

Last Revised: May 10, 2023**Summary of Updates to the Tables Accompanying the Texas Risk Reduction Program (TRRP) Rule¹**

Date of Change	Change Made
5/10/2023	Nitrate: ^{GW} Soil _{Ing} PCLs removed from 30 acre source area in Tables 1 and 2 to be consistent with the 11/8/2019 change (see footnote in PCL tables)
5/10/2023	Bromodichloromethane, Bromoform, Chloroform, and Dibromochloromethane: ^{GW} GW _{Ing} PCLs were corrected with the MCL for total trihalomethanes in Table 3. ^{GW} Soil _{Ing} PCLs were corrected in Tables 1 and 2
3/6/2023	Dibenzothiophene: RfD revised
3/6/2023	Perfluorobutyric acid (Butanoic acid, heptafluoro-) [PFBA]: RfD and RfC revised
3/6/2023	Perfluorohexanoic acid (Hexanoic acid, undecafluoro-) [PFHxA]: RfD revised
3/6/2023	Perfluoropentanoic acid (Pentanoic acid, nonafluoro-) [PFPeA]: RfD revised
3/1/2022	Glyphosate: RfDo revised
3/1/2022	Thallium: CAS corrected from 7791-12-0 to 7440-28-0 in Toxicity Factors, Chem/Phys Properties, and ABS _{Cl} /ABS.d tables.
1/6/2021	Amino-2,6-dinitrotoluene, 4-: Sfo and RfDo revised
1/6/2021	Amino-2,6-dinitrotoluene, 2-: Sfo and RfDo revised
1/6/2021	Bis (2-chloro-1-methyl) ether: Name corrected to Bis (2-chloro-1-methylethyl) ether
1/6/2021	Bromodichloromethane: RfDo revised
1/6/2021	Bromomethane: RfC revised
1/6/2021	Dichlorophenoxyacetic acid, 2,4- (2,4-D): RfDo revised
1/6/2021	Ethylene oxide: Class, URF revised
1/6/2021	Hexanone, 2-: RfDo revised
1/6/2021	Lithium: RfDo revised
1/6/2021	Nitropropane, 2-: URF revised
1/6/2021	Perfluorooctane sulfonamide (1-Octanesulfonamide, heptadecafluoro-): Name corrected to Perfluorooctane sulfonamide (1-Octanesulfonamide, heptadecafluoro-)
1/6/2021	Perfluorooctanoic sulfonic acid (1-Octanesulfonic acid, heptadecafluoro-1-): Name corrected to Perfluorooctane sulfonic acid (1-Octanesulfonic acid, heptadecafluoro-1-)
1/6/2021	PFAS (All): The common acronym for each compound was added
1/6/2021	Phosphorotrithioic acid, S,S,S-tributyl ester: RfDo revised
1/6/2021	Propanol, 1-: RfDo revised
1/6/2021	Tetrachloroethylene: The common acronym (PCE) was added
1/6/2021	Trichloroethylene: The common acronym (TCE) was added
11/8/2019	Benzo(j)fluoranthene: Sfo and URF revised
11/8/2019	Bis (2-chloroisopropyl) ether: Name changed to Bis (2-chloro-1-methyl) ether
11/8/2019	Bromodichloromethane: ^{GW} GW _{Ing} PCLs were replaced with the MCL for total trihalomethanes in Table 3, ^{GW} Soil _{Ing} PCLs were revised in Tables 1 and 2, and footnote for total trihalomethanes was revised in Tables 1, 2 and 3.
11/8/2019	Bromoform: ^{GW} GW _{Ing} PCLs were replaced with the MCL for total trihalomethanes in Table 3, ^{GW} Soil _{Ing} PCLs were revised in Tables 1 and 2, and footnote for total trihalomethanes was revised in Tables 1, 2 and 3.
11/8/2019	Chloroform: ^{GW} GW _{Ing} PCLs were replaced with the MCL for total trihalomethanes in Table 3, ^{GW} Soil _{Ing} PCLs were revised in Tables 1 and 2, and footnote for total trihalomethanes was revised in Tables 1, 2 and 3.
11/8/2019	Cyclotrimethylenetrinitramine (RDX): Class, Sfo and RfD revised
11/8/2019	Dibromochloromethane: ^{GW} GW _{Ing} PCLs were replaced with the MCL for total trihalomethanes in Table 3, ^{GW} Soil _{Ing} PCLs were revised in Tables 1 and 2, and footnote for total trihalomethanes was revised in Tables 1, 2 and 3.
11/8/2019	Dichloroethane, 1,2-: RfD revised
11/8/2019	Diethanolamine: RfC added
11/8/2019	Dodecylphenol, 4-: Duplicate rows were eliminated
11/8/2019	Nitrate: ^{GW} Soil _{Ing} PCLs removed (see footnote in PCL tables)
11/8/2019	Nonylphenol, 4-n-: Duplicate rows were eliminated
11/8/2019	Potassium: CAS revised
11/8/2019	Toxaphene: RfD added
11/8/2019	Triethanolamine: RfC added
4/27/2018	Chlorine: RfC revised
4/27/2018	Cobalt: URF and RfC revised
4/27/2018	Ethylene dibromide (dibromoethane, 1,2-): Class, URF and RfC revised
4/27/2018	Manganese: RfC revised
4/27/2018	Transformer Mineral Oil: Added back into tables (accidentally left out in previous years)
3/31/2017	Benz(a)anthracene : Class, Sfo and URF revised

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Date of Change	Change Made
3/31/2017	Benzo-a-pyrene : Class, Sfo and URF revised; RfD and RfC added
3/31/2017	Benzo-b-fluoranthene : Class, Sfo and URF revised
3/31/2017	Benzo-k-fluoranthene : Class, Sfo and URF revised
3/31/2017	Cadmium : Class, URF and RfC revised
3/31/2017	Chromium (VI) : Class and RfD revised
3/31/2017	Chrysene : Class, Sfo and URF revised
3/31/2017	Dibenz-a,h-anthracene : Class, Sfo and URF revised
3/31/2017	Dichloroethane, 1,2- : URF and RfC revised
3/31/2017	Dichloropropane, 1,2- : Class, Sfo, and RfD revised and URF added
3/31/2017	Dimethylformamide, N,N- : NEW
3/31/2017	Ethanol, 2-amino- : RfC added
3/31/2017	Ethylene oxide : Class and URF revised
3/31/2017	Heptane, n- : RfC revised
3/31/2017	Hexachloropropylene : Sfo and RfD revised, URF removed and RfC added
3/31/2017	Indeno-1,2,3-cd-pyrene : Class, Sfo and URF revised
3/31/2017	Mercuric chloride : Chemical listing removed from tables. Mercury toxicity factors apply to all inorganic forms of mercury.
3/31/2017	Nitrate : name revised to Nitrate-N to be consistent with MCLs. Laboratories should report results in nitrate as nitrogen (Nitrate-N). If a laboratory reports the results in nitrate as nitrate (Nitrate-NO ₃), the conversion is Nitrate-N = 0.2259 x Nitrate-NO ₃ .
3/31/2017	Nitrite : name revised to Nitrite-N to be consistent with MCLs. Laboratories should report results in nitrite as nitrogen (Nitrite-N). If a laboratory reports the results in nitrite as nitrite (Nitrite-NO ₂), the conversion is Nitrite-N = 0.3045 x Nitrite-NO ₂ .
3/31/2017	Pentane : RfD revised
3/31/2017	Phenol, 4-tert-butyl- : RfD revised
3/31/2017	Thallium and compounds : name revised to Thallium and RfD revised
3/31/2017	Triaminotrinitrobenzene (TATB) : Sfo removed
3/31/2017	Trichloro-1,2,2-trifluoroethane, 1,1,2- : RfC revised
3/31/2017	Trimethylbenzene, 1,2,3- : RfD and RfC revised
3/31/2017	Trimethylbenzene, 1,2,4- : RfD and RfC revised
3/31/2017	Trimethylbenzene, 1,3,5- : RfD and RfC revised
3/4/2016	Asbestos, removed from all tables: URF removed in 2011. Contact your TCEQ project manager if asbestos may be a chemical of concern.
3/4/2016	Chlordane, gamma : name revised to Chlordane, trans- (gamma chlordane)
3/4/2016	Dimethyl-2-nitrobenzene, 1,3- : NEW
3/4/2016	Dimethyl-3-nitrobenzene, 1,2- : NEW
3/4/2016	Dimethyl-4-nitrobenzene, 1,2- : NEW
3/4/2016	Dimethyl-5-nitrobenzene, 1,3- : NEW
3/4/2016	Ethoxy ethanol, 2- : Henry's Law Constant revised
3/4/2016	Perfluorooctanoic sulfonic acid (1-Octanesulfonic acid, heptadecafluoro-1-) : RfC revised
3/4/2016	Perfluoropentanoic acid (Pentanoic acid, nonafluoro-) : RfD revised
3/4/2016	Perfluorohexanoic acid (Hexanoic acid, undecafluoro-) : RfD revised
3/4/2016	Perfluorododecanoic acid (Dodecanoic acid, tricosafuoro-) : RfC revised
3/4/2016	Perfluorodecanoic acid (Decanoic acid, nonadecafluoro-) : RfC revised
3/4/2016	Perfluorohexane sulfonic acid (1-Hexanesulfonic acid, tridecafluoro-) : RfD and RfC revised
3/4/2016	Perfluorobutyric acid (Butanoic acid, heptafluoro-) : RfC revised
3/4/2016	Perfluorobutane sulfonic acid (1-Butanesulfonic acid, nonafluoro-) : RfC revised
12/16/2015	Ammonia: Class and RfC revised
12/16/2015	Chromium (VI): URF and RfC revised
12/16/2015	Dicyclopentadiene: Class and RfD revised and RfC was removed
12/16/2015	Ethyl acrylate: RfD and RfC added
12/16/2015	Isopropyl alcohol: RfD revised and RfC added
12/16/2015	Methyl-5-nitroaniline, 2- (5-nitro-o-toluidine): Chemical removed from PCL Tables because Sfo removed in 2014 and the chemical has no other toxicity factors
12/16/2015	Perfloro Acids (All): RfDs revised
12/16/2015	Phenol: Class revised and RfC added
12/16/2015	Triethylene glycol: Class and RfD revised
12/16/2015	Tungsten (as sodium tungstate dihydride): NEW
11/12/2014	Aluminum and Silver: Correction for error in Comm/Ind Groundwater PCL
11/12/2014	Arsenic: calculation error
11/12/2014	Cadmium: calculation error

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Date of Change	Change Made
11/12/2014	Dimethylaminoazobenzene, p: calculation error
11/12/2014	Perfluoro Acids (All): calculation error
9/10/2014	Acenaphthene: Class revised
9/10/2014	Acetone cyanohydrin: Class revised
9/10/2014	Acrolein: RfC revised
9/10/2014	Arsenic: URF updated
9/10/2014	Biphenyl, 1,1: Class revised
9/10/2014	Biphenyl, 1,1: RfD revised
9/10/2014	Butanal (butyraldehyde): RfC added
9/10/2014	Butene, 1: RfC revised
9/10/2014	Butene, cis-2: RfC revised
9/10/2014	Butene, trans-2: RfC revised
9/10/2014	Butyl acetate: RfC revised
9/10/2014	Butylbenzene, sec-: Class revised
9/10/2014	Butylbenzene, tert-: Class revised
9/10/2014	Cadmium: RfC added
9/10/2014	Chloroethanol, 2- :Class and RfD revised
9/10/2014	Chloromethane (methyl chloride): RfD added
9/10/2014	Chloromethane: Class revised
9/10/2014	Cobalt: RfD revised
9/10/2014	Copper: RfD revised
9/10/2014	Desethylatrazine: NEW
9/10/2014	Dibenzothiophene: Class and RfD revised
9/10/2014	Dichlorobenzene, 1,4- RfC revised
9/10/2014	Dinitrotoluene, 2,6- RfD reference revised
9/10/2014	Di-n-octyl phthalate: Class and RfD revised
9/10/2014	Dioxane, 1,4: RfC revised; URF added
9/10/2014	Ethoxy ethanol, 2: RfD revised
9/10/2014	Ethyl acetate: Class and RfD revised; RfC added
9/10/2014	Fenuron: NEW
9/10/2014	Fluoranthene: Class revised
9/10/2014	Isobutylene (2-methyl-1-propene): RfD added
9/10/2014	Manganese: RfC revised
9/10/2014	Methacrylonitrile: Class and RfD revised; RfC added
9/10/2014	Methanol: RfD revised
9/10/2014	Methoxyethanol, 2: RfD revised
9/10/2014	Methyl acrylate: Class revised; RfC added
9/10/2014	Methyl cyclohexane: Class revised
9/10/2014	Methyl-5-nitroaniline, 2- (5-nitro-o-toluidine): SFo removed
9/10/2014	Methylene chloride (dichloromethane): SFo and RfD revised
9/10/2014	Perfluorobutane sulfonic acid (1-Butanesulfonic acid, nonafluoro-): NEW
9/10/2014	Perfluorobutyric acid (Butanoic acid, heptafluoro-): NEW
9/10/2014	Perfluorodecane sulfonic acid (1-Decanesulfonic acid, heneicosafuoro-): NEW
9/10/2014	Perfluorodecanoic acid (Decanoic acid, nonadecafluoro-):NEW
9/10/2014	Perfluorododecanoic acid (Dodecanoic acid, tricosafuoro-): NEW
9/10/2014	Perfluoroheptanoic acid (Heptanoic acid, tridecafluoro-): NEW
9/10/2014	Perfluorohexane sulfonic acid (1-Hexanesulfonic acid, tridecafluoro-): NEW
9/10/2014	Perfluorohexanoic acid (Hexanoic acid, undecafluoro-): NEW
9/10/2014	Perfluorononanoic acid (Nonanoic acid, heptadecafluoro-): NEW
9/10/2014	Perfluorooctane sulfonamide (1-Octanesulfonamide, heptadecafluoro-): NEW
9/10/2014	Perfluorooctanoic acid (Octanoic acid, pentadecafluoro-): NEW
9/10/2014	Perfluorooctanoic sulfonic acid (1-Octanesulfonic acid, heptadecafluoro-1-): NEW
9/10/2014	Perfluoropentanoic acid (Pentanoic acid, nonafluoro-): NEW
9/10/2014	Perfluorotetradecanoic acid (Tetradecanoic acid, heptacosafuoro-): NEW
9/10/2014	Perfluorotridecanoic acid (Tridecanoic acid, pentacosafuoro-): NEW
9/10/2014	Perfluoroundecanoic acid (Undecanoic acid, uncosafuoro-): NEW
9/10/2014	Phenothiazine: RfD revised
9/10/2014	Prometryn: NEW

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Date of Change	Change Made
9/10/2014	Tetrachloroethylene: RfD revised
9/10/2014	Toluidine, o: Class and Sfo revised
9/10/2014	Toluidine, p: Class and Sfo revised
9/10/2014	Trinitrophenylmethylnitramine (tetryl; nitramine): RfD revised
9/10/2014	Uranium (soluble salts): RfC revised
6/29/2012	Benzenethiol: RfD revised
6/29/2012	Chloro-1,3-butadiene, 2-:Class, URF, and RfC revised
6/29/2012	Diisopropyl ether (2,2'-oxybis-propane): RfC revised
6/29/2012	Dioxins/furans, polychlorinated; (reported as 2,3,7,8-TCDD TEQ): RfD was revised by USEPA; however, the TRRP rule sets the critical PCL at all 3 tiers for dioxin in soil [30 TAC 350.76(e)(3)] so the PCLs did not change.
6/29/2012	Ethyl-2-methyl benzene, 1-: RfD revised
6/29/2012	Ethyl-4-methyl benzene: RfD revised
6/29/2012	Hexachloroethane: Class, Sfo, RfD, URF, and RfC revised
6/29/2012	Methoxyethanol, 2-: RfD revised
6/29/2012	Methyl-5-nitroaniline, 2- (5-nitro-o-toluidine): Class and Sfo revised
6/29/2012	Methylene chloride (dichloromethane): Class, Sfo, RfD, URF, and RfC revised
6/29/2012	Nickel and compounds: Class, URF, and RfC revised
6/29/2012	Pentane: RfC revised
6/29/2012	Phenothiazine: RfD revised
6/29/2012	Sulfolane: RfD revised
6/29/2012	Tetrachloroethylene: Class, Sfo, and RfD revised
6/29/2012	Tetrahydrofuran: Class, RfD, and RfC revised
6/29/2012	Trichloroethane, 1,1,1: Class and RfC revised
6/29/2012	Trichloroethylene: Class, Sfo, RfD, URF, and RfC revised
6/29/2012	Vanadium: RfD and RfC revised
6/29/2012	Added: Cyclohexene, 4-ethenyl-(aka 4-vinylcyclohexene); Isopentane; Cyclopentane; Methylstyrene, alpha-; Morpholine, 4-butyl
5/24/2011	Asbestos : URF (Unit Risk Factors) and soil PCLs removed. Contact your TCEQ Project Manager if asbestos may be a chemical of concern.
5/24/2011	Glyphosate : chemical/physical properties revised. Ionizing Koc data under review. Contact your TCEQ Project Manager if glyphosate may be a chemical of concern.
5/24/2011	TCDD, 2,3,7,8: (dioxin) : named revised to Dioxins/furans, polychlorinated; (reported as 2,3,7,8:TCDD TEQ)
5/24/2011	See list on next sheet for additional toxicity factors changes. For questions on toxicity factors, contact the Toxicology Section at 877-992-8370.
5/24/2011	Added: Leptophos, Ethanol, 2-(methvlamino)-, Hexene, cis-2-, Pentadiene, cis-1,3-, Cyclopentene, Pentene, 2.
3/31/2010	Acrylamide : Sfo, RfD, URF and RfC revised
3/31/2010	Benzyl alcohol : RfD revised
3/31/2010	Bromobenzene : RfD and RfC revised
3/31/2010	Butanol, 2-: RfD and RfC revised
3/31/2010	Chromium (III) : RfC revised
3/31/2010	Chromium (Total) : RfC revised
3/31/2010	Diethylene glycol monobutyl ether : RfD and RfC revised
3/31/2010	Fluorine : RfC revised
3/31/2010	Hexanone, 2-: RfD and RfC revised
3/31/2010	Hydrazine : RfC revised
3/31/2010	Hydroquinone : Sfo revised
3/31/2010	Kepone (chlordecone) : Sfo and RfD revised
3/31/2010	Pentane : RfC revised
3/31/2010	Titanium : RfD revised
3/31/2010	Trichlorobenzene, 1,2,4- : Sfo and RfC revised
3/31/2010	Trichloropropane, 1,2,3- : Sfo, RfD, and RfC revised
3/31/2010	Vanadium : RfD revised
3/31/2010	Added : Hexanedinitrile
3/25/2009	Allyl Alcohol : RfC revised.
3/25/2009	Benzyl chloride: RfD and RfC revised.
3/25/2009	Bromobenzene: RfD and RfC revised.
3/25/2009	Butadiene, 1,3- : URF and RfC revised.
3/25/2009	Butyl benzyl phthalate : Sfo revised.
3/25/2009	Chloroaniline, p- : Sfo revised.
3/25/2009	Chloronitrobenzene, p- (1-chloro-4-nitrobenzene) : Sfo revised.
3/25/2009	Cobalt : RfD and RfC revised.

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Date of Change	Change Made
3/25/2009	Dibromo-3-chloropropane, 1,2-: URF revised.
3/25/2009	Dichloro-2-butene, 1,4-:URF revised.
3/25/2009	Dichloro-2-butene, trans-1,4- :URF revised.
3/25/2009	Dichlorobenzene, 1,4- : RFC revised.
3/25/2009	Dichloroethane, 1,2-: RfD revised.
3/25/2009	Dimethylbenzidine, 3,3'-: SFO revised.
3/25/2009	Dinitrobenzene, 1,3- (dinitrobenzene, 2,4-) : RfD revised.
3/25/2009	Formaldehyde : URF and RfC revised.
3/25/2009	Formic acid : RfC revised.
3/25/2009	Hydroquinone: SFO and RfD revised.
3/25/2009	Isobutylene : RfC revised.
3/25/2009	Lithium : RfD revised.
3/25/2009	Methylene-bis (2-chloroaniline) 4,4'- : SFO revised.
3/25/2009	Methylnaphthalene, 1- : SFO revised.
3/25/2009	Nitroaniline, 4- :SFO, RfD, and RfC revised.
3/25/2009	Nitrobenzene : RfD, URF, and RfC revised.
3/25/2009	Nitrosodimethylamine, N-: RfC revised.
3/25/2009	Nitrotoluene, o- (2-nitrotoluene) : SFO and RfD revised.
3/25/2009	Propanal (propionaldehyde) : RfC revised.
3/25/2009	Propylene glycol : RfD revised.
3/25/2009	Styrene : RfC revised.
3/25/2009	Tetrachloroethane, 1,1,2,2- : RfD revised.
3/25/2009	Tetrachloroethylene (PCE) : URF and RfC revised.
3/25/2009	Toluene : RfC revised.
3/25/2009	Toluenediamine, 2,6-: RfD revised.
3/25/2009	Trichloroethylene : SFO, URF and RfC revised.
3/25/2009	Trimethylbenzene, 1,2,4-: RfD revised.
3/25/2009	Vinyl Chloride : URF and RfC revised.
3/25/2009	Xylenes, Xylene, m-, Xylene, o-, and Xylene, p- : RfC revised.
3/25/2009	Chemicals added this year: Hexene, 1-, Diisopropylbenzene, p-
4/23/2008	Trichloroethane, 1,1,1- :RfC and RfD revised.
4/23/2008	Benzene : RfC and URF revised.
4/23/2008	Butoxy ethanol, 2- : RfC revised.
4/23/2008	Dichloroethylene, 1,1- : RfC revised.
4/23/2008	Hexane, n- : RfC revised.
4/23/2008	Methyl amyl ketone (2:heptanone) : RfC revised.
4/23/2008	Aluminum : RfD revised.
4/23/2008	Bis (2-chloroethoxy) methane : RfD revised.
4/23/2008	Chlorotoluene, p- (4-chlorotoluene) : RfD revised.
4/23/2008	Dicyclopentadiene : RfC and RfD revised.
4/23/2008	Dinitro-2-methylphenol, 4,6- (dinitro-o-cresol, 4, 6-) : RfD revised.
4/23/2008	Hexachlorobutadiene : RfD revised.
4/23/2008	Malononitrile : RfD revised.
4/23/2008	Nitroglycerin : RfD and SFO revised.
4/23/2008	Nitrosodimethylamine, N-:RfD revised.
4/23/2008	Nitrotoluene, p- : RfD and SFO revised.
4/23/2008	Trichlorophenol, 2,4,6- : RfD revised.
4/23/2008	Chloronitrobenzene, p- (1-chloro-4-nitrobenzene) : RfC revised.
4/23/2008	Dichloroethylene, trans-1,2 :RfC revised.
4/23/2008	Diisopropyl ether (2,2'-oxybis-propane) : RfC revised.
4/23/2008	Trimethylbenzene, 1,2,4- : RfC revised.
4/23/2008	Dibromo-3-chloropropane, 1,2- : SFO revised.
4/23/2008	Pentachloroethane : SFO revised.
4/23/2008	Chemicals added this year : Phosphorotriothic acid, S,S,S-tributyl ester; Biphenyl, 1,1'-, 2-phenoxy-; Hexanediamine, 1,6-; Ethanol, 2-(2-aminoethoxy)-
3/30/2007	Acetone cyanohydrin : RfD and RfC revised.
3/30/2007	Adipic acid (hexanedioic acid) : RfD revised.
3/30/2007	Aluminum : RfD revised.
3/30/2007	Benzyl alcohol : RfD revised.

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3/30/2007	Bromobenzene : RFC revised.
3/30/2007	Cacodylic acid : RfD revised.
3/30/2007	Chlorobenzene : RFC revised.
3/30/2007	Chloroform : RFC revised.
3/30/2007	Chloronitrobenzene, p- (1-chloro-4-nitrobenzene) : Sfo revised and RfD added.
3/30/2007	Cobalt : RfD and RfC revised and URF added.
3/30/2007	Dibromo-3-chloropropane, 1,2- : RfD added.
3/30/2007	Dichloroethane, 1,1- : RfD revised.
3/30/2007	Dichloropropane, 1,3- : RfD revised.
3/30/2007	Diethylene glycol monobutyl ether : RfD revised.
3/30/2007	Diisopropyl ether (2,2'-oxybis-propane) : RfC revised.
3/30/2007	Dimethylbenzidine, 3,3' : Sfo revised.
3/30/2007	Dinitrobenzene, 1,4- : RfD revised.
3/30/2007	Dinitro-2-methylphenol, 4,6- (dinitro-o-cresol, 4, 6-) : RfD revised.
3/30/2007	Di:n-octyl phthalate : RfD revised.
3/30/2007	Epichlorohydrin : RfD revised.
3/30/2007	Ethylenediamine : RfD revised.
3/30/2007	Formic acid : RfC revised.
3/30/2007	Hexane, n- : RfD and RfC revised.
3/30/2007	Hexanoic acid : RfD revised.
3/30/2007	Hydroquinone : Sfo added.
3/30/2007	Kepone (chlordecone) : Sfo and RfD revised.
3/30/2007	Malononitrile : RfD revised.
3/30/2007	Methylene-bis (2-chloroaniline) 4,4'- : RfD revised.
3/30/2007	Nitroaniline, 2 : RfD and RfC revised.
3/30/2007	Nitroaniline, 3- :Sfo revised.
3/30/2007	Nitroaniline, 4- :Sfo and RfC revised.
3/30/2007	Nitrosodimethylamine, N- : RfD added.
3/30/2007	Nitrosodiphenylamine, N- :RfD added.
3/30/2007	Nitrotoluene, m- :RfD revised.
3/30/2007	Nitrotoluene, o- :Sfo added.
3/30/2007	Nitrotoluene, p- : Sfo added.
3/30/2007	Propylene glycol : RfD and RfC revised.
3/30/2007	Tetrachloroethane, 1,1,2,2- : RfD revised.
3/30/2007	Trichlorobenzene, 1,2,4- : RfC revised.
3/30/2007	Trichloroethane, 1,1,1- : RfC revised.
3/30/2007	Trinitrophenylmethylnitramine (tetryl; nitramine) : RfD revised.
3/30/2007	Xylene, m- :RfC revised.
3/30/2007	Xylene, o- :RfC revised.
3/30/2007	Xylene, p- :RfC revised.
3/30/2007	>8-10 C aliphatics (TPH) : RfC revised.
3/30/2007	>10-12 C aliphatics (TPH) : RfC revised.
3/30/2007	>12-16 C aliphatics (TPH) : RfC revised.
3/30/2007	Chemicals added this year : 1,2-benzenedicarboxylic acid, disodecyl ester, Butyl methacrylate, Ethanol, 2-amino-, ethanol, 2-(2-ethoxyethoxy)-, Nonene, 1-n,- tetraoxadodecane, 2,5,8,11-
3/31/2006	Barium : RfD was revised.
3/31/2006	Benzene : RfD corrected.
3/31/2006	Di-n-octyl phthalate : RfC was revised.
3/31/2006	Ethylene dibromide : URF was revised.
3/31/2006	Hexane : RfC was revised.
3/31/2006	Hexanoic acid : RfD revised.
3/31/2006	Nonyphenol : RfD revised.
3/31/2006	Tert-amyl-methyl-ether (TAME) : RfC was revised.
3/31/2006	Toluene : RfD and RfC were revised.
3/31/2006	Chemicals added this year : Hydrocaproic acid, 6-, Monocrotophos, Nonylphenol ethoxylate, Prothiofos, Sodium hypochlorite, Sulprofos, Tert-amyl-ethyl ether (TAEE), Tetrachlorvinphose (Stirophos), Tetraethyl pyrophosphate (TEPP)
3/21/2005	Boron : Carcinogenic classification and RfD were revised.
3/21/2005	Cobalt : RfC was revised.

Last Revised: May 10, 2023

Summary of Updates to the Tables Accompanying the Texas Risk Reduction Program (TRRP) Rule¹

Date of Change	Change Made
3/21/2005	Dioxane, 1,4-: RfD was revised.
3/21/2005	Ethylene dibromide : Sfo, and URF were revised. RfD and RfC were added.
3/21/2005	Perchlorate : RfD was revised.
3/21/2005	Chemicals added this year : Acetate, 2-ethoxyethanol, Acetate, isoamyl, Acetate, isobutyl, Acetate, sec-butyl, Benzenediacetonitrile, 1,3-, Benzo-j-fluoranthene, Benzophenone, Benzoyl peroxide, Bromacil, Butadiene, 2-methyl-1,3- (isoprene), Butane, 2,3-dimethyl-, Butanol, 2-, Butanol, 2-methyl-2-, Butene, 1-, Butene, cis-2-, Butene, trans-2-, Cyclopentane, methyl-, Dibenzo(a,e)pyrene, Dibenzo(a,h)pyrene, Dibenzo(a,i)pyrene, Dichloromid, Dichlorofluoromethane, Dipropylene glycol, Hexanal, 2-ethyl-, Hydroquinone, Isoamyl alcohol, Isodecanol, Pentane, 2-methyl-, Pentane, 3-methyl-, Pentanol, 1-, Pentanol, 4-methyl-2-, Phenol, 4-tert-butyl-, Phenothiazine, and Tetraethylene glycol.
3/31/2004	Acetone : RfD was revised.
3/31/2004	Acrolein : RfD and carcinogenic classification were revised.
3/31/2004	Adipic acid : RfD was revised; RfC was removed; RS-ESL was added.
3/31/2004	Benzene : RfD and RfC were revised.
3/31/2004	Cyclohexane : RfC was revised.
3/31/2004	Diisopropyl ether : RS-ESL was revised.
3/31/2004	Disodium Iminodiacetate : RfD was revised.
3/31/2004	Mercury: Much higher PCLs may be obtained using a pH-dependent K _d based on site-specific information (see Figure:30 TAC §350.73(e)(1)(C)).
3/31/2004	Methyl Ethyl Ketone : RfC was revised.
3/31/2004	Methyl isobutyl ketone : RfC was added (previously used a RS-ESL).
3/31/2004	MTBE : reference for toxicity factors was revised.
3/31/2004	Nickel : RfC was revised.
3/27/2003	Table containing K _{oc} values for ionizing organic COCs as a function of pH was added.
3/27/2003	Adipic acid : RfD was revised; RfC was added; RS-ESL was removed.
3/27/2003	Aminobiphenyl, 4- :Sfo was revised; RfD and URF were removed.
3/27/2003	Ammonium sulfate entry was changed to ammonium salts.
3/27/2003	Aniline : RfD was added.
3/27/2003	Arsenic : refer to TRRP website for November 12, 2002 memorandum regarding implementation of new MCL.
3/27/2003	Bis (2-chloroethoxy) methane : Sfo and URF were revised.
3/27/2003	Boron : RfC was added.
3/27/2003	Bromobenzene : reference for RfD was revised; RfC was revised.
3/27/2003	Bromodichloromethane : MCL was removed; note was added regarding MCL for total trihalomethanes
3/27/2003	Bromoform : MCL was removed; note was added regarding MCL for total trihalomethanes
3/27/2003	Butadiene, 1,3: URF and carcinogenic classification were revised; RfC was added (previously used a RS:ESL).
3/27/2003	Butyric acid : RfD was revised; RfC was added; RS-ESL was removed.
3/27/2003	Chloral hydrate : references for carcinogenic classification and RfD were revised.
3/27/2003	Chloroform : MCL was removed; note was added regarding MCL for total trihalomethanes
3/27/2003	Cyclohexane : RS-ESL was revised.
3/27/2003	Cyclohexanol : RS-ESL was revised.
3/27/2003	Dibenz-a,h-acridine : carcinogenic classification was revised.
3/27/2003	Dibromochloromethane : MCL was removed; note was added regarding MCL for total trihalomethanes
3/27/2003	Dichlorobenzene, 1,2: RfC was revised.
3/27/2003	Dichloroethylene, 1,1: Sfo and URF were removed; RfD was revised; RfC was added.
3/27/2003	Diethylhexyl adipate : MCL was added.
3/27/2003	Hexanoic acid : RfD and RfC were revised.
3/27/2003	Kepone : carcinogenic classification was revised.
3/27/2003	Lithium : RfD was revised.
3/27/2003	Mercury : CAS number for mercuric chloride was added to entry.
3/27/2003	MTBE : URF was revised.
3/27/2003	Nitroglycerin : Sfo was added.
3/27/2003	Nitrosopiperidine, N: carcinogenic classification was revised.
3/27/2003	Perylene : RfD was revised.
3/27/2003	Phenol : RfD was revised.
3/27/2003	Picloram : reference for RfD was revised.
3/27/2003	Safarole : carcinogenic classification was revised.
3/27/2003	Tetrachloroethylene : reference for carcinogenic classification was revised.

Last Revised: May 10, 2023**Summary of Updates to the Tables Accompanying the Texas Risk Reduction Program (TRRP) Rule¹**

Date of Change	Change Made
3/27/2003	Toluenediamine, 2,6: LogKoc was revised.
3/27/2003	Trichloroethylene : reference for carcinogenic classification was revised.
3/27/2003	Uranium : MCL was revised.
3/27/2003	Valeric acid : RfD and RfC were revised.
3/27/2003	Xylenes : RfD was revised; RfC was added (previously used a RS:ESL).
3/28/2002	References for some tox values were revised.
3/28/2002	Arsenic : MCL was revised. Note that this change is significant enough for the executive director to require use of the new arsenic MCL, even if the SIN or RAP has already been submitted.
3/28/2002	Nitrophenol, 3: RS-ESL was revised.
3/28/2002	Triaminotrinitrobenzene - H_unitless was corrected to reflect a value.
12/19/2001	**Note: As discussed in the guidance document Toxicity Factors and Chemical/Physical Parameters (RG-366/TRRP-19), updates to the tables to reflect changes in toxicity factors or chemical/physical data will now be made annually in March. Exceptions to this schedule include a change that has been of such a magnitude that the PCLs previously developed for a COC would not be adequately protective of human health and the environment.
12/19/2001	Several compounds were added to the tables which are not of human health concern but for which other criteria may apply. These are noted in the tables and an additional information table is referenced.
12/19/2001	Ammonia : taste and odor value for groundwater was added to the secondary MCL column.
12/19/2001	Benzaldehyde : RS-ESL was revised.
12/19/2001	Bis (2-chloroethoxy) methane : chemical/physical parameters were added.
12/19/2001	Chlordane, gamma : chemical/physical parameters were added.
12/19/2001	Chloroform : Sfo was removed.
12/19/2001	Chloromethane : RfC and carcinogenic classification were revised.
12/19/2001	Cyclohexane : RS-ESL was revised.
12/19/2001	Diethylene glycol monobutyl ether : RfC was revised.
12/19/2001	Hexachlorocyclopentadiene : RfD, RfC, and carcinogenic classification were revised.
12/19/2001	Methyl acetate : RfD was revised.
12/19/2001	Methyl cyclohexane : RfC was revised.
12/19/2001	Perchlorate : RfD was revised. Note that this change is significant enough for the executive director to require use of the new perchlorate RfD, even if the SIN or RAP has already been submitted.
12/19/2001	Quinoline : Carcinogenic classification and Sfo were revised.
12/19/2001	Triaminotrinitrobenzene : chemical/physical parameters were revised.
3/15/2001	**Note: Updates to the tables will be made approximately once every six months. Exceptions to the six month schedule include a change that has been of such a magnitude that the PCLs previously developed for a contaminant would not be adequately protective of human health and the environment.
3/15/2001	Please note that several COCs were added to the tables. New COCs added since the last publication of the tables are identified in the chemical/physical properties table and the ABS.d/ABS.gi table.
3/15/2001	Based on conversations with ATSDR, it was determined that the MRL list provided on ATSDR's website (http://www.atsdr.cdc.gov/mrls.html) lists official, more up-to-date MRLs than the May 23, 1996 FR version which were previously used for the tables. Many of the toxicity factors additions and revisions noted below were due to transitioning to this new source for MRL values.
3/15/2001	The reference to the 1995 MADEP document was removed and replaced by TNRCC-derived values. This only affected the RfD for one noncarcinogenic PAH (2-methylnaphthalene), which is noted below.
3/15/2001	Acetaldehyde : RfD was added.
3/15/2001	Benzene : Sfo was revised.

Last Revised: May 10, 2023**Summary of Updates to the Tables Accompanying the Texas Risk Reduction Program (TRRP) Rule¹**

Date of Change	Change Made
3/15/2001	Cadmium : ABS.d was changed to 0.001; RfC was removed.
3/15/2001	Chloral : RfD was revised.
3/15/2001	Chlordane : CAS number was corrected.
3/15/2001	Chlorobenzene : RfC was added.
3/15/2001	Chloromethane : RfC was revised.
3/15/2001	Chlorotoluene, o: LogKoc and Dair were added to match Figure: 30 TAC §350.73(e) of the TRRP rule; Dwat was also added.
3/15/2001	Cyanide : Henry's Law Constant was added.
3/15/2001	Dibenzofuran : chemical/physical parameters were revised.
3/15/2001	Dichlorobenzene, 1,3: chemical/physical parameters were corrected to match Figure: 30 TAC §350.73(e) of the TRRP rule.
3/15/2001	Dichloroethane, 1,2: RfC was revised.
3/15/2001	Dichloropropene, 1,3- (mixed isomers) : RfD, Sfo, and URF were revised.
3/15/2001	Dimethylphthalate : chemical/physical parameters were corrected to match Figure: 30 TAC §350.73(e) of the TRRP rule.
3/15/2001	Dinitro-2-methylphenol, 4,6- chemical/physical parameters were revised.
3/15/2001	Endothall : Dair and Dwat were added.
3/15/2001	Endrin : Dair and Dwat were added.
3/15/2001	Ethion : Dair and Dwat were added.
3/15/2001	Ethyl-2-methyl benzene, 1- and ethyl-4-methyl benzene, 1- MCLs were removed (had previously used toluene's MCL).
3/15/2001	Formaldehyde : RfC was added (previously used a RS-ESL).
3/15/2001	Hexachlorocyclohexane, alpha : RfD was added.
3/15/2001	Hexanone, 2: chemical/physical parameters were added.
3/15/2001	Kepone : Sfo and URF were added.
3/15/2001	Mercury : a second entry was added to include Kds (and PCLs) at two different soil pHs; LogKd was revised to match Figure: 30 TAC §350.73(e) of the TRRP rule.
3/15/2001	Methylnaphthalene, 1: RfD was revised.
3/15/2001	Methylnaphthalene, 2: RfD was revised.
3/15/2001	MTBE : Sfo was revised.
3/15/2001	Naled : Dair value was added.
3/15/2001	Nickel : RfC was added.
3/15/2001	Nitrate : LogKoc and Henry's Law Constant were added.
3/15/2001	Nitroaniline, 3- and nitroaniline, 4: chemical/physical parameters were revised.
3/15/2001	Nitrophenol, 2- and nitrophenol, 4: RS-ESLs were added; chemical/physical parameters were revised.

Last Revised: May 10, 2023

Summary of Updates to the Tables Accompanying the Texas Risk Reduction Program (TRRP) Rule¹

Date of Change	Change Made
3/15/2001	t (exposure interval) was corrected to match Figure: 30 TAC §350.75(b)(1) of the TRRP rule (value changed slightly).
3/15/2001	Tetrachloroethane, 1,1,2,2: RfD was revised.
3/15/2001	Tetraethyl lead was removed as a COC for the vegetable ingestion pathway (was previously considered to be a metal).
3/15/2001	Tetrahydrofuran : chemical/physical parameters were revised.
3/15/2001	Thallium : LogKd was added.
3/15/2001	Toluenediamine, 2,6: LogKoc was added.
3/15/2001	Trimethylbenzene, 1,2,3: MCL was removed (had previously used toluene's MCL).
3/15/2001	Uranium : RfC was added.
3/15/2001	Vinyl chloride : SFo, RfD, URF, and RfC were revised.
9/16/1999	Original TRRP tables available.

Footnote

1 As discussed in TRRP §350.73(a) and in the accompanying guidance document entitled Toxicity Factors and Chemical/Physical Parameters (RG-366/TRRP-19), persons are required to use the most current toxicity factors as of the date of submittal of the Self-Implementation Notice (SIN) or the Response Action Plan (RAP). The TCEQ provides toxicity factors on the agency's website as a convenience to users of the tables. However, since the tables are typically updated on an annual basis, it is the person's responsibility to ensure that they are using the most current toxicity factors according to the hierarchy described in §350.73(a). TCEQ project managers will verify that toxicity factors are current at the time of submittal of the SIN or RAP. Note that if the executive director determines during the review of the Response Action Completion Report (RACR) that a change in a toxicity factor since the submittal of the SIN or RAP has been of such a magnitude that the PCLs previously developed for a COC would clearly not be protective of human health and the environment, the adequacy of the response action must be reevaluated.

This table contains a list of all edits and additions to the TRRP PCL tables from 1999-March 6, 2023
end of worksheet

**Table 1
Tier 1 Residential Soil PCLs¹**

Last Revised: May 10, 2023

Chemical of Concern	CAS	0.5 acre source area										30 acre source area											
		TotSoil _{Comb} ² (mg/kg)	note ³	GWSoil _{Dg} (mg/kg)	note ³	GWSoil _{Class 3} (mg/kg)	note ³	AirSoil _{Inh-V} ⁴ (mg/kg)	note ³	AirGW-Soil _{Inh-V} (mg/kg)	note ³	GWSoil for Secondary MCL (mg/kg)	TotSoil _{Comb} ² (mg/kg)	note ³	GWSoil _{Dg} (mg/kg)	note ³	GWSoil _{Class 3} (mg/kg)	note ³	AirSoil _{Inh-V} ⁴ (mg/kg)	note ³	AirGW-Soil _{Inh-V} (mg/kg)	note ³	GWSoil for Secondary MCL (mg/kg)
Chlorotoluene, o- (2-chlorotoluene)	95-49-8	1.2E+03	n	9.1E+00	n	9.1E+02	n	1.3E+04	n	4.4E+05	n >S	--	1.1E+03	n	4.5E+00	n	4.5E+02	n	6.8E+03	n	2.8E+04	n >S	--
Chlorotoluene, p- (4-chlorotoluene)	106-43-4	1.6E+03	n	1.1E+01	n	1.1E+03	n	--	--	--	--	--	1.6E+03	n	5.4E+00	n	5.4E+02	n	--	--	--	--	--
Chlorpyrifos	2921-88-2	1.3E+02	n	1.5E+01	n	1.5E+03	n >S	--	--	--	--	--	1.3E+02	n	7.4E+00	n	7.4E+02	n >S	--	--	--	--	--
Chromium (III)	16065-83-1	3.3E+04	n	2.4E+03	m >S	2.4E+05	m >S	--	--	--	--	--	2.7E+04	n	1.2E+03	m >S	1.2E+05	m >S	--	--	--	--	--
Chromium (total)	7440-47-3	3.3E+04	n	2.4E+03	m >S	2.4E+05	m >S	--	--	--	--	--	2.7E+04	n	1.2E+03	m >S	1.2E+05	m >S	--	--	--	--	--
Chromium (VI)	18540-29-9	1.2E+02	n	2.8E+01	m >S	2.8E+03	m >S	--	--	--	--	--	1.2E+02	n	1.4E+01	m >S	1.4E+03	m >S	--	--	--	--	--
Chrysene	218-01-9	4.1E+03	c	1.1E+04	c >S	1.0E+06	c >S	8.7E+05	c	1.0E+06	c >S	--	4.1E+03	c	5.6E+03	c >S	5.6E+05	c >S	4.5E+05	c	1.0E+06	c >S	--
Cobalt	7440-48-4	6.8E+02	n	2.2E+02	n >S	2.2E+04	n >S	--	--	--	--	--	6.8E+02	n	1.1E+02	n >S	1.1E+04	n >S	--	--	--	--	--
Copolymer acrylamide	69418-26-4	1.3E+01	n	9.4E-03	n	9.4E-01	n	--	--	--	--	--	1.3E+01	n	4.7E-03	n	4.7E-01	n	--	--	--	--	--
Copper	7440-50-8	1.3E+03	n	1.0E+03	e >S	1.0E+05	e >S	--	--	--	--	8.0E+02	1.3E+03	n	5.2E+02	e >S	5.2E+04	e >S	--	--	--	--	4.0E+02
Coronene	191-07-1	1.3E+02	n	5.6E+04	n >S	1.0E+06	n >S	--	--	--	--	--	1.3E+02	n	2.8E+04	n >S	1.0E+06	n >S	--	--	--	--	--
Coumaphos	56-72-4	4.3E+02	n	1.1E+02	n	1.1E+04	n >S	--	--	--	--	--	4.3E+02	n	5.5E+01	n	5.5E+03	n >S	--	--	--	--	--
Cresol	1319-77-3	3.3E+03	n	6.6E+00	n	6.6E+02	n	--	--	--	--	--	3.3E+03	n	3.3E+00	n	3.3E+02	n	--	--	--	--	--
Cresol, m- (3-methylphenol)	108-39-4	3.3E+03	n	6.6E+00	n	6.6E+02	n	--	--	--	--	--	3.3E+03	n	3.3E+00	n	3.3E+02	n	--	--	--	--	--
Cresol, o- (2-methylphenol)	95-48-7	3.3E+03	n	7.1E+00	n	7.1E+02	n	--	--	--	--	--	3.3E+03	n	3.6E+00	n	3.6E+02	n	--	--	--	--	--
Cresol, p- (4-methylphenol)	106-44-5	3.3E+02	n	6.3E-01	n	6.3E+01	n	--	--	--	--	--	3.3E+02	n	3.2E-01	n	3.2E+01	n	--	--	--	--	--
Crotonaldehyde	123-73-9	3.2E+00	c	9.5E-04	c	9.5E-02	c	--	--	--	--	--	3.2E+00	c	4.8E-04	c	4.8E-02	c	--	--	--	--	--
Cumene (isopropylbenzene)	98-82-8	4.3E+03	n	3.5E+02	n	3.5E+04	n >S	9.2E+03	n	6.2E+05	n >S	--	3.0E+03	n	1.7E+02	n	1.7E+04	n >S	4.8E+03	n	4.0E+04	n >S	--
Cyanazine	21725-46-2	5.6E+00	c	4.2E-03	c	4.2E-01	c	--	--	--	--	--	5.6E+00	c	2.1E-03	c	2.1E-01	c	--	--	--	--	--
Cyanide	57-12-5	4.5E+01	m	4.0E+01	m	4.0E+03	m	7.2E+02	n	--	--	--	4.3E+01	n	2.0E+01	m	2.0E+03	m	3.7E+02	n	--	--	--
Cyanogen	460-19-5	1.1E+01	n	6.1E-02	n	6.1E+00	n	1.2E+01	n	1.8E+01	n	--	5.9E+00	n	3.0E-02	n	3.0E+00	n	6.3E+00	n	1.2E+00	n	--
Cycloate	1134-23-2	3.7E+03	n	1.5E+02	n	1.5E+04	n >S	--	--	--	--	--	3.7E+03	n	7.6E+01	n	7.6E+03	n >S	--	--	--	--	--
Cyclohexane	110-82-7	7.5E+04	n	5.9E+03	n >S	5.9E+05	n >S	9.2E+04	n	2.9E+05	n >S	--	4.2E+04	n	2.9E+03	n >S	2.9E+05	n >S	4.7E+04	n	1.8E+04	n >S	--
Cyclohexanol	108-93-0	3.3E+05	n	2.9E+02	n >S	2.9E+04	n >S	--	--	--	--	--	3.3E+05	n	1.5E+02	n >S	1.5E+04	n >S	--	--	--	--	--
Cyclohexanone	108-94-1	3.2E+04	n	2.6E+02	n	2.6E+04	n	3.5E+04	n	1.0E+06	n >S	--	1.7E+04	n	1.3E+02	n	1.3E+04	n	1.8E+04	n	1.9E+05	n >S	--
Cyclohexene, 1-methanol-3-	1679-51-2	1.3E+03	n	3.8E+00	n	3.8E+02	n	--	--	--	--	--	1.3E+03	n	1.9E+00	n	1.9E+02	n	--	--	--	--	--
Cyclohexene, 4-vinyl-1-	100-40-3	1.3E+03	n	3.1E+01	n	3.1E+03	n >S	5.1E+03	n	6.2E+04	n >S	--	1.1E+03	n	1.5E+01	n	1.5E+03	n >S	2.6E+03	n	4.0E+03	n >S	--
Cyclopentane	287-92-3	4.8E+03	n	2.8E+01	n	2.8E+03	n	3.7E+05	n	7.0E+05	n >S	--	4.8E+03	n	1.4E+01	n	1.4E+03	n	1.9E+05	n	4.6E+04	n >S	--
Cyclopentane, methyl-	96-37-7	5.3E+03	n	1.4E+02	n	1.4E+04	n >S	1.5E+04	n	3.8E+04	n >S	--	4.0E+03	n	6.8E+01	n	6.8E+03	n >S	7.9E+03	n	2.5E+03	n >S	--
Cyclopentene	142-29-0	4.1E+05	n	1.1E+03	n	1.1E+05	n >S	--	--	--	--	--	4.1E+05	n	5.3E+02	n	5.3E+04	n >S	--	--	--	--	--
Cyclotetramethylenetetranitramine (HMX)	2691-41-0	1.6E+03	n	2.3E+00	n	2.3E+02	n	--	--	--	--	--	1.6E+03	n	1.2E+00	n	1.2E+02	n	--	--	--	--	--
Cyclotrimethylenetrinitramine (RDX)	121-82-4	5.9E+01	c	5.1E-02	c	5.1E+00	c	--	--	--	--	--	5.9E+01	c	2.5E-02	c	2.5E+00	c	--	--	--	--	--
Cymene (isopropyltoluene)	99-87-6	8.2E+03	n	2.3E+02	n	2.3E+04	n >S	--	--	--	--	--	8.2E+03	n	1.2E+02	n	1.2E+04	n >S	--	--	--	--	--
Cymoxanil	57966-95-7	8.7E+02	n	6.1E-01	n	6.1E+01	n	--	--	--	--	--	8.7E+02	n	3.0E-01	n	3.0E+01	n	--	--	--	--	--
Dacthal (DCPA)	1861-32-1	6.2E+02	n	4.5E+02	n >S	4.5E+04	n >S	--	--	--	--	--	6.2E+02	n	2.3E+02	n >S	2.3E+04	n >S	--	--	--	--	--
Dalapon, sodium salt (2,2-dichloropropanoic acid)	75-99-0	2.0E+03	n	5.8E-01	m	5.8E+01	m	--	--	--	--	--	2.0E+03	n	2.9E-01	m	2.9E+01	m	--	--	--	--	--
DDD	72-54-8	1.4E+01	c	1.3E+01	c	1.3E+03	c >S	--	--	--	--	--	1.4E+01	c	6.5E+00	c	6.5E+02	c >S	--	--	--	--	--
DDE	72-55-9	1.0E+01	c	1.2E+01	c	1.2E+03	c >S	--	--	--	--	--	1.0E+01	c	5.9E+00	c	5.9E+02	c >S	--	--	--	--	--
DDT	50-29-3	5.4E+00	c	1.5E+01	c	1.5E+03	c >S	1.2E+03	c	1.0E+06	c >S	--	5.4E+00	c	7.4E+00	c	7.4E+02	c >S	6.2E+02	c	2.2E+05	c >S	--
Demeton	8065-48-3	2.7E+00	n	1.2E-02	n	1.2E+00	n	--	--	--	--	--	2.7E+00	n	6.2E-03	n	6.2E-01	n	--	--	--	--	--
Desethylatrazine	6190-65-4	2.3E+03	n	4.0E+00	n	4.0E+02	n	--	--	--	--	--	2.3E+03	n	2.0E+00	n	2.0E+02	n	--	--	--	--	--
Diacetone alcohol (4-hydroxy-4-methyl-2-pentanone)	123-42-2	2.7E+03	n	1.9E+00	n	1.9E+02	n	--	--	--	--	--	2.7E+03	n	9.7E-01	n	9.7E+01	n	--	--	--	--	--
Diallate	2303-16-4	3.8E+01	c	1.2E+00	c	1.2E+02	c	--	--	--	--	--	3.8E+01	c	5.8E-01	c	5.8E+01	c	--	--	--	--	--
Diazinon	333-41-5	3.1E+01	n	1.6E-01	n	1.6E+01	n	6.5E+01	n	2.9E+04	n >S	--	2.1E+01	n	7.9E-02	n	7.9E+00	n	3.3E+01	n	1.9E+03	n >S	--
Dibenz(a,h)acridine	226-36-8	3.7E+00	c	5.8E+01	c >S	5.8E+03	c >S	1.5E+04	c	1.0E+06	c >S	--	3.7E+00	c	2.9E+01	c >S	2.9E+03	c >S	7.9E+03	c >S	1.0E+06	c >S	--
Dibenz(a,j)acridine	224-42-0	5.8E+00	c	1.1E+02	c >S	1.1E+04	c >S	2.1E+04	c	1.0E+06	c >S	--	5.8E+00	c	5.6E+01	c >S	5.6E+03	c >S	1.1E+04	c	1.0E+06	c >S	--
Dibenz-a,h-anthracene	53-70-3	4.0E+00	c	1.5E+01	m4	1.5E+03	m >S	2.9E+03	c	1.0E+06	c >S	--	4.0E+00	c	7.6E+00	m4	7.6E+02	m >S	1.5E+03	c	1.0E+06	c >S	--
Dibenzo(a,e)pyrene	192-65-4	6.1E-01	c	1.3E+02	c >S	1.3E+04	c >S	7.2E+03	c	1.0E+06	c >S	--	6.1E-01	c	6.5E+01	c >S	6.5E+03	c >S	3.7E+03	c	1.0E+06	c >S	--
Dibenzo(a,h)pyrene	189-64-0	6.1E-02	c	1.2E+01	c	1.2E+03	c >S	7.0E+02	c	1.0E+06	c >S	--	6.1E-02	c	6.0E+00	c	6.0E+02	c >S	3.6E+02	c	1.0E+06	c >S	--
Dibenzo(a,i)pyrene	189-55-9	6.1E-02	c	1.2E+01	c	1.2E+03	c >S	7.0E+02	c	1.0E+06	c >S	--	6.1E-02	c	6.0E+00	c	6.0E+02	c >S	3.6E+02	c	1.0E+06	c >S	--
Dibenzofuran	132-64-9	2.7E+02	n	3.3E+01	n	3.3E+03	n >S	--	--	--	--	--	2.7E+02	n	1.7E+01	n	1.7E+03	n >S	--	--	--	--	--
Dibenzothiophene	132-65-0	1.9E+02	n	1.0E+02	n	1.0E+04	n >S	--	--	--	--	--	1.9E+02	n	5.0E+01	n	5.0E+03	n >S	--	--	--	--	--

**Table 1
Tier 1 Residential Soil PCLs¹**

Last Revised: May 10, 2023

Chemical of Concern	CAS	0.5 acre source area										30 acre source area												
		TotSoil _{Comb} ² (mg/kg)	note ³	GWSoil _{Dg} (mg/kg)	note ³	GWSoil _{Class 3} (mg/kg)	note ³	AirSoil _{Inh-V} ⁴ (mg/kg)	note ³	AirGW-Soil _{Inh-V} (mg/kg)	note ³	GW ⁵ Soil for Secondary MCL (mg/kg)	TotSoil _{Comb} ² (mg/kg)	note ³	GWSoil _{Dg} (mg/kg)	note ³	GWSoil _{Class 3} (mg/kg)	note ³	AirSoil _{Inh-V} ⁴ (mg/kg)	note ³	AirGW-Soil _{Inh-V} (mg/kg)	note ³	GW ⁵ Soil for Secondary MCL (mg/kg)	
Dimethoxybenzidine, 3,3'-	119-90-4	3.4E+02	c	2.8E-01	c	2.8E+01	c	--	--	--	--	3.4E+02	c	1.4E-01	c	1.4E+01	c	--	--	--	--	--	--	--
Dimethyl-2-nitrobenzene, 1,3-	81-20-9	1.3E+02	n	2.2E+00	n	2.2E+02	n	2.8E+03	n	4.9E+05	n >S	--	--	1.2E+02	n	1.1E+00	n	1.1E+02	n	1.4E+03	n	3.2E+04	n >S	--
Dimethyl-3-nitrobenzene, 1,2-	83-41-0	1.3E+02	n	1.4E+00	n	1.4E+02	n	2.4E+03	n	3.9E+05	n >S	--	--	1.2E+02	n	7.1E-01	n	7.1E+01	n	1.2E+03	n	2.5E+04	n >S	--
Dimethyl-4-nitrobenzene, 1-2-	99-51-4	1.3E+02	n	1.4E+00	n	1.4E+02	n	2.5E+03	n	4.2E+05	n >S	--	--	1.2E+02	n	7.0E-01	n	7.0E+01	n	1.3E+03	n	2.7E+04	n >S	--
Dimethyl-5-nitrobenzene, 1,3-	99-12-7	1.3E+02	n	1.6E+00	n	1.6E+02	n	2.2E+03	n	3.2E+05	n >S	--	--	1.2E+02	n	8.2E-01	n	8.2E+01	n	1.1E+03	n	2.1E+04	n >S	--
Dimethylphenethylamine, alpha, alpha-	122-09-8	1.3E+02	n	3.8E-01	n	3.8E+01	n	--	--	--	--	--	--	1.3E+02	n	1.9E-01	n	1.9E+01	n	--	--	--	--	--
Dimethyl phenol, 2,4-	105-67-9	1.3E+03	n	3.2E+00	n	3.2E+02	n	--	--	--	--	--	--	1.3E+03	n	1.6E+00	n	1.6E+02	n	--	--	--	--	--
Dimethylaminoazobenzene, p-	60-11-7	6.4E-01	n	1.1E+00	n	1.1E+02	n	--	--	--	--	--	--	6.4E-01	n	5.6E-01	n	5.6E+01	n	--	--	--	--	--
Dimethylbenz-a-anthracene, 7,12-	57-97-6	1.7E-02	c	1.2E+00	c	1.2E+02	c	1.4E+02	c	1.0E+06	c >S	--	--	1.7E-02	c	6.2E-01	c	6.2E+01	c	7.3E+01	c	7.3E+05	c >S	--
Dimethylbenzidine, 3,3'-	119-93-7	4.3E-01	c	8.2E-04	c	8.2E-02	c	--	--	--	--	--	--	4.3E-01	c	4.1E-04	c	4.1E-02	c	--	--	--	--	--
Dimethylformamide, N,N-	68-12-2	2.3E+03	n	4.7E+00	n	4.7E+02	n	3.2E+03	n	7.2E+05	n	--	--	1.4E+03	n	2.4E+00	n	2.4E+02	n	1.6E+03	n	4.7E+04	n	--
Dimethylnaphthalene, 1,3-	575-41-7	2.3E+03	n	7.9E+02	n	7.9E+04	n >S	--	--	--	--	--	--	2.3E+03	n	3.9E+02	n	3.9E+04	n >S	--	--	--	--	--
Dimethylphthalate	131-11-3	5.3E+04	n	6.2E+01	n	6.2E+03	n	--	--	--	--	--	--	5.3E+04	n	3.1E+01	n	3.1E+03	n	--	--	--	--	--
Di-n-butyl phthalate	84-74-2	6.2E+03	n	3.3E+03	n	3.3E+05	n >S	--	--	--	--	--	--	6.2E+03	n	1.7E+03	n	1.7E+05	n >S	--	--	--	--	--
Dinitro-2-methylphenol, 4,6- (dinitro-o-cresol, 4, 6-)	534-52-1	6.7E+00	n	4.7E-03	n	4.7E-01	n	--	--	--	--	--	--	6.7E+00	n	2.3E-03	n	2.3E-01	n	--	--	--	--	--
Dinitrobenzene, 1,3- (dinitrobenzene, 2,4-)	99-65-0	6.7E+00	n	7.6E-03	n	7.6E-01	n	--	--	--	--	--	--	6.7E+00	n	3.8E-03	n	3.8E-01	n	--	--	--	--	--
Dinitrobenzene, 1,4-	100-25-4	6.7E+00	n	7.2E-03	n	7.2E-01	n	--	--	--	--	--	--	6.7E+00	n	3.6E-03	n	3.6E-01	n	--	--	--	--	--
Dinitrophenol, 2,4-	51-28-5	1.3E+02	n	9.4E-02	n	9.4E+00	n	--	--	--	--	--	--	1.3E+02	n	4.7E-02	n	4.7E+00	n	--	--	--	--	--
Dinitrophenol, 2,5-	329-71-5	1.3E+02	n	9.6E-02	n	9.6E+00	n	--	--	--	--	--	--	1.3E+02	n	4.8E-02	n	4.8E+00	n	--	--	--	--	--
Dinitrotoluene, 2,4-	121-14-2	6.9E+00	c	5.3E-03	c	5.3E-01	c	--	--	--	--	--	--	6.9E+00	c	2.7E-03	c	2.7E-01	c	--	--	--	--	--
Dinitrotoluene, 2,6-	606-20-2	6.9E+00	c	4.8E-03	c	4.8E-01	c	--	--	--	--	--	--	6.9E+00	c	2.4E-03	c	2.4E-01	c	--	--	--	--	--
Di-n-octyl phthalate	117-84-0	6.4E+02	n	8.1E+05	n >S	1.0E+06	n >S	--	--	--	--	--	--	6.4E+02	n	4.1E+05	n >S	1.0E+06	n >S	--	--	--	--	--
Dinoseb	88-85-7	6.7E+01	n	3.5E-01	m	3.5E+01	m	--	--	--	--	--	--	6.7E+01	n	1.8E-01	m	1.8E+01	m	--	--	--	--	--
Dioxane 1,4-	123-91-1	4.5E+01	c	1.8E-02	c	1.8E+00	c	1.8E+02	c	1.5E+04	c	--	--	3.7E+01	c	8.8E-03	c	8.8E-01	c	9.3E+01	c	9.7E+02	c	--
Dioxin (as 2,3,7,8-TCDD toxicity equivalent quotients (TEQs))	1746-01-6	1.0E-03	e	1.7E-02	m	1.7E+00	m	--	--	--	--	--	--	1.0E-03	e	8.5E-03	m	8.5E-01	m	--	--	--	--	--
Diphenyl ether	101-84-8	3.8E+02	n	9.2E+01	n	9.2E+03	n >S	--	--	--	--	--	--	3.8E+02	n	4.6E+01	n	4.6E+03	n >S	--	--	--	--	--
Diphenylamine	122-39-4	1.7E+03	n	9.6E+00	n	9.6E+02	n	--	--	--	--	--	--	1.7E+03	n	4.8E+00	n	4.8E+02	n	--	--	--	--	--
Diphenylhydrazine, 1,2-	122-66-7	5.6E+00	c	3.2E-02	c	3.2E+00	c	1.4E+02	c	1.1E+05	c >S	--	--	5.4E+00	c	1.6E-02	c	1.6E+00	c	7.2E+01	c	7.0E+03	c	--
Dipropylene glycol	110-98-5	8.0E+03	n	5.7E+00	n	5.7E+02	n	--	--	--	--	--	--	8.0E+03	n	2.8E+00	n	2.8E+02	n	--	--	--	--	--
Diquat	85-00-7	1.5E+02	n	2.0E-01	m	2.0E+01	m	--	--	--	--	--	--	1.5E+02	n	1.0E-01	m	1.0E+01	m	--	--	--	--	--
Disodium iminodiacetate (iminodiacetic acid, disodium salt)	142-73-4	6.7E+02	n	4.7E-01	n	4.7E+01	n	--	--	--	--	--	--	6.7E+02	n	2.3E-01	n	2.3E+01	n	--	--	--	--	--
Disulfoton	298-04-4	2.7E+00	n	3.5E-01	n	3.5E+01	n	--	--	--	--	--	--	2.7E+00	n	1.8E-01	n	1.8E+01	n	--	--	--	--	--
Diuron	330-54-1	1.3E+02	n	9.3E-01	n	9.3E+01	n	--	--	--	--	--	--	1.3E+02	n	4.6E-01	n	4.6E+01	n	--	--	--	--	--
Dodecylphenol, 4-	104-43-8	3.3E+03	n	1.0E+06	n >S	1.0E+06	n >S	--	--	--	--	--	--	3.3E+03	n	1.0E+06	n >S	1.0E+06	n >S	--	--	--	--	--
Endosulfan	115-29-7	4.0E+02	n	4.6E+00	n	4.6E+02	n >S	--	--	--	--	--	--	4.0E+02	n	2.3E+00	n	2.3E+02	n >S	--	--	--	--	--
Endosulfan I	959-98-8	9.1E+01	n	3.1E+01	n	3.1E+03	n >S	--	--	--	--	--	--	9.1E+01	n	1.5E+01	n	1.5E+03	n >S	--	--	--	--	--
Endosulfan II	3213-65-9	2.7E+02	n	9.2E+01	n	9.2E+03	n >S	--	--	--	--	--	--	2.7E+02	n	4.6E+01	n	4.6E+03	n >S	--	--	--	--	--
Endosulfan sulfate	1031-07-8	3.8E+02	n	4.7E+03	n >S	4.7E+05	n >S	--	--	--	--	--	--	3.8E+02	n	2.3E+03	n >S	2.3E+05	n >S	--	--	--	--	--
Endothall	145-73-3	1.3E+03	n	5.3E-01	m	5.3E+01	m	--	--	--	--	--	--	1.3E+03	n	2.7E-01	m	2.7E+01	m	--	--	--	--	--
Endrin	72-20-8	9.0E+00	n	7.5E-01	m	7.5E+01	m	--	--	--	--	--	--	9.0E+00	n	3.8E-01	m	3.8E+01	m	--	--	--	--	--
Endrin aldehyde	7421-93-4	1.9E+01	n	6.3E+02	n	6.3E+04	n >S	--	--	--	--	--	--	1.9E+01	n	3.1E+02	n	3.1E+04	n >S	--	--	--	--	--
Endrin ketone	53494-70-5	1.9E+01	n	5.1E+01	n	5.1E+03	n	--	--	--	--	--	--	1.9E+01	n	2.5E+01	n	2.5E+03	n	--	--	--	--	--
Epichlorohydrin	106-89-8	2.5E+01	n	1.8E-01	c	1.8E+01	c	2.6E+01	n	1.4E+03	n	--	--	1.3E+01	n	9.2E-02	c	9.2E+00	c	1.4E+01	n	9.1E+01	n	--
EPN (o-ethyl o-(4-nitrophenyl)phenylphosphonothioate)	2104-64-5	6.7E-01	n	5.5E-02	n	5.5E+00	n	--	--	--	--	--	--	6.7E-01	n	2.7E-02	n	2.7E+00	n	--	--	--	--	--
Esfenvalerate	66230-04-4	7.4E+01	n	1.2E+02	n >S	1.2E+04	n >S	--	--	--	--	--	--	7.4E+01	n	6.2E+01	n >S	6.2E+03	n >S	--	--	--	--	--
Ethalfuralin (sonolan)	55283-68-6	4.7E+01	c	2.5E+01	c	2.5E+03	c	--	--	--	--	--	--	4.7E+01	c	1.2E+01	c	1.2E+03	c	--	--	--	--	--
Ethanol	64-17-5	1.0E+06	n	1.6E+03	n	1.6E+05	n	--	--	--	--	--	--	1.0E+06	n	7.9E+02	n	7.9E+04	n	--	--	--	--	--
Ethanol, 2-amino-	141-43-5	1.1E+02	n	8.0E-02	n	8.0E+00	n	2.9E+03	n	8.1E+05	n	--	--	1.1E+02	n	4.0E-02	n	4.0E+00	n	1.5E+03	n	5.3E+04	n	--
Ethanol, 2-(2-aminoethoxy)-	929-06-6	3.3E+01	n	2.3E-02	n	2.3E+00	n	--	--	--	--	--	--	3.3E+01	n	1.2E-02	n	1.2E+00	n	--	--	--	--	--
Ethanol, 2-(2-ethoxyethoxy)-	111-90-0	1.3E+05	n	1.6E+02	n	1.6E+04	n	--	--	--	--	--	--	1.3E+05	n	8.2E+01	n	8.2E+03	n	--	--	--	--	--
Ethanol, 2-(methylamino)-	109-83-1	9.1E+02	n	7.5E-01	n	7.5E+01	n	6.4E+03	n	1.0E+06	n	--	--	8.1E+02	n	3.8E-01	n	3.8E+01	n	3.3E+03	n	1.3E+05	n	--
Ethion	563-12-2	2.7E+01	n	7.6E+00	n	7.6E+02	n >S	--	--	--	--	--	--	2.7E+01	n	3.8E+00	n	3.8E+02	n >S	--	--	--	--	--

**Table 1
Tier 1 Residential Soil PCLs¹**

Last Revised: May 10, 2023

Chemical of Concern	CAS	0.5 acre source area										30 acre source area											
		TotSoil _{Comb} ² (mg/kg)	note ³	GWSoil _{Dg} (mg/kg)	note ³	GWSoil _{Class 3} (mg/kg)	note ³	AirSoil _{Inh-V} ⁴ (mg/kg)	note ³	AirGW-Soil _{Inh-V} (mg/kg)	note ³	GWSoil for Secondary MCL (mg/kg)	TotSoil _{Comb} ² (mg/kg)	note ³	GWSoil _{Dg} (mg/kg)	note ³	GWSoil _{Class 3} (mg/kg)	note ³	AirSoil _{Inh-V} ⁴ (mg/kg)	note ³	AirGW-Soil _{Inh-V} (mg/kg)	note ³	GWSoil for Secondary MCL (mg/kg)
Ethoprop	13194-48-4	6.7E+00	n	1.2E-01	n	1.2E+01	n	--	--	--	--	6.7E+00	n	6.2E-02	n	6.2E+00	n	--	--	--	--	--	--
Ethoxy ethanol, 2-	110-80-5	5.7E+03	n	4.3E+00	n	4.3E+02	n >S	2.5E+04	n	1.0E+06	n >S	4.7E+03	n	2.1E+00	n	2.1E+02	n >S	1.3E+04	n	4.2E+05	n >S	--	--
Ethyl acetate	141-78-6	3.5E+03	n	4.7E+01	n	4.7E+03	n	3.7E+03	n	1.1E+05	n	1.8E+03	n	2.4E+01	n	2.4E+03	n	1.9E+03	n	7.3E+03	n	--	--
Ethyl acrylate	140-88-5	1.3E+02	c	1.2E-01	c	1.2E+01	c	2.4E+02	n	6.8E+03	n	9.6E+01	n	5.9E-02	c	5.9E+00	c	1.2E+02	n	4.4E+02	n	--	--
Ethyl benzene	100-11-4	6.4E+03	n	7.6E+00	m	7.6E+02	m	2.9E+04	n	3.2E+05	n >S	5.3E+03	n	3.8E+00	m	3.8E+02	m	1.5E+04	n	2.1E+04	n >S	--	--
Ethyl dipropylthiocarbamate, S-	759-94-4	1.7E+03	n	7.0E+00	n	7.0E+02	n	--	--	--	--	1.7E+03	n	3.5E+00	n	3.5E+02	n	--	--	--	--	--	--
Ethyl ether	60-29-7	1.6E+04	n	1.1E+01	n	1.1E+03	n	--	--	--	--	1.6E+04	n	5.6E+00	n	5.6E+02	n	--	--	--	--	--	--
Ethyl methacrylate	97-63-2	3.6E+03	n	7.5E+00	n	7.5E+02	n	7.1E+03	n	1.9E+05	n >S	2.4E+03	n	3.8E+00	n	3.8E+02	n	3.6E+03	n	1.3E+04	n	--	--
Ethyl methanesulfonate	62-50-0	3.4E+01	c	1.8E-02	c	1.8E+00	c	1.2E+02	c	3.6E+04	c	2.7E+01	c	8.9E-03	c	8.9E-01	c	6.1E+01	c	2.3E+03	c	--	--
Ethyl tert-butyl ether (2-ethyl-2-ethoxypropane)	637-92-3	8.0E+01	n	8.9E-02	n	8.9E+00	n	4.6E+03	n	4.0E+04	n >S	7.9E+01	n	4.5E-02	n	4.5E+00	n	2.4E+03	n	2.6E+03	n	--	--
Ethyl-1-hexanol, 2-	104-76-7	1.0E+04	n	7.6E+01	n	7.6E+03	n	--	--	--	--	1.0E+04	n	3.8E+01	n	3.8E+03	n	--	--	--	--	--	--
Ethyl-2-hexenal, 2-	645-62-5	1.2E+04	n	2.8E+01	n	2.8E+03	n	--	--	--	--	1.2E+04	n	1.4E+01	n	1.4E+03	n	--	--	--	--	--	--
Ethyl-2-methyl benzene, 1-	611-14-3	2.8E+03	n	5.6E+01	n	5.6E+03	n >S	8.4E+03	n	4.2E+05	n >S	2.1E+03	n	2.8E+01	n	2.8E+03	n >S	4.3E+03	n	2.7E+04	n >S	--	--
Ethyl-4-methyl benzene, 1-	622-96-8	2.6E+03	n	6.0E+01	n	6.0E+03	n >S	7.2E+03	n	3.4E+05	n >S	1.9E+03	n	3.0E+01	n	3.0E+03	n >S	3.7E+03	n	2.2E+04	n >S	--	--
Ethylene*	74-85-1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethylene dibromide (dibromoethane, 1,2-)	106-93-4	2.5E+00	c	2.1E-04	m	2.1E-02	m	1.3E+01	c	3.1E+02	c	2.1E+00	c	1.0E-04	m	1.0E-02	m	6.8E+00	c	2.0E+01	c	--	--
Ethylene glycol	107-21-1	1.3E+05	n	9.4E+01	n	9.4E+03	n	--	--	--	--	1.3E+05	n	4.7E+01	n	4.7E+03	n	--	--	--	--	--	--
Ethylene oxide	75-21-8	5.8E+00	c	1.8E-03	c	1.8E-01	c	2.6E+02	c	6.0E+03	c	5.7E+00	c	9.0E-04	c	9.0E-02	c	1.3E+02	c	3.9E+02	c	--	--
Ethylene thiourea	96-45-7	5.3E+00	n	3.8E-03	n	3.8E-01	n	--	--	--	--	5.3E+00	n	1.9E-03	n	1.9E-01	n	--	--	--	--	--	--
Ethylenediamine	107-15-3	7.4E+03	n	4.6E+00	n	4.6E+02	n	--	--	--	--	7.4E+03	n	2.3E+00	n	2.3E+02	n	--	--	--	--	--	--
Ethylenimine	151-56-4	5.5E-02	c	2.8E-05	c	2.8E-03	c	1.3E-01	c	2.8E+01	c	3.9E-02	c	1.4E-05	c	1.4E-03	c	6.8E-02	c	1.8E+00	c	--	--
Ethylhexyl acrylate, 2-	103-11-7	9.8E+01	c	7.7E+00	c	7.7E+02	c	--	--	--	--	9.8E+01	c	3.8E+00	c	3.8E+02	c	--	--	--	--	--	--
Famphur	52-85-7	2.0E+00	n	1.8E-03	n	1.8E-01	n	--	--	--	--	2.0E+00	n	9.1E-04	n	9.1E-02	n	--	--	--	--	--	--
Fensulfothion	115-90-2	6.7E+01	n	3.5E-01	n	3.5E+01	n	--	--	--	--	6.7E+01	n	1.8E-01	n	1.8E+01	n	--	--	--	--	--	--
Fenthion	55-38-9	4.7E+00	n	7.9E-02	n	7.9E+00	n	--	--	--	--	4.7E+00	n	3.9E-02	n	3.9E+00	n	--	--	--	--	--	--
Fenuron	101-42-8	4.7E+03	n	4.6E+00	n	4.6E+02	n	--	--	--	--	4.7E+03	n	2.3E+00	n	2.3E+02	n	--	--	--	--	--	--
Fluoranthene	206-44-0	2.3E+03	n	1.9E+03	n >S	1.9E+05	n >S	--	--	--	--	2.3E+03	n	9.6E+02	n >S	9.6E+04	n >S	--	--	--	--	--	--
Fluorene	86-73-7	2.3E+03	n	3.0E+02	n	3.0E+04	n >S	--	--	--	--	2.3E+03	n	1.5E+02	n	1.5E+04	n >S	--	--	--	--	--	--
Fluorine (soluble fluoride)	7782-41-4	4.8E+03	n	--	--	--	--	--	--	--	--	4.8E+03	n	--	--	--	--	--	--	--	--	--	--
Fluorochloridone	61213-25-0	5.0E+02	n	4.0E+00	n	4.0E+02	n	--	--	--	--	5.0E+02	n	2.0E+00	n	2.0E+02	n	--	--	--	--	--	--
Fonofos	944-22-9	1.3E+02	n	7.1E+00	n	7.1E+02	n	--	--	--	--	1.3E+02	n	3.6E+00	n	3.6E+02	n	--	--	--	--	--	--
Formaldehyde	50-00-0	9.3E+02	n	9.8E+00	n	9.8E+02	n	9.9E+02	n	1.7E+05	n	4.9E+02	n	4.9E+00	n	4.9E+02	n	5.1E+02	n	1.1E+04	n	--	--
Formic acid	64-18-6	2.1E+02	n	4.2E+01	n	4.2E+03	n	2.1E+02	n	3.4E+04	n	1.1E+02	n	2.1E+01	n	2.1E+03	n	1.1E+02	n	2.2E+03	n	--	--
Furan	110-00-9	8.2E+01	n	8.1E-02	n	8.1E+00	n	--	--	--	--	8.2E+01	n	4.1E-02	n	4.1E+00	n	--	--	--	--	--	--
Furfural	98-01-1	2.5E+02	n	1.5E-01	n	1.5E+01	n	--	--	--	--	2.5E+02	n	7.4E-02	n	7.4E+00	n	--	--	--	--	--	--
Glycidylaldehyde	765-34-4	2.7E+01	n	2.2E-02	n	2.2E+00	n	1.5E+02	n	3.3E+04	n	2.3E+01	n	1.1E-02	n	1.1E+00	n	7.7E+01	n	2.1E+03	n	--	--
Glyphosate	1071-83-6	6.7E+04	n	2.9E+01	m	2.9E+03	m	--	--	--	--	6.7E+04	n	1.5E+01	m	1.5E+03	m	--	--	--	--	--	--
Heptachlor	76-44-8	1.3E-01	c	1.9E-01	m	1.9E+01	m	9.1E+00	c	3.0E+03	c >S	1.3E-01	c	9.4E-02	m	9.4E+00	m	4.7E+00	c	1.9E+02	c >S	--	--
Heptachlor epoxide	1024-57-3	2.4E-01	c	5.8E-02	m	5.8E+00	m	2.4E+01	c	3.5E+04	c >S	2.4E-01	c	2.9E-02	m	2.9E+00	m	1.2E+01	c	2.2E+03	c >S	--	--
Heptane, n-	142-82-5	4.7E+03	n	7.2E+02	n	7.2E+04	n >S	1.4E+05	n	4.2E+05	n >S	4.6E+03	n	3.6E+02	n	3.6E+04	n >S	7.1E+04	n	2.7E+04	n >S	--	--
Heptanoic acid, n-	111-14-8	1.2E+02	n	2.4E+01	n	2.4E+03	n	1.2E+02	n	3.2E+04	n >S	6.3E+01	n	1.2E+01	n	1.2E+03	n	6.3E+01	n	2.1E+03	n >S	--	--
Hexachlorobenzene	118-74-1	1.1E+00	c	1.1E+00	m	1.1E+02	m >S	1.9E+01	c	6.4E+03	c >S	1.0E+00	c	5.6E-01	m	5.6E+01	m >S	9.8E+00	c	4.2E+02	c >S	--	--
Hexachlorobutadiene	87-68-3	2.0E+01	c	3.3E+00	c	3.3E+02	c	2.9E+01	c	2.5E+03	c >S	1.2E+01	c	1.6E+00	c	1.6E+02	c	1.5E+01	c	1.6E+02	c	--	--
Hexachlorocyclohexane, alpha (alpha-BHC)	319-84-6	2.6E-01	c	7.9E-03	c	7.9E-01	c	1.4E+01	c	8.4E+03	c >S	2.5E-01	c	4.0E-03	c	4.0E-01	c	7.2E+00	c	5.4E+02	c >S	--	--
Hexachlorocyclohexane, beta (beta-BHC)	319-85-7	9.3E-01	c	2.9E-02	c	2.9E+00	c	7.2E+01	c	6.6E+04	c >S	9.2E-01	c	1.4E-02	c	1.4E+00	c	3.7E+01	c	4.2E+03	c >S	--	--
Hexachlorocyclohexane, delta (delta-BHC)	319-86-8	2.9E+00	c	1.7E-01	c	1.7E+01	c	1.0E+02	c	1.2E+05	c >S	2.9E+00	c	8.7E-02	c	8.7E+00	c	5.2E+01	c	8.0E+03	c >S	--	--
Hexachlorocyclohexane, gamma (lindane; gamma-BHC)	58-89-9	1.1E+00	c	9.2E-03	m	9.2E-01	m	--	--	--	--	1.1E+00	c	4.6E-03	m	4.6E-01	m	--	--	--	--	--	--
Hexachlorocyclohexane, techn (technical-BHC)	608-73-1	1.3E+00	c	5.0E-02	c	5.0E+00	c	8.9E+01	c	9.7E+04	c >S	1.3E+00	c	2.5E-02	c	2.5E+00	c	4.6E+01	c	6.3E+03	c >S	--	--
Hexachlorocyclopentadiene	77-47-4	1.4E+01	n	1.9E+01	m	1.9E+03	m >S	1.4E+01	n	2.1E+03	n >S	7.2E+00	n	9.6E+00	m	9.6E+02	m >S	7.3E+00	n	1.4E+02	n	--	--
Hexachloroethane	67-72-1	4.6E+01	n	1.3E+00	n	1.3E+02	n	5.0E+03	n	5.5E+05	n >S	4.6E+01	n	6.4E-01	n	6.4E+01	n	2.5E+03	n	3.6E+04	n >S	--	--
Hexachlorophene	70-30-4	2.0E+01	n	5.9E+03	n >S	5.9E+05	n >S	--	--	--	--	2.0E+01	n	2.9E+03	n >S	2.9E+05	n >S	--	--	--	--	--	--
Hexachloropropylene	1888-71-7	4.6E+01	n	7.3E+00	n	7.3E+02	n	5.1E+03	n	9.2E+05	n >S	4.6E+01	n	3.7E+00	n	3.7E+02	n	2.6E+03	n	5.9E+04	n >S	--	--

Table 1
Tier 1 Residential Soil PCLs¹

Last Revised: May 10, 2023

Chemical of Concern	CAS	0.5 acre source area										30 acre source area															
		TotSoil _{Comb} ²		GWSoil _{Dg}		GWSoil _{Class 3}		AirSoil _{Inh-V} ⁴		AirGW-Soil _{Inh-V}		GWSoil for Secondary MCL		TotSoil _{Comb} ²		GWSoil _{Dg}		GWSoil _{Class 3}		AirSoil _{Inh-V} ⁴		AirGW-Soil _{Inh-V}		GWSoil for Secondary MCL			
		(mg/kg)	note ³	(mg/kg)	note ³	(mg/kg)	note ³	(mg/kg)	note ³	(mg/kg)	note ³	(mg/kg)	note ³	(mg/kg)	note ³	(mg/kg)	note ³	(mg/kg)	note ³	(mg/kg)	note ³	(mg/kg)	note ³	(mg/kg)	note ³	(mg/kg)	note ³
Perchlorate	14797-73-0	5.1E+01	n	1.4E-01	n	1.4E+01	n	--	--	--	--	--	5.1E+01	n	7.0E-02	n	7.0E+00	n	--	--	--	--	--	--	--	--	--
Perfluorooctane sulfonic acid (1-Octanesulfonic acid, heptadecafluoro-1-) [PFOS]	1763-23-1	1.5E+00	n	5.0E-02	n	5.0E+00	n	1.5E+02	n	1.6E+05	n >S	--	1.5E+00	n	2.5E-02	n	2.5E+00	n	8.0E+01	n	1.1E+04	n	--	--	--	--	--
Perfluoroundecanoic acid (Undecanoic acid, uncosafluoro-) [PFUnDa]	2058-94-8	8.0E-01	n	1.8E-02	n	1.8E+00	n	--	--	--	--	--	8.0E-01	n	9.2E-03	n	9.2E-01	n	--	--	--	--	--	--	--	--	--
Perfluoropentanoic acid (Pentanoic acid, nonafluoro-) [PFPeA]	2706-90-3	3.3E+01	n	4.2E-02	n	4.2E+00	n	--	--	--	--	--	3.3E+01	n	2.1E-02	n	2.1E+00	n	--	--	--	--	--	--	--	--	--
Perfluorohexanoic acid (Hexanoic acid, undecafluoro-) [PFHxA]	307-24-4	3.3E+01	n	6.3E-02	n	6.3E+00	n	--	--	--	--	--	3.3E+01	n	3.2E-02	n	3.2E+00	n	--	--	--	--	--	--	--	--	--
Perfluorododecanoic acid (Dodecanoic acid, tricosafuoro-) [PFDoA]	307-55-1	7.9E-01	n	3.4E-02	n	3.4E+00	n	6.9E+01	n	6.4E+04	n >S	--	7.8E-01	n	1.7E-02	n	1.7E+00	n	3.6E+01	n	4.1E+03	n >S	--	--	--	--	--
Perfluorooctanoic acid (Octanoic acid, pentadecafluoro-) [PFOA]	335-67-1	6.0E-01	n	3.0E-03	n	3.0E-01	n	2.4E+00	n	9.1E+02	n	--	4.9E-01	n	1.5E-03	n	1.5E-01	n	1.2E+00	n	5.9E+01	n	--	--	--	--	--
Perfluorodecanoic acid (Decanoic acid, nonadecafluoro-) [PFDA]	335-76-2	9.9E-01	n	2.2E-02	n	2.2E+00	n	8.6E+01	n	7.8E+04	n >S	--	9.8E-01	n	1.1E-02	n	1.1E+00	n	4.4E+01	n	5.0E+03	n >S	--	--	--	--	--
Perfluorododecane sulfonic acid (1-Decanesulfonic acid, heneicosafuoro-) [PFDS]	335-77-3	8.0E-01	n	4.0E-02	n	4.0E+00	n	--	--	--	--	--	8.0E-01	n	2.0E-02	n	2.0E+00	n	--	--	--	--	--	--	--	--	--
Perfluorohexane sulfonic acid (1-Hexanesulfonic acid, tridecafluoro-) [PFHxS]	355-46-4	2.5E-01	n	2.0E-03	n	2.0E-01	n	1.1E+01	n	6.3E+03	n	--	2.4E-01	n	1.0E-03	n	1.0E-01	n	5.8E+00	n	6.2E+02	n	--	--	--	--	--
Perfluorobutyric acid (Butanoic acid, heptafluoro-) [PFBA]	375-22-4	6.1E+01	n	6.7E-02	n	6.7E+00	n	6.8E+02	n	8.2E+05	n	--	5.6E+01	n	3.4E-02	n	3.4E+00	n	3.5E+02	n	3.4E+05	n	--	--	--	--	--
Perfluorobutane sulfonic acid (1-Butanesulfonic acid, nonafluoro-) [PFBS]	375-73-5	8.6E+01	n	1.1E-01	n	1.1E+01	n	1.1E+03	n	1.0E+06	n >S	--	8.0E+01	n	5.3E-02	n	5.3E+00	n	5.8E+02	n	7.2E+05	n >S	--	--	--	--	--
Perfluoroheptanoic acid (Heptanoic acid, tridecafluoro-) [PFHpA]	375-85-9	1.5E+00	n	4.6E-03	n	4.6E-01	n	--	--	--	--	--	1.5E+00	n	2.3E-03	n	2.3E-01	n	--	--	--	--	--	--	--	--	--
Perfluorononanoic acid (Nonanoic acid, heptadecafluoro-) [PFNA]	375-95-1	7.6E-01	n	3.1E-03	n	3.1E-01	n	1.7E+01	n	6.8E+03	n >S	--	7.3E-01	n	1.5E-03	n	1.5E-01	n	8.9E+00	n	4.4E+02	n >S	--	--	--	--	--
Perfluorotetradecanoic acid (Tetradecanoic acid, heptacosafuoro-) [PFTeDA]	376-06-7	5.1E-01	n	1.1E-01	n	1.1E+01	n >S	--	--	--	--	--	5.1E-01	n	5.6E-02	n	5.6E+00	n >S	--	--	--	--	--	--	--	--	--
Perfluorotridecanoic acid (Tridecanoic acid, pentacosafuoro-) [PFTrDA]	72629-94-8	6.1E-01	n	6.1E-02	n	6.1E+00	n >S	--	--	--	--	--	6.1E-01	n	3.0E-02	n	3.0E+00	n >S	--	--	--	--	--	--	--	--	--
Perfluorooctane sulfonamide (1-Octanesulfonamide, heptadecafluoro-) [PFOSA]	754-91-6	5.8E-02	n	9.2E-01	n	9.2E+01	n	6.3E-02	n	1.7E-01	n	--	3.1E-02	n	4.6E-01	n	4.6E+01	n	3.2E-02	n	1.1E-02	n	--	--	--	--	--
Perylene	198-55-0	1.3E+03	n	7.6E+04	n >S	1.0E+06	n >S	--	--	--	--	--	1.3E+03	n	3.8E+04	n >S	1.0E+06	n >S	--	--	--	--	--	--	--	--	--
Phenacetin	62-44-2	1.8E+03	c	1.2E+00	c	1.2E+02	c	1.1E+04	c	1.0E+06	c >S	--	1.5E+03	c	6.2E-01	c	6.2E+01	c	5.6E+03	c	2.3E+05	c >S	--	--	--	--	--
Phenanthrene	85-01-8	1.7E+03	n	4.2E+02	n	4.2E+04	n >S	--	--	--	--	--	1.7E+03	n	2.1E+02	n	2.1E+04	n >S	--	--	--	--	--	--	--	--	--
Phenanthridine	229-87-8	2.0E+02	n	5.3E+00	n	5.3E+02	n	--	--	--	--	--	2.0E+02	n	2.6E+00	n	2.6E+02	n	--	--	--	--	--	--	--	--	--
Phenol	108-95-2	1.8E+03	n	1.9E+01	n	1.9E+03	n	1.9E+03	n	4.2E+05	n >S	--	9.5E+02	n	9.6E+00	n	9.6E+02	n	1.0E+03	n	2.7E+04	n	--	--	--	--	--
Phenol, 4-tert-butyl-	98-54-4	8.0E+03	n	1.1E+02	n	1.1E+04	n >S	--	--	--	--	--	8.0E+03	n	5.4E+01	n	5.4E+03	n >S	--	--	--	--	--	--	--	--	--
Phenothiazine	92-84-2	6.3E+01	n	8.0E+00	n >S	8.0E+02	n >S	--	--	--	--	--	6.3E+01	n	4.0E+00	n >S	4.0E+02	n >S	--	--	--	--	--	--	--	--	--
Phenyl mercuric acetate	62-38-4	5.3E+00	n	1.6E-02	n	1.6E+00	n	--	--	--	--	--	5.3E+00	n	8.1E-03	n	8.1E-01	n	--	--	--	--	--	--	--	--	--
Phenylene diamine, m-	108-45-2	4.0E+02	n	2.9E-01	n	2.9E+01	n	--	--	--	--	--	4.0E+02	n	1.4E-01	n	1.4E+01	n	--	--	--	--	--	--	--	--	--
Phenylene diamine, p-	106-50-3	1.3E+04	n	9.1E+00	n	9.1E+02	n	--	--	--	--	--	1.3E+04	n	4.6E+00	n	4.6E+02	n	--	--	--	--	--	--	--	--	--
Phorate	298-02-2	1.3E+01	n	1.1E+00	n	1.1E+02	n	--	--	--	--	--	1.3E+01	n	5.4E-01	n	5.4E+01	n	--	--	--	--	--	--	--	--	--
Phosalone	2310-17-0	1.3E+02	n	2.3E+00	n	2.3E+02	n	--	--	--	--	--	1.3E+02	n	1.2E+00	n	1.2E+02	n	--	--	--	--	--	--	--	--	--
Phosdrin (mevinphos)	7786-34-7	1.7E+00	n	1.2E-03	n	1.2E-01	n	--	--	--	--	--	1.7E+00	n	5.9E-04	n	5.9E-02	n	--	--	--	--	--	--	--	--	--
Phosmet	732-11-6	1.3E+03	n	4.1E+00	n	4.1E+02	n	--	--	--	--	--	1.3E+03	n	2.0E+00	n	2.0E+02	n	--	--	--	--	--	--	--	--	--
Phosphine	7803-51-2	3.8E+00	n	--	--	--	--	4.6E+00	n	--	--	--	2.1E+00	n	--	--	--	--	2.4E+00	n	--	--	--	--	--	--	--
Phosphorotriothic acid, S,S,S-tributyl ester	78-48-8	3.2E+01	n	4.3E+02	c >S	4.3E+04	c >S	--	--	--	--	--	3.2E+01	n	2.2E+02	c >S	2.2E+04	c >S	--	--	--	--	--	--	--	--	--
Phosphorus, total*	7723-14-0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phosphorus, white	7723-14-0	1.5E+00	n	2.3E-02	n	2.3E+00	n	--	--	--	--	--	1.5E+00	n	1.1E-02	n	1.1E+00	n	--	--	--	--	--	--	--	--	--
Phthalic anhydride	85-44-9	3.6E+04	n	2.5E+02	n	2.5E+04	n	5.0E+04	n	1.0E+06	n >S	--	2.1E+04	n	1.2E+02	n	1.2E+04	n	2.6E+04	n	1.0E+06	n >S	--	--	--	--	--
Picloram	1918-02-1	4.7E+03	n	9.8E-01	m	9.8E+01	m	--	--	--	--	--	4.7E+03	n	4.9E-01	m	4.9E+01	m	--	--	--	--	--	--	--	--	--
Picoline, 2- (2-methylpyridine)	109-06-8	7.4E+02	n	5.6E-01	n	5.6E+01	n	--	--	--	--	--	7.4E+02	n	2.8E-01	n	2.8E+01	n	--	--	--	--	--	--	--	--	--
Polybrominated biphenyls (PBBs)	67774-32-7	9.7E-03	c	9.0E-03	c	9.0E-01	c	--	--	--	--	--	9.7E-03	c	4.5E-03	c	4.5E-01	c	--	--	--	--	--	--	--	--	--
Polychlorinated biphenyls (PCBs)	1336-36-3	1.1E+00	n	1.1E+01	m	1.1E+03	m	5.4E+01	c	6.2E+04	c >S	--	1.1E+00	n	5.3E+00	m	5.3E+02	m	2.8E+01	c	4.0E+03	c >S	--	--	--	--	--
Potassium*	7440-09-7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Primene	68955-53-3	3.6E+02	n	5.4E+01	n	5.4E+03	n	--	--	--	--	--	3.6E+02	n	2.7E+01	n	2.7E+03	n	--	--	--	--	--	--	--	--	--
Prometon (pramitol)	1610-18-0	1.0E+03	n	9.6E+00	n	9.6E+02	n	--	--	--	--	--	1.0E+03	n	4.8E+00	n	4.8E+02	n	--	--	--	--	--	--	--	--	--
Prometryn	7287-19-6	2.7E+03	n	9.8E+01	n	9.8E+03	n >S	--	--	--	--	--	2.7E+03	n	4.9E+01	n	4.9E+03	n >S	--	--	--	--	--	--	--	--	--
Pronamide	23950-58-5	5.0E+03	n	1.8E+01	n	1.8E+03	n >S	--	--	--	--	--	5.0E+03	n	9.1E+00	n	9.1E+02	n >S	--	--	--	--	--	--	--	--	--
Propanal (propionaldehyde)	123-38-6	1.0E+02	n	3.9E-01	n	3.9E+01	n	1.2E+02	n	3.3E+03	n	--	5.8E+01	n	2.0E-01	n	2.0E+01	n	6.3E+01	n	2.1E+02	n	--	--	--	--	--

**Table 1
Tier 1 Residential Soil PCLs¹**

Last Revised: May 10, 2023

Chemical of Concern	CAS	0.5 acre source area										30 acre source area											
		TotSoil _{Comb} ² (mg/kg)	note ³	GWSoil _{Dg} (mg/kg)	note ³	GWSoil _{Class 3} (mg/kg)	note ³	AirSoil _{Inh-V} ⁴ (mg/kg)	note ³	AirGW-Soil _{Inh-V} (mg/kg)	note ³	GWSoil for Secondary MCL (mg/kg)	TotSoil _{Comb} ² (mg/kg)	note ³	GWSoil _{Dg} (mg/kg)	note ³	GWSoil _{Class 3} (mg/kg)	note ³	AirSoil _{Inh-V} ⁴ (mg/kg)	note ³	AirGW-Soil _{Inh-V} (mg/kg)	note ³	GWSoil for Secondary MCL (mg/kg)
Propane, 1-bromo-	106-94-5	2.9E+03	n	3.4E+00	n	3.4E+02	n	--	--	--	--	2.9E+03	n	1.7E+00	n	1.7E+02	n	--	--	--	--	--	--
Propanil	709-98-8	3.3E+02	n	4.7E+00	n	4.7E+02	n	--	--	--	--	3.3E+02	n	2.3E+00	n	2.3E+02	n	--	--	--	--	--	--
Propanoic acid (propionic acid)	79-09-4	4.1E+04	n	2.3E+01	n	2.3E+03	n	--	--	--	--	4.1E+04	n	1.2E+01	n	1.2E+03	n	--	--	--	--	--	--
Propanol, 1-	71-23-8	1.6E+05	n	1.0E+02	n	1.0E+04	n	--	--	--	--	1.6E+05	n	5.0E+01	n	5.0E+03	n	--	--	--	--	--	--
Propargite	2312-35-8	1.3E+03	n	1.1E+02	n	1.1E+04	n >S	--	--	--	--	1.3E+03	n	5.5E+01	n	5.5E+03	n >S	--	--	--	--	--	--
Propargyl alcohol	107-19-7	1.6E+02	n	1.0E-01	n	1.0E+01	n	--	--	--	--	1.6E+02	n	5.2E-02	n	5.2E+00	n	--	--	--	--	--	--
Propazine	139-40-2	1.1E+02	c	9.5E-01	c	9.5E+01	c	--	--	--	--	1.1E+02	c	4.7E-01	c	4.7E+01	c	--	--	--	--	--	--
Propham	122-42-9	1.3E+03	n	1.9E+00	n	1.9E+02	n	--	--	--	--	1.3E+03	n	9.7E-01	n	9.7E+01	n	--	--	--	--	--	--
Propionitrile (propane nitrile)	107-12-0	3.3E+01	n	1.9E-02	n	1.9E+00	n	--	--	--	--	3.3E+01	n	9.7E-03	n	9.7E-01	n	--	--	--	--	--	--
Propyl acetate, n-	109-60-4	7.4E+03	n	5.3E+00	n	5.3E+02	n	--	--	--	--	7.4E+03	n	2.7E+00	n	2.7E+02	n	--	--	--	--	--	--
Propylbenzene, n-	103-65-1	2.2E+03	n	4.5E+01	n	4.5E+03	n >S	6.3E+03	n	2.8E+05	n >S	1.6E+03	n	2.2E+01	n	2.2E+03	n >S	3.3E+03	n	1.8E+04	n >S	--	--
Propylene glycol	57-55-6	3.7E+02	n	9.4E+02	n	9.4E+04	n	3.7E+02	n	9.6E+04	n	1.9E+02	n	4.7E+02	n	4.7E+04	n	1.9E+02	n	6.2E+03	n	--	--
Propylene glycol monomethyl ether	107-98-2	4.6E+04	n	3.3E+01	n	3.3E+03	n	2.3E+05	n	1.0E+06	n >S	3.9E+04	n	1.7E+01	n	1.7E+03	n	1.2E+05	n	9.7E+05	n >S	--	--
Propylene oxide	75-56-9	2.0E+01	c	7.5E-03	c	7.5E-01	c	9.7E+01	c	3.1E+03	c	1.7E+01	c	3.8E-03	c	3.8E-01	c	5.0E+01	c	2.0E+02	c	--	--
Propylene tetramer	6842-15-5	4.6E+03	n	2.5E+04	n >S	1.0E+06	n >S	1.5E+04	n	4.6E+05	n >S	3.6E+03	n	1.3E+04	n >S	1.0E+06	n >S	7.9E+03	n	2.9E+04	n >S	--	--
Prothiofos (Tokuthion)	34643-46-4	6.6E+00	n	2.4E+03	n	2.4E+05	n >S	--	--	--	--	6.6E+00	n	1.2E+03	n	1.2E+05	n >S	--	--	--	--	--	--
Pyrene	129-00-0	1.7E+03	n	1.1E+03	n >S	1.1E+05	n >S	--	--	--	--	1.7E+03	n	5.6E+02	n >S	5.6E+04	n >S	--	--	--	--	--	--
Pyridine	110-86-1	8.2E+01	n	6.9E-02	n	6.9E+00	n	--	--	--	--	8.2E+01	n	3.5E-02	n	3.5E+00	n	--	--	--	--	--	--
Quinoline	91-22-5	1.6E+00	c	7.5E-03	c	7.5E-01	c	--	--	--	--	1.6E+00	c	3.8E-03	c	3.8E-01	c	--	--	--	--	--	--
Ronnel	299-84-3	2.3E+03	n	4.2E+02	n	4.2E+04	n >S	--	--	--	--	2.3E+03	n	2.1E+02	n	2.1E+04	n >S	--	--	--	--	--	--
Safrole	94-59-7	1.6E+01	c	1.6E-01	c	1.6E+01	c	6.7E+01	c	7.5E+03	c >S	1.3E+01	c	8.2E-02	c	8.2E+00	c	3.4E+01	c	4.8E+02	c	--	--
Selenium	7782-49-2	3.1E+02	n	2.3E+00	m >S	2.3E+02	m >S	--	--	--	--	3.1E+02	n	1.1E+00	m >S	1.1E+02	m >S	--	--	--	--	--	--
Selenourea	630-10-4	4.1E+02	n	--	--	--	--	--	--	--	--	4.1E+02	n	--	--	--	--	--	--	--	--	--	--
Silver	7440-22-4	9.7E+01	n	4.8E-01	n >S	4.8E+01	n >S	--	--	--	3.9E-01	9.7E+01	n	2.4E-01	n >S	2.4E+01	n >S	--	--	--	--	2.0E-01	--
Simazine	122-34-9	3.9E+01	c	5.5E-02	m	5.5E+00	m	--	--	--	--	3.9E+01	c	2.8E-02	m	2.8E+00	m	--	--	--	--	--	--
Sodium*	7440-23-5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sodium hypochlorite	7681-52-9	1.5E+04	n	--	--	--	--	--	--	--	--	1.4E+04	n	--	--	--	--	--	--	--	--	--	--
Sodium polyacrylate	9003-04-7	1.2E+02	n	2.4E+01	n	2.4E+03	n	1.2E+02	n	3.0E+04	n	6.2E+01	n	1.2E+01	n	1.2E+03	n	6.2E+01	n	1.9E+03	n	--	--
Strontium	7440-24-6	4.4E+04	n	6.1E+02	n	6.1E+04	n	--	--	--	--	4.4E+04	n	3.1E+02	n	3.1E+04	n	--	--	--	--	--	--
Strychnine	57-24-9	2.0E+01	n	3.7E-02	n	3.7E+00	n	--	--	--	--	2.0E+01	n	1.9E-02	n	1.9E+00	n	--	--	--	--	--	--
Styrene	100-42-5	6.7E+03	n	3.3E+00	m	3.3E+02	m	1.1E+04	n	4.9E+05	n >S	4.3E+03	n	1.6E+00	m	1.6E+02	m	5.8E+03	n	3.2E+04	n >S	--	--
Sulfate*	14808-79-8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide*	18496-25-8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfolane	126-33-0	4.3E+02	n	6.1E-01	n	6.1E+01	n	8.6E+02	n	2.5E+05	n >S	2.9E+02	n	3.1E-01	n	3.1E+01	n	4.4E+02	n	1.6E+04	n >S	--	--
Sulfur*	7704-34-9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulprofos (Bolstar)	35400-43-2	2.0E+02	n	7.5E+03	n >S	7.5E+05	n >S	--	--	--	--	2.0E+02	n	3.8E+03	n >S	3.8E+05	n >S	--	--	--	--	--	--
Tebuconazole	107534-96-3	2.0E+03	n	3.1E+01	n	3.1E+03	n >S	--	--	--	--	2.0E+03	n	1.6E+01	n	1.6E+03	n >S	--	--	--	--	--	--
Tebuthiuron	34014-18-1	4.7E+03	n	5.4E+00	n	5.4E+02	n	--	--	--	--	4.7E+03	n	2.7E+00	n	2.7E+02	n	--	--	--	--	--	--
Terbufos	13071-79-9	1.7E+00	n	3.4E-01	n	3.4E+01	n	--	--	--	--	1.7E+00	n	1.7E-01	n	1.7E+01	n	--	--	--	--	--	--
Tert-amyl ethyl ether (TAEE)	919-94-8	3.3E+03	n	9.5E+00	n	9.5E+02	n	--	--	--	--	3.3E+03	n	4.7E+00	n	4.7E+02	n	--	--	--	--	--	--
Tert-amyl-methyl ether (TAME)	994-05-8	3.3E+03	n	3.8E+00	n	3.8E+02	n	--	--	--	--	3.3E+03	n	1.9E+00	n	1.9E+02	n	--	--	--	--	--	--
Tert-butyl alcohol (2-methyl-2-propanol)	75-65-0	7.4E+03	n	4.6E+00	n	4.6E+02	n	--	--	--	--	7.4E+03	n	2.3E+00	n	2.3E+02	n	--	--	--	--	--	--
Tetrachlorobenzene, 1,2,3,4-	634-66-2	2.0E+01	n	1.2E+01	n	1.2E+03	n	--	--	--	--	2.0E+01	n	6.0E+00	n	6.0E+02	n	--	--	--	--	--	--
Tetrachlorobenzene, 1,2,3,5-	634-90-2	1.3E+01	n	1.9E+00	n	1.9E+02	n	--	--	--	--	1.3E+01	n	9.4E-01	n	9.4E+01	n	--	--	--	--	--	--
Tetrachlorobenzene, 1,2,4,5-	95-94-3	2.0E+01	n	4.8E-01	n	4.8E+01	n >S	--	--	--	--	2.0E+01	n	2.4E-01	n	2.4E+01	n >S	--	--	--	--	--	--
Tetrachloroethane, 1,1,1,2-	630-20-6	6.5E+01	c	1.4E+00	c	1.4E+02	c	9.1E+01	c	4.5E+03	c	3.9E+01	c	7.1E-01	c	7.1E+01	c	4.7E+01	c	2.9E+02	c	--	--
Tetrachloroethane, 1,1,2,2-	79-34-5	3.0E+01	c	2.3E-02	c	2.3E+00	c	--	--	--	--	3.0E+01	c	1.2E-02	c	1.2E+00	c	--	--	--	--	--	--

**Table 1
Tier 1 Residential Soil PCLs¹**

Last Revised: May 10, 2023

Chemical of Concern	CAS	0.5 acre source area										30 acre source area											
		TotSoil _{Comb} ² (mg/kg)	note ³	GWSoil _{Dg} (mg/kg)	note ³	GWSoil _{Class 3} (mg/kg)	note ³	AirSoil _{Inh-V} ⁴ (mg/kg)	note ³	AirGW-Soil _{Inh-V} (mg/kg)	note ³	GWSoil for Secondary MCL (mg/kg)	TotSoil _{Comb} ² (mg/kg)	note ³	GWSoil _{Dg} (mg/kg)	note ³	GWSoil _{Class 3} (mg/kg)	note ³	AirSoil _{Inh-V} ⁴ (mg/kg)	note ³	AirGW-Soil _{Inh-V} (mg/kg)	note ³	GWSoil for Secondary MCL (mg/kg)
Tetrachloroethylene [PCE]	127-18-4	7.1E+02	c	5.0E-02	m	5.0E+00	m	9.4E+02	c	5.0E+03	c >S	--	4.2E+02	c	2.5E-02	m	2.5E+00	m	4.8E+02	c	3.2E+02	c	--
Tetrachlorophenol, 2,3,4,5-	4901-51-3	4.0E+02	n	1.5E+01	n	1.5E+03	n	--	--	--	--	--	4.0E+02	n	7.4E+00	n	7.4E+02	n	--	--	--	--	--
Tetrachlorophenol, 2,3,4,6-	58-90-2	1.8E+02	n	4.5E+00	n	4.5E+02	n	--	--	--	--	--	1.8E+02	n	2.2E+00	n	2.2E+02	n	--	--	--	--	--
Tetrachlorophenol, 2,3,5,6-	935-95-5	2.3E+01	n	2.2E+00	n	2.2E+02	n >S	--	--	--	--	--	2.3E+01	n	1.1E+00	n	1.1E+02	n >S	--	--	--	--	--
Tetrachlorvinphos (Stirophos)	22248-79-9	2.6E+03	n	2.4E+03	n	2.4E+05	n >S	--	--	--	--	--	2.6E+03	n	1.2E+03	n	1.2E+05	n >S	--	--	--	--	--
Tetradifon	116-29-0	1.0E+03	n	8.7E+01	n	8.7E+03	n >S	--	--	--	--	--	1.0E+03	n	4.4E+01	n	4.4E+03	n >S	--	--	--	--	--
Tetraethyl dithiopyrophosphate (sulfotep)	3689-24-5	3.3E+01	n	3.9E-01	n	3.9E+01	n	--	--	--	--	--	3.3E+01	n	1.9E-01	n	1.9E+01	n	--	--	--	--	--
Tetraethyl lead	78-00-2	6.7E-03	n	5.0E-04	n	5.0E-02	n	--	--	--	--	--	6.7E-03	n	2.5E-04	n	2.5E-02	n	--	--	--	--	--
Tetraethyl pyrophosphate (TEPP)	107-49-3	7.3E-01	n	9.3E-03	n	9.3E-01	n	--	--	--	--	--	7.3E-01	n	4.6E-03	n	4.6E-01	n	--	--	--	--	--
Tetraethylene glycol	112-60-7	2.2E+04	n	1.6E+01	n	1.6E+03	n	--	--	--	--	--	2.2E+04	n	7.8E+00	n	7.8E+02	n	--	--	--	--	--
Tetrahydrofuran	109-99-9	1.5E+02	c	2.5E-01	c	2.5E+01	c	1.9E+02	c	4.6E+03	c	--	8.6E+01	c	1.2E-01	c	1.2E+01	c	9.7E+01	c	3.0E+02	c	--
Tetrahydropyran	142-68-7	1.6E+02	c	2.7E-01	c	2.7E+01	c	2.0E+02	c	5.9E+03	c	--	9.2E+01	c	1.4E-01	c	1.4E+01	c	1.0E+02	c	3.8E+02	c	--
Tetraoxadodecane, 2,5,8,11-	112-49-2	1.7E+03	n	1.7E+00	n	1.7E+02	n	--	--	--	--	--	1.7E+03	n	8.6E-01	n	8.6E+01	n	--	--	--	--	--
Thallium	7440-28-0	5.3E+00	n	1.7E+00	m	1.7E+02	m	--	--	--	--	--	5.3E+00	n	8.7E-01	m	8.7E+01	m	--	--	--	--	--
Thiofanox	39196-18-4	2.0E+01	n	3.1E-02	n	3.1E+00	n	--	--	--	--	--	2.0E+01	n	1.6E-02	n	1.6E+00	n	--	--	--	--	--
Thionazin	297-97-2	4.7E+00	n	1.1E-02	n	1.1E+00	n	--	--	--	--	--	4.7E+00	n	5.5E-03	n	5.5E-01	n	--	--	--	--	--
Thiophanate-methyl	23564-05-8	5.3E+03	n	4.5E+00	n	4.5E+02	n >S	--	--	--	--	--	5.3E+03	n	2.2E+00	n	2.2E+02	n >S	--	--	--	--	--
Thiram	137-26-8	3.3E+02	n	3.5E+00	n	3.5E+02	n	--	--	--	--	--	3.3E+02	n	1.8E+00	n	1.8E+02	n	--	--	--	--	--
Tin	7440-31-5	3.5E+04	n	3.7E+04	n >S	1.0E+06	n >S	--	--	--	--	--	3.5E+04	n	1.8E+04	n >S	1.0E+06	n >S	--	--	--	--	--
Titanium	7440-32-6	2.2E+05	n	--	--	--	--	--	--	--	--	--	2.2E+05	n	--	--	--	--	--	--	--	--	--
Toluene	108-88-3	5.9E+03	n	8.2E+00	m	8.2E+02	m	6.3E+04	n	5.2E+05	n >S	--	5.4E+03	n	4.1E+00	m	4.1E+02	m	3.2E+04	n	3.4E+04	n >S	--
Toluene diisocyanate, 2,4,2,6-	26471-62-5	1.5E+02	n	--	--	--	--	1.5E+02	n	1.7E+05	n	--	7.5E+01	n	--	--	--	--	7.5E+01	n	1.1E+04	n	--
Toluenediamine, 2,4-	95-80-7	1.5E+00	c	1.5E-02	c	1.5E+00	c	--	--	--	--	--	1.5E+00	c	7.6E-03	c	7.6E-01	c	--	--	--	--	--
Toluenediamine, 2,6-	823-40-5	2.0E+03	n	1.4E+00	n	1.4E+02	n	--	--	--	--	--	2.0E+03	n	7.2E-01	n	7.2E+01	n	--	--	--	--	--
Toluidine, o-	95-53-4	4.7E+01	c	5.8E-01	c	5.8E+01	c	1.4E+02	c	2.7E+04	c	--	3.5E+01	c	2.9E-01	c	2.9E+01	c	7.1E+01	c	1.7E+03	c	--
Toluidine, p-	106-49-0	7.1E+01	c	8.9E-02	c	8.9E+00	c	--	--	--	--	--	7.1E+01	c	4.4E-02	c	4.4E+00	c	--	--	--	--	--
Toxaphene	8001-35-2	1.2E+00	c	1.2E+01	m	1.2E+03	m	9.6E+02	c	1.0E+06	c >S	--	1.2E+00	c	5.8E+00	m	5.8E+02	m	4.9E+02	c	4.4E+05	c >S	--
TPH, TX1005, C6-C12	TPH-1005-1	1.6E+03	n	6.5E+01	n	6.5E+03	n >S	3.1E+03	n	1.2E+05	n >S	--	1.1E+03	n	3.3E+01	n	3.3E+03	n >S	1.6E+03	n	7.6E+03	n >S	--
TPH, TX1005, >C12-C28	TPH-1005-2	2.3E+03	n	2.0E+02	n	2.0E+04	n >S	1.5E+04	n	1.0E+06	n >S	--	2.0E+03	n	9.9E+01	n	9.9E+03	n >S	7.8E+03	n	9.8E+04	n >S	--
TPH, TX1005, >C12-C35	TPH-1005-3	2.3E+03	n	2.0E+02	n	2.0E+04	n >S	1.5E+04	n	1.0E+06	n >S	--	2.0E+03	n	9.9E+01	n	9.9E+03	n >S	7.8E+03	n	9.8E+04	n >S	--
TPH, TX1005, >C28-C35	TPH-1005-4	2.3E+03	n	2.0E+02	n	2.0E+04	n >S	1.5E+04	n	1.0E+06	n >S	--	2.0E+03	n	9.9E+01	n	9.9E+03	n >S	7.8E+03	n	9.8E+04	n >S	--
TP Silvex, 2,4,5-	93-72-1	5.3E+02	n	5.3E+00	m	5.3E+02	m	--	--	--	--	--	5.3E+02	n	2.6E+00	m	2.6E+02	m	--	--	--	--	--
Triademenol	55219-65-3	2.0E+03	n	8.4E+00	n	8.4E+02	n	--	--	--	--	--	2.0E+03	n	4.2E+00	n	4.2E+02	n	--	--	--	--	--
Triallate	2303-17-5	3.2E+02	n	1.9E+01	n	1.9E+03	n >S	--	--	--	--	--	3.2E+02	n	9.5E+00	n	9.5E+02	n >S	--	--	--	--	--
Triaminotrinitrobenzene (TATB)	3058-38-6	2.0E+02	n	1.5E-01	n	1.5E+01	n	--	--	--	--	--	2.0E+02	n	7.7E-02	n	7.7E+00	n	--	--	--	--	--
Tributyltin oxide	56-35-9	2.0E+01	n	--	--	--	--	--	--	--	--	--	2.0E+01	n	--	--	--	--	--	--	--	--	--
Trichloro-1,2,2-trifluoroethane, 1,1,2-	76-13-1	7.4E+04	n	8.0E+04	n >S	1.0E+06	n >S	7.7E+04	n	1.7E+05	n >S	--	3.9E+04	n	4.0E+04	n >S	1.0E+06	n >S	3.9E+04	n	1.1E+04	n	--
Trichlorobenzene, 1,2,3-	87-61-6	1.2E+02	n	2.6E+01	n	2.6E+03	n	3.0E+02	n	4.8E+04	n >S	--	8.7E+01	n	1.3E+01	n	1.3E+03	n	1.6E+02	n	3.1E+03	n >S	--
Trichlorobenzene, 1,2,4-	120-82-1	1.2E+02	n	4.8E+00	m	4.8E+02	m	1.5E+02	n	1.1E+04	n >S	--	7.0E+01	n	2.4E+00	m	2.4E+02	m	7.8E+01	n	6.9E+02	n	--
Trichlorobenzene, 1,3,5-	108-70-3	7.8E+01	n	7.5E+00	n	7.5E+02	n	1.3E+02	n	1.0E+04	n >S	--	4.9E+01	n	3.7E+00	n	3.7E+02	n	6.5E+01	n	6.7E+02	n	--
Trichloroethane, 1,1,1-	71-55-6	5.3E+04	n	1.6E+00	m	1.6E+02	m	7.8E+04	n	3.3E+05	n >S	--	3.2E+04	n	8.1E-01	m	8.1E+01	m	4.0E+04	n	2.1E+04	n >S	--
Trichloroethane, 1,1,2-	79-00-5	1.8E+01	c	2.0E-02	m	2.0E+00	m	2.2E+01	c	3.2E+02	c	--	1.0E+01	c	1.0E-02	m	1.0E+00	m	1.2E+01	c	2.1E+01	c	--
Trichloroethylene [TCE]	79-01-6	1.8E+01	n	3.4E-02	m	3.4E+00	m	3.1E+01	n	1.6E+02	n	--	1.1E+01	n	1.7E-02	m	1.7E+00	m	1.6E+01	n	1.0E+01	n	--
Trichlorofluoromethane	75-69-4	2.5E+04	n	1.3E+02	n	1.3E+04	n	--	--	--	--	--	2.5E+04	n	6.4E+01	n	6.4E+03	n	--	--	--	--	--
Trichloronate	327-98-0	1.4E+02	n	1.2E+02	n	1.2E+04	n >S	--	--	--	--	--	1.4E+02	n	6.2E+01	n	6.2E+03	n >S	--	--	--	--	--
Trichlorophenol, 2,3,4-	15950-66-0	6.7E+03	n	5.9E+01	n	5.9E+03	n	--	--	--	--	--	6.7E+03	n	3.0E+01	n	3.0E+03	n	--	--	--	--	--
Trichlorophenol, 2,3,5-	933-78-8	6.7E+03	n	2.8E+01	n	2.8E+03	n	--	--	--	--	--	6.7E+03	n	1.4E+01	n	1.4E+03	n	--	--	--	--	--

**Table 1
Tier 1 Residential Soil PCLs¹**

Last Revised: May 10, 2023

Chemical of Concern	CAS	0.5 acre source area										30 acre source area											
		TotSoil _{Comb} ² (mg/kg)	note ³	GWSoil _{Dg} (mg/kg)	note ³	GWSoil _{Class 3} (mg/kg)	note ³	AirSoil _{Inh-V} ⁴ (mg/kg)	note ³	AirGW-Soil _{Inh-V} (mg/kg)	note ³	GWSoil for Secondary MCL (mg/kg)	TotSoil _{Comb} ² (mg/kg)	note ³	GWSoil _{Dg} (mg/kg)	note ³	GWSoil _{Class 3} (mg/kg)	note ³	AirSoil _{Inh-V} ⁴ (mg/kg)	note ³	AirGW-Soil _{Inh-V} (mg/kg)	note ³	GWSoil for Secondary MCL (mg/kg)
Trichlorophenol, 2,3,6-	933-75-5	5.3E+02	n	2.9E+01	n	2.9E+03	n >S	—	—	—	—	5.3E+02	n	1.4E+01	n	1.4E+03	n >S	—	—	—	—	—	—
Trichlorophenol, 2,4,5-	95-95-4	6.7E+03	n	3.4E+01	n	3.4E+03	n	—	—	—	—	6.7E+03	n	1.7E+01	n	1.7E+03	n	—	—	—	—	—	—
Trichlorophenol, 2,4,6-	88-06-2	6.7E+01	n	1.7E-01	n	1.7E+01	n	2.0E+03	c	3.5E+05	c >S	—	6.7E+01	n	8.7E-02	n	8.7E+00	n	1.0E+03	c	2.3E+04	c >S	—
Trichlorophenol, 3,4,5-	609-19-8	6.7E+03	n	3.3E+02	n	3.3E+04	n	—	—	—	—	6.7E+03	n	1.6E+02	n	1.6E+04	n	—	—	—	—	—	—
Trichlorophenoxyacetic acid, 2,4,5-	93-76-5	6.7E+02	n	9.9E-01	n	9.9E+01	n	—	—	—	—	6.7E+02	n	4.9E-01	n	4.9E+01	n	—	—	—	—	—	—
Trichloropropane, 1,1,2-	598-77-6	4.6E+00	n	1.5E+00	n	1.5E+02	n	4.6E+00	n	3.2E+01	n	—	2.4E+00	n	7.3E-01	n	7.3E+01	n	2.4E+00	n	2.1E+00	n	—
Trichloropropane, 1,2,3-	96-18-4	2.0E-01	c	5.3E-04	c	5.3E-02	c	1.4E+01	n	5.7E+02	n	—	2.0E-01	c	2.7E-04	c	2.7E-02	c	7.2E+00	n	3.7E+01	n	—
Triethanolamine	102-71-6	3.0E+03	n	9.4E+00	n	9.4E+02	n	3.9E+03	n	1.0E+06	n	—	1.7E+03	n	4.7E+00	n	4.7E+02	n	2.0E+03	n	9.6E+05	n	—
Triethylamine	121-44-8	1.1E+02	n	—	—	—	—	1.1E+02	n	1.6E+03	n	—	5.5E+01	n	—	—	—	—	5.5E+01	n	1.0E+02	n	—
Triethylene glycol	112-27-6	1.3E+05	n	9.4E+01	n	9.4E+03	n	—	—	—	—	—	1.3E+05	n	4.7E+01	n	4.7E+03	n	—	—	—	—	—
Triethylphosphorothioate, O, O, O-	126-68-1	5.5E-01	n	4.4E-03	n	4.4E-01	n	—	—	—	—	—	5.5E-01	n	2.2E-03	n	2.2E-01	n	—	—	—	—	—
Trifluralin	1582-09-8	2.7E+02	c	6.5E+01	c	6.5E+03	c >S	—	—	—	—	—	2.7E+02	c	3.3E+01	c	3.3E+03	c >S	—	—	—	—	—
Trimethylamine	75-50-3	1.5E+02	n	—	—	—	—	1.5E+02	n	4.4E+03	n	—	7.6E+01	n	—	—	—	—	7.6E+01	n	2.8E+02	n	—
Trimethylbenzene, 1,2,3-	526-73-8	1.6E+03	n	2.1E+01	n	2.1E+03	n >S	3.6E+03	n	1.5E+05	n >S	—	1.1E+03	n	1.1E+01	n	1.1E+03	n >S	1.9E+03	n	9.4E+03	n >S	—
Trimethylbenzene, 1,2,4-	95-63-6	1.6E+03	n	3.3E+01	n	3.3E+03	n >S	4.0E+03	n	1.9E+05	n >S	—	1.2E+03	n	1.6E+01	n	1.6E+03	n >S	2.1E+03	n	1.3E+04	n >S	—
Trimethylbenzene, 1,3,5-	108-67-8	1.5E+03	n	3.6E+01	n	3.6E+03	n >S	3.5E+03	n	1.6E+05	n >S	—	1.1E+03	n	1.8E+01	n	1.8E+03	n >S	1.8E+03	n	1.1E+04	n >S	—
Trinitrobenzene, 1,3,5-	99-35-4	2.0E+03	n	1.8E+00	n	1.8E+02	n	—	—	—	—	—	2.0E+03	n	9.1E-01	n	9.1E+01	n	—	—	—	—	—
Trinitrophenylmethyl nitramine (tetryl; nitramine)	479-45-8	1.5E+02	n	5.5E-01	n	5.5E+01	n	—	—	—	—	—	1.5E+02	n	2.8E-01	n	2.8E+01	n	—	—	—	—	—
Trinitrotoluene, 2,4,6-	118-96-7	3.3E+01	n	1.7E-01	n	1.7E+01	n	—	—	—	—	—	3.3E+01	n	8.6E-02	n	8.6E+00	n	—	—	—	—	—
Tungsten (as sodium tungstate dihydride)	7440-33-7	7.3E+01	n	8.1E+01	n	8.1E+03	n	—	—	—	—	—	7.3E+01	n	4.1E+01	n	4.1E+03	n	—	—	—	—	—
Uranium (soluble salts)	7440-61-1	2.2E+02	n	1.8E+03	m >S	1.8E+05	m >S	—	—	—	—	—	2.2E+02	n	8.9E+02	m >S	8.9E+04	m >S	—	—	—	—	—
Valeric acid (pentanoic acid)	109-52-4	1.3E+02	n	2.3E+01	n >S	2.3E+03	n >S	1.3E+02	n	3.8E+04	n >S	—	6.8E+01	n	1.2E+01	n >S	1.2E+03	n >S	6.8E+01	n	2.5E+03	n >S	—
Vanadium	7440-62-2	7.6E+01	n	8.8E+02	n >S	8.8E+04	n >S	—	—	—	—	—	7.5E+01	n	4.4E+02	n >S	4.4E+04	n >S	—	—	—	—	—
Vernam	1929-77-7	6.7E+01	n	2.7E+00	n	2.7E+02	n	—	—	—	—	—	6.7E+01	n	1.4E+00	n	1.4E+02	n	—	—	—	—	—
Vinyl acetate	108-05-4	3.0E+03	n	5.3E+01	n	5.3E+03	n	3.1E+03	n	3.1E+04	n	—	1.5E+03	n	2.7E+01	n	2.7E+03	n	1.6E+03	n	2.0E+03	n	—
Vinyl chloride	75-01-4	3.7E+00	c	2.2E-02	m	2.2E+00	m	4.3E+01	c	4.2E+01	c	—	3.4E+00	c	1.1E-02	m	1.1E+00	m	2.2E+01	c	2.7E+00	c	—
Vinylcyclohexane	695-12-5	4.1E+04	n	1.4E+03	n >S	1.4E+05	n >S	—	—	—	—	—	4.1E+04	n	7.1E+02	n >S	7.1E+04	n >S	—	—	—	—	—
Warfarin	81-81-2	2.0E+01	n	2.8E-01	n	2.8E+01	n	—	—	—	—	—	2.0E+01	n	1.4E-01	n	1.4E+01	n	—	—	—	—	—
Xylene, m-	108-38-3	8.9E+03	n	1.1E+02	m	1.1E+04	m >S	9.4E+03	n	1.1E+05	n >S	—	4.7E+03	n	5.3E+01	m	5.3E+03	m >S	4.8E+03	n	7.2E+03	n >S	—
Xylene, o-	95-47-6	4.8E+04	n	7.1E+01	m	7.1E+03	m >S	6.8E+04	n	1.0E+06	n >S	—	2.9E+04	n	3.5E+01	m	3.5E+03	m >S	3.5E+04	n	3.5E+05	n >S	—
Xylene, p-	106-42-3	8.9E+03	n	1.5E+02	m	1.5E+04	m >S	9.4E+03	n	1.4E+05	n >S	—	4.7E+03	n	7.5E+01	m	7.5E+03	m >S	4.8E+03	n	9.1E+03	n >S	—
Xylenes	1330-20-7	6.0E+03	n	1.2E+02	m	1.2E+04	m >S	9.4E+03	n	1.3E+05	n >S	—	3.7E+03	n	6.1E+01	m	6.1E+03	m >S	4.8E+03	n	8.1E+03	n >S	—
Zinc	7440-66-6	9.9E+03	n	2.4E+03	n >S	2.4E+05	n >S	—	—	—	—	1.6E+03	9.9E+03	n	1.2E+03	n >S	1.2E+05	n >S	—	—	—	—	8.0E+02
6 C aliphatics (TPH) (>53% n-hexane content)	NA	3.3E+03	n	1.7E+02	n	1.7E+04	n >S	1.0E+04	n	1.2E+04	n >S	—	2.5E+03	n	8.6E+01	n	8.6E+03	n >S	5.3E+03	n	8.1E+02	n	—
6 C aliphatics (TPH) (<53% n-hexane content)	NA	4.8E+03	n	1.7E+02	n	1.7E+04	n >S	2.8E+05	n	3.4E+05	n >S	—	4.8E+03	n	8.6E+01	n	8.6E+03	n >S	1.5E+05	n	2.2E+04	n >S	—
>6-8 C aliphatics (TPH) (>53% n-hexane content)	NA	3.3E+03	n	4.2E+02	n	4.2E+04	n >S	1.0E+04	n	2.0E+04	n >S	—	2.5E+03	n	2.1E+02	n	2.1E+04	n >S	5.3E+03	n	1.3E+03	n >S	—
>6-8 C aliphatics (TPH) (<53% n-hexane content)	NA	4.8E+03	n	4.2E+02	n	4.2E+04	n >S	2.8E+05	n	5.6E+05	n >S	—	4.8E+03	n	2.1E+02	n	2.1E+04	n >S	1.5E+05	n	3.6E+04	n >S	—
>8-10 C aliphatics (TPH)	NA	4.0E+03	n	3.6E+03	n >S	3.6E+05	n >S	7.7E+03	n	4.8E+04	n >S	—	2.7E+03	n	1.8E+03	n >S	1.8E+05	n >S	3.9E+03	n	3.1E+03	n >S	—
>10-12 C aliphatics (TPH)	NA	3.6E+03	n	2.5E+04	n >S	1.0E+06	n >S	7.7E+03	n	2.3E+05	n >S	—	2.5E+03	n	1.3E+04	n >S	1.0E+06	n >S	3.9E+03	n	1.5E+04	n >S	—
>12-16 C aliphatics (TPH)	NA	4.3E+03	n	4.9E+05	n >S	1.0E+06	n >S	1.2E+04	n	1.0E+06	n >S	—	3.2E+03	n	2.5E+05	n >S	1.0E+06	n >S	6.2E+03	n	6.6E+04	n >S	—
>16-21 C aliphatics (TPH)	NA	1.3E+05	n	1.0E+06	n >S	1.0E+06	n >S	—	—	—	—	—	1.3E+05	n	1.0E+06	n >S	1.0E+06	n >S	—	—	—	—	—

**Table 1
Tier 1 Residential Soil PCLs¹**

Last Revised: May 10, 2023

Chemical of Concern	CAS	0.5 acre source area										30 acre source area													
		TotSoil _{Comb} ² (mg/kg)	note ³	GWSoil _{Ing} (mg/kg)	note ³	GWSoil _{Class 3} (mg/kg)	note ³	AirSoil _{Inh-V} ⁴ (mg/kg)	note ³	AirGW-Soil _{Inh-V} (mg/kg)	note ³	GWSoil for Secondary MCL (mg/kg)	TotSoil _{Comb} ² (mg/kg)	note ³	GWSoil _{Ing} (mg/kg)	note ³	GWSoil _{Class 3} (mg/kg)	note ³	AirSoil _{Inh-V} ⁴ (mg/kg)	note ³	AirGW-Soil _{Inh-V} (mg/kg)	note ³	GWSoil for Secondary MCL (mg/kg)		
>16-21 C aliphatics (TPH) (for transformer mineral oil releases only)	NA	1.1E+05	n	1.0E+06	n >S	1.0E+06	n >S	—	—	—	—	—	1.1E+05	n	1.0E+06	n >S	1.0E+06	n >S	—	—	—	—	—	—	
>21-35 C aliphatics (TPH)	NA	1.3E+05	n	1.0E+06	n >S	1.0E+06	n >S	—	—	—	—	—	1.3E+05	n	1.0E+06	n >S	1.0E+06	n >S	—	—	—	—	—	—	
>21-35 C aliphatics (TPH) (for transformer mineral oil releases only)	NA	1.1E+05	n	1.0E+06	n >S	1.0E+06	n >S	—	—	—	—	—	1.1E+05	n	1.0E+06	n >S	1.0E+06	n >S	—	—	—	—	—	—	
>7-8 C aromatics (TPH)	NA	6.4E+03	n	2.0E+01	n	2.0E+03	n	2.9E+04	n	2.4E+05	n >S	—	5.3E+03	n	1.0E+01	n	1.0E+03	n	1.5E+04	n	1.6E+04	n	1.6E+04	n >S	—
>8-10 C aromatics (TPH)	NA	1.6E+03	n	6.5E+01	n	6.5E+03	n >S	3.1E+03	n	1.2E+05	n >S	—	1.1E+03	n	3.3E+01	n	3.3E+03	n >S	1.6E+03	n	7.6E+03	n	7.6E+03	n >S	—
>10-12 C aromatics (TPH)	NA	1.9E+03	n	1.0E+02	n	1.0E+04	n >S	6.6E+03	n	4.4E+05	n >S	—	1.5E+03	n	5.0E+01	n	5.0E+03	n >S	3.4E+03	n	2.8E+04	n	2.8E+04	n >S	—
>12-16 C aromatics (TPH)	NA	2.3E+03	n	2.0E+02	n	2.0E+04	n >S	1.5E+04	n	1.0E+06	n >S	—	2.0E+03	n	9.9E+01	n	9.9E+03	n >S	7.8E+03	n	9.8E+04	n	9.8E+04	n >S	—
>16-21 C aromatics (TPH)	NA	2.0E+03	n	4.7E+02	n >S	4.7E+04	n >S	—	—	—	—	—	2.0E+03	n	2.3E+02	n >S	2.3E+04	n >S	—	—	—	—	—	—	
>21-35 C aromatics (TPH)	NA	2.0E+03	n	3.7E+03	n >S	3.7E+05	n >S	—	—	—	—	—	2.0E+03	n	1.8E+03	n >S	1.8E+05	n >S	—	—	—	—	—	—	
Transformer Mineral Oil	NA	2.6E+04	n	2.5E+05	n	1.0E+06	n	8.4E+04	n	1.0E+06	n	—	2.0E+04	n	1.3E+05	n	1.0E+06	n	4.3E+04	n	6.1E+05	n	6.1E+05	n	—

Footnotes

1 In accordance with §350.72(b), when establishing Tier 1 PCLs for individual COCs for each of the individual and combined human health exposure pathways, the person must evaluate whether the PCLs need to be adjusted to lower concentrations to meet the cumulative carcinogenic risk level and hazard index criteria specified in §350.72(c). For COCs which exhibit both carcinogenic and noncarcinogenic characteristics, they shall be evaluated as both a carcinogen and noncarcinogen when determining whether the PCL established for an individual COC for each of the individual and combined human health exposure pathways needs to be adjusted to a lower concentration to meet the cumulative risk and hazard criteria. The person shall then use the lower of the carcinogenic or noncarcinogenic PCL as the Tier 1 human health PCL. In other words, the Tier 1 PCLs provided in this table for an individual COC should not be used as the final Tier 1 human health PCL for any of the individual or combined exposure pathways in cases where there are more than 10 carcinogenic and/or more than 10 noncarcinogenic COCs within a source medium unless it can be demonstrated that further downward adjustment is not necessary to meet the cumulative risk and hazard criteria.

2 Combined includes inhalation; ingestion; dermal; vegetable consumption pathways

3 c = carcinogenic; n = noncarcinogenic; m = primary MCL-based; e = EPA Action Level-based; > S = solubility limit exceeded during calculation

4 For subsurface soils only

5 Site-specific PCLs for mercury may vary based on the pH-dependent Kd value (see Figure:30 TAC §350.73(f)(1)(C)).

6 Persons must use the value provided in the "GWSoil for Secondary MCL" column of this table as the GWSoil PCL for MTBE if the conditions described in §350.74(f)(3) exist.

7 Please see the note on nitrate/nitrite in the "List of Updates" spreadsheet for March 31, 2017.

8 This chemical is one of four chemicals that make up total trihalomethanes (TTHMs). USEPA has established an MCL for TTHMs of 0.08 mg/L. Each individual chemical that contributes to TTHMs must meet the 0.08 mg/L based GWSoil_{Ing} PCL, and the person must ensure that the total soil concentrations for all four will not impact groundwater above the GW_{Ing} based MCL.

9 Nitrate, nitrite, and ammonia are inorganic anions that are mobile in most environmental situations, quickly partitioning from soil to groundwater. Due to these partitioning characteristics it is difficult to calculate a reliable soil-water partition coefficient (Kd) and Henry's law constant (H') for these compounds. The Kd and H' are parameters that are required to calculate the GWSoil_{Ing} PCL in accordance with 30 TAC 350.75(b)(1) using the Tier 1 GWSoil_{Ing} PCL equation.

* These compounds are not necessarily of concern from a human health standpoint, therefore calculation of human health-based values is not required. However, aesthetics and ecological criteria would still apply. See table entitled "Compounds for which Calculation of a Human Health PCL is Not Required" available on the TCEQ website at <http://www.tceq.state.tx.us/remediation/trpp/trpp.html>.

