E-01	I					1	0.1		Metsulfuron-methyl	74223-64-6	1.6E+04	n	2.1E+05	nm					4.9E+03	n		1.9E+00	n	
				3.0E+00	P			V		1		3.42E-01	Mineral oils	8012-95-1	2.3E+05	nms	3.5E+06	nms					6.0E+04	n		2.4E+03	n	
1.8E+01	C	5.1E-03	C	2.0E-04	I			V		1			Mirex	2385-85-5	3.6E-02	c	1.7E-01	c	5.5E-04	c	2.4E-03	c	8.8E-04	c		6.3E-04	c	
				2.0E-03	I					1	0.1		Molinate	2212-67-1	1.3E+02	n	1.6E+03	n					3.0E+01	n		1.7E-02	n	
				5.0E-03	I					1			Molybdenum	7439-98-7	3.9E+02	n	5.8E+03	n					1.0E+02	n		2.0E+00	n	
				1.0E-01	I					1			Monochloramine	10599-90-3	7.8E+03	n	1.2E+05	nm					2.0E+03	n	4000			
				2.0E-03	P					1	0.1		Monomethylaniline	100-61-8	1.3E+02	n	1.6E+03	n					3.8E+01	n		1.4E-02	n	
				2.5E-02	I					1	0.1		Myclobutanil	88671-89-0	1.6E+03	n	2.1E+04	n					4.5E+02	n		5.6E+00	n	
				3.0E-04	X					1	0.1		N,N'-Diphenyl-1,4-benzenediamine	74-31-7	1.9E+01	n	2.5E+02	n					3.6E+00	n		3.7E-01	n	
				2.0E-03	I			V		1			Naled	300-76-5	1.6E+02	n	2.3E+03	n					4.0E+01	n		1.8E-02	n	
				3.0E-02	X	1.0E-01	P	V		1			Naphtha, High Flash Aromatic (HFAN)	64742-95-6	2.3E+03	n	3.5E+04	n	1.0E+02	n	4.4E+02	n	1.5E+02	n				
1.8E+00	C	0.0E+00	C							1	0.1		Naphthylamine, 2-	91-59-8	3.0E-01	c	1.3E+00	c					3.9E-02	c		2.0E-04	c	
				1.2E-01	O					1	0.1		Napropamide	15299-99-7	7.6E+03	n	9.8E+04	n					2.0E+03	n		1.3E+01	n	
		2.6E-04	C	1.1E-02	C	1.4E-05	C			1	0.1		Nickel Acetate	373-02-4	6.7E+02	n	8.1E+03	n	1.1E-02	c**	4.7E-02	c**	2.2E+02	n		4.5E-02	n	
		2.6E-04	C	1.1E-02	C	1.4E-05	C			1	0.1		Nickel Carbonate	3333-67-3	6.7E+02	n	8.1E+03	n	1.1E-02	c**	4.7E-02	c**	2.2E+02	n				
		2.6E-04	C	1.1E-02	C	1.4E-05	C	V		1			Nickel Carbonyl	13463-39-3	8.2E+02	n	1.1E+04	n	1.1E-02	c**	4.7E-02	c**	2.2E-02	c**				
		2.6E-04	C	1.1E-02	C	1.4E-05	C			0.04			Nickel Hydroxide	12054-48-7	8.2E+02	n	1.1E+04	n	1.1E-02	c**	4.7E-02	c**	2.0E+02	n				
		2.6E-04	C	1.1E-02	C	2.0E-05	C			0.04			Nickel Oxide	1313-99-1	8.4E+02	n	1.2E+04	n	1.1E-02	c**	4.7E-02	c**	2.0E+02	n				
		2.4E-04	I	1.1E-02	C	1.4E-05	C			0.04			Nickel Refinery Dust	E715532	8.2E+02	n	1.1E+04	n	1.2E-02	c**	5.1E-02	c**	2.2E+02	n		3.2E+01	n	
		2.6E-04	C	2.0E-02	I	9.0E-05	A			0.04			Nickel Soluble Salts	7440-02-0	1.5E+03	n	2.2E+04	n	1.1E-02	c**	4.7E-02	c**	3.9E+02	n		2.6E+01	n	
1.7E+00	C	4.8E-04	I	1.1E-02	C	1.4E-05	C			0.04			Nickel Subsulfide	12035-72-2	4.1E-01	c	1.9E+00	c	5.8E-03	c**	2.6E-02	c**	4.5E-02	c				
		2.6E-04	C	1.1E-02	C	1.4E-05	C			1	0.1		Nickelocene	1271-28-9	6.7E+02	n	8.1E+03	n	1.1E-02	c**	4.7E-02	c**	2.2E+02	n				
				1.6E+00	I					1			Nitrate	14797-55-8	1.3E+05	nm	1.9E+06	nm					3.2E+04	n	10000			
										1			Nitrate + Nitrite (as N)	E701177											10000			
				1.0E-01	I					1			Nitrite	14797-65-0	7.8E+03	n	1.2E+05	nm					2.0E+03	n	1000			
				1.0E-02	X	5.0E-05	X			1	0.1		Nitroaniline, 2-	88-74-4	6.3E+02	n	8.0E+03	n	5.2E-02	n	2.2E-01	n	1.9E+02	n		8.0E-02	n	

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (see FQ #31); H = HEAST; F = See FAQ; W = see user guide Section 2.3.5; E = see user guide Section 2.3.6; L = see user's guide Section 5.2; M = mutagen; S = see user's guide Section 5; V = volatile; R = RBA applied (see user's guide Section 5.10) ; c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (see user's guide Section 5.13); s = concentration may exceed Csat (see user's guide Section 5.12)