NA=Not applicable

All values capped at 1.0E+06

This table shows the residential soil protective concentration levels for both 0.5 acre and 30 acre source areas

end of worksheet

Table 2
Tier 1 Commercial/Industrial Soil PCLs¹

Last Revised: May 10, 2023

Chemical of Concern	CAS	0.5 acre source area										30 acre source area																	
		TotSoil _{comb} ²		GWSoil _{ing}		GWSoil _{class 3}		AirSoil _{inh-v} ⁴		AirGW-Soil _{inh-v}		GW ⁵ Soil for Secondary MCL		TotSoil _{comb} ²		GWSoil _{ing}		GWSoil _{class 3}		AirSoil _{inh-v} ⁴		AirGW-Soil _{inh-v}		GW ⁵ Soil for Secondary MCL					
		(mg/kg)	note ³	(mg/kg)	note ³	(mg/kg)	note ³	(mg/kg)	note ³	(mg/kg)	note ³	(mg/kg)	note ³	(mg/kg)	note ³	(mg/kg)	note ³	(mg/kg)	note ³	(mg/kg)	note ³	(mg/kg)	note ³	(mg/kg)	note ³	(mg/kg)	note ³		
Acenaphthene	83-32-9	3.7E+04	n	7.1E+02	n >S	7.1E+04	n >S	--	--	--	--	3.7E+04	n	3.5E+02	n >S	3.5E+04	n >S	--	--	--	--	3.7E+04	n	6.1E+02	n >S	6.1E+04	n >S		
Acenaphthylene	208-96-8	3.7E+04	n	1.2E+03	n >S	1.2E+05	n >S	--	--	--	--	3.7E+04	n	6.1E+02	n >S	6.1E+04	n >S	--	--	--	--	3.7E+04	n	6.1E+02	n >S	6.1E+04	n >S		
Acetaldehyde	75-07-0	2.0E+02	n	1.5E+01	n	1.5E+03	n	2.0E+02	n	6.7E+03	n	1.0E+02	n	7.4E+00	n	7.4E+02	n	1.0E+02	n	4.3E+02	n	4.3E+02	n	1.0E+02	n	4.3E+02	n	1.0E+02	n
Acetate, 2-ethoxyethanol	111-15-9	7.8E+03	n	1.6E+01	n	1.6E+03	n	8.4E+03	n	1.0E+06	n >S	4.2E+03	n	8.0E+00	n	8.0E+02	n	4.3E+03	n	8.9E+04	n	8.9E+04	n	4.3E+03	n	8.9E+04	n	4.3E+03	n
Acetate, isoamyl	123-92-2	7.4E+04	n	2.6E+01	n	2.6E+03	n	--	--	--	--	7.4E+04	n	1.3E+01	n	1.3E+03	n	--	--	--	--	7.4E+04	n	1.3E+01	n	1.3E+03	n	--	--
Acetate, isobutyl	110-19-0	4.9E+04	n	1.1E+01	n	1.1E+03	n	--	--	--	--	4.9E+04	n	5.5E+00	n	5.5E+02	n	--	--	--	--	4.9E+04	n	5.5E+00	n	5.5E+02	n	--	--
Acetate, sec-butyl	105-46-4	4.9E+04	n	1.2E+01	n	1.2E+03	n	--	--	--	--	4.9E+04	n	5.9E+00	n	5.9E+02	n	--	--	--	--	4.9E+04	n	5.9E+00	n	5.9E+02	n	--	--
Acetic acid*	64-19-7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acetone (2-propanone)	67-64-1	4.4E+05	n	1.3E+02	n	1.3E+04	n	8.4E+05	n	1.0E+06	n >S	2.9E+05	n	6.4E+01	n	6.4E+03	n	4.3E+05	n	9.7E+05	n >S	9.7E+05	n >S	6.4E+01	n	6.4E+03	n	4.3E+05	n
Acetone cyanohydrin	75-86-5	1.5E+03	n	4.3E-01	n	4.3E+01	n	6.1E+03	n	9.3E+05	n	1.2E+03	n	2.1E-01	n	2.1E+01	n	3.1E+03	n	6.0E+04	n	6.0E+04	n	2.1E-01	n	2.1E+01	n	3.1E+03	n
Acetonitrile	75-05-8	1.7E+03	n	4.5E+00	n	4.5E+02	n	1.8E+03	n	8.7E+04	n	9.1E+02	n	2.3E+00	n	2.3E+02	n	9.4E+02	n	5.6E+03	n	5.6E+03	n	2.3E+00	n	2.3E+02	n	9.4E+02	n
Acetophenone	98-86-2	6.8E+04	n	2.5E+01	n	2.5E+03	n	--	--	--	--	6.8E+04	n	1.2E+01	n	1.2E+03	n	--	--	--	--	6.8E+04	n	1.2E+01	n	1.2E+03	n	--	--
Acetylaminofluorene, 2-	53-96-3	4.3E+00	c	1.0E-02	c	1.0E+00	c	3.1E+01	c	2.0E+04	c >S	3.8E+00	c	5.1E-03	c	5.1E-01	c	1.6E+01	c	1.7E+03	c >S	1.7E+03	c >S	5.1E-03	c	5.1E-01	c	1.6E+01	c
Acifluorfen, sodium	62476-59-9	8.9E+03	n	6.1E+00	n	6.1E+02	n	--	--	--	--	8.9E+03	n	3.1E+00	n	3.1E+02	n	--	--	--	--	8.9E+03	n	3.1E+00	n	3.1E+02	n	--	--
Acridine	260-94-6	2.0E+03	n	2.3E+01	n	2.3E+03	n	--	--	--	--	2.0E+03	n	1.1E+01	n	1.1E+03	n	--	--	--	--	2.0E+03	n	1.1E+01	n	1.1E+03	n	--	--
Acrolein	107-02-8	1.5E+02	n	7.1E-02	n	7.1E+00	n	2.1E+02	n	2.6E+04	n	9.0E+01	n	3.5E-02	n	3.5E+00	n	1.1E+02	n	1.7E+03	n	1.7E+03	n	3.5E-02	n	3.5E+00	n	1.1E+02	n
Acrylamide	79-06-1	2.1E+01	c	7.9E-03	c	7.9E-01	c	4.7E+01	c	1.2E+04	c	1.5E+01	c	3.9E-03	c	3.9E-01	c	2.4E+01	c	8.1E+02	c	8.1E+02	c	3.9E-03	c	3.9E-01	c	2.4E+01	c
Acrylic acid	79-10-7	1.7E+02	n	7.2E+01	n	7.2E+03	n	1.7E+02	n	4.1E+04	n	8.7E+01	n	3.6E+01	n	3.6E+03	n	8.7E+01	n	2.7E+03	n	2.7E+03	n	3.6E+01	n	3.6E+03	n	8.7E+01	n
Acrylonitrile	107-13-1	7.6E+00	c	7.5E-03	c	7.5E-01	c	8.8E+00	c	1.9E+02	c	4.2E+00	c	3.7E-03	c	3.7E-01	c	4.6E+00	c	1.2E+01	c	1.2E+01	c	3.7E-03	c	3.7E-01	c	4.6E+00	c
Adipic acid (hexanedioic acid)	124-04-9	1.0E+06	n	2.8E+02	n	2.8E+04	n	--	--	--	--	1.0E+06	n	1.4E+02	n	1.4E+04	n	--	--	--	--	1.0E+06	n	1.4E+02	n	1.4E+04	n	--	--
Alachlor	15972-60-8	2.4E+02	c	1.9E-02	m	1.9E+00	m	--	--	--	--	2.4E+02	c	9.5E-03	m	9.5E-01	m	--	--	--	--	2.4E+02	c	9.5E-03	m	9.5E-01	m	--	--
Aldicarb	116-06-3	6.8E+02	n	1.8E-02	m	1.8E+00	m	--	--	--	--	6.8E+02	n	8.9E-03	m	8.9E-01	m	--	--	--	--	6.8E+02	n	8.9E-03	m	8.9E-01	m	--	--
Aldicarb sulfone	1646-88-4	6.8E+02	n	1.4E-02	m	1.4E+00	m	--	--	--	--	6.8E+02	n	6.9E-03	m	6.9E-01	m	--	--	--	--	6.8E+02	n	6.9E-03	m	6.9E-01	m	--	--
Aldrin	309-00-2	1.0E+00	c	2.3E-01	c	2.3E+01	c	1.4E+01	c	1.4E+04	c >S	9.7E-01	c	1.2E-01	c	1.2E+01	c	7.2E+00	c	9.2E+02	c >S	9.2E+02	c >S	1.2E-01	c	1.2E+01	c	7.2E+00	c
Allyl alcohol	107-18-6	8.0E+00	n	7.5E-01	n	7.5E+01	n	8.0E+00	n	8.5E+02	n	4.1E+00	n	3.7E-01	n	3.7E+01	n	4.1E+00	n	5.5E+01	n	5.5E+01	n	3.7E-01	n	3.7E+01	n	4.1E+00	n
Allyl chloride	107-05-1	2.1E+01	n	3.0E+00	n	3.0E+02	n	2.1E+01	n	5.3E+01	n	1.1E+01	n	1.5E+00	n	1.5E+02	n	1.1E+01	n	3.4E+00	n	3.4E+00	n	1.5E+00	n	1.5E+02	n	1.1E+01	n
Aluminum	7429-90-5	6.2E+05	n >S	5.2E+05	n >S	1.0E+06	n >S	--	--	--	1.4E+03	5.7E+05	n	2.6E+05	n >S	1.0E+06	n >S	--	--	--	7.1E+02	5.7E+05	n	2.6E+05	n >S	1.0E+06	n >S	--	--
Ametryn	834-12-8	6.1E+03	n	2.1E+01	n	2.1E+03	n	--	--	--	--	6.1E+03	n	1.1E+01	n	1.1E+03	n	--	--	--	--	6.1E+03	n	1.1E+01	n	1.1E+03	n	--	--
Amino-2,6-dinitrotoluene, 4-	19406-51-0	3.4E+02	n	6.0E-01	n	6.0E+01	n	--	--	--	--	3.4E+02	n	3.0E-01	n	3.0E+01	n	--	--	--	--	3.4E+02	n	3.0E-01	n	3.0E+01	n	--	--
Amino-4,6-dinitrotoluene, 2-	35572-78-2	3.4E+02	n	8.9E-01	n	8.9E+01	n	--	--	--	--	3.4E+02	n	4.5E-01	n	4.5E+01	n	--	--	--	--	3.4E+02	n	4.5E-01	n	4.5E+01	n	--	--
Aminobiphenyl, 4- (1,1-biphenyl-4-amine)	92-67-1	3.1E+00	c	2.4E-02	c	2.4E+00	c	--	--	--	--	3.1E+00	c	1.2E-02	c	1.2E+00	c	--	--	--	--	3.1E+00	c	1.2E-02	c	1.2E+00	c	--	--
Aminopyridine, 4-	504-24-5	1.4E+01	n	2.8E-03	n	2.8E-01	n	--	--	--	--	1.4E+01	n	1.4E-03	n	1.4E-01	n	--	--	--	--	1.4E+01	n	1.4E-03	n	1.4E-01	n	--	--
Ammonia ³	7664-41-7	6.9E+03	n	--	--	--	--	6.9E+03	n	2.5E+04	n	3.1E+00	n	--	--	--	--	3.5E+03	n	1.6E+03	n	1.6E+03	n	3.1E+00	n	--	--	3.1E+00	n
Ammonium polyphosphate*	6833-79-9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ammonium salts*	AMMONIUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aniline	62-53-3	1.8E+02	n	8.2E-01	c	8.2E+01	c	1.8E+02	n	3.6E+04	n	9.3E+01	n	4.1E-01	c	4.1E+01	c	9.4E+01	n	2.3E+03	n	2.3E+03	n	4.1E-01	c	4.1E+01	c	9.4E+01	n
Anthracene	120-12-7	1.9E+05	n	2.1E+04	n >S	1.0E+06	n >S	--	--	--	--	1.9E+05	n	1.0E+04	n >S	1.0E+06	n >S	--	--	--	--	1.9E+05	n	1.0E+04	n >S	1.0E+06	n >S	--	--
Anthraquinone, 9,10-	84-65-1	4.9E+02	c	2.5E+00	c	2.5E+02	c >S	--	--	--	--	4.9E+02	c	1.3E+00	c	1.3E+02	c >S	--	--	--	--	4.9E+02	c	1.3E+00	c	1.3E+02	c >S	--	--
Antimony	7440-36-0	3.1E+02	n	5.4E+00	m >S	5.4E+02	m >S	--	--	--	--	3.1E+02	n	2.7E+00	m >S	2.7E+02	m >S	--	--	--	--	3.1E+02	n	2.7E+00	m >S	2.7E+02	m >S	--	--
Aramite	140-57-8	7.6E+02	c	--	--	--	--	--	--	--	--	7.6E+02	c	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Arsenic	7440-38-2	2.0E+02	c	5.0E+00	m >S	5.0E+02	m >S	--	--	--	--	2.0E+02	c	2.5E+00	m >S	2.5E+02	m >S	--	--	--	--	2.0E+02	c	2.5E+00	m >S	2.5E+02	m >S	--	--
Arsine	7784-42-1	1.1E+00	n	--	--	--	--	1.1E+00	n	--	--	5.5E-01	n	--	--	--	--	5.5E-01	n	--	--	5.5E-01	n	--	--	--	--	--	--
Atrazine	1912-24-9	8.6E+01	c	2.5E-02	m	2.5E+00	m	--	--	--	--	8.6E+01	c	1.2E-02	m	1.2E+00	m	--	--	--	--	8.6E+01	c	1.2E-02	m	1.2E+00	m	--	--
Azinphos-methyl (guthion)	86-50-0	1.0E+03	n	1.3E+00	n >S	1.3E+02	n >S	--	--	--	--	1.0E+03	n	6.6E-01	n >S	6.6E+01	n >S	--	--	--	--	1.0E+03	n	6.6E-01	n >S	6.6E+01	n >S	--	--
Azobenzene	103-33-3	1.6E+02	c	4.0E+01	c	4.0E+03	c >S	2.3E+03	c	1.0E+06	c >S	1.5E+02	c	2.0E+01	c	2.0E+03	c >S	1.2E+03	c	1.6E+05	c >S	1.6E+05	c >S	2.0E+01	c	2.0E+03	c >S	1.2E+03	c
Barium	7440-39-3	1.2E+05	n	4.4E+02	m >S	4.4E+04	m >S	--	--	--	--	1.2E+05	n	2.2E+02	m >S	2.2E+04	m >S	--	--	--	--	1.2E+05	n	2.2E+02	m >S	2.2E+04	m >S	--	--
Bayleton	43121-43-3	2.0E+04	n	2.2E+01	n	2.2E+03	n >S	--	--	--	--	2.0E+04	n	1.1E+01	n	1.1E+03	n >S	--	--	--	--	2.0E+04	n	1.1E+01	n	1.1E+03	n >S	--	--
Benfen (benfluralin)	1861-40-1	2.0E+05	n	1.5E+05	n >S	1.0E+06	n >S	--	--	--	--	2.0E+05	n	7.3E+04	n >S	1.0E+06	n >S	--	--	--	--	2.0E							

Table 2
Tier 1 Commercial/Industrial Soil PCLs¹

Last Revised: May 10, 2023

Chemical of Concern	CAS	0.5 acre source area										30 acre source area												
		TotSoil _{Comb} ² (mg/kg)	note ³	GWSoil _{mg} (mg/kg)	note ³	GWSoil _{Class 3} (mg/kg)	note ³	AirSoil _{Inh-V} ⁴ (mg/kg)	note ³	AirGW-Soil _{Inh-V} (mg/kg)	note ³	GWSoil for Secondary MCL (mg/kg)	TotSoil _{Comb} ² (mg/kg)	note ³	GWSoil _{mg} (mg/kg)	note ³	GWSoil _{Class 3} (mg/kg)	note ³	AirSoil _{Inh-V} ⁴ (mg/kg)	note ³	AirGW-Soil _{Inh-V} (mg/kg)	note ³	GWSoil for Secondary MCL (mg/kg)	
Benzene	71-43-2	2.4E+02	c	2.6E-02	m	2.6E+00	m	2.7E+02	c	1.6E+03	c	—	1.3E+02	c	1.3E-02	m	1.3E+00	m	1.4E+02	c	1.0E+02	c	—	
Benzenediacetonitrile, 1,3-	626-17-5	4.1E+03	n	9.7E-01	n	9.7E+01	n	—	—	—	—	—	4.1E+03	n	4.9E-01	n	4.9E+01	n	—	—	—	—	—	
Benzenedicarboxylic acid, 1,2-disodecyl ester	26761-40-0	2.7E+04	n	1.0E+06	n >S	1.0E+06	n >S	1.0E+06	n	1.0E+06	n >S	—	2.7E+04	n	1.0E+06	n >S	1.0E+06	n >S	1.0E+06	n	1.0E+06	n >S	—	
Benzenethiol	108-98-5	1.0E+03	n	2.0E-01	n	2.0E+01	n	—	—	—	—	—	1.0E+03	n	1.0E-01	n	1.0E+01	n	—	—	—	—	—	
Benztidine	92-87-5	4.7E-02	c	2.4E-05	c	2.4E-03	c	1.1E-01	c	2.3E+01	c	—	3.3E-02	c	1.2E-05	c	1.2E-03	c	5.4E-02	c	1.9E+00	c	—	
Benzo-a-pyrene	50-32-8	1.7E+01	c	7.6E+00	m	7.6E+02	m >S	8.9E+01	n	1.0E+06	n >S	—	1.7E+01	c	3.8E+00	m	3.8E+02	m >S	4.6E+01	n	1.0E+05	n >S	—	
Benzo-b-fluoranthene	205-99-2	1.7E+02	c	9.8E+02	c >S	9.8E+04	c >S	1.5E+04	c	1.0E+06	c >S	—	1.7E+02	c	4.9E+02	c >S	4.9E+04	c >S	7.8E+03	c	1.0E+06	c >S	—	
Benzo-e-pyrene	192-97-2	1.9E+04	n	3.4E+05	n >S	1.0E+06	n >S	—	—	—	—	—	1.9E+04	n	1.7E+05	n >S	1.0E+06	n >S	—	—	—	—	—	
Benzo-g,h,i-perylene	191-24-2	1.9E+04	n	1.4E+05	n >S	1.0E+06	n >S	—	—	—	—	—	1.9E+04	n	6.9E+04	n >S	1.0E+06	n >S	—	—	—	—	—	
Benzoic acid	65-85-0	1.0E+06	n	5.7E+02	n	5.7E+04	n >S	—	—	—	—	—	1.0E+06	n	2.8E+02	n	2.8E+04	n >S	—	—	—	—	—	
Benzo-j-fluoranthene	205-82-3	1.7E+02	c	4.3E+02	c >S	4.3E+04	c >S	7.9E+03	c	1.0E+06	c >S	—	1.7E+02	c	2.1E+02	c >S	2.1E+04	c >S	4.1E+03	c	1.0E+06	c >S	—	
Benzo-k-fluoranthene	207-08-9	1.7E+03	c	1.0E+04	c >S	1.0E+06	c >S	3.8E+05	c	1.0E+06	c >S	—	1.7E+03	c	5.0E+03	c >S	5.0E+05	c >S	1.9E+05	c	1.0E+06	c >S	—	
Benzophenone	119-61-9	4.6E+03	n	5.1E+01	n	5.1E+03	n >S	—	—	—	—	—	4.6E+03	n	2.5E+01	n	2.5E+03	n >S	—	—	—	—	—	
Benzotrichloride	98-07-7	1.5E+00	c	9.5E-03	c	9.5E-01	c	—	—	—	—	—	1.5E+00	c	4.7E-03	c	4.7E-01	c	—	—	—	—	—	
Benzoyl peroxide	94-36-0	3.4E+04	n	1.6E+02	n	1.6E+04	n >S	—	—	—	—	—	3.4E+04	n	8.1E+01	n	8.1E+03	n >S	—	—	—	—	—	
Benzyl alcohol	100-51-6	6.8E+04	n	1.7E+01	n	1.7E+03	n	—	—	—	—	—	6.8E+04	n	8.7E+00	n	8.7E+02	n	—	—	—	—	—	
Benzyl chloride	100-44-7	4.2E+01	n	1.1E-01	c	1.1E+01	c	4.3E+01	n	1.3E+03	n	—	2.2E+01	n	5.6E-02	c	5.6E+00	c	2.2E+01	n	8.4E+01	n	—	
Benzyl dichloride	98-87-3	7.3E+01	n	1.4E-01	c	1.4E+01	c	7.7E+01	n	3.3E+03	n >S	—	3.9E+01	n	7.1E-02	c	7.1E+00	c	4.0E+01	n	2.1E+02	n	—	
Beryllium	7440-41-7	2.5E+02	n	1.8E+00	m >S	1.8E+02	m >S	—	—	—	—	—	2.5E+02	n	9.2E-01	m >S	9.2E+01	m >S	—	—	—	—	—	
Biphenyl, 1,1'-	92-52-4	8.5E+04	n	7.6E+03	n >S	7.6E+05	n >S	—	—	—	—	—	8.5E+04	n	3.8E+03	n >S	3.8E+05	n >S	—	—	—	—	—	
Biphenyl, 1,1', 2-phenoxy-	6738-04-1	3.4E+04	n	2.2E+05	n >S	1.0E+06	n >S	—	—	—	—	—	3.4E+04	n	1.1E+05	n >S	1.0E+06	n >S	—	—	—	—	—	
Biquinoline, 2,2'-	119-91-5	2.0E+03	n	8.0E+01	n	8.0E+03	n >S	—	—	—	—	—	2.0E+03	n	4.0E+01	n	4.0E+03	n >S	—	—	—	—	—	
Bis (2-chloroethoxy) methane	111-91-1	9.1E+00	c	2.6E-02	c	2.6E+00	c	1.9E+01	c	1.9E+03	c	—	6.2E+00	c	1.3E-02	c	1.3E+00	c	9.8E+00	c	1.2E+02	c	—	
Bis (2-chloroethyl) ether	111-44-4	4.9E+00	c	4.7E-03	c	4.7E-01	c	6.0E+00	c	4.0E+02	c	—	2.8E+00	c	2.4E-03	c	2.4E-01	c	3.1E+00	c	2.6E+01	c	—	
Bis (2-chloro-1-methylethyl) ether	108-60-1	1.5E+02	c	4.3E-01	c	4.3E+01	c	3.5E+02	c	2.1E+04	c	—	1.1E+02	c	2.1E-01	c	2.1E+01	c	1.8E+02	c	1.4E+03	c	—	
Bis (2-chloromethyl) ether	542-88-1	9.0E-03	c	1.8E-05	c	1.8E-03	c	9.7E-03	c	2.8E-01	c	—	4.8E-03	c	9.2E-06	c	9.2E-04	c	5.0E-03	c	1.8E-02	c	—	
Bis (2-ethyl-hexyl) phthalate	117-81-7	5.6E+02	c	1.6E+02	m	1.6E+04	m >S	—	—	—	—	—	5.6E+02	c	8.2E+01	m	8.2E+03	m >S	—	—	—	—	—	
Bismuth	7440-69-9	4.1E+05	n	—	—	—	—	—	—	—	—	—	4.1E+05	n	—	—	—	—	—	—	—	—	—	
Bisphenol A	80-05-7	3.4E+04	n	8.7E+01	n	8.7E+03	n	—	—	—	—	—	3.4E+04	n	4.4E+01	n	4.4E+03	n	—	—	—	—	—	
Boron	7440-42-8	1.9E+05	n	—	—	—	—	—	—	—	—	—	1.9E+05	n	—	—	—	—	—	—	—	—	—	
Bromacil	314-40-9	6.8E+04	n	5.1E+01	n	5.1E+03	n	—	—	—	—	—	6.8E+04	n	2.6E+01	n	2.6E+03	n	—	—	—	—	—	
Bromo-2-chloroethane, 1-	107-04-0	4.1E+04	n	1.0E+01	n	1.0E+03	n	—	—	—	—	—	4.1E+04	n	5.2E+00	n	5.2E+02	n	—	—	—	—	—	
Bromobenzene	108-86-1	1.2E+03	n	6.9E+00	n	6.9E+02	n	1.4E+03	n	3.7E+04	n >S	—	6.4E+02	n	3.4E+00	n	3.4E+02	n	7.0E+02	n	2.4E+03	n >S	—	
Bromodichloromethane ⁸	75-27-4	4.6E+02	c	3.6E-01	m	3.6E+01	m	—	—	—	—	—	4.6E+02	c	1.8E-01	m	1.8E+01	m	—	—	—	—	—	
Bromoform ⁸	75-25-2	1.0E+03	c	4.4E-01	m	4.4E+01	m	1.4E+03	c	4.7E+04	c >S	—	6.0E+02	c	2.2E-01	m	2.2E+01	m	7.2E+02	c	3.1E+03	c	—	
Bromomethane	74-83-9	7.9E+01	n	3.9E-01	n	3.9E+01	n	8.4E+01	n	1.9E+02	n	—	4.2E+01	n	2.0E-01	n	2.0E+01	n	4.3E+01	n	1.2E+01	n	—	
Bromophenyl phenylether, 4-	101-55-3	1.2E+00	c	7.9E-01	c	7.9E+01	c	1.6E+01	c	1.5E+04	c >S	—	1.1E+00	c	4.0E-01	c	4.0E+01	c	8.4E+00	c	1.0E+03	c	—	
Butadiene, 1,3-	106-99-0	7.1E+02	n	—	—	—	—	7.1E+02	n	6.9E+02	n	—	3.6E+02	n	—	—	—	3.6E+02	n	—	—	4.5E+01	n	—
Butadiene, 2-methyl-1,3- (isoprene)	78-79-5	5.3E+04	n	3.3E+01	n	3.3E+03	n	3.9E+05	n	8.7E+05	n >S	—	4.7E+04	n	1.7E+01	n	1.7E+03	n	2.0E+05	n	5.6E+04	n >S	—	
Butanal (butyraldehyde)	123-72-8	2.1E+03	n	9.4E+00	n	9.4E+02	n	2.1E+03	n	6.0E+04	n	—	1.1E+03	n	4.7E+00	n	4.7E+02	n	1.1E+03	n	3.9E+03	n	—	
Butane, 2,3-dimethyl-	79-29-8	5.3E+04	n	8.5E+02	n	8.5E+04	n >S	3.9E+05	n	6.4E+05	n >S	—	4.7E+04	n	4.2E+02	n	4.2E+04	n >S	2.0E+05	n	4.1E+04	n >S	—	
Butanoic acid (butyric acid)	107-92-6	1.8E+02	n	7.0E+01	n	7.0E+03	n	1.8E+02	n	5.1E+04	n	—	9.3E+01	n	3.5E+01	n	3.5E+03	n	9.3E+01	n	3.3E+03	n	—	
Butanol, 2-	78-92-2	1.0E+06	n	3.1E+02	n	3.1E+04	n	1.0E+06	n	1.0E+06	n >S	—	6.8E+05	n	1.6E+02	n	1.6E+04	n	1.0E+06	n	1.0E+06	n >S	—	
Butanol, 2-methyl-1-	137-32-6	1.0E+04	n	1.8E+00	n	1.8E+02	n	—	—	—	—	—	1.0E+04	n	8.9E-01	n	8.9E+01	n	—	—	—	—	—	
Butanol, 2-methyl-2-	75-85-4	1.0E+04	n	1.8E+00	n	1.8E+02	n	—	—	—	—	—	1.0E+04	n	8.8E-01	n	8.8E+01	n	—	—	—	—	—	
Butanol, n-	71-36-3	1.0E+05	n	1.6E+01	n	1.6E+03	n	—	—	—	—	—	1.0E+05	n	7.9E+00	n	7.9E+02	n	—	—	—	—	—	
Butene, 1-	106-98-9	4.0E+04	n	1.3E+02	n	1.3E+04	n >S	1.1E+05	n	1.2E+05	n >S	—	3.0E+04	n	6.6E+01	n	6.6E+03	n >S	5.9E+04	n	8.0E+03	n >S	—	
Butene, cis-2-	590-18-1	2.2E+04	n	9.6E+01	n	9.6E+03	n >S	3.4E+04	n	3.9E+04	n >S	—	1.4E+04	n	4.8E+01	n	4.8E+03	n >S	1.8E+04	n	2.5E+03	n	—	
Butene, trans-2-	624-64-6	2.2E+04	n	9.6E+01	n	9.6E+03	n >S	3.4E+04	n	3.9E+04	n >S	—	1.4E+04	n	4.8E+01	n	4.8E+03	n >S	1.8E+04	n	2.5E+03	n	—	
Butoxy ethanol, 2- (Ethylene glycol monobutyl ether; EGBE)	111-76-2	5.8E+04	n	1.8E+01	n	1.8E+03	n	4.1E+05	n	1.0E+06	n >S	—	5.2E+04	n	8.8E+00	n	8.8E+02	n	2.1E+05	n	1.0E+06	n >S	—	

Table 2
Tier 1 Commercial/Industrial Soil PCLs¹

Last Revised: May 10, 2023

Chemical of Concern	CAS	0.5 acre source area										30 acre source area											
		TotSoil _{comb} ² (mg/kg)	note ³	GWSoil _{mg} (mg/kg)	note ³	GWSoil _{Class 3} (mg/kg)	note ³	AirSoil _{inh-v} ⁴ (mg/kg)	note ³	AirGW-Soil _{inh-v} (mg/kg)	note ³	GWSoil for Secondary MCL (mg/kg)	TotSoil _{comb} ² (mg/kg)	note ³	GWSoil _{mg} (mg/kg)	note ³	GWSoil _{Class 3} (mg/kg)	note ³	AirSoil _{inh-v} ⁴ (mg/kg)	note ³	AirGW-Soil _{inh-v} (mg/kg)	note ³	GWSoil for Secondary MCL (mg/kg)
Butyl acetate	123-86-4	6.4E+04	n	3.1E+01	n	3.1E+03	n	1.2E+05	n	1.0E+06	n >S	--	4.2E+04	n	1.5E+01	n	1.5E+03	n	6.0E+04	n	1.9E+05	n >S	--
Butyl acrylate	141-32-2	9.2E+03	n	3.1E+00	n	3.1E+02	n	--	--	--	--	--	9.2E+03	n	1.5E+00	n	1.5E+02	n	--	--	--	--	--
Butyl benzyl phthalate	85-68-7	1.0E+04	c	5.9E+02	c	5.9E+04	c >S	--	--	--	--	--	1.0E+04	c	3.0E+02	c	3.0E+04	c >S	--	--	--	--	--
Butyl ether, n- (dibutyl ether)	142-96-1	1.0E+05	n	1.3E+02	n	1.3E+04	n >S	--	--	--	--	--	1.0E+05	n	6.5E+01	n	6.5E+03	n >S	--	--	--	--	--
Butyl methacrylate	97-88-1	2.6E+04	n	7.8E+01	n	7.8E+03	n >S	--	--	--	--	--	2.6E+04	n	3.9E+01	n	3.9E+03	n >S	--	--	--	--	--
Butylate	2008-41-5	3.4E+04	n	2.5E+01	n	2.5E+03	n >S	--	--	--	--	--	3.4E+04	n	1.3E+01	n	1.3E+03	n >S	--	--	--	--	--
Butylbenzene, n-	104-51-8	3.4E+04	n	4.5E+02	n	4.5E+04	n >S	--	--	--	--	--	3.4E+04	n	2.3E+02	n	2.3E+04	n >S	--	--	--	--	--
Butylbenzene, sec-	135-98-8	4.1E+04	n	2.5E+02	n	2.5E+04	n >S	--	--	--	--	--	4.1E+04	n	1.3E+02	n	1.3E+04	n >S	--	--	--	--	--
Butylbenzene, tert-	98-06-6	4.1E+04	n	3.0E+02	n	3.0E+04	n >S	--	--	--	--	--	4.1E+04	n	1.5E+02	n	1.5E+04	n >S	--	--	--	--	--
Cacodylic acid	75-60-5	2.0E+03	n	4.4E-01	n	4.4E+01	n	--	--	--	--	--	2.0E+03	n	2.2E-01	n	2.2E+01	n	--	--	--	--	--
Cadmium	7440-43-9	8.1E+02	n	1.5E+00	m >S	1.5E+02	m >S	--	--	--	--	--	7.7E+02	n	7.5E-01	m >S	7.5E+01	m >S	--	--	--	--	--
Calcium*	7440-70-2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Caprolactam	105-60-2	3.4E+05	n	1.4E+02	n	1.4E+04	n	--	--	--	--	--	3.4E+05	n	7.0E+01	n	7.0E+03	n	--	--	--	--	--
Captan	133-06-2	5.5E+03	c	1.5E+02	c >S	1.5E+04	c >S	--	--	--	--	--	5.5E+03	c	7.5E+01	c >S	7.5E+03	c >S	--	--	--	--	--
Carbaryl	63-25-2	6.8E+04	n	8.2E+01	n	8.2E+03	n >S	--	--	--	--	--	6.8E+04	n	4.1E+01	n	4.1E+03	n >S	--	--	--	--	--
Carbazole	86-74-8	9.5E+02	c	1.0E+01	c	1.0E+03	c >S	--	--	--	--	--	9.5E+02	c	5.1E+00	c	5.1E+02	c >S	--	--	--	--	--
Carbofuran	1563-66-2	3.4E+03	n	1.2E-01	m	1.2E+01	m	--	--	--	--	--	3.4E+03	n	6.2E-02	m	6.2E+00	m	--	--	--	--	--
Carbon disulfide	75-15-0	1.3E+04	n	4.1E+01	n	4.1E+03	n	1.5E+04	n	3.8E+04	n >S	--	7.2E+03	n	2.0E+01	n	2.0E+03	n	7.7E+03	n	2.4E+03	n	--
Carbon tetrachloride	56-23-5	8.1E+01	c	6.2E-02	m	6.2E+00	m	1.0E+02	c	4.1E+02	c	--	4.6E+01	c	3.1E-02	m	3.1E+00	m	5.2E+01	c	2.6E+01	c	--
Carophenothion	786-19-6	8.9E+03	n	4.4E+03	n	4.4E+05	n >S	--	--	--	--	--	8.9E+03	n	2.2E+03	n	2.2E+05	n >S	--	--	--	--	--
Carbosulfan	55285-14-8	6.8E+03	n	7.5E+02	n >S	7.5E+04	n >S	--	--	--	--	--	6.8E+03	n	3.8E+02	n >S	3.8E+04	n >S	--	--	--	--	--
Carboxin	5234-68-4	6.8E+04	n	2.6E+02	n	2.6E+04	n >S	--	--	--	--	--	6.8E+04	n	1.3E+02	n	1.3E+04	n >S	--	--	--	--	--
Chloral	75-87-6	1.0E+05	n	1.6E+01	n	1.6E+03	n	--	--	--	--	--	1.0E+05	n	7.9E+00	n	7.9E+02	n	--	--	--	--	--
Chloral hydrate (1,1-ethanediol, 2,2,2-trichloro-)	302-17-0	6.8E+04	n	1.6E+01	n	1.6E+03	n	--	--	--	--	--	6.8E+04	n	7.8E+00	n	7.8E+02	n	--	--	--	--	--
Chloramben (amiben; 3-amino-2,5-dichlorobenzoic acid)	133-90-4	1.0E+04	n	1.1E+01	n	1.1E+03	n	--	--	--	--	--	1.0E+04	n	5.6E+00	n	5.6E+02	n	--	--	--	--	--
Chlordane (technical)	12789-03-6	6.6E+01	c	9.6E+00	m	9.6E+02	m >S	2.1E+03	c	1.0E+06	c >S	--	6.4E+01	c	4.8E+00	m	4.8E+02	m >S	1.1E+03	c	4.0E+05	c >S	--
Chlordane, cis- (alpha chlordane)	5103-71-9	5.4E+01	c	1.7E+03	c	1.7E+05	c >S	6.9E+03	c	1.0E+06	c >S	--	5.4E+01	c	8.3E+02	c	8.3E+04	c >S	3.5E+03	c	1.0E+06	c >S	--
Chlordane, trans- (gamma chlordane)	5103-74-2	5.3E+01	c	9.2E+01	c	9.2E+03	c >S	1.6E+03	c	1.0E+06	c >S	--	5.1E+01	c	4.6E+01	c	4.6E+03	c >S	8.4E+02	c	2.6E+05	c >S	--
Chlorfenvinphos	470-90-6	3.9E+01	n	2.7E+00	n	2.7E+02	n	4.3E+01	n	--	--	--	2.1E+01	n	1.4E+00	n	1.4E+02	n	2.2E+01	n	--	--	--
Chloride*	16887-00-6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorine	7782-50-5	1.9E+02	n	--	--	--	--	1.9E+02	n	--	--	--	9.6E+01	n	--	--	--	--	9.6E+01	n	--	--	--
Chloro-1,3-butadiene, 2-	126-99-8	2.0E+00	c	--	--	--	--	2.0E+00	c	4.4E+00	c	--	1.0E+00	c	--	--	--	--	1.0E+00	c	2.8E-01	c	--
Chloro-2-propanol, 1-	127-00-4	2.0E+04	n	3.2E+00	n	3.2E+02	n	--	--	--	--	--	2.0E+04	n	1.6E+00	n	1.6E+02	n	--	--	--	--	--
Chloro-3-methylphenol, 4-	59-50-7	3.4E+03	n	1.4E+01	n	1.4E+03	n	--	--	--	--	--	3.4E+03	n	6.8E+00	n	6.8E+02	n	--	--	--	--	--
Chloroaniline, p-	106-47-8	9.5E+01	c	4.7E-02	c	4.7E+00	c	--	--	--	--	--	9.5E+01	c	2.3E-02	c	2.3E+00	c	--	--	--	--	--
Chlorobenzene	108-90-7	1.0E+03	n	1.1E+00	m	1.1E+02	m	1.1E+03	n	1.8E+04	n >S	--	5.4E+02	n	5.5E-01	m	5.5E+01	m	5.5E+02	n	1.1E+03	n	--
Chlorobenzilate	510-15-6	6.3E+01	c	2.6E-01	c	2.6E+01	c	5.9E+02	c	4.0E+05	c >S	--	5.7E+01	c	1.3E-01	c	1.3E+01	c	3.0E+02	c	2.6E+04	c >S	--
Chlorobromomethane (bromochloromethane)	74-97-5	4.1E+04	n	9.1E+00	n	9.1E+02	n	--	--	--	--	--	4.1E+04	n	4.5E+00	n	4.5E+02	n	--	--	--	--	--
Chlorodifluoromethane	75-45-6	1.0E+06	n	--	--	--	--	1.0E+06	n	1.0E+06	n >S	--	5.5E+05	n	--	--	--	--	5.5E+05	n	8.1E+04	n >S	--
Chloroethane (ethyl chloride)	75-00-3	1.4E+05	n	9.2E+01	n	9.2E+03	n	2.1E+05	n	5.1E+05	n >S	--	8.7E+04	n	4.6E+01	n	4.6E+03	n	1.1E+05	n	3.3E+04	n >S	--
Chloroethanol, 2-	107-07-3	2.0E+04	n	2.9E+00	n	2.9E+02	n	--	--	--	--	--	2.0E+04	n	1.4E+00	n	1.4E+02	n	--	--	--	--	--
Chloroethoxy ethene, 2- (2-chloroethylvinylether)	110-75-8	6.4E+00	n	6.5E-03	c	6.5E-01	c	6.4E+00	n	9.5E+01	n	--	3.3E+00	n	3.2E-03	c	3.2E-01	c	3.3E+00	n	6.2E+00	n	--
Chloroform ⁸	67-66-3	2.6E+01	c	3.3E-01	m	3.3E+01	m	2.6E+01	c	1.4E+02	c	--	1.3E+01	c	1.7E-01	m	1.7E+01	m	1.3E+01	c	9.0E+00	c	--
Chlorohexane, 1-	544-10-5	1.4E+04	n	1.2E+02	n	1.2E+04	n >S	2.1E+04	n	4.1E+05	n >S	--	8.7E+03	n	5.9E+01	n	5.9E+03	n >S	1.1E+04	n	2.6E+04	n >S	--
Chloromethane (methyl chloride)	74-87-3	2.9E+02	c	9.1E-01	c	9.1E+01	c	3.3E+02	c	3.5E+02	c	--	1.6E+02	c	4.5E-01	c	4.5E+01	c	1.7E+02	c	2.3E+01	c	--
Chloronaphthalene, 1- (Chloronaphthalene, alpha-)	90-13-1	5.0E+04	n	2.2E+03	n	2.2E+05	n >S	--	--	--	--	--	5.0E+04	n	1.1E+03	n	1.1E+05	n >S	--	--	--	--	--
Chloronaphthalene, 2- (chloronaphthalene, beta)	91-58-7	5.0E+04	n	2.0E+03	n	2.0E+05	n >S	--	--	--	--	--	5.0E+04	n	1.0E+03	n	1.0E+05	n >S	--	--	--	--	--
Chloronitrobenzene, p- (1-chloro-4-nitrobenzene)	100-00-5	7.8E+01	n	4.6E-01	n	4.6E+01	n	8.8E+01	n	6.7E+03	n >S	--	4.2E+01	n	2.3E-01	n	2.3E+01	n	4.5E+01	n	4.3E+02	n	--
Chlorophenol, 2-	95-57-8	5.1E+03	n	4.9E+00	n	4.9E+02	n	--	--	--	--	--	5.1E+03	n	2.4E+00	n	2.4E+02	n	--	--	--	--	--
Chlorophenol, 3-	108-43-0	3.4E+03	n	2.3E+00	n	2.3E+02	n	--	--	--	--	--	3.4E+03	n	1.2E+00	n	1.2E+02	n	--	--	--	--	--

Table 2
Tier 1 Commercial/Industrial Soil PCLs¹

Last Revised: May 10, 2023

Chemical of Concern	CAS	0.5 acre source area										30 acre source area											
		TotSoil _{Comb} ² (mg/kg)	note ³	GWSoil _{mg} (mg/kg)	note ³	GWSoil _{Class 3} (mg/kg)	note ³	AirSoil _{Inh-V} ⁴ (mg/kg)	note ³	AirGW-Soil _{Inh-V} (mg/kg)	note ³	GWSoil for Secondary MCL (mg/kg)	TotSoil _{Comb} ² (mg/kg)	note ³	GWSoil _{mg} (mg/kg)	note ³	GWSoil _{Class 3} (mg/kg)	note ³	AirSoil _{Inh-V} ⁴ (mg/kg)	note ³	AirGW-Soil _{Inh-V} (mg/kg)	note ³	GWSoil for Secondary MCL (mg/kg)
Chlorophenol, 4-	106-48-9	3.4E+03	n	2.5E+00	n	2.5E+02	n	—	—	—	—	3.4E+03	n	1.2E+00	n	1.2E+02	n	—	—	—	—	—	—
Chlorophenyl phenylether, 4-	7005-72-3	9.8E-01	c	7.2E-02	c	7.2E+00	c	4.2E+00	c	1.1E+03	c >S	8.0E-01	c	3.6E-02	c	3.6E+00	c	2.2E+00	c	7.0E+01	c	—	—
Chloropropane, 2-	75-29-6	2.0E+03	n	1.6E+01	n	1.6E+03	n	2.1E+03	n	4.8E+03	n	1.1E+03	n	8.1E+00	n	8.1E+02	n	1.1E+03	n	3.1E+02	n	—	—
Chlorothalonil	1897-45-6	1.7E+03	c	1.8E+01	c	1.8E+03	c	—	—	—	—	1.7E+03	c	9.1E+00	c	9.1E+02	c	—	—	—	—	—	—
Chlorotoluene, o- (2-chlorotoluene)	95-49-8	7.8E+03	n	2.7E+01	n	2.7E+03	n	1.8E+04	n	6.1E+05	n >S	5.6E+03	n	1.4E+01	n	1.4E+03	n	9.5E+03	n	4.0E+04	n >S	—	—
Chlorotoluene, p- (4-chlorotoluene)	106-43-4	2.0E+04	n	3.2E+01	n	3.2E+03	n >S	—	—	—	—	2.0E+04	n	1.6E+01	n	1.6E+03	n >S	—	—	—	—	—	—
Chlorpyrifos	2921-88-2	2.0E+03	n	4.4E+01	n	4.4E+03	n >S	—	—	—	—	2.0E+03	n	2.2E+01	n	2.2E+03	n >S	—	—	—	—	—	—
Chromium (III)	16065-83-1	1.2E+05	n	2.4E+03	m >S	2.4E+05	m >S	—	—	—	—	7.5E+04	n	1.2E+03	m >S	1.2E+05	m >S	—	—	—	—	—	—
Chromium (total)	7440-47-3	1.2E+05	n	2.4E+03	m >S	2.4E+05	m >S	—	—	—	—	7.5E+04	n	1.2E+03	m >S	1.2E+05	m >S	—	—	—	—	—	—
Chromium (VI)	18540-29-9	1.0E+03	n	2.8E+01	m >S	2.8E+03	m >S	—	—	—	—	1.0E+03	n	1.4E+01	m >S	1.4E+03	m >S	—	—	—	—	—	—
Chrysene	218-01-9	1.7E+04	c	2.5E+04	c >S	1.0E+06	c >S	1.0E+06	c	1.0E+06	c >S	1.7E+04	c	1.3E+04	c >S	1.0E+06	c >S	7.5E+05	c	1.0E+06	c >S	—	—
Cobalt	7440-48-4	6.3E+03	c	6.6E+02	n >S	6.6E+04	n >S	—	—	—	—	3.3E+03	c	3.3E+02	n >S	3.3E+04	n >S	—	—	—	—	—	—
Copolymer acrylamide	69418-26-4	1.4E+02	n	2.8E-02	n	2.8E+00	n	—	—	—	—	1.4E+02	n	1.4E-02	n	1.4E+00	n	—	—	—	—	—	—
Copper	7440-50-8	9.4E+04	n	1.0E+03	e >S	1.0E+05	e >S	—	—	—	8.0E+02	9.4E+04	n	5.2E+02	e >S	5.2E+04	e >S	—	—	—	—	4.0E+02	—
Coronene	191-07-1	1.4E+03	n	1.7E+05	n >S	1.0E+06	n >S	—	—	—	—	1.4E+03	n	8.4E+04	n >S	1.0E+06	n >S	—	—	—	—	—	—
Coumaphos	56-72-4	4.8E+03	n	3.3E+02	n >S	3.3E+04	n >S	—	—	—	—	4.8E+03	n	1.6E+02	n >S	1.6E+04	n >S	—	—	—	—	—	—
Cresol	1319-77-3	3.4E+04	n	2.0E+01	n	2.0E+03	n	—	—	—	—	3.4E+04	n	9.9E+00	n	9.9E+02	n	—	—	—	—	—	—
Cresol, m- (3-methylphenol)	108-39-4	3.4E+04	n	2.0E+01	n	2.0E+03	n	—	—	—	—	3.4E+04	n	9.9E+00	n	9.9E+02	n	—	—	—	—	—	—
Cresol, o- (2-methylphenol)	95-48-7	3.4E+04	n	2.1E+01	n	2.1E+03	n	—	—	—	—	3.4E+04	n	1.1E+01	n	1.1E+03	n	—	—	—	—	—	—
Cresol, p- (4-methylphenol)	106-44-5	3.4E+03	n	1.9E+00	n	1.9E+02	n	—	—	—	—	3.4E+03	n	9.4E-01	n	9.4E+01	n	—	—	—	—	—	—
Crotonaldehyde	123-73-9	1.5E+01	c	2.1E-03	c	2.1E-01	c	—	—	—	—	1.5E+01	c	1.1E-03	c	1.1E-01	c	—	—	—	—	—	—
Cumene (isopropylbenzene)	98-82-8	1.1E+04	n	1.0E+03	n	1.0E+05	n >S	1.3E+04	n	8.7E+05	n >S	6.3E+03	n	5.2E+02	n	5.2E+04	n >S	6.7E+03	n	5.7E+04	n >S	—	—
Cyanazine	21725-46-2	2.3E+01	c	9.4E-03	c	9.4E-01	c	—	—	—	—	2.3E+01	c	4.7E-03	c	4.7E-01	c	—	—	—	—	—	—
Cyanide	57-12-5	3.7E+02	n	4.0E+01	m	4.0E+03	m	1.0E+03	n	—	—	2.8E+02	n	2.0E+01	m	2.0E+03	m	5.2E+02	n	—	—	—	—
Cyanogen	460-19-5	1.7E+01	n	1.8E-01	n	1.8E+01	n	1.7E+01	n	2.5E+01	n	8.8E+00	n	9.1E-02	n	9.1E+00	n	8.8E+00	n	1.6E+00	n	—	—
Cycloate	1134-23-2	3.7E+04	n	4.5E+02	n	4.5E+04	n >S	—	—	—	—	3.7E+04	n	2.3E+02	n	2.3E+04	n >S	—	—	—	—	—	—
Cyclohexane	110-82-7	1.3E+05	n	1.8E+04	n >S	1.0E+06	n >S	1.3E+05	n	4.0E+05	n >S	6.5E+04	n	8.8E+03	n >S	8.8E+05	n >S	6.6E+04	n	2.6E+04	n >S	—	—
Cyclohexanol	108-93-0	1.0E+06	n	8.8E+02	n >S	8.8E+04	n >S	—	—	—	—	1.0E+06	n	4.4E+02	n >S	4.4E+04	n >S	—	—	—	—	—	—
Cyclohexanone	108-94-1	4.9E+04	n	7.8E+02	n	7.8E+04	n >S	4.9E+04	n	1.0E+06	n >S	2.5E+04	n	3.9E+02	n	3.9E+04	n >S	2.5E+04	n	2.7E+05	n >S	—	—
Cyclohexene, 1-methanol-3-	1679-51-2	1.4E+04	n	1.1E+01	n	1.1E+03	n	—	—	—	—	1.4E+04	n	5.6E+00	n	5.6E+02	n	—	—	—	—	—	—
Cyclohexene, 4-vinyl-1-	100-40-3	5.4E+03	n	9.1E+01	n	9.1E+03	n >S	7.1E+03	n	8.7E+04	n >S	3.1E+03	n	4.6E+01	n	4.6E+03	n >S	3.6E+03	n	5.6E+03	n >S	—	—
Cyclopentane	287-92-3	5.5E+04	n	8.4E+01	n	8.4E+03	n >S	5.2E+05	n	9.9E+05	n >S	5.0E+04	n	4.2E+01	n	4.2E+03	n >S	2.7E+05	n	6.4E+04	n >S	—	—
Cyclopentane, methyl-	96-37-7	1.8E+04	n	4.1E+02	n	4.1E+04	n >S	2.1E+04	n	5.3E+04	n >S	1.0E+04	n	2.0E+02	n	2.0E+04	n >S	1.1E+04	n	3.4E+03	n >S	—	—
Cyclopentene	142-29-0	1.0E+06	n	3.2E+03	n	3.2E+05	n >S	—	—	—	—	1.0E+06	n	1.6E+03	n	1.6E+05	n >S	—	—	—	—	—	—
Cyclotetramethylenetetranitramine (HMX)	2691-41-0	1.2E+04	n	7.0E+00	n	7.0E+02	n	—	—	—	—	1.2E+04	n	3.5E+00	n	3.5E+02	n	—	—	—	—	—	—
Cyclotrimethylenetrinitramine (RDX)	121-82-4	2.4E+02	c	1.1E-01	c	1.1E+01	c	—	—	—	—	2.4E+02	c	5.7E-02	c	5.7E+00	c	—	—	—	—	—	—
Cymene (isopropyltoluene)	99-87-6	1.0E+05	n	6.9E+02	n	6.9E+04	n >S	—	—	—	—	1.0E+05	n	3.5E+02	n	3.5E+04	n >S	—	—	—	—	—	—
Cymoxanil	57966-95-7	8.9E+03	n	1.8E+00	n	1.8E+02	n	—	—	—	—	8.9E+03	n	9.1E-01	n	9.1E+01	n	—	—	—	—	—	—
Dacthal (DCPA)	1861-32-1	6.8E+03	n	1.4E+03	n >S	1.4E+05	n >S	—	—	—	—	6.8E+03	n	6.8E+02	n >S	6.8E+04	n >S	—	—	—	—	—	—
Dalapon, sodium salt (2,2-dichloropropanoic acid)	75-99-0	2.0E+04	n	5.8E-01	m	5.8E+01	m	—	—	—	—	2.0E+04	n	2.9E-01	m	2.9E+01	m	—	—	—	—	—	—
DDD	72-54-8	1.0E+02	c	2.9E+01	c	2.9E+03	c >S	—	—	—	—	1.0E+02	c	1.5E+01	c	1.5E+03	c >S	—	—	—	—	—	—
DDE	72-55-9	7.3E+01	c	2.6E+01	c	2.6E+03	c >S	—	—	—	—	7.3E+01	c	1.3E+01	c	1.3E+03	c >S	—	—	—	—	—	—
DDT	50-29-3	7.1E+01	c	3.3E+01	c >S	3.3E+03	c >S	2.0E+03	c	1.0E+06	c >S	6.8E+01	c	1.7E+01	c >S	1.7E+03	c >S	1.0E+03	c	3.7E+05	c >S	—	—
Demeton	8065-48-3	2.7E+01	n	3.7E-02	n	3.7E+00	n	—	—	—	—	2.7E+01	n	1.9E-02	n	1.9E+00	n	—	—	—	—	—	—
Desethylatrazine	6190-65-4	2.4E+04	n	1.2E+01	n	1.2E+03	n	—	—	—	—	2.4E+04	n	6.0E+00	n	6.0E+02	n	—	—	—	—	—	—
Diacetone alcohol (4-hydroxy-4-methyl-2-pentanone)	123-42-2	2.7E+04	n	5.8E+00	n	5.8E+02	n	—	—	—	—	2.7E+04	n	2.9E+00	n	2.9E+02	n	—	—	—	—	—	—
Diallate	2303-16-4	3.1E+02	c	2.6E+00	c	2.6E+02	c	—	—	—	—	3.1E+02	c	1.3E+00	c	1.3E+02	c	—	—	—	—	—	—
Diazinon	333-41-5	7.9E+01	n	4.7E-01	n	4.7E+01	n	9.1E+01	n	4.0E+04	n >S	4.3E+01	n	2.4E-01	n	2.4E+01	n	4.7E+01	n	2.6E+03	n >S	—	—
Dibenz(a,h)acridine	226-36-8	1.6E+01	c	1.3E+02	c >S	1.3E+04	c >S	2.6E+04	c	1.0E+06	c >S	1.6E+01	c	6.5E+01	c >S	6.5E+03	c >S	1.3E+04	c	1.0E+06	c >S	—	—
Dibenz(a,j)acridine	224-42-0	2.4E+01	c	2.5E+02	c >S	2.5E+04	c >S	3.5E+04	c	1.0E+06	c >S	2.4E+01	c	1.3E+02	c >S	1.3E+04	c >S	1.8E+04	c	1.0E+06	c >S	—	—

Table 2
Tier 1 Commercial/Industrial Soil PCLs¹

Last Revised: May 10, 2023

Chemical of Concern	CAS	0.5 acre source area									30 acre source area												
		TotSoil _{Comb} ² (mg/kg)	note ³	GWSoil _{mg} (mg/kg)	note ³	GWSoil _{Class 3} (mg/kg)	note ³	AirSoil _{Inh-V} ⁴ (mg/kg)	note ³	AirGW-Soil _{Inh-V} (mg/kg)	note ³	GWSoil for Secondary MCL (mg/kg)	TotSoil _{Comb} ² (mg/kg)	note ³	GWSoil _{mg} (mg/kg)	note ³	GWSoil _{Class 3} (mg/kg)	note ³	AirSoil _{Inh-V} ⁴ (mg/kg)	note ³	AirGW-Soil _{Inh-V} (mg/kg)	note ³	GWSoil for Secondary MCL (mg/kg)
Dibenz-a,h-anthracene	53-70-3	1.7E+01	c	1.6E+02	c >S	1.6E+04	c >S	4.8E+03	c	1.0E+06	c >S	—	1.7E+01	c	7.8E+01	c >S	7.8E+03	c >S	2.5E+03	c	1.0E+06	c >S	—
Dibenzo(a,e)pyrene	192-65-4	2.6E+00	c	2.9E+02	c >S	2.9E+04	c >S	1.2E+04	c	1.0E+06	c >S	—	2.6E+00	c	1.5E+02	c >S	1.5E+04	c >S	6.2E+03	c	1.0E+06	c >S	—
Dibenzo(a,h)pyrene	189-64-0	2.6E-01	c	2.7E+01	c >S	2.7E+03	c >S	1.2E+03	c	1.0E+06	c >S	—	2.6E-01	c	1.3E+01	c >S	1.3E+03	c >S	6.0E+02	c	1.0E+06	c >S	—
Dibenzo(a,i)pyrene	189-55-9	2.6E-01	c	2.7E+01	c	2.7E+03	c >S	1.2E+03	c	1.0E+06	c >S	—	2.6E-01	c	1.3E+01	c	1.3E+03	c >S	6.0E+02	c	1.0E+06	c >S	—
Dibenzofuran	132-64-9	2.7E+03	n	1.0E+02	n	1.0E+04	n >S	—	—	—	—	—	2.7E+03	n	5.0E+01	n	5.0E+03	n >S	—	—	—	—	—
Dibenzothiophene	132-65-0	2.0E+03	n	3.0E+02	n >S	3.0E+04	n >S	—	—	—	—	—	2.0E+03	n	1.5E+02	n >S	1.5E+04	n >S	—	—	—	—	—
Dibromo-3-chloropropane, 1,2-	96-12-8	2.6E-01	c	1.7E-03	m	1.7E-01	m	2.6E-01	c	9.0E+00	c	—	1.4E-01	c	8.7E-04	m	8.7E-02	m	1.4E-01	c	5.9E-01	c	—
Dibromochloromethane (chlorodibromomethane) ⁸	124-48-1	3.4E+02	c	3.6E-01	m	3.6E+01	m	—	—	—	—	—	3.4E+02	c	1.8E-01	m	1.8E+01	m	—	—	—	—	—
Dibromofluoromethane	1868-53-7	2.0E+05	n	4.7E+01	n	4.7E+03	n	—	—	—	—	—	2.0E+05	n	2.3E+01	n	2.3E+03	n	—	—	—	—	—
Dicamba	1918-00-9	2.0E+04	n	4.4E+00	n	4.4E+02	n	—	—	—	—	—	2.0E+04	n	2.2E+00	n	2.2E+02	n	—	—	—	—	—
Dichlormid	37764-25-3	1.7E+04	n	7.8E+00	n	7.8E+02	n	—	—	—	—	—	1.7E+04	n	3.9E+00	n	3.9E+02	n	—	—	—	—	—
Dichloro-2-butene, 1,4-	764-41-0	3.3E-01	c	—	—	—	—	3.3E-01	c	1.0E+01	c	—	1.7E-01	c	—	—	—	—	1.7E-01	c	6.7E-01	c	—
Dichloro-2-butene, 1,4- trans	110-57-6	3.4E-01	c	—	—	—	—	3.4E-01	c	1.1E+01	c	—	1.8E-01	c	—	—	—	—	1.8E-01	c	7.2E-01	c	—
Dichlorobenzene, 1,2-	95-50-1	1.1E+03	n	1.8E+01	m	1.8E+03	m	1.1E+03	n	4.8E+04	n >S	—	5.7E+02	n	8.9E+00	m	8.9E+02	m	5.7E+02	n	3.1E+03	n >S	—
Dichlorobenzene, 1,3-	541-73-1	1.7E+02	n	2.0E+01	n	2.0E+03	n >S	1.7E+02	n	2.4E+03	n >S	—	8.8E+01	n	1.0E+01	n	1.0E+03	n >S	8.8E+01	n	1.6E+02	n	—
Dichlorobenzene, 1,4-	106-46-7	1.2E+03	c	2.1E+00	m	2.1E+02	m	1.6E+04	n	6.8E+05	n >S	—	1.2E+03	c	1.1E+00	m	1.1E+02	m	8.5E+03	n	4.4E+04	n >S	—
Dichlorobenzidine, 3,3'	91-94-1	4.2E+01	c	1.4E-01	c	1.4E+01	c	—	—	—	—	—	4.2E+01	c	7.0E-02	c	7.0E+00	c	—	—	—	—	—
Dichlorobutane, 2,3-	7581-97-7	1.5E+02	n	7.7E+00	n	7.7E+02	n	1.5E+02	n	2.1E+03	n	—	7.7E+01	n	3.8E+00	n	3.8E+02	n	7.7E+01	n	1.4E+02	n	—
Dichlorodifluoromethane	75-71-8	2.1E+03	n	7.2E+02	n	7.2E+04	n >S	2.1E+03	n	4.1E+03	n	—	1.1E+03	n	3.6E+02	n	3.6E+04	n >S	1.1E+03	n	2.7E+02	n	—
Dichloroethane, 1,1-	75-34-3	4.1E+04	n	5.5E+01	n	5.5E+03	n	5.2E+04	n	2.3E+05	n >S	—	2.3E+04	n	2.8E+01	n	2.8E+03	n	2.7E+04	n	1.5E+04	n >S	—
Dichloroethane, 1,2-	107-06-2	1.1E+02	c	1.4E-02	m	1.4E+00	m	1.8E+02	c	1.2E+03	c	—	7.1E+01	c	6.9E-03	m	6.9E-01	m	9.1E+01	c	7.5E+01	c	—
Dichloroethylene, 1,1-	75-35-4	6.4E+03	n	5.0E-02	m	5.0E+00	m	7.3E+03	n	1.7E+04	n	—	3.5E+03	n	2.5E-02	m	2.5E+00	m	3.8E+03	n	1.1E+03	n	—
Dichloroethylene, cis-1,2-	156-59-2	7.9E+02	n	2.5E-01	m	2.5E+01	m	1.3E+03	n	6.1E+03	n	—	5.0E+02	n	1.2E-01	m	1.2E+01	m	6.6E+02	n	3.9E+02	n	—
Dichloroethylene, trans-1,2	156-60-5	1.2E+03	n	4.9E-01	m	4.9E+01	m	1.3E+03	n	5.3E+03	n	—	6.4E+02	n	2.5E-01	m	2.5E+01	m	6.6E+02	n	3.4E+02	n	—
Dichlorofluoromethane	75-43-4	2.0E+05	n	4.2E+01	n	4.2E+03	n	—	—	—	—	—	2.0E+05	n	2.1E+01	n	2.1E+03	n	—	—	—	—	—
Dichlorophenol, 2,3-	576-24-9	2.0E+03	n	1.6E+00	n	1.6E+02	n	—	—	—	—	—	2.0E+03	n	8.1E-01	n	8.1E+01	n	—	—	—	—	—
Dichlorophenol, 2,4-	120-83-2	2.0E+03	n	1.1E+00	n	1.1E+02	n	—	—	—	—	—	2.0E+03	n	5.3E-01	n	5.3E+01	n	—	—	—	—	—
Dichlorophenol, 2,5-	583-78-8	2.0E+03	n	1.5E+00	n	1.5E+02	n	—	—	—	—	—	2.0E+03	n	7.5E-01	n	7.5E+01	n	—	—	—	—	—
Dichlorophenol, 2,6-	87-65-0	6.8E+02	n	2.0E-01	n	2.0E+01	n	—	—	—	—	—	6.8E+02	n	1.0E-01	n	1.0E+01	n	—	—	—	—	—
Dichlorophenol, 3,4-	95-77-2	2.0E+03	n	6.0E+00	n	6.0E+02	n	—	—	—	—	—	2.0E+03	n	3.0E+00	n	3.0E+02	n	—	—	—	—	—
Dichlorophenol, 3,5-	591-35-5	2.0E+03	n	4.0E+00	n	4.0E+02	n	—	—	—	—	—	2.0E+03	n	2.0E+00	n	2.0E+02	n	—	—	—	—	—
Dichlorophenoxy, 2,4- butyric acid, 4- (2,4-DB)	94-82-6	5.5E+03	n	1.2E+00	n	1.2E+02	n	—	—	—	—	—	5.5E+03	n	5.8E-01	n	5.8E+01	n	—	—	—	—	—
Dichlorophenoxyacetic acid, 2,4- (2,4-D)	94-75-7	1.6E+05	n	2.6E+00	m	2.6E+02	m	—	—	—	—	—	1.6E+05	n	1.3E+00	m	1.3E+02	m	—	—	—	—	—
Dichloroprop (2-(2,4-dichlorophenoxy) propanoic acid)	120-36-5	6.8E+03	n	1.4E+00	n	1.4E+02	n	—	—	—	—	—	6.8E+03	n	7.0E-01	n	7.0E+01	n	—	—	—	—	—
Dichloropropane, 1,2-	78-87-5	8.6E+01	n	2.3E-02	m	2.3E+00	m	8.6E+01	n	7.4E+02	n	—	4.4E+01	n	1.1E-02	m	1.1E+00	m	4.4E+01	n	4.8E+01	n	—
Dichloropropane, 1,3-	142-28-9	9.9E+01	c	1.4E-01	c	1.4E+01	c	1.5E+02	c	3.0E+03	c	—	6.1E+01	c	7.2E-02	c	7.2E+00	c	7.7E+01	c	2.0E+02	c	—
Dichloropropane, 2,2-	594-20-7	8.6E+01	n	2.7E-01	c	2.7E+01	c	8.6E+01	n	7.1E+02	n	—	4.4E+01	n	1.4E-01	c	1.4E+01	c	4.4E+01	n	4.6E+01	n	—
Dichloropropanol, 2,3-	616-23-9	2.0E+03	n	7.2E-01	n	7.2E+01	n	—	—	—	—	—	2.0E+03	n	3.6E-01	n	3.6E+01	n	—	—	—	—	—
Dichloropropene, 1,1-	563-58-6	9.9E+01	c	3.0E-01	c	3.0E+01	c	1.5E+02	c	4.8E+02	c	—	6.1E+01	c	1.5E-01	c	1.5E+01	c	7.7E+01	c	3.1E+01	c	—
Dichloropropene, 1,3- (mixed isomers)	542-75-6	9.9E+01	c	8.8E-02	c	8.8E+00	c	1.5E+02	c	1.3E+03	c	—	6.1E+01	c	4.4E-02	c	4.4E+00	c	7.7E+01	c	8.3E+01	c	—
Dichloropropene, cis 1,3-	10061-01-5	5.3E+01	c	1.5E-02	c	1.5E+00	c	4.3E+02	n	3.8E+03	n	—	5.3E+01	c	7.4E-03	c	7.4E-01	c	2.2E+02	n	2.5E+02	n	—
Dichloropropene, trans 1,3-	10061-02-6	9.9E+01	c	8.0E-02	c	8.0E+00	c	1.5E+02	c	1.3E+03	c	—	6.1E+01	c	4.0E-02	c	4.0E+00	c	7.7E+01	c	8.1E+01	c	—
Dichlorvos	62-73-7	6.6E+01	c	1.0E+06	c	1.0E+06	c	1.0E+06	n	1.0E+06	n	—	6.6E+01	c	5.5E+05	c	1.0E+06	c	8.7E+05	n	1.0E+06	n	—
Dicrotophos (bidrin)	141-66-2	6.8E+01	n	1.4E-02	n	1.4E+00	n	—	—	—	—	—	6.8E+01	n	7.0E-03	n	7.0E-01	n	—	—	—	—	—
Dicyclopentadiene	77-73-6	8.2E+04	n	—	—	—	—	—	—	—	—	—	8.2E+04	n	—	—	—	—	—	—	—	—	—
Dieldrin	60-57-1	1.2E+00	c	1.1E-01	c	1.1E+01	c	5.3E+01	c	1.8E+05	c >S	—	1.1E+00	c	5.5E-02	c	5.5E+00	c	2.7E+01	c	1.2E+04	c >S	—
Diethanolamine	111-42-2	3.2E+02	n	7.0E-02	n	7.0E+00	n	4.9E+03	n	1.0E+06	n	—	3.0E+02	n	3.5E-02	n	3.5E+00	n	2.5E+03	n	9.6E+05	n	—
Diethylthiocarbamate, sodium salt	148-18-5	1.1E+02	c	—	—	—	—	—	—	—	—	—	1.1E+02	c	—	—	—	—	—	—	—	—	—
Diethyl phthalate	84-66-2	5.5E+05	n	4.7E+02	n	4.7E+04	n >S	—	—	—	—	—	5.5E+05	n	2.3E+02	n	2.3E+04	n >S	—	—	—	—	—
Diethylene glycol	111-46-6	1.0E+06	n	2.8E+02	n	2.8E+04	n	—	—	—	—	—	1.0E+06	n	1.4E+02	n	1.4E+04	n	—	—	—	—	—

Table 2
Tier 1 Commercial/Industrial Soil PCLs¹

Last Revised: May 10, 2023

Chemical of Concern	CAS	0.5 acre source area										30 acre source area											
		TotSoil _{Comb} ² (mg/kg)	note ³	GWSoil _{mg} (mg/kg)	note ³	GWSoil _{Class 3} (mg/kg)	note ³	AirSoil _{Inh-V} ⁴ (mg/kg)	note ³	AirGW-Soil _{Inh-V} (mg/kg)	note ³	GWSoil for Secondary MCL (mg/kg)	TotSoil _{Comb} ² (mg/kg)	note ³	GWSoil _{mg} (mg/kg)	note ³	GWSoil _{Class 3} (mg/kg)	note ³	AirSoil _{Inh-V} ⁴ (mg/kg)	note ³	AirGW-Soil _{Inh-V} (mg/kg)	note ³	GWSoil for Secondary MCL (mg/kg)
Diethylene glycol monobutyl ether	112-34-5	2.8E+01	n	4.7E+00	n	4.7E+02	n	2.8E+01	n	9.6E+03	n	1.5E+01	n	2.3E+00	n	2.3E+02	n	1.5E+01	n	6.2E+02	n	—	—
Diethylhexyl adipate	103-23-1	1.6E+04	c	6.1E+03	m >S	6.1E+05	m >S	—	—	—	—	1.6E+04	c	3.0E+03	m >S	3.0E+05	m >S	—	—	—	—	—	—
Diethylstilbestrol	56-53-1	4.1E-03	c	1.3E-03	c	1.3E-01	c	—	—	—	—	4.1E-03	c	6.5E-04	c	6.5E-02	c	—	—	—	—	—	—
Disobutylene (trimethyl-1-pentene, 2,4,4-)	107-39-1	4.0E+03	n	1.8E+03	n >S	1.8E+05	n >S	4.3E+03	n	1.3E+04	n >S	2.1E+03	n	9.0E+02	n >S	9.0E+04	n >S	2.2E+03	n	8.6E+02	n >S	—	—
Diisopropylbenzene, p-	100-18-5	6.8E+03	n	2.8E+02	n	2.8E+04	n >S	—	—	—	—	6.8E+03	n	1.4E+02	n	1.4E+04	n >S	—	—	—	—	—	—
Diisopropyl ether (2,2'-oxybis-propane)	108-20-3	1.3E+04	n	3.6E+01	n	3.6E+03	n	1.5E+04	n	1.3E+05	n >S	7.2E+03	n	1.8E+01	n	1.8E+03	n	7.7E+03	n	8.7E+03	n >S	—	—
Dimethenamid	87674-68-8	1.0E+04	n	3.1E+00	n	3.1E+02	n	—	—	—	—	1.0E+04	n	1.5E+00	n	1.5E+02	n	—	—	—	—	—	—
Dimethoate	60-51-5	1.4E+02	n	3.0E-02	n	3.0E+00	n	—	—	—	—	1.4E+02	n	1.5E-02	n	1.5E+00	n	—	—	—	—	—	—
Dimethoxybenzidine, 3,3'-	119-90-4	1.4E+03	c	6.3E-01	c	6.3E+01	c	—	—	—	—	1.4E+03	c	3.2E-01	c	3.2E+01	c	—	—	—	—	—	—
Dimethyl-2-nitrobenzene, 1,3-	81-20-9	1.0E+03	n	6.7E+00	n	6.7E+02	n	3.9E+03	n	6.9E+05	n >S	8.1E+02	n	3.3E+00	n	3.3E+02	n	2.0E+03	n	4.5E+04	n >S	—	—
Dimethyl-3-nitrobenzene, 1,2-	83-41-0	9.7E+02	n	4.2E+00	n	4.2E+02	n	3.4E+03	n	5.4E+05	n >S	7.7E+02	n	2.1E+00	n	2.1E+02	n	1.7E+03	n	3.5E+04	n >S	—	—
Dimethyl-4-nitrobenzene, 1-2-	99-51-4	9.8E+02	n	4.2E+00	n	4.2E+02	n	3.5E+03	n	5.9E+05	n >S	7.8E+02	n	2.1E+00	n	2.1E+02	n	1.8E+03	n	3.8E+04	n >S	—	—
Dimethyl-5-nitrobenzene, 1,3-	99-12-7	9.4E+02	n	4.9E+00	n	4.9E+02	n	3.1E+03	n	4.5E+05	n >S	7.3E+02	n	2.5E+00	n	2.5E+02	n	1.6E+03	n	2.9E+04	n >S	—	—
Dimethylphenethylamine, alpha, alpha-	122-09-8	1.4E+03	n	1.1E+00	n	1.1E+02	n	—	—	—	—	1.4E+03	n	5.6E-01	n	5.6E+01	n	—	—	—	—	—	—
Dimethyl phenol, 2,4-	105-67-9	1.4E+04	n	9.7E+00	n	9.7E+02	n	—	—	—	—	1.4E+04	n	4.8E+00	n	4.8E+02	n	—	—	—	—	—	—
Dimethylaminoazobenzene, p-	60-11-7	6.8E+00	n	3.4E+00	n	3.4E+02	n	—	—	—	—	6.8E+00	n	1.7E+00	n	1.7E+02	n	—	—	—	—	—	—
Dimethylbenz-a-anthracene, 7,12-	57-97-6	6.9E-02	c	2.8E+00	c	2.8E+02	c	2.4E+02	c	1.0E+06	c >S	6.9E-02	c	1.4E+00	c	1.4E+02	c	1.2E+02	c	1.0E+06	c >S	—	—
Dimethylbenzidine, 3,3'-	119-93-7	1.7E+00	c	1.8E-03	c	1.8E-01	c	—	—	—	—	1.7E+00	c	9.2E-04	c	9.2E-02	c	—	—	—	—	—	—
Dimethylformamide, N,N-	68-12-2	4.3E+03	n	1.4E+01	n	1.4E+03	n	4.5E+03	n	1.0E+06	n	2.3E+03	n	7.1E+00	n	7.1E+02	n	2.3E+03	n	6.6E+04	n	—	—
Dimethylnaphthalene, 1,3-	575-41-7	2.5E+04	n	2.4E+03	n	2.4E+05	n >S	—	—	—	—	2.5E+04	n	1.2E+03	n	1.2E+05	n >S	—	—	—	—	—	—
Dimethylphthalate	131-11-3	5.5E+05	n	1.9E+02	n	1.9E+04	n >S	—	—	—	—	5.5E+05	n	9.3E+01	n	9.3E+03	n >S	—	—	—	—	—	—
Di-n-butyl phthalate	84-74-2	6.8E+04	n	9.9E+03	n	9.9E+05	n >S	—	—	—	—	6.8E+04	n	5.0E+03	n	5.0E+05	n >S	—	—	—	—	—	—
Dinitro-2-methylphenol, 4,6- (dinitro-o-cresol, 4, 6-)	534-52-1	6.8E+01	n	1.4E-02	n	1.4E+00	n	—	—	—	—	6.8E+01	n	7.0E-03	n	7.0E-01	n	—	—	—	—	—	—
Dinitrobenzene, 1,3- (dinitrobenzene, 2,4-)	99-65-0	6.8E+01	n	2.3E-02	n	2.3E+00	n	—	—	—	—	6.8E+01	n	1.1E-02	n	1.1E+00	n	—	—	—	—	—	—
Dinitrobenzene, 1,4-	100-25-4	6.8E+01	n	2.2E-02	n	2.2E+00	n	—	—	—	—	6.8E+01	n	1.1E-02	n	1.1E+00	n	—	—	—	—	—	—
Dinitrophenol, 2,4-	51-28-5	1.4E+03	n	2.8E-01	n	2.8E+01	n	—	—	—	—	1.4E+03	n	1.4E-01	n	1.4E+01	n	—	—	—	—	—	—
Dinitrophenol, 2,5-	329-71-5	1.4E+03	n	2.9E-01	n	2.9E+01	n	—	—	—	—	1.4E+03	n	1.4E-01	n	1.4E+01	n	—	—	—	—	—	—
Dinitrotoluene, 2,4-	121-14-2	2.8E+01	c	1.2E-02	c	1.2E+00	c	—	—	—	—	2.8E+01	c	6.0E-03	c	6.0E-01	c	—	—	—	—	—	—
Dinitrotoluene, 2,6-	606-20-2	2.8E+01	c	1.1E-02	c	1.1E+00	c	—	—	—	—	2.8E+01	c	5.4E-03	c	5.4E-01	c	—	—	—	—	—	—
Di-n-octyl phthalate	117-84-0	6.8E+03	n	1.0E+06	n >S	1.0E+06	n >S	—	—	—	—	6.8E+03	n	1.0E+06	n >S	1.0E+06	n >S	—	—	—	—	—	—
Dinoseb	88-85-7	6.8E+02	n	3.5E-01	m	3.5E+01	m	—	—	—	—	6.8E+02	n	1.8E-01	m	1.8E+01	m	—	—	—	—	—	—
Dioxane 1,4-	123-91-1	1.5E+02	c	4.0E-02	c	4.0E+00	c	3.0E+02	c	2.5E+04	c	1.0E+02	c	2.0E-02	c	2.0E+00	c	1.6E+02	c	1.6E+03	c	—	—
Dioxin (as 2,3,7,8-TCDD toxicity equivalent quotients (TEQs))	1746-01-6	5.0E-03	e	1.7E-02	m	1.7E+00	m	—	—	—	—	5.0E-03	e	8.5E-03	m	8.5E-01	m	—	—	—	—	—	—
Diphenyl ether	101-84-8	4.2E+03	n	2.7E+02	n	2.7E+04	n >S	—	—	—	—	4.2E+03	n	1.4E+02	n	1.4E+04	n >S	—	—	—	—	—	—
Diphenylamine	122-39-4	1.7E+04	n	2.9E+01	n	2.9E+03	n	—	—	—	—	1.7E+04	n	1.4E+01	n	1.4E+03	n	—	—	—	—	—	—
Diphenylhydrazine, 1,2-	122-66-7	2.2E+01	c	7.2E-02	c	7.2E+00	c	2.4E+02	c	1.8E+05	c >S	2.0E+01	c	3.6E-02	c	3.6E+00	c	1.2E+02	c	1.2E+04	c	—	—
Dipropylene glycol	110-98-5	8.2E+04	n	1.7E+01	n	1.7E+03	n	—	—	—	—	8.2E+04	n	8.5E+00	n	8.5E+02	n	—	—	—	—	—	—
Diquat	85-00-7	1.5E+03	n	2.0E-01	m	2.0E+01	m	—	—	—	—	1.5E+03	n	1.0E-01	m	1.0E+01	m	—	—	—	—	—	—
Disodium iminodiacetate (iminodiacetic acid, disodium salt)	142-73-4	6.8E+03	n	1.4E+00	n	1.4E+02	n	—	—	—	—	6.8E+03	n	7.0E-01	n	7.0E+01	n	—	—	—	—	—	—
Disulfoton	298-04-4	2.7E+01	n	1.0E+00	n	1.0E+02	n	—	—	—	—	2.7E+01	n	5.2E-01	n	5.2E+01	n	—	—	—	—	—	—
Diuron	330-54-1	1.4E+03	n	2.8E+00	n	2.8E+02	n	—	—	—	—	1.4E+03	n	1.4E+00	n	1.4E+02	n	—	—	—	—	—	—
Dodecylphenol, 4-	104-43-8	3.4E+04	n	1.0E+06	n >S	1.0E+06	n >S	—	—	—	—	3.4E+04	n	1.0E+06	n >S	1.0E+06	n >S	—	—	—	—	—	—
Endosulfan	115-29-7	4.1E+03	n	1.4E+01	n	1.4E+03	n >S	—	—	—	—	4.1E+03	n	6.9E+00	n	6.9E+02	n >S	—	—	—	—	—	—
Endosulfan I	959-98-8	1.4E+03	n	9.2E+01	n	9.2E+03	n >S	—	—	—	—	1.4E+03	n	4.6E+01	n	4.6E+03	n >S	—	—	—	—	—	—
Endosulfan II	33213-65-9	4.1E+03	n	2.8E+02	n	2.8E+04	n >S	—	—	—	—	4.1E+03	n	1.4E+02	n	1.4E+04	n >S	—	—	—	—	—	—
Endosulfan sulfate	1031-07-8	4.1E+03	n	1.4E+04	n >S	1.0E+06	n >S	—	—	—	—	4.1E+03	n	7.0E+03	n >S	7.0E+05	n >S	—	—	—	—	—	—
Endothall	145-73-3	1.4E+04	n	5.3E-01	m	5.3E+01	m	—	—	—	—	1.4E+04	n	2.7E-01	m	2.7E+01	m	—	—	—	—	—	—
Endrin	72-20-8	2.0E+02	n	7.5E-01	m	7.5E+01	m	—	—	—	—	2.0E+02	n	3.8E-01	m	3.8E+01	m	—	—	—	—	—	—
Endrin aldehyde	7421-93-4	2.0E+02	n	1.9E+03	n >S	1.9E+05	n >S	—	—	—	—	2.0E+02	n	9.4E+02	n >S	9.4E+04	n >S	—	—	—	—	—	—
Endrin ketone	53494-70-5	2.0E+02	n	1.5E+02	n	1.5E+04	n >S	—	—	—	—	2.0E+02	n	7.6E+01	n	7.6E+03	n >S	—	—	—	—	—	—

Table 2
Tier 1 Commercial/Industrial Soil PCLs¹

Last Revised: May 10, 2023

Chemical of Concern	CAS	0.5 acre source area										30 acre source area													
		TotSoil _{Comb} ² (mg/kg)	note ³	GWSoil _{mg} (mg/kg)	note ³	GWSoil _{Class 3} (mg/kg)	note ³	AirSoil _{Inh-V} ⁴ (mg/kg)	note ³	AirGW-Soil _{Inh-V} (mg/kg)	note ³	GWSoil for Secondary MCL (mg/kg)	TotSoil _{Comb} ² (mg/kg)	note ³	GWSoil _{mg} (mg/kg)	note ³	GWSoil _{Class 3} (mg/kg)	note ³	AirSoil _{Inh-V} ⁴ (mg/kg)	note ³	AirGW-Soil _{Inh-V} (mg/kg)	note ³	GWSoil for Secondary MCL (mg/kg)		
Epichlorohydrin	106-89-8	3.7E+01	n	4.1E-01	c	4.1E+01	c	3.7E+01	n	2.0E+03	n	--	1.9E+01	n	2.1E-01	c	2.1E+01	c	1.9E+01	n	--	--	1.3E+02	n	--
EPN (o-ethyl o-(4-nitrophenyl)phenylphosphonothioate)	2104-64-5	6.8E+00	n	1.6E-01	n	1.6E+01	n	--	--	--	--	--	6.8E+00	n	8.2E-02	n	8.2E+00	n	--	--	--	--	--	--	--
Esfenvalerate	66230-04-4	1.4E+03	n	3.7E+02	n >S	3.7E+04	n >S	--	--	--	--	--	1.4E+03	n	1.9E+02	n >S	1.9E+04	n >S	--	--	--	--	--	--	--
Ethalfuralin (sonolan)	55283-68-6	2.1E+02	c	5.6E+01	c	5.6E+03	c	--	--	--	--	--	2.1E+02	c	2.8E+01	c	2.8E+03	c	--	--	--	--	--	--	--
Ethanol	64-17-5	1.0E+06	n	4.7E+03	n	4.7E+05	n	--	--	--	--	--	1.0E+06	n	2.4E+03	n	2.4E+05	n	--	--	--	--	--	--	--
Ethanol, 2-amino-	141-43-5	9.0E+02	n	2.4E-01	n	2.4E+01	n	4.1E+03	n	1.0E+06	n	--	7.5E+02	n	1.2E-01	n	1.2E+01	n	2.1E+03	n	--	--	7.4E+04	n	--
Ethanol, 2-(2-aminoethoxy)-	929-06-6	3.4E+02	n	7.0E-02	n	7.0E+00	n	--	--	--	--	--	3.4E+02	n	3.5E-02	n	3.5E+00	n	--	--	--	--	--	--	--
Ethanol, 2-(2-ethoxyethoxy)-	111-90-0	1.0E+06	n	4.9E+02	n	4.9E+04	n	--	--	--	--	--	1.0E+06	n	2.5E+02	n	2.5E+04	n	--	--	--	--	--	--	--
Ethanol, 2-(methylamino)-	109-83-1	4.9E+03	n	2.2E+00	n	2.2E+02	n	9.0E+03	n	1.0E+06	n >S	--	3.3E+03	n	1.1E+00	n	1.1E+02	n	4.6E+03	n	--	--	1.8E+05	n	--
Ethion	563-12-2	3.4E+02	n	2.3E+01	n	2.3E+03	n >S	--	--	--	--	--	3.4E+02	n	1.1E+01	n	1.1E+03	n >S	--	--	--	--	--	--	--
Ethoprop	13194-48-4	6.8E+01	n	3.7E-01	n	3.7E+01	n	--	--	--	--	--	6.8E+01	n	1.8E-01	n	1.8E+01	n	--	--	--	--	--	--	--
Ethoxy ethanol, 2-	110-80-5	2.5E+04	n	1.3E+01	n	1.3E+03	n >S	3.5E+04	n	1.0E+06	n >S	--	1.5E+04	n	6.4E+00	n	6.4E+02	n >S	1.8E+04	n	--	--	5.9E+05	n >S	--
Ethyl acetate	141-78-6	5.1E+03	n	1.4E+02	n	1.4E+04	n	5.1E+03	n	1.6E+05	n	--	2.6E+03	n	7.0E+01	n	7.0E+03	n	2.6E+03	n	--	--	1.0E+04	n	--
Ethyl acrylate	140-88-5	3.2E+02	n	2.7E-01	c	2.7E+01	c	3.4E+02	n	9.6E+03	n	--	1.7E+02	n	1.3E-01	c	1.3E+01	c	1.7E+02	n	--	--	6.2E+02	n	--
Ethyl benzene	100-41-4	2.9E+04	n	7.6E+00	m	7.6E+02	m	4.1E+04	n	4.5E+05	n >S	--	1.7E+04	n	3.8E+00	m	3.8E+02	m	2.1E+04	n	--	--	2.9E+04	n >S	--
Ethyl dipropylthiocarbamate, S-	759-94-4	1.7E+04	n	2.1E+01	n	2.1E+03	n	--	--	--	--	--	1.7E+04	n	1.1E+01	n	1.1E+03	n	--	--	--	--	--	--	--
Ethyl ether	60-29-7	2.0E+05	n	3.3E+01	n	3.3E+03	n	--	--	--	--	--	2.0E+05	n	1.7E+01	n	1.7E+03	n	--	--	--	--	--	--	--
Ethyl methacrylate	97-63-2	8.9E+03	n	2.2E+01	n	2.2E+03	n	9.9E+03	n	2.7E+05	n >S	--	4.8E+03	n	1.1E+01	n	1.1E+03	n	5.1E+03	n	--	--	1.8E+04	n	--
Ethyl methanesulfonate	62-50-0	9.8E+01	c	4.0E-02	c	4.0E+00	c	2.0E+02	c	6.0E+04	c	--	6.7E+01	c	2.0E-02	c	2.0E+00	c	1.0E+02	c	--	--	3.9E+03	c	--
Ethyl tert-butyl ether (2-ethyl-2-ethoxypropane)	637-92-3	8.8E+02	n	2.7E-01	n	2.7E+01	n	6.4E+03	n	5.6E+04	n >S	--	7.8E+02	n	1.3E-01	n	1.3E+01	n	3.3E+03	n	--	--	3.6E+03	n	--
Ethyl-1-hexanol, 2-	104-76-7	1.0E+05	n	2.3E+02	n	2.3E+04	n >S	--	--	--	--	--	1.0E+05	n	1.1E+02	n	1.1E+04	n >S	--	--	--	--	--	--	--
Ethyl-2-hexenal, 2-	645-62-5	1.5E+05	n	8.4E+01	n	8.4E+03	n >S	--	--	--	--	--	1.5E+05	n	4.2E+01	n	4.2E+03	n >S	--	--	--	--	--	--	--
Ethyl-2-methyl benzene, 1-	611-14-3	9.6E+03	n	1.7E+02	n	1.7E+04	n >S	1.2E+04	n	5.8E+05	n >S	--	5.4E+03	n	8.3E+01	n	8.3E+03	n >S	6.1E+03	n	--	--	3.8E+04	n >S	--
Ethyl-4-methyl benzene, 1-	622-96-8	8.4E+03	n	1.8E+02	n	1.8E+04	n >S	1.0E+04	n	4.8E+05	n >S	--	4.7E+03	n	9.0E+01	n	9.0E+03	n >S	5.2E+03	n	--	--	3.1E+04	n >S	--
Ethylene*	74-85-1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethylene dibromide (dibromoethane, 1,2-)	106-93-4	8.7E+00	c	2.1E-04	m	2.1E-02	m	2.2E+01	c	5.3E+02	c	--	6.3E+00	c	1.0E-04	m	1.0E-02	m	1.1E+01	c	--	--	3.4E+01	c	--
Ethylene glycol	107-21-1	1.0E+06	n	2.8E+02	n	2.8E+04	n	--	--	--	--	--	1.0E+06	n	1.4E+02	n	1.4E+04	n	--	--	--	--	--	--	--
Ethylene oxide	75-21-8	2.6E+01	c	4.0E-03	c	4.0E-01	c	4.3E+02	c	1.0E+04	c	--	2.5E+01	c	2.0E-03	c	2.0E-01	c	2.2E+02	c	--	--	6.5E+02	c	--
Ethylene thiourea	96-45-7	5.5E+01	n	1.1E-02	n	1.1E+00	n	--	--	--	--	--	5.5E+01	n	5.6E-03	n	5.6E-01	n	--	--	--	--	--	--	--
Ethylenediamine	107-15-3	9.2E+04	n	1.4E+01	n	1.4E+03	n	--	--	--	--	--	9.2E+04	n	6.9E+00	n	6.9E+02	n	--	--	--	--	--	--	--
Ethylenimine	151-56-4	1.5E-01	c	6.3E-05	c	6.3E-03	c	2.2E-01	c	4.7E+01	c	--	9.0E-02	c	3.1E-05	c	3.1E-03	c	1.1E-01	c	--	--	3.0E+00	c	--
Ethylhexyl acrylate, 2-	103-11-7	4.0E+02	c	1.7E+01	c	1.7E+03	c	--	--	--	--	--	4.0E+02	c	8.6E+00	c	8.6E+02	c	--	--	--	--	--	--	--
Famphur	52-85-7	2.0E+01	n	5.4E-03	n	5.4E-01	n	--	--	--	--	--	2.0E+01	n	2.7E-03	n	2.7E-01	n	--	--	--	--	--	--	--
Fensulfothion	115-90-2	6.8E+02	n	1.0E+00	n	1.0E+02	n	--	--	--	--	--	6.8E+02	n	5.2E-01	n	5.2E+01	n	--	--	--	--	--	--	--
Fenthion	55-38-9	4.8E+01	n	2.3E-01	n	2.3E+01	n	--	--	--	--	--	4.8E+01	n	1.2E-01	n	1.2E+01	n	--	--	--	--	--	--	--
Fenuron	101-42-8	4.8E+04	n	1.4E+01	n	1.4E+03	n	--	--	--	--	--	4.8E+04	n	6.9E+00	n	6.9E+02	n	--	--	--	--	--	--	--
Fluoranthene	206-44-0	2.5E+04	n	5.7E+03	n >S	5.7E+05	n >S	--	--	--	--	--	2.5E+04	n	2.9E+03	n >S	2.9E+05	n >S	--	--	--	--	--	--	--
Fluorene	86-73-7	2.5E+04	n	8.9E+02	n >S	8.9E+04	n >S	--	--	--	--	--	2.5E+04	n	4.5E+02	n >S	4.5E+04	n >S	--	--	--	--	--	--	--
Fluorine (soluble fluoride)	7782-41-4	5.8E+04	n	--	--	--	--	--	--	--	--	--	5.8E+04	n	--	--	--	--	--	--	--	--	--	--	--
Fluorochloridone	61213-25-0	5.1E+03	n	1.2E+01	n	1.2E+03	n	--	--	--	--	--	5.1E+03	n	5.9E+00	n	5.9E+02	n	--	--	--	--	--	--	--
Fonofos	944-22-9	1.4E+03	n	2.1E+01	n	2.1E+03	n >S	--	--	--	--	--	1.4E+03	n	1.1E+01	n	1.1E+03	n >S	--	--	--	--	--	--	--
Formaldehyde	50-00-0	1.4E+03	n	2.9E+01	n	2.9E+03	n	1.4E+03	n	2.4E+05	n	--	7.1E+02	n	1.5E+01	n	1.5E+03	n	7.1E+02	n	--	--	1.6E+04	n	--
Formic acid	64-18-6	3.0E+02	n	1.3E+02	n	1.3E+04	n	3.0E+02	n	4.7E+04	n	--	1.5E+02	n	6.3E+01	n	6.3E+03	n	1.5E+02	n	--	--	3.1E+03	n	--
Furan	110-00-9	1.0E+03	n	2.4E-01	n	2.4E+01	n	--	--	--	--	--	1.0E+03	n	1.2E-01	n	1.2E+01	n	--	--	--	--	--	--	--
Furfural	98-01-1	3.1E+03	n	4.4E-01	n	4.4E+01	n	--	--	--	--	--	3.1E+03	n	2.2E-01	n	2.2E+01	n	--	--	--	--	--	--	--
Glycidylaldehyde	765-34-4	1.4E+02	n	6.7E-02	n	6.7E+00	n	2.1E+02	n	4.6E+04	n	--	8.5E+01	n	3.3E-02	n	3.3E+00	n	1.1E+02	n	--	--	3.0E+03	n	--
Glyphosate	1071-83-6	6.8E+05	n	2.9E+01	m	2.9E+03	m	--	--	--	--	--	6.8E+05	n	1.5E+01	m	1.5E+03	m	--	--	--	--	--	--	--
Heptachlor	76-44-8	3.3E+00	c	1.9E-01	m	1.9E+01	m	1.5E+01	c	5.0E+03	c >S	--	2.8E+00	c	9.4E-02	m	9.4E+00	m	7.9E+00	c	--	--	3.2E+02	c >S	--
Heptachlor epoxide	1024-57-3	2.0E+00	c	5.8E-02	m	5.8E+00	m	4.0E+01	c	5.8E+04	c >S	--	1.9E+00	c	2.9E-02	m	2.9E+00	m	2.1E+01	c	--	--	3.8E+03	c >S	--
Heptane, n-	142-82-5	4.7E+04	n	2.1E+03	n >S	2.1E+05	n >S	1.9E+05	n	5.9E+05	n >S	--	3.8E+04	n	1.1E+03	n >S	1.1E+05	n >S	9.9E+04	n	--	--	3.8E+04	n >S	--

Table 2
Tier 1 Commercial/Industrial Soil PCLs¹

Last Revised: May 10, 2023

Chemical of Concern	CAS	0.5 acre source area										30 acre source area													
		TotSoil _{comb} ²		GWSoil _{ing}		GWSoil _{class 3}		AirSoil _{inh-v} ⁴		AirGW-Soil _{inh-v}		GW ⁵ Soil for Secondary MCL		TotSoil _{comb} ²		GWSoil _{ing}		GWSoil _{class 3}		AirSoil _{inh-v} ⁴		AirGW-Soil _{inh-v}		GW ⁵ Soil for Secondary MCL	
		(mg/kg)	note ³	(mg/kg)	note ³	(mg/kg)	note ³	(mg/kg)	note ³	(mg/kg)	note ³	(mg/kg)	note ³	(mg/kg)	note ³	(mg/kg)	note ³	(mg/kg)	note ³	(mg/kg)	note ³	(mg/kg)	note ³	(mg/kg)	note ³
Heptanoic acid, n-	111-14-8	1.7E+02	n	7.1E+01	n	7.1E+03	n >S	1.7E+02	n	4.5E+04	n >S	--	8.8E+01	n	3.5E+01	m	3.5E+03	n >S	8.8E+01	n	2.9E+03	n >S	--		
Hexachlorobenzene	118-74-1	8.7E+00	c	1.1E+00	m	1.1E+02	m >S	3.2E+01	c	1.1E+04	c >S	--	6.9E+00	c	5.6E-01	m	5.6E+01	m >S	1.6E+01	c	7.0E+02	c >S	--		
Hexachlorobutadiene	87-68-3	4.1E+01	c	7.4E+00	c	7.4E+02	c >S	4.9E+01	c	4.2E+03	c >S	--	2.3E+01	c	3.7E+00	c	3.7E+02	c >S	2.5E+01	c	2.7E+02	c	--		
Hexachlorocyclohexane, alpha (alpha-BHC)	319-84-6	3.3E+00	c	1.8E-02	c	1.8E+00	c	2.3E+01	c	1.4E+04	c >S	--	2.9E+00	c	8.9E-03	c	8.9E-01	c	1.2E+01	c	9.1E+02	c >S	--		
Hexachlorocyclohexane, beta (beta-BHC)	319-85-7	1.2E+01	c	6.5E-02	c	6.5E+00	c	1.2E+02	c	1.1E+05	c >S	--	1.1E+01	c	3.2E-02	c	3.2E+00	c	6.2E+01	c	7.1E+03	c >S	--		
Hexachlorocyclohexane, delta (delta-BHC)	319-86-8	1.2E+01	c	3.9E-01	c	3.9E+01	c	1.7E+02	c	2.1E+05	c >S	--	1.2E+01	c	1.9E-01	c	1.9E+01	c	8.8E+01	c	1.3E+04	c >S	--		
Hexachlorocyclohexane, gamma (lindane; gamma-BHC)	58-89-9	1.8E+01	c	9.2E-03	m	9.2E-01	m	--	--	--	--	--	1.8E+01	c	4.6E-03	m	4.6E-01	m	--	--	--	--	--		
Hexachlorocyclohexane, techn (technical-BHC)	608-73-1	1.2E+01	c	1.1E-01	c	1.1E+01	c	1.5E+02	c	1.6E+05	c >S	--	1.1E+01	c	5.6E-02	c	5.6E+00	c	7.7E+01	c	1.1E+04	c >S	--		
Hexachlorocyclopentadiene	77-47-4	2.0E+01	n	1.9E+01	m	1.9E+03	m >S	2.0E+01	n	2.9E+03	n >S	--	1.0E+01	n	9.6E+00	m	9.6E+02	m >S	1.0E+01	n	1.9E+02	n	--		
Hexachloroethane	67-72-1	4.5E+02	n	3.8E+00	n	3.8E+02	n	6.9E+03	n	7.7E+05	n >S	--	4.2E+02	n	1.9E+00	n	1.9E+02	n	3.6E+03	n	5.0E+04	n >S	--		
Hexachlorophene	70-30-4	2.0E+02	n	1.8E+04	n >S	1.0E+06	n >S	--	--	--	--	--	2.0E+02	n	8.8E+03	n >S	8.8E+05	n >S	--	--	--	--	--		
Hexachloropropylene	1888-71-7	4.5E+02	n	2.2E+01	n	2.2E+03	n	7.1E+03	n	1.0E+06	n >S	--	4.2E+02	n	1.1E+01	n	1.1E+03	n	3.7E+03	n	8.3E+04	n >S	--		
Hexanal, 2-ethyl-	123-05-7	1.0E+05	n	7.9E+01	n	7.9E+03	n >S	--	--	--	--	--	1.0E+05	n	3.9E+01	n	3.9E+03	n >S	--	--	--	--	--		
Hexane, n-	110-54-3	1.2E+04	n	6.1E+02	n	6.1E+04	n >S	1.4E+04	n	7.4E+03	n >S	--	6.6E+03	n	3.0E+02	n	3.0E+04	n >S	7.4E+03	n	4.8E+02	n	--		
Hexanediamine, 1,6-	124-09-4	3.4E+03	n	7.3E-01	n	7.3E+01	n	--	--	--	--	--	3.4E+03	n	3.7E-01	n	3.7E+01	n	--	--	--	--	--		
Hexanedinitrile	111-69-3	5.6E+02	n	2.0E-01	n	2.0E+01	n	1.4E+03	n	4.5E+05	n	--	4.1E+02	n	1.0E-01	n	1.0E+01	n	7.1E+02	n	2.9E+04	n	--		
Hexanediol, 1,6-	629-11-8	1.0E+06	n	7.8E+02	n	7.8E+04	n >S	1.0E+06	n	1.0E+06	n >S	--	1.0E+06	n	3.9E+02	n	3.9E+04	n >S	1.0E+06	n	1.0E+06	n >S	--		
Hexanoic acid	142-62-1	1.9E+02	n	9.0E+00	n	9.0E+02	n	1.9E+02	n	5.7E+04	n >S	--	9.8E+01	n	4.5E+00	n	4.5E+02	n	9.8E+01	n	3.7E+03	n	--		
Hexanone, 2-	591-78-6	1.1E+03	n	9.6E+00	n	9.6E+02	n	1.2E+03	n	4.3E+04	n	--	5.9E+02	n	4.8E+00	n	4.8E+02	n	5.9E+02	n	2.7E+03	n	--		
Hexazinone	51235-04-2	2.2E+04	n	8.2E+00	n	8.2E+02	n	--	--	--	--	--	2.2E+04	n	4.1E+00	n	4.1E+02	n	--	--	--	--	--		
Hexene, 1-	592-41-6	2.3E+03	n	2.2E+03	n	2.2E+05	n >S	2.4E+03	n	4.3E+03	n >S	--	1.2E+03	n	1.1E+03	n	1.1E+05	n >S	1.2E+03	n	2.8E+02	n	--		
Hexene, cis-2-	7688-21-3	2.3E+03	n	1.8E+03	n	1.8E+05	n >S	2.4E+03	n	5.2E+03	n >S	--	1.2E+03	n	9.2E+02	n	9.2E+04	n >S	1.2E+03	n	3.3E+02	n	--		
Hexylene glycol (2-methyl-2,4-pentanediol)	107-41-5	2.0E+05	n	4.4E+01	n	4.4E+03	n	--	--	--	--	--	2.0E+05	n	2.2E+01	n	2.2E+03	n	--	--	--	--	--		
Hydrazine	302-01-2	7.2E-01	c	1.3E-03	c	1.3E-01	c	7.8E-01	c	1.6E+02	c	--	3.8E-01	c	6.5E-04	c	6.5E-02	c	4.0E-01	c	1.1E+01	c	--		
Hydrocaproic acid, 6- (6-hydroxyhexanoic acid)	1191-25-9	2.2E+02	n	9.1E+00	n	9.1E+02	n	2.3E+02	n	7.8E+04	n >S	--	1.2E+02	n	4.5E+00	n	4.5E+02	n	1.2E+02	n	5.7E+03	n	--		
Hydrogen chloride (hydrochloric acid)*	7647-01-0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
Hydroquinone	123-31-9	3.2E+02	c	7.0E-02	c	7.0E+00	c	--	--	--	--	--	3.2E+02	c	3.5E-02	c	3.5E+00	c	--	--	--	--	--		
Indene	95-13-6	1.6E+02	n	2.1E+01	n	2.1E+03	n	1.6E+02	n	5.6E+03	n	--	8.0E+01	n	1.1E+01	n	1.1E+03	n	8.1E+01	n	3.6E+02	n	--		
Indeno-1,2,3-cd-pyrene	193-39-5	1.7E+02	c	2.8E+03	c >S	2.8E+05	c >S	6.2E+04	c	1.0E+06	c >S	--	1.7E+02	c	1.4E+03	c >S	1.4E+05	c >S	3.2E+04	c	1.0E+06	c >S	--		
Iron*	7439-89-6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
Isoamyl alcohol	123-51-3	5.1E+03	n	9.6E-01	n	9.6E+01	n	--	--	--	--	--	5.1E+03	n	4.8E-01	n	4.8E+01	n	--	--	--	--	--		
Isobutyl alcohol	78-83-1	3.1E+05	n	4.7E+01	n	4.7E+03	n	--	--	--	--	--	3.1E+05	n	2.3E+01	n	2.3E+03	n	--	--	--	--	--		
Isobutylene (2-methyl-1-propene)	115-11-7	3.8E+03	n	8.2E+00	n	8.2E+02	n	1.0E+06	n	1.0E+06	n >S	--	3.8E+03	n	4.1E+00	n	4.1E+02	n	1.0E+06	n	1.7E+05	n >S	--		
Isobutyric acid (2-methylpropanoic acid)	79-31-2	3.4E+05	n	7.0E+01	n	7.0E+03	n	--	--	--	--	--	3.4E+05	n	3.5E+01	n	3.5E+03	n	--	--	--	--	--		
Isodecanol	25339-17-7	1.1E+03	n	8.8E+00	n	8.8E+02	n	--	--	--	--	--	1.1E+03	n	4.4E+00	n	4.4E+02	n	--	--	--	--	--		
Isodrin	465-73-6	1.1E-01	c	3.3E+00	c	3.3E+02	c	2.9E+00	c	1.6E+04	c >S	--	1.0E-01	c	1.7E+00	c	1.7E+02	c	1.5E+00	c	1.0E+03	c	--		
Isopentane	78-78-4	5.5E+04	n	8.0E+02	n	8.0E+04	n >S	5.2E+05	n	6.3E+05	n >S	--	5.0E+04	n	4.0E+02	n	4.0E+04	n	2.7E+05	n	4.0E+04	n >S	--		
Isophorone	78-59-1	2.0E+04	c	6.7E+00	c	6.7E+02	c	--	--	--	--	--	2.0E+04	c	3.4E+00	c	3.4E+02	c	--	--	--	--	--		
Isopropyl acetate	108-21-4	7.2E+04	n	1.2E+01	n	1.2E+03	n	--	--	--	--	--	7.2E+04	n	6.0E+00	n	6.0E+02	n	--	--	--	--	--		
Isopropyl alcohol	67-63-0	1.3E+04	n	3.0E+02	n	3.0E+04	n	1.4E+04	n	1.0E+06	n >S	--	6.9E+03	n	1.5E+02	n	1.5E+04	n	7.0E+03	n	7.8E+04	n	--		
Isosafrole	120-58-1	5.5E+01	c	2.9E-01	c	2.9E+01	c	1.5E+02	c	2.2E+04	c >S	--	4.1E+01	c	1.5E-01	c	1.5E+01	c	7.9E+01	c	1.5E+03	c	--		
Kelthane (dicofol)	115-32-2	4.1E+03	n	2.2E+02	n	2.2E+04	n >S	--	--	--	--	--	4.1E+03	n	1.1E+02	n	1.1E+04	n >S	--	--	--	--	--		
Kepone (chlordecone)	143-50-0	1.9E+00	c	2.2E-01	c	2.2E+01	c	8.2E+01	c	4.3E+05	c >S	--	1.8E+00	c	1.1E-01	c	1.1E+01	c	4.2E+01	c	2.8E+04	c >S	--		
Lead (inorganic)	7439-92-1	1.6E+03	e	3.0E+00	e >S	3.0E+02	e >S	--	--	--	--	--	1.6E+03	e	1.5E+00	e >S	1.5E+02	e >S	--	--	--	--	--		
Leptophos	21609-90-5	3.2E+00	n	1.9E+00	n	1.9E+02	n >S	4.7E+01	n	4.7E+05	n >S	--	3.0E+00	n	9.6E-01	n	9.6E+01	n >S	2.4E+01	n	3.0E+04	n >S	--		
Limonene, d-*	5989-27-5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
Lithium	7439-93-2	6.8E+03	n	--	--	--	--	--	--	--	--	--	6.8E+03	n	--	--	--	--	--	--	--	--	--		
Magnesium*	7439-95-4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
Malathion	121-75-5	2.8E+02	n	2.0E+01	n	2.0E+03	n >S	2.8E+02	n	1.7E+05	n >S	--	1.4E+02	n	9.8E+00	n	9.8E+02	n >S	1.4E+02	n	1.1E+04	n >S	--		
Maleic anhydride	108-31-6	6.8E+04	n	2.1E+01	n	2.1E+03	n	--	--	--	--	--	6.8E+04	n	1.1E+01	n	1.1E+03	n	--	--	--	--	--		

Table 2
Tier 1 Commercial/Industrial Soil PCLs¹

Last Revised: May 10, 2023

Chemical of Concern	CAS	0.5 acre source area									30 acre source area												
		TotSoil _{Comb} ² (mg/kg)	note ³	GWSoil _{mg} (mg/kg)	note ³	GWSoil _{Class 3} (mg/kg)	note ³	AirSoil _{Inh-V} ⁴ (mg/kg)	note ³	AirGW-Soil _{Inh-V} (mg/kg)	note ³	GW ⁵ Soil for Secondary MCL (mg/kg)	TotSoil _{Comb} ² (mg/kg)	note ³	GWSoil _{mg} (mg/kg)	note ³	GWSoil _{Class 3} (mg/kg)	note ³	AirSoil _{Inh-V} ⁴ (mg/kg)	note ³	AirGW-Soil _{Inh-V} (mg/kg)	note ³	GW ⁵ Soil for Secondary MCL (mg/kg)
Maleic hydrazide	123-33-1	3.4E+05	n	1.1E+02	n	1.1E+04	n	—	—	—	—	3.4E+05	n	5.3E+01	n	5.3E+03	n	—	—	—	—	—	—
Malononitrile	109-77-3	6.8E+01	n	1.5E-02	n	1.5E+00	n	—	—	—	—	6.8E+01	n	7.7E-03	n	7.7E-01	n	—	—	—	—	—	—
Mancozeb	8018-01-7	2.0E+04	n	5.4E+00	n	5.4E+02	n >S	—	—	—	—	2.0E+04	n	2.7E+00	n	2.7E+02	n >S	—	—	—	—	—	—
Manganese	7439-96-5	7.3E+04	n	1.0E+04	n >S	1.0E+06	n >S	—	—	—	5.0E+01	6.9E+04	n	5.1E+03	n >S	5.1E+05	n >S	—	—	—	—	—	2.5E+01
MCPA (4-(chloro-2-methylphenoxy) acetic acid)	94-74-6	3.4E+02	n	7.0E-02	n	7.0E+00	n	—	—	—	—	3.4E+02	n	3.5E-02	n	3.5E+00	n	—	—	—	—	—	—
MCPP (2-(4-chloro-2-methylphenoxy) propanoic acid)	93-65-2	6.8E+02	n	1.4E-01	n	1.4E+01	n	—	—	—	—	6.8E+02	n	7.0E-02	n	7.0E+00	n	—	—	—	—	—	—
Mercury (pH = 4.9) ⁵	7439-97-6	6.2E+00	n	7.8E-03	m	7.8E-01	m >S	6.4E+00	n	4.0E+01	n >S	3.3E+00	n	3.9E-03	m	3.9E-01	m >S	3.3E+00	n	2.6E+00	n >S	—	—
Mercury (pH=6.8) ⁵	7439-97-6	1.9E+01	n	2.1E+00	m	2.1E+02	m >S	2.2E+01	n	1.1E+04	n >S	1.1E+01	n	1.0E+00	m	1.0E+02	m >S	1.1E+01	n	6.9E+02	n >S	—	—
Merphos	150-50-5	2.0E+01	n	1.9E+01	n	1.9E+03	n >S	—	—	—	—	2.0E+01	n	9.7E+00	n	9.7E+02	n >S	—	—	—	—	—	—
Methacrylic acid (2-methyl-2-propenoic acid)	79-41-4	1.0E+04	n	1.4E+00	n	1.4E+02	n	—	—	—	—	1.0E+04	n	7.0E-01	n	7.0E+01	n	—	—	—	—	—	—
Methacrylonitrile	126-98-7	8.0E+02	n	7.5E+00	n	7.5E+02	n	8.2E+02	n	3.2E+04	n	4.2E+02	n	3.8E+00	n	3.8E+02	n	4.2E+02	n	2.1E+03	n	—	—
Methanol	67-56-1	3.7E+05	n	2.8E+02	n	2.8E+04	n	4.6E+05	n	1.0E+06	n >S	2.1E+05	n	1.4E+02	n	1.4E+04	n	2.4E+05	n	9.6E+05	n >S	—	—
Methapyrilene	91-80-5	4.1E+00	c	1.2E-03	c	1.2E-01	c	—	—	—	—	4.1E+00	c	5.9E-04	c	5.9E-02	c	—	—	—	—	—	—
Methomyl	16752-77-5	1.7E+04	n	1.5E+01	n	1.5E+03	n	—	—	—	—	1.7E+04	n	7.6E+00	n	7.6E+02	n	—	—	—	—	—	—
Methoxychlor	72-43-5	3.4E+03	n	1.2E+02	m	1.2E+04	m >S	—	—	—	—	3.4E+03	n	6.2E+01	m	6.2E+03	m >S	—	—	—	—	—	—
Methoxyethanol, 2-	109-86-4	4.2E+02	n	1.1E+01	n	1.1E+03	n >S	4.3E+02	n	6.2E+02	n >S	2.2E+02	n	5.4E+00	n	5.4E+02	n >S	2.2E+02	n	4.0E+01	n	—	—
Methyl acetate (acetic acid, methyl ester)	79-20-9	1.0E+06	n	1.5E+02	n	1.5E+04	n	—	—	—	—	1.0E+06	n	7.3E+01	n	7.3E+03	n	—	—	—	—	—	—
Methyl acrylate	96-33-3	3.6E+02	n	3.1E-01	n	3.1E+01	n	4.3E+02	n	7.9E+03	n	2.0E+02	n	1.5E-01	n	1.5E+01	n	2.2E+02	n	5.1E+02	n	—	—
Methyl amyl ketone (2-heptanone)	110-43-0	3.8E+04	n	1.4E+01	n	1.4E+03	n	1.6E+05	n	1.0E+06	n >S	3.1E+04	n	7.1E+00	n	7.1E+02	n	8.0E+04	n	3.9E+05	n >S	—	—
Methyl chrysene, 1-	3351-28-8	2.4E+03	c	5.0E+04	c >S	1.0E+06	c >S	1.0E+06	c	1.0E+06	c >S	2.4E+03	c	2.5E+04	c >S	1.0E+06	c >S	1.0E+06	c	1.0E+06	c >S	—	—
Methyl chrysene, 2-	3351-32-4	2.4E+03	c	5.0E+04	c >S	1.0E+06	c >S	1.0E+06	c	1.0E+06	c >S	2.4E+03	c	2.5E+04	c >S	1.0E+06	c >S	1.0E+06	c	1.0E+06	c >S	—	—
Methyl chrysene, 6-	1705-85-7	2.4E+02	c	4.0E+03	c >S	4.0E+05	c >S	3.9E+05	c	1.0E+06	c >S	2.4E+02	c	2.0E+03	c >S	2.0E+05	c >S	2.0E+05	c	1.0E+06	c >S	—	—
Methyl cyclohexane	108-87-2	6.4E+04	n	4.6E+04	n >S	1.0E+06	n >S	6.4E+04	n	2.5E+05	n >S	3.3E+04	n	2.3E+04	n >S	1.0E+06	n >S	3.3E+04	n	1.6E+04	n >S	—	—
Methyl ethyl ketone (2-butanone)	78-93-3	1.9E+05	n	8.7E+01	n	8.7E+03	n	2.8E+05	n	1.0E+06	n >S	1.2E+05	n	4.4E+01	n	4.4E+03	n	1.5E+05	n	8.7E+05	n >S	—	—
Methyl iodide (iodomethane)	74-88-4	1.4E+03	n	3.4E-01	n	3.4E+01	n	—	—	—	—	1.4E+03	n	1.7E-01	n	1.7E+01	n	—	—	—	—	—	—
Methyl isobutyl ketone (4-methyl-2-pentanone)	108-10-1	4.1E+04	n	1.5E+01	n	1.5E+03	n	8.1E+04	n	1.0E+06	n >S	2.8E+04	n	7.4E+00	n	7.4E+02	n	4.2E+04	n	1.5E+05	n >S	—	—
Methyl mercury	22967-92-6	9.7E+01	n	—	—	—	—	—	—	—	—	9.7E+01	n	—	—	—	—	—	—	—	—	—	—
Methyl methacrylate	80-62-6	1.5E+04	n	2.9E+02	n	2.9E+04	n	1.5E+04	n	3.2E+05	n >S	7.7E+03	n	1.5E+02	n	1.5E+04	n	7.7E+03	n	2.0E+04	n	—	—
Methyl methanesulfonate	66-27-3	9.5E+01	c	4.0E-02	c	4.0E+00	c	1.9E+02	c	5.4E+04	c	6.4E+01	c	2.0E-02	c	2.0E+00	c	9.7E+01	c	3.5E+03	c	—	—
Methyl parathion	298-00-0	1.7E+02	n	5.1E-01	n	5.1E+01	n	—	—	—	—	1.7E+02	n	2.5E-01	n	2.5E+01	n	—	—	—	—	—	—
Methyl-1-butene, 2-	563-46-2	5.3E+04	n	1.9E+02	n	1.9E+04	n >S	3.9E+05	n	4.8E+05	n >S	4.7E+04	n	9.7E+01	n	9.7E+03	n >S	2.0E+05	n	3.1E+04	n >S	—	—
Methyl-1-propanal, 2- (isobutyraldehyde)	78-84-2	4.1E+04	n	6.2E+00	n	6.2E+02	n	—	—	—	—	4.1E+04	n	3.1E+00	n	3.1E+02	n	—	—	—	—	—	—
Methyl-2-butene, 2-	513-35-9	5.3E+04	n	1.2E+02	n	1.2E+04	n >S	3.9E+05	n	5.5E+05	n >S	4.7E+04	n	5.8E+01	n	5.8E+03	n >S	2.0E+05	n	3.6E+04	n >S	—	—
Methyl-2-pentanol, 2-	623-36-9	1.5E+01	c	3.3E-03	c	3.3E-01	c	—	—	—	—	1.5E+01	c	1.6E-03	c	1.6E-01	c	—	—	—	—	—	—
Methylcholanthrene, 3-	56-49-5	7.9E-01	c	3.4E+01	c	3.4E+03	c >S	3.0E+03	c	1.0E+06	c >S	7.9E-01	c	1.7E+01	c	1.7E+03	c >S	1.5E+03	c	1.0E+06	c >S	—	—
Methylene bromide (dibromomethane)	74-95-3	1.1E+02	n	2.5E+00	c	2.5E+02	c	1.1E+02	n	3.1E+03	n	5.9E+01	n	1.3E+00	c	1.3E+02	c	5.9E+01	n	2.0E+02	n	—	—
Methylene chloride (dichloromethane)	75-09-2	1.2E+04	n	1.3E-02	m	1.3E+00	m	2.1E+04	c	9.4E+04	c >S	8.6E+03	n	6.5E-03	m	6.5E-01	m	1.1E+04	c	6.1E+03	c	—	—
Methylene-bis (2-chloroaniline) 4,4'-	101-14-4	1.8E+02	c	6.5E+00	c	6.5E+02	c	4.5E+03	c	1.0E+06	c >S	1.8E+02	c	3.2E+00	c	3.2E+02	c	2.3E+03	c	6.9E+05	c >S	—	—
Methylmercury hydroxide	1184-57-2	6.8E+01	n	1.4E-02	n	1.4E+00	n	—	—	—	—	6.8E+01	n	7.1E-03	n	7.1E-01	n	—	—	—	—	—	—
Methylnaphthalene, 1-	90-12-0	6.0E+02	c	6.6E+00	c	6.6E+02	c	—	—	—	—	6.0E+02	c	3.3E+00	c	3.3E+02	c	—	—	—	—	—	—
Methylnaphthalene, 2-	91-57-6	2.5E+03	n	5.1E+01	n	5.1E+03	n >S	—	—	—	—	2.5E+03	n	2.5E+01	n	2.5E+03	n >S	—	—	—	—	—	—
Methylpyrrolidone, N-	872-50-4	1.4E+04	n	2.9E+00	n	2.9E+02	n	—	—	—	—	1.4E+04	n	1.4E+00	n	1.4E+02	n	—	—	—	—	—	—
Methylstyrene, alpha-	98-83-9	6.3E+02	n	1.9E+01	n	1.9E+03	n	6.8E+02	n	3.0E+04	n >S	3.3E+02	n	9.7E+00	n	9.7E+02	n	3.5E+02	n	1.9E+03	n >S	—	—
Methyltetrahydrofuran, 2-	96-47-9	2.9E+02	c	6.2E-01	c	6.2E+01	c	3.2E+02	c	7.0E+03	c	1.6E+02	c	3.1E-01	c	3.1E+01	c	1.6E+02	c	4.5E+02	c	—	—
Methyltetrahydropyran, 2-	10141-72-7	3.3E+02	c	7.3E-01	c	7.3E+01	c	3.7E+02	c	9.6E+03	c	1.8E+02	c	3.6E-01	c	3.6E+01	c	1.9E+02	c	6.2E+02	c	—	—
Metolachlor	51218-45-2	1.0E+05	n	3.3E+02	n	3.3E+04	n >S	—	—	—	—	1.0E+05	n	1.6E+02	n	1.6E+04	n >S	—	—	—	—	—	—
Metribuzin	21087-64-9	1.7E+04	n	3.7E+00	n	3.7E+02	n	—	—	—	—	1.7E+04	n	1.8E+00	n	1.8E+02	n	—	—	—	—	—	—
Mirex	2385-85-5	1.4E+02	n	1.3E+04	n >S	1.0E+06	n >S	—	—	—	—	1.4E+02	n	6.7E+03	n >S	6.7E+05	n >S	—	—	—	—	—	—
Molinate	2212-67-1	1.4E+03	n	5.7E-01	n	5.7E+01	n	—	—	—	—	1.4E+03	n	2.9E-01	n	2.9E+01	n	—	—	—	—	—	—
Molybdenum	7439-98-7	4.5E+03	n	1.5E+02	n >S	1.5E+04	n >S	—	—	—	—	4.5E+03	n	7.3E+01	n >S	7.3E+03	n >S	—	—	—	—	—	—

Table 2
Tier 1 Commercial/Industrial Soil PCLs¹

Last Revised: May 10, 2023

Chemical of Concern	CAS	0.5 acre source area										30 acre source area																					
		TotSoil _{comb} ²		GWSoil _{ing}		GWSoil _{class 3}		AirSoil _{inh-v} ⁴		AirGW-Soil _{inh-v}		GW ⁵ Soil for Secondary MCL		TotSoil _{comb} ²		GWSoil _{ing}		GWSoil _{class 3}		AirSoil _{inh-v} ⁴		AirGW-Soil _{inh-v}		GW ⁵ Soil for Secondary MCL									
		(mg/kg)	note ³	(mg/kg)	note ³	(mg/kg)	note ³	(mg/kg)	note ³	(mg/kg)	note ³	(mg/kg)	note ³	(mg/kg)	note ³	(mg/kg)	note ³	(mg/kg)	note ³	(mg/kg)	note ³	(mg/kg)	note ³	(mg/kg)	note ³	(mg/kg)	note ³						
Monocrotophos	2157-98-4	4.1E+02	n	8.8E-02	n	8.8E+00	n	--	--	--	--	4.1E+02	n	4.4E-02	n	4.4E+00	n	--	--	--	--	4.1E+02	n	4.4E-02	n	4.4E+00	n	--	--	--	--		
Morpholine	110-91-8	1.0E+06	n	7.1E+04	n	1.0E+06	n	--	--	--	--	1.0E+06	n	3.6E+04	n	9.8E+05	n	--	--	--	--	1.0E+06	n	3.6E+04	n	9.8E+05	n	--	--	--	--		
Morpholine, N-butyl-	1005-67-0	1.6E+03	n	6.9E-01	n	6.9E+01	n	--	--	--	--	1.6E+03	n	3.5E-01	n	3.5E+01	n	--	--	--	--	1.6E+03	n	3.5E-01	n	3.5E+01	n	--	--	--	--		
MTBE (methyl tert-butyl ether) ⁶	1634-04-4	2.0E+03	c	1.9E+00	n	1.9E+02	n	2.3E+03	c	1.7E+04	c	3.8E-02	1.1E+03	c	9.3E-01	n	9.3E+01	n	1.2E+03	c	1.1E+03	c	1.9E-02	1.1E+03	c	9.3E+01	n	1.2E+03	c	1.1E+03	c	1.9E-02	
Naled	300-76-5	1.4E+03	n	1.1E+00	n	1.1E+02	n >S	--	--	--	--	1.4E+03	n	5.3E-01	n	5.3E+01	n >S	--	--	--	--	1.4E+03	n	5.3E-01	n	5.3E+01	n >S	--	--	--	--		
Naphthalene	91-20-3	3.6E+02	n	9.3E+01	n	9.3E+03	n >S	3.7E+02	n	2.8E+04	n >S	--	1.9E+02	n	4.7E+01	n	4.7E+03	n >S	1.9E+02	n	1.8E+03	n >S	--	1.9E+02	n	4.7E+01	n	4.7E+03	n >S	1.9E+02	n	1.8E+03	n >S
Naphthoquinone, 1,4-	130-15-4	4.8E+03	n	1.4E+00	n	1.4E+02	n	--	--	--	--	4.8E+03	n	6.9E-01	n	6.9E+01	n	--	--	--	--	4.8E+03	n	6.9E-01	n	6.9E+01	n	--	--	--	--		
Naphthylamine, 1-	134-32-7	1.4E+04	n	2.8E+01	n	2.8E+03	n	--	--	--	--	1.4E+04	n	1.4E+01	n	1.4E+03	n	--	--	--	--	1.4E+04	n	1.4E+01	n	1.4E+03	n	--	--	--	--		
Naphthylamine, 2-	91-59-8	1.1E+01	c	2.9E-02	c	2.9E+00	c	--	--	--	--	1.1E+01	c	1.4E-02	c	1.4E+00	c	--	--	--	--	1.1E+01	c	1.4E-02	c	1.4E+00	c	--	--	--	--		
Napropamide	15299-99-7	6.8E+04	n	1.6E+03	n	1.6E+05	n >S	--	--	--	--	6.8E+04	n	8.2E+02	n	8.2E+04	n >S	--	--	--	--	6.8E+04	n	8.2E+02	n	8.2E+04	n >S	--	--	--	--		
Neopentyl glycol	126-30-7	2.0E+05	n	4.4E+01	n	4.4E+03	n	--	--	--	--	2.0E+05	n	2.2E+01	n	2.2E+03	n	--	--	--	--	2.0E+05	n	2.2E+01	n	2.2E+03	n	--	--	--	--		
Nickel and compounds	7440-02-0	8.8E+03	n	4.7E+02	n >S	4.7E+04	n >S	--	--	--	--	8.8E+03	n	2.3E+02	n >S	2.3E+04	n >S	--	--	--	--	8.8E+03	n	2.3E+02	n >S	2.3E+04	n >S	--	--	--	--		
Nitrate-N ^{7,9}	14797-55-8	1.0E+06	n	--	--	--	--	--	--	--	--	1.0E+06	n	--	--	--	--	--	--	--	--	1.0E+06	n	--	--	--	--	--	--	--	--		
Nitrite-N ^{7,9}	14797-65-0	9.7E+04	n	--	--	--	--	--	--	--	--	9.7E+04	n	--	--	--	--	--	--	--	--	9.7E+04	n	--	--	--	--	--	--	--	--		
Nitroaniline, 2-	88-74-4	5.0E+01	n	6.6E-02	n	6.6E+00	n	6.7E+01	n	1.7E+04	n >S	--	2.9E+01	n	3.3E-02	n	3.3E+00	n	3.4E+01	n	1.1E+03	n	--	2.9E+01	n	3.3E-02	n	3.3E+00	n	3.4E+01	n	1.1E+03	n
Nitroaniline, 3-	99-09-2	5.9E+01	n	7.6E-02	n	7.6E+00	n	8.4E+01	n	2.3E+04	n >S	--	3.6E+01	n	3.8E-02	n	3.8E+00	n	4.3E+01	n	1.5E+03	n >S	--	3.6E+01	n	3.8E-02	n	3.8E+00	n	4.3E+01	n	1.5E+03	n >S
Nitroaniline, 4-	100-01-6	9.5E+02	c	2.4E-01	c	2.4E+01	c	1.7E+03	n	4.7E+05	n >S	--	6.6E+02	n	1.2E-01	c	1.2E+01	c	8.7E+02	n	3.1E+04	n >S	--	6.6E+02	n	1.2E-01	c	1.2E+01	c	8.7E+02	n	3.1E+04	n >S
Nitrobenzene	98-95-3	1.1E+02	c	1.0E+00	n	1.0E+02	n	1.1E+02	c	8.7E+03	c	--	5.7E+01	c	5.2E-01	n	5.2E+01	n	5.7E+01	c	5.6E+02	c	--	5.7E+01	c	5.2E-01	n	5.2E+01	n	5.7E+01	c	5.6E+02	c
Nitroglycerin	55-63-0	6.8E+01	n	4.1E-02	n	4.1E+00	n	--	--	--	--	6.8E+01	n	2.1E-02	n	2.1E+00	n	--	--	--	--	6.8E+01	n	2.1E-02	n	2.1E+00	n	--	--	--	--		
Nitrophenol, 2-	88-75-5	1.4E+03	n	4.0E-01	n	4.0E+01	n	--	--	--	--	1.4E+03	n	2.0E-01	n	2.0E+01	n	--	--	--	--	1.4E+03	n	2.0E-01	n	2.0E+01	n	--	--	--	--		
Nitrophenol, 3-	554-84-7	1.4E+03	n	6.8E-01	n	6.8E+01	n	--	--	--	--	1.4E+03	n	3.4E-01	n	3.4E+01	n	--	--	--	--	1.4E+03	n	3.4E-01	n	3.4E+01	n	--	--	--	--		
Nitrophenol, 4-	100-02-7	1.4E+03	n	3.0E-01	n	3.0E+01	n	--	--	--	--	1.4E+03	n	1.5E-01	n	1.5E+01	n	--	--	--	--	1.4E+03	n	1.5E-01	n	1.5E+01	n	--	--	--	--		
Nitropropane, 2-	79-46-9	1.0E+00	c	2.1E-02	n	2.1E+00	n	1.0E+00	c	2.8E+01	c	--	5.3E-01	c	1.1E-02	n	1.1E+00	n	5.3E-01	c	1.8E+00	c	--	5.3E-01	c	1.1E-02	n	1.1E+00	n	5.3E-01	c	1.8E+00	c
Nitroquinoline-N-oxide, 4-	56-57-5	1.2E+00	c	5.2E-04	c	5.2E-02	c	3.2E+00	c	4.5E+04	c	--	9.0E-01	c	2.6E-04	c	2.6E-02	c	1.6E+00	c	2.2E+04	c	--	9.0E-01	c	2.6E-04	c	2.6E-02	c	1.6E+00	c	2.2E+04	c
Nitrosodiethanolamine	1116-54-7	6.8E+00	c	1.5E-03	c	1.5E-01	c	--	--	--	--	6.8E+00	c	7.4E-04	c	7.4E-02	c	--	--	--	--	6.8E+00	c	7.4E-04	c	7.4E-02	c	--	--	--	--		
Nitrosodiethylamine, n-	55-18-5	7.0E-02	c	2.8E-05	c	2.8E-03	c	1.1E-01	c	2.5E+01	c	--	4.4E-02	c	1.4E-05	c	1.4E-03	c	5.7E-02	c	1.6E+00	c	--	4.4E-02	c	1.4E-05	c	1.4E-03	c	5.7E-02	c	1.6E+00	c
Nitrosodimethylamine, n-	62-75-9	2.1E-01	c	8.3E-05	c	8.3E-03	c	3.3E-01	c	7.0E+01	c	--	1.3E-01	c	4.1E-05	c	4.1E-03	c	1.7E-01	c	4.5E+00	c	--	1.3E-01	c	4.1E-05	c	4.1E-03	c	1.7E-01	c	4.5E+00	c
Nitrosodi-n-butylamine, n-	924-16-3	1.2E+00	c	4.2E-03	c	4.2E-01	c	1.7E+00	c	8.8E+01	c	--	7.1E-01	c	2.1E-03	c	2.1E-01	c	9.0E-01	c	5.7E+00	c	--	7.1E-01	c	2.1E-03	c	2.1E-01	c	9.0E-01	c	5.7E+00	c
Nitrosodi-n-propylamine, n-	621-64-7	1.4E+00	c	7.9E-04	c	7.9E-02	c	--	--	--	--	1.4E+00	c	3.9E-04	c	3.9E-02	c	--	--	--	--	1.4E+00	c	3.9E-04	c	3.9E-02	c	--	--	--	--		
Nitrosodiphenylamine	86-30-6	1.9E+03	c	6.3E+00	c	6.3E+02	c >S	--	--	--	--	1.9E+03	c	3.2E+00	c	3.2E+02	c >S	--	--	--	--	1.9E+03	c	3.2E+00	c	3.2E+02	c >S	--	--	--	--		
Nitroso-methyl-ethyl-amine, n-	10595-95-6	1.3E+00	c	2.6E-04	c	2.6E-02	c	--	--	--	--	1.3E+00	c	1.3E-04	c	1.3E-02	c	--	--	--	--	1.3E+00	c	1.3E-04	c	1.3E-02	c	--	--	--	--		
Nitrosomorpholine, N-	59-89-2	1.4E+00	c	5.9E-04	c	5.9E-02	c	2.9E+00	c	8.8E+02	c	--	9.7E-01	c	2.9E-04	c	2.9E-02	c	1.5E+00	c	5.7E+01	c	--	9.7E-01	c	2.9E-04	c	2.9E-02	c	1.5E+00	c	5.7E+01	c
Nitroso-n-ethylurea, n-	759-73-9	1.4E-01	c	4.7E-05	c	4.7E-03	c	--	--	--	--	1.4E-01	c	2.3E-05	c	2.3E-03	c	--	--	--	--	1.4E-01	c	2.3E-05	c	2.3E-03	c	--	--	--	--		
Nitrosopiperidine, N-	100-75-4	1.1E+00	c	4.6E-04	c	4.6E-02	c	2.2E+00	c	5.9E+02	c	--	7.4E-01	c	2.3E-04	c	2.3E-02	c	1.2E+00	c	3.8E+01	c	--	7.4E-01	c	2.3E-04	c	2.3E-02	c	1.2E+00	c	3.8E+01	c
Nitrosopyrrolidine, n-	930-55-2	4.7E+00	c	1.9E-03	c	1.9E-01	c	9.8E+00	c	3.1E+03	c	--	3.2E+00	c	9.5E-04	c	9.5E-02	c	5.0E+00	c	2.0E+02	c	--	3.2E+00	c	9.5E-04	c	9.5E-02	c	5.0E+00	c	2.0E+02	c
Nitrotoluene, m-	99-08-1	6.8E+03	n	5.5E+00	n	5.5E+02	n	--	--	--	--	6.8E+03	n	2.8E+00	n	2.8E+02	n	--	--	--	--	6.8E+03	n	2.8E+00	n	2.8E+02	n	--	--	--	--		
Nitrotoluene, o-	88-72-2	8.7E+01	c	7.0E-02	c	7.0E+00	c	--	--	--	--	8.7E+01	c	3.5E-02	c	3.5E+00	c	--	--	--	--	8.7E+01	c	3.5E-02	c	3.5E+00	c	--	--	--	--		
Nitrotoluene, p-	99-99-0	1.2E+03	c	9.6E-01	c	9.6E+01	c	--	--	--	--	1.2E+03	c	4.8E-01	c	4.8E+01	c	--	--	--	--	1.2E+03	c	4.8E-01	c	4.8E+01	c	--	--	--	--		
Nonachlor, cis-	5103-73-1	5.3E+01	c	2.8E+01	c	2.8E+03	c >S	2.1E+03	c	1.0E+06	c >S	--	5.2E+01	c	1.4E+01	c	1.4E+03	c >S	1.1E+03	c	4.0E+05	c >S	--	5.2E+01	c	1.4E+01	c	1.4E+03	c >S	1.1E+03	c	4.0E+05	c >S
Nonachlor, trans-	39765-80-5	5.3E+01	c	2.8E+01	c	2.8E+03	c >S	2.1E+03	c	1.0E+06	c >S	--	5.2E+01	c	1.4E+01	c	1.4E+03	c >S	1.1E+03	c	4.0E+05	c >S	--	5.2E+01	c	1.4E+01	c	1.4E+03	c >S	1.1E+03	c	4.0E+05	c >S
Nonanal	124-19-6	1.4E+05	n	4.4E+02	n	4.4E+04	n >S	--	--	--	--	1.4E+05	n	2.2E+02	n	2.2E+04	n >S	--	--	--	--	1.4E+05	n	2.2E+02	n	2.2E+04	n >S	--	--	--	--		
Nonene, 1-n	124-11-8	1.0E+05	n	9.9E+03	n >S	9.9E+05	n >S	--	--	--	--	1.0E+05	n	4.9E+03	n >S	4.9E+05	n >S	--	--	--	--	1.0E+05	n	4.9E+03	n >S	4.9E+05	n >S	--	--	--	--		
Nonylphenol, 4-n-	104-40-5	6.8E+04	n	8.8E+05	n >S	1.0E+06	n >S	--	--	--	--	6.8E+04	n	4.4E+05	n >S	1.0E+06	n >S	--	--	--	--	6.8E+04	n	4.4E+05	n >S	1.0E+06	n >S	--	--	--	--		
Nonylphenol ethoxylate	9016-45-9	6.8E+04	n	1.0E+06	n >S	1.0E+06	n >S	--	--	--	--	6.8E+04	n	1.0E+06	n >S	1.0E+06	n >S	--	--	--	--	6.8E+04</											

Table 2
Tier 1 Commercial/Industrial Soil PCLs¹

Last Revised: May 10, 2023

Chemical of Concern	CAS	0.5 acre source area										30 acre source area											
		TotSoil _{comb} ² (mg/kg)	note ³	GWSoil _{mg} (mg/kg)	note ³	GWSoil _{Class 3} (mg/kg)	note ³	AirSoil _{inh-v} ⁴ (mg/kg)	note ³	AirGW-Soil _{inh-v} (mg/kg)	note ³	GWSoil for Secondary MCL (mg/kg)	TotSoil _{comb} ² (mg/kg)	note ³	GWSoil _{mg} (mg/kg)	note ³	GWSoil _{Class 3} (mg/kg)	note ³	AirSoil _{inh-v} ⁴ (mg/kg)	note ³	AirGW-Soil _{inh-v} (mg/kg)	note ³	GWSoil for Secondary MCL (mg/kg)
Pebulate	1114-71-2	3.4E+04	n	7.0E+01	n	7.0E+03	n >S	--	--	--	--	3.4E+04	n	3.5E+01	n	3.5E+03	n >S	--	--	--	--	--	--
Pendimethalin	40487-42-1	2.7E+04	n	2.2E+04	n >S	1.0E+06	n >S	--	--	--	--	2.7E+04	n	1.1E+04	n >S	1.0E+06	n >S	--	--	--	--	--	--
Pentachlorobenzene	608-93-5	5.5E+02	n	7.4E+01	n	7.4E+03	n >S	--	--	--	--	5.5E+02	n	3.7E+01	n	3.7E+03	n >S	--	--	--	--	--	--
Pentachloroethane	76-01-7	1.1E+02	c	2.2E-01	c	2.2E+01	c	1.6E+02	c	4.8E+03	c	6.5E+01	c	1.1E-01	c	1.1E+01	c	8.1E+01	c	3.1E+02	c	--	--
Pentachloronitrobenzene	82-68-8	7.3E+01	c	4.1E+00	c	4.1E+02	c >S	--	--	--	--	7.3E+01	c	2.1E+00	c	2.1E+02	c >S	--	--	--	--	--	--
Pentachlorophenol	87-86-5	3.2E+01	c	1.8E-02	m	1.8E+00	m	--	--	--	--	3.2E+01	c	9.2E-03	m	9.2E-01	m	--	--	--	--	--	--
Pentadiene, 1,3-cis-	1574-41-0	5.3E+04	n	5.6E+01	n	5.6E+03	n	3.9E+05	n	7.7E+05	n >S	4.7E+04	n	2.8E+01	n	2.8E+03	n	2.0E+05	n	5.0E+04	n >S	--	--
Pentadiene, 1,3-trans-	2004-70-8	5.3E+04	n	3.9E+01	n	3.9E+03	n	3.9E+05	n	9.3E+05	n >S	4.7E+04	n	1.9E+01	n	1.9E+03	n	2.0E+05	n	6.0E+04	n >S	--	--
Pentaerythritol tetranitrate (PETN)	78-11-5	1.4E+03	n	3.7E+01	n	3.7E+03	n	--	--	--	--	1.4E+03	n	1.8E+01	n	1.8E+03	n	--	--	--	--	--	--
Pentane	109-66-0	5.5E+04	n	1.0E+03	n	1.0E+05	n >S	5.2E+05	n	1.1E+05	n >S	5.0E+04	n	5.2E+02	n	5.2E+04	n >S	2.7E+05	n	7.3E+03	n >S	--	--
Pentane, 2-methyl-	107-83-5	5.3E+04	n	1.1E+03	n	1.1E+05	n >S	3.9E+05	n	6.4E+05	n >S	4.7E+04	n	5.7E+02	n	5.7E+04	n >S	2.0E+05	n	4.1E+04	n >S	--	--
Pentane, 3-methyl-	96-14-0	5.3E+04	n	9.3E+02	n	9.3E+04	n >S	3.9E+05	n	6.6E+05	n >S	4.7E+04	n	4.7E+02	n	4.7E+04	n >S	2.0E+05	n	4.3E+04	n >S	--	--
Pentanediol, 1,5-	111-29-5	1.0E+06	n	7.2E+02	n	7.2E+04	n	1.0E+06	n	1.0E+06	n >S	1.0E+06	n	3.6E+02	n	3.6E+04	n	1.0E+06	n	9.9E+05	n >S	--	--
Pentanol, 1-	71-41-0	3.4E+04	n	6.8E+00	n	6.8E+02	n	--	--	--	--	3.4E+04	n	3.4E+00	n	3.4E+02	n	--	--	--	--	--	--
Pentanol, 4-methyl-2-	108-11-2	2.7E+04	n	5.3E+00	n	5.3E+02	n	--	--	--	--	2.7E+04	n	2.6E+00	n	2.6E+02	n	--	--	--	--	--	--
Pentanone, 2-	107-87-9	4.1E+04	n	6.6E+00	n	6.6E+02	n	--	--	--	--	4.1E+04	n	3.3E+00	n	3.3E+02	n	--	--	--	--	--	--
Pentene, 2-	109-68-2	5.3E+04	n	1.4E+02	n	1.4E+04	n >S	3.9E+05	n	6.2E+05	n >S	4.7E+04	n	7.0E+01	n	7.0E+03	n >S	2.0E+05	n	4.0E+04	n >S	--	--
Pentyne, 1-	627-19-0	5.3E+04	n	3.8E+01	n	3.8E+03	n	3.9E+05	n	8.7E+05	n >S	4.7E+04	n	1.9E+01	n	1.9E+03	n	2.0E+05	n	5.6E+04	n >S	--	--
Perchlorate	14797-73-0	5.7E+02	n	4.2E-01	n	4.2E+01	n	--	--	--	--	5.7E+02	n	2.1E-01	n	2.1E+01	n	--	--	--	--	--	--
Perfluorooctane sulfonic acid (1-Octanesulfonic acid, heptadecafluoro-1-) [PFOS]	1763-23-1	1.5E+01	n	1.5E-01	n	1.5E+01	n	2.2E+02	n	2.3E+05	n >S	1.4E+01	n	7.5E-02	n	7.5E+00	n	1.1E+02	n	1.5E+04	n	--	--
Perfluoroundecanoic acid (Undecanoic acid, uncosafluoro-) [PFUnDa]	2058-94-8	8.2E+00	n	5.5E-02	n	5.5E+00	n	--	--	--	--	8.2E+00	n	2.7E-02	n	2.7E+00	n	--	--	--	--	--	--
Perfluoropentanoic acid (Pentanoic acid, nonafluoro-) [PFPeA]	2706-90-3	3.4E+02	n	1.3E-01	n	1.3E+01	n	--	--	--	--	3.4E+02	n	6.3E-02	n	6.3E+00	n	--	--	--	--	--	--
Perfluorohexanoic acid (Hexanoic acid, undecafluoro-) [PFHxA]	307-24-4	3.4E+02	n	1.9E-01	n	1.9E+01	n	--	--	--	--	3.4E+02	n	9.4E-02	n	9.4E+00	n	--	--	--	--	--	--
Perfluorododecanoic acid (Dodecanoic acid, tricosafafluoro-) [PFDoA]	307-55-1	7.5E+00	n	1.0E-01	n	1.0E+01	n >S	9.7E+01	n	8.9E+04	n >S	7.0E+00	n	5.0E-02	n	5.0E+00	n >S	5.0E+01	n	5.8E+03	n >S	--	--
Perfluorooctanoic acid (Octanoic acid, pentadecafluoro-) [PFOA]	335-67-1	2.4E+00	n	8.8E-03	n	8.8E-01	n	3.4E+00	n	1.3E+03	n	1.4E+00	n	4.4E-03	n	4.4E-01	n	1.7E+00	n	8.3E+01	n	--	--
Perfluorodecanoic acid (Decanoic acid, nonadecafluoro-) [PFDA]	335-76-2	9.4E+00	n	6.7E-02	n	6.7E+00	n	1.2E+02	n	1.1E+05	n >S	8.8E+00	n	3.3E-02	n	3.3E+00	n	6.2E+01	n	7.1E+03	n >S	--	--
Perfluorodecane sulfonic acid (1-Decanesulfonic acid, hencosafluoro-) [PFDS]	335-77-3	8.2E+00	n	1.2E-01	n	1.2E+01	n >S	--	--	--	--	8.2E+00	n	6.0E-02	n	6.0E+00	n >S	--	--	--	--	--	--
Perfluorohexane sulfonic acid (1-Hexanesulfonic acid, tridecafluoro-) [PFHxS]	355-46-4	2.2E+00	n	6.1E-03	n	6.1E-01	n	1.6E+01	n	8.8E+03	n >S	2.0E+00	n	3.0E-03	n	3.0E-01	n	8.2E+00	n	8.7E+02	n	--	--
Perfluorobutyric acid (Butanoic acid, heptafluoro-) [PFBA]	375-22-4	4.0E+02	n	2.0E-01	n	2.0E+01	n	9.6E+02	n	1.0E+06	n	2.9E+02	n	1.0E-01	n	1.0E+01	n	4.9E+02	n	4.8E+05	n	--	--
Perfluorobutane sulfonic acid (1-Butanesulfonic acid, nonafluoro-) [PFBS]	375-73-5	6.0E+02	n	3.2E-01	n	3.2E+01	n	1.6E+03	n	1.0E+06	n >S	4.4E+02	n	1.6E-01	n	1.6E+01	n	8.2E+02	n	1.0E+06	n >S	--	--
Perfluoroheptanoic acid (Heptanoic acid, tridecafluoro-) [PFHpA]	375-85-9	1.6E+01	n	1.4E-02	n	1.4E+00	n	--	--	--	--	1.6E+01	n	6.8E-03	n	6.8E-01	n	--	--	--	--	--	--
Perfluorononanoic acid (Nonanoic acid, heptadecafluoro-) [PFNA]	375-95-1	6.1E+00	n	9.2E-03	n	9.2E-01	n	2.4E+01	n	9.5E+03	n >S	4.9E+00	n	4.6E-03	n	4.6E-01	n	1.2E+01	n	6.2E+02	n >S	--	--
Perfluorotetradecanoic acid (Tetradecanoic acid, heptacosafafluoro-) [PFTeDA]	376-06-7	8.2E+00	n	3.4E-01	n	3.4E+01	n >S	--	--	--	--	8.2E+00	n	1.7E-01	n	1.7E+01	n >S	--	--	--	--	--	--
Perfluorotridecanoic acid (Tridecanoic acid, pentacosafafluoro-) [PFTriDA]	72629-94-8	8.2E+00	n	1.8E-01	n	1.8E+01	n >S	--	--	--	--	8.2E+00	n	9.1E-02	n	9.1E+00	n >S	--	--	--	--	--	--
Perfluorooctane sulfonamide (1-Octanesulfonamide, heptadecafluoro-) [PFOSA]	754-91-6	8.7E-02	n	2.8E+00	n	2.8E+02	n >S	8.8E-02	n	2.3E-01	n	4.5E-02	n	1.4E+00	n	1.4E+02	n >S	4.5E-02	n	1.5E-02	n	--	--
Perylene	198-55-0	1.4E+04	n	2.3E+05	n >S	1.0E+06	n >S	--	--	--	--	1.4E+04	n	1.1E+05	n >S	1.0E+06	n >S	--	--	--	--	--	--
Phenacetin	62-44-2	5.9E+03	c	2.8E+00	c	2.8E+02	c	1.8E+04	c	1.0E+06	c >S	4.5E+03	c	1.4E+00	c	1.4E+02	c	9.4E+03	c	3.8E+05	c >S	--	--
Phenanthrene	85-01-8	1.9E+04	n	1.2E+03	n >S	1.2E+05	n >S	--	--	--	--	1.9E+04	n	6.2E+02	n >S	6.2E+04	n >S	--	--	--	--	--	--
Phenanthridine	229-87-8	2.0E+03	n	1.6E+01	n	1.6E+03	n	--	--	--	--	2.0E+03	n	7.9E+00	n	7.9E+02	n	--	--	--	--	--	--
Phenol	108-95-2	2.7E+03	n	5.7E+01	n	5.7E+03	n	2.7E+03	n	5.8E+05	n >S	1.4E+03	n	2.9E+01	n	2.9E+03	n	1.4E+03	n	3.8E+04	n	--	--
Phenol, 4-tert-butyl-	98-54-4	8.2E+04	n	3.2E+02	n	3.2E+04	n >S	--	--	--	--	8.2E+04	n	1.6E+02	n	1.6E+04	n >S	--	--	--	--	--	--
Phenothiazine	92-84-2	7.5E+02	n	2.4E+01	n >S	2.4E+03	n >S	--	--	--	--	7.5E+02	n	1.2E+01	n >S	1.2E+03	n >S	--	--	--	--	--	--
Phenyl mercuric acetate	62-38-4	5.5E+01	n	4.9E-02	n	4.9E+00	n	--	--	--	--	5.5E+01	n	2.4E-02	n	2.4E+00	n	--	--	--	--	--	--
Phenylene diamine, m-	108-45-2	4.1E+03	n	8.6E-01	n	8.6E+01	n	--	--	--	--	4.1E+03	n	4.3E-01	n	4.3E+01	n	--	--	--	--	--	--
Phenylene diamine, p-	106-50-3	1.3E+05	n	2.7E+01	n	2.7E+03	n	--	--	--	--	1.3E+05	n	1.4E+01	n	1.4E+03	n	--	--	--	--	--	--

Table 2
Tier 1 Commercial/Industrial Soil PCLs¹

Last Revised: May 10, 2023

Chemical of Concern	CAS	0.5 acre source area										30 acre source area											
		TotSoil _{Comb} ² (mg/kg)	note ³	GWSoil _{ing} (mg/kg)	note ³	GWSoil _{Class 3} (mg/kg)	note ³	AirSoil _{Inh-V} ⁴ (mg/kg)	note ³	AirGW-Soil _{Inh-V} (mg/kg)	note ³	GWSoil for Secondary MCL (mg/kg)	TotSoil _{Comb} ² (mg/kg)	note ³	GWSoil _{ing} (mg/kg)	note ³	GWSoil _{Class 3} (mg/kg)	note ³	AirSoil _{Inh-V} ⁴ (mg/kg)	note ³	AirGW-Soil _{Inh-V} (mg/kg)	note ³	GWSoil for Secondary MCL (mg/kg)
Phorate	298-02-2	1.4E+02	n	3.2E+00	n	3.2E+02	n	--	--	--	--	1.4E+02	n	1.6E+00	n	1.6E+02	n	--	--	--	--	--	--
Phosalone	2310-17-0	1.4E+03	n	7.0E+00	n	7.0E+02	n	--	--	--	--	1.4E+03	n	3.5E+00	n	3.5E+02	n	--	--	--	--	--	--
Phosdrin (mevinphos)	7786-34-7	1.7E+01	n	3.5E-03	n	3.5E-01	n	--	--	--	--	1.7E+01	n	1.8E-03	n	1.8E-01	n	--	--	--	--	--	--
Phosmet	732-11-6	1.4E+04	n	1.2E+01	n	1.2E+03	n	--	--	--	--	1.4E+04	n	6.1E+00	n	6.1E+02	n	--	--	--	--	--	--
Phosphine	7803-51-2	6.3E+00	n	--	--	--	--	6.4E+00	n	--	--	3.3E+00	n	--	--	--	--	3.3E+00	n	--	--	--	--
Phosphorothioic acid, S,S,S-tributyl ester	78-48-8	2.3E+02	c	9.7E+02	c >S	9.7E+04	c >S	--	--	--	--	2.3E+02	c	4.8E+02	c >S	4.8E+04	c >S	--	--	--	--	--	--
Phosphorus, total*	7723-14-0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phosphorus, white	7723-14-0	1.6E+01	n	6.9E-02	n	6.9E+00	n	--	--	--	--	1.6E+01	n	3.4E-02	n	3.4E+00	n	--	--	--	--	--	--
Phthalic anhydride	85-44-9	6.6E+04	n	7.4E+02	n	7.4E+04	n >S	7.0E+04	n	1.0E+06	n >S	3.5E+04	n	3.7E+02	n	3.7E+04	n >S	3.6E+04	n	1.0E+06	n >S	--	--
Picloram	1918-02-1	4.8E+04	n	9.8E-01	m	9.8E+01	m	--	--	--	--	4.8E+04	n	4.9E-01	m	4.9E+01	m	--	--	--	--	--	--
Picoline, 2- (2-methylpyridine)	109-06-8	9.2E+03	n	1.7E+00	n	1.7E+02	n	--	--	--	--	9.2E+03	n	8.4E-01	n	8.4E+01	n	--	--	--	--	--	--
Polybrominated biphenyls (PBBs)	67774-32-7	2.1E+00	c	2.0E-02	c	2.0E+00	c >S	--	--	--	--	2.1E+00	c	1.0E-02	c	1.0E+00	c >S	--	--	--	--	--	--
Polychlorinated biphenyls (PCBs)	1336-36-3	7.7E+00	c	1.1E+01	m	1.1E+03	m	9.1E+01	c	1.0E+05	c >S	7.1E+00	c	5.3E+00	m	5.3E+02	m	4.7E+01	c	6.8E+03	c >S	--	--
Potassium*	7440-09-7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Primene	68955-53-3	4.1E+03	n	1.6E+02	n	1.6E+04	n	--	--	--	--	4.1E+03	n	8.1E+01	n	8.1E+03	n	--	--	--	--	--	--
Prometon (pramitol)	1610-18-0	1.0E+04	n	2.9E+01	n	2.9E+03	n >S	--	--	--	--	1.0E+04	n	1.4E+01	n	1.4E+03	n >S	--	--	--	--	--	--
Prometryn	7287-19-6	2.7E+04	n	2.9E+02	n	2.9E+04	n >S	--	--	--	--	2.7E+04	n	1.5E+02	n	1.5E+04	n >S	--	--	--	--	--	--
Pronamide	23950-58-5	5.1E+04	n	5.4E+01	n	5.4E+03	n >S	--	--	--	--	5.1E+04	n	2.7E+01	n	2.7E+03	n >S	--	--	--	--	--	--
Propanal (propionaldehyde)	123-38-6	1.7E+02	n	1.2E+00	n	1.2E+02	n	1.7E+02	n	4.6E+03	n	8.7E+01	n	5.9E-01	n	5.9E+01	n	8.8E+01	n	3.0E+02	n	--	--
Propane, 1-bromo-	106-94-5	3.7E+04	n	1.0E+01	n	1.0E+03	n	--	--	--	--	3.7E+04	n	5.1E+00	n	5.1E+02	n	--	--	--	--	--	--
Propanil	709-98-8	3.4E+03	n	1.4E+01	n	1.4E+03	n	--	--	--	--	3.4E+03	n	6.9E+00	n	6.9E+02	n	--	--	--	--	--	--
Propanoic acid (propionic acid)	79-09-4	5.1E+05	n	7.0E+01	n	7.0E+03	n	--	--	--	--	5.1E+05	n	3.5E+01	n	3.5E+03	n	--	--	--	--	--	--
Propanol, 1-	71-23-8	1.0E+06	n	3.0E+02	n	3.0E+04	n	--	--	--	--	1.0E+06	n	1.5E+02	n	1.5E+04	n	--	--	--	--	--	--
Propargite	2312-35-8	1.4E+04	n	3.3E+02	n >S	3.3E+04	n >S	--	--	--	--	1.4E+04	n	1.6E+02	n >S	1.6E+04	n >S	--	--	--	--	--	--
Propargyl alcohol	107-19-7	2.0E+03	n	3.1E-01	n	3.1E+01	n	--	--	--	--	2.0E+03	n	1.6E-01	n	1.6E+01	n	--	--	--	--	--	--
Propazine	139-40-2	4.3E+02	c	2.1E+00	c	2.1E+02	c	--	--	--	--	4.3E+02	c	1.1E+00	c	1.1E+02	c	--	--	--	--	--	--
Propaph	122-42-9	1.4E+04	n	5.8E+00	n	5.8E+02	n	--	--	--	--	1.4E+04	n	2.9E+00	n	2.9E+02	n	--	--	--	--	--	--
Propionitrile (propane nitrile)	107-12-0	4.1E+02	n	5.8E-02	n	5.8E+00	n	--	--	--	--	4.1E+02	n	2.9E-02	n	2.9E+00	n	--	--	--	--	--	--
Propyl acetate, n-	109-60-4	9.2E+04	n	1.6E+01	n	1.6E+03	n	--	--	--	--	9.2E+04	n	7.9E+00	n	7.9E+02	n	--	--	--	--	--	--
Propylbenzene, n-	103-65-1	7.3E+03	n	1.3E+02	n	1.3E+04	n >S	8.9E+03	n	3.9E+05	n >S	4.1E+03	n	6.7E+01	n	6.7E+03	n >S	4.6E+03	n	2.5E+04	n >S	--	--
Propylene glycol	57-55-6	5.1E+02	n	2.8E+03	n	2.8E+05	n >S	5.1E+02	n	1.3E+05	n	2.6E+02	n	1.4E+03	n	1.4E+05	n >S	2.6E+02	n	8.7E+03	n	--	--
Propylene glycol monomethyl ether	107-98-2	2.2E+05	n	9.9E+01	n	9.9E+03	n	3.2E+05	n	1.0E+06	n >S	1.3E+05	n	5.0E+01	n	5.0E+03	n	1.7E+05	n	9.7E+05	n >S	--	--
Propylene oxide	75-56-9	6.9E+01	c	1.7E-02	c	1.7E+00	c	1.6E+02	c	5.3E+03	c	4.9E+01	c	8.4E-03	c	8.4E-01	c	8.4E+01	c	3.4E+02	c	--	--
Propylene tetramer	6842-15-5	1.6E+04	n	7.6E+04	n >S	1.0E+06	n >S	2.1E+04	n	6.4E+05	n >S	9.5E+03	n	3.8E+04	n >S	1.0E+06	n >S	1.1E+04	n	4.1E+04	n >S	--	--
Prothiofos (Tokuthion)	34643-46-4	6.8E+01	n	7.2E+03	n >S	7.2E+05	n >S	--	--	--	--	6.8E+01	n	3.6E+03	n >S	3.6E+05	n >S	--	--	--	--	--	--
Pyrene	129-00-0	1.9E+04	n	3.3E+03	n >S	3.3E+05	n >S	--	--	--	--	1.9E+04	n	1.7E+03	n >S	1.7E+05	n >S	--	--	--	--	--	--
Pyridine	110-86-1	1.0E+03	n	2.1E-01	n	2.1E+01	n	--	--	--	--	1.0E+03	n	1.0E-01	n	1.0E+01	n	--	--	--	--	--	--
Quinoline	91-22-5	6.4E+00	c	1.7E-02	c	1.7E+00	c	--	--	--	--	6.4E+00	c	8.4E-03	c	8.4E-01	c	--	--	--	--	--	--
Ronnel	299-84-3	3.4E+04	n	1.2E+03	n >S	1.2E+05	n >S	--	--	--	--	3.4E+04	n	6.2E+02	n >S	6.2E+04	n >S	--	--	--	--	--	--
Safrole	94-59-7	4.9E+01	c	3.7E-01	c	3.7E+01	c	1.1E+02	c	1.3E+04	c >S	3.5E+01	c	1.8E-01	c	1.8E+01	c	5.8E+01	c	8.1E+02	c	--	--
Selenium	7782-49-2	4.9E+03	n	2.3E+00	m >S	2.3E+02	m >S	--	--	--	--	4.9E+03	n	1.1E+00	m >S	1.1E+02	m >S	--	--	--	--	--	--
Selenourea	630-10-4	5.1E+03	n	--	--	--	--	--	--	--	--	5.1E+03	n	--	--	--	--	--	--	--	--	--	--
Silver	7440-22-4	2.3E+03	n	1.4E+00	n >S	1.4E+02	n >S	--	--	--	--	2.3E+03	n	7.1E-01	n >S	7.1E+01	n >S	--	--	--	--	--	2.0E-01
Simazine	122-34-9	1.6E+02	c	5.5E-02	m	5.5E+00	m	--	--	--	--	1.6E+02	c	2.8E-02	m	2.8E+00	m	--	--	--	--	--	--
Sodium*	7440-23-5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sodium hypochlorite	7681-52-9	1.2E+05	n	--	--	--	--	--	--	--	--	9.6E+04	n	--	--	--	--	--	--	--	--	--	--
Sodium polyacrylate	9003-04-7	1.7E+02	n	7.2E+01	n	7.2E+03	n	1.7E+02	n	4.1E+04	n	8.7E+01	n	3.6E+01	n	3.6E+03	n	8.7E+01	n	2.7E+03	n	--	--
Strontium	7440-24-6	4.9E+05	n	1.8E+03	n	1.8E+05	n	--	--	--	--	4.9E+05	n	9.2E+02	n	9.2E+04	n	--	--	--	--	--	--
Strychnine	57-24-9	2.0E+02	n	1.1E-01	n	1.1E+01	n	--	--	--	--	2.0E+02	n	5.6E-02	n	5.6E+00	n	--	--	--	--	--	--
Styrene	100-42-5	1.5E+04	n	3.3E+00	m	3.3E+02	m	1.6E+04	n	6.9E+05	n >S	7.8E+03	n	1.6E+00	m	1.6E+02	m	8.1E+03	n	4.5E+04	n >S	--	--

Table 2
Tier 1 Commercial/Industrial Soil PCLs¹

Last Revised: May 10, 2023

Chemical of Concern	CAS	0.5 acre source area										30 acre source area												
		TotSoil _{comb} ² (mg/kg)	note ³	GWSoil _{ing} (mg/kg)	note ³	GWSoil _{class 3} (mg/kg)	note ³	AirSoil _{inh-v} ⁴ (mg/kg)	note ³	AirGW-Soil _{inh-v} (mg/kg)	note ³	GWSoil for Secondary MCL (mg/kg)	TotSoil _{comb} ² (mg/kg)	note ³	GWSoil _{ing} (mg/kg)	note ³	GWSoil _{class 3} (mg/kg)	note ³	AirSoil _{inh-v} ⁴ (mg/kg)	note ³	AirGW-Soil _{inh-v} (mg/kg)	note ³	GWSoil for Secondary MCL (mg/kg)	
Sulfate*	14808-79-8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sulfide*	18496-25-8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sulfolane	126-33-0	1.1E+03	n	1.8E+00	n	1.8E+02	n	1.2E+03	n	3.5E+05	n >S	—	5.8E+02	n	9.1E-01	n	9.1E+01	n	6.2E+02	n	2.2E+04	n >S	—	
Sulfur*	7704-34-9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Sulprofos (Bolstar)	35400-43-2	2.0E+03	n	2.3E+04	n >S	1.0E+06	n >S	—	—	—	—	—	2.0E+03	n	1.1E+04	n >S	1.0E+06	n >S	—	—	—	—	—	
Tebuconazole	107534-96-3	2.0E+04	n	9.4E+01	n	9.4E+03	n >S	—	—	—	—	—	2.0E+04	n	4.7E+01	n	4.7E+03	n >S	—	—	—	—	—	
Tebuthiuron	34014-18-1	4.8E+04	n	1.6E+01	n	1.6E+03	n	—	—	—	—	—	4.8E+04	n	8.1E+00	n	8.1E+02	n	—	—	—	—	—	
Terbufos	13071-79-9	1.7E+01	n	1.0E+00	n	1.0E+02	n	—	—	—	—	—	1.7E+01	n	5.0E-01	n	5.0E+01	n	—	—	—	—	—	
Tert-amyl ethyl ether (TAEE)	919-94-8	4.1E+04	n	2.8E+01	n	2.8E+03	n	—	—	—	—	—	4.1E+04	n	1.4E+01	n	1.4E+03	n	—	—	—	—	—	
Tert-amyl-methyl ether (TAME)	994-05-8	4.1E+04	n	1.1E+01	n	1.1E+03	n	—	—	—	—	—	4.1E+04	n	5.7E+00	n	5.7E+02	n	—	—	—	—	—	
Tert-butyl alcohol (2-methyl-2-propanol)	75-65-0	9.2E+04	n	1.4E+01	n	1.4E+03	n	—	—	—	—	—	9.2E+04	n	6.9E+00	n	6.9E+02	n	—	—	—	—	—	
Tetrachlorobenzene, 1,2,3,4-	634-66-2	2.0E+02	n	3.6E+01	n	3.6E+03	n	—	—	—	—	—	2.0E+02	n	1.8E+01	n	1.8E+03	n	—	—	—	—	—	
Tetrachlorobenzene, 1,2,3,5-	634-90-2	2.0E+02	n	5.6E+00	n	5.6E+02	n	—	—	—	—	—	2.0E+02	n	2.8E+00	n	2.8E+02	n	—	—	—	—	—	
Tetrachlorobenzene, 1,2,4,5-	95-94-3	2.0E+02	n	1.4E+00	n	1.4E+02	n >S	—	—	—	—	—	2.0E+02	n	7.2E-01	n	7.2E+01	n >S	—	—	—	—	—	
Tetrachloroethane, 1,1,1,2-	630-20-6	1.3E+02	c	3.2E+00	c	3.2E+02	c	1.5E+02	c	7.5E+03	c	—	7.3E+01	c	1.6E+00	c	1.6E+02	c	7.8E+01	c	4.9E+02	c	—	
Tetrachloroethane, 1,1,2,2-	79-34-5	1.4E+02	c	5.2E-02	c	5.2E+00	c	—	—	—	—	—	1.4E+02	c	2.6E-02	c	2.6E+00	c	—	—	—	—	—	
Tetrachloroethylene [PCE]	127-18-4	1.4E+03	c	5.0E-02	m	5.0E+00	m	1.6E+03	c	8.4E+03	c >S	—	7.7E+02	c	2.5E-02	m	2.5E+00	m	8.1E+02	c	5.4E+02	c	—	
Tetrachlorophenol, 2,3,4,5-	4901-51-3	2.0E+04	n	4.4E+01	n	4.4E+03	n	—	—	—	—	—	2.0E+04	n	2.2E+01	n	2.2E+03	n	—	—	—	—	—	
Tetrachlorophenol, 2,3,4,6-	58-90-2	2.0E+04	n	1.3E+01	n	1.3E+03	n >S	—	—	—	—	—	2.0E+04	n	6.7E+00	n	6.7E+02	n >S	—	—	—	—	—	
Tetrachlorophenol, 2,3,5,6-	935-95-5	2.0E+04	n	6.5E+00	n >S	6.5E+02	n >S	—	—	—	—	—	2.0E+04	n	3.2E+00	n >S	3.2E+02	n >S	—	—	—	—	—	
Tetrachlorvinphos (Stirophos)	22248-79-9	2.9E+04	n	7.1E+03	n	7.1E+05	n >S	—	—	—	—	—	2.9E+04	n	3.5E+03	n	3.5E+05	n >S	—	—	—	—	—	
Tetradifon	116-29-0	1.4E+04	n	2.6E+02	n >S	2.6E+04	n >S	—	—	—	—	—	1.4E+04	n	1.3E+02	n >S	1.3E+04	n >S	—	—	—	—	—	
Tetraethyl dithiopyrophosphate (sulfotep)	3689-24-5	3.4E+02	n	1.2E+00	n	1.2E+02	n	—	—	—	—	—	3.4E+02	n	5.8E-01	n	5.8E+01	n	—	—	—	—	—	
Tetraethyl lead	78-00-2	6.8E-02	n	1.5E-03	n	1.5E-01	n	—	—	—	—	—	6.8E-02	n	7.5E-04	n	7.5E-02	n	—	—	—	—	—	
Tetraethyl pyrophosphate (TEPP)	107-49-3	7.5E+00	n	2.8E-02	n	2.8E+00	n	—	—	—	—	—	7.5E+00	n	1.4E-02	n	1.4E+00	n	—	—	—	—	—	
Tetraethylene glycol	112-60-7	2.2E+05	n	4.6E+01	n	4.6E+03	n	—	—	—	—	—	2.2E+05	n	2.3E+01	n	2.3E+03	n	—	—	—	—	—	
Tetrahydrofuran	109-99-9	2.9E+02	c	5.6E-01	c	5.6E+01	c	3.2E+02	c	7.8E+03	c	—	1.6E+02	c	2.8E-01	c	2.8E+01	c	1.6E+02	c	5.0E+02	c	—	
Tetrahydropyran	142-68-7	3.1E+02	c	6.1E-01	c	6.1E+01	c	3.4E+02	c	1.0E+04	c	—	1.7E+02	c	3.0E-01	c	3.0E+01	c	1.7E+02	c	6.5E+02	c	—	
Tetraoxadodecane, 2,5,8,11-	112-49-2	1.7E+04	n	5.1E+00	n	5.1E+02	n	—	—	—	—	—	1.7E+04	n	2.6E+00	n	2.6E+02	n	—	—	—	—	—	
Thallium	7440-28-0	6.5E+01	n	1.7E+00	m	1.7E+02	m	—	—	—	—	—	6.5E+01	n	8.7E-01	m	8.7E+01	m	—	—	—	—	—	
Thiofanox	39196-18-4	2.0E+02	n	9.4E-02	n	9.4E+00	n	—	—	—	—	—	2.0E+02	n	4.7E-02	n	4.7E+00	n	—	—	—	—	—	
Thionazin	297-97-2	4.8E+01	n	3.3E-02	n	3.3E+00	n	—	—	—	—	—	4.8E+01	n	1.7E-02	n	1.7E+00	n	—	—	—	—	—	
Thiophanate-methyl	23564-05-8	5.5E+04	n	1.3E+01	n >S	1.3E+03	n >S	—	—	—	—	—	5.5E+04	n	6.6E+00	n >S	6.6E+02	n >S	—	—	—	—	—	
Thiram	137-26-8	3.4E+03	n	1.0E+01	n	1.0E+03	n >S	—	—	—	—	—	3.4E+03	n	5.2E+00	n	5.2E+02	n >S	—	—	—	—	—	
Tin	7440-31-5	4.1E+05	n	1.1E+05	n >S	1.0E+06	n >S	—	—	—	—	—	4.1E+05	n	5.5E+04	n >S	1.0E+06	n >S	—	—	—	—	—	
Titanium	7440-32-6	1.0E+06	n	—	—	—	—	—	—	—	—	—	1.0E+06	n	—	—	—	—	—	—	—	—	—	
Toluene	108-88-3	4.2E+04	n	8.2E+00	m	8.2E+02	m	8.8E+04	n	7.3E+05	n >S	—	2.9E+04	n	4.1E+00	m	4.1E+02	m	4.5E+04	n	4.7E+04	n >S	—	
Toluene diisocyanate, 2,4/2,6-	26471-62-5	2.0E+02	n	—	—	—	—	2.0E+02	n	2.4E+05	n	—	1.0E+02	n	—	—	—	—	1.0E+02	n	1.5E+04	n	—	
Toluenediamine, 2,4-	95-80-7	6.0E+00	c	3.4E-02	c	3.4E+00	c	—	—	—	—	—	6.0E+00	c	1.7E-02	c	1.7E+00	c	—	—	—	—	—	
Toluenediamine, 2,6-	823-40-5	2.0E+04	n	4.3E+00	n	4.3E+02	n	—	—	—	—	—	2.0E+04	n	2.2E+00	n	2.2E+02	n	—	—	—	—	—	
Toluidine, o-	95-53-4	1.1E+02	c	1.3E+00	c	1.3E+02	c	2.3E+02	c	4.5E+04	c	—	7.6E+01	c	6.5E-01	c	6.5E+01	c	1.2E+02	c	2.9E+03	c	—	
Toluidine, p-	106-49-0	2.3E+02	c	2.0E-01	c	2.0E+01	c	—	—	—	—	—	2.3E+02	c	9.9E-02	c	9.9E+00	c	—	—	—	—	—	
Toxaphene	8001-35-2	1.7E+01	c	1.2E+01	m	1.2E+03	m	1.6E+03	c	1.0E+06	c >S	—	1.7E+01	c	5.8E+00	m	5.8E+02	m	8.3E+02	c	7.5E+05	c >S	—	
TPH, TX1005, C6-C12	TPH-1005-1	3.9E+03	n	1.9E+02	n	1.9E+04	n >S	4.3E+03	n	1.6E+05	n >S	—	2.1E+03	n	9.7E+01	n	9.7E+03	n >S	2.2E+03	n	1.1E+04	n >S	—	
TPH, TX1005, >C12-C28	TPH-1005-2	1.2E+04	n	5.9E+02	n	5.9E+04	n >S	2.1E+04	n	1.0E+06	n >S	—	7.8E+03	n	3.0E+02	n	3.0E+04	n >S	1.1E+04	n	1.4E+05	n >S	—	
TPH, TX1005, >C12-C35	TPH-1005-3	1.2E+04	n	5.9E+02	n	5.9E+04	n >S	2.1E+04	n	1.0E+06	n >S	—	7.8E+03	n	3.0E+02	n	3.0E+04	n >S	1.1E+04	n	1.4E+05	n >S	—	
TPH, TX1005, >C28-C35	TPH-1005-4	1.2E+04	n	5.9E+02	n	5.9E+04	n >S	2.1E+04	n	1.0E+06	n >S	—	7.8E+03	n	3.0E+02	n	3.0E+04	n >S	1.1E+04	n	1.4E+05	n >S	—	
TP Silvex, 2,4,5-	93-72-1	5.5E+03	n	5.3E+00	m	5.3E+02	m	—	—	—	—	—	5.5E+03	n	2.6E+00	m	2.6E+02	m	—	—	—	—	—	
Triadimenol	55219-65-3	2.0E+04	n	2.5E+01	n	2.5E+03	n >S	—	—	—	—	—	2.0E+04	n	1.2E+01	m	1.2E+03	n >S	—	—	—	—	—	
Triallate	2303-17-5	8.9E+03	n	5.6E+01	n	5.6E+03	n >S	—	—	—	—	—	8.9E+03	n	2.8E+01	n	2.8E+03	n >S	—	—	—	—	—	

Table 2
Tier 1 Commercial/Industrial Soil PCLs¹

Last Revised: May 10, 2023

Chemical of Concern	CAS	0.5 acre source area										30 acre source area											
		TotSoil _{Comb} ² (mg/kg)	note ³	GWSoil _{mg} (mg/kg)	note ³	GWSoil _{Class 3} (mg/kg)	note ³	AirSoil _{Inh-V} ⁴ (mg/kg)	note ³	AirGW-Soil _{Inh-V} (mg/kg)	note ³	GWSoil for Secondary MCL (mg/kg)	TotSoil _{Comb} ² (mg/kg)	note ³	GWSoil _{mg} (mg/kg)	note ³	GWSoil _{Class 3} (mg/kg)	note ³	AirSoil _{Inh-V} ⁴ (mg/kg)	note ³	AirGW-Soil _{Inh-V} (mg/kg)	note ³	GWSoil for Secondary MCL (mg/kg)
Triaminotrirobenzene (TATB)	3058-38-6	2.0E+03	n	4.6E-01	n	4.6E+01	n	—	—	—	—	2.0E+03	n	2.3E-01	n	2.3E+01	n	—	—	—	—	—	—
Tributyltin oxide	56-35-9	2.0E+02	n	—	n	—	n	—	—	—	—	2.0E+02	n	—	n	—	n	—	—	—	—	—	—
Trichloro-1,2,2-trifluoroethane, 1,1,2-	76-13-1	1.1E+05	n	2.4E+05	n >S	1.0E+06	n >S	1.1E+05	n	2.3E+05	n >S	5.5E+04	n	1.2E+05	n >S	1.0E+06	n >S	5.5E+04	n	1.5E+04	n >S	—	—
Trichlorobenzene, 1,2,3-	87-61-6	3.5E+02	n	7.9E+01	n	7.9E+03	n >S	4.2E+02	n	6.7E+04	n >S	2.0E+02	n	3.9E+01	n	3.9E+03	n >S	2.2E+02	n	4.3E+03	n >S	—	—
Trichlorobenzene, 1,2,4-	120-82-1	2.0E+02	n	4.8E+00	m	4.8E+02	m	2.1E+02	n	1.5E+04	n >S	1.1E+02	n	2.4E+00	m	2.4E+02	m	1.1E+02	n	9.7E+02	n	—	—
Trichlorobenzene, 1,3,5-	108-70-3	1.6E+02	n	2.2E+01	n	2.2E+03	n >S	1.8E+02	n	1.5E+04	n >S	8.7E+01	n	1.1E+01	m	1.1E+03	n >S	9.1E+01	n	9.4E+02	n >S	—	—
Trichloroethane, 1,1,1-	71-55-6	1.0E+05	n	1.6E+00	m	1.6E+02	m	1.1E+05	n	4.6E+05	n >S	5.5E+04	n	8.1E-01	m	8.1E+01	m	5.6E+04	n	3.0E+04	n >S	—	—
Trichloroethane, 1,1,2-	79-00-5	3.5E+01	c	2.0E-02	m	2.0E+00	m	3.8E+01	c	5.4E+02	c	1.9E+01	c	1.0E-02	m	1.0E+00	m	1.9E+01	c	3.5E+01	c	—	—
Trichloroethylene [TCE]	79-01-6	4.0E+01	n	3.4E-02	m	3.4E+00	m	4.3E+01	n	2.2E+02	n	2.1E+01	n	1.7E-02	m	1.7E+00	m	2.2E+01	n	1.4E+01	n	—	—
Trichlorofluoromethane	75-69-4	3.1E+05	n	3.8E+02	n	3.8E+04	n >S	—	—	—	—	3.1E+05	n	1.9E+02	n	1.9E+04	n >S	—	—	—	—	—	—
Trichloronate	327-98-0	2.0E+03	n	3.7E+02	n	3.7E+04	n >S	—	—	—	—	2.0E+03	n	1.8E+02	n	1.8E+04	n >S	—	—	—	—	—	—
Trichlorophenol, 2,3,4-	15950-66-0	6.8E+04	n	1.8E+02	n	1.8E+04	n	—	—	—	—	6.8E+04	n	8.9E+01	n	8.9E+03	n	—	—	—	—	—	—
Trichlorophenol, 2,3,5-	933-78-8	6.8E+04	n	8.3E+01	n	8.3E+03	n	—	—	—	—	6.8E+04	n	4.1E+01	n	4.1E+03	n	—	—	—	—	—	—
Trichlorophenol, 2,3,6-	933-75-5	6.8E+04	n	8.6E+01	n	8.6E+03	n >S	—	—	—	—	6.8E+04	n	4.3E+01	n	4.3E+03	n >S	—	—	—	—	—	—
Trichlorophenol, 2,4,5-	95-95-4	6.8E+04	n	1.0E+02	n	1.0E+04	n	—	—	—	—	6.8E+04	n	5.1E+01	n	5.1E+03	n	—	—	—	—	—	—
Trichlorophenol, 2,4,6-	88-06-2	6.8E+02	n	5.2E-01	n	5.2E+01	n	3.3E+03	c	5.9E+05	c >S	6.8E+02	n	2.6E-01	n	2.6E+01	n	1.7E+03	c	3.8E+04	c >S	—	—
Trichlorophenol, 3,4,5-	609-19-8	6.8E+04	n	9.8E+02	n	9.8E+04	n	—	—	—	—	6.8E+04	n	4.9E+02	n	4.9E+04	n	—	—	—	—	—	—
Trichlorophenoxyacetic acid, 2,4,5-	93-76-5	6.8E+03	n	2.9E+00	n	2.9E+02	n	—	—	—	—	6.8E+03	n	1.5E+00	n	1.5E+02	n	—	—	—	—	—	—
Trichloropropane, 1,1,2-	598-77-6	6.4E+00	n	4.3E+00	n	4.3E+02	n	6.4E+00	n	4.5E+01	n	3.3E+00	n	2.2E+00	n	2.2E+02	n	3.3E+00	n	2.9E+00	n	—	—
Trichloropropane, 1,2,3-	96-18-4	9.5E-01	c	1.2E-03	c	1.2E-01	c	2.0E+01	n	7.9E+02	n	9.5E-01	c	6.0E-04	c	6.0E-02	c	1.0E+01	n	5.1E+01	n	—	—
Triethanolamine	102-71-6	5.2E+03	n	2.8E+01	n	2.8E+03	n	5.4E+03	n	1.0E+06	n	2.7E+03	n	1.4E+01	n	1.4E+03	n	2.8E+03	n	9.6E+05	n	—	—
Triethylamine	121-44-8	1.5E+02	n	—	—	—	—	1.5E+02	n	2.2E+03	n	7.7E+01	n	—	—	—	—	7.7E+01	n	1.4E+02	n	—	—
Triethylene glycol	112-27-6	1.0E+06	n	2.8E+02	n	2.8E+04	n	—	—	—	—	1.0E+06	n	1.4E+02	n	1.4E+04	n	—	—	—	—	—	—
Triethylphosphorothioate, O, O, O-	126-68-1	5.7E+00	n	1.3E-02	n	1.3E+00	n	—	—	—	—	5.7E+00	n	6.5E-03	n	6.5E-01	n	—	—	—	—	—	—
Trifluralin	1582-09-8	2.5E+03	c	1.5E+02	c	1.5E+04	c >S	—	—	—	—	2.5E+03	c	7.3E+01	c	7.3E+03	c >S	—	—	—	—	—	—
Trimethylamine	75-50-3	2.1E+02	n	—	—	—	—	2.1E+02	n	6.1E+03	n	1.1E+02	n	—	—	—	—	1.1E+02	n	3.9E+02	n	—	—
Trimethylbenzene, 1,2,3-	526-73-8	4.4E+03	n	6.4E+01	n	6.4E+03	n >S	5.1E+03	n	2.0E+05	n >S	2.4E+03	n	3.2E+01	n	3.2E+03	n >S	2.6E+03	n	1.3E+04	n >S	—	—
Trimethylbenzene, 1,2,4-	95-63-6	4.9E+03	n	9.9E+01	n	9.9E+03	n >S	5.6E+03	n	2.7E+05	n >S	2.7E+03	n	4.9E+01	n	4.9E+03	n >S	2.9E+03	n	1.8E+04	n >S	—	—
Trimethylbenzene, 1,3,5-	108-67-8	4.3E+03	n	1.1E+02	n	1.1E+04	n >S	4.9E+03	n	2.3E+05	n >S	2.3E+03	n	5.4E+01	n	5.4E+03	n >S	2.5E+03	n	1.5E+04	n >S	—	—
Trinitrobenzene, 1,3,5-	99-35-4	2.0E+04	n	5.4E+00	n	5.4E+02	n	—	—	—	—	2.0E+04	n	2.7E+00	n	2.7E+02	n	—	—	—	—	—	—
Trinitrophenylmethylnitramine (tetryl; nitramine)	479-45-8	1.6E+03	n	1.6E+00	n	1.6E+02	n	—	—	—	—	1.6E+03	n	8.2E-01	n	8.2E+01	n	—	—	—	—	—	—
Trinitrotoluene, 2,4,6-	118-96-7	3.4E+02	n	5.1E-01	n	5.1E+01	n	—	—	—	—	3.4E+02	n	2.6E-01	n	2.6E+01	n	—	—	—	—	—	—
Tungsten (as sodium tungstate dihydride)	7440-33-7	8.2E+02	n	2.4E+02	n	2.4E+04	n	—	—	—	—	8.2E+02	n	1.2E+02	n	1.2E+04	n	—	—	—	—	—	—
Uranium (soluble salts)	7440-61-1	2.8E+03	n	1.8E+03	m >S	1.8E+05	m >S	—	—	—	—	2.6E+03	n	8.9E+02	m >S	8.9E+04	m >S	—	—	—	—	—	—
Valeric acid (pentanoic acid)	109-52-4	1.8E+02	n	7.0E+01	n >S	7.0E+03	n >S	1.8E+02	n	5.3E+04	n >S	9.5E+01	n	3.5E+01	n >S	3.5E+03	n >S	9.5E+01	n	3.4E+03	n >S	—	—
Vanadium	7440-62-2	6.2E+02	n	2.6E+03	n >S	2.6E+05	n >S	—	—	—	—	6.1E+02	n	1.3E+03	n >S	1.3E+05	n >S	—	—	—	—	—	—
Vernam	1929-77-7	6.8E+02	n	8.2E+00	n	8.2E+02	n	—	—	—	—	6.8E+02	n	4.1E+00	n	4.1E+02	n	—	—	—	—	—	—
Vinyl acetate	108-05-4	4.3E+03	n	1.6E+02	n	1.6E+04	n	4.3E+03	n	4.3E+04	n	2.2E+03	n	8.0E+01	n	8.0E+03	n	2.2E+03	n	2.8E+03	n	—	—
Vinyl chloride	75-01-4	1.5E+01	c	2.2E-02	m	2.2E+00	m	7.2E+01	c	7.1E+01	c	1.3E+01	c	1.1E-02	m	1.1E+00	m	3.7E+01	c	4.6E+00	c	—	—
Vinylcyclohexane	695-12-5	5.1E+05	n	4.2E+03	n >S	4.2E+05	n >S	—	—	—	—	5.1E+05	n	2.1E+03	n >S	2.1E+05	n >S	—	—	—	—	—	—
Warfarin	81-81-2	2.0E+02	n	8.4E-01	n	8.4E+01	n	—	—	—	—	2.0E+02	n	4.2E-01	n	4.2E+01	n	—	—	—	—	—	—
Xylene, m-	108-38-3	1.3E+04	n	1.1E+02	m	1.1E+04	m >S	1.3E+04	n	1.6E+05	n >S	6.7E+03	n	5.3E+01	m	5.3E+03	m >S	6.7E+03	n	1.0E+04	n >S	—	—
Xylene, o-	95-47-6	9.1E+04	n	7.1E+01	m	7.1E+03	m >S	9.5E+04	n	1.0E+06	n >S	4.8E+04	n	3.5E+01	m	3.5E+03	m >S	4.9E+04	n	4.9E+05	n >S	—	—
Xylene, p-	106-42-3	1.3E+04	n	1.5E+02	m	1.5E+04	m >S	1.3E+04	n	2.0E+05	n >S	6.7E+03	n	7.5E+01	m	7.5E+03	m >S	6.7E+03	n	1.3E+04	n >S	—	—
Xylenes	1330-20-7	1.2E+04	n	1.2E+02	m	1.2E+04	m >S	1.3E+04	n	1.8E+05	n >S	6.5E+03	n	6.1E+01	m	6.1E+03	m >S	6.7E+03	n	1.1E+04	n >S	—	—
Zinc	7440-66-6	2.5E+05	n	7.0E+03	n >S	7.0E+05	n >S	—	—	—	—	1.6E+03	n	3.5E+03	n >S	3.5E+05	n >S	—	—	—	—	8.0E+02	—
6 C aliphatics (TPH) (>53% n-hexane content)	NA	1.2E+04	n	5.1E+02	n	5.1E+04	n >S	1.4E+04	n	1.7E+04	n >S	6.6E+03	n	2.6E+02	n	2.6E+04	n >S	7.4E+03	n	1.1E+03	n	—	—
6 C aliphatics (TPH) (<53% n-hexane content)	NA	5.3E+04	n	1.5E+02	n	5.1E+04	n >S	4.0E+05	n	4.8E+05	n >S	4.7E+04	n	2.6E+02	n	2.6E+04	n >S	2.0E+05	n	3.1E+04	n >S	—	—
>6-8 C aliphatics (TPH) (>53% n-hexane content)	NA	1.2E+04	n	1.3E+03	n	1.3E+05	n >S	1.4E+04	n	2.8E+04	n >S	6.6E+03	n	6.3E+02	n	6.3E+04	n >S	7.4E+03	n	1.8E+03	n >S	—	—
>6-8 C aliphatics (TPH) (<53% n-hexane content)	NA	5.3E+04	n	1.3E+03	n	1.3E+05	n >S	4.0E+05	n	7.8E+05	n >S	4.7E+04	n	6.3E+02	n	6.3E+04	n >S	2.0E+05	n	5.0E+04	n >S	—	—

**Table 2
Tier 1 Commercial/Industrial Soil PCLs¹**

Last Revised: May 10, 2023

Chemical of Concern	CAS	0.5 acre source area										30 acre source area											
		TotSoil _{comb} ² (mg/kg)	note ³	GWSoil _{ing} (mg/kg)	note ³	GWSoil _{class 3} (mg/kg)	note ³	AirSoil _{inh-v} ⁴ (mg/kg)	note ³	AirGW-Soil _{inh-v} (mg/kg)	note ³	GWSoil for Secondary MCL (mg/kg)	TotSoil _{comb} ² (mg/kg)	note ³	GWSoil _{ing} (mg/kg)	note ³	GWSoil _{class 3} (mg/kg)	note ³	AirSoil _{inh-v} ⁴ (mg/kg)	note ³	AirGW-Soil _{inh-v} (mg/kg)	note ³	GWSoil for Secondary MCL (mg/kg)
>8-10 C aliphatics (TPH)	NA	9.7E+03	n	1.1E+04	n >S	1.0E+06	n >S	1.1E+04	n	6.8E+04	n >S	—	5.2E+03	n	5.4E+03	n >S	5.4E+05	n >S	5.5E+03	n	4.4E+03	n >S	—
>10-12 C aliphatics (TPH)	NA	9.3E+03	n	7.6E+04	n >S	1.0E+06	n >S	1.1E+04	n	3.2E+05	n >S	—	5.1E+03	n	3.8E+04	n >S	1.0E+06	n >S	5.5E+03	n	2.1E+04	n >S	—
>12-16 C aliphatics (TPH)	NA	1.4E+04	n	1.0E+06	n >S	1.0E+06	n >S	1.7E+04	n	1.0E+06	n >S	—	7.7E+03	n	7.4E+05	n >S	1.0E+06	n >S	8.7E+03	n	9.3E+04	n >S	—
>16-21 C aliphatics (TPH)	NA	1.0E+06	n	1.0E+06	n >S	1.0E+06	n >S	—	—	—	—	—	1.0E+06	n	1.0E+06	n >S	1.0E+06	n >S	—	—	—	—	—
>16-21 C aliphatics (TPH) (for transformer mineral oil releases only)	NA	1.0E+06	n	1.0E+06	n >S	1.0E+06	n >S	—	—	—	—	—	1.0E+06	n	1.0E+06	n >S	1.0E+06	n >S	—	—	—	—	—
>21-35 C aliphatics (TPH)	NA	1.0E+06	n	1.0E+06	n >S	1.0E+06	n >S	—	—	—	—	—	1.0E+06	n	1.0E+06	n >S	1.0E+06	n >S	—	—	—	—	—
>21-35 C aliphatics (TPH) (for transformer mineral oil releases only)	NA	1.0E+06	n	1.0E+06	n >S	1.0E+06	n >S	—	—	—	—	—	1.0E+06	n	1.0E+06	n >S	1.0E+06	n >S	—	—	—	—	—
>7-8 C aromatics (TPH)	NA	2.9E+04	n	6.0E+01	n	6.0E+03	n >S	4.1E+04	n	3.4E+05	n >S	—	1.7E+04	n	3.0E+01	n	3.0E+03	n >S	2.1E+04	n	2.2E+04	n >S	—
>8-10 C aromatics (TPH)	NA	3.9E+03	n	1.9E+02	n	1.9E+04	n >S	4.3E+03	n	1.6E+05	n >S	—	2.1E+03	n	9.7E+01	n	9.7E+03	n >S	2.2E+03	n	1.1E+04	n >S	—
>10-12 C aromatics (TPH)	NA	6.9E+03	n	3.0E+02	n	3.0E+04	n >S	9.2E+03	n	6.1E+05	n >S	—	4.0E+03	n	1.5E+02	n	1.5E+04	n >S	4.8E+03	n	4.0E+04	n >S	—
>12-16 C aromatics (TPH)	NA	1.2E+04	n	5.9E+02	n	5.9E+04	n >S	2.1E+04	n	1.0E+06	n >S	—	7.8E+03	n	3.0E+02	n	3.0E+04	n >S	1.1E+04	n	1.4E+05	n >S	—
>16-21 C aromatics (TPH)	NA	2.0E+04	n	1.4E+03	n >S	1.4E+05	n >S	—	—	—	—	—	2.0E+04	n	7.0E+02	n >S	7.0E+04	n >S	—	—	—	—	—
>21-35 C aromatics (TPH)	NA	2.0E+04	n	1.1E+04	n >S	1.0E+06	n >S	—	—	—	—	—	2.0E+04	n	5.5E+03	n >S	5.5E+05	n >S	—	—	—	—	—
Transformer Mineral Oil	NA	8.0E+04	n	7.5E+05	n	1.0E+06	n	1.2E+05	n	1.0E+06	n	—	5.2E+04	n	3.7E+05	n	1.0E+06	n	6.1E+04	n	8.6E+05	n	—

Footnotes

1 In accordance with §350.72(b), when establishing Tier 1 PCLs for individual COCs for each of the individual and combined human health exposure pathways, the person must evaluate whether the PCLs need to be adjusted to lower concentrations to meet the cumulative carcinogenic risk level and hazard index criteria specified in §350.72(c). For COCs which exhibit both carcinogenic and noncarcinogenic characteristics, they shall be evaluated as both a carcinogen and noncarcinogen when determining whether the PCL established for an individual COC for each of the individual and combined human health exposure pathways needs to be adjusted to a lower concentration to meet the cumulative risk and hazard criteria. The person shall then use the lower of the carcinogenic or noncarcinogenic PCL as the Tier 1 human health PCL. In other words, the Tier 1 PCLs provided in this table for an individual COC should not be used as the final Tier 1 human health PCL for any of the individual or combined exposure pathways in cases where there are more than 10 carcinogenic and/or more than 10 noncarcinogenic COCs within a source medium unless it can be demonstrated that further downward adjustment is not necessary to meet the cumulative risk and hazard criteria.

2 Combined includes inhalation; ingestion; dermal pathways

3 c = carcinogenic; n = noncarcinogenic; m = primary MCL-based; e = EPA Action Level-based; > S = solubility limit exceeded during calculation

4 For subsurface soils only

5 Site-specific PCLs for mercury may vary based on the pH-dependent Kd value (see Figure:30 TAC §350.73(f)(1)(C)).

6 Persons must use the value provided in the "GWSoil for Secondary MCL" column of this table as the GWSoil PCL for MTBE if the conditions described in §350.74(f)(3) exist.

7 Please see the note on nitrate/nitrite in the "List of Updates" spreadsheet for March 31, 2017.

8 This chemical is one of four chemicals that make up total trihalomethanes (TTHMs). USEPA has established an MCL for TTHMs of 0.08 mg/L. Each individual chemical that contributes to TTHMs must meet the 0.08 mg/L based GWSoil_{ing} PCL, and the person must ensure that the total soil concentrations for all four will not impact groundwater above the GWSoil_{ing} based MCL.

9 Nitrate, nitrite, and ammonia are inorganic anions that are mobile in most environmental situations, quickly partitioning from soil to groundwater. Due to these partitioning characteristics it is difficult to calculate a reliable soil-water partition coefficient (Kd) and Henry's law constant (H') for these compounds. The Kd and H' are parameters that are required to calculate the GWSoil_{ing} PCL in accordance with 30 TAC 350.75(b)(1) using the Tier 1 GWSoil_{ing} PCL equation.

***** These compounds are not necessarily of concern from a human health standpoint, therefore calculation of human health-based values is not required. However, aesthetics and ecological criteria would still apply. See table entitled "Compounds for which Calculation of a Human Health PCL is Not Required" available on the TCEQ website at <http://www.tceq.state.tx.us/remediation/trrp/trrp.html>.

NA=Not applicable

All values capped at 1.0E+06

This table shows the commercial/industrial protective concentration levels for 0.5 and 30 acre source areas
end of worksheet

Table 3

Tier 1 Groundwater PCLs - Residential and Commercial/Industrial¹

Last Revised: May 10, 2023

Chemical of Concern	CAS	Residential								Commercial/Industrial								Secondary MCL ⁵ (mg/L)
		GW _{GW_{Ing}} ² (mg/L)	note ⁴	GW _{Class3} ³ (mg/L)	note ⁴	Air _{GW_{Inh-V}} 0.5 acre source area (mg/L)	note ⁴	Air _{GW_{Inh-V}} 30 acre source area (mg/L)	note ⁴	GW _{GW_{Ing}} ² (mg/L)	note ⁴	GW _{Class3} ³ (mg/L)	note ⁴	Air _{GW_{Inh-V}} 0.5 acre source area (mg/L)	note ⁴	Air _{GW_{Inh-V}} 30 acre source area (mg/L)	note ⁴	
Acenaphthene	83-32-9	1.5E+00	n	1.5E+02	n >S	--	--	--	--	4.4E+00	n >S	4.4E+02	n >S	--	--	--	--	
Acenaphthylene	208-96-8	1.5E+00	n	1.5E+02	n >S	--	--	--	--	4.4E+00	n >S	4.4E+02	n >S	--	--	--	--	
Acetaldehyde	75-07-0	2.4E+00	n	2.4E+02	n	2.4E+03	n	3.1E+02	n	7.3E+00	n	7.3E+02	n	3.3E+03	n	4.3E+02	n	
Acetate, 2-ethoxyethanol	111-15-9	2.4E+00	n	2.4E+02	n	4.5E+05	n >S	5.8E+04	n	7.3E+00	n	7.3E+02	n	6.3E+05	n >S	8.1E+04	n	
Acetate, isoamyl	123-92-2	1.8E+00	n	1.8E+02	n	--	--	--	--	5.3E+00	n	5.3E+02	n	--	--	--	--	
Acetate, isobutyl	110-19-0	1.2E+00	n	1.2E+02	n	--	--	--	--	3.5E+00	n	3.5E+02	n	--	--	--	--	
Acetate, sec-butyl	105-46-4	1.2E+00	n	1.2E+02	n	--	--	--	--	3.5E+00	n	3.5E+02	n	--	--	--	--	
Acetic acid*	64-19-7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Acetone (2-propanone)	67-64-1	2.2E+01	n	2.2E+03	n	1.0E+06	n >S	1.0E+06	n >S	6.6E+01	n	6.6E+03	n	1.0E+06	n >S	1.0E+06	n >S	
Acetone cyanohydrin	75-86-5	7.3E-02	n	7.3E+00	n	3.4E+05	n	4.4E+04	n	2.2E-01	n	2.2E+01	n	4.8E+05	n	6.2E+04	n	
Acetonitrile	75-05-8	7.8E-01	n	7.8E+01	n	3.2E+04	n	4.2E+03	n	2.3E+00	n	2.3E+02	n	4.5E+04	n	5.8E+03	n	
Acetophenone	98-86-2	2.4E+00	n	2.4E+02	n	--	--	--	--	7.3E+00	n	7.3E+02	n	--	--	--	--	
Acetylaminofluorene, 2-	53-96-3	2.4E-04	c	2.4E-02	c	6.3E+02	c >S	1.0E+02	c >S	5.4E-04	c	5.4E-02	c	1.1E+03	c >S	1.8E+02	c >S	
Acifluorfen, sodium	62476-59-9	3.2E-01	n	3.2E+01	n	--	--	--	--	9.5E-01	n	9.5E+01	n	--	--	--	--	
Acridine	260-94-6	7.3E-02	n	7.3E+00	n	--	--	--	--	2.2E-01	n	2.2E+01	n	--	--	--	--	
Acrolein	107-02-8	1.2E-02	n	1.2E+00	n	9.5E+03	n	1.2E+03	n	3.7E-02	n	3.7E+00	n	1.3E+04	n	1.7E+03	n	
Acrylamide	79-06-1	1.8E-03	c	1.8E-01	c	3.8E+03	c	5.0E+02	c	4.1E-03	c	4.1E-01	c	6.3E+03	c	8.4E+02	c	
Acrylic acid	79-10-7	1.2E+01	n	1.2E+03	n	1.5E+04	n	2.0E+03	n	3.7E-01	n	3.7E+03	n	2.1E+04	n	2.7E+03	n	
Acrylonitrile	107-13-1	1.7E-03	c	1.7E-01	c	5.8E+01	c	7.5E+00	c	3.8E-03	c	3.8E-01	c	9.7E+01	c	1.3E+01	c	
Adipic acid (hexanedioic acid)	124-04-9	4.9E+01	n	4.9E+03	n	--	--	--	--	1.5E+02	n	1.5E+04	n	--	--	--	--	
Alachlor	15972-60-8	2.0E-03	m	2.0E-01	m	--	--	--	--	2.0E-03	m	2.0E-01	m	--	--	--	--	
Aldicarb	116-06-3	7.0E-03	m	7.0E-01	m	--	--	--	--	7.0E-03	m	7.0E-01	m	--	--	--	--	
Aldicarb sulfone	1646-88-4	7.0E-03	m	7.0E-01	m	--	--	--	--	7.0E-03	m	7.0E-01	m	--	--	--	--	
Aldrin	309-00-2	5.4E-05	c	5.4E-03	c	4.4E+00	c >S	5.7E-01	c >S	1.2E-04	c	1.2E-02	c	7.4E+00	c >S	9.6E-01	c >S	
Allyl alcohol	107-18-6	1.2E-01	n	1.2E+01	n	3.0E+02	n	3.8E+01	n	3.7E-01	n	3.7E+01	n	4.1E+02	n	5.4E+01	n	
Allyl chloride	107-05-1	2.4E-01	n	2.4E+01	n	9.1E+00	n	1.2E+00	n	7.3E-01	n	7.3E+01	n	1.3E+01	n	1.7E+00	n	
Aluminum	7429-90-5	2.4E-01	n >S	2.4E+03	n >S	--	--	--	--	7.3E+01	n >S	7.3E+03	n >S	--	--	--	2.0E-01	
Ametrin	834-12-8	2.2E-01	n	2.2E+01	n	--	--	--	--	6.6E-01	n	6.6E+01	n	--	--	--	--	
Amino-2,6-dinitrotoluene, 4-	19406-51-0	1.2E-02	n	1.2E+00	n	--	--	--	--	3.7E-02	n	3.7E+00	n	--	--	--	--	
Amino-4,6-dinitrotoluene, 2-	35572-78-2	1.2E-02	n	1.2E+00	n	--	--	--	--	3.7E-02	n	3.7E+00	n	--	--	--	--	
Aminobiphenyl, 4- (1,1-biphenyl-4-amine)	92-67-1	1.5E-04	c	1.5E-02	c	--	--	--	--	3.4E-04	c	3.4E-02	c	--	--	--	--	
Aminopyridine, 4-	504-24-5	4.9E-04	n	4.9E-02	n	--	--	--	--	1.5E-03	n	1.5E-01	n	--	--	--	--	
Ammonia ⁵	7664-41-7	--	--	--	--	8.7E+03	n	1.1E+03	n	--	--	--	--	1.2E+04	n	1.6E+03	n	
Ammonium polyphosphate*	6833-79-9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Ammonium salts*	AMMONIUM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Aniline	62-53-3	1.6E-01	c	1.6E+01	c	1.1E+04	n	1.4E+03	n	3.6E-01	c	3.6E+01	c	1.6E+04	n	2.0E+03	n	
Anthracene	120-12-7	7.3E+00	n >S	7.3E+02	n >S	--	--	--	--	2.2E+01	n >S	2.2E+03	n >S	--	--	--	--	
Anthraquinone, 9,10-	84-65-1	2.3E-02	c	2.3E+00	c >S	--	--	--	--	5.2E-02	c	5.2E+00	c >S	--	--	--	--	
Antimony	7440-36-0	6.0E-03	m >S	6.0E-01	m >S	--	--	--	--	6.0E-03	m >S	6.0E-01	m >S	--	--	--	--	
Aramite	140-57-8	3.7E-02	c	3.7E+00	c	--	--	--	--	8.2E-02	c	8.2E+00	c	--	--	--	--	
Arsenic	7440-38-2	1.0E-02	m >S	1.0E+00	m >S	--	--	--	--	1.0E-02	m >S	1.0E+00	m >S	--	--	--	--	
Arsine	7784-42-1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Atrazine	1912-24-9	3.0E-03	m	3.0E-01	m	--	--	--	--	3.0E-03	m	3.0E-01	m	--	--	--	--	
Azinphos-methyl (quthion)	86-50-0	3.7E-02	n	3.7E+00	n >S	--	--	--	--	1.1E-01	n >S	1.1E+01	n >S	--	--	--	--	
Azobenzene	103-33-3	8.3E-03	c	8.3E-01	c	6.8E+02	c >S	8.8E+01	c >S	1.9E-02	c	1.9E+00	c >S	1.1E+03	c >S	1.5E+02	c >S	
Barium	7440-39-3	2.0E+00	m >S	2.0E+02	m >S	--	--	--	--	2.0E+00	m >S	2.0E+02	m >S	--	--	--	--	
Bayleton	43121-43-3	7.3E-01	n >S	7.3E+01	n >S	--	--	--	--	2.2E+00	n	2.2E+02	n >S	--	--	--	--	
Benfen (benfluralin)	1861-40-1	7.3E+00	n >S	7.3E+02	n >S	--	--	--	--	2.2E+01	n >S	2.2E+03	n >S	--	--	--	--	
Benomyl	17804-35-2	1.2E+00	n	1.2E+02	n >S	--	--	--	--	3.7E+00	n >S	3.7E+02	n >S	--	--	--	--	
Benzo-a-anthracene	56-55-3	9.1E-03	c	9.1E-01	c >S	3.0E+03	c >S	3.9E+02	c >S	2.0E-02	c >S	2.0E+00	c >S	5.0E+03	c >S	6.5E+02	c >S	
Benzaldehyde	100-52-7	2.4E+00	n	2.4E+02	n	--	--	--	--	7.3E+00	n	7.3E+02	n	--	--	--	--	
Benzene	71-43-2	5.0E-03	m	5.0E-01	m	1.8E+02	c	2.3E+01	c	5.0E-03	m	5.0E-01	m	3.0E+02	c	3.9E+01	c	
Benzenedicarbonitrile, 1,3-	626-17-5	1.5E-01	n	1.5E+01	n	--	--	--	--	4.4E-01	n	4.4E+01	n	--	--	--	--	
Benzenedicarboxylic acid, 1,2-disodecyl ester	26761-40-0	9.8E-01	n >S	9.8E+01	n >S	1.5E+05	n >S	1.9E+04	n >S	2.9E+00	n >S	2.9E+02	n >S	2.0E+05	n >S	2.6E+04	n >S	
Benzenethiol	108-98-5	2.4E-02	n	2.4E+00	n	--	--	--	--	7.3E-02	n	7.3E+00	n	--	--	--	--	
Benzydine	92-87-5	4.0E-06	c	4.0E-04	c	5.0E+00	c	8.4E-01	c	8.9E-06	c	8.9E-04	c	8.4E+00	c	1.4E+00	c	
Benzo-a-pyrene	50-32-8	2.0E-04	m	2.0E-02	m >S	2.9E+01	n >S	3.8E+00	n >S	2.0E-04	m	2.0E-02	m >S	4.1E+01	n >S	5.3E+00	n >S	
Benzo-b-fluoranthene	205-99-2	9.1E-03	c >S	9.1E-01	c >S	2.4E+03	c >S	3.1E+02	c >S	2.0E-02	c >S	2.0E+00	c >S	4.0E+03	c >S	5.2E+02	c >S	
Benzo-e-pyrene	192-97-2	7.3E-01	n >S	7.3E+01	n >S	--	--	--	--	2.2E+00	n >S	2.2E+02	n >S	--	--	--	--	
Benzo-g,h,i-perylene	191-24-2	7.3E-01	n >S	7.3E+01	n >S	--	--	--	--	2.2E+00	n >S	2.2E+02	n >S	--	--	--	--	
Benzoic acid	65-85-0	9.8E+01	n	9.8E+03	n >S	--	--	--	--	2.9E+02	n	2.9E+04	n >S	--	--	--	--	
Benzo-i-fluoranthene	205-82-3	9.1E-03	c >S	9.1E-01	c >S	1.5E+03	c >S	2.0E+02	c >S	2.0E-02	c >S	2.0E+00	c >S	2.6E+03	c >S	3.3E+02	c >S	
Benzo-k-fluoranthene	207-08-9	9.1E-02	c >S	9.1E+00	c >S	1.4E+05	c >S	1.8E+04	c >S	2.0E-01	c >S	2.0E+01	c >S	2.4E+05	c >S	3.1E+04	c >S	
Benzophenone	119-61-9	1.6E-01	n	1.6E+01	n	--	--	--	--	4.9E-01	n	4.9E+01	n >S	--	--	--	--	
Benzotrithloride	98-07-7	7.0E-05	c	7.0E-03	c	--	--	--	--	1.6E-04	c	1.6E-02	c	--	--	--	--	
Benzoyl peroxide	94-36-0	1.2E+00	n	1.2E+02	n >S	--	--	--	--	3.7E+00	n	3.7E+02	n >S	--	--	--	--	
Benzyl alcohol	100-51-6	2.4E+00	n	2.4E+02	n	--	--	--	--	7.3E+00	n	7.3E+02	n	--	--	--	--	
Benzyl chloride	100-44-7	5.4E-03	c	5.4E-01	c	1.0E+02	n	1.3E+01	n	1.2E-02	c	1.2E+00	c	1.4E+02	n	1.8E+01	n	
Benzyl dichloride	98-87-3	5.4E-03	c	5.4E-01	c	2.0E+02	n	2.6E+01	n	1.2E-02	c	1.2E+00	c	2.8E+02	n >S	3.6E+01	n	

Table 3

Tier 1 Groundwater PCLs - Residential and Commercial/Industrial¹

Last Revised: May 10, 2023

Chemical of Concern	CAS	Residential								Commercial/Industrial								Secondary MCL ⁵ (mg/L)
		GW _{Ing} ² (mg/L)	note ⁴	GW _{Class3} ³ (mg/L)	note ⁴	Air _{GW_{Inh-V}} 0.5 acre source area (mg/L)	note ⁴	Air _{GW_{Inh-V}} 30 acre source area (mg/L)	note ⁴	GW _{Ing} ² (mg/L)	note ⁴	GW _{Class3} ³ (mg/L)	note ⁴	Air _{GW_{Inh-V}} 0.5 acre source area (mg/L)	note ⁴	Air _{GW_{Inh-V}} 30 acre source area (mg/L)	note ⁴	
Dinitrobenzene, 1,4-	100-25-4	2.4E-03	n	2.4E-01	n	--	--	--	--	7.3E-03	n	7.3E-01	n	--	--	--	--	
Dinitrophenol, 2,4-	51-28-5	4.9E-02	n	4.9E+00	n	--	--	--	--	1.5E-01	n	1.5E+01	n	--	--	--	--	
Dinitrophenol, 2,5-	329-71-5	4.9E-02	n	4.9E+00	n	--	--	--	--	1.5E-01	n	1.5E+01	n	--	--	--	--	
Dinitrotoluene, 2,4-	121-14-2	1.3E-03	c	1.3E-01	c	--	--	--	--	3.0E-03	c	3.0E-01	c	--	--	--	--	
Dinitrotoluene, 2,6-	606-20-2	1.3E-03	c	1.3E-01	c	--	--	--	--	3.0E-03	c	3.0E-01	c	--	--	--	--	
Di-n-octyl phthalate	117-84-0	2.4E-01	n >S	2.4E+01	n >S	--	--	--	--	7.3E-01	n >S	7.3E+01	n >S	--	--	--	--	
Dinoseb	88-85-7	7.0E-03	m	7.0E-01	m	--	--	--	--	7.0E-03	m	7.0E-01	m	--	--	--	--	
Dioxane 1,4-	123-91-1	9.1E-03	c	9.1E-01	c	7.7E+03	c	1.0E+03	c	2.0E-02	c	2.0E+00	c	1.3E+04	c	1.7E+03	c	
Dioxin (as 2,3,7,8-TCDD toxicity equivalent quotients (TEQs))	1746-01-6	3.0E-08	m	3.0E-06	m	--	--	--	--	3.0E-08	m	3.0E-06	m	--	--	--	--	
Diphenyl ether	101-84-8	1.5E-01	n	1.5E+01	n >S	--	--	--	--	4.5E-01	n	4.5E+01	n >S	--	--	--	--	
Diphenylamine	122-39-4	6.1E-01	n	6.1E+01	n	--	--	--	--	1.8E+00	n	1.8E+02	n	--	--	--	--	
Diphenylhydrazine, 1,2-	122-66-7	1.1E-03	c	1.1E-01	c	3.8E+03	c >S	4.9E+02	c	2.6E-03	c	2.6E-01	c	6.4E+03	c >S	8.3E+02	c	
Dipropylene glycol	110-98-5	2.9E+00	n	2.9E+02	n	--	--	--	--	8.8E+00	n	8.8E+02	n	--	--	--	--	
Diquat	85-00-7	2.0E-02	m	2.0E+00	m	--	--	--	--	2.0E-02	m	2.0E+00	m	--	--	--	--	
Disodium iminodiacetate (iminodiacetic acid, disodium salt)	142-73-4	2.4E-01	n	2.4E+01	n	--	--	--	--	7.3E-01	n	7.3E+01	n	--	--	--	--	
Disulfoton	298-04-4	9.8E-04	n	9.8E-02	n	--	--	--	--	2.9E-03	n	2.9E-01	n	--	--	--	--	
Diuron	330-54-1	4.9E-02	n	4.9E+00	n	--	--	--	--	1.5E-01	n	1.5E+01	n	--	--	--	--	
Docexylphenol, 4-	104-43-8	1.2E+00	n >S	1.2E+02	n >S	--	--	--	--	3.7E+00	n >S	3.7E+02	n >S	--	--	--	--	
Endosulfan	115-29-7	1.5E-01	n	1.5E+01	n >S	--	--	--	--	4.4E-01	n	4.4E+01	n >S	--	--	--	--	
Endosulfan I	959-98-8	4.9E-02	n	4.9E+00	n >S	--	--	--	--	1.5E-01	n	1.5E+01	n >S	--	--	--	--	
Endosulfan II	33213-65-9	1.5E-01	n	1.5E+01	n >S	--	--	--	--	4.4E-01	n	4.4E+01	n >S	--	--	--	--	
Endosulfan sulfate	1031-07-8	1.5E-01	n >S	1.5E+01	n >S	--	--	--	--	4.4E-01	n >S	4.4E+01	n >S	--	--	--	--	
Endothall	145-73-3	1.0E-01	m	1.0E+01	m	--	--	--	--	1.0E-01	m	1.0E+01	m	--	--	--	--	
Endrin	72-20-8	2.0E-03	m	2.0E-01	m	--	--	--	--	2.0E-03	m	2.0E-01	m	--	--	--	--	
Endrin aldehyde	7421-93-4	7.3E-03	n	7.3E-01	n >S	--	--	--	--	2.2E-02	n >S	2.2E+00	n >S	--	--	--	--	
Endrin ketone	53494-70-5	7.3E-03	n	7.3E-01	n	--	--	--	--	2.2E-02	n	2.2E+00	n >S	--	--	--	--	
Epiclorohydrin	106-89-8	9.2E-02	c	9.2E+00	c	7.1E+02	n	9.1E+01	n	2.1E-01	c	2.1E+01	c	9.9E+02	n	1.3E+02	n	
EPN (o-ethyl o-(4-nitrophenyl)phenylphosphonothioate)	2104-64-5	2.4E-04	n	2.4E-02	n	--	--	--	--	7.3E-04	n	7.3E-02	n	--	--	--	--	
Esfenvalerate	66230-04-4	4.9E-02	n >S	4.9E+00	n >S	--	--	--	--	1.5E-01	n >S	1.5E+01	n >S	--	--	--	--	
Ethalfuralin (sonolan)	55283-68-6	1.0E-02	c	1.0E+00	c	--	--	--	--	2.3E-02	c	2.3E+00	c	--	--	--	--	
Ethanol	64-17-5	8.1E+02	n	8.1E+04	n	--	--	--	--	2.4E+03	n	2.4E+05	n	--	--	--	--	
Ethanol, 2-amino-	141-43-5	4.2E-02	n	4.2E+00	n	4.2E+05	n	5.5E+04	n	1.2E-01	n	1.2E+01	n	5.9E+05	n	7.7E+04	n	
Ethanol, 2-(2-aminoethoxy)-	929-06-6	1.2E-02	n	1.2E+00	n	--	--	--	--	3.7E-02	n	3.7E+00	n	--	--	--	--	
Ethanol, 2-(2-ethoxyethoxy)-	111-90-0	4.9E+01	n	4.9E+03	n	--	--	--	--	1.5E+02	n	1.5E+04	n	--	--	--	--	
Ethanol, 2-(2-methylamino)-	109-83-1	3.9E-01	n	3.9E+01	n	1.0E+06	n	1.3E+05	n	1.2E+00	n	1.2E+02	n	1.0E+06	n >S	1.8E+05	n	
Ethion	563-12-2	1.2E-02	n	1.2E+00	n >S	--	--	--	--	3.7E-02	n	3.7E+00	n >S	--	--	--	--	
Ethoprop	13194-48-4	2.4E-03	n	2.4E-01	n	--	--	--	--	7.3E-03	n	7.3E-01	n	--	--	--	--	
Ethoxy ethanol, 2-	110-80-5	2.2E+00	n	2.2E+02	n >S	1.0E+06	n >S	4.3E+05	n >S	6.6E+00	n	6.6E+02	n >S	1.0E+06	n >S	6.1E+05	n >S	
Ethyl acetate	141-78-6	2.2E+01	n	2.2E+03	n	5.3E+04	n	6.9E+03	n	6.6E+01	n	6.6E+03	n	7.4E+04	n	9.6E+03	n	
Ethyl acrylate	140-88-5	1.9E-02	c	1.9E+00	c	1.1E+03	n	1.4E+02	n	4.3E-02	c	4.3E+00	c	1.5E+03	n	2.0E+02	n	
Ethyl benzene	100-41-4	7.0E-01	m	7.0E+01	m	3.0E+04	n >S	3.8E+03	n >S	7.0E-01	m	7.0E+01	m	4.2E+04	n >S	5.4E+03	n >S	
Ethyl dipropylthiocarbamate, S-	759-94-4	6.1E-01	n	6.1E+01	n	--	--	--	--	1.8E+00	n	1.8E+02	n	--	--	--	--	
Ethyl ether	60-29-7	4.9E+00	n	4.9E+02	n	--	--	--	--	1.5E+01	n	1.5E+03	n	--	--	--	--	
Ethyl methacrylate	97-63-2	2.2E+00	n	2.2E+02	n	5.7E+04	n >S	7.4E+03	n	6.6E+00	n	6.6E+02	n	8.0E+04	n >S	1.0E+04	n	
Ethyl methanesulfonate	62-50-0	9.2E-03	c	9.2E-01	c	1.9E+04	c	2.4E+03	c	2.1E-02	c	2.1E+00	c	3.1E+04	c	4.0E+03	c	
Ethyl tert-butyl ether (2-ethyl-2-ethoxypropane)	637-92-3	2.4E-02	n	2.4E+00	n	1.1E+04	n >S	1.4E+03	n	7.3E-02	n	7.3E+00	n	1.5E+04	n >S	2.0E+03	n	
Ethyl-1-hexanol, 2-	104-76-7	3.7E+00	n	3.7E+02	n	--	--	--	--	1.1E+01	n	1.1E+03	n >S	--	--	--	--	
Ethyl-2-hexenal, 2-	645-62-5	3.7E+00	n	3.7E+02	n	--	--	--	--	1.1E+01	n	1.1E+03	n >S	--	--	--	--	
Ethyl-2-methyl benzene, 1-	611-14-3	1.2E+00	n	1.2E+02	n >S	9.2E+03	n >S	1.2E+03	n >S	3.7E+00	n	3.7E+02	n >S	1.3E+04	n >S	1.7E+03	n >S	
Ethyl-4-methyl benzene, 1-	622-96-8	1.2E+00	n	1.2E+02	n >S	7.0E+03	n >S	9.0E+02	n >S	3.7E+00	n	3.7E+02	n >S	9.7E+03	n >S	1.3E+03	n >S	
Ethylene*	74-85-1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Ethylene dibromide (dibromoethane, 1,2-)	106-93-4	5.0E-05	m	5.0E-03	m	7.6E+01	c	9.8E+00	c	5.0E-05	m	5.0E-03	m	1.3E+02	c	1.7E+01	c	
Ethylene glycol	107-21-1	4.9E+01	n	4.9E+03	n	--	--	--	--	1.5E+02	n	1.5E+04	n	--	--	--	--	
Ethylene oxide	75-21-8	8.9E-04	c	8.9E-02	c	3.0E+03	c	3.9E+02	c	2.0E-03	c	2.0E-01	c	5.0E+03	c	6.5E+02	c	
Ethylene thiourea	96-45-7	2.0E-03	n	2.0E-01	n	--	--	--	--	5.8E-03	n	5.8E-01	n	--	--	--	--	
Ethylenediamine	107-15-3	2.2E+00	n	2.2E+02	n	--	--	--	--	6.6E+00	n	6.6E+02	n	--	--	--	--	
Ethylenimine	151-56-4	1.4E-05	c	1.4E-03	c	1.4E+01	c	1.8E+00	c	3.1E-05	c	3.1E-03	c	2.3E+01	c	3.0E+00	c	
Ethylhexyl acrylate, 2-	103-11-7	1.9E-02	c	1.9E+00	c	--	--	--	--	4.3E-02	c	4.3E+00	c	--	--	--	--	
Famphur	52-85-7	7.3E-04	n	7.3E-02	n	--	--	--	--	2.2E-03	n	2.2E-01	n	--	--	--	--	
Fensulfthion	115-90-2	2.4E-02	n	2.4E+00	n	--	--	--	--	7.3E-02	n	7.3E+00	n	--	--	--	--	
Fenthion	55-38-9	1.7E-03	n	1.7E-01	n	--	--	--	--	5.1E-03	n	5.1E-01	n	--	--	--	--	
Fenuron	101-42-8	1.7E+00	n	1.7E+02	n	--	--	--	--	5.1E+00	n	5.1E+02	n	--	--	--	--	
Fluoranthene	206-44-0	9.8E-01	n >S	9.8E+01	n >S	--	--	--	--	2.9E+00	n >S	2.9E+02	n >S	--	--	--	--	
Fluorene	86-73-7	9.8E-01	n	9.8E+01	n >S	--	--	--	--	2.9E+00	n >S	2.9E+02	n >S	--	--	--	--	
Fluorine (soluble fluoride)	7782-41-4	4.0E+00	m	4.0E+02	m	--	--	--	--	4.0E+00	m	4.0E+02	m	--	--	--	2.0E+00	
Fluorochloridone	61213-25-0	1.8E-01	n	1.8E+01	n	--	--	--	--	5.5E-01	n	5.5E+01	n	--	--	--	--	
Fonofos	944-22-9	4.9E-02	n	4.9E+00	n	--	--	--	--	1.5E-01	n	1.5E+01	n >S	--	--	--	--	

**Table 3
Tier 1 Groundwater PCLs - Residential and Commercial/Industrial¹**

Last Revised: May 10, 2023

Chemical of Concern	CAS	Residential								Commercial/Industrial								Secondary MCL ⁵ (mg/L)
		GW _{Ing} ² (mg/L)	note ⁴	GW _{Class3} ³ (mg/L)	note ⁴	Air GW _{Inh-V} 0.5 acre source area (mg/L)	note ⁴	Air GW _{Inh-V} 30 acre source area (mg/L)	note ⁴	GW _{Ing} ² (mg/L)	note ⁴	GW _{Class3} ³ (mg/L)	note ⁴	Air GW _{Inh-V} 0.5 acre source area (mg/L)	note ⁴	Air GW _{Inh-V} 30 acre source area (mg/L)	note ⁴	
Nitrosodiphenylamine	86-30-6	1.9E-01	c	1.9E+01	c	--	--	--	--	4.2E-01	c	4.2E+01	c >S	--	--	--	--	
Nitroso-methyl-ethyl-amine, n-	10595-95-6	4.1E-05	c	4.1E-03	c	--	--	--	--	9.3E-05	c	9.3E-03	c	--	--	--	--	
Nitrosomorpholine, N-	59-89-2	1.4E-04	c	1.4E-02	c	2.7E+02	c	3.6E+01	c	3.1E-04	c	3.1E-02	c	4.6E+02	c	6.0E+01	c	
Nitroso-n-ethylurea, n-	759-73-9	6.5E-06	c	6.5E-04	c	--	--	--	--	1.5E-05	c	1.5E-03	c	--	--	--	--	
Nitrosopiperidine, N-	100-75-4	9.7E-05	c	9.7E-03	c	1.6E+02	c	2.1E+01	c	2.2E-04	c	2.2E-02	c	2.8E+02	c	3.6E+01	c	
Nitrosopyrrolidine, n-	930-55-2	4.3E-04	c	4.3E-02	c	9.6E+02	c	1.2E+02	c	9.7E-04	c	9.7E-02	c	1.6E+03	c	2.1E+02	c	
Nitrotoluene, m-	99-08-1	2.4E-01	n	2.4E+01	n	--	--	--	--	7.3E-01	n	7.3E+01	n	--	--	--	--	
Nitrotoluene, o-	88-72-2	4.1E-03	c	4.1E-01	c	--	--	--	--	9.3E-03	c	9.3E-01	c	--	--	--	--	
Nitrotoluene, p-	99-99-0	5.7E-02	c	5.7E+00	c	--	--	--	--	1.3E-01	c	1.3E+01	c	--	--	--	--	
Nonachlor, cis-	5103-73-1	2.6E-03	c	2.6E-01	c >S	7.7E+02	c >S	9.9E+01	c >S	5.8E-03	c	5.8E-01	c >S	1.3E+03	c >S	1.7E+02	c >S	
Nonachlor, trans-	39765-80-5	2.6E-03	c	2.6E-01	c >S	7.7E+02	c >S	9.9E+01	c >S	5.8E-03	c	5.8E-01	c >S	1.3E+03	c >S	1.7E+02	c >S	
Nonanal	124-19-6	4.9E+00	n	4.9E+02	n >S	--	--	--	--	1.5E+01	n	1.5E+03	n >S	--	--	--	--	
Nonene, 1-n	124-11-8	2.4E+00	n >S	2.4E+02	n >S	--	--	--	--	7.3E+00	n >S	7.3E+02	n >S	--	--	--	--	
Nonylphenol, 4-n-	104-40-5	2.4E+00	n >S	2.4E+02	n >S	--	--	--	--	7.3E+00	n >S	7.3E+02	n >S	--	--	--	--	
Nonylphenol ethoxylate	9016-45-9	2.4E+00	n >S	2.4E+02	n >S	--	--	--	--	7.3E+00	n >S	7.3E+02	n >S	--	--	--	--	
Octamethylpyrophosphoramide	152-16-9	4.9E-02	n	4.9E+00	n	--	--	--	--	1.5E-01	n	1.5E+01	n	--	--	--	--	
Octanone	106-68-3	1.5E+00	n	1.5E+02	n	1.0E+06	n >S	6.2E+05	n >S	4.4E+00	n	4.4E+02	n	1.0E+06	n >S	8.7E+05	n >S	
Oxamyl	23135-22-0	2.0E-01	m	2.0E+01	m	--	--	--	--	2.0E-01	m	2.0E+01	m	--	--	--	--	
Oxychlorodane	27304-13-8	2.6E-03	c	2.6E-01	c >S	7.7E+02	c >S	9.9E+01	c >S	5.8E-03	c	5.8E-01	c >S	1.3E+03	c >S	1.7E+02	c >S	
Paraquat	1910-42-5	1.1E-01	n	1.1E+01	n	--	--	--	--	3.3E-01	n	3.3E+01	n	--	--	--	--	
Parathion (ethyl parathion)	56-38-2	1.5E-01	n	1.5E+01	n >S	--	--	--	--	4.4E-01	n	4.4E+01	n >S	--	--	--	--	
Pebulate	1114-71-2	1.2E+00	n	1.2E+02	n >S	--	--	--	--	3.7E+00	n	3.7E+02	n >S	--	--	--	--	
Pendimethalin	40487-42-1	9.8E-01	n >S	9.8E+01	n >S	--	--	--	--	2.9E+00	n >S	2.9E+02	n >S	--	--	--	--	
Pentachlorobenzene	608-93-5	2.0E-02	n	2.0E+00	n >S	--	--	--	--	5.8E-02	n	5.8E+00	n >S	--	--	--	--	
Pentachloroethane	76-01-7	1.0E-02	c	1.0E+00	c	3.0E+02	c	3.8E+01	c	2.3E-02	c	2.3E+00	c	5.0E+02	c	6.4E+01	c	
Pentachloronitrobenzene	82-68-8	3.5E-03	c	3.5E-01	c >S	--	--	--	--	7.9E-03	c	7.9E-01	c >S	--	--	--	--	
Pentachlorophenol	87-86-5	1.0E-03	m	1.0E-01	m	--	--	--	--	1.0E-03	m	1.0E-01	m	--	--	--	--	
Pentadiene, 1,3-cis-	1574-41-0	1.5E+00	n	1.5E+02	n	4.3E+04	n >S	5.6E+03	n >S	4.4E+00	n	4.4E+02	n	6.0E+04	n >S	7.8E+03	n >S	
Pentadiene, 1,3-trans-	2004-70-8	1.5E+00	n	1.5E+02	n	7.6E+04	n >S	9.8E+03	n >S	4.4E+00	n	4.4E+02	n	1.1E+05	n >S	1.4E+04	n >S	
Pentaerythritol tetranitrate (PETN)	78-11-5	4.9E-02	n	4.9E+00	n	--	--	--	--	1.5E-01	n	1.5E+01	n	--	--	--	--	
Pentane	109-66-0	1.5E+00	n	1.5E+02	n >S	3.4E+02	n >S	4.4E+01	n >S	4.4E+00	n	4.4E+02	n >S	4.8E+02	n >S	6.2E+01	n >S	
Pentane, 2-methyl-	107-83-5	1.5E+00	n	1.5E+02	n >S	1.7E+03	n >S	2.3E+02	n >S	4.4E+00	n	4.4E+02	n >S	2.4E+03	n >S	3.2E+02	n >S	
Pentane, 3-methyl-	96-14-0	1.5E+00	n	1.5E+02	n >S	2.2E+03	n >S	2.9E+02	n >S	4.4E+00	n	4.4E+02	n >S	3.1E+03	n >S	4.0E+02	n >S	
Pentanediol, 1,5-	111-29-5	1.2E+02	n	1.2E+04	n	1.0E+06	n >S	1.0E+06	n >S	3.7E+02	n	3.7E+04	n	1.0E+06	n >S	1.0E+06	n >S	
Pentanol, 1-	71-41-0	8.1E-01	n	8.1E+01	n	--	--	--	--	2.4E+00	n	2.4E+02	n	--	--	--	--	
Pentanol, 4-methyl-2-	108-11-2	6.4E-01	n	6.4E+01	n	--	--	--	--	1.9E+00	n	1.9E+02	n	--	--	--	--	
Pentanone, 2-	107-87-9	9.8E-01	n	9.8E+01	n	--	--	--	--	2.9E+00	n	2.9E+02	n	--	--	--	--	
Pentene, 2-	109-68-2	1.5E+00	n	1.5E+02	n	1.4E+04	n >S	1.8E+03	n >S	4.4E+00	n	4.4E+02	n >S	2.0E+04	n >S	2.5E+03	n >S	
Pentvne, 1-	627-19-0	1.5E+00	n	1.5E+02	n	7.2E+04	n >S	9.3E+03	n >S	4.4E+00	n	4.4E+02	n >S	1.0E+05	n >S	1.3E+04	n >S	
Perchlorate	14797-73-0	1.7E-02	n	1.7E+00	n	--	--	--	--	5.1E-02	n	5.1E+00	n	--	--	--	--	
Perfluorooctane sulfonic acid (1-Octanesulfonic acid, heptaecafluoro-1-) [PFOS]	1763-23-1	5.6E-04	n	5.6E-02	n	1.8E+03	n >S	2.4E+02	n	1.7E-03	n	1.7E-01	n	2.6E+03	n >S	3.4E+02	n	
Perfluoroundecanoic acid (Undecanoic acid, uncosafluoro-) [PFUnDa]	2058-94-8	2.9E-04	n	2.9E-02	n	--	--	--	--	8.8E-04	n	8.8E-02	n	--	--	--	--	
Perfluoropentanoic acid (Pentanoic acid, nonafluoro-) [PFPeA]	2706-90-3	1.2E-02	n	1.2E+00	n	--	--	--	--	3.7E-02	n	3.7E+00	n	--	--	--	--	
Perfluorohexanoic acid (Hexanoic acid, undecafluoro-) [PFHxA]	307-24-4	1.2E-02	n	1.2E+00	n	--	--	--	--	3.7E-02	n	3.7E+00	n	--	--	--	--	
Perfluorododecanoic acid (Dodecanoic acid, tricosafluoro-) [PFDoA]	307-55-1	2.9E-04	n	2.9E-02	n	5.5E+02	n >S	7.2E+01	n >S	8.8E-04	n	8.8E-02	n >S	7.8E+02	n >S	1.0E+02	n >S	
Perfluorooctanoic acid (Octanoic acid, pentadecafluoro-) [PFOA]	335-67-1	2.9E-04	n	2.9E-02	n	9.0E+01	n	1.2E+01	n	8.8E-04	n	8.8E-02	n	1.3E+02	n	1.6E+01	n	
Perfluorodecanoic acid (Decanoic acid, nonadecafluoro-) [PFDA]	335-76-2	3.7E-04	n	3.7E-02	n	1.3E+03	n >S	1.6E+02	n >S	1.1E-03	n	1.1E-01	n	1.8E+03	n >S	2.3E+02	n >S	
Perfluorodecane sulfonic acid (1-Decanesulfonic acid, heneicosafluoro-) [PFDS]	335-77-3	2.9E-04	n	2.9E-02	n	--	--	--	--	8.8E-04	n	8.8E-02	n >S	--	--	--	--	
Perfluorohexane sulfonic acid (1-Hexanesulfonic acid, tridecafluoro-) [PFHxS]	355-46-4	9.3E-05	n	9.3E-03	n	2.9E+02	n	5.7E+01	n	2.8E-04	n	2.8E-02	n	4.0E+02	n >S	7.9E+01	n	
Perfluorobutyric acid (Butanoic acid, heptafluoro-) [PFBA]	375-22-4	2.4E-02	n	2.4E+00	n	3.0E+05	n	2.5E+05	n	7.3E-02	n	7.3E+00	n	4.2E+05	n	3.5E+05	n	
Perfluorobutane sulfonic acid (1-Butanesulfonic acid, nonafluoro-) [PFBS]	375-73-5	3.4E-02	n	3.4E+00	n	5.4E+05	n >S	4.7E+05	n >S	1.0E-01	n	1.0E+01	n	7.6E+05	n >S	6.5E+05	n >S	
Perfluoroheptanoic acid (Heptanoic acid, tridecafluoro-) [PFHpA]	375-85-9	5.6E-04	n	5.6E-02	n	--	--	--	--	1.7E-03	n	1.7E-01	n	--	--	--	--	
Perfluorononanoic acid (Nonanoic acid, heptaecafluoro-) [PFNA]	375-95-1	2.9E-04	n	2.9E-02	n	6.5E+02	n >S	8.4E+01	n >S	8.8E-04	n	8.8E-02	n	9.1E+02	n >S	1.2E+02	n >S	
Perfluorotetradecanoic acid (Tetradecanoic acid, heptacosafuoro-) [PFTeDA]	376-06-7	2.9E-04	n	2.9E-02	n >S	--	--	--	--	8.8E-04	n	8.8E-02	n >S	--	--	--	--	
Perfluorotridecanoic acid (Tridecanoic acid, pentacosafuoro-) [PFTrDA]	72629-94-8	2.9E-04	n	2.9E-02	n >S	--	--	--	--	8.8E-04	n	8.8E-02	n >S	--	--	--	--	

Table 3
Tier 1 Groundwater PCLs - Residential and Commercial/Industrial¹

Last Revised: May 10, 2023

Chemical of Concern	CAS	Residential								Commercial/Industrial								Secondary MCL ⁵ (mg/L)
		GW _{Ing} ² (mg/L)		GW _{Class3} ³ (mg/L)		Air GW _{Inh-V} 0.5 acre source area (mg/L)		Air GW _{Inh-V} 30 acre source area (mg/L)		GW _{Ing} ² (mg/L)		GW _{Class3} ³ (mg/L)		Air GW _{Inh-V} 0.5 acre source area (mg/L)		Air GW _{Inh-V} 30 acre source area (mg/L)		
		note ⁴	note ⁴	note ⁴	note ⁴	note ⁴	note ⁴	note ⁴	note ⁴	note ⁴	note ⁴	note ⁴	note ⁴	note ⁴	note ⁴	note ⁴	note ⁴	
Terbufos	13071-79-9	6.1E-04	n	6.1E-02	n	—	—	—	—	1.8E-03	n	1.8E-01	n	—	—	—	—	—
Tert-amyl ethyl ether (TAEE)	919-94-8	9.8E-01	n	9.8E+01	n	—	—	—	—	2.9E+00	n	2.9E+02	n	—	—	—	—	—
Tert-amyl-methyl ether (TAME)	994-05-8	9.8E-01	n	9.8E+01	n	—	—	—	—	2.9E+00	n	2.9E+02	n	—	—	—	—	—
Tert-butyl alcohol (2-methyl-2-propanol)	75-65-0	2.2E+00	n	2.2E+02	n	—	—	—	—	6.6E+00	n	6.6E+02	n	—	—	—	—	—
Tetrachlorobenzene, 1,2,3,4-	634-66-2	7.3E-03	n	7.3E-01	n	—	—	—	—	2.2E-02	n	2.2E+00	n	—	—	—	—	—
Tetrachlorobenzene, 1,2,3,5-	634-90-2	7.3E-03	n	7.3E-01	n	—	—	—	—	2.2E-02	n	2.2E+00	n	—	—	—	—	—
Tetrachlorobenzene, 1,2,4,5-	95-94-3	7.3E-03	n	7.3E-01	n >S	—	—	—	—	2.2E-02	n	2.2E+00	n >S	—	—	—	—	—
Tetrachloroethane, 1,1,1,2-	630-20-6	3.5E-02	c	3.5E+00	c	1.1E+02	c	1.4E+01	c	7.9E-02	c	7.9E+00	c	1.9E+02	c	2.4E+01	c	—
Tetrachloroethane, 1,1,1,2-	79-34-5	4.6E-03	c	4.6E-01	c	—	—	—	—	1.0E-02	c	1.0E+00	c	—	—	—	—	—
Tetrachloroethylene [PCE]	127-18-4	5.0E-03	m	5.0E-01	m	5.0E+02	c >S	6.4E+01	c	5.0E-03	m	5.0E-01	m	8.4E+02	c >S	1.1E+02	c	—
Tetrachlorophenol, 2,3,4,5-	4901-51-3	7.3E-01	n	7.3E+01	n	—	—	—	—	2.2E+00	n	2.2E+02	n	—	—	—	—	—
Tetrachlorophenol, 2,3,4,6-	58-90-2	7.3E-01	n	7.3E+01	n	—	—	—	—	2.2E+00	n	2.2E+02	n >S	—	—	—	—	—
Tetrachlorophenol, 2,3,5,6-	935-95-5	7.3E-01	n	7.3E+01	n >S	—	—	—	—	2.2E+00	n >S	2.2E+02	n >S	—	—	—	—	—
Tetrachlorvinphos (Stirophos)	22248-79-9	1.0E+00	n	1.0E+02	n >S	—	—	—	—	3.1E+00	n	3.1E+02	n >S	—	—	—	—	—
Tetradifon	116-29-0	4.9E-01	n	4.9E+01	n >S	—	—	—	—	1.5E+00	n >S	1.5E+02	n >S	—	—	—	—	—
Tetraethyl dithiopyrophosphate (sulfotep)	3689-24-5	1.2E-02	n	1.2E+00	n	—	—	—	—	3.7E-02	n	3.7E+00	n	—	—	—	—	—
Tetraethyl lead	78-00-2	2.4E-06	n	2.4E-04	n	—	—	—	—	7.3E-06	n	7.3E-04	n	—	—	—	—	—
Tetraethyl pyrophosphate (TEPP)	107-49-3	2.7E-04	n	2.7E-02	n	—	—	—	—	8.0E-04	n	8.0E-02	n	—	—	—	—	—
Tetraethylene glycol	112-60-7	8.1E+00	n	8.1E+02	n	—	—	—	—	2.4E+01	n	2.4E+03	n	—	—	—	—	—
Tetrahydrofuran	109-99-9	1.2E-01	c	1.2E+01	c	2.2E+03	c	2.9E+02	c	2.7E-01	c	2.7E+01	c	3.7E+03	c	4.8E+02	c	—
Tetrahydropyran	142-68-7	1.2E-01	c	1.2E+01	c	2.6E+03	c	3.4E+02	c	2.7E-01	c	2.7E+01	c	4.4E+03	c	5.7E+02	c	—
Tetraoxadodecane, 2,5,8,11-	112-49-2	6.1E-01	n	6.1E+01	n	—	—	—	—	1.8E+00	n	1.8E+02	n	—	—	—	—	—

Table 3
Tier 1 Groundwater PCLs - Residential and Commercial/Industrial¹

Last Revised: May 10, 2023

Chemical of Concern	CAS	Residential								Commercial/Industrial								Secondary MCL ⁵ (mg/L)	
		GW _{Inh} ² (mg/L)		GW _{Class3} ³ (mg/L)		Air GW _{Inh-V} 0.5 acre source area (mg/L)		Air GW _{Inh-V} 30 acre source area (mg/L)		GW _{Inh} ² (mg/L)		GW _{Class3} ³ (mg/L)		Air GW _{Inh-V} 0.5 acre source area (mg/L)		Air GW _{Inh-V} 30 acre source area (mg/L)			
		note ⁴	note ⁴	note ⁴	note ⁴	note ⁴	note ⁴	note ⁴	note ⁴	note ⁴	note ⁴	note ⁴	note ⁴	note ⁴	note ⁴	note ⁴	note ⁴		
Thallium	7440-28-0	2.0E-03	m	2.0E-01	m	—	—	—	—	2.0E-03	m	2.0E-01	m	—	—	—	—	—	—
Thiofanox	39196-18-4	7.3E-03	n	7.3E-01	n	—	—	—	—	2.2E-02	n	2.2E+00	n	—	—	—	—	—	—
Thionazin	297-97-2	1.7E-03	n	1.7E-01	n	—	—	—	—	5.1E-03	n	5.1E-01	n	—	—	—	—	—	—
Thiophanate-methyl	23564-05-8	2.0E+00	n	2.0E+02	n >S	—	—	—	—	5.8E+00	n >S	5.8E+02	n >S	—	—	—	—	—	—
Thiram	137-26-8	1.2E-01	n	1.2E+01	n	—	—	—	—	3.7E-01	n	3.7E+01	n >S	—	—	—	—	—	—
Tin	7440-31-5	1.5E+01	n >S	1.5E+03	n >S	—	—	—	—	4.4E+01	n >S	4.4E+03	n >S	—	—	—	—	—	—
Titanium	7440-32-6	1.2E+02	n >S	1.2E+04	n >S	—	—	—	—	3.7E+02	n >S	3.7E+04	n >S	—	—	—	—	—	—
Toluene	108-88-3	1.0E+00	m	1.0E+02	m	6.4E+04	n >S	8.2E+03	n >S	1.0E+00	m	1.0E+02	m	8.9E+04	n >S	1.2E+04	n >S	—	—
Toluene diisocyanate, 2,4/2,6-	26471-62-5	—	—	—	—	1.8E+03	n	2.4E+02	n	—	—	—	—	2.6E+03	n	3.3E+02	n	—	—
Toluenediamine, 2,4-	95-80-7	2.9E-04	c	2.9E-02	c	—	—	—	—	6.4E-04	c	6.4E-02	c	—	—	—	—	—	—
Toluenediamine, 2,6-	823-40-5	7.3E-01	n	7.3E+01	n	—	—	—	—	2.2E+00	n	2.2E+02	n	—	—	—	—	—	—
Toluidine, o-	95-53-4	5.7E-02	c	5.7E+00	c	2.6E+03	c	3.4E+02	c	1.3E-01	c	1.3E+01	c	4.4E+03	c	5.7E+02	c	—	—
Toluidine, p-	106-49-0	3.0E-02	c	3.0E+00	c	—	—	—	—	6.8E-02	c	6.8E+00	c	—	—	—	—	—	—
Toxaphene	8001-35-2	3.0E-03	m	3.0E-01	m	1.8E+03	c >S	2.3E+02	c >S	3.0E-03	m	3.0E-01	m	3.0E+03	c >S	3.9E+02	c >S	—	—
TPH, TX1005, C6-C12	TPH-1005-1	9.8E-01	n	9.8E+01	n >S	1.8E+03	n >S	2.3E+02	n >S	2.9E+00	n	2.9E+02	n >S	2.5E+03	n >S	3.2E+02	n >S	—	—
TPH, TX1005, >C12-C28	TPH-1005-2	9.8E-01	n	9.8E+01	n >S	7.5E+03	n >S	9.7E+02	n >S	2.9E+00	n	2.9E+02	n >S	1.0E+04	n >S	1.4E+03	n >S	—	—
TPH, TX1005, >C12-C35	TPH-1005-3	9.8E-01	n	9.8E+01	n >S	7.5E+03	n >S	9.7E+02	n >S	2.9E+00	n	2.9E+02	n >S	1.0E+04	n >S	1.4E+03	n >S	—	—
TPH, TX1005, >C28-C35	TPH-1005-4	9.8E-01	n	9.8E+01	n >S	7.5E+03	n >S	9.7E+02	n >S	2.9E+00	n	2.9E+02	n >S	1.0E+04	n >S	1.4E+03	n >S	—	—
TP Silvex, 2,4,5-	93-72-1	5.0E-02	m	5.0E+00	m	—	—	—	—	5.0E-02	m	5.0E+00	m	—	—	—	—	—	—
Triadimenol	55219-65-3	7.3E-01	n	7.3E+01	n	—	—	—	—	2.2E+00	n	2.2E+02	n >S	—	—	—	—	—	—
Triallate	2303-17-5	3.2E-01	n	3.2E+01	n >S	—	—	—	—	9.5E-01	n	9.5E+01	n >S	—	—	—	—	—	—
Triaminotrinitrobenzene (TATB)	3058-38-6	7.3E-02	n	7.3E+00	n	—	—	—	—	2.2E-01	n	2.2E+01	n	—	—	—	—	—	—
Tributyltin oxide	56-35-9	7.3E-03	n	7.3E-01	n	—	—	—	—	2.2E-02	n	2.2E+00	n	—	—	—	—	—	—
Trichloro-1,2,2-trifluoroethane, 1,1,2-	76-13-1	7.3E+02	n >S	7.3E+04	n >S	1.5E+03	n >S	2.0E+02	n	2.2E+03	n >S	2.2E+05	n >S	2.1E+03	n >S	2.8E+02	n >S	—	—
Trichlorobenzene, 1,2,3-	87-61-6	7.3E-02	n	7.3E+00	n	1.3E+02	n >S	1.7E+01	n >S	2.2E-01	n	2.2E+01	n >S	1.9E+02	n >S	2.4E+01	n >S	—	—
Trichlorobenzene, 1,2,4-	120-82-1	7.0E-02	m	7.0E+00	m	1.6E+02	n >S	2.0E+01	n	7.0E-02	m	7.0E+00	m	2.2E+02	n >S	2.8E+01	n	—	—
Trichlorobenzene, 1,3,5-	108-70-3	7.3E-02	n	7.3E+00	n	1.0E+02	n >S	1.3E+01	n	2.2E-01	n	2.2E+01	n >S	1.4E+02	n >S	1.8E+01	n >S	—	—
Trichloroethane, 1,1,1-	71-55-6	2.0E-01	m	2.0E+01	m	4.1E+04	n >S	5.2E+03	n >S	2.0E-01	m	2.0E+01	m	5.7E+04	n >S	7.3E+03	n >S	—	—
Trichloroethane, 1,1,2-	79-00-5	5.0E-03	m	5.0E-01	m	8.0E+01	c	1.0E+01	c	5.0E-03	m	5.0E-01	m	1.3E+02	c	1.7E+01	c	—	—
Trichloroethylene [TCE]	79-01-6	5.0E-03	m	5.0E-01	m	2.4E+01	n	3.1E+00	n	5.0E-03	m	5.0E-01	m	3.3E+01	n	4.3E+00	n	—	—
Trichlorofluoromethane	75-69-4	7.3E+00	n	7.3E+02	n	—	—	—	—	2.2E+01	n	2.2E+03	n >S	—	—	—	—	—	—
Trichloronate	327-98-0	7.3E-02	n	7.3E+00	n >S	—	—	—	—	2.2E-01	n	2.2E+01	n >S	—	—	—	—	—	—
Trichlorophenol, 2,3,4-	15950-66-0	2.4E+00	n	2.4E+02	n	—	—	—	—	7.3E+00	n	7.3E+02	n	—	—	—	—	—	—
Trichlorophenol, 2,3,5-	933-78-8	2.4E+00	n	2.4E+02	n	—	—	—	—	7.3E+00	n	7.3E+02	n	—	—	—	—	—	—
Trichlorophenol, 2,3,6-	933-75-5	2.4E+00	n	2.4E+02	n >S	—	—	—	—	7.3E+00	n	7.3E+02	n >S	—	—	—	—	—	—
Trichlorophenol, 2,4,5-	95-95-4	2.4E+00	n	2.4E+02	n	—	—	—	—	7.3E+00	n	7.3E+02	n	—	—	—	—	—	—
Trichlorophenol, 2,4,6-	88-06-2	2.4E-02	n	2.4E+00	n	4.9E+04	c >S	6.4E+03	c >S	7.3E-02	n	7.3E+00	n	8.3E+04	c >S	1.1E+04	c >S	—	—
Trichlorophenol, 3,4,5-	609-19-8	2.4E+00	n	2.4E+02	n	—	—	—	—	7.3E+00	n	7.3E+02	n	—	—	—	—	—	—

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Tier 1 Groundwater PCLs - Residential and Commercial/Industrial¹

Last Revised: May 10, 2023

Chemical of Concern	CAS	Residential								Commercial/Industrial								Secondary MCL ⁵ (mg/L)	
		GW _{Inq} ² (mg/L)		GW _{Class3} ³ (mg/L)		Air _{GW_{Inh-V}} 0.5 acre source area (mg/L)		Air _{GW_{Inh-V}} 30 acre source area (mg/L)		GW _{Inq} ² (mg/L)		GW _{Class3} ³ (mg/L)		Air _{GW_{Inh-V}} 0.5 acre source area (mg/L)		Air _{GW_{Inh-V}} 30 acre source area (mg/L)			
		note ⁴	note ⁴	note ⁴	note ⁴	note ⁴	note ⁴	note ⁴	note ⁴	note ⁴	note ⁴	note ⁴	note ⁴	note ⁴	note ⁴	note ⁴	note ⁴		
Trichlorophenoxyacetic acid, 2,4,5-	93-76-5	2.4E-01	n	2.4E+01	n	—	—	—	—	7.3E-01	n	7.3E+01	n	—	—	—	—	—	—
Trichloropropane, 1,1,2-	598-77-6	1.2E-01	n	1.2E+01	n	2.7E+00	n	3.5E-01	n	3.7E-01	n	3.7E+01	n	3.8E+00	n	4.9E-01	n	—	—
Trichloropropane, 1,2,3-	96-18-4	3.0E-05	c	3.0E-03	c	3.2E+01	n	4.2E+00	n	6.8E-05	c	6.8E-03	c	4.5E+01	n	5.8E+00	n	—	—
Triethanolamine	102-71-6	4.9E+00	n	4.9E+02	n	1.0E+06	n	1.0E+06	n	1.5E+01	n	1.5E+03	n	1.0E+06	n	1.0E+06	n	—	—
Triethylamine	121-44-8	—	—	—	—	6.3E+02	n	8.1E+01	n	—	—	—	—	8.8E+02	n	1.1E+02	n	—	—
Triethylene glycol	112-27-6	4.9E+01	n	4.9E+03	n	—	—	—	—	1.5E+02	n	1.5E+04	n	—	—	—	—	—	—
Triethylphosphorothioate, O, O, O-	126-68-1	2.0E-04	n	2.0E-02	n	—	—	—	—	6.1E-04	n	6.1E-02	n	—	—	—	—	—	—
Trifluralin	1582-09-8	1.2E-01	c	1.2E+01	c >S	—	—	—	—	2.7E-01	c	2.7E+01	c >S	—	—	—	—	—	—
Trimethylamine	75-50-3	—	—	—	—	1.7E+03	n	2.2E+02	n	—	—	—	—	2.3E+03	n	3.0E+02	n	—	—
Trimethylbenzene, 1,2,3-	526-73-8	8.3E-01	n	8.3E+01	n >S	5.6E+03	n >S	7.3E+02	n >S	2.5E+00	n	2.5E+02	n >S	7.9E+03	n >S	1.0E+03	n >S	—	—
Trimethylbenzene, 1,2,4-	95-63-6	8.3E-01	n	8.3E+01	n >S	4.9E+03	n >S	6.3E+02	n >S	2.5E+00	n	2.5E+02	n >S	6.8E+03	n >S	8.8E+02	n >S	—	—
Trimethylbenzene, 1,3,5-	108-67-8	8.3E-01	n	8.3E+01	n >S	3.8E+03	n >S	4.9E+02	n >S	2.5E+00	n	2.5E+02	n >S	5.3E+03	n >S	6.8E+02	n >S	—	—
Trinitrobenzene, 1,3,5-	99-35-4	7.3E-01	n	7.3E+01	n	—	—	—	—	2.2E+00	n	2.2E+02	n	—	—	—	—	—	—
Trinitrophenylmethylnitramine (tetryl; nitramine)	479-45-8	4.9E-02	n	4.9E+00	n	—	—	—	—	1.5E-01	n	1.5E+01	n	—	—	—	—	—	—
Trinitrotoluene, 2,4,6-	118-96-7	1.2E-02	n	1.2E+00	n	—	—	—	—	3.7E-02	n	3.7E+00	n	—	—	—	—	—	—
Tungsten (as sodium tungstate dihydride)	7440-33-7	2.4E-02	n	2.4E+00	n	—	—	—	—	7.3E-02	n	7.3E+00	n	—	—	—	—	—	—
Uranium (soluble salts)	7440-61-1	3.0E-02	m >S	3.0E+00	m >S	—	—	—	—	3.0E-02	m >S	3.0E+00	m >S	—	—	—	—	—	—
Valeric acid (pentanoic acid)	109-52-4	1.2E+01	n >S	1.2E+03	n >S	2.0E+04	n >S	2.6E+03	n >S	3.7E+01	n >S	3.7E+03	n >S	2.8E+04	n >S	3.6E+03	n >S	—	—
Vanadium	7440-62-2	4.4E-02	n >S	4.4E+00	n >S	—	—	—	—	1.3E-01	n >S	1.3E+01	n >S	—	—	—	—	—	—
Vernam	1929-77-7	2.4E-02	n	2.4E+00	n	—	—	—	—	7.3E-02	n	7.3E+00	n	—	—	—	—	—	—
Vinyl acetate	108-05-4	2.4E+01	n	2.4E+03	n	1.4E+04	n	1.8E+03	n	7.3E-01	n	7.3E+03	n	2.0E+04	n	2.6E+03	n	—	—
Vinyl chloride	75-01-4	2.0E-03	m	2.0E-01	m	3.8E+00	c	4.9E-01	c	2.0E-03	m	2.0E-01	m	6.4E+00	c	8.3E-01	c	—	—
Vinylcyclohexane	695-12-5	1.2E+01	n >S	1.2E+03	n >S	—	—	—	—	3.7E+01	n >S	3.7E+03	n >S	—	—	—	—	—	—
Warfarin	81-81-2	7.3E-03	n	7.3E-01	n	—	—	—	—	2.2E-02	n	2.2E+00	n	—	—	—	—	—	—
Xylene, m-	108-38-3	1.0E+01	m	1.0E+03	m >S	1.1E+04	n >S	1.4E+03	n >S	1.0E+01	m	1.0E+03	m >S	1.5E+04	n >S	1.9E+03	n >S	—	—
Xylene, o-	95-47-6	1.0E+01	m	1.0E+03	m >S	7.6E+05	n >S	9.8E+04	n >S	1.0E+01	m	1.0E+03	m >S	1.0E+06	n >S	1.4E+05	n >S	—	—
Xylene, p-	106-42-3	1.0E+01	m	1.0E+03	m >S	9.4E+03	n >S	1.2E+03	n >S	1.0E+01	m	1.0E+03	m >S	1.3E+04	n >S	1.7E+03	n >S	—	—
Xylenes	1330-20-7	1.0E+01	m	1.0E+03	m >S	1.0E+04	n >S	1.3E+03	n >S	1.0E+01	m	1.0E+03	m >S	1.4E+04	n >S	1.9E+03	n >S	—	—
Zinc	7440-66-6	7.3E+00	n >S	7.3E+02	n >S	—	—	—	—	2.2E+01	n >S	2.2E+03	n >S	—	—	—	—	—	5.0E+00
6 C aliphatics (TPH) (>53% n-hexane content)	NA	1.5E+00	n	1.5E+02	n >S	1.1E+02	n >S	1.4E+01	n	4.4E+00	n	4.4E+02	n >S	1.5E+02	n >S	1.9E+01	n	—	—
6 C aliphatics (TPH) (<53% n-hexane content)	NA	1.5E+00	n	1.5E+02	n >S	2.9E+03	n >S	3.8E+02	n >S	4.4E+00	n	4.4E+02	n >S	4.1E+03	n >S	5.3E+02	n >S	—	—
>6-8 C aliphatics (TPH) (>53% n-hexane content)	NA	1.5E+00	n	1.5E+02	n >S	7.1E+01	n >S	9.1E+00	n >S	4.4E+00	n	4.4E+02	n >S	9.9E+01	n >S	1.3E+01	n >S	—	—
>6-8 C aliphatics (TPH) (<53% n-hexane content)	NA	1.5E+00	n	1.5E+02	n >S	1.9E+03	n >S	2.5E+02	n >S	4.4E+00	n	4.4E+02	n >S	2.7E+03	n >S	3.5E+02	n >S	—	—
>8-10 C aliphatics (TPH)	NA	2.4E+00	n >S	2.4E+02	n >S	3.3E+01	n >S	4.3E+00	n >S	7.3E+00	n >S	7.3E+02	n >S	4.6E+01	n >S	6.0E+00	n >S	—	—
>10-12 C aliphatics (TPH)	NA	2.4E+00	n >S	2.4E+02	n >S	2.2E+01	n >S	2.8E+00	n >S	7.3E+00	n >S	7.3E+02	n >S	3.1E+01	n >S	4.0E+00	n >S	—	—

Table 3
Tier 1 Groundwater PCLs - Residential and Commercial/Industrial¹

Last Revised: May 10, 2023

Chemical of Concern	CAS	Residential								Commercial/Industrial								Secondary MCL ⁵ (mg/L)
		^{GW} GW _{Ing} ² (mg/L)	note ⁴	^{GW} GW _{Class3} ³ (mg/L)	note ⁴	^{Air} GW _{Inh-V} 0.5 acre source area (mg/L)	note ⁴	^{Air} GW _{Inh-V} 30 acre source area (mg/L)	note ⁴	^{GW} GW _{Ing} ² (mg/L)	note ⁴	^{GW} GW _{Class3} ³ (mg/L)	note ⁴	^{Air} GW _{Inh-V} 0.5 acre source area (mg/L)	note ⁴	^{Air} GW _{Inh-V} 30 acre source area (mg/L)	note ⁴	
>12-16 C aliphatics (TPH)	NA	2.4E+00	n >S	2.4E+02	n >S	5.1E+00	n >S	6.6E-01	n >S	7.3E+00	n >S	7.3E+02	n >S	7.1E+00	n >S	9.2E-01	n >S	—
>16-21 C aliphatics (TPH)	NA	4.9E+01	n >S	4.9E+03	n >S	—	—	—	—	1.5E+02	n >S	1.5E+04	n >S	—	—	—	—	—
>16-21 C aliphatics (TPH) (for transformer mineral oil releases only)	NA	3.9E+01	n >S	3.9E+03	n >S	—	—	—	—	1.2E+02	n >S	1.2E+04	n >S	—	—	—	—	—
>21-35 C aliphatics (TPH)	NA	4.9E+01	n >S	4.9E+03	n >S	—	—	—	—	1.5E+02	n >S	1.5E+04	n >S	—	—	—	—	—
>21-35 C aliphatics (TPH) (for transformer mineral oil releases only)	NA	3.9E+01	n >S	3.9E+03	n >S	—	—	—	—	1.2E+02	n >S	1.2E+04	n >S	—	—	—	—	—
>7-8 C aromatics (TPH)	NA	2.4E+00	n	2.4E+02	n	2.9E+04	n >S	3.8E+03	n >S	7.3E+00	n	7.3E+02	n >S	4.1E+04	n >S	5.3E+03	n >S	—
>8-10 C aromatics (TPH)	NA	9.8E-01	n	9.8E+01	n >S	1.8E+03	n >S	2.3E+02	n >S	2.9E+00	n	2.9E+02	n >S	2.5E+03	n >S	3.2E+02	n >S	—
>10-12 C aromatics (TPH)	NA	9.8E-01	n	9.8E+01	n >S	4.3E+03	n >S	5.5E+02	n >S	2.9E+00	n	2.9E+02	n >S	6.0E+03	n >S	7.7E+02	n >S	—
>12-16 C aromatics (TPH)	NA	9.8E-01	n	9.8E+01	n >S	7.5E+03	n >S	9.7E+02	n >S	2.9E+00	n	2.9E+02	n >S	1.0E+04	n >S	1.4E+03	n >S	—
>16-21 C aromatics (TPH)	NA	7.3E-01	n >S	7.3E+01	n >S	—	—	—	—	2.2E+00	n >S	2.2E+02	n >S	—	—	—	—	—
>21-35 C aromatics (TPH)	NA	7.3E-01	n >S	7.3E+01	n >S	—	—	—	—	2.2E+00	n >S	2.2E+02	n >S	—	—	—	—	—
Transformer Mineral Oil	NA	1.3E+01	n >S	1.3E+03	n >S	5.6E+01	n	7.3E+00	n	4.0E+01	n >S	4.0E+03	n >S	7.9E+01	n	1.0E+01	n	—

Footnotes
1 In accordance with §350.72(b), when establishing Tier 1 PCLs for individual COCs for each of the individual and combined human health exposure pathways, the person must evaluate whether the PCLs need to be adjusted to lower concentrations to meet the cumulative carcinogenic based on primary MCLs when available.
2 based on primary MCLs when available.
3 100 x ^{GW}GW_{Ing}
4 c = carcinogenic; n = noncarcinogenic; m = primary MCL-based; e = EPA Action Level-based; > S = solubility limit exceeded during calculation
5 The Secondary MCL values for ammonia and MTBE are based on taste and odor.
6 This chemical is one of four chemicals that make up total trihalomethanes (TTHMs). USEPA has established an MCL for TTHMs of 0.08 mg/L, so neither the individual concentration for any of these four chemicals can exceed the MCL, nor the total additive concentration of these four
7 Dibenz-a,h-anthracene does not have an MCL. However, the relative potency factor for dibenz-a,h-anthracene is equal to the potency factor for benzo-a-pyrene and is treated like benzo-a-pyrene for groundwater pathways.
8 Persons must use the value provided in the "Secondary MCL" column of this table as the ^{GW}GW_{Ing} PCL for MTBE if the conditions described in §350.74(f)(3) exist.
9 Please see the note on nitrate/nitrite in the "List of Updates" spreadsheet for March 31, 2017.
* These compounds are not necessarily of concern from a human health standpoint, therefore calculation of human health-based values is not required. However, aesthetics and ecological criteria would still apply. See table entitled "Compounds for which Calculation of a Human Health NA = not applicable
All values capped at 1E+06

This table shows the protective groundwater concentrations for residential and commercial/industrial land with 0.5 acre and 30 acre source areas
end of worksheet

Table 4
Tier 1 Residential Total Soil Combined PCLs

Last Revised: March 6, 2023

Chemical of Concern	CAS	TotSoil _{Comb}			
		(includes inhalation, ingestion, dermal, and vegetable consumption pathways)			
		0.5 acre source area Carcinogenic (mg/kg)	0.5 acre source area Noncarcinogenic (mg/kg)	30 acre source area Carcinogenic (mg/kg)	30 acre source area Noncarcinogenic (mg/kg)
Acenaphthene	83-32-9	—	3.0E+03	—	3.0E+03
Acenaphthylene	208-96-8	—	3.8E+03	—	3.8E+03
Acetaldehyde	75-07-0	1.7E+02	1.4E+02	8.7E+01	7.3E+01
Acetate, 2-ethoxyethanol	111-15-9	—	3.5E+03	—	2.3E+03
Acetate, isoamyl	123-92-2	—	5.9E+03	—	5.9E+03
Acetate, isobutyl	110-19-0	—	3.9E+03	—	3.9E+03
Acetate, sec-butyl	105-46-4	—	3.9E+03	—	3.9E+03
Acetic acid*	64-19-7	—	—	—	—
Acetone (2-propanone)	67-64-1	—	6.6E+04	—	5.9E+04
Acetone cyanohydrin	75-86-5	—	1.9E+02	—	1.8E+02
Acetonitrile	75-05-8	—	8.7E+02	—	5.3E+02
Acetophenone	98-86-2	—	6.7E+03	—	6.7E+03
Acetylaminofluorene, 2-	53-96-3	1.2E+00	—	1.1E+00	—
Acifluorfen, sodium	62476-59-9	—	8.7E+02	—	8.7E+02
Acridine	260-94-6	—	2.0E+02	—	2.0E+02
Acrolein	107-02-8	—	3.2E+01	—	2.7E+01
Acrylamide	79-06-1	7.0E+00	1.1E+02	5.7E+00	9.8E+01
Acrylic acid	79-10-7	—	1.2E+02	—	6.2E+01
Acrylonitrile	107-13-1	3.6E+00	2.2E+01	2.2E+00	1.3E+01
Adipic acid (hexanedioic acid)	124-04-9	—	1.3E+05	—	1.3E+05
Alachlor	15972-60-8	5.9E+01	6.7E+02	5.9E+01	6.7E+02
Aldicarb	116-06-3	—	6.7E+01	—	6.7E+01
Aldicarb sulfone	1646-88-4	—	6.7E+01	—	6.7E+01
Aldrin	309-00-2	5.0E-02	5.9E-01	5.0E-02	5.9E-01
Allyl alcohol	107-18-6	—	5.6E+00	—	2.9E+00
Allyl chloride	107-05-1	—	1.5E+01	—	7.8E+00
Aluminum	7429-90-5	—	6.5E+04	—	6.4E+04
Ametryn	834-12-8	—	6.0E+02	—	6.0E+02
Amino-2,6-dinitrotoluene, 4-	19406-51-0	1.6E+02	3.3E+01	1.6E+02	3.3E+01
Amino-4,6-dinitrotoluene, 2-	35572-78-2	1.6E+02	3.3E+01	1.6E+02	3.3E+01
Aminobiphenyl, 4- (1,1-biphenyl-4-amine)	92-67-1	7.7E-01	—	7.7E-01	—
Aminopyridine, 4-	504-24-5	—	1.3E+00	—	1.3E+00
Ammonia	7664-41-7	—	4.9E+03	—	2.5E+03
Ammonium polyphosphate*	6833-79-9	—	—	—	—
Ammonium salts*	AMMONIUM	—	—	—	—
Aniline	62-53-3	8.2E+02	1.0E+02	8.2E+02	5.9E+01
Anthracene	120-12-7	—	1.8E+04	—	1.8E+04
Anthraquinone, 9,10-	84-65-1	1.2E+02	1.3E+03	1.2E+02	1.3E+03
Antimony	7440-36-0	—	1.5E+01	—	1.5E+01
Aramite	140-57-8	1.1E+02	2.4E+03	1.1E+02	2.4E+03
Arsenic	7440-38-2	3.4E+01	2.4E+01	3.4E+01	2.4E+01

Table 4
Tier 1 Residential Total Soil Combined PCLs

Last Revised: March 6, 2023

Chemical of Concern	CAS	TotSoilComb			
		(includes inhalation, ingestion, dermal, and vegetable consumption pathways)			
		0.5 acre source area Carcinogenic (mg/kg)	0.5 acre source area Noncarcinogenic (mg/kg)	30 acre source area Carcinogenic (mg/kg)	30 acre source area Noncarcinogenic (mg/kg)
Arsine	7784-42-1	—	7.7E-01	—	3.9E-01
Atrazine	1912-24-9	2.1E+01	2.3E+03	2.1E+01	2.3E+03
Azinphos-methyl (guthion)	86-50-0	—	1.0E+02	—	1.0E+02
Azobenzene	103-33-3	3.7E+01	—	3.6E+01	—
Barium	7440-39-3	—	8.1E+03	—	8.1E+03
Bayleton	43121-43-3	—	2.0E+03	—	2.0E+03
Benefin (benfluralin)	1861-40-1	—	1.9E+04	—	1.9E+04
Benomyl	17804-35-2	—	3.3E+03	—	3.3E+03
Benz-a-anthracene	56-55-3	4.1E+01	—	4.1E+01	—
Benzaldehyde	100-52-7	—	8.2E+03	—	8.2E+03
Benzene	71-43-2	1.2E+02	3.0E+02	6.9E+01	2.9E+02
Benzenedicarbonitrile, 1,3-	626-17-5	—	4.0E+02	—	4.0E+02
Benzenedicarboxylic acid, 1,2-disodecyl ester	26761-40-0	—	2.7E+03	—	2.6E+03
Benzenethiol	108-98-5	—	8.2E+01	—	8.2E+01
Benzidine	92-87-5	1.5E-02	2.0E+02	1.3E-02	2.0E+02
Benzo-a-pyrene	50-32-8	4.1E+00	1.4E+01	4.1E+00	1.2E+01
Benzo-b-fluoranthene	205-99-2	4.2E+01	—	4.1E+01	—
Benzo-e-pyrene	192-97-2	—	1.8E+03	—	1.8E+03
Benzo-g,h,i-perylene	191-24-2	—	1.8E+03	—	1.8E+03
Benzoic acid	65-85-0	—	2.7E+05	—	2.7E+05
Benzo-j-fluoranthene	205-82-3	3.9E+01	—	3.9E+01	—
Benzo-k-fluoranthene	207-08-9	4.2E+02	—	4.2E+02	—
Benzophenone	119-61-9	—	4.5E+02	—	4.5E+02
Benzotrichloride	98-07-7	3.6E-01	—	3.6E-01	—
Benzoyl peroxide	94-36-0	—	3.3E+03	—	3.3E+03
Benzyl alcohol	100-51-6	—	6.7E+03	—	6.7E+03
Benzyl chloride	100-44-7	3.6E+01	2.6E+01	3.6E+01	1.4E+01
Benzyl dichloride	98-87-3	2.8E+01	3.9E+01	2.8E+01	2.3E+01
Beryllium	7440-41-7	9.4E+03	3.8E+01	4.8E+03	3.8E+01
Biphenyl, 1,1'-	92-52-4	—	1.2E+04	—	1.2E+04
Biphenyl, 1,1'-, 2-phenoxy-	6738-04-1	—	3.2E+03	—	3.2E+03
Biquinoline, 2,2'-	119-91-5	—	1.8E+02	—	1.8E+02
Bis (2-chloroethoxy) methane	111-91-1	3.1E+00	2.0E+02	2.5E+00	2.0E+02
Bis (2-chloroethyl) ether	111-44-4	2.2E+00	—	1.4E+00	—
Bis (2-chloro-1-methylethyl) ether	108-60-1	5.1E+01	2.7E+03	4.1E+01	2.7E+03
Bis (2-chloromethyl) ether	542-88-1	4.8E-03	—	2.7E-03	—
Bis (2-ethyl-hexyl) phthalate	117-81-7	4.3E+01	2.7E+02	4.3E+01	2.7E+02
Bismuth	7440-69-9	—	3.7E+04	—	3.7E+04
Bisphenol A	80-05-7	—	3.3E+03	—	3.3E+03
Boron	7440-42-8	—	1.6E+04	—	1.6E+04
Bromacil	314-40-9	—	6.7E+03	—	6.7E+03

Table 4
Tier 1 Residential Total Soil Combined PCLs

Last Revised: March 6, 2023

Chemical of Concern	CAS	TotSoil _{Comb}			
		(includes inhalation, ingestion, dermal, and vegetable consumption pathways)			
		0.5 acre source area Carcinogenic (mg/kg)	0.5 acre source area Noncarcinogenic (mg/kg)	30 acre source area Carcinogenic (mg/kg)	30 acre source area Noncarcinogenic (mg/kg)
Bromo-2-chloroethane, 1-	107-04-0	—	3.3E+03	—	3.3E+03
Bromobenzene	108-86-1	—	3.9E+02	—	2.8E+02
Bromodichloromethane	75-27-4	9.8E+01	6.6E+02	9.8E+01	6.6E+02
Bromoform	75-25-2	4.0E+02	1.6E+03	2.8E+02	1.6E+03
Bromomethane	74-83-9	—	3.9E+01	—	2.4E+01
Bromophenyl phenylether, 4-	101-55-3	2.8E-01	—	2.7E-01	—
Butadiene, 1,3-	106-99-0	7.2E+02	5.1E+02	3.7E+02	2.6E+02
Butadiene, 2-methyl-1,3- (isoprene)	78-79-5	—	4.8E+03	—	4.7E+03
Butanal (butyraldehyde)	123-72-8	—	1.2E+03	—	6.8E+02
Butane, 2,3-dimethyl-	79-29-8	—	4.8E+03	—	4.7E+03
Butanoic acid (butyric acid)	107-92-6	—	1.3E+02	—	6.6E+01
Butanol, 2-	78-92-2	—	1.5E+05	—	1.3E+05
Butanol, 2-methyl-1-	137-32-6	—	8.2E+02	—	8.2E+02
Butanol, 2-methyl-2-	75-85-4	—	8.2E+02	—	8.2E+02
Butanol, n-	71-36-3	—	8.2E+03	—	8.2E+03
Butene, 1-	106-98-9	—	4.6E+03	—	4.4E+03
Butene, cis-2-	590-18-1	—	4.1E+03	—	3.5E+03
Butene, trans-2-	624-64-6	—	4.1E+03	—	3.5E+03
Butoxy ethanol, 2- (Ethylene glycol monobutyl ether; EGBE)	111-76-2	—	6.5E+03	—	6.4E+03
Butyl acetate	123-86-4	—	1.0E+04	—	9.1E+03
Butyl acrylate	141-32-2	—	7.4E+02	—	7.4E+02
Butyl benzyl phthalate	85-68-7	1.6E+03	1.0E+04	1.6E+03	1.0E+04
Butyl ether, n- (dibutyl ether)	142-96-1	—	8.2E+03	—	8.2E+03
Butyl methacrylate	97-88-1	—	3.4E+03	—	3.4E+03
Butylate	2008-41-5	—	3.3E+03	—	3.3E+03
Butylbenzene, n-	104-51-8	—	3.3E+03	—	3.3E+03
Butylbenzene, sec-	135-98-8	—	3.3E+03	—	3.3E+03
Butylbenzene, tert-	98-06-6	—	3.3E+03	—	3.3E+03
Cacodylic acid	75-60-5	—	2.0E+02	—	2.0E+02
Cadmium	7440-43-9	4.6E+04	5.2E+01	2.4E+04	5.1E+01
Calcium*	7440-70-2	—	—	—	—
Caprolactam	105-60-2	—	3.3E+04	—	3.3E+04
Captan	133-06-2	1.3E+03	8.7E+03	1.3E+03	8.7E+03
Carbaryl	63-25-2	—	6.7E+03	—	6.7E+03
Carbazole	86-74-8	2.3E+02	—	2.3E+02	—
Carbofuran	1563-66-2	—	3.3E+02	—	3.3E+02
Carbon disulfide	75-15-0	—	4.6E+03	—	3.3E+03
Carbon tetrachloride	56-23-5	3.5E+01	2.7E+02	2.3E+01	2.3E+02
Carbophenothion	786-19-6	—	8.2E+02	—	8.2E+02
Carbosulfan	55285-14-8	—	4.3E+02	—	4.3E+02
Carboxin	5234-68-4	—	6.7E+03	—	6.7E+03

Table 4
Tier 1 Residential Total Soil Combined PCLs

Last Revised: March 6, 2023

Chemical of Concern	CAS	TotSoilComb (includes inhalation, ingestion, dermal, and vegetable consumption pathways)			
		0.5 acre source area Carcinogenic (mg/kg)	0.5 acre source area Noncarcinogenic (mg/kg)	30 acre source area Carcinogenic (mg/kg)	30 acre source area Noncarcinogenic (mg/kg)
		Chloral	75-87-6	—	8.2E+03
Chloral hydrate (1,1-ethanediol, 2,2,2-trichloro-)	302-17-0	—	6.7E+03	—	6.7E+03
Chloramben (amiben; 3-amino-2,5-dichlorobenzoic acid)	133-90-4	—	1.0E+03	—	1.0E+03
Chlordane (technical)	12789-03-6	6.0E+00	2.0E+01	5.9E+00	2.0E+01
Chlordane, cis- (alpha chlordane)	5103-71-9	1.3E+01	3.2E+01	1.3E+01	3.2E+01
Chlordane, trans- (gamma chlordane)	5103-74-2	7.4E+00	2.3E+01	7.3E+00	2.3E+01
Chlorfenvinphos	470-90-6	—	1.4E+01	—	9.6E+00
Chloride*	16887-00-6	—	—	—	—
Chlorine	7782-50-5	—	1.3E+02	—	6.8E+01
Chloro-1,3-butadiene, 2-	126-99-8	1.2E+00	3.1E+02	6.1E-01	1.6E+02
Chloro-2-propanol, 1-	127-00-4	—	1.6E+03	—	1.6E+03
Chloro-3-methylphenol, 4-	59-50-7	—	3.3E+02	—	3.3E+02
Chloroaniline, p-	106-47-8	2.3E+01	2.7E+02	2.3E+01	2.7E+02
Chlorobenzene	108-90-7	—	5.2E+02	—	3.2E+02
Chlorobenzilate	510-15-6	1.7E+01	1.3E+03	1.6E+01	1.3E+03
Chlorobromomethane (bromochloromethane)	74-97-5	—	3.3E+03	—	3.3E+03
Chlorodifluoromethane	75-45-6	—	7.7E+05	—	3.9E+05
Chloroethane (ethyl chloride)	75-00-3	—	2.7E+04	—	2.3E+04
Chloroethanol, 2-	107-07-3	—	1.6E+03	—	1.6E+03
Chloroethoxy ethene, 2- (2-chloroethylvinylether)	110-75-8	5.5E+00	4.5E+00	5.5E+00	2.3E+00
Chloroform	67-66-3	1.6E+01	5.3E+02	8.0E+00	4.0E+02
Chlorohexane, 1-	544-10-5	—	2.7E+03	—	2.3E+03
Chloromethane (methyl chloride)	74-87-3	1.4E+02	2.4E+02	8.4E+01	2.1E+02
Chloronaphthalene, 1- (Chloronaphthalene, alpha-)	90-13-1	—	4.6E+03	—	4.6E+03
Chloronaphthalene, 2- (chloronaphthalene, beta)	91-58-7	—	5.0E+03	—	5.0E+03
Chloronitrobenzene, p- (1-chloro-4-nitrobenzene)	100-00-5	7.5E+02	3.2E+01	7.5E+02	2.2E+01
Chlorophenol, 2-	95-57-8	—	4.1E+02	—	4.1E+02
Chlorophenol, 3-	108-43-0	—	3.3E+02	—	3.3E+02
Chlorophenol, 4-	106-48-9	—	3.3E+02	—	3.3E+02
Chlorophenyl phenylether, 4-	7005-72-3	1.6E-01	—	1.5E-01	—
Chloropropane, 2-	75-29-6	—	9.4E+02	—	6.0E+02
Chloroethalonil	1897-45-6	4.3E+02	1.0E+03	4.3E+02	1.0E+03
Chlorotoluene, o- (2-chlorotoluene)	95-49-8	—	1.2E+03	—	1.1E+03
Chlorotoluene, p- (4-chlorotoluene)	106-43-4	—	1.6E+03	—	1.6E+03
Chlorpyrifos	2921-88-2	—	1.3E+02	—	1.3E+02
Chromium (III)	16065-83-1	—	3.3E+04	—	2.7E+04
Chromium (total)	7440-47-3	—	3.3E+04	—	2.7E+04
Chromium (VI)	18540-29-9	9.8E+03	1.2E+02	5.1E+03	1.2E+02
Chrysene	218-01-9	4.1E+03	—	4.1E+03	—
Cobalt	7440-48-4	3.8E+03	6.8E+02	1.9E+03	6.8E+02
Copolymer acrylamide	69418-26-4	—	1.3E+01	—	1.3E+01

Table 4
Tier 1 Residential Total Soil Combined PCLs

Last Revised: March 6, 2023

Chemical of Concern	CAS	TotSoil _{Comb}			
		(includes inhalation, ingestion, dermal, and vegetable consumption pathways)			
		0.5 acre source area Carcinogenic (mg/kg)	0.5 acre source area Noncarcinogenic (mg/kg)	30 acre source area Carcinogenic (mg/kg)	30 acre source area Noncarcinogenic (mg/kg)
Copper	7440-50-8	—	1.3E+03	—	1.3E+03
Coronene	191-07-1	—	1.3E+02	—	1.3E+02
Coumaphos	56-72-4	—	4.3E+02	—	4.3E+02
Cresol	1319-77-3	—	3.3E+03	—	3.3E+03
Cresol, m- (3-methylphenol)	108-39-4	—	3.3E+03	—	3.3E+03
Cresol, o- (2-methylphenol)	95-48-7	—	3.3E+03	—	3.3E+03
Cresol, p- (4-methylphenol)	106-44-5	—	3.3E+02	—	3.3E+02
Crotonaldehyde	123-73-9	3.2E+00	8.2E+01	3.2E+00	8.2E+01
Cumene (isopropylbenzene)	98-82-8	—	4.3E+03	—	3.0E+03
Cyanazine	21725-46-2	5.6E+00	1.3E+02	5.6E+00	1.3E+02
Cyanide	57-12-5	—	4.5E+01	—	4.3E+01
Cyanogen	460-19-5	—	1.1E+01	—	5.9E+00
Cycloate	1134-23-2	—	3.7E+03	—	3.7E+03
Cyclohexane	110-82-7	—	7.5E+04	—	4.2E+04
Cyclohexanol	108-93-0	—	3.3E+05	—	3.3E+05
Cyclohexanone	108-94-1	—	3.2E+04	—	1.7E+04
Cyclohexene, 1-methanol-3-	1679-51-2	—	1.3E+03	—	1.3E+03
Cyclohexene, 4-vinyl-1-	100-40-3	—	1.3E+03	—	1.1E+03
Cyclopentane	287-92-3	—	4.8E+03	—	4.8E+03
Cyclopentane, methyl-	96-37-7	—	5.3E+03	—	4.0E+03
Cyclopentene	142-29-0	—	4.1E+05	—	4.1E+05
Cyclotetramethylenetetranitramine (HMX)	2691-41-0	—	1.6E+03	—	1.6E+03
Cyclotrimethylenetrinitramine (RDX)	121-82-4	5.9E+01	2.7E+02	5.9E+01	2.7E+02
Cymene (isopropyltoluene)	99-87-6	—	8.2E+03	—	8.2E+03
Cymoxanil	57966-95-7	—	8.7E+02	—	8.7E+02
Dacthal (DCPA)	1861-32-1	—	6.2E+02	—	6.2E+02
Dalapon, sodium salt (2,2-dichloropropanoic acid)	75-99-0	—	2.0E+03	—	2.0E+03
DDD	72-54-8	1.4E+01	—	1.4E+01	—
DDE	72-55-9	1.0E+01	—	1.0E+01	—
DDT	50-29-3	5.4E+00	1.9E+01	5.4E+00	1.9E+01
Demeton	8065-48-3	—	2.7E+00	—	2.7E+00
Desethylatrazine	6190-65-4	—	2.3E+03	—	2.3E+03
Diacetone alcohol (4-hydroxy-4-methyl-2-pentanone)	123-42-2	—	2.7E+03	—	2.7E+03
Diallate	2303-16-4	3.8E+01	—	3.8E+01	—
Diazinon	333-41-5	—	3.1E+01	—	2.1E+01
Dibenz(a,h)acridine	226-36-8	3.7E+00	—	3.7E+00	—
Dibenz(a,j)acridine	224-42-0	5.8E+00	—	5.8E+00	—
Dibenz-a,h-anthracene	53-70-3	4.0E+00	—	4.0E+00	—
Dibenzo(a,e)pyrene	192-65-4	6.1E-01	—	6.1E-01	—
Dibenzo(a,h)pyrene	189-64-0	6.1E-02	—	6.1E-02	—
Dibenzo(a,i)pyrene	189-55-9	6.1E-02	—	6.1E-02	—

Table 4
Tier 1 Residential Total Soil Combined PCLs

Last Revised: March 6, 2023

Chemical of Concern	CAS	TotSoil _{Comb}			
		(includes inhalation, ingestion, dermal, and vegetable consumption pathways)			
		0.5 acre source area Carcinogenic (mg/kg)	0.5 acre source area Noncarcinogenic (mg/kg)	30 acre source area Carcinogenic (mg/kg)	30 acre source area Noncarcinogenic (mg/kg)
Dibenzofuran	132-64-9	—	2.7E+02	—	2.7E+02
Dibenzothiophene	132-65-0	—	1.9E+02	—	1.9E+02
Dibromo-3-chloropropane, 1,2-	96-12-8	1.5E-01	5.0E+00	8.0E-02	3.2E+00
Dibromochloromethane (chlorodibromomethane)	124-48-1	7.2E+01	1.6E+03	7.2E+01	1.6E+03
Dibromofluoromethane	1868-53-7	—	1.6E+04	—	1.6E+04
Dicamba	1918-00-9	—	2.0E+03	—	2.0E+03
Dichlormid	37764-25-3	—	1.7E+03	—	1.7E+03
Dichloro-2-butene, 1,4-	764-41-0	2.0E-01	—	1.0E-01	—
Dichloro-2-butene, 1,4- trans	110-57-6	2.0E-01	—	1.1E-01	—
Dichlorobenzene, 1,2-	95-50-1	—	7.2E+02	—	3.9E+02
Dichlorobenzene, 1,3-	541-73-1	—	1.2E+02	—	6.2E+01
Dichlorobenzene, 1,4-	106-46-7	2.5E+02	1.2E+04	2.5E+02	6.1E+03
Dichlorobenzidine, 3,3-	91-94-1	1.0E+01	—	1.0E+01	—
Dichlorobutane, 2,3-	7581-97-7	—	9.5E+01	—	5.2E+01
Dichlorodifluoromethane	75-71-8	—	1.4E+03	—	7.5E+02
Dichloroethane, 1,1-	75-34-3	—	1.1E+04	—	8.8E+03
Dichloroethane, 1,2-	107-06-2	4.1E+01	6.1E+02	3.0E+01	3.3E+02
Dichloroethylene, 1,1-	75-35-4	—	2.3E+03	—	1.6E+03
Dichloroethylene, cis-1,2-	156-59-2	—	1.4E+02	—	1.2E+02
Dichloroethylene, trans-1,2	156-60-5	—	5.9E+02	—	3.7E+02
Dichlorofluoromethane	75-43-4	—	1.6E+04	—	1.6E+04
Dichlorophenol, 2,3-	576-24-9	—	2.0E+02	—	2.0E+02
Dichlorophenol, 2,4-	120-83-2	—	2.0E+02	—	2.0E+02
Dichlorophenol, 2,5-	583-78-8	—	2.0E+02	—	2.0E+02
Dichlorophenol, 2,6-	87-65-0	—	6.7E+01	—	6.7E+01
Dichlorophenol, 3,4-	95-77-2	—	2.0E+02	—	2.0E+02
Dichlorophenol, 3,5-	591-35-5	—	2.0E+02	—	2.0E+02
Dichlorophenoxy, 2,4- butyric acid, 4- (2,4-DB)	94-82-6	—	5.3E+02	—	5.3E+02
Dichlorophenoxyacetic acid, 2,4- (2,4-D)	94-75-7	—	1.5E+04	—	1.5E+04
Dichloroprop (2-(2,4-dichlorophenoxy) propanoic acid)	120-36-5	—	6.7E+02	—	6.7E+02
Dichloropropane, 1,2-	78-87-5	1.2E+02	6.1E+01	9.0E+01	3.1E+01
Dichloropropane, 1,3-	142-28-9	3.6E+01	2.6E+02	2.6E+01	1.4E+02
Dichloropropane, 2,2-	594-20-7	8.9E+01	6.1E+01	8.9E+01	3.1E+01
Dichloropropanol, 2,3-	616-23-9	—	2.0E+02	—	2.0E+02
Dichloropropene, 1,1-	563-58-6	3.6E+01	2.7E+02	2.6E+01	1.5E+02
Dichloropropene, 1,3- (mixed isomers)	542-75-6	3.6E+01	2.7E+02	2.6E+01	1.5E+02
Dichloropropene, cis 1,3-	10061-01-5	1.1E+01	8.0E+00	1.1E+01	7.8E+00
Dichloropropene, trans 1,3-	10061-02-6	3.6E+01	2.7E+02	2.6E+01	1.5E+02
Dichlorvos	62-73-7	1.6E+01	3.3E+01	1.6E+01	3.3E+01
Dicrotophos (bidrin)	141-66-2	—	6.7E+00	—	6.7E+00
Dicyclopentadiene	77-73-6	—	6.6E+03	—	6.6E+03

Table 4
Tier 1 Residential Total Soil Combined PCLs

Last Revised: March 6, 2023

Chemical of Concern	CAS	TotSoilComb			
		(includes inhalation, ingestion, dermal, and vegetable consumption pathways)			
		0.5 acre source area Carcinogenic (mg/kg)	0.5 acre source area Noncarcinogenic (mg/kg)	30 acre source area Carcinogenic (mg/kg)	30 acre source area Noncarcinogenic (mg/kg)
Dieldrin	60-57-1	1.5E-01	2.2E+00	1.5E-01	2.2E+00
Diethanolamine	111-42-2	–	3.3E+01	–	3.3E+01
Diethyldithiocarbamate, sodium salt	148-18-5	2.2E+01	2.5E+03	2.2E+01	2.5E+03
Diethyl phthalate	84-66-2	–	5.3E+04	–	5.3E+04
Diethylene glycol	111-46-6	–	1.3E+05	–	1.3E+05
Diethylene glycol monobutyl ether	112-34-5	–	2.0E+01	–	1.0E+01
Diethylhexyl adipate	103-23-1	3.9E+03	4.0E+04	3.9E+03	4.0E+04
Diethylstilbestrol	56-53-1	7.1E-04	–	7.1E-04	–
Diisobutylene (trimethyl-1-pentene, 2,4,4-)	107-39-1	–	1.9E+03	–	1.2E+03
Diisopropylbenzene, p-	100-18-5	–	6.7E+02	–	6.7E+02
Diisopropyl ether (2,2'-oxybis-propane)	108-20-3	–	4.6E+03	–	3.3E+03
Dimethenamid	87674-68-8	–	1.0E+03	–	1.0E+03
Dimethoate	60-51-5	–	1.3E+01	–	1.3E+01
Dimethoxybenzidine, 3,3'-	119-90-4	3.4E+02	–	3.4E+02	–
Dimethyl-2-nitrobenzene, 1,3-	81-20-9	–	1.3E+02	–	1.2E+02
Dimethyl-3-nitrobenzene, 1,2-	83-41-0	–	1.3E+02	–	1.2E+02
Dimethyl-4-nitrobenzene, 1-2-	99-51-4	–	1.3E+02	–	1.2E+02
Dimethyl-5-nitrobenzene, 1,3-	99-12-7	–	1.3E+02	–	1.2E+02
Dimethylphenethylamine, alpha, alpha-	122-09-8	–	1.3E+02	–	1.3E+02
Dimethyl phenol, 2,4-	105-67-9	–	1.3E+03	–	1.3E+03
Dimethylaminoazobenzene, p-	60-11-7	–	6.4E-01	–	6.4E-01
Dimethylbenz-a-anthracene, 7,12-	57-97-6	1.7E-02	–	1.7E-02	–
Dimethylbenzidine, 3,3'-	119-93-7	4.3E-01	–	4.3E-01	–
Dimethylformamide, N,N-	68-12-2	–	2.3E+03	–	1.4E+03
Dimethylnaphthalene, 1,3-	575-41-7	–	2.3E+03	–	2.3E+03
Dimethylphthalate	131-11-3	–	5.3E+04	–	5.3E+04
Di-n-butyl phthalate	84-74-2	–	6.2E+03	–	6.2E+03
Dinitro-2-methylphenol, 4,6- (dinitro-o-cresol, 4, 6-)	534-52-1	–	6.7E+00	–	6.7E+00
Dinitrobenzene, 1,3- (dinitrobenzene, 2,4-)	99-65-0	–	6.7E+00	–	6.7E+00
Dinitrobenzene, 1,4-	100-25-4	–	6.7E+00	–	6.7E+00
Dinitrophenol, 2,4-	51-28-5	–	1.3E+02	–	1.3E+02
Dinitrophenol, 2,5-	329-71-5	–	1.3E+02	–	1.3E+02
Dinitrotoluene, 2,4-	121-14-2	6.9E+00	1.3E+02	6.9E+00	1.3E+02
Dinitrotoluene, 2,6-	606-20-2	6.9E+00	6.7E+01	6.9E+00	6.7E+01
Di-n-octyl phthalate	117-84-0	–	6.4E+02	–	6.4E+02
Dinoseb	88-85-7	–	6.7E+01	–	6.7E+01
Dioxane 1,4-	123-91-1	4.5E+01	1.6E+03	3.7E+01	1.2E+03
Dioxin (as 2,3,7,8-TCDD toxicity equivalent quotients (TEQs))	1746-01-6	–	–	–	–
Diphenyl ether	101-84-8	–	3.8E+02	–	3.8E+02
Diphenylamine	122-39-4	–	1.7E+03	–	1.7E+03
Diphenylhydrazine, 1,2-	122-66-7	5.6E+00	–	5.4E+00	–

Table 4
Tier 1 Residential Total Soil Combined PCLs

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		0.5 acre source area Carcinogenic (mg/kg)	0.5 acre source area Noncarcinogenic (mg/kg)	30 acre source area Carcinogenic (mg/kg)	30 acre source area Noncarcinogenic (mg/kg)
		Dipropylene glycol	110-98-5	—	8.0E+03
Diquat	85-00-7	—	1.5E+02	—	1.5E+02
Disodium iminodiacetate (iminodiacetic acid, disodium salt)	142-73-4	—	6.7E+02	—	6.7E+02
Disulfoton	298-04-4	—	2.7E+00	—	2.7E+00
Diuron	330-54-1	—	1.3E+02	—	1.3E+02
Dodecylphenol, 4-	104-43-8	—	3.3E+03	—	3.3E+03
Endosulfan	115-29-7	—	4.0E+02	—	4.0E+02
Endosulfan I	959-98-8	—	9.1E+01	—	9.1E+01
Endosulfan II	33213-65-9	—	2.7E+02	—	2.7E+02
Endosulfan sulfate	1031-07-8	—	3.8E+02	—	3.8E+02
Endothall	145-73-3	—	1.3E+03	—	1.3E+03
Endrin	72-20-8	—	9.0E+00	—	9.0E+00
Endrin aldehyde	7421-93-4	—	1.9E+01	—	1.9E+01
Endrin ketone	53494-70-5	—	1.9E+01	—	1.9E+01
Epichlorohydrin	106-89-8	2.8E+02	2.5E+01	1.8E+02	1.3E+01
EPN (o-ethyl o-(4-nitrophenyl)phenylphosphonothioate)	2104-64-5	—	6.7E-01	—	6.7E-01
Esfenvalerate	66230-04-4	—	7.4E+01	—	7.4E+01
Ethalfuralin (sonolan)	55283-68-6	4.7E+01	2.5E+03	4.7E+01	2.5E+03
Ethanol	64-17-5	—	1.0E+06	—	1.0E+06
Ethanol, 2-amino-	141-43-5	—	1.1E+02	—	1.1E+02
Ethanol, 2-(2-aminoethoxy)-	929-06-6	—	3.3E+01	—	3.3E+01
Ethanol, 2-(2-ethoxyethoxy)-	111-90-0	—	1.3E+05	—	1.3E+05
Ethanol, 2-(methylamino)-	109-83-1	—	9.1E+02	—	8.1E+02
Ethion	563-12-2	—	2.7E+01	—	2.7E+01
Ethoprop	13194-48-4	1.7E+02	6.7E+00	1.7E+02	6.7E+00
Ethoxy ethanol, 2-	110-80-5	—	5.7E+03	—	4.7E+03
Ethyl acetate	141-78-6	—	3.5E+03	—	1.8E+03
Ethyl acrylate	140-88-5	1.3E+02	1.5E+02	1.3E+02	9.6E+01
Ethyl benzene	100-41-4	—	6.4E+03	—	5.3E+03
Ethyl dipropylthiocarbamate, S-	759-94-4	—	1.7E+03	—	1.7E+03
Ethyl ether	60-29-7	—	1.6E+04	—	1.6E+04
Ethyl methacrylate	97-63-2	—	3.6E+03	—	2.4E+03
Ethyl methanesulfonate	62-50-0	3.4E+01	—	2.7E+01	—
Ethyl tert-butyl ether (2-ethyl-2-ethoxypropane)	637-92-3	—	8.0E+01	—	7.9E+01
Ethyl-1-hexanol, 2-	104-76-7	—	1.0E+04	—	1.0E+04
Ethyl-2-hexenal, 2-	645-62-5	—	1.2E+04	—	1.2E+04
Ethyl-2-methyl benzene, 1-	611-14-3	—	2.8E+03	—	2.1E+03
Ethyl-4-methyl benzene, 1-	622-96-8	—	2.6E+03	—	1.9E+03
Ethylene*	74-85-1	—	—	—	—
Ethylene dibromide (dibromoethane, 1,2-)	106-93-4	2.5E+00	5.1E+02	2.1E+00	4.0E+02
Ethylene glycol	107-21-1	—	1.3E+05	—	1.3E+05