Toxicity and Chemical-specific Information													Contaminant		Screening Levels												Protection of Ground Water SSLs		
SFO (mg/kg-day)$^{-1}$	key	IUR (ug/m^3)$^{-1}$	key	RfD_o (mg/kg-day)	key	RfC_i (mg/m^3)	key	volatile	mutagen	GIABS	ABS	C_{sat} (mg/kg)	Analyte	CAS No.	Resident Soil (mg/kg)	key	Industrial Soil (mg/kg)	key	Resident Air (ug/m^3)	key	Industrial Air (ug/m^3)	key	Tapwater (ug/L)	key	MCL (ug/L)	Risk-based SSL (mg/kg)	key	MCL-based SSL (mg/kg)
2.0E-02	P			4.0E-03	P	6.0E-03	P			1	0.1		Nitroaniline, 4-	100-01-6	2.7E+01	c**	1.1E+02	c*	6.3E+00	n	2.6E+01	n	3.8E+00	c*		1.6E-03	c*		
		4.0E-05	I	2.0E-03	I	9.0E-03	I	V		1		3.05E+03	Nitrobenzene	98-95-3	5.1E+00	c*	2.2E+01	c*	7.0E-02	c	3.1E-01	c	1.4E-01	c*		9.2E-05	c*		
				3.0E+03	P					1	0.1		Nitrocellulose	9004-70-0	1.9E+08	nm	2.5E+09	nm					6.0E+07	n		1.3E+04	n		
				7.0E-02	H					1	0.1		Nitrofurantoin	67-20-9	4.4E+03	n	5.7E+04	n					1.4E+03	n		6.1E-01	n		
1.3E+00	C	3.7E-04	C							1	0.1		Nitrofurazone	59-87-0	4.2E-01	c	1.8E+00	c	7.6E-03	c	3.3E-02	c	6.0E-02	c		5.4E-05	c		
1.7E-02	P			1.0E-04	P					1	0.1		Nitroglycerin	55-63-0	6.3E+00	n	8.2E+01	n					2.0E+00	n		8.5E-04	n		
				1.0E-01	I					1	0.1		Nitroguanidine	556-88-7	6.3E+03	n	8.2E+04	n					2.0E+03	n		4.8E-01	n		
		8.8E-06	P			5.0E-03	P	V		1		1.80E+04	Nitromethane	75-52-5	5.4E+00	c*	2.4E+01	c*	3.2E-01	c*	1.4E+00	c*	6.4E-01	c*		1.4E-04	c*		
		2.7E-03	H			2.0E-02	I	V		1		4.86E+03	Nitropropane, 2-	79-46-9	1.4E-02	c	6.0E-02	c	1.0E-03	c	4.5E-03	c	2.1E-03	c		5.4E-07	c		
2.7E+01	C	7.7E-03	C						M	1	0.1		Nitroso-N-ethylurea, N-	759-73-9	4.5E-03	c	8.5E-02	c	1.3E-04	c	1.6E-03	c	9.2E-04	c		2.2E-07	c		
1.2E+02	C	3.4E-02	C						M	1	0.1		Nitroso-N-methylurea, N-	684-93-5	1.0E-03	c	1.9E-02	c	3.0E-05	c	3.6E-04	c	2.1E-04	c		4.6E-08	c		
5.4E+00	I	1.6E-03	I					V		1			Nitroso-di-N-butylamine, N-	924-16-3	9.9E-02	c	4.6E-01	c	1.8E-03	c	7.7E-03	c	2.7E-03	c		5.5E-06	c		
7.0E+00	I	2.0E-03	C							1	0.1		Nitroso-di-N-propylamine, N-	621-64-7	7.8E-02	c	3.3E-01	c	1.4E-03	c	6.1E-03	c	1.1E-02	c		8.1E-06	c		
2.8E+00	I	8.0E-04	C							1	0.1		Nitrosodiethanolamine, N-	1116-54-7	1.9E-01	c	8.2E-01	c	3.5E-03	c	1.5E-02	c	2.8E-02	c		5.6E-06	c		
1.5E+02	I	4.3E-02	I						M	1	0.1		Nitrosodiethylamine, N-	55-18-5	8.1E-04	c	1.5E-02	c	2.4E-05	c	2.9E-04	c	1.7E-04	c		6.1E-08	c		
5.1E+01	I	1.4E-02	I	8.0E-06	P	4.0E-05	X	V	M	1		2.37E+05	Nitrosodimethylamine, N-	62-75-9	2.0E-03	c	3.4E-02	c	7.2E-05	c	8.8E-04	c	1.1E-04	c		2.7E-08	c		
4.9E-03	I	2.6E-06	C							1	0.1		Nitrosodiphenylamine, N-	86-30-6	1.1E+02	c	4.7E+02	c	1.1E+00	c	4.7E+00	c	1.2E+01	c		6.7E-02	c		
2.2E+01	I	6.3E-03	C					V		1		1.08E+05	Nitrosomethylethylamine, N-	10595-95-6	2.0E-02	c	9.1E-02	c	4.5E-04	c	1.9E-03	c	7.1E-04	c		2.0E-07	c		
6.7E+00	C	1.9E-03	C							1	0.1		Nitrosomorpholine [N-]	59-89-2	8.1E-02	c	3.4E-01	c	1.5E-03	c	6.5E-03	c	1.2E-02	c		2.8E-06	c		
9.4E+00	C	2.7E-03	C							1	0.1		Nitrosopiperidine [N-]	100-75-4	5.8E-02	c	2.4E-01	c	1.0E-03	c	4.5E-03	c	8.2E-03	c		4.4E-06	c		
2.1E+00	I	6.1E-04	I							1	0.1		Nitrosopyrrolidine, N-	930-55-2	2.6E-01	c	1.1E+00	c	4.6E-03	c	2.0E-02	c	3.7E-02	c		1.4E-05	c		
				1.0E-04	X					1	0.1		Nitrotoluene, m-	99-08-1	6.3E+00	n	8.2E+01	n					1.7E+00	n		1.6E-03	n		
2.2E-01	P			9.0E-04	P			V		1		1.51E+03	Nitrotoluene, o-	88-72-2	3.2E+00	c*	1.5E+01	c*					3.1E-01	c*		3.0E-04	c*		
1.6E-02	P			4.0E-03	P					1	0.1		Nitrotoluene, p-	99-99-0	3.4E+01	c**	1.4E+02	c*					4.3E+00	c*		4.0E-03	c*		
				3.0E-04	X	2.0E-02	P	V		1		6.86E+00	Nonane, n-	111-84-2	1.1E+01	ns	7.2E+01	ns	2.1E+01	n	8.8E+01	n	5.3E+00	n		7.5E-02	n		
				1.5E-02	O					1	0.1		Norflurazon	27314-13-2	9.5E+02	n	1.2E+04	n					2.9E+02	n		1.9E+00	n		
				3.0E-03	I					1	0.1		Octabromodiphenyl Ether	32536-52-0	1.9E+02	n	2.5E+03	n					6.0E+01	n		1.2E+01	n		
				5.0E-02	I					1	0.006		Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	2691-41-0	3.9E+03	n	5.7E+04	n					1.0E+03	n		1.3E+00	n		
				2.0E-03	H					1	0.1		Octamethylpyrophosphoramide	152-16-9	1.3E+02	n	1.6E+03	n					4.0E+01	n		9.6E-03	n		
7.8E-03	O			1.4E-01	O					1	0.1		Oryzalin	19044-88-3	7.0E+01	c	2.9E+02	c					7.9E+00	c		1.5E-02	c		
				5.0E-03	I					1	0.1		Oxadiazon	19666-30-9	3.2E+02	n	4.1E+03	n					4.7E+01	n		4.8E-01	n		
				2.5E-02	I					1	0.1		Oxamyl	23135-22-0	1.6E+03	n	2.1E+04	n					5.0E+02	n	200	1.1E-01	n	4.4E-02	
7.3E-02	O			3.0E-02	O					1	0.1		Oxyfluorfen	42874-03-3	7.4E+00	c	3.1E+01	c					5.4E-01	c		4.3E-02	c		
				1.3E-02	I					1	0.1		Paclobutrazol	76738-62-0	8.2E+02	n	1.1E+04	n					2.3E+02	n		4.6E-01	n		
				4.5E-03	I					1	0.1		Paraquat Dichloride	1910-42-5	2.8E+02	n	3.7E+03	n					9.0E+01	n		1.2E+00	n		
				6.0E-03	H					1	0.1		Parathion	56-38-2	3.8E+02	n	4.9E+03	n					8.6E+01	n		4.3E-01	n		
				5.0E-02	H			V		1			Pebulate	1114-71-2	3.9E+03	n	5.8E+04	n					5.6E+02	n		4.5E-01	n		
				3.0E-01	O					1	0.1		Pendimethalin	40487-42-1	1.9E+04	n	2.5E+05	nm					1.4E+03	n		1.6E+01	n		
				2.0E-03	I			V		1		3.12E-01	Pentabromodiphenyl Ether	32534-81-9	1.6E+02	ns	2.3E+03	ns					4.0E+01	n		1.7E+00	n		
				1.0E-04	I					1	0.1		Pentabromodiphenyl ether, 2,2',4,4',5- (BDE-99)	60348-60-9	6.3E+00	n	8.2E+01	n					2.0E+00	n		8.7E-02	n		
				8.0E-04	I			V		1			Pentachlorobenzene	608-93-5	6.3E+01	n	9.3E+02	n					3.2E+00	n		2.4E-02	n		
9.0E-02	P							V		1		4.57E+02	Pentachloroethane	76-01-7	7.7E+00	c	3.6E+01	c					6.5E-01	c		3.1E-04	c		
2.6E-01	H			3.0E-03	I			V		1			Pentachloronitrobenzene	82-68-8	2.7E+00	c*	1.3E+01	c					1.2E-01	c		1.5E-03	c		
4.0E-01	I	5.1E-06	C	5.0E-03	I					1	0.25		Pentachlorophenol	87-86-5	1.0E+00	c	4.0E+00	c	5.5E-01	c	2.4E+00	c	4.1E-02	c	1	5.7E-05	c	1.4E-03	
4.0E-03	X			2.0E-03	P					1	0.1		Pentaerythritol tetranitrate (PETN)	78-11-5	1.3E+02	n	5.7E+02	c**					1.9E+01	c**		2.8E-02	c**		
						1.0E+00	P	V		1		3.88E+02	Pentane, n-	109-66-0	8.1E+02	ns	3.4E+03	ns	1.0E+03	n	4.4E+03	n	2.1E+03	n		1.0E+01	n		
													Perchlorates																	
				7.0E-04	I					1			~Ammonium Perchlorate	7790-98-9	5.5E+01	n	8.2E+02	n					1.4E+01	n					
				7.0E-04	I					1			~Lithium Perchlorate	7791-03-9	5.5E+01	n	8.2E+02	n					1.4E+01	n					
				7.0E-04	I					1			~Perchlorate and Perchlorate Salts	14797-73-0	5.5E+01	n	8.2E+02	n					1.4E+01	n	15.0(F)				
				7.0E-04	I					1			~Potassium Perchlorate	7778-74-7	5.5E+01	n	8.2E+02	n					1.4E+01	n					
				7.0E-04	I					1			~Sodium Perchlorate	7601-89-0	5.5E+01	n	8.2E+02	n					1.4E+01	n					
				2.0E-02	P					1	0.1		Perfluorobutane sulfonic acid (PFBS)	375-73-5	1.3E+03	n	1.6E+04	n					4.0E+02	n		1.3E-01	n		
				2.0E-02	P					1	0.1		Perfluorobutanesulfonate	45187-15-3	1.3E+03	n	1.6E+04	n					4.0E+02	n		1.3E-01	n		
				5.0E-02	I					1	0.1		Permethrin	52645-53-1	3.2E+03	n	4.1E+04	n					1.0E+03	n		2.4E+02	n		
2.2E-03	C	6.3E-07	C							1	0.1		Phenacetin	62-44-2	2.5E+02	c	1.0E+03	c	4.5E+00	c	1.9E+01	c	3.4E+01	c		9.7E-03	c		
				2.4E-01	O					1	0.1		Phenmedipham	13684-63-4	1.5E+04	n	2.0E+05	nm					3.8E+03	n		2.1E+01	n		
				3.0E-01	I	2.0E-01	C			1	0.1		Phenol	108-95-2	1.9E+04	n	2.5E+05	nm	2.1E+02	n	8.8E+02	n	5.8E+03	n		3.3E+00	n		
				4.0E-03	I					1	0.1		Phenol, 2-(1-methylethoxy)-, methylcarbamate	114-26-1	2.5E+02	n	3.3E+03	n					7.8E+01	n		2.5E-02	n		
				5.0E-04	X					1	0.1		Phenothiazine	92-84-2	3.2E+01	n	4.1E+02	n					4.3E+00	n		1.4E-02	n		
				2.0E-04	X			V		1		1.29E+02	Phenyl Isothiocyanate	103-72-0	1.6E+01	n	2.3E+02	ns					2.6E+00	n		1.7E-03	n		
				6.0E-03	I					1	0.1		Phenylenediamine, m-	108-45-2	3.8E+02	n	4.9E+03	n					1.2E+02	n		3.2E-02	n		
1.2E-01	P			4.0E-03	P					1	0.1		Phenylenediamine, o-	95-54-5	4.5E+00	c*	1.9E+01	c					6.5E-01	c		1.7E-04	c		
				1.0E-03	X					1	0.1		Phenylenediamine, p-	106-50-3	6.3E+01	n	8.2E+02	n					2.0E+01	n		5.4E-03	n		
1.9E-03	H									1	0.1		Phenylphenol, 2-	90-43-7	2.8E+02	c	1.2E+03	c					3.0E+01	c		4.1E-01	c		
				2.0E-04	H					1	0.1		Phorate	298-02-2	1.3E+01	n	1.6E+02	n					3.0E+00	n		3.4E-03	n		
						3.0E-04	I	V		1		1.61E+03	Phosgene	75-44-5	3.1E-01	n	1.3E+00	n	3.1E-01	n	1.3E+00	n	6.3E-01	n		1.6E-04	n		
				2.0E-02	I					1	0.1		Phosmet	732-11-6	1.3E+03	n	1.6E+04	n					3.7E+02	n		8.2E-02	n		
													Phosphates, Inorganic																	
				4.9E+01	P					1			~Aluminum metaphosphate	13776-88-0	3.8E+06	nm	5.7E+07	nm					9.7E+05	n					
				4.9E+01	P					1			~Ammonium polyphosphate	68333-79-9	3.8E+06	nm	5.7E+07	nm					9.7E+05	n					