Table 4
Tier 1 Residential Total Soil Combined PCLs

Last Revised: March 6, 2023

Chemical of Concern	CAS	TotSoil _{Comb}			
		(includes inhalation, ingestion, dermal, and vegetable consumption pathways)			
		0.5 acre source area Carcinogenic (mg/kg)	0.5 acre source area Noncarcinogenic (mg/kg)	30 acre source area Carcinogenic (mg/kg)	30 acre source area Noncarcinogenic (mg/kg)
Ethylene oxide	75-21-8	5.8E+00	—	5.7E+00	—
Ethylene thiourea	96-45-7	4.3E+01	5.3E+00	4.3E+01	5.3E+00
Ethylenediamine	107-15-3	—	7.4E+03	—	7.4E+03
Ethylenimine	151-56-4	5.5E-02	—	3.9E-02	—
Ethylhexyl acrylate, 2-	103-11-7	9.8E+01	—	9.8E+01	—
Famphur	52-85-7	—	2.0E+00	—	2.0E+00
Fensulfothion	115-90-2	—	6.7E+01	—	6.7E+01
Fenthion	55-38-9	—	4.7E+00	—	4.7E+00
Fenuron	101-42-8	—	4.7E+03	—	4.7E+03
Fluoranthene	206-44-0	—	2.3E+03	—	2.3E+03
Fluorene	86-73-7	—	2.3E+03	—	2.3E+03
Fluorine (soluble fluoride)	7782-41-4	—	4.8E+03	—	4.8E+03
Fluorochloridone	61213-25-0	—	5.0E+02	—	5.0E+02
Fonofos	944-22-9	—	1.3E+02	—	1.3E+02
Formaldehyde	50-00-0	—	9.3E+02	—	4.9E+02
Formic acid	64-18-6	—	2.1E+02	—	1.1E+02
Furan	110-00-9	—	8.2E+01	—	8.2E+01
Furfural	98-01-1	—	2.5E+02	—	2.5E+02
Glycidylaldehyde	765-34-4	—	2.7E+01	—	2.3E+01
Glyphosate	1071-83-6	—	6.7E+04	—	6.7E+04
Heptachlor	76-44-8	1.3E-01	7.1E+00	1.3E-01	7.1E+00
Heptachlor epoxide	1024-57-3	2.4E-01	5.4E-01	2.4E-01	5.4E-01
Heptane, n-	142-82-5	—	4.7E+03	—	4.6E+03
Heptanoic acid, n-	111-14-8	—	1.2E+02	—	6.3E+01
Hexachlorobenzene	118-74-1	1.1E+00	2.9E+01	1.0E+00	2.9E+01
Hexachlorobutadiene	87-68-3	2.0E+01	6.7E+01	1.2E+01	6.7E+01
Hexachlorocyclohexane, alpha (alpha-BHC)	319-84-6	2.6E-01	2.7E+02	2.5E-01	2.7E+02
Hexachlorocyclohexane, beta (beta-BHC)	319-85-7	9.3E-01	—	9.2E-01	—
Hexachlorocyclohexane, delta (delta-BHC)	319-86-8	2.9E+00	2.2E+01	2.9E+00	2.2E+01
Hexachlorocyclohexane, gamma (lindane; gamma-BHC)	58-89-9	1.1E+00	9.2E+00	1.1E+00	9.2E+00
Hexachlorocyclohexane, techn (technical-BHC)	608-73-1	1.3E+00	—	1.3E+00	—
Hexachlorocyclopentadiene	77-47-4	—	1.4E+01	—	7.2E+00
Hexachloroethane	67-72-1	1.2E+02	4.6E+01	1.2E+02	4.6E+01
Hexachlorophene	70-30-4	—	2.0E+01	—	2.0E+01
Hexachloropropylene	1888-71-7	1.2E+02	4.6E+01	1.2E+02	4.6E+01
Hexanal, 2-ethyl-	123-05-7	—	1.0E+04	—	1.0E+04
Hexane, n-	110-54-3	—	3.3E+03	—	2.5E+03
Hexanediamine, 1,6-	124-09-4	—	3.3E+02	—	3.3E+02
Hexanedinitrile	111-69-3	—	8.5E+01	—	7.9E+01
Hexanediol, 1,6-	629-11-8	—	3.0E+05	—	2.8E+05
Hexanoic acid	142-62-1	—	1.3E+02	—	6.9E+01

Table 4
Tier 1 Residential Total Soil Combined PCLs

Last Revised: March 6, 2023

Chemical of Concern	CAS	TotSoilComb			
		(includes inhalation, ingestion, dermal, and vegetable consumption pathways)			
		0.5 acre source area Carcinogenic (mg/kg)	0.5 acre source area Noncarcinogenic (mg/kg)	30 acre source area Carcinogenic (mg/kg)	30 acre source area Noncarcinogenic (mg/kg)
Hexanone, 2-	591-78-6	—	6.9E+02	—	3.8E+02
Hexazinone	51235-04-2	—	2.2E+03	—	2.2E+03
Hexene, 1-	592-41-6	—	1.6E+03	—	8.4E+02
Hexene, cis-2-	7688-21-3	—	1.6E+03	—	8.4E+02
Hexylene glycol (2-methyl-2,4-pentanediol)	107-41-5	—	2.0E+04	—	2.0E+04
Hydrazine	302-01-2	3.8E-01	2.9E+00	2.1E-01	1.5E+00
Hydrocaproic acid, 6- (6-hydroxyhexanoic acid)	1191-25-9	—	1.6E+02	—	8.1E+01
Hydrogen chloride (hydrochloric acid)*	7647-01-0	—	—	—	—
Hydroquinone	123-31-9	7.8E+01	2.7E+03	7.8E+01	2.7E+03
Indene	95-13-6	—	1.0E+02	—	5.6E+01
Indeno-1,2,3-cd-pyrene	193-39-5	4.2E+01	—	4.2E+01	—
Iron*	7439-89-6	—	—	—	—
Isoamyl alcohol	123-51-3	—	4.1E+02	—	4.1E+02
Isobutyl alcohol	78-83-1	—	2.5E+04	—	2.5E+04
Isobutylene (2-methyl-1-propene)	115-11-7	—	3.0E+02	—	3.0E+02
Isobutyric acid (2-methylpropanoic acid)	79-31-2	—	3.3E+04	—	3.3E+04
Isodecanol	25339-17-7	—	7.1E+01	—	7.1E+01
Isodrin	465-73-6	2.7E-02	2.0E-01	2.7E-02	2.0E-01
Isopentane	78-78-4	—	4.8E+03	—	4.8E+03
Isophorone	78-59-1	4.9E+03	1.3E+04	4.9E+03	1.3E+04
Isopropyl acetate	108-21-4	—	5.7E+03	—	5.7E+03
Isopropyl alcohol	67-63-0	—	9.1E+03	—	4.8E+03
Isosafrole	120-58-1	1.7E+01	—	1.5E+01	—
Kelthane (dicofol)	115-32-2	—	2.7E+02	—	2.7E+02
Kepone (chlordecone)	143-50-0	3.6E-01	1.7E+01	3.5E-01	1.7E+01
Lead (inorganic)	7439-92-1	—	—	—	—
Leptophos	21609-90-5	—	1.6E-01	—	1.6E-01
Limonene, d-*	5989-27-5	—	—	—	—
Lithium	7439-93-2	—	4.4E+02	—	4.4E+02
Magnesium*	7439-95-4	—	—	—	—
Malathion	121-75-5	—	1.7E+02	—	9.6E+01
Maleic anhydride	108-31-6	—	6.7E+03	—	6.7E+03
Maleic hydrazide	123-33-1	—	3.3E+04	—	3.3E+04
Malononitrile	109-77-3	—	6.7E+00	—	6.7E+00
Mancozeb	8018-01-7	—	2.0E+03	—	2.0E+03
Manganese	7439-96-5	—	3.9E+03	—	3.9E+03
MCPA (4-(chloro-2-methylphenoxy) acetic acid)	94-74-6	—	3.3E+01	—	3.3E+01
MCPP (2-(4-chloro-2-methylphenoxy) propanoic acid)	93-65-2	—	6.7E+01	—	6.7E+01
Mercury (pH = 4.9) ¹	7439-97-6	—	3.6E+00	—	2.1E+00
Mercury (pH=6.8) ¹	7439-97-6	—	8.3E+00	—	5.5E+00
Merphos	150-50-5	—	2.0E+00	—	2.0E+00

Table 4
Tier 1 Residential Total Soil Combined PCLs

Last Revised: March 6, 2023

Chemical of Concern	CAS	TotSoil _{Comb}			
		(includes inhalation, ingestion, dermal, and vegetable consumption pathways)			
		0.5 acre source area Carcinogenic (mg/kg)	0.5 acre source area Noncarcinogenic (mg/kg)	30 acre source area Carcinogenic (mg/kg)	30 acre source area Noncarcinogenic (mg/kg)
Methacrylic acid (2-methyl-2-propenoic acid)	79-41-4	—	8.2E+02	—	8.2E+02
Methacrylonitrile	126-98-7	—	5.1E+02	—	2.8E+02
Methanol	67-56-1	—	1.1E+05	—	8.3E+04
Methapyrilene	91-80-5	1.0E+00	—	1.0E+00	—
Methomyl	16752-77-5	—	1.7E+03	—	1.7E+03
Methoxychlor	72-43-5	—	2.7E+02	—	2.7E+02
Methoxyethanol, 2-	109-86-4	—	2.7E+02	—	1.5E+02
Methyl acetate (acetic acid, methyl ester)	79-20-9	—	8.2E+04	—	8.2E+04
Methyl acrylate	96-33-3	—	1.1E+02	—	8.0E+01
Methyl amyl ketone (2-heptanone)	110-43-0	—	3.9E+03	—	3.8E+03
Methyl chrysene, 1-	3351-28-8	5.8E+02	—	5.8E+02	—
Methyl chrysene, 2-	3351-32-4	5.8E+02	—	5.8E+02	—
Methyl chrysene, 6-	1705-85-7	5.7E+01	—	5.7E+01	—
Methyl cyclohexane	108-87-2	—	4.1E+04	—	2.2E+04
Methyl ethyl ketone (2-butanone)	78-93-3	—	4.0E+04	—	3.3E+04
Methyl iodide (iodomethane)	74-88-4	—	1.1E+02	—	1.1E+02
Methyl isobutyl ketone (4-methyl-2-pentanone)	108-10-1	—	5.9E+03	—	5.4E+03
Methyl mercury	22967-92-6	—	8.0E+00	—	8.0E+00
Methyl methacrylate	80-62-6	—	9.8E+03	—	5.3E+03
Methyl methanesulfonate	66-27-3	3.3E+01	—	2.6E+01	—
Methyl parathion	298-00-0	—	1.7E+01	—	1.7E+01
Methyl-1-butene, 2-	563-46-2	—	4.8E+03	—	4.7E+03
Methyl-1-propanal, 2- (isobutyraldehyde)	78-84-2	—	3.3E+03	—	3.3E+03
Methyl-2-butene, 2-	513-35-9	—	4.8E+03	—	4.7E+03
Methyl-2-pentenal, 2-	623-36-9	3.2E+00	—	3.2E+00	—
Methylcholanthrene, 3-	56-49-5	1.9E-01	—	1.9E-01	—
Methylene bromide (dibromomethane)	74-95-3	8.1E+02	8.1E+01	8.1E+02	4.2E+01
Methylene chloride (dichloromethane)	75-09-2	1.1E+04	1.6E+03	5.9E+03	1.5E+03
Methylene-bis (2-chloroaniline) 4,4'-	101-14-4	4.6E+01	1.3E+02	4.5E+01	1.3E+02
Methylmercury hydroxide	1184-57-2	—	6.7E+00	—	6.7E+00
Methylnaphthalene, 1-	90-12-0	1.5E+02	4.4E+03	1.5E+02	4.4E+03
Methylnaphthalene, 2-	91-57-6	—	2.5E+02	—	2.5E+02
Methylpyrrolidone, N-	872-50-4	—	1.3E+03	—	1.3E+03
Methylstyrene, alpha-	98-83-9	—	2.8E+02	—	1.8E+02
Methyltetrahydrofuran, 2-	96-47-9	1.5E+02	1.6E+04	8.6E+01	1.6E+04
Methyltetrahydropyran, 2-	10141-72-7	1.7E+02	1.6E+04	9.8E+01	1.6E+04
Metolachlor	51218-45-2	—	1.0E+04	—	1.0E+04
Metribuzin	21087-64-9	—	1.7E+03	—	1.7E+03
Mirex	2385-85-5	—	1.3E+01	—	1.3E+01
Molinate	2212-67-1	—	1.3E+02	—	1.3E+02
Molybdenum	7439-98-7	—	1.6E+02	—	1.6E+02

Table 4
Tier 1 Residential Total Soil Combined PCLs

Last Revised: March 6, 2023

Chemical of Concern	CAS	TotSoilComb (includes inhalation, ingestion, dermal, and vegetable consumption pathways)			
		0.5 acre source area Carcinogenic (mg/kg)	0.5 acre source area Noncarcinogenic (mg/kg)	30 acre source area Carcinogenic (mg/kg)	30 acre source area Noncarcinogenic (mg/kg)
		Monocrotophos	2157-98-4	—	4.0E+01
Morpholine	110-91-8	—	1.0E+06	—	1.0E+06
Morpholine, N-butyl-	1005-67-0	—	1.5E+02	—	1.5E+02
MTBE (methyl tert-butyl ether)	1634-04-4	9.8E+02	8.0E+02	5.9E+02	7.9E+02
Naled	300-76-5	—	1.3E+02	—	1.3E+02
Naphthalene	91-20-3	—	2.2E+02	—	1.2E+02
Naphthoquinone, 1,4-	130-15-4	—	4.7E+02	—	4.7E+02
Naphthylamine, 1-	134-32-7	—	1.3E+03	—	1.3E+03
Naphthylamine, 2-	91-59-8	2.6E+00	—	2.6E+00	—
Napropamide	15299-99-7	—	6.7E+03	—	6.7E+03
Neopentyl glycol	126-30-7	—	2.0E+04	—	2.0E+04
Nickel and compounds	7440-02-0	1.3E+05	8.4E+02	6.8E+04	8.4E+02
Nitrate-N	14797-55-8	—	1.3E+05	—	1.3E+05
Nitrite-N	14797-65-0	—	8.0E+03	—	8.0E+03
Nitroaniline, 2-	88-74-4	—	1.4E+01	—	1.1E+01
Nitroaniline, 3-	99-09-2	1.2E+02	1.5E+01	1.2E+02	1.2E+01
Nitroaniline, 4-	100-01-6	2.3E+02	2.2E+02	2.3E+02	1.9E+02
Nitrobenzene	98-95-3	6.6E+01	1.2E+02	3.4E+01	1.1E+02
Nitroglycerin	55-63-0	2.8E+02	6.7E+00	2.8E+02	6.7E+00
Nitrophenol, 2-	88-75-5	—	1.3E+02	—	1.3E+02
Nitrophenol, 3-	554-84-7	—	1.3E+02	—	1.3E+02
Nitrophenol, 4-	100-02-7	—	1.3E+02	—	1.3E+02
Nitropropane, 2-	79-46-9	6.2E-01	1.1E+01	3.2E-01	1.1E+01
Nitroquinoline-N-oxide, 4-	56-57-5	4.0E-01	—	3.3E-01	—
Nitrosodiethanolamine	1116-54-7	1.7E+00	—	1.7E+00	—
Nitrosodiethylamine, n-	55-18-5	2.5E-02	—	1.8E-02	—
Nitrosodimethylamine, n-	62-75-9	7.4E-02	5.8E-01	5.5E-02	5.2E-01
Nitrosodi-n-butylamine, n-	924-16-3	4.7E-01	—	3.3E-01	—
Nitrosodi-n-propylamine, n-	621-64-7	4.0E-01	—	4.0E-01	—
Nitrosodiphenylamine	86-30-6	5.7E+02	—	5.7E+02	—
Nitroso-methyl-ethyl-amine, n-	10595-95-6	2.8E-01	—	2.8E-01	—
Nitrosomorpholine, N-	59-89-2	5.0E-01	—	3.9E-01	—
Nitroso-n-ethylurea, n-	759-73-9	3.4E-02	—	3.4E-02	—
Nitrosopiperidine, N-	100-75-4	3.6E-01	—	2.9E-01	—
Nitrosopyrrolidine, n-	930-55-2	1.6E+00	—	1.3E+00	—
Nitrotoluene, m-	99-08-1	—	6.7E+02	—	6.7E+02
Nitrotoluene, o-	88-72-2	2.1E+01	6.0E+01	2.1E+01	6.0E+01
Nitrotoluene, p-	99-99-0	2.9E+02	2.7E+02	2.9E+02	2.7E+02
Nonachlor, cis-	5103-73-1	5.6E+00	1.9E+01	5.6E+00	1.9E+01
Nonachlor, trans-	39765-80-5	5.6E+00	1.9E+01	5.6E+00	1.9E+01
Nonanal	124-19-6	—	1.3E+04	—	1.3E+04

Table 4
Tier 1 Residential Total Soil Combined PCLs

Last Revised: March 6, 2023

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		(includes inhalation, ingestion, dermal, and vegetable consumption pathways)			
		0.5 acre source area Carcinogenic (mg/kg)	0.5 acre source area Noncarcinogenic (mg/kg)	30 acre source area Carcinogenic (mg/kg)	30 acre source area Noncarcinogenic (mg/kg)
Nonene, 1-n	124-11-8	—	8.2E+03	—	8.2E+03
Nonylphenol, 4-n-	104-40-5	—	6.5E+03	—	6.5E+03
Nonylphenol ethoxylate	9016-45-9	—	6.5E+03	—	6.5E+03
Octamethylpyrophosphoramidate	152-16-9	—	1.3E+02	—	1.3E+02
Octanone	106-68-3	—	4.9E+03	—	4.9E+03
Oxamyl	23135-22-0	—	1.7E+03	—	1.7E+03
Oxychloridane	27304-13-8	5.6E+00	1.9E+01	5.6E+00	1.9E+01
Paraquat	1910-42-5	—	3.0E+02	—	3.0E+02
Parathion (ethyl parathion)	56-38-2	—	4.0E+02	—	4.0E+02
Pebulate	1114-71-2	—	3.3E+03	—	3.3E+03
Pendimethalin	40487-42-1	—	2.5E+03	—	2.5E+03
Pentachlorobenzene	608-93-5	—	5.3E+01	—	5.3E+01
Pentachloroethane	76-01-7	3.9E+01	2.5E+03	2.8E+01	2.5E+03
Pentachloronitrobenzene	82-68-8	1.0E+01	1.4E+02	1.0E+01	1.4E+02
Pentachlorophenol	87-86-5	7.3E-01	3.6E+01	7.3E-01	3.6E+01
Pentadiene, 1,3-cis-	1574-41-0	—	4.8E+03	—	4.7E+03
Pentadiene, 1,3-trans-	2004-70-8	—	4.8E+03	—	4.7E+03
Pentaerythritol tetranitrate (PETN)	78-11-5	—	1.3E+02	—	1.3E+02
Pentane	109-66-0	—	4.8E+03	—	4.8E+03
Pentane, 2-methyl-	107-83-5	—	4.8E+03	—	4.7E+03
Pentane, 3-methyl-	96-14-0	—	4.8E+03	—	4.7E+03
Pentanediol, 1,5-	111-29-5	—	3.0E+05	—	2.7E+05
Pentanol, 1-	71-41-0	—	2.7E+03	—	2.7E+03
Pentanol, 4-methyl-2-	108-11-2	—	2.1E+03	—	2.1E+03
Pentanone, 2-	107-87-9	—	3.3E+03	—	3.3E+03
Pentene, 2-	109-68-2	—	4.8E+03	—	4.7E+03
Pentyne, 1-	627-19-0	—	4.8E+03	—	4.7E+03
Perchlorate	14797-73-0	—	5.1E+01	—	5.1E+01
Perfluorooctane sulfonic acid (1-Octanesulfonic acid, heptadecafluoro-1-) [PFOS]	1763-23-1	—	1.5E+00	—	1.5E+00
Perfluoroundecanoic acid (Undecanoic acid, uncosafluoro-) [PFUnDa]	2058-94-8	—	8.0E-01	—	8.0E-01
Perfluoropentanoic acid (Pentanoic acid, nonafluoro-) [PFPeA]	2706-90-3	—	3.3E+01	—	3.3E+01
Perfluorohexanoic acid (Hexanoic acid, undecafluoro-) [PFHxA]	307-24-4	—	3.3E+01	—	3.3E+01
Perfluorododecanoic acid (Dodecanoic acid, tricosafuoro-) [PFDoA]	307-55-1	—	7.9E-01	—	7.8E-01
Perfluorooctanoic acid (Octanoic acid, pentadecafluoro-) [PFOA]	335-67-1	—	6.0E-01	—	4.9E-01
Perfluorodecanoic acid (Decanoic acid, nonadecafluoro-) [PFDA]	335-76-2	—	9.9E-01	—	9.8E-01
Perfluorodecane sulfonic acid (1-Decanesulfonic acid, heneicosafluoro-) [PFDS]	335-77-3	—	8.0E-01	—	8.0E-01
Perfluorohexane sulfonic acid (1-Hexanesulfonic acid, tridecafluoro-) [PFHxS]	355-46-4	—	2.5E-01	—	2.4E-01

Table 4
Tier 1 Residential Total Soil Combined PCLs

Last Revised: March 6, 2023

Chemical of Concern	CAS	TotSoil _{Comb}			
		(includes inhalation, ingestion, dermal, and vegetable consumption pathways)			
		0.5 acre source area Carcinogenic (mg/kg)	0.5 acre source area Noncarcinogenic (mg/kg)	30 acre source area Carcinogenic (mg/kg)	30 acre source area Noncarcinogenic (mg/kg)
Perfluorobutyric acid (Butanoic acid, heptafluoro-) [PFBA]	375-22-4	—	6.1E+01	—	5.6E+01
Perfluorobutane sulfonic acid (1-Butanesulfonic acid, nonafluoro-) [PFBS]	375-73-5	—	8.6E+01	—	8.0E+01
Perfluoroheptanoic acid (Heptanoic acid, tridecafluoro-) [PFHpA]	375-85-9	—	1.5E+00	—	1.5E+00
Perfluorononanoic acid (Nonanoic acid, heptadecafluoro-) [PFNA]	375-95-1	—	7.6E-01	—	7.3E-01
Perfluorotetradecanoic acid (Tetradecanoic acid, heptacosafuoro-) [PFTeDA]	376-06-7	—	5.1E-01	—	5.1E-01
Perfluorotridecanoic acid (Tridecanoic acid, pentacosafuoro-) [PFTrDA]	72629-94-8	—	6.1E-01	—	6.1E-01
Perfluorooctane sulfonamide (1-Octanesulfonamide, heptadecafluoro-) [PFOSA]	754-91-6	—	5.8E-02	—	3.1E-02
Perylene	198-55-0	—	1.3E+03	—	1.3E+03
Phenacetin	62-44-2	1.8E+03	—	1.5E+03	—
Phenanthrene	85-01-8	—	1.7E+03	—	1.7E+03
Phenanthridine	229-87-8	—	2.0E+02	—	2.0E+02
Phenol	108-95-2	—	1.8E+03	—	9.5E+02
Phenol, 4-tert-butyl-	98-54-4	—	8.0E+03	—	8.0E+03
Phenothiazine	92-84-2	—	6.3E+01	—	6.3E+01
Phenyl mercuric acetate	62-38-4	—	5.3E+00	—	5.3E+00
Phenylene diamine, m-	108-45-2	—	4.0E+02	—	4.0E+02
Phenylene diamine, p-	106-50-3	—	1.3E+04	—	1.3E+04
Phorate	298-02-2	—	1.3E+01	—	1.3E+01
Phosalone	2310-17-0	—	1.3E+02	—	1.3E+02
Phosdrin (mevinphos)	7786-34-7	—	1.7E+00	—	1.7E+00
Phosmet	732-11-6	—	1.3E+03	—	1.3E+03
Phosphine	7803-51-2	—	3.8E+00	—	2.1E+00
Phosphorotrithioic acid, S,S,S-tributyl ester	78-48-8	5.2E+01	3.2E+01	5.2E+01	3.2E+01
Phosphorus, total*	7723-14-0	—	—	—	—
Phosphorus, white	7723-14-0	—	1.5E+00	—	1.5E+00
Phthalic anhydride	85-44-9	—	3.6E+04	—	2.1E+04
Picloram	1918-02-1	—	4.7E+03	—	4.7E+03
Picoline, 2- (2-methylpyridine)	109-06-8	—	7.4E+02	—	7.4E+02
Polybrominated biphenyls (PBBs)	67774-32-7	9.7E-03	1.6E-02	9.7E-03	1.6E-02
Polychlorinated biphenyls (PCBs)	1336-36-3	1.8E+00	1.1E+00	1.7E+00	1.1E+00
Potassium*	7440-09-7	—	—	—	—
Primene	68955-53-3	—	3.6E+02	—	3.6E+02
Prometon (pramitol)	1610-18-0	—	1.0E+03	—	1.0E+03
Prometryn	7287-19-6	—	2.7E+03	—	2.7E+03
Pronamide	23950-58-5	—	5.0E+03	—	5.0E+03
Propanal (propionaldehyde)	123-38-6	—	1.0E+02	—	5.8E+01
Propane, 1-bromo-	106-94-5	—	2.9E+03	—	2.9E+03
Propanil	709-98-8	—	3.3E+02	—	3.3E+02

Table 4
Tier 1 Residential Total Soil Combined PCLs

Last Revised: March 6, 2023

Chemical of Concern	CAS	TotSoil _{Comb}			
		(includes inhalation, ingestion, dermal, and vegetable consumption pathways)			
		0.5 acre source area Carcinogenic (mg/kg)	0.5 acre source area Noncarcinogenic (mg/kg)	30 acre source area Carcinogenic (mg/kg)	30 acre source area Noncarcinogenic (mg/kg)
Propanoic acid (propionic acid)	79-09-4	—	4.1E+04	—	4.1E+04
Propanol, 1-	71-23-8	—	1.6E+05	—	1.6E+05
Propargite	2312-35-8	—	1.3E+03	—	1.3E+03
Propargyl alcohol	107-19-7	—	1.6E+02	—	1.6E+02
Propazine	139-40-2	1.1E+02	1.3E+03	1.1E+02	1.3E+03
Propham	122-42-9	—	1.3E+03	—	1.3E+03
Propionitrile (propane nitrile)	107-12-0	—	3.3E+01	—	3.3E+01
Propyl acetate, n-	109-60-4	—	7.4E+03	—	7.4E+03
Propylbenzene, n-	103-65-1	—	2.2E+03	—	1.6E+03
Propylene glycol	57-55-6	—	3.7E+02	—	1.9E+02
Propylene glycol monomethyl ether	107-98-2	—	4.6E+04	—	3.9E+04
Propylene oxide	75-56-9	2.0E+01	4.6E+02	1.7E+01	2.4E+02
Propylene tetramer	6842-15-5	—	4.6E+03	—	3.6E+03
Prothiofos (Tokuthion)	34643-46-4	—	6.6E+00	—	6.6E+00
Pyrene	129-00-0	—	1.7E+03	—	1.7E+03
Pyridine	110-86-1	—	8.2E+01	—	8.2E+01
Quinoline	91-22-5	1.6E+00	—	1.6E+00	—
Ronnel	299-84-3	—	2.3E+03	—	2.3E+03
Safrole	94-59-7	1.6E+01	—	1.3E+01	—
Selenium	7782-49-2	—	3.1E+02	—	3.1E+02
Selenourea	630-10-4	—	4.1E+02	—	4.1E+02
Silver	7440-22-4	—	9.7E+01	—	9.7E+01
Simazine	122-34-9	3.9E+01	3.3E+02	3.9E+01	3.3E+02
Sodium*	7440-23-5	—	—	—	—
Sodium hypochlorite	7681-52-9	—	1.5E+04	—	1.4E+04
Sodium polyacrylate	9003-04-7	—	1.2E+02	—	6.2E+01
Strontium	7440-24-6	—	4.4E+04	—	4.4E+04
Strychnine	57-24-9	—	2.0E+01	—	2.0E+01
Styrene	100-42-5	—	6.7E+03	—	4.3E+03
Sulfate*	14808-79-8	—	—	—	—
Sulfide*	18496-25-8	—	—	—	—
Sulfolane	126-33-0	—	4.3E+02	—	2.9E+02
Sulfur*	7704-34-9	—	—	—	—
Sulprofos (Bolstar)	35400-43-2	—	2.0E+02	—	2.0E+02
Tebuconazole	107534-96-3	—	2.0E+03	—	2.0E+03
Tebuthiuron	34014-18-1	—	4.7E+03	—	4.7E+03
Terbufos	13071-79-9	—	1.7E+00	—	1.7E+00
Tert-amyl ethyl ether (TAEE)	919-94-8	—	3.3E+03	—	3.3E+03

Table 4
Tier 1 Residential Total Soil Combined PCLs

Last Revised: March 6, 2023

Chemical of Concern	CAS	TotSoilComb (includes inhalation, ingestion, dermal, and vegetable consumption pathways)			
		0.5 acre source area Carcinogenic (mg/kg)	0.5 acre source area Noncarcinogenic (mg/kg)	30 acre source area Carcinogenic (mg/kg)	30 acre source area Noncarcinogenic (mg/kg)
		Tert-amyl-methyl ether (TAME)	994-05-8	—	3.3E+03
Tert-butyl alcohol (2-methyl-2-propanol)	75-65-0	—	7.4E+03	—	7.4E+03
Tetrachlorobenzene, 1,2,3,4-	634-66-2	—	2.0E+01	—	2.0E+01
Tetrachlorobenzene, 1,2,3,5-	634-90-2	—	1.3E+01	—	1.3E+01
Tetrachlorobenzene, 1,2,4,5-	95-94-3	—	2.0E+01	—	2.0E+01
Tetrachloroethane, 1,1,1,2-	630-20-6	6.5E+01	2.5E+03	3.9E+01	2.5E+03
Tetrachloroethane, 1,1,2,2-	79-34-5	3.0E+01	1.6E+03	3.0E+01	1.6E+03
Tetrachloroethylene [PCE]	127-18-4	7.1E+02	1.3E+03	4.2E+02	1.1E+03
Tetrachlorophenol, 2,3,4,5-	4901-51-3	—	4.0E+02	—	4.0E+02
Tetrachlorophenol, 2,3,4,6-	58-90-2	—	1.8E+02	—	1.8E+02
Tetrachlorophenol, 2,3,5,6-	935-95-5	—	2.3E+01	—	2.3E+01
Tetrachlorvinphos (Stirophos)	22248-79-9	—	2.6E+03	—	2.6E+03
Tetradifon	116-29-0	—	1.0E+03	—	1.0E+03
Tetraethyl dithiopyrophosphate (sulfotep)	3689-24-5	—	3.3E+01	—	3.3E+01
Tetraethyl lead	78-00-2	—	6.7E-03	—	6.7E-03
Tetraethyl pyrophosphate (TEPP)	107-49-3	—	7.3E-01	—	7.3E-01
Tetraethylene glycol	112-60-7	—	2.2E+04	—	2.2E+04
Tetrahydrofuran	109-99-9	1.5E+02	2.2E+04	8.6E+01	1.3E+04
Tetrahydropyran	142-68-7	1.6E+02	1.6E+04	9.2E+01	1.6E+04
Tetraoxadodecane, 2,5,8,11-	112-49-2	—	1.7E+03	—	1.7E+03
Thallium	7440-28-0	—	5.3E+00	—	5.3E+00
Thiofanox	39196-18-4	—	2.0E+01	—	2.0E+01
Thionazin	297-97-2	—	4.7E+00	—	4.7E+00
Thiophanate-methyl	23564-05-8	—	5.3E+03	—	5.3E+03
Thiram	137-26-8	—	3.3E+02	—	3.3E+02
Tin	7440-31-5	—	3.5E+04	—	3.5E+04
Titanium	7440-32-6	—	2.2E+05	—	2.2E+05
Toluene	108-88-3	—	5.9E+03	—	5.4E+03
Toluene diisocyanate, 2,4/2,6-	26471-62-5	—	1.5E+02	—	7.5E+01
Toluenediamine, 2,4-	95-80-7	1.5E+00	—	1.5E+00	—
Toluenediamine, 2,6-	823-40-5	—	2.0E+03	—	2.0E+03
Toluidine, o-	95-53-4	4.7E+01	—	3.5E+01	—
Toluidine, p-	106-49-0	7.1E+01	—	7.1E+01	—
Toxaphene	8001-35-2	1.2E+00	9.0E+00	1.2E+00	9.0E+00
TPH, TX1005, C6-C12	TPH-1005-1	—	1.6E+03	—	1.1E+03
TPH, TX1005, >C12-C28	TPH-1005-2	—	2.3E+03	—	2.0E+03
TPH, TX1005, >C12-C35	TPH-1005-3	—	2.3E+03	—	2.0E+03
TPH, TX1005, >C28-C35	TPH-1005-4	—	2.3E+03	—	2.0E+03

Table 4
Tier 1 Residential Total Soil Combined PCLs

Last Revised: March 6, 2023

Chemical of Concern	CAS	TotSoil _{Comb}			
		(includes inhalation, ingestion, dermal, and vegetable consumption pathways)			
		0.5 acre source area Carcinogenic (mg/kg)	0.5 acre source area Noncarcinogenic (mg/kg)	30 acre source area Carcinogenic (mg/kg)	30 acre source area Noncarcinogenic (mg/kg)
TP Silvex, 2,4,5-	93-72-1	—	5.3E+02	—	5.3E+02
Triademenol	55219-65-3	—	2.0E+03	—	2.0E+03
Triallate	2303-17-5	—	3.2E+02	—	3.2E+02
Triaminotrinitrobenzene (TATB)	3058-38-6	—	2.0E+02	—	2.0E+02
Tributyltin oxide	56-35-9	—	2.0E+01	—	2.0E+01
Trichloro-1,2,2-trifluoroethane, 1,1,2-	76-13-1	—	7.4E+04	—	3.9E+04
Trichlorobenzene, 1,2,3-	87-61-6	—	1.2E+02	—	8.7E+01
Trichlorobenzene, 1,2,4-	120-82-1	1.6E+02	1.2E+02	1.6E+02	7.0E+01
Trichlorobenzene, 1,3,5-	108-70-3	—	7.8E+01	—	4.9E+01
Trichloroethane, 1,1,1-	71-55-6	—	5.3E+04	—	3.2E+04
Trichloroethane, 1,1,2-	79-00-5	1.8E+01	3.3E+02	1.0E+01	3.3E+02
Trichloroethylene [TCE]	79-01-6	5.3E+01	1.8E+01	3.4E+01	1.1E+01
Trichlorofluoromethane	75-69-4	—	2.5E+04	—	2.5E+04
Trichloronate	327-98-0	—	1.4E+02	—	1.4E+02
Trichlorophenol, 2,3,4-	15950-66-0	—	6.7E+03	—	6.7E+03
Trichlorophenol, 2,3,5-	933-78-8	—	6.7E+03	—	6.7E+03
Trichlorophenol, 2,3,6-	933-75-5	—	5.3E+02	—	5.3E+02
Trichlorophenol, 2,4,5-	95-95-4	—	6.7E+03	—	6.7E+03
Trichlorophenol, 2,4,6-	88-06-2	3.5E+02	6.7E+01	3.0E+02	6.7E+01
Trichlorophenol, 3,4,5-	609-19-8	—	6.7E+03	—	6.7E+03
Trichlorophenoxyacetic acid, 2,4,5-	93-76-5	—	6.7E+02	—	6.7E+02
Trichloropropane, 1,1,2-	598-77-6	—	4.6E+00	—	2.4E+00
Trichloropropane, 1,2,3-	96-18-4	2.0E-01	1.3E+01	2.0E-01	7.0E+00
Triethanolamine	102-71-6	—	3.0E+03	—	1.7E+03
Triethylamine	121-44-8	—	1.1E+02	—	5.5E+01
Triethylene glycol	112-27-6	—	1.3E+05	—	1.3E+05
Triethylphosphorothioate, O, O, O-	126-68-1	—	5.5E-01	—	5.5E-01
Trifluralin	1582-09-8	2.7E+02	3.0E+02	2.7E+02	3.0E+02
Trimethylamine	75-50-3	—	1.5E+02	—	7.6E+01
Trimethylbenzene, 1,2,3-	526-73-8	—	1.6E+03	—	1.1E+03
Trimethylbenzene, 1,2,4-	95-63-6	—	1.6E+03	—	1.2E+03
Trimethylbenzene, 1,3,5-	108-67-8	—	1.5E+03	—	1.1E+03
Trinitrobenzene, 1,3,5-	99-35-4	—	2.0E+03	—	2.0E+03
Trinitrophenylmethylnitramine (teteryl; nitramine)	479-45-8	—	1.5E+02	—	1.5E+02
Trinitrotoluene, 2,4,6-	118-96-7	1.6E+02	3.3E+01	1.6E+02	3.3E+01
Tungsten (as sodium tungstate dihydride)	7440-33-7	—	7.3E+01	—	7.3E+01
Uranium (soluble salts)	7440-61-1	—	2.2E+02	—	2.2E+02
Valeric acid (pentanoic acid)	109-52-4	—	1.3E+02	—	6.8E+01

Table 4
Tier 1 Residential Total Soil Combined PCLs

Last Revised: March 6, 2023

Chemical of Concern	CAS	TotSoilComb (includes inhalation, ingestion, dermal, and vegetable consumption pathways)			
		0.5 acre source area Carcinogenic (mg/kg)	0.5 acre source area Noncarcinogenic (mg/kg)	30 acre source area Carcinogenic (mg/kg)	30 acre source area Noncarcinogenic (mg/kg)
		Vanadium	7440-62-2	—	7.6E+01
Vernam	1929-77-7	—	6.7E+01	—	6.7E+01
Vinyl acetate	108-05-4	—	3.0E+03	—	1.5E+03
Vinyl chloride	75-01-4	3.7E+00	1.9E+02	3.4E+00	1.6E+02
Vinylcyclohexane	695-12-5	—	4.1E+04	—	4.1E+04
Warfarin	81-81-2	—	2.0E+01	—	2.0E+01
Xylene, m-	108-38-3	—	8.9E+03	—	4.7E+03
Xylene, o-	95-47-6	—	4.8E+04	—	2.9E+04
Xylene, p-	106-42-3	—	8.9E+03	—	4.7E+03
Xylenes	1330-20-7	—	6.0E+03	—	3.7E+03
Zinc	7440-66-6	—	9.9E+03	—	9.9E+03
6 C aliphatics (TPH) (>53% n-hexane content)	NA	—	3.3E+03	—	2.5E+03
6 C aliphatics (TPH) (<53% n-hexane content)	NA	—	4.8E+03	—	4.8E+03
>6-8 C aliphatics (TPH) (>53% n-hexane content)	NA	—	3.3E+03	—	2.5E+03
>6-8 C aliphatics (TPH) (<53% n-hexane content)	NA	—	4.8E+03	—	4.8E+03
>8-10 C aliphatics (TPH)	NA	—	4.0E+03	—	2.7E+03
>10-12 C aliphatics (TPH)	NA	—	3.6E+03	—	2.5E+03
>12-16 C aliphatics (TPH)	NA	—	4.3E+03	—	3.2E+03
>16-21 C aliphatics (TPH)	NA	—	1.3E+05	—	1.3E+05
>16-21 C aliphatics (TPH) (for transformer mineral oil releases only)	NA	—	1.1E+05	—	1.1E+05
>21-35 C aliphatics (TPH)	NA	—	1.3E+05	—	1.3E+05
>21-35 C aliphatics (TPH) (for transformer mineral oil releases only)	NA	—	1.1E+05	—	1.1E+05
>7-8 C aromatics (TPH)	NA	—	6.4E+03	—	5.3E+03
>8-10 C aromatics (TPH)	NA	—	1.6E+03	—	1.1E+03
>10-12 C aromatics (TPH)	NA	—	1.9E+03	—	1.5E+03
>12-16 C aromatics (TPH)	NA	—	2.3E+03	—	2.0E+03
>16-21 C aromatics (TPH)	NA	—	2.0E+03	—	2.0E+03
>21-35 C aromatics (TPH)	NA	—	2.0E+03	—	2.0E+03

Footnotes

1 Site-specific PCLs for mercury may vary based on the pH-dependent Kd value (see Figure:30 TAC §350.73(f)(1)(C)).

* These compounds are not necessarily of concern from a human health standpoint, therefore calculation of human health-based values is not required. However, aesthetics and ecological criteria would still apply. See table entitled "Compounds for which Calculation of a Human Health PCL is Not Required" available on the TCEQ website at <http://www.tceq.state.tx.us/remediation/trrp/trrp.html>.

NA = not applicable

All values capped at 1E+06

This table shows the total soil combined protective concentration levels for residential land with both carcinogenic and non-carcinogenic values depicted.

end of worksheet

Table 5
Tier 1 Commercial/Industrial Total Soil Combined PCLs

Last Revised: March 6, 2023

Chemical of Concern	CAS	TotSoil _{Comb}			
		(includes inhalation, ingestion, and dermal pathways)			
		0.5 acre source area Carcinogenic (mg/kg)	0.5 acre source area Noncarcinogenic (mg/kg)	30 acre source area Carcinogenic (mg/kg)	30 acre source area Noncarcinogenic (mg/kg)
Acenaphthene	83-32-9	—	3.7E+04	—	3.7E+04
Acenaphthylene	208-96-8	—	3.7E+04	—	3.7E+04
Acetaldehyde	75-07-0	2.9E+02	2.0E+02	1.5E+02	1.0E+02
Acetate, 2-ethoxyethanol	111-15-9	—	7.8E+03	—	4.2E+03
Acetate, isoamyl	123-92-2	—	7.4E+04	—	7.4E+04
Acetate, isobutyl	110-19-0	—	4.9E+04	—	4.9E+04
Acetate, sec-butyl	105-46-4	—	4.9E+04	—	4.9E+04
Acetic acid*	64-19-7	—	—	—	—
Acetone (2-propanone)	67-64-1	—	4.4E+05	—	2.9E+05
Acetone cyanohydrin	75-86-5	—	1.5E+03	—	1.2E+03
Acetonitrile	75-05-8	—	1.7E+03	—	9.1E+02
Acetophenone	98-86-2	—	6.8E+04	—	6.8E+04
Acetylamino fluorene, 2-	53-96-3	4.3E+00	—	3.8E+00	—
Acifluorfen, sodium	62476-59-9	—	8.9E+03	—	8.9E+03
Acridine	260-94-6	—	2.0E+03	—	2.0E+03
Acrolein	107-02-8	—	1.5E+02	—	9.0E+01
Acrylamide	79-06-1	2.1E+01	5.8E+02	1.5E+01	3.7E+02
Acrylic acid	79-10-7	—	1.7E+02	—	8.7E+01
Acrylonitrile	107-13-1	7.6E+00	4.1E+01	4.2E+00	2.2E+01
Adipic acid (hexanedioic acid)	124-04-9	—	1.0E+06	—	1.0E+06
Alachlor	15972-60-8	2.4E+02	6.8E+03	2.4E+02	6.8E+03
Aldicarb	116-06-3	—	6.8E+02	—	6.8E+02
Aldicarb sulfone	1646-88-4	—	6.8E+02	—	6.8E+02
Aldrin	309-00-2	1.0E+00	2.0E+01	9.7E-01	2.0E+01
Allyl alcohol	107-18-6	—	8.0E+00	—	4.1E+00
Allyl chloride	107-05-1	—	2.1E+01	—	1.1E+01
Aluminum	7429-90-5	—	6.2E+05	—	5.7E+05
Ametryn	834-12-8	—	6.1E+03	—	6.1E+03
Amino-2,6-dinitrotoluene, 4-	19406-51-0	6.4E+02	3.4E+02	6.4E+02	3.4E+02
Amino-4,6-dinitrotoluene, 2-	35572-78-2	6.4E+02	3.4E+02	6.4E+02	3.4E+02
Aminobiphenyl, 4- (1,1-biphenyl-4-amine)	92-67-1	3.1E+00	—	3.1E+00	—
Aminopyridine, 4-	504-24-5	—	1.4E+01	—	1.4E+01
Ammonia	7664-41-7	—	6.9E+03	—	3.5E+03
Ammonium polyphosphate*	6833-79-9	—	—	—	—
Ammonium salts*	AMMONIUM	—	—	—	—
Aniline	62-53-3	3.3E+03	1.8E+02	3.3E+03	9.3E+01
Anthracene	120-12-7	—	1.9E+05	—	1.9E+05
Anthraquinone, 9,10-	84-65-1	4.9E+02	1.4E+04	4.9E+02	1.4E+04
Antimony	7440-36-0	—	3.1E+02	—	3.1E+02
Aramite	140-57-8	7.6E+02	3.4E+04	7.6E+02	3.4E+04
Arsenic	7440-38-2	2.0E+02	3.3E+02	2.0E+02	3.3E+02

Table 5
Tier 1 Commercial/Industrial Total Soil Combined PCLs

Last Revised: March 6, 2023

Chemical of Concern	CAS	TotSoil _{Comb}			
		(includes inhalation, ingestion, and dermal pathways)			
		0.5 acre source area Carcinogenic (mg/kg)	0.5 acre source area Noncarcinogenic (mg/kg)	30 acre source area Carcinogenic (mg/kg)	30 acre source area Noncarcinogenic (mg/kg)
Arsine	7784-42-1	—	1.1E+00	—	5.5E-01
Atrazine	1912-24-9	8.6E+01	2.4E+04	8.6E+01	2.4E+04
Azinphos-methyl (guthion)	86-50-0	—	1.0E+03	—	1.0E+03
Azobenzene	103-33-3	1.6E+02	—	1.5E+02	—
Barium	7440-39-3	—	1.2E+05	—	1.2E+05
Bayleton	43121-43-3	—	2.0E+04	—	2.0E+04
Benefin (benfluralin)	1861-40-1	—	2.0E+05	—	2.0E+05
Benomyl	17804-35-2	—	3.4E+04	—	3.4E+04
Benz-a-anthracene	56-55-3	1.7E+02	—	1.7E+02	—
Benzaldehyde	100-52-7	—	1.0E+05	—	1.0E+05
Benzene	71-43-2	2.4E+02	2.4E+03	1.3E+02	1.8E+03
Benzenedicarbonitrile, 1,3-	626-17-5	—	4.1E+03	—	4.1E+03
Benzenedicarboxylic acid, 1,2-disodecyl ester	26761-40-0	—	2.7E+04	—	2.7E+04
Benzenethiol	108-98-5	—	1.0E+03	—	1.0E+03
Benzidine	92-87-5	4.7E-02	2.0E+03	3.3E-02	2.0E+03
Benzo-a-pyrene	50-32-8	1.7E+01	5.9E+01	1.7E+01	3.6E+01
Benzo-b-fluoranthene	205-99-2	1.7E+02	—	1.7E+02	—
Benzo-e-pyrene	192-97-2	—	1.9E+04	—	1.9E+04
Benzo-g,h,i-perylene	191-24-2	—	1.9E+04	—	1.9E+04
Benzoic acid	65-85-0	—	1.0E+06	—	1.0E+06
Benzo-j-fluoranthene	205-82-3	1.7E+02	—	1.7E+02	—
Benzo-k-fluoranthene	207-08-9	1.7E+03	—	1.7E+03	—
Benzophenone	119-61-9	—	4.6E+03	—	4.6E+03
Benzotrichloride	98-07-7	1.5E+00	—	1.5E+00	—
Benzoyl peroxide	94-36-0	—	3.4E+04	—	3.4E+04
Benzyl alcohol	100-51-6	—	6.8E+04	—	6.8E+04
Benzyl chloride	100-44-7	1.7E+02	4.2E+01	1.7E+02	2.2E+01
Benzyl dichloride	98-87-3	1.1E+02	7.3E+01	1.1E+02	3.9E+01
Beryllium	7440-41-7	1.6E+04	2.5E+02	8.1E+03	2.5E+02
Biphenyl, 1,1-	92-52-4	—	8.5E+04	—	8.5E+04
Biphenyl, 1,1'-, 2-phenoxy-	6738-04-1	—	3.4E+04	—	3.4E+04
Biquinoline, 2,2'-	119-91-5	—	2.0E+03	—	2.0E+03
Bis (2-chloroethoxy) methane	111-91-1	9.1E+00	2.0E+03	6.2E+00	2.0E+03
Bis (2-chloroethyl) ether	111-44-4	4.9E+00	—	2.8E+00	—
Bis (2-chloro-1-methylethyl) ether	108-60-1	1.5E+02	2.7E+04	1.1E+02	2.7E+04
Bis (2-chloromethyl) ether	542-88-1	9.0E-03	—	4.8E-03	—
Bis (2-ethyl-hexyl) phthalate	117-81-7	5.6E+02	5.6E+03	5.6E+02	5.6E+03
Bismuth	7440-69-9	—	4.1E+05	—	4.1E+05
Bisphenol A	80-05-7	—	3.4E+04	—	3.4E+04
Boron	7440-42-8	—	1.9E+05	—	1.9E+05
Bromacil	314-40-9	—	6.8E+04	—	6.8E+04

Table 5
Tier 1 Commercial/Industrial Total Soil Combined PCLs

Last Revised: March 6, 2023

Chemical of Concern	CAS	TotSoil _{Comb}			
		(includes inhalation, ingestion, and dermal pathways)			
		0.5 acre source area Carcinogenic (mg/kg)	0.5 acre source area Noncarcinogenic (mg/kg)	30 acre source area Carcinogenic (mg/kg)	30 acre source area Noncarcinogenic (mg/kg)
Bromo-2-chloroethane, 1-	107-04-0	—	4.1E+04	—	4.1E+04
Bromobenzene	108-86-1	—	1.2E+03	—	6.4E+02
Bromodichloromethane	75-27-4	4.6E+02	8.2E+03	4.6E+02	8.2E+03
Bromoform	75-25-2	1.0E+03	2.0E+04	6.0E+02	2.0E+04
Bromomethane	74-83-9	—	7.9E+01	—	4.2E+01
Bromophenyl phenylether, 4-	101-55-3	1.2E+00	—	1.1E+00	—
Butadiene, 1,3-	106-99-0	1.2E+03	7.1E+02	6.2E+02	3.6E+02
Butadiene, 2-methyl-1,3- (isoprene)	78-79-5	—	5.3E+04	—	4.7E+04
Butanal (butyraldehyde)	123-72-8	—	2.1E+03	—	1.1E+03
Butane, 2,3-dimethyl-	79-29-8	—	5.3E+04	—	4.7E+04
Butanoic acid (butyric acid)	107-92-6	—	1.8E+02	—	9.3E+01
Butanol, 2-	78-92-2	—	1.0E+06	—	6.8E+05
Butanol, 2-methyl-1-	137-32-6	—	1.0E+04	—	1.0E+04
Butanol, 2-methyl-2-	75-85-4	—	1.0E+04	—	1.0E+04
Butanol, n-	71-36-3	—	1.0E+05	—	1.0E+05
Butene, 1-	106-98-9	—	4.0E+04	—	3.0E+04
Butene, cis-2-	590-18-1	—	2.2E+04	—	1.4E+04
Butene, trans-2-	624-64-6	—	2.2E+04	—	1.4E+04
Butoxy ethanol, 2- (Ethylene glycol monobutyl ether; EGBE)	111-76-2	—	5.8E+04	—	5.2E+04
Butyl acetate	123-86-4	—	6.4E+04	—	4.2E+04
Butyl acrylate	141-32-2	—	9.2E+03	—	9.2E+03
Butyl benzyl phthalate	85-68-7	1.0E+04	1.4E+05	1.0E+04	1.4E+05
Butyl ether, n- (dibutyl ether)	142-96-1	—	1.0E+05	—	1.0E+05
Butyl methacrylate	97-88-1	—	2.6E+04	—	2.6E+04
Butylate	2008-41-5	—	3.4E+04	—	3.4E+04
Butylbenzene, n-	104-51-8	—	3.4E+04	—	3.4E+04
Butylbenzene, sec-	135-98-8	—	4.1E+04	—	4.1E+04
Butylbenzene, tert-	98-06-6	—	4.1E+04	—	4.1E+04
Cacodylic acid	75-60-5	—	2.0E+03	—	2.0E+03
Cadmium	7440-43-9	7.7E+04	8.1E+02	4.0E+04	7.7E+02
Calcium*	7440-70-2	—	—	—	—
Caprolactam	105-60-2	—	3.4E+05	—	3.4E+05
Captan	133-06-2	5.5E+03	8.9E+04	5.5E+03	8.9E+04
Carbaryl	63-25-2	—	6.8E+04	—	6.8E+04
Carbazole	86-74-8	9.5E+02	—	9.5E+02	—
Carbofuran	1563-66-2	—	3.4E+03	—	3.4E+03
Carbon disulfide	75-15-0	—	1.3E+04	—	7.2E+03
Carbon tetrachloride	56-23-5	8.1E+01	1.4E+03	4.6E+01	8.7E+02
Carbophenothion	786-19-6	—	8.9E+03	—	8.9E+03
Carbosulfan	55285-14-8	—	6.8E+03	—	6.8E+03
Carboxin	5234-68-4	—	6.8E+04	—	6.8E+04

Table 5
Tier 1 Commercial/Industrial Total Soil Combined PCLs

Last Revised: March 6, 2023

Chemical of Concern	CAS	TotSoilComb (includes inhalation, ingestion, and dermal pathways)			
		0.5 acre source area Carcinogenic (mg/kg)	0.5 acre source area Noncarcinogenic (mg/kg)	30 acre source area Carcinogenic (mg/kg)	30 acre source area Noncarcinogenic (mg/kg)
		Chloral	75-87-6	—	1.0E+05
Chloral hydrate (1,1-ethanediol, 2,2,2-trichloro-)	302-17-0	—	6.8E+04	—	6.8E+04
Chloramben (amiben; 3-amino-2,5-dichlorobenzoic acid)	133-90-4	—	1.0E+04	—	1.0E+04
Chlordane (technical)	12789-03-6	6.6E+01	3.9E+02	6.4E+01	3.7E+02
Chlordane, cis- (alpha chlordane)	5103-71-9	5.4E+01	3.3E+02	5.4E+01	3.3E+02
Chlordane, trans- (gamma chlordane)	5103-74-2	5.3E+01	3.1E+02	5.1E+01	2.9E+02
Chlorfenvinphos	470-90-6	—	3.9E+01	—	2.1E+01
Chloride*	16887-00-6	—	—	—	—
Chlorine	7782-50-5	—	1.9E+02	—	9.6E+01
Chloro-1,3-butadiene, 2-	126-99-8	2.0E+00	4.3E+02	1.0E+00	2.2E+02
Chloro-2-propanol, 1-	127-00-4	—	2.0E+04	—	2.0E+04
Chloro-3-methylphenol, 4-	59-50-7	—	3.4E+03	—	3.4E+03
Chloroaniline, p-	106-47-8	9.5E+01	2.7E+03	9.5E+01	2.7E+03
Chlorobenzene	108-90-7	—	1.0E+03	—	5.4E+02
Chlorobenzilate	510-15-6	6.3E+01	1.4E+04	5.7E+01	1.4E+04
Chlorobromomethane (bromochloromethane)	74-97-5	—	4.1E+04	—	4.1E+04
Chlorodifluoromethane	75-45-6	—	1.0E+06	—	5.5E+05
Chloroethane (ethyl chloride)	75-00-3	—	1.4E+05	—	8.7E+04
Chloroethanol, 2-	107-07-3	—	2.0E+04	—	2.0E+04
Chloroethoxy ethene, 2- (2-chloroethylvinylether)	110-75-8	2.6E+01	6.4E+00	2.6E+01	3.3E+00
Chloroform	67-66-3	2.6E+01	1.7E+03	1.3E+01	9.7E+02
Chlorohexane, 1-	544-10-5	—	1.4E+04	—	8.7E+03
Chloromethane (methyl chloride)	74-87-3	2.9E+02	1.3E+03	1.6E+02	7.8E+02
Chloronaphthalene, 1- (Chloronaphthalene, alpha-)	90-13-1	—	5.0E+04	—	5.0E+04
Chloronaphthalene, 2- (chloronaphthalene, beta)	91-58-7	—	5.0E+04	—	5.0E+04
Chloronitrobenzene, p- (1-chloro-4-nitrobenzene)	100-00-5	3.0E+03	7.8E+01	3.0E+03	4.2E+01
Chlorophenol, 2-	95-57-8	—	5.1E+03	—	5.1E+03
Chlorophenol, 3-	108-43-0	—	3.4E+03	—	3.4E+03
Chlorophenol, 4-	106-48-9	—	3.4E+03	—	3.4E+03
Chlorophenyl phenylether, 4-	7005-72-3	9.8E-01	—	8.0E-01	—
Chloropropane, 2-	75-29-6	—	2.0E+03	—	1.1E+03
Chlorothalonil	1897-45-6	1.7E+03	1.0E+04	1.7E+03	1.0E+04
Chlorotoluene, o- (2-chlorotoluene)	95-49-8	—	7.8E+03	—	5.6E+03
Chlorotoluene, p- (4-chlorotoluene)	106-43-4	—	2.0E+04	—	2.0E+04
Chlorpyrifos	2921-88-2	—	2.0E+03	—	2.0E+03
Chromium (III)	16065-83-1	—	1.2E+05	—	7.5E+04
Chromium (total)	7440-47-3	—	1.2E+05	—	7.5E+04
Chromium (VI)	18540-29-9	1.6E+04	1.0E+03	8.5E+03	1.0E+03
Chrysene	218-01-9	1.7E+04	—	1.7E+04	—
Cobalt	7440-48-4	6.3E+03	8.7E+03	3.3E+03	8.0E+03
Copolymer acrylamide	69418-26-4	—	1.4E+02	—	1.4E+02

Table 5
Tier 1 Commercial/Industrial Total Soil Combined PCLs

Last Revised: March 6, 2023

Chemical of Concern	CAS	TotSoil _{Comb}			
		(includes inhalation, ingestion, and dermal pathways)			
		0.5 acre source area Carcinogenic (mg/kg)	0.5 acre source area Noncarcinogenic (mg/kg)	30 acre source area Carcinogenic (mg/kg)	30 acre source area Noncarcinogenic (mg/kg)
Copper	7440-50-8	—	9.4E+04	—	9.4E+04
Coronene	191-07-1	—	1.4E+03	—	1.4E+03
Coumaphos	56-72-4	—	4.8E+03	—	4.8E+03
Cresol	1319-77-3	—	3.4E+04	—	3.4E+04
Cresol, m- (3-methylphenol)	108-39-4	—	3.4E+04	—	3.4E+04
Cresol, o- (2-methylphenol)	95-48-7	—	3.4E+04	—	3.4E+04
Cresol, p- (4-methylphenol)	106-44-5	—	3.4E+03	—	3.4E+03
Crotonaldehyde	123-73-9	1.5E+01	1.0E+03	1.5E+01	1.0E+03
Cumene (isopropylbenzene)	98-82-8	—	1.1E+04	—	6.3E+03
Cyanazine	21725-46-2	2.3E+01	1.4E+03	2.3E+01	1.4E+03
Cyanide	57-12-5	—	3.7E+02	—	2.8E+02
Cyanogen	460-19-5	—	1.7E+01	—	8.8E+00
Cycloate	1134-23-2	—	3.7E+04	—	3.7E+04
Cyclohexane	110-82-7	—	1.3E+05	—	6.5E+04
Cyclohexanol	108-93-0	—	1.0E+06	—	1.0E+06
Cyclohexanone	108-94-1	—	4.9E+04	—	2.5E+04
Cyclohexene, 1-methanol-3-	1679-51-2	—	1.4E+04	—	1.4E+04
Cyclohexene, 4-vinyl-1-	100-40-3	—	5.4E+03	—	3.1E+03
Cyclopentane	287-92-3	—	5.5E+04	—	5.0E+04
Cyclopentane, methyl-	96-37-7	—	1.8E+04	—	1.0E+04
Cyclopentene	142-29-0	—	1.0E+06	—	1.0E+06
Cyclotetramethylenetetranitramine (HMX)	2691-41-0	—	1.2E+04	—	1.2E+04
Cyclotrimethylenetrinitramine (RDX)	121-82-4	2.4E+02	2.7E+03	2.4E+02	2.7E+03
Cymene (isopropyltoluene)	99-87-6	—	1.0E+05	—	1.0E+05
Cymoxanil	57966-95-7	—	8.9E+03	—	8.9E+03
Dacthal (DCPA)	1861-32-1	—	6.8E+03	—	6.8E+03
Dalapon, sodium salt (2,2-dichloropropanoic acid)	75-99-0	—	2.0E+04	—	2.0E+04
DDD	72-54-8	1.0E+02	—	1.0E+02	—
DDE	72-55-9	7.3E+01	—	7.3E+01	—
DDT	50-29-3	7.1E+01	4.4E+02	6.8E+01	4.4E+02
Demeton	8065-48-3	—	2.7E+01	—	2.7E+01
Desethylatrazine	6190-65-4	—	2.4E+04	—	2.4E+04
Diacetone alcohol (4-hydroxy-4-methyl-2-pentanone)	123-42-2	—	2.7E+04	—	2.7E+04
Diallate	2303-16-4	3.1E+02	—	3.1E+02	—
Diazinon	333-41-5	—	7.9E+01	—	4.3E+01
Dibenz(a,h)acridine	226-36-8	1.6E+01	—	1.6E+01	—
Dibenz(a,j)acridine	224-42-0	2.4E+01	—	2.4E+01	—
Dibenz-a,h-anthracene	53-70-3	1.7E+01	—	1.7E+01	—
Dibenzo(a,e)pyrene	192-65-4	2.6E+00	—	2.6E+00	—
Dibenzo(a,h)pyrene	189-64-0	2.6E-01	—	2.6E-01	—
Dibenzo(a,i)pyrene	189-55-9	2.6E-01	—	2.6E-01	—

Table 5
Tier 1 Commercial/Industrial Total Soil Combined PCLs

Last Revised: March 6, 2023

Chemical of Concern	CAS	TotSoil _{Comb}			
		(includes inhalation, ingestion, and dermal pathways)			
		0.5 acre source area Carcinogenic (mg/kg)	0.5 acre source area Noncarcinogenic (mg/kg)	30 acre source area Carcinogenic (mg/kg)	30 acre source area Noncarcinogenic (mg/kg)
Dibenzofuran	132-64-9	—	2.7E+03	—	2.7E+03
Dibenzothiophene	132-65-0	—	2.0E+03	—	2.0E+03
Dibromo-3-chloropropane, 1,2-	96-12-8	2.6E-01	1.0E+01	1.4E-01	5.6E+00
Dibromochloromethane (chlorodibromomethane)	124-48-1	3.4E+02	2.0E+04	3.4E+02	2.0E+04
Dibromofluoromethane	1868-53-7	—	2.0E+05	—	2.0E+05
Dicamba	1918-00-9	—	2.0E+04	—	2.0E+04
Dichlormid	37764-25-3	—	1.7E+04	—	1.7E+04
Dichloro-2-butene, 1,4-	764-41-0	3.3E-01	—	1.7E-01	—
Dichloro-2-butene, 1,4- trans	110-57-6	3.4E-01	—	1.8E-01	—
Dichlorobenzene, 1,2-	95-50-1	—	1.1E+03	—	5.7E+02
Dichlorobenzene, 1,3-	541-73-1	—	1.7E+02	—	8.8E+01
Dichlorobenzene, 1,4-	106-46-7	1.2E+03	1.6E+04	1.2E+03	8.5E+03
Dichlorobenzidine, 3,3-	91-94-1	4.2E+01	—	4.2E+01	—
Dichlorobutane, 2,3-	7581-97-7	—	1.5E+02	—	7.7E+01
Dichlorodifluoromethane	75-71-8	—	2.1E+03	—	1.1E+03
Dichloroethane, 1,1-	75-34-3	—	4.1E+04	—	2.3E+04
Dichloroethane, 1,2-	107-06-2	1.1E+02	9.3E+02	7.1E+01	4.8E+02
Dichloroethylene, 1,1-	75-35-4	—	6.4E+03	—	3.5E+03
Dichloroethylene, cis-1,2-	156-59-2	—	7.9E+02	—	5.0E+02
Dichloroethylene, trans-1,2	156-60-5	—	1.2E+03	—	6.4E+02
Dichlorofluoromethane	75-43-4	—	2.0E+05	—	2.0E+05
Dichlorophenol, 2,3-	576-24-9	—	2.0E+03	—	2.0E+03
Dichlorophenol, 2,4-	120-83-2	—	2.0E+03	—	2.0E+03
Dichlorophenol, 2,5-	583-78-8	—	2.0E+03	—	2.0E+03
Dichlorophenol, 2,6-	87-65-0	—	6.8E+02	—	6.8E+02
Dichlorophenol, 3,4-	95-77-2	—	2.0E+03	—	2.0E+03
Dichlorophenol, 3,5-	591-35-5	—	2.0E+03	—	2.0E+03
Dichlorophenoxy, 2,4- butyric acid, 4- (2,4-DB)	94-82-6	—	5.5E+03	—	5.5E+03
Dichlorophenoxyacetic acid, 2,4- (2,4-D)	94-75-7	—	1.6E+05	—	1.6E+05
Dichloroprop (2-(2,4-dichlorophenoxy) propanoic acid)	120-36-5	—	6.8E+03	—	6.8E+03
Dichloropropane, 1,2-	78-87-5	3.5E+02	8.6E+01	2.3E+02	4.4E+01
Dichloropropane, 1,3-	142-28-9	9.9E+01	4.2E+02	6.1E+01	2.2E+02
Dichloropropane, 2,2-	594-20-7	4.2E+02	8.6E+01	4.2E+02	4.4E+01
Dichloropropanol, 2,3-	616-23-9	—	2.0E+03	—	2.0E+03
Dichloropropene, 1,1-	563-58-6	9.9E+01	4.2E+02	6.1E+01	2.2E+02
Dichloropropene, 1,3- (mixed isomers)	542-75-6	9.9E+01	4.2E+02	6.1E+01	2.2E+02
Dichloropropene, cis 1,3-	10061-01-5	5.3E+01	8.3E+01	5.3E+01	7.0E+01
Dichloropropene, trans 1,3-	10061-02-6	9.9E+01	4.2E+02	6.1E+01	2.2E+02
Dichlorvos	62-73-7	6.6E+01	3.4E+02	6.6E+01	3.4E+02
Dicrotophos (bidrin)	141-66-2	—	6.8E+01	—	6.8E+01
Dicyclopentadiene	77-73-6	—	8.2E+04	—	8.2E+04

Table 5
Tier 1 Commercial/Industrial Total Soil Combined PCLs

Last Revised: March 6, 2023

Chemical of Concern	CAS	TotSoilComb			
		(includes inhalation, ingestion, and dermal pathways)			
		0.5 acre source area Carcinogenic (mg/kg)	0.5 acre source area Noncarcinogenic (mg/kg)	30 acre source area Carcinogenic (mg/kg)	30 acre source area Noncarcinogenic (mg/kg)
Dieldrin	60-57-1	1.2E+00	3.4E+01	1.1E+00	3.4E+01
Diethanolamine	111-42-2	—	3.2E+02	—	3.0E+02
Diethyldithiocarbamate, sodium salt	148-18-5	1.1E+02	3.1E+04	1.1E+02	3.1E+04
Diethyl phthalate	84-66-2	—	5.5E+05	—	5.5E+05
Diethylene glycol	111-46-6	—	1.0E+06	—	1.0E+06
Diethylene glycol monobutyl ether	112-34-5	—	2.8E+01	—	1.5E+01
Diethylhexyl adipate	103-23-1	1.6E+04	4.1E+05	1.6E+04	4.1E+05
Diethylstilbestrol	56-53-1	4.1E-03	—	4.1E-03	—
Diisobutylene (trimethyl-1-pentene, 2,4,4-)	107-39-1	—	4.0E+03	—	2.1E+03
Diisopropylbenzene, p-	100-18-5	—	6.8E+03	—	6.8E+03
Diisopropyl ether (2,2'-oxybis-propane)	108-20-3	—	1.3E+04	—	7.2E+03
Dimethenamid	87674-68-8	—	1.0E+04	—	1.0E+04
Dimethoate	60-51-5	—	1.4E+02	—	1.4E+02
Dimethoxybenzidine, 3,3'-	119-90-4	1.4E+03	—	1.4E+03	—
Dimethyl-2-nitrobenzene, 1,3-	81-20-9	—	1.0E+03	—	8.1E+02
Dimethyl-3-nitrobenzene, 1,2-	83-41-0	—	9.7E+02	—	7.7E+02
Dimethyl-4-nitrobenzene, 1-2-	99-51-4	—	9.8E+02	—	7.8E+02
Dimethyl-5-nitrobenzene, 1,3-	99-12-7	—	9.4E+02	—	7.3E+02
Dimethylphenethylamine, alpha, alpha-	122-09-8	—	1.4E+03	—	1.4E+03
Dimethyl phenol, 2,4-	105-67-9	—	1.4E+04	—	1.4E+04
Dimethylaminoazobenzene, p-	60-11-7	—	6.8E+00	—	6.8E+00
Dimethylbenz-a-anthracene, 7,12-	57-97-6	6.9E-02	—	6.9E-02	—
Dimethylbenzidine, 3,3'-	119-93-7	1.7E+00	—	1.7E+00	—
Dimethylformamide, N,N-	68-12-2	—	4.3E+03	—	2.3E+03
Dimethylnaphthalene, 1,3-	575-41-7	—	2.5E+04	—	2.5E+04
Dimethylphthalate	131-11-3	—	5.5E+05	—	5.5E+05
Di-n-butyl phthalate	84-74-2	—	6.8E+04	—	6.8E+04
Dinitro-2-methylphenol, 4,6- (dinitro-o-cresol, 4, 6-)	534-52-1	—	6.8E+01	—	6.8E+01
Dinitrobenzene, 1,3- (dinitrobenzene, 2,4-)	99-65-0	—	6.8E+01	—	6.8E+01
Dinitrobenzene, 1,4-	100-25-4	—	6.8E+01	—	6.8E+01
Dinitrophenol, 2,4-	51-28-5	—	1.4E+03	—	1.4E+03
Dinitrophenol, 2,5-	329-71-5	—	1.4E+03	—	1.4E+03
Dinitrotoluene, 2,4-	121-14-2	2.8E+01	1.4E+03	2.8E+01	1.4E+03
Dinitrotoluene, 2,6-	606-20-2	2.8E+01	6.8E+02	2.8E+01	6.8E+02
Di-n-octyl phthalate	117-84-0	—	6.8E+03	—	6.8E+03
Dinoseb	88-85-7	—	6.8E+02	—	6.8E+02
Dioxane 1,4-	123-91-1	1.5E+02	5.0E+03	1.0E+02	2.8E+03
Dioxin (as 2,3,7,8-TCDD toxicity equivalent quotients (TEQs))	1746-01-6	—	—	—	—
Diphenyl ether	101-84-8	—	4.2E+03	—	4.2E+03
Diphenylamine	122-39-4	—	1.7E+04	—	1.7E+04
Diphenylhydrazine, 1,2-	122-66-7	2.2E+01	—	2.0E+01	—

Table 5
Tier 1 Commercial/Industrial Total Soil Combined PCLs

Last Revised: March 6, 2023

Chemical of Concern	CAS	TotSoilComb			
		(includes inhalation, ingestion, and dermal pathways)			
		0.5 acre source area Carcinogenic (mg/kg)	0.5 acre source area Noncarcinogenic (mg/kg)	30 acre source area Carcinogenic (mg/kg)	30 acre source area Noncarcinogenic (mg/kg)
Dipropylene glycol	110-98-5	—	8.2E+04	—	8.2E+04
Diquat	85-00-7	—	1.5E+03	—	1.5E+03
Disodium iminodiacetate (iminodiacetic acid, disodium salt)	142-73-4	—	6.8E+03	—	6.8E+03
Disulfoton	298-04-4	—	2.7E+01	—	2.7E+01
Diuron	330-54-1	—	1.4E+03	—	1.4E+03
Dodecylphenol, 4-	104-43-8	—	3.4E+04	—	3.4E+04
Endosulfan	115-29-7	—	4.1E+03	—	4.1E+03
Endosulfan I	959-98-8	—	1.4E+03	—	1.4E+03
Endosulfan II	33213-65-9	—	4.1E+03	—	4.1E+03
Endosulfan sulfate	1031-07-8	—	4.1E+03	—	4.1E+03
Endothall	145-73-3	—	1.4E+04	—	1.4E+04
Endrin	72-20-8	—	2.0E+02	—	2.0E+02
Endrin aldehyde	7421-93-4	—	2.0E+02	—	2.0E+02
Endrin ketone	53494-70-5	—	2.0E+02	—	2.0E+02
Epichlorohydrin	106-89-8	6.6E+02	3.7E+01	3.8E+02	1.9E+01
EPN (o-ethyl o-(4-nitrophenyl)phenylphosphonothioate)	2104-64-5	—	6.8E+00	—	6.8E+00
Esfenvalerate	66230-04-4	—	1.4E+03	—	1.4E+03
Ethalfuralin (sonolan)	55283-68-6	2.1E+02	2.7E+04	2.1E+02	2.7E+04
Ethanol	64-17-5	—	1.0E+06	—	1.0E+06
Ethanol, 2-amino-	141-43-5	—	9.0E+02	—	7.5E+02
Ethanol, 2-(2-aminoethoxy)-	929-06-6	—	3.4E+02	—	3.4E+02
Ethanol, 2-(2-ethoxyethoxy)-	111-90-0	—	1.0E+06	—	1.0E+06
Ethanol, 2-(methylamino)-	109-83-1	—	4.9E+03	—	3.3E+03
Ethion	563-12-2	—	3.4E+02	—	3.4E+02
Ethoprop	13194-48-4	6.8E+02	6.8E+01	6.8E+02	6.8E+01
Ethoxy ethanol, 2-	110-80-5	—	2.5E+04	—	1.5E+04
Ethyl acetate	141-78-6	—	5.1E+03	—	2.6E+03
Ethyl acrylate	140-88-5	6.0E+02	3.2E+02	6.0E+02	1.7E+02
Ethyl benzene	100-41-4	—	2.9E+04	—	1.7E+04
Ethyl dipropylthiocarbamate, S-	759-94-4	—	1.7E+04	—	1.7E+04
Ethyl ether	60-29-7	—	2.0E+05	—	2.0E+05
Ethyl methacrylate	97-63-2	—	8.9E+03	—	4.8E+03
Ethyl methanesulfonate	62-50-0	9.8E+01	—	6.7E+01	—
Ethyl tert-butyl ether (2-ethyl-2-ethoxypropane)	637-92-3	—	8.8E+02	—	7.8E+02
Ethyl-1-hexanol, 2-	104-76-7	—	1.0E+05	—	1.0E+05
Ethyl-2-hexenal, 2-	645-62-5	—	1.5E+05	—	1.5E+05
Ethyl-2-methyl benzene, 1-	611-14-3	—	9.6E+03	—	5.4E+03
Ethyl-4-methyl benzene, 1-	622-96-8	—	8.4E+03	—	4.7E+03
Ethylene*	74-85-1	—	—	—	—
Ethylene dibromide (dibromoethane, 1,2-)	106-93-4	8.7E+00	1.9E+03	6.3E+00	1.1E+03
Ethylene glycol	107-21-1	—	1.0E+06	—	1.0E+06

Table 5
Tier 1 Commercial/Industrial Total Soil Combined PCLs

Last Revised: March 6, 2023

Chemical of Concern	CAS	TotSoil _{Comb}			
		(includes inhalation, ingestion, and dermal pathways)			
		0.5 acre source area Carcinogenic (mg/kg)	0.5 acre source area Noncarcinogenic (mg/kg)	30 acre source area Carcinogenic (mg/kg)	30 acre source area Noncarcinogenic (mg/kg)
Ethylene oxide	75-21-8	2.6E+01	—	2.5E+01	—
Ethylene thiourea	96-45-7	1.7E+02	5.5E+01	1.7E+02	5.5E+01
Ethylenediamine	107-15-3	—	9.2E+04	—	9.2E+04
Ethylenimine	151-56-4	1.5E-01	—	9.0E-02	—
Ethylhexyl acrylate, 2-	103-11-7	4.0E+02	—	4.0E+02	—
Famphur	52-85-7	—	2.0E+01	—	2.0E+01
Fensulfothion	115-90-2	—	6.8E+02	—	6.8E+02
Fenthion	55-38-9	—	4.8E+01	—	4.8E+01
Fenuron	101-42-8	—	4.8E+04	—	4.8E+04
Fluoranthene	206-44-0	—	2.5E+04	—	2.5E+04
Fluorene	86-73-7	—	2.5E+04	—	2.5E+04
Fluorine (soluble fluoride)	7782-41-4	—	5.8E+04	—	5.8E+04
Fluorochloridone	61213-25-0	—	5.1E+03	—	5.1E+03
Fonofos	944-22-9	—	1.4E+03	—	1.4E+03
Formaldehyde	50-00-0	—	1.4E+03	—	7.1E+02
Formic acid	64-18-6	—	3.0E+02	—	1.5E+02
Furan	110-00-9	—	1.0E+03	—	1.0E+03
Furfural	98-01-1	—	3.1E+03	—	3.1E+03
Glycidylaldehyde	765-34-4	—	1.4E+02	—	8.5E+01
Glyphosate	1071-83-6	—	6.8E+05	—	6.8E+05
Heptachlor	76-44-8	3.3E+00	3.4E+02	2.8E+00	3.4E+02
Heptachlor epoxide	1024-57-3	2.0E+00	8.9E+00	1.9E+00	8.9E+00
Heptane, n-	142-82-5	—	4.7E+04	—	3.8E+04
Heptanoic acid, n-	111-14-8	—	1.7E+02	—	8.8E+01
Hexachlorobenzene	118-74-1	8.7E+00	5.5E+02	6.9E+00	5.5E+02
Hexachlorobutadiene	87-68-3	4.1E+01	6.8E+02	2.3E+01	6.8E+02
Hexachlorocyclohexane, alpha (alpha-BHC)	319-84-6	3.3E+00	6.8E+03	2.9E+00	6.8E+03
Hexachlorocyclohexane, beta (beta-BHC)	319-85-7	1.2E+01	—	1.1E+01	—
Hexachlorocyclohexane, delta (delta-BHC)	319-86-8	1.2E+01	2.6E+02	1.2E+01	2.6E+02
Hexachlorocyclohexane, gamma (lindane; gamma-BHC)	58-89-9	1.8E+01	2.6E+02	1.8E+01	2.6E+02
Hexachlorocyclohexane, techn (technical-BHC)	608-73-1	1.2E+01	—	1.1E+01	—
Hexachlorocyclopentadiene	77-47-4	—	2.0E+01	—	1.0E+01
Hexachloroethane	67-72-1	4.8E+02	4.5E+02	4.8E+02	4.2E+02
Hexachlorophene	70-30-4	—	2.0E+02	—	2.0E+02
Hexachloropropylene	1888-71-7	4.8E+02	4.5E+02	4.8E+02	4.2E+02
Hexanal, 2-ethyl-	123-05-7	—	1.0E+05	—	1.0E+05
Hexane, n-	110-54-3	—	1.2E+04	—	6.6E+03
Hexanediamine, 1,6-	124-09-4	—	3.4E+03	—	3.4E+03
Hexanedinitrile	111-69-3	—	5.6E+02	—	4.1E+02
Hexanediol, 1,6-	629-11-8	—	1.0E+06	—	1.0E+06
Hexanoic acid	142-62-1	—	1.9E+02	—	9.8E+01

Table 5
Tier 1 Commercial/Industrial Total Soil Combined PCLs

Last Revised: March 6, 2023

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		(includes inhalation, ingestion, and dermal pathways)			
		0.5 acre source area Carcinogenic (mg/kg)	0.5 acre source area Noncarcinogenic (mg/kg)	30 acre source area Carcinogenic (mg/kg)	30 acre source area Noncarcinogenic (mg/kg)
Hexanone, 2-	591-78-6	—	1.1E+03	—	5.9E+02
Hexazinone	51235-04-2	—	2.2E+04	—	2.2E+04
Hexene, 1-	592-41-6	—	2.3E+03	—	1.2E+03
Hexene, cis-2-	7688-21-3	—	2.3E+03	—	1.2E+03
Hexylene glycol (2-methyl-2,4-pentanediol)	107-41-5	—	2.0E+05	—	2.0E+05
Hydrazine	302-01-2	7.2E-01	4.1E+00	3.8E-01	2.1E+00
Hydrocaproic acid, 6- (6-hydroxyhexanoic acid)	1191-25-9	—	2.2E+02	—	1.2E+02
Hydrogen chloride (hydrochloric acid)*	7647-01-0	—	—	—	—
Hydroquinone	123-31-9	3.2E+02	2.7E+04	3.2E+02	2.7E+04
Indene	95-13-6	—	1.6E+02	—	8.0E+01
Indeno-1,2,3-cd-pyrene	193-39-5	1.7E+02	—	1.7E+02	—
Iron*	7439-89-6	—	—	—	—
Isoamyl alcohol	123-51-3	—	5.1E+03	—	5.1E+03
Isobutyl alcohol	78-83-1	—	3.1E+05	—	3.1E+05
Isobutylene (2-methyl-1-propene)	115-11-7	—	3.8E+03	—	3.8E+03
Isobutyric acid (2-methylpropanoic acid)	79-31-2	—	3.4E+05	—	3.4E+05
Isodecanol	25339-17-7	—	1.1E+03	—	1.1E+03
Isodrin	465-73-6	1.1E-01	2.0E+00	1.0E-01	2.0E+00
Isopentane	78-78-4	—	5.5E+04	—	5.0E+04
Isophorone	78-59-1	2.0E+04	1.4E+05	2.0E+04	1.4E+05
Isopropyl acetate	108-21-4	—	7.2E+04	—	7.2E+04
Isopropyl alcohol	67-63-0	—	1.3E+04	—	6.9E+03
Isosafrole	120-58-1	5.5E+01	—	4.1E+01	—
Kelthane (dicofol)	115-32-2	—	4.1E+03	—	4.1E+03
Kepone (chlordecone)	143-50-0	1.9E+00	2.0E+02	1.8E+00	2.0E+02
Lead (inorganic)	7439-92-1	—	—	—	—
Leptophos	21609-90-5	—	3.2E+00	—	3.0E+00
Limonene, d-*	5989-27-5	—	—	—	—
Lithium	7439-93-2	—	6.8E+03	—	6.8E+03
Magnesium*	7439-95-4	—	—	—	—
Malathion	121-75-5	—	2.8E+02	—	1.4E+02
Maleic anhydride	108-31-6	—	6.8E+04	—	6.8E+04
Maleic hydrazide	123-33-1	—	3.4E+05	—	3.4E+05
Malononitrile	109-77-3	—	6.8E+01	—	6.8E+01
Mancozeb	8018-01-7	—	2.0E+04	—	2.0E+04
Manganese	7439-96-5	—	7.3E+04	—	6.9E+04
MCPA (4-(chloro-2-methylphenoxy) acetic acid)	94-74-6	—	3.4E+02	—	3.4E+02
MCPP (2-(4-chloro-2-methylphenoxy) propanoic acid)	93-65-2	—	6.8E+02	—	6.8E+02
Mercury (pH = 4.9) ¹	7439-97-6	—	6.2E+00	—	3.3E+00
Mercury (pH=6.8) ¹	7439-97-6	—	1.9E+01	—	1.1E+01
Merphos	150-50-5	—	2.0E+01	—	2.0E+01

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Last Revised: March 6, 2023

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		0.5 acre source area Carcinogenic (mg/kg)	0.5 acre source area Noncarcinogenic (mg/kg)	30 acre source area Carcinogenic (mg/kg)	30 acre source area Noncarcinogenic (mg/kg)
		Methacrylic acid (2-methyl-2-propenoic acid)	79-41-4	—	1.0E+04
Methacrylonitrile	126-98-7	—	8.0E+02	—	4.2E+02
Methanol	67-56-1	—	3.7E+05	—	2.1E+05
Methapyrilene	91-80-5	4.1E+00	—	4.1E+00	—
Methomyl	16752-77-5	—	1.7E+04	—	1.7E+04
Methoxychlor	72-43-5	—	3.4E+03	—	3.4E+03
Methoxyethanol, 2-	109-86-4	—	4.2E+02	—	2.2E+02
Methyl acetate (acetic acid, methyl ester)	79-20-9	—	1.0E+06	—	1.0E+06
Methyl acrylate	96-33-3	—	3.6E+02	—	2.0E+02
Methyl amyl ketone (2-heptanone)	110-43-0	—	3.8E+04	—	3.1E+04
Methyl chrysene, 1-	3351-28-8	2.4E+03	—	2.4E+03	—
Methyl chrysene, 2-	3351-32-4	2.4E+03	—	2.4E+03	—
Methyl chrysene, 6-	1705-85-7	2.4E+02	—	2.4E+02	—
Methyl cyclohexane	108-87-2	—	6.4E+04	—	3.3E+04
Methyl ethyl ketone (2-butanone)	78-93-3	—	1.9E+05	—	1.2E+05
Methyl iodide (iodomethane)	74-88-4	—	1.4E+03	—	1.4E+03
Methyl isobutyl ketone (4-methyl-2-pentanone)	108-10-1	—	4.1E+04	—	2.8E+04
Methyl mercury	22967-92-6	—	9.7E+01	—	9.7E+01
Methyl methacrylate	80-62-6	—	1.5E+04	—	7.7E+03
Methyl methanesulfonate	66-27-3	9.5E+01	—	6.4E+01	—
Methyl parathion	298-00-0	—	1.7E+02	—	1.7E+02
Methyl-1-butene, 2-	563-46-2	—	5.3E+04	—	4.7E+04
Methyl-1-propanal, 2- (isobutyraldehyde)	78-84-2	—	4.1E+04	—	4.1E+04
Methyl-2-butene, 2-	513-35-9	—	5.3E+04	—	4.7E+04
Methyl-2-pentenal, 2-	623-36-9	1.5E+01	—	1.5E+01	—
Methylcholanthrene, 3-	56-49-5	7.9E-01	—	7.9E-01	—
Methylene bromide (dibromomethane)	74-95-3	3.8E+03	1.1E+02	3.8E+03	5.9E+01
Methylene chloride (dichloromethane)	75-09-2	2.0E+04	1.2E+04	1.1E+04	8.6E+03
Methylene-bis (2-chloroaniline) 4,4'-	101-14-4	1.8E+02	1.4E+03	1.8E+02	1.4E+03
Methylmercury hydroxide	1184-57-2	—	6.8E+01	—	6.8E+01
Methylnaphthalene, 1-	90-12-0	6.0E+02	4.3E+04	6.0E+02	4.3E+04
Methylnaphthalene, 2-	91-57-6	—	2.5E+03	—	2.5E+03
Methylpyrrolidone, N-	872-50-4	—	1.4E+04	—	1.4E+04
Methylstyrene, alpha-	98-83-9	—	6.3E+02	—	3.3E+02
Methyltetrahydrofuran, 2-	96-47-9	2.9E+02	2.0E+05	1.6E+02	2.0E+05
Methyltetrahydropyran, 2-	10141-72-7	3.3E+02	2.0E+05	1.8E+02	2.0E+05
Metolachlor	51218-45-2	—	1.0E+05	—	1.0E+05
Metribuzin	21087-64-9	—	1.7E+04	—	1.7E+04
Mirex	2385-85-5	—	1.4E+02	—	1.4E+02
Molinate	2212-67-1	—	1.4E+03	—	1.4E+03
Molybdenum	7439-98-7	—	4.5E+03	—	4.5E+03

Table 5
Tier 1 Commercial/Industrial Total Soil Combined PCLs

Last Revised: March 6, 2023

Chemical of Concern	CAS	TotSoil _{Comb}			
		(includes inhalation, ingestion, and dermal pathways)			
		0.5 acre source area Carcinogenic (mg/kg)	0.5 acre source area Noncarcinogenic (mg/kg)	30 acre source area Carcinogenic (mg/kg)	30 acre source area Noncarcinogenic (mg/kg)
Monocrotophos	2157-98-4	—	4.1E+02	—	4.1E+02
Morpholine	110-91-8	—	1.0E+06	—	1.0E+06
Morpholine, N-butyl-	1005-67-0	—	1.6E+03	—	1.6E+03
MTBE (methyl tert-butyl ether)	1634-04-4	2.0E+03	8.8E+03	1.1E+03	7.8E+03
Naled	300-76-5	—	1.4E+03	—	1.4E+03
Naphthalene	91-20-3	—	3.6E+02	—	1.9E+02
Naphthoquinone, 1,4-	130-15-4	—	4.8E+03	—	4.8E+03
Naphthylamine, 1-	134-32-7	—	1.4E+04	—	1.4E+04
Naphthylamine, 2-	91-59-8	1.1E+01	—	1.1E+01	—
Napropamide	15299-99-7	—	6.8E+04	—	6.8E+04
Neopentyl glycol	126-30-7	—	2.0E+05	—	2.0E+05
Nickel and compounds	7440-02-0	2.2E+05	8.8E+03	1.1E+05	8.6E+03
Nitrate-N	14797-55-8	—	1.0E+06	—	1.0E+06
Nitrite-N	14797-65-0	—	9.7E+04	—	9.7E+04
Nitroaniline, 2-	88-74-4	—	5.0E+01	—	2.9E+01
Nitroaniline, 3-	99-09-2	5.0E+02	5.9E+01	5.0E+02	3.6E+01
Nitroaniline, 4-	100-01-6	9.5E+02	1.0E+03	9.5E+02	6.6E+02
Nitrobenzene	98-95-3	1.1E+02	7.0E+02	5.7E+01	4.8E+02
Nitroglycerin	55-63-0	1.1E+03	6.8E+01	1.1E+03	6.8E+01
Nitrophenol, 2-	88-75-5	—	1.4E+03	—	1.4E+03
Nitrophenol, 3-	554-84-7	—	1.4E+03	—	1.4E+03
Nitrophenol, 4-	100-02-7	—	1.4E+03	—	1.4E+03
Nitropropane, 2-	79-46-9	1.0E+00	1.1E+02	5.3E-01	8.7E+01
Nitroquinoline-N-oxide, 4-	56-57-5	1.2E+00	—	9.0E-01	—
Nitrosodiethanolamine	1116-54-7	6.8E+00	—	6.8E+00	—
Nitrosodiethylamine, n-	55-18-5	7.0E-02	—	4.4E-02	—
Nitrosodimethylamine, n-	62-75-9	2.1E-01	3.6E+00	1.3E-01	2.4E+00
Nitrosodi-n-butylamine, n-	924-16-3	1.2E+00	—	7.1E-01	—
Nitrosodi-n-propylamine, n-	621-64-7	1.4E+00	—	1.4E+00	—
Nitrosodiphenylamine	86-30-6	1.9E+03	—	1.9E+03	—
Nitroso-methyl-ethyl-amine, n-	10595-95-6	1.3E+00	—	1.3E+00	—
Nitrosomorpholine, N-	59-89-2	1.4E+00	—	9.7E-01	—
Nitroso-n-ethylurea, n-	759-73-9	1.4E-01	—	1.4E-01	—
Nitrosopiperidine, N-	100-75-4	1.1E+00	—	7.4E-01	—
Nitrosopyrrolidine, n-	930-55-2	4.7E+00	—	3.2E+00	—
Nitrotoluene, m-	99-08-1	—	6.8E+03	—	6.8E+03
Nitrotoluene, o-	88-72-2	8.7E+01	6.1E+02	8.7E+01	6.1E+02
Nitrotoluene, p-	99-99-0	1.2E+03	2.7E+03	1.2E+03	2.7E+03
Nonachlor, cis-	5103-73-1	5.3E+01	3.2E+02	5.2E+01	3.0E+02
Nonachlor, trans-	39765-80-5	5.3E+01	3.2E+02	5.2E+01	3.0E+02
Nonanal	124-19-6	—	1.4E+05	—	1.4E+05

Table 5
Tier 1 Commercial/Industrial Total Soil Combined PCLs

Last Revised: March 6, 2023

Chemical of Concern	CAS	TotSoil _{Comb}			
		(includes inhalation, ingestion, and dermal pathways)			
		0.5 acre source area Carcinogenic (mg/kg)	0.5 acre source area Noncarcinogenic (mg/kg)	30 acre source area Carcinogenic (mg/kg)	30 acre source area Noncarcinogenic (mg/kg)
Nonene, 1-n	124-11-8	—	1.0E+05	—	1.0E+05
Nonylphenol, 4-n-	104-40-5	—	6.8E+04	—	6.8E+04
Nonylphenol ethoxylate	9016-45-9	—	6.8E+04	—	6.8E+04
Octamethylpyrophosphoramidate	152-16-9	—	1.4E+03	—	1.4E+03
Octanone	106-68-3	—	5.8E+04	—	5.6E+04
Oxamyl	23135-22-0	—	1.7E+04	—	1.7E+04
Oxychloridane	27304-13-8	5.3E+01	3.2E+02	5.2E+01	3.0E+02
Paraquat	1910-42-5	—	3.1E+03	—	3.1E+03
Parathion (ethyl parathion)	56-38-2	—	4.1E+03	—	4.1E+03
Pebulate	1114-71-2	—	3.4E+04	—	3.4E+04
Pendimethalin	40487-42-1	—	2.7E+04	—	2.7E+04
Pentachlorobenzene	608-93-5	—	5.5E+02	—	5.5E+02
Pentachloroethane	76-01-7	1.1E+02	3.1E+04	6.5E+01	3.1E+04
Pentachloronitrobenzene	82-68-8	7.3E+01	2.0E+03	7.3E+01	2.0E+03
Pentachlorophenol	87-86-5	3.2E+01	2.3E+03	3.2E+01	2.3E+03
Pentadiene, 1,3-cis-	1574-41-0	—	5.3E+04	—	4.7E+04
Pentadiene, 1,3-trans-	2004-70-8	—	5.3E+04	—	4.7E+04
Pentaerythritol tetranitrate (PETN)	78-11-5	—	1.4E+03	—	1.4E+03
Pentane	109-66-0	—	5.5E+04	—	5.0E+04
Pentane, 2-methyl-	107-83-5	—	5.3E+04	—	4.7E+04
Pentane, 3-methyl-	96-14-0	—	5.3E+04	—	4.7E+04
Pentanediol, 1,5-	111-29-5	—	1.0E+06	—	1.0E+06
Pentanol, 1-	71-41-0	—	3.4E+04	—	3.4E+04
Pentanol, 4-methyl-2-	108-11-2	—	2.7E+04	—	2.7E+04
Pentanone, 2-	107-87-9	—	4.1E+04	—	4.1E+04
Pentene, 2-	109-68-2	—	5.3E+04	—	4.7E+04
Pentyne, 1-	627-19-0	—	5.3E+04	—	4.7E+04
Perchlorate	14797-73-0	—	5.7E+02	—	5.7E+02
Perfluorooctane sulfonic acid (1-Octanesulfonic acid, heptadecafluoro-1-) [PFOS]	1763-23-1	—	1.5E+01	—	1.4E+01
Perfluoroundecanoic acid (Undecanoic acid, uncosafluoro-) [PFUnDa]	2058-94-8	—	8.2E+00	—	8.2E+00
Perfluoropentanoic acid (Pentanoic acid, nonafluoro-) [PFPeA]	2706-90-3	—	3.4E+02	—	3.4E+02
Perfluorohexanoic acid (Hexanoic acid, undecafluoro-) [PFHxA]	307-24-4	—	3.4E+02	—	3.4E+02
Perfluorododecanoic acid (Dodecanoic acid, tricosafuoro-) [PFDoA]	307-55-1	—	7.5E+00	—	7.0E+00
Perfluorooctanoic acid (Octanoic acid, pentadecafluoro-) [PFOA]	335-67-1	—	2.4E+00	—	1.4E+00
Perfluorodecanoic acid (Decanoic acid, nonadecafluoro-) [PFDA]	335-76-2	—	9.4E+00	—	8.8E+00
Perfluorodecane sulfonic acid (1-Decanesulfonic acid, heneicosafluoro-) [PFDS]	335-77-3	—	8.2E+00	—	8.2E+00
Perfluorohexane sulfonic acid (1-Hexanesulfonic acid, tridecafluoro-) [PFHxS]	355-46-4	—	2.2E+00	—	2.0E+00

Table 5
Tier 1 Commercial/Industrial Total Soil Combined PCLs

Last Revised: March 6, 2023

Chemical of Concern	CAS	TotSoilComb (includes inhalation, ingestion, and dermal pathways)			
		0.5 acre source area Carcinogenic (mg/kg)	0.5 acre source area Noncarcinogenic (mg/kg)	30 acre source area Carcinogenic (mg/kg)	30 acre source area Noncarcinogenic (mg/kg)
		Perfluorobutyric acid (Butanoic acid, heptafluoro-) [PFBA]	375-22-4	—	4.0E+02
Perfluorobutane sulfonic acid (1-Butanesulfonic acid, nonafluoro-) [PFBS]	375-73-5	—	6.0E+02	—	4.4E+02
Perfluoroheptanoic acid (Heptanoic acid, tridecafluoro-) [PFHpA]	375-85-9	—	1.6E+01	—	1.6E+01
Perfluorononanoic acid (Nonanoic acid, heptadecafluoro-) [PFNA]	375-95-1	—	6.1E+00	—	4.9E+00
Perfluorotetradecanoic acid (Tetradecanoic acid, heptacosafuoro-) [PFTeDA]	376-06-7	—	8.2E+00	—	8.2E+00
Perfluorotridecanoic acid (Tridecanoic acid, pentacosafuoro-) [PFTrDA]	72629-94-8	—	8.2E+00	—	8.2E+00
Perfluorooctane sulfonamide (1-Octanesulfonamide, heptadecafluoro-) [PFOSA]	754-91-6	—	8.7E-02	—	4.5E-02
Perylene	198-55-0	—	1.4E+04	—	1.4E+04
Phenacetin	62-44-2	5.9E+03	—	4.5E+03	—
Phenanthrene	85-01-8	—	1.9E+04	—	1.9E+04
Phenanthridine	229-87-8	—	2.0E+03	—	2.0E+03
Phenol	108-95-2	—	2.7E+03	—	1.4E+03
Phenol, 4-tert-butyl-	98-54-4	—	8.2E+04	—	8.2E+04
Phenothiazine	92-84-2	—	7.5E+02	—	7.5E+02
Phenyl mercuric acetate	62-38-4	—	5.5E+01	—	5.5E+01
Phenylene diamine, m-	108-45-2	—	4.1E+03	—	4.1E+03
Phenylene diamine, p-	106-50-3	—	1.3E+05	—	1.3E+05
Phorate	298-02-2	—	1.4E+02	—	1.4E+02
Phosalone	2310-17-0	—	1.4E+03	—	1.4E+03
Phosdrin (mevinphos)	7786-34-7	—	1.7E+01	—	1.7E+01
Phosmet	732-11-6	—	1.4E+04	—	1.4E+04
Phosphine	7803-51-2	—	6.3E+00	—	3.3E+00
Phosphorotriothioic acid, S,S,S-tributyl ester	78-48-8	2.3E+02	3.4E+02	2.3E+02	3.4E+02
Phosphorus, total*	7723-14-0	—	—	—	—
Phosphorus, white	7723-14-0	—	1.6E+01	—	1.6E+01
Phthalic anhydride	85-44-9	—	6.6E+04	—	3.5E+04
Picloram	1918-02-1	—	4.8E+04	—	4.8E+04
Picoline, 2- (2-methylpyridine)	109-06-8	—	9.2E+03	—	9.2E+03
Polybrominated biphenyls (PBBs)	67774-32-7	2.1E+00	4.8E+00	2.1E+00	4.8E+00
Polychlorinated biphenyls (PCBs)	1336-36-3	7.7E+00	1.2E+01	7.1E+00	1.2E+01
Potassium*	7440-09-7	—	—	—	—
Primene	68955-53-3	—	4.1E+03	—	4.1E+03
Prometon (pramitol)	1610-18-0	—	1.0E+04	—	1.0E+04
Prometryn	7287-19-6	—	2.7E+04	—	2.7E+04
Pronamide	23950-58-5	—	5.1E+04	—	5.1E+04
Propanal (propionaldehyde)	123-38-6	—	1.7E+02	—	8.7E+01
Propane, 1-bromo-	106-94-5	—	3.7E+04	—	3.7E+04
Propanil	709-98-8	—	3.4E+03	—	3.4E+03

Table 5
Tier 1 Commercial/Industrial Total Soil Combined PCLs

Last Revised: March 6, 2023

Chemical of Concern	CAS	TotSoil _{Comb}			
		(includes inhalation, ingestion, and dermal pathways)			
		0.5 acre source area Carcinogenic (mg/kg)	0.5 acre source area Noncarcinogenic (mg/kg)	30 acre source area Carcinogenic (mg/kg)	30 acre source area Noncarcinogenic (mg/kg)
Propanoic acid (propionic acid)	79-09-4	—	5.1E+05	—	5.1E+05
Propanol, 1-	71-23-8	—	1.0E+06	—	1.0E+06
Propargite	2312-35-8	—	1.4E+04	—	1.4E+04
Propargyl alcohol	107-19-7	—	2.0E+03	—	2.0E+03
Propazine	139-40-2	4.3E+02	1.4E+04	4.3E+02	1.4E+04
Propham	122-42-9	—	1.4E+04	—	1.4E+04
Propionitrile (propane nitrile)	107-12-0	—	4.1E+02	—	4.1E+02
Propyl acetate, n-	109-60-4	—	9.2E+04	—	9.2E+04
Propylbenzene, n-	103-65-1	—	7.3E+03	—	4.1E+03
Propylene glycol	57-55-6	—	5.1E+02	—	2.6E+02
Propylene glycol monomethyl ether	107-98-2	—	2.2E+05	—	1.3E+05
Propylene oxide	75-56-9	6.9E+01	6.4E+02	4.9E+01	3.3E+02
Propylene tetramer	6842-15-5	—	1.6E+04	—	9.5E+03
Prothiofos (Tokuthion)	34643-46-4	—	6.8E+01	—	6.8E+01
Pyrene	129-00-0	—	1.9E+04	—	1.9E+04
Pyridine	110-86-1	—	1.0E+03	—	1.0E+03
Quinoline	91-22-5	6.4E+00	—	6.4E+00	—
Ronnel	299-84-3	—	3.4E+04	—	3.4E+04
Safrole	94-59-7	4.9E+01	—	3.5E+01	—
Selenium	7782-49-2	—	4.9E+03	—	4.9E+03
Selenourea	630-10-4	—	5.1E+03	—	5.1E+03
Silver	7440-22-4	—	2.3E+03	—	2.3E+03
Simazine	122-34-9	1.6E+02	3.4E+03	1.6E+02	3.4E+03
Sodium*	7440-23-5	—	—	—	—
Sodium hypochlorite	7681-52-9	—	1.2E+05	—	9.6E+04
Sodium polyacrylate	9003-04-7	—	1.7E+02	—	8.7E+01
Strontium	7440-24-6	—	4.9E+05	—	4.9E+05
Strychnine	57-24-9	—	2.0E+02	—	2.0E+02
Styrene	100-42-5	—	1.5E+04	—	7.8E+03
Sulfate*	14808-79-8	—	—	—	—
Sulfide*	18496-25-8	—	—	—	—
Sulfolane	126-33-0	—	1.1E+03	—	5.8E+02
Sulfur*	7704-34-9	—	—	—	—
Sulprofos (Bolstar)	35400-43-2	—	2.0E+03	—	2.0E+03
Tebuconazole	107534-96-3	—	2.0E+04	—	2.0E+04
Tebuthiuron	34014-18-1	—	4.8E+04	—	4.8E+04
Terbufos	13071-79-9	—	1.7E+01	—	1.7E+01
Tert-amyl ethyl ether (TAEE)	919-94-8	—	4.1E+04	—	4.1E+04
Tert-amyl-methyl ether (TAME)	994-05-8	—	4.1E+04	—	4.1E+04
Tert-butyl alcohol (2-methyl-2-propanol)	75-65-0	—	9.2E+04	—	9.2E+04
Tetrachlorobenzene, 1,2,3,4-	634-66-2	—	2.0E+02	—	2.0E+02

Table 5
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		(includes inhalation, ingestion, and dermal pathways)			
		0.5 acre source area Carcinogenic (mg/kg)	0.5 acre source area Noncarcinogenic (mg/kg)	30 acre source area Carcinogenic (mg/kg)	30 acre source area Noncarcinogenic (mg/kg)
Tetrachlorobenzene, 1,2,3,5-	634-90-2	—	2.0E+02	—	2.0E+02
Tetrachlorobenzene, 1,2,4,5-	95-94-3	—	2.0E+02	—	2.0E+02
Tetrachloroethane, 1,1,1,2-	630-20-6	1.3E+02	3.1E+04	7.3E+01	3.1E+04
Tetrachloroethane, 1,1,2,2-	79-34-5	1.4E+02	2.0E+04	1.4E+02	2.0E+04
Tetrachloroethylene [PCE]	127-18-4	1.4E+03	5.8E+03	7.7E+02	3.4E+03
Tetrachlorophenol, 2,3,4,5-	4901-51-3	—	2.0E+04	—	2.0E+04
Tetrachlorophenol, 2,3,4,6-	58-90-2	—	2.0E+04	—	2.0E+04
Tetrachlorophenol, 2,3,5,6-	935-95-5	—	2.0E+04	—	2.0E+04
Tetrachlorvinphos (Stirophos)	22248-79-9	—	2.9E+04	—	2.9E+04
Tetradifon	116-29-0	—	1.4E+04	—	1.4E+04
Tetraethyl dithiopyrophosphate (sulfotep)	3689-24-5	—	3.4E+02	—	3.4E+02
Tetraethyl lead	78-00-2	—	6.8E-02	—	6.8E-02
Tetraethyl pyrophosphate (TEPP)	107-49-3	—	7.5E+00	—	7.5E+00
Tetraethylene glycol	112-60-7	—	2.2E+05	—	2.2E+05
Tetrahydrofuran	109-99-9	2.9E+02	4.1E+04	1.6E+02	2.2E+04
Tetrahydropyran	142-68-7	3.1E+02	2.0E+05	1.7E+02	2.0E+05
Tetraoxadodecane, 2,5,8,11-	112-49-2	—	1.7E+04	—	1.7E+04
Thallium	7440-28-0	—	6.5E+01	—	6.5E+01
Thiofanox	39196-18-4	—	2.0E+02	—	2.0E+02
Thionazin	297-97-2	—	4.8E+01	—	4.8E+01
Thiophanate-methyl	23564-05-8	—	5.5E+04	—	5.5E+04
Thiram	137-26-8	—	3.4E+03	—	3.4E+03
Tin	7440-31-5	—	4.1E+05	—	4.1E+05
Titanium	7440-32-6	—	1.0E+06	—	1.0E+06
Toluene	108-88-3	—	4.2E+04	—	2.9E+04
Toluene diisocyanate, 2,4/2,6-	26471-62-5	—	2.0E+02	—	1.0E+02
Toluenediamine, 2,4-	95-80-7	6.0E+00	—	6.0E+00	—
Toluenediamine, 2,6-	823-40-5	—	2.0E+04	—	2.0E+04
Toluidine, o-	95-53-4	1.1E+02	—	7.6E+01	—
Toluidine, p-	106-49-0	2.3E+02	—	2.3E+02	—
Toxaphene	8001-35-2	1.7E+01	2.1E+02	1.7E+01	2.1E+02
TPH, TX1005, C6-C12	TPH-1005-1	—	3.9E+03	—	2.1E+03
TPH, TX1005, >C12-C28	TPH-1005-2	—	1.2E+04	—	7.8E+03
TPH, TX1005, >C12-C35	TPH-1005-3	—	1.2E+04	—	7.8E+03
TPH, TX1005, >C28-C35	TPH-1005-4	—	1.2E+04	—	7.8E+03
TP Silvex, 2,4,5-	93-72-1	—	5.5E+03	—	5.5E+03
Triadimenol	55219-65-3	—	2.0E+04	—	2.0E+04
Triallate	2303-17-5	—	8.9E+03	—	8.9E+03
Triaminotrinitrobenzene (TATB)	3058-38-6	—	2.0E+03	—	2.0E+03
Tributyltin oxide	56-35-9	—	2.0E+02	—	2.0E+02
Trichloro-1,2,2-trifluoroethane, 1,1,2-	76-13-1	—	1.1E+05	—	5.5E+04

Table 5
Tier 1 Commercial/Industrial Total Soil Combined PCLs

Last Revised: March 6, 2023

Chemical of Concern	CAS	TotSoil _{Comb}			
		(includes inhalation, ingestion, and dermal pathways)			
		0.5 acre source area Carcinogenic (mg/kg)	0.5 acre source area Noncarcinogenic (mg/kg)	30 acre source area Carcinogenic (mg/kg)	30 acre source area Noncarcinogenic (mg/kg)
Trichlorobenzene, 1,2,3-	87-61-6	—	3.5E+02	—	2.0E+02
Trichlorobenzene, 1,2,4-	120-82-1	6.6E+02	2.0E+02	6.6E+02	1.1E+02
Trichlorobenzene, 1,3,5-	108-70-3	—	1.6E+02	—	8.7E+01
Trichloroethane, 1,1,1-	71-55-6	—	1.0E+05	—	5.5E+04
Trichloroethane, 1,1,2-	79-00-5	3.5E+01	4.1E+03	1.9E+01	4.1E+03
Trichloroethylene [TCE]	79-01-6	1.2E+02	4.0E+01	6.7E+01	2.1E+01
Trichlorofluoromethane	75-69-4	—	3.1E+05	—	3.1E+05
Trichloronate	327-98-0	—	2.0E+03	—	2.0E+03
Trichlorophenol, 2,3,4-	15950-66-0	—	6.8E+04	—	6.8E+04
Trichlorophenol, 2,3,5-	933-78-8	—	6.8E+04	—	6.8E+04
Trichlorophenol, 2,3,6-	933-75-5	—	6.8E+04	—	6.8E+04
Trichlorophenol, 2,4,5-	95-95-4	—	6.8E+04	—	6.8E+04
Trichlorophenol, 2,4,6-	88-06-2	1.1E+03	6.8E+02	8.6E+02	6.8E+02
Trichlorophenol, 3,4,5-	609-19-8	—	6.8E+04	—	6.8E+04
Trichlorophenoxyacetic acid, 2,4,5-	93-76-5	—	6.8E+03	—	6.8E+03
Trichloropropane, 1,1,2-	598-77-6	—	6.4E+00	—	3.3E+00
Trichloropropane, 1,2,3-	96-18-4	9.5E-01	1.9E+01	9.5E-01	1.0E+01
Triethanolamine	102-71-6	—	5.2E+03	—	2.7E+03
Triethylamine	121-44-8	—	1.5E+02	—	7.7E+01
Triethylene glycol	112-27-6	—	1.0E+06	—	1.0E+06
Triethylphosphorothioate, O, O, O-	126-68-1	—	5.7E+00	—	5.7E+00
Trifluralin	1582-09-8	2.5E+03	5.1E+03	2.5E+03	5.1E+03
Trimethylamine	75-50-3	—	2.1E+02	—	1.1E+02
Trimethylbenzene, 1,2,3-	526-73-8	—	4.4E+03	—	2.4E+03
Trimethylbenzene, 1,2,4-	95-63-6	—	4.9E+03	—	2.7E+03
Trimethylbenzene, 1,3,5-	108-67-8	—	4.3E+03	—	2.3E+03
Trinitrobenzene, 1,3,5-	99-35-4	—	2.0E+04	—	2.0E+04
Trinitrophenylmethylnitramine (tetryl; nitramine)	479-45-8	—	1.6E+03	—	1.6E+03
Trinitrotoluene, 2,4,6-	118-96-7	6.4E+02	3.4E+02	6.4E+02	3.4E+02
Tungsten (as sodium tungstate dihydride)	7440-33-7	—	8.2E+02	—	8.2E+02
Uranium (soluble salts)	7440-61-1	—	2.8E+03	—	2.6E+03
Valeric acid (pentanoic acid)	109-52-4	—	1.8E+02	—	9.5E+01
Vanadium	7440-62-2	—	6.2E+02	—	6.1E+02
Vernam	1929-77-7	—	6.8E+02	—	6.8E+02
Vinyl acetate	108-05-4	—	4.3E+03	—	2.2E+03
Vinyl chloride	75-01-4	1.5E+01	9.1E+02	1.3E+01	5.5E+02
Vinylcyclohexane	695-12-5	—	5.1E+05	—	5.1E+05
Warfarin	81-81-2	—	2.0E+02	—	2.0E+02
Xylene, m-	108-38-3	—	1.3E+04	—	6.7E+03
Xylene, o-	95-47-6	—	9.1E+04	—	4.8E+04
Xylene, p-	106-42-3	—	1.3E+04	—	6.7E+03

Table 5
Tier 1 Commercial/Industrial Total Soil Combined PCLs

Last Revised: March 6, 2023

Chemical of Concern	CAS	TotSoil _{Comb}			
		(includes inhalation, ingestion, and dermal pathways)			
		0.5 acre source area Carcinogenic (mg/kg)	0.5 acre source area Noncarcinogenic (mg/kg)	30 acre source area Carcinogenic (mg/kg)	30 acre source area Noncarcinogenic (mg/kg)
Xylenes	1330-20-7	—	1.2E+04	—	6.5E+03
Zinc	7440-66-6	—	2.5E+05	—	2.5E+05
6 C aliphatics (TPH) (>53% n-hexane content)	NA	—	1.2E+04	—	6.6E+03
6 C aliphatics (TPH) (<53% n-hexane content)	NA	—	5.3E+04	—	4.7E+04
>6-8 C aliphatics (TPH) (>53% n-hexane content)	NA	—	1.2E+04	—	6.6E+03
>6-8 C aliphatics (TPH) (<53% n-hexane content)	NA	—	5.3E+04	—	4.7E+04
>8-10 C aliphatics (TPH)	NA	—	9.7E+03	—	5.2E+03
>10-12 C aliphatics (TPH)	NA	—	9.3E+03	—	5.1E+03
>12-16 C aliphatics (TPH)	NA	—	1.4E+04	—	7.7E+03
>16-21 C aliphatics (TPH)	NA	—	1.0E+06	—	1.0E+06
>16-21 C aliphatics (TPH) (for transformer mineral oil releases only)	NA	—	1.0E+06	—	1.0E+06
>21-35 C aliphatics (TPH)	NA	—	1.0E+06	—	1.0E+06
>21-35 C aliphatics (TPH) (for transformer mineral oil releases only)	NA	—	1.0E+06	—	1.0E+06
>7-8 C aromatics (TPH)	NA	—	2.9E+04	—	1.7E+04
>8-10 C aromatics (TPH)	NA	—	3.9E+03	—	2.1E+03
>10-12 C aromatics (TPH)	NA	—	6.9E+03	—	4.0E+03
>12-16 C aromatics (TPH)	NA	—	1.2E+04	—	7.8E+03
>16-21 C aromatics (TPH)	NA	—	2.0E+04	—	2.0E+04
>21-35 C aromatics (TPH)	NA	—	2.0E+04	—	2.0E+04

Footnotes

1 Site-specific PCLs for mercury may vary based on the pH-dependent Kd value (see Figure:30 TAC §350.73(f)(1)(C)).

* These compounds are not necessarily of concern from a human health standpoint, therefore calculation of human health-based values is not required. However, aesthetics and ecological criteria would still apply. See table entitled "Compounds for which Calculation of a Human Health PCL is Not Required" available on the TCEQ website at <http://www.tceq.state.tx.us/remediation/trrp/trrp.html>.

NA = not applicable

All values capped at 1E+06

This table shows the total soil combined protective concentration levels for commercial/industrial land with both carcinogenic and non-carcinogenic values depicted.
end of worksheet

**Table 6
Tier 1 Individual Residential Soil PCLs**

Last Revised: March 6, 2023

Chemical of Concern	CAS	Carcinogenic							Noncarcinogenic						
		AirSoil ^{Inh-vp} 0.5 acre source area (mg/kg)	AirSoil ^{Inh-vp} 30 acre source area (mg/kg)	SoilSoil ^{Ing} (mg/kg)	SoilSoil ^{Derm} (mg/kg)	VegSoil ^{Ing} (mg/kg)	AirSoil ^{Inh-v} 0.5 acre source area (mg/kg)	AirSoil ^{Inh-v} 30 acre source area (mg/kg)	AirSoil ^{Inh-vp} 0.5 acre source area (mg/kg)	AirSoil ^{Inh-vp} 30 acre source area (mg/kg)	SoilSoil ^{Ing} (mg/kg)	SoilSoil ^{Derm} (mg/kg)	VegSoil ^{Ing} (mg/kg)	AirSoil ^{Inh-v} 0.5 acre source area (mg/kg)	AirSoil ^{Inh-v} 30 acre source area (mg/kg)
		Acenaphthene	83-32-9	--	--	--	--	--	--	--	--	4.9E+03	1.6E+04	1.4E+04	--
Acenaphthylene	208-96-8	--	--	--	--	--	--	--	--	4.9E+03	1.6E+04	--	--	--	
Acetaldehyde	75-07-0	1.7E+02	8.7E+01	--	--	--	1.7E+02	8.7E+01	1.4E+02	7.4E+01	8.2E+03	--	--	1.4E+02 7.4E+01	
Acetate, 2-ethoxyethanol	111-15-9	--	--	--	--	--	--	--	6.0E+03	3.1E+03	8.2E+03	--	--	6.0E+03 3.1E+03	
Acetate, isoamyl	123-92-2	--	--	--	--	--	--	--	--	--	5.9E+03	--	--	--	
Acetate, isobutyl	110-19-0	--	--	--	--	--	--	--	--	--	3.9E+03	--	--	--	
Acetate, sec-butyl	105-46-4	--	--	--	--	--	--	--	--	--	3.9E+03	--	--	--	
Acetic acid*	64-19-7	--	--	--	--	--	--	--	--	--	--	--	--	--	
Acetone (2-propanone)	67-64-1	--	--	--	--	--	--	--	6.0E+05	3.1E+05	7.4E+04	--	--	6.0E+05 3.1E+05	
Acetone cyanohydrin	75-86-5	--	--	--	--	--	--	--	4.3E+03	2.2E+03	2.5E+02	1.1E+03	--	4.3E+03 2.2E+03	
Acetonitrile	75-05-8	--	--	--	--	--	--	--	1.3E+03	6.7E+02	2.6E+03	--	--	1.3E+03 6.7E+02	
Acetophenone	98-86-2	--	--	--	--	--	--	--	--	--	8.2E+03	3.6E+04	--	--	
Acetylaminofluorene, 2-	53-96-3	1.9E+01	9.5E+00	1.6E+00	5.5E+00	--	1.9E+01	9.5E+00	--	--	--	--	--	--	
Acifluorfen, sodium	62476-59-9	--	--	--	--	--	--	--	--	--	1.1E+03	4.6E+03	--	--	
Acridine	260-94-6	--	--	--	--	--	--	--	--	--	2.5E+02	1.1E+03	--	--	
Acrolein	107-02-8	--	--	--	--	--	--	--	1.5E+02	7.8E+01	4.1E+01	--	--	1.5E+02 7.8E+01	
Acrylamide	79-06-1	2.8E+01	1.4E+01	1.2E+01	4.2E+01	--	2.8E+01	1.4E+01	7.2E+02	3.7E+02	1.6E+02	7.1E+02	--	7.2E+02 3.7E+02	
Acrylic acid	79-10-7	--	--	--	--	--	--	--	1.2E+02	6.2E+01	4.1E+04	--	--	1.2E+02 6.2E+01	
Acrylonitrile	107-13-1	5.3E+00	2.7E+00	1.1E+01	--	--	5.3E+00	2.7E+00	3.1E+01	1.6E+01	8.2E+01	--	--	3.1E+01 1.6E+01	
Adipic acid (hexanedioic acid)	124-04-9	--	--	--	--	--	--	--	--	--	1.6E+05	7.1E+05	--	--	
Alachlor	15972-60-8	--	--	7.6E+01	2.6E+02	--	--	--	--	--	8.2E+02	3.6E+03	--	--	
Aldicarb	116-06-3	--	--	--	--	--	--	--	--	--	8.2E+01	3.6E+02	--	--	
Aldicarb sulfone	1646-88-4	--	--	--	--	--	--	--	--	--	8.2E+01	3.6E+02	--	--	
Aldrin	309-00-2	8.3E+00	4.3E+00	3.6E-01	1.2E+00	6.2E-02	8.3E+00	4.3E+00	--	--	2.5E+00	1.1E+01	8.4E-01	--	
Allyl alcohol	107-18-6	--	--	--	--	--	--	--	5.7E+00	2.9E+00	4.1E+02	--	--	5.7E+00 2.9E+00	
Allyl chloride	107-05-1	--	--	--	--	--	--	--	1.5E+01	7.9E+00	8.2E+02	--	--	1.5E+01 7.9E+00	
Aluminum	7429-90-5	--	--	--	--	--	--	--	1.0E+06	1.0E+06	8.2E+04	3.6E+05	1.0E+06	--	
Ametryn	834-12-8	--	--	--	--	--	--	--	--	--	7.4E+02	3.2E+03	--	--	
Amino-2,6-dinitrotoluene, 4-	19406-51-0	--	--	2.0E+02	6.9E+02	--	--	--	--	--	4.1E+01	1.8E+02	--	--	
Amino-4,6-dinitrotoluene, 2-	35572-78-2	--	--	2.0E+02	6.9E+02	--	--	--	--	--	4.1E+01	1.8E+02	--	--	
Aminobiphenyl, 4- (1,1-biphenyl-4-amine)	92-67-1	--	--	1.0E+00	3.4E+00	--	--	--	--	--	--	--	--	--	
Aminopyridine, 4-	504-24-5	--	--	--	--	--	--	--	--	--	1.6E+00	7.1E+00	--	--	
Ammonia	7664-41-7	--	--	--	--	--	--	--	4.9E+03	2.5E+03	--	--	4.9E+03	2.5E+03	
Ammonium polyphosphate*	6833-79-9	--	--	--	--	--	--	--	--	--	--	--	--	--	
Ammonium salts*	AMMONIUM	--	--	--	--	--	--	--	--	--	--	--	--	--	
Aniline	62-53-3	--	--	1.1E+03	3.6E+03	--	--	--	1.3E+02	6.7E+01	5.7E+02	2.5E+03	--	1.3E+02 6.7E+01	
Anthracene	120-12-7	--	--	--	--	--	--	--	--	--	2.5E+04	8.2E+04	2.9E+05	--	
Anthraquinone, 9,10-	84-65-1	--	--	1.6E+02	5.3E+02	--	--	--	--	--	1.6E+03	7.1E+03	--	--	
Antimony	7440-36-0	--	--	--	--	--	--	--	--	--	3.3E+01	2.1E+02	3.2E+01	--	
Aramite	140-57-8	1.0E+06	1.0E+06	2.4E+02	8.3E+02	2.7E+02	--	--	--	--	4.1E+03	1.8E+04	8.9E+03	--	
Arsenic	7440-38-2	1.5E+05	7.7E+04	5.2E+01	4.6E+02	1.3E+02	--	--	--	--	3.1E+01	3.6E+02	1.5E+02	--	
Arsine	7784-42-1	--	--	--	--	--	--	--	7.7E-01	3.9E-01	--	--	--	7.7E-01 3.9E-01	
Atrazine	1912-24-9	--	--	2.7E+01	9.4E+01	--	--	--	--	--	2.9E+03	1.2E+04	--	--	
Azinphos-methyl (guthion)	86-50-0	--	--	--	--	--	--	--	--	--	1.2E+02	5.3E+02	--	--	
Azobenzene	103-33-3	1.4E+03	7.1E+02	5.5E+01	1.9E+02	3.5E+02	1.4E+03	7.1E+02	--	--	--	--	--	--	

**Table 6
Tier 1 Individual Residential Soil PCLs**

Last Revised: March 6, 2023

Chemical of Concern	CAS	Carcinogenic							Noncarcinogenic							
		AirSoil _{Inh-vp} ¹	AirSoil _{Inh-vp} ¹	SoilSoil _{Ing}	SoilSoil _{Derm}	VegSoil _{Ing}	AirSoil _{Inh-v} ¹	AirSoil _{Inh-v} ¹	AirSoil _{Inh-vp} ¹	AirSoil _{Inh-vp} ¹	SoilSoil _{Ing}	SoilSoil _{Derm}	VegSoil _{Ing}	AirSoil _{Inh-v} ¹	AirSoil _{Inh-v} ¹	
		0.5 acre source area (mg/kg)	30 acre source area (mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	0.5 acre source area (mg/kg)	30 acre source area (mg/kg)	0.5 acre source area (mg/kg)	30 acre source area (mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	0.5 acre source area (mg/kg)	30 acre source area (mg/kg)	
Barium	7440-39-3	—	—	—	—	—	—	—	—	—	—	1.6E+04	5.0E+04	2.4E+04	—	—
Bayleton	43121-43-3	—	—	—	—	—	—	—	—	—	—	2.5E+03	1.1E+04	—	—	—
Benefin (benfluralin)	1861-40-1	—	—	—	—	—	—	—	—	—	—	2.5E+04	1.1E+05	4.2E+05	—	—
Benomyl	17804-35-2	—	—	—	—	—	—	—	—	—	—	4.1E+03	1.8E+04	—	—	—
Benz-a-anthracene	56-55-3	5.4E+03	2.8E+03	6.1E+01	1.6E+02	6.8E+02	5.5E+03	2.8E+03	—	—	—	—	—	—	—	—
Benzaldehyde	100-52-7	—	—	—	—	—	—	—	—	—	—	8.2E+03	—	—	—	—
Benzene	71-43-2	1.6E+02	8.4E+01	4.0E+02	—	—	1.6E+02	8.4E+01	4.3E+03	2.2E+03	3.3E+02	—	—	—	4.3E+03	2.2E+03
Benzenediacetonitrile, 1,3-	626-17-5	—	—	—	—	—	—	—	—	—	—	4.9E+02	2.1E+03	—	—	—
Benzenedicarboxylic acid, 1,2-disodecyl ester	26761-40-0	—	—	—	—	—	—	—	1.0E+06	1.0E+06	3.3E+03	1.4E+04	6.6E+05	1.0E+06	1.0E+06	1.0E+06
Benzethiol	108-98-5	—	—	—	—	—	—	—	—	—	—	8.2E+01	—	—	—	—
Benzydine	92-87-5	6.3E-02	3.2E-02	2.6E-02	9.0E-02	—	6.3E-02	3.2E-02	—	—	2.5E+02	1.1E+03	—	—	—	—
Benzo-a-pyrene	50-32-8	1.2E+03	6.2E+02	6.1E+00	1.6E+01	6.5E+01	1.2E+03	6.4E+02	6.2E+01	3.2E+01	2.5E+01	8.2E+01	5.2E+02	6.4E+01	3.3E+01	3.3E+01
Benzo-b-fluoranthene	205-99-2	8.8E+03	4.5E+03	6.1E+01	1.6E+02	8.2E+02	9.0E+03	4.6E+03	—	—	—	—	—	—	—	—
Benzo-e-pyrene	192-97-2	—	—	—	—	—	—	—	—	—	—	2.5E+03	8.2E+03	7.4E+04	—	—
Benzo-g,h,i-perylene	191-24-2	—	—	—	—	—	—	—	—	—	—	2.5E+03	8.2E+03	3.0E+04	—	—
Benzoic acid	65-85-0	—	—	—	—	—	—	—	—	—	—	3.3E+05	1.0E+06	—	—	—
Benzo-j-fluoranthene	205-82-3	4.7E+03	2.4E+03	6.1E+01	1.6E+02	3.6E+02	4.7E+03	2.4E+03	—	—	—	—	—	—	—	—
Benzo-k-fluoranthene	207-08-9	2.1E+05	1.1E+05	6.1E+02	1.6E+03	8.4E+03	2.2E+05	1.1E+05	—	—	—	—	—	—	—	—
Benzophenone	119-61-9	—	—	—	—	—	—	—	—	—	—	5.5E+02	2.4E+03	—	—	—
Benzotrithloride	98-07-7	—	—	4.7E-01	1.6E+00	—	—	—	—	—	—	—	—	—	—	—
Benzoyl peroxide	94-36-0	—	—	—	—	—	—	—	—	—	—	4.1E+03	1.8E+04	—	—	—
Benzyl alcohol	100-51-6	—	—	—	—	—	—	—	—	—	—	8.2E+03	3.6E+04	—	—	—
Benzyl chloride	100-44-7	—	—	3.6E+01	—	—	—	—	3.1E+01	1.6E+01	1.6E+02	—	—	3.1E+01	1.6E+01	1.6E+01
Benzyl dichloride	98-87-3	—	—	3.6E+01	1.2E+02	—	—	—	5.5E+01	2.8E+01	1.6E+02	7.1E+02	—	5.5E+01	2.8E+01	2.8E+01
Beryllium	7440-41-7	9.4E+03	4.8E+03	—	—	—	—	—	1.9E+04	1.0E+04	1.6E+02	5.0E+01	3.1E+03	—	—	—
Biphenyl, 1,1'-	92-52-4	—	—	—	—	—	—	—	—	—	—	4.1E+04	1.8E+04	—	—	—
Biphenyl, 1,1'-, 2-phenoxy-	6738-04-1	—	—	—	—	—	—	—	—	—	—	4.1E+03	1.8E+04	1.0E+05	—	—
Biquinoline, 2,2'-	119-91-5	—	—	—	—	—	—	—	—	—	—	2.5E+02	1.1E+03	1.9E+03	—	—
Bis (2-chloroethoxy) methane	111-91-1	1.1E+01	5.8E+00	5.5E+00	1.9E+01	—	1.1E+01	5.8E+00	—	—	—	2.5E+02	1.1E+03	—	—	—
Bis (2-chloroethyl) ether	111-44-4	3.6E+00	1.8E+00	5.5E+00	—	—	3.6E+00	1.8E+00	—	—	—	—	—	—	—	—
Bis (2-chloro-1-methylethyl) ether	108-60-1	2.1E+02	1.1E+02	8.7E+01	3.0E+02	—	2.1E+02	1.1E+02	—	—	—	3.3E+03	1.4E+04	—	—	—
Bis (2-chloromethyl) ether	542-88-1	5.8E-03	3.0E-03	2.8E-02	—	—	5.8E-03	3.0E-03	—	—	—	—	—	—	—	—
Bis (2-ethyl-hexyl) phthalate	117-81-7	—	—	4.3E+02	2.8E+02	5.8E+01	—	—	—	—	—	1.6E+03	1.4E+03	4.3E+02	—	—
Bismuth	7440-69-9	—	—	—	—	—	—	—	—	—	—	4.1E+04	3.6E+05	—	—	—
Bisphenol A	80-05-7	—	—	—	—	—	—	—	—	—	—	4.1E+03	1.8E+04	—	—	—
Boron	7440-42-8	—	—	—	—	—	—	—	1.0E+06	1.0E+06	1.6E+04	7.1E+05	—	—	—	—
Bromacil	314-40-9	—	—	—	—	—	—	—	—	—	—	8.2E+03	3.6E+04	—	—	—
Bromo-2-chloroethane, 1-	107-04-0	—	—	—	—	—	—	—	—	—	—	3.3E+03	—	—	—	—
Bromobenzene	108-86-1	—	—	—	—	—	—	—	9.7E+02	5.0E+02	6.6E+02	—	—	9.7E+02	5.0E+02	5.0E+02
Bromodichloromethane	75-27-4	—	—	9.8E+01	—	—	—	—	—	—	—	6.6E+02	—	—	—	—
Bromoform	75-25-2	8.4E+02	4.3E+02	7.7E+02	—	—	8.4E+02	4.3E+02	—	—	—	1.6E+03	—	—	—	—
Bromomethane	74-83-9	—	—	—	—	—	—	—	6.0E+01	3.1E+01	1.1E+02	—	—	6.0E+01	3.1E+01	3.1E+01
Bromophenyl phenylether, 4-	101-55-3	9.7E+00	5.0E+00	4.0E-01	1.4E+00	3.0E+00	9.8E+00	5.0E+00	—	—	—	—	—	—	—	—
Butadiene, 1,3-	106-99-0	7.2E+02	3.7E+02	—	—	—	7.2E+02	3.7E+02	5.1E+02	2.6E+02	—	—	—	5.1E+02	2.6E+02	2.6E+02
Butadiene, 2-methyl-1,3- (isoprene)	78-79-5	—	—	—	—	—	—	—	2.8E+05	1.4E+05	4.9E+03	—	—	2.8E+05	1.4E+05	1.4E+05

**Table 6
Tier 1 Individual Residential Soil PCLs**

Last Revised: March 6, 2023

Chemical of Concern	CAS	Carcinogenic							Noncarcinogenic						
		AirSoil _{Inh-vp} ¹ 0.5 acre source area (mg/kg)	AirSoil _{Inh-vp} ¹ 30 acre source area (mg/kg)	SoilSoil _{Ing}	SoilSoil _{Derm}	VegSoil _{Ing}	AirSoil _{Inh-v} ¹ 0.5 acre source area (mg/kg)	AirSoil _{Inh-v} ¹ 30 acre source area (mg/kg)	AirSoil _{Inh-vp} ¹ 0.5 acre source area (mg/kg)	AirSoil _{Inh-vp} ¹ 30 acre source area (mg/kg)	SoilSoil _{Ing}	SoilSoil _{Derm}	VegSoil _{Ing}	AirSoil _{Inh-v} ¹ 0.5 acre source area (mg/kg)	AirSoil _{Inh-v} ¹ 30 acre source area (mg/kg)
		Butanal (butyraldehyde)	123-72-8	—	—	—	—	—	—	—	1.5E+03	7.9E+02	4.9E+03	—	—
Butane, 2,3-dimethyl-	79-29-8	—	—	—	—	—	—	—	2.8E+05	1.4E+05	4.9E+03	—	—	2.8E+05	1.4E+05
Butanoic acid (butyric acid)	107-92-6	—	—	—	—	—	—	—	1.3E+02	6.6E+01	4.1E+04	1.8E+05	—	1.3E+02	6.6E+01
Butanol, 2-	78-92-2	—	—	—	—	—	—	—	1.0E+06	7.2E+05	1.6E+05	—	—	1.0E+06	7.2E+05
Butanol, 2-methyl-1-	137-32-6	—	—	—	—	—	—	—	—	—	8.2E+02	—	—	—	—
Butanol, 2-methyl-2-	75-85-4	—	—	—	—	—	—	—	—	—	8.2E+02	—	—	—	—
Butanol, n-	71-36-3	—	—	—	—	—	—	—	—	—	8.2E+03	—	—	—	—
Butene, 1-	106-98-9	—	—	—	—	—	—	—	8.1E+04	4.2E+04	4.9E+03	—	—	8.1E+04	4.2E+04
Butene, cis-2-	590-18-1	—	—	—	—	—	—	—	2.5E+04	1.3E+04	4.9E+03	—	—	2.5E+04	1.3E+04
Butene, trans-2-	624-64-6	—	—	—	—	—	—	—	2.5E+04	1.3E+04	4.9E+03	—	—	2.5E+04	1.3E+04
Butoxy ethanol, 2- (Ethylene glycol monobutyl ether; EGBE)	111-76-2	—	—	—	—	—	—	—	2.9E+05	1.5E+05	8.2E+03	3.6E+04	—	2.9E+05	1.5E+05
Butyl acetate	123-86-4	—	—	—	—	—	—	—	8.4E+04	4.3E+04	1.1E+04	—	—	8.4E+04	4.3E+04
Butyl acrylate	141-32-2	—	—	—	—	—	—	—	—	—	7.4E+02	—	—	—	—
Butyl benzyl phthalate	85-68-7	—	—	3.2E+03	1.1E+04	4.6E+03	—	—	—	—	1.6E+04	7.1E+04	4.7E+04	—	—
Butyl ether, n- (dibutyl ether)	142-96-1	—	—	—	—	—	—	—	—	—	8.2E+03	—	—	—	—
Butyl methacrylate	97-88-1	—	—	—	—	—	—	—	—	—	7.4E+03	6.4E+03	—	—	—
Butylate	2008-41-5	—	—	—	—	—	—	—	—	—	4.1E+03	1.8E+04	—	—	—
Butylbenzene, n-	104-51-8	—	—	—	—	—	—	—	—	—	4.1E+03	1.8E+04	—	—	—
Butylbenzene, sec-	135-98-8	—	—	—	—	—	—	—	—	—	3.3E+03	—	—	—	—
Butylbenzene, tert-	98-06-6	—	—	—	—	—	—	—	—	—	3.3E+03	—	—	—	—
Cacodylic acid	75-60-5	—	—	—	—	—	—	—	—	—	2.5E+02	1.1E+03	—	—	—
Cadmium	7440-43-9	4.6E+04	2.4E+04	—	—	—	—	—	1.1E+04	5.5E+03	2.6E+02	2.3E+03	6.7E+01	—	—
Calcium*	7440-70-2	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Caprolactam	105-60-2	—	—	—	—	—	—	—	—	—	4.1E+04	1.8E+05	—	—	—
Captan	133-06-2	—	—	1.7E+03	5.9E+03	—	—	—	—	—	1.1E+04	4.6E+04	—	—	—
Carbaryl	63-25-2	—	—	—	—	—	—	—	—	—	8.2E+03	3.6E+04	—	—	—
Carbazole	86-74-8	—	—	3.0E+02	1.0E+03	—	—	—	—	—	—	—	—	—	—
Carbofuran	1563-66-2	—	—	—	—	—	—	—	—	—	4.1E+02	1.8E+03	—	—	—
Carbon disulfide	75-15-0	—	—	—	—	—	—	—	1.1E+04	5.5E+03	8.2E+03	—	—	1.1E+04	5.5E+03
Carbon tetrachloride	56-23-5	6.0E+01	3.1E+01	8.7E+01	—	—	6.0E+01	3.1E+01	1.5E+03	7.9E+02	3.3E+02	—	—	1.5E+03	7.9E+02
Carbophenothion	786-19-6	—	—	—	—	—	—	—	—	—	1.1E+03	4.6E+03	1.6E+04	—	—
Carbosulfan	55285-14-8	—	—	—	—	—	—	—	—	—	8.2E+02	3.6E+03	1.2E+03	—	—
Carboxin	5234-68-4	—	—	—	—	—	—	—	—	—	8.2E+03	3.6E+04	—	—	—
Chloral	75-87-6	—	—	—	—	—	—	—	—	—	8.2E+03	—	—	—	—
Chloral hydrate (1,1-ethanediol, 2,2,2-trichloro-)	302-17-0	—	—	—	—	—	—	—	—	—	8.2E+03	3.6E+04	—	—	—
Chloramben (amiben; 3-amino-2,5-dichlorobenzoic acid)	133-90-4	—	—	—	—	—	—	—	—	—	1.2E+03	5.3E+03	—	—	—
Chlordane (technical)	12789-03-6	1.2E+03	6.4E+02	1.7E+01	1.5E+02	9.7E+00	1.2E+03	6.4E+02	3.7E+03	1.9E+03	4.1E+01	4.4E+02	4.6E+01	3.7E+03	1.9E+03
Chlordane, cis- (alpha chlordane)	5103-71-9	4.0E+03	2.1E+03	1.7E+01	5.9E+01	3.0E+02	4.1E+03	2.1E+03	1.2E+04	6.2E+03	4.1E+01	1.8E+02	1.4E+03	1.2E+04	6.3E+03
Chlordane, trans- (gamma chlordane)	5103-74-2	9.6E+02	5.0E+02	1.7E+01	5.9E+01	1.7E+01	9.7E+02	5.0E+02	2.9E+03	1.5E+03	4.1E+01	1.8E+02	7.8E+01	2.9E+03	1.5E+03
Chlorfenvinphos	470-90-6	—	—	—	—	—	—	—	3.1E+01	1.6E+01	5.7E+01	2.5E+02	5.2E+01	3.1E+01	1.6E+01
Chloride*	16887-00-6	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Chlorine	7782-50-5	—	—	—	—	—	—	—	1.3E+02	6.9E+01	8.2E+03	7.1E+04	—	1.3E+02	6.9E+01
Chloro-1,3-butadiene, 2-	126-99-8	1.2E+00	6.1E-01	—	—	—	1.2E+00	6.1E-01	3.1E+02	1.6E+02	—	—	—	3.1E+02	1.6E+02
Chloro-2-propanol, 1-	127-00-4	—	—	—	—	—	—	—	—	—	1.6E+03	—	—	—	—
Chloro-3-methylphenol, 4-	59-50-7	—	—	—	—	—	—	—	—	—	4.1E+02	1.8E+03	—	—	—

**Table 6
Tier 1 Individual Residential Soil PCLs**

Last Revised: March 6, 2023

Chemical of Concern	CAS	Carcinogenic							Noncarcinogenic						
		Air ¹ Soil _{Inh-Vp} 0.5 acre source area (mg/kg)	Air ¹ Soil _{Inh-Vp} 30 acre source area (mg/kg)	Soil _{Inh-Vp} (mg/kg)	Soil _{Derm} (mg/kg)	Veg _{Inh-Vp} (mg/kg)	Air ¹ Soil _{Inh-V} 0.5 acre source area (mg/kg)	Air ¹ Soil _{Inh-V} 30 acre source area (mg/kg)	Air ¹ Soil _{Inh-Vp} 0.5 acre source area (mg/kg)	Air ¹ Soil _{Inh-Vp} 30 acre source area (mg/kg)	Soil _{Inh-Vp} (mg/kg)	Soil _{Derm} (mg/kg)	Veg _{Inh-Vp} (mg/kg)	Air ¹ Soil _{Inh-V} 0.5 acre source area (mg/kg)	Air ¹ Soil _{Inh-V} 30 acre source area (mg/kg)
		Chloroaniline, p-	106-47-8	—	—	3.0E+01	1.0E+02	—	—	—	—	—	—	3.3E+02	1.4E+03
Chlorobenzene	108-90-7	—	—	—	—	—	—	—	7.7E+02	3.9E+02	1.6E+03	—	—	7.7E+02	3.9E+02
Chlorobenzilate	510-15-6	3.5E+02	1.8E+02	2.2E+01	7.7E+01	—	3.5E+02	1.8E+02	—	—	1.6E+03	7.1E+03	—	—	—
Chlorobromomethane (bromochloromethane)	74-97-5	—	—	—	—	—	—	—	—	—	3.3E+03	—	—	—	—
Chlorodifluoromethane	75-45-6	—	—	—	—	—	—	—	7.7E+05	3.9E+05	—	—	—	7.7E+05	3.9E+05
Chloroethane (ethyl chloride)	75-00-3	—	—	—	—	—	—	—	1.5E+05	7.9E+04	3.3E+04	—	—	1.5E+05	7.9E+04
Chloroethanol, 2-	107-07-3	—	—	—	—	—	—	—	—	—	1.6E+03	—	—	—	—
Chloroethoxy ethene, 2- (2-chloroethylvinylether)	110-75-8	—	—	5.5E+00	—	—	—	—	4.6E+00	2.4E+00	1.6E+02	—	—	4.6E+00	2.4E+00
Chloroform	67-66-3	1.6E+01	8.0E+00	—	—	—	1.6E+01	8.0E+00	1.5E+03	7.7E+02	8.2E+02	—	—	1.5E+03	7.7E+02
Chlorohexane, 1-	544-10-5	—	—	—	—	—	—	—	1.5E+04	7.9E+03	3.3E+03	—	—	1.5E+04	7.9E+03
Chloromethane (methyl chloride)	74-87-3	2.0E+02	1.0E+02	4.7E+02	—	—	2.0E+02	1.0E+02	1.4E+03	7.1E+02	2.9E+02	—	—	1.4E+03	7.1E+02
Chloronaphthalene, 1- (Chloronaphthalene, alpha-)	90-13-1	—	—	—	—	—	—	—	—	—	6.6E+03	2.2E+04	5.2E+04	—	—
Chloronaphthalene, 2- (chloronaphthalene, beta)	91-58-7	—	—	—	—	—	—	—	—	—	6.6E+03	2.2E+04	—	—	—
Chloronitrobenzene, p- (1-chloro-4-nitrobenzene)	100-00-5	—	—	9.6E+02	3.3E+03	—	—	—	6.3E+01	3.2E+01	8.2E+01	3.6E+02	—	6.3E+01	3.2E+01
Chlorophenol, 2-	95-57-8	—	—	—	—	—	—	—	—	—	4.1E+02	—	—	—	—
Chlorophenol, 3-	108-43-0	—	—	—	—	—	—	—	—	—	4.1E+02	1.8E+03	—	—	—
Chlorophenol, 4-	106-48-9	—	—	—	—	—	—	—	—	—	4.1E+02	1.8E+03	—	—	—
Chlorophenyl phenylether, 4-	7005-72-3	2.5E+00	1.3E+00	4.0E-01	1.4E+00	3.9E-01	2.5E+00	1.3E+00	—	—	—	—	—	—	—
Chloropropane, 2-	75-29-6	—	—	—	—	—	—	—	1.5E+03	7.9E+02	2.5E+03	—	—	1.5E+03	7.9E+02
Chlorothalonil	1897-45-6	—	—	5.5E+02	1.9E+03	—	—	—	—	—	1.2E+03	5.3E+03	—	—	—
Chlorotoluene, o- (2-chlorotoluene)	95-49-8	—	—	—	—	—	—	—	1.3E+04	6.8E+03	1.6E+03	7.1E+03	—	1.3E+04	6.8E+03
Chlorotoluene, p- (4-chlorotoluene)	106-43-4	—	—	—	—	—	—	—	—	—	1.6E+03	—	—	—	—
Chlorpyrifos	2921-88-2	—	—	—	—	—	—	—	—	—	2.5E+02	1.1E+03	3.6E+02	—	—
Chromium (III)	16065-83-1	—	—	—	—	—	—	—	1.4E+05	7.0E+04	1.2E+05	6.9E+04	1.0E+06	—	—
Chromium (total)	7440-47-3	—	—	—	—	—	—	—	1.4E+05	7.0E+04	1.2E+05	6.9E+04	1.0E+06	—	—
Chromium (VI)	18540-29-9	9.8E+03	5.1E+03	—	—	—	—	—	2.1E+05	1.1E+05	2.5E+02	2.7E+02	2.9E+03	—	—
Chrysene	218-01-9	8.5E+05	4.4E+05	6.1E+03	1.6E+04	5.9E+04	8.7E+05	4.5E+05	—	—	—	—	—	—	—
Cobalt	7440-48-4	3.8E+03	1.9E+03	—	—	—	—	—	6.1E+04	3.1E+04	8.2E+02	3.6E+04	5.0E+03	—	—
Copolymer acrylamide	69418-26-4	—	—	—	—	—	—	—	—	—	1.6E+01	7.1E+01	—	—	—
Copper	7440-50-8	—	—	—	—	—	—	—	—	—	7.9E+03	3.4E+05	1.6E+03	—	—
Coronene	191-07-1	—	—	—	—	—	—	—	—	—	1.6E+02	7.1E+02	7.6E+03	—	—
Coumaphos	56-72-4	—	—	—	—	—	—	—	—	—	5.7E+02	2.5E+03	5.3E+03	—	—
Cresol	1319-77-3	—	—	—	—	—	—	—	—	—	4.1E+03	1.8E+04	—	—	—
Cresol, m- (3-methylphenol)	108-39-4	—	—	—	—	—	—	—	—	—	4.1E+03	1.8E+04	—	—	—
Cresol, o- (2-methylphenol)	95-48-7	—	—	—	—	—	—	—	—	—	4.1E+03	1.8E+04	—	—	—
Cresol, p- (4-methylphenol)	106-44-5	—	—	—	—	—	—	—	—	—	4.1E+02	1.8E+03	—	—	—
Crotonaldehyde	123-73-9	—	—	3.2E+00	—	—	—	—	—	—	8.2E+01	—	—	—	—
Cumene (isopropylbenzene)	98-82-8	—	—	—	—	—	—	—	9.2E+03	4.8E+03	8.2E+03	—	—	9.2E+03	4.8E+03
Cyanazine	21725-46-2	—	—	7.2E+00	2.5E+01	—	—	—	—	—	1.6E+02	7.1E+02	—	—	—
Cyanide	57-12-5	—	—	—	—	—	—	—	7.2E+02	3.7E+02	4.9E+01	2.1E+03	—	7.2E+02	3.7E+02
Cyanogen	460-19-5	—	—	—	—	—	—	—	1.2E+01	6.3E+00	8.2E+01	—	—	1.2E+01	6.3E+00
Cycloate	1134-23-2	—	—	—	—	—	—	—	—	—	4.5E+03	2.0E+04	—	—	—
Cyclohexane	110-82-7	—	—	—	—	—	—	—	9.2E+04	4.7E+04	4.1E+05	—	—	9.2E+04	4.7E+04
Cyclohexanol	108-93-0	—	—	—	—	—	—	—	—	—	4.1E+05	1.0E+06	—	—	—
Cyclohexanone	108-94-1	—	—	—	—	—	—	—	3.5E+04	1.8E+04	4.1E+05	—	—	3.5E+04	1.8E+04

Table 6
Tier 1 Individual Residential Soil PCLs

Last Revised: March 6, 2023

Chemical of Concern	CAS	Carcinogenic							Noncarcinogenic						
		AirSoil _{Inh-vp} ¹ 0.5 acre source area (mg/kg)	AirSoil _{Inh-vp} ¹ 30 acre source area (mg/kg)	SoilSoil _{Ing}	SoilSoil _{Derm}	VegSoil _{Ing}	AirSoil _{Inh-v} ¹ 0.5 acre source area (mg/kg)	AirSoil _{Inh-v} ¹ 30 acre source area (mg/kg)	AirSoil _{Inh-vp} ¹ 0.5 acre source area (mg/kg)	AirSoil _{Inh-vp} ¹ 30 acre source area (mg/kg)	SoilSoil _{Ing}	SoilSoil _{Derm}	VegSoil _{Ing}	AirSoil _{Inh-v} ¹ 0.5 acre source area (mg/kg)	AirSoil _{Inh-v} ¹ 30 acre source area (mg/kg)
		Cyclohexene, 1-methanol-3-	1679-51-2	—	—	—	—	—	—	—	—	—	1.6E+03	7.1E+03	—
Cyclohexene, 4-vinyl-1-	100-40-3	—	—	—	—	—	—	—	5.1E+03	2.6E+03	1.8E+03	—	—	5.1E+03	2.6E+03
Cyclopentane	287-92-3	—	—	—	—	—	—	—	3.7E+05	1.9E+05	4.9E+03	—	—	3.7E+05	1.9E+05
Cyclopentane, methyl-	96-37-7	—	—	—	—	—	—	—	1.5E+04	7.9E+03	8.2E+03	—	—	1.5E+04	7.9E+03
Cyclopentene	142-29-0	—	—	—	—	—	—	—	—	—	4.1E+05	—	—	—	—
Cyclotetramethylenetetranitramine (HMX)	2691-41-0	—	—	—	—	—	—	—	—	—	4.1E+03	2.7E+03	—	—	—
Cyclotrimethylenetrinitramine (RDX)	121-82-4	—	—	7.6E+01	2.6E+02	—	—	—	—	—	3.3E+02	1.4E+03	—	—	—
Cymene (isopropyltoluene)	99-87-6	—	—	—	—	—	—	—	—	—	8.2E+03	—	—	—	—
Cymoxanil	57966-95-7	—	—	—	—	—	—	—	—	—	1.1E+03	4.6E+03	—	—	—
Dacthal (DCPA)	1861-32-1	—	—	—	—	—	—	—	—	—	8.2E+02	3.6E+03	1.0E+04	—	—
Dalapon, sodium salt (2,2-dichloropropanoic acid)	75-99-0	—	—	—	—	—	—	—	—	—	2.5E+03	1.1E+04	—	—	—
DDD	72-54-8	—	—	2.5E+01	2.9E+02	3.7E+01	—	—	—	—	—	—	—	—	—
DDE	72-55-9	—	—	1.8E+01	2.0E+02	2.7E+01	—	—	—	—	—	—	—	—	—
DDT	50-29-3	1.2E+03	6.2E+02	1.8E+01	2.0E+02	8.1E+00	1.2E+03	6.2E+02	—	—	4.1E+01	5.9E+02	3.7E+01	—	—
Demeton	8065-48-3	—	—	—	—	—	—	—	—	—	3.3E+00	1.4E+01	—	—	—
Desethylatrazine	6190-65-4	—	—	—	—	—	—	—	—	—	2.9E+03	1.2E+04	—	—	—
Diacetone alcohol (4-hydroxy-4-methyl-2-pentanone)	123-42-2	—	—	—	—	—	—	—	—	—	3.3E+03	1.4E+04	—	—	—
Diallate	2303-16-4	—	—	1.0E+02	3.4E+02	7.6E+01	—	—	—	—	—	—	—	—	—
Diazinon	333-41-5	—	—	—	—	—	—	—	6.5E+01	3.3E+01	7.4E+01	3.2E+02	—	6.5E+01	3.3E+01
Dibenz(a,h)acridine	226-36-8	1.4E+04	7.4E+03	5.1E+00	1.7E+01	6.6E+01	1.5E+04	7.9E+03	—	—	—	—	—	—	—
Dibenz(a,j)acridine	224-42-0	1.9E+04	1.0E+04	8.3E+00	2.2E+01	1.4E+02	2.1E+04	1.1E+04	—	—	—	—	—	—	—
Dibenz-a,h-anthracene	53-70-3	2.7E+03	1.4E+03	6.1E+00	1.6E+01	4.6E+01	2.9E+03	1.5E+03	—	—	—	—	—	—	—
Dibenzo(a,e)pyrene	192-65-4	5.6E+03	2.9E+03	8.3E-01	2.8E+00	1.1E+01	7.2E+03	3.7E+03	—	—	—	—	—	—	—
Dibenzo(a,h)pyrene	189-64-0	5.5E+02	2.8E+02	8.3E-02	2.8E-01	1.1E+00	7.0E+02	3.6E+02	—	—	—	—	—	—	—
Dibenzo(a,i)pyrene	189-55-9	5.5E+02	2.8E+02	8.3E-02	2.8E-01	1.1E+00	7.0E+02	3.6E+02	—	—	—	—	—	—	—
Dibenzofuran	132-64-9	—	—	—	—	—	—	—	—	—	3.3E+02	1.4E+03	—	—	—
Dibenzothiophene	132-65-0	—	—	—	—	—	—	—	—	—	2.5E+02	1.1E+03	2.6E+03	—	—
Dibromo-3-chloropropane, 1,2-	96-12-8	1.6E-01	8.1E-02	7.6E+00	2.6E+01	—	1.6E-01	8.1E-02	8.1E+00	4.2E+00	1.6E+01	7.1E+01	—	8.1E+00	4.2E+00
Dibromochloromethane (chlorodibromomethane)	124-48-1	—	—	7.2E+01	—	—	—	—	—	—	1.6E+03	—	—	—	—
Dibromofluoromethane	1868-53-7	—	—	—	—	—	—	—	—	—	1.6E+04	—	—	—	—
Dicamba	1918-00-9	—	—	—	—	—	—	—	—	—	2.5E+03	1.1E+04	—	—	—
Dichlormid	37764-25-3	—	—	—	—	—	—	—	—	—	2.0E+03	8.9E+03	—	—	—
Dichloro-2-butene, 1,4-	764-41-0	2.0E-01	1.0E-01	—	—	—	2.0E-01	1.0E-01	—	—	—	—	—	—	—
Dichloro-2-butene, 1,4- trans	110-57-6	2.0E-01	1.1E-01	—	—	—	2.0E-01	1.1E-01	—	—	—	—	—	—	—
Dichlorobenzene, 1,2-	95-50-1	—	—	—	—	—	—	—	8.0E+02	4.1E+02	7.4E+03	—	—	8.0E+02	4.1E+02
Dichlorobenzene, 1,3-	541-73-1	—	—	—	—	—	—	—	1.2E+02	6.3E+01	2.5E+03	—	—	1.2E+02	6.3E+01
Dichlorobenzene, 1,4-	106-46-7	—	—	2.5E+02	—	—	—	—	1.2E+04	6.1E+03	—	—	—	1.2E+04	6.1E+03
Dichlorobenzidine, 3,3'-	91-94-1	—	—	1.3E+01	4.6E+01	—	—	—	—	—	—	—	—	—	—
Dichlorobutane, 2,3-	7581-97-7	—	—	—	—	—	—	—	1.1E+02	5.5E+01	8.2E+02	—	—	1.1E+02	5.5E+01
Dichlorodifluoromethane	75-71-8	—	—	—	—	—	—	—	1.5E+03	7.9E+02	1.6E+04	—	—	1.5E+03	7.9E+02
Dichloroethane, 1,1-	75-34-3	—	—	—	—	—	—	—	3.7E+04	1.9E+04	1.6E+04	—	—	3.7E+04	1.9E+04
Dichloroethane, 1,2-	107-06-2	1.1E+02	5.4E+01	6.7E+01	—	—	1.1E+02	5.4E+01	6.8E+02	3.5E+02	6.4E+03	—	—	6.8E+02	3.5E+02
Dichloroethylene, 1,1-	75-35-4	—	—	—	—	—	—	—	5.2E+03	2.7E+03	4.1E+03	—	—	5.2E+03	2.7E+03
Dichloroethylene, cis-1,2-	156-59-2	—	—	—	—	—	—	—	9.2E+02	4.7E+02	1.6E+02	—	—	9.2E+02	4.7E+02
Dichloroethylene, trans-1,2	156-60-5	—	—	—	—	—	—	—	9.2E+02	4.7E+02	1.6E+03	—	—	9.2E+02	4.7E+02

**Table 6
Tier 1 Individual Residential Soil PCLs**

Last Revised: March 6, 2023

Chemical of Concern	CAS	Carcinogenic							Noncarcinogenic								
		AirSoil _{Inh-vp} ¹ 0.5 acre source area (mg/kg)	AirSoil _{Inh-vp} ¹ 30 acre source area (mg/kg)	SoilSoil _{Ing} (mg/kg)	SoilSoil _{Derm} (mg/kg)	VegSoil _{Ing} (mg/kg)	AirSoil _{Inh-v} ¹ 0.5 acre source area (mg/kg)	AirSoil _{Inh-v} ¹ 30 acre source area (mg/kg)	AirSoil _{Inh-vp} ¹ 0.5 acre source area (mg/kg)	AirSoil _{Inh-vp} ¹ 30 acre source area (mg/kg)	SoilSoil _{Ing} (mg/kg)	SoilSoil _{Derm} (mg/kg)	VegSoil _{Ing} (mg/kg)	AirSoil _{Inh-v} ¹ 0.5 acre source area (mg/kg)	AirSoil _{Inh-v} ¹ 30 acre source area (mg/kg)		
		Dichlorofluoromethane	75-43-4	—	—	—	—	—	—	—	—	—	—	—	1.6E+04	—	—
Dichlorophenol, 2,3-	576-24-9	—	—	—	—	—	—	—	—	—	—	—	2.5E+02	1.1E+03	—	—	—
Dichlorophenol, 2,4-	120-83-2	—	—	—	—	—	—	—	—	—	—	—	2.5E+02	1.1E+03	—	—	—
Dichlorophenol, 2,5-	583-78-8	—	—	—	—	—	—	—	—	—	—	—	2.5E+02	1.1E+03	—	—	—
Dichlorophenol, 2,6-	87-65-0	—	—	—	—	—	—	—	—	—	—	—	8.2E+01	3.6E+02	—	—	—
Dichlorophenol, 3,4-	95-77-2	—	—	—	—	—	—	—	—	—	—	—	2.5E+02	1.1E+03	—	—	—
Dichlorophenol, 3,5-	591-35-5	—	—	—	—	—	—	—	—	—	—	—	2.5E+02	1.1E+03	—	—	—
Dichlorophenoxy, 2,4- butyric acid, 4- (2,4-DB)	94-82-6	—	—	—	—	—	—	—	—	—	—	—	6.6E+02	2.8E+03	—	—	—
Dichlorophenoxyacetic acid, 2,4- (2,4-D)	94-75-7	—	—	—	—	—	—	—	—	—	—	—	1.6E+04	1.4E+05	—	—	—
Dichloroprop (2-(2,4-dichlorophenoxy) propanoic acid)	120-36-5	—	—	—	—	—	—	—	—	—	—	—	8.2E+02	3.6E+03	—	—	—
Dichloropropane, 1,2-	78-87-5	3.9E+02	2.0E+02	1.6E+02	—	—	3.9E+02	2.0E+02	6.1E+01	3.2E+01	1.1E+04	—	—	—	6.1E+01	3.2E+01	
Dichloropropane, 1,3-	142-28-9	9.0E+01	4.6E+01	6.1E+01	—	—	9.0E+01	4.6E+01	3.1E+02	1.6E+02	1.6E+03	—	—	—	3.1E+02	1.6E+02	
Dichloropropane, 2,2-	594-20-7	—	—	8.9E+01	—	—	—	—	6.1E+01	3.2E+01	7.4E+03	—	—	—	6.1E+01	3.2E+01	
Dichloropropanol, 2,3-	616-23-9	—	—	—	—	—	—	—	—	—	—	2.5E+02	1.1E+03	—	—	—	
Dichloropropene, 1,1-	563-58-6	9.0E+01	4.6E+01	6.1E+01	—	—	9.0E+01	4.6E+01	3.1E+02	1.6E+02	2.5E+03	—	—	—	3.1E+02	1.6E+02	
Dichloropropene, 1,3- (mixed isomers)	542-75-6	9.0E+01	4.6E+01	6.1E+01	—	—	9.0E+01	4.6E+01	3.1E+02	1.6E+02	2.5E+03	—	—	—	3.1E+02	1.6E+02	
Dichloropropene, cis 1,3-	10061-01-5	—	—	1.1E+01	—	—	—	—	3.1E+02	1.6E+02	8.2E+00	—	—	—	3.1E+02	1.6E+02	
Dichloropropene, trans 1,3-	10061-02-6	9.0E+01	4.6E+01	6.1E+01	—	—	9.0E+01	4.6E+01	3.1E+02	1.6E+02	2.5E+03	—	—	—	3.1E+02	1.6E+02	
Dichlorvos	62-73-7	—	—	2.1E+01	7.2E+01	—	—	—	3.4E+05	1.8E+05	4.1E+01	1.8E+02	—	—	1.0E+06	6.2E+05	
Dicrotophos (bidrin)	141-66-2	—	—	—	—	—	—	—	—	—	8.2E+00	3.6E+01	—	—	—	—	
Dicyclopentadiene	77-73-6	—	—	—	—	—	—	—	—	—	6.6E+03	—	—	—	—	—	
Dieldrin	60-57-1	3.2E+01	1.6E+01	3.8E-01	1.3E+00	2.9E-01	3.2E+01	1.6E+01	—	—	4.1E+00	1.8E+01	6.3E+00	—	—	—	
Diethanolamine	111-42-2	—	—	—	—	—	—	—	3.5E+03	1.8E+03	4.1E+01	1.8E+02	—	—	3.5E+03	1.8E+03	
Diethyldithiocarbamate, sodium salt	148-18-5	—	—	2.2E+01	—	—	—	—	—	—	2.5E+03	—	—	—	—	—	
Diethyl phthalate	84-66-2	—	—	—	—	—	—	—	—	—	6.6E+04	2.8E+05	—	—	—	—	
Diethylene glycol	111-46-6	—	—	—	—	—	—	—	—	—	1.6E+05	7.1E+05	—	—	—	—	
Diethylene glycol monobutyl ether	112-34-5	—	—	—	—	—	—	—	2.0E+01	1.0E+01	2.5E+03	1.1E+04	—	—	2.0E+01	1.0E+01	
Diethylhexyl adipate	103-23-1	—	—	5.1E+03	1.7E+04	—	—	—	—	—	4.9E+04	2.1E+05	—	—	—	—	
Diethylstilbestrol	56-53-1	—	—	1.3E-03	4.4E-03	2.5E-03	—	—	—	—	—	—	—	—	—	—	
Diisobutylene (trimethyl-1-pentene, 2,4,4-)	107-39-1	—	—	—	—	—	—	—	3.1E+03	1.6E+03	4.9E+03	—	—	—	3.1E+03	1.6E+03	
Diisopropylbenzene, p-	100-18-5	—	—	—	—	—	—	—	—	—	8.2E+02	3.6E+03	—	—	—	—	
Diisopropyl ether (2,2'-oxybis-propane)	108-20-3	—	—	—	—	—	—	—	1.1E+04	5.5E+03	8.2E+03	—	—	—	1.1E+04	5.5E+03	
Dimethenamid	87674-68-8	—	—	—	—	—	—	—	—	—	1.2E+03	5.3E+03	—	—	—	—	
Dimethoate	60-51-5	—	—	—	—	—	—	—	—	—	1.6E+01	7.1E+01	—	—	—	—	
Dimethoxybenzidine, 3,3'-	119-90-4	—	—	4.3E+02	1.5E+03	—	—	—	—	—	—	—	—	—	—	—	
Dimethyl-2-nitrobenzene, 1,3-	81-20-9	—	—	—	—	—	—	—	2.7E+03	1.4E+03	1.6E+02	7.1E+02	—	—	2.8E+03	1.4E+03	
Dimethyl-3-nitrobenzene, 1,2-	83-41-0	—	—	—	—	—	—	—	2.4E+03	1.2E+03	1.6E+02	7.1E+02	—	—	2.4E+03	1.2E+03	
Dimethyl-4-nitrobenzene, 1-2-	99-51-4	—	—	—	—	—	—	—	2.5E+03	1.3E+03	1.6E+02	7.1E+02	—	—	2.5E+03	1.3E+03	
Dimethyl-5-nitrobenzene, 1,3-	99-12-7	—	—	—	—	—	—	—	2.2E+03	1.1E+03	1.6E+02	7.1E+02	—	—	2.2E+03	1.1E+03	
Dimethylphenethylamine, alpha, alpha-	122-09-8	—	—	—	—	—	—	—	—	—	1.6E+02	7.1E+02	—	—	—	—	
Dimethyl phenol, 2,4-	105-67-9	—	—	—	—	—	—	—	—	—	1.6E+03	7.1E+03	—	—	—	—	
Dimethylaminoazobenzene, p-	60-11-7	—	—	—	—	—	—	—	—	—	8.2E-01	3.6E+00	1.5E+01	—	—	—	
Dimethylbenz-a-anthracene, 7,12-	57-97-6	1.2E+02	6.3E+01	2.4E-02	6.4E-02	3.7E-01	1.4E+02	7.3E+01	—	—	—	—	—	—	—	—	
Dimethylbenzidine, 3,3'-	119-93-7	—	—	5.5E-01	1.9E+00	—	—	—	—	—	—	—	—	—	—	—	
Dimethylformamide, N,N-	68-12-2	—	—	—	—	—	—	—	3.2E+03	1.6E+03	8.2E+03	—	—	—	3.2E+03	1.6E+03	

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Tier 1 Individual Residential Soil PCLs**

Last Revised: March 6, 2023

Chemical of Concern	CAS	Carcinogenic							Noncarcinogenic						
		AirSoil _{Inh-vp} ¹ 0.5 acre source area (mg/kg)	AirSoil _{Inh-vp} ¹ 30 acre source area (mg/kg)	SoilSoil _{Ing} (mg/kg)	SoilSoil _{Derm} (mg/kg)	VegSoil _{Ing} (mg/kg)	AirSoil _{Inh-v} ¹ 0.5 acre source area (mg/kg)	AirSoil _{Inh-v} ¹ 30 acre source area (mg/kg)	AirSoil _{Inh-vp} ¹ 0.5 acre source area (mg/kg)	AirSoil _{Inh-vp} ¹ 30 acre source area (mg/kg)	SoilSoil _{Ing} (mg/kg)	SoilSoil _{Derm} (mg/kg)	VegSoil _{Ing} (mg/kg)	AirSoil _{Inh-v} ¹ 0.5 acre source area (mg/kg)	AirSoil _{Inh-v} ¹ 30 acre source area (mg/kg)
Dimethylnaphthalene, 1,3-	575-41-7	—	—	—	—	—	—	—	—	—	3.3E+03	1.1E+04	3.1E+04	—	—
Dimethylphthalate	131-11-3	—	—	—	—	—	—	—	—	—	6.6E+04	2.8E+05	—	—	—
Di-n-butyl phthalate	84-74-2	—	—	—	—	—	—	—	—	—	8.2E+03	3.6E+04	8.7E+04	—	—
Dinitro-2-methylphenol, 4,6- (dinitro-o-cresol, 4, 6-)	534-52-1	—	—	—	—	—	—	—	—	—	8.2E+00	3.6E+01	—	—	—
Dinitrobenzene, 1,3- (dinitrobenzene, 2,4-)	99-65-0	—	—	—	—	—	—	—	—	—	8.2E+00	3.6E+01	—	—	—
Dinitrobenzene, 1,4-	100-25-4	—	—	—	—	—	—	—	—	—	8.2E+00	3.6E+01	—	—	—
Dinitrophenol, 2,4-	51-28-5	—	—	—	—	—	—	—	—	—	1.6E+02	7.1E+02	—	—	—
Dinitrophenol, 2,5-	329-71-5	—	—	—	—	—	—	—	—	—	1.6E+02	7.1E+02	—	—	—
Dinitrotoluene, 2,4-	121-14-2	—	—	8.9E+00	3.1E+01	—	—	—	—	—	1.6E+02	7.1E+02	—	—	—
Dinitrotoluene, 2,6-	606-20-2	—	—	8.9E+00	3.1E+01	—	—	—	—	—	8.2E+01	3.6E+02	—	—	—
Di-n-octyl phthalate	117-84-0	—	—	—	—	—	—	—	—	—	8.2E+02	3.6E+03	2.0E+04	—	—
Dinoseb	88-85-7	—	—	—	—	—	—	—	—	—	8.2E+01	3.6E+02	—	—	—
Dioxane 1,4-	123-91-1	1.8E+02	9.3E+01	6.1E+01	—	—	1.8E+02	9.3E+01	4.2E+03	2.2E+03	2.5E+03	—	—	4.2E+03	2.2E+03
Dioxin (as 2,3,7,8-TCDD toxicity equivalent quotients (TEQs))	1746-01-6	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Diphenyl ether	101-84-8	—	—	—	—	—	—	—	—	—	5.1E+02	2.2E+03	4.5E+03	—	—
Diphenylamine	122-39-4	—	—	—	—	—	—	—	—	—	2.0E+03	8.9E+03	—	—	—
Diphenylhydrazine, 1,2-	122-66-7	1.4E+02	7.2E+01	7.6E+00	2.6E+01	—	1.4E+02	7.2E+01	—	—	—	—	—	—	—
Dipropylene glycol	110-98-5	—	—	—	—	—	—	—	—	—	9.8E+03	4.3E+04	—	—	—
Diquat	85-00-7	—	—	—	—	—	—	—	—	—	1.8E+02	7.8E+02	—	—	—
Disodium iminodiacetate (iminodiacetic acid, disodium salt)	142-73-4	—	—	—	—	—	—	—	—	—	8.2E+02	3.6E+03	—	—	—
Disulfoton	298-04-4	—	—	—	—	—	—	—	—	—	3.3E+00	1.4E+01	—	—	—
Diuron	330-54-1	—	—	—	—	—	—	—	—	—	1.6E+02	7.1E+02	—	—	—
Dodecylphenol, 4-	104-43-8	—	—	—	—	—	—	—	—	—	4.1E+03	1.8E+04	3.9E+05	—	—
Endosulfan	115-29-7	—	—	—	—	—	—	—	—	—	4.9E+02	2.1E+03	—	—	—
Endosulfan I	959-98-8	—	—	—	—	—	—	—	—	—	1.6E+02	7.1E+02	2.9E+02	—	—
Endosulfan II	33213-65-9	—	—	—	—	—	—	—	—	—	4.9E+02	2.1E+03	8.6E+02	—	—
Endosulfan sulfate	1031-07-8	—	—	—	—	—	—	—	—	—	4.9E+02	2.1E+03	1.0E+04	—	—
Endothall	145-73-3	—	—	—	—	—	—	—	—	—	1.6E+03	7.1E+03	—	—	—
Endrin	72-20-8	—	—	—	—	—	—	—	—	—	2.5E+01	1.1E+02	1.6E+01	—	—
Endrin aldehyde	7421-93-4	—	—	—	—	—	—	—	—	—	2.5E+01	1.1E+02	6.5E+02	—	—
Endrin ketone	53494-70-5	—	—	—	—	—	—	—	—	—	2.5E+01	1.1E+02	3.8E+02	—	—
Epichlorohydrin	106-89-8	5.1E+02	2.6E+02	6.1E+02	—	—	5.1E+02	2.6E+02	2.6E+01	1.4E+01	4.9E+02	—	—	2.6E+01	1.4E+01
EPN (o-ethyl o-(4-nitrophenyl)phenylphosphonothioate)	2104-64-5	—	—	—	—	—	—	—	—	—	8.2E-01	3.6E+00	—	—	—
Esfenvalerate	66230-04-4	—	—	—	—	—	—	—	—	—	1.6E+02	7.1E+02	1.7E+02	—	—
Ethalfuralin (sonolan)	55283-68-6	—	—	6.8E+01	2.3E+02	4.5E+02	—	—	—	—	3.3E+03	1.4E+04	4.3E+04	—	—
Ethanol	64-17-5	—	—	—	—	—	—	—	—	—	1.0E+06	—	—	—	—
Ethanol, 2-amino-	141-43-5	—	—	—	—	—	—	—	2.9E+03	1.5E+03	1.4E+02	6.0E+02	—	2.9E+03	1.5E+03
Ethanol, 2-(2-aminoethoxy)-	929-06-6	—	—	—	—	—	—	—	—	—	4.1E+01	1.8E+02	—	—	—
Ethanol, 2-(2-ethoxyethoxy)-	111-90-0	—	—	—	—	—	—	—	—	—	1.6E+05	7.1E+05	—	—	—
Ethanol, 2-(methylamino)-	109-83-1	—	—	—	—	—	—	—	6.4E+03	3.3E+03	1.3E+03	5.7E+03	—	6.4E+03	3.3E+03
Ethion	563-12-2	—	—	—	—	—	—	—	—	—	4.1E+01	1.8E+02	1.6E+02	—	—
Ethoprop	13194-48-4	—	—	2.2E+02	7.4E+02	—	—	—	—	—	8.2E+00	3.6E+01	—	—	—
Ethoxy ethanol, 2-	110-80-5	—	—	—	—	—	—	—	2.5E+04	1.3E+04	7.4E+03	—	—	2.5E+04	1.3E+04
Ethyl acetate	141-78-6	—	—	—	—	—	—	—	3.7E+03	1.9E+03	7.4E+04	—	—	3.7E+03	1.9E+03
Ethyl acrylate	140-88-5	—	—	1.3E+02	—	—	—	—	2.4E+02	1.2E+02	4.1E+02	—	—	2.4E+02	1.2E+02

**Table 6
Tier 1 Individual Residential Soil PCLs**

Last Revised: March 6, 2023

Chemical of Concern	CAS	Carcinogenic							Noncarcinogenic						
		AirSoil _{Inh-vp} ¹ 0.5 acre source area (mg/kg)	AirSoil _{Inh-vp} ¹ 30 acre source area (mg/kg)	SoilSoil _{Ing} (mg/kg)	SoilSoil _{Derm} (mg/kg)	VegSoil _{Ing} (mg/kg)	AirSoil _{Inh-v} ¹ 0.5 acre source area (mg/kg)	AirSoil _{Inh-v} ¹ 30 acre source area (mg/kg)	AirSoil _{Inh-vp} ¹ 0.5 acre source area (mg/kg)	AirSoil _{Inh-vp} ¹ 30 acre source area (mg/kg)	SoilSoil _{Ing} (mg/kg)	SoilSoil _{Derm} (mg/kg)	VegSoil _{Ing} (mg/kg)	AirSoil _{Inh-v} ¹ 0.5 acre source area (mg/kg)	AirSoil _{Inh-v} ¹ 30 acre source area (mg/kg)
Ethyl benzene	100-41-4	—	—	—	—	—	—	—	2.9E+04	1.5E+04	8.2E+03	—	—	2.9E+04	1.5E+04
Ethyl dipropylthiocarbamate, S-	759-94-4	—	—	—	—	—	—	—	—	—	2.0E+03	8.9E+03	—	—	—
Ethyl ether	60-29-7	—	—	—	—	—	—	—	—	—	1.6E+04	—	—	—	—
Ethyl methacrylate	97-63-2	—	—	—	—	—	—	—	7.1E+03	3.6E+03	7.4E+03	—	—	7.1E+03	3.6E+03
Ethyl methanesulfonate	62-50-0	1.2E+02	6.1E+01	6.1E+01	2.1E+02	—	1.2E+02	6.1E+01	—	—	—	—	—	—	—
Ethyl tert-butyl ether (2-ethyl-2-ethoxypropane)	637-92-3	—	—	—	—	—	—	—	4.6E+03	2.4E+03	8.2E+01	—	—	4.6E+03	2.4E+03
Ethyl-1-hexanol, 2-	104-76-7	—	—	—	—	—	—	—	—	—	1.2E+04	5.3E+04	—	—	—
Ethyl-2-hexenal, 2-	645-62-5	—	—	—	—	—	—	—	—	—	1.2E+04	—	—	—	—
Ethyl-2-methyl benzene, 1-	611-14-3	—	—	—	—	—	—	—	8.4E+03	4.3E+03	4.1E+03	—	—	8.4E+03	4.3E+03
Ethyl-4-methyl benzene, 1-	622-96-8	—	—	—	—	—	—	—	7.2E+03	3.7E+03	4.1E+03	—	—	7.2E+03	3.7E+03
Ethylene*	74-85-1	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ethylene dibromide (dibromoethane, 1,2-)	106-93-4	1.3E+01	6.8E+00	3.0E+00	—	—	1.3E+01	6.8E+00	1.7E+03	8.6E+02	7.4E+02	—	—	1.7E+03	8.6E+02
Ethylene glycol	107-21-1	—	—	—	—	—	—	—	—	—	1.6E+05	7.1E+05	—	—	—
Ethylene oxide	75-21-8	2.6E+02	1.3E+02	6.0E+00	—	—	2.6E+02	1.3E+02	—	—	—	—	—	—	—
Ethylene thiourea	96-45-7	—	—	5.5E+01	1.9E+02	—	—	—	—	—	6.6E+00	2.8E+01	—	—	—
Ethylenediamine	107-15-3	—	—	—	—	—	—	—	—	—	7.4E+03	—	—	—	—
Ethylenimine	151-56-4	1.3E-01	6.8E-02	9.3E-02	—	—	1.3E-01	6.8E-02	—	—	—	—	—	—	—
Ethylhexyl acrylate, 2-	103-11-7	—	—	1.3E+02	4.3E+02	—	—	—	—	—	—	—	—	—	—
Famphur	52-85-7	—	—	—	—	—	—	—	—	—	2.5E+00	1.1E+01	—	—	—
Fensulfothion	115-90-2	—	—	—	—	—	—	—	—	—	8.2E+01	3.6E+02	—	—	—
Fenthion	55-38-9	—	—	—	—	—	—	—	—	—	5.7E+00	2.5E+01	—	—	—
Fenuron	101-42-8	—	—	—	—	—	—	—	—	—	5.7E+03	2.5E+04	—	—	—
Fluoranthene	206-44-0	—	—	—	—	—	—	—	—	—	3.3E+03	1.1E+04	2.9E+04	—	—
Fluorene	86-73-7	—	—	—	—	—	—	—	—	—	3.3E+03	1.1E+04	2.2E+04	—	—
Fluorine (soluble fluoride)	7782-41-4	—	—	—	—	—	—	—	1.0E+06	1.0E+06	4.9E+03	2.1E+05	—	—	—
Fluorochloridone	61213-25-0	—	—	—	—	—	—	—	—	—	6.1E+02	2.7E+03	—	—	—
Fonofos	944-22-9	—	—	—	—	—	—	—	—	—	1.6E+02	7.1E+02	—	—	—
Formaldehyde	50-00-0	—	—	—	—	—	—	—	9.9E+02	5.1E+02	1.6E+04	—	—	9.9E+02	5.1E+02
Formic acid	64-18-6	—	—	—	—	—	—	—	2.1E+02	1.1E+02	7.4E+04	—	—	2.1E+02	1.1E+02
Furan	110-00-9	—	—	—	—	—	—	—	—	—	8.2E+01	—	—	—	—
Furfural	98-01-1	—	—	—	—	—	—	—	—	—	2.5E+02	—	—	—	—
Glycidylaldehyde	765-34-4	—	—	—	—	—	—	—	1.5E+02	7.7E+01	3.3E+01	—	—	1.5E+02	7.7E+01
Glyphosate	1071-83-6	—	—	—	—	—	—	—	—	—	8.2E+04	3.6E+05	—	—	—
Heptachlor	76-44-8	9.1E+00	4.7E+00	1.3E+00	4.6E+00	1.5E-01	9.1E+00	4.7E+00	—	—	4.1E+01	1.8E+02	9.0E+00	—	—
Heptachlor epoxide	1024-57-3	2.4E+01	1.2E+01	6.7E-01	2.3E+00	4.5E-01	2.4E+01	1.2E+01	—	—	1.1E+00	4.6E+00	1.4E+00	—	—
Heptane, n-	142-82-5	—	—	—	—	—	—	—	1.4E+05	7.1E+04	4.9E+03	—	—	1.4E+05	7.1E+04
Heptanoic acid, n-	111-14-8	—	—	—	—	—	—	—	1.2E+02	6.3E+01	4.1E+04	1.8E+05	—	1.2E+02	6.3E+01
Hexachlorobenzene	118-74-1	1.9E+01	9.8E+00	3.8E+00	1.3E+01	1.9E+00	1.9E+01	9.8E+00	—	—	6.6E+01	2.8E+02	6.4E+01	—	—
Hexachlorobutadiene	87-68-3	2.9E+01	1.5E+01	7.8E+01	2.7E+02	—	2.9E+01	1.5E+01	—	—	8.2E+01	3.6E+02	—	—	—
Hexachlorocyclohexane, alpha (alpha-BHC)	319-84-6	1.4E+01	7.2E+00	9.6E-01	8.2E+00	3.7E-01	1.4E+01	7.2E+00	—	—	6.6E+02	7.1E+03	5.0E+02	—	—
Hexachlorocyclohexane, beta (beta-BHC)	319-85-7	7.2E+01	3.7E+01	3.4E+00	2.9E+01	1.4E+00	7.2E+01	3.7E+01	—	—	—	—	—	—	—
Hexachlorocyclohexane, delta (delta-BHC)	319-86-8	1.0E+02	5.2E+01	3.4E+00	2.9E+01	—	1.0E+02	5.2E+01	—	—	2.5E+01	2.7E+02	—	—	—
Hexachlorocyclohexane, gamma (lindane; gamma-BHC)	58-89-9	—	—	4.7E+00	4.0E+01	1.5E+00	—	—	—	—	2.5E+01	2.7E+02	1.6E+01	—	—
Hexachlorocyclohexane, techn (technical-BHC)	608-73-1	8.9E+01	4.6E+01	3.4E+00	2.9E+01	2.4E+00	8.9E+01	4.6E+01	—	—	—	—	—	—	—
Hexachlorocyclopentadiene	77-47-4	—	—	—	—	—	—	—	1.4E+01	7.3E+00	4.9E+02	2.1E+03	—	1.4E+01	7.3E+00

**Table 6
Tier 1 Individual Residential Soil PCLs**

Last Revised: March 6, 2023

Chemical of Concern	CAS	Carcinogenic							Noncarcinogenic							
		AirSoil _{Inh-vp} ¹ 0.5 acre source area (mg/kg)	AirSoil _{Inh-vp} ¹ 30 acre source area (mg/kg)	SoilSoil _{Ing}	SoilSoil _{Derm} (mg/kg)	VegSoil _{Ing}	AirSoil _{Inh-v} ¹ 0.5 acre source area (mg/kg)	AirSoil _{Inh-v} ¹ 30 acre source area (mg/kg)	AirSoil _{Inh-vp} ¹ 0.5 acre source area (mg/kg)	AirSoil _{Inh-vp} ¹ 30 acre source area (mg/kg)	SoilSoil _{Ing}	SoilSoil _{Derm} (mg/kg)	VegSoil _{Ing}	AirSoil _{Inh-v} ¹ 0.5 acre source area (mg/kg)	AirSoil _{Inh-v} ¹ 30 acre source area (mg/kg)	
		Hexachloroethane	67-72-1	—	—	1.5E+02	5.2E+02	—	—	—	—	4.9E+03	2.5E+03	5.7E+01	2.5E+02	—
Hexachlorophene	70-30-4	—	—	—	—	—	—	—	—	—	—	2.5E+01	1.1E+02	2.6E+03	—	—
Hexachloropropylene	1888-71-7	—	—	1.5E+02	5.2E+02	—	—	—	—	5.1E+03	2.6E+03	5.7E+01	2.5E+02	—	5.1E+03	2.6E+03
Hexanal, 2-ethyl-	123-05-7	—	—	—	—	—	—	—	—	—	—	1.2E+04	5.3E+04	—	—	—
Hexane, n-	110-54-3	—	—	—	—	—	—	—	—	1.0E+04	5.3E+03	4.9E+03	—	—	1.0E+04	5.3E+03
Hexanediamine, 1,6-	124-09-4	—	—	—	—	—	—	—	—	—	—	4.1E+02	1.8E+03	—	—	—
Hexanedinitrile	111-69-3	—	—	—	—	—	—	—	—	9.8E+02	5.1E+02	1.1E+02	5.0E+02	—	9.8E+02	5.1E+02
Hexanediol, 1,6-	629-11-8	—	—	—	—	—	—	—	—	1.0E+06	1.0E+06	4.1E+05	1.0E+06	—	1.0E+06	1.0E+06
Hexanoic acid	142-62-1	—	—	—	—	—	—	—	—	1.4E+02	7.0E+01	5.2E+03	2.3E+04	—	1.4E+02	7.0E+01
Hexanone, 2-	591-78-6	—	—	—	—	—	—	—	—	8.3E+02	4.2E+02	4.1E+03	—	—	8.3E+02	4.2E+02
Hexazinone	51235-04-2	—	—	—	—	—	—	—	—	—	—	2.7E+03	1.2E+04	—	—	—
Hexene, 1-	592-41-6	—	—	—	—	—	—	—	—	1.7E+03	8.7E+02	2.7E+04	—	—	1.7E+03	8.7E+02
Hexene, cis-2-	7688-21-3	—	—	—	—	—	—	—	—	1.7E+03	8.7E+02	2.7E+04	—	—	1.7E+03	8.7E+02
Hexylene glycol (2-methyl-2,4-pentanediol)	107-41-5	—	—	—	—	—	—	—	—	—	—	2.5E+04	1.1E+05	—	—	—
Hydrazine	302-01-2	4.6E-01	2.4E-01	2.0E+00	—	—	4.6E-01	2.4E-01	2.9E+00	1.5E+00	—	—	—	—	2.9E+00	1.5E+00
Hydrocaproic acid, 6- (6-hydroxyhexanoic acid)	1191-25-9	—	—	—	—	—	—	—	—	1.6E+02	8.3E+01	5.2E+03	2.3E+04	—	1.6E+02	8.3E+01
Hydrogen chloride (hydrochloric acid)*	7647-01-0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hydroquinone	123-31-9	—	—	1.0E+02	3.5E+02	—	—	—	—	—	—	3.3E+03	1.4E+04	—	—	—
Indene	95-13-6	—	—	—	—	—	—	—	—	1.1E+02	5.8E+01	1.6E+03	—	—	1.1E+02	5.8E+01
Indeno-1,2,3-cd-pyrene	193-39-5	3.4E+04	1.7E+04	6.1E+01	1.6E+02	8.3E+02	3.7E+04	1.9E+04	—	—	—	—	—	—	—	—
Iron*	7439-89-6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Isoamyl alcohol	123-51-3	—	—	—	—	—	—	—	—	—	—	4.1E+02	—	—	—	—
Isobutyl alcohol	78-83-1	—	—	—	—	—	—	—	—	—	—	2.5E+04	—	—	—	—
Isobutylene (2-methyl-1-propene)	115-11-7	—	—	—	—	—	—	—	1.0E+06	8.7E+05	3.0E+02	—	—	—	1.0E+06	8.7E+05
Isobutyric acid (2-methylpropanoic acid)	79-31-2	—	—	—	—	—	—	—	—	—	—	4.1E+04	1.8E+05	—	—	—
Isodecanol	25339-17-7	—	—	—	—	—	—	—	—	—	—	1.3E+02	5.7E+02	2.1E+02	—	—
Isodrin	465-73-6	1.7E+00	8.9E-01	3.6E-02	1.2E-01	—	1.7E+00	9.0E-01	—	—	—	2.5E-01	1.1E+00	—	—	—
Isopentane	78-78-4	—	—	—	—	—	—	—	3.7E+05	1.9E+05	4.9E+03	—	—	—	3.7E+05	1.9E+05
Isophorone	78-59-1	—	—	6.4E+03	2.2E+04	—	—	—	—	—	—	1.6E+04	7.1E+04	—	—	—
Isopropyl acetate	108-21-4	—	—	—	—	—	—	—	—	—	—	5.7E+03	—	—	—	—
Isopropyl alcohol	67-63-0	—	—	—	—	—	—	—	9.7E+03	5.0E+03	1.6E+05	—	—	—	9.7E+03	5.0E+03
Isosafrole	120-58-1	9.1E+01	4.7E+01	2.8E+01	9.4E+01	—	9.1E+01	4.7E+01	—	—	—	—	—	—	—	—
Kelthane (dicofol)	115-32-2	—	—	—	—	—	—	—	—	—	—	4.9E+02	2.1E+03	8.2E+02	—	—
Kepone (chlordecone)	143-50-0	4.8E+01	2.5E+01	6.1E-01	2.1E+00	1.5E+00	4.9E+01	2.5E+01	—	—	—	2.5E+01	1.1E+02	1.2E+02	—	—
Lead (inorganic)	7439-92-1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Leptophos	21609-90-5	—	—	—	—	—	—	—	3.3E+01	1.7E+01	4.1E-01	1.8E+00	3.1E-01	3.3E+01	1.7E+01	
Limonene, d-*	5989-27-5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Lithium	7439-93-2	—	—	—	—	—	—	—	—	—	—	5.7E+02	2.5E+04	2.1E+03	—	—
Magnesium*	7439-95-4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Malathion	121-75-5	—	—	—	—	—	—	—	2.0E+02	1.0E+02	1.6E+03	7.1E+03	—	—	2.0E+02	1.0E+02
Maleic anhydride	108-31-6	—	—	—	—	—	—	—	—	—	—	8.2E+03	3.6E+04	—	—	—
Maleic hydrazide	123-33-1	—	—	—	—	—	—	—	—	—	—	4.1E+04	1.8E+05	—	—	—
Malononitrile	109-77-3	—	—	—	—	—	—	—	—	—	—	8.2E+00	3.6E+01	—	—	—
Mancozeb	8018-01-7	—	—	—	—	—	—	—	—	—	—	2.5E+03	1.1E+04	—	—	—
Manganese	7439-96-5	—	—	—	—	—	—	—	8.1E+05	4.2E+05	1.1E+04	3.0E+04	7.6E+03	—	—	—

**Table 6
Tier 1 Individual Residential Soil PCLs**

Last Revised: March 6, 2023

Chemical of Concern	CAS	Carcinogenic							Noncarcinogenic							
		AirSoil _{Inh-Vp} ¹ 0.5 acre source area (mg/kg)	AirSoil _{Inh-Vp} ¹ 30 acre source area (mg/kg)	SoilSoil _{Ing} (mg/kg)	SoilSoil _{Derm} (mg/kg)	VegSoil _{Ing} (mg/kg)	AirSoil _{Inh-V} ¹ 0.5 acre source area (mg/kg)	AirSoil _{Inh-V} ¹ 30 acre source area (mg/kg)	AirSoil _{Inh-Vp} ¹ 0.5 acre source area (mg/kg)	AirSoil _{Inh-Vp} ¹ 30 acre source area (mg/kg)	SoilSoil _{Ing} (mg/kg)	SoilSoil _{Derm} (mg/kg)	VegSoil _{Ing} (mg/kg)	AirSoil _{Inh-V} ¹ 0.5 acre source area (mg/kg)	AirSoil _{Inh-V} ¹ 30 acre source area (mg/kg)	
		MCPA (4-(chloro-2-methylphenoxy) acetic acid)	94-74-6	—	—	—	—	—	—	—	—	—	—	4.1E+01	1.8E+02	—
MCPP (2-(4-chloro-2-methylphenoxy) propanoic acid)	93-65-2	—	—	—	—	—	—	—	—	—	—	8.2E+01	3.6E+02	—	—	—
Mercury (pH = 4.9) ²	7439-97-6	—	—	—	—	—	—	—	—	4.6E+00	2.4E+00	2.5E+01	7.5E+01	3.6E+02	4.6E+00	2.4E+00
Mercury (pH=6.8) ²	7439-97-6	—	—	—	—	—	—	—	—	1.6E+01	8.0E+00	2.5E+01	7.5E+01	3.6E+02	1.6E+01	8.0E+00
Merphos	150-50-5	—	—	—	—	—	—	—	—	—	—	2.5E+00	1.1E+01	—	—	—
Methacrylic acid (2-methyl-2-propenoic acid)	79-41-4	—	—	—	—	—	—	—	—	—	—	8.2E+02	—	—	—	—
Methacrylonitrile	126-98-7	—	—	—	—	—	—	—	—	5.8E+02	3.0E+02	4.1E+03	—	—	5.8E+02	3.0E+02
Methanol	67-56-1	—	—	—	—	—	—	—	—	3.3E+05	1.7E+05	1.6E+05	—	—	3.3E+05	1.7E+05
Methapyrilene	91-80-5	—	—	1.3E+00	4.4E+00	—	—	—	—	—	—	—	—	—	—	—
Methomyl	16752-77-5	—	—	—	—	—	—	—	—	—	—	2.0E+03	8.9E+03	—	—	—
Methoxychlor	72-43-5	—	—	—	—	—	—	—	—	—	—	4.1E+02	1.8E+03	1.5E+03	—	—
Methoxyethanol, 2-	109-86-4	—	—	—	—	—	—	—	—	3.1E+02	1.6E+02	2.2E+03	—	—	3.1E+02	1.6E+02
Methyl acetate (acetic acid, methyl ester)	79-20-9	—	—	—	—	—	—	—	—	—	—	8.2E+04	—	—	—	—
Methyl acrylate	96-33-3	—	—	—	—	—	—	—	—	3.1E+02	1.6E+02	1.6E+02	—	—	3.1E+02	1.6E+02
Methyl amyl ketone (2-heptanone)	110-43-0	—	—	—	—	—	—	—	—	1.1E+05	5.7E+04	4.1E+03	—	—	1.1E+05	5.7E+04
Methyl chrysene, 1-	3351-28-8	1.0E+06	1.0E+06	8.3E+02	2.2E+03	1.3E+04	1.0E+06	1.0E+06	—	—	—	—	—	—	—	—
Methyl chrysene, 2-	3351-32-4	1.0E+06	1.0E+06	8.3E+02	2.2E+03	1.3E+04	1.0E+06	1.0E+06	—	—	—	—	—	—	—	—
Methyl chrysene, 6-	1705-85-7	2.1E+05	1.1E+05	8.3E+01	2.2E+02	1.0E+03	2.3E+05	1.2E+05	—	—	—	—	—	—	—	—
Methyl cyclohexane	108-87-2	—	—	—	—	—	—	—	—	4.6E+04	2.4E+04	4.1E+05	—	—	4.6E+04	2.4E+04
Methyl ethyl ketone (2-butanone)	78-93-3	—	—	—	—	—	—	—	—	2.0E+05	1.0E+05	4.9E+04	—	—	2.0E+05	1.0E+05
Methyl iodide (iodomethane)	74-88-4	—	—	—	—	—	—	—	—	—	—	1.1E+02	—	—	—	—
Methyl isobutyl ketone (4-methyl-2-pentanone)	108-10-1	—	—	—	—	—	—	—	—	5.8E+04	3.0E+04	6.6E+03	—	—	5.8E+04	3.0E+04
Methyl mercury	22967-92-6	—	—	—	—	—	—	—	—	—	—	8.2E+00	3.6E+02	—	—	—
Methyl methacrylate	80-62-6	—	—	—	—	—	—	—	—	1.1E+04	5.5E+03	1.1E+05	—	—	1.1E+04	5.5E+03
Methyl methanesulfonate	66-27-3	1.1E+02	5.7E+01	6.1E+01	2.1E+02	—	1.1E+02	5.7E+01	—	—	—	—	—	—	—	—
Methyl parathion	298-00-0	—	—	—	—	—	—	—	—	—	—	2.0E+01	8.9E+01	—	—	—
Methyl-1-butene, 2-	563-46-2	—	—	—	—	—	—	—	—	2.8E+05	1.4E+05	4.9E+03	—	—	2.8E+05	1.4E+05
Methyl-1-propanal, 2- (isobutyraldehyde)	78-84-2	—	—	—	—	—	—	—	—	—	—	3.3E+03	—	—	—	—
Methyl-2-butene, 2-	513-35-9	—	—	—	—	—	—	—	—	2.8E+05	1.4E+05	4.9E+03	—	—	2.8E+05	1.4E+05
Methyl-2-pentenal, 2-	623-36-9	—	—	3.2E+00	—	—	—	—	—	—	—	—	—	—	—	—
Methylcholanthrene, 3-	56-49-5	1.5E+03	7.8E+02	2.8E-01	7.3E-01	5.0E+00	1.8E+03	9.0E+02	—	—	—	—	—	—	—	—
Methylene bromide (dibromomethane)	74-95-3	—	—	8.1E+02	—	—	—	—	—	8.2E+01	4.2E+01	4.9E+03	—	—	8.2E+01	4.2E+01
Methylene chloride (dichloromethane)	75-09-2	1.3E+04	6.6E+03	6.2E+04	—	—	1.3E+04	6.6E+03	2.0E+04	1.0E+04	1.7E+03	—	—	2.0E+04	1.0E+04	
Methylene-bis (2-chloroaniline) 4,4'-	101-14-4	2.7E+03	1.4E+03	6.1E+01	2.1E+02	—	2.7E+03	1.4E+03	—	—	1.6E+02	7.1E+02	—	—	—	—
Methylmercury hydroxide	1184-57-2	—	—	—	—	—	—	—	—	—	—	8.2E+00	3.6E+01	—	—	—
Methylnaphthalene, 1-	90-12-0	—	—	2.1E+02	5.5E+02	—	—	—	—	—	—	5.7E+03	1.9E+04	—	—	—
Methylnaphthalene, 2-	91-57-6	—	—	—	—	—	—	—	—	—	—	3.3E+02	1.1E+03	—	—	—
Methylpyrrolidone, N-	872-50-4	—	—	—	—	—	—	—	—	—	—	1.6E+03	7.1E+03	—	—	—
Methylstyrene, alpha-	98-83-9	—	—	—	—	—	—	—	—	4.8E+02	2.5E+02	6.8E+02	—	—	4.8E+02	2.5E+02
Methyltetrahydrofuran, 2-	96-47-9	1.9E+02	9.7E+01	8.0E+02	—	—	1.9E+02	9.7E+01	—	—	—	1.6E+04	—	—	—	—
Methyltetrahydropyran, 2-	10141-72-7	2.2E+02	1.1E+02	8.0E+02	—	—	2.2E+02	1.1E+02	—	—	—	1.6E+04	—	—	—	—
Metolachlor	51218-45-2	—	—	—	—	—	—	—	—	—	—	1.2E+04	5.3E+04	—	—	—
Metribuzin	21087-64-9	—	—	—	—	—	—	—	—	—	—	2.0E+03	8.9E+03	—	—	—
Mirex	2385-85-5	—	—	—	—	—	—	—	—	—	—	1.6E+01	7.1E+01	—	—	—
Molinate	2212-67-1	—	—	—	—	—	—	—	—	—	—	1.6E+02	7.1E+02	—	—	—

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Chemical of Concern	CAS	Carcinogenic							Noncarcinogenic							
		AirSoil _{Inh-vp} ¹ 0.5 acre source area (mg/kg)	AirSoil _{Inh-vp} ¹ 30 acre source area (mg/kg)	SoilSoil _{Ing} (mg/kg)	SoilSoil _{Derm} (mg/kg)	VegSoil _{Ing} (mg/kg)	AirSoil _{Inh-v} ¹ 0.5 acre source area (mg/kg)	AirSoil _{Inh-v} ¹ 30 acre source area (mg/kg)	AirSoil _{Inh-vp} ¹ 0.5 acre source area (mg/kg)	AirSoil _{Inh-vp} ¹ 30 acre source area (mg/kg)	SoilSoil _{Ing} (mg/kg)	SoilSoil _{Derm} (mg/kg)	VegSoil _{Ing} (mg/kg)	AirSoil _{Inh-v} ¹ 0.5 acre source area (mg/kg)	AirSoil _{Inh-v} ¹ 30 acre source area (mg/kg)	
Molybdenum	7439-98-7	—	—	—	—	—	—	—	—	—	—	4.1E+02	6.8E+03	2.6E+02	—	—
Monocrotophos	2157-98-4	—	—	—	—	—	—	—	—	—	—	4.9E+01	2.1E+02	—	—	—
Morpholine	110-91-8	—	—	—	—	—	—	—	—	—	—	1.0E+06	—	—	—	—
Morpholine, N-butyl-	1005-67-0	—	—	—	—	—	—	—	—	—	—	1.9E+02	8.2E+02	—	—	—
MTBE (methyl tert-butyl ether)	1634-04-4	1.4E+03	7.1E+02	3.4E+03	—	—	1.4E+03	7.1E+02	4.6E+04	2.4E+04	8.2E+02	—	—	4.6E+04	2.4E+04	
Naled	300-76-5	—	—	—	—	—	—	—	—	—	1.6E+02	7.1E+02	—	—	—	
Naphthalene	91-20-3	—	—	—	—	—	—	—	2.7E+02	1.4E+02	1.6E+03	5.5E+03	—	2.7E+02	1.4E+02	
Naphthoquinone, 1,4-	130-15-4	—	—	—	—	—	—	—	—	—	5.7E+02	2.5E+03	—	—	—	
Naphthylamine, 1-	134-32-7	—	—	—	—	—	—	—	—	—	1.6E+03	7.1E+03	—	—	—	
Naphthylamine, 2-	91-59-8	—	—	3.4E+00	1.2E+01	—	—	—	—	—	—	—	—	—	—	
Napropamide	15299-99-7	—	—	—	—	—	—	—	—	—	8.2E+03	3.6E+04	—	—	—	
Neopentyl glycol	126-30-7	—	—	—	—	—	—	—	—	—	2.5E+04	1.1E+05	—	—	—	
Nickel and compounds	7440-02-0	1.3E+05	6.8E+04	—	—	—	—	—	2.2E+05	1.1E+05	1.6E+03	2.8E+03	4.6E+03	—	—	
Nitrate-N	14797-55-8	—	—	—	—	—	—	—	—	—	1.3E+05	1.0E+06	—	—	—	
Nitrite-N	14797-65-0	—	—	—	—	—	—	—	—	—	8.2E+03	3.6E+05	—	—	—	
Nitroaniline, 2-	88-74-4	—	—	—	—	—	—	—	4.8E+01	2.4E+01	2.5E+01	1.1E+02	—	4.8E+01	2.4E+01	
Nitroaniline, 3-	99-09-2	—	—	1.6E+02	5.5E+02	—	—	—	6.0E+01	3.1E+01	2.5E+01	1.1E+02	—	6.0E+01	3.1E+01	
Nitroaniline, 4-	100-01-6	—	—	3.0E+02	1.0E+03	—	—	—	1.2E+03	6.2E+02	3.3E+02	1.4E+03	—	1.2E+03	6.2E+02	
Nitrobenzene	98-95-3	6.6E+01	3.4E+01	—	—	—	6.6E+01	3.4E+01	1.0E+03	5.2E+02	1.6E+02	7.1E+02	—	1.0E+03	5.2E+02	
Nitroglycerin	55-63-0	—	—	3.6E+02	1.2E+03	—	—	—	—	—	8.2E+00	3.6E+01	—	—	—	
Nitrophenol, 2-	88-75-5	—	—	—	—	—	—	—	—	—	1.6E+02	7.1E+02	—	—	—	
Nitrophenol, 3-	554-84-7	—	—	—	—	—	—	—	—	—	1.6E+02	7.1E+02	—	—	—	
Nitrophenol, 4-	100-02-7	—	—	—	—	—	—	—	—	—	1.6E+02	7.1E+02	—	—	—	
Nitropropane, 2-	79-46-9	6.2E-01	3.2E-01	—	—	—	6.2E-01	3.2E-01	3.1E+02	1.6E+02	1.1E+01	—	—	3.1E+02	1.6E+02	
Nitroquinoline-N-oxide, 4-	56-57-5	1.9E+00	9.7E-01	6.5E-01	2.2E+00	—	1.9E+00	9.7E-01	—	—	—	—	—	—	—	
Nitrosodiethanolamine	1116-54-7	—	—	2.2E+00	7.4E+00	—	—	—	—	—	—	—	—	—	—	
Nitrosodiethylamine, n-	55-18-5	6.6E-02	3.4E-02	4.0E-02	—	—	6.6E-02	3.4E-02	—	—	—	—	—	—	—	
Nitrosodimethylamine, n-	62-75-9	2.0E-01	1.0E-01	1.2E-01	—	—	2.0E-01	1.0E-01	4.7E+00	2.4E+00	6.6E-01	—	—	4.7E+00	2.4E+00	
Nitrosodi-n-butylamine, n-	924-16-3	1.0E+00	5.3E-01	1.1E+00	3.8E+00	—	1.0E+00	5.3E-01	—	—	—	—	—	—	—	
Nitrosodi-n-propylamine, n-	621-64-7	—	—	8.7E-01	7.4E-01	—	—	—	—	—	—	—	—	—	—	
Nitrosodiphenylamine	86-30-6	—	—	1.2E+03	1.1E+03	—	—	—	—	—	—	—	—	—	—	
Nitroso-methyl-ethyl-amine, n-	10595-95-6	—	—	2.8E-01	—	—	—	—	—	—	—	—	—	—	—	
Nitrosomorpholine, N-	59-89-2	1.7E+00	8.8E-01	9.1E-01	3.1E+00	—	1.7E+00	8.8E-01	—	—	—	—	—	—	—	
Nitroso-n-ethylurea, n-	759-73-9	—	—	4.3E-02	1.5E-01	—	—	—	—	—	—	—	—	—	—	
Nitrosopiperidine, N-	100-75-4	1.3E+00	6.9E-01	6.5E-01	2.2E+00	—	1.3E+00	6.9E-01	—	—	—	—	—	—	—	
Nitrosopyrrolidine, n-	930-55-2	5.8E+00	3.0E+00	2.9E+00	9.9E+00	—	5.8E+00	3.0E+00	—	—	—	—	—	—	—	
Nitrotoluene, m-	99-08-1	—	—	—	—	—	—	—	—	—	8.2E+02	3.6E+03	—	—	—	
Nitrotoluene, o-	88-72-2	—	—	2.8E+01	9.4E+01	—	—	—	—	—	7.4E+01	3.2E+02	—	—	—	
Nitrotoluene, p-	99-99-0	—	—	3.8E+02	1.3E+03	—	—	—	—	—	3.3E+02	1.4E+03	—	—	—	
Nonachlor, cis-	5103-73-1	1.2E+03	6.4E+02	1.7E+01	5.9E+01	9.7E+00	1.2E+03	6.4E+02	3.7E+03	1.9E+03	4.1E+01	1.8E+02	4.6E+01	3.7E+03	1.9E+03	
Nonachlor, trans-	39765-80-5	1.2E+03	6.4E+02	1.7E+01	5.9E+01	9.7E+00	1.2E+03	6.4E+02	3.7E+03	1.9E+03	4.1E+01	1.8E+02	4.6E+01	3.7E+03	1.9E+03	
Nonanal	124-19-6	—	—	—	—	—	—	—	—	—	1.6E+04	7.1E+04	—	—	—	
Nonene, 1-n	124-11-8	—	—	—	—	—	—	—	—	—	8.2E+03	—	—	—	—	
Nonylphenol, 4-n-	104-40-5	—	—	—	—	—	—	—	—	—	8.2E+03	3.6E+04	2.8E+05	—	—	
Nonylphenol ethoxylate	9016-45-9	—	—	—	—	—	—	—	—	—	8.2E+03	3.6E+04	2.9E+05	—	—	

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Last Revised: March 6, 2023

Chemical of Concern	CAS	Carcinogenic							Noncarcinogenic						
		AlrSoil _{Inh-vp} ¹ 0.5 acre source area (mg/kg)	AlrSoil _{Inh-vp} ¹ 30 acre source area (mg/kg)	SoilSoil _{Ing} (mg/kg)	SoilSoil _{Derm} (mg/kg)	VegSoil _{Ing} (mg/kg)	AlrSoil _{Inh-v} ¹ 0.5 acre source area (mg/kg)	AlrSoil _{Inh-v} ¹ 30 acre source area (mg/kg)	AlrSoil _{Inh-vp} ¹ 0.5 acre source area (mg/kg)	AlrSoil _{Inh-vp} ¹ 30 acre source area (mg/kg)	SoilSoil _{Ing} (mg/kg)	SoilSoil _{Derm} (mg/kg)	VegSoil _{Ing} (mg/kg)	AlrSoil _{Inh-v} ¹ 0.5 acre source area (mg/kg)	AlrSoil _{Inh-v} ¹ 30 acre source area (mg/kg)
		Octamethylpyrophosphoramide	152-16-9	—	—	—	—	—	—	—	—	—	1.6E+02	7.1E+02	—
Octanone	106-68-3	—	—	—	—	—	—	—	9.0E+05	4.6E+05	4.9E+03	—	—	9.0E+05	4.6E+05
Oxamyl	23135-22-0	—	—	—	—	—	—	—	—	—	2.0E+03	8.9E+03	—	—	—
Oxychlorthane	27304-13-8	1.2E+03	6.4E+02	1.7E+01	5.9E+01	9.7E+00	1.2E+03	6.4E+02	3.7E+03	1.9E+03	4.1E+01	1.8E+02	4.6E+01	3.7E+03	1.9E+03
Paraquat	1910-42-5	—	—	—	—	—	—	—	—	—	3.7E+02	1.6E+03	—	—	—
Parathion (ethyl parathion)	56-38-2	—	—	—	—	—	—	—	—	—	4.9E+02	2.1E+03	—	—	—
Pebulate	1114-71-2	—	—	—	—	—	—	—	—	—	4.1E+03	1.8E+04	—	—	—
Pendimethalin	40487-42-1	—	—	—	—	—	—	—	—	—	3.3E+03	1.4E+04	5.1E+04	—	—
Pentachlorobenzene	608-93-5	—	—	—	—	—	—	—	—	—	6.6E+01	2.8E+02	—	—	—
Pentachloroethane	76-01-7	9.4E+01	4.8E+01	6.7E+01	—	—	9.4E+01	4.8E+01	—	—	2.5E+03	—	—	—	—
Pentachloronitrobenzene	82-68-8	—	—	2.3E+01	8.0E+01	2.3E+01	—	—	—	—	2.5E+02	1.1E+03	4.8E+02	—	—
Pentachlorophenol	87-86-5	—	—	1.5E+01	2.1E+01	7.9E-01	—	—	—	—	4.1E+02	7.1E+02	4.2E+01	—	—
Pentadiene, 1,3-cis-	1574-41-0	—	—	—	—	—	—	—	2.8E+05	1.4E+05	4.9E+03	—	—	2.8E+05	1.4E+05
Pentadiene, 1,3-trans-	2004-70-8	—	—	—	—	—	—	—	2.8E+05	1.4E+05	4.9E+03	—	—	2.8E+05	1.4E+05
Pentaerythritol tetranitrate (PETN)	78-11-5	—	—	—	—	—	—	—	—	—	1.6E+02	7.1E+02	—	—	—
Pentane	109-66-0	—	—	—	—	—	—	—	3.7E+05	1.9E+05	4.9E+03	—	—	3.7E+05	1.9E+05
Pentane, 2-methyl-	107-83-5	—	—	—	—	—	—	—	2.8E+05	1.4E+05	4.9E+03	—	—	2.8E+05	1.4E+05
Pentane, 3-methyl-	96-14-0	—	—	—	—	—	—	—	2.8E+05	1.4E+05	4.9E+03	—	—	2.8E+05	1.4E+05
Pentandiol, 1,5-	111-29-5	—	—	—	—	—	—	—	1.0E+06	1.0E+06	4.1E+05	1.0E+06	—	1.0E+06	1.0E+06
Pentanol, 1-	71-41-0	—	—	—	—	—	—	—	—	—	2.7E+03	—	—	—	—
Pentanol, 4-methyl-2-	108-11-2	—	—	—	—	—	—	—	—	—	2.1E+03	—	—	—	—
Pentanone, 2-	107-87-9	—	—	—	—	—	—	—	—	—	3.3E+03	—	—	—	—
Pentene, 2-	109-68-2	—	—	—	—	—	—	—	2.8E+05	1.4E+05	4.9E+03	—	—	2.8E+05	1.4E+05
Pentyne, 1-	627-19-0	—	—	—	—	—	—	—	2.8E+05	1.4E+05	4.9E+03	—	—	2.8E+05	1.4E+05
Perchlorate	14797-73-0	—	—	—	—	—	—	—	—	—	5.7E+01	5.0E+02	—	—	—
Perfluorooctane sulfonic acid (1-Octanesulfonic acid, heptadecafluoro-1-) [PFOS]	1763-23-1	—	—	—	—	—	—	—	1.5E+02	7.9E+01	1.9E+00	8.2E+00	—	1.5E+02	8.0E+01
Perfluoroundecanoic acid (Undecanoic acid, uncosafluoro-) [PFUnDa]	2058-94-8	—	—	—	—	—	—	—	—	—	9.8E-01	4.3E+00	—	—	—
Perfluoropentanoic acid (Pentanoic acid, nonafluoro-) [PFPeA]	2706-90-3	—	—	—	—	—	—	—	—	—	4.1E+01	1.8E+02	—	—	—
Perfluorohexanoic acid (Hexanoic acid, undecafluoro-) [PFHxA]	307-24-4	—	—	—	—	—	—	—	—	—	4.1E+01	1.8E+02	—	—	—
Perfluorododecanoic acid (Dodecanoic acid, tricafluoro-) [PFDoA]	307-55-1	—	—	—	—	—	—	—	6.9E+01	3.6E+01	9.8E-01	4.3E+00	—	6.9E+01	3.6E+01
Perfluorooctanoic acid (Octanoic acid, pentadecafluoro-) [PFOA]	335-67-1	—	—	—	—	—	—	—	2.4E+00	1.2E+00	9.8E-01	4.3E+00	—	2.4E+00	1.2E+00
Perfluorodecanoic acid (Decanoic acid, nonadecafluoro-) [PFDA]	335-76-2	—	—	—	—	—	—	—	8.6E+01	4.4E+01	1.2E+00	5.3E+00	—	8.6E+01	4.4E+01
Perfluorodecane sulfonic acid (1-Decanesulfonic acid, heneicosafluoro-) [PFDS]	335-77-3	—	—	—	—	—	—	—	—	—	9.8E-01	4.3E+00	—	—	—
Perfluorohexane sulfonic acid (1-Hexanesulfonic acid, tridecafluoro-) [PFHxS]	355-46-4	—	—	—	—	—	—	—	1.1E+01	5.8E+00	3.1E-01	1.4E+00	—	1.1E+01	5.8E+00
Perfluorobutyric acid (Butanoic acid, heptafluoro-) [PFBA]	375-22-4	—	—	—	—	—	—	—	6.8E+02	3.5E+02	8.2E+01	3.6E+02	—	6.8E+02	3.5E+02
Perfluorobutane sulfonic acid (1-Butanesulfonic acid, nonafluoro-) [PFBS]	375-73-5	—	—	—	—	—	—	—	1.1E+03	5.8E+02	1.1E+02	5.0E+02	—	1.1E+03	5.8E+02
Perfluoroheptanoic acid (Heptanoic acid, tridecafluoro-) [PFHpA]	375-85-9	—	—	—	—	—	—	—	—	—	1.9E+00	8.2E+00	—	—	—
Perfluorononanoic acid (Nonanoic acid, heptadecafluoro-) [PFNA]	375-95-1	—	—	—	—	—	—	—	1.7E+01	8.9E+00	9.8E-01	4.3E+00	—	1.7E+01	8.9E+00
Perfluorotetradecanoic acid (Tetradecanoic acid, heptacosafuoro-) [PFTeDA]	376-06-7	—	—	—	—	—	—	—	—	—	9.8E-01	4.3E+00	1.4E+00	—	—
Perfluorotridecanoic acid (Tridecanoic acid, pentacosafuoro-) [PFTrDA]	72629-94-8	—	—	—	—	—	—	—	—	—	9.8E-01	4.3E+00	2.5E+00	—	—

**Table 6
Tier 1 Individual Residential Soil PCLs**

Last Revised: March 6, 2023

Chemical of Concern	CAS	Carcinogenic							Noncarcinogenic						
		AlrSoil _{Inh-vp} ¹ 0.5 acre source area (mg/kg)	AlrSoil _{Inh-vp} ¹ 30 acre source area (mg/kg)	Soil _{Soil_{Ing}} (mg/kg)	Soil _{Soil_{Derm}} (mg/kg)	VegSoil _{Ing} (mg/kg)	AlrSoil _{Inh-v} ¹ 0.5 acre source area (mg/kg)	AlrSoil _{Inh-v} ¹ 30 acre source area (mg/kg)	AlrSoil _{Inh-vp} ¹ 0.5 acre source area (mg/kg)	AlrSoil _{Inh-vp} ¹ 30 acre source area (mg/kg)	Soil _{Soil_{Ing}} (mg/kg)	Soil _{Soil_{Derm}} (mg/kg)	VegSoil _{Ing} (mg/kg)	AlrSoil _{Inh-v} ¹ 0.5 acre source area (mg/kg)	AlrSoil _{Inh-v} ¹ 30 acre source area (mg/kg)
		Perfluorooctane sulfonamide (1-Octanesulfonamide, heptadecafluoro-) [PFOSA]	754-91-6	—	—	—	—	—	—	—	6.3E-02	3.2E-02	9.8E-01	4.3E+00	—
Perylene	198-55-0	—	—	—	—	—	—	—	—	—	1.6E+03	7.1E+03	4.9E+04	—	—
Phenacetin	62-44-2	1.1E+04	5.6E+03	2.8E+03	9.4E+03	—	1.1E+04	5.6E+03	—	—	—	—	—	—	—
Phenanthrene	85-01-8	—	—	—	—	—	—	—	—	—	2.5E+03	8.2E+03	1.7E+04	—	—
Phenanthridine	229-87-8	—	—	—	—	—	—	—	—	—	2.5E+02	1.1E+03	—	—	—
Phenol	108-95-2	—	—	—	—	—	—	—	1.9E+03	1.0E+03	2.5E+04	1.1E+05	—	1.9E+03	1.0E+03
Phenol, 4-tert-butyl-	98-54-4	—	—	—	—	—	—	—	—	—	9.8E+03	4.3E+04	—	—	—
Phenothiazine	92-84-2	—	—	—	—	—	—	—	—	—	9.0E+01	3.9E+02	4.4E+02	—	—
Phenyl mercuric acetate	62-38-4	—	—	—	—	—	—	—	—	—	6.6E+00	2.8E+01	—	—	—
Phenylene diamine, m-	108-45-2	—	—	—	—	—	—	—	—	—	4.9E+02	2.1E+03	—	—	—
Phenylene diamine, p-	106-50-3	—	—	—	—	—	—	—	—	—	1.6E+04	6.8E+04	—	—	—
Phorate	298-02-2	—	—	—	—	—	—	—	—	—	1.6E+01	7.1E+01	—	—	—
Phosalone	2310-17-0	—	—	—	—	—	—	—	—	—	1.6E+02	7.1E+02	—	—	—
Phosdrin (mevinphos)	7786-34-7	—	—	—	—	—	—	—	—	—	2.0E+00	8.9E+00	—	—	—
Phosmet	732-11-6	—	—	—	—	—	—	—	—	—	1.6E+03	7.1E+03	—	—	—
Phosphine	7803-51-2	—	—	—	—	—	—	—	4.6E+00	2.4E+00	2.5E+01	2.1E+02	—	4.6E+00	2.4E+00
Phosphorotriothic acid, S,S,S-tributyl ester	78-48-8	—	—	7.2E+01	2.5E+02	8.1E+02	—	—	—	—	4.1E+01	1.8E+02	9.2E+02	—	—
Phosphorus, total*	7723-14-0	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Phosphorus, white	7723-14-0	—	—	—	—	—	—	—	—	—	1.6E+00	1.4E+01	—	—	—
Phthalic anhydride	85-44-9	—	—	—	—	—	—	—	5.0E+04	2.6E+04	1.6E+05	7.1E+05	—	5.0E+04	2.6E+04
Picloram	1918-02-1	—	—	—	—	—	—	—	—	—	5.7E+03	2.5E+04	—	—	—
Picoline, 2- (2-methylpyridine)	109-06-8	—	—	—	—	—	—	—	—	—	7.4E+02	—	—	—	—
Polybrominated biphenyls (PBBs)	67774-32-7	—	—	6.8E-01	2.3E+00	9.9E-03	—	—	—	—	5.7E-01	2.5E+00	1.7E-02	—	—
Polychlorinated biphenyls (PCBs)	1336-36-3	5.4E+01	2.8E+01	3.0E+00	7.4E+00	1.3E+01	5.4E+01	2.8E+01	—	—	1.6E+00	5.1E+00	1.4E+01	—	—
Potassium*	7440-09-7	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Primene	68955-53-3	—	—	—	—	—	—	—	—	—	4.9E+02	2.1E+03	3.9E+03	—	—
Prometon (pramitol)	1610-18-0	—	—	—	—	—	—	—	—	—	1.2E+03	5.3E+03	—	—	—
Prometryn	7287-19-6	—	—	—	—	—	—	—	—	—	3.3E+03	1.4E+04	—	—	—
Pronamide	23950-58-5	—	—	—	—	—	—	—	—	—	6.1E+03	2.7E+04	—	—	—
Propanal (propionaldehyde)	123-38-6	—	—	—	—	—	—	—	1.2E+02	6.3E+01	6.6E+02	—	—	1.2E+02	6.3E+01
Propane, 1-bromo-	106-94-5	—	—	—	—	—	—	—	—	—	2.9E+03	—	—	—	—
Propanil	709-98-8	—	—	—	—	—	—	—	—	—	4.1E+02	1.8E+03	—	—	—
Propanoic acid (propionic acid)	79-09-4	—	—	—	—	—	—	—	—	—	4.1E+04	—	—	—	—
Propanol, 1-	71-23-8	—	—	—	—	—	—	—	—	—	1.6E+05	—	—	—	—
Propargite	2312-35-8	—	—	—	—	—	—	—	—	—	1.6E+03	7.1E+03	—	—	—
Propargyl alcohol	107-19-7	—	—	—	—	—	—	—	—	—	1.6E+02	—	—	—	—
Propazine	139-40-2	—	—	1.4E+02	4.7E+02	—	—	—	—	—	1.6E+03	7.1E+03	—	—	—
Propham	122-42-9	—	—	—	—	—	—	—	—	—	1.6E+03	7.1E+03	—	—	—
Propionitrile (propane nitrile)	107-12-0	—	—	—	—	—	—	—	—	—	3.3E+01	—	—	—	—
Propyl acetate, n-	109-60-4	—	—	—	—	—	—	—	—	—	7.4E+03	—	—	—	—
Propylbenzene, n-	103-65-1	—	—	—	—	—	—	—	6.3E+03	3.3E+03	3.3E+03	—	—	6.3E+03	3.3E+03
Propylene glycol	57-55-6	—	—	—	—	—	—	—	3.7E+02	1.9E+02	1.0E+06	1.0E+06	—	3.7E+02	1.9E+02
Propylene glycol monomethyl ether	107-98-2	—	—	—	—	—	—	—	2.3E+05	1.2E+05	5.7E+04	—	—	2.3E+05	1.2E+05
Propylene oxide	75-56-9	9.7E+01	5.0E+01	2.5E+01	—	—	9.7E+01	5.0E+01	4.6E+02	2.4E+02	—	—	—	4.6E+02	2.4E+02
Propylene tetramer	6842-15-5	—	—	—	—	—	—	—	1.5E+04	7.9E+03	8.2E+03	3.6E+04	—	1.5E+04	7.9E+03

**Table 6
Tier 1 Individual Residential Soil PCLs**

Last Revised: March 6, 2023

Chemical of Concern	CAS	Carcinogenic							Noncarcinogenic						
		AirSoil _{Inh-vp} ¹ 0.5 acre source area (mg/kg)	AirSoil _{Inh-vp} ¹ 30 acre source area (mg/kg)	SoilSoil _{Ing} (mg/kg)	SoilSoil _{Derm} (mg/kg)	VegSoil _{Ing} (mg/kg)	AirSoil _{Inh-v} ¹ 0.5 acre source area (mg/kg)	AirSoil _{Inh-v} ¹ 30 acre source area (mg/kg)	AirSoil _{Inh-vp} ¹ 0.5 acre source area (mg/kg)	AirSoil _{Inh-vp} ¹ 30 acre source area (mg/kg)	SoilSoil _{Ing} (mg/kg)	SoilSoil _{Derm} (mg/kg)	VegSoil _{Ing} (mg/kg)	AirSoil _{Inh-v} ¹ 0.5 acre source area (mg/kg)	AirSoil _{Inh-v} ¹ 30 acre source area (mg/kg)
Prothiofos (Tokuthion)	34643-46-4	—	—	—	—	—	—	—	—	—	8.2E+00	3.6E+01	4.9E+02	—	—
Pyrene	129-00-0	—	—	—	—	—	—	—	—	—	2.5E+03	8.2E+03	1.7E+04	—	—
Pyridine	110-86-1	—	—	—	—	—	—	—	—	—	8.2E+01	—	—	—	—
Quinoline	91-22-5	—	—	2.0E+00	6.9E+00	—	—	—	—	—	—	—	—	—	—
Ronnel	299-84-3	—	—	—	—	—	—	—	—	—	4.1E+03	1.8E+04	7.0E+03	—	—
Safrole	94-59-7	6.7E+01	3.4E+01	2.8E+01	9.4E+01	—	6.7E+01	3.4E+01	—	—	—	—	—	—	—
Selenium	7782-49-2	—	—	—	—	—	—	—	—	—	4.1E+02	1.8E+04	1.3E+03	—	—
Selenourea	630-10-4	—	—	—	—	—	—	—	—	—	4.1E+02	—	—	—	—
Silver	7440-22-4	—	—	—	—	—	—	—	—	—	4.1E+02	7.1E+02	1.5E+02	—	—
Simazine	122-34-9	—	—	5.1E+01	1.7E+02	—	—	—	—	—	4.1E+02	1.8E+03	—	—	—
Sodium*	7440-23-5	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sodium hypochlorite	7681-52-9	—	—	—	—	—	—	—	3.0E+05	1.5E+05	1.7E+04	1.5E+05	—	—	—
Sodium polyacrylate	9003-04-7	—	—	—	—	—	—	—	1.2E+02	6.2E+01	4.1E+04	—	—	1.2E+02	6.2E+01
Strontium	7440-24-6	—	—	—	—	—	—	—	—	—	4.9E+04	4.3E+05	—	—	—
Strychnine	57-24-9	—	—	—	—	—	—	—	—	—	2.5E+01	1.1E+02	—	—	—
Styrene	100-42-5	—	—	—	—	—	—	—	1.1E+04	5.8E+03	1.6E+04	—	—	1.1E+04	5.8E+03
Sulfate*	14808-79-8	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sulfide*	18496-25-8	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sulfolane	126-33-0	—	—	—	—	—	—	—	8.6E+02	4.4E+02	1.1E+03	4.6E+03	—	8.6E+02	4.4E+02
Sulfur*	7704-34-9	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sulprofos (Bolstar)	35400-43-2	—	—	—	—	—	—	—	—	—	2.5E+02	1.1E+03	8.4E+03	—	—
Tebuconazole	107534-96-3	—	—	—	—	—	—	—	—	—	2.5E+03	1.1E+04	—	—	—
Tebuthiuron	34014-18-1	—	—	—	—	—	—	—	—	—	5.7E+03	2.5E+04	—	—	—
Terbufos	13071-79-9	—	—	—	—	—	—	—	—	—	2.0E+00	8.9E+00	—	—	—
Tert-amyl ethyl ether (TAEE)	919-94-8	—	—	—	—	—	—	—	—	—	3.3E+03	—	—	—	—
Tert-amyl-methyl ether (TAME)	994-05-8	—	—	—	—	—	—	—	—	—	3.3E+03	—	—	—	—
Tert-butyl alcohol (2-methyl-2-propanol)	75-65-0	—	—	—	—	—	—	—	—	—	7.4E+03	—	—	—	—
Tetrachlorobenzene, 1,2,3,4-	634-66-2	—	—	—	—	—	—	—	—	—	2.5E+01	1.1E+02	—	—	—
Tetrachlorobenzene, 1,2,3,5-	634-90-2	—	—	—	—	—	—	—	—	—	2.5E+01	1.1E+02	4.2E+01	—	—
Tetrachlorobenzene, 1,2,4,5-	95-94-3	—	—	—	—	—	—	—	—	—	2.5E+01	1.1E+02	—	—	—
Tetrachloroethane, 1,1,1,2-	630-20-6	9.1E+01	4.7E+01	2.3E+02	—	—	9.1E+01	4.7E+01	—	—	2.5E+03	—	—	—	—
Tetrachloroethane, 1,1,2,2-	79-34-5	—	—	3.0E+01	—	—	—	—	—	—	1.6E+03	—	—	—	—
Tetrachloroethylene [PCE]	127-18-4	9.4E+02	4.8E+02	2.9E+03	—	—	9.4E+02	4.8E+02	5.7E+03	2.9E+03	1.7E+03	—	—	5.7E+03	2.9E+03
Tetrachlorophenol, 2,3,4,5-	4901-51-3	—	—	—	—	—	—	—	—	—	2.5E+03	1.1E+04	5.0E+02	—	—
Tetrachlorophenol, 2,3,4,6-	58-90-2	—	—	—	—	—	—	—	—	—	2.5E+03	1.1E+04	2.0E+02	—	—
Tetrachlorophenol, 2,3,5,6-	935-95-5	—	—	—	—	—	—	—	—	—	2.5E+03	1.1E+04	2.3E+01	—	—
Tetrachlorvinphos (Stirophos)	22248-79-9	—	—	—	—	—	—	—	—	—	3.4E+03	1.5E+04	4.5E+04	—	—
Tetradifon	116-29-0	—	—	—	—	—	—	—	—	—	1.6E+03	7.1E+03	4.9E+03	—	—
Tetraethyl dithiopyrophosphate (sulfotep)	3689-24-5	—	—	—	—	—	—	—	—	—	4.1E+01	1.8E+02	—	—	—
Tetraethyl lead	78-00-2	—	—	—	—	—	—	—	—	—	8.2E-03	3.6E-02	—	—	—
Tetraethyl pyrophosphate (TEPP)	107-49-3	—	—	—	—	—	—	—	—	—	9.0E-01	3.9E+00	—	—	—
Tetraethylene glycol	112-60-7	—	—	—	—	—	—	—	—	—	2.7E+04	1.2E+05	—	—	—
Tetrahydrofuran	109-99-9	1.9E+02	9.7E+01	8.0E+02	—	—	1.9E+02	9.7E+01	3.1E+04	1.6E+04	7.4E+04	—	—	3.1E+04	1.6E+04
Tetrahydropyran	142-68-7	2.0E+02	1.0E+02	8.0E+02	—	—	2.0E+02	1.0E+02	—	—	1.6E+04	—	—	—	—
Tetraoxadodecane, 2,5,8,11-	112-49-2	—	—	—	—	—	—	—	—	—	2.0E+03	8.9E+03	—	—	—

Table 6
Tier 1 Individual Residential Soil PCLs

Last Revised: March 6, 2023

Chemical of Concern	CAS	Carcinogenic							Noncarcinogenic						
		AirSoil _{Inh-Vp} ¹ 0.5 acre source area (mg/kg)	AirSoil _{Inh-Vp} ¹ 30 acre source area (mg/kg)	SoilSoil _{Ing} (mg/kg)	SoilSoil _{Derm} (mg/kg)	VegSoil _{Ing} (mg/kg)	AirSoil _{Inh-V} ¹ 0.5 acre source area (mg/kg)	AirSoil _{Inh-V} ¹ 30 acre source area (mg/kg)	AirSoil _{Inh-Vp} ¹ 0.5 acre source area (mg/kg)	AirSoil _{Inh-Vp} ¹ 30 acre source area (mg/kg)	SoilSoil _{Ing} (mg/kg)	SoilSoil _{Derm} (mg/kg)	VegSoil _{Ing} (mg/kg)	AirSoil _{Inh-V} ¹ 0.5 acre source area (mg/kg)	AirSoil _{Inh-V} ¹ 30 acre source area (mg/kg)
		Thallium	7440-28-0	—	—	—	—	—	—	—	—	—	5.5E+00	2.4E+02	3.7E+02
Thiofanox	39196-18-4	—	—	—	—	—	—	—	—	—	2.5E+01	1.1E+02	—	—	—
Thionazin	297-97-2	—	—	—	—	—	—	—	—	—	5.7E+00	2.5E+01	—	—	—
Thiophanate-methyl	23564-05-8	—	—	—	—	—	—	—	—	—	6.6E+03	2.8E+04	—	—	—
Thiram	137-26-8	—	—	—	—	—	—	—	—	—	4.1E+02	1.8E+03	—	—	—
Tin	7440-31-5	—	—	—	—	—	—	—	—	—	4.9E+04	2.1E+05	3.1E+05	—	—
Titanium	7440-32-6	—	—	—	—	—	—	—	—	—	4.1E+05	5.3E+05	1.0E+06	—	—
Toluene	108-88-3	—	—	—	—	—	—	—	6.3E+04	3.2E+04	6.6E+03	—	—	6.3E+04	3.2E+04
Toluene diisocyanate, 2,4/2,6-	26471-62-5	—	—	—	—	—	—	—	1.5E+02	7.5E+01	—	—	—	1.5E+02	7.5E+01
Toluenediamine, 2,4-	95-80-7	—	—	1.9E+00	6.5E+00	—	—	—	—	—	—	—	—	—	—
Toluenediamine, 2,6-	823-40-5	—	—	—	—	—	—	—	—	—	2.5E+03	1.1E+04	—	—	—
Toluidine, o-	95-53-4	1.4E+02	7.1E+01	3.8E+02	8.7E+01	—	1.4E+02	7.1E+01	—	—	—	—	—	—	—
Toluidine, p-	106-49-0	—	—	2.0E+02	1.1E+02	—	—	—	—	—	—	—	—	—	—
Toxaphene	8001-35-2	9.4E+02	4.8E+02	5.5E+00	1.9E+01	1.8E+00	9.6E+02	4.9E+02	—	—	2.5E+01	1.1E+02	1.6E+01	—	—
TPH, TX1005, C6-C12	TPH-1005-1	—	—	—	—	—	—	—	3.1E+03	1.6E+03	3.3E+03	—	—	3.1E+03	1.6E+03
TPH, TX1005, >C12-C28	TPH-1005-2	—	—	—	—	—	—	—	1.5E+04	7.8E+03	3.3E+03	1.4E+04	—	1.5E+04	7.8E+03
TPH, TX1005, >C12-C35	TPH-1005-3	—	—	—	—	—	—	—	1.5E+04	7.8E+03	3.3E+03	1.4E+04	—	1.5E+04	7.8E+03
TPH, TX1005, >C28-C35	TPH-1005-4	—	—	—	—	—	—	—	1.5E+04	7.8E+03	3.3E+03	1.4E+04	—	1.5E+04	7.8E+03
TP Silvex, 2,4,5-	93-72-1	—	—	—	—	—	—	—	—	—	6.6E+02	2.8E+03	—	—	—
Triadimenol	55219-65-3	—	—	—	—	—	—	—	—	—	2.5E+03	1.1E+04	—	—	—
Triallate	2303-17-5	—	—	—	—	—	—	—	—	—	1.1E+03	4.6E+03	5.2E+02	—	—
Triaminotrinitrobenzene (TATB)	3058-38-6	—	—	—	—	—	—	—	—	—	2.5E+02	1.1E+03	—	—	—
Tributyltin oxide	56-35-9	—	—	—	—	—	—	—	—	—	2.5E+01	1.1E+02	—	—	—
Trichloro-1,2,2-trifluoroethane, 1,1,2-	76-13-1	—	—	—	—	—	—	—	7.7E+04	3.9E+04	1.0E+06	—	—	7.7E+04	3.9E+04
Trichlorobenzene, 1,2,3-	87-61-6	—	—	—	—	—	—	—	3.0E+02	1.6E+02	2.5E+02	1.1E+03	—	3.0E+02	1.6E+02
Trichlorobenzene, 1,2,4-	120-82-1	—	—	2.1E+02	7.2E+02	—	—	—	1.5E+02	7.8E+01	8.2E+02	3.6E+03	—	1.5E+02	7.8E+01
Trichlorobenzene, 1,3,5-	108-70-3	—	—	—	—	—	—	—	1.3E+02	6.5E+01	2.5E+02	1.1E+03	—	1.3E+02	6.5E+01
Trichloroethane, 1,1,1-	71-55-6	—	—	—	—	—	—	—	7.8E+04	4.0E+04	1.6E+05	—	—	7.8E+04	4.0E+04
Trichloroethane, 1,1,2-	79-00-5	2.2E+01	1.2E+01	1.1E+02	—	—	2.2E+01	1.2E+01	—	—	3.3E+02	—	—	—	—
Trichloroethylene [TCE]	79-01-6	8.7E+01	4.5E+01	1.3E+02	—	—	8.7E+01	4.5E+01	3.1E+01	1.6E+01	4.1E+01	—	—	3.1E+01	1.6E+01
Trichlorofluoromethane	75-69-4	—	—	—	—	—	—	—	—	—	2.5E+04	—	—	—	—
Trichloronate	327-98-0	—	—	—	—	—	—	—	—	—	2.5E+02	1.1E+03	4.4E+02	—	—
Trichlorophenol, 2,3,4-	15950-66-0	—	—	—	—	—	—	—	—	—	8.2E+03	3.6E+04	—	—	—
Trichlorophenol, 2,3,5-	933-78-8	—	—	—	—	—	—	—	—	—	8.2E+03	3.6E+04	—	—	—
Trichlorophenol, 2,3,6-	933-75-5	—	—	—	—	—	—	—	—	—	8.2E+03	3.6E+04	5.8E+02	—	—
Trichlorophenol, 2,4,5-	95-95-4	—	—	—	—	—	—	—	—	—	8.2E+03	3.6E+04	—	—	—
Trichlorophenol, 2,4,6-	88-06-2	2.0E+03	1.0E+03	5.5E+02	1.9E+03	—	2.0E+03	1.0E+03	—	—	8.2E+01	3.6E+02	—	—	—
Trichlorophenol, 3,4,5-	609-19-8	—	—	—	—	—	—	—	—	—	8.2E+03	3.6E+04	—	—	—
Trichlorophenoxyacetic acid, 2,4,5-	93-76-5	—	—	—	—	—	—	—	—	—	8.2E+02	3.6E+03	—	—	—
Trichloropropane, 1,1,2-	598-77-6	—	—	—	—	—	—	—	4.6E+00	2.4E+00	4.1E+02	—	—	4.6E+00	2.4E+00
Trichloropropane, 1,2,3-	96-18-4	—	—	2.0E-01	—	—	—	—	1.4E+01	7.2E+00	3.3E+02	—	—	1.4E+01	7.2E+00
Triethanolamine	102-71-6	—	—	—	—	—	—	—	3.9E+03	2.0E+03	1.6E+04	7.1E+04	—	3.9E+03	2.0E+03
Triethylamine	121-44-8	—	—	—	—	—	—	—	1.1E+02	5.5E+01	—	—	—	1.1E+02	5.5E+01

**Table 6
Tier 1 Individual Residential Soil PCLs**

Last Revised: March 6, 2023

Chemical of Concern	CAS	Carcinogenic							Noncarcinogenic							
		AirSoil _{Inh-vp} ¹ 0.5 acre source area (mg/kg)	AirSoil _{Inh-vp} ¹ 30 acre source area (mg/kg)	SoilSoil _{Ing} (mg/kg)	SoilSoil _{Derm} (mg/kg)	VegSoil _{Ing} (mg/kg)	AirSoil _{Inh-v} ¹ 0.5 acre source area (mg/kg)	AirSoil _{Inh-v} ¹ 30 acre source area (mg/kg)	AirSoil _{Inh-vp} ¹ 0.5 acre source area (mg/kg)	AirSoil _{Inh-vp} ¹ 30 acre source area (mg/kg)	SoilSoil _{Ing} (mg/kg)	SoilSoil _{Derm} (mg/kg)	VegSoil _{Ing} (mg/kg)	AirSoil _{Inh-v} ¹ 0.5 acre source area (mg/kg)	AirSoil _{Inh-v} ¹ 30 acre source area (mg/kg)	
Triethylene glycol	112-27-6	—	—	—	—	—	—	—	—	—	1.6E+05	7.1E+05	—	—	—	
Triethylphosphorothioate, O, O, O-	126-68-1	—	—	—	—	—	—	—	—	—	6.8E-01	3.0E+00	—	—	—	
Trifluralin	1582-09-8	—	—	7.9E+02	2.7E+03	5.0E+02	—	—	—	—	6.1E+02	2.7E+03	7.7E+02	—	—	
Trimethylamine	75-50-3	—	—	—	—	—	—	—	—	1.5E+02	7.6E+01	—	—	—	1.5E+02	7.6E+01
Trimethylbenzene, 1,2,3-	526-73-8	—	—	—	—	—	—	—	—	3.6E+03	1.9E+03	2.8E+03	—	—	3.6E+03	1.9E+03
Trimethylbenzene, 1,2,4-	95-63-6	—	—	—	—	—	—	—	—	4.0E+03	2.1E+03	2.8E+03	—	—	4.0E+03	2.1E+03
Trimethylbenzene, 1,3,5-	108-67-8	—	—	—	—	—	—	—	—	3.5E+03	1.8E+03	2.8E+03	—	—	3.5E+03	1.8E+03
Trinitrobenzene, 1,3,5-	99-35-4	—	—	—	—	—	—	—	—	—	—	2.5E+03	1.1E+04	—	—	—
Trinitrophenylmethylnitramine (tetryl; nitramine)	479-45-8	—	—	—	—	—	—	—	—	—	—	1.6E+02	1.4E+03	—	—	—
Trinitrotoluene, 2,4,6-	118-96-7	—	—	2.0E+02	6.9E+02	—	—	—	—	—	—	4.1E+01	1.8E+02	—	—	—
Tungsten (as sodium tungstate dihydride)	7440-33-7	—	—	—	—	—	—	—	—	1.0E+06	1.0E+06	8.2E+01	7.1E+02	—	—	—
Uranium (soluble salts)	7440-61-1	—	—	—	—	—	—	—	—	3.9E+04	2.0E+04	2.5E+02	1.1E+04	2.9E+03	—	—
Valeric acid (pentanoic acid)	109-52-4	—	—	—	—	—	—	—	—	1.3E+02	6.8E+01	4.1E+04	1.8E+05	—	1.3E+02	6.8E+01
Vanadium	7440-62-2	—	—	—	—	—	—	—	—	2.9E+04	1.5E+04	1.5E+02	1.7E+02	2.4E+03	—	—
Vernam	1929-77-7	—	—	—	—	—	—	—	—	—	—	8.2E+01	3.6E+02	—	—	—
Vinyl acetate	108-05-4	—	—	—	—	—	—	—	—	3.1E+03	1.6E+03	8.2E+04	—	—	3.1E+03	1.6E+03
Vinyl chloride	75-01-4	4.3E+01	2.2E+01	4.0E+00	—	—	4.3E+01	2.2E+01	9.2E+02	4.7E+02	2.5E+02	—	—	—	9.2E+02	4.7E+02
Vinylcyclohexane	695-12-5	—	—	—	—	—	—	—	—	—	—	4.1E+04	—	—	—	—
Warfarin	81-81-2	—	—	—	—	—	—	—	—	—	—	2.5E+01	1.1E+02	—	—	—
Xylene, m-	108-38-3	—	—	—	—	—	—	—	—	9.4E+03	4.8E+03	1.6E+05	—	—	9.4E+03	4.8E+03
Xylene, o-	95-47-6	—	—	—	—	—	—	—	—	6.8E+04	3.5E+04	1.6E+05	—	—	6.8E+04	3.5E+04
Xylene, p-	106-42-3	—	—	—	—	—	—	—	—	9.4E+03	4.8E+03	1.6E+05	—	—	9.4E+03	4.8E+03
Xylenes	1330-20-7	—	—	—	—	—	—	—	—	9.4E+03	4.8E+03	1.6E+04	—	—	9.4E+03	4.8E+03
Zinc	7440-66-6	—	—	—	—	—	—	—	—	—	—	2.5E+04	2.1E+05	1.8E+04	—	—
6 C aliphatics (TPH) (>53% n-hexane content)	NA	—	—	—	—	—	—	—	—	1.0E+04	5.3E+03	4.9E+03	—	—	1.0E+04	5.3E+03
6 C aliphatics (TPH) (<53% n-hexane content)	NA	—	—	—	—	—	—	—	—	2.8E+05	1.5E+05	4.9E+03	—	—	2.8E+05	1.5E+05
>6-8 C aliphatics (TPH) (>53% n-hexane content)	NA	—	—	—	—	—	—	—	—	1.0E+04	5.3E+03	4.9E+03	—	—	1.0E+04	5.3E+03
>6-8 C aliphatics (TPH) (<53% n-hexane content)	NA	—	—	—	—	—	—	—	—	2.8E+05	1.5E+05	4.9E+03	—	—	2.8E+05	1.5E+05
>8-10 C aliphatics (TPH)	NA	—	—	—	—	—	—	—	—	7.7E+03	3.9E+03	8.2E+03	—	—	7.7E+03	3.9E+03
>10-12 C aliphatics (TPH)	NA	—	—	—	—	—	—	—	—	7.7E+03	3.9E+03	8.2E+03	3.6E+04	—	7.7E+03	3.9E+03
>12-16 C aliphatics (TPH)	NA	—	—	—	—	—	—	—	—	1.2E+04	6.2E+03	8.2E+03	3.6E+04	—	1.2E+04	6.2E+03
>16-21 C aliphatics (TPH)	NA	—	—	—	—	—	—	—	—	—	—	1.6E+05	7.1E+05	—	—	—
>16-21 C aliphatics (TPH) (for transformer mineral oil releases only)	NA	—	—	—	—	—	—	—	—	—	—	1.3E+05	7.1E+05	—	—	—
>21-35 C aliphatics (TPH)	NA	—	—	—	—	—	—	—	—	—	—	1.6E+05	5.7E+05	—	—	—
>21-35 C aliphatics (TPH) (for transformer mineral oil releases only)	NA	—	—	—	—	—	—	—	—	—	—	1.3E+05	5.7E+05	—	—	—

**Table 6
Tier 1 Individual Residential Soil PCLs**

Last Revised: March 6, 2023

Chemical of Concern	CAS	Carcinogenic							Noncarcinogenic						
		AirSoil _{Inh-vp} ¹ 0.5 acre source area (mg/kg)	AirSoil _{Inh-vp} ¹ 30 acre source area (mg/kg)	SoilSoil _{Ing} (mg/kg)	SoilSoil _{Derm} (mg/kg)	VegSoil _{Ing} (mg/kg)	AirSoil _{Inh-v} ¹ 0.5 acre source area (mg/kg)	AirSoil _{Inh-v} ¹ 30 acre source area (mg/kg)	AirSoil _{Inh-vp} ¹ 0.5 acre source area (mg/kg)	AirSoil _{Inh-vp} ¹ 30 acre source area (mg/kg)	SoilSoil _{Ing} (mg/kg)	SoilSoil _{Derm} (mg/kg)	VegSoil _{Ing} (mg/kg)	AirSoil _{Inh-v} ¹ 0.5 acre source area (mg/kg)	AirSoil _{Inh-v} ¹ 30 acre source area (mg/kg)
>7-8 C aromatics (TPH)	NA	—	—	—	—	—	—	—	2.9E+04	1.5E+04	8.2E+03	—	—	2.9E+04	1.5E+04
>8-10 C aromatics (TPH)	NA	—	—	—	—	—	—	—	3.1E+03	1.6E+03	3.3E+03	—	—	3.1E+03	1.6E+03
>10-12 C aromatics (TPH)	NA	—	—	—	—	—	—	—	6.6E+03	3.4E+03	3.3E+03	1.4E+04	—	6.6E+03	3.4E+03
>12-16 C aromatics (TPH)	NA	—	—	—	—	—	—	—	1.5E+04	7.8E+03	3.3E+03	1.4E+04	—	1.5E+04	7.8E+03
>16-21 C aromatics (TPH)	NA	—	—	—	—	—	—	—	—	—	2.5E+03	1.1E+04	—	—	—
>21-35 C aromatics (TPH)	NA	—	—	—	—	—	—	—	—	—	2.5E+03	1.1E+04	—	—	—

Footnotes

1 For subsurface soils only

2 Site-specific PCLs for mercury may vary based on the pH-dependent Kd value (see Figure:30 TAC §350.73(f)(1)(C)).

* These compounds are not necessarily of concern from a human health standpoint, therefore calculation of human health-based values is not required. However, aesthetics and ecological criteria would still apply. See table entitled "Compounds for which Calculation of a Human Health PCL is Not Required" available on the TCEQ website at <http://www.tceq.state.tx.us/remediation/trrp/trrp.html>.

NA = not applicable

All values capped at 1E+06

This table shows individual residential soil protective concentration levels with both carcinogenic and non-carcinogenic values depicted

end of worksheet

**Table 7
Tier 1 Individual Commercial/Industrial Soil PCLs**

Last Revised: March 6, 2023

Chemical of Concern	CAS	Carcinogenic						Noncarcinogenic					
		Air ¹ Soil _{Inh-vp} 0.5 acre source area (mg/kg)	Air ¹ Soil _{Inh-vp} 30 acre source area (mg/kg)	Soil _{Inh-vp} (mg/kg)	Soil _{Derm} (mg/kg)	Air ¹ Soil _{Inh-v} 0.5 acre source area (mg/kg)	Air ¹ Soil _{Inh-v} 30 acre source area (mg/kg)	Air ¹ Soil _{Inh-vp} 0.5 acre source area (mg/kg)	Air ¹ Soil _{Inh-vp} 30 acre source area (mg/kg)	Soil _{Inh-vp} (mg/kg)	Soil _{Derm} (mg/kg)	Air ¹ Soil _{Inh-v} 0.5 acre source area (mg/kg)	Air ¹ Soil _{Inh-v} 30 acre source area (mg/kg)
Acenaphthene	83-32-9	–	–	–	–	–	–	–	–	6.1E+04	9.4E+04	–	–
Acenaphthylene	208-96-8	–	–	–	–	–	–	–	–	6.1E+04	9.4E+04	–	–
Acetaldehyde	75-07-0	2.9E+02	1.5E+02	–	–	2.9E+02	1.5E+02	2.0E+02	1.0E+02	1.0E+05	–	2.0E+02	1.0E+02
Acetate, 2-ethoxyethanol	111-15-9	–	–	–	–	–	–	8.4E+03	4.3E+03	1.0E+05	–	8.4E+03	4.3E+03
Acetate, isoamyl	123-92-2	–	–	–	–	–	–	–	–	7.4E+04	–	–	–
Acetate, isobutyl	110-19-0	–	–	–	–	–	–	–	–	4.9E+04	–	–	–
Acetate, sec-butyl	105-46-4	–	–	–	–	–	–	–	–	4.9E+04	–	–	–
Acetic acid*	64-19-7	–	–	–	–	–	–	–	–	–	–	–	–
Acetone (2-propanone)	67-64-1	–	–	–	–	–	–	8.4E+05	4.3E+05	9.2E+05	–	8.4E+05	4.3E+05
Acetone cyanohydrin	75-86-5	–	–	–	–	–	–	6.1E+03	3.1E+03	3.1E+03	6.1E+03	6.1E+03	3.1E+03
Acetonitrile	75-05-8	–	–	–	–	–	–	1.8E+03	9.4E+02	3.3E+04	–	1.8E+03	9.4E+02
Acetophenone	98-86-2	–	–	–	–	–	–	–	–	1.0E+05	2.0E+05	–	–
Acetylaminofluorene, 2-	53-96-3	3.1E+01	1.6E+01	7.5E+00	1.5E+01	3.1E+01	1.6E+01	–	–	–	–	–	–
Acifluorfen, sodium	62476-59-9	–	–	–	–	–	–	–	–	1.3E+04	2.7E+04	–	–
Acridine	260-94-6	–	–	–	–	–	–	–	–	3.1E+03	6.1E+03	–	–
Acrolein	107-02-8	–	–	–	–	–	–	2.1E+02	1.1E+02	5.1E+02	–	2.1E+02	1.1E+02
Acrylamide	79-06-1	4.7E+01	2.4E+01	5.7E+01	1.1E+02	4.7E+01	2.4E+01	1.0E+03	5.2E+02	2.0E+03	4.1E+03	1.0E+03	5.2E+02
Acrylic acid	79-10-7	–	–	–	–	–	–	1.7E+02	8.7E+01	5.1E+05	–	1.7E+02	8.7E+01
Acrylonitrile	107-13-1	8.8E+00	4.6E+00	5.3E+01	–	8.8E+00	4.6E+00	4.3E+01	2.2E+01	1.0E+03	–	4.3E+01	2.2E+01
Adipic acid (hexanedioic acid)	124-04-9	–	–	–	–	–	–	–	–	1.0E+06	1.0E+06	–	–
Alachlor	15972-60-8	–	–	3.6E+02	7.2E+02	–	–	–	–	1.0E+04	2.0E+04	–	–
Aldicarb	116-06-3	–	–	–	–	–	–	–	–	1.0E+03	2.0E+03	–	–
Aldicarb sulfone	1646-88-4	–	–	–	–	–	–	–	–	1.0E+03	2.0E+03	–	–
Aldrin	309-00-2	1.4E+01	7.2E+00	1.7E+00	3.4E+00	1.4E+01	7.2E+00	–	–	3.1E+01	6.1E+01	–	–
Allyl alcohol	107-18-6	–	–	–	–	–	–	8.0E+00	4.1E+00	5.1E+03	–	8.0E+00	4.1E+00
Allyl chloride	107-05-1	–	–	–	–	–	–	2.1E+01	1.1E+01	1.0E+04	–	2.1E+01	1.1E+01
Aluminum	7429-90-5	–	–	–	–	–	–	1.0E+06	1.0E+06	1.0E+06	1.0E+06	–	–
Ametryn	834-12-8	–	–	–	–	–	–	–	–	9.2E+03	1.8E+04	–	–
Amino-2,6-dinitrotoluene, 4-	19406-51-0	–	–	9.5E+02	1.9E+03	–	–	–	–	5.1E+02	1.0E+03	–	–
Amino-4,6-dinitrotoluene, 2-	35572-78-2	–	–	9.5E+02	1.9E+03	–	–	–	–	5.1E+02	1.0E+03	–	–
Aminobiphenyl, 4- (1,1-biphenyl-4-amine)	92-67-1	–	–	4.7E+00	9.4E+00	–	–	–	–	–	–	–	–
Aminopyridine, 4-	504-24-5	–	–	–	–	–	–	–	–	2.0E+01	4.1E+01	–	–
Ammonia	7664-41-7	–	–	–	–	–	–	6.9E+03	3.5E+03	–	–	6.9E+03	3.5E+03
Ammonium polyphosphate*	6833-79-9	–	–	–	–	–	–	–	–	–	–	–	–
Ammonium salts*	AMMONIUM	–	–	–	–	–	–	–	–	–	–	–	–
Aniline	62-53-3	–	–	5.0E+03	1.0E+04	–	–	1.8E+02	9.4E+01	7.2E+03	1.4E+04	1.8E+02	9.4E+01
Anthracene	120-12-7	–	–	–	–	–	–	–	–	3.1E+05	4.7E+05	–	–
Anthraquinone, 9,10-	84-65-1	–	–	7.3E+02	1.5E+03	–	–	–	–	2.0E+04	4.1E+04	–	–
Antimony	7440-36-0	–	–	–	–	–	–	–	–	4.1E+02	1.2E+03	–	–

**Table 7
Tier 1 Individual Commercial/Industrial Soil PCLs**

Last Revised: March 6, 2023

Chemical of Concern	CAS	Carcinogenic						Noncarcinogenic					
		Air ¹ Soil _{Inh-vp} 0.5 acre source area (mg/kg)	Air ¹ Soil _{Inh-vp} 30 acre source area (mg/kg)	Soil _{Inh-vp} (mg/kg)	Soil _{Derm} (mg/kg)	Air ¹ Soil _{Inh-v} 0.5 acre source area (mg/kg)	Air ¹ Soil _{Inh-v} 30 acre source area (mg/kg)	Air ¹ Soil _{Inh-vp} 0.5 acre source area (mg/kg)	Air ¹ Soil _{Inh-vp} 30 acre source area (mg/kg)	Soil _{Inh-vp} (mg/kg)	Soil _{Derm} (mg/kg)	Air ¹ Soil _{Inh-v} 0.5 acre source area (mg/kg)	Air ¹ Soil _{Inh-v} 30 acre source area (mg/kg)
Aramite	140-57-8	1.0E+06	1.0E+06	1.1E+03	2.3E+03	–	–	–	–	5.1E+04	1.0E+05	–	–
Arsenic	7440-38-2	2.5E+05	1.3E+05	2.4E+02	1.3E+03	–	–	–	–	3.9E+02	2.0E+03	–	–
Arsine	7784-42-1	–	–	–	–	–	–	1.1E+00	5.5E-01	–	–	1.1E+00	5.5E-01
Atrazine	1912-24-9	–	–	1.3E+02	2.6E+02	–	–	–	–	3.6E+04	7.2E+04	–	–
Azinphos-methyl (guthion)	86-50-0	–	–	–	–	–	–	–	–	1.5E+03	3.1E+03	–	–
Azobenzene	103-33-3	2.3E+03	1.2E+03	2.6E+02	5.2E+02	2.3E+03	1.2E+03	–	–	–	–	–	–
Barium	7440-39-3	–	–	–	–	–	–	–	–	2.0E+05	2.9E+05	–	–
Bayleton	43121-43-3	–	–	–	–	–	–	–	–	3.1E+04	6.1E+04	–	–
Benefin (benfluralin)	1861-40-1	–	–	–	–	–	–	–	–	3.1E+05	6.1E+05	–	–
Benomyl	17804-35-2	–	–	–	–	–	–	–	–	5.1E+04	1.0E+05	–	–
Benz-a-anthracene	56-55-3	9.1E+03	4.7E+03	2.9E+02	4.4E+02	9.2E+03	4.7E+03	–	–	–	–	–	–
Benzaldehyde	100-52-7	–	–	–	–	–	–	–	–	1.0E+05	–	–	–
Benzene	71-43-2	2.7E+02	1.4E+02	1.9E+03	–	2.7E+02	1.4E+02	6.0E+03	3.1E+03	4.1E+03	–	6.0E+03	3.1E+03
Benzenedicarbonitrile, 1,3-	626-17-5	–	–	–	–	–	–	–	–	6.1E+03	1.2E+04	–	–
Benzenedicarboxylic acid, 1,2-disodecyl ester	26761-40-0	–	–	–	–	–	–	1.0E+06	1.0E+06	4.1E+04	8.2E+04	1.0E+06	1.0E+06
Benzenethiol	108-98-5	–	–	–	–	–	–	–	–	1.0E+03	–	–	–
Benzidine	92-87-5	1.1E-01	5.4E-02	1.2E-01	2.5E-01	1.1E-01	5.4E-02	–	–	3.1E+03	6.1E+03	–	–
Benzo-a-pyrene	50-32-8	2.0E+03	1.0E+03	2.9E+01	4.4E+01	2.1E+03	1.1E+03	8.7E+01	4.5E+01	3.1E+02	4.7E+02	8.9E+01	4.6E+01
Benzo-b-fluoranthene	205-99-2	1.5E+04	7.6E+03	2.9E+02	4.4E+02	1.5E+04	7.8E+03	–	–	–	–	–	–
Benzo-e-pyrene	192-97-2	–	–	–	–	–	–	–	–	3.1E+04	4.7E+04	–	–
Benzo-g,h,i-perylene	191-24-2	–	–	–	–	–	–	–	–	3.1E+04	4.7E+04	–	–
Benzoic acid	65-85-0	–	–	–	–	–	–	–	–	1.0E+06	1.0E+06	–	–
Benzo-j-fluoranthene	205-82-3	7.8E+03	4.0E+03	2.9E+02	4.4E+02	7.9E+03	4.1E+03	–	–	–	–	–	–
Benzo-k-fluoranthene	207-08-9	3.5E+05	1.8E+05	2.9E+03	4.4E+03	3.8E+05	1.9E+05	–	–	–	–	–	–
Benzophenone	119-61-9	–	–	–	–	–	–	–	–	6.8E+03	1.4E+04	–	–
Benzotrichloride	98-07-7	–	–	2.2E+00	4.4E+00	–	–	–	–	–	–	–	–
Benzoyl peroxide	94-36-0	–	–	–	–	–	–	–	–	5.1E+04	1.0E+05	–	–
Benzyl alcohol	100-51-6	–	–	–	–	–	–	–	–	1.0E+05	2.0E+05	–	–
Benzyl chloride	100-44-7	–	–	1.7E+02	–	–	–	4.3E+01	2.2E+01	2.0E+03	–	4.3E+01	2.2E+01
Benzyl dichloride	98-87-3	–	–	1.7E+02	3.4E+02	–	–	7.7E+01	4.0E+01	2.0E+03	4.1E+03	7.7E+01	4.0E+01
Beryllium	7440-41-7	1.6E+04	8.1E+03	–	–	–	–	2.7E+04	1.4E+04	2.0E+03	2.9E+02	–	–
Biphenyl, 1,1'-	92-52-4	–	–	–	–	–	–	–	–	5.1E+05	1.0E+05	–	–
Biphenyl, 1,1'-, 2-phenoxy-	6738-04-1	–	–	–	–	–	–	–	–	5.1E+04	1.0E+05	–	–
Biquinoline, 2,2'-	119-91-5	–	–	–	–	–	–	–	–	3.1E+03	6.1E+03	–	–
Bis (2-chloroethoxy) methane	111-91-1	1.9E+01	9.8E+00	2.6E+01	5.2E+01	1.9E+01	9.8E+00	–	–	3.1E+03	6.1E+03	–	–
Bis (2-chloroethyl) ether	111-44-4	6.0E+00	3.1E+00	2.6E+01	–	6.0E+00	3.1E+00	–	–	–	–	–	–
Bis (2-chloro-1-methylethyl) ether	108-60-1	3.5E+02	1.8E+02	4.1E+02	8.2E+02	3.5E+02	1.8E+02	–	–	4.1E+04	8.2E+04	–	–
Bis (2-chloromethyl) ether	542-88-1	9.7E-03	5.0E-03	1.3E-01	–	9.7E-03	5.0E-03	–	–	–	–	–	–
Bis (2-ethyl-hexyl) phthalate	117-81-7	–	–	2.0E+03	7.8E+02	–	–	–	–	2.0E+04	7.8E+03	–	–

**Table 7
Tier 1 Individual Commercial/Industrial Soil PCLs**

Last Revised: March 6, 2023

Chemical of Concern	CAS	Carcinogenic						Noncarcinogenic					
		Air ¹ Soil _{Inh-vp} 0.5 acre source area (mg/kg)	Air ¹ Soil _{Inh-vp} 30 acre source area (mg/kg)	Soil _{Inh} (mg/kg)	Soil _{Derm} (mg/kg)	Air ¹ Soil _{Inh-v} 0.5 acre source area (mg/kg)	Air ¹ Soil _{Inh-v} 30 acre source area (mg/kg)	Air ¹ Soil _{Inh-vp} 0.5 acre source area (mg/kg)	Air ¹ Soil _{Inh-vp} 30 acre source area (mg/kg)	Soil _{Inh} (mg/kg)	Soil _{Derm} (mg/kg)	Air ¹ Soil _{Inh-v} 0.5 acre source area (mg/kg)	Air ¹ Soil _{Inh-v} 30 acre source area (mg/kg)
Carbofuran	1563-66-2	–	–	–	–	–	–	–	–	5.1E+03	1.0E+04	–	–
Carbon disulfide	75-15-0	–	–	–	–	–	–	1.5E+04	7.7E+03	1.0E+05	–	1.5E+04	7.7E+03
Carbon tetrachloride	56-23-5	1.0E+02	5.2E+01	4.1E+02	–	1.0E+02	5.2E+01	2.1E+03	1.1E+03	4.1E+03	–	2.1E+03	1.1E+03
Carbophenothion	786-19-6	–	–	–	–	–	–	–	–	1.3E+04	2.7E+04	–	–
Carbosulfan	55285-14-8	–	–	–	–	–	–	–	–	1.0E+04	2.0E+04	–	–
Carboxin	5234-68-4	–	–	–	–	–	–	–	–	1.0E+05	2.0E+05	–	–
Chloral	75-87-6	–	–	–	–	–	–	–	–	1.0E+05	–	–	–
Chloral hydrate (1,1-ethanediol, 2,2,2-trichloro-)	302-17-0	–	–	–	–	–	–	–	–	1.0E+05	2.0E+05	–	–
Chloramben (amiben; 3-amino-2,5-dichlorobenzoic acid)	133-90-4	–	–	–	–	–	–	–	–	1.5E+04	3.1E+04	–	–
Chlordane (technical)	12789-03-6	2.1E+03	1.1E+03	8.2E+01	4.1E+02	2.1E+03	1.1E+03	5.2E+03	2.7E+03	5.1E+02	2.6E+03	5.2E+03	2.7E+03
Chlordane, cis- (alpha chlordane)	5103-71-9	6.8E+03	3.5E+03	8.2E+01	1.6E+02	6.9E+03	3.5E+03	1.7E+04	8.7E+03	5.1E+02	1.0E+03	1.7E+04	8.9E+03
Chlordane, trans- (gamma chlordane)	5103-74-2	1.6E+03	8.3E+02	8.2E+01	1.6E+02	1.6E+03	8.4E+02	4.0E+03	2.1E+03	5.1E+02	1.0E+03	4.1E+03	2.1E+03
Chlorfenvinphos	470-90-6	–	–	–	–	–	–	4.3E+01	2.2E+01	7.2E+02	1.4E+03	4.3E+01	2.2E+01
Chloride*	16887-00-6	–	–	–	–	–	–	–	–	–	–	–	–
Chlorine	7782-50-5	–	–	–	–	–	–	1.9E+02	9.6E+01	1.0E+05	4.1E+05	1.9E+02	9.6E+01
Chloro-1,3-butadiene, 2-	126-99-8	2.0E+00	1.0E+00	–	–	2.0E+00	1.0E+00	4.3E+02	2.2E+02	–	–	4.3E+02	2.2E+02
Chloro-2-propanol, 1-	127-00-4	–	–	–	–	–	–	–	–	2.0E+04	–	–	–
Chloro-3-methylphenol, 4-	59-50-7	–	–	–	–	–	–	–	–	5.1E+03	1.0E+04	–	–
Chloroaniline, p-	106-47-8	–	–	1.4E+02	2.9E+02	–	–	–	–	4.1E+03	8.2E+03	–	–
Chlorobenzene	108-90-7	–	–	–	–	–	–	1.1E+03	5.5E+02	2.0E+04	–	1.1E+03	5.5E+02
Chlorobenzilate	510-15-6	5.9E+02	3.0E+02	1.1E+02	2.1E+02	5.9E+02	3.0E+02	–	–	2.0E+04	4.1E+04	–	–
Chlorobromomethane (bromochloromethane)	74-97-5	–	–	–	–	–	–	–	–	4.1E+04	–	–	–
Chlorodifluoromethane	75-45-6	–	–	–	–	–	–	1.0E+06	5.5E+05	–	–	1.0E+06	5.5E+05
Chloroethane (ethyl chloride)	75-00-3	–	–	–	–	–	–	2.1E+05	1.1E+05	4.1E+05	–	2.1E+05	1.1E+05
Chloroethanol, 2-	107-07-3	–	–	–	–	–	–	–	–	2.0E+04	–	–	–
Chloroethoxy ethene, 2- (2-chloroethylvinylether)	110-75-8	–	–	2.6E+01	–	–	–	6.4E+00	3.3E+00	2.0E+03	–	6.4E+00	3.3E+00
Chloroform	67-66-3	2.6E+01	1.3E+01	–	–	2.6E+01	1.3E+01	2.1E+03	1.1E+03	1.0E+04	–	2.1E+03	1.1E+03
Chlorohexane, 1-	544-10-5	–	–	–	–	–	–	2.1E+04	1.1E+04	4.1E+04	–	2.1E+04	1.1E+04
Chloromethane (methyl chloride)	74-87-3	3.3E+02	1.7E+02	2.2E+03	–	3.3E+02	1.7E+02	1.9E+03	9.9E+02	3.7E+03	–	1.9E+03	9.9E+02
Chloronaphthalene, 1- (Chloronaphthalene, alpha-)	90-13-1	–	–	–	–	–	–	–	–	8.2E+04	1.3E+05	–	–
Chloronaphthalene, 2- (chloronaphthalene, beta)	91-58-7	–	–	–	–	–	–	–	–	8.2E+04	1.3E+05	–	–
Chloronitrobenzene, p- (1-chloro-4-nitrobenzene)	100-00-5	–	–	4.5E+03	9.1E+03	–	–	8.8E+01	4.5E+01	1.0E+03	2.0E+03	8.8E+01	4.5E+01
Chlorophenol, 2-	95-57-8	–	–	–	–	–	–	–	–	5.1E+03	–	–	–
Chlorophenol, 3-	108-43-0	–	–	–	–	–	–	–	–	5.1E+03	1.0E+04	–	–
Chlorophenol, 4-	106-48-9	–	–	–	–	–	–	–	–	5.1E+03	1.0E+04	–	–
Chlorophenyl phenylether, 4-	7005-72-3	4.2E+00	2.2E+00	1.9E+00	3.8E+00	4.2E+00	2.2E+00	–	–	–	–	–	–
Chloropropane, 2-	75-29-6	–	–	–	–	–	–	2.1E+03	1.1E+03	3.1E+04	–	2.1E+03	1.1E+03
Chlorothalonil	1897-45-6	–	–	2.6E+03	5.2E+03	–	–	–	–	1.5E+04	3.1E+04	–	–
Chlorotoluene, o- (2-chlorotoluene)	95-49-8	–	–	–	–	–	–	1.8E+04	9.5E+03	2.0E+04	4.1E+04	1.8E+04	9.5E+03

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		Air ¹ Soil _{Inh-vp} 0.5 acre source area (mg/kg)	Air ¹ Soil _{Inh-vp} 30 acre source area (mg/kg)	Soil _{Ing} (mg/kg)	Soil _{Derm} (mg/kg)	Air ¹ Soil _{Inh-v} 0.5 acre source area (mg/kg)	Air ¹ Soil _{Inh-v} 30 acre source area (mg/kg)	Air ¹ Soil _{Inh-vp} 0.5 acre source area (mg/kg)	Air ¹ Soil _{Inh-vp} 30 acre source area (mg/kg)	Soil _{Ing} (mg/kg)	Soil _{Derm} (mg/kg)	Air ¹ Soil _{Inh-v} 0.5 acre source area (mg/kg)	Air ¹ Soil _{Inh-v} 30 acre source area (mg/kg)
Chlorotoluene, p- (4-chlorotoluene)	106-43-4	–	–	–	–	–	–	–	–	2.0E+04	–	–	–
Chlorpyrifos	2921-88-2	–	–	–	–	–	–	–	–	3.1E+03	6.1E+03	–	–
Chromium (III)	16065-83-1	–	–	–	–	–	–	1.9E+05	9.8E+04	1.0E+06	4.0E+05	–	–
Chromium (total)	7440-47-3	–	–	–	–	–	–	1.9E+05	9.8E+04	1.0E+06	4.0E+05	–	–
Chromium (VI)	18540-29-9	1.6E+04	8.5E+03	–	–	–	–	3.0E+05	1.5E+05	3.2E+03	1.5E+03	–	–
Chrysene	218-01-9	1.0E+06	7.3E+05	2.9E+04	4.4E+04	1.0E+06	7.5E+05	–	–	–	–	–	–
Cobalt	7440-48-4	6.3E+03	3.3E+03	–	–	–	–	8.5E+04	4.4E+04	1.0E+04	2.0E+05	–	–
Copolymer acrylamide	69418-26-4	–	–	–	–	–	–	–	–	2.0E+02	4.1E+02	–	–
Copper	7440-50-8	–	–	–	–	–	–	–	–	9.9E+04	1.0E+06	–	–
Coronene	191-07-1	–	–	–	–	–	–	–	–	2.0E+03	4.1E+03	–	–
Coumaphos	56-72-4	–	–	–	–	–	–	–	–	7.2E+03	1.4E+04	–	–
Cresol	1319-77-3	–	–	–	–	–	–	–	–	5.1E+04	1.0E+05	–	–
Cresol, m- (3-methylphenol)	108-39-4	–	–	–	–	–	–	–	–	5.1E+04	1.0E+05	–	–
Cresol, o- (2-methylphenol)	95-48-7	–	–	–	–	–	–	–	–	5.1E+04	1.0E+05	–	–
Cresol, p- (4-methylphenol)	106-44-5	–	–	–	–	–	–	–	–	5.1E+03	1.0E+04	–	–
Crotonaldehyde	123-73-9	–	–	1.5E+01	–	–	–	–	–	1.0E+03	–	–	–
Cumene (isopropylbenzene)	98-82-8	–	–	–	–	–	–	1.3E+04	6.7E+03	1.0E+05	–	1.3E+04	6.7E+03
Cyanazine	21725-46-2	–	–	3.4E+01	6.8E+01	–	–	–	–	2.0E+03	4.1E+03	–	–
Cyanide	57-12-5	–	–	–	–	–	–	1.0E+03	5.2E+02	6.1E+02	1.2E+04	1.0E+03	5.2E+02
Cyanogen	460-19-5	–	–	–	–	–	–	1.7E+01	8.8E+00	1.0E+03	–	1.7E+01	8.8E+00
Cycloate	1134-23-2	–	–	–	–	–	–	–	–	5.6E+04	1.1E+05	–	–
Cyclohexane	110-82-7	–	–	–	–	–	–	1.3E+05	6.6E+04	1.0E+06	–	1.3E+05	6.6E+04
Cyclohexanol	108-93-0	–	–	–	–	–	–	–	–	1.0E+06	1.0E+06	–	–
Cyclohexanone	108-94-1	–	–	–	–	–	–	4.9E+04	2.5E+04	1.0E+06	–	4.9E+04	2.5E+04
Cyclohexene, 1-methanol-3-	1679-51-2	–	–	–	–	–	–	–	–	2.0E+04	4.1E+04	–	–
Cyclohexene, 4-vinyl-1-	100-40-3	–	–	–	–	–	–	7.1E+03	3.6E+03	2.2E+04	–	7.1E+03	3.6E+03
Cyclopentane	287-92-3	–	–	–	–	–	–	5.2E+05	2.7E+05	6.1E+04	–	5.2E+05	2.7E+05
Cyclopentane, methyl-	96-37-7	–	–	–	–	–	–	2.1E+04	1.1E+04	1.0E+05	–	2.1E+04	1.1E+04
Cyclopentene	142-29-0	–	–	–	–	–	–	–	–	1.0E+06	–	–	–
Cyclotetramethylenetetranitramine (HMX)	2691-41-0	–	–	–	–	–	–	–	–	5.1E+04	1.5E+04	–	–
Cyclotrimethylenetrinitramine (RDX)	121-82-4	–	–	3.6E+02	7.2E+02	–	–	–	–	4.1E+03	8.2E+03	–	–
Cymene (isopropyltoluene)	99-87-6	–	–	–	–	–	–	–	–	1.0E+05	–	–	–
Cymoxanil	57966-95-7	–	–	–	–	–	–	–	–	1.3E+04	2.7E+04	–	–
Dacthal (DCPA)	1861-32-1	–	–	–	–	–	–	–	–	1.0E+04	2.0E+04	–	–
Dalapon, sodium salt (2,2-dichloropropanoic acid)	75-99-0	–	–	–	–	–	–	–	–	3.1E+04	6.1E+04	–	–
DDD	72-54-8	–	–	1.2E+02	7.9E+02	–	–	–	–	–	–	–	–
DDE	72-55-9	–	–	8.4E+01	5.6E+02	–	–	–	–	–	–	–	–
DDT	50-29-3	2.0E+03	1.0E+03	8.4E+01	5.6E+02	2.0E+03	1.0E+03	–	–	5.1E+02	3.4E+03	–	–
Demeton	8065-48-3	–	–	–	–	–	–	–	–	4.1E+01	8.2E+01	–	–

**Table 7
Tier 1 Individual Commercial/Industrial Soil PCLs**

Last Revised: March 6, 2023

Chemical of Concern	CAS	Carcinogenic						Noncarcinogenic					
		Air ¹ Soil _{Inh-vp} 0.5 acre source area (mg/kg)	Air ¹ Soil _{Inh-vp} 30 acre source area (mg/kg)	Soil _{Ing} (mg/kg)	Soil _{Derm} (mg/kg)	Air ¹ Soil _{Inh-v¹} 0.5 acre source area (mg/kg)	Air ¹ Soil _{Inh-v¹} 30 acre source area (mg/kg)	Air ¹ Soil _{Inh-vp} 0.5 acre source area (mg/kg)	Air ¹ Soil _{Inh-vp} 30 acre source area (mg/kg)	Soil _{Ing} (mg/kg)	Soil _{Derm} (mg/kg)	Air ¹ Soil _{Inh-v¹} 0.5 acre source area (mg/kg)	Air ¹ Soil _{Inh-v¹} 30 acre source area (mg/kg)
Desethylatrazine	6190-65-4	–	–	–	–	–	–	–	–	3.6E+04	7.2E+04	–	–
Diacetone alcohol (4-hydroxy-4-methyl-2-pentanone)	123-42-2	–	–	–	–	–	–	–	–	4.1E+04	8.2E+04	–	–
Diallate	2303-16-4	–	–	4.7E+02	9.4E+02	–	–	–	–	–	–	–	–
Diazinon	333-41-5	–	–	–	–	–	–	9.1E+01	4.7E+01	9.2E+02	1.8E+03	9.1E+01	4.7E+01
Dibenz(a,h)acridine	226-36-8	2.4E+04	1.2E+04	2.4E+01	4.8E+01	2.6E+04	1.3E+04	–	–	–	–	–	–
Dibenz(a,j)acridine	224-42-0	3.3E+04	1.7E+04	3.9E+01	6.0E+01	3.5E+04	1.8E+04	–	–	–	–	–	–
Dibenz-a,h-anthracene	53-70-3	4.5E+03	2.3E+03	2.9E+01	4.4E+01	4.8E+03	2.5E+03	–	–	–	–	–	–
Dibenzo(a,e)pyrene	192-65-4	9.5E+03	4.9E+03	3.9E+00	7.8E+00	1.2E+04	6.2E+03	–	–	–	–	–	–
Dibenzo(a,h)pyrene	189-64-0	9.2E+02	4.7E+02	3.9E-01	7.8E-01	1.2E+03	6.0E+02	–	–	–	–	–	–
Dibenzo(a,i)pyrene	189-55-9	9.2E+02	4.7E+02	3.9E-01	7.8E-01	1.2E+03	6.0E+02	–	–	–	–	–	–
Dibenzofuran	132-64-9	–	–	–	–	–	–	–	–	4.1E+03	8.2E+03	–	–
Dibenzothiophene	132-65-0	–	–	–	–	–	–	–	–	3.1E+03	6.1E+03	–	–
Dibromo-3-chloropropane, 1,2-	96-12-8	2.6E-01	1.4E-01	3.6E+01	7.2E+01	2.6E-01	1.4E-01	1.1E+01	5.8E+00	2.0E+02	4.1E+02	1.1E+01	5.8E+00
Dibromochloromethane (chlorodibromomethane)	124-48-1	–	–	3.4E+02	–	–	–	–	–	2.0E+04	–	–	–
Dibromofluoromethane	1868-53-7	–	–	–	–	–	–	–	–	2.0E+05	–	–	–
Dicamba	1918-00-9	–	–	–	–	–	–	–	–	3.1E+04	6.1E+04	–	–
Dichlormid	37764-25-3	–	–	–	–	–	–	–	–	2.6E+04	5.1E+04	–	–
Dichloro-2-butene, 1,4-	764-41-0	3.3E-01	1.7E-01	–	–	3.3E-01	1.7E-01	–	–	–	–	–	–
Dichloro-2-butene, 1,4- trans	110-57-6	3.4E-01	1.8E-01	–	–	3.4E-01	1.8E-01	–	–	–	–	–	–
Dichlorobenzene, 1,2-	95-50-1	–	–	–	–	–	–	1.1E+03	5.7E+02	9.2E+04	–	1.1E+03	5.7E+02
Dichlorobenzene, 1,3-	541-73-1	–	–	–	–	–	–	1.7E+02	8.8E+01	3.1E+04	–	1.7E+02	8.8E+01
Dichlorobenzene, 1,4-	106-46-7	–	–	1.2E+03	–	–	–	1.6E+04	8.5E+03	–	–	1.6E+04	8.5E+03
Dichlorobenzidine, 3,3'-	91-94-1	–	–	6.4E+01	1.3E+02	–	–	–	–	–	–	–	–
Dichlorobutane, 2,3-	7581-97-7	–	–	–	–	–	–	1.5E+02	7.7E+01	1.0E+04	–	1.5E+02	7.7E+01
Dichlorodifluoromethane	75-71-8	–	–	–	–	–	–	2.1E+03	1.1E+03	2.0E+05	–	2.1E+03	1.1E+03
Dichloroethane, 1,1-	75-34-3	–	–	–	–	–	–	5.2E+04	2.7E+04	2.0E+05	–	5.2E+04	2.7E+04
Dichloroethane, 1,2-	107-06-2	1.8E+02	9.1E+01	3.1E+02	–	1.8E+02	9.1E+01	9.5E+02	4.9E+02	8.0E+04	–	9.5E+02	4.9E+02
Dichloroethylene, 1,1-	75-35-4	–	–	–	–	–	–	7.3E+03	3.8E+03	5.1E+04	–	7.3E+03	3.8E+03
Dichloroethylene, cis-1,2-	156-59-2	–	–	–	–	–	–	1.3E+03	6.6E+02	2.0E+03	–	1.3E+03	6.6E+02
Dichloroethylene, trans-1,2	156-60-5	–	–	–	–	–	–	1.3E+03	6.6E+02	2.0E+04	–	1.3E+03	6.6E+02
Dichlorofluoromethane	75-43-4	–	–	–	–	–	–	–	–	2.0E+05	–	–	–
Dichlorophenol, 2,3-	576-24-9	–	–	–	–	–	–	–	–	3.1E+03	6.1E+03	–	–
Dichlorophenol, 2,4-	120-83-2	–	–	–	–	–	–	–	–	3.1E+03	6.1E+03	–	–
Dichlorophenol, 2,5-	583-78-8	–	–	–	–	–	–	–	–	3.1E+03	6.1E+03	–	–
Dichlorophenol, 2,6-	87-65-0	–	–	–	–	–	–	–	–	1.0E+03	2.0E+03	–	–
Dichlorophenol, 3,4-	95-77-2	–	–	–	–	–	–	–	–	3.1E+03	6.1E+03	–	–
Dichlorophenol, 3,5-	591-35-5	–	–	–	–	–	–	–	–	3.1E+03	6.1E+03	–	–
Dichlorophenoxy, 2,4- butyric acid, 4- (2,4-DB)	94-82-6	–	–	–	–	–	–	–	–	8.2E+03	1.6E+04	–	–
Dichlorophenoxyacetic acid, 2,4- (2,4-D)	94-75-7	–	–	–	–	–	–	–	–	2.0E+05	8.2E+05	–	–

**Table 7
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		Air ¹ Soil _{Inh-vp} 0.5 acre source area (mg/kg)	Air ¹ Soil _{Inh-vp} 30 acre source area (mg/kg)	Soil _{Ing} (mg/kg)	Soil _{Derm} (mg/kg)	Air ¹ Soil _{Inh-v} 0.5 acre source area (mg/kg)	Air ¹ Soil _{Inh-v} 30 acre source area (mg/kg)	Air ¹ Soil _{Inh-vp} 0.5 acre source area (mg/kg)	Air ¹ Soil _{Inh-vp} 30 acre source area (mg/kg)	Soil _{Ing} (mg/kg)	Soil _{Derm} (mg/kg)	Air ¹ Soil _{Inh-v} 0.5 acre source area (mg/kg)	Air ¹ Soil _{Inh-v} 30 acre source area (mg/kg)
Dichloroprop (2-(2,4-dichlorophenoxy) propanoic acid)	120-36-5	–	–	–	–	–	–	–	–	1.0E+04	2.0E+04	–	–
Dichloropropane, 1,2-	78-87-5	6.5E+02	3.4E+02	7.7E+02	–	6.5E+02	3.4E+02	8.6E+01	4.4E+01	1.3E+05	–	8.6E+01	4.4E+01
Dichloropropane, 1,3-	142-28-9	1.5E+02	7.7E+01	2.9E+02	–	1.5E+02	7.7E+01	4.3E+02	2.2E+02	2.0E+04	–	4.3E+02	2.2E+02
Dichloropropane, 2,2-	594-20-7	–	–	4.2E+02	–	–	–	8.6E+01	4.4E+01	9.2E+04	–	8.6E+01	4.4E+01
Dichloropropanol, 2,3-	616-23-9	–	–	–	–	–	–	–	–	3.1E+03	6.1E+03	–	–
Dichloropropene, 1,1-	563-58-6	1.5E+02	7.7E+01	2.9E+02	–	1.5E+02	7.7E+01	4.3E+02	2.2E+02	3.1E+04	–	4.3E+02	2.2E+02
Dichloropropene, 1,3- (mixed isomers)	542-75-6	1.5E+02	7.7E+01	2.9E+02	–	1.5E+02	7.7E+01	4.3E+02	2.2E+02	3.1E+04	–	4.3E+02	2.2E+02
Dichloropropene, cis 1,3-	10061-01-5	–	–	5.3E+01	–	–	–	4.3E+02	2.2E+02	1.0E+02	–	4.3E+02	2.2E+02
Dichloropropene, trans 1,3-	10061-02-6	1.5E+02	7.7E+01	2.9E+02	–	1.5E+02	7.7E+01	4.3E+02	2.2E+02	3.1E+04	–	4.3E+02	2.2E+02
Dichlorvos	62-73-7	–	–	9.9E+01	2.0E+02	–	–	4.8E+05	2.5E+05	5.1E+02	1.0E+03	1.0E+06	8.7E+05
Dicrotophos (bidrin)	141-66-2	–	–	–	–	–	–	–	–	1.0E+02	2.0E+02	–	–
Dicyclopentadiene	77-73-6	–	–	–	–	–	–	–	–	8.2E+04	–	–	–
Dieldrin	60-57-1	5.3E+01	2.7E+01	1.8E+00	3.6E+00	5.3E+01	2.7E+01	–	–	5.1E+01	1.0E+02	–	–
Diethanolamine	111-42-2	–	–	–	–	–	–	4.9E+03	2.5E+03	5.1E+02	1.0E+03	4.9E+03	2.5E+03
Diethyldithiocarbamate, sodium salt	148-18-5	–	–	1.1E+02	–	–	–	–	–	3.1E+04	–	–	–
Diethyl phthalate	84-66-2	–	–	–	–	–	–	–	–	8.2E+05	1.0E+06	–	–
Diethylene glycol	111-46-6	–	–	–	–	–	–	–	–	1.0E+06	1.0E+06	–	–
Diethylene glycol monobutyl ether	112-34-5	–	–	–	–	–	–	2.8E+01	1.5E+01	3.1E+04	6.1E+04	2.8E+01	1.5E+01
Diethylhexyl adipate	103-23-1	–	–	2.4E+04	4.8E+04	–	–	–	–	6.1E+05	1.0E+06	–	–
Diethylstilbestrol	56-53-1	–	–	6.1E-03	1.2E-02	–	–	–	–	–	–	–	–
Diisobutylene (trimethyl-1-pentene, 2,4,4-)	107-39-1	–	–	–	–	–	–	4.3E+03	2.2E+03	6.1E+04	–	4.3E+03	2.2E+03
Diisopropylbenzene, p-	100-18-5	–	–	–	–	–	–	–	–	1.0E+04	2.0E+04	–	–
Diisopropyl ether (2,2'-oxybis-propane)	108-20-3	–	–	–	–	–	–	1.5E+04	7.7E+03	1.0E+05	–	1.5E+04	7.7E+03
Dimethenamid	87674-68-8	–	–	–	–	–	–	–	–	1.5E+04	3.1E+04	–	–
Dimethoate	60-51-5	–	–	–	–	–	–	–	–	2.0E+02	4.1E+02	–	–
Dimethoxybenzidine, 3,3'-	119-90-4	–	–	2.0E+03	4.1E+03	–	–	–	–	–	–	–	–
Dimethyl-2-nitrobenzene, 1,3-	81-20-9	–	–	–	–	–	–	3.8E+03	2.0E+03	2.0E+03	4.1E+03	3.9E+03	2.0E+03
Dimethyl-3-nitrobenzene, 1,2-	83-41-0	–	–	–	–	–	–	3.4E+03	1.7E+03	2.0E+03	4.1E+03	3.4E+03	1.7E+03
Dimethyl-4-nitrobenzene, 1-2-	99-51-4	–	–	–	–	–	–	3.5E+03	1.8E+03	2.0E+03	4.1E+03	3.5E+03	1.8E+03
Dimethyl-5-nitrobenzene, 1,3-	99-12-7	–	–	–	–	–	–	3.1E+03	1.6E+03	2.0E+03	4.1E+03	3.1E+03	1.6E+03
Dimethylphenethylamine, alpha, alpha-	122-09-8	–	–	–	–	–	–	–	–	2.0E+03	4.1E+03	–	–
Dimethyl phenol, 2,4-	105-67-9	–	–	–	–	–	–	–	–	2.0E+04	4.1E+04	–	–
Dimethylaminoazobenzene, p-	60-11-7	–	–	–	–	–	–	–	–	1.0E+01	2.0E+01	–	–
Dimethylbenz-a-anthracene, 7,12-	57-97-6	2.1E+02	1.1E+02	1.1E-01	1.8E-01	2.4E+02	1.2E+02	–	–	–	–	–	–
Dimethylbenzidine, 3,3'-	119-93-7	–	–	2.6E+00	5.2E+00	–	–	–	–	–	–	–	–
Dimethylformamide, N,N-	68-12-2	–	–	–	–	–	–	4.5E+03	2.3E+03	1.0E+05	–	4.5E+03	2.3E+03
Dimethylnaphthalene, 1,3-	575-41-7	–	–	–	–	–	–	–	–	4.1E+04	6.3E+04	–	–
Dimethylphthalate	131-11-3	–	–	–	–	–	–	–	–	8.2E+05	1.0E+06	–	–
Di-n-butyl phthalate	84-74-2	–	–	–	–	–	–	–	–	1.0E+05	2.0E+05	–	–