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Toxicity and Chemical-specific Information												Contaminant		Screening Levels													Protection of Ground Water SSLs		
SFO (mg/kg-day)$^{-1}$	key	IUR (ug/m^3)$^{-1}$	key	RfD_o (mg/kg-day)	key	RfC_i (mg/m^3)	key	volatile	mutagen	GIABS	ABS	C_{sat} (mg/kg)	Analyte	CAS No.	Resident Soil (mg/kg)	key	Industrial Soil (mg/kg)	key	Resident Air (ug/m^3)	key	Industrial Air (ug/m^3)	key	Tapwater (ug/L)	key	MCL (ug/L)	Risk-based SSL (mg/kg)	key	MCL-based SSL (mg/kg)
				4.9E+01	P					1			~Calcium pyrophosphate	7790-76-3	3.8E+06	nm	5.7E+07	nm					9.7E+05	n				
				4.9E+01	P					1			~Diammonium phosphate	7783-28-0	3.8E+06	nm	5.7E+07	nm					9.7E+05	n				
				4.9E+01	P					1			~Dicalcium phosphate	7757-93-9	3.8E+06	nm	5.7E+07	nm					9.7E+05	n				
				4.9E+01	P					1			~Dimagnesium phosphate	7782-75-4	3.8E+06	nm	5.7E+07	nm					9.7E+05	n				
				4.9E+01	P					1			~Dipotassium phosphate	7758-11-4	3.8E+06	nm	5.7E+07	nm					9.7E+05	n				
				4.9E+01	P					1			~Disodium phosphate	7558-79-4	3.8E+06	nm	5.7E+07	nm					9.7E+05	n				
				4.9E+01	P					1			~Monoaluminum phosphate	13530-50-2	3.8E+06	nm	5.7E+07	nm					9.7E+05	n				
				4.9E+01	P					1			~Monoammonium phosphate	7722-76-1	3.8E+06	nm	5.7E+07	nm					9.7E+05	n				
				4.9E+01	P					1			~Monocalcium phosphate	7758-23-8	3.8E+06	nm	5.7E+07	nm					9.7E+05	n				
				4.9E+01	P					1			~Monomagnesium phosphate	7757-86-0	3.8E+06	nm	5.7E+07	nm					9.7E+05	n				
				4.9E+01	P					1			~Monopotassium phosphate	7778-77-0	3.8E+06	nm	5.7E+07	nm					9.7E+05	n				
				4.9E+01	P					1			~Monosodium phosphate	7558-80-7	3.8E+06	nm	5.7E+07	nm					9.7E+05	n				
				4.9E+01	P					1			~Polyphosphoric acid	8017-16-1	3.8E+06	nm	5.7E+07	nm					9.7E+05	n				
				4.9E+01	P					1			~Potassium tripolyphosphate	13845-36-8	3.8E+06	nm	5.7E+07	nm					9.7E+05	n				
				4.9E+01	P					1			~Sodium acid pyrophosphate	7758-16-9	3.8E+06	nm	5.7E+07	nm					9.7E+05	n				
				4.9E+01	P					1			~Sodium aluminum phosphate (acidic)	7785-88-8	3.8E+06	nm	5.7E+07	nm					9.7E+05	n				
				4.9E+01	P					1			~Sodium aluminum phosphate (anhydrous)	10279-59-1	3.8E+06	nm	5.7E+07	nm					9.7E+05	n				
				4.9E+01	P					1			~Sodium aluminum phosphate (tetrahydrate)	10305-76-7	3.8E+06	nm	5.7E+07	nm					9.7E+05	n				
				4.9E+01	P					1			~Sodium hexametaphosphate	10124-56-8	3.8E+06	nm	5.7E+07	nm					9.7E+05	n				
				4.9E+01	P					1			~Sodium polyphosphate	68915-31-1	3.8E+06	nm	5.7E+07	nm					9.7E+05	n				
				4.9E+01	P					1			~Sodium trimetaphosphate	7785-84-4	3.8E+06	nm	5.7E+07	nm					9.7E+05	n				
				4.9E+01	P					1			~Sodium tripolyphosphate	7758-29-4	3.8E+06	nm	5.7E+07	nm					9.7E+05	n				
				4.9E+01	P					1			~Tetrapotassium phosphate	7320-34-5	3.8E+06	nm	5.7E+07	nm					9.7E+05	n				
				4.9E+01	P					1			~Tetrasodium pyrophosphate	7722-88-5	3.8E+06	nm	5.7E+07	nm					9.7E+05	n				
				4.9E+01	P					1			~Trialuminum sodium tetra decahydrogenoctaorthophosphate (dihydrate)	15136-87-5	3.8E+06	nm	5.7E+07	nm					9.7E+05	n				
				4.9E+01	P					1			~Tricalcium phosphate	7758-87-4	3.8E+06	nm	5.7E+07	nm					9.7E+05	n				
				4.9E+01	P					1			~Trimagnesium phosphate	7757-87-1	3.8E+06	nm	5.7E+07	nm					9.7E+05	n				
				4.9E+01	P					1			~Tripotassium phosphate	7778-53-2	3.8E+06	nm	5.7E+07	nm					9.7E+05	n				
				4.9E+01	P					1			~Trisodium phosphate	7601-54-9	3.8E+06	nm	5.7E+07	nm					9.7E+05	n				
				3.0E-04	I	3.0E-04	I	V		1			Phosphine	7803-51-2	2.3E+01	n	3.5E+02	n	3.1E-01	n	1.3E+00	n	5.7E-01	n				
				4.9E+01	P	1.0E-02	I			1			Phosphoric Acid	7664-38-2	3.0E+06	nm	2.9E+07	nm	1.0E+01	n	4.4E+01	n	9.7E+05	n				
				2.0E-05	I			V		1			Phosphorus, White	7723-14-0	1.6E+00	n	2.3E+01	n					4.0E-01	n		1.5E-03	n	
													Phthalates															
1.4E-02	I	2.4E-06	C	2.0E-02	I					1	0.1		~Bis(2-ethylhexyl)phthalate	117-81-7	3.9E+01	c*	1.6E+02	c	1.2E+00	c	5.1E+00	c	5.6E+00	c*	6	1.3E+00	c*	1.4E+00
1.9E-03	P			2.0E-01	I					1	0.1		~Butyl Benzyl Phthalate	85-68-7	2.9E+02	c*	1.2E+03	c					1.6E+01	c		2.4E-01	c	
				1.0E+00	I					1	0.1		~Butylphthalyl Butylglycolate	85-70-1	6.3E+04	n	8.2E+05	nm					1.3E+04	n		3.1E+02	n	
				1.0E-01	I					1	0.1		~Dibutyl Phthalate	84-74-2	6.3E+03	n	8.2E+04	n					9.0E+02	n		2.3E+00	n	
				8.0E-01	I					1	0.1		~Diethyl Phthalate	84-66-2	5.1E+04	n	6.6E+05	nm					1.5E+04	n		6.1E+00	n	
				1.0E-01	I			V		1			~Dimethylterephthalate	120-61-6	7.8E+03	n	1.2E+05	nm					1.9E+03	n		4.9E-01	n	
				1.0E-02	P					1	0.1		~Octyl Phthalate, di-N-	117-84-0	6.3E+02	n	8.2E+03	n					2.0E+02	n		5.7E+01	n	
				1.0E+00	H					1	0.1		~Phthalic Acid, P-	100-21-0	6.3E+04	n	8.2E+05	nm					1.9E+04	n		6.8E+00	n	
				2.0E+00	I	2.0E-02	C			1	0.1		~Phthalic Anhydride	85-44-9	1.3E+05	nm	1.6E+06	nm	2.1E+01	n	8.8E+01	n	3.9E+04	n		8.5E+00	n	
				7.0E-02	I					1	0.1		Picloram	1918-02-1	4.4E+03	n	5.7E+04	n					1.4E+03	n	500	3.8E-01	n	1.4E-01
				1.0E-04	X					1	0.1		Picramic Acid (2-Amino-4,6-dinitrophenol)	96-91-3	6.3E+00	n	8.2E+01	n					2.0E+00	n		1.3E-03	n	
				9.0E-04	X					1	0.1		Picric Acid (2,4,6-Trinitrophenol)	88-89-1	5.7E+01	n	7.4E+02	n					1.8E+01	n		8.4E-02	n	
				7.0E-05	O					1	0.1		Pirimiphos, Methyl	29232-93-7	4.4E+00	n	5.7E+01	n					8.5E-01	n		8.1E-04	n	
3.0E+01	C	8.6E-03	C	7.0E-06	H					1	0.1		Polybrominated Biphenyls	59536-65-1	1.8E-02	c*	7.7E-02	c*	3.3E-04	c	1.4E-03	c	2.6E-03	c*				
													Polychlorinated Biphenyls (PCBs)															
7.0E-02	S	2.0E-05	S	7.0E-05	I			V		1	0.14		~Aroclor 1016	12674-11-2	4.1E+00	n	2.7E+01	c**	1.4E-01	c	6.1E-01	c	2.2E-01	c**		2.1E-02	c**	
2.0E+00	S	5.7E-04	S					V		1	0.14		~Aroclor 1221	11104-28-2	2.0E-01	c	8.3E-01	c	4.9E-03	c	2.1E-02	c	4.7E-03	c		8.0E-05	c	
2.0E+00	S	5.7E-04	S					V		1	0.14		~Aroclor 1232	11141-16-5	1.7E-01	c	7.2E-01	c	4.9E-03	c	2.1E-02	c	4.7E-03	c		8.0E-05	c	
2.0E+00	S	5.7E-04	S					V		1	0.14		~Aroclor 1242	53469-21-9	2.3E-01	c	9.5E-01	c	4.9E-03	c	2.1E-02	c	7.8E-03	c		1.2E-03	c	
2.0E+00	S	5.7E-04	S					V		1	0.14		~Aroclor 1248	12672-29-6	2.3E-01	c	9.5E-01	c	4.9E-03	c	2.1E-02	c	7.8E-03	c		1.2E-03	c	
2.0E+00	S	5.7E-04	S	2.0E-05	I			V		1	0.14		~Aroclor 1254	11097-69-1	2.4E-01	c**	9.7E-01	c*	4.9E-03	c	2.1E-02	c	7.8E-03	c*		2.0E-03	c*	
2.0E+00	S	5.7E-04	S					V		1	0.14		~Aroclor 1260	11096-82-5	2.4E-01	c	9.9E-01	c	4.9E-03	c	2.1E-02	c	7.8E-03	c		5.5E-03	c	
				6.0E-04	X			V		1	0.14		~Aroclor 5460	11126-42-4	3.5E+01	n	4.4E+02	n					1.2E+01	n		2.0E+00	n	
3.9E+00	W	1.1E-03	W	2.3E-05	W	1.3E-03	W	V		1	0.14		~Heptachlorobiphenyl, 2,3,3',4,4',5,5'- (PCB 189)	39635-31-9	1.3E-01	c*	5.2E-01	c*	2.5E-03	c	1.1E-02	c	4.0E-03	c		2.8E-03	c	
3.9E+00	W	1.1E-03	W	2.3E-05	W	1.3E-03	W	V		1	0.14		~Hexachlorobiphenyl, 2,3',4,4',5,5'- (PCB 167)	52663-72-6	1.2E-01	c*	5.1E-01	c*	2.5E-03	c	1.1E-02	c	4.0E-03	c		1.7E-03	c	
3.9E+00	W	1.1E-03	W	2.3E-05	W	1.3E-03	W	V		1	0.14		~Hexachlorobiphenyl, 2,3,3',4,4',5'- (PCB 157)	69782-90-7	1.2E-01	c*	5.0E-01	c*	2.5E-03	c	1.1E-02	c	4.0E-03	c		1.7E-03	c	
3.9E+00	W	1.1E-03	W	2.3E-05	W	1.3E-03	W	V		1	0.14		~Hexachlorobiphenyl, 2,3,3',4,4',5- (PCB 156)	38380-08-4	1.2E-01	c*	5.0E-01	c*	2.5E-03	c	1.1E-02	c	4.0E-03	c		1.7E-03	c	
3.9E+03	W	1.1E+00	W	2.3E-08	W	1.3E-06	W	V		1	0.14		~Hexachlorobiphenyl, 3,3',4,4',5,5'- (PCB 169)	32774-16-6	1.2E-04	c*	5.1E-04	c*	2.5E-06	c	1.1E-05	c	4.0E-06	c		1.7E-06	c	
3.9E+00	W	1.1E-03	W	2.3E-05	W	1.3E-03	W	V		1	0.14		~Pentachlorobiphenyl, 2',3,4,4',5- (PCB 123)	65510-44-3	1.2E-01	c*	4.9E-01	c*	2.5E-03	c	1.1E-02	c	4.0E-03	c		1.0E-03	c	
3.9E+00	W	1.1E-03	W	2.3E-05	W	1.3E-03	W	V		1	0.14		~Pentachlorobiphenyl, 2,3',4,4',5- (PCB 118)	31508-00-6	1.2E-01	c*	4.9E-01	c*	2.5E-03	c	1.1E-02	c	4.0E-03	c		1.0E-03	c	
3.9E+00	W	1.1E-03	W	2.3E-05	W	1.3E-03	W	V		1	0.14		~Pentachlorobiphenyl, 2,3,3',4,4'- (PCB 105)	32598-14-4	1.2E-01	c*	4.9E-01	c*	2.5E-03	c	1.1E-02	c	4.0E-03	c		1.0E-03	c	
3.9E+00	W	1.1E-03	W	2.3E-05	W	1.3E-03	W	V		1	0.14		~Pentachlorobiphenyl, 2,3,4,4',5- (PCB 114)	74472-37-0	1.2E-01	c*	5.0E-01	c*	2.5E-03	c	1.1E-02	c	4.0E-03	c		1.0E-03	c	
1.3E+04	W	3.8E+00	W	7.0E-09	W	4.0E-07	W	V		1	0.14		~Pentachlorobiphenyl, 3,3',4,4',5- (PCB 126)	57465-28-8	3.6E-05	c*	1.5E-04	c*	7.4E-07	c	3.2E-06	c	1.2E-06	c		3.0E-07	c	
2.0E+00	I	5.7E-04	I					V		1	0.14		~Polychlorinated Biphenyls (high risk)	1336-36-3	2.3E-01	c	9.4E-01	c	4.9E-03	c	2.1E-02	c			0.5			
4.0E-01	I	1.0E-04	I					V		1	0.14		~Polychlorinated Biphenyls (low risk)	1336-36-3					2.8E-02	c	1.2E-01	c	4.4E-02	c	0.5	6.8E-03	c	7.8E-02
7.0E-02	I	2.0E-05	I					V		1	0.14		~Polychlorinated Biphenyls (lowest risk)	1336-36-3					1.4E-01	c	6.1E-01	c			0.5			
1.3E+01	W	3.8E-03	W	7.0E-06	W	4.0E-04	W			1	0.14		~Tetrachlorobiphenyl, 3,3',4,4'- (PCB 77)	32598-13-3	3.8E-02	c*	1.6E-01	c*	7.4E-04	c	3.2E-03	c	6.0E-03	c*		9.4E-04	c*	
3.9E+01	W	1.1E-02	W	2.3E-06	W	1.3E-04	W	V		1	0.14		~Tetrachlorobiphenyl, 3,4,4',5- (PCB 81)	70362-50-4	1.2E-02	c*	4.8E-02	c*	2.5E-04	c	1.1E-03	c	4.0E-04	c		6.2E-05	c	

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (see FQ #31); H = HEAST; F = See FAQ; W = see user guide Section 2.3.5; E = see user guide Section 2.3.6; L = see user's guide Section 5.2; M = mutagen; S = see user's guide Section 5; V = volatile; R = RBA applied (see user's guide Section 5.10) ; c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (see user's guide Section 5.13); s = concentration may exceed Csat (see user's guide Section 5.12)

Toxicity and Chemical-specific Information												Contaminant		Screening Levels												Protection of Ground Water SSLs		
SFO (mg/kg-day)$^{-1}$	key	IUR (ug/m^3)$^{-1}$	key	RfD_o (mg/kg-day)	key	RfC_i (mg/m^3)	key	volatile	mutagen	GIABS	ABS	C_{sat} (mg/kg)	Analyte	CAS No.	Resident Soil (mg/kg)	key	Industrial Soil (mg/kg)	key	Resident Air (ug/m^3)	key	Industrial Air (ug/m^3)	key	Tapwater (ug/L)	key	MCL (ug/L)	Risk-based SSL (mg/kg)	key	MCL-based SSL (mg/kg)
						6.0E-04	I			1	0.1		Polymeric Methylene Diphenyl Diisocyanate (PMDI)	9016-87-9	8.5E+05	nm	3.6E+06	nm	6.3E-01	n	2.6E+00	n						
													Polynuclear Aromatic Hydrocarbons (PAHs)																
				6.0E-02	I			V		1	0.13		~Acenaphthene	83-32-9	3.6E+03	n	4.5E+04	n					5.3E+02	n		5.5E+00	n	
				3.0E-01	I			V		1	0.13		~Anthracene	120-12-7	1.8E+04	n	2.3E+05	nm					1.8E+03	n		5.8E+01	n	
1.0E-01	E	6.0E-05	E					V	M	1	0.13		~Benz[a]anthracene	56-55-3	1.1E+00	c	2.1E+01	c	1.7E-02	c	2.0E-01	c	3.0E-02	c		1.1E-02	c	
1.2E+00	C	1.1E-04	C							1	0.13		~Benzo(j)fluoranthene	205-82-3	4.2E-01	c	1.8E+00	c	2.6E-02	c	1.1E-01	c	6.5E-02	c		7.8E-02	c	
1.0E+00	I	6.0E-04	I	3.0E-04	I	2.0E-06	I		M	1	0.13		~Benzo[a]pyrene	50-32-8	1.1E-01	c	2.1E+00	c	1.7E-03	c**	8.8E-03	n	2.5E-02	c	0.2	2.9E-02	c	2.4E-01
1.0E-01	E	6.0E-05	E						M	1	0.13		~Benzo[b]fluoranthene	205-99-2	1.1E+00	c	2.1E+01	c	1.7E-02	c	2.0E-01	c	2.5E-01	c		3.0E-01	c	
1.0E-02	E	6.0E-06	E						M	1	0.13		~Benzo[k]fluoranthene	207-08-9	1.1E+01	c	2.1E+02	c	1.7E-01	c	2.0E+00	c	2.5E+00	c		2.9E+00	c	
				8.0E-02	I			V		1	0.13		~Chloronaphthalene, Beta-	91-58-7	4.8E+03	n	6.0E+04	n					7.5E+02	n		3.9E+00	n	
1.0E-03	E	6.0E-07	E						M	1	0.13		~Chrysene	218-01-9	1.1E+02	c	2.1E+03	c	1.7E+00	c	2.0E+01	c	2.5E+01	c		9.0E+00	c	
1.0E+00	E	6.0E-04	E						M	1	0.13		~Dibenz[a,h]anthracene	53-70-3	1.1E-01	c	2.1E+00	c	1.7E-03	c	2.0E-02	c	2.5E-02	c		9.6E-02	c	
1.2E+01	C	1.1E-03	C							1	0.13		~Dibenzo(a,e)pyrene	192-65-4	4.2E-02	c	1.8E-01	c	2.6E-03	c	1.1E-02	c	6.5E-03	c		8.4E-02	c	
2.5E+02	C	7.1E-02	C						M	1	0.13		~Dimethylbenz(a)anthracene, 7,12-	57-97-6	4.6E-04	c	8.4E-03	c	1.4E-05	c	1.7E-04	c	1.0E-04	c		9.9E-05	c	
				4.0E-02	I					1	0.13		~Fluoranthene	206-44-0	2.4E+03	n	3.0E+04	n					8.0E+02	n		8.9E+01	n	
				4.0E-02	I			V		1	0.13		~Fluorene	86-73-7	2.4E+03	n	3.0E+04	n					2.9E+02	n		5.4E+00	n	
1.0E-01	E	6.0E-05	E						M	1	0.13		~Indeno[1,2,3-cd]pyrene	193-39-5	1.1E+00	c	2.1E+01	c	1.7E-02	c	2.0E-01	c	2.5E-01	c		9.8E-01	c	
2.9E-02	P			7.0E-02	A			V		1	0.13	3.94E+02	~Methylnaphthalene, 1-	90-12-0	1.8E+01	c	7.3E+01	c					1.1E+00	c		6.0E-03	c	
				4.0E-03	I			V		1	0.13		~Methylnaphthalene, 2-	91-57-6	2.4E+02	n	3.0E+03	n					3.6E+01	n		1.9E-01	n	
		3.4E-05	C	2.0E-02	I	3.0E-03	I	V		1	0.13		~Naphthalene	91-20-3	3.8E+00	c*	1.7E+01	c*	8.3E-02	c*	3.6E-01	c*	1.7E-01	c*		5.4E-04	c*	
1.2E+00	C	1.1E-04	C							1	0.13		~Nitropyrene, 4-	57835-92-4	4.2E-01	c	1.8E+00	c	2.6E-02	c	1.1E-01	c	1.9E-02	c		3.3E-03	c	
				3.0E-02	I			V		1	0.13		~Pyrene	129-00-0	1.8E+03	n	2.3E+04	n					1.2E+02	n		1.3E+01	n	
				2.0E-02	P					1	0.1		Potassium Perfluorobutane Sulfonate	29420-49-3	1.3E+03	n	1.6E+04	n					4.0E+02	n				
1.5E-01	I			9.0E-03	I					1	0.1		Prochloraz	67747-09-5	3.6E+00	c	1.5E+01	c					3.8E-01	c		1.9E-03	c	
				6.0E-03	H			V		1			Profluralin	26399-36-0	4.7E+02	n	7.0E+03	n					2.6E+01	n		1.6E+00	n	
				1.5E-02	I					1	0.1		Prometon	1610-18-0	9.5E+02	n	1.2E+04	n					2.5E+02	n		1.2E-01	n	
				4.0E-02	O					1	0.1		Prometryn	7287-19-6	2.5E+03	n	3.3E+04	n					6.0E+02	n		9.0E-01	n	
				7.5E-02	I					1	0.1		Pronamide	23950-58-5	4.7E+03	n	6.2E+04	n					1.2E+03	n		1.2E+00	n	
				1.3E-02	I					1	0.1		Propachlor	1918-16-7	8.2E+02	n	1.1E+04	n					2.5E+02	n		1.5E-01	n	
				5.0E-03	I					1	0.1		Propanil	709-98-8	3.2E+02	n	4.1E+03	n					8.2E+01	n		4.5E-02	n	
1.9E-01	O			4.0E-02	O					1	0.1		Propargite	2312-35-8	2.8E+00	c	1.2E+01	c					1.6E-01	c		1.1E-02	c	
				2.0E-03	I			V		1		1.11E+05	Propargyl Alcohol	107-19-7	1.6E+02	n	2.3E+03	n					4.0E+01	n		8.1E-03	n	
				2.0E-02	I					1	0.1		Propazine	139-40-2	1.3E+03	n	1.6E+04	n					3.4E+02	n		3.0E-01	n	
				2.0E-02	I					1	0.1		Propham	122-42-9	1.3E+03	n	1.6E+04	n					3.5E+02	n		2.2E-01	n	
				1.0E-01	O					1	0.1		Propiconazole	60207-90-1	6.3E+03	n	8.2E+04	n					1.6E+03	n		5.3E+00	n	
						8.0E-03	I	V		1		3.26E+04	Propionaldehyde	123-38-6	7.5E+01	n	3.1E+02	n	8.3E+00	n	3.5E+01	n	1.7E+01	n		3.4E-03	n	
				1.0E-01	X	1.0E+00	X	V		1		2.64E+02	Propyl benzene	103-65-1	3.8E+03	ns	2.4E+04	ns	1.0E+03	n	4.4E+03	n	6.6E+02	n		1.2E+00	n	
						3.0E+00	C	V		1		3.49E+02	Propylene	115-07-1	2.2E+03	ns	9.3E+03	ns	3.1E+03	n	1.3E+04	n	6.3E+03	n		6.0E+00	n	
				2.0E+01	P					1	0.1		Propylene Glycol	57-55-6	1.3E+06	nm	1.6E+07	nm					4.0E+05	n		8.1E+01	n	
						2.7E-04	A			1	0.1		Propylene Glycol Dinitrate	6423-43-4	3.9E+05	nm	1.6E+06	nm	2.8E-01	n	1.2E+00	n						
				7.0E-01	H	2.0E+00	I	V		1		1.06E+05	Propylene Glycol Monomethyl Ether	107-98-2	4.1E+04	n	3.7E+05	nms	2.1E+03	n	8.8E+03	n	3.2E+03	n		6.5E-01	n	
2.4E-01	I	3.7E-06	I			3.0E-02	I	V		1		7.77E+04	Propylene Oxide	75-56-9	2.1E+00	c	9.7E+00	c	7.6E-01	c*	3.3E+00	c*	2.7E-01	c		5.6E-05	c	
				1.0E-03	I			V		1		5.30E+05	Pyridine	110-86-1	7.8E+01	n	1.2E+03	n					2.0E+01	n		6.8E-03	n	
				5.0E-04	I					1	0.1		Quinalphos	13593-03-8	3.2E+01	n	4.1E+02	n					5.1E+00	n		4.3E-02	n	
3.0E+00	I									1	0.1		Quinoline	91-22-5	1.8E-01	c	7.7E-01	c					2.4E-02	c		7.8E-05	c	
				9.0E-03	I					1	0.1		Quizalofop-ethyl	76578-14-8	5.7E+02	n	7.4E+03	n					1.2E+02	n		1.9E+00	n	
						3.0E-02	A			1			Refractory Ceramic Fibers (units in fibers)	E715557					3.1E+01	S	1.3E+02	S						
				3.0E-02	I					1	0.1		Resmethrin	10453-86-8	1.9E+03	n	2.5E+04	n					6.7E+01	n		4.2E+01	n	
				5.0E-02	H			V		1			Ronnel	299-84-3	3.9E+03	n	5.8E+04	n					4.1E+02	n		3.7E+00	n	
				4.0E-03	I					1	0.1		Rotenone	83-79-4	2.5E+02	n	3.3E+03	n					6.1E+01	n		3.2E+01	n	
2.2E-01	C	6.3E-05	C						M	1	0.1		Safrole	94-59-7	5.5E-01	c	1.0E+01	c	1.6E-02	c	1.9E-01	c	9.6E-02	c		5.9E-05	c	
				5.0E-03	I					1			Selenious Acid	7783-00-8	3.9E+02	n	5.8E+03	n					1.0E+02	n				
				5.0E-03	I	2.0E-02	C			1			Selenium	7782-49-2	3.9E+02	n	5.8E+03	n	2.1E+01	n	8.8E+01	n	1.0E+02	n	50	5.2E-01	n	2.6E-01
				5.0E-03	C	2.0E-02	C			1			Selenium Sulfide	7446-34-6	3.9E+02	n	5.8E+03	n	2.1E+01	n	8.8E+01	n	1.0E+02	n				
				1.4E-01	O					1	0.1		Sethoxydim	74051-80-2	8.8E+03	n	1.1E+05	nm					1.6E+03	n		1.4E+01	n	
						3.0E-03	C			1			Silica (crystalline, respirable)	7631-86-9	4.3E+06	nm	1.8E+07	nm	3.1E+00	n	1.3E+01	n						
				5.0E-03	I					0.04			Silver	7440-22-4	3.9E+02	n	5.8E+03	n					9.4E+01	n		8.0E-01	n	
1.2E-01	H			5.0E-03	I					1	0.1		Simazine	122-34-9	4.5E+00	c*	1.9E+01	c					6.1E-01	c	4	3.0E-04	c	2.0E-03
				1.3E-02	I					1	0.1		Sodium Acifluorfen	62476-59-9	8.2E+02	n	1.1E+04	n					2.6E+02	n		2.1E+00	n	
				4.0E-03	I					1			Sodium Azide	26628-22-8	3.1E+02	n	4.7E+03	n					8.0E+01	n				
2.7E-01	H			3.0E-02	I					1	0.1		Sodium Diethyldithiocarbamate	148-18-5	2.0E+00	c	8.5E+00	c					2.9E-01	c		1.8E-04	c	
				5.0E-02	A	1.3E-02	C			1			Sodium Fluoride	7681-49-4	3.9E+03	n	5.8E+04	n	1.4E+01	n	5.7E+01	n	1.0E+03	n	4000	1.5E+02	n	6.0E+02
				2.0E-05	I					1	0.1		Sodium Fluoroacetate	62-74-8	1.3E+00	n	1.6E+01	n					4.0E-01	n		8.1E-05	n	
				1.0E-03	H					1			Sodium Metavanadate	13718-26-8	7.8E+01	n	1.2E+03	n					2.0E+01	n				
				8.0E-04	P					1			Sodium Tungstate	13472-45-2	6.3E+01	n	9.3E+02	n					1.6E+01	n				
				8.0E-04	P					1			Sodium Tungstate Dihydrate	10213-10-2	6.3E+01	n	9.3E+02	n					1.6E+01	n				
2.4E-02	H			3.0E-02	I					1	0.1		Stirofos (Tetrachlorovinphos)	961-11-5	2.3E+01	c*	9.6E+01	c					2.8E+00	c		8.2E-03	c	
				6.0E-01	I					1			Strontium, Stable	7440-24-6	4.7E+04	n	7.0E+05	nm					1.2E+04	n		4.2E+02	n	
				3.0E-04	I					1	0.1		Strychnine	57-24-9	1.9E+01	n	2.5E+02	n					5.9E+00	n		6.5E-02	n	
				2.0E-01	I	1.0E+00	I	V		1		8.67E+02	Styrene	100-42-5	6.0E+03	ns	3.5E+04	ns	1.0E+03	n	4.4E+03	n	1.2E+03	n	100	1.3E+00	n	1.1E-01
				3.0E-03	P					1	0.1		Styrene-Acrylonitrile (SAN) Trimer	57964-39-3	1.9E+02	n	2.5E+03	n					4.8E+01	n				

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (see FQ #31); H = HEAST; F = See FAQ; W = see user guide Section 2.3.5; E = see user guide Section 2.3.6; L = see user's guide Section 5.2; M = mutagen; S = see user's guide Section 5; V = volatile; R = RBA applied (see user's guide Section 5.10) ; c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (see user's guide Section 5.13); s = concentration may exceed Csat (see user's guide Section 5.12)