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Dinitro-2-methylphenol, 4,6- (dinitro-o-cresol, 4, 6-)	534-52-1	–	–	–	–	–	–	–	–	1.0E+02	2.0E+02	–	–
Dinitrobenzene, 1,3- (dinitrobenzene, 2,4-)	99-65-0	–	–	–	–	–	–	–	–	1.0E+02	2.0E+02	–	–
Dinitrobenzene, 1,4-	100-25-4	–	–	–	–	–	–	–	–	1.0E+02	2.0E+02	–	–
Dinitrophenol, 2,4-	51-28-5	–	–	–	–	–	–	–	–	2.0E+03	4.1E+03	–	–
Dinitrophenol, 2,5-	329-71-5	–	–	–	–	–	–	–	–	2.0E+03	4.1E+03	–	–
Dinitrotoluene, 2,4-	121-14-2	–	–	4.2E+01	8.4E+01	–	–	–	–	2.0E+03	4.1E+03	–	–
Dinitrotoluene, 2,6-	606-20-2	–	–	4.2E+01	8.4E+01	–	–	–	–	1.0E+03	2.0E+03	–	–
Di-n-octyl phthalate	117-84-0	–	–	–	–	–	–	–	–	1.0E+04	2.0E+04	–	–
Dinoseb	88-85-7	–	–	–	–	–	–	–	–	1.0E+03	2.0E+03	–	–
Dioxane 1,4-	123-91-1	3.0E+02	1.6E+02	2.9E+02	–	3.0E+02	1.6E+02	5.9E+03	3.1E+03	3.1E+04	–	5.9E+03	3.1E+03
Dioxin (as 2,3,7,8-TCDD toxicity equivalent quotients (TEQs))	1746-01-6	–	–	–	–	–	–	–	–	–	–	–	–
Diphenyl ether	101-84-8	–	–	–	–	–	–	–	–	6.3E+03	1.3E+04	–	–
Diphenylamine	122-39-4	–	–	–	–	–	–	–	–	2.6E+04	5.1E+04	–	–
Diphenylhydrazine, 1,2-	122-66-7	2.4E+02	1.2E+02	3.6E+01	7.2E+01	2.4E+02	1.2E+02	–	–	–	–	–	–
Dipropylene glycol	110-98-5	–	–	–	–	–	–	–	–	1.2E+05	2.5E+05	–	–
Diquat	85-00-7	–	–	–	–	–	–	–	–	2.2E+03	4.5E+03	–	–
Disodium iminodiacetate (iminodiacetic acid, disodium salt)	142-73-4	–	–	–	–	–	–	–	–	1.0E+04	2.0E+04	–	–
Disulfoton	298-04-4	–	–	–	–	–	–	–	–	4.1E+01	8.2E+01	–	–
Diuron	330-54-1	–	–	–	–	–	–	–	–	2.0E+03	4.1E+03	–	–
Dodecylphenol, 4-	104-43-8	–	–	–	–	–	–	–	–	5.1E+04	1.0E+05	–	–
Endosulfan	115-29-7	–	–	–	–	–	–	–	–	6.1E+03	1.2E+04	–	–
Endosulfan I	959-98-8	–	–	–	–	–	–	–	–	2.0E+03	4.1E+03	–	–
Endosulfan II	33213-65-9	–	–	–	–	–	–	–	–	6.1E+03	1.2E+04	–	–
Endosulfan sulfate	1031-07-8	–	–	–	–	–	–	–	–	6.1E+03	1.2E+04	–	–
Endothall	145-73-3	–	–	–	–	–	–	–	–	2.0E+04	4.1E+04	–	–
Endrin	72-20-8	–	–	–	–	–	–	–	–	3.1E+02	6.1E+02	–	–
Endrin aldehyde	7421-93-4	–	–	–	–	–	–	–	–	3.1E+02	6.1E+02	–	–
Endrin ketone	53494-70-5	–	–	–	–	–	–	–	–	3.1E+02	6.1E+02	–	–
Epichlorohydrin	106-89-8	8.6E+02	4.4E+02	2.9E+03	–	8.6E+02	4.4E+02	3.7E+01	1.9E+01	6.1E+03	–	3.7E+01	1.9E+01
EPN (o-ethyl o-(4-nitrophenyl)phenylphosphonothioate)	2104-64-5	–	–	–	–	–	–	–	–	1.0E+01	2.0E+01	–	–
Esfenvalerate	66230-04-4	–	–	–	–	–	–	–	–	2.0E+03	4.1E+03	–	–
Ethalfuralin (sonolan)	55283-68-6	–	–	3.2E+02	6.4E+02	–	–	–	–	4.1E+04	8.2E+04	–	–
Ethanol	64-17-5	–	–	–	–	–	–	–	–	1.0E+06	–	–	–
Ethanol, 2-amino-	141-43-5	–	–	–	–	–	–	4.1E+03	2.1E+03	1.7E+03	3.5E+03	4.1E+03	2.1E+03
Ethanol, 2-(2-aminoethoxy)-	929-06-6	–	–	–	–	–	–	–	–	5.1E+02	1.0E+03	–	–
Ethanol, 2-(2-ethoxyethoxy)-	111-90-0	–	–	–	–	–	–	–	–	1.0E+06	1.0E+06	–	–
Ethanol, 2-(methylamino)-	109-83-1	–	–	–	–	–	–	9.0E+03	4.6E+03	1.6E+04	3.3E+04	9.0E+03	4.6E+03
Ethion	563-12-2	–	–	–	–	–	–	–	–	5.1E+02	1.0E+03	–	–
Ethoprop	13194-48-4	–	–	1.0E+03	2.0E+03	–	–	–	–	1.0E+02	2.0E+02	–	–

**Table 7
Tier 1 Individual Commercial/Industrial Soil PCLs**

Last Revised: March 6, 2023

Chemical of Concern	CAS	Carcinogenic						Noncarcinogenic					
		Air ¹ Soil _{Inh-vp} 0.5 acre source area (mg/kg)	Air ¹ Soil _{Inh-vp} 30 acre source area (mg/kg)	Soil _{Inh-vp} (mg/kg)	Soil _{Derm} (mg/kg)	Air ¹ Soil _{Inh-v} 0.5 acre source area (mg/kg)	Air ¹ Soil _{Inh-v} 30 acre source area (mg/kg)	Air ¹ Soil _{Inh-vp} 0.5 acre source area (mg/kg)	Air ¹ Soil _{Inh-vp} 30 acre source area (mg/kg)	Soil _{Inh-vp} (mg/kg)	Soil _{Derm} (mg/kg)	Air ¹ Soil _{Inh-v} 0.5 acre source area (mg/kg)	Air ¹ Soil _{Inh-v} 30 acre source area (mg/kg)
Ethoxy ethanol, 2-	110-80-5	–	–	–	–	–	–	3.5E+04	1.8E+04	9.2E+04	–	3.5E+04	1.8E+04
Ethyl acetate	141-78-6	–	–	–	–	–	–	5.1E+03	2.6E+03	9.2E+05	–	5.1E+03	2.6E+03
Ethyl acrylate	140-88-5	–	–	6.0E+02	–	–	–	3.4E+02	1.7E+02	5.1E+03	–	3.4E+02	1.7E+02
Ethyl benzene	100-41-4	–	–	–	–	–	–	4.1E+04	2.1E+04	1.0E+05	–	4.1E+04	2.1E+04
Ethyl dipropylthiocarbamate, S-	759-94-4	–	–	–	–	–	–	–	–	2.6E+04	5.1E+04	–	–
Ethyl ether	60-29-7	–	–	–	–	–	–	–	–	2.0E+05	–	–	–
Ethyl methacrylate	97-63-2	–	–	–	–	–	–	9.9E+03	5.1E+03	9.2E+04	–	9.9E+03	5.1E+03
Ethyl methanesulfonate	62-50-0	2.0E+02	1.0E+02	2.9E+02	5.8E+02	2.0E+02	1.0E+02	–	–	–	–	–	–
Ethyl tert-butyl ether (2-ethyl-2-ethoxypropane)	637-92-3	–	–	–	–	–	–	6.4E+03	3.3E+03	1.0E+03	–	6.4E+03	3.3E+03
Ethyl-1-hexanol, 2-	104-76-7	–	–	–	–	–	–	–	–	1.5E+05	3.1E+05	–	–
Ethyl-2-hexenal, 2-	645-62-5	–	–	–	–	–	–	–	–	1.5E+05	–	–	–
Ethyl-2-methyl benzene, 1-	611-14-3	–	–	–	–	–	–	1.2E+04	6.1E+03	5.1E+04	–	1.2E+04	6.1E+03
Ethyl-4-methyl benzene, 1-	622-96-8	–	–	–	–	–	–	1.0E+04	5.2E+03	5.1E+04	–	1.0E+04	5.2E+03
Ethylene*	74-85-1	–	–	–	–	–	–	–	–	–	–	–	–
Ethylene dibromide (dibromoethane, 1,2-)	106-93-4	2.2E+01	1.1E+01	1.4E+01	–	2.2E+01	1.1E+01	2.3E+03	1.2E+03	9.2E+03	–	2.3E+03	1.2E+03
Ethylene glycol	107-21-1	–	–	–	–	–	–	–	–	1.0E+06	1.0E+06	–	–
Ethylene oxide	75-21-8	4.3E+02	2.2E+02	2.8E+01	–	4.3E+02	2.2E+02	–	–	–	–	–	–
Ethylene thiourea	96-45-7	–	–	2.6E+02	5.2E+02	–	–	–	–	8.2E+01	1.6E+02	–	–
Ethylenediamine	107-15-3	–	–	–	–	–	–	–	–	9.2E+04	–	–	–
Ethylenimine	151-56-4	2.2E-01	1.1E-01	4.4E-01	–	2.2E-01	1.1E-01	–	–	–	–	–	–
Ethylhexyl acrylate, 2-	103-11-7	–	–	6.0E+02	1.2E+03	–	–	–	–	–	–	–	–
Famphur	52-85-7	–	–	–	–	–	–	–	–	3.1E+01	6.1E+01	–	–
Fensulfothion	115-90-2	–	–	–	–	–	–	–	–	1.0E+03	2.0E+03	–	–
Fenthion	55-38-9	–	–	–	–	–	–	–	–	7.2E+01	1.4E+02	–	–
Fenuron	101-42-8	–	–	–	–	–	–	–	–	7.2E+04	1.4E+05	–	–
Fluoranthene	206-44-0	–	–	–	–	–	–	–	–	4.1E+04	6.3E+04	–	–
Fluorene	86-73-7	–	–	–	–	–	–	–	–	4.1E+04	6.3E+04	–	–
Fluorine (soluble fluoride)	7782-41-4	–	–	–	–	–	–	1.0E+06	1.0E+06	6.1E+04	1.0E+06	–	–
Fluorochloridone	61213-25-0	–	–	–	–	–	–	–	–	7.7E+03	1.5E+04	–	–
Fonofos	944-22-9	–	–	–	–	–	–	–	–	2.0E+03	4.1E+03	–	–
Formaldehyde	50-00-0	–	–	–	–	–	–	1.4E+03	7.1E+02	2.0E+05	–	1.4E+03	7.1E+02
Formic acid	64-18-6	–	–	–	–	–	–	3.0E+02	1.5E+02	9.2E+05	–	3.0E+02	1.5E+02
Furan	110-00-9	–	–	–	–	–	–	–	–	1.0E+03	–	–	–
Furfural	98-01-1	–	–	–	–	–	–	–	–	3.1E+03	–	–	–
Glycidylaldehyde	765-34-4	–	–	–	–	–	–	2.1E+02	1.1E+02	4.1E+02	–	2.1E+02	1.1E+02
Glyphosate	1071-83-6	–	–	–	–	–	–	–	–	1.0E+06	1.0E+06	–	–
Heptachlor	76-44-8	1.5E+01	7.9E+00	6.4E+00	1.3E+01	1.5E+01	7.9E+00	–	–	5.1E+02	1.0E+03	–	–
Heptachlor epoxide	1024-57-3	4.0E+01	2.0E+01	3.1E+00	6.3E+00	4.0E+01	2.1E+01	–	–	1.3E+01	2.7E+01	–	–
Heptane, n-	142-82-5	–	–	–	–	–	–	1.9E+05	9.9E+04	6.1E+04	–	1.9E+05	9.9E+04

**Table 7
Tier 1 Individual Commercial/Industrial Soil PCLs**

Last Revised: March 6, 2023

Chemical of Concern	CAS	Carcinogenic						Noncarcinogenic					
		Air ¹ Soil _{Inh-vp} 0.5 acre source area (mg/kg)	Air ¹ Soil _{Inh-vp} 30 acre source area (mg/kg)	Soil _{Inh-vp} (mg/kg)	Soil _{Derm} (mg/kg)	Air ¹ Soil _{Inh-v} 0.5 acre source area (mg/kg)	Air ¹ Soil _{Inh-v} 30 acre source area (mg/kg)	Air ¹ Soil _{Inh-vp} 0.5 acre source area (mg/kg)	Air ¹ Soil _{Inh-vp} 30 acre source area (mg/kg)	Soil _{Inh-vp} (mg/kg)	Soil _{Derm} (mg/kg)	Air ¹ Soil _{Inh-v} 0.5 acre source area (mg/kg)	Air ¹ Soil _{Inh-v} 30 acre source area (mg/kg)
Heptanoic acid, n-	111-14-8	—	—	—	—	—	—	1.7E+02	8.8E+01	5.1E+05	1.0E+06	1.7E+02	8.8E+01
Hexachlorobenzene	118-74-1	3.2E+01	1.6E+01	1.8E+01	3.6E+01	3.2E+01	1.6E+01	—	—	8.2E+02	1.6E+03	—	—
Hexachlorobutadiene	87-68-3	4.9E+01	2.5E+01	3.7E+02	7.3E+02	4.9E+01	2.5E+01	—	—	1.0E+03	2.0E+03	—	—
Hexachlorocyclohexane, alpha (alpha-BHC)	319-84-6	2.3E+01	1.2E+01	4.5E+00	2.3E+01	2.3E+01	1.2E+01	—	—	8.2E+03	4.1E+04	—	—
Hexachlorocyclohexane, beta (beta-BHC)	319-85-7	1.2E+02	6.2E+01	1.6E+01	7.9E+01	1.2E+02	6.2E+01	—	—	—	—	—	—
Hexachlorocyclohexane, delta (delta-BHC)	319-86-8	1.7E+02	8.7E+01	1.6E+01	7.9E+01	1.7E+02	8.8E+01	—	—	3.1E+02	1.5E+03	—	—
Hexachlorocyclohexane, gamma (lindane; gamma-BHC)	58-89-9	—	—	2.2E+01	1.1E+02	—	—	—	—	3.1E+02	1.5E+03	—	—
Hexachlorocyclohexane, techn (technical-BHC)	608-73-1	1.5E+02	7.7E+01	1.6E+01	7.9E+01	1.5E+02	7.7E+01	—	—	—	—	—	—
Hexachlorocyclopentadiene	77-47-4	—	—	—	—	—	—	2.0E+01	1.0E+01	6.1E+03	1.2E+04	2.0E+01	1.0E+01
Hexachloroethane	67-72-1	—	—	7.2E+02	1.4E+03	—	—	6.9E+03	3.6E+03	7.2E+02	1.4E+03	6.9E+03	3.6E+03
Hexachlorophene	70-30-4	—	—	—	—	—	—	—	—	3.1E+02	6.1E+02	—	—
Hexachloropropylene	1888-71-7	—	—	7.2E+02	1.4E+03	—	—	7.1E+03	3.7E+03	7.2E+02	1.4E+03	7.1E+03	3.7E+03
Hexanal, 2-ethyl-	123-05-7	—	—	—	—	—	—	—	—	1.5E+05	3.1E+05	—	—
Hexane, n-	110-54-3	—	—	—	—	—	—	1.4E+04	7.4E+03	6.1E+04	—	1.4E+04	7.4E+03
Hexanediamine, 1,6-	124-09-4	—	—	—	—	—	—	—	—	5.1E+03	1.0E+04	—	—
Hexanedinitrile	111-69-3	—	—	—	—	—	—	1.4E+03	7.1E+02	1.4E+03	2.9E+03	1.4E+03	7.1E+02
Hexanediol, 1,6-	629-11-8	—	—	—	—	—	—	1.0E+06	1.0E+06	1.0E+06	1.0E+06	1.0E+06	1.0E+06
Hexanoic acid	142-62-1	—	—	—	—	—	—	1.9E+02	9.8E+01	6.5E+04	1.3E+05	1.9E+02	9.8E+01
Hexanone, 2-	591-78-6	—	—	—	—	—	—	1.2E+03	5.9E+02	5.1E+04	—	1.2E+03	5.9E+02
Hexazinone	51235-04-2	—	—	—	—	—	—	—	—	3.4E+04	6.7E+04	—	—
Hexene, 1-	592-41-6	—	—	—	—	—	—	2.4E+03	1.2E+03	3.4E+05	—	2.4E+03	1.2E+03
Hexene, cis-2-	7688-21-3	—	—	—	—	—	—	2.4E+03	1.2E+03	3.4E+05	—	2.4E+03	1.2E+03
Hexylene glycol (2-methyl-2,4-pentanediol)	107-41-5	—	—	—	—	—	—	—	—	3.1E+05	6.1E+05	—	—
Hydrazine	302-01-2	7.8E-01	4.0E-01	9.5E+00	—	7.8E-01	4.0E-01	4.1E+00	2.1E+00	—	—	4.1E+00	2.1E+00
Hydrocaproic acid, 6- (6-hydroxyhexanoic acid)	1191-25-9	—	—	—	—	—	—	2.3E+02	1.2E+02	6.5E+04	1.3E+05	2.3E+02	1.2E+02
Hydrogen chloride (hydrochloric acid)*	7647-01-0	—	—	—	—	—	—	—	—	—	—	—	—
Hydroquinone	123-31-9	—	—	4.8E+02	9.5E+02	—	—	—	—	4.1E+04	8.2E+04	—	—
Indene	95-13-6	—	—	—	—	—	—	1.6E+02	8.1E+01	2.0E+04	—	1.6E+02	8.1E+01
Indeno-1,2,3-cd-pyrene	193-39-5	5.6E+04	2.9E+04	2.9E+02	4.4E+02	6.2E+04	3.2E+04	—	—	—	—	—	—
Iron*	7439-89-6	—	—	—	—	—	—	—	—	—	—	—	—
Isoamyl alcohol	123-51-3	—	—	—	—	—	—	—	—	5.1E+03	—	—	—
Isobutyl alcohol	78-83-1	—	—	—	—	—	—	—	—	3.1E+05	—	—	—
Isobutylene (2-methyl-1-propene)	115-11-7	—	—	—	—	—	—	1.0E+06	1.0E+06	3.8E+05	—	1.0E+06	1.0E+06
Isobutyric acid (2-methylpropanoic acid)	79-31-2	—	—	—	—	—	—	—	—	5.1E+05	1.0E+06	—	—
Isodecanol	25339-17-7	—	—	—	—	—	—	—	—	1.6E+03	3.3E+03	—	—
Isodrin	465-73-6	2.9E+00	1.5E+00	1.7E-01	3.4E-01	2.9E+00	1.5E+00	—	—	3.1E+00	6.1E+00	—	—
Isopentane	78-78-4	—	—	—	—	—	—	5.2E+05	2.7E+05	6.1E+04	—	5.2E+05	2.7E+05
Isophorone	78-59-1	—	—	3.0E+04	6.0E+04	—	—	—	—	2.0E+05	4.1E+05	—	—
Isopropyl acetate	108-21-4	—	—	—	—	—	—	—	—	7.2E+04	—	—	—

**Table 7
Tier 1 Individual Commercial/Industrial Soil PCLs**

Last Revised: March 6, 2023

Chemical of Concern	CAS	Carcinogenic						Noncarcinogenic					
		Air ¹ Soil _{Inh-vp} 0.5 acre source area (mg/kg)	Air ¹ Soil _{Inh-vp} 30 acre source area (mg/kg)	Soil _{Inh-vp} (mg/kg)	Soil _{Derm} (mg/kg)	Air ¹ Soil _{Inh-v} 0.5 acre source area (mg/kg)	Air ¹ Soil _{Inh-v} 30 acre source area (mg/kg)	Air ¹ Soil _{Inh-vp} 0.5 acre source area (mg/kg)	Air ¹ Soil _{Inh-vp} 30 acre source area (mg/kg)	Soil _{Inh-vp} (mg/kg)	Soil _{Derm} (mg/kg)	Air ¹ Soil _{Inh-v} 0.5 acre source area (mg/kg)	Air ¹ Soil _{Inh-v} 30 acre source area (mg/kg)
Isopropyl alcohol	67-63-0	–	–	–	–	–	–	1.4E+04	7.0E+03	1.0E+06	–	1.4E+04	7.0E+03
Isosafrole	120-58-1	1.5E+02	7.9E+01	1.3E+02	2.6E+02	1.5E+02	7.9E+01	–	–	–	–	–	–
Kelthane (dicofol)	115-32-2	–	–	–	–	–	–	–	–	6.1E+03	1.2E+04	–	–
Kepone (chlordecone)	143-50-0	8.1E+01	4.2E+01	2.9E+00	5.7E+00	8.2E+01	4.2E+01	–	–	3.1E+02	6.1E+02	–	–
Lead (inorganic)	7439-92-1	–	–	–	–	–	–	–	–	–	–	–	–
Leptophos	21609-90-5	–	–	–	–	–	–	4.6E+01	2.3E+01	5.1E+00	1.0E+01	4.7E+01	2.4E+01
Limonene, d-*	5989-27-5	–	–	–	–	–	–	–	–	–	–	–	–
Lithium	7439-93-2	–	–	–	–	–	–	–	–	7.2E+03	1.4E+05	–	–
Magnesium*	7439-95-4	–	–	–	–	–	–	–	–	–	–	–	–
Malathion	121-75-5	–	–	–	–	–	–	2.8E+02	1.4E+02	2.0E+04	4.1E+04	2.8E+02	1.4E+02
Maleic anhydride	108-31-6	–	–	–	–	–	–	–	–	1.0E+05	2.0E+05	–	–
Maleic hydrazide	123-33-1	–	–	–	–	–	–	–	–	5.1E+05	1.0E+06	–	–
Malononitrile	109-77-3	–	–	–	–	–	–	–	–	1.0E+02	2.0E+02	–	–
Mancozeb	8018-01-7	–	–	–	–	–	–	–	–	3.1E+04	6.1E+04	–	–
Manganese	7439-96-5	–	–	–	–	–	–	1.0E+06	5.9E+05	1.4E+05	1.7E+05	–	–
MCPA (4-(chloro-2-methylphenoxy) acetic acid)	94-74-6	–	–	–	–	–	–	–	–	5.1E+02	1.0E+03	–	–
MCPP (2-(4-chloro-2-methylphenoxy) propanoic acid)	93-65-2	–	–	–	–	–	–	–	–	1.0E+03	2.0E+03	–	–
Mercury (pH = 4.9) ²	7439-97-6	–	–	–	–	–	–	6.4E+00	3.3E+00	3.1E+02	4.3E+02	6.4E+00	3.3E+00
Mercury (pH=6.8) ²	7439-97-6	–	–	–	–	–	–	2.2E+01	1.1E+01	3.1E+02	4.3E+02	2.2E+01	1.1E+01
Merphos	150-50-5	–	–	–	–	–	–	–	–	3.1E+01	6.1E+01	–	–
Methacrylic acid (2-methyl-2-propenoic acid)	79-41-4	–	–	–	–	–	–	–	–	1.0E+04	–	–	–
Methacrylonitrile	126-98-7	–	–	–	–	–	–	8.2E+02	4.2E+02	5.1E+04	–	8.2E+02	4.2E+02
Methanol	67-56-1	–	–	–	–	–	–	4.6E+05	2.4E+05	1.0E+06	–	4.6E+05	2.4E+05
Methapyrilene	91-80-5	–	–	6.1E+00	1.2E+01	–	–	–	–	–	–	–	–
Methomyl	16752-77-5	–	–	–	–	–	–	–	–	2.6E+04	5.1E+04	–	–
Methoxychlor	72-43-5	–	–	–	–	–	–	–	–	5.1E+03	1.0E+04	–	–
Methoxyethanol, 2-	109-86-4	–	–	–	–	–	–	4.3E+02	2.2E+02	2.8E+04	–	4.3E+02	2.2E+02
Methyl acetate (acetic acid, methyl ester)	79-20-9	–	–	–	–	–	–	–	–	1.0E+06	–	–	–
Methyl acrylate	96-33-3	–	–	–	–	–	–	4.3E+02	2.2E+02	2.0E+03	–	4.3E+02	2.2E+02
Methyl amyl ketone (2-heptanone)	110-43-0	–	–	–	–	–	–	1.6E+05	8.0E+04	5.1E+04	–	1.6E+05	8.0E+04
Methyl chrysene, 1-	3351-28-8	1.0E+06	1.0E+06	3.9E+03	6.0E+03	1.0E+06	1.0E+06	–	–	–	–	–	–
Methyl chrysene, 2-	3351-32-4	1.0E+06	1.0E+06	3.9E+03	6.0E+03	1.0E+06	1.0E+06	–	–	–	–	–	–
Methyl chrysene, 6-	1705-85-7	3.6E+05	1.9E+05	3.9E+02	6.0E+02	3.9E+05	2.0E+05	–	–	–	–	–	–
Methyl cyclohexane	108-87-2	–	–	–	–	–	–	6.4E+04	3.3E+04	1.0E+06	–	6.4E+04	3.3E+04
Methyl ethyl ketone (2-butanone)	78-93-3	–	–	–	–	–	–	2.8E+05	1.4E+05	6.1E+05	–	2.8E+05	1.5E+05
Methyl iodide (iodomethane)	74-88-4	–	–	–	–	–	–	–	–	1.4E+03	–	–	–
Methyl isobutyl ketone (4-methyl-2-pentanone)	108-10-1	–	–	–	–	–	–	8.1E+04	4.2E+04	8.2E+04	–	8.1E+04	4.2E+04
Methyl mercury	22967-92-6	–	–	–	–	–	–	–	–	1.0E+02	2.0E+03	–	–
Methyl methacrylate	80-62-6	–	–	–	–	–	–	1.5E+04	7.7E+03	1.0E+06	–	1.5E+04	7.7E+03

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Last Revised: March 6, 2023

Chemical of Concern	CAS	Carcinogenic						Noncarcinogenic					
		Air ¹ Soil _{Inh-vp} 0.5 acre source area (mg/kg)	Air ¹ Soil _{Inh-vp} 30 acre source area (mg/kg)	Soil _{Inh-vp} (mg/kg)	Soil _{Derm} (mg/kg)	Air ¹ Soil _{Inh-v} 0.5 acre source area (mg/kg)	Air ¹ Soil _{Inh-v} 30 acre source area (mg/kg)	Air ¹ Soil _{Inh-vp} 0.5 acre source area (mg/kg)	Air ¹ Soil _{Inh-vp} 30 acre source area (mg/kg)	Soil _{Inh-vp} (mg/kg)	Soil _{Derm} (mg/kg)	Air ¹ Soil _{Inh-v} 0.5 acre source area (mg/kg)	Air ¹ Soil _{Inh-v} 30 acre source area (mg/kg)
Methyl methanesulfonate	66-27-3	1.9E+02	9.7E+01	2.9E+02	5.8E+02	1.9E+02	9.7E+01	—	—	—	—	—	—
Methyl parathion	298-00-0	—	—	—	—	—	—	—	—	2.6E+02	5.1E+02	—	—
Methyl-1-butene, 2-	563-46-2	—	—	—	—	—	—	3.9E+05	2.0E+05	6.1E+04	—	3.9E+05	2.0E+05
Methyl-1-propanal, 2- (isobutyraldehyde)	78-84-2	—	—	—	—	—	—	—	—	4.1E+04	—	—	—
Methyl-2-butene, 2-	513-35-9	—	—	—	—	—	—	3.9E+05	2.0E+05	6.1E+04	—	3.9E+05	2.0E+05
Methyl-2-pentenal, 2-	623-36-9	—	—	1.5E+01	—	—	—	—	—	—	—	—	—
Methylcholanthrene, 3-	56-49-5	2.5E+03	1.3E+03	1.3E+00	2.0E+00	3.0E+03	1.5E+03	—	—	—	—	—	—
Methylene bromide (dibromomethane)	74-95-3	—	—	3.8E+03	—	—	—	1.1E+02	5.9E+01	6.1E+04	—	1.1E+02	5.9E+01
Methylene chloride (dichloromethane)	75-09-2	2.1E+04	1.1E+04	2.9E+05	—	2.1E+04	1.1E+04	2.8E+04	1.4E+04	2.1E+04	—	2.8E+04	1.4E+04
Methylene-bis (2-chloroaniline) 4,4'-	101-14-4	4.5E+03	2.3E+03	2.9E+02	5.7E+02	4.5E+03	2.3E+03	—	—	2.0E+03	4.1E+03	—	—
Methylmercury hydroxide	1184-57-2	—	—	—	—	—	—	—	—	1.0E+02	2.0E+02	—	—
Methylnaphthalene, 1-	90-12-0	—	—	9.9E+02	1.5E+03	—	—	—	—	7.2E+04	1.1E+05	—	—
Methylnaphthalene, 2-	91-57-6	—	—	—	—	—	—	—	—	4.1E+03	6.3E+03	—	—
Methylpyrrolidone, N-	872-50-4	—	—	—	—	—	—	—	—	2.0E+04	4.1E+04	—	—
Methylstyrene, alpha-	98-83-9	—	—	—	—	—	—	6.8E+02	3.5E+02	8.5E+03	—	6.8E+02	3.5E+02
Methyltetrahydrofuran, 2-	96-47-9	3.2E+02	1.6E+02	3.8E+03	—	3.2E+02	1.6E+02	—	—	2.0E+05	—	—	—
Methyltetrahydropyran, 2-	10141-72-7	3.7E+02	1.9E+02	3.8E+03	—	3.7E+02	1.9E+02	—	—	2.0E+05	—	—	—
Metolachlor	51218-45-2	—	—	—	—	—	—	—	—	1.5E+05	3.1E+05	—	—
Metribuzin	21087-64-9	—	—	—	—	—	—	—	—	2.6E+04	5.1E+04	—	—
Mirex	2385-85-5	—	—	—	—	—	—	—	—	2.0E+02	4.1E+02	—	—
Molinate	2212-67-1	—	—	—	—	—	—	—	—	2.0E+03	4.1E+03	—	—
Molybdenum	7439-98-7	—	—	—	—	—	—	—	—	5.1E+03	3.9E+04	—	—
Monocrotophos	2157-98-4	—	—	—	—	—	—	—	—	6.1E+02	1.2E+03	—	—
Morpholine	110-91-8	—	—	—	—	—	—	—	—	1.0E+06	—	—	—
Morpholine, N-butyl-	1005-67-0	—	—	—	—	—	—	—	—	2.4E+03	4.7E+03	—	—
MTBE (methyl tert-butyl ether)	1634-04-4	2.3E+03	1.2E+03	1.6E+04	—	2.3E+03	1.2E+03	6.4E+04	3.3E+04	1.0E+04	—	6.4E+04	3.3E+04
Naled	300-76-5	—	—	—	—	—	—	—	—	2.0E+03	4.1E+03	—	—
Naphthalene	91-20-3	—	—	—	—	—	—	3.7E+02	1.9E+02	2.0E+04	3.1E+04	3.7E+02	1.9E+02
Naphthoquinone, 1,4-	130-15-4	—	—	—	—	—	—	—	—	7.2E+03	1.4E+04	—	—
Naphthylamine, 1-	134-32-7	—	—	—	—	—	—	—	—	2.0E+04	4.1E+04	—	—
Naphthylamine, 2-	91-59-8	—	—	1.6E+01	3.2E+01	—	—	—	—	—	—	—	—
Napropamide	15299-99-7	—	—	—	—	—	—	—	—	1.0E+05	2.0E+05	—	—
Neopentyl glycol	126-30-7	—	—	—	—	—	—	—	—	3.1E+05	6.1E+05	—	—
Nickel and compounds	7440-02-0	2.2E+05	1.1E+05	—	—	—	—	3.1E+05	1.6E+05	2.0E+04	1.6E+04	—	—
Nitrate-N	14797-55-8	—	—	—	—	—	—	—	—	1.0E+06	1.0E+06	—	—
Nitrite-N	14797-65-0	—	—	—	—	—	—	—	—	1.0E+05	1.0E+06	—	—
Nitroaniline, 2-	88-74-4	—	—	—	—	—	—	6.7E+01	3.4E+01	3.1E+02	6.1E+02	6.7E+01	3.4E+01
Nitroaniline, 3-	99-09-2	—	—	7.5E+02	1.5E+03	—	—	8.4E+01	4.3E+01	3.1E+02	6.1E+02	8.4E+01	4.3E+01
Nitroaniline, 4-	100-01-6	—	—	1.4E+03	2.9E+03	—	—	1.7E+03	8.7E+02	4.1E+03	8.2E+03	1.7E+03	8.7E+02

**Table 7
Tier 1 Individual Commercial/Industrial Soil PCLs**

Last Revised: March 6, 2023

Chemical of Concern	CAS	Carcinogenic						Noncarcinogenic					
		Air ¹ Soil _{Inh-vp} 0.5 acre source area (mg/kg)	Air ¹ Soil _{Inh-vp} 30 acre source area (mg/kg)	Soil _{Inh-vp} (mg/kg)	Soil _{Derm} (mg/kg)	Air ¹ Soil _{Inh-v} 0.5 acre source area (mg/kg)	Air ¹ Soil _{Inh-v} 30 acre source area (mg/kg)	Air ¹ Soil _{Inh-vp} 0.5 acre source area (mg/kg)	Air ¹ Soil _{Inh-vp} 30 acre source area (mg/kg)	Soil _{Inh-vp} (mg/kg)	Soil _{Derm} (mg/kg)	Air ¹ Soil _{Inh-v} 0.5 acre source area (mg/kg)	Air ¹ Soil _{Inh-v} 30 acre source area (mg/kg)
Nitrobenzene	98-95-3	1.1E+02	5.7E+01	–	–	1.1E+02	5.7E+01	1.4E+03	7.3E+02	2.0E+03	4.1E+03	1.4E+03	7.3E+02
Nitroglycerin	55-63-0	–	–	1.7E+03	3.4E+03	–	–	–	–	1.0E+02	2.0E+02	–	–
Nitrophenol, 2-	88-75-5	–	–	–	–	–	–	–	–	2.0E+03	4.1E+03	–	–
Nitrophenol, 3-	554-84-7	–	–	–	–	–	–	–	–	2.0E+03	4.1E+03	–	–
Nitrophenol, 4-	100-02-7	–	–	–	–	–	–	–	–	2.0E+03	4.1E+03	–	–
Nitropropane, 2-	79-46-9	1.0E+00	5.3E-01	–	–	1.0E+00	5.3E-01	4.3E+02	2.2E+02	1.4E+02	–	4.3E+02	2.2E+02
Nitroquinoline-N-oxide, 4-	56-57-5	3.2E+00	1.6E+00	3.0E+00	6.1E+00	3.2E+00	1.6E+00	–	–	–	–	–	–
Nitrosodiethanolamine	1116-54-7	–	–	1.0E+01	2.0E+01	–	–	–	–	–	–	–	–
Nitrosodiethylamine, n-	55-18-5	1.1E-01	5.7E-02	1.9E-01	–	1.1E-01	5.7E-02	–	–	–	–	–	–
Nitrosodimethylamine, n-	62-75-9	3.3E-01	1.7E-01	5.6E-01	–	3.3E-01	1.7E-01	6.6E+00	3.4E+00	8.2E+00	–	6.6E+00	3.4E+00
Nitrosodi-n-butylamine, n-	924-16-3	1.7E+00	9.0E-01	5.3E+00	1.1E+01	1.7E+00	9.0E-01	–	–	–	–	–	–
Nitrosodi-n-propylamine, n-	621-64-7	–	–	4.1E+00	2.0E+00	–	–	–	–	–	–	–	–
Nitrosodiphenylamine	86-30-6	–	–	5.8E+03	2.9E+03	–	–	–	–	–	–	–	–
Nitroso-methyl-ethyl-amine, n-	10595-95-6	–	–	1.3E+00	–	–	–	–	–	–	–	–	–
Nitrosomorpholine, N-	59-89-2	2.9E+00	1.5E+00	4.3E+00	8.5E+00	2.9E+00	1.5E+00	–	–	–	–	–	–
Nitroso-n-ethylurea, n-	759-73-9	–	–	2.0E-01	4.1E-01	–	–	–	–	–	–	–	–
Nitrosopiperidine, N-	100-75-4	2.2E+00	1.2E+00	3.0E+00	6.1E+00	2.2E+00	1.2E+00	–	–	–	–	–	–
Nitrosopyrrolidine, n-	930-55-2	9.8E+00	5.0E+00	1.4E+01	2.7E+01	9.8E+00	5.0E+00	–	–	–	–	–	–
Nitrotoluene, m-	99-08-1	–	–	–	–	–	–	–	–	1.0E+04	2.0E+04	–	–
Nitrotoluene, o-	88-72-2	–	–	1.3E+02	2.6E+02	–	–	–	–	9.2E+02	1.8E+03	–	–
Nitrotoluene, p-	99-99-0	–	–	1.8E+03	3.6E+03	–	–	–	–	4.1E+03	8.2E+03	–	–
Nonachlor, cis-	5103-73-1	2.1E+03	1.1E+03	8.2E+01	1.6E+02	2.1E+03	1.1E+03	5.2E+03	2.7E+03	5.1E+02	1.0E+03	5.2E+03	2.7E+03
Nonachlor, trans-	39765-80-5	2.1E+03	1.1E+03	8.2E+01	1.6E+02	2.1E+03	1.1E+03	5.2E+03	2.7E+03	5.1E+02	1.0E+03	5.2E+03	2.7E+03
Nonanal	124-19-6	–	–	–	–	–	–	–	–	2.0E+05	4.1E+05	–	–
Nonene, 1-n	124-11-8	–	–	–	–	–	–	–	–	1.0E+05	–	–	–
Nonylphenol, 4-n-	104-40-5	–	–	–	–	–	–	–	–	1.0E+05	2.0E+05	–	–
Nonylphenol ethoxylate	9016-45-9	–	–	–	–	–	–	–	–	1.0E+05	2.0E+05	–	–
Octamethylpyrophosphoramidate	152-16-9	–	–	–	–	–	–	–	–	2.0E+03	4.1E+03	–	–
Octanone	106-68-3	–	–	–	–	–	–	1.0E+06	6.5E+05	6.1E+04	–	1.0E+06	6.5E+05
Oxamyl	23135-22-0	–	–	–	–	–	–	–	–	2.6E+04	5.1E+04	–	–
Oxychlorane	27304-13-8	2.1E+03	1.1E+03	8.2E+01	1.6E+02	2.1E+03	1.1E+03	5.2E+03	2.7E+03	5.1E+02	1.0E+03	5.2E+03	2.7E+03
Paraquat	1910-42-5	–	–	–	–	–	–	–	–	4.6E+03	9.2E+03	–	–
Parathion (ethyl parathion)	56-38-2	–	–	–	–	–	–	–	–	6.1E+03	1.2E+04	–	–
Pebulate	1114-71-2	–	–	–	–	–	–	–	–	5.1E+04	1.0E+05	–	–
Pendimethalin	40487-42-1	–	–	–	–	–	–	–	–	4.1E+04	8.2E+04	–	–
Pentachlorobenzene	608-93-5	–	–	–	–	–	–	–	–	8.2E+02	1.6E+03	–	–
Pentachloroethane	76-01-7	1.6E+02	8.1E+01	3.2E+02	–	1.6E+02	8.1E+01	–	–	3.1E+04	–	–	–
Pentachloronitrobenzene	82-68-8	–	–	1.1E+02	2.2E+02	–	–	–	–	3.1E+03	6.1E+03	–	–
Pentachlorophenol	87-86-5	–	–	7.2E+01	5.7E+01	–	–	–	–	5.1E+03	4.1E+03	–	–

**Table 7
Tier 1 Individual Commercial/Industrial Soil PCLs**

Last Revised: March 6, 2023

Chemical of Concern	CAS	Carcinogenic						Noncarcinogenic					
		Air ¹ Soil _{Inh-vp} 0.5 acre source area (mg/kg)	Air ¹ Soil _{Inh-vp} 30 acre source area (mg/kg)	Soil _{Inh} (mg/kg)	Soil _{Derm} (mg/kg)	Air ¹ Soil _{Inh-v} 0.5 acre source area (mg/kg)	Air ¹ Soil _{Inh-v} 30 acre source area (mg/kg)	Air ¹ Soil _{Inh-vp} 0.5 acre source area (mg/kg)	Air ¹ Soil _{Inh-vp} 30 acre source area (mg/kg)	Soil _{Inh} (mg/kg)	Soil _{Derm} (mg/kg)	Air ¹ Soil _{Inh-v} 0.5 acre source area (mg/kg)	Air ¹ Soil _{Inh-v} 30 acre source area (mg/kg)
Pentadiene, 1,3-cis-	1574-41-0	–	–	–	–	–	–	3.9E+05	2.0E+05	6.1E+04	–	3.9E+05	2.0E+05
Pentadiene, 1,3-trans-	2004-70-8	–	–	–	–	–	–	3.9E+05	2.0E+05	6.1E+04	–	3.9E+05	2.0E+05
Pentaerythritol tetranitrate (PETN)	78-11-5	–	–	–	–	–	–	–	–	2.0E+03	4.1E+03	–	–
Pentane	109-66-0	–	–	–	–	–	–	5.2E+05	2.7E+05	6.1E+04	–	5.2E+05	2.7E+05
Pentane, 2-methyl-	107-83-5	–	–	–	–	–	–	3.9E+05	2.0E+05	6.1E+04	–	3.9E+05	2.0E+05
Pentane, 3-methyl-	96-14-0	–	–	–	–	–	–	3.9E+05	2.0E+05	6.1E+04	–	3.9E+05	2.0E+05
Pentenediol, 1,5-	111-29-5	–	–	–	–	–	–	1.0E+06	1.0E+06	1.0E+06	1.0E+06	1.0E+06	1.0E+06
Pentanol, 1-	71-41-0	–	–	–	–	–	–	–	–	3.4E+04	–	–	–
Pentanol, 4-methyl-2-	108-11-2	–	–	–	–	–	–	–	–	2.7E+04	–	–	–
Pentanone, 2-	107-87-9	–	–	–	–	–	–	–	–	4.1E+04	–	–	–
Pentene, 2-	109-68-2	–	–	–	–	–	–	3.9E+05	2.0E+05	6.1E+04	–	3.9E+05	2.0E+05
Pentyne, 1-	627-19-0	–	–	–	–	–	–	3.9E+05	2.0E+05	6.1E+04	–	3.9E+05	2.0E+05
Perchlorate	14797-73-0	–	–	–	–	–	–	–	–	7.2E+02	2.9E+03	–	–
Perfluorooctane sulfonic acid (1-Octanesulfonic acid, heptadecafluoro-1-) [PFOS]	1763-23-1	–	–	–	–	–	–	2.2E+02	1.1E+02	2.4E+01	4.7E+01	2.2E+02	1.1E+02
Perfluoroundecanoic acid (Undecanoic acid, uncosafluoro-) [PFUnDa]	2058-94-8	–	–	–	–	–	–	–	–	1.2E+01	2.5E+01	–	–
Perfluoropentanoic acid (Pentanoic acid, nonafluoro-) [PFPeA]	2706-90-3	–	–	–	–	–	–	–	–	5.1E+02	1.0E+03	–	–
Perfluorohexanoic acid (Hexanoic acid, undecafluoro-) [PFHxA]	307-24-4	–	–	–	–	–	–	–	–	5.1E+02	1.0E+03	–	–
Perfluorododecanoic acid (Dodecanoic acid, tricosafafluoro-) [PFDoA]	307-55-1	–	–	–	–	–	–	9.7E+01	5.0E+01	1.2E+01	2.5E+01	9.7E+01	5.0E+01
Perfluorooctanoic acid (Octanoic acid, pentadecafluoro-) [PFOA]	335-67-1	–	–	–	–	–	–	3.4E+00	1.7E+00	1.2E+01	2.5E+01	3.4E+00	1.7E+00
Perfluorodecanoic acid (Decanoic acid, nonadecafluoro-) [PFDA]	335-76-2	–	–	–	–	–	–	1.2E+02	6.2E+01	1.5E+01	3.1E+01	1.2E+02	6.2E+01
Perfluorodecane sulfonic acid (1-Decanesulfonic acid, heneicosafluoro-) [PFDS]	335-77-3	–	–	–	–	–	–	–	–	1.2E+01	2.5E+01	–	–
Perfluorohexane sulfonic acid (1-Hexanesulfonic acid, tridecafluoro-) [PFHxS]	355-46-4	–	–	–	–	–	–	1.6E+01	8.2E+00	3.9E+00	7.8E+00	1.6E+01	8.2E+00
Perfluorobutyric acid (Butanoic acid, heptafluoro-) [PFBA]	375-22-4	–	–	–	–	–	–	9.6E+02	4.9E+02	1.0E+03	2.0E+03	9.6E+02	4.9E+02
Perfluorobutane sulfonic acid (1-Butanesulfonic acid, nonafluoro-) [PFBS]	375-73-5	–	–	–	–	–	–	1.6E+03	8.2E+02	1.4E+03	2.9E+03	1.6E+03	8.2E+02
Perfluoroheptanoic acid (Heptanoic acid, tridecafluoro-) [PFHpA]	375-85-9	–	–	–	–	–	–	–	–	2.4E+01	4.7E+01	–	–
Perfluorononanoic acid (Nonanoic acid, heptadecafluoro-) [PFNA]	375-95-1	–	–	–	–	–	–	2.4E+01	1.2E+01	1.2E+01	2.5E+01	2.4E+01	1.2E+01
Perfluorotetradecanoic acid (Tetradecanoic acid, heptacosafafluoro-) [PFTeDA]	376-06-7	–	–	–	–	–	–	–	–	1.2E+01	2.5E+01	–	–
Perfluorotridecanoic acid (Tridecanoic acid, pentacosafafluoro-) [PFTrDA]	72629-94-8	–	–	–	–	–	–	–	–	1.2E+01	2.5E+01	–	–
Perfluorooctane sulfonamide (1-Octanesulfonamide, heptadecafluoro-) [PFOSA]	754-91-6	–	–	–	–	–	–	8.8E-02	4.5E-02	1.2E+01	2.5E+01	8.8E-02	4.5E-02
Perylene	198-55-0	–	–	–	–	–	–	–	–	2.0E+04	4.1E+04	–	–
Phenacetin	62-44-2	1.8E+04	9.4E+03	1.3E+04	2.6E+04	1.8E+04	9.4E+03	–	–	–	–	–	–
Phenanthrene	85-01-8	–	–	–	–	–	–	–	–	3.1E+04	4.7E+04	–	–
Phenanthridine	229-87-8	–	–	–	–	–	–	–	–	3.1E+03	6.1E+03	–	–
Phenol	108-95-2	–	–	–	–	–	–	2.7E+03	1.4E+03	3.1E+05	6.1E+05	2.7E+03	1.4E+03

**Table 7
Tier 1 Individual Commercial/Industrial Soil PCLs**

Last Revised: March 6, 2023

Chemical of Concern	CAS	Carcinogenic						Noncarcinogenic					
		Air ¹ Soil _{Inh-vp} 0.5 acre source area (mg/kg)	Air ¹ Soil _{Inh-vp} 30 acre source area (mg/kg)	Soil _{Inh-vp} (mg/kg)	Soil _{Derm} (mg/kg)	Air ¹ Soil _{Inh-v¹} 0.5 acre source area (mg/kg)	Air ¹ Soil _{Inh-v¹} 30 acre source area (mg/kg)	Air ¹ Soil _{Inh-vp} 0.5 acre source area (mg/kg)	Air ¹ Soil _{Inh-vp} 30 acre source area (mg/kg)	Soil _{Inh-vp} (mg/kg)	Soil _{Derm} (mg/kg)	Air ¹ Soil _{Inh-v¹} 0.5 acre source area (mg/kg)	Air ¹ Soil _{Inh-v¹} 30 acre source area (mg/kg)
Phenol, 4-tert-butyl-	98-54-4	–	–	–	–	–	–	–	–	1.2E+05	2.5E+05	–	–
Phenothiazine	92-84-2	–	–	–	–	–	–	–	–	1.1E+03	2.2E+03	–	–
Phenyl mercuric acetate	62-38-4	–	–	–	–	–	–	–	–	8.2E+01	1.6E+02	–	–
Phenylene diamine, m-	108-45-2	–	–	–	–	–	–	–	–	6.1E+03	1.2E+04	–	–
Phenylene diamine, p-	106-50-3	–	–	–	–	–	–	–	–	1.9E+05	3.9E+05	–	–
Phorate	298-02-2	–	–	–	–	–	–	–	–	2.0E+02	4.1E+02	–	–
Phosalone	2310-17-0	–	–	–	–	–	–	–	–	2.0E+03	4.1E+03	–	–
Phosdrin (mevinphos)	7786-34-7	–	–	–	–	–	–	–	–	2.6E+01	5.1E+01	–	–
Phosmet	732-11-6	–	–	–	–	–	–	–	–	2.0E+04	4.1E+04	–	–
Phosphine	7803-51-2	–	–	–	–	–	–	6.4E+00	3.3E+00	3.1E+02	1.2E+03	6.4E+00	3.3E+00
Phosphorotriothic acid, S,S,S-tributyl ester	78-48-8	–	–	3.4E+02	6.8E+02	–	–	–	–	5.1E+02	1.0E+03	–	–
Phosphorus, total*	7723-14-0	–	–	–	–	–	–	–	–	–	–	–	–
Phosphorus, white	7723-14-0	–	–	–	–	–	–	–	–	2.0E+01	8.2E+01	–	–
Phthalic anhydride	85-44-9	–	–	–	–	–	–	7.0E+04	3.6E+04	1.0E+06	1.0E+06	7.0E+04	3.6E+04
Picloram	1918-02-1	–	–	–	–	–	–	–	–	7.2E+04	1.4E+05	–	–
Picoline, 2- (2-methylpyridine)	109-06-8	–	–	–	–	–	–	–	–	9.2E+03	–	–	–
Polybrominated biphenyls (PBBs)	67774-32-7	–	–	3.2E+00	6.4E+00	–	–	–	–	7.2E+00	1.4E+01	–	–
Polychlorinated biphenyls (PCBs)	1336-36-3	9.1E+01	4.7E+01	1.4E+01	2.0E+01	9.1E+01	4.7E+01	–	–	2.0E+01	2.9E+01	–	–
Potassium*	7440-09-7	–	–	–	–	–	–	–	–	–	–	–	–
Primene	68955-53-3	–	–	–	–	–	–	–	–	6.1E+03	1.2E+04	–	–
Prometon (pramitol)	1610-18-0	–	–	–	–	–	–	–	–	1.5E+04	3.1E+04	–	–
Prometryn	7287-19-6	–	–	–	–	–	–	–	–	4.1E+04	8.2E+04	–	–
Pronamide	23950-58-5	–	–	–	–	–	–	–	–	7.7E+04	1.5E+05	–	–
Propanal (propionaldehyde)	123-38-6	–	–	–	–	–	–	1.7E+02	8.8E+01	8.2E+03	–	1.7E+02	8.8E+01
Propane, 1-bromo-	106-94-5	–	–	–	–	–	–	–	–	3.7E+04	–	–	–
Propanil	709-98-8	–	–	–	–	–	–	–	–	5.1E+03	1.0E+04	–	–
Propanoic acid (propionic acid)	79-09-4	–	–	–	–	–	–	–	–	5.1E+05	–	–	–
Propanol, 1-	71-23-8	–	–	–	–	–	–	–	–	1.0E+06	–	–	–
Propargite	2312-35-8	–	–	–	–	–	–	–	–	2.0E+04	4.1E+04	–	–
Propargyl alcohol	107-19-7	–	–	–	–	–	–	–	–	2.0E+03	–	–	–
Propazine	139-40-2	–	–	6.4E+02	1.3E+03	–	–	–	–	2.0E+04	4.1E+04	–	–
Propham	122-42-9	–	–	–	–	–	–	–	–	2.0E+04	4.1E+04	–	–
Propionitrile (propane nitrile)	107-12-0	–	–	–	–	–	–	–	–	4.1E+04	–	–	–
Propyl acetate, n-	109-60-4	–	–	–	–	–	–	–	–	9.2E+04	–	–	–
Propylbenzene, n-	103-65-1	–	–	–	–	–	–	8.9E+03	4.6E+03	4.1E+04	–	8.9E+03	4.6E+03
Propylene glycol	57-55-6	–	–	–	–	–	–	5.1E+02	2.6E+02	1.0E+06	1.0E+06	5.1E+02	2.6E+02
Propylene glycol monomethyl ether	107-98-2	–	–	–	–	–	–	3.2E+05	1.7E+05	7.2E+05	–	3.2E+05	1.7E+05
Propylene oxide	75-56-9	1.6E+02	8.4E+01	1.2E+02	–	1.6E+02	8.4E+01	6.4E+02	3.3E+02	–	–	6.4E+02	3.3E+02
Propylene tetramer	6842-15-5	–	–	–	–	–	–	2.1E+04	1.1E+04	1.0E+05	2.0E+05	2.1E+04	1.1E+04

**Table 7
Tier 1 Individual Commercial/Industrial Soil PCLs**

Last Revised: March 6, 2023

Chemical of Concern	CAS	Carcinogenic						Noncarcinogenic					
		Air ¹ Soil _{Inh-vp} 0.5 acre source area (mg/kg)	Air ¹ Soil _{Inh-vp} 30 acre source area (mg/kg)	Soil _{Inh} (mg/kg)	Soil _{Derm} (mg/kg)	Air ¹ Soil _{Inh-v} 0.5 acre source area (mg/kg)	Air ¹ Soil _{Inh-v} 30 acre source area (mg/kg)	Air ¹ Soil _{Inh-vp} 0.5 acre source area (mg/kg)	Air ¹ Soil _{Inh-vp} 30 acre source area (mg/kg)	Soil _{Inh} (mg/kg)	Soil _{Derm} (mg/kg)	Air ¹ Soil _{Inh-v} 0.5 acre source area (mg/kg)	Air ¹ Soil _{Inh-v} 30 acre source area (mg/kg)
Prothiofos (Tokuthion)	34643-46-4	–	–	–	–	–	–	–	–	1.0E+02	2.0E+02	–	–
Pyrene	129-00-0	–	–	–	–	–	–	–	–	3.1E+04	4.7E+04	–	–
Pyridine	110-86-1	–	–	–	–	–	–	–	–	1.0E+03	–	–	–
Quinoline	91-22-5	–	–	9.5E+00	1.9E+01	–	–	–	–	–	–	–	–
Ronnel	299-84-3	–	–	–	–	–	–	–	–	5.1E+04	1.0E+05	–	–
Safrole	94-59-7	1.1E+02	5.8E+01	1.3E+02	2.6E+02	1.1E+02	5.8E+01	–	–	–	–	–	–
Selenium	7782-49-2	–	–	–	–	–	–	–	–	5.1E+03	1.0E+05	–	–
Selenourea	630-10-4	–	–	–	–	–	–	–	–	5.1E+03	–	–	–
Silver	7440-22-4	–	–	–	–	–	–	–	–	5.1E+03	4.1E+03	–	–
Simazine	122-34-9	–	–	2.4E+02	4.8E+02	–	–	–	–	5.1E+03	1.0E+04	–	–
Sodium*	7440-23-5	–	–	–	–	–	–	–	–	–	–	–	–
Sodium hypochlorite	7681-52-9	–	–	–	–	–	–	4.2E+05	2.2E+05	2.1E+05	8.6E+05	–	–
Sodium polyacrylate	9003-04-7	–	–	–	–	–	–	1.7E+02	8.7E+01	5.1E+05	–	1.7E+02	8.7E+01
Strontium	7440-24-6	–	–	–	–	–	–	–	–	6.1E+05	1.0E+06	–	–
Strychnine	57-24-9	–	–	–	–	–	–	–	–	3.1E+02	6.1E+02	–	–
Styrene	100-42-5	–	–	–	–	–	–	1.6E+04	8.1E+03	2.0E+05	–	1.6E+04	8.1E+03
Sulfate*	14808-79-8	–	–	–	–	–	–	–	–	–	–	–	–
Sulfide*	18496-25-8	–	–	–	–	–	–	–	–	–	–	–	–
Sulfolane	126-33-0	–	–	–	–	–	–	1.2E+03	6.2E+02	1.3E+04	2.7E+04	1.2E+03	6.2E+02
Sulfur*	7704-34-9	–	–	–	–	–	–	–	–	–	–	–	–
Sulprofos (Bolstar)	35400-43-2	–	–	–	–	–	–	–	–	3.1E+03	6.1E+03	–	–
Tebuconazole	107534-96-3	–	–	–	–	–	–	–	–	3.1E+04	6.1E+04	–	–
Tebuthiuron	34014-18-1	–	–	–	–	–	–	–	–	7.2E+04	1.4E+05	–	–
Terbufos	13071-79-9	–	–	–	–	–	–	–	–	2.6E+01	5.1E+01	–	–
Tert-amyl ethyl ether (TAEЕ)	919-94-8	–	–	–	–	–	–	–	–	4.1E+04	–	–	–
Tert-amyl-methyl ether (TAME)	994-05-8	–	–	–	–	–	–	–	–	4.1E+04	–	–	–
Tert-butyl alcohol (2-methyl-2-propanol)	75-65-0	–	–	–	–	–	–	–	–	9.2E+04	–	–	–
Tetrachlorobenzene, 1,2,3,4-	634-66-2	–	–	–	–	–	–	–	–	3.1E+02	6.1E+02	–	–
Tetrachlorobenzene, 1,2,3,5-	634-90-2	–	–	–	–	–	–	–	–	3.1E+02	6.1E+02	–	–
Tetrachlorobenzene, 1,2,4,5-	95-94-3	–	–	–	–	–	–	–	–	3.1E+02	6.1E+02	–	–
Tetrachloroethane, 1,1,1,2-	630-20-6	1.5E+02	7.8E+01	1.1E+03	–	1.5E+02	7.8E+01	–	–	3.1E+04	–	–	–
Tetrachloroethane, 1,1,2,2-	79-34-5	–	–	1.4E+02	–	–	–	–	–	2.0E+04	–	–	–
Tetrachloroethylene [PCE]	127-18-4	1.6E+03	8.1E+02	1.4E+04	–	1.6E+03	8.1E+02	8.0E+03	4.1E+03	2.1E+04	–	8.0E+03	4.1E+03
Tetrachlorophenol, 2,3,4,5-	4901-51-3	–	–	–	–	–	–	–	–	3.1E+04	6.1E+04	–	–
Tetrachlorophenol, 2,3,4,6-	58-90-2	–	–	–	–	–	–	–	–	3.1E+04	6.1E+04	–	–
Tetrachlorophenol, 2,3,5,6-	935-95-5	–	–	–	–	–	–	–	–	3.1E+04	6.1E+04	–	–
Tetrachlorvinphos (Stirophos)	22248-79-9	–	–	–	–	–	–	–	–	4.3E+04	8.6E+04	–	–
Tetradifon	116-29-0	–	–	–	–	–	–	–	–	2.0E+04	4.1E+04	–	–
Tetraethyl dithiopyrophosphate (sulfotep)	3689-24-5	–	–	–	–	–	–	–	–	5.1E+02	1.0E+03	–	–

**Table 7
Tier 1 Individual Commercial/Industrial Soil PCLs**

Last Revised: March 6, 2023

Chemical of Concern	CAS	Carcinogenic						Noncarcinogenic					
		Air ¹ Soil _{Inh-vp} 0.5 acre source area (mg/kg)	Air ¹ Soil _{Inh-vp} 30 acre source area (mg/kg)	Soil _{Inh-vp} (mg/kg)	Soil _{Derm} (mg/kg)	Air ¹ Soil _{Inh-v} 0.5 acre source area (mg/kg)	Air ¹ Soil _{Inh-v} 30 acre source area (mg/kg)	Air ¹ Soil _{Inh-vp} 0.5 acre source area (mg/kg)	Air ¹ Soil _{Inh-vp} 30 acre source area (mg/kg)	Soil _{Inh-vp} (mg/kg)	Soil _{Derm} (mg/kg)	Air ¹ Soil _{Inh-v} 0.5 acre source area (mg/kg)	Air ¹ Soil _{Inh-v} 30 acre source area (mg/kg)
Tetraethyl lead	78-00-2	–	–	–	–	–	–	–	–	1.0E-01	2.0E-01	–	–
Tetraethyl pyrophosphate (TEPP)	107-49-3	–	–	–	–	–	–	–	–	1.1E+01	2.2E+01	–	–
Tetraethylene glycol	112-60-7	–	–	–	–	–	–	–	–	3.4E+05	6.7E+05	–	–
Tetrahydrofuran	109-99-9	3.2E+02	1.6E+02	3.8E+03	–	3.2E+02	1.6E+02	4.3E+04	2.2E+04	9.2E+05	–	4.3E+04	2.2E+04
Tetrahydropyran	142-68-7	3.4E+02	1.7E+02	3.8E+03	–	3.4E+02	1.7E+02	–	–	2.0E+05	–	–	–
Tetraoxadodecane, 2,5,8,11-	112-49-2	–	–	–	–	–	–	–	–	2.6E+04	5.1E+04	–	–
Thallium	7440-28-0	–	–	–	–	–	–	–	–	6.8E+01	1.4E+03	–	–
Thiofanox	39196-18-4	–	–	–	–	–	–	–	–	3.1E+02	6.1E+02	–	–
Thionazin	297-97-2	–	–	–	–	–	–	–	–	7.2E+01	1.4E+02	–	–
Thiophanate-methyl	23564-05-8	–	–	–	–	–	–	–	–	8.2E+04	1.6E+05	–	–
Thiram	137-26-8	–	–	–	–	–	–	–	–	5.1E+03	1.0E+04	–	–
Tin	7440-31-5	–	–	–	–	–	–	–	–	6.1E+05	1.0E+06	–	–
Titanium	7440-32-6	–	–	–	–	–	–	–	–	1.0E+06	1.0E+06	–	–
Toluene	108-88-3	–	–	–	–	–	–	8.8E+04	4.5E+04	8.2E+04	–	8.8E+04	4.5E+04
Toluene diisocyanate, 2,4/2,6-	26471-62-5	–	–	–	–	–	–	2.0E+02	1.0E+02	–	–	2.0E+02	1.0E+02
Toluenediamine, 2,4-	95-80-7	–	–	8.9E+00	1.8E+01	–	–	–	–	–	–	–	–
Toluenediamine, 2,6-	823-40-5	–	–	–	–	–	–	–	–	3.1E+04	6.1E+04	–	–
Toluidine, o-	95-53-4	2.3E+02	1.2E+02	1.8E+03	2.4E+02	2.3E+02	1.2E+02	–	–	–	–	–	–
Toluidine, p-	106-49-0	–	–	9.5E+02	3.0E+02	–	–	–	–	–	–	–	–
Toxaphene	8001-35-2	1.6E+03	8.1E+02	2.6E+01	5.2E+01	1.6E+03	8.3E+02	–	–	3.2E+02	6.3E+02	–	–
TPH, TX1005, C6-C12	TPH-1005-1	–	–	–	–	–	–	4.3E+03	2.2E+03	4.1E+04	–	4.3E+03	2.2E+03
TPH, TX1005, >C12-C28	TPH-1005-2	–	–	–	–	–	–	2.1E+04	1.1E+04	4.1E+04	8.2E+04	2.1E+04	1.1E+04
TPH, TX1005, >C12-C35	TPH-1005-3	–	–	–	–	–	–	2.1E+04	1.1E+04	4.1E+04	8.2E+04	2.1E+04	1.1E+04
TPH, TX1005, >C28-C35	TPH-1005-4	–	–	–	–	–	–	2.1E+04	1.1E+04	4.1E+04	8.2E+04	2.1E+04	1.1E+04
TP Silvex, 2,4,5-	93-72-1	–	–	–	–	–	–	–	–	8.2E+03	1.6E+04	–	–
Triademenol	55219-65-3	–	–	–	–	–	–	–	–	3.1E+04	6.1E+04	–	–
Triallate	2303-17-5	–	–	–	–	–	–	–	–	1.3E+04	2.7E+04	–	–
Triaminotrinitrobenzene (TATB)	3058-38-6	–	–	–	–	–	–	–	–	3.1E+03	6.1E+03	–	–
Tributyltin oxide	56-35-9	–	–	–	–	–	–	–	–	3.1E+02	6.1E+02	–	–
Trichloro-1,2,2-trifluoroethane, 1,1,2-	76-13-1	–	–	–	–	–	–	1.1E+05	5.5E+04	1.0E+06	–	1.1E+05	5.5E+04
Trichlorobenzene, 1,2,3-	87-61-6	–	–	–	–	–	–	4.2E+02	2.2E+02	3.1E+03	6.1E+03	4.2E+02	2.2E+02
Trichlorobenzene, 1,2,4-	120-82-1	–	–	9.9E+02	2.0E+03	–	–	2.1E+02	1.1E+02	1.0E+04	2.0E+04	2.1E+02	1.1E+02
Trichlorobenzene, 1,3,5-	108-70-3	–	–	–	–	–	–	1.8E+02	9.1E+01	3.1E+03	6.1E+03	1.8E+02	9.1E+01
Trichloroethane, 1,1,1-	71-55-6	–	–	–	–	–	–	1.1E+05	5.6E+04	1.0E+06	–	1.1E+05	5.6E+04
Trichloroethane, 1,1,2-	79-00-5	3.8E+01	1.9E+01	5.0E+02	–	3.8E+01	1.9E+01	–	–	4.1E+03	–	–	–
Trichloroethylene [TCE]	79-01-6	1.5E+02	7.5E+01	6.2E+02	–	1.5E+02	7.5E+01	4.3E+01	2.2E+01	5.1E+02	–	4.3E+01	2.2E+01
Trichlorofluoromethane	75-69-4	–	–	–	–	–	–	–	–	3.1E+05	–	–	–
Trichloronate	327-98-0	–	–	–	–	–	–	–	–	3.1E+03	6.1E+03	–	–

**Table 7
Tier 1 Individual Commercial/Industrial Soil PCLs**

Last Revised: March 6, 2023

Chemical of Concern	CAS	Carcinogenic						Noncarcinogenic					
		Air ¹ Soil _{Inh-vp} 0.5 acre source area (mg/kg)	Air ¹ Soil _{Inh-vp} 30 acre source area (mg/kg)	Soil _{Inh-vp} (mg/kg)	Soil _{Derm} (mg/kg)	Air ¹ Soil _{Inh-v} 0.5 acre source area (mg/kg)	Air ¹ Soil _{Inh-v} 30 acre source area (mg/kg)	Air ¹ Soil _{Inh-vp} 0.5 acre source area (mg/kg)	Air ¹ Soil _{Inh-vp} 30 acre source area (mg/kg)	Soil _{Inh-vp} (mg/kg)	Soil _{Derm} (mg/kg)	Air ¹ Soil _{Inh-v} 0.5 acre source area (mg/kg)	Air ¹ Soil _{Inh-v} 30 acre source area (mg/kg)
Trichlorophenol, 2,3,4-	15950-66-0	–	–	–	–	–	–	–	–	1.0E+05	2.0E+05	–	–
Trichlorophenol, 2,3,5-	933-78-8	–	–	–	–	–	–	–	–	1.0E+05	2.0E+05	–	–
Trichlorophenol, 2,3,6-	933-75-5	–	–	–	–	–	–	–	–	1.0E+05	2.0E+05	–	–
Trichlorophenol, 2,4,5-	95-95-4	–	–	–	–	–	–	–	–	1.0E+05	2.0E+05	–	–
Trichlorophenol, 2,4,6-	88-06-2	3.3E+03	1.7E+03	2.6E+03	5.2E+03	3.3E+03	1.7E+03	–	–	1.0E+03	2.0E+03	–	–
Trichlorophenol, 3,4,5-	609-19-8	–	–	–	–	–	–	–	–	1.0E+05	2.0E+05	–	–
Trichlorophenoxyacetic acid, 2,4,5-	93-76-5	–	–	–	–	–	–	–	–	1.0E+04	2.0E+04	–	–
Trichloropropane, 1,1,2-	598-77-6	–	–	–	–	–	–	6.4E+00	3.3E+00	5.1E+03	–	6.4E+00	3.3E+00
Trichloropropane, 1,2,3-	96-18-4	–	–	9.5E-01	–	–	–	2.0E+01	1.0E+01	4.1E+03	–	2.0E+01	1.0E+01
Triethanolamine	102-71-6	–	–	–	–	–	–	5.4E+03	2.8E+03	2.0E+05	4.1E+05	5.4E+03	2.8E+03
Triethylamine	121-44-8	–	–	–	–	–	–	1.5E+02	7.7E+01	–	–	1.5E+02	7.7E+01
Triethylene glycol	112-27-6	–	–	–	–	–	–	–	–	1.0E+06	1.0E+06	–	–
Triethylphosphorothioate, O, O, O-	126-68-1	–	–	–	–	–	–	–	–	8.5E+00	1.7E+01	–	–
Trifluralin	1582-09-8	–	–	3.7E+03	7.4E+03	–	–	–	–	7.7E+03	1.5E+04	–	–
Trimethylamine	75-50-3	–	–	–	–	–	–	2.1E+02	1.1E+02	–	–	2.1E+02	1.1E+02
Trimethylbenzene, 1,2,3-	526-73-8	–	–	–	–	–	–	5.1E+03	2.6E+03	3.5E+04	–	5.1E+03	2.6E+03
Trimethylbenzene, 1,2,4-	95-63-6	–	–	–	–	–	–	5.6E+03	2.9E+03	3.5E+04	–	5.6E+03	2.9E+03
Trimethylbenzene, 1,3,5-	108-67-8	–	–	–	–	–	–	4.9E+03	2.5E+03	3.5E+04	–	4.9E+03	2.5E+03
Trinitrobenzene, 1,3,5-	99-35-4	–	–	–	–	–	–	–	–	3.1E+04	6.1E+04	–	–
Trinitrophenylmethylnitramine (tetryl; nitramine)	479-45-8	–	–	–	–	–	–	–	–	2.0E+03	8.2E+03	–	–
Trinitrotoluene, 2,4,6-	118-96-7	–	–	9.5E+02	1.9E+03	–	–	–	–	5.1E+02	1.0E+03	–	–
Tungsten (as sodium tungstate dihydride)	7440-33-7	–	–	–	–	–	–	1.0E+06	1.0E+06	1.0E+03	4.1E+03	–	–
Uranium (soluble salts)	7440-61-1	–	–	–	–	–	–	5.4E+04	2.8E+04	3.1E+03	6.1E+04	–	–
Valeric acid (pentanoic acid)	109-52-4	–	–	–	–	–	–	1.8E+02	9.5E+01	5.1E+05	1.0E+06	1.8E+02	9.5E+01
Vanadium	7440-62-2	–	–	–	–	–	–	4.1E+04	2.1E+04	1.8E+03	9.6E+02	–	–
Vernam	1929-77-7	–	–	–	–	–	–	–	–	1.0E+03	2.0E+03	–	–
Vinyl acetate	108-05-4	–	–	–	–	–	–	4.3E+03	2.2E+03	1.0E+06	–	4.3E+03	2.2E+03
Vinyl chloride	75-01-4	7.2E+01	3.7E+01	1.9E+01	–	7.2E+01	3.7E+01	1.3E+03	6.6E+02	3.1E+03	–	1.3E+03	6.6E+02
Vinylcyclohexane	695-12-5	–	–	–	–	–	–	–	–	5.1E+05	–	–	–
Warfarin	81-81-2	–	–	–	–	–	–	–	–	3.1E+02	6.1E+02	–	–
Xylene, m-	108-38-3	–	–	–	–	–	–	1.3E+04	6.7E+03	1.0E+06	–	1.3E+04	6.7E+03
Xylene, o-	95-47-6	–	–	–	–	–	–	9.5E+04	4.9E+04	1.0E+06	–	9.5E+04	4.9E+04
Xylene, p-	106-42-3	–	–	–	–	–	–	1.3E+04	6.7E+03	1.0E+06	–	1.3E+04	6.7E+03
Xylenes	1330-20-7	–	–	–	–	–	–	1.3E+04	6.7E+03	2.0E+05	–	1.3E+04	6.7E+03
Zinc	7440-66-6	–	–	–	–	–	–	–	–	3.1E+05	1.0E+06	–	–
6 C aliphatics (TPH) (>53% n-hexane content)	NA	–	–	–	–	–	–	1.4E+04	7.4E+03	6.1E+04	–	1.4E+04	7.4E+03
6 C aliphatics (TPH) (<53% n-hexane content)	NA	–	–	–	–	–	–	4.0E+05	2.0E+05	6.1E+04	–	4.0E+05	2.0E+05
>6-8 C aliphatics (TPH) (>53% n-hexane content)	NA	–	–	–	–	–	–	1.4E+04	7.4E+03	6.1E+04	–	1.4E+04	7.4E+03
>6-8 C aliphatics (TPH) (<53% n-hexane content)	NA	–	–	–	–	–	–	4.0E+05	2.0E+05	6.1E+04	–	4.0E+05	2.0E+05

**Table 7
Tier 1 Individual Commercial/Industrial Soil PCLs**

Last Revised: March 6, 2023

Chemical of Concern	CAS	Carcinogenic						Noncarcinogenic					
		Air ¹ Soil _{Inh-vp} 0.5 acre source area (mg/kg)	Air ¹ Soil _{Inh-vp} 30 acre source area (mg/kg)	Soil _{Inh} (mg/kg)	Soil _{Derm} (mg/kg)	Air ¹ Soil _{Inh-v} 0.5 acre source area (mg/kg)	Air ¹ Soil _{Inh-v} 30 acre source area (mg/kg)	Air ¹ Soil _{Inh-vp} 0.5 acre source area (mg/kg)	Air ¹ Soil _{Inh-vp} 30 acre source area (mg/kg)	Soil _{Inh} (mg/kg)	Soil _{Derm} (mg/kg)	Air ¹ Soil _{Inh-v} 0.5 acre source area (mg/kg)	Air ¹ Soil _{Inh-v} 30 acre source area (mg/kg)
>8-10 C aliphatics (TPH)	NA	—	—	—	—	—	—	1.1E+04	5.5E+03	1.0E+05	—	1.1E+04	5.5E+03
>10-12 C aliphatics (TPH)	NA	—	—	—	—	—	—	1.1E+04	5.5E+03	1.0E+05	2.0E+05	1.1E+04	5.5E+03
>12-16 C aliphatics (TPH)	NA	—	—	—	—	—	—	1.7E+04	8.7E+03	1.0E+05	2.0E+05	1.7E+04	8.7E+03
>16-21 C aliphatics (TPH)	NA	—	—	—	—	—	—	—	—	1.0E+06	1.0E+06	—	—
>16-21 C aliphatics (TPH) (for transformer mineral oil releases only)	NA	—	—	—	—	—	—	—	—	1.0E+06	1.0E+06	—	—
>21-35 C aliphatics (TPH)	NA	—	—	—	—	—	—	—	—	1.0E+06	1.0E+06	—	—
>21-35 C aliphatics (TPH) (for transformer mineral oil releases only)	NA	—	—	—	—	—	—	—	—	1.0E+06	1.0E+06	—	—
>7-8 C aromatics (TPH)	NA	—	—	—	—	—	—	4.1E+04	2.1E+04	1.0E+05	—	4.1E+04	2.1E+04
>8-10 C aromatics (TPH)	NA	—	—	—	—	—	—	4.3E+03	2.2E+03	4.1E+04	—	4.3E+03	2.2E+03
>10-12 C aromatics (TPH)	NA	—	—	—	—	—	—	9.2E+03	4.8E+03	4.1E+04	8.2E+04	9.2E+03	4.8E+03
>12-16 C aromatics (TPH)	NA	—	—	—	—	—	—	2.1E+04	1.1E+04	4.1E+04	8.2E+04	2.1E+04	1.1E+04
>16-21 C aromatics (TPH)	NA	—	—	—	—	—	—	—	—	3.1E+04	6.1E+04	—	—
>21-35 C aromatics (TPH)	NA	—	—	—	—	—	—	—	—	3.1E+04	6.1E+04	—	—

Footnotes

1 For subsurface soils only

2 Site-specific PCLs for mercury may vary based on the pH-dependent K_d value(see Figure:30 TAC §350.73(f)(1)(C)).

* These compounds are not necessarily of concern from a human health standpoint, therefore calculation of human health-based values is not required. However, aesthetics and ecological criteria would still apply. See table entitled "Compounds for which Calculation of a Human Health PCL is Not Required" available on the TCEQ website at <http://www.tceq.state.tx.us/remediation/trrp/trrp.html>.

NA = not applicable

All values capped at 1E+06

This table shows individual protective concentration levels for commercial/industrial properties with carcinogenic and non-carcinogenic values depicted.
end of worksheet

Table 8
Tier 1 Individual Residential and Commercial/Industrial Groundwater PCLs

Last Revised: March 6, 2023

Chemical of Concern	CAS	Residential								Commercial/Industrial							
		Carcinogenic		Noncarcinogenic		Carcinogenic		Noncarcinogenic		Carcinogenic		Noncarcinogenic		Carcinogenic		Noncarcinogenic	
		GW _{Intg} ¹ (mg/L)	GW _{Class 3} ² (mg/L)	GW _{Intg} ¹ (mg/L)	GW _{Class 3} ² (mg/L)	Air _{GW_{Intg-V}} ¹ 0.5 acre source area (mg/L)	Air _{GW_{Intg-V}} ³⁰ acre source area (mg/L)	Air _{GW_{Intg-V}} ¹ 0.5 acre source area (mg/L)	Air _{GW_{Intg-V}} ³⁰ acre source area (mg/L)	GW _{Intg} ¹ (mg/L)	GW _{Class 3} ² (mg/L)	GW _{Intg} ¹ (mg/L)	GW _{Class 3} ² (mg/L)	Air _{GW_{Intg-V}} ¹ 0.5 acre source area (mg/L)	Air _{GW_{Intg-V}} ³⁰ acre source area (mg/L)	Air _{GW_{Intg-V}} ¹ 0.5 acre source area (mg/L)	Air _{GW_{Intg-V}} ³⁰ acre source area (mg/L)
Acenaphthene	83-32-9	—	—	1.5E+00	1.5E+02	—	—	—	—	—	—	4.4E+00	4.4E+02	—	—	—	—
Acenaphthylene	208-96-8	—	—	1.5E+00	1.5E+02	—	—	—	—	—	—	4.4E+00	4.4E+02	—	—	—	—
Acetaldehyde	75-07-0	—	—	2.4E+00	2.4E+02	2.8E+03	3.6E+02	2.4E+03	3.1E+02	—	—	7.3E+00	7.3E+02	4.7E+03	6.0E+02	3.3E+03	4.3E+02
Acetate, 2-ethoxyethanol	111-15-9	—	—	2.4E+00	2.4E+02	—	—	4.5E+05	5.8E+04	—	—	7.3E+00	7.3E+02	—	—	6.3E+05	8.1E+04
Acetate, isoamyl	123-92-2	—	—	1.8E+00	1.8E+02	—	—	—	—	—	—	5.3E+00	5.3E+02	—	—	—	—
Acetate, isobutyl	110-19-0	—	—	1.2E+00	1.2E+02	—	—	—	—	—	—	3.5E+00	3.5E+02	—	—	—	—
Acetate, sec-butyl	105-46-4	—	—	1.2E+00	1.2E+02	—	—	—	—	—	—	3.5E+00	3.5E+02	—	—	—	—
Acetic acid*	64-19-7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Acetone (2-propanone)	67-64-1	—	—	2.2E+01	2.2E+03	—	—	1.0E+06	1.0E+06	—	—	6.6E+01	6.6E+03	—	—	1.0E+06	1.0E+06
Acetone cyanohydrin	75-86-5	—	—	7.3E-02	7.3E+00	—	—	3.4E+05	4.4E+04	—	—	2.2E-01	2.2E+01	—	—	4.8E+05	6.2E+04
Acetonitrile	75-05-8	—	—	7.8E-01	7.8E+01	—	—	3.2E+04	4.2E+03	—	—	2.3E+00	2.3E+02	—	—	4.5E+04	5.8E+03
Acetophenone	98-86-2	—	—	2.4E+00	2.4E+02	—	—	—	—	—	—	7.3E+00	7.3E+02	—	—	—	—
Acetylaminofluorene, 2-	53-96-3	2.4E-04	2.4E-02	—	—	6.3E+02	1.0E+02	—	—	5.4E-04	5.4E-02	—	—	1.1E+03	1.8E+02	—	—
Acifluorfen, sodium	62476-59-9	—	—	3.2E-01	3.2E+01	—	—	—	—	—	—	9.5E-01	9.5E+01	—	—	—	—
Acridine	260-94-6	—	—	7.3E-02	7.3E+00	—	—	—	—	—	—	2.2E-01	2.2E+01	—	—	—	—
Acrolein	107-02-8	—	—	1.2E-02	1.2E+00	—	—	9.5E+03	1.2E+03	—	—	3.7E-02	3.7E+00	—	—	1.3E+04	1.7E+03
Acrylamide	79-06-1	1.8E-03	1.8E-01	4.9E-02	4.9E+00	3.8E+03	5.0E+02	9.7E+04	1.3E+04	4.1E-03	4.1E-01	1.5E-01	1.5E+01	6.3E+03	8.4E+02	1.4E+05	1.8E+04
Acrylic acid	79-10-7	—	—	1.2E+01	1.2E+03	—	—	1.5E+04	2.0E+03	—	—	3.7E+01	3.7E+03	—	—	2.1E+04	2.7E+03
Acrylonitrile	107-13-1	1.7E-03	1.7E-01	2.4E-02	2.4E+00	5.8E+01	7.5E+00	3.4E+02	4.3E+01	3.8E-03	3.8E-01	7.3E-02	7.3E+00	9.7E+01	1.3E+01	4.7E+02	6.1E+01
Adipic acid (hexanedioic acid)	124-04-9	—	—	4.9E+01	4.9E+03	—	—	—	—	—	—	1.5E+02	1.5E+04	—	—	—	—
Alachlor	15972-60-8	1.1E-02	1.1E+00	2.4E-01	2.4E+01	—	—	—	—	2.6E-02	2.6E+00	7.3E-01	7.3E+01	—	—	—	—
Aldicarb	116-06-3	—	—	2.4E-02	2.4E+00	—	—	—	—	—	—	7.3E-02	7.3E+00	—	—	—	—
Aldicarb sulfone	1646-88-4	—	—	2.4E-02	2.4E+00	—	—	—	—	—	—	7.3E-02	7.3E+00	—	—	—	—
Aldrin	309-00-2	5.4E-05	5.4E-03	7.3E-04	7.3E-02	4.4E+00	5.7E-01	—	—	1.2E-04	1.2E-02	2.2E-03	2.2E-01	7.4E+00	9.6E-01	—	—
Allyl alcohol	107-18-6	—	—	1.2E-01	1.2E+01	—	—	3.0E+02	3.8E+01	—	—	3.7E-01	3.7E+01	—	—	4.1E+02	5.4E+01
Allyl chloride	107-05-1	—	—	2.4E-01	2.4E+01	—	—	9.1E+00	1.2E+00	—	—	7.3E-01	7.3E+01	—	—	1.3E+01	1.7E+00
Aluminum	7429-90-5	—	—	2.4E+01	2.4E+03	—	—	—	—	—	—	7.3E+01	7.3E+03	—	—	—	—
Ametryn	834-12-8	—	—	2.2E-01	2.2E+01	—	—	—	—	—	—	6.6E-01	6.6E+01	—	—	—	—
Amino-2,6-dinitrotoluene, 4-	19406-51-0	3.0E-02	3.0E+00	1.2E-02	1.2E+00	—	—	—	—	6.8E-02	6.8E+00	3.7E-02	3.7E+00	—	—	—	—
Amino-4,6-dinitrotoluene, 2-	35572-78-2	3.0E-02	3.0E+00	1.2E-02	1.2E+00	—	—	—	—	6.8E-02	6.8E+00	3.7E-02	3.7E+00	—	—	—	—
Aminobiphenyl, 4- (1,1-biphenyl-4-amine)	92-67-1	1.5E-04	1.5E-02	—	—	—	—	—	—	3.4E-04	3.4E-02	—	—	—	—	—	—
Aminopyridine, 4-	504-24-5	—	—	4.9E-04	4.9E-02	—	—	—	—	—	—	1.5E-03	1.5E-01	—	—	—	—
Ammonia	7664-41-7	—	—	—	—	—	—	8.7E+03	1.1E+03	—	—	—	—	—	—	1.2E+04	1.6E+03
Ammonium polyphosphate*	6833-79-9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ammonium salts*	AMMONIUM	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Aniline	62-53-3	1.6E-01	1.6E+01	1.7E-01	1.7E+01	—	—	1.1E+04	1.4E+03	3.6E-01	3.6E+01	5.1E-01	5.1E+01	—	—	1.6E+04	2.0E+03
Anthracene	120-12-7	—	—	7.3E+00	7.3E+02	—	—	—	—	—	—	2.2E+01	2.2E+03	—	—	—	—
Anthraquinone, 9,10-	84-65-1	2.3E-02	2.3E+00	4.9E-01	4.9E+01	—	—	—	—	5.2E-02	5.2E+00	1.5E+00	1.5E+02	—	—	—	—
Antimony	7440-36-0	—	—	9.8E-03	9.8E-01	—	—	—	—	—	—	2.9E-02	2.9E+00	—	—	—	—
Aramite	140-57-8	3.7E-02	3.7E+00	1.2E+00	1.2E+02	—	—	—	—	8.2E-02	8.2E+00	3.7E+00	3.7E+02	—	—	—	—
Arsenic	7440-38-2	6.1E-03	6.1E-01	7.3E-03	7.3E-01	—	—	—	—	1.4E-02	1.4E+00	2.2E-02	2.2E+00	—	—	—	—
Arsine	7784-42-1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Atrazine	1912-24-9	4.1E-03	4.1E-01	8.6E-01	8.6E+01	—	—	—	—	9.2E-03	9.2E-01	2.6E+00	2.6E+02	—	—	—	—
Azinphos-methyl (guthion)	86-50-0	—	—	3.7E-02	3.7E+00	—	—	—	—	—	—	1.1E-01	1.1E+01	—	—	—	—
Azobenzene	103-33-3	8.3E-03	8.3E-01	—	—	6.8E+02	8.8E+01	—	—	1.9E-02	1.9E+00	—	—	1.1E+03	1.5E+02	—	—
Barium	7440-39-3	—	—	4.9E+00	4.9E+02	—	—	—	—	—	—	1.5E+01	1.5E+03	—	—	—	—
Bayleton	43121-43-3	—	—	7.3E-01	7.3E+01	—	—	—	—	—	—	2.2E+00	2.2E+02	—	—	—	—
Benefin (benfluralin)	1861-40-1	—	—	7.3E+00	7.3E+02	—	—	—	—	—	—	2.2E+01	2.2E+03	—	—	—	—
Benomyl	17804-35-2	—	—	1.2E+00	1.2E+02	—	—	—	—	—	—	3.7E+00	3.7E+02	—	—	—	—
Benz-a-anthracene	56-55-3	9.1E-03	9.1E-01	—	—	3.0E+03	3.9E+02	—	—	2.0E-02	2.0E+00	—	—	5.0E+03	6.5E+02	—	—

Table 8
Tier 1 Individual Residential and Commercial/Industrial Groundwater PCLs

Last Revised: March 6, 2023

Chemical of Concern	CAS	Residential								Commercial/Industrial							
		Carcinogenic		Noncarcinogenic		Carcinogenic		Noncarcinogenic		Carcinogenic		Noncarcinogenic		Carcinogenic		Noncarcinogenic	
		GW _{Intg} ¹ (mg/L)	GW _{Class 3} ² (mg/L)	GW _{Intg} ¹ (mg/L)	GW _{Class 3} ² (mg/L)	AirGW _{Inh-V} ^{0.5} acre source area (mg/L)	AirGW _{Inh-V} ³⁰ acre source area (mg/L)	AirGW _{Inh-V} ^{0.5} acre source area (mg/L)	AirGW _{Inh-V} ³⁰ acre source area (mg/L)	GW _{Intg} ¹ (mg/L)	GW _{Class 3} ² (mg/L)	GW _{Intg} ¹ (mg/L)	GW _{Class 3} ² (mg/L)	AirGW _{Inh-V} ^{0.5} acre source area (mg/L)	AirGW _{Inh-V} ³⁰ acre source area (mg/L)	AirGW _{Inh-V} ^{0.5} acre source area (mg/L)	AirGW _{Inh-V} ³⁰ acre source area (mg/L)
Benzaldehyde	100-52-7	—	—	2.4E+00	2.4E+02	—	—	—	—	—	—	7.3E+00	7.3E+02	—	—	—	—
Benzene	71-43-2	6.1E-02	6.1E+00	9.8E-02	9.8E+00	1.8E+02	2.3E+01	4.7E+03	6.1E+02	1.4E-01	1.4E+01	2.9E-01	2.9E+01	3.0E+02	3.9E+01	6.6E+03	8.6E+02
Benzenedicarbonitrile, 1,3-	626-17-5	—	—	1.5E-01	1.5E+01	—	—	—	—	—	—	4.4E-01	4.4E+01	—	—	—	—
Benzenedicarboxylic acid, 1,2-disodecyl ester	26761-40-0	—	—	9.8E-01	9.8E+01	—	—	1.5E+05	1.9E+04	—	—	2.9E+00	2.9E+02	—	—	2.0E+05	2.6E+04
Benzenethiol	108-98-5	—	—	2.4E-02	2.4E+00	—	—	—	—	—	—	7.3E-02	7.3E+00	—	—	—	—
Benzidine	92-87-5	4.0E-06	4.0E-04	7.3E-02	7.3E+00	5.0E+00	8.4E-01	—	—	8.9E-06	8.9E-04	2.2E-01	2.2E+01	8.4E+00	1.4E+00	—	—
Benzo-a-pyrene	50-32-8	9.1E-04	9.1E-02	7.3E-03	7.3E-01	5.7E+02	7.4E+01	2.9E+01	3.8E+00	2.0E-03	2.0E-01	2.2E-02	2.2E+00	9.6E+02	1.2E+02	4.1E+01	5.3E+00
Benzo-b-fluoranthene	205-99-2	9.1E-03	9.1E-01	—	—	2.4E+03	3.1E+02	—	—	2.0E-02	2.0E+00	—	—	4.0E+03	5.2E+02	—	—
Benzo-e-pyrene	192-97-2	—	—	7.3E-01	7.3E+01	—	—	—	—	—	—	2.2E+00	2.2E+02	—	—	—	—
Benzo-g,h,i-perylene	191-24-2	—	—	7.3E-01	7.3E+01	—	—	—	—	—	—	2.2E+00	2.2E+02	—	—	—	—
Benzoic acid	65-85-0	—	—	9.8E+01	9.8E+03	—	—	—	—	—	—	2.9E+02	2.9E+04	—	—	—	—
Benzo-j-fluoranthene	205-82-3	9.1E-03	9.1E-01	—	—	1.5E+03	2.0E+02	—	—	2.0E-02	2.0E+00	—	—	2.6E+03	3.3E+02	—	—
Benzo-k-fluoranthene	207-08-9	9.1E-02	9.1E+00	—	—	1.4E+05	1.8E+04	—	—	2.0E-01	2.0E+01	—	—	2.4E+05	3.1E+04	—	—
Benzophenone	119-61-9	—	—	1.6E-01	1.6E+01	—	—	—	—	—	—	4.9E-01	4.9E+01	—	—	—	—
Benzotrichloride	98-07-7	7.0E-05	7.0E-03	—	—	—	—	—	—	1.6E-04	1.6E-02	—	—	—	—	—	—
Benzoyl peroxide	94-36-0	—	—	1.2E+00	1.2E+02	—	—	—	—	—	—	3.7E+00	3.7E+02	—	—	—	—
Benzyl alcohol	100-51-6	—	—	2.4E+00	2.4E+02	—	—	—	—	—	—	7.3E+00	7.3E+02	—	—	—	—
Benzyl chloride	100-44-7	5.4E-03	5.4E-01	4.9E-02	4.9E+00	—	—	1.0E+02	1.3E+01	1.2E-02	1.2E+00	1.5E-01	1.5E+01	—	—	1.4E+02	1.8E+01
Benzyl dichloride	98-87-3	5.4E-03	5.4E-01	4.9E-02	4.9E+00	—	—	2.0E+02	2.6E+01	1.2E-02	1.2E+00	1.5E-01	1.5E+01	—	—	2.8E+02	3.6E+01
Beryllium	7440-41-7	—	—	4.9E-02	4.9E+00	—	—	—	—	—	—	1.5E-01	1.5E+01	—	—	—	—
Biphenyl, 1,1'-	92-52-4	—	—	1.2E+01	1.2E+03	—	—	—	—	—	—	3.7E+01	3.7E+03	—	—	—	—
Biphenyl, 1,1'-, 2-phenoxy-	6738-04-1	—	—	1.2E+00	1.2E+02	—	—	—	—	—	—	3.7E+00	3.7E+02	—	—	—	—
Biquinoline, 2,2'-	119-91-5	—	—	7.3E-02	7.3E+00	—	—	—	—	—	—	2.2E-01	2.2E+01	—	—	—	—
Bis (2-chloroethoxy) methane	111-91-1	8.3E-04	8.3E-02	7.3E-02	7.3E+00	8.0E+01	1.0E+01	—	—	1.9E-03	1.9E-01	2.2E-01	2.2E+01	1.3E+02	1.7E+01	—	—
Bis (2-chloroethyl) ether	111-44-4	8.3E-04	8.3E-02	—	—	9.3E+01	1.2E+01	—	—	1.9E-03	1.9E-01	—	—	1.6E+02	2.0E+01	—	—
Bis (2-chloro-1-methylethyl) ether	108-60-1	1.3E-02	1.3E+00	9.8E-01	9.8E+01	8.7E+02	1.1E+02	—	—	2.9E-02	2.9E+00	2.9E+00	2.9E+02	1.5E+03	1.9E+02	—	—
Bis (2-chloromethyl) ether	542-88-1	4.1E-06	4.1E-04	—	—	8.5E-02	1.1E-02	—	—	9.3E-06	9.3E-04	—	—	1.4E-01	1.9E-02	—	—
Bis (2-ethyl-hexyl) phthalate	117-81-7	6.5E-02	6.5E+00	4.9E-01	4.9E+01	—	—	—	—	1.5E-01	1.5E+01	1.5E+00	1.5E+02	—	—	—	—
Bismuth	7440-69-9	—	—	1.2E+01	1.2E+03	—	—	—	—	—	—	3.7E+01	3.7E+03	—	—	—	—
Bisphenol A	80-05-7	—	—	1.2E+00	1.2E+02	—	—	—	—	—	—	3.7E+00	3.7E+02	—	—	—	—
Boron	7440-42-8	—	—	4.9E+00	4.9E+02	—	—	—	—	—	—	1.5E+01	1.5E+03	—	—	—	—
Bromacil	314-40-9	—	—	2.4E+00	2.4E+02	—	—	—	—	—	—	7.3E+00	7.3E+02	—	—	—	—
Bromo-2-chloroethane, 1-	107-04-0	—	—	9.8E-01	9.8E+01	—	—	—	—	—	—	2.9E+00	2.9E+02	—	—	—	—
Bromobenzene	108-86-1	—	—	2.0E-01	2.0E+01	—	—	2.3E+03	2.9E+02	—	—	5.8E-01	5.8E+01	—	—	3.2E+03	4.1E+02
Bromodichloromethane	75-27-4	1.5E-02	1.5E+00	2.0E-01	2.0E+01	—	—	—	—	3.3E-02	3.3E+00	5.8E-01	5.8E+01	—	—	—	—
Bromoform ³	75-25-2	1.2E-01	1.2E+01	4.9E-01	4.9E+01	5.1E+03	6.7E+02	—	—	2.6E-01	2.6E+01	1.5E+00	1.5E+02	8.6E+03	1.1E+03	—	—
Bromomethane	74-83-9	—	—	3.4E-02	3.4E+00	—	—	3.6E+01	4.6E+00	—	—	1.0E-01	1.0E+01	—	—	5.0E+01	6.5E+00
Bromophenyl phenylether, 4-	101-55-3	6.1E-05	6.1E-03	—	—	1.6E+00	2.0E-01	—	—	1.4E-04	1.4E-02	—	—	2.7E+00	3.4E-01	—	—
Butadiene, 1,3-	106-99-0	—	—	—	—	5.1E+01	6.6E+00	3.6E+01	4.7E+00	—	—	—	—	8.6E+01	1.1E+01	5.1E+01	6.6E+00
Butadiene, 2-methyl-1,3- (isoprene)	78-79-5	—	—	1.5E+00	1.5E+02	—	—	8.2E+04	1.1E+04	—	—	4.4E+00	4.4E+02	—	—	1.2E+05	1.5E+04
Butanal (butyraldehyde)	123-72-8	—	—	1.5E+00	1.5E+02	—	—	2.0E+04	2.6E+03	—	—	4.4E+00	4.4E+02	—	—	2.8E+04	3.6E+03
Butane, 2,3-dimethyl-	79-29-8	—	—	1.5E+00	1.5E+02	—	—	2.4E+03	3.0E+02	—	—	4.4E+00	4.4E+02	—	—	3.3E+03	4.3E+02
Butanoic acid (butyric acid)	107-92-6	—	—	1.2E+01	1.2E+03	—	—	1.9E+04	2.5E+03	—	—	3.7E+01	3.7E+03	—	—	2.7E+04	3.4E+03
Butanol, 2-	78-92-2	—	—	4.9E+01	4.9E+03	—	—	1.0E+06	1.0E+06	—	—	1.5E+02	1.5E+04	—	—	1.0E+06	1.0E+06
Butanol, 2-methyl-1-	137-32-6	—	—	2.4E-01	2.4E+01	—	—	—	—	—	—	7.3E-01	7.3E+01	—	—	—	—
Butanol, 2-methyl-2-	75-85-4	—	—	2.4E-01	2.4E+01	—	—	—	—	—	—	7.3E-01	7.3E+01	—	—	—	—
Butanol, n-	71-36-3	—	—	2.4E+00	2.4E+02	—	—	—	—	—	—	7.3E+00	7.3E+02	—	—	—	—
Butene, 1-	106-98-9	—	—	1.5E+00	1.5E+02	—	—	2.9E+03	3.8E+02	—	—	4.4E+00	4.4E+02	—	—	4.1E+03	5.3E+02
Butene, cis-2-	590-18-1	—	—	1.5E+00	1.5E+02	—	—	1.3E+03	1.7E+02	—	—	4.4E+00	4.4E+02	—	—	1.8E+03	2.3E+02
Butene, trans-2-	624-64-6	—	—	1.5E+00	1.5E+02	—	—	1.3E+03	1.7E+02	—	—	4.4E+00	4.4E+02	—	—	1.8E+03	2.3E+02

Table 8
Tier 1 Individual Residential and Commercial/Industrial Groundwater PCLs

Last Revised: March 6, 2023

Chemical of Concern	CAS	Residential								Commercial/Industrial							
		Carcinogenic		Noncarcinogenic		Carcinogenic		Noncarcinogenic		Carcinogenic		Noncarcinogenic		Carcinogenic		Noncarcinogenic	
		GW _{Intg} ¹ (mg/L)	GW _{Class 3} ² (mg/L)	GW _{Intg} ¹ (mg/L)	GW _{Class 3} ² (mg/L)	Air _{GW_{Intg-V}} ¹ 0.5 acre source area (mg/L)	Air _{GW_{Intg-V}} ³⁰ acre source area (mg/L)	Air _{GW_{Intg-V}} ¹ 0.5 acre source area (mg/L)	Air _{GW_{Intg-V}} ³⁰ acre source area (mg/L)	GW _{Intg} ¹ (mg/L)	GW _{Class 3} ² (mg/L)	GW _{Intg} ¹ (mg/L)	GW _{Class 3} ² (mg/L)	Air _{GW_{Intg-V}} ^{0.5} acre source area (mg/L)	Air _{GW_{Intg-V}} ³⁰ acre source area (mg/L)	Air _{GW_{Intg-V}} ^{0.5} acre source area (mg/L)	Air _{GW_{Intg-V}} ³⁰ acre source area (mg/L)
Butoxy ethanol, 2- (Ethylene glycol monobutyl ether; EGBE)	111-76-2	—	—	2.4E+00	2.4E+02	—	—	1.0E+06	1.0E+06	—	—	7.3E+00	7.3E+02	—	—	1.0E+06	1.0E+06
Butyl acetate	123-86-4	—	—	3.4E+00	3.4E+02	—	—	7.0E+05	9.1E+04	—	—	1.0E+01	1.0E+03	—	—	9.8E+05	1.3E+05
Butyl acrylate	141-32-2	—	—	2.2E-01	2.2E+01	—	—	—	—	—	—	6.6E-01	6.6E+01	—	—	—	—
Butyl benzyl phthalate	85-68-7	4.8E-01	4.8E+01	4.9E+00	4.9E+02	—	—	—	—	1.1E+00	1.1E+02	1.5E+01	1.5E+03	—	—	—	—
Butyl ether, n- (dibutyl ether)	142-96-1	—	—	2.4E+00	2.4E+02	—	—	—	—	—	—	7.3E+00	7.3E+02	—	—	—	—
Butyl methacrylate	97-88-1	—	—	2.2E+00	2.2E+02	—	—	—	—	—	—	6.6E+00	6.6E+02	—	—	—	—
Butylate	2008-41-5	—	—	1.2E+00	1.2E+02	—	—	—	—	—	—	3.7E+00	3.7E+02	—	—	—	—
Butylbenzene, n-	104-51-8	—	—	1.2E+00	1.2E+02	—	—	—	—	—	—	3.7E+00	3.7E+02	—	—	—	—
Butylbenzene, sec-	135-98-8	—	—	9.8E-01	9.8E+01	—	—	—	—	—	—	2.9E+00	2.9E+02	—	—	—	—
Butylbenzene, tert-	98-06-6	—	—	9.8E-01	9.8E+01	—	—	—	—	—	—	2.9E+00	2.9E+02	—	—	—	—
Cacodylic acid	75-60-5	—	—	7.3E-02	7.3E+00	—	—	—	—	—	—	2.2E-01	2.2E+01	—	—	—	—
Cadmium	7440-43-9	—	—	2.4E-02	2.4E+00	—	—	—	—	—	—	7.3E-02	7.3E+00	—	—	—	—
Calcium*	7440-70-2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Caprolactam	105-60-2	—	—	1.2E+01	1.2E+03	—	—	—	—	—	—	3.7E+01	3.7E+03	—	—	—	—
Captan	133-06-2	2.6E-01	2.6E+01	3.2E+00	3.2E+02	—	—	—	—	5.8E-01	5.8E+01	9.5E+00	9.5E+02	—	—	—	—
Carbaryl	63-25-2	—	—	2.4E+00	2.4E+02	—	—	—	—	—	—	7.3E+00	7.3E+02	—	—	—	—
Carbazole	86-74-8	4.6E-02	4.6E+00	—	—	—	—	—	—	1.0E-01	1.0E+01	—	—	—	—	—	—
Carbofuran	1563-66-2	—	—	1.2E-01	1.2E+01	—	—	—	—	—	—	3.7E-01	3.7E+01	—	—	—	—
Carbon disulfide	75-15-0	—	—	2.4E+00	2.4E+02	—	—	4.9E+03	6.3E+02	—	—	7.3E+00	7.3E+02	—	—	6.8E+03	8.8E+02
Carbon tetrachloride	56-23-5	1.3E-02	1.3E+00	9.8E-02	9.8E+00	2.0E+01	2.5E+00	5.1E+02	6.6E+01	2.9E-02	2.9E+00	2.9E-01	2.9E+01	3.3E+01	4.3E+00	7.1E+02	9.2E+01
Carbophenothion	786-19-6	—	—	3.2E-01	3.2E+01	—	—	—	—	—	—	9.5E-01	9.5E+01	—	—	—	—
Carbosulfan	55285-14-8	—	—	2.4E-01	2.4E+01	—	—	—	—	—	—	7.3E-01	7.3E+01	—	—	—	—
Carboxin	5234-68-4	—	—	2.4E+00	2.4E+02	—	—	—	—	—	—	7.3E+00	7.3E+02	—	—	—	—
Chloral	75-87-6	—	—	2.4E+00	2.4E+02	—	—	—	—	—	—	7.3E+00	7.3E+02	—	—	—	—
Chloral hydrate (1,1-ethanediol, 2,2,2-trichloro-)	302-17-0	—	—	2.4E+00	2.4E+02	—	—	—	—	—	—	7.3E+00	7.3E+02	—	—	—	—
Chloramben (amiben; 3-amino-2,5-dichlorobenzoic acid)	133-90-4	—	—	3.7E-01	3.7E+01	—	—	—	—	—	—	1.1E+00	1.1E+02	—	—	—	—
Chlordane (technical)	12789-03-6	2.6E-03	2.6E-01	1.2E-02	1.2E+00	7.7E+02	9.9E+01	2.3E+03	3.0E+02	5.8E-03	5.8E-01	3.7E-02	3.7E+00	1.3E+03	1.7E+02	3.2E+03	4.2E+02
Chlordane, cis- (alpha chlordane)	5103-71-9	2.6E-03	2.6E-01	1.2E-02	1.2E+00	1.5E+02	2.0E+01	4.6E+02	6.0E+01	5.8E-03	5.8E-01	3.7E-02	3.7E+00	2.6E+02	3.3E+01	6.5E+02	8.4E+01
Chlordane, trans- (gamma chlordane)	5103-74-2	2.6E-03	2.6E-01	1.2E-02	1.2E+00	1.5E+02	2.0E+01	4.6E+02	6.0E+01	5.8E-03	5.8E-01	3.7E-02	3.7E+00	2.6E+02	3.3E+01	6.5E+02	8.4E+01
Chlorfenvinphos	470-90-6	—	—	1.7E-02	1.7E+00	—	—	—	—	—	—	5.1E-02	5.1E+00	—	—	—	—
Chloride*	16887-00-6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Chlorine	7782-50-5	—	—	2.4E+00	2.4E+02	—	—	1.3E+01	1.6E+00	—	—	7.3E+00	7.3E+02	—	—	1.8E+01	2.3E+00
Chloro-1,3-butadiene, 2-	126-99-8	—	—	—	—	2.8E-01	3.7E-02	7.3E+01	9.4E+00	—	—	—	—	4.7E-01	6.1E-02	1.0E+02	1.3E+01
Chloro-2-propanol, 1-	127-00-4	—	—	4.9E-01	4.9E+01	—	—	—	—	—	—	1.5E+00	1.5E+02	—	—	—	—
Chloro-3-methylphenol, 4-	59-50-7	—	—	1.2E-01	1.2E+01	—	—	—	—	—	—	3.7E-01	3.7E+01	—	—	—	—
Chloroaniline, p-	106-47-8	4.6E-03	4.6E-01	9.8E-02	9.8E+00	—	—	—	—	1.0E-02	1.0E+00	2.9E-01	2.9E+01	—	—	—	—
Chlorobenzene	108-90-7	—	—	4.9E-01	4.9E+01	—	—	1.2E+03	1.5E+02	—	—	1.5E+00	1.5E+02	—	—	1.6E+03	2.1E+02
Chlorobenzilate	510-15-6	3.4E-03	3.4E-01	4.9E-01	4.9E+01	7.0E+03	9.0E+02	—	—	7.6E-03	7.6E-01	1.5E+00	1.5E+02	1.2E+04	1.5E+03	—	—
Chlorobromomethane (bromochloromethane)	74-97-5	—	—	9.8E-01	9.8E+01	—	—	—	—	—	—	2.9E+00	2.9E+02	—	—	—	—
Chlorodifluoromethane	75-45-6	—	—	—	—	—	—	1.7E+05	2.2E+04	—	—	—	—	—	—	2.4E+05	3.1E+04
Chloroethane (ethyl chloride)	75-00-3	—	—	9.8E+00	9.8E+02	—	—	1.2E+05	1.5E+04	—	—	2.9E+01	2.9E+03	—	—	1.6E+05	2.1E+04
Chloroethanol, 2-	107-07-3	—	—	4.9E-01	4.9E+01	—	—	—	—	—	—	1.5E+00	1.5E+02	—	—	—	—
Chloroethoxy ethene, 2- (2-chloroethylvinylether)	110-75-8	8.3E-04	8.3E-02	4.9E-02	4.9E+00	—	—	2.0E+01	2.5E+00	1.9E-03	1.9E-01	1.5E-01	1.5E+01	—	—	2.7E+01	3.5E+00
Chloroform ³	67-66-3	—	—	2.4E-01	2.4E+01	2.0E+01	2.6E+00	1.9E+03	2.5E+02	—	—	7.3E-01	7.3E+01	3.3E+01	4.3E+00	2.7E+03	3.4E+02
Chlorohexane, 1-	544-10-5	—	—	9.8E-01	9.8E+01	—	—	7.3E+03	9.4E+02	—	—	2.9E+00	2.9E+02	—	—	1.0E+04	1.3E+03
Chloromethane (methyl chloride)	74-87-3	7.0E-02	7.0E+00	8.8E-02	8.8E+00	3.6E+01	4.7E+00	2.5E+02	3.2E+01	1.6E-01	1.6E+01	2.6E-01	2.6E+01	6.1E+01	7.9E+00	3.5E+02	4.5E+01
Chloronaphthalene, 1- (Chloronaphthalene, alpha-)	90-13-1	—	—	2.0E+00	2.0E+02	—	—	—	—	—	—	5.8E+00	5.8E+02	—	—	—	—
Chloronaphthalene, 2- (chloronaphthalene, beta)	91-58-7	—	—	2.0E+00	2.0E+02	—	—	—	—	—	—	5.8E+00	5.8E+02	—	—	—	—
Chloronitrobenzene, p- (1-chloro-4-nitrobenzene)	100-00-5	1.4E-01	1.4E+01	2.4E-02	2.4E+00	—	—	7.6E+02	9.9E+01	3.2E-01	3.2E+01	7.3E-02	7.3E+00	—	—	1.1E+03	1.4E+02
Chlorophenol, 2-	95-57-8	—	—	1.2E-01	1.2E+01	—	—	—	—	—	—	3.7E-01	3.7E+01	—	—	—	—

Table 8
Tier 1 Individual Residential and Commercial/Industrial Groundwater PCLs

Last Revised: March 6, 2023

Chemical of Concern	CAS	Residential								Commercial/Industrial							
		Carcinogenic		Noncarcinogenic		Carcinogenic		Noncarcinogenic		Carcinogenic		Noncarcinogenic		Carcinogenic		Noncarcinogenic	
		GW _{Intg} ¹ (mg/L)	GW _{Class 3} ² (mg/L)	GW _{Intg} ¹ (mg/L)	GW _{Class 3} ² (mg/L)	Air ³ GW _{Inh-V} 0.5 acre source area (mg/L)	Air ³ GW _{Inh-V} 30 acre source area (mg/L)	Air ³ GW _{Inh-V} 0.5 acre source area (mg/L)	Air ³ GW _{Inh-V} 30 acre source area (mg/L)	GW _{Intg} ¹ (mg/L)	GW _{Class 3} ² (mg/L)	GW _{Intg} ¹ (mg/L)	GW _{Class 3} ² (mg/L)	Air ³ GW _{Inh-V} 0.5 acre source area (mg/L)	Air ³ GW _{Inh-V} 30 acre source area (mg/L)	Air ³ GW _{Inh-V} 0.5 acre source area (mg/L)	Air ³ GW _{Inh-V} 30 acre source area (mg/L)
Chlorophenol, 3-	108-43-0	—	—	1.2E-01	1.2E+01	—	—	—	—	—	—	3.7E-01	3.7E+01	—	—	—	—
Chlorophenol, 4-	106-48-9	—	—	1.2E-01	1.2E+01	—	—	—	—	—	—	3.7E-01	3.7E+01	—	—	—	—
Chlorophenyl phenylether, 4-	7005-72-3	6.1E-05	6.1E-03	—	—	1.2E+00	1.6E-01	—	—	1.4E-04	1.4E-02	—	—	2.1E+00	2.7E-01	—	—
Chloropropane, 2-	75-29-6	—	—	7.3E-01	7.3E+01	—	—	4.7E+02	6.0E+01	—	—	2.2E+00	2.2E+02	—	—	6.5E+02	8.5E+01
Chlorothalonil	1897-45-6	8.3E-02	8.3E+00	3.7E-01	3.7E+01	—	—	—	—	1.9E-01	1.9E+01	1.1E+00	1.1E+02	—	—	—	—
Chlorotoluene, o- (2-chlorotoluene)	95-49-8	—	—	4.9E-01	4.9E+01	—	—	2.4E+04	3.1E+03	—	—	1.5E+00	1.5E+02	—	—	3.3E+04	4.3E+03
Chlorotoluene, p- (4-chlorotoluene)	106-43-4	—	—	4.9E-01	4.9E+01	—	—	—	—	—	—	1.5E+00	1.5E+02	—	—	—	—
Chlorpyrifos	2921-88-2	—	—	7.3E-02	7.3E+00	—	—	—	—	—	—	2.2E-01	2.2E+01	—	—	—	—
Chromium (III)	16065-83-1	—	—	3.7E+01	3.7E+03	—	—	—	—	—	—	1.1E+02	1.1E+04	—	—	—	—
Chromium (total)	7440-47-3	—	—	3.7E+01	3.7E+03	—	—	—	—	—	—	1.1E+02	1.1E+04	—	—	—	—
Chromium (VI)	18540-29-9	—	—	7.6E-02	7.6E+00	—	—	—	—	—	—	2.3E-01	2.3E+01	—	—	—	—
Chrysene	218-01-9	9.1E-01	9.1E+01	—	—	8.6E+05	1.1E+05	—	—	2.0E+00	2.0E+02	—	—	1.0E+06	1.9E+05	—	—
Cobalt	7440-48-4	—	—	2.4E-01	2.4E+01	—	—	—	—	—	—	7.3E-01	7.3E+01	—	—	—	—
Copolymer acrylamide	69418-26-4	—	—	4.9E-03	4.9E-01	—	—	—	—	—	—	1.5E-02	1.5E+00	—	—	—	—
Copper	7440-50-8	—	—	2.4E+00	2.4E+02	—	—	—	—	—	—	7.1E+00	7.1E+02	—	—	—	—
Coronene	191-07-1	—	—	4.9E-02	4.9E+00	—	—	—	—	—	—	1.5E-01	1.5E+01	—	—	—	—
Coumaphos	56-72-4	—	—	1.7E-01	1.7E+01	—	—	—	—	—	—	5.1E-01	5.1E+01	—	—	—	—
Cresol	1319-77-3	—	—	1.2E+00	1.2E+02	—	—	—	—	—	—	3.7E+00	3.7E+02	—	—	—	—
Cresol, m- (3-methylphenol)	108-39-4	—	—	1.2E+00	1.2E+02	—	—	—	—	—	—	3.7E+00	3.7E+02	—	—	—	—
Cresol, o- (2-methylphenol)	95-48-7	—	—	1.2E+00	1.2E+02	—	—	—	—	—	—	3.7E+00	3.7E+02	—	—	—	—
Cresol, p- (4-methylphenol)	106-44-5	—	—	1.2E-01	1.2E+01	—	—	—	—	—	—	3.7E-01	3.7E+01	—	—	—	—
Crotonaldehyde	123-73-9	4.8E-04	4.8E-02	2.4E-02	2.4E+00	—	—	—	—	1.1E-03	1.1E-01	7.3E-02	7.3E+00	—	—	—	—
Cumene (isopropylbenzene)	98-82-8	—	—	2.4E+00	2.4E+02	—	—	4.4E+03	5.7E+02	—	—	7.3E+00	7.3E+02	—	—	6.2E+03	8.0E+02
Cyanazine	21725-46-2	1.1E-03	1.1E-01	4.9E-02	4.9E+00	—	—	—	—	2.4E-03	2.4E-01	1.5E-01	1.5E+01	—	—	—	—
Cyanide	57-12-5	—	—	1.5E-02	1.5E+00	—	—	—	—	—	—	4.4E-02	4.4E+00	—	—	—	—
Cyanogen	460-19-5	—	—	2.4E-02	2.4E+00	—	—	7.3E+00	9.4E-01	—	—	7.3E-02	7.3E+00	—	—	1.0E+01	1.3E+00
Cycloate	1134-23-2	—	—	1.3E+00	1.3E+02	—	—	—	—	—	—	4.0E+00	4.0E+02	—	—	—	—
Cyclohexane	110-82-7	—	—	1.2E+02	1.2E+04	—	—	5.9E+03	7.7E+02	—	—	3.7E+02	3.7E+04	—	—	8.3E+03	1.1E+03
Cyclohexanol	108-93-0	—	—	1.2E+02	1.2E+04	—	—	—	—	—	—	3.7E+02	3.7E+04	—	—	—	—
Cyclohexanone	108-94-1	—	—	1.2E+02	1.2E+04	—	—	1.0E+06	1.8E+05	—	—	3.7E+02	3.7E+04	—	—	1.0E+06	2.5E+05
Cyclohexene, 1-methanol-3-	1679-51-2	—	—	4.9E-01	4.9E+01	—	—	—	—	—	—	1.5E+00	1.5E+02	—	—	—	—
Cyclohexene, 4-vinyl-1-	100-40-3	—	—	5.4E-01	5.4E+01	—	—	1.1E+03	1.4E+02	—	—	1.6E+00	1.6E+02	—	—	1.5E+03	2.0E+02
Cyclopentane	287-92-3	—	—	1.5E+00	1.5E+02	—	—	3.7E+04	4.8E+03	—	—	4.4E+00	4.4E+02	—	—	5.1E+04	6.7E+03
Cyclopentane, methyl-	96-37-7	—	—	2.4E+00	2.4E+02	—	—	6.8E+02	8.8E+01	—	—	7.3E+00	7.3E+02	—	—	9.5E+02	1.2E+02
Cyclopentene	142-29-0	—	—	1.2E+02	1.2E+04	—	—	—	—	—	—	3.7E+02	3.7E+04	—	—	—	—
Cyclotetramethylenetetranitramine (HMX)	2691-41-0	—	—	1.2E+00	1.2E+02	—	—	—	—	—	—	3.7E+00	3.7E+02	—	—	—	—
Cyclotrimethylenetrinitramine (RDX)	121-82-4	1.1E-02	1.1E+00	9.8E-02	9.8E+00	—	—	—	—	2.6E-02	2.6E+00	2.9E-01	2.9E+01	—	—	—	—
Cymene (isopropyltoluene)	99-87-6	—	—	2.4E+00	2.4E+02	—	—	—	—	—	—	7.3E+00	7.3E+02	—	—	—	—
Cymoxanil	57966-95-7	—	—	3.2E-01	3.2E+01	—	—	—	—	—	—	9.5E-01	9.5E+01	—	—	—	—
Dacthal (DCPA)	1861-32-1	—	—	2.4E-01	2.4E+01	—	—	—	—	—	—	7.3E-01	7.3E+01	—	—	—	—
Dalapon, sodium salt (2,2-dichloropropanoic acid)	75-99-0	—	—	7.3E-01	7.3E+01	—	—	—	—	—	—	2.2E+00	2.2E+02	—	—	—	—
DDD	72-54-8	3.8E-03	3.8E-01	—	—	—	—	—	—	8.5E-03	8.5E-01	—	—	—	—	—	—
DDE	72-55-9	2.7E-03	2.7E-01	—	—	—	—	—	—	6.0E-03	6.0E-01	—	—	—	—	—	—
DDT	50-29-3	2.7E-03	2.7E-01	1.2E-02	1.2E+00	6.2E+02	8.1E+01	—	—	6.0E-03	6.0E-01	3.7E-02	3.7E+00	1.0E+03	1.4E+02	—	—
Demeton	8065-48-3	—	—	9.8E-04	9.8E-02	—	—	—	—	—	—	2.9E-03	2.9E-01	—	—	—	—
Desethylatrazine	6190-65-4	—	—	8.6E-01	8.6E+01	—	—	—	—	—	—	2.6E+00	2.6E+02	—	—	—	—
Diacetone alcohol (4-hydroxy-4-methyl-2-pentanone)	123-42-2	—	—	9.8E-01	9.8E+01	—	—	—	—	—	—	2.9E+00	2.9E+02	—	—	—	—
Diallate	2303-16-4	1.5E-02	1.5E+00	—	—	—	—	—	—	3.4E-02	3.4E+00	—	—	—	—	—	—
Diazinon	333-41-5	—	—	2.2E-02	2.2E+00	—	—	4.0E+03	5.2E+02	—	—	6.6E-02	6.6E+00	—	—	5.6E+03	7.2E+02
Dibenz(a,h)acridine	226-36-8	7.6E-04	7.6E-02	—	—	8.1E+03	1.1E+03	—	—	1.7E-03	1.7E-01	—	—	1.4E+04	1.8E+03	—	—

Table 8
Tier 1 Individual Residential and Commercial/Industrial Groundwater PCLs

Last Revised: March 6, 2023

Chemical of Concern	CAS	Residential								Commercial/Industrial							
		Carcinogenic		Noncarcinogenic		Carcinogenic		Noncarcinogenic		Carcinogenic		Noncarcinogenic		Carcinogenic		Noncarcinogenic	
		GW _{mg} ¹ (mg/L)	GW _{Class 3} ² (mg/L)	GW _{mg} ¹ (mg/L)	GW _{Class 3} ² (mg/L)	AirGW _{Inh-V} ^{0.5} 0.5 acre source area (mg/L)	AirGW _{Inh-V} ³⁰ 30 acre source area (mg/L)	AirGW _{Inh-V} ^{0.5} 0.5 acre source area (mg/L)	AirGW _{Inh-V} ³⁰ 30 acre source area (mg/L)	GW _{mg} ¹ (mg/L)	GW _{Class 3} ² (mg/L)	GW _{mg} ¹ (mg/L)	GW _{Class 3} ² (mg/L)	AirGW _{Inh-V} ^{0.5} 0.5 acre source area (mg/L)	AirGW _{Inh-V} ³⁰ 30 acre source area (mg/L)	AirGW _{Inh-V} ^{0.5} 0.5 acre source area (mg/L)	AirGW _{Inh-V} ³⁰ 30 acre source area (mg/L)
Dibenz(a,j)acridine	224-42-0	1.3E-03	1.3E-01	—	—	1.0E+04	1.3E+03	—	—	2.8E-03	2.8E-01	—	—	1.7E+04	2.2E+03	—	—
Dibenz-a,h-anthracene	53-70-3	9.1E-04	9.1E-02	—	—	1.5E+03	2.0E+02	—	—	2.0E-03	2.0E-01	—	—	2.6E+03	3.3E+02	—	—
Dibenzo(a,e)pyrene	192-65-4	1.3E-04	1.3E-02	—	—	1.0E+03	1.3E+02	—	—	2.8E-04	2.8E-02	—	—	1.7E+03	2.2E+02	—	—
Dibenzo(a,h)pyrene	189-64-0	1.3E-05	1.3E-03	—	—	1.0E+02	1.3E+01	—	—	2.8E-05	2.8E-03	—	—	1.7E+02	2.2E+01	—	—
Dibenzo(a,i)pyrene	189-55-9	1.3E-05	1.3E-03	—	—	1.0E+02	1.3E+01	—	—	2.8E-05	2.8E-03	—	—	1.7E+02	2.2E+01	—	—
Dibenzofuran	132-64-9	—	—	9.8E-02	9.8E+00	—	—	—	—	—	—	2.9E-01	2.9E+01	—	—	—	—
Dibenzothiophene	132-65-0	—	—	7.3E-02	7.3E+00	—	—	—	—	—	—	2.2E-01	2.2E+01	—	—	—	—
Dibromo-3-chloropropane, 1,2-	96-12-8	1.1E-03	1.1E-01	4.9E-03	4.9E-01	6.2E-01	8.0E-02	3.2E+01	4.1E+00	2.6E-03	2.6E-01	1.5E-02	1.5E+00	1.0E+00	1.3E-01	4.4E+01	5.7E+00
Dibromochloromethane (chlorodibromomethane) ³	124-48-1	1.1E-02	1.1E+00	4.9E-01	4.9E+01	—	—	—	—	2.4E-02	2.4E+00	1.5E+00	1.5E+02	—	—	—	—
Dibromofluoromethane	1868-53-7	—	—	4.9E+00	4.9E+02	—	—	—	—	—	—	1.5E+01	1.5E+03	—	—	—	—
Dicamba	1918-00-9	—	—	7.3E-01	7.3E+01	—	—	—	—	—	—	2.2E+00	2.2E+02	—	—	—	—
Dichlorimid	37764-25-3	—	—	6.1E-01	6.1E+01	—	—	—	—	—	—	1.8E+00	1.8E+02	—	—	—	—
Dichloro-2-butene, 1,4-	764-41-0	—	—	—	—	6.7E-01	8.7E-02	—	—	—	—	—	—	1.1E+00	1.5E-01	—	—
Dichloro-2-butene, 1,4- trans	110-57-6	—	—	—	—	6.5E-01	8.5E-02	—	—	—	—	—	—	1.1E+00	1.4E-01	—	—
Dichlorobenzene, 1,2-	95-50-1	—	—	2.2E+00	2.2E+02	—	—	1.2E+03	1.5E+02	—	—	6.6E+00	6.6E+02	—	—	1.6E+03	2.1E+02
Dichlorobenzene, 1,3-	541-73-1	—	—	7.3E-01	7.3E+01	—	—	1.9E+02	2.5E+01	—	—	2.2E+00	2.2E+02	—	—	2.7E+02	3.4E+01
Dichlorobenzene, 1,4-	106-46-7	3.8E-02	3.8E+00	—	—	—	—	1.7E+04	2.2E+03	8.5E-02	8.5E+00	—	—	—	—	2.4E+04	3.1E+03
Dichlorobenzidine, 3,3'-	91-94-1	2.0E-03	2.0E-01	—	—	—	—	—	—	4.5E-03	4.5E-01	—	—	—	—	—	—
Dichlorobutane, 2,3-	7581-97-7	—	—	2.4E-01	2.4E+01	—	—	1.4E+02	1.9E+01	—	—	7.3E-01	7.3E+01	—	—	2.0E+02	2.6E+01
Dichlorodifluoromethane	75-71-8	—	—	4.9E+00	4.9E+02	—	—	6.0E+01	7.8E+00	—	—	1.5E+01	1.5E+03	—	—	8.4E+01	1.1E+01
Dichloroethane, 1,1-	75-34-3	—	—	4.9E+00	4.9E+02	—	—	4.3E+04	5.6E+03	—	—	1.5E+01	1.5E+03	—	—	6.0E+04	7.8E+03
Dichloroethane, 1,2-	107-06-2	1.0E-02	1.0E+00	1.9E+00	1.9E+02	2.5E+02	3.3E+01	1.6E+03	2.1E+02	2.2E-02	2.2E+00	5.7E+00	5.7E+02	4.2E+02	5.5E+01	2.3E+03	2.9E+02
Dichloroethylene, 1,1-	75-35-4	—	—	1.2E+00	1.2E+02	—	—	1.7E+03	2.2E+02	—	—	3.7E+00	3.7E+02	—	—	2.3E+03	3.0E+02
Dichloroethylene, cis-1,2-	156-59-2	—	—	4.9E-02	4.9E+00	—	—	1.2E+03	1.6E+02	—	—	1.5E-01	1.5E+01	—	—	1.7E+03	2.2E+02
Dichloroethylene, trans-1,2	156-60-5	—	—	4.9E-01	4.9E+01	—	—	7.7E+02	9.9E+01	—	—	1.5E+00	1.5E+02	—	—	1.1E+03	1.4E+02
Dichlorofluoromethane	75-43-4	—	—	4.9E+00	4.9E+02	—	—	—	—	—	—	1.5E+01	1.5E+03	—	—	—	—
Dichlorophenol, 2,3-	576-24-9	—	—	7.3E-02	7.3E+00	—	—	—	—	—	—	2.2E-01	2.2E+01	—	—	—	—
Dichlorophenol, 2,4-	120-83-2	—	—	7.3E-02	7.3E+00	—	—	—	—	—	—	2.2E-01	2.2E+01	—	—	—	—
Dichlorophenol, 2,5-	583-78-8	—	—	7.3E-02	7.3E+00	—	—	—	—	—	—	2.2E-01	2.2E+01	—	—	—	—
Dichlorophenol, 2,6-	87-65-0	—	—	2.4E-02	2.4E+00	—	—	—	—	—	—	7.3E-02	7.3E+00	—	—	—	—
Dichlorophenol, 3,4-	95-77-2	—	—	7.3E-02	7.3E+00	—	—	—	—	—	—	2.2E-01	2.2E+01	—	—	—	—
Dichlorophenol, 3,5-	591-35-5	—	—	7.3E-02	7.3E+00	—	—	—	—	—	—	2.2E-01	2.2E+01	—	—	—	—
Dichlorophenoxy, 2,4- butyric acid, 4- (2,4-DB)	94-82-6	—	—	2.0E-01	2.0E+01	—	—	—	—	—	—	5.8E-01	5.8E+01	—	—	—	—
Dichlorophenoxyacetic acid, 2,4- (2,4-D)	94-75-7	—	—	4.9E+00	4.9E+02	—	—	—	—	—	—	1.5E+01	1.5E+03	—	—	—	—
Dichloroprop (2-(2,4-dichlorophenoxy) propanoic acid)	120-36-5	—	—	2.4E-01	2.4E+01	—	—	—	—	—	—	7.3E-01	7.3E+01	—	—	—	—
Dichloropropane, 1,2-	78-87-5	2.5E-02	2.5E+00	3.2E+00	3.2E+02	7.4E+02	9.5E+01	1.2E+02	1.5E+01	5.5E-02	5.5E+00	9.5E+00	9.5E+02	1.2E+03	1.6E+02	1.6E+02	2.1E+01
Dichloropropane, 1,3-	142-28-9	9.1E-03	9.1E-01	4.9E-01	4.9E+01	2.5E+02	3.3E+01	8.7E+02	1.1E+02	2.0E-02	2.0E+00	1.5E+00	1.5E+02	4.3E+02	5.5E+01	1.2E+03	1.6E+02
Dichloropropane, 2,2-	594-20-7	1.3E-02	1.3E+00	2.2E+00	2.2E+02	—	—	5.7E+01	7.3E+00	3.0E-02	3.0E+00	6.6E+00	6.6E+02	—	—	7.9E+01	1.0E+01
Dichloropropanol, 2,3-	616-23-9	—	—	7.3E-02	7.3E+00	—	—	—	—	—	—	2.2E-01	2.2E+01	—	—	—	—
Dichloropropene, 1,1-	563-58-6	9.1E-03	9.1E-01	7.3E-01	7.3E+01	1.9E+01	2.5E+00	6.6E+01	8.5E+00	2.0E-02	2.0E+00	2.2E+00	2.2E+02	3.2E+01	4.2E+00	9.2E+01	1.2E+01
Dichloropropene, 1,3- (mixed isomers)	542-75-6	9.1E-03	9.1E-01	7.3E-01	7.3E+01	1.8E+02	2.3E+01	6.1E+02	7.9E+01	2.0E-02	2.0E+00	2.2E+00	2.2E+02	3.0E+02	3.8E+01	8.5E+02	1.1E+02
Dichloropropene, cis 1,3-	10061-01-5	1.7E-03	1.7E-01	2.4E-03	2.4E-01	—	—	6.9E+02	8.9E+01	3.8E-03	3.8E-01	7.3E-03	7.3E-01	—	—	9.7E+02	1.2E+02
Dichloropropene, trans 1,3-	10061-02-6	9.1E-03	9.1E-01	7.3E-01	7.3E+01	1.9E+02	2.5E+01	6.5E+02	8.4E+01	2.0E-02	2.0E+00	2.2E+00	2.2E+02	3.2E+02	4.1E+01	9.1E+02	1.2E+02
Dichlorvos	62-73-7	3.1E-03	3.1E-01	1.2E-02	1.2E+00	—	—	1.0E+04	1.3E+03	7.0E-03	7.0E-01	3.7E-02	3.7E+00	—	—	1.4E+04	1.8E+03
Dicrotophos (bidrin)	141-66-2	—	—	2.4E-03	2.4E-01	—	—	—	—	—	—	7.3E-03	7.3E-01	—	—	—	—
Dicyclopentadiene	77-73-6	—	—	2.0E+00	2.0E+02	—	—	—	—	—	—	5.8E+00	5.8E+02	—	—	—	—
Dieldrin	60-57-1	5.7E-05	5.7E-03	1.2E-03	1.2E-01	1.3E+02	1.6E+01	—	—	1.3E-04	1.3E-02	3.7E-03	3.7E-01	2.1E+02	2.8E+01	—	—
Diethanolamine	111-42-2	—	—	1.2E-02	1.2E+00	—	—	1.0E+06	1.0E+06	—	—	3.7E-02	3.7E+00	—	—	1.0E+06	1.0E+06
Diethylthiocarbamate, sodium salt	148-18-5	3.4E-03	3.4E-01	7.3E-01	7.3E+01	—	—	—	—	7.6E-03	7.6E-01	2.2E+00	2.2E+02	—	—	—	—
Diethyl phthalate	84-66-2	—	—	2.0E+01	2.0E+03	—	—	—	—	—	—	5.8E+01	5.8E+03	—	—	—	—

**Table 8
Tier 1 Individual Residential and Commercial/Industrial Groundwater PCLs**

Last Revised: March 6, 2023

Chemical of Concern	CAS	Residential								Commercial/Industrial							
		Carcinogenic		Noncarcinogenic		Carcinogenic		Noncarcinogenic		Carcinogenic		Noncarcinogenic		Carcinogenic		Noncarcinogenic	
		GW _{Intg} ¹ (mg/L)	GW _{Class 3} ² (mg/L)	GW _{Intg} ¹ (mg/L)	GW _{Class 3} ² (mg/L)	AirGW _{Inh-V} ¹ 0.5 acre source area (mg/L)	AirGW _{Inh-V} ³⁰ acre source area (mg/L)	AirGW _{Inh-V} ¹ 0.5 acre source area (mg/L)	AirGW _{Inh-V} ³⁰ acre source area (mg/L)	GW _{Intg} ¹ (mg/L)	GW _{Class 3} ² (mg/L)	GW _{Intg} ¹ (mg/L)	GW _{Class 3} ² (mg/L)	AirGW _{Inh-V} ¹ 0.5 acre source area (mg/L)	AirGW _{Inh-V} ³⁰ acre source area (mg/L)	AirGW _{Inh-V} ¹ 0.5 acre source area (mg/L)	AirGW _{Inh-V} ³⁰ acre source area (mg/L)
Diethylene glycol	111-46-6	—	—	4.9E+01	4.9E+03	—	—	—	—	—	—	1.5E+02	1.5E+04	—	—	—	—
Diethylene glycol monobutyl ether	112-34-5	—	—	7.3E-01	7.3E+01	—	—	3.2E+03	4.1E+02	—	—	2.2E+00	2.2E+02	—	—	4.5E+03	5.8E+02
Diethylhexyl adipate	103-23-1	7.6E-01	7.6E+01	1.5E+01	1.5E+03	—	—	—	—	1.7E+00	1.7E+02	4.4E+01	4.4E+03	—	—	—	—
Diethylstilbestrol	56-53-1	1.9E-07	1.9E-05	—	—	—	—	—	—	4.3E-07	4.3E-05	—	—	—	—	—	—
Diisobutylene (trimethyl-1-pentene, 2,4,4-)	107-39-1	—	—	1.5E+00	1.5E+02	—	—	2.3E+01	3.0E+00	—	—	4.4E+00	4.4E+02	—	—	3.2E+01	4.2E+00
Diisopropylbenzene, p-	100-18-5	—	—	2.4E-01	2.4E+01	—	—	—	—	—	—	7.3E-01	7.3E+01	—	—	—	—
Diisopropyl ether (2,2'-oxybis-propane)	108-20-3	—	—	2.4E+00	2.4E+02	—	—	2.0E+04	2.5E+03	—	—	7.3E+00	7.3E+02	—	—	2.7E+04	3.5E+03
Dimethenamid	87674-68-8	—	—	3.7E-01	3.7E+01	—	—	—	—	—	—	1.1E+00	1.1E+02	—	—	—	—
Dimethoate	60-51-5	—	—	4.9E-03	4.9E-01	—	—	—	—	—	—	1.5E-02	1.5E+00	—	—	—	—
Dimethoxybenzidine, 3,3'-	119-90-4	6.5E-02	6.5E+00	—	—	—	—	—	—	1.5E-01	1.5E+01	—	—	—	—	—	—
Dimethyl-2-nitrobenzene, 1,3-	81-20-9	—	—	4.9E-02	4.9E+00	—	—	1.1E+04	1.4E+03	—	—	1.5E-01	1.5E+01	—	—	1.5E+04	2.0E+03
Dimethyl-3-nitrobenzene, 1,2-	83-41-0	—	—	4.9E-02	4.9E+00	—	—	1.3E+04	1.7E+03	—	—	1.5E-01	1.5E+01	—	—	1.9E+04	2.4E+03
Dimethyl-4-nitrobenzene, 1,2-	99-51-4	—	—	4.9E-02	4.9E+00	—	—	1.5E+04	1.9E+03	—	—	1.5E-01	1.5E+01	—	—	2.1E+04	2.7E+03
Dimethyl-5-nitrobenzene, 1,3-	99-12-7	—	—	4.9E-02	4.9E+00	—	—	9.5E+03	1.2E+03	—	—	1.5E-01	1.5E+01	—	—	1.3E+04	1.7E+03
Dimethylphenethylamine, alpha, alpha-	122-09-8	—	—	4.9E-02	4.9E+00	—	—	—	—	—	—	1.5E-01	1.5E+01	—	—	—	—
Dimethyl phenol, 2,4-	105-67-9	—	—	4.9E-01	4.9E+01	—	—	—	—	—	—	1.5E+00	1.5E+02	—	—	—	—
Dimethylaminoazobenzene, p-	60-11-7	—	—	2.4E-04	2.4E-02	—	—	—	—	—	—	7.3E-04	7.3E-02	—	—	—	—
Dimethylbenz-a-anthracene, 7,12-	57-97-6	3.7E-06	3.7E-04	—	—	3.3E+01	4.3E+00	—	—	8.2E-06	8.2E-04	—	—	5.5E+01	7.2E+00	—	—
Dimethylbenzidine, 3,3'-	119-93-7	8.3E-05	8.3E-03	—	—	—	—	—	—	1.9E-04	1.9E-02	—	—	—	—	—	—
Dimethylformamide, N,N-	68-12-2	—	—	2.4E+00	2.4E+02	—	—	3.7E+05	4.8E+04	—	—	7.3E+00	7.3E+02	—	—	5.2E+05	6.8E+04
Dimethylnaphthalene, 1,3-	575-41-7	—	—	9.8E-01	9.8E+01	—	—	—	—	—	—	2.9E+00	2.9E+02	—	—	—	—
Dimethylphthalate	131-11-3	—	—	2.0E+01	2.0E+03	—	—	—	—	—	—	5.8E+01	5.8E+03	—	—	—	—
Di-n-butyl phthalate	84-74-2	—	—	2.4E+00	2.4E+02	—	—	—	—	—	—	7.3E+00	7.3E+02	—	—	—	—
Dinitro-2-methylphenol, 4,6- (dinitro-o-cresol, 4, 6-)	534-52-1	—	—	2.4E-03	2.4E-01	—	—	—	—	—	—	7.3E-03	7.3E-01	—	—	—	—
Dinitrobenzene, 1,3- (dinitrobenzene, 2,4-)	99-65-0	—	—	2.4E-03	2.4E-01	—	—	—	—	—	—	7.3E-03	7.3E-01	—	—	—	—
Dinitrobenzene, 1,4-	100-25-4	—	—	2.4E-03	2.4E-01	—	—	—	—	—	—	7.3E-03	7.3E-01	—	—	—	—
Dinitrophenol, 2,4-	51-28-5	—	—	4.9E-02	4.9E+00	—	—	—	—	—	—	1.5E-01	1.5E+01	—	—	—	—
Dinitrophenol, 2,5-	329-71-5	—	—	4.9E-02	4.9E+00	—	—	—	—	—	—	1.5E-01	1.5E+01	—	—	—	—
Dinitrotoluene, 2,4-	121-14-2	1.3E-03	1.3E-01	4.9E-02	4.9E+00	—	—	—	—	3.0E-03	3.0E-01	1.5E-01	1.5E+01	—	—	—	—
Dinitrotoluene, 2,6-	606-20-2	1.3E-03	1.3E-01	2.4E-02	2.4E+00	—	—	—	—	3.0E-03	3.0E-01	7.3E-02	7.3E+00	—	—	—	—
Di-n-octyl phthalate	117-84-0	—	—	2.4E-01	2.4E+01	—	—	—	—	—	—	7.3E-01	7.3E+01	—	—	—	—
Dinoseb	88-85-7	—	—	2.4E-02	2.4E+00	—	—	—	—	—	—	7.3E-02	7.3E+00	—	—	—	—
Dioxane 1,4-	123-91-1	9.1E-03	9.1E-01	7.3E-01	7.3E+01	7.7E+03	1.0E+03	1.8E+05	2.3E+04	2.0E-02	2.0E+00	2.2E+00	2.2E+02	1.3E+04	1.7E+03	2.5E+05	3.3E+04
Dioxin (as 2,3,7,8-TCDD toxicity equivalent quotients (TEQs))	1746-01-6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Diphenyl ether	101-84-8	—	—	1.5E-01	1.5E+01	—	—	—	—	—	—	4.5E-01	4.5E+01	—	—	—	—
Diphenylamine	122-39-4	—	—	6.1E-01	6.1E+01	—	—	—	—	—	—	1.8E+00	1.8E+02	—	—	—	—
Diphenylhydrazine, 1,2-	122-66-7	1.1E-03	1.1E-01	—	—	3.8E+03	4.9E+02	—	—	2.6E-03	2.6E-01	—	—	6.4E+03	8.3E+02	—	—
Dipropylene glycol	110-98-5	—	—	2.9E+00	2.9E+02	—	—	—	—	—	—	8.8E+00	8.8E+02	—	—	—	—
Diquat	85-00-7	—	—	5.4E-02	5.4E+00	—	—	—	—	—	—	1.6E-01	1.6E+01	—	—	—	—
Disodium iminodiacetate (iminodiacetic acid, disodium salt)	142-73-4	—	—	2.4E-01	2.4E+01	—	—	—	—	—	—	7.3E-01	7.3E+01	—	—	—	—
Disulfoton	298-04-4	—	—	9.8E-04	9.8E-02	—	—	—	—	—	—	2.9E-03	2.9E-01	—	—	—	—
Diuron	330-54-1	—	—	4.9E-02	4.9E+00	—	—	—	—	—	—	1.5E-01	1.5E+01	—	—	—	—
Dodecylphenol, 4-	104-43-8	—	—	1.2E+00	1.2E+02	—	—	—	—	—	—	3.7E+00	3.7E+02	—	—	—	—
Endosulfan	115-29-7	—	—	1.5E-01	1.5E+01	—	—	—	—	—	—	4.4E-01	4.4E+01	—	—	—	—
Endosulfan I	959-98-8	—	—	4.9E-02	4.9E+00	—	—	—	—	—	—	1.5E-01	1.5E+01	—	—	—	—
Endosulfan II	33213-65-9	—	—	1.5E-01	1.5E+01	—	—	—	—	—	—	4.4E-01	4.4E+01	—	—	—	—
Endosulfan sulfate	1031-07-8	—	—	1.5E-01	1.5E+01	—	—	—	—	—	—	4.4E-01	4.4E+01	—	—	—	—
Endothall	145-73-3	—	—	4.9E-01	4.9E+01	—	—	—	—	—	—	1.5E+00	1.5E+02	—	—	—	—
Endrin	72-20-8	—	—	7.3E-03	7.3E-01	—	—	—	—	—	—	2.2E-02	2.2E+00	—	—	—	—
Endrin aldehyde	7421-93-4	—	—	7.3E-03	7.3E-01	—	—	—	—	—	—	2.2E-02	2.2E+00	—	—	—	—