Toxicity and Chemical-specific Information												Contaminant		Screening Levels										Protection of Ground Water SSLs		
SFO (mg/kg-day)$^{-1}$	key	IUR (ug/m^3)$^{-1}$	key	RfD_o (mg/kg-day)	key	RfC_i (mg/m^3)	key	volatile	mutagen	GIABS	ABS	C_{sat} (mg/kg)	Analyte	CAS No.	Resident Soil (mg/kg)	key	Industrial Soil (mg/kg)	key	Resident Air (ug/m^3)	key	Industrial Air (ug/m^3)	key	Tapwater (ug/L)	key	MCL (ug/L)	Risk-based SSL (mg/kg)	key	MCL-based SSL (mg/kg)
				1.0E-03	P	2.0E-03	X			1	0.1		Sulfolane	126-33-0	6.3E+01	n	8.2E+02	n	2.1E+00	n	8.8E+00	n	2.0E+01	n		4.4E-03	n	
				8.0E-04	P					1	0.1		Sulfonylbis(4-chlorobenzene), 1,1'-	80-07-9	5.1E+01	n	6.6E+02	n					1.1E+01	n		6.5E-02	n	
						1.0E-03	C	V		1			Sulfur Trioxide	7446-11-9	1.4E+06	nm	6.0E+06	nm	1.0E+00	n	4.4E+00	n	2.1E+00	n				
						1.0E-03	C			1			Sulfuric Acid	7664-93-9	1.4E+06	nm	6.0E+06	nm	1.0E+00	n	4.4E+00	n						
2.5E-02	I	7.1E-06	I	5.0E-02	H					1	0.1		Sulfurous acid, 2-chloroethyl 2-[4-(1,1-dimethylethyl)phenoxy]-1-methylethyl	140-57-8	2.2E+01	c	9.2E+01	c	4.0E-01	c	1.7E+00	c	1.3E+00	c		1.5E-02	c	
				3.0E-02	H					1	0.1		TCMTB	21564-17-0	1.9E+03	n	2.5E+04	n					4.8E+02	n		3.3E+00	n	
				7.0E-02	I					1	0.1		Tebuthiuron	34014-18-1	4.4E+03	n	5.7E+04	n					1.4E+03	n		3.9E-01	n	
				2.0E-02	H					1	0.1		Temephos	3383-96-8	1.3E+03	n	1.6E+04	n					4.0E+02	n		7.6E+01	n	
				1.3E-02	I					1	0.1		Terbacil	5902-51-2	8.2E+02	n	1.1E+04	n					2.5E+02	n		7.5E-02	n	
				2.5E-05	H			V		1		3.09E+01	Terbufos	13071-79-9	2.0E+00	n	2.9E+01	n					2.4E-01	n		5.2E-04	n	
				1.0E-03	I					1	0.1		Terbutryn	886-50-0	6.3E+01	n	8.2E+02	n					1.3E+01	n		1.9E-02	n	
5.0E-03	C	1.3E-06	C					V		1	0.1		Tert-Butyl Acetate	540-88-5	8.0E+00	c	3.5E+01	c	2.2E+00	c	9.4E+00	c	3.3E+00	c		7.6E-04	c	
				1.0E-04	I					1	0.1		Tetrabromodiphenyl ether, 2,2',4,4'- (BDE-47)	5436-43-1	6.3E+00	n	8.2E+01	n					2.0E+00	n		5.3E-02	n	
				3.0E-04	I			V		1			Tetrachlorobenzene, 1,2,4,5-	95-94-3	2.3E+01	n	3.5E+02	n					1.7E+00	n		7.9E-03	n	
2.6E-02	I	7.4E-06	I	3.0E-02	I			V		1		6.80E+02	Tetrachloroethane, 1,1,1,2-	630-20-6	2.0E+00	c	8.8E+00	c	3.8E-01	c	1.7E+00	c	5.7E-01	c		2.2E-04	c	
2.0E-01	I	5.8E-05	C	2.0E-02	I			V		1		1.90E+03	Tetrachloroethane, 1,1,2,2-	79-34-5	6.0E-01	c	2.7E+00	c	4.8E-02	c	2.1E-01	c	7.6E-02	c		3.0E-05	c	
2.1E-03	I	2.6E-07	I	6.0E-03	I	4.0E-02	I	V		1		1.66E+02	Tetrachloroethylene	127-18-4	2.4E+01	c**	1.0E+02	c**	1.1E+01	c**	4.7E+01	c**	1.1E+01	c**	5	5.1E-03	c**	2.3E-03
				3.0E-02	I					1	0.1		Tetrachlorophenol, 2,3,4,6-	58-90-2	1.9E+03	n	2.5E+04	n					2.4E+02	n		1.8E-01	n	
2.0E+01	H							V		1			Tetrachlorotoluene, p- alpha, alpha, alpha-	5216-25-1	3.5E-02	c	1.6E-01	c					1.3E-03	c		4.5E-06	c	
				5.0E-04	I					1	0.1		Tetraethyl Dithiopyrophosphate	3689-24-5	3.2E+01	n	4.1E+02	n					7.1E+00	n		5.2E-03	n	
						8.0E+01	I	V		1		2.05E+03	Tetrafluoroethane, 1,1,1,2-	811-97-2	1.0E+05	nms	4.3E+05	nms	8.3E+04	n	3.5E+05	n	1.7E+05	n		9.3E+01	n	
				2.0E-03	P					1	0.0007		Tetryl (Trinitrophenylmethylnitramine)	479-45-8	1.6E+02	n	2.3E+03	n					3.9E+01	n		3.7E-01	n	
				2.0E-05	S					1			Thallic Oxide	1314-32-5	1.6E+00	n	2.3E+01	n					4.0E-01	n				
				1.0E-05	X					1			Thallium (I) Nitrate	10102-45-1	7.8E-01	n	1.2E+01	n					2.0E-01	n				
				1.0E-05	X					1			Thallium (Soluble Salts)	7440-28-0	7.8E-01	n	1.2E+01	n					2.0E-01	n	2	1.4E-02	n	1.4E-01
				1.0E-05	X			V		1			Thallium Acetate	563-68-8	7.8E-01	n	1.2E+01	n					2.0E-01	n		4.1E-05	n	
				2.0E-05	X			V		1			Thallium Carbonate	6533-73-9	1.6E+00	n	2.3E+01	n					4.0E-01	n		8.3E-05	n	
				1.0E-05	X					1			Thallium Chloride	7791-12-0	7.8E-01	n	1.2E+01	n					2.0E-01	n				
				1.0E-05	S					1			Thallium Selenite	12039-52-0	7.8E-01	n	1.2E+01	n					2.0E-01	n				
				2.0E-05	X					1			Thallium Sulfate	7446-18-6	1.6E+00	n	2.3E+01	n					4.0E-01	n				
				4.3E-02	O					1	0.1		Thifensulfuron-methyl	79277-27-3	2.7E+03	n	3.5E+04	n					8.6E+02	n		2.6E-01	n	
				1.0E-02	I					1	0.1		Thiobencarb	28249-77-6	6.3E+02	n	8.2E+03	n					1.6E+02	n		5.5E-01	n	
				7.0E-02	X					1	0.0075		Thiodiglycol	111-48-8	5.4E+03	n	7.9E+04	n					1.4E+03	n		2.8E-01	n	
				3.0E-04	H					1	0.1		Thiofanox	39196-18-4	1.9E+01	n	2.5E+02	n					5.3E+00	n		1.8E-03	n	
1.2E-02	O			2.7E-02	O					1	0.1		Thiophanate, Methyl	23564-05-8	4.7E+01	c*	2.0E+02	c					6.7E+00	c*		5.7E-03	c*	
				1.5E-02	O					1	0.1		Thiram	137-26-8	9.5E+02	n	1.2E+04	n					2.9E+02	n		4.2E-01	n	
				6.0E-01	H					1			Tin	7440-31-5	4.7E+04	n	7.0E+05	nm					1.2E+04	n		3.0E+03	n	
						1.0E-04	A	V		1			Titanium Tetrachloride	7550-45-0	1.4E+05	nm	6.0E+05	nm	1.0E-01	n	4.4E-01	n	2.1E-01	n				
				8.0E-02	I	5.0E+00	I	V		1		8.18E+02	Toluene	108-88-3	4.9E+03	ns	4.7E+04	ns	5.2E+03	n	2.2E+04	n	1.1E+03	n	1000	7.6E-01	n	6.9E-01
		1.1E-05	C			8.0E-06	C	V		1			Toluene-2,4-diisocyanate	584-84-9	6.4E+00	n	2.7E+01	n	8.3E-03	n	3.5E-02	n	1.7E-02	n		2.5E-04	n	
1.8E-01	X			2.0E-04	X					1	0.1		Toluene-2,5-diamine	95-70-5	3.0E+00	c**	1.3E+01	c*					4.3E-01	c**		1.3E-04	c**	
		1.1E-05	C			8.0E-06	C	V		1		1.71E+03	Toluene-2,6-diisocyanate	91-08-7	5.3E+00	n	2.2E+01	n	8.3E-03	n	3.5E-02	n	1.7E-02	n		2.6E-04	n	
				5.0E-03	P					1	0.1		Toluic Acid, p-	99-94-5	3.2E+02	n	4.1E+03	n					9.0E+01	n		2.3E-02	n	
1.6E-02	P	5.1E-05	C							1	0.1		Toluidine, o- (Methylaniline, 2-)	95-53-4	3.4E+01	c	1.4E+02	c	5.5E-02	c	2.4E-01	c	4.7E+00	c		2.0E-03	c	
3.0E-02	P			4.0E-03	X					1	0.1		Toluidine, p-	106-49-0	1.8E+01	c*	7.7E+01	c*					2.5E+00	c*		1.1E-03	c*	
				3.0E+00	P			V		1		3.42E-01	Total Petroleum Hydrocarbons (Aliphatic High)	E1790670	2.3E+05	nms	3.5E+06	nms					6.0E+04	n		2.4E+03	n	
						6.0E-01	P	V		1		1.41E+02	Total Petroleum Hydrocarbons (Aliphatic Low)	E1790666	5.2E+02	ns	2.2E+03	ns	6.3E+02	n	2.6E+03	n	1.3E+03	n		8.8E+00	n	
				1.0E-02	X	1.0E-01	P	V		1		6.86E+00	Total Petroleum Hydrocarbons (Aliphatic Medium)	E1790668	9.6E+01	ns	4.4E+02	ns	1.0E+02	n	4.4E+02	n	1.0E+02	n		1.5E+00	n	
				4.0E-02	P					1	0.1		Total Petroleum Hydrocarbons (Aromatic High)	E1790676	2.5E+03	n	3.3E+04	n					8.0E+02	n		8.9E+01	n	
				4.0E-03	P	3.0E-02	P	V		1		1.82E+03	Total Petroleum Hydrocarbons (Aromatic Low)	E1790672	8.2E+01	n	4.2E+02	n	3.1E+01	n	1.3E+02	n	3.3E+01	n		1.7E-02	n	
				4.0E-03	P	3.0E-03	P	V		1			Total Petroleum Hydrocarbons (Aromatic Medium)	E1790674	1.1E+02	n	6.0E+02	n	3.1E+00	n	1.3E+01	n	5.5E+00	n		2.3E-02	n	
1.1E+00	I	3.2E-04	I	9.0E-05	P					1	0.1		Toxaphene	8001-35-2	4.9E-01	c*	2.1E+00	c*	8.8E-03	c	3.8E-02	c	7.1E-02	c*	3	1.1E-02	c*	4.6E-01
				3.0E-05	X					1	0.1		Toxaphene, Weathered	E1841606	1.9E+00	n	2.5E+01	n					6.0E-01	n		9.3E-02	n	
				7.5E-03	I					1	0.1		Tralomethrin	66841-25-6	4.7E+02	n	6.2E+03	n					1.5E+02	n		5.8E+01	n	
				3.0E-04	A			V		1			Tri-n-butyltin	688-73-3	2.3E+01	n	3.5E+02	n					3.7E+00	n		8.2E-02	n	
				8.0E+01	X					1	0.1		Triacetin	102-76-1	5.1E+06	nm	6.6E+07	nm					1.6E+06	n		4.5E+02	n	
				3.4E-02	O					1	0.1		Triadimefon	43121-43-3	2.1E+03	n	2.8E+04	n					6.3E+02	n		5.0E-01	n	
7.2E-02	O			2.5E-02	O			V		1			Triallate	2303-17-5	9.7E+00	c	4.6E+01	c					4.7E-01	c		1.0E-03	c	
				1.0E-02	I					1	0.1		Triasulfuron	82097-50-5	6.3E+02	n	8.2E+03	n					2.0E+02	n		2.1E-01	n	
				8.0E-03	I					1	0.1		Tribenuron-methyl	101200-48-0	5.1E+02	n	6.6E+03	n					1.6E+02	n		6.1E-02	n	
				5.0E-03	I			V		1			Tribromobenzene, 1,2,4-	615-54-3	3.9E+02	n	5.8E+03	n					4.5E+01	n		6.4E-02	n	
				9.0E-03	X					1	0.1		Tribromophenol, 2,4,6-	118-79-6	5.7E+02	n	7.4E+03	n					1.2E+02	n		2.2E-01	n	
9.0E-03	P			1.0E-02	P					1	0.1		Tributyl Phosphate	126-73-8	6.0E+01	c*	2.6E+02	c*					5.2E+00	c*		2.5E-02	c*	
				3.0E-04	P					1	0.1		Tributyltin Compounds	E1790678	1.9E+01	n	2.5E+02	n					6.0E+00	n				
				3.0E-04	I					1	0.1		Tributyltin Oxide	56-35-9	1.9E+01	n	2.5E+02	n					5.7E+00	n		2.9E+02	n	
				3.0E+01	I	5.0E+00	P	V		1		9.10E+02	Trichloro-1,2,2-trifluoroethane, 1,1,2-	76-13-1	6.7E+03	ns	2.8E+04	ns	5.2E+03	n	2.2E+04	n	1.0E+04	n		2.6E+01	n	
7.0E-02	I			2.0E-02	I					1	0.1		Trichloroacetic Acid	76-03-9	7.8E+00	c	3.3E+01	c					1.1E+00	c	60	2.2E-04	c	1.2E-02
2.9E-02	H									1	0.1		Trichloroaniline HCl, 2,4,6-	33663-50-2	1.9E+01	c	7.9E+01	c					2.7E+00	c		7.4E-03	c	
7.0E-03	X			3.0E-05	X					1	0.1		Trichloroaniline, 2,4,6-	634-93-5	1.9E+00	n	2.5E+01	n					4.0E-01	n		3.6E-03	n	
				8.0E-04	X			V		1			Trichlorobenzene, 1,2,3-	87-61-6	6.3E+01	n	9.3E+02	n					7.0E+00	n		2.1E-02	n	
2.9E-02	P			1.0E-02	I	2.0E-03	P	V		1		4.04E+02	Trichlorobenzene, 1,2,4-	120-82-1	2.4E+01	c**	1.1E+02	c**	2.1E+00	n	8.8E+00	n	1.2E+00	c**	70	3.4E-03	c**	2.0E-01

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (see FQ #31); H = HEAST; F = See FAQ; W = see user guide Section 2.3.5; E = see user guide Section 2.3.6; L = see user's guide Section 5.2; M = mutagen; S = see user's guide Section 5; V = volatile; R = RBA applied (see user's guide Section 5.10) ; c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (see user's guide Section 5.13); s = concentration may exceed Csat (see user's guide Section 5.12)

Toxicity and Chemical-specific Information													Contaminant		Screening Levels										Protection of Ground Water SSLs		
SFO (mg/kg-day)$^{-1}$	key	IUR (ug/m^3)$^{-1}$	key	RfD_o (mg/kg-day)	key	RfC_i (mg/m^3)	key	volatile	mutagen	GIABS	ABS	C_{sat} (mg/kg)	Analyte	CAS No.	Resident Soil (mg/kg)	key	Industrial Soil (mg/kg)	key	Resident Air (ug/m^3)	key	Industrial Air (ug/m^3)	key	Tapwater (ug/L)	key	MCL (ug/L)	Risk-based SSL (mg/kg)	key	MCL-based SSL (mg/kg)
				2.0E+00	I	5.0E+00	I	V		1		6.40E+02	Trichloroethane, 1,1,1-	71-55-6	8.1E+03	ns	3.6E+04	ns	5.2E+03	n	2.2E+04	n	8.0E+03	n	200	2.8E+00	n	7.0E-02
5.7E-02	I	1.6E-05	I	4.0E-03	I	2.0E-04	X	V		1		2.16E+03	Trichloroethane, 1,1,2-	79-00-5	1.1E+00	c**	5.0E+00	c**	1.8E-01	c**	7.7E-01	c**	2.8E-01	c**	5	8.9E-05	c**	1.6E-03
4.6E-02	I	4.1E-06	I	5.0E-04	I	2.0E-03	I	V	M	1		6.92E+02	Trichloroethylene	79-01-6	9.4E-01	c**	6.0E+00	c**	4.8E-01	c**	3.0E+00	c**	4.9E-01	c**	5	1.8E-04	c**	1.8E-03
				3.0E-01	I			V		1		1.23E+03	Trichlorofluoromethane	75-69-4	2.3E+04	ns	3.5E+05	nms					5.2E+03	n		3.3E+00	n	
				1.0E-01	I					1	0.1		Trichlorophenol, 2,4,5-	95-95-4	6.3E+03	n	8.2E+04	n					1.2E+03	n		4.0E+00	n	
1.1E-02	I	3.1E-06	I	1.0E-03	P					1	0.1		Trichlorophenol, 2,4,6-	88-06-2	4.9E+01	c**	2.1E+02	c**	9.1E-01	c	4.0E+00	c	4.1E+00	c**		4.0E-03	c**	
				1.0E-02	I					1	0.1		Trichlorophenoxyacetic Acid, 2,4,5-	93-76-5	6.3E+02	n	8.2E+03	n					1.6E+02	n		6.8E-02	n	
				8.0E-03	I					1	0.1		Trichlorophenoxypropionic acid, -2,4,5	93-72-1	5.1E+02	n	6.6E+03	n					1.1E+02	n	50	6.1E-02	n	2.8E-02
				5.0E-03	I			V		1		1.28E+03	Trichloropropane, 1,1,2-	598-77-6	3.9E+02	n	5.8E+03	ns					8.8E+01	n		3.5E-02	n	
3.0E+01	I			4.0E-03	I	3.0E-04	I	V	M	1		1.40E+03	Trichloropropane, 1,2,3-	96-18-4	5.1E-03	c	1.1E-01	c	3.1E-01	n	1.3E+00	n	7.5E-04	c		3.2E-07	c	
				3.0E-03	X	3.0E-04	P	V		1		3.11E+02	Trichloropropene, 1,2,3-	96-19-5	7.3E-01	n	3.1E+00	n	3.1E-01	n	1.3E+00	n	6.2E-01	n		3.1E-04	n	
				2.0E-02	A					1	0.1		Tricresyl Phosphate (TCP)	1330-78-5	1.3E+03	n	1.6E+04	n					1.6E+02	n		1.5E+01	n	
				3.0E-03	I					1	0.1		Tridiphane	58138-08-2	1.9E+02	n	2.5E+03	n					1.8E+01	n		1.3E-01	n	
						7.0E-03	I	V		1		2.79E+04	Triethylamine	121-44-8	1.2E+02	n	4.8E+02	n	7.3E+00	n	3.1E+01	n	1.5E+01	n		4.4E-03	n	
				2.0E+00	P					1	0.1		Triethylene Glycol	112-27-6	1.3E+05	nm	1.6E+06	nm					4.0E+04	n		8.8E+00	n	
						2.0E+01	P	V		1		4.81E+03	Trifluoroethane, 1,1,1-	420-46-2	1.5E+04	ns	6.2E+04	ns	2.1E+04	n	8.8E+04	n	4.2E+04	n		1.3E+02	n	
7.7E-03	I			7.5E-03	I			V		1			Trifluralin	1582-09-8	9.0E+01	c**	4.2E+02	c*					2.6E+00	c*		8.4E-02	c*	
2.0E-02	P			1.0E-02	P					1	0.1		Trimethyl Phosphate	512-56-1	2.7E+01	c*	1.1E+02	c*					3.9E+00	c*		8.6E-04	c*	
				1.0E-02	I	6.0E-02	I	V		1		2.93E+02	Trimethylbenzene, 1,2,3-	526-73-8	3.4E+02	ns	2.0E+03	ns	6.3E+01	n	2.6E+02	n	5.5E+01	n		8.1E-02	n	
				1.0E-02	I	6.0E-02	I	V		1		2.19E+02	Trimethylbenzene, 1,2,4-	95-63-6	3.0E+02	ns	1.8E+03	ns	6.3E+01	n	2.6E+02	n	5.6E+01	n		8.1E-02	n	
				1.0E-02	I	6.0E-02	I	V		1		1.82E+02	Trimethylbenzene, 1,3,5-	108-67-8	2.7E+02	ns	1.5E+03	ns	6.3E+01	n	2.6E+02	n	6.0E+01	n		8.7E-02	n	
				1.0E-02	X			V		1		2.96E+01	Trimethylpentene, 2,4,4-	25167-70-8	7.8E+02	ns	1.2E+04	ns					6.5E+01	n		2.2E-01	n	
				3.0E-02	I					1	0.019		Trinitrobenzene, 1,3,5-	99-35-4	2.2E+03	n	3.2E+04	n					5.9E+02	n		2.1E+00	n	
3.0E-02	I			5.0E-04	I					1	0.032		Trinitrotoluene, 2,4,6-	118-96-7	2.1E+01	c**	9.6E+01	c**					2.5E+00	c**		1.5E-02	c**	
				2.0E-02	P					1	0.1		Triphenylphosphine Oxide	791-28-6	1.3E+03	n	1.6E+04	n					3.6E+02	n		1.5E+00	n	
				2.0E-02	A					1	0.1		Tris(1,3-Dichloro-2-propyl) Phosphate	13674-87-8	1.3E+03	n	1.6E+04	n					3.6E+02	n		8.0E+00	n	
				1.0E-02	X					1	0.1		Tris(1-chloro-2-propyl)phosphate	13674-84-5	6.3E+02	n	8.2E+03	n					1.9E+02	n		6.5E-01	n	
2.3E+00	C	6.6E-04	C					V		1		4.67E+02	Tris(2,3-dibromopropyl)phosphate	126-72-7	2.8E-01	c	1.3E+00	c	4.3E-03	c	1.9E-02	c	6.8E-03	c		1.3E-04	c	
2.0E-02	P			7.0E-03	P					1	0.1		Tris(2-chloroethyl)phosphate	115-96-8	2.7E+01	c*	1.1E+02	c*					3.8E+00	c*		3.8E-03	c*	
3.2E-03	P			1.0E-01	P					1	0.1		Tris(2-ethylhexyl)phosphate	78-42-2	1.7E+02	c*	7.2E+02	c					2.4E+01	c*		1.2E+02	c*	
				8.0E-04	P					1			Tungsten	7440-33-7	6.3E+01	n	9.3E+02	n					1.6E+01	n		2.4E+00	n	
				2.0E-04	A	4.0E-05	A			1			Uranium (Soluble Salts)	E715565	1.6E+01	n	2.3E+02	n	4.2E-02	n	1.8E-01	n	4.0E+00	n	30	1.8E+00	n	1.4E+01
1.0E+00	C	2.9E-04	C						M	1	0.1		Urethane	51-79-6	1.2E-01	c	2.3E+00	c	3.5E-03	c	4.2E-02	c	2.5E-02	c		5.6E-06	c	
		8.3E-03	P	9.0E-03	I	7.0E-06	P			0.026			Vanadium Pentoxide	1314-62-1	4.6E+02	c**	2.0E+03	c**	3.4E-04	c*	1.5E-03	c*	1.5E+02	n				
				5.0E-03	S	1.0E-04	A			0.026			Vanadium and Compounds	7440-62-2	3.9E+02	n	5.8E+03	n	1.0E-01	n	4.4E-01	n	8.6E+01	n		8.6E+01	n	
				1.0E-03	I			V		1			Vernolate	1929-77-7	7.8E+01	n	1.2E+03	n					1.1E+01	n		8.9E-03	n	
				1.2E-03	O					1	0.1		Vinclozolin	50471-44-8	7.6E+01	n	9.8E+02	n					2.1E+01	n		1.6E-02	n	
				1.0E+00	H	2.0E-01	I	V		1		2.75E+03	Vinyl Acetate	108-05-4	9.1E+02	n	3.8E+03	ns	2.1E+02	n	8.8E+02	n	4.1E+02	n		8.7E-02	n	
		3.2E-05	H			3.0E-03	I	V		1		2.47E+03	Vinyl Bromide	593-60-2	1.2E-01	c*	5.2E-01	c*	8.8E-02	c*	3.8E-01	c*	1.8E-01	c*		5.1E-05	c*	
7.2E-01	I	4.4E-06	I	3.0E-03	I	1.0E-01	I	V	M	1		3.92E+03	Vinyl Chloride	75-01-4	5.9E-02	c	1.7E+00	c	1.7E-01	c	2.8E+00	c	1.9E-02	c	2	6.5E-06	c	6.9E-04
				3.0E-04	I					1	0.1		Warfarin	81-81-2	1.9E+01	n	2.5E+02	n					5.6E+00	n		5.9E-03	n	
				2.0E-01	S	1.0E-01	S	V		1		3.90E+02	Xylene, P-	106-42-3	5.6E+02	ns	2.4E+03	ns	1.0E+02	n	4.4E+02	n	1.9E+02	n		1.9E-01	n	
				2.0E-01	S	1.0E-01	S	V		1		3.88E+02	Xylene, m-	108-38-3	5.5E+02	ns	2.4E+03	ns	1.0E+02	n	4.4E+02	n	1.9E+02	n		1.9E-01	n	
				2.0E-01	S	1.0E-01	S	V		1		4.34E+02	Xylene, o-	95-47-6	6.5E+02	ns	2.8E+03	ns	1.0E+02	n	4.4E+02	n	1.9E+02	n		1.9E-01	n	
				2.0E-01	I	1.0E-01	I	V		1		2.60E+02	Xylenes	1330-20-7	5.8E+02	ns	2.5E+03	ns	1.0E+02	n	4.4E+02	n	1.9E+02	n	10000	1.9E-01	n	9.9E+00
				3.0E-04	I					1			Zinc Phosphide	1314-84-7	2.3E+01	n	3.5E+02	n					6.0E+00	n				
				3.0E-01	I					1			Zinc and Compounds	7440-66-6	2.3E+04	n	3.5E+05	nm					6.0E+03	n		3.7E+02	n	
				5.0E-02	I					1	0.1		Zineb	12122-67-7	3.2E+03	n	4.1E+04	n					9.9E+02	n		2.9E+00	n	
				8.0E-05	X					1			Zirconium	7440-67-7	6.3E+00	n	9.3E+01	n					1.6E+00	n		4.8E+00	n	

Land Application of Biosolids
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biosolids must also be met. In addition, there are general requirements, management practices, and frequency of monitoring, recordkeeping, and reporting requirements that must be met. Each of these land application requirements is discussed below.