**Table 8
Tier 1 Individual Residential and Commercial/Industrial Groundwater PCLs**

Last Revised: March 6, 2023

Chemical of Concern	CAS	Residential								Commercial/Industrial							
		Carcinogenic		Noncarcinogenic		Carcinogenic		Noncarcinogenic		Carcinogenic		Noncarcinogenic		Carcinogenic		Noncarcinogenic	
		GW _{Intg} ¹ (mg/L)	GW _{Class 3} ² (mg/L)	GW _{Intg} ¹ (mg/L)	GW _{Class 3} ² (mg/L)	AirGW _{Intg-V} ¹ 0.5 acre source area (mg/L)	AirGW _{Intg-V} ³⁰ acre source area (mg/L)	AirGW _{Intg-V} ¹ 0.5 acre source area (mg/L)	AirGW _{Intg-V} ³⁰ acre source area (mg/L)	GW _{Intg} ¹ (mg/L)	GW _{Class 3} ² (mg/L)	GW _{Intg} ¹ (mg/L)	GW _{Class 3} ² (mg/L)	AirGW _{Intg-V} ¹ 0.5 acre source area (mg/L)	AirGW _{Intg-V} ³⁰ acre source area (mg/L)	AirGW _{Intg-V} ¹ 0.5 acre source area (mg/L)	AirGW _{Intg-V} ³⁰ acre source area (mg/L)
Endrin ketone	53494-70-5	—	—	7.3E-03	7.3E-01	—	—	—	—	—	—	2.2E-02	2.2E+00	—	—	—	—
Epichlorohydrin	106-89-8	9.2E-02	9.2E+00	1.5E-01	1.5E+01	1.4E+04	1.8E+03	7.1E+02	9.1E+01	2.1E-01	2.1E+01	4.4E-01	4.4E+01	2.3E+04	3.0E+03	9.9E+02	1.3E+02
EPN (o-ethyl o-(4-nitrophenyl)phenylphosphonothioate)	2104-64-5	—	—	2.4E-04	2.4E-02	—	—	—	—	—	—	7.3E-04	7.3E-02	—	—	—	—
Esfenvalerate	66230-04-4	—	—	4.9E-02	4.9E+00	—	—	—	—	—	—	1.5E-01	1.5E+01	—	—	—	—
Ethalfuralin (sonolan)	55283-68-6	1.0E-02	1.0E+00	9.8E-01	9.8E+01	—	—	—	—	2.3E-02	2.3E+00	2.9E+00	2.9E+02	—	—	—	—
Ethanol	64-17-5	—	—	8.1E+02	8.1E+04	—	—	—	—	—	—	2.4E+03	2.4E+05	—	—	—	—
Ethanol, 2-amino-	141-43-5	—	—	4.2E-02	4.2E+00	—	—	4.2E+05	5.5E+04	—	—	1.2E-01	1.2E+01	—	—	5.9E+05	7.7E+04
Ethanol, 2-(2-aminoethoxy)-	929-06-6	—	—	1.2E-02	1.2E+00	—	—	—	—	—	—	3.7E-02	3.7E+00	—	—	—	—
Ethanol, 2-(2-ethoxyethoxy)-	111-90-0	—	—	4.9E+01	4.9E+03	—	—	—	—	—	—	1.5E+02	1.5E+04	—	—	—	—
Ethanol, 2-(methylamino)-	109-83-1	—	—	3.9E-01	3.9E+01	—	—	1.0E+06	1.3E+05	—	—	1.2E+00	1.2E+02	—	—	1.0E+06	1.8E+05
Ethion	563-12-2	—	—	1.2E-02	1.2E+00	—	—	—	—	—	—	3.7E-02	3.7E+00	—	—	—	—
Ethoprop	13194-48-4	3.2E-02	3.2E+00	2.4E-03	2.4E-01	—	—	—	—	7.3E-02	7.3E+00	7.3E-03	7.3E-01	—	—	—	—
Ethoxy ethanol, 2-	110-80-5	—	—	2.2E+00	2.2E+02	—	—	1.0E+06	4.3E+05	—	—	6.6E+00	6.6E+02	—	—	1.0E+06	6.1E+05
Ethyl acetate	141-78-6	—	—	2.2E+01	2.2E+03	—	—	5.3E+04	6.9E+03	—	—	6.6E+01	6.6E+03	—	—	7.4E+04	9.6E+03
Ethyl acrylate	140-88-5	1.9E-02	1.9E+00	1.2E-01	1.2E+01	—	—	1.1E+03	1.4E+02	4.3E-02	4.3E+00	3.7E-01	3.7E+01	—	—	1.5E+03	2.0E+02
Ethyl benzene	100-41-4	—	—	2.4E+00	2.4E+02	—	—	3.0E+04	3.8E+03	—	—	7.3E+00	7.3E+02	—	—	4.2E+04	5.4E+03
Ethyl dipropylthiocarbamate, S-	759-94-4	—	—	6.1E-01	6.1E+01	—	—	—	—	—	—	1.8E+00	1.8E+02	—	—	—	—
Ethyl ether	60-29-7	—	—	4.9E+00	4.9E+02	—	—	—	—	—	—	1.5E+01	1.5E+03	—	—	—	—
Ethyl methacrylate	97-63-2	—	—	2.2E+00	2.2E+02	—	—	5.7E+04	7.4E+03	—	—	6.6E+00	6.6E+02	—	—	8.0E+04	1.0E+04
Ethyl methanesulfonate	62-50-0	9.2E-03	9.2E-01	—	—	1.9E+04	2.4E+03	—	—	2.1E-02	2.1E+00	—	—	3.1E+04	4.0E+03	—	—
Ethyl tert-butyl ether (2-ethyl-2-ethoxypropane)	637-92-3	—	—	2.4E-02	2.4E+00	—	—	1.1E+04	1.4E+03	—	—	7.3E-02	7.3E+00	—	—	1.5E+04	2.0E+03
Ethyl-1-hexanol, 2-	104-76-7	—	—	3.7E+00	3.7E+02	—	—	—	—	—	—	1.1E+01	1.1E+03	—	—	—	—
Ethyl-2-hexenal, 2-	645-62-5	—	—	3.7E+00	3.7E+02	—	—	—	—	—	—	1.1E+01	1.1E+03	—	—	—	—
Ethyl-2-methyl benzene, 1-	611-14-3	—	—	1.2E+00	1.2E+02	—	—	9.2E+03	1.2E+03	—	—	3.7E+00	3.7E+02	—	—	1.3E+04	1.7E+03
Ethyl-4-methyl benzene, 1-	622-96-8	—	—	1.2E+00	1.2E+02	—	—	7.0E+03	9.0E+02	—	—	3.7E+00	3.7E+02	—	—	9.7E+03	1.3E+03
Ethylene*	74-85-1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ethylene dibromide (dibromoethane, 1,2-)	106-93-4	4.6E-04	4.6E-02	2.2E-01	2.2E+01	7.6E+01	9.8E+00	9.6E+03	1.2E+03	1.0E-03	1.0E-01	6.6E-01	6.6E+01	1.3E+02	1.7E+01	1.3E+04	1.7E+03
Ethylene glycol	107-21-1	—	—	4.9E+01	4.9E+03	—	—	—	—	—	—	1.5E+02	1.5E+04	—	—	—	—
Ethylene oxide	75-21-8	8.9E-04	8.9E-02	—	—	3.0E+03	3.9E+02	—	—	2.0E-03	2.0E-01	—	—	5.0E+03	6.5E+02	—	—
Ethylene thiourea	96-45-7	8.3E-03	8.3E-01	2.0E-03	2.0E-01	—	—	—	—	1.9E-02	1.9E+00	5.8E-03	5.8E-01	—	—	—	—
Ethylenediamine	107-15-3	—	—	2.2E+00	2.2E+02	—	—	—	—	—	—	6.6E+00	6.6E+02	—	—	—	—
Ethylenimine	151-56-4	1.4E-05	1.4E-03	—	—	1.4E+01	1.8E+00	—	—	3.1E-05	3.1E-03	—	—	2.3E+01	3.0E+00	—	—
Ethylhexyl acrylate, 2-	103-11-7	1.9E-02	1.9E+00	—	—	—	—	—	—	4.3E-02	4.3E+00	—	—	—	—	—	—
Famphur	52-85-7	—	—	7.3E-04	7.3E-02	—	—	—	—	—	—	2.2E-03	2.2E-01	—	—	—	—
Fensulfothion	115-90-2	—	—	2.4E-02	2.4E+00	—	—	—	—	—	—	7.3E-02	7.3E+00	—	—	—	—
Fenthion	55-38-9	—	—	1.7E-03	1.7E-01	—	—	—	—	—	—	5.1E-03	5.1E-01	—	—	—	—
Fenuron	101-42-8	—	—	1.7E+00	1.7E+02	—	—	—	—	—	—	5.1E+00	5.1E+02	—	—	—	—
Fluoranthene	206-44-0	—	—	9.8E-01	9.8E+01	—	—	—	—	—	—	2.9E+00	2.9E+02	—	—	—	—
Fluorene	86-73-7	—	—	9.8E-01	9.8E+01	—	—	—	—	—	—	2.9E+00	2.9E+02	—	—	—	—
Fluorine (soluble fluoride)	7782-41-4	—	—	1.5E+00	1.5E+02	—	—	—	—	—	—	4.4E+00	4.4E+02	—	—	—	—
Fluorochloridone	61213-25-0	—	—	1.8E-01	1.8E+01	—	—	—	—	—	—	5.5E-01	5.5E+01	—	—	—	—
Fonofos	944-22-9	—	—	4.9E-02	4.9E+00	—	—	—	—	—	—	1.5E-01	1.5E+01	—	—	—	—
Formaldehyde	50-00-0	—	—	4.9E+00	4.9E+02	—	—	8.6E+04	1.1E+04	—	—	1.5E+01	1.5E+03	—	—	1.2E+05	1.6E+04
Formic acid	64-18-6	—	—	2.2E+01	2.2E+03	—	—	1.7E+04	2.3E+03	—	—	6.6E+01	6.6E+03	—	—	2.4E+04	3.2E+03
Furan	110-00-9	—	—	2.4E-02	2.4E+00	—	—	—	—	—	—	7.3E-02	7.3E+00	—	—	—	—
Furfural	98-01-1	—	—	7.3E-02	7.3E+00	—	—	—	—	—	—	2.2E-01	2.2E+01	—	—	—	—
Glycidylaldehyde	765-34-4	—	—	9.8E-03	9.8E-01	—	—	1.4E+04	1.9E+03	—	—	2.9E-02	2.9E+00	—	—	2.0E+04	2.6E+03
Glyphosate	1071-83-6	—	—	2.4E+01	2.4E+03	—	—	—	—	—	—	7.3E+01	7.3E+03	—	—	—	—
Heptachlor	76-44-8	2.0E-04	2.0E-02	1.2E-02	1.2E+00	6.3E+00	8.1E-01	—	—	4.5E-04	4.5E-02	3.7E-02	3.7E+00	1.1E+01	1.4E+00	—	—
Heptachlor epoxide	1024-57-3	1.0E-04	1.0E-02	3.2E-04	3.2E-02	1.2E+02	1.5E+01	—	—	2.2E-04	2.2E-02	9.5E-04	9.5E-02	2.0E+02	2.6E+01	—	—

Table 8
Tier 1 Individual Residential and Commercial/Industrial Groundwater PCLs

Last Revised: March 6, 2023

Chemical of Concern	CAS	Residential								Commercial/Industrial							
		Carcinogenic		Noncarcinogenic		Carcinogenic		Noncarcinogenic		Carcinogenic		Noncarcinogenic		Carcinogenic		Noncarcinogenic	
		GW _{Intg} ¹ (mg/L)	GW _{Class 3} ² (mg/L)	GW _{Intg} ¹ (mg/L)	GW _{Class 3} ² (mg/L)	Air ³ GW _{Inh-V} 0.5 acre source (mg/L)	Air ³ GW _{Inh-V} 30 acre source (mg/L)	Air ³ GW _{Inh-V} 0.5 acre source (mg/L)	Air ³ GW _{Inh-V} 30 acre source (mg/L)	GW _{Intg} ¹ (mg/L)	GW _{Class 3} ² (mg/L)	GW _{Intg} ¹ (mg/L)	GW _{Class 3} ² (mg/L)	Air ³ GW _{Inh-V} 0.5 acre source (mg/L)	Air ³ GW _{Inh-V} 30 acre source (mg/L)	Air ³ GW _{Inh-V} 0.5 acre source (mg/L)	Air ³ GW _{Inh-V} 30 acre source (mg/L)
Heptane, n-	142-82-5	—	—	1.5E+00	1.5E+02	—	—	8.7E+02	1.1E+02	—	—	4.4E+00	4.4E+02	—	—	1.2E+03	1.6E+02
Heptanoic acid, n-	111-14-8	—	—	1.2E+01	1.2E+03	—	—	1.7E+04	2.1E+03	—	—	3.7E+01	3.7E+03	—	—	2.3E+04	3.0E+03
Hexachlorobenzene	118-74-1	5.7E-04	5.7E-02	2.0E-02	2.0E+00	5.7E+00	7.4E-01	—	—	1.3E-03	1.3E-01	5.8E-02	5.8E+00	9.6E+00	1.2E+00	—	—
Hexachlorobutadiene	87-68-3	1.2E-02	1.2E+00	2.4E-02	2.4E+00	8.9E+00	1.1E+00	—	—	2.6E-02	2.6E+00	7.3E-02	7.3E+00	1.5E+01	1.9E+00	—	—
Hexachlorocyclohexane, alpha (alpha-BHC)	319-84-6	1.4E-04	1.4E-02	2.0E-01	2.0E+01	1.5E+02	2.0E+01	—	—	3.2E-04	3.2E-02	5.8E-01	5.8E+01	2.6E+02	3.3E+01	—	—
Hexachlorocyclohexane, beta (beta-BHC)	319-85-7	5.1E-04	5.1E-02	—	—	1.1E+03	1.5E+02	—	—	1.1E-03	1.1E-01	—	—	1.9E+03	2.5E+02	—	—
Hexachlorocyclohexane, delta (delta-BHC)	319-86-8	5.1E-04	5.1E-02	7.3E-03	7.3E-01	3.6E+02	4.7E+01	—	—	1.1E-03	1.1E-01	2.2E-02	2.2E+00	6.1E+02	7.9E+01	—	—
Hexachlorocyclohexane, gamma (lindane; gamma-BHC)	58-89-9	7.0E-04	7.0E-02	7.3E-03	7.3E-01	—	—	—	—	1.6E-03	1.6E-01	2.2E-02	2.2E+00	—	—	—	—
Hexachlorocyclohexane, techn (technical-BHC)	608-73-1	5.1E-04	5.1E-02	—	—	9.9E+02	1.3E+02	—	—	1.1E-03	1.1E-01	—	—	1.7E+03	2.2E+02	—	—
Hexachlorocyclopentadiene	77-47-4	—	—	1.5E-01	1.5E+01	—	—	5.4E+00	7.0E-01	—	—	4.4E-01	4.4E+01	—	—	7.6E+00	9.8E-01
Hexachloroethane	67-72-1	2.3E-02	2.3E+00	1.7E-02	1.7E+00	—	—	7.3E+03	9.5E+02	5.1E-02	5.1E+00	5.1E-02	5.1E+00	—	—	1.0E+04	1.3E+03
Hexachlorophene	70-30-4	—	—	7.3E-03	7.3E-01	—	—	—	—	—	—	2.2E-02	2.2E+00	—	—	—	—
Hexachloropropylene	1888-71-7	2.3E-02	2.3E+00	1.7E-02	1.7E+00	—	—	2.1E+03	2.8E+02	5.1E-02	5.1E+00	5.1E-02	5.1E+00	—	—	3.0E+03	3.9E+02
Hexanal, 2-ethyl-	123-05-7	—	—	3.7E+00	3.7E+02	—	—	—	—	—	—	1.1E+01	1.1E+03	—	—	—	—
Hexane, n-	110-54-3	—	—	1.5E+00	1.5E+02	—	—	3.8E+01	4.9E+00	—	—	4.4E+00	4.4E+02	—	—	5.3E+01	6.9E+00
Hexanediamine, 1,6-	124-09-4	—	—	1.2E-01	1.2E+01	—	—	—	—	—	—	3.7E-01	3.7E+01	—	—	—	—
Hexanedinitrile	111-69-3	—	—	3.4E-02	3.4E+00	—	—	1.6E+05	2.1E+04	—	—	1.0E-01	1.0E+01	—	—	2.2E+05	2.9E+04
Hexanediol, 1,6-	629-11-8	—	—	1.2E+02	1.2E+04	—	—	1.0E+06	1.0E+06	—	—	3.7E+02	3.7E+04	—	—	1.0E+06	1.0E+06
Hexanoic acid	142-62-1	—	—	1.6E+00	1.6E+02	—	—	2.1E+04	2.7E+03	—	—	4.7E+00	4.7E+02	—	—	3.0E+04	3.8E+03
Hexanone, 2-	591-78-6	—	—	1.2E+00	1.2E+02	—	—	1.2E+04	1.5E+03	—	—	3.7E+00	3.7E+02	—	—	1.6E+04	2.1E+03
Hexazinone	51235-04-2	—	—	8.1E-01	8.1E+01	—	—	—	—	—	—	2.4E+00	2.4E+02	—	—	—	—
Hexene, 1-	592-41-6	—	—	8.1E+00	8.1E+02	—	—	3.4E+01	4.3E+00	—	—	2.4E+01	2.4E+03	—	—	4.7E+01	6.1E+00
Hexene, cis-2-	7688-21-3	—	—	8.1E+00	8.1E+02	—	—	4.8E+01	6.2E+00	—	—	2.4E+01	2.4E+03	—	—	6.7E+01	8.7E+00
Hexylene glycol (2-methyl-2,4-pentanediol)	107-41-5	—	—	7.3E+00	7.3E+02	—	—	—	—	—	—	2.2E+01	2.2E+03	—	—	—	—
Hydrazine	302-01-2	3.0E-04	3.0E-02	—	—	5.1E+01	6.7E+00	3.2E+02	4.2E+01	6.8E-04	6.8E-02	—	—	8.6E+01	1.1E+01	4.5E+02	5.9E+01
Hydrocaproic acid, 6- (6-hydroxyhexanoic acid)	1191-25-9	—	—	1.6E+00	1.6E+02	—	—	2.9E+04	4.2E+03	—	—	4.7E+00	4.7E+02	—	—	4.0E+04	5.9E+03
Hydrogen chloride (hydrochloric acid)*	7647-01-0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hydroquinone	123-31-9	1.5E-02	1.5E+00	9.8E-01	9.8E+01	—	—	—	—	3.4E-02	3.4E+00	2.9E+00	2.9E+02	—	—	—	—
Indene	95-13-6	—	—	4.9E-01	4.9E+01	—	—	2.7E+02	3.5E+01	—	—	1.5E+00	1.5E+02	—	—	3.8E+02	5.0E+01
Indeno-1,2,3-cd-pyrene	193-39-5	9.1E-03	9.1E-01	—	—	1.4E+04	1.8E+03	—	—	2.0E-02	2.0E+00	—	—	2.3E+04	3.0E+03	—	—
Iron*	7439-89-6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Isoamyl alcohol	123-51-3	—	—	1.2E-01	1.2E+01	—	—	—	—	—	—	3.7E-01	3.7E+01	—	—	—	—
Isobutyl alcohol	78-83-1	—	—	7.3E+00	7.3E+02	—	—	—	—	—	—	2.2E+01	2.2E+03	—	—	—	—
Isobutylene (2-methyl-1-propene)	115-11-7	—	—	9.0E-02	9.0E+00	—	—	6.1E+04	7.9E+03	—	—	2.7E-01	2.7E+01	—	—	8.5E+04	1.1E+04
Isobutyric acid (2-methylpropanoic acid)	79-31-2	—	—	1.2E+01	1.2E+03	—	—	—	—	—	—	3.7E+01	3.7E+03	—	—	—	—
Isodecanol	25339-17-7	—	—	3.9E-02	3.9E+00	—	—	—	—	—	—	1.2E-01	1.2E+01	—	—	—	—
Isodrin	465-73-6	5.4E-06	5.4E-04	7.3E-05	7.3E-03	3.4E-02	4.4E-03	—	—	1.2E-05	1.2E-03	2.2E-04	2.2E-02	5.7E-02	7.4E-03	—	—
Isopentane	78-78-4	—	—	1.5E+00	1.5E+02	—	—	2.5E+03	3.2E+02	—	—	4.4E+00	4.4E+02	—	—	3.4E+03	4.4E+02
Isophorone	78-59-1	9.6E-01	9.6E+01	4.9E+00	4.9E+02	—	—	—	—	2.2E+00	2.2E+02	1.5E+01	1.5E+03	—	—	—	—
Isopropyl acetate	108-21-4	—	—	1.7E+00	1.7E+02	—	—	—	—	—	—	5.1E+00	5.1E+02	—	—	—	—
Isopropyl alcohol	67-63-0	—	—	4.9E+01	4.9E+03	—	—	4.2E+05	5.5E+04	—	—	1.5E+02	1.5E+04	—	—	5.9E+05	7.6E+04
Isosafrole	120-58-1	4.1E-03	4.1E-01	—	—	4.3E+02	5.5E+01	—	—	9.3E-03	9.3E-01	—	—	7.2E+02	9.3E+01	—	—
Kelthane (dicofol)	115-32-2	—	—	1.5E-01	1.5E+01	—	—	—	—	—	—	4.4E-01	4.4E+01	—	—	—	—
Kepon (chlordecone)	143-50-0	9.1E-05	9.1E-03	7.3E-03	7.3E-01	2.4E+02	3.0E+01	—	—	2.0E-04	2.0E-02	2.2E-02	2.2E+00	4.0E+02	5.1E+01	—	—
Lead (inorganic)	7439-92-1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Leptophos	21609-90-5	—	—	1.2E-04	1.2E-02	—	—	6.4E+01	8.2E+00	—	—	3.7E-04	3.7E-02	—	—	8.9E+01	1.2E+01
Limonene, d-*	5989-27-5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Lithium	7439-93-2	—	—	1.7E-01	1.7E+01	—	—	—	—	—	—	5.1E-01	5.1E+01	—	—	—	—
Magnesium*	7439-95-4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Malathion	121-75-5	—	—	4.9E-01	4.9E+01	—	—	9.2E+03	1.2E+03	—	—	1.5E+00	1.5E+02	—	—	1.3E+04	1.7E+03

**Table 8
Tier 1 Individual Residential and Commercial/Industrial Groundwater PCLs**

Last Revised: March 6, 2023

Chemical of Concern	CAS	Residential								Commercial/Industrial							
		Carcinogenic		Noncarcinogenic		Carcinogenic		Noncarcinogenic		Carcinogenic		Noncarcinogenic		Carcinogenic		Noncarcinogenic	
		GW _{Intg} ¹ (mg/L)	GW _{Class 3} ² (mg/L)	GW _{Intg} ¹ (mg/L)	GW _{Class 3} ² (mg/L)	Air _{GW_{Intg-V}} ¹ 0.5 acre source area (mg/L)	Air _{GW_{Intg-V}} ³⁰ acre source area (mg/L)	Air _{GW_{Intg-V}} ¹ 0.5 acre source area (mg/L)	Air _{GW_{Intg-V}} ³⁰ acre source area (mg/L)	GW _{Intg} ¹ (mg/L)	GW _{Class 3} ² (mg/L)	GW _{Intg} ¹ (mg/L)	GW _{Class 3} ² (mg/L)	Air _{GW_{Intg-V}} ^{0.5} acre source area (mg/L)	Air _{GW_{Intg-V}} ³⁰ acre source area (mg/L)	Air _{GW_{Intg-V}} ^{0.5} acre source area (mg/L)	Air _{GW_{Intg-V}} ³⁰ acre source area (mg/L)
Maleic anhydride	108-31-6	—	—	2.4E+00	2.4E+02	—	—	—	—	—	—	7.3E+00	7.3E+02	—	—	—	—
Maleic hydrazide	123-33-1	—	—	1.2E+01	1.2E+03	—	—	—	—	—	—	3.7E+01	3.7E+03	—	—	—	—
Malononitrile	109-77-3	—	—	2.4E-03	2.4E-01	—	—	—	—	—	—	7.3E-03	7.3E-01	—	—	—	—
Mancozeb	8018-01-7	—	—	7.3E-01	7.3E+01	—	—	—	—	—	—	2.2E+00	2.2E+02	—	—	—	—
Manganese	7439-96-5	—	—	1.1E+00	1.1E+02	—	—	—	—	—	—	1.0E+01	1.0E+03	—	—	—	—
MCPA (4-(chloro-2-methylphenoxy) acetic acid)	94-74-6	—	—	1.2E-02	1.2E+00	—	—	—	—	—	—	3.7E-02	3.7E+00	—	—	—	—
MCPP (2-(4-chloro-2-methylphenoxy) propanoic acid)	93-65-2	—	—	2.4E-02	2.4E+00	—	—	—	—	—	—	7.3E-02	7.3E+00	—	—	—	—
Mercury (pH = 4.9)	7439-97-6	—	—	7.3E-03	7.3E-01	—	—	7.3E+00	9.4E-01	—	—	2.2E-02	2.2E+00	—	—	1.0E+01	1.3E+00
Mercury (pH=6.8)	7439-97-6	—	—	7.3E-03	7.3E-01	—	—	7.3E+00	9.4E-01	—	—	2.2E-02	2.2E+00	—	—	1.0E+01	1.3E+00
Merphos	150-50-5	—	—	7.3E-04	7.3E-02	—	—	—	—	—	—	2.2E-03	2.2E-01	—	—	—	—
Methacrylic acid (2-methyl-2-propenoic acid)	79-41-4	—	—	2.4E-01	2.4E+01	—	—	—	—	—	—	7.3E-01	7.3E+01	—	—	—	—
Methacrylonitrile	126-98-7	—	—	1.2E+00	1.2E+02	—	—	1.1E+04	1.4E+03	—	—	3.7E+00	3.7E+02	—	—	1.6E+04	2.0E+03
Methanol	67-56-1	—	—	4.9E+01	4.9E+03	—	—	1.0E+06	1.0E+06	—	—	1.5E+02	1.5E+04	—	—	1.0E+06	1.0E+06
Methapyrilene	91-80-5	1.9E-04	1.9E-02	—	—	—	—	—	—	4.3E-04	4.3E-02	—	—	—	—	—	—
Methylol	16752-77-5	—	—	6.1E-01	6.1E+01	—	—	—	—	—	—	1.8E+00	1.8E+02	—	—	—	—
Methoxychlor	72-43-5	—	—	1.2E-01	1.2E+01	—	—	—	—	—	—	3.7E-01	3.7E+01	—	—	—	—
Methoxyethanol, 2-	109-86-4	—	—	6.6E-01	6.6E+01	—	—	8.1E+01	1.1E+01	—	—	2.0E+00	2.0E+02	—	—	1.1E+02	1.5E+01
Methyl acetate (acetic acid, methyl ester)	79-20-9	—	—	2.4E+01	2.4E+03	—	—	—	—	—	—	7.3E+01	7.3E+03	—	—	—	—
Methyl acrylate	96-33-3	—	—	4.9E-02	4.9E+00	—	—	2.7E+03	3.4E+02	—	—	1.5E-01	1.5E+01	—	—	3.7E+03	4.8E+02
Methyl amyl ketone (2-heptanone)	110-43-0	—	—	1.2E+00	1.2E+02	—	—	1.0E+06	1.4E+05	—	—	3.7E+00	3.7E+02	—	—	1.0E+06	2.0E+05
Methyl chrysene, 1-	3351-28-8	1.3E-01	1.3E+01	—	—	8.0E+05	1.0E+05	—	—	2.8E-01	2.8E+01	—	—	1.0E+06	1.7E+05	—	—
Methyl chrysene, 2-	3351-32-4	1.3E-01	1.3E+01	—	—	8.0E+05	1.0E+05	—	—	2.8E-01	2.8E+01	—	—	1.0E+06	1.7E+05	—	—
Methyl chrysene, 6-	1705-85-7	1.3E-02	1.3E+00	—	—	8.0E+04	1.0E+04	—	—	2.8E-02	2.8E+00	—	—	1.3E+05	1.7E+04	—	—
Methyl cyclohexane	108-87-2	—	—	1.2E+02	1.2E+04	—	—	1.4E+03	1.8E+02	—	—	3.7E+02	3.7E+04	—	—	2.0E+03	2.6E+02
Methyl ethyl ketone (2-butanone)	78-93-3	—	—	1.5E+01	1.5E+03	—	—	1.0E+06	6.2E+05	—	—	4.4E+01	4.4E+03	—	—	1.0E+06	8.7E+05
Methyl iodide (iodomethane)	74-88-4	—	—	3.4E-02	3.4E+00	—	—	—	—	—	—	1.0E-01	1.0E+01	—	—	—	—
Methyl isobutyl ketone (4-methyl-2-pentanone)	108-10-1	—	—	2.0E+00	2.0E+02	—	—	6.7E+05	8.7E+04	—	—	5.8E+00	5.8E+02	—	—	9.4E+05	1.2E+05
Methyl mercury	22967-92-6	—	—	2.4E-03	2.4E-01	—	—	—	—	—	—	7.3E-03	7.3E-01	—	—	—	—
Methyl methacrylate	80-62-6	—	—	3.4E+01	3.4E+03	—	—	7.9E+04	1.0E+04	—	—	1.0E+02	1.0E+04	—	—	1.1E+05	1.4E+04
Methyl methanesulfonate	66-27-3	9.2E-03	9.2E-01	—	—	1.7E+04	2.2E+03	—	—	2.1E-02	2.1E+00	—	—	2.8E+04	3.7E+03	—	—
Methyl parathion	298-00-0	—	—	6.1E-03	6.1E-01	—	—	—	—	—	—	1.8E-02	1.8E+00	—	—	—	—
Methyl-1-butene, 2-	563-46-2	—	—	1.5E+00	1.5E+02	—	—	7.8E+03	1.0E+03	—	—	4.4E+00	4.4E+02	—	—	1.1E+04	1.4E+03
Methyl-1-propanal, 2- (isobutyraldehyde)	78-84-2	—	—	9.8E-01	9.8E+01	—	—	—	—	—	—	2.9E+00	2.9E+02	—	—	—	—
Methyl-2-butene, 2-	513-35-9	—	—	1.5E+00	1.5E+02	—	—	1.5E+04	1.9E+03	—	—	4.4E+00	4.4E+02	—	—	2.1E+04	2.7E+03
Methyl-2-pentenal, 2-	623-36-9	4.8E-04	4.8E-02	—	—	—	—	—	—	1.1E-03	1.1E-01	—	—	—	—	—	—
Methylcholanthrene, 3-	56-49-5	4.1E-05	4.1E-03	—	—	4.1E+02	5.4E+01	—	—	9.3E-05	9.3E-03	—	—	7.0E+02	9.0E+01	—	—
Methylene bromide (dibromomethane)	74-95-3	1.2E-01	1.2E+01	1.5E+00	1.5E+02	—	—	2.4E+02	3.1E+01	2.7E-01	2.7E+01	4.4E+00	4.4E+02	—	—	3.3E+02	4.3E+01
Methylene chloride (dichloromethane)	75-09-2	9.3E+00	9.3E+02	5.1E-01	5.1E+01	2.1E+04	2.8E+03	3.3E+04	4.3E+03	2.1E+01	2.1E+03	1.5E+00	1.5E+02	3.6E+04	4.6E+03	4.7E+04	6.0E+03
Methylene-bis (2-chloroaniline) 4,4'-	101-14-4	9.1E-03	9.1E-01	4.9E-02	4.9E+00	2.0E+04	2.6E+03	—	—	2.0E-02	2.0E+00	1.5E-01	1.5E+01	3.3E+04	4.3E+03	—	—
Methylmercury hydroxide	1184-57-2	—	—	2.4E-03	2.4E-01	—	—	—	—	—	—	7.3E-03	7.3E-01	—	—	—	—
Methylnaphthalene, 1-	90-12-0	3.1E-02	3.1E+00	1.7E+00	1.7E+02	—	—	—	—	7.0E-02	7.0E+00	5.1E+00	5.1E+02	—	—	—	—
Methylnaphthalene, 2-	91-57-6	—	—	9.8E-02	9.8E+00	—	—	—	—	—	—	2.9E-01	2.9E+01	—	—	—	—
Methylpyrrolidone, N-	872-50-4	—	—	4.9E-01	4.9E+01	—	—	—	—	—	—	1.5E+00	1.5E+02	—	—	—	—
Methylstyrene, alpha-	98-83-9	—	—	2.0E-01	2.0E+01	—	—	6.6E+02	8.5E+01	—	—	6.1E-01	6.1E+01	—	—	9.2E+02	1.2E+02
Methyltetrahydrofuran, 2-	96-47-9	1.2E-01	1.2E+01	4.9E+00	4.9E+02	1.8E+03	2.3E+02	—	—	2.7E-01	2.7E+01	1.5E+01	1.5E+03	3.1E+03	3.9E+02	—	—
Methyltetrahydropyran, 2-	10141-72-7	1.2E-01	1.2E+01	4.9E+00	4.9E+02	2.1E+03	2.7E+02	—	—	2.7E-01	2.7E+01	1.5E+01	1.5E+03	3.6E+03	4.6E+02	—	—
Metolachlor	51218-45-2	—	—	3.7E+00	3.7E+02	—	—	—	—	—	—	1.1E+01	1.1E+03	—	—	—	—
Metribuzin	21087-64-9	—	—	6.1E-01	6.1E+01	—	—	—	—	—	—	1.8E+00	1.8E+02	—	—	—	—
Mirex	2385-85-5	—	—	4.9E-03	4.9E-01	—	—	—	—	—	—	1.5E-02	1.5E+00	—	—	—	—
Molinate	2212-67-1	—	—	4.9E-02	4.9E+00	—	—	—	—	—	—	1.5E-01	1.5E+01	—	—	—	—

Table 8
Tier 1 Individual Residential and Commercial/Industrial Groundwater PCLs

Last Revised: March 6, 2023

Chemical of Concern	CAS	Residential								Commercial/Industrial							
		Carcinogenic		Noncarcinogenic		Carcinogenic		Noncarcinogenic		Carcinogenic		Noncarcinogenic		Carcinogenic		Noncarcinogenic	
		GW _{Intg} ¹ (mg/L)	GW _{Class 3} ² (mg/L)	GW _{Intg} ¹ (mg/L)	GW _{Class 3} ² (mg/L)	AirGW _{Inh-V} ¹ 0.5 acre source (mg/L)	AirGW _{Inh-V} ³⁰ acre source (mg/L)	AirGW _{Inh-V} ¹ 0.5 acre source (mg/L)	AirGW _{Inh-V} ³⁰ acre source (mg/L)	GW _{Intg} ¹ (mg/L)	GW _{Class 3} ² (mg/L)	GW _{Intg} ¹ (mg/L)	GW _{Class 3} ² (mg/L)	AirGW _{Inh-V} ¹ 0.5 acre source (mg/L)	AirGW _{Inh-V} ³⁰ acre source (mg/L)	AirGW _{Inh-V} ¹ 0.5 acre source (mg/L)	AirGW _{Inh-V} ³⁰ acre source (mg/L)
Molybdenum	7439-98-7	—	—	1.2E-01	1.2E+01	—	—	—	—	—	—	3.7E-01	3.7E+01	—	—	—	—
Monocrotophos	2157-98-4	—	—	1.5E-02	1.5E+00	—	—	—	—	—	—	4.4E-02	4.4E+00	—	—	—	—
Morpholine	110-91-8	—	—	1.2E+04	1.2E+06	—	—	—	—	—	—	3.7E+04	3.7E+06	—	—	—	—
Morpholine, N-butyl-	1005-67-0	—	—	5.6E-02	5.6E+00	—	—	—	—	—	—	1.7E-01	1.7E+01	—	—	—	—
MTBE (methyl tert-butyl ether)	1634-04-4	5.1E-01	5.1E+01	2.4E-01	2.4E+01	4.0E+03	5.2E+02	1.4E+05	1.7E+04	1.1E+00	1.1E+02	7.3E-01	7.3E+01	6.8E+03	8.8E+02	1.9E+05	2.4E+04
Naled	300-76-5	—	—	4.9E-02	4.9E+00	—	—	—	—	—	—	1.5E-01	1.5E+01	—	—	—	—
Naphthalene	91-20-3	—	—	4.9E-01	4.9E+01	—	—	3.2E+02	4.1E+01	—	—	1.5E+00	1.5E+02	—	—	4.4E+02	5.7E+01
Naphthoquinone, 1,4-	130-15-4	—	—	1.7E-01	1.7E+01	—	—	—	—	—	—	5.1E-01	5.1E+01	—	—	—	—
Naphthylamine, 1-	134-32-7	—	—	4.9E-01	4.9E+01	—	—	—	—	—	—	1.5E+00	1.5E+02	—	—	—	—
Naphthylamine, 2-	91-59-8	5.1E-04	5.1E-02	—	—	—	—	—	—	1.1E-03	1.1E-01	—	—	—	—	—	—
Napropamide	15299-99-7	—	—	2.4E+00	2.4E+02	—	—	—	—	—	—	7.3E+00	7.3E+02	—	—	—	—
Neopentyl glycol	126-30-7	—	—	7.3E+00	7.3E+02	—	—	—	—	—	—	2.2E+01	2.2E+03	—	—	—	—
Nickel and compounds	7440-02-0	—	—	4.9E-01	4.9E+01	—	—	—	—	—	—	1.5E+00	1.5E+02	—	—	—	—
Nitrate-N	14797-55-8	—	—	3.9E+01	3.9E+03	—	—	—	—	—	—	1.2E+02	1.2E+04	—	—	—	—
Nitrite-N	14797-65-0	—	—	2.4E+00	2.4E+02	—	—	—	—	—	—	7.3E+00	7.3E+02	—	—	—	—
Nitroaniline, 2-	88-74-4	—	—	7.3E-03	7.3E-01	—	—	4.0E+03	5.2E+02	—	—	2.2E-02	2.2E+00	—	—	5.6E+03	7.2E+02
Nitroaniline, 3-	99-09-2	2.4E-02	2.4E+00	7.3E-03	7.3E-01	—	—	4.7E+03	6.1E+02	5.4E-02	5.4E+00	2.2E-02	2.2E+00	—	—	6.6E+03	8.6E+02
Nitroaniline, 4-	100-01-6	4.6E-02	4.6E+00	9.8E-02	9.8E+00	—	—	1.4E+05	1.9E+04	1.0E-01	1.0E+01	2.9E-01	2.9E+01	—	—	2.0E+05	2.6E+04
Nitrobenzene	98-95-3	—	—	4.9E-02	4.9E+00	7.2E+02	9.3E+01	1.1E+04	1.4E+03	—	—	1.5E-01	1.5E+01	1.2E+03	1.6E+02	1.6E+04	2.0E+03
Nitroglycerin	55-63-0	5.4E-02	5.4E+00	2.4E-03	2.4E-01	—	—	—	—	1.2E-01	1.2E+01	7.3E-03	7.3E-01	—	—	—	—
Nitrophenol, 2-	88-75-5	—	—	4.9E-02	4.9E+00	—	—	—	—	—	—	1.5E-01	1.5E+01	—	—	—	—
Nitrophenol, 3-	554-84-7	—	—	4.9E-02	4.9E+00	—	—	—	—	—	—	1.5E-01	1.5E+01	—	—	—	—
Nitrophenol, 4-	100-02-7	—	—	4.9E-02	4.9E+00	—	—	—	—	—	—	1.5E-01	1.5E+01	—	—	—	—
Nitropropane, 2-	79-46-9	—	—	3.4E-03	3.4E-01	8.1E+00	1.0E+00	4.0E+03	5.2E+02	—	—	1.0E-02	1.0E+00	1.4E+01	1.8E+00	5.6E+03	7.3E+02
Nitroquinoline-N-oxide, 4-	56-57-5	9.7E-05	9.7E-03	—	—	1.1E+04	1.1E+04	—	—	2.2E-04	2.2E-02	—	—	1.9E+04	1.8E+04	—	—
Nitrosodiethanolamine	1116-54-7	3.3E-04	3.3E-02	—	—	—	—	—	—	7.3E-04	7.3E-02	—	—	—	—	—	—
Nitrosodiethylamine, n-	55-18-5	6.1E-06	6.1E-04	—	—	7.4E+00	9.5E-01	—	—	1.4E-05	1.4E-03	—	—	1.2E+01	1.6E+00	—	—
Nitrosodimethylamine, n-	62-75-9	1.8E-05	1.8E-03	2.0E-04	2.0E-02	2.0E+01	2.6E+00	4.8E+02	6.3E+01	4.0E-05	4.0E-03	5.8E-04	5.8E-02	3.4E+01	4.4E+00	6.8E+02	8.8E+01
Nitrosodi-n-butylamine, n-	924-16-3	1.7E-04	1.7E-02	—	—	4.7E+00	6.1E-01	—	—	3.8E-04	3.8E-02	—	—	7.9E+00	1.0E+00	—	—
Nitrosodi-n-propylamine, n-	621-64-7	1.3E-04	1.3E-02	—	—	—	—	—	—	2.9E-04	2.9E-02	—	—	—	—	—	—
Nitrosodiphenylamine	86-30-6	1.9E-01	1.9E+01	—	—	—	—	—	—	4.2E-01	4.2E+01	—	—	—	—	—	—
Nitroso-methyl-ethyl-amine, n-	10595-95-6	4.1E-05	4.1E-03	—	—	—	—	—	—	9.3E-05	9.3E-03	—	—	—	—	—	—
Nitrosomorpholine, N-	59-89-2	1.4E-04	1.4E-02	—	—	2.7E+02	3.6E+01	—	—	3.1E-04	3.1E-02	—	—	4.6E+02	6.0E+01	—	—
Nitroso-n-ethylurea, n-	759-73-9	6.5E-06	6.5E-04	—	—	—	—	—	—	1.5E-05	1.5E-03	—	—	—	—	—	—
Nitrosopiperidine, N-	100-75-4	9.7E-05	9.7E-03	—	—	1.6E+02	2.1E+01	—	—	2.2E-04	2.2E-02	—	—	2.8E+02	3.6E+01	—	—
Nitrosopyrrolidine, n-	930-55-2	4.3E-04	4.3E-02	—	—	9.6E+02	1.2E+02	—	—	9.7E-04	9.7E-02	—	—	1.6E+03	2.1E+02	—	—
Nitrotoluene, m-	99-08-1	—	—	2.4E-01	2.4E+01	—	—	—	—	—	—	7.3E-01	7.3E+01	—	—	—	—
Nitrotoluene, o-	88-72-2	4.1E-03	4.1E-01	2.2E-02	2.2E+00	—	—	—	—	9.3E-03	9.3E-01	6.6E-02	6.6E+00	—	—	—	—
Nitrotoluene, p-	99-99-0	5.7E-02	5.7E+00	9.8E-02	9.8E+00	—	—	—	—	1.3E-01	1.3E+01	2.9E-01	2.9E+01	—	—	—	—
Nonachlor, cis-	5103-73-1	2.6E-03	2.6E-01	1.2E-02	1.2E+00	7.7E+02	9.9E+01	2.3E+03	3.0E+02	5.8E-03	5.8E-01	3.7E-02	3.7E+00	1.3E+03	1.7E+02	3.2E+03	4.2E+02
Nonachlor, trans-	39765-80-5	2.6E-03	2.6E-01	1.2E-02	1.2E+00	7.7E+02	9.9E+01	2.3E+03	3.0E+02	5.8E-03	5.8E-01	3.7E-02	3.7E+00	1.3E+03	1.7E+02	3.2E+03	4.2E+02
Nonanal	124-19-6	—	—	4.9E+00	4.9E+02	—	—	—	—	—	—	1.5E+01	1.5E+03	—	—	—	—
Nonene, 1-n	124-11-8	—	—	2.4E+00	2.4E+02	—	—	—	—	—	—	7.3E+00	7.3E+02	—	—	—	—
Nonylphenol, 4-n-	104-40-5	—	—	2.4E+00	2.4E+02	—	—	—	—	—	—	7.3E+00	7.3E+02	—	—	—	—
Nonylphenol ethoxylate	9016-45-9	—	—	2.4E+00	2.4E+02	—	—	—	—	—	—	7.3E+00	7.3E+02	—	—	—	—
Octamethylpyrophosphoramide	152-16-9	—	—	4.9E-02	4.9E+00	—	—	—	—	—	—	1.5E-01	1.5E+01	—	—	—	—
Octanone	106-68-3	—	—	1.5E+00	1.5E+02	—	—	1.0E+06	6.2E+05	—	—	4.4E+00	4.4E+02	—	—	1.0E+06	8.7E+05
Oxamyl	23135-22-0	—	—	6.1E-01	6.1E+01	—	—	—	—	—	—	1.8E+00	1.8E+02	—	—	—	—
Oxychlorane	27304-13-8	2.6E-03	2.6E-01	1.2E-02	1.2E+00	7.7E+02	9.9E+01	2.3E+03	3.0E+02	5.8E-03	5.8E-01	3.7E-02	3.7E+00	1.3E+03	1.7E+02	3.2E+03	4.2E+02
Paraquat	1910-42-5	—	—	1.1E-01	1.1E+01	—	—	—	—	—	—	3.3E-01	3.3E+01	—	—	—	—

Table 8
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Last Revised: March 6, 2023

Chemical of Concern	CAS	Residential								Commercial/Industrial							
		Carcinogenic		Noncarcinogenic		Carcinogenic		Noncarcinogenic		Carcinogenic		Noncarcinogenic		Carcinogenic		Noncarcinogenic	
		GW _{Intg} ¹ (mg/L)	GW _{Class 3} ² (mg/L)	GW _{Intg} ¹ (mg/L)	GW _{Class 3} ² (mg/L)	AirGW _{Inh-V} ^{0.5} acre source area (mg/L)	AirGW _{Inh-V} ³⁰ acre source area (mg/L)	AirGW _{Inh-V} ^{0.5} acre source area (mg/L)	AirGW _{Inh-V} ³⁰ acre source area (mg/L)	GW _{Intg} ¹ (mg/L)	GW _{Class 3} ² (mg/L)	GW _{Intg} ¹ (mg/L)	GW _{Class 3} ² (mg/L)	AirGW _{Inh-V} ^{0.5} acre source area (mg/L)	AirGW _{Inh-V} ³⁰ acre source area (mg/L)	AirGW _{Inh-V} ^{0.5} acre source area (mg/L)	AirGW _{Inh-V} ³⁰ acre source area (mg/L)
Parathion (ethyl parathion)	56-38-2	—	—	1.5E-01	1.5E+01	—	—	—	—	—	—	4.4E-01	4.4E+01	—	—	—	—
Pebulate	1114-71-2	—	—	1.2E+00	1.2E+02	—	—	—	—	—	—	3.7E+00	3.7E+02	—	—	—	—
Pendimethalin	40487-42-1	—	—	9.8E-01	9.8E+01	—	—	—	—	—	—	2.9E+00	2.9E+02	—	—	—	—
Pentachlorobenzene	608-93-5	—	—	2.0E-02	2.0E+00	—	—	—	—	—	—	5.8E-02	5.8E+00	—	—	—	—
Pentachloroethane	76-01-7	1.0E-02	1.0E+00	7.3E-01	7.3E+01	3.0E+02	3.8E+01	—	—	2.3E-02	2.3E+00	2.2E+00	2.2E+02	5.0E+02	6.4E+01	—	—
Pentachloronitrobenzene	82-68-8	3.5E-03	3.5E-01	7.3E-02	7.3E+00	—	—	—	—	7.9E-03	7.9E-01	2.2E-01	2.2E+01	—	—	—	—
Pentachlorophenol	87-86-5	2.3E-03	2.3E-01	1.2E-01	1.2E+01	—	—	—	—	5.1E-03	5.1E-01	3.7E-01	3.7E+01	—	—	—	—
Pentadiene, 1,3-cis-	1574-41-0	—	—	1.5E+00	1.5E+02	—	—	4.3E+04	5.6E+03	—	—	4.4E+00	4.4E+02	—	—	6.0E+04	7.8E+03
Pentadiene, 1,3-trans-	2004-70-8	—	—	1.5E+00	1.5E+02	—	—	7.6E+04	9.8E+03	—	—	4.4E+00	4.4E+02	—	—	1.1E+05	1.4E+04
Pentaerythritol tetranitrate (PETN)	78-11-5	—	—	4.9E-02	4.9E+00	—	—	—	—	—	—	1.5E-01	1.5E+01	—	—	—	—
Pentane	109-66-0	—	—	1.5E+00	1.5E+02	—	—	3.4E+02	4.4E+01	—	—	4.4E+00	4.4E+02	—	—	4.8E+02	6.2E+01
Pentane, 2-methyl-	107-83-5	—	—	1.5E+00	1.5E+02	—	—	1.7E+03	2.3E+02	—	—	4.4E+00	4.4E+02	—	—	2.4E+03	3.2E+02
Pentane, 3-methyl-	96-14-0	—	—	1.5E+00	1.5E+02	—	—	2.2E+03	2.9E+02	—	—	4.4E+00	4.4E+02	—	—	3.1E+03	4.0E+02
Pentanediol, 1,5-	111-29-5	—	—	1.2E+02	1.2E+04	—	—	1.0E+06	1.0E+06	—	—	3.7E+02	3.7E+04	—	—	1.0E+06	1.0E+06
Pentanol, 1-	71-41-0	—	—	8.1E-01	8.1E+01	—	—	—	—	—	—	2.4E+00	2.4E+02	—	—	—	—
Pentanol, 4-methyl-2-	108-11-2	—	—	6.4E-01	6.4E+01	—	—	—	—	—	—	1.9E+00	1.9E+02	—	—	—	—
Pentanone, 2-	107-87-9	—	—	9.8E-01	9.8E+01	—	—	—	—	—	—	2.9E+00	2.9E+02	—	—	—	—
Pentene, 2-	109-68-2	—	—	1.5E+00	1.5E+02	—	—	1.4E+04	1.8E+03	—	—	4.4E+00	4.4E+02	—	—	2.0E+04	2.5E+03
Pentyne, 1-	627-19-0	—	—	1.5E+00	1.5E+02	—	—	7.2E+04	9.3E+03	—	—	4.4E+00	4.4E+02	—	—	1.0E+05	1.3E+04
Perchlorate	14797-73-0	—	—	1.7E-02	1.7E+00	—	—	—	—	—	—	5.1E-02	5.1E+00	—	—	—	—
Perfluorooctane sulfonic acid (1-Octanesulfonic acid, heptadecafluoro-1-) [PFOS]	1763-23-1	—	—	5.6E-04	5.6E-02	—	—	1.8E+03	2.4E+02	—	—	1.7E-03	1.7E-01	—	—	2.6E+03	3.4E+02
Perfluoroundecanoic acid (Undecanoic acid, uncosafluoro-) [PFUnDa]	2058-94-8	—	—	2.9E-04	2.9E-02	—	—	—	—	—	—	8.8E-04	8.8E-02	—	—	—	—
Perfluoropentanoic acid (Pentanoic acid, nonafluoro-) [PFPeA]	2706-90-3	—	—	1.2E-02	1.2E+00	—	—	—	—	—	—	3.7E-02	3.7E+00	—	—	—	—
Perfluorohexanoic acid (Hexanoic acid, undecafluoro-) [PFHxA]	307-24-4	—	—	1.2E-02	1.2E+00	—	—	—	—	—	—	3.7E-02	3.7E+00	—	—	—	—
Perfluorododecanoic acid (Dodecanoic acid, tricosfluoro-) [PFDoA]	307-55-1	—	—	2.9E-04	2.9E-02	—	—	5.5E+02	7.2E+01	—	—	8.8E-04	8.8E-02	—	—	7.8E+02	1.0E+02
Perfluorooctanoic acid (Octanoic acid, pentadecafluoro-) [PFOA]	335-67-1	—	—	2.9E-04	2.9E-02	—	—	9.0E+01	1.2E+01	—	—	8.8E-04	8.8E-02	—	—	1.3E+02	1.6E+01
Perfluorodecanoic acid (Decanoic acid, nonadecafluoro-) [PFDA]	335-76-2	—	—	3.7E-04	3.7E-02	—	—	1.3E+03	1.6E+02	—	—	1.1E-03	1.1E-01	—	—	1.8E+03	2.3E+02
Perfluorodecane sulfonic acid (1-Decanesulfonic acid, heneicosfluoro-) [PFDS]	335-77-3	—	—	2.9E-04	2.9E-02	—	—	—	—	—	—	8.8E-04	8.8E-02	—	—	—	—
Perfluorohexane sulfonic acid (1-Hexanesulfonic acid, tridecafluoro-) [PFHxS]	355-46-4	—	—	9.3E-05	9.3E-03	—	—	2.9E+02	5.7E+01	—	—	2.8E-04	2.8E-02	—	—	4.0E+02	7.9E+01
Perfluorobutyric acid (Butanoic acid, heptafluoro-) [PFBA]	375-22-4	—	—	2.4E-02	2.4E+00	—	—	3.0E+05	2.5E+05	—	—	7.3E-02	7.3E+00	—	—	4.2E+05	3.5E+05
Perfluorobutane sulfonic acid (1-Butanesulfonic acid, nonafluoro-) [PFBS]	375-73-5	—	—	3.4E-02	3.4E+00	—	—	5.4E+05	4.7E+05	—	—	1.0E-01	1.0E+01	—	—	7.6E+05	6.5E+05
Perfluoroheptanoic acid (Heptanoic acid, tridecafluoro-) [PFHpA]	375-85-9	—	—	5.6E-04	5.6E-02	—	—	—	—	—	—	1.7E-03	1.7E-01	—	—	—	—
Perfluorononanoic acid (Nonanoic acid, heptadecafluoro-) [PFNA]	375-95-1	—	—	2.9E-04	2.9E-02	—	—	6.5E+02	8.4E+01	—	—	8.8E-04	8.8E-02	—	—	9.1E+02	1.2E+02
Perfluorotetradecanoic acid (Tetradecanoic acid, heptacosfluoro-) [PFTeDA]	376-06-7	—	—	2.9E-04	2.9E-02	—	—	—	—	—	—	8.8E-04	8.8E-02	—	—	—	—
Perfluorotridecanoic acid (Tridecanoic acid, pentacosfluoro-) [PFTDA]	72629-94-8	—	—	2.9E-04	2.9E-02	—	—	—	—	—	—	8.8E-04	8.8E-02	—	—	—	—
Perfluorooctane sulfonamide (1-Octanesulfonamide, heptadecafluoro-) [PFOSA]	754-91-6	—	—	2.9E-04	2.9E-02	—	—	5.3E-05	6.8E-06	—	—	8.8E-04	8.8E-02	—	—	7.4E-05	9.6E-06
Perylene	198-55-0	—	—	4.9E-01	4.9E+01	—	—	—	—	—	—	1.5E+00	1.5E+02	—	—	—	—
Phenacetin	62-44-2	4.1E-01	4.1E+01	—	—	1.0E+06	1.5E+05	—	—	9.3E-01	9.3E+01	—	—	1.0E+06	2.5E+05	—	—
Phenanthrene	85-01-8	—	—	7.3E-01	7.3E+01	—	—	—	—	—	—	2.2E+00	2.2E+02	—	—	—	—
Phenanthridine	229-87-8	—	—	7.3E-02	7.3E+00	—	—	—	—	—	—	2.2E-01	2.2E+01	—	—	—	—
Phenol	108-95-2	—	—	7.3E+00	7.3E+02	—	—	1.6E+05	2.1E+04	—	—	2.2E+01	2.2E+03	—	—	2.2E+05	2.9E+04
Phenol, 4-tert-butyl-	98-54-4	—	—	2.9E+00	2.9E+02	—	—	—	—	—	—	8.8E+00	8.8E+02	—	—	—	—
Phenothiazine	92-84-2	—	—	2.7E-02	2.7E+00	—	—	—	—	—	—	8.0E-02	8.0E+00	—	—	—	—
Phenyl mercuric acetate	62-38-4	—	—	2.0E-03	2.0E-01	—	—	—	—	—	—	5.8E-03	5.8E-01	—	—	—	—

**Table 8
Tier 1 Individual Residential and Commercial/Industrial Groundwater PCLs**

Last Revised: March 6, 2023

Chemical of Concern	CAS	Residential								Commercial/Industrial							
		Carcinogenic		Noncarcinogenic		Carcinogenic		Noncarcinogenic		Carcinogenic		Noncarcinogenic		Carcinogenic		Noncarcinogenic	
		GW _{Intg} ¹ (mg/L)	GW _{Class 3} ² (mg/L)	GW _{Intg} ¹ (mg/L)	GW _{Class 3} ² (mg/L)	Air _{GW_{Intg-V}} ¹ 0.5 acre source area (mg/L)	Air _{GW_{Intg-V}} ³⁰ acre source area (mg/L)	Air _{GW_{Intg-V}} ¹ 0.5 acre source area (mg/L)	Air _{GW_{Intg-V}} ³⁰ acre source area (mg/L)	GW _{Intg} ¹ (mg/L)	GW _{Class 3} ² (mg/L)	GW _{Intg} ¹ (mg/L)	GW _{Class 3} ² (mg/L)	Air _{GW_{Intg-V}} ^{0.5} acre source area (mg/L)	Air _{GW_{Intg-V}} ³⁰ acre source area (mg/L)	Air _{GW_{Intg-V}} ^{0.5} acre source area (mg/L)	Air _{GW_{Intg-V}} ³⁰ acre source area (mg/L)
Phenylene diamine, m-	108-45-2	—	—	1.5E-01	1.5E+01	—	—	—	—	—	—	4.4E-01	4.4E+01	—	—	—	—
Phenylene diamine, p-	106-50-3	—	—	4.6E+00	4.6E+02	—	—	—	—	—	—	1.4E+01	1.4E+03	—	—	—	—
Phorate	298-02-2	—	—	4.9E-03	4.9E-01	—	—	—	—	—	—	1.5E-02	1.5E+00	—	—	—	—
Phosalone	2310-17-0	—	—	4.9E-02	4.9E+00	—	—	—	—	—	—	1.5E-01	1.5E+01	—	—	—	—
Phosdrin (mevinphos)	7786-34-7	—	—	6.1E-04	6.1E-02	—	—	—	—	—	—	1.8E-03	1.8E-01	—	—	—	—
Phosmet	732-11-6	—	—	4.9E-01	4.9E+01	—	—	—	—	—	—	1.5E+00	1.5E+02	—	—	—	—
Phosphine	7803-51-2	—	—	7.3E-03	7.3E-01	—	—	2.9E-03	3.7E-04	—	—	2.2E-02	2.2E+00	—	—	4.0E-03	5.2E-04
Phosphorothioic acid, S,S,S-tributyl ester	78-48-8	1.1E-02	1.1E+00	1.2E-02	1.2E+00	—	—	—	—	2.4E-02	2.4E+00	3.7E-02	3.7E+00	—	—	—	—
Phosphorus, total*	7723-14-0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Phosphorus, white	7723-14-0	—	—	4.9E-04	4.9E-02	—	—	—	—	—	—	1.5E-03	1.5E-01	—	—	—	—
Phthalic anhydride	85-44-9	—	—	4.9E+01	4.9E+03	—	—	1.0E+06	4.0E+05	—	—	1.5E+02	1.5E+04	—	—	1.0E+06	5.6E+05
Picloram	1918-02-1	—	—	1.7E+00	1.7E+02	—	—	—	—	—	—	5.1E+00	5.1E+02	—	—	—	—
Picoline, 2- (2-methylpyridine)	109-06-8	—	—	2.2E-01	2.2E+01	—	—	—	—	—	—	6.6E-01	6.6E+01	—	—	—	—
Polybrominated biphenyls (PBBs)	67774-32-7	1.0E-04	1.0E-02	1.7E-04	1.7E-02	—	—	—	—	2.3E-04	2.3E-02	5.1E-04	5.1E-02	—	—	—	—
Polychlorinated biphenyls (PCBs)	1336-36-3	4.6E-04	4.6E-02	4.9E-04	4.9E-02	2.9E+00	3.8E-01	—	—	1.0E-03	1.0E-01	1.5E-03	1.5E-01	4.9E+00	6.4E-01	—	—
Potassium*	7440-09-7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Primene	68955-53-3	—	—	1.5E-01	1.5E+01	—	—	—	—	—	—	4.4E-01	4.4E+01	—	—	—	—
Prometon (pramitol)	1610-18-0	—	—	3.7E-01	3.7E+01	—	—	—	—	—	—	1.1E+00	1.1E+02	—	—	—	—
Prometryn	7287-19-6	—	—	9.8E-01	9.8E+01	—	—	—	—	—	—	2.9E+00	2.9E+02	—	—	—	—
Pronamide	23950-58-5	—	—	1.8E+00	1.8E+02	—	—	—	—	—	—	5.5E+00	5.5E+02	—	—	—	—
Propanal (propionaldehyde)	123-38-6	—	—	2.0E-01	2.0E+01	—	—	1.6E+03	2.1E+02	—	—	5.8E-01	5.8E+01	—	—	2.3E+03	3.0E+02
Propane, 1-bromo-	106-94-5	—	—	8.8E-01	8.8E+01	—	—	—	—	—	—	2.6E+00	2.6E+02	—	—	—	—
Propanil	709-98-8	—	—	1.2E-01	1.2E+01	—	—	—	—	—	—	3.7E-01	3.7E+01	—	—	—	—
Propanoic acid (propionic acid)	79-09-4	—	—	1.2E+01	1.2E+03	—	—	—	—	—	—	3.7E+01	3.7E+03	—	—	—	—
Propanol, 1-	71-23-8	—	—	4.9E+01	4.9E+03	—	—	—	—	—	—	1.5E+02	1.5E+04	—	—	—	—
Propargite	2312-35-8	—	—	4.9E-01	4.9E+01	—	—	—	—	—	—	1.5E+00	1.5E+02	—	—	—	—
Propargyl alcohol	107-19-7	—	—	4.9E-02	4.9E+00	—	—	—	—	—	—	1.5E-01	1.5E+01	—	—	—	—
Propazine	139-40-2	2.1E-02	2.1E+00	4.9E-01	4.9E+01	—	—	—	—	4.6E-02	4.6E+00	1.5E+00	1.5E+02	—	—	—	—
Propham	122-42-9	—	—	4.9E-01	4.9E+01	—	—	—	—	—	—	1.5E+00	1.5E+02	—	—	—	—
Propionitrile (propane nitrile)	107-12-0	—	—	9.8E-03	9.8E-01	—	—	—	—	—	—	2.9E-02	2.9E+00	—	—	—	—
Propyl acetate, n-	109-60-4	—	—	2.2E+00	2.2E+02	—	—	—	—	—	—	6.6E+00	6.6E+02	—	—	—	—
Propylbenzene, n-	103-65-1	—	—	9.8E-01	9.8E+01	—	—	6.0E+03	7.8E+02	—	—	2.9E+00	2.9E+02	—	—	8.5E+03	1.1E+03
Propylene glycol	57-55-6	—	—	4.9E+02	4.9E+04	—	—	5.0E+04	6.4E+03	—	—	1.5E+03	1.5E+05	—	—	7.0E+04	9.0E+03
Propylene glycol monomethyl ether	107-98-2	—	—	1.7E+01	1.7E+03	—	—	1.0E+06	1.0E+06	—	—	5.1E+01	5.1E+03	—	—	1.0E+06	1.0E+06
Propylene oxide	75-56-9	3.8E-03	3.8E-01	—	—	1.6E+03	2.0E+02	7.5E+03	9.7E+02	8.5E-03	8.5E-01	—	—	2.7E+03	3.4E+02	1.1E+04	1.4E+03
Propylene tetramer	6842-15-5	—	—	2.4E+00	2.4E+02	—	—	4.4E+01	5.7E+00	—	—	7.3E+00	7.3E+02	—	—	6.2E+01	8.0E+00
Prothiofos (Tokuthion)	34643-46-4	—	—	2.4E-03	2.4E-01	—	—	—	—	—	—	7.3E-03	7.3E-01	—	—	—	—
Pyrene	129-00-0	—	—	7.3E-01	7.3E+01	—	—	—	—	—	—	2.2E+00	2.2E+02	—	—	—	—
Pyridine	110-86-1	—	—	2.4E-02	2.4E+00	—	—	—	—	—	—	7.3E-02	7.3E+00	—	—	—	—
Quinoline	91-22-5	3.0E-04	3.0E-02	—	—	—	—	—	—	6.8E-04	6.8E-02	—	—	—	—	—	—
Ronnel	299-84-3	—	—	1.2E+00	1.2E+02	—	—	—	—	—	—	3.7E+00	3.7E+02	—	—	—	—
Safrole	94-59-7	4.1E-03	4.1E-01	—	—	1.9E+02	2.4E+01	—	—	9.3E-03	9.3E-01	—	—	3.2E+02	4.1E+01	—	—
Selenium	7782-49-2	—	—	1.2E-01	1.2E+01	—	—	—	—	—	—	3.7E-01	3.7E+01	—	—	—	—
Selenourea	630-10-4	—	—	1.2E-01	1.2E+01	—	—	—	—	—	—	3.7E-01	3.7E+01	—	—	—	—
Silver	7440-22-4	—	—	1.2E-01	1.2E+01	—	—	—	—	—	—	3.7E-01	3.7E+01	—	—	—	—
Simazine	122-34-9	7.6E-03	7.6E-01	1.2E-01	1.2E+01	—	—	—	—	1.7E-02	1.7E+00	3.7E-01	3.7E+01	—	—	—	—
Sodium*	7440-23-5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sodium hypochlorite	7681-52-9	—	—	5.1E+00	5.1E+02	—	—	—	—	—	—	1.5E+01	1.5E+03	—	—	—	—
Sodium polyacrylate	9003-04-7	—	—	1.2E+01	1.2E+03	—	—	1.5E+04	2.0E+03	—	—	3.7E+01	3.7E+03	—	—	2.1E+04	2.7E+03
Strontium	7440-24-6	—	—	1.5E+01	1.5E+03	—	—	—	—	—	—	4.4E+01	4.4E+03	—	—	—	—

**Table 8
Tier 1 Individual Residential and Commercial/Industrial Groundwater PCLs**

Last Revised: March 6, 2023

Chemical of Concern	CAS	Residential								Commercial/Industrial							
		Carcinogenic		Noncarcinogenic		Carcinogenic		Noncarcinogenic		Carcinogenic		Noncarcinogenic		Carcinogenic		Noncarcinogenic	
		GW _{Intg} ¹ (mg/L)	GW _{Class 3} ² (mg/L)	GW _{Intg} ¹ (mg/L)	GW _{Class 3} ² (mg/L)	AirGW _{Inh-V} ^{0.5} acre source (mg/L)	AirGW _{Inh-V} ³⁰ acre source (mg/L)	AirGW _{Inh-V} ^{0.5} acre source (mg/L)	AirGW _{Inh-V} ³⁰ acre source (mg/L)	GW _{Intg} ¹ (mg/L)	GW _{Class 3} ² (mg/L)	GW _{Intg} ¹ (mg/L)	GW _{Class 3} ² (mg/L)	AirGW _{Inh-V} ^{0.5} acre source (mg/L)	AirGW _{Inh-V} ³⁰ acre source (mg/L)	AirGW _{Inh-V} ^{0.5} acre source (mg/L)	AirGW _{Inh-V} ³⁰ acre source (mg/L)
Strychnine	57-24-9	—	—	7.3E-03	7.3E-01	—	—	—	—	—	—	2.2E-02	2.2E+00	—	—	—	—
Styrene	100-42-5	—	—	4.9E+00	4.9E+02	—	—	1.5E+04	2.0E+03	—	—	1.5E+01	1.5E+03	—	—	2.1E+04	2.7E+03
Sulfate*	14808-79-8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sulfide*	18496-25-8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sulfolane	126-33-0	—	—	3.2E-01	3.2E+01	—	—	1.3E+05	1.7E+04	—	—	9.5E-01	9.5E+01	—	—	1.8E+05	2.3E+04
Sulfur*	7704-34-9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sulprofos (Bolstar)	35400-43-2	—	—	7.3E-02	7.3E+00	—	—	—	—	—	—	2.2E-01	2.2E+01	—	—	—	—
Tebuconazole	107534-96-3	—	—	7.3E-01	7.3E+01	—	—	—	—	—	—	2.2E+00	2.2E+02	—	—	—	—
Tebuthiuron	34014-18-1	—	—	1.7E+00	1.7E+02	—	—	—	—	—	—	5.1E+00	5.1E+02	—	—	—	—
Terbufos	13071-79-9	—	—	6.1E-04	6.1E-02	—	—	—	—	—	—	1.8E-03	1.8E-01	—	—	—	—
Tert-amyl ethyl ether (TAE)	919-94-8	—	—	9.8E-01	9.8E+01	—	—	—	—	—	—	2.9E+00	2.9E+02	—	—	—	—
Tert-amyl-methyl ether (TAME)	994-05-8	—	—	9.8E-01	9.8E+01	—	—	—	—	—	—	2.9E+00	2.9E+02	—	—	—	—
Tert-butyl alcohol (2-methyl-2-propanol)	75-65-0	—	—	2.2E+00	2.2E+02	—	—	—	—	—	—	6.6E+00	6.6E+02	—	—	—	—
Tetrachlorobenzene, 1,2,3,4-	634-66-2	—	—	7.3E-03	7.3E-01	—	—	—	—	—	—	2.2E-02	2.2E+00	—	—	—	—
Tetrachlorobenzene, 1,2,3,5-	634-90-2	—	—	7.3E-03	7.3E-01	—	—	—	—	—	—	2.2E-02	2.2E+00	—	—	—	—
Tetrachlorobenzene, 1,2,4,5-	95-94-3	—	—	7.3E-03	7.3E-01	—	—	—	—	—	—	2.2E-02	2.2E+00	—	—	—	—
Tetrachloroethane, 1,1,1,2-	630-20-6	3.5E-02	3.5E+00	7.3E-01	7.3E+01	1.1E+02	1.4E+01	—	—	7.9E-02	7.9E+00	2.2E+00	2.2E+02	1.9E+02	2.4E+01	—	—
Tetrachloroethane, 1,1,2,2-	79-34-5	4.6E-03	4.6E-01	4.9E-01	4.9E+01	—	—	—	—	1.0E-02	1.0E+00	1.5E+00	1.5E+02	—	—	—	—
Tetrachloroethylene [PCE]	127-18-4	4.3E-01	4.3E+01	5.1E-01	5.1E+01	5.0E+02	6.4E+01	3.0E+03	3.9E+02	9.7E-01	9.7E+01	1.5E+00	1.5E+02	8.4E+02	1.1E+02	4.2E+03	5.4E+02
Tetrachlorophenol, 2,3,4,5-	4901-51-3	—	—	7.3E-01	7.3E+01	—	—	—	—	—	—	2.2E+00	2.2E+02	—	—	—	—
Tetrachlorophenol, 2,3,4,6-	58-90-2	—	—	7.3E-01	7.3E+01	—	—	—	—	—	—	2.2E+00	2.2E+02	—	—	—	—
Tetrachlorophenol, 2,3,5,6-	935-95-5	—	—	7.3E-01	7.3E+01	—	—	—	—	—	—	2.2E+00	2.2E+02	—	—	—	—
Tetrachlorvinphos (Stirophos)	22248-79-9	—	—	1.0E+00	1.0E+02	—	—	—	—	—	—	3.1E+00	3.1E+02	—	—	—	—
Tetradifon	116-29-0	—	—	4.9E-01	4.9E+01	—	—	—	—	—	—	1.5E+00	1.5E+02	—	—	—	—
Tetraethyl dithiopyrophosphate (sulfotep)	3689-24-5	—	—	1.2E-02	1.2E+00	—	—	—	—	—	—	3.7E-02	3.7E+00	—	—	—	—
Tetraethyl lead	78-00-2	—	—	2.4E-06	2.4E-04	—	—	—	—	—	—	7.3E-06	7.3E-04	—	—	—	—
Tetraethyl pyrophosphate (TEPP)	107-49-3	—	—	2.7E-04	2.7E-02	—	—	—	—	—	—	8.0E-04	8.0E-02	—	—	—	—
Tetraethylene glycol	112-60-7	—	—	8.1E+00	8.1E+02	—	—	—	—	—	—	2.4E+01	2.4E+03	—	—	—	—
Tetrahydrofuran	109-99-9	1.2E-01	1.2E+01	2.2E+01	2.2E+03	2.2E+03	2.9E+02	3.6E+05	4.7E+04	2.7E-01	2.7E+01	6.6E+01	6.6E+03	3.7E+03	4.8E+02	5.1E+05	6.6E+04
Tetrahydropyran	142-68-7	1.2E-01	1.2E+01	4.9E+00	4.9E+02	2.6E+03	3.4E+02	—	—	2.7E-01	2.7E+01	1.5E+01	1.5E+03	4.4E+03	5.7E+02	—	—
Tetraoxadodecane, 2,5,8,11-	112-49-2	—	—	6.1E-01	6.1E+01	—	—	—	—	—	—	1.8E+00	1.8E+02	—	—	—	—
Thallium	7440-28-0	—	—	1.6E-03	1.6E-01	—	—	—	—	—	—	4.9E-03	4.9E-01	—	—	—	—
Thiofanox	39196-18-4	—	—	7.3E-03	7.3E-01	—	—	—	—	—	—	2.2E-02	2.2E+00	—	—	—	—
Thionazin	297-97-2	—	—	1.7E-03	1.7E-01	—	—	—	—	—	—	5.1E-03	5.1E-01	—	—	—	—
Thiophanate-methyl	23564-05-8	—	—	2.0E+00	2.0E+02	—	—	—	—	—	—	5.8E+00	5.8E+02	—	—	—	—
Thiram	137-26-8	—	—	1.2E-01	1.2E+01	—	—	—	—	—	—	3.7E-01	3.7E+01	—	—	—	—
Tin	7440-31-5	—	—	1.5E+01	1.5E+03	—	—	—	—	—	—	4.4E+01	4.4E+03	—	—	—	—
Titanium	7440-32-6	—	—	1.2E+02	1.2E+04	—	—	—	—	—	—	3.7E+02	3.7E+04	—	—	—	—
Toluene	108-88-3	—	—	2.0E+00	2.0E+02	—	—	6.4E+04	8.2E+03	—	—	5.8E+00	5.8E+02	—	—	8.9E+04	1.2E+04
Toluene diisocyanate, 2,4/2,6-	26471-62-5	—	—	—	—	—	—	1.8E+03	2.4E+02	—	—	—	—	—	—	2.6E+03	3.3E+02
Toluenediamine, 2,4-	95-80-7	2.9E-04	2.9E-02	—	—	—	—	—	—	6.4E-04	6.4E-02	—	—	—	—	—	—
Toluenediamine, 2,6-	823-40-5	—	—	7.3E-01	7.3E+01	—	—	—	—	—	—	2.2E+00	2.2E+02	—	—	—	—
Toluidine, o-	95-53-4	5.7E-02	5.7E+00	—	—	2.6E+03	3.4E+02	—	—	1.3E-01	1.3E+01	—	—	4.4E+03	5.7E+02	—	—
Toluidine, p-	106-49-0	3.0E-02	3.0E+00	—	—	—	—	—	—	6.8E-02	6.8E+00	—	—	—	—	—	—
Toxaphene	8001-35-2	8.3E-04	8.3E-02	7.6E-03	7.6E-01	1.8E+03	2.3E+02	—	—	1.9E-03	1.9E-01	2.3E-02	2.3E+00	3.0E+03	3.9E+02	—	—
TPH, TX1005, C6-C12	TPH-1005-1	—	—	9.8E-01	9.8E+01	—	—	1.8E+03	2.3E+02	—	—	2.9E+00	2.9E+02	—	—	2.5E+03	3.2E+02
TPH, TX1005, >C12-C28	TPH-1005-2	—	—	9.8E-01	9.8E+01	—	—	7.5E+03	9.7E+02	—	—	2.9E+00	2.9E+02	—	—	1.0E+04	1.4E+03
TPH, TX1005, >C12-C35	TPH-1005-3	—	—	9.8E-01	9.8E+01	—	—	7.5E+03	9.7E+02	—	—	2.9E+00	2.9E+02	—	—	1.0E+04	1.4E+03
TPH, TX1005, >C28-C35	TPH-1005-4	—	—	9.8E-01	9.8E+01	—	—	7.5E+03	9.7E+02	—	—	2.9E+00	2.9E+02	—	—	1.0E+04	1.4E+03
TP Silvex, 2,4,5-	93-72-1	—	—	2.0E-01	2.0E+01	—	—	—	—	—	—	5.8E-01	5.8E+01	—	—	—	—

Table 8
Tier 1 Individual Residential and Commercial/Industrial Groundwater PCLs

Last Revised: March 6, 2023

Chemical of Concern	CAS	Residential								Commercial/Industrial							
		Carcinogenic		Noncarcinogenic		Carcinogenic		Noncarcinogenic		Carcinogenic		Noncarcinogenic		Carcinogenic		Noncarcinogenic	
		GW _{1mg} ¹ (mg/L)	GW _{Class 3} ² (mg/L)	GW _{1mg} ¹ (mg/L)	GW _{Class 3} ² (mg/L)	AirGW _{0.5 acre} ¹ (mg/L)	AirGW _{30 acre} ³⁰ (mg/L)	AirGW _{0.5 acre} ¹ (mg/L)	AirGW _{30 acre} ³⁰ (mg/L)	GW _{1mg} ¹ (mg/L)	GW _{Class 3} ² (mg/L)	GW _{1mg} ¹ (mg/L)	GW _{Class 3} ² (mg/L)	AirGW _{0.5 acre} ¹ (mg/L)	AirGW _{30 acre} ³⁰ (mg/L)	AirGW _{0.5 acre} ¹ (mg/L)	AirGW _{30 acre} ³⁰ (mg/L)
Triademenol	55219-65-3	—	—	7.3E-01	7.3E+01	—	—	—	—	—	—	2.2E+00	2.2E+02	—	—	—	—
Triallate	2303-17-5	—	—	3.2E-01	3.2E+01	—	—	—	—	—	—	9.5E-01	9.5E+01	—	—	—	—
Triaminotrirobenzene (TATB)	3058-38-6	—	—	7.3E-02	7.3E+00	—	—	—	—	—	—	2.2E-01	2.2E+01	—	—	—	—
Tributyltin oxide	56-35-9	—	—	7.3E-03	7.3E-01	—	—	—	—	—	—	2.2E-02	2.2E+00	—	—	—	—
Trichloro-1,2,2-trifluoroethane, 1,1,2-	76-13-1	—	—	7.3E+02	7.3E+04	—	—	1.5E+03	2.0E+02	—	—	2.2E+03	2.2E+05	—	—	2.1E+03	2.8E+02
Trichlorobenzene, 1,2,3-	87-61-6	—	—	7.3E-02	7.3E+00	—	—	1.3E+02	1.7E+01	—	—	2.2E-01	2.2E+01	—	—	1.9E+02	2.4E+01
Trichlorobenzene, 1,2,4-	120-82-1	3.1E-02	3.1E+00	2.4E-01	2.4E+01	—	—	1.6E+02	2.0E+01	7.0E-02	7.0E+00	7.3E-01	7.3E+01	—	—	2.2E+02	2.8E+01
Trichlorobenzene, 1,3,5-	108-70-3	—	—	7.3E-02	7.3E+00	—	—	1.0E+02	1.3E+01	—	—	2.2E-01	2.2E+01	—	—	1.4E+02	1.8E+01
Trichloroethane, 1,1,1-	71-55-6	—	—	4.9E+01	4.9E+03	—	—	4.1E+04	5.2E+03	—	—	1.5E+02	1.5E+04	—	—	5.7E+04	7.3E+03
Trichloroethane, 1,1,2-	79-00-5	1.6E-02	1.6E+00	9.8E-02	9.8E+00	8.0E+01	1.0E+01	—	—	3.6E-02	3.6E+00	2.9E-01	2.9E+01	1.3E+02	1.7E+01	—	—
Trichloroethylene [TCE]	79-01-6	2.0E-02	2.0E+00	1.2E-02	1.2E+00	6.7E+01	8.7E+00	2.4E+01	3.1E+00	4.4E-02	4.4E+00	3.7E-02	3.7E+00	1.1E+02	1.5E+01	3.3E+01	4.3E+00
Trichlorofluoromethane	75-69-4	—	—	7.3E+00	7.3E+02	—	—	—	—	—	—	2.2E+01	2.2E+03	—	—	—	—
Trichloronate	327-98-0	—	—	7.3E-02	7.3E+00	—	—	—	—	—	—	2.2E-01	2.2E+01	—	—	—	—
Trichlorophenol, 2,3,4-	15950-66-0	—	—	2.4E+00	2.4E+02	—	—	—	—	—	—	7.3E+00	7.3E+02	—	—	—	—
Trichlorophenol, 2,3,5-	933-78-8	—	—	2.4E+00	2.4E+02	—	—	—	—	—	—	7.3E+00	7.3E+02	—	—	—	—
Trichlorophenol, 2,3,6-	933-75-5	—	—	2.4E+00	2.4E+02	—	—	—	—	—	—	7.3E+00	7.3E+02	—	—	—	—
Trichlorophenol, 2,4,5-	95-95-4	—	—	2.4E+00	2.4E+02	—	—	—	—	—	—	7.3E+00	7.3E+02	—	—	—	—
Trichlorophenol, 2,4,6-	88-06-2	8.3E-02	8.3E+00	2.4E-02	2.4E+00	4.9E+04	6.4E+03	—	—	1.9E-01	1.9E+01	7.3E-02	7.3E+00	8.3E+04	1.1E+04	—	—
Trichlorophenol, 3,4,5-	609-19-8	—	—	2.4E+00	2.4E+02	—	—	—	—	—	—	7.3E+00	7.3E+02	—	—	—	—
Trichlorophenoxyacetic acid, 2,4,5-	93-76-5	—	—	2.4E-01	2.4E+01	—	—	—	—	—	—	7.3E-01	7.3E+01	—	—	—	—
Trichloropropane, 1,1,2-	598-77-6	—	—	1.2E-01	1.2E+01	—	—	2.7E+00	3.5E-01	—	—	3.7E-01	3.7E+01	—	—	3.8E+00	4.9E-01
Trichloropropane, 1,2,3-	96-18-4	3.0E-05	3.0E-03	9.8E-02	9.8E+00	—	—	3.2E+01	4.2E+00	6.8E-05	6.8E-03	2.9E-01	2.9E+01	—	—	4.5E+01	5.8E+00
Triethanolamine	102-71-6	—	—	4.9E+00	4.9E+02	—	—	1.0E+06	1.0E+06	—	—	1.5E+01	1.5E+03	—	—	1.0E+06	1.0E+06
Triethylamine	121-44-8	—	—	—	—	—	—	6.3E+02	8.1E+01	—	—	—	—	—	—	8.8E+02	1.1E+02
Triethylene glycol	112-27-6	—	—	4.9E+01	4.9E+03	—	—	—	—	—	—	1.5E+02	1.5E+04	—	—	—	—
Triethylphosphorothioate, O, O, O-	126-68-1	—	—	2.0E-04	2.0E-02	—	—	—	—	—	—	6.1E-04	6.1E-02	—	—	—	—
Trifluralin	1582-09-8	1.2E-01	1.2E+01	1.8E-01	1.8E+01	—	—	—	—	2.7E-01	2.7E+01	5.5E-01	5.5E+01	—	—	—	—
Trimethylamine	75-50-3	—	—	—	—	—	—	1.7E+03	2.2E+02	—	—	—	—	—	—	2.3E+03	3.0E+02
Trimethylbenzene, 1,2,3-	526-73-8	—	—	8.3E-01	8.3E+01	—	—	5.6E+03	7.3E+02	—	—	2.5E+00	2.5E+02	—	—	7.9E+03	1.0E+03
Trimethylbenzene, 1,2,4-	95-63-6	—	—	8.3E-01	8.3E+01	—	—	4.9E+03	6.3E+02	—	—	2.5E+00	2.5E+02	—	—	6.8E+03	8.8E+02
Trimethylbenzene, 1,3,5-	108-67-8	—	—	8.3E-01	8.3E+01	—	—	3.8E+03	4.9E+02	—	—	2.5E+00	2.5E+02	—	—	5.3E+03	6.8E+02
Trinitrobenzene, 1,3,5-	99-35-4	—	—	7.3E-01	7.3E+01	—	—	—	—	—	—	2.2E+00	2.2E+02	—	—	—	—
Trinitrophenylmethylnitramine (tetryl; nitramine)	479-45-8	—	—	4.9E-02	4.9E+00	—	—	—	—	—	—	1.5E-01	1.5E+01	—	—	—	—
Trinitrotoluene, 2,4,6-	118-96-7	3.0E-02	3.0E+00	1.2E-02	1.2E+00	—	—	—	—	6.8E-02	6.8E+00	3.7E-02	3.7E+00	—	—	—	—
Tungsten (as sodium tungstate dihydride)	7440-33-7	—	—	2.4E-02	2.4E+00	—	—	—	—	—	—	7.3E-02	7.3E+00	—	—	—	—
Uranium (soluble salts)	7440-61-1	—	—	7.3E-02	7.3E+00	—	—	—	—	—	—	2.2E-01	2.2E+01	—	—	—	—
Valeric acid (pentanoic acid)	109-52-4	—	—	1.2E+01	1.2E+03	—	—	2.0E+04	2.6E+03	—	—	3.7E+01	3.7E+03	—	—	2.8E+04	3.6E+03
Vanadium	7440-62-2	—	—	4.4E-02	4.4E+00	—	—	—	—	—	—	1.3E-01	1.3E+01	—	—	—	—
Vernam	1929-77-7	—	—	2.4E-02	2.4E+00	—	—	—	—	—	—	7.3E-02	7.3E+00	—	—	—	—
Vinyl acetate	108-05-4	—	—	2.4E+01	2.4E+03	—	—	1.4E+04	1.8E+03	—	—	7.3E+01	7.3E+03	—	—	2.0E+04	2.6E+03
Vinyl chloride	75-01-4	6.1E-04	6.1E-02	7.3E-02	7.3E+00	3.8E+00	4.9E-01	8.2E+01	1.1E+01	1.4E-03	1.4E-01	2.2E-01	2.2E+01	6.4E+00	8.3E-01	1.2E+02	1.5E+01
Vinylcyclohexane	695-12-5	—	—	1.2E+01	1.2E+03	—	—	—	—	—	—	3.7E+01	3.7E+03	—	—	—	—
Warfarin	81-81-2	—	—	7.3E-03	7.3E-01	—	—	—	—	—	—	2.2E-02	2.2E+00	—	—	—	—
Xylene, m-	108-38-3	—	—	4.9E+01	4.9E+03	—	—	1.1E+04	1.4E+03	—	—	1.5E+02	1.5E+04	—	—	1.5E+04	1.9E+03
Xylene, o-	95-47-6	—	—	4.9E+01	4.9E+03	—	—	7.6E+05	9.8E+04	—	—	1.5E+02	1.5E+04	—	—	1.0E+06	1.4E+05
Xylene, p-	106-42-3	—	—	4.9E+01	4.9E+03	—	—	9.4E+03	1.2E+03	—	—	1.5E+02	1.5E+04	—	—	1.3E+04	1.7E+03
Xylenes	1330-20-7	—	—	4.9E+00	4.9E+02	—	—	1.0E+04	1.3E+03	—	—	1.5E+01	1.5E+03	—	—	1.4E+04	1.9E+03
Zinc	7440-66-6	—	—	7.3E+00	7.3E+02	—	—	—	—	—	—	2.2E+01	2.2E+03	—	—	—	—
6 C aliphatics (TPH) (>53% n-hexane content)	NA	—	—	1.5E+00	1.5E+02	—	—	1.1E+02	1.4E+01	—	—	4.4E+00	4.4E+02	—	—	1.5E+02	1.9E+01
6 C aliphatics (TPH) (<53% n-hexane content)	NA	—	—	1.5E+00	1.5E+02	—	—	2.9E+03	3.8E+02	—	—	4.4E+00	4.4E+02	—	—	4.1E+03	5.3E+02

**Table 8
Tier 1 Individual Residential and Commercial/Industrial Groundwater PCLs**

Last Revised: March 6, 2023

Chemical of Concern	CAS	Residential								Commercial/Industrial							
		Carcinogenic		Noncarcinogenic		Carcinogenic		Noncarcinogenic		Carcinogenic		Noncarcinogenic		Carcinogenic		Noncarcinogenic	
		^{GW} GW _{Ing} ¹ (mg/L)	^{GW} GW _{Class 3} ² (mg/L)	^{GW} GW _{Ing} ¹ (mg/L)	^{GW} GW _{Class 3} ² (mg/L)	^{Air} GW _{Inh-V} 0.5 acre source area (mg/L)	^{Air} GW _{Inh-V} 30 acre source area (mg/L)	^{Air} GW _{Inh-V} 0.5 acre source area (mg/L)	^{Air} GW _{Inh-V} 30 acre source area (mg/L)	^{GW} GW _{Ing} ¹ (mg/L)	^{GW} GW _{Class 3} ² (mg/L)	^{GW} GW _{Ing} ¹ (mg/L)	^{GW} GW _{Class 3} ² (mg/L)	^{Air} GW _{Inh-V} 0.5 acre source area (mg/L)	^{Air} GW _{Inh-V} 30 acre source area (mg/L)	^{Air} GW _{Inh-V} 0.5 acre source area (mg/L)	^{Air} GW _{Inh-V} 30 acre source area (mg/L)
>6-8 C aliphatics (TPH) (>53% n-hexane content)	NA	—	—	1.5E+00	1.5E+02	—	—	7.1E+01	9.1E+00	—	—	4.4E+00	4.4E+02	—	—	9.9E+01	1.3E+01
>6-8 C aliphatics (TPH) (<53% n-hexane content)	NA	—	—	1.5E+00	1.5E+02	—	—	1.9E+03	2.5E+02	—	—	4.4E+00	4.4E+02	—	—	2.7E+03	3.5E+02
>8-10 C aliphatics (TPH)	NA	—	—	2.4E+00	2.4E+02	—	—	3.3E+01	4.3E+00	—	—	7.3E+00	7.3E+02	—	—	4.6E+01	6.0E+00
>10-12 C aliphatics (TPH)	NA	—	—	2.4E+00	2.4E+02	—	—	2.2E+01	2.8E+00	—	—	7.3E+00	7.3E+02	—	—	3.1E+01	4.0E+00
>12-16 C aliphatics (TPH)	NA	—	—	2.4E+00	2.4E+02	—	—	5.1E+00	6.6E-01	—	—	7.3E+00	7.3E+02	—	—	7.1E+00	9.2E-01
>16-21 C aliphatics (TPH)	NA	—	—	4.9E+01	4.9E+03	—	—	—	—	—	—	1.5E+02	1.5E+04	—	—	—	—
>16-21 C aliphatics (TPH) (for transformer mineral oil releases only)	NA	—	—	3.9E+01	3.9E+03	—	—	—	—	—	—	1.2E+02	1.2E+04	—	—	—	—
>21-35 C aliphatics (TPH)	NA	—	—	4.9E+01	4.9E+03	—	—	—	—	—	—	1.5E+02	1.5E+04	—	—	—	—
>21-35 C aliphatics (TPH) (for transformer mineral oil releases only)	NA	—	—	3.9E+01	3.9E+03	—	—	—	—	—	—	1.2E+02	1.2E+04	—	—	—	—
>7-8 C aromatics (TPH)	NA	—	—	2.4E+00	2.4E+02	—	—	2.9E+04	3.8E+03	—	—	7.3E+00	7.3E+02	—	—	4.1E+04	5.3E+03
>8-10 C aromatics (TPH)	NA	—	—	9.8E-01	9.8E+01	—	—	1.8E+03	2.3E+02	—	—	2.9E+00	2.9E+02	—	—	2.5E+03	3.2E+02
>10-12 C aromatics (TPH)	NA	—	—	9.8E-01	9.8E+01	—	—	4.3E+03	5.5E+02	—	—	2.9E+00	2.9E+02	—	—	6.0E+03	7.7E+02
>12-16 C aromatics (TPH)	NA	—	—	9.8E-01	9.8E+01	—	—	7.5E+03	9.7E+02	—	—	2.9E+00	2.9E+02	—	—	1.0E+04	1.4E+03
>16-21 C aromatics (TPH)	NA	—	—	7.3E-01	7.3E+01	—	—	—	—	—	—	2.2E+00	2.2E+02	—	—	—	—
>21-35 C aromatics (TPH)	NA	—	—	7.3E-01	7.3E+01	—	—	—	—	—	—	2.2E+00	2.2E+02	—	—	—	—

Footnotes

1 Based on primary MCLs when available

2 100 x ^{GW}GW_{Ing}

3 The total MCL for trihalomethanes (bromodichloromethane, bromoform, chloroform, and dibromochloromethane) is 0.08 mg/L.

* These compounds are not necessarily of concern from a human health standpoint, therefore calculation of human health-based values is not required. However, aesthetics and ecological criteria would still apply. See table entitled "Compounds for which Calculation of a Human Health PCL is Not Required" available on the TCEQ website at <http://www.tceq.state.tx.us/remediation/trrp/trrp.html>.

NA=Not applicable

All values capped at 1E+06

This table shows the residential and commercial/industrial groundwater protective concentration levels with carcinogenic and non-carcinogenic values depicted.

end of worksheet

**Table 9
Individual RBELs Residential**

Last Revised: March 6, 2023

Chemical of Concern	CAS	Soil										Groundwater			
		Carcinogenic					Noncarcinogenic					Carcinogenic		Noncarcinogenic	
		Air ¹ RBEL _{Inh} (mg/m3)	Soil ¹ RBEL _{Ing} (mg/kg)	Soil ¹ RBEL _{Derm} (mg/kg)	AbgVeg ¹ RBEL _{Ing} above-ground (mg/kg)	BgVeg ¹ RBEL _{Ing} below-ground (mg/kg)	Air ¹ RBEL _{Inh} (mg/m3)	Soil ¹ RBEL _{Ing} (mg/kg)	Soil ¹ RBEL _{Derm} (mg/kg)	AbgVeg ¹ RBEL _{Ing} above-ground (mg/kg)	BgVeg ¹ RBEL _{Ing} below-ground (mg/kg)	GW ¹ RBEL _{Ing} (mg/L)	GW ² RBEL _{Class 3} (mg/L)	GW ¹ RBEL _{Ing} (mg/L)	GW ² RBEL _{Class 3} (mg/L)
Acenaphthene	83-32-9	–	–	–	–	–	4.9E+03	1.6E+04	–	9.4E+02	–	–	1.5E+00	1.5E+02	
Acenaphthylene	208-96-8	–	–	–	–	–	4.9E+03	1.6E+04	–	–	–	–	1.5E+00	1.5E+02	
Acetaldehyde	75-07-0	1.1E-02	–	–	–	9.4E-03	8.2E+03	–	–	–	–	–	2.4E+00	2.4E+02	
Acetate, 2-ethoxyethanol	111-15-9	–	–	–	–	6.3E-02	8.2E+03	–	–	–	–	–	2.4E+00	2.4E+02	
Acetate, isoamyl	123-92-2	–	–	–	–	–	5.9E+03	–	–	–	–	–	1.8E+00	1.8E+02	
Acetate, isobutyl	110-19-0	–	–	–	–	–	3.9E+03	–	–	–	–	–	1.2E+00	1.2E+02	
Acetate, sec-butyl	105-46-4	–	–	–	–	–	3.9E+03	–	–	–	–	–	1.2E+00	1.2E+02	
Acetic acid*	64-19-7	–	–	–	–	–	–	–	–	–	–	–	–	–	
Acetone (2-propanone)	67-64-1	–	–	–	–	3.2E+01	7.4E+04	–	–	–	–	–	2.2E+01	2.2E+03	
Acetone cyanohydrin	75-86-5	–	–	–	–	6.3E-02	2.5E+02	1.1E+03	–	–	–	–	7.3E-02	7.3E+00	
Acetonitrile	75-05-8	–	–	–	–	6.3E-02	2.6E+03	–	–	–	–	–	7.8E-01	7.8E+01	
Acetophenone	98-86-2	–	–	–	–	–	8.2E+03	3.6E+04	–	–	–	–	2.4E+00	2.4E+02	
Acetylaminofluorene, 2-	53-96-3	1.9E-05	1.6E+00	5.5E+00	–	–	–	–	–	–	2.4E-04	2.4E-02	–	–	
Acifluorfen, sodium	62476-59-9	–	–	–	–	–	1.1E+03	4.6E+03	–	–	–	–	3.2E-01	3.2E+01	
Acridine	260-94-6	–	–	–	–	–	2.5E+02	1.1E+03	–	–	–	–	7.3E-02	7.3E+00	
Acrolein	107-02-8	–	–	–	–	2.8E-03	4.1E+01	–	–	–	–	–	1.2E-02	1.2E+00	
Acrylamide	79-06-1	2.4E-04	1.2E+01	4.2E+01	–	6.3E-03	1.6E+02	7.1E+02	–	–	1.8E-03	1.8E-01	4.9E-02	4.9E+00	
Acrylic acid	79-10-7	–	–	–	–	1.0E-03	4.1E+04	–	–	–	–	–	1.2E+01	1.2E+03	
Acrylonitrile	107-13-1	3.6E-04	1.1E+01	–	–	2.1E-03	8.2E+01	–	–	–	1.7E-03	1.7E-01	2.4E-02	2.4E+00	
Adipic acid (hexanedioic acid)	124-04-9	–	–	–	–	–	1.6E+05	7.1E+05	–	–	–	–	4.9E+01	4.9E+03	
Alachlor	15972-60-8	–	7.6E+01	2.6E+02	–	–	8.2E+02	3.6E+03	–	–	1.1E-02	1.1E+00	2.4E-01	2.4E+01	
Aldicarb	116-06-3	–	–	–	–	–	8.2E+01	3.6E+02	–	–	–	–	2.4E-02	2.4E+00	
Aldicarb sulfone	1646-88-4	–	–	–	–	–	8.2E+01	3.6E+02	–	–	–	–	2.4E-02	2.4E+00	
Aldrin	309-00-2	5.0E-06	3.6E-01	1.2E+00	–	3.4E-02	–	2.5E+00	1.1E+01	–	4.7E-01	5.4E-05	5.4E-03	7.3E-04	7.3E-02
Allyl alcohol	107-18-6	–	–	–	–	–	1.0E-04	4.1E+02	–	–	–	–	1.2E-01	1.2E+01	
Allyl chloride	107-05-1	–	–	–	–	–	1.0E-03	8.2E+02	–	–	–	–	2.4E-01	2.4E+01	
Aluminum	7429-90-5	–	–	–	–	–	5.2E-03	8.2E+04	3.6E+05	6.5E+03	1.6E+04	–	–	2.4E+01	2.4E+03
Ametryn	834-12-8	–	–	–	–	–	7.4E+02	3.2E+03	–	–	–	–	2.2E-01	2.2E+01	
Amino-2,6-dinitrotoluene, 4-	19406-51-0	–	2.0E+02	6.9E+02	–	–	4.1E+01	1.8E+02	–	–	3.0E-02	3.0E+00	1.2E-02	1.2E+00	
Amino-4,6-dinitrotoluene, 2-	35572-78-2	–	2.0E+02	6.9E+02	–	–	4.1E+01	1.8E+02	–	–	3.0E-02	3.0E+00	1.2E-02	1.2E+00	
Aminobiphenyl, 4- (1,1-biphenyl-4-amine)	92-67-1	–	1.0E+00	3.4E+00	–	–	–	–	–	–	1.5E-04	1.5E-02	–	–	
Aminopyridine, 4-	504-24-5	–	–	–	–	–	1.6E+00	7.1E+00	–	–	–	–	4.9E-04	4.9E-02	
Ammonia	7664-41-7	–	–	–	–	3.3E-01	–	–	–	–	–	–	–	–	
Ammonium polyphosphate*	6833-79-9	–	–	–	–	–	–	–	–	–	–	–	–	–	
Ammonium salts*	AMMONIUM	–	–	–	–	–	–	–	–	–	–	–	–	–	
Aniline	62-53-3	–	1.1E+03	3.6E+03	–	–	1.0E-03	5.7E+02	2.5E+03	–	–	1.6E-01	1.6E+01	1.7E-01	1.7E+01
Anthracene	120-12-7	–	–	–	–	–	2.5E+04	8.2E+04	–	4.7E+03	–	–	7.3E+00	7.3E+02	
Anthraquinone, 9,10-	84-65-1	–	1.6E+02	5.3E+02	–	–	1.6E+03	7.1E+03	–	–	2.3E-02	2.3E+00	4.9E-01	4.9E+01	
Antimony	7440-36-0	–	–	–	–	–	3.3E+01	2.1E+02	2.6E+00	6.3E+00	–	–	9.8E-03	9.8E-01	
Aramite	140-57-8	3.4E-03	2.4E+02	8.3E+02	–	2.3E+01	–	4.1E+03	1.8E+04	–	7.8E+02	3.7E-02	3.7E+00	1.2E+00	1.2E+02
Arsenic	7440-38-2	1.6E-04	5.2E+01	4.6E+02	1.7E+00	3.9E+00	–	3.1E+01	3.6E+02	2.0E+00	4.7E+00	6.1E-03	6.1E-01	7.3E-03	7.3E-01
Arsine	7784-42-1	–	–	–	–	–	5.2E-05	–	–	–	–	–	–	–	
Atrazine	1912-24-9	–	2.7E+01	9.4E+01	–	–	–	2.9E+03	1.2E+04	–	–	4.1E-03	4.1E-01	8.6E-01	8.6E+01

**Table 9
Individual RBELs Residential**

Last Revised: March 6, 2023

Chemical of Concern	CAS	Soil										Groundwater			
		Carcinogenic					Noncarcinogenic					Carcinogenic		Noncarcinogenic	
		Air ¹ RBEL _{Inh} (mg/m3)	Soil ¹ RBEL _{Ing} (mg/kg)	Soil ¹ RBEL _{Der} (mg/kg)	Abg ¹ Veg ¹ RBEL _{Ing} above-ground (mg/kg)	Bg ¹ Veg ¹ RBEL _{Ing} below-ground (mg/kg)	Air ¹ RBEL _{Inh} (mg/m3)	Soil ¹ RBEL _{Ing} (mg/kg)	Soil ¹ RBEL _{Der} (mg/kg)	Abg ¹ Veg ¹ RBEL _{Ing} above-ground (mg/kg)	Bg ¹ Veg ¹ RBEL _{Ing} below-ground (mg/kg)	GW ¹ RBEL _{Ing} (mg/L)	GW ² RBEL _{Class 3} (mg/L)	GW ¹ RBEL _{Ing} (mg/L)	GW ² RBEL _{Class 3} (mg/L)
Azinphos-methyl (guthion)	86-50-0	—	—	—	—	—	—	1.2E+02	5.3E+02	—	—	—	—	3.7E-02	3.7E+00
Azobenzene	103-33-3	7.8E-04	5.5E+01	1.9E+02	—	5.3E+00	—	—	—	—	—	8.3E-03	8.3E-01	—	—
Barium	7440-39-3	—	—	—	—	—	—	1.6E+04	5.0E+04	1.3E+03	3.1E+03	—	—	4.9E+00	4.9E+02
Bayleton	43121-43-3	—	—	—	—	—	—	2.5E+03	1.1E+04	—	—	—	—	7.3E-01	7.3E+01
Benefin (benfluralin)	1861-40-1	—	—	—	—	—	—	2.5E+04	1.1E+05	—	4.7E+03	—	—	7.3E+00	7.3E+02
Benomyl	17804-35-2	—	—	—	—	—	—	4.1E+03	1.8E+04	—	—	—	—	1.2E+00	1.2E+02
Benz-a-anthracene	56-55-3	4.1E-04	6.1E+01	1.6E+02	—	5.8E+00	—	—	—	—	—	9.1E-03	9.1E-01	—	—
Benzaldehyde	100-52-7	—	—	—	—	—	—	8.2E+03	—	—	—	—	—	2.4E+00	2.4E+02
Benzene	71-43-2	1.1E-02	4.0E+02	—	—	—	2.9E-01	3.3E+02	—	—	—	6.1E-02	6.1E+00	9.8E-02	9.8E+00
Benzenedicarbonitrile, 1,3-	626-17-5	—	—	—	—	—	—	4.9E+02	2.1E+03	—	—	—	—	1.5E-01	1.5E+01
Benzenedicarboxylic acid, 1,2-disodecyl ester	26761-40-0	—	—	—	—	—	5.2E-03	3.3E+03	1.4E+04	—	6.3E+02	—	—	9.8E-01	9.8E+01
Benzenethiol	108-98-5	—	—	—	—	—	—	8.2E+01	—	—	—	—	—	2.4E-02	2.4E+00
Benzidine	92-87-5	3.6E-07	2.6E-02	9.0E-02	—	—	—	2.5E+02	1.1E+03	—	—	4.0E-06	4.0E-04	7.3E-02	7.3E+00
Benzo-a-pyrene	50-32-8	4.1E-05	6.1E+00	1.6E+01	—	5.8E-01	2.1E-06	2.5E+01	8.2E+01	—	4.7E+00	9.1E-04	9.1E-02	7.3E-03	7.3E-01
Benzo-b-fluoranthene	205-99-2	4.1E-04	6.1E+01	1.6E+02	—	5.8E+00	—	—	—	—	—	9.1E-03	9.1E-01	—	—
Benzo-e-pyrene	192-97-2	—	—	—	—	—	—	2.5E+03	8.2E+03	—	4.7E+02	—	—	7.3E-01	7.3E+01
Benzo-g,h,i-perylene	191-24-2	—	—	—	—	—	—	2.5E+03	8.2E+03	—	4.7E+02	—	—	7.3E-01	7.3E+01
Benzoic acid	65-85-0	—	—	—	—	—	—	3.3E+05	1.0E+06	—	—	—	—	9.8E+01	9.8E+03
Benzo-j-fluoranthene	205-82-3	4.1E-04	6.1E+01	1.6E+02	—	5.8E+00	—	—	—	—	—	9.1E-03	9.1E-01	—	—
Benzo-k-fluoranthene	207-08-9	4.1E-03	6.1E+02	1.6E+03	—	5.8E+01	—	—	—	—	—	9.1E-02	9.1E+00	—	—
Benzophenone	119-61-9	—	—	—	—	—	—	5.5E+02	2.4E+03	—	—	—	—	1.6E-01	1.6E+01
Benzotrchloride	98-07-7	—	4.7E-01	1.6E+00	—	—	—	—	—	—	—	7.0E-05	7.0E-03	—	—
Benzoyl peroxide	94-36-0	—	—	—	—	—	—	4.1E+03	1.8E+04	—	—	—	—	1.2E+00	1.2E+02
Benzyl alcohol	100-51-6	—	—	—	—	—	—	8.2E+03	3.6E+04	—	—	—	—	2.4E+00	2.4E+02
Benzyl chloride	100-44-7	—	3.6E+01	—	—	—	1.0E-03	1.6E+02	—	—	—	5.4E-03	5.4E-01	4.9E-02	4.9E+00
Benzyl dichloride	98-87-3	—	3.6E+01	1.2E+02	—	—	1.0E-03	1.6E+02	7.1E+02	—	—	5.4E-03	5.4E-01	4.9E-02	4.9E+00
Beryllium	7440-41-7	1.0E-05	—	—	—	—	2.1E-05	1.6E+02	5.0E+01	1.3E+01	3.1E+01	—	—	4.9E-02	4.9E+00
Biphenyl, 1,1-	92-52-4	—	—	—	—	—	—	4.1E+04	1.8E+04	—	—	—	—	1.2E+01	1.2E+03
Biphenyl, 1,1'-, 2-phenoxy-	6738-04-1	—	—	—	—	—	—	4.1E+03	1.8E+04	—	7.8E+02	—	—	1.2E+00	1.2E+02
Biquinoline, 2,2'-	119-91-5	—	—	—	—	—	—	2.5E+02	1.1E+03	—	4.7E+01	—	—	7.3E-02	7.3E+00
Bis (2-chloroethoxy) methane	111-91-1	7.4E-05	5.5E+00	1.9E+01	—	—	—	2.5E+02	1.1E+03	—	—	8.3E-04	8.3E-02	7.3E-02	7.3E+00
Bis (2-chloroethyl) ether	111-44-4	7.4E-05	5.5E+00	—	—	—	—	—	—	—	—	8.3E-04	8.3E-02	—	—
Bis (2-chloro-1-methylethyl) ether	108-60-1	2.4E-03	8.7E+01	3.0E+02	—	—	—	3.3E+03	1.4E+04	—	—	1.3E-02	1.3E+00	9.8E-01	9.8E+01
Bis (2-chloromethyl) ether	542-88-1	3.9E-07	2.8E-02	—	—	—	—	—	—	—	—	4.1E-06	4.1E-04	—	—
Bis (2-ethyl-hexyl) phthalate	117-81-7	—	4.3E+02	2.8E+02	—	4.2E+01	—	1.6E+03	1.4E+03	—	3.1E+02	6.5E-02	6.5E+00	4.9E-01	4.9E+01
Bismuth	7440-69-9	—	—	—	—	—	—	4.1E+04	3.6E+05	3.3E+03	—	—	—	1.2E+01	1.2E+03
Bisphenol A	80-05-7	—	—	—	—	—	—	4.1E+03	1.8E+04	—	—	—	—	1.2E+00	1.2E+02
Boron	7440-42-8	—	—	—	—	—	2.1E-02	1.6E+04	7.1E+05	—	—	—	—	4.9E+00	4.9E+02
Bromacil	314-40-9	—	—	—	—	—	—	8.2E+03	3.6E+04	—	—	—	—	2.4E+00	2.4E+02
Bromo-2-chloroethane, 1-	107-04-0	—	—	—	—	—	—	3.3E+03	—	—	—	—	—	9.8E-01	9.8E+01
Bromobenzene	108-86-1	—	—	—	—	—	6.3E-02	6.6E+02	—	—	—	—	—	2.0E-01	2.0E+01
Bromodichloromethane	75-27-4	—	9.8E+01	—	—	—	—	6.6E+02	—	—	—	1.5E-02	1.5E+00	2.0E-01	2.0E+01
Bromoform ³	75-25-2	2.2E-02	7.7E+02	—	—	—	—	1.6E+03	—	—	—	1.2E-01	1.2E+01	4.9E-01	4.9E+01

**Table 9
Individual RBELs Residential**

Last Revised: March 6, 2023

Chemical of Concern	CAS	Soil										Groundwater				
		Carcinogenic					Noncarcinogenic					Carcinogenic		Noncarcinogenic		
		Air ^R RBEL _{Inh} (mg/m3)	Soil ^R RBEL _{Ing} (mg/kg)	Soil ^R RBEL _{Der} (mg/kg)	AbgVeg ^R RBEL _{Ing} above-ground (mg/kg)	BgVeg ^R RBEL _{Ing} below-ground (mg/kg)	Air ^R RBEL _{Inh} (mg/m3)	Soil ^R RBEL _{Ing} (mg/kg)	Soil ^R RBEL _{Der} (mg/kg)	AbgVeg ^R RBEL _{Ing} above-ground (mg/kg)	BgVeg ^R RBEL _{Ing} below-ground (mg/kg)	GW ^R RBEL _{Ing} ¹ (mg/L)	GW ^R RBEL _{Class 3} ² (mg/L)	GW ^R RBEL _{Ing} ¹ (mg/L)	GW ^R RBEL _{Class 3} ² (mg/L)	
Bromomethane	74-83-9	–	–	–	–	–	4.1E-03	1.1E+02	–	–	–	–	–	–	3.4E-02	3.4E+00
Bromophenyl phenylether, 4-	101-55-3	7.4E-06	4.0E-01	1.4E+00	–	3.9E-02	–	–	–	–	–	6.1E-05	6.1E-03	–	–	
Butadiene, 1,3-	106-99-0	4.9E-02	–	–	–	–	3.4E-02	–	–	–	–	–	–	–	–	
Butadiene, 2-methyl-1,3- (isoprene)	78-79-5	–	–	–	–	–	1.9E+01	4.9E+03	–	–	–	–	–	1.5E+00	1.5E+02	
Butanal (butyraldehyde)	123-72-8	–	–	–	–	–	1.0E-01	4.9E+03	–	–	–	–	–	1.5E+00	1.5E+02	
Butane, 2,3-dimethyl-	79-29-8	–	–	–	–	–	1.9E+01	4.9E+03	–	–	–	–	–	1.5E+00	1.5E+02	
Butanoic acid (butyric acid)	107-92-6	–	–	–	–	–	1.0E-03	4.1E+04	1.8E+05	–	–	–	–	1.2E+01	1.2E+03	
Butanol, 2-	78-92-2	–	–	–	–	–	3.1E+01	1.6E+05	–	–	–	–	–	4.9E+01	4.9E+03	
Butanol, 2-methyl-1-	137-32-6	–	–	–	–	–	–	8.2E+02	–	–	–	–	–	2.4E-01	2.4E+01	
Butanol, 2-methyl-2-	75-85-4	–	–	–	–	–	–	8.2E+02	–	–	–	–	–	2.4E-01	2.4E+01	
Butanol, n-	71-36-3	–	–	–	–	–	–	8.2E+03	–	–	–	–	–	2.4E+00	2.4E+02	
Butene, 1-	106-98-9	–	–	–	–	–	5.5E+00	4.9E+03	–	–	–	–	–	1.5E+00	1.5E+02	
Butene, cis-2-	590-18-1	–	–	–	–	–	1.7E+00	4.9E+03	–	–	–	–	–	1.5E+00	1.5E+02	
Butene, trans-2-	624-64-6	–	–	–	–	–	1.7E+00	4.9E+03	–	–	–	–	–	1.5E+00	1.5E+02	
Butoxy ethanol, 2- (Ethylene glycol monobutyl ether; EGBE)	111-76-2	–	–	–	–	–	1.7E+00	8.2E+03	3.6E+04	–	–	–	–	2.4E+00	2.4E+02	
Butyl acetate	123-86-4	–	–	–	–	–	4.9E+00	1.1E+04	–	–	–	–	–	3.4E+00	3.4E+02	
Butyl acrylate	141-32-2	–	–	–	–	–	–	7.4E+02	–	–	–	–	–	2.2E-01	2.2E+01	
Butyl benzyl phthalate	85-68-7	–	3.2E+03	1.1E+04	–	3.1E+02	–	1.6E+04	7.1E+04	–	3.1E+03	4.8E-01	4.8E+01	4.9E+00	4.9E+02	
Butyl ether, n- (dibutyl ether)	142-96-1	–	–	–	–	–	–	8.2E+03	–	–	–	–	–	2.4E+00	2.4E+02	
Butyl methacrylate	97-88-1	–	–	–	–	–	–	7.4E+03	6.4E+03	–	–	–	–	2.2E+00	2.2E+02	
Butylate	2008-41-5	–	–	–	–	–	–	4.1E+03	1.8E+04	–	–	–	–	1.2E+00	1.2E+02	
Butylbenzene, n-	104-51-8	–	–	–	–	–	–	4.1E+03	1.8E+04	–	–	–	–	1.2E+00	1.2E+02	
Butylbenzene, sec-	135-98-8	–	–	–	–	–	–	3.3E+03	–	–	–	–	–	9.8E-01	9.8E+01	
Butylbenzene, tert-	98-06-6	–	–	–	–	–	–	3.3E+03	–	–	–	–	–	9.8E-01	9.8E+01	
Cacodylic acid	75-60-5	–	–	–	–	–	–	2.5E+02	1.1E+03	–	–	–	–	7.3E-02	7.3E+00	
Cadmium	7440-43-9	5.0E-05	–	–	–	–	1.1E-05	2.6E+02	2.3E+03	1.1E+01	2.6E+01	–	–	2.4E-02	2.4E+00	
Calcium*	7440-70-2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
Caprolactam	105-60-2	–	–	–	–	–	–	4.1E+04	1.8E+05	–	–	–	–	1.2E+01	1.2E+03	
Captan	133-06-2	–	1.7E+03	5.9E+03	–	–	–	1.1E+04	4.6E+04	–	–	2.6E-01	2.6E+01	3.2E+00	3.2E+02	
Carbaryl	63-25-2	–	–	–	–	–	–	8.2E+03	3.6E+04	–	–	–	–	2.4E+00	2.4E+02	
Carbazole	86-74-8	–	3.0E+02	1.0E+03	–	–	–	–	–	–	–	4.6E-02	4.6E+00	–	–	
Carbofuran	1563-66-2	–	–	–	–	–	–	4.1E+02	1.8E+03	–	–	–	–	1.2E-01	1.2E+01	
Carbon disulfide	75-15-0	–	–	–	–	–	7.3E-01	8.2E+03	–	–	–	–	–	2.4E+00	2.4E+02	
Carbon tetrachloride	56-23-5	4.1E-03	8.7E+01	–	–	–	1.0E-01	3.3E+02	–	–	–	1.3E-02	1.3E+00	9.8E-02	9.8E+00	
Carbophenothion	786-19-6	–	–	–	–	–	–	1.1E+03	4.6E+03	–	2.0E+02	–	–	3.2E-01	3.2E+01	
Carbosulfan	55285-14-8	–	–	–	–	–	–	8.2E+02	3.6E+03	–	1.6E+02	–	–	2.4E-01	2.4E+01	
Carboxin	5234-68-4	–	–	–	–	–	–	8.2E+03	3.6E+04	–	–	–	–	2.4E+00	2.4E+02	
Chloral	75-87-6	–	–	–	–	–	–	8.2E+03	–	–	–	–	–	2.4E+00	2.4E+02	
Chloral hydrate (1,1-ethanediol, 2,2,2-trichloro-)	302-17-0	–	–	–	–	–	–	8.2E+03	3.6E+04	–	–	–	–	2.4E+00	2.4E+02	
Chloramben (amiben; 3-amino-2,5-dichlorobenzoic acid)	133-90-4	–	–	–	–	–	–	1.2E+03	5.3E+03	–	–	–	–	3.7E-01	3.7E+01	
Chlordane (technical)	12789-03-6	2.4E-04	1.7E+01	1.5E+02	–	1.7E+00	7.3E-04	4.1E+01	4.4E+02	–	7.8E+00	2.6E-03	2.6E-01	1.2E-02	1.2E+00	
Chlordane, cis- (alpha chlordane)	5103-71-9	2.4E-04	1.7E+01	5.9E+01	–	1.7E+00	7.3E-04	4.1E+01	1.8E+02	–	7.8E+00	2.6E-03	2.6E-01	1.2E-02	1.2E+00	
Chlordane, trans- (gamma chlordane)	5103-74-2	2.4E-04	1.7E+01	5.9E+01	–	1.7E+00	7.3E-04	4.1E+01	1.8E+02	–	7.8E+00	2.6E-03	2.6E-01	1.2E-02	1.2E+00	

**Table 9
Individual RBELs Residential**

Last Revised: March 6, 2023

Chemical of Concern	CAS	Soil										Groundwater			
		Carcinogenic					Noncarcinogenic					Carcinogenic		Noncarcinogenic	
		Air ^R RBEL _{Inh} (mg/m3)	Soil ^R RBEL _{Ing} (mg/kg)	Soil ^R RBEL _{Der} (mg/kg)	AbgVeg ^R RBEL _{Ing} above-ground (mg/kg)	BgVeg ^R RBEL _{Ing} below-ground (mg/kg)	Air ^R RBEL _{Inh} (mg/m3)	Soil ^R RBEL _{Ing} (mg/kg)	Soil ^R RBEL _{Der} (mg/kg)	AbgVeg ^R RBEL _{Ing} above-ground (mg/kg)	BgVeg ^R RBEL _{Ing} below-ground (mg/kg)	GW ^R RBEL _{Ing} ¹ (mg/L)	GW ^R RBEL _{Class 3} ² (mg/L)	GW ^R RBEL _{Ing} ¹ (mg/L)	GW ^R RBEL _{Class 3} ² (mg/L)
Chlorfenvinphos	470-90-6	—	—	—	—	—	2.1E-03	5.7E+01	2.5E+02	—	1.1E+01	—	—	1.7E-02	1.7E+00
Chloride*	16887-00-6	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Chlorine	7782-50-5	—	—	—	—	—	9.1E-03	8.2E+03	7.1E+04	—	—	—	—	2.4E+00	2.4E+02
Chloro-1,3-butadiene, 2-	126-99-8	8.1E-05	—	—	—	—	2.1E-02	—	—	—	—	—	—	—	—
Chloro-2-propanol, 1-	127-00-4	—	—	—	—	—	—	1.6E+03	—	—	—	—	—	4.9E-01	4.9E+01
Chloro-3-methylphenol, 4-	59-50-7	—	—	—	—	—	—	4.1E+02	1.8E+03	—	—	—	—	1.2E-01	1.2E+01
Chloroaniline, p-	106-47-8	—	3.0E+01	1.0E+02	—	—	—	3.3E+02	1.4E+03	—	—	4.6E-03	4.6E-01	9.8E-02	9.8E+00
Chlorobenzene	108-90-7	—	—	—	—	—	5.2E-02	1.6E+03	—	—	—	—	—	4.9E-01	4.9E+01
Chlorobenzilate	510-15-6	3.1E-04	2.2E+01	7.7E+01	—	—	—	1.6E+03	7.1E+03	—	—	3.4E-03	3.4E-01	4.9E-01	4.9E+01
Chlorobromomethane (bromochloromethane)	74-97-5	—	—	—	—	—	—	3.3E+03	—	—	—	—	—	9.8E-01	9.8E+01
Chlorodifluoromethane	75-45-6	—	—	—	—	—	5.2E+01	—	—	—	—	—	—	—	—
Chloroethane (ethyl chloride)	75-00-3	—	—	—	—	—	1.0E+01	3.3E+04	—	—	—	—	—	9.8E+00	9.8E+02
Chloroethanol, 2-	107-07-3	—	—	—	—	—	—	1.6E+03	—	—	—	—	—	4.9E-01	4.9E+01
Chloroethoxy ethene, 2- (2-chloroethylvinylether)	110-75-8	—	5.5E+00	—	—	—	3.1E-04	1.6E+02	—	—	—	8.3E-04	8.3E-02	4.9E-02	4.9E+00
Chloroform ³	67-66-3	1.1E-03	—	—	—	—	1.0E-01	8.2E+02	—	—	—	—	—	2.4E-01	2.4E+01
Chlorohexane, 1-	544-10-5	—	—	—	—	—	1.0E+00	3.3E+03	—	—	—	—	—	9.8E-01	9.8E+01
Chloromethane (methyl chloride)	74-87-3	1.4E-02	4.7E+02	—	—	—	9.4E-02	2.9E+02	—	—	—	7.0E-02	7.0E+00	8.8E-02	8.8E+00
Chloronaphthalene, 1- (Chloronaphthalene, alpha-)	90-13-1	—	—	—	—	—	—	6.6E+03	2.2E+04	—	1.3E+03	—	—	2.0E+00	2.0E+02
Chloronaphthalene, 2- (chloronaphthalene, beta)	91-58-7	—	—	—	—	—	—	6.6E+03	2.2E+04	—	—	—	—	2.0E+00	2.0E+02
Chloronitrobenzene, p- (1-chloro-4-nitrobenzene)	100-00-5	—	9.6E+02	3.3E+03	—	—	6.3E-04	8.2E+01	3.6E+02	—	—	1.4E-01	1.4E+01	2.4E-02	2.4E+00
Chlorophenol, 2-	95-57-8	—	—	—	—	—	—	4.1E+02	—	—	—	—	—	1.2E-01	1.2E+01
Chlorophenol, 3-	108-43-0	—	—	—	—	—	—	4.1E+02	1.8E+03	—	—	—	—	1.2E-01	1.2E+01
Chlorophenol, 4-	106-48-9	—	—	—	—	—	—	4.1E+02	1.8E+03	—	—	—	—	1.2E-01	1.2E+01
Chlorophenyl phenylether, 4-	7005-72-3	7.4E-06	4.0E-01	1.4E+00	—	3.9E-02	—	—	—	—	—	6.1E-05	6.1E-03	—	—
Chloropropane, 2-	75-29-6	—	—	—	—	—	1.0E-01	2.5E+03	—	—	—	—	—	7.3E-01	7.3E+01
Chlorothalonil	1897-45-6	—	5.5E+02	1.9E+03	—	—	—	1.2E+03	5.3E+03	—	—	8.3E-02	8.3E+00	3.7E-01	3.7E+01
Chlorotoluene, o- (2-chlorotoluene)	95-49-8	—	—	—	—	—	8.3E-01	1.6E+03	7.1E+03	—	—	—	—	4.9E-01	4.9E+01
Chlorotoluene, p- (4-chlorotoluene)	106-43-4	—	—	—	—	—	—	1.6E+03	—	—	—	—	—	4.9E-01	4.9E+01
Chlorpyrifos	2921-88-2	—	—	—	—	—	—	2.5E+02	1.1E+03	—	4.7E+01	—	—	7.3E-02	7.3E+00
Chromium (III)	16065-83-1	—	—	—	—	—	1.5E-04	1.2E+05	6.9E+04	9.8E+03	2.3E+04	—	—	3.7E+01	3.7E+03
Chromium (total)	7440-47-3	—	—	—	—	—	1.5E-04	1.2E+05	6.9E+04	9.8E+03	2.3E+04	—	—	3.7E+01	3.7E+03
Chromium (VI)	18540-29-9	1.1E-05	—	—	—	—	2.3E-04	2.5E+02	2.7E+02	2.0E+01	4.8E+01	—	—	7.6E-02	7.6E+00
Chrysene	218-01-9	4.1E-02	6.1E+03	1.6E+04	—	5.8E+02	—	—	—	—	—	9.1E-01	9.1E+01	—	—
Cobalt	7440-48-4	4.1E-06	—	—	—	—	6.6E-05	8.2E+02	3.6E+04	6.5E+01	1.6E+02	—	—	2.4E-01	2.4E+01
Copolymer acrylamide	69418-26-4	—	—	—	—	—	—	1.6E+01	7.1E+01	—	—	—	—	4.9E-03	4.9E-01
Copper	7440-50-8	—	—	—	—	—	—	7.9E+03	3.4E+05	6.3E+02	1.5E+03	—	—	2.4E+00	2.4E+02
Coronene	191-07-1	—	—	—	—	—	—	1.6E+02	7.1E+02	—	3.1E+01	—	—	4.9E-02	4.9E+00
Coumaphos	56-72-4	—	—	—	—	—	—	5.7E+02	2.5E+03	—	1.1E+02	—	—	1.7E-01	1.7E+01
Cresol	1319-77-3	—	—	—	—	—	—	4.1E+03	1.8E+04	—	—	—	—	1.2E+00	1.2E+02
Cresol, m- (3-methylphenol)	108-39-4	—	—	—	—	—	—	4.1E+03	1.8E+04	—	—	—	—	1.2E+00	1.2E+02
Cresol, o- (2-methylphenol)	95-48-7	—	—	—	—	—	—	4.1E+03	1.8E+04	—	—	—	—	1.2E+00	1.2E+02
Cresol, p- (4-methylphenol)	106-44-5	—	—	—	—	—	—	4.1E+02	1.8E+03	—	—	—	—	1.2E-01	1.2E+01
Crotonaldehyde	123-73-9	—	3.2E+00	—	—	—	—	8.2E+01	—	—	—	4.8E-04	4.8E-02	2.4E-02	2.4E+00

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Individual RBELs Residential**

Last Revised: March 6, 2023

Chemical of Concern	CAS	Soil										Groundwater						
		Carcinogenic					Noncarcinogenic					Carcinogenic		Noncarcinogenic				
		Air ^R RBEL _{Inh} (mg/m3)	Soil ^R RBEL _{Ing} (mg/kg)	Soil ^R RBEL _{Derm} (mg/kg)	AbgVeg ^R RBEL _{Ing} above-ground (mg/kg)	BgVeg ^R RBEL _{Ing} below-ground (mg/kg)	Air ^R RBEL _{Inh} (mg/m3)	Soil ^R RBEL _{Ing} (mg/kg)	Soil ^R RBEL _{Derm} (mg/kg)	AbgVeg ^R RBEL _{Ing} above-ground (mg/kg)	BgVeg ^R RBEL _{Ing} below-ground (mg/kg)	GW ^R RBEL _{Ing} ¹ (mg/L)	GW ^R RBEL _{Class 3} ² (mg/L)	GW ^R RBEL _{Ing} ¹ (mg/L)	GW ^R RBEL _{Class 3} ² (mg/L)			
Cumene (isopropylbenzene)	98-82-8	–	–	–	–	–	4.2E-01	8.2E+03	–	–	–	–	–	–	–	–	2.4E+00	2.4E+02
Cyanazine	21725-46-2	–	7.2E+00	2.5E+01	–	–	–	1.6E+02	7.1E+02	–	–	–	–	1.1E-03	1.1E-01	–	4.9E-02	4.9E+00
Cyanide	57-12-5	–	–	–	–	–	8.3E-04	4.9E+01	2.1E+03	–	–	–	–	–	–	–	1.5E-02	1.5E+00
Cyanogen	460-19-5	–	–	–	–	–	8.3E-04	8.2E+01	–	–	–	–	–	–	–	–	2.4E-02	2.4E+00
Cycloate	1134-23-2	–	–	–	–	–	–	4.5E+03	2.0E+04	–	–	–	–	–	–	–	1.3E+00	1.3E+02
Cyclohexane	110-82-7	–	–	–	–	–	6.3E+00	4.1E+05	–	–	–	–	–	–	–	–	1.2E+02	1.2E+04
Cyclohexanol	108-93-0	–	–	–	–	–	–	4.1E+05	1.0E+06	–	–	–	–	–	–	–	1.2E+02	1.2E+04
Cyclohexanone	108-94-1	–	–	–	–	–	7.3E-01	4.1E+05	–	–	–	–	–	–	–	–	1.2E+02	1.2E+04
Cyclohexene, 1-methanol-3-	1679-51-2	–	–	–	–	–	–	1.6E+03	7.1E+03	–	–	–	–	–	–	–	4.9E-01	4.9E+01
Cyclohexene, 4-vinyl-1-	100-40-3	–	–	–	–	–	3.4E-01	1.8E+03	–	–	–	–	–	–	–	–	5.4E-01	5.4E+01
Cyclopentane	287-92-3	–	–	–	–	–	2.5E+01	4.9E+03	–	–	–	–	–	–	–	–	1.5E+00	1.5E+02
Cyclopentane, methyl-	96-37-7	–	–	–	–	–	1.0E+00	8.2E+03	–	–	–	–	–	–	–	–	2.4E+00	2.4E+02
Cyclopentene	142-29-0	–	–	–	–	–	–	4.1E+05	–	–	–	–	–	–	–	–	1.2E+02	1.2E+04
Cyclotetramethylenetetranitramine (HMX)	2691-41-0	–	–	–	–	–	–	4.1E+03	2.7E+03	–	–	–	–	–	–	–	1.2E+00	1.2E+02
Cyclotrimethylenetrinitramine (RDX)	121-82-4	–	7.6E+01	2.6E+02	–	–	–	3.3E+02	1.4E+03	–	–	–	–	1.1E-02	1.1E+00	–	9.8E-02	9.8E+00
Cymene (isopropyltoluene)	99-87-6	–	–	–	–	–	–	8.2E+03	–	–	–	–	–	–	–	–	2.4E+00	2.4E+02
Cymoxanil	57966-95-7	–	–	–	–	–	–	1.1E+03	4.6E+03	–	–	–	–	–	–	–	3.2E-01	3.2E+01
Dacthal (DCPA)	1861-32-1	–	–	–	–	–	–	8.2E+02	3.6E+03	–	–	1.6E+02	–	–	–	–	2.4E-01	2.4E+01
Dalapon, sodium salt (2,2-dichloropropanoic acid)	75-99-0	–	–	–	–	–	–	2.5E+03	1.1E+04	–	–	–	–	–	–	–	7.3E-01	7.3E+01
DDD	72-54-8	–	2.5E+01	2.9E+02	–	2.4E+00	–	–	–	–	–	–	–	3.8E-03	3.8E-01	–	–	–
DDE	72-55-9	–	1.8E+01	2.0E+02	–	1.7E+00	–	–	–	–	–	–	–	2.7E-03	2.7E-01	–	–	–
DDT	50-29-3	2.5E-04	1.8E+01	2.0E+02	–	1.7E+00	–	4.1E+01	5.9E+02	–	–	7.8E+00	2.7E-03	2.7E-01	–	–	1.2E-02	1.2E+00
Demeton	8065-48-3	–	–	–	–	–	–	3.3E+00	1.4E+01	–	–	–	–	–	–	–	9.8E-04	9.8E-02
Desethylatrazine	6190-65-4	–	–	–	–	–	–	2.9E+03	1.2E+04	–	–	–	–	–	–	–	8.6E-01	8.6E+01
Diacetone alcohol (4-hydroxy-4-methyl-2-pentanone)	123-42-2	–	–	–	–	–	–	3.3E+03	1.4E+04	–	–	–	–	–	–	–	9.8E-01	9.8E+01
Diallate	2303-16-4	–	1.0E+02	3.4E+02	–	9.6E+00	–	–	–	–	–	–	–	1.5E-02	1.5E+00	–	–	–
Diazinon	333-41-5	–	–	–	–	–	1.0E-04	7.4E+01	3.2E+02	–	–	–	–	–	–	–	2.2E-02	2.2E+00
Dibenz(a,h)acridine	226-36-8	2.2E-04	5.1E+00	1.7E+01	–	4.9E-01	–	–	–	–	–	–	–	7.6E-04	7.6E-02	–	–	–
Dibenz(a,j)acridine	224-42-0	2.8E-04	8.3E+00	2.2E+01	–	8.0E-01	–	–	–	–	–	–	–	1.3E-03	1.3E-01	–	–	–
Dibenz-a,h-anthracene	53-70-3	4.1E-05	6.1E+00	1.6E+01	–	5.8E-01	–	–	–	–	–	–	–	9.1E-04	9.1E-02	–	–	–
Dibenzo(a,e)pyrene	192-65-4	2.8E-05	8.3E-01	2.8E+00	–	8.0E-02	–	–	–	–	–	–	–	1.3E-04	1.3E-02	–	–	–
Dibenzo(a,h)pyrene	189-64-0	2.8E-06	8.3E-02	2.8E-01	–	8.0E-03	–	–	–	–	–	–	–	1.3E-05	1.3E-03	–	–	–
Dibenzo(a,i)pyrene	189-55-9	2.8E-06	8.3E-02	2.8E-01	–	8.0E-03	–	–	–	–	–	–	–	1.3E-05	1.3E-03	–	–	–
Dibenzofuran	132-64-9	–	–	–	–	–	–	3.3E+02	1.4E+03	–	–	–	–	–	–	–	9.8E-02	9.8E+00
Dibenzothiophene	132-65-0	–	–	–	–	–	–	2.5E+02	1.1E+03	–	–	4.7E+01	–	–	–	–	7.3E-02	7.3E+00
Dibromo-3-chloropropane, 1,2-	96-12-8	4.1E-06	7.6E+00	2.6E+01	–	–	2.1E-04	1.6E+01	7.1E+01	–	–	–	–	1.1E-03	1.1E-01	–	4.9E-03	4.9E-01
Dibromochloromethane (chlorodibromomethane) ³	124-48-1	–	7.2E+01	–	–	–	–	1.6E+03	–	–	–	–	–	1.1E-02	1.1E+00	–	4.9E-01	4.9E+01
Dibromofluoromethane	1868-53-7	–	–	–	–	–	–	1.6E+04	–	–	–	–	–	–	–	–	4.9E+00	4.9E+02
Dicamba	1918-00-9	–	–	–	–	–	–	2.5E+03	1.1E+04	–	–	–	–	–	–	–	7.3E-01	7.3E+01
Dichlormid	37764-25-3	–	–	–	–	–	–	2.0E+03	8.9E+03	–	–	–	–	–	–	–	6.1E-01	6.1E+01
Dichloro-2-butene, 1,4-	764-41-0	5.8E-06	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Dichloro-2-butene, 1,4- trans	110-57-6	5.8E-06	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Dichlorobenzene, 1,2-	95-50-1	–	–	–	–	–	3.1E-02	7.4E+03	–	–	–	–	–	–	–	–	2.2E+00	2.2E+02

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Chemical of Concern	CAS	Soil										Groundwater				
		Carcinogenic					Noncarcinogenic					Carcinogenic		Noncarcinogenic		
		Air ^R RBEL _{Inh} (mg/m3)	Soil ^R RBEL _{Ing} (mg/kg)	Soil ^R RBEL _{Derm} (mg/kg)	Abg ^R Veg ^R RBEL _{Ing} above-ground (mg/kg)	Bg ^R Veg ^R RBEL _{Ing} below-ground (mg/kg)	Air ^R RBEL _{Inh} (mg/m3)	Soil ^R RBEL _{Ing} (mg/kg)	Soil ^R RBEL _{Derm} (mg/kg)	Abg ^R Veg ^R RBEL _{Ing} above-ground (mg/kg)	Bg ^R Veg ^R RBEL _{Ing} below-ground (mg/kg)	GW ^R RBEL _{Ing} ¹ (mg/L)	GW ^R RBEL _{Class 3} ² (mg/L)	GW ^R RBEL _{Ing} ¹ (mg/L)	GW ^R RBEL _{Class 3} ² (mg/L)	
Dichlorobenzene, 1,3-	541-73-1	–	–	–	–	–	8.3E-03	2.5E+03	–	–	–	–	–	–	7.3E-01	7.3E+01
Dichlorobenzene, 1,4-	106-46-7	–	2.5E+02	–	–	–	5.5E-01	–	–	–	–	3.8E-02	3.8E+00	–	–	
Dichlorobenzidine, 3,3'-	91-94-1	–	1.3E+01	4.6E+01	–	–	–	–	–	–	–	2.0E-03	2.0E-01	–	–	
Dichlorobutane, 2,3-	7581-97-7	–	–	–	–	–	7.3E-03	8.2E+02	–	–	–	–	–	2.4E-01	2.4E+01	
Dichlorodifluoromethane	75-71-8	–	–	–	–	–	1.0E-01	1.6E+04	–	–	–	–	–	4.9E+00	4.9E+02	
Dichloroethane, 1,1-	75-34-3	–	–	–	–	–	2.5E+00	1.6E+04	–	–	–	–	–	4.9E+00	4.9E+02	
Dichloroethane, 1,2-	107-06-2	7.2E-03	6.7E+01	–	–	–	4.6E-02	6.4E+03	–	–	–	1.0E-02	1.0E+00	1.9E+00	1.9E+02	
Dichloroethylene, 1,1-	75-35-4	–	–	–	–	–	3.5E-01	4.1E+03	–	–	–	–	–	1.2E+00	1.2E+02	
Dichloroethylene, cis-1,2-	156-59-2	–	–	–	–	–	6.3E-02	1.6E+02	–	–	–	–	–	4.9E-02	4.9E+00	
Dichloroethylene, trans-1,2	156-60-5	–	–	–	–	–	6.3E-02	1.6E+03	–	–	–	–	–	4.9E-01	4.9E+01	
Dichlorofluoromethane	75-43-4	–	–	–	–	–	–	1.6E+04	–	–	–	–	–	4.9E+00	4.9E+02	
Dichlorophenol, 2,3-	576-24-9	–	–	–	–	–	–	2.5E+02	1.1E+03	–	–	–	–	7.3E-02	7.3E+00	
Dichlorophenol, 2,4-	120-83-2	–	–	–	–	–	–	2.5E+02	1.1E+03	–	–	–	–	7.3E-02	7.3E+00	
Dichlorophenol, 2,5-	583-78-8	–	–	–	–	–	–	2.5E+02	1.1E+03	–	–	–	–	7.3E-02	7.3E+00	
Dichlorophenol, 2,6-	87-65-0	–	–	–	–	–	–	8.2E+01	3.6E+02	–	–	–	–	2.4E-02	2.4E+00	
Dichlorophenol, 3,4-	95-77-2	–	–	–	–	–	–	2.5E+02	1.1E+03	–	–	–	–	7.3E-02	7.3E+00	
Dichlorophenol, 3,5-	591-35-5	–	–	–	–	–	–	2.5E+02	1.1E+03	–	–	–	–	7.3E-02	7.3E+00	
Dichlorophenoxy, 2,4- butyric acid, 4- (2,4-DB)	94-82-6	–	–	–	–	–	–	6.6E+02	2.8E+03	–	–	–	–	2.0E-01	2.0E+01	
Dichlorophenoxyacetic acid, 2,4- (2,4-D)	94-75-7	–	–	–	–	–	–	1.6E+04	1.4E+05	–	–	–	–	4.9E+00	4.9E+02	
Dichloroprop (2-(2,4-dichlorophenoxy) propanoic acid)	120-36-5	–	–	–	–	–	–	8.2E+02	3.6E+03	–	–	–	–	2.4E-01	2.4E+01	
Dichloropropane, 1,2-	78-87-5	2.6E-02	1.6E+02	–	–	–	4.2E-03	1.1E+04	–	–	–	2.5E-02	2.5E+00	3.2E+00	3.2E+02	
Dichloropropane, 1,3-	142-28-9	6.1E-03	6.1E+01	–	–	–	2.1E-02	1.6E+03	–	–	–	9.1E-03	9.1E-01	4.9E-01	4.9E+01	
Dichloropropane, 2,2-	594-20-7	–	8.9E+01	–	–	–	4.2E-03	7.4E+03	–	–	–	1.3E-02	1.3E+00	2.2E+00	2.2E+02	
Dichloropropanol, 2,3-	616-23-9	–	–	–	–	–	–	2.5E+02	1.1E+03	–	–	–	–	7.3E-02	7.3E+00	
Dichloropropene, 1,1-	563-58-6	6.1E-03	6.1E+01	–	–	–	2.1E-02	2.5E+03	–	–	–	9.1E-03	9.1E-01	7.3E-01	7.3E+01	
Dichloropropene, 1,3- (mixed isomers)	542-75-6	6.1E-03	6.1E+01	–	–	–	2.1E-02	2.5E+03	–	–	–	9.1E-03	9.1E-01	7.3E-01	7.3E+01	
Dichloropropene, cis 1,3-	10061-01-5	–	1.1E+01	–	–	–	2.1E-02	8.2E+00	–	–	–	1.7E-03	1.7E-01	2.4E-03	2.4E-01	
Dichloropropene, trans 1,3-	10061-02-6	6.1E-03	6.1E+01	–	–	–	2.1E-02	2.5E+03	–	–	–	9.1E-03	9.1E-01	7.3E-01	7.3E+01	
Dichlorvos	62-73-7	–	2.1E+01	7.2E+01	–	–	5.2E-04	4.1E+01	1.8E+02	–	–	3.1E-03	3.1E-01	1.2E-02	1.2E+00	
Dicrotophos (bidrin)	141-66-2	–	–	–	–	–	–	8.2E+00	3.6E+01	–	–	–	–	2.4E-03	2.4E-01	
Dicyclopentadiene	77-73-6	–	–	–	–	–	–	6.6E+03	–	–	–	–	–	2.0E+00	2.0E+02	
Dieldrin	60-57-1	5.3E-06	3.8E-01	1.3E+00	–	3.7E-02	–	4.1E+00	1.8E+01	–	7.8E-01	5.7E-05	5.7E-03	1.2E-03	1.2E-01	
Diethanolamine	111-42-2	–	–	–	–	–	2.6E-02	4.1E+01	1.8E+02	–	–	–	–	1.2E-02	1.2E+00	
Diethyldithiocarbamate, sodium salt	148-18-5	–	2.2E+01	–	–	–	–	2.5E+03	–	–	–	3.4E-03	3.4E-01	7.3E-01	7.3E+01	
Diethyl phthalate	84-66-2	–	–	–	–	–	–	6.6E+04	2.8E+05	–	–	–	–	2.0E+01	2.0E+03	
Diethylene glycol	111-46-6	–	–	–	–	–	–	1.6E+05	7.1E+05	–	–	–	–	4.9E+01	4.9E+03	
Diethylene glycol monobutyl ether	112-34-5	–	–	–	–	–	1.0E-04	2.5E+03	1.1E+04	–	–	–	–	7.3E-01	7.3E+01	
Diethylhexyl adipate	103-23-1	–	5.1E+03	1.7E+04	–	–	–	4.9E+04	2.1E+05	–	–	7.6E-01	7.6E+01	1.5E+01	1.5E+03	
Diethylstilbestrol	56-53-1	–	1.3E-03	4.4E-03	–	1.2E-04	–	–	–	–	–	1.9E-07	1.9E-05	–	–	
Diisobutylene (trimethyl-1-pentene, 2,4,4-)	107-39-1	–	–	–	–	–	2.1E-01	4.9E+03	–	–	–	–	–	1.5E+00	1.5E+02	
Diisopropylbenzene, p-	100-18-5	–	–	–	–	–	–	8.2E+02	3.6E+03	–	–	–	–	2.4E-01	2.4E+01	
Diisopropyl ether (2,2'-oxybis-propane)	108-20-3	–	–	–	–	–	7.3E-01	8.2E+03	–	–	–	–	–	2.4E+00	2.4E+02	
Dimethenamid	87674-68-8	–	–	–	–	–	–	1.2E+03	5.3E+03	–	–	–	–	3.7E-01	3.7E+01	