Pollutant Limits, Pathogen and Vector Attraction Reduction Requirements

All biosolids applied to the land must meet ***the ceiling concentrations for pollutants,*** listed in the first column of Table 2-1. The ceiling concentrations are the maximum concentration limits for 10 heavy metal

TABLE 2-1
Pollutant Limits

Pollutant	Ceiling Concentration Limits for All Biosolids Applied to Land (milligrams per kilogram)[a]	Pollutant Concentration Limits for EQ and PC Biosolids (milligrams per kilogram)[a]	Cumulative Pollutant Loading Rate Limits for CPLR Biosolids (kilograms per hectare)	Annual Pollutant Loading Rate Limits for APLR Biosolids (kilograms per hectare per 365-day period)
Arsenic	75	41	41	2.0
Cadmium	85	39	39	1.9
Chromium	3,000	1,200	3,000	150
Copper	4,300	1,500	1,500	75
Lead	840	300	300	15
Mercury	57	17	17	0.85
Molybdenum[b]	75	—	—	—
Nickel	420	420	420	21
Selenium	100	36	100	5.0
Zinc	7,500	2,800	2,800	140
Applies to:	All biosolids that are land applied	Bulk biosolids and bagged biosolids[c]	Bulk biosolids	Bagged biosolids[c]
From Part 503	Table 1, Section 503.13	Table 3, Section 503.13	Table 2, Section 503.13	Table 4, Section 503.13

[a] Dry-weight basis

[b] As a result of the February 25, 1994, Amendment to the rule, the limits for molybdenum were deleted from the Part 503 rule pending EPA reconsideration.

[c] Bagged biosolids are sold or given away in a bag or other container.

pollutants in biosolids; specifically, arsenic, cadmium, chromium, copper, lead, mercury, molybdenum, nickel, selenium, and zinc. If a limit for any one of the pollutants is exceeded, the biosolids cannot be applied to the land until such time that the ceiling concentration limits are no longer exceeded. The ceiling concentrations for pollutants are included in Part 503 to prevent the land application of biosolids with the highest levels of pollutants and to encourage pretreatment efforts that will result in lower levels of pollutants.

2 Biosolids applied to the land must also meet either pollutant concentration limits, cumulative pollutant loading rate limits, or annual pollutant loading rate limits for these same heavy metals.

3 Either ***Class A or Class B pathogen requirements*** (summarized in Table 2-5) ***and site restrictions*** (Figure 2-4) must be met before the biosolids can be land applied; the two classes differ depending on the level of pathogen reduction that has been obtained.

4 Finally, 1 of 10 options specified in Part 503 and summarized in Table 2-6 to achieve ***vector attraction reduction*** must be met when biosolids are applied to the land.

Options for Meeting Land Application Requirements

This guidance document groups the Part 503 requirements into four options for meeting pollutant limits and pathogen and vector attraction reduction operational standards when biosolids are applied to the land. The options include:

- the Exceptional Quality (EQ) Option
- the Pollutant Concentration (PC) Option
- the Cumulative Pollutant Loading Rate (CPLR) Option
- the Annual Pollutant Loading Rate (APLR) Option

It is very important to realize that each option is equally protective of public health and the environment; that is, EQ, PC, CPLR, and APLR biosolids used in accordance with the Part 503 rule are equally safe. This safety is ensured by the combination of pollutant limits and management practices imposed by each option.

Whichever option is chosen, at a minimum, the ceiling concentrations for pollutants (listed in Table 2-1) and the frequency of monitoring, reporting, and recordkeeping requirements (see Tables 2-7 and 2-8) must be met. The four options are summarized in Table 2-2, illustrated in Figure 2-3, and discussed in detail below.

Depending on the land application option under consideration, site restrictions (Figure 2-4), general requirements (Figure 2-8), and management practices (Figure 2-9) also apply. These additional restrictions,

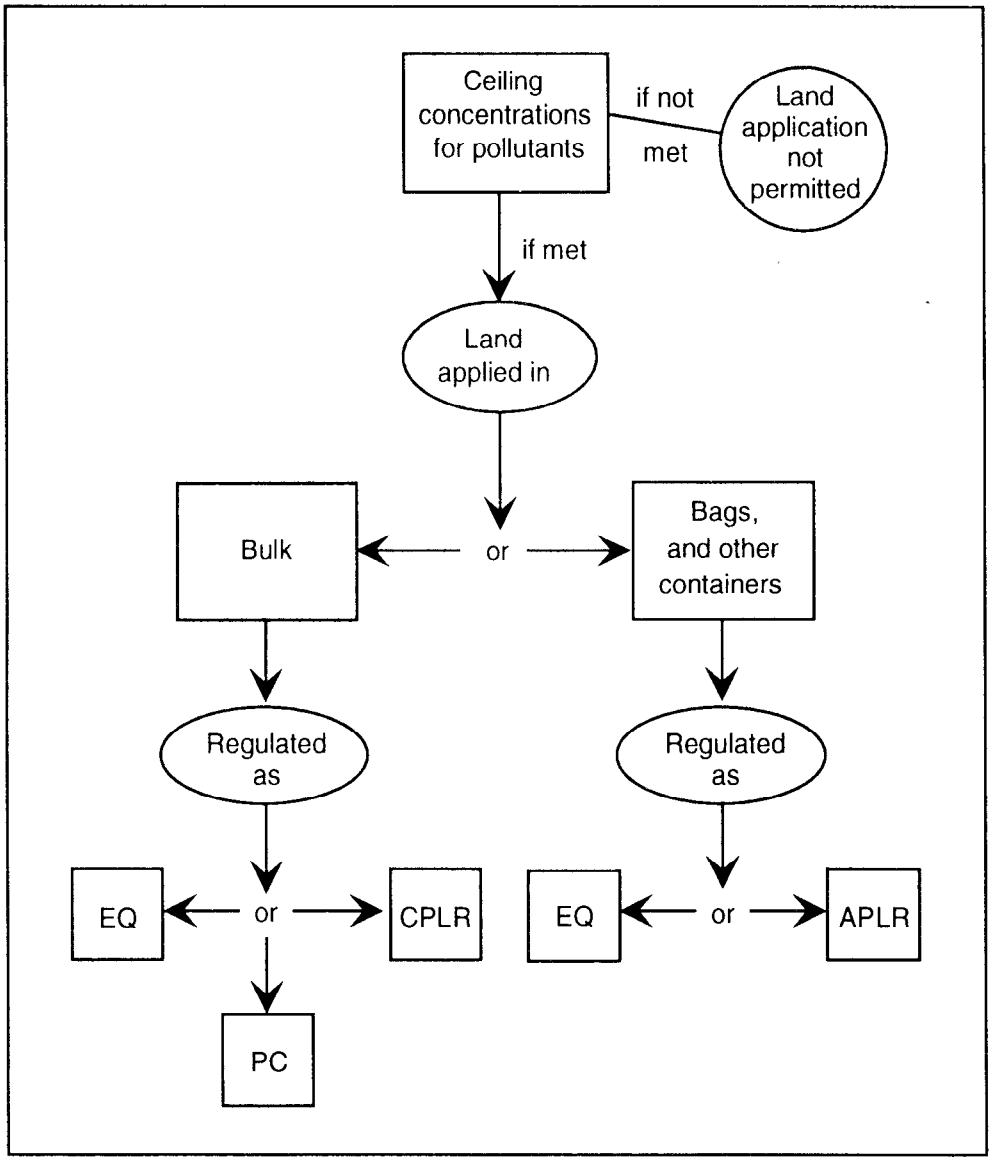

Figure 2-3. Options for meeting certain Part 503 land application requirements

The ceiling concentrations for pollutants in Table 2-1 may not be exceeded.

- The pollutant concentration limits in Table 2-1 may not be exceeded.
- One of the Class A pathogen requirements in Table 2-5 must be met.
- One of the first eight vector attraction reduction options in Table 2-6 must be achieved.

Methods that typically achieve the pathogen and vector attraction reduction requirements and allow biosolids to meet EQ requirements include alkaline stabilization, composting, and heat drying. The Part 503 frequency of

TABLE 2-3
Summary of Regulatory Requirements for Different Types of Biosolids

Type of Biosolids and Class of Pathogens	Meet Ceiling Concentration for Pollutants	Meet Pollutant Concentration Limits	Site Restrictions	General Requirements and Management Practices	Track Added Pollutants
EQ Bag or Bulk Class A	Yes	Yes	No		
PC Bulk Only Class A[a]	Yes	Yes	No	Yes	No
PC Bulk Only Class B	Yes	Yes	Yes		No
CPLR Bulk Only Class A	Yes	No	No	Yes	
CPLR Bulk Only Class B	Yes	No	Yes		
APLR Bag Only Class A	Yes	No	No	Yes[b]	Yes[c]

[a] Biosolids meeting Class A pathogen reduction requirements but following options 9 or 10 vector attraction reduction requirements are also considered PC biosolids.

[b] The only general and management practice requirement that must be met is a labeling requirement.

[c] The amount of biosolids that can be applied to a site during the year must be consistent with the annual whole sludge application rate (AWSAR) for the biosolids that does not cause any of the ALPRs to be exceeded.

Note: See Chapter Two text for explanation of biosolids types.

The pollutant concentration limits in Table 2-1 may not be exceeded (same requirement as for EQ biosolids, discussed above).

One of three Class B pathogen requirements must be met (see Table 2-5), as well as Class B site restrictions (see Figures 2-4 and 2-5).

One of 10 vector attraction reduction options must be achieved (see Table 2-6).

Frequency of monitoring (see Table 2-7), as well as recordkeeping and reporting requirements (see Table 2-8) must be met.

TABLE 2-4
Types of Land onto Which Different Types of Biosolids May Be Applied

Biosolids Option	Pathogen Class	VAR[a] Options	Type of Land	Other Restrictions
EQ	A	1-8	All[b]	None
PC	A	9 or 10	All except lawn and home gardens[c]	Management practices
	B	1-10	All except lawn and home gardens[c]	Management practices and site restrictions
CPLR	A	1-10	All except lawn and home garden[d]	Management practices
	B	1-10	All except lawn and home garden[c,d]	Management practices and site restrictions
APLR	A	1-8	All, but most likely lawns and home gardens	Labeling management practice

[a] VAR means vector attraction reduction.

[b] Agricultural land, forest, reclamation sites, and lawns and home gardens.

[c] It is not possible to impose site restrictions on lawns and home gardens.

[d] It is not possible to track cumulative additions of pollutants on lawns and home gardens.

Applicable site restrictions, general requirements, and management practices must be met (summarized in Tables 2-3 and 2-4 and listed in Figures 2-4, 2-8, and 2-9).

Class A biosolids meeting vector attraction reduction requirements 9 and 10 in Table 2-6 are another type of biosolids material that would fit in the PC category.

Thus, PC biosolids must meet more requirements than EQ biosolids, but are subject to fewer requirements than CPLR biosolids. Currently, the majority of biosolids in the United States could be characterized as PC biosolids, as defined in this guidance document.

Option 3: Cumulative Pollutant Loading Rate (CPLR) Biosolids

The third option for meeting land application requirements allows bulk biosolids that do not meet the pollutant concentration limits in Table 2-1 to

TABLE 2-5
Summary of Class A and Class B Pathogen Reduction Requirements

CLASS A

In addition to meeting the requirements in one of the six alternatives listed below, fecal coliform or *Salmonella* sp. bacteria levels must meet specific density requirements at the time of biosolids use or disposal or when prepared for sale or give-away (see Chapter Five of this guidance)

Alternative 1: Thermally Treated Biosolids

Use one of four time-temperature regimens

Alternative 2: Biosolids Treated in a High pH-High Temperature Process

Specifies pH, temperature, and air-drying requirements

Alternative 3: For Biosolids Treated in Other Processes

Demonstrate that the process can reduce enteric viruses and viable helminth ova. Maintain operating conditions used in the demonstration

Alternative 4: Biosolids Treated in Unknown Processes

Demonstration of the process is unnecessary. Instead, test for pathogens—*Salmonella* sp. or fecal coliform bacteria, enteric viruses, and viable helminth ova—at the time the biosolids are used or disposed of or are prepared for sale or give-away

Alternative 5: Use of PFRP

Biosolids are treated in one of the Processes to Further Reduce Pathogens (PFRP) (see Table 5-4)

Alternative 6: Use of a Process Equivalent to PFRP

Biosolids are treated in a process equivalent to one of the PFRPs, as determined by the permitting authority

CLASS B

The requirements in one of the three alternatives below must be met

Alternative 1: Monitoring of Indicator Organisms

Test for fecal coliform density as an indicator for all pathogens at the time of biosolids use or disposal

Alternative 2: Use of PSRP

Biosolids are treated in one of the Processes to Significantly Reduce Pathogens (PSRP) (see Table 5-7)

Alternative 3: Use of Processes Equivalent to PSRP

Biosolids are treated in a process equivalent to one of the PSRPs, as determined by the permitting authority

Note: Details of each alternative for meeting the requirements for Class A and Class B designations are provided in Chapter Five.

TABLE 2-6
Summary of Vector Attraction Reduction Options

Requirements in one of the following options must be met:

Option 1:	Reduce the mass of volatile solids by a minimum of 38 percent
Option 2:	Demonstrate vector attraction reduction with additional anaerobic digestion in a bench-scale unit
Option 3:	Demonstrate vector attraction reduction with additional aerobic digestion in a bench-scale unit
Option 4:	Meet a specific oxygen uptake rate for aerobically treated biosolids
Option 5:	Use aerobic processes at greater than 40°C (average temperatures 45°C) for 14 days or longer (e.g., during biosolids composting)
Option 6:	Add alkaline materials to raise the pH under specified conditions
Option 7:	Reduce moisture content of biosolids that do not contain unstabilized solids from other than primary treatment to at least 75 percent solids
Option 8:	Reduce moisture content of biosolids with unstabilized solids to at least 90 percent
Option 9:	Inject biosolids beneath the soil surface within a specified time, depending on the level of pathogen treatment
Option 10:	Incorporate biosolids applied to or placed on the land surface within specified time periods after application to or placement on the land surface.

Note: Details of each vector attraction reduction option are provided in Chapter Five.

WARM Model Energy Use and GHG Emission Values

WARM: Per Ton Estimates of Energy Use for Alternative Management Scenarios

Material	Energy Savings per Ton of Material Source Reduced (million BTU)	Energy Savings per Ton of Material Recycled (million BTU)	Energy Savings per Ton of Material Landfilled (million BTU)	Energy Savings per Ton of Material Combusted (million BTU)	Energy Savings per Ton of Material Composted (million BTU)	Energy Savings per Ton of Material Anaerobically Digested (million BTU)
Aluminum Cans	(89.69)	(152.76)	0.27	0.60	NA	NA
Aluminum Ingot	(126.95)	(113.85)	0.27	0.60	NA	NA
Steel Cans	(29.88)	(19.97)	0.27	(17.14)	NA	NA
Copper Wire	(122.36)	(82.59)	0.27	0.54	NA	NA
Glass	(6.90)	(2.13)	0.27	0.50	NA	NA
HDPE	(61.21)	(50.20)	0.27	(19.34)	NA	NA
LDPE	(71.02)	NA	0.27	(19.24)	NA	NA
PET	(50.26)	(31.87)	0.27	(10.13)	NA	NA
LLDPE	(66.37)	NA	0.27	(19.30)	NA	NA
PP	(66.59)	NA	0.27	(19.31)	NA	NA
PS	(74.99)	NA	0.27	(17.40)	NA	NA
PVC	(48.34)	NA	0.27	(7.46)	NA	NA
PLA	(30.69)	NA	0.27	(7.94)	0.58	NA
Corrugated Containers	(22.32)	(15.07)	(0.25)	(6.64)	NA	NA
Magazines/third-class mail	(33.23)	(0.69)	0.04	(4.89)	NA	NA
Newspaper	(36.46)	(16.49)	0.05	(7.53)	NA	NA
Office Paper	(36.60)	(10.08)	(0.53)	(6.40)	NA	NA
Phonebooks	(40.20)	(11.93)	0.05	(7.53)	NA	NA
Textbooks	(35.60)	(1.03)	(0.53)	(6.40)	NA	NA
Dimensional Lumber	(3.67)	0.59	0.23	(7.88)	NA	NA
Medium-density Fiberboard	(11.92)	0.86	0.26	(7.88)	NA	NA
Food Waste (non-meat)	(7.20)	NA	(0.02)	(2.06)	0.58	(1.40)
Food Waste (meat only)	(43.60)	NA	(0.02)	(2.06)	0.58	(1.40)
Beef	(63.88)	NA	(0.02)	(2.06)	0.58	(1.40)
Poultry	(26.48)	NA	(0.02)	(2.06)	0.58	(1.40)
Grains	(5.64)	NA	(0.02)	(2.06)	0.58	(1.40)
Bread	(6.52)	NA	(0.02)	(2.06)	0.58	(1.40)
Fruits and Vegetables	(5.07)	NA	(0.02)	(2.06)	0.58	(1.40)
Dairy Products	(14.27)	NA	(0.02)	(2.06)	0.58	(1.40)
Yard Trimmings	0.00	NA	0.14	(2.48)	0.58	NA
Grass	0.00	NA	0.19	(2.48)	0.58	NA
Leaves	0.00	NA	0.16	(2.48)	0.58	NA
Branches	0.00	NA	(0.00)	(2.48)	0.58	NA
Mixed Paper (general)	(29.44)	(20.45)	(0.21)	(6.67)	NA	NA
Mixed Paper (primarily residential)	(28.66)	(20.45)	(0.19)	(6.64)	NA	NA
Mixed Paper (primarily from offices)	(34.64)	(20.85)	(0.18)	(6.11)	NA	NA
Mixed Metals	(50.61)	(65.99)	0.27	(10.99)	NA	NA
Mixed Plastics	(54.42)	(38.84)	0.27	(13.63)	NA	NA
Mixed Recyclables	NA	(14.82)	(0.07)	(6.58)	NA	NA
Food Waste	(14.56)	NA	(0.02)	(2.06)	0.58	(1.40)
Mixed Organics	NA	NA	0.06	(2.26)	0.58	NA
Mixed MSW	NA	NA	(0.07)	(4.64)	NA	NA
Carpet	(91.06)	(21.47)	0.27	(7.19)	NA	NA
Personal Computers	(956.74)	(29.15)	0.27	(6.27)	NA	NA
Clay Bricks	(5.13)	NA	0.27	NA	NA	NA
Concrete	NA	(0.11)	0.27	NA	NA	NA
Fly Ash	NA	(4.77)	0.27	NA	NA	NA
Tires	(71.71)	(3.56)	0.27	(28.52)	NA	NA
Asphalt Concrete	(1.68)	(1.22)	0.27	NA	NA	NA
Asphalt Shingles	(3.13)	(2.43)	0.27	(8.53)	NA	NA
Drywall	(3.56)	(2.62)	0.27	NA	NA	NA
Fiberglass Insulation	(4.73)	NA	0.27	NA	NA	NA
Vinyl Flooring	(10.73)	NA	0.27	(7.46)	NA	NA
Wood Flooring	(14.45)	NA	0.27	(10.39)	NA	NA

WARM: Per Ton Estimates of GHG Emissions for Baseline and Alternative Management Scenarios

Material	GHG Emissions per Ton of Material Source Reduced ($MTCO_2E$)	GHG Emissions per Ton of Material Recycled ($MTCO_2E$)	GHG Emissions per Ton of Material Landfilled ($MTCO_2E$)	GHG Emissions per Ton of Material Combusted ($MTCO_2E$)	GHG Emissions per Ton of Material Composted ($MTCO_2E$)	GHG Emission per Ton of Material Anaerobically Digested
Aluminum Cans	(4.91)	(9.11)	0.02	0.04	NA	NA
Aluminum Ingot	(7.47)	(7.19)	0.02	0.04	NA	NA
Steel Cans	(3.06)	(1.81)	0.02	(1.57)	NA	NA
Copper Wire	(7.01)	(4.71)	0.02	0.03	NA	NA
Glass	(0.53)	(0.28)	0.02	0.03	NA	NA
HDPE	(1.47)	(0.87)	0.02	1.23	NA	NA
LDPE	(1.80)	NA	0.02	1.24	NA	NA
PET	(2.20)	(1.12)	0.02	1.21	NA	NA
LLDPE	(1.58)	NA	0.02	1.23	NA	NA
PP	(1.55)	NA	0.02	1.23	NA	NA
PS	(2.50)	NA	0.02	1.60	NA	NA
PVC	(1.95)	NA	0.02	0.64	NA	NA
PLA	(2.09)	NA	(1.64)	(0.97)	(0.15)	NA
Corrugated Containers	(5.60)	(3.12)	0.23	(0.51)	NA	NA
Magazines/third-class mail	(8.60)	(3.07)	(0.39)	(0.37)	NA	NA
Newspaper	(4.77)	(2.75)	(0.82)	(0.58)	NA	NA
Office Paper	(7.97)	(2.86)	1.22	(0.49)	NA	NA
Phonebooks	(6.22)	(2.64)	(0.82)	(0.58)	NA	NA
Textbooks	(9.07)	(3.11)	1.22	(0.49)	NA	NA
Dimensional Lumber	(2.03)	(2.46)	(1.01)	(0.61)	NA	NA
Medium-density Fiberboard	(2.23)	(2.47)	(0.88)	(0.61)	NA	NA
Food Waste (non-meat)	(0.76)	NA	0.54	(0.14)	(0.18)	(0.06)
Food Waste (meat only)	(15.10)	NA	0.54	(0.14)	(0.18)	(0.06)
Beef	(30.05)	NA	0.54	(0.14)	(0.18)	(0.06)
Poultry	(2.47)	NA	0.54	(0.14)	(0.18)	(0.06)
Grains	(0.62)	NA	0.54	(0.14)	(0.18)	(0.06)
Bread	(0.67)	NA	0.54	(0.14)	(0.18)	(0.06)
Fruits and Vegetables	(0.44)	NA	0.54	(0.14)	(0.18)	(0.06)
Dairy Products	(1.74)	NA	0.54	(0.14)	(0.18)	(0.06)
Yard Trimmings	NA	NA	(0.18)	(0.18)	(0.15)	NA
Grass	NA	NA	0.13	(0.18)	(0.15)	NA
Leaves	NA	NA	(0.52)	(0.18)	(0.15)	NA
Branches	NA	NA	(0.51)	(0.18)	(0.15)	NA
Mixed Paper (general)	(6.75)	(3.53)	0.13	(0.51)	NA	NA
Mixed Paper (primarily residential)	(6.65)	(3.53)	0.07	(0.51)	NA	NA
Mixed Paper (primarily from offices)	(7.96)	(3.59)	0.17	(0.47)	NA	NA
Mixed Metals	(3.70)	(4.34)	0.02	(1.02)	NA	NA
Mixed Plastics	(1.92)	(1.02)	0.02	1.22	NA	NA
Mixed Recyclables	NA	(2.82)	0.04	(0.44)	NA	NA
Food Waste	(3.66)	NA	0.54	(0.14)	(0.18)	(0.06)
Mixed Organics	NA	NA	0.20	(0.16)	(0.16)	NA
Mixed MSW	NA	NA	0.35	(0.07)	NA	NA
Carpet	(3.82)	(2.36)	0.02	1.08	NA	NA
Personal Computers	(50.49)	(2.50)	0.02	(0.19)	NA	NA
Clay Bricks	(0.27)	NA	0.02	NA	NA	NA
Concrete	NA	(0.01)	0.02	NA	NA	NA
Fly Ash	NA	(0.87)	0.02	NA	NA	NA
Tires	(4.28)	(0.38)	0.02	0.51	NA	NA
Asphalt Concrete	(0.11)	(0.08)	0.02	NA	NA	NA
Asphalt Shingles	(0.19)	(0.09)	0.02	(0.35)	NA	NA
Drywall	(0.21)	0.03	(0.06)	NA	NA	NA
Fiberglass Insulation	(0.38)	NA	0.02	NA	NA	NA
Vinyl Flooring	(0.61)	NA	0.02	(0.33)	NA	NA
Wood Flooring	(4.05)	NA	(0.86)	(0.77)	NA	NA