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		Carcinogenic					Noncarcinogenic					Carcinogenic		Noncarcinogenic	
		Air ^R RBEL _{Inh} (mg/m3)	Soil ^R RBEL _{Ing} (mg/kg)	Soil ^R RBEL _{Derm} (mg/kg)	Abg ^R Veg ^R RBEL _{Ing} above-ground (mg/kg)	Bg ^R Veg ^R RBEL _{Ing} below-ground (mg/kg)	Air ^R RBEL _{Inh} (mg/m3)	Soil ^R RBEL _{Ing} (mg/kg)	Soil ^R RBEL _{Derm} (mg/kg)	Abg ^R Veg ^R RBEL _{Ing} above-ground (mg/kg)	Bg ^R Veg ^R RBEL _{Ing} below-ground (mg/kg)	GW ^R RBEL _{Ing} ¹ (mg/L)	GW ^R RBEL _{Class 3} ² (mg/L)	GW ^R RBEL _{Ing} ¹ (mg/L)	GW ^R RBEL _{Class 3} ² (mg/L)
Dimethoate	60-51-5	–	–	–	–	–	1.6E+01	7.1E+01	–	–	–	–	4.9E-03	4.9E-01	
Dimethoxybenzidine, 3,3'-	119-90-4	–	4.3E+02	1.5E+03	–	–	–	–	–	–	–	6.5E-02	6.5E+00	–	–
Dimethyl-2-nitrobenzene, 1,3-	81-20-9	–	–	–	–	9.4E-03	1.6E+02	7.1E+02	–	–	–	–	–	4.9E-02	4.9E+00
Dimethyl-3-nitrobenzene, 1,2-	83-41-0	–	–	–	–	9.4E-03	1.6E+02	7.1E+02	–	–	–	–	–	4.9E-02	4.9E+00
Dimethyl-4-nitrobenzene, 1-2-	99-51-4	–	–	–	–	9.4E-03	1.6E+02	7.1E+02	–	–	–	–	–	4.9E-02	4.9E+00
Dimethyl-5-nitrobenzene, 1,3-	99-12-7	–	–	–	–	9.4E-03	1.6E+02	7.1E+02	–	–	–	–	–	4.9E-02	4.9E+00
Dimethylphenethylamine, alpha, alpha-	122-09-8	–	–	–	–	–	1.6E+02	7.1E+02	–	–	–	–	–	4.9E-02	4.9E+00
Dimethyl phenol, 2,4-	105-67-9	–	–	–	–	–	1.6E+03	7.1E+03	–	–	–	–	–	4.9E-01	4.9E+01
Dimethylaminoazobenzene, p-	60-11-7	–	–	–	–	–	8.2E-01	3.6E+00	–	1.6E-01	–	–	2.4E-04	2.4E-02	
Dimethylbenz-a-anthracene, 7,12-	57-97-6	1.0E-06	2.4E-02	6.4E-02	–	2.3E-03	–	–	–	–	–	3.7E-06	3.7E-04	–	–
Dimethylbenzidine, 3,3'-	119-93-7	–	5.5E-01	1.9E+00	–	–	–	–	–	–	–	8.3E-05	8.3E-03	–	–
Dimethylformamide, N,N-	68-12-2	–	–	–	–	3.1E-02	8.2E+03	–	–	–	–	–	–	2.4E+00	2.4E+02
Dimethylnaphthalene, 1,3-	575-41-7	–	–	–	–	–	3.3E+03	1.1E+04	–	6.3E+02	–	–	9.8E-01	9.8E+01	
Dimethylphthalate	131-11-3	–	–	–	–	–	6.6E+04	2.8E+05	–	–	–	–	–	2.0E+01	2.0E+03
Di-n-butyl phthalate	84-74-2	–	–	–	–	–	8.2E+03	3.6E+04	–	1.6E+03	–	–	–	2.4E+00	2.4E+02
Dinitro-2-methylphenol, 4,6- (dinitro-o-cresol, 4, 6-)	534-52-1	–	–	–	–	–	8.2E+00	3.6E+01	–	–	–	–	–	2.4E-03	2.4E-01
Dinitrobenzene, 1,3- (dinitrobenzene, 2,4-)	99-65-0	–	–	–	–	–	8.2E+00	3.6E+01	–	–	–	–	–	2.4E-03	2.4E-01
Dinitrobenzene, 1,4-	100-25-4	–	–	–	–	–	8.2E+00	3.6E+01	–	–	–	–	–	2.4E-03	2.4E-01
Dinitrophenol, 2,4-	51-28-5	–	–	–	–	–	1.6E+02	7.1E+02	–	–	–	–	–	4.9E-02	4.9E+00
Dinitrophenol, 2,5-	329-71-5	–	–	–	–	–	1.6E+02	7.1E+02	–	–	–	–	–	4.9E-02	4.9E+00
Dinitrotoluene, 2,4-	121-14-2	–	8.9E+00	3.1E+01	–	–	1.6E+02	7.1E+02	–	–	–	1.3E-03	1.3E-01	4.9E-02	4.9E+00
Dinitrotoluene, 2,6-	606-20-2	–	8.9E+00	3.1E+01	–	–	8.2E+01	3.6E+02	–	–	–	1.3E-03	1.3E-01	2.4E-02	2.4E+00
Di-n-octyl phthalate	117-84-0	–	–	–	–	–	8.2E+02	3.6E+03	–	1.6E+02	–	–	–	2.4E-01	2.4E+01
Dinoseb	88-85-7	–	–	–	–	–	8.2E+01	3.6E+02	–	–	–	–	–	2.4E-02	2.4E+00
Dioxane 1,4-	123-91-1	4.9E-03	6.1E+01	–	–	–	1.1E-01	2.5E+03	–	–	–	9.1E-03	9.1E-01	7.3E-01	7.3E+01
Dioxin (as 2,3,7,8-TCDD toxicity equivalent quotients (TEQs))	1746-01-6	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Diphenyl ether	101-84-8	–	–	–	–	–	5.1E+02	2.2E+03	–	9.7E+01	–	–	–	1.5E-01	1.5E+01
Diphenylamine	122-39-4	–	–	–	–	–	2.0E+03	8.9E+03	–	–	–	–	–	6.1E-01	6.1E+01
Diphenylhydrazine, 1,2-	122-66-7	1.1E-04	7.6E+00	2.6E+01	–	–	–	–	–	–	–	1.1E-03	1.1E-01	–	–
Dipropylene glycol	110-98-5	–	–	–	–	–	9.8E+03	4.3E+04	–	–	–	–	–	2.9E+00	2.9E+02
Diquat	85-00-7	–	–	–	–	–	1.8E+02	7.8E+02	–	–	–	–	–	5.4E-02	5.4E+00
Disodium iminodiacetate (iminodiacetic acid, disodium salt)	142-73-4	–	–	–	–	–	8.2E+02	3.6E+03	–	–	–	–	–	2.4E-01	2.4E+01
Disulfoton	298-04-4	–	–	–	–	–	3.3E+00	1.4E+01	–	–	–	–	–	9.8E-04	9.8E-02
Diuron	330-54-1	–	–	–	–	–	1.6E+02	7.1E+02	–	–	–	–	–	4.9E-02	4.9E+00
Dodecylphenol, 4-	104-43-8	–	–	–	–	–	4.1E+03	1.8E+04	–	7.8E+02	–	–	–	1.2E+00	1.2E+02
Endosulfan	115-29-7	–	–	–	–	–	4.9E+02	2.1E+03	–	–	–	–	–	1.5E-01	1.5E+01
Endosulfan I	959-98-8	–	–	–	–	–	1.6E+02	7.1E+02	–	3.1E+01	–	–	–	4.9E-02	4.9E+00
Endosulfan II	33213-65-9	–	–	–	–	–	4.9E+02	2.1E+03	–	9.4E+01	–	–	–	1.5E-01	1.5E+01
Endosulfan sulfate	1031-07-8	–	–	–	–	–	4.9E+02	2.1E+03	–	9.4E+01	–	–	–	1.5E-01	1.5E+01
Endothall	145-73-3	–	–	–	–	–	1.6E+03	7.1E+03	–	–	–	–	–	4.9E-01	4.9E+01
Endrin	72-20-8	–	–	–	–	–	2.5E+01	1.1E+02	–	4.7E+00	–	–	–	7.3E-03	7.3E-01
Endrin aldehyde	7421-93-4	–	–	–	–	–	2.5E+01	1.1E+02	–	4.7E+00	–	–	–	7.3E-03	7.3E-01
Endrin ketone	53494-70-5	–	–	–	–	–	2.5E+01	1.1E+02	–	4.7E+00	–	–	–	7.3E-03	7.3E-01

**Table 9
Individual RBELs Residential**

Last Revised: March 6, 2023

Chemical of Concern	CAS	Soil										Groundwater			
		Carcinogenic					Noncarcinogenic					Carcinogenic		Noncarcinogenic	
		Air ^R RBEL _{Inh} (mg/m3)	Soil ^R RBEL _{Ing} (mg/kg)	Soil ^R RBEL _{Der} (mg/kg)	Abg ^R Veg ^R RBEL _{Ing} above-ground (mg/kg)	Bg ^R Veg ^R RBEL _{Ing} below-ground (mg/kg)	Air ^R RBEL _{Inh} (mg/m3)	Soil ^R RBEL _{Ing} (mg/kg)	Soil ^R RBEL _{Der} (mg/kg)	Abg ^R Veg ^R RBEL _{Ing} above-ground (mg/kg)	Bg ^R Veg ^R RBEL _{Ing} below-ground (mg/kg)	GW ^R RBEL _{Ing} ¹ (mg/L)	GW ^R RBEL _{Class 3} ² (mg/L)	GW ^R RBEL _{Ing} ¹ (mg/L)	GW ^R RBEL _{Class 3} ² (mg/L)
Epichlorohydrin	106-89-8	2.0E-02	6.1E+02	—	—	—	1.0E-03	4.9E+02	—	—	—	9.2E-02	9.2E+00	1.5E-01	1.5E+01
EPN (o-ethyl o-(4-nitrophenyl)phenylphosphonothioate)	2104-64-5	—	—	—	—	—	—	8.2E-01	3.6E+00	—	—	—	—	2.4E-04	2.4E-02
Esfenvalerate	66230-04-4	—	—	—	—	—	—	1.6E+02	7.1E+02	—	3.1E+01	—	—	4.9E-02	4.9E+00
Ethalfuralin (sonolan)	55283-68-6	—	6.8E+01	2.3E+02	—	6.6E+00	—	3.3E+03	1.4E+04	—	6.3E+02	1.0E-02	1.0E+00	9.8E-01	9.8E+01
Ethanol	64-17-5	—	—	—	—	—	—	1.0E+06	—	—	—	—	—	8.1E+02	8.1E+04
Ethanol, 2-amino-	141-43-5	—	—	—	—	—	2.4E-02	1.4E+02	6.0E+02	—	—	—	—	4.2E-02	4.2E+00
Ethanol, 2-(2-aminoethoxy)-	929-06-6	—	—	—	—	—	—	4.1E+01	1.8E+02	—	—	—	—	1.2E-02	1.2E+00
Ethanol, 2-(2-ethoxyethoxy)-	111-90-0	—	—	—	—	—	—	1.6E+05	7.1E+05	—	—	—	—	4.9E+01	4.9E+03
Ethanol, 2-(methylamino)-	109-83-1	—	—	—	—	—	4.8E-02	1.3E+03	5.7E+03	—	—	—	—	3.9E-01	3.9E+01
Ethion	563-12-2	—	—	—	—	—	—	4.1E+01	1.8E+02	—	7.8E+00	—	—	1.2E-02	1.2E+00
Ethoprop	13194-48-4	—	2.2E+02	7.4E+02	—	—	—	8.2E+00	3.6E+01	—	—	3.2E-02	3.2E+00	2.4E-03	2.4E-01
Ethoxy ethanol, 2-	110-80-5	—	—	—	—	—	2.1E-01	7.4E+03	—	—	—	—	—	2.2E+00	2.2E+02
Ethyl acetate	141-78-6	—	—	—	—	—	2.4E-01	7.4E+04	—	—	—	—	—	2.2E+01	2.2E+03
Ethyl acrylate	140-88-5	—	1.3E+02	—	—	—	8.3E-03	4.1E+02	—	—	—	1.9E-02	1.9E+00	1.2E-01	1.2E+01
Ethyl benzene	100-41-4	—	—	—	—	—	2.0E+00	8.2E+03	—	—	—	—	—	2.4E+00	2.4E+02
Ethyl dipropylthiocarbamate, S-	759-94-4	—	—	—	—	—	—	2.0E+03	8.9E+03	—	—	—	—	6.1E-01	6.1E+01
Ethyl ether	60-29-7	—	—	—	—	—	—	1.6E+04	—	—	—	—	—	4.9E+00	4.9E+02
Ethyl methacrylate	97-63-2	—	—	—	—	—	3.1E-01	7.4E+03	—	—	—	—	—	2.2E+00	2.2E+02
Ethyl methanesulfonate	62-50-0	8.7E-04	6.1E+01	2.1E+02	—	—	—	—	—	—	—	9.2E-03	9.2E-01	—	—
Ethyl tert-butyl ether (2-ethyl-2-ethoxypropane)	637-92-3	—	—	—	—	—	3.1E-01	8.2E+01	—	—	—	—	—	2.4E-02	2.4E+00
Ethyl-1-hexanol, 2-	104-76-7	—	—	—	—	—	—	1.2E+04	5.3E+04	—	—	—	—	3.7E+00	3.7E+02
Ethyl-2-hexenal, 2-	645-62-5	—	—	—	—	—	—	1.2E+04	—	—	—	—	—	3.7E+00	3.7E+02
Ethyl-2-methyl benzene, 1-	611-14-3	—	—	—	—	—	4.2E-01	4.1E+03	—	—	—	—	—	1.2E+00	1.2E+02
Ethyl-4-methyl benzene, 1-	622-96-8	—	—	—	—	—	4.2E-01	4.1E+03	—	—	—	—	—	1.2E+00	1.2E+02
Ethylene*	74-85-1	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ethylene dibromide (dibromoethane, 1,2-)	106-93-4	5.5E-04	3.0E+00	—	—	—	7.0E-02	7.4E+02	—	—	—	4.6E-04	4.6E-02	2.2E-01	2.2E+01
Ethylene glycol	107-21-1	—	—	—	—	—	—	1.6E+05	7.1E+05	—	—	—	—	4.9E+01	4.9E+03
Ethylene oxide	75-21-8	1.7E-02	6.0E+00	—	—	—	—	—	—	—	—	8.9E-04	8.9E-02	—	—
Ethylene thiourea	96-45-7	—	5.5E+01	1.9E+02	—	—	—	6.6E+00	2.8E+01	—	—	8.3E-03	8.3E-01	2.0E-03	2.0E-01
Ethylenediamine	107-15-3	—	—	—	—	—	—	7.4E+03	—	—	—	—	—	2.2E+00	2.2E+02
Ethylenimine	151-56-4	1.3E-06	9.3E-02	—	—	—	—	—	—	—	—	1.4E-05	1.4E-03	—	—
Ethylhexyl acrylate, 2-	103-11-7	—	1.3E+02	4.3E+02	—	—	—	—	—	—	—	1.9E-02	1.9E+00	—	—
Famphur	52-85-7	—	—	—	—	—	—	2.5E+00	1.1E+01	—	—	—	—	7.3E-04	7.3E-02
Fensulfothion	115-90-2	—	—	—	—	—	—	8.2E+01	3.6E+02	—	—	—	—	2.4E-02	2.4E+00
Fenthion	55-38-9	—	—	—	—	—	—	5.7E+00	2.5E+01	—	—	—	—	1.7E-03	1.7E-01
Fenuron	101-42-8	—	—	—	—	—	—	5.7E+03	2.5E+04	—	—	—	—	1.7E+00	1.7E+02
Fluoranthene	206-44-0	—	—	—	—	—	—	3.3E+03	1.1E+04	—	6.3E+02	—	—	9.8E-01	9.8E+01
Fluorene	86-73-7	—	—	—	—	—	—	3.3E+03	1.1E+04	—	6.3E+02	—	—	9.8E-01	9.8E+01
Fluorine (soluble fluoride)	7782-41-4	—	—	—	—	—	2.8E-02	4.9E+03	2.1E+05	—	—	—	—	1.5E+00	1.5E+02
Fluorochloridone	61213-25-0	—	—	—	—	—	—	6.1E+02	2.7E+03	—	—	—	—	1.8E-01	1.8E+01
Fonofos	944-22-9	—	—	—	—	—	—	1.6E+02	7.1E+02	—	—	—	—	4.9E-02	4.9E+00
Formaldehyde	50-00-0	—	—	—	—	—	1.1E-02	1.6E+04	—	—	—	—	—	4.9E+00	4.9E+02
Formic acid	64-18-6	—	—	—	—	—	3.1E-03	7.4E+04	—	—	—	—	—	2.2E+01	2.2E+03

**Table 9
Individual RBELs Residential**

Last Revised: March 6, 2023

Chemical of Concern	CAS	Soil										Groundwater				
		Carcinogenic					Noncarcinogenic					Carcinogenic		Noncarcinogenic		
		Air ¹ RBEL _{Inh} (mg/m3)	Soil ¹ RBEL _{Ing} (mg/kg)	Soil ¹ RBEL _{Der} (mg/kg)	Abg ¹ Veg ¹ RBEL _{Ing} above-ground (mg/kg)	Bg ¹ Veg ¹ RBEL _{Ing} below-ground (mg/kg)	Air ¹ RBEL _{Inh} (mg/m3)	Soil ¹ RBEL _{Ing} (mg/kg)	Soil ¹ RBEL _{Der} (mg/kg)	Abg ¹ Veg ¹ RBEL _{Ing} above-ground (mg/kg)	Bg ¹ Veg ¹ RBEL _{Ing} below-ground (mg/kg)	GW ¹ RBEL _{Ing} ¹ (mg/L)	GW ¹ RBEL _{Class 3} ² (mg/L)	GW ¹ RBEL _{Ing} ¹ (mg/L)	GW ¹ RBEL _{Class 3} ² (mg/L)	
Furan	110-00-9	—	—	—	—	—	—	8.2E+01	—	—	—	—	—	—	2.4E-02	2.4E+00
Furfural	98-01-1	—	—	—	—	—	—	2.5E+02	—	—	—	—	—	—	7.3E-02	7.3E+00
Glycidylaldehyde	765-34-4	—	—	—	—	—	1.0E-03	3.3E+01	—	—	—	—	—	—	9.8E-03	9.8E-01
Glyphosate	1071-83-6	—	—	—	—	—	—	8.2E+04	3.6E+05	—	—	—	—	—	2.4E+01	2.4E+03
Heptachlor	76-44-8	1.9E-05	1.3E+00	4.6E+00	—	1.3E-01	—	4.1E+01	1.8E+02	—	7.8E+00	2.0E-04	2.0E-02	1.2E-02	1.2E+00	
Heptachlor epoxide	1024-57-3	9.4E-06	6.7E-01	2.3E+00	—	6.4E-02	—	1.1E+00	4.6E+00	—	2.0E-01	1.0E-04	1.0E-02	3.2E-04	3.2E-02	
Heptane, n-	142-82-5	—	—	—	—	—	9.4E+00	4.9E+03	—	—	—	—	—	1.5E+00	1.5E+02	
Heptanoic acid, n-	111-14-8	—	—	—	—	—	1.0E-03	4.1E+04	1.8E+05	—	—	—	—	1.2E+01	1.2E+03	
Hexachlorobenzene	118-74-1	5.3E-05	3.8E+00	1.3E+01	—	3.7E-01	—	6.6E+01	2.8E+02	—	1.3E+01	5.7E-04	5.7E-02	2.0E-02	2.0E+00	
Hexachlorobutadiene	87-68-3	1.1E-03	7.8E+01	2.7E+02	—	—	—	8.2E+01	3.6E+02	—	—	1.2E-02	1.2E+00	2.4E-02	2.4E+00	
Hexachlorocyclohexane, alpha (alpha-BHC)	319-84-6	1.4E-05	9.6E-01	8.2E+00	—	9.3E-02	—	6.6E+02	7.1E+03	—	1.3E+02	1.4E-04	1.4E-02	2.0E-01	2.0E+01	
Hexachlorocyclohexane, beta (beta-BHC)	319-85-7	4.6E-05	3.4E+00	2.9E+01	—	3.2E-01	—	—	—	—	—	5.1E-04	5.1E-02	—	—	
Hexachlorocyclohexane, delta (delta-BHC)	319-86-8	4.8E-05	3.4E+00	2.9E+01	—	—	—	2.5E+01	2.7E+02	—	—	5.1E-04	5.1E-02	7.3E-03	7.3E-01	
Hexachlorocyclohexane, gamma (lindane; gamma-BHC)	58-89-9	—	4.7E+00	4.0E+01	—	4.5E-01	—	2.5E+01	2.7E+02	—	4.7E+00	7.0E-04	7.0E-02	7.3E-03	7.3E-01	
Hexachlorocyclohexane, techn (technical-BHC)	608-73-1	4.8E-05	3.4E+00	2.9E+01	—	3.2E-01	—	—	—	—	—	5.1E-04	5.1E-02	—	—	
Hexachlorocyclopentadiene	77-47-4	—	—	—	—	—	2.1E-04	4.9E+02	2.1E+03	—	—	—	—	1.5E-01	1.5E+01	
Hexachloroethane	67-72-1	—	1.5E+02	5.2E+02	—	—	3.1E-02	5.7E+01	2.5E+02	—	—	2.3E-02	2.3E+00	1.7E-02	1.7E+00	
Hexachlorophene	70-30-4	—	—	—	—	—	—	2.5E+01	1.1E+02	—	4.7E+00	—	—	7.3E-03	7.3E-01	
Hexachloropropylene	1888-71-7	—	1.5E+02	5.2E+02	—	—	3.1E-02	5.7E+01	2.5E+02	—	—	2.3E-02	2.3E+00	1.7E-02	1.7E+00	
Hexanal, 2-ethyl-	123-05-7	—	—	—	—	—	—	1.2E+04	5.3E+04	—	—	—	—	3.7E+00	3.7E+02	
Hexane, n-	110-54-3	—	—	—	—	—	7.0E-01	4.9E+03	—	—	—	—	—	1.5E+00	1.5E+02	
Hexanediamine, 1,6-	124-09-4	—	—	—	—	—	—	4.1E+02	1.8E+03	—	—	—	—	1.2E-01	1.2E+01	
Hexanedinitrile	111-69-3	—	—	—	—	—	6.3E-03	1.1E+02	5.0E+02	—	—	—	—	3.4E-02	3.4E+00	
Hexanediol, 1,6-	629-11-8	—	—	—	—	—	1.9E+01	4.1E+05	1.0E+06	—	—	—	—	1.2E+02	1.2E+04	
Hexanoic acid	142-62-1	—	—	—	—	—	1.0E-03	5.2E+03	2.3E+04	—	—	—	—	1.6E+00	1.6E+02	
Hexanone, 2-	591-78-6	—	—	—	—	—	3.1E-02	4.1E+03	—	—	—	—	—	1.2E+00	1.2E+02	
Hexazinone	51235-04-2	—	—	—	—	—	—	2.7E+03	1.2E+04	—	—	—	—	8.1E-01	8.1E+01	
Hexene, 1-	592-41-6	—	—	—	—	—	1.1E-01	2.7E+04	—	—	—	—	—	8.1E+00	8.1E+02	
Hexene, cis-2-	7688-21-3	—	—	—	—	—	1.1E-01	2.7E+04	—	—	—	—	—	8.1E+00	8.1E+02	
Hexylene glycol (2-methyl-2,4-pentanediol)	107-41-5	—	—	—	—	—	—	2.5E+04	1.1E+05	—	—	—	—	7.3E+00	7.3E+02	
Hydrazine	302-01-2	5.0E-06	2.0E+00	—	—	—	3.1E-05	—	—	—	—	3.0E-04	3.0E-02	—	—	
Hydrocaproic acid, 6- (6-hydroxyhexanoic acid)	1191-25-9	—	—	—	—	—	1.0E-03	5.2E+03	2.3E+04	—	—	—	—	1.6E+00	1.6E+02	
Hydrogen chloride (hydrochloric acid)*	7647-01-0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hydroquinone	123-31-9	—	1.0E+02	3.5E+02	—	—	—	3.3E+03	1.4E+04	—	—	1.5E-02	1.5E+00	9.8E-01	9.8E+01	
Indene	95-13-6	—	—	—	—	—	3.1E-03	1.6E+03	—	—	—	—	—	4.9E-01	4.9E+01	
Indeno-1,2,3-cd-pyrene	193-39-5	4.1E-04	6.1E+01	1.6E+02	—	5.8E+00	—	—	—	—	—	9.1E-03	9.1E-01	—	—	
Iron*	7439-89-6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Isoamyl alcohol	123-51-3	—	—	—	—	—	—	4.1E+02	—	—	—	—	—	1.2E-01	1.2E+01	
Isobutyl alcohol	78-83-1	—	—	—	—	—	—	2.5E+04	—	—	—	—	—	7.3E+00	7.3E+02	
Isobutylene (2-methyl-1-propene)	115-11-7	—	—	—	—	—	1.1E+02	3.0E+02	—	—	—	—	—	9.0E-02	9.0E+00	
Isobutyric acid (2-methylpropanoic acid)	79-31-2	—	—	—	—	—	—	4.1E+04	1.8E+05	—	—	—	—	1.2E+01	1.2E+03	
Isodecanol	25339-17-7	—	—	—	—	—	—	1.3E+02	5.7E+02	—	2.5E+01	—	—	3.9E-02	3.9E+00	
Isodrin	465-73-6	5.0E-07	3.6E-02	1.2E-01	—	—	—	2.5E-01	1.1E+00	—	—	5.4E-06	5.4E-04	7.3E-05	7.3E-03	

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Individual RBELs Residential**

Last Revised: March 6, 2023

Chemical of Concern	CAS	Soil										Groundwater				
		Carcinogenic					Noncarcinogenic					Carcinogenic		Noncarcinogenic		
		AirRBEL _{Inh} (mg/m3)	SoilRBEL _{Ing} (mg/kg)	SoilRBEL _{Der} (mg/kg)	AbgVegRBEL _{Ing} above-ground (mg/kg)	BgVegRBEL _{Ing} below-ground (mg/kg)	AirRBEL _{Inh} (mg/m3)	SoilRBEL _{Ing} (mg/kg)	SoilRBEL _{Der} (mg/kg)	AbgVegRBEL _{Ing} above-ground (mg/kg)	BgVegRBEL _{Ing} below-ground (mg/kg)	GWRBEL _{Ing} ¹ (mg/L)	GWRBEL _{Class 3} ² (mg/L)	GWRBEL _{Ing} ¹ (mg/L)	GWRBEL _{Class 3} ² (mg/L)	
Isopentane	78-78-4	—	—	—	—	—	2.5E+01	4.9E+03	—	—	—	—	—	—	1.5E+00	1.5E+02
Isophorone	78-59-1	—	6.4E+03	2.2E+04	—	—	—	1.6E+04	7.1E+04	—	—	9.6E-01	9.6E+01	4.9E+00	4.9E+02	
Isopropyl acetate	108-21-4	—	—	—	—	—	—	5.7E+03	—	—	—	—	—	1.7E+00	1.7E+02	
Isopropyl alcohol	67-63-0	—	—	—	—	—	2.1E-01	1.6E+05	—	—	—	—	—	4.9E+01	4.9E+03	
Isosafrole	120-58-1	3.9E-04	2.8E+01	9.4E+01	—	—	—	—	—	—	—	4.1E-03	4.1E-01	—	—	
Kelthane (dicofol)	115-32-2	—	—	—	—	—	—	4.9E+02	2.1E+03	—	9.4E+01	—	—	1.5E-01	1.5E+01	
Kepone (chlordecone)	143-50-0	5.3E-06	6.1E-01	2.1E+00	—	5.8E-02	—	2.5E+01	1.1E+02	—	4.7E+00	9.1E-05	9.1E-03	7.3E-03	7.3E-01	
Lead (inorganic)	7439-92-1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Leptophos	21609-90-5	—	—	—	—	—	1.9E-06	4.1E-01	1.8E+00	—	7.8E-02	—	—	1.2E-04	1.2E-02	
Limonene, d-*	5989-27-5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Lithium	7439-93-2	—	—	—	—	—	—	5.7E+02	2.5E+04	4.6E+01	1.1E+02	—	—	1.7E-01	1.7E+01	
Magnesium*	7439-95-4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Malathion	121-75-5	—	—	—	—	—	2.1E-04	1.6E+03	7.1E+03	—	—	—	—	4.9E-01	4.9E+01	
Maleic anhydride	108-31-6	—	—	—	—	—	—	8.2E+03	3.6E+04	—	—	—	—	2.4E+00	2.4E+02	
Maleic hydrazide	123-33-1	—	—	—	—	—	—	4.1E+04	1.8E+05	—	—	—	—	1.2E+01	1.2E+03	
Malononitrile	109-77-3	—	—	—	—	—	—	8.2E+00	3.6E+01	—	—	—	—	2.4E-03	2.4E-01	
Mancozeb	8018-01-7	—	—	—	—	—	—	2.5E+03	1.1E+04	—	—	—	—	7.3E-01	7.3E+01	
Manganese	7439-96-5	—	—	—	—	—	8.8E-04	1.1E+04	3.0E+04	9.1E+02	2.2E+03	—	—	1.1E+00	1.1E+02	
MCPA (4-(chloro-2-methylphenoxy) acetic acid)	94-74-6	—	—	—	—	—	—	4.1E+01	1.8E+02	—	—	—	—	1.2E-02	1.2E+00	
MCPP (2-(4-chloro-2-methylphenoxy) propanoic acid)	93-65-2	—	—	—	—	—	—	8.2E+01	3.6E+02	—	—	—	—	2.4E-02	2.4E+00	
Mercury (pH = 4.9)	7439-97-6	—	—	—	—	—	3.1E-04	2.5E+01	7.5E+01	2.0E+00	—	—	—	7.3E-03	7.3E-01	
Mercury (pH=6.8)	7439-97-6	—	—	—	—	—	3.1E-04	2.5E+01	7.5E+01	2.0E+00	—	—	—	7.3E-03	7.3E-01	
Merphos	150-50-5	—	—	—	—	—	—	2.5E+00	1.1E+01	—	—	—	—	7.3E-04	7.3E-02	
Methacrylic acid (2-methyl-2-propenoic acid)	79-41-4	—	—	—	—	—	—	8.2E+02	—	—	—	—	—	2.4E-01	2.4E+01	
Methacrylonitrile	126-98-7	—	—	—	—	—	3.1E-02	4.1E+03	—	—	—	—	—	1.2E+00	1.2E+02	
Methanol	67-56-1	—	—	—	—	—	7.5E+00	1.6E+05	—	—	—	—	—	4.9E+01	4.9E+03	
Methapyrilene	91-80-5	—	1.3E+00	4.4E+00	—	—	—	—	—	—	—	1.9E-04	1.9E-02	—	—	
Methomyl	16752-77-5	—	—	—	—	—	—	2.0E+03	8.9E+03	—	—	—	—	6.1E-01	6.1E+01	
Methoxychlor	72-43-5	—	—	—	—	—	—	4.1E+02	1.8E+03	—	7.8E+01	—	—	1.2E-01	1.2E+01	
Methoxyethanol, 2-	109-86-4	—	—	—	—	—	2.1E-02	2.2E+03	—	—	—	—	—	6.6E-01	6.6E+01	
Methyl acetate (acetic acid, methyl ester)	79-20-9	—	—	—	—	—	—	8.2E+04	—	—	—	—	—	2.4E+01	2.4E+03	
Methyl acrylate	96-33-3	—	—	—	—	—	2.1E-02	1.6E+02	—	—	—	—	—	4.9E-02	4.9E+00	
Methyl amyl ketone (2-heptanone)	110-43-0	—	—	—	—	—	2.9E+00	4.1E+03	—	—	—	—	—	1.2E+00	1.2E+02	
Methyl chrysene, 1-	3351-28-8	2.8E-02	8.3E+02	2.2E+03	—	8.0E+01	—	—	—	—	—	1.3E-01	1.3E+01	—	—	
Methyl chrysene, 2-	3351-32-4	2.8E-02	8.3E+02	2.2E+03	—	8.0E+01	—	—	—	—	—	1.3E-01	1.3E+01	—	—	
Methyl chrysene, 6-	1705-85-7	2.8E-03	8.3E+01	2.2E+02	—	8.0E+00	—	—	—	—	—	1.3E-02	1.3E+00	—	—	
Methyl cyclohexane	108-87-2	—	—	—	—	—	3.1E+00	4.1E+05	—	—	—	—	—	1.2E+02	1.2E+04	
Methyl ethyl ketone (2-butanone)	78-93-3	—	—	—	—	—	9.2E+00	4.9E+04	—	—	—	—	—	1.5E+01	1.5E+03	
Methyl iodide (iodomethane)	74-88-4	—	—	—	—	—	—	1.1E+02	—	—	—	—	—	3.4E-02	3.4E+00	
Methyl isobutyl ketone (4-methyl-2-pentanone)	108-10-1	—	—	—	—	—	3.1E+00	6.6E+03	—	—	—	—	—	2.0E+00	2.0E+02	
Methyl mercury	22967-92-6	—	—	—	—	—	—	8.2E+00	3.6E+02	—	—	—	—	2.4E-03	2.4E-01	
Methyl methacrylate	80-62-6	—	—	—	—	—	7.3E-01	1.1E+05	—	—	—	—	—	3.4E+01	3.4E+03	
Methyl methanesulfonate	66-27-3	8.7E-04	6.1E+01	2.1E+02	—	—	—	—	—	—	—	9.2E-03	9.2E-01	—	—	

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Individual RBELs Residential**

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Chemical of Concern	CAS	Soil										Groundwater			
		Carcinogenic					Noncarcinogenic					Carcinogenic		Noncarcinogenic	
		Air ¹ RBEL _{Inh} (mg/m3)	Soil ¹ RBEL _{Ing} (mg/kg)	Soil ¹ RBEL _{Der} (mg/kg)	Abg ¹ Veg ¹ RBEL _{Ing} above-ground (mg/kg)	Bg ¹ Veg ¹ RBEL _{Ing} below-ground (mg/kg)	Air ¹ RBEL _{Inh} (mg/m3)	Soil ¹ RBEL _{Ing} (mg/kg)	Soil ¹ RBEL _{Der} (mg/kg)	Abg ¹ Veg ¹ RBEL _{Ing} above-ground (mg/kg)	Bg ¹ Veg ¹ RBEL _{Ing} below-ground (mg/kg)	GW ¹ RBEL _{Ing} ¹ (mg/L)	GW ¹ RBEL _{Class 3} ² (mg/L)	GW ¹ RBEL _{Ing} ¹ (mg/L)	GW ¹ RBEL _{Class 3} ² (mg/L)
Methyl parathion	298-00-0	—	—	—	—	—	2.0E+01	8.9E+01	—	—	—	—	—	6.1E-03	6.1E-01
Methyl-1-butene, 2-	563-46-2	—	—	—	—	1.9E+01	4.9E+03	—	—	—	—	—	1.5E+00	1.5E+02	
Methyl-1-propanal, 2- (isobutyraldehyde)	78-84-2	—	—	—	—	—	3.3E+03	—	—	—	—	—	9.8E-01	9.8E+01	
Methyl-2-butene, 2-	513-35-9	—	—	—	—	1.9E+01	4.9E+03	—	—	—	—	—	1.5E+00	1.5E+02	
Methyl-2-pentenal, 2-	623-36-9	—	3.2E+00	—	—	—	—	—	—	—	4.8E-04	4.8E-02	—	—	
Methylcholanthrene, 3-	56-49-5	1.2E-05	2.8E-01	7.3E-01	—	2.7E-02	—	—	—	—	4.1E-05	4.1E-03	—	—	
Methylene bromide (dibromomethane)	74-95-3	—	8.1E+02	—	—	4.2E-03	4.9E+03	—	—	—	1.2E-01	1.2E+01	1.5E+00	1.5E+02	
Methylene chloride (dichloromethane)	75-09-2	8.7E-01	6.2E+04	—	—	1.4E+00	1.7E+03	—	—	—	9.3E+00	9.3E+02	5.1E-01	5.1E+01	
Methylene-bis (2-chloroaniline) 4,4'-	101-14-4	6.6E-04	6.1E+01	2.1E+02	—	—	1.6E+02	7.1E+02	—	—	9.1E-03	9.1E-01	4.9E-02	4.9E+00	
Methylmercury hydroxide	1184-57-2	—	—	—	—	—	8.2E+00	3.6E+01	—	—	—	—	2.4E-03	2.4E-01	
Methylnaphthalene, 1-	90-12-0	—	2.1E+02	5.5E+02	—	—	5.7E+03	1.9E+04	—	—	3.1E-02	3.1E+00	1.7E+00	1.7E+02	
Methylnaphthalene, 2-	91-57-6	—	—	—	—	—	3.3E+02	1.1E+03	—	—	—	—	9.8E-02	9.8E+00	
Methylpyrrolidone, N-	872-50-4	—	—	—	—	—	1.6E+03	7.1E+03	—	—	—	—	4.9E-01	4.9E+01	
Methylstyrene, alpha-	98-83-9	—	—	—	—	2.6E-02	6.8E+02	—	—	—	—	—	2.0E-01	2.0E+01	
Methyltetrahydrofuran, 2-	96-47-9	1.3E-02	8.0E+02	—	—	—	1.6E+04	—	—	—	1.2E-01	1.2E+01	4.9E+00	4.9E+02	
Methyltetrahydropyran, 2-	10141-72-7	1.3E-02	8.0E+02	—	—	—	1.6E+04	—	—	—	1.2E-01	1.2E+01	4.9E+00	4.9E+02	
Metolachlor	51218-45-2	—	—	—	—	—	1.2E+04	5.3E+04	—	—	—	—	3.7E+00	3.7E+02	
Metribuzin	21087-64-9	—	—	—	—	—	2.0E+03	8.9E+03	—	—	—	—	6.1E-01	6.1E+01	
Mirex	2385-85-5	—	—	—	—	—	1.6E+01	7.1E+01	—	—	—	—	4.9E-03	4.9E-01	
Molinate	2212-67-1	—	—	—	—	—	1.6E+02	7.1E+02	—	—	—	—	4.9E-02	4.9E+00	
Molybdenum	7439-98-7	—	—	—	—	—	4.1E+02	6.8E+03	3.3E+01	7.8E+01	—	—	1.2E-01	1.2E+01	
Monocrotophos	2157-98-4	—	—	—	—	—	4.9E+01	2.1E+02	—	—	—	—	1.5E-02	1.5E+00	
Morpholine	110-91-8	—	—	—	—	—	1.0E+06	—	—	—	—	—	1.2E+04	1.2E+06	
Morpholine, N-butyl-	1005-67-0	—	—	—	—	—	1.9E+02	8.2E+02	—	—	—	—	5.6E-02	5.6E+00	
MTBE (methyl tert-butyl ether)	1634-04-4	9.4E-02	3.4E+03	—	—	3.1E+00	8.2E+02	—	—	—	5.1E-01	5.1E+01	2.4E-01	2.4E+01	
Naled	300-76-5	—	—	—	—	—	1.6E+02	7.1E+02	—	—	—	—	4.9E-02	4.9E+00	
Naphthalene	91-20-3	—	—	—	—	3.1E-03	1.6E+03	5.5E+03	—	—	—	—	4.9E-01	4.9E+01	
Naphthoquinone, 1,4-	130-15-4	—	—	—	—	—	5.7E+02	2.5E+03	—	—	—	—	1.7E-01	1.7E+01	
Naphthylamine, 1-	134-32-7	—	—	—	—	—	1.6E+03	7.1E+03	—	—	—	—	4.9E-01	4.9E+01	
Naphthylamine, 2-	91-59-8	—	3.4E+00	1.2E+01	—	—	—	—	—	—	5.1E-04	5.1E-02	—	—	
Napropamide	15299-99-7	—	—	—	—	—	8.2E+03	3.6E+04	—	—	—	—	2.4E+00	2.4E+02	
Neopentyl glycol	126-30-7	—	—	—	—	—	2.5E+04	1.1E+05	—	—	—	—	7.3E+00	7.3E+02	
Nickel and compounds	7440-02-0	1.4E-04	—	—	—	2.4E-04	1.6E+03	2.8E+03	1.3E+02	3.1E+02	—	—	4.9E-01	4.9E+01	
Nitrate-N	14797-55-8	—	—	—	—	—	1.3E+05	1.0E+06	—	—	—	—	3.9E+01	3.9E+03	
Nitrite-N	14797-65-0	—	—	—	—	—	8.2E+03	3.6E+05	—	—	—	—	2.4E+00	2.4E+02	
Nitroaniline, 2-	88-74-4	—	—	—	—	2.1E-04	2.5E+01	1.1E+02	—	—	—	—	7.3E-03	7.3E-01	
Nitroaniline, 3-	99-09-2	—	1.6E+02	5.5E+02	—	2.1E-04	2.5E+01	1.1E+02	—	—	2.4E-02	2.4E+00	7.3E-03	7.3E-01	
Nitroaniline, 4-	100-01-6	—	3.0E+02	1.0E+03	—	6.3E-03	3.3E+02	1.4E+03	—	—	4.6E-02	4.6E+00	9.8E-02	9.8E+00	
Nitrobenzene	98-95-3	6.1E-04	—	—	—	9.4E-03	1.6E+02	7.1E+02	—	—	—	—	4.9E-02	4.9E+00	
Nitroglycerin	55-63-0	—	3.6E+02	1.2E+03	—	—	8.2E+00	3.6E+01	—	—	5.4E-02	5.4E+00	2.4E-03	2.4E-01	
Nitrophenol, 2-	88-75-5	—	—	—	—	—	1.6E+02	7.1E+02	—	—	—	—	4.9E-02	4.9E+00	
Nitrophenol, 3-	554-84-7	—	—	—	—	—	1.6E+02	7.1E+02	—	—	—	—	4.9E-02	4.9E+00	
Nitrophenol, 4-	100-02-7	—	—	—	—	—	1.6E+02	7.1E+02	—	—	—	—	4.9E-02	4.9E+00	

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Individual RBELs Residential**

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Chemical of Concern	CAS	Soil										Groundwater				
		Carcinogenic					Noncarcinogenic					Carcinogenic		Noncarcinogenic		
		AlrRBEL _{Inh} (mg/m3)	SoilRBEL _{Ing} (mg/kg)	SoilRBEL _{Derm} (mg/kg)	AbgVegRBEL _{Ing} above-ground (mg/kg)	BgVegRBEL _{Ing} below-ground (mg/kg)	AlrRBEL _{Inh} (mg/m3)	SoilRBEL _{Ing} (mg/kg)	SoilRBEL _{Derm} (mg/kg)	AbgVegRBEL _{Ing} above-ground (mg/kg)	BgVegRBEL _{Ing} below-ground (mg/kg)	GWRBEL _{Ing} ¹ (mg/L)	GWRBEL _{Class 3} ² (mg/L)	GWRBEL _{Ing} ¹ (mg/L)	GWRBEL _{Class 3} ² (mg/L)	
Nitropropane, 2-	79-46-9	4.2E-05	—	—	—	—	2.1E-02	1.1E+01	—	—	—	—	—	—	3.4E-03	3.4E-01
Nitroquinoline-N-oxide, 4-	56-57-5	9.0E-06	6.5E-01	2.2E+00	—	—	—	—	—	—	9.7E-05	9.7E-03	—	—	—	—
Nitrosodiethanolamine	1116-54-7	—	2.2E+00	7.4E+00	—	—	—	—	—	—	3.3E-04	3.3E-02	—	—	—	—
Nitrosodiethylamine, n-	55-18-5	5.7E-07	4.0E-02	—	—	—	—	—	—	—	6.1E-06	6.1E-04	—	—	—	—
Nitrosodimethylamine, n-	62-75-9	1.7E-06	1.2E-01	—	—	—	4.2E-05	6.6E-01	—	—	1.8E-05	1.8E-03	2.0E-04	2.0E-02	—	—
Nitrosodi-n-butylamine, n-	924-16-3	1.5E-05	1.1E+00	3.8E+00	—	—	—	—	—	—	1.7E-04	1.7E-02	—	—	—	—
Nitrosodi-n-propylamine, n-	621-64-7	—	8.7E-01	7.4E-01	—	—	—	—	—	—	1.3E-04	1.3E-02	—	—	—	—
Nitrosodiphenylamine	86-30-6	—	1.2E+03	1.1E+03	—	—	—	—	—	—	1.9E-01	1.9E+01	—	—	—	—
Nitroso-methyl-ethyl-amine, n-	10595-95-6	—	2.8E-01	—	—	—	—	—	—	—	4.1E-05	4.1E-03	—	—	—	—
Nitrosomorpholine, N-	59-89-2	1.3E-05	9.1E-01	3.1E+00	—	—	—	—	—	—	1.4E-04	1.4E-02	—	—	—	—
Nitroso-n-ethylurea, n-	759-73-9	—	4.3E-02	1.5E-01	—	—	—	—	—	—	6.5E-06	6.5E-04	—	—	—	—
Nitrosopiperidine, N-	100-75-4	9.0E-06	6.5E-01	2.2E+00	—	—	—	—	—	—	9.7E-05	9.7E-03	—	—	—	—
Nitrosopyrrolidine, n-	930-55-2	4.0E-05	2.9E+00	9.9E+00	—	—	—	—	—	—	4.3E-04	4.3E-02	—	—	—	—
Nitrotoluene, m-	99-08-1	—	—	—	—	—	—	8.2E+02	3.6E+03	—	—	—	—	2.4E-01	2.4E+01	
Nitrotoluene, o-	88-72-2	—	2.8E+01	9.4E+01	—	—	—	7.4E+01	3.2E+02	—	—	—	—	2.2E-02	2.2E+00	
Nitrotoluene, p-	99-99-0	—	3.8E+02	1.3E+03	—	—	—	3.3E+02	1.4E+03	—	—	—	—	9.8E-02	9.8E+00	
Nonachlor, cis-	5103-73-1	2.4E-04	1.7E+01	5.9E+01	—	1.7E+00	7.3E-04	4.1E+01	1.8E+02	—	7.8E+00	2.6E-03	2.6E-01	1.2E-02	1.2E+00	
Nonachlor, trans-	39765-80-5	2.4E-04	1.7E+01	5.9E+01	—	1.7E+00	7.3E-04	4.1E+01	1.8E+02	—	7.8E+00	2.6E-03	2.6E-01	1.2E-02	1.2E+00	
Nonanal	124-19-6	—	—	—	—	—	—	1.6E+04	7.1E+04	—	—	—	—	4.9E+00	4.9E+02	
Nonene, 1-n	124-11-8	—	—	—	—	—	—	8.2E+03	—	—	—	—	—	2.4E+00	2.4E+02	
Nonylphenol, 4-n-	104-40-5	—	—	—	—	—	—	8.2E+03	3.6E+04	—	1.6E+03	—	—	2.4E+00	2.4E+02	
Nonylphenol ethoxylate	9016-45-9	—	—	—	—	—	—	8.2E+03	3.6E+04	—	1.6E+03	—	—	2.4E+00	2.4E+02	
Octamethylpyrophosphoramide	152-16-9	—	—	—	—	—	—	1.6E+02	7.1E+02	—	—	—	—	4.9E-02	4.9E+00	
Octanone	106-68-3	—	—	—	—	—	1.9E+01	4.9E+03	—	—	—	—	—	1.5E+00	1.5E+02	
Oxamyl	23135-22-0	—	—	—	—	—	—	2.0E+03	8.9E+03	—	—	—	—	6.1E-01	6.1E+01	
Oxychlorthane	27304-13-8	2.4E-04	1.7E+01	5.9E+01	—	1.7E+00	7.3E-04	4.1E+01	1.8E+02	—	7.8E+00	2.6E-03	2.6E-01	1.2E-02	1.2E+00	
Paraquat	1910-42-5	—	—	—	—	—	—	3.7E+02	1.6E+03	—	—	—	—	1.1E-01	1.1E+01	
Parathion (ethyl parathion)	56-38-2	—	—	—	—	—	—	4.9E+02	2.1E+03	—	—	—	—	1.5E-01	1.5E+01	
Pebulate	1114-71-2	—	—	—	—	—	—	4.1E+03	1.8E+04	—	—	—	—	1.2E+00	1.2E+02	
Pendimethalin	40487-42-1	—	—	—	—	—	—	3.3E+03	1.4E+04	—	6.3E+02	—	—	9.8E-01	9.8E+01	
Pentachlorobenzene	608-93-5	—	—	—	—	—	—	6.6E+01	2.8E+02	—	—	—	—	2.0E-02	2.0E+00	
Pentachloroethane	76-01-7	3.3E-03	6.7E+01	—	—	—	—	2.5E+03	—	—	—	1.0E-02	1.0E+00	7.3E-01	7.3E+01	
Pentachloronitrobenzene	82-68-8	—	2.3E+01	8.0E+01	—	2.2E+00	—	2.5E+02	1.1E+03	—	4.7E+01	3.5E-03	3.5E-01	7.3E-02	7.3E+00	
Pentachlorophenol	87-86-5	—	1.5E+01	2.1E+01	—	1.5E+00	—	4.1E+02	7.1E+02	—	7.8E+01	2.3E-03	2.3E-01	1.2E-01	1.2E+01	
Pentadiene, 1,3-cis-	1574-41-0	—	—	—	—	—	1.9E+01	4.9E+03	—	—	—	—	—	1.5E+00	1.5E+02	
Pentadiene, 1,3-trans-	2004-70-8	—	—	—	—	—	1.9E+01	4.9E+03	—	—	—	—	—	1.5E+00	1.5E+02	
Pentaerythritol tetranitrate (PETN)	78-11-5	—	—	—	—	—	—	1.6E+02	7.1E+02	—	—	—	—	4.9E-02	4.9E+00	
Pentane	109-66-0	—	—	—	—	—	2.5E+01	4.9E+03	—	—	—	—	—	1.5E+00	1.5E+02	
Pentane, 2-methyl-	107-83-5	—	—	—	—	—	1.9E+01	4.9E+03	—	—	—	—	—	1.5E+00	1.5E+02	
Pentane, 3-methyl-	96-14-0	—	—	—	—	—	1.9E+01	4.9E+03	—	—	—	—	—	1.5E+00	1.5E+02	
Pentanediol, 1,5-	111-29-5	—	—	—	—	—	1.9E+01	4.1E+05	1.0E+06	—	—	—	—	1.2E+02	1.2E+04	
Pentanol, 1-	71-41-0	—	—	—	—	—	—	2.7E+03	—	—	—	—	—	8.1E-01	8.1E+01	
Pentanol, 4-methyl-2-	108-11-2	—	—	—	—	—	—	2.1E+03	—	—	—	—	—	6.4E-01	6.4E+01	

**Table 9
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Chemical of Concern	CAS	Soil										Groundwater			
		Carcinogenic					Noncarcinogenic					Carcinogenic		Noncarcinogenic	
		Alr ^R BEL _{Inh} (mg/m3)	Soil ^R BEL _{Ing} (mg/kg)	Soil ^R BEL _{Derm} (mg/kg)	AbgVeg ^R BEL _{Ing} above-ground (mg/kg)	BgVeg ^R BEL _{Ing} below-ground (mg/kg)	Alr ^R BEL _{Inh} (mg/m3)	Soil ^R BEL _{Ing} (mg/kg)	Soil ^R BEL _{Derm} (mg/kg)	AbgVeg ^R BEL _{Ing} above-ground (mg/kg)	BgVeg ^R BEL _{Ing} below-ground (mg/kg)	GW ^R BEL _{Ing} ¹ (mg/L)	GW ^R BEL _{Class 3} ² (mg/L)	GW ^R BEL _{Ing} ¹ (mg/L)	GW ^R BEL _{Class 3} ² (mg/L)
Phosphorus, white	7723-14-0	–	–	–	–	–	–	1.6E+00	1.4E+01	–	–	–	–	4.9E-04	4.9E-02
Phthalic anhydride	85-44-9	–	–	–	–	–	1.3E-01	1.6E+05	7.1E+05	–	–	–	–	4.9E+01	4.9E+03
Picloram	1918-02-1	–	–	–	–	–	–	5.7E+03	2.5E+04	–	–	–	–	1.7E+00	1.7E+02
Picoline, 2- (2-methylpyridine)	109-06-8	–	–	–	–	–	–	7.4E+02	–	–	–	–	–	2.2E-01	2.2E+01
Polybrominated biphenyls (PBBs)	67774-32-7	–	6.8E-01	2.3E+00	–	6.6E-02	–	5.7E-01	2.5E+00	–	1.1E-01	1.0E-04	1.0E-02	1.7E-04	1.7E-02
Polychlorinated biphenyls (PCBs)	1336-36-3	4.3E-05	3.0E+00	7.4E+00	–	2.9E-01	–	1.6E+00	5.1E+00	–	3.1E-01	4.6E-04	4.6E-02	4.9E-04	4.9E-02
Potassium*	7440-09-7	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Primene	68955-53-3	–	–	–	–	–	–	4.9E+02	2.1E+03	–	9.4E+01	–	–	1.5E-01	1.5E+01
Prometon (pramitol)	1610-18-0	–	–	–	–	–	–	1.2E+03	5.3E+03	–	–	–	–	3.7E-01	3.7E+01
Prometryn	7287-19-6	–	–	–	–	–	–	3.3E+03	1.4E+04	–	–	–	–	9.8E-01	9.8E+01
Pronamide	23950-58-5	–	–	–	–	–	–	6.1E+03	2.7E+04	–	–	–	–	1.8E+00	1.8E+02
Propanal (propionaldehyde)	123-38-6	–	–	–	–	–	8.3E-03	6.6E+02	–	–	–	–	–	2.0E-01	2.0E+01
Propane, 1-bromo-	106-94-5	–	–	–	–	–	–	2.9E+03	–	–	–	–	–	8.8E-01	8.8E+01
Propanil	709-98-8	–	–	–	–	–	–	4.1E+02	1.8E+03	–	–	–	–	1.2E-01	1.2E+01
Propanoic acid (propionic acid)	79-09-4	–	–	–	–	–	–	4.1E+04	–	–	–	–	–	1.2E+01	1.2E+03
Propanol, 1-	71-23-8	–	–	–	–	–	–	1.6E+05	–	–	–	–	–	4.9E+01	4.9E+03
Propargite	2312-35-8	–	–	–	–	–	–	1.6E+03	7.1E+03	–	–	–	–	4.9E-01	4.9E+01
Propargyl alcohol	107-19-7	–	–	–	–	–	–	1.6E+02	–	–	–	–	–	4.9E-02	4.9E+00
Propazine	139-40-2	–	1.4E+02	4.7E+02	–	–	–	1.6E+03	7.1E+03	–	–	2.1E-02	2.1E+00	4.9E-01	4.9E+01
Propham	122-42-9	–	–	–	–	–	–	1.6E+03	7.1E+03	–	–	–	–	4.9E-01	4.9E+01
Propionitrile (propane nitrile)	107-12-0	–	–	–	–	–	–	3.3E+01	–	–	–	–	–	9.8E-03	9.8E-01
Propyl acetate, n-	109-60-4	–	–	–	–	–	–	7.4E+03	–	–	–	–	–	2.2E+00	2.2E+02
Propylbenzene, n-	103-65-1	–	–	–	–	–	4.2E-01	3.3E+03	–	–	–	–	–	9.8E-01	9.8E+01
Propylene glycol	57-55-6	–	–	–	–	–	3.1E-03	1.0E+06	1.0E+06	–	–	–	–	4.9E+02	4.9E+04
Propylene glycol monomethyl ether	107-98-2	–	–	–	–	–	2.1E+00	5.7E+04	–	–	–	–	–	1.7E+01	1.7E+03
Propylene oxide	75-56-9	6.6E-03	2.5E+01	–	–	–	3.1E-02	–	–	–	–	3.8E-03	3.8E-01	–	–
Propylene tetramer	6842-15-5	–	–	–	–	–	1.0E+00	8.2E+03	3.6E+04	–	–	–	–	2.4E+00	2.4E+02
Prothiofos (Tokuthion)	34643-46-4	–	–	–	–	–	–	8.2E+00	3.6E+01	–	1.6E+00	–	–	2.4E-03	2.4E-01
Pyrene	129-00-0	–	–	–	–	–	–	2.5E+03	8.2E+03	–	4.7E+02	–	–	7.3E-01	7.3E+01
Pyridine	110-86-1	–	–	–	–	–	–	8.2E+01	–	–	–	–	–	2.4E-02	2.4E+00
Quinoline	91-22-5	–	2.0E+00	6.9E+00	–	–	–	–	–	–	–	3.0E-04	3.0E-02	–	–
Ronnel	299-84-3	–	–	–	–	–	–	4.1E+03	1.8E+04	–	7.8E+02	–	–	1.2E+00	1.2E+02
Safrole	94-59-7	3.9E-04	2.8E+01	9.4E+01	–	–	–	–	–	–	–	4.1E-03	4.1E-01	–	–
Selenium	7782-49-2	–	–	–	–	–	–	4.1E+02	1.8E+04	3.3E+01	7.8E+01	–	–	1.2E-01	1.2E+01
Selenourea	630-10-4	–	–	–	–	–	–	4.1E+02	–	–	–	–	–	1.2E-01	1.2E+01
Silver	7440-22-4	–	–	–	–	–	–	4.1E+02	7.1E+02	3.3E+01	7.8E+01	–	–	1.2E-01	1.2E+01
Simazine	122-34-9	–	5.1E+01	1.7E+02	–	–	–	4.1E+02	1.8E+03	–	–	7.6E-03	7.6E-01	1.2E-01	1.2E+01
Sodium*	7440-23-5	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Sodium hypochlorite	7681-52-9	–	–	–	–	–	3.2E-04	1.7E+04	1.5E+05	–	–	–	–	5.1E+00	5.1E+02
Sodium polyacrylate	9003-04-7	–	–	–	–	–	1.0E-03	4.1E+04	–	–	–	–	–	1.2E+01	1.2E+03
Strontium	7440-24-6	–	–	–	–	–	–	4.9E+04	4.3E+05	3.9E+03	9.4E+03	–	–	1.5E+01	1.5E+03
Strychnine	57-24-9	–	–	–	–	–	–	2.5E+01	1.1E+02	–	–	–	–	7.3E-03	7.3E-01
Styrene	100-42-5	–	–	–	–	–	4.9E-01	1.6E+04	–	–	–	–	–	4.9E+00	4.9E+02

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Chemical of Concern	CAS	Soil									Groundwater					
		Carcinogenic					Noncarcinogenic					Carcinogenic		Noncarcinogenic		
		Air ¹ RBEL _{Inh} (mg/m3)	Soil ¹ RBEL _{Ing} (mg/kg)	Soil ¹ RBEL _{Der} (mg/kg)	Abg ¹ Veg ¹ RBEL _{Ing} above-ground (mg/kg)	Bg ¹ Veg ¹ RBEL _{Ing} below-ground (mg/kg)	Air ¹ RBEL _{Inh} (mg/m3)	Soil ¹ RBEL _{Ing} (mg/kg)	Soil ¹ RBEL _{Der} (mg/kg)	Abg ¹ Veg ¹ RBEL _{Ing} above-ground (mg/kg)	Bg ¹ Veg ¹ RBEL _{Ing} below-ground (mg/kg)	GW ¹ RBEL _{Ing} (mg/L)	GW ¹ RBEL _{Class 3} (mg/L)	GW ¹ RBEL _{Ing} (mg/L)	GW ¹ RBEL _{Class 3} (mg/L)	
Sulfate*	14808-79-8	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
Sulfide*	18496-25-8	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
Sulfolane	126-33-0	–	–	–	–	–	6.7E-03	1.1E+03	4.6E+03	–	–	–	–	–	3.2E-01	3.2E+01
Sulfur*	7704-34-9	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Sulprofos (Bolstar)	35400-43-2	–	–	–	–	–	–	2.5E+02	1.1E+03	–	–	4.7E+01	–	–	7.3E-02	7.3E+00
Tebuconazole	107534-96-3	–	–	–	–	–	–	2.5E+03	1.1E+04	–	–	–	–	–	7.3E-01	7.3E+01
Tebuthiuron	34014-18-1	–	–	–	–	–	–	5.7E+03	2.5E+04	–	–	–	–	–	1.7E+00	1.7E+02
Terbufos	13071-79-9	–	–	–	–	–	–	2.0E+00	8.9E+00	–	–	–	–	–	6.1E-04	6.1E-02
Tert-amyl ethyl ether (TAEE)	919-94-8	–	–	–	–	–	–	3.3E+03	–	–	–	–	–	–	9.8E-01	9.8E+01
Tert-amyl-methyl ether (TAME)	994-05-8	–	–	–	–	–	–	3.3E+03	–	–	–	–	–	–	9.8E-01	9.8E+01
Tert-butyl alcohol (2-methyl-2-propanol)	75-65-0	–	–	–	–	–	–	7.4E+03	–	–	–	–	–	–	2.2E+00	2.2E+02
Tetrachlorobenzene, 1,2,3,4-	634-66-2	–	–	–	–	–	–	2.5E+01	1.1E+02	–	–	–	–	–	7.3E-03	7.3E-01
Tetrachlorobenzene, 1,2,3,5-	634-90-2	–	–	–	–	–	–	2.5E+01	1.1E+02	–	–	4.7E+00	–	–	7.3E-03	7.3E-01
Tetrachlorobenzene, 1,2,4,5-	95-94-3	–	–	–	–	–	–	2.5E+01	1.1E+02	–	–	–	–	–	7.3E-03	7.3E-01
Tetrachloroethane, 1,1,1,2-	630-20-6	3.3E-03	2.3E+02	–	–	–	–	2.5E+03	–	–	–	–	3.5E-02	3.5E+00	7.3E-01	7.3E+01
Tetrachloroethane, 1,1,2,2-	79-34-5	–	3.0E+01	–	–	–	–	1.6E+03	–	–	–	–	4.6E-03	4.6E-01	4.9E-01	4.9E+01
Tetrachloroethylene [PCE]	127-18-4	6.4E-02	2.9E+03	–	–	–	3.9E-01	1.7E+03	–	–	–	–	4.3E-01	4.3E+01	5.1E-01	5.1E+01
Tetrachlorophenol, 2,3,4,5-	4901-51-3	–	–	–	–	–	–	2.5E+03	1.1E+04	–	–	4.7E+02	–	–	7.3E-01	7.3E+01
Tetrachlorophenol, 2,3,4,6-	58-90-2	–	–	–	–	–	–	2.5E+03	1.1E+04	–	–	4.7E+02	–	–	7.3E-01	7.3E+01
Tetrachlorophenol, 2,3,5,6-	935-95-5	–	–	–	–	–	–	2.5E+03	1.1E+04	–	–	4.7E+02	–	–	7.3E-01	7.3E+01
Tetrachlorvinphos (Stirophos)	22248-79-9	–	–	–	–	–	–	3.4E+03	1.5E+04	–	–	6.6E+02	–	–	1.0E+00	1.0E+02
Tetradifon	116-29-0	–	–	–	–	–	–	1.6E+03	7.1E+03	–	–	3.1E+02	–	–	4.9E-01	4.9E+01
Tetraethyl dithiopyrophosphate (sulfotep)	3689-24-5	–	–	–	–	–	–	4.1E+01	1.8E+02	–	–	–	–	–	1.2E-02	1.2E+00
Tetraethyl lead	78-00-2	–	–	–	–	–	–	8.2E-03	3.6E-02	–	–	–	–	–	2.4E-06	2.4E-04
Tetraethyl pyrophosphate (TEPP)	107-49-3	–	–	–	–	–	–	9.0E-01	3.9E+00	–	–	–	–	–	2.7E-04	2.7E-02
Tetraethylene glycol	112-60-7	–	–	–	–	–	–	2.7E+04	1.2E+05	–	–	–	–	–	8.1E+00	8.1E+02
Tetrahydrofuran	109-99-9	1.3E-02	8.0E+02	–	–	–	2.1E+00	7.4E+04	–	–	–	–	1.2E-01	1.2E+01	2.2E+01	2.2E+03
Tetrahydropyran	142-68-7	1.3E-02	8.0E+02	–	–	–	–	1.6E+04	–	–	–	–	1.2E-01	1.2E+01	4.9E+00	4.9E+02
Tetraoxadodecane, 2,5,8,11-	112-49-2	–	–	–	–	–	–	2.0E+03	8.9E+03	–	–	–	–	–	6.1E-01	6.1E+01
Thallium	7440-28-0	–	–	–	–	–	–	5.5E+00	2.4E+02	4.4E-01	1.0E+00	–	–	–	1.6E-03	1.6E-01
Thiofanox	39196-18-4	–	–	–	–	–	–	2.5E+01	1.1E+02	–	–	–	–	–	7.3E-03	7.3E-01
Thionazin	297-97-2	–	–	–	–	–	–	5.7E+00	2.5E+01	–	–	–	–	–	1.7E-03	1.7E-01
Thiophanate-methyl	23564-05-8	–	–	–	–	–	–	6.6E+03	2.8E+04	–	–	–	–	–	2.0E+00	2.0E+02
Thiram	137-26-8	–	–	–	–	–	–	4.1E+02	1.8E+03	–	–	–	–	–	1.2E-01	1.2E+01
Tin	7440-31-5	–	–	–	–	–	–	4.9E+04	2.1E+05	3.9E+03	9.4E+03	–	–	–	1.5E+01	1.5E+03
Titanium	7440-32-6	–	–	–	–	–	–	4.1E+05	5.3E+05	3.3E+04	7.8E+04	–	–	–	1.2E+02	1.2E+04
Toluene	108-88-3	–	–	–	–	–	–	4.3E+00	6.6E+03	–	–	–	–	–	2.0E+00	2.0E+02
Toluene diisocyanate, 2,4/2,6-	26471-62-5	–	–	–	–	–	–	7.3E-05	–	–	–	–	–	–	–	–
Toluenediamine, 2,4-	95-80-7	–	1.9E+00	6.5E+00	–	–	–	–	–	–	–	–	2.9E-04	2.9E-02	–	–
Toluenediamine, 2,6-	823-40-5	–	–	–	–	–	–	2.5E+03	1.1E+04	–	–	–	–	–	7.3E-01	7.3E+01
Toluidine, o-	95-53-4	4.8E-04	3.8E+02	8.7E+01	–	–	–	–	–	–	–	–	5.7E-02	5.7E+00	–	–
Toluidine, p-	106-49-0	–	2.0E+02	1.1E+02	–	–	–	–	–	–	–	–	3.0E-02	3.0E+00	–	–
Toxaphene	8001-35-2	7.6E-05	5.5E+00	1.9E+01	–	5.3E-01	–	2.5E+01	1.1E+02	–	–	4.8E+00	8.3E-04	8.3E-02	7.6E-03	7.6E-01

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		Carcinogenic					Noncarcinogenic					Carcinogenic		Noncarcinogenic		
		Air ^R RBEL _{Inh}	Soil ^R RBEL _{Ing} (mg/m3)	Soil ^R RBEL _{Derm} (mg/kg)	Abg ^R Veg ^R RBEL _{Ing} above-ground (mg/kg)	Bg ^R Veg ^R RBEL _{Ing} below-ground (mg/kg)	Air ^R RBEL _{Inh}	Soil ^R RBEL _{Ing}	Soil ^R RBEL _{Derm} (mg/kg)	Abg ^R Veg ^R RBEL _{Ing} above-ground (mg/kg)	Bg ^R Veg ^R RBEL _{Ing} below-ground (mg/kg)	GW ^R RBEL _{Ing} ¹ (mg/L)	GW ^R RBEL _{Class 3} ² (mg/L)	GW ^R RBEL _{Ing} ¹ (mg/L)	GW ^R RBEL _{Class 3} ² (mg/L)	
TPH, TX1005, C6-C12	TPH-1005-1	–	–	–	–	–	2.1E-01	3.3E+03	–	–	–	–	–	–	9.8E-01	9.8E+01
TPH, TX1005, >C12-C28	TPH-1005-2	–	–	–	–	–	2.1E-01	3.3E+03	1.4E+04	–	–	–	–	–	9.8E-01	9.8E+01
TPH, TX1005, >C12-C35	TPH-1005-3	–	–	–	–	–	2.1E-01	3.3E+03	1.4E+04	–	–	–	–	–	9.8E-01	9.8E+01
TPH, TX1005, >C28-C35	TPH-1005-4	–	–	–	–	–	2.1E-01	3.3E+03	1.4E+04	–	–	–	–	–	9.8E-01	9.8E+01
TP Silvex, 2,4,5-	93-72-1	–	–	–	–	–	–	6.6E+02	2.8E+03	–	–	–	–	–	2.0E-01	2.0E+01
Triademenol	55219-65-3	–	–	–	–	–	–	2.5E+03	1.1E+04	–	–	–	–	–	7.3E-01	7.3E+01
Triallate	2303-17-5	–	–	–	–	–	–	1.1E+03	4.6E+03	–	2.0E+02	–	–	–	3.2E-01	3.2E+01
Triaminotrinitrobenzene (TATB)	3058-38-6	–	–	–	–	–	–	2.5E+02	1.1E+03	–	–	–	–	–	7.3E-02	7.3E+00
Tributyltin oxide	56-35-9	–	–	–	–	–	–	2.5E+01	1.1E+02	–	4.7E+00	–	–	–	7.3E-03	7.3E-01
Trichloro-1,2,2-trifluoroethane, 1,1,2-	76-13-1	–	–	–	–	–	5.2E+00	1.0E+06	–	–	–	–	–	–	7.3E+02	7.3E+04
Trichlorobenzene, 1,2,3-	87-61-6	–	–	–	–	–	2.1E-03	2.5E+02	1.1E+03	–	–	–	–	–	7.3E-02	7.3E+00
Trichlorobenzene, 1,2,4-	120-82-1	–	2.1E+02	7.2E+02	–	–	2.1E-03	8.2E+02	3.6E+03	–	–	3.1E-02	3.1E+00	–	2.4E-01	2.4E+01
Trichlorobenzene, 1,3,5-	108-70-3	–	–	–	–	–	2.1E-03	2.5E+02	1.1E+03	–	–	–	–	–	7.3E-02	7.3E+00
Trichloroethane, 1,1,1-	71-55-6	–	–	–	–	–	5.3E+00	1.6E+05	–	–	–	–	–	–	4.9E+01	4.9E+03
Trichloroethane, 1,1,2-	79-00-5	1.5E-03	1.1E+02	–	–	–	–	3.3E+02	–	–	–	1.6E-02	1.6E+00	–	9.8E-02	9.8E+00
Trichloroethylene [TCE]	79-01-6	5.9E-03	1.3E+02	–	–	–	2.1E-03	4.1E+01	–	–	–	2.0E-02	2.0E+00	–	1.2E-02	1.2E+00
Trichlorofluoromethane	75-69-4	–	–	–	–	–	–	2.5E+04	–	–	–	–	–	–	7.3E+00	7.3E+02
Trichloronate	327-98-0	–	–	–	–	–	–	2.5E+02	1.1E+03	–	4.7E+01	–	–	–	7.3E-02	7.3E+00
Trichlorophenol, 2,3,4-	15950-66-0	–	–	–	–	–	–	8.2E+03	3.6E+04	–	–	–	–	–	2.4E+00	2.4E+02
Trichlorophenol, 2,3,5-	933-78-8	–	–	–	–	–	–	8.2E+03	3.6E+04	–	–	–	–	–	2.4E+00	2.4E+02
Trichlorophenol, 2,3,6-	933-75-5	–	–	–	–	–	–	8.2E+03	3.6E+04	–	1.6E+03	–	–	–	2.4E+00	2.4E+02
Trichlorophenol, 2,4,5-	95-95-4	–	–	–	–	–	–	8.2E+03	3.6E+04	–	–	–	–	–	2.4E+00	2.4E+02
Trichlorophenol, 2,4,6-	88-06-2	7.8E-03	5.5E+02	1.9E+03	–	–	–	8.2E+01	3.6E+02	–	–	8.3E-02	8.3E+00	–	2.4E-02	2.4E+00
Trichlorophenol, 3,4,5-	609-19-8	–	–	–	–	–	–	8.2E+03	3.6E+04	–	–	–	–	–	2.4E+00	2.4E+02
Trichlorophenoxyacetic acid, 2,4,5-	93-76-5	–	–	–	–	–	–	8.2E+02	3.6E+03	–	–	–	–	–	2.4E-01	2.4E+01
Trichloropropane, 1,1,2-	598-77-6	–	–	–	–	–	3.1E-04	4.1E+02	–	–	–	–	–	–	1.2E-01	1.2E+01
Trichloropropane, 1,2,3-	96-18-4	–	2.0E-01	–	–	–	3.1E-04	3.3E+02	–	–	–	3.0E-05	3.0E-03	–	9.8E-02	9.8E+00
Triethanolamine	102-71-6	–	–	–	–	–	2.6E-02	1.6E+04	7.1E+04	–	–	–	–	–	4.9E+00	4.9E+02
Triethylamine	121-44-8	–	–	–	–	–	7.3E-03	–	–	–	–	–	–	–	–	–
Triethylene glycol	112-27-6	–	–	–	–	–	–	1.6E+05	7.1E+05	–	–	–	–	–	4.9E+01	4.9E+03
Triethylphosphorothioate, O, O, O-	126-68-1	–	–	–	–	–	–	6.8E-01	3.0E+00	–	–	–	–	–	2.0E-04	2.0E-02
Trifluralin	1582-09-8	–	7.9E+02	2.7E+03	–	7.6E+01	–	6.1E+02	2.7E+03	–	1.2E+02	1.2E-01	1.2E+01	–	1.8E-01	1.8E+01
Trimethylamine	75-50-3	–	–	–	–	–	7.3E-03	–	–	–	–	–	–	–	–	–
Trimethylbenzene, 1,2,3-	526-73-8	–	–	–	–	–	1.9E-01	2.8E+03	–	–	–	–	–	–	8.3E-01	8.3E+01
Trimethylbenzene, 1,2,4-	95-63-6	–	–	–	–	–	1.9E-01	2.8E+03	–	–	–	–	–	–	8.3E-01	8.3E+01
Trimethylbenzene, 1,3,5-	108-67-8	–	–	–	–	–	1.9E-01	2.8E+03	–	–	–	–	–	–	8.3E-01	8.3E+01
Trinitrobenzene, 1,3,5-	99-35-4	–	–	–	–	–	–	2.5E+03	1.1E+04	–	–	–	–	–	7.3E-01	7.3E+01
Trinitrophenylmethyl nitramine (tetryl; nitramine)	479-45-8	–	–	–	–	–	–	1.6E+02	1.4E+03	–	–	–	–	–	4.9E-02	4.9E+00
Trinitrotoluene, 2,4,6-	118-96-7	–	2.0E+02	6.9E+02	–	–	–	4.1E+01	1.8E+02	–	–	3.0E-02	3.0E+00	–	1.2E-02	1.2E+00
Tungsten (as sodium tungstate dihydride)	7440-33-7	–	–	–	–	–	5.5E-03	8.2E+01	7.1E+02	6.5E+00	1.6E+01	–	–	–	2.4E-02	2.4E+00
Uranium (soluble salts)	7440-61-1	–	–	–	–	–	4.2E-05	2.5E+02	1.1E+04	2.0E+01	4.7E+01	–	–	–	7.3E-02	7.3E+00
Valeric acid (pentanoic acid)	109-52-4	–	–	–	–	–	1.0E-03	4.1E+04	1.8E+05	–	–	–	–	–	1.2E+01	1.2E+03
Vanadium	7440-62-2	–	–	–	–	–	3.1E-05	1.5E+02	1.7E+02	1.2E+01	2.8E+01	–	–	–	4.4E-02	4.4E+00

**Table 9
Individual RBELs Residential**

Last Revised: March 6, 2023

Chemical of Concern	CAS	Soil										Groundwater			
		Carcinogenic					Noncarcinogenic					Carcinogenic		Noncarcinogenic	
		AirRBEL _{Inh} (mg/m3)	SoilRBEL _{Ing} (mg/kg)	SoilRBEL _{Derm} (mg/kg)	AbgVegRBEL _{Ing} above-ground (mg/kg)	BgVegRBEL _{Ing} below-ground (mg/kg)	AirRBEL _{Inh} (mg/m3)	SoilRBEL _{Ing} (mg/kg)	SoilRBEL _{Derm} (mg/kg)	AbgVegRBEL _{Ing} above-ground (mg/kg)	BgVegRBEL _{Ing} below-ground (mg/kg)	GWRBEL _{Ing} ¹ (mg/L)	GWRBEL _{Class 3} ² (mg/L)	GWRBEL _{Ing} ¹ (mg/L)	GWRBEL _{Class 3} ² (mg/L)
Vernam	1929-77-7	—	—	—	—	—	—	8.2E+01	3.6E+02	—	—	—	—	2.4E-02	2.4E+00
Vinyl acetate	108-05-4	—	—	—	—	—	2.1E-01	8.2E+04	—	—	—	—	—	2.4E+01	2.4E+03
Vinyl chloride	75-01-4	2.9E-03	4.0E+00	—	—	—	6.3E-02	2.5E+02	—	—	—	6.1E-04	6.1E-02	7.3E-02	7.3E+00
Vinylcyclohexane	695-12-5	—	—	—	—	—	—	4.1E+04	—	—	—	—	—	1.2E+01	1.2E+03
Warfarin	81-81-2	—	—	—	—	—	—	2.5E+01	1.1E+02	—	—	—	—	7.3E-03	7.3E-01
Xylene, m-	108-38-3	—	—	—	—	—	6.4E-01	1.6E+05	—	—	—	—	—	4.9E+01	4.9E+03
Xylene, o-	95-47-6	—	—	—	—	—	6.4E-01	1.6E+05	—	—	—	—	—	4.9E+01	4.9E+03
Xylene, p-	106-42-3	—	—	—	—	—	6.4E-01	1.6E+05	—	—	—	—	—	4.9E+01	4.9E+03
Xylenes	1330-20-7	—	—	—	—	—	6.4E-01	1.6E+04	—	—	—	—	—	4.9E+00	4.9E+02
Zinc	7440-66-6	—	—	—	—	—	—	2.5E+04	2.1E+05	2.0E+03	4.7E+03	—	—	7.3E+00	7.3E+02
6 C aliphatics (TPH) (>53% n-hexane content)	NA	—	—	—	—	—	7.0E-01	4.9E+03	—	—	—	—	—	1.5E+00	1.5E+02
6 C aliphatics (TPH) (<53% n-hexane content)	NA	—	—	—	—	—	1.9E+01	4.9E+03	—	—	—	—	—	1.5E+00	1.5E+02
>6-8 C aliphatics (TPH) (>53% n-hexane content)	NA	—	—	—	—	—	7.0E-01	4.9E+03	—	—	—	—	—	1.5E+00	1.5E+02
>6-8 C aliphatics (TPH) (<53% n-hexane content)	NA	—	—	—	—	—	1.9E+01	4.9E+03	—	—	—	—	—	1.5E+00	1.5E+02
>8-10 C aliphatics (TPH)	NA	—	—	—	—	—	5.2E-01	8.2E+03	—	—	—	—	—	2.4E+00	2.4E+02
>10-12 C aliphatics (TPH)	NA	—	—	—	—	—	5.2E-01	8.2E+03	3.6E+04	—	—	—	—	2.4E+00	2.4E+02
>12-16 C aliphatics (TPH)	NA	—	—	—	—	—	5.2E-01	8.2E+03	3.6E+04	—	—	—	—	2.4E+00	2.4E+02
>16-21 C aliphatics (TPH)	NA	—	—	—	—	—	—	1.6E+05	7.1E+05	—	—	—	—	4.9E+01	4.9E+03
>16-21 C aliphatics (TPH) (for transformer mineral oil releases only)	NA	—	—	—	—	—	—	1.3E+05	7.1E+05	—	—	—	—	3.9E+01	3.9E+03
>21-35 C aliphatics (TPH)	NA	—	—	—	—	—	—	1.6E+05	5.7E+05	—	—	—	—	4.9E+01	4.9E+03
>21-35 C aliphatics (TPH) (for transformer mineral oil releases only)	NA	—	—	—	—	—	—	1.3E+05	5.7E+05	—	—	—	—	3.9E+01	3.9E+03
>7-8 C aromatics (TPH)	NA	—	—	—	—	—	2.0E+00	8.2E+03	—	—	—	—	—	2.4E+00	2.4E+02
>8-10 C aromatics (TPH)	NA	—	—	—	—	—	2.1E-01	3.3E+03	—	—	—	—	—	9.8E-01	9.8E+01
>10-12 C aromatics (TPH)	NA	—	—	—	—	—	2.1E-01	3.3E+03	1.4E+04	—	—	—	—	9.8E-01	9.8E+01
>12-16 C aromatics (TPH)	NA	—	—	—	—	—	2.1E-01	3.3E+03	1.4E+04	—	—	—	—	9.8E-01	9.8E+01
>16-21 C aromatics (TPH)	NA	—	—	—	—	—	—	2.5E+03	1.1E+04	—	—	—	—	7.3E-01	7.3E+01
>21-35 C aromatics (TPH)	NA	—	—	—	—	—	—	2.5E+03	1.1E+04	—	—	—	—	7.3E-01	7.3E+01

Footnotes

1 Based on primary MCLs when available

2 100 x ^{GW}GW_{Ing}

3 The total MCL for trihalomethanes (bromodichloromethane, bromoform, chloroform, and dibromochloromethane) is 0.08 mg/L.

* These compounds are not necessarily of concern from a human health standpoint, therefore calculation of human health-based values is not required. However, aesthetics and ecological criteria would still apply. See table entitled "Compounds for which Calculation of a Human Health PCL is Not Required" available on the TCEQ website at <http://www.tceq.state.tx.us/remediation/trrp/trrp.html>.

NA = not applicable

All values capped at 1E+06

This table shows the residential risk-based exposure limits for soil and groundwater with carcinogenic and non-carcinogenic values depicted.

end of worksheet

Table 10
Individual RBELs Commercial/Industrial

Last Revised: March 6, 2023

Chemical of Concern	CAS	Soil						Groundwater			
		Carcinogenic			Noncarcinogenic			Carcinogenic		Noncarcinogenic	
		Air RBEL _{Inh} (mg/m ³)	Soil RBEL _{Ing} (mg/kg)	Soil RBEL _{Derm} (mg/kg)	Air RBEL _{Inh} (mg/m ³)	Soil RBEL _{Ing} (mg/kg)	Soil RBEL _{Derm} (mg/kg)	GW RBEL _{Ing} ¹ (mg/L)	GW RBEL _{Class 3} ² (mg/L)	GW RBEL _{Ing} ¹ (mg/L)	GW RBEL _{Class 3} ² (mg/L)
Ammonium salts*	AMMONIUM	—	—	—	—	—	—	—	—	—	—
Aniline	62-53-3	—	5.0E+03	1.0E+04	1.5E-03	7.2E+03	1.4E+04	3.6E-01	3.6E+01	5.1E-01	5.1E+01
Anthracene	120-12-7	—	—	—	—	3.1E+05	4.7E+05	—	—	2.2E+01	2.2E+03
Anthraquinone, 9,10-	84-65-1	—	7.3E+02	1.5E+03	—	2.0E+04	4.1E+04	5.2E-02	5.2E+00	1.5E+00	1.5E+02
Antimony	7440-36-0	—	—	—	—	4.1E+02	1.2E+03	—	—	2.9E-02	2.9E+00
Aramite	140-57-8	5.8E-03	1.1E+03	2.3E+03	—	5.1E+04	1.0E+05	8.2E-02	8.2E+00	3.7E+00	3.7E+02
Arsenic	7440-38-2	2.7E-04	2.4E+02	1.3E+03	—	3.9E+02	2.0E+03	1.4E-02	1.4E+00	2.2E-02	2.2E+00
Arsine	7784-42-1	—	—	—	7.3E-05	—	—	—	—	—	—
Atrazine	1912-24-9	—	1.3E+02	2.6E+02	—	3.6E+04	7.2E+04	9.2E-03	9.2E-01	2.6E+00	2.6E+02
Azinphos-methyl (guthion)	86-50-0	—	—	—	—	1.5E+03	3.1E+03	—	—	1.1E-01	1.1E+01
Azobenzene	103-33-3	1.3E-03	2.6E+02	5.2E+02	—	—	—	1.9E-02	1.9E+00	—	—
Barium	7440-39-3	—	—	—	—	2.0E+05	2.9E+05	—	—	1.5E+01	1.5E+03
Bayleton	43121-43-3	—	—	—	—	3.1E+04	6.1E+04	—	—	2.2E+00	2.2E+02
Benefin (benfluralin)	1861-40-1	—	—	—	—	3.1E+05	6.1E+05	—	—	2.2E+01	2.2E+03
Benomyl	17804-35-2	—	—	—	—	5.1E+04	1.0E+05	—	—	3.7E+00	3.7E+02
Benz-a-anthracene	56-55-3	6.8E-04	2.9E+02	4.4E+02	—	—	—	2.0E-02	2.0E+00	—	—
Benzaldehyde	100-52-7	—	—	—	—	1.0E+05	—	—	—	7.3E+00	7.3E+02
Benzene	71-43-2	1.9E-02	1.9E+03	—	4.1E-01	4.1E+03	—	1.4E-01	1.4E+01	2.9E-01	2.9E+01
Benzenedicarbonitrile, 1,3-	626-17-5	—	—	—	—	6.1E+03	1.2E+04	—	—	4.4E-01	4.4E+01
Benzenedicarboxylic acid, 1,2-disodecyl ester	26761-40-0	—	—	—	7.3E-03	4.1E+04	8.2E+04	—	—	2.9E+00	2.9E+02
Benzenethiol	108-98-5	—	—	—	—	1.0E+03	—	—	—	7.3E-02	7.3E+00
Benzidine	92-87-5	6.1E-07	1.2E-01	2.5E-01	—	3.1E+03	6.1E+03	8.9E-06	8.9E-04	2.2E-01	2.2E+01
Benzo-a-pyrene	50-32-8	6.8E-05	2.9E+01	4.4E+01	2.9E-06	3.1E+02	4.7E+02	2.0E-03	2.0E-01	2.2E-02	2.2E+00
Benzo-b-fluoranthene	205-99-2	6.8E-04	2.9E+02	4.4E+02	—	—	—	2.0E-02	2.0E+00	—	—
Benzo-e-pyrene	192-97-2	—	—	—	—	3.1E+04	4.7E+04	—	—	2.2E+00	2.2E+02
Benzo-g,h,i-perylene	191-24-2	—	—	—	—	3.1E+04	4.7E+04	—	—	2.2E+00	2.2E+02
Benzoic acid	65-85-0	—	—	—	—	1.0E+06	1.0E+06	—	—	2.9E+02	2.9E+04
Benzo-j-fluoranthene	205-82-3	6.8E-04	2.9E+02	4.4E+02	—	—	—	2.0E-02	2.0E+00	—	—
Benzo-k-fluoranthene	207-08-9	6.8E-03	2.9E+03	4.4E+03	—	—	—	2.0E-01	2.0E+01	—	—
Benzophenone	119-61-9	—	—	—	—	6.8E+03	1.4E+04	—	—	4.9E-01	4.9E+01
Benzotrithloride	98-07-7	—	2.2E+00	4.4E+00	—	—	—	1.6E-04	1.6E-02	—	—
Benzoyl peroxide	94-36-0	—	—	—	—	5.1E+04	1.0E+05	—	—	3.7E+00	3.7E+02
Benzyl alcohol	100-51-6	—	—	—	—	1.0E+05	2.0E+05	—	—	7.3E+00	7.3E+02
Benzyl chloride	100-44-7	—	1.7E+02	—	1.5E-03	2.0E+03	—	1.2E-02	1.2E+00	1.5E-01	1.5E+01

Table 10
Individual RBELs Commercial/Industrial

Last Revised: March 6, 2023

Chemical of Concern	CAS	Soil						Groundwater			
		Carcinogenic			Noncarcinogenic			Carcinogenic		Noncarcinogenic	
		Air RBEL _{Inh} (mg/m ³)	Soil RBEL _{Ing} (mg/kg)	Soil RBEL _{Derm} (mg/kg)	Air RBEL _{Inh} (mg/m ³)	Soil RBEL _{Ing} (mg/kg)	Soil RBEL _{Derm} (mg/kg)	GW RBEL _{Ing} ¹ (mg/L)	GW RBEL _{Class 3} ² (mg/L)	GW RBEL _{Ing} ¹ (mg/L)	GW RBEL _{Class 3} ² (mg/L)
Benzyl dichloride	98-87-3	—	1.7E+02	3.4E+02	1.5E-03	2.0E+03	4.1E+03	1.2E-02	1.2E+00	1.5E-01	1.5E+01
Beryllium	7440-41-7	1.7E-05	—	—	2.9E-05	2.0E+03	2.9E+02	—	—	1.5E-01	1.5E+01
Biphenyl, 1,1'-	92-52-4	—	—	—	—	5.1E+05	1.0E+05	—	—	3.7E+01	3.7E+03
Biphenyl, 1,1'-, 2-phenoxy-	6738-04-1	—	—	—	—	5.1E+04	1.0E+05	—	—	3.7E+00	3.7E+02
Biquinoline, 2,2'-	119-91-5	—	—	—	—	3.1E+03	6.1E+03	—	—	2.2E-01	2.2E+01
Bis (2-chloroethoxy) methane	111-91-1	1.2E-04	2.6E+01	5.2E+01	—	3.1E+03	6.1E+03	1.9E-03	1.9E-01	2.2E-01	2.2E+01
Bis (2-chloroethyl) ether	111-44-4	1.2E-04	2.6E+01	—	—	—	—	1.9E-03	1.9E-01	—	—
Bis (2-chloro-1-methylethyl) ether	108-60-1	4.1E-03	4.1E+02	8.2E+02	—	4.1E+04	8.2E+04	2.9E-02	2.9E+00	2.9E+00	2.9E+02
Bis (2-chloromethyl) ether	542-88-1	6.6E-07	1.3E-01	—	—	—	—	9.3E-06	9.3E-04	—	—
Bis (2-ethyl-hexyl) phthalate	117-81-7	—	2.0E+03	7.8E+02	—	2.0E+04	7.8E+03	1.5E-01	1.5E+01	1.5E+00	1.5E+02
Bismuth	7440-69-9	—	—	—	—	5.1E+05	1.0E+06	—	—	3.7E+01	3.7E+03
Bisphenol A	80-05-7	—	—	—	—	5.1E+04	1.0E+05	—	—	3.7E+00	3.7E+02
Boron	7440-42-8	—	—	—	2.9E-02	2.0E+05	1.0E+06	—	—	1.5E+01	1.5E+03
Bromacil	314-40-9	—	—	—	—	1.0E+05	2.0E+05	—	—	7.3E+00	7.3E+02
Bromo-2-chloroethane, 1-	107-04-0	—	—	—	—	4.1E+04	—	—	—	2.9E+00	2.9E+02
Bromobenzene	108-86-1	—	—	—	8.8E-02	8.2E+03	—	—	—	5.8E-01	5.8E+01
Bromodichloromethane	75-27-4	—	4.6E+02	—	—	8.2E+03	—	3.3E-02	3.3E+00	5.8E-01	5.8E+01
Bromoform ³	75-25-2	3.7E-02	3.6E+03	—	—	2.0E+04	—	2.6E-01	2.6E+01	1.5E+00	1.5E+02
Bromomethane	74-83-9	—	—	—	5.7E-03	1.4E+03	—	—	—	1.0E-01	1.0E+01
Bromophenyl phenylether, 4-	101-55-3	1.2E-05	1.9E+00	3.8E+00	—	—	—	1.4E-04	1.4E-02	—	—
Butadiene, 1,3-	106-99-0	8.2E-02	—	—	4.8E-02	—	—	—	—	—	—
Butadiene, 2-methyl-1,3- (isoprene)	78-79-5	—	—	—	2.6E+01	6.1E+04	—	—	—	4.4E+00	4.4E+02
Butanal (butyraldehyde)	123-72-8	—	—	—	1.5E-01	6.1E+04	—	—	—	4.4E+00	4.4E+02
Butane, 2,3-dimethyl-	79-29-8	—	—	—	2.6E+01	6.1E+04	—	—	—	4.4E+00	4.4E+02
Butanoic acid (butyric acid)	107-92-6	—	—	—	1.5E-03	5.1E+05	1.0E+06	—	—	3.7E+01	3.7E+03
Butanol, 2-	78-92-2	—	—	—	4.4E+01	1.0E+06	—	—	—	1.5E+02	1.5E+04
Butanol, 2-methyl-1-	137-32-6	—	—	—	—	1.0E+04	—	—	—	7.3E-01	7.3E+01
Butanol, 2-methyl-2-	75-85-4	—	—	—	—	1.0E+04	—	—	—	7.3E-01	7.3E+01
Butanol, n-	71-36-3	—	—	—	—	1.0E+05	—	—	—	7.3E+00	7.3E+02
Butene, 1-	106-98-9	—	—	—	7.7E+00	6.1E+04	—	—	—	4.4E+00	4.4E+02
Butene, cis-2-	590-18-1	—	—	—	2.3E+00	6.1E+04	—	—	—	4.4E+00	4.4E+02
Butene, trans-2-	624-64-6	—	—	—	2.3E+00	6.1E+04	—	—	—	4.4E+00	4.4E+02
Butoxy ethanol, 2- (Ethylene glycol monobutyl ether; EGBE)	111-76-2	—	—	—	2.3E+00	1.0E+05	2.0E+05	—	—	7.3E+00	7.3E+02
Butyl acetate	123-86-4	—	—	—	6.9E+00	1.4E+05	—	—	—	1.0E+01	1.0E+03

Table 10
Individual RBELs Commercial/Industrial

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Chemical of Concern	CAS	Soil						Groundwater			
		Carcinogenic			Noncarcinogenic			Carcinogenic		Noncarcinogenic	
		Air RBEL _{Inh} (mg/m ³)	Soil RBEL _{Ing} (mg/kg)	Soil RBEL _{Derm} (mg/kg)	Air RBEL _{Inh} (mg/m ³)	Soil RBEL _{Ing} (mg/kg)	Soil RBEL _{Derm} (mg/kg)	GW RBEL _{Ing} ¹ (mg/L)	GW RBEL _{Class 3} ² (mg/L)	GW RBEL _{Ing} ¹ (mg/L)	GW RBEL _{Class 3} ² (mg/L)
Butyl acrylate	141-32-2	—	—	—	—	9.2E+03	—	—	—	6.6E-01	6.6E+01
Butyl benzyl phthalate	85-68-7	—	1.5E+04	3.0E+04	—	2.0E+05	4.1E+05	1.1E+00	1.1E+02	1.5E+01	1.5E+03
Butyl ether, n- (dibutyl ether)	142-96-1	—	—	—	—	1.0E+05	—	—	—	7.3E+00	7.3E+02
Butyl methacrylate	97-88-1	—	—	—	—	9.2E+04	3.7E+04	—	—	6.6E+00	6.6E+02
Butylate	2008-41-5	—	—	—	—	5.1E+04	1.0E+05	—	—	3.7E+00	3.7E+02
Butylbenzene, n-	104-51-8	—	—	—	—	5.1E+04	1.0E+05	—	—	3.7E+00	3.7E+02
Butylbenzene, sec-	135-98-8	—	—	—	—	4.1E+04	—	—	—	2.9E+00	2.9E+02
Butylbenzene, tert-	98-06-6	—	—	—	—	4.1E+04	—	—	—	2.9E+00	2.9E+02
Cacodylic acid	75-60-5	—	—	—	—	3.1E+03	6.1E+03	—	—	2.2E-01	2.2E+01
Cadmium	7440-43-9	8.3E-05	—	—	1.6E-05	1.0E+03	5.1E+03	—	—	7.3E-02	7.3E+00
Calcium*	7440-70-2	—	—	—	—	—	—	—	—	—	—
Caprolactam	105-60-2	—	—	—	—	5.1E+05	1.0E+06	—	—	3.7E+01	3.7E+03
Captan	133-06-2	—	8.2E+03	1.6E+04	—	1.3E+05	2.7E+05	5.8E-01	5.8E+01	9.5E+00	9.5E+02
Carbaryl	63-25-2	—	—	—	—	1.0E+05	2.0E+05	—	—	7.3E+00	7.3E+02
Carbazole	86-74-8	—	1.4E+03	2.9E+03	—	—	—	1.0E-01	1.0E+01	—	—
Carbofuran	1563-66-2	—	—	—	—	5.1E+03	1.0E+04	—	—	3.7E-01	3.7E+01
Carbon disulfide	75-15-0	—	—	—	1.0E+00	1.0E+05	—	—	—	7.3E+00	7.3E+02
Carbon tetrachloride	56-23-5	6.8E-03	4.1E+02	—	1.5E-01	4.1E+03	—	2.9E-02	2.9E+00	2.9E-01	2.9E+01
Carbophenothion	786-19-6	—	—	—	—	1.3E+04	2.7E+04	—	—	9.5E-01	9.5E+01
Carbosulfan	55285-14-8	—	—	—	—	1.0E+04	2.0E+04	—	—	7.3E-01	7.3E+01
Carboxin	5234-68-4	—	—	—	—	1.0E+05	2.0E+05	—	—	7.3E+00	7.3E+02
Chloral	75-87-6	—	—	—	—	1.0E+05	—	—	—	7.3E+00	7.3E+02
Chloral hydrate (1,1-ethanediol, 2,2,2-trichloro-)	302-17-0	—	—	—	—	1.0E+05	2.0E+05	—	—	7.3E+00	7.3E+02
Chloramben (amiben; 3-amino-2,5-dichlorobenzoic acid)	133-90-4	—	—	—	—	1.5E+04	3.1E+04	—	—	1.1E+00	1.1E+02
Chlordane (technical)	12789-03-6	4.1E-04	8.2E+01	4.1E+02	1.0E-03	5.1E+02	2.6E+03	5.8E-03	5.8E-01	3.7E-02	3.7E+00
Chlordane, cis- (alpha chlordane)	5103-71-9	4.1E-04	8.2E+01	1.6E+02	1.0E-03	5.1E+02	1.0E+03	5.8E-03	5.8E-01	3.7E-02	3.7E+00
Chlordane, trans- (gamma chlordane)	5103-74-2	4.1E-04	8.2E+01	1.6E+02	1.0E-03	5.1E+02	1.0E+03	5.8E-03	5.8E-01	3.7E-02	3.7E+00
Chlorfenvinphos	470-90-6	—	—	—	2.9E-03	7.2E+02	1.4E+03	—	—	5.1E-02	5.1E+00
Chloride*	16887-00-6	—	—	—	—	—	—	—	—	—	—
Chlorine	7782-50-5	—	—	—	1.3E-02	1.0E+05	4.1E+05	—	—	7.3E+00	7.3E+02
Chloro-1,3-butadiene, 2-	126-99-8	1.4E-04	—	—	2.9E-02	—	—	—	—	—	—
Chloro-2-propanol, 1-	127-00-4	—	—	—	—	2.0E+04	—	—	—	1.5E+00	1.5E+02
Chloro-3-methylphenol, 4-	59-50-7	—	—	—	—	5.1E+03	1.0E+04	—	—	3.7E-01	3.7E+01
Chloroaniline, p-	106-47-8	—	1.4E+02	2.9E+02	—	4.1E+03	8.2E+03	1.0E-02	1.0E+00	2.9E-01	2.9E+01

Table 10
Individual RBELs Commercial/Industrial

Last Revised: March 6, 2023

Chemical of Concern	CAS	Soil						Groundwater			
		Carcinogenic			Noncarcinogenic			Carcinogenic		Noncarcinogenic	
		Air ¹ RBEL _{Inh} (mg/m ³)	Soil ¹ RBEL _{Ing} (mg/kg)	Soil ¹ RBEL _{Derm} (mg/kg)	Air ¹ RBEL _{Inh} (mg/m ³)	Soil ¹ RBEL _{Ing} (mg/kg)	Soil ¹ RBEL _{Derm} (mg/kg)	GW ¹ RBEL _{Ing} (mg/L)	GW ² RBEL _{Class 3} (mg/L)	GW ¹ RBEL _{Ing} (mg/L)	GW ² RBEL _{Class 3} (mg/L)
Chlorobenzene	108-90-7	—	—	—	7.3E-02	2.0E+04	—	—	—	1.5E+00	1.5E+02
Chlorobenzilate	510-15-6	5.2E-04	1.1E+02	2.1E+02	—	2.0E+04	4.1E+04	7.6E-03	7.6E-01	1.5E+00	1.5E+02
Chlorobromomethane (bromochloromethane)	74-97-5	—	—	—	—	4.1E+04	—	—	—	2.9E+00	2.9E+02
Chlorodifluoromethane	75-45-6	—	—	—	7.3E+01	—	—	—	—	—	—
Chloroethane (ethyl chloride)	75-00-3	—	—	—	1.5E+01	4.1E+05	—	—	—	2.9E+01	2.9E+03
Chloroethanol, 2-	107-07-3	—	—	—	—	2.0E+04	—	—	—	1.5E+00	1.5E+02
Chloroethoxy ethene, 2- (2-chloroethylvinylether)	110-75-8	—	2.6E+01	—	4.4E-04	2.0E+03	—	1.9E-03	1.9E-01	1.5E-01	1.5E+01
Chloroform ³	67-66-3	1.8E-03	—	—	1.4E-01	1.0E+04	—	—	—	7.3E-01	7.3E+01
Chlorohexane, 1-	544-10-5	—	—	—	1.5E+00	4.1E+04	—	—	—	2.9E+00	2.9E+02
Chloromethane (methyl chloride)	74-87-3	2.3E-02	2.2E+03	—	1.3E-01	3.7E+03	—	1.6E-01	1.6E+01	2.6E-01	2.6E+01
Chloronaphthalene, 1- (Chloronaphthalene, alpha-)	90-13-1	—	—	—	—	8.2E+04	1.3E+05	—	—	5.8E+00	5.8E+02
Chloronaphthalene, 2- (chloronaphthalene, beta)	91-58-7	—	—	—	—	8.2E+04	1.3E+05	—	—	5.8E+00	5.8E+02
Chloronitrobenzene, p- (1-chloro-4-nitrobenzene)	100-00-5	—	4.5E+03	9.1E+03	8.8E-04	1.0E+03	2.0E+03	3.2E-01	3.2E+01	7.3E-02	7.3E+00
Chlorophenol, 2-	95-57-8	—	—	—	—	5.1E+03	—	—	—	3.7E-01	3.7E+01
Chlorophenol, 3-	108-43-0	—	—	—	—	5.1E+03	1.0E+04	—	—	3.7E-01	3.7E+01
Chlorophenol, 4-	106-48-9	—	—	—	—	5.1E+03	1.0E+04	—	—	3.7E-01	3.7E+01
Chlorophenyl phenylether, 4-	7005-72-3	1.2E-05	1.9E+00	3.8E+00	—	—	—	1.4E-04	1.4E-02	—	—
Chloropropane, 2-	75-29-6	—	—	—	1.5E-01	3.1E+04	—	—	—	2.2E+00	2.2E+02
Chlorothalonil	1897-45-6	—	2.6E+03	5.2E+03	—	1.5E+04	3.1E+04	1.9E-01	1.9E+01	1.1E+00	1.1E+02
Chlorotoluene, o- (2-chlorotoluene)	95-49-8	—	—	—	1.2E+00	2.0E+04	4.1E+04	—	—	1.5E+00	1.5E+02
Chlorotoluene, p- (4-chlorotoluene)	106-43-4	—	—	—	—	2.0E+04	—	—	—	1.5E+00	1.5E+02
Chlorpyrifos	2921-88-2	—	—	—	—	3.1E+03	6.1E+03	—	—	2.2E-01	2.2E+01
Chromium (III)	16065-83-1	—	—	—	2.0E-04	1.0E+06	4.0E+05	—	—	1.1E+02	1.1E+04
Chromium (total)	7440-47-3	—	—	—	2.0E-04	1.0E+06	4.0E+05	—	—	1.1E+02	1.1E+04
Chromium (VI)	18540-29-9	1.8E-05	—	—	3.2E-04	3.2E+03	1.5E+03	—	—	2.3E-01	2.3E+01
Chrysene	218-01-9	6.8E-02	2.9E+04	4.4E+04	—	—	—	2.0E+00	2.0E+02	—	—
Cobalt	7440-48-4	6.8E-06	—	—	9.2E-05	1.0E+04	2.0E+05	—	—	7.3E-01	7.3E+01
Copolymer acrylamide	69418-26-4	—	—	—	—	2.0E+02	4.1E+02	—	—	1.5E-02	1.5E+00
Copper	7440-50-8	—	—	—	—	9.9E+04	1.0E+06	—	—	7.1E+00	7.1E+02
Coronene	191-07-1	—	—	—	—	2.0E+03	4.1E+03	—	—	1.5E-01	1.5E+01
Coumaphos	56-72-4	—	—	—	—	7.2E+03	1.4E+04	—	—	5.1E-01	5.1E+01
Cresol	1319-77-3	—	—	—	—	5.1E+04	1.0E+05	—	—	3.7E+00	3.7E+02
Cresol, m- (3-methylphenol)	108-39-4	—	—	—	—	5.1E+04	1.0E+05	—	—	3.7E+00	3.7E+02
Cresol, o- (2-methylphenol)	95-48-7	—	—	—	—	5.1E+04	1.0E+05	—	—	3.7E+00	3.7E+02

Table 10
Individual RBELs Commercial/Industrial

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Chemical of Concern	CAS	Soil						Groundwater			
		Carcinogenic			Noncarcinogenic			Carcinogenic		Noncarcinogenic	
		Air RBEL _{Inh} (mg/m ³)	Soil RBEL _{Ing} (mg/kg)	Soil RBEL _{Derm} (mg/kg)	Air RBEL _{Inh} (mg/m ³)	Soil RBEL _{Ing} (mg/kg)	Soil RBEL _{Derm} (mg/kg)	GW RBEL _{Ing} ¹ (mg/L)	GW RBEL _{Class 3} ² (mg/L)	GW RBEL _{Ing} ¹ (mg/L)	GW RBEL _{Class 3} ² (mg/L)
Cresol, p- (4-methylphenol)	106-44-5	—	—	—	—	5.1E+03	1.0E+04	—	—	3.7E-01	3.7E+01
Crotonaldehyde	123-73-9	—	1.5E+01	—	—	1.0E+03	—	1.1E-03	1.1E-01	7.3E-02	7.3E+00
Cumene (isopropylbenzene)	98-82-8	—	—	—	5.8E-01	1.0E+05	—	—	—	7.3E+00	7.3E+02
Cyanazine	21725-46-2	—	3.4E+01	6.8E+01	—	2.0E+03	4.1E+03	2.4E-03	2.4E-01	1.5E-01	1.5E+01
Cyanide	57-12-5	—	—	—	1.2E-03	6.1E+02	1.2E+04	—	—	4.4E-02	4.4E+00
Cyanogen	460-19-5	—	—	—	1.2E-03	1.0E+03	—	—	—	7.3E-02	7.3E+00
Cycloate	1134-23-2	—	—	—	—	5.6E+04	1.1E+05	—	—	4.0E+00	4.0E+02
Cyclohexane	110-82-7	—	—	—	8.8E+00	1.0E+06	—	—	—	3.7E+02	3.7E+04
Cyclohexanol	108-93-0	—	—	—	—	1.0E+06	1.0E+06	—	—	3.7E+02	3.7E+04
Cyclohexanone	108-94-1	—	—	—	1.0E+00	1.0E+06	—	—	—	3.7E+02	3.7E+04
Cyclohexene, 1-methanol-3-	1679-51-2	—	—	—	—	2.0E+04	4.1E+04	—	—	1.5E+00	1.5E+02
Cyclohexene, 4-vinyl-1-	100-40-3	—	—	—	4.8E-01	2.2E+04	—	—	—	1.6E+00	1.6E+02
Cyclopentane	287-92-3	—	—	—	3.5E+01	6.1E+04	—	—	—	4.4E+00	4.4E+02
Cyclopentane, methyl-	96-37-7	—	—	—	1.5E+00	1.0E+05	—	—	—	7.3E+00	7.3E+02
Cyclopentene	142-29-0	—	—	—	—	1.0E+06	—	—	—	3.7E+02	3.7E+04
Cyclotetramethylenetetranitramine (HMX)	2691-41-0	—	—	—	—	5.1E+04	1.5E+04	—	—	3.7E+00	3.7E+02
Cyclotrimethylenetrinitramine (RDX)	121-82-4	—	3.6E+02	7.2E+02	—	4.1E+03	8.2E+03	2.6E-02	2.6E+00	2.9E-01	2.9E+01
Cymene (isopropyltoluene)	99-87-6	—	—	—	—	1.0E+05	—	—	—	7.3E+00	7.3E+02
Cymoxanil	57966-95-7	—	—	—	—	1.3E+04	2.7E+04	—	—	9.5E-01	9.5E+01
Dacthal (DCPA)	1861-32-1	—	—	—	—	1.0E+04	2.0E+04	—	—	7.3E-01	7.3E+01
Dalapon, sodium salt (2,2-dichloropropanoic acid)	75-99-0	—	—	—	—	3.1E+04	6.1E+04	—	—	2.2E+00	2.2E+02
DDD	72-54-8	—	1.2E+02	7.9E+02	—	—	—	8.5E-03	8.5E-01	—	—
DDE	72-55-9	—	8.4E+01	5.6E+02	—	—	—	6.0E-03	6.0E-01	—	—
DDT	50-29-3	4.2E-04	8.4E+01	5.6E+02	—	5.1E+02	3.4E+03	6.0E-03	6.0E-01	3.7E-02	3.7E+00
Demeton	8065-48-3	—	—	—	—	4.1E+01	8.2E+01	—	—	2.9E-03	2.9E-01
Desethylatrazine	6190-65-4	—	—	—	—	3.6E+04	7.2E+04	—	—	2.6E+00	2.6E+02
Diacetone alcohol (4-hydroxy-4-methyl-2-pentanone)	123-42-2	—	—	—	—	4.1E+04	8.2E+04	—	—	2.9E+00	2.9E+02
Diallate	2303-16-4	—	4.7E+02	9.4E+02	—	—	—	3.4E-02	3.4E+00	—	—
Diazinon	333-41-5	—	—	—	1.5E-04	9.2E+02	1.8E+03	—	—	6.6E-02	6.6E+00
Dibenz(a,h)acridine	226-36-8	3.7E-04	2.4E+01	4.8E+01	—	—	—	1.7E-03	1.7E-01	—	—
Dibenz(a,j)acridine	224-42-0	4.6E-04	3.9E+01	6.0E+01	—	—	—	2.8E-03	2.8E-01	—	—
Dibenz-a,h-anthracene	53-70-3	6.8E-05	2.9E+01	4.4E+01	—	—	—	2.0E-03	2.0E-01	—	—
Dibenzo(a,e)pyrene	192-65-4	4.6E-05	3.9E+00	7.8E+00	—	—	—	2.8E-04	2.8E-02	—	—
Dibenzo(a,h)pyrene	189-64-0	4.6E-06	3.9E-01	7.8E-01	—	—	—	2.8E-05	2.8E-03	—	—

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Chemical of Concern	CAS	Soil						Groundwater			
		Carcinogenic			Noncarcinogenic			Carcinogenic		Noncarcinogenic	
		Air RBEL _{Inh} (mg/m ³)	Soil RBEL _{Ing} (mg/kg)	Soil RBEL _{Derm} (mg/kg)	Air RBEL _{Inh} (mg/m ³)	Soil RBEL _{Ing} (mg/kg)	Soil RBEL _{Derm} (mg/kg)	GW RBEL _{Ing} ¹ (mg/L)	GW RBEL _{Class 3} ² (mg/L)	GW RBEL _{Ing} ¹ (mg/L)	GW RBEL _{Class 3} ² (mg/L)
Dibenzo(a,i)pyrene	189-55-9	4.6E-06	3.9E-01	7.8E-01	—	—	—	2.8E-05	2.8E-03	—	—
Dibenzofuran	132-64-9	—	—	—	—	4.1E+03	8.2E+03	—	—	2.9E-01	2.9E+01
Dibenzothiophene	132-65-0	—	—	—	—	3.1E+03	6.1E+03	—	—	2.2E-01	2.2E+01
Dibromo-3-chloropropane, 1,2-	96-12-8	6.8E-06	3.6E+01	7.2E+01	2.9E-04	2.0E+02	4.1E+02	2.6E-03	2.6E-01	1.5E-02	1.5E+00
Dibromochloromethane (chlorodibromomethane) ³	124-48-1	—	3.4E+02	—	—	2.0E+04	—	2.4E-02	2.4E+00	1.5E+00	1.5E+02
Dibromofluoromethane	1868-53-7	—	—	—	—	2.0E+05	—	—	—	1.5E+01	1.5E+03
Dicamba	1918-00-9	—	—	—	—	3.1E+04	6.1E+04	—	—	2.2E+00	2.2E+02
Dichlormid	37764-25-3	—	—	—	—	2.6E+04	5.1E+04	—	—	1.8E+00	1.8E+02
Dichloro-2-butene, 1,4-	764-41-0	9.7E-06	—	—	—	—	—	—	—	—	—
Dichloro-2-butene, 1,4- trans	110-57-6	9.7E-06	—	—	—	—	—	—	—	—	—
Dichlorobenzene, 1,2-	95-50-1	—	—	—	4.4E-02	9.2E+04	—	—	—	6.6E+00	6.6E+02
Dichlorobenzene, 1,3-	541-73-1	—	—	—	1.2E-02	3.1E+04	—	—	—	2.2E+00	2.2E+02
Dichlorobenzene, 1,4-	106-46-7	—	1.2E+03	—	7.7E-01	—	—	8.5E-02	8.5E+00	—	—
Dichlorobenzidine, 3,3-	91-94-1	—	6.4E+01	1.3E+02	—	—	—	4.5E-03	4.5E-01	—	—
Dichlorobutane, 2,3-	7581-97-7	—	—	—	1.0E-02	1.0E+04	—	—	—	7.3E-01	7.3E+01
Dichlorodifluoromethane	75-71-8	—	—	—	1.5E-01	2.0E+05	—	—	—	1.5E+01	1.5E+03
Dichloroethane, 1,1-	75-34-3	—	—	—	3.5E+00	2.0E+05	—	—	—	1.5E+01	1.5E+03
Dichloroethane, 1,2-	107-06-2	1.2E-02	3.1E+02	—	6.4E-02	8.0E+04	—	2.2E-02	2.2E+00	5.7E+00	5.7E+02
Dichloroethylene, 1,1-	75-35-4	—	—	—	5.0E-01	5.1E+04	—	—	—	3.7E+00	3.7E+02
Dichloroethylene, cis-1,2-	156-59-2	—	—	—	8.8E-02	2.0E+03	—	—	—	1.5E-01	1.5E+01
Dichloroethylene, trans-1,2	156-60-5	—	—	—	8.8E-02	2.0E+04	—	—	—	1.5E+00	1.5E+02
Dichlorofluoromethane	75-43-4	—	—	—	—	2.0E+05	—	—	—	1.5E+01	1.5E+03
Dichlorophenol, 2,3-	576-24-9	—	—	—	—	3.1E+03	6.1E+03	—	—	2.2E-01	2.2E+01
Dichlorophenol, 2,4-	120-83-2	—	—	—	—	3.1E+03	6.1E+03	—	—	2.2E-01	2.2E+01
Dichlorophenol, 2,5-	583-78-8	—	—	—	—	3.1E+03	6.1E+03	—	—	2.2E-01	2.2E+01
Dichlorophenol, 2,6-	87-65-0	—	—	—	—	1.0E+03	2.0E+03	—	—	7.3E-02	7.3E+00
Dichlorophenol, 3,4-	95-77-2	—	—	—	—	3.1E+03	6.1E+03	—	—	2.2E-01	2.2E+01
Dichlorophenol, 3,5-	591-35-5	—	—	—	—	3.1E+03	6.1E+03	—	—	2.2E-01	2.2E+01
Dichlorophenoxy, 2,4- butyric acid, 4- (2,4-DB)	94-82-6	—	—	—	—	8.2E+03	1.6E+04	—	—	5.8E-01	5.8E+01
Dichlorophenoxyacetic acid, 2,4- (2,4-D)	94-75-7	—	—	—	—	2.0E+05	8.2E+05	—	—	1.5E+01	1.5E+03
Dichloroprop (2-(2,4-dichlorophenoxy) propanoic acid)	120-36-5	—	—	—	—	1.0E+04	2.0E+04	—	—	7.3E-01	7.3E+01
Dichloropropane, 1,2-	78-87-5	4.4E-02	7.7E+02	—	5.8E-03	1.3E+05	—	5.5E-02	5.5E+00	9.5E+00	9.5E+02
Dichloropropane, 1,3-	142-28-9	1.0E-02	2.9E+02	—	2.9E-02	2.0E+04	—	2.0E-02	2.0E+00	1.5E+00	1.5E+02
Dichloropropane, 2,2-	594-20-7	—	4.2E+02	—	5.8E-03	9.2E+04	—	3.0E-02	3.0E+00	6.6E+00	6.6E+02

Table 10
Individual RBELs Commercial/Industrial

Last Revised: March 6, 2023

Chemical of Concern	CAS	Soil						Groundwater			
		Carcinogenic			Noncarcinogenic			Carcinogenic		Noncarcinogenic	
		Air RBEL _{Inh} (mg/m ³)	Soil RBEL _{Ing} (mg/kg)	Soil RBEL _{Derm} (mg/kg)	Air RBEL _{Inh} (mg/m ³)	Soil RBEL _{Ing} (mg/kg)	Soil RBEL _{Derm} (mg/kg)	GW RBEL _{Ing} ¹ (mg/L)	GW RBEL _{Class 3} ² (mg/L)	GW RBEL _{Ing} ¹ (mg/L)	GW RBEL _{Class 3} ² (mg/L)
Dichloropropanol, 2,3-	616-23-9	–	–	–	–	3.1E+03	6.1E+03	–	–	2.2E-01	2.2E+01
Dichloropropene, 1,1-	563-58-6	1.0E-02	2.9E+02	–	2.9E-02	3.1E+04	–	2.0E-02	2.0E+00	2.2E+00	2.2E+02
Dichloropropene, 1,3- (mixed isomers)	542-75-6	1.0E-02	2.9E+02	–	2.9E-02	3.1E+04	–	2.0E-02	2.0E+00	2.2E+00	2.2E+02
Dichloropropene, cis 1,3-	10061-01-5	–	5.3E+01	–	2.9E-02	1.0E+02	–	3.8E-03	3.8E-01	7.3E-03	7.3E-01
Dichloropropene, trans 1,3-	10061-02-6	1.0E-02	2.9E+02	–	2.9E-02	3.1E+04	–	2.0E-02	2.0E+00	2.2E+00	2.2E+02
Dichlorvos	62-73-7	–	9.9E+01	2.0E+02	7.3E-04	5.1E+02	1.0E+03	7.0E-03	7.0E-01	3.7E-02	3.7E+00
Dicrotophos (bidrin)	141-66-2	–	–	–	–	1.0E+02	2.0E+02	–	–	7.3E-03	7.3E-01
Dicyclopentadiene	77-73-6	–	–	–	–	8.2E+04	–	–	–	5.8E+00	5.8E+02
Dieldrin	60-57-1	8.9E-06	1.8E+00	3.6E+00	–	5.1E+01	1.0E+02	1.3E-04	1.3E-02	3.7E-03	3.7E-01
Diethanolamine	111-42-2	–	–	–	3.7E-02	5.1E+02	1.0E+03	–	–	3.7E-02	3.7E+00
Diethyldithiocarbamate, sodium salt	148-18-5	–	1.1E+02	–	–	3.1E+04	–	7.6E-03	7.6E-01	2.2E+00	2.2E+02
Diethyl phthalate	84-66-2	–	–	–	–	8.2E+05	1.0E+06	–	–	5.8E+01	5.8E+03
Diethylene glycol	111-46-6	–	–	–	–	1.0E+06	1.0E+06	–	–	1.5E+02	1.5E+04
Diethylene glycol monobutyl ether	112-34-5	–	–	–	1.5E-04	3.1E+04	6.1E+04	–	–	2.2E+00	2.2E+02
Diethylhexyl adipate	103-23-1	–	2.4E+04	4.8E+04	–	6.1E+05	1.0E+06	1.7E+00	1.7E+02	4.4E+01	4.4E+03
Diethylstilbestrol	56-53-1	–	6.1E-03	1.2E-02	–	–	–	4.3E-07	4.3E-05	–	–
Diisobutylene (trimethyl-1-pentene, 2,4,4-)	107-39-1	–	–	–	2.9E-01	6.1E+04	–	–	–	4.4E+00	4.4E+02
Diisopropylbenzene, p-	100-18-5	–	–	–	–	1.0E+04	2.0E+04	–	–	7.3E-01	7.3E+01
Diisopropyl ether (2,2'-oxybis-propane)	108-20-3	–	–	–	1.0E+00	1.0E+05	–	–	–	7.3E+00	7.3E+02
Dimethenamid	87674-68-8	–	–	–	–	1.5E+04	3.1E+04	–	–	1.1E+00	1.1E+02
Dimethoate	60-51-5	–	–	–	–	2.0E+02	4.1E+02	–	–	1.5E-02	1.5E+00
Dimethoxybenzidine, 3,3'-	119-90-4	–	2.0E+03	4.1E+03	–	–	–	1.5E-01	1.5E+01	–	–
Dimethyl-2-nitrobenzene, 1,3-	81-20-9	–	–	–	1.3E-02	2.0E+03	4.1E+03	–	–	1.5E-01	1.5E+01
Dimethyl-3-nitrobenzene, 1,2-	83-41-0	–	–	–	1.3E-02	2.0E+03	4.1E+03	–	–	1.5E-01	1.5E+01
Dimethyl-4-nitrobenzene, 1-2-	99-51-4	–	–	–	1.3E-02	2.0E+03	4.1E+03	–	–	1.5E-01	1.5E+01
Dimethyl-5-nitrobenzene, 1,3-	99-12-7	–	–	–	1.3E-02	2.0E+03	4.1E+03	–	–	1.5E-01	1.5E+01
Dimethylphenethylamine, alpha, alpha-	122-09-8	–	–	–	–	2.0E+03	4.1E+03	–	–	1.5E-01	1.5E+01
Dimethyl phenol, 2,4-	105-67-9	–	–	–	–	2.0E+04	4.1E+04	–	–	1.5E+00	1.5E+02
Dimethylaminoazobenzene, p-	60-11-7	–	–	–	–	1.0E+01	2.0E+01	–	–	7.3E-04	7.3E-02
Dimethylbenz-a-anthracene, 7,12-	57-97-6	1.7E-06	1.1E-01	1.8E-01	–	–	–	8.2E-06	8.2E-04	–	–
Dimethylbenzidine, 3,3'-	119-93-7	–	2.6E+00	5.2E+00	–	–	–	1.9E-04	1.9E-02	–	–
Dimethylformamide, N,N-	68-12-2	–	–	–	4.4E-02	1.0E+05	–	–	–	7.3E+00	7.3E+02
Dimethylnaphthalene, 1,3-	575-41-7	–	–	–	–	4.1E+04	6.3E+04	–	–	2.9E+00	2.9E+02
Dimethylphthalate	131-11-3	–	–	–	–	8.2E+05	1.0E+06	–	–	5.8E+01	5.8E+03

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Individual RBELs Commercial/Industrial

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Chemical of Concern	CAS	Soil						Groundwater			
		Carcinogenic			Noncarcinogenic			Carcinogenic		Noncarcinogenic	
		Air ¹ RBEL _{Inh} (mg/m ³)	Soil ¹ RBEL _{Ing} (mg/kg)	Soil ¹ RBEL _{Derm} (mg/kg)	Air ¹ RBEL _{Inh} (mg/m ³)	Soil ¹ RBEL _{Ing} (mg/kg)	Soil ¹ RBEL _{Derm} (mg/kg)	GW ¹ RBEL _{Ing} (mg/L)	GW ² RBEL _{Class 3} (mg/L)	GW ¹ RBEL _{Ing} (mg/L)	GW ² RBEL _{Class 3} (mg/L)
Di-n-butyl phthalate	84-74-2	—	—	—	—	1.0E+05	2.0E+05	—	—	7.3E+00	7.3E+02
Dinitro-2-methylphenol, 4,6- (dinitro-o-cresol, 4, 6-)	534-52-1	—	—	—	—	1.0E+02	2.0E+02	—	—	7.3E-03	7.3E-01
Dinitrobenzene, 1,3- (dinitrobenzene, 2,4-)	99-65-0	—	—	—	—	1.0E+02	2.0E+02	—	—	7.3E-03	7.3E-01
Dinitrobenzene, 1,4-	100-25-4	—	—	—	—	1.0E+02	2.0E+02	—	—	7.3E-03	7.3E-01
Dinitrophenol, 2,4-	51-28-5	—	—	—	—	2.0E+03	4.1E+03	—	—	1.5E-01	1.5E+01
Dinitrophenol, 2,5-	329-71-5	—	—	—	—	2.0E+03	4.1E+03	—	—	1.5E-01	1.5E+01
Dinitrotoluene, 2,4-	121-14-2	—	4.2E+01	8.4E+01	—	2.0E+03	4.1E+03	3.0E-03	3.0E-01	1.5E-01	1.5E+01
Dinitrotoluene, 2,6-	606-20-2	—	4.2E+01	8.4E+01	—	1.0E+03	2.0E+03	3.0E-03	3.0E-01	7.3E-02	7.3E+00
Di-n-octyl phthalate	117-84-0	—	—	—	—	1.0E+04	2.0E+04	—	—	7.3E-01	7.3E+01
Dinoseb	88-85-7	—	—	—	—	1.0E+03	2.0E+03	—	—	7.3E-02	7.3E+00
Dioxane 1,4-	123-91-1	8.2E-03	2.9E+02	—	1.6E-01	3.1E+04	—	2.0E-02	2.0E+00	2.2E+00	2.2E+02
Dioxin (as 2,3,7,8-TCDD toxicity equivalent quotients (TEQs))	1746-01-6	—	—	—	—	—	—	—	—	—	—
Diphenyl ether	101-84-8	—	—	—	—	6.3E+03	1.3E+04	—	—	4.5E-01	4.5E+01
Diphenylamine	122-39-4	—	—	—	—	2.6E+04	5.1E+04	—	—	1.8E+00	1.8E+02
Diphenylhydrazine, 1,2-	122-66-7	1.9E-04	3.6E+01	7.2E+01	—	—	—	2.6E-03	2.6E-01	—	—
Dipropylene glycol	110-98-5	—	—	—	—	1.2E+05	2.5E+05	—	—	8.8E+00	8.8E+02
Diquat	85-00-7	—	—	—	—	2.2E+03	4.5E+03	—	—	1.6E-01	1.6E+01
Disodium iminodiacetate (iminodiacetic acid, disodium salt)	142-73-4	—	—	—	—	1.0E+04	2.0E+04	—	—	7.3E-01	7.3E+01
Disulfoton	298-04-4	—	—	—	—	4.1E+01	8.2E+01	—	—	2.9E-03	2.9E-01
Diuron	330-54-1	—	—	—	—	2.0E+03	4.1E+03	—	—	1.5E-01	1.5E+01
Dodecylphenol, 4-	104-43-8	—	—	—	—	5.1E+04	1.0E+05	—	—	3.7E+00	3.7E+02
Endosulfan	115-29-7	—	—	—	—	6.1E+03	1.2E+04	—	—	4.4E-01	4.4E+01
Endosulfan I	959-98-8	—	—	—	—	2.0E+03	4.1E+03	—	—	1.5E-01	1.5E+01
Endosulfan II	33213-65-9	—	—	—	—	6.1E+03	1.2E+04	—	—	4.4E-01	4.4E+01
Endosulfan sulfate	1031-07-8	—	—	—	—	6.1E+03	1.2E+04	—	—	4.4E-01	4.4E+01
Endothall	145-73-3	—	—	—	—	2.0E+04	4.1E+04	—	—	1.5E+00	1.5E+02
Endrin	72-20-8	—	—	—	—	3.1E+02	6.1E+02	—	—	2.2E-02	2.2E+00
Endrin aldehyde	7421-93-4	—	—	—	—	3.1E+02	6.1E+02	—	—	2.2E-02	2.2E+00
Endrin ketone	53494-70-5	—	—	—	—	3.1E+02	6.1E+02	—	—	2.2E-02	2.2E+00
Epichlorohydrin	106-89-8	3.4E-02	2.9E+03	—	1.5E-03	6.1E+03	—	2.1E-01	2.1E+01	4.4E-01	4.4E+01
EPN (o-ethyl o-(4-nitrophenyl)phenylphosphonothioate)	2104-64-5	—	—	—	—	1.0E+01	2.0E+01	—	—	7.3E-04	7.3E-02
Esfenvalerate	66230-04-4	—	—	—	—	2.0E+03	4.1E+03	—	—	1.5E-01	1.5E+01
Ethalfuralin (sonolan)	55283-68-6	—	3.2E+02	6.4E+02	—	4.1E+04	8.2E+04	2.3E-02	2.3E+00	2.9E+00	2.9E+02
Ethanol	64-17-5	—	—	—	—	1.0E+06	—	—	—	2.4E+03	2.4E+05

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Individual RBELs Commercial/Industrial

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Chemical of Concern	CAS	Soil						Groundwater			
		Carcinogenic			Noncarcinogenic			Carcinogenic		Noncarcinogenic	
		Air RBEL _{Inh} (mg/m ³)	Soil RBEL _{Ing} (mg/kg)	Soil RBEL _{Derm} (mg/kg)	Air RBEL _{Inh} (mg/m ³)	Soil RBEL _{Ing} (mg/kg)	Soil RBEL _{Derm} (mg/kg)	GW RBEL _{Ing} ¹ (mg/L)	GW RBEL _{Class 3} ² (mg/L)	GW RBEL _{Ing} ¹ (mg/L)	GW RBEL _{Class 3} ² (mg/L)
Ethanol, 2-amino-	141-43-5	—	—	—	3.4E-02	1.7E+03	3.5E+03	—	—	1.2E-01	1.2E+01
Ethanol, 2-(2-aminoethoxy)-	929-06-6	—	—	—	—	5.1E+02	1.0E+03	—	—	3.7E-02	3.7E+00
Ethanol, 2-(2-ethoxyethoxy)-	111-90-0	—	—	—	—	1.0E+06	1.0E+06	—	—	1.5E+02	1.5E+04
Ethanol, 2-(methylamino)-	109-83-1	—	—	—	6.7E-02	1.6E+04	3.3E+04	—	—	1.2E+00	1.2E+02
Ethion	563-12-2	—	—	—	—	5.1E+02	1.0E+03	—	—	3.7E-02	3.7E+00
Ethoprop	13194-48-4	—	1.0E+03	2.0E+03	—	1.0E+02	2.0E+02	7.3E-02	7.3E+00	7.3E-03	7.3E-01
Ethoxy ethanol, 2-	110-80-5	—	—	—	2.9E-01	9.2E+04	—	—	—	6.6E+00	6.6E+02
Ethyl acetate	141-78-6	—	—	—	3.4E-01	9.2E+05	—	—	—	6.6E+01	6.6E+03
Ethyl acrylate	140-88-5	—	6.0E+02	—	1.2E-02	5.1E+03	—	4.3E-02	4.3E+00	3.7E-01	3.7E+01
Ethyl benzene	100-41-4	—	—	—	2.8E+00	1.0E+05	—	—	—	7.3E+00	7.3E+02
Ethyl dipropylthiocarbamate, S-	759-94-4	—	—	—	—	2.6E+04	5.1E+04	—	—	1.8E+00	1.8E+02
Ethyl ether	60-29-7	—	—	—	—	2.0E+05	—	—	—	1.5E+01	1.5E+03
Ethyl methacrylate	97-63-2	—	—	—	4.4E-01	9.2E+04	—	—	—	6.6E+00	6.6E+02
Ethyl methanesulfonate	62-50-0	1.5E-03	2.9E+02	5.8E+02	—	—	—	2.1E-02	2.1E+00	—	—
Ethyl tert-butyl ether (2-ethyl-2-ethoxypropane)	637-92-3	—	—	—	4.4E-01	1.0E+03	—	—	—	7.3E-02	7.3E+00
Ethyl-1-hexanol, 2-	104-76-7	—	—	—	—	1.5E+05	3.1E+05	—	—	1.1E+01	1.1E+03
Ethyl-2-hexenal, 2-	645-62-5	—	—	—	—	1.5E+05	—	—	—	1.1E+01	1.1E+03
Ethyl-2-methyl benzene, 1-	611-14-3	—	—	—	5.8E-01	5.1E+04	—	—	—	3.7E+00	3.7E+02
Ethyl-4-methyl benzene, 1-	622-96-8	—	—	—	5.8E-01	5.1E+04	—	—	—	3.7E+00	3.7E+02
Ethylene*	74-85-1	—	—	—	—	—	—	—	—	—	—
Ethylene dibromide (dibromoethane, 1,2-)	106-93-4	9.3E-04	1.4E+01	—	9.8E-02	9.2E+03	—	1.0E-03	1.0E-01	6.6E-01	6.6E+01
Ethylene glycol	107-21-1	—	—	—	—	1.0E+06	1.0E+06	—	—	1.5E+02	1.5E+04
Ethylene oxide	75-21-8	2.9E-02	2.8E+01	—	—	—	—	2.0E-03	2.0E-01	—	—
Ethylene thiourea	96-45-7	—	2.6E+02	5.2E+02	—	8.2E+01	1.6E+02	1.9E-02	1.9E+00	5.8E-03	5.8E-01
Ethylenediamine	107-15-3	—	—	—	—	9.2E+04	—	—	—	6.6E+00	6.6E+02
Ethylenimine	151-56-4	2.2E-06	4.4E-01	—	—	—	—	3.1E-05	3.1E-03	—	—
Ethylhexyl acrylate, 2-	103-11-7	—	6.0E+02	1.2E+03	—	—	—	4.3E-02	4.3E+00	—	—
Famphur	52-85-7	—	—	—	—	3.1E+01	6.1E+01	—	—	2.2E-03	2.2E-01
Fensulfothion	115-90-2	—	—	—	—	1.0E+03	2.0E+03	—	—	7.3E-02	7.3E+00
Fenthion	55-38-9	—	—	—	—	7.2E+01	1.4E+02	—	—	5.1E-03	5.1E-01
Fenuron	101-42-8	—	—	—	—	7.2E+04	1.4E+05	—	—	5.1E+00	5.1E+02
Fluoranthene	206-44-0	—	—	—	—	4.1E+04	6.3E+04	—	—	2.9E+00	2.9E+02
Fluorene	86-73-7	—	—	—	—	4.1E+04	6.3E+04	—	—	2.9E+00	2.9E+02
Fluorine (soluble fluoride)	7782-41-4	—	—	—	3.9E-02	6.1E+04	1.0E+06	—	—	4.4E+00	4.4E+02

Table 10
Individual RBELs Commercial/Industrial

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Chemical of Concern	CAS	Soil						Groundwater			
		Carcinogenic			Noncarcinogenic			Carcinogenic		Noncarcinogenic	
		Air RBEL _{Inh} (mg/m ³)	Soil RBEL _{Ing} (mg/kg)	Soil RBEL _{Derm} (mg/kg)	Air RBEL _{Inh} (mg/m ³)	Soil RBEL _{Ing} (mg/kg)	Soil RBEL _{Derm} (mg/kg)	GW RBEL _{Ing} ¹ (mg/L)	GW RBEL _{Class 3} ² (mg/L)	GW RBEL _{Ing} ¹ (mg/L)	GW RBEL _{Class 3} ² (mg/L)
Fluorochloridone	61213-25-0	—	—	—	—	7.7E+03	1.5E+04	—	—	5.5E-01	5.5E+01
Fonofos	944-22-9	—	—	—	—	2.0E+03	4.1E+03	—	—	1.5E-01	1.5E+01
Formaldehyde	50-00-0	—	—	—	1.6E-02	2.0E+05	—	—	—	1.5E+01	1.5E+03
Formic acid	64-18-6	—	—	—	4.4E-03	9.2E+05	—	—	—	6.6E+01	6.6E+03
Furan	110-00-9	—	—	—	—	1.0E+03	—	—	—	7.3E-02	7.3E+00
Furfural	98-01-1	—	—	—	—	3.1E+03	—	—	—	2.2E-01	2.2E+01
Glycidylaldehyde	765-34-4	—	—	—	1.5E-03	4.1E+02	—	—	—	2.9E-02	2.9E+00
Glyphosate	1071-83-6	—	—	—	—	1.0E+06	1.0E+06	—	—	7.3E+01	7.3E+03
Heptachlor	76-44-8	3.1E-05	6.4E+00	1.3E+01	—	5.1E+02	1.0E+03	4.5E-04	4.5E-02	3.7E-02	3.7E+00
Heptachlor epoxide	1024-57-3	1.6E-05	3.1E+00	6.3E+00	—	1.3E+01	2.7E+01	2.2E-04	2.2E-02	9.5E-04	9.5E-02
Heptane, n-	142-82-5	—	—	—	1.3E+01	6.1E+04	—	—	—	4.4E+00	4.4E+02
Heptanoic acid, n-	111-14-8	—	—	—	1.5E-03	5.1E+05	1.0E+06	—	—	3.7E+01	3.7E+03
Hexachlorobenzene	118-74-1	8.9E-05	1.8E+01	3.6E+01	—	8.2E+02	1.6E+03	1.3E-03	1.3E-01	5.8E-02	5.8E+00
Hexachlorobutadiene	87-68-3	1.9E-03	3.7E+02	7.3E+02	—	1.0E+03	2.0E+03	2.6E-02	2.6E+00	7.3E-02	7.3E+00
Hexachlorocyclohexane, alpha (alpha-BHC)	319-84-6	2.3E-05	4.5E+00	2.3E+01	—	8.2E+03	4.1E+04	3.2E-04	3.2E-02	5.8E-01	5.8E+01
Hexachlorocyclohexane, beta (beta-BHC)	319-85-7	7.7E-05	1.6E+01	7.9E+01	—	—	—	1.1E-03	1.1E-01	—	—
Hexachlorocyclohexane, delta (delta-BHC)	319-86-8	8.0E-05	1.6E+01	7.9E+01	—	3.1E+02	1.5E+03	1.1E-03	1.1E-01	2.2E-02	2.2E+00
Hexachlorocyclohexane, gamma (lindane; gamma-BHC)	58-89-9	—	2.2E+01	1.1E+02	—	3.1E+02	1.5E+03	1.6E-03	1.6E-01	2.2E-02	2.2E+00
Hexachlorocyclohexane, techn (technical-BHC)	608-73-1	8.0E-05	1.6E+01	7.9E+01	—	—	—	1.1E-03	1.1E-01	—	—
Hexachlorocyclopentadiene	77-47-4	—	—	—	2.9E-04	6.1E+03	1.2E+04	—	—	4.4E-01	4.4E+01
Hexachloroethane	67-72-1	—	7.2E+02	1.4E+03	4.4E-02	7.2E+02	1.4E+03	5.1E-02	5.1E+00	5.1E-02	5.1E+00
Hexachlorophene	70-30-4	—	—	—	—	3.1E+02	6.1E+02	—	—	2.2E-02	2.2E+00
Hexachloropropylene	1888-71-7	—	7.2E+02	1.4E+03	4.4E-02	7.2E+02	1.4E+03	5.1E-02	5.1E+00	5.1E-02	5.1E+00
Hexanal, 2-ethyl-	123-05-7	—	—	—	—	1.5E+05	3.1E+05	—	—	1.1E+01	1.1E+03
Hexane, n-	110-54-3	—	—	—	9.8E-01	6.1E+04	—	—	—	4.4E+00	4.4E+02
Hexanediamine, 1,6-	124-09-4	—	—	—	—	5.1E+03	1.0E+04	—	—	3.7E-01	3.7E+01
Hexanedinitrile	111-69-3	—	—	—	8.8E-03	1.4E+03	2.9E+03	—	—	1.0E-01	1.0E+01
Hexanediol, 1,6-	629-11-8	—	—	—	2.7E+01	1.0E+06	1.0E+06	—	—	3.7E+02	3.7E+04
Hexanoic acid	142-62-1	—	—	—	1.5E-03	6.5E+04	1.3E+05	—	—	4.7E+00	4.7E+02
Hexanone, 2-	591-78-6	—	—	—	4.4E-02	5.1E+04	—	—	—	3.7E+00	3.7E+02
Hexazinone	51235-04-2	—	—	—	—	3.4E+04	6.7E+04	—	—	2.4E+00	2.4E+02
Hexene, 1-	592-41-6	—	—	—	1.6E-01	3.4E+05	—	—	—	2.4E+01	2.4E+03
Hexene, cis-2-	7688-21-3	—	—	—	1.6E-01	3.4E+05	—	—	—	2.4E+01	2.4E+03
Hexylene glycol (2-methyl-2,4-pentanediol)	107-41-5	—	—	—	—	3.1E+05	6.1E+05	—	—	2.2E+01	2.2E+03

Table 10
Individual RBELs Commercial/Industrial

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Chemical of Concern	CAS	Soil						Groundwater			
		Carcinogenic			Noncarcinogenic			Carcinogenic		Noncarcinogenic	
		Air RBEL _{Inh} (mg/m ³)	Soil RBEL _{Ing} (mg/kg)	Soil RBEL _{Derm} (mg/kg)	Air RBEL _{Inh} (mg/m ³)	Soil RBEL _{Ing} (mg/kg)	Soil RBEL _{Derm} (mg/kg)	GW RBEL _{Ing} ¹ (mg/L)	GW RBEL _{Class 3} ² (mg/L)	GW RBEL _{Ing} ¹ (mg/L)	GW RBEL _{Class 3} ² (mg/L)
Hydrazine	302-01-2	8.3E-06	9.5E+00	—	4.4E-05	—	—	6.8E-04	6.8E-02	—	—
Hydrocaproic acid, 6- (6-hydroxyhexanoic acid)	1191-25-9	—	—	—	1.5E-03	6.5E+04	1.3E+05	—	—	4.7E+00	4.7E+02
Hydrogen chloride (hydrochloric acid)*	7647-01-0	—	—	—	—	—	—	—	—	—	—
Hydroquinone	123-31-9	—	4.8E+02	9.5E+02	—	4.1E+04	8.2E+04	3.4E-02	3.4E+00	2.9E+00	2.9E+02
Indene	95-13-6	—	—	—	4.4E-03	2.0E+04	—	—	—	1.5E+00	1.5E+02
Indeno-1,2,3-cd-pyrene	193-39-5	6.8E-04	2.9E+02	4.4E+02	—	—	—	2.0E-02	2.0E+00	—	—
Iron*	7439-89-6	—	—	—	—	—	—	—	—	—	—
Isoamyl alcohol	123-51-3	—	—	—	—	5.1E+03	—	—	—	3.7E-01	3.7E+01
Isobutyl alcohol	78-83-1	—	—	—	—	3.1E+05	—	—	—	2.2E+01	2.2E+03
Isobutylene (2-methyl-1-propene)	115-11-7	—	—	—	1.6E+02	3.8E+03	—	—	—	2.7E-01	2.7E+01
Isobutyric acid (2-methylpropanoic acid)	79-31-2	—	—	—	—	5.1E+05	1.0E+06	—	—	3.7E+01	3.7E+03
Isodecanol	25339-17-7	—	—	—	—	1.6E+03	3.3E+03	—	—	1.2E-01	1.2E+01
Isodrin	465-73-6	8.3E-07	1.7E-01	3.4E-01	—	3.1E+00	6.1E+00	1.2E-05	1.2E-03	2.2E-04	2.2E-02
Isopentane	78-78-4	—	—	—	3.5E+01	6.1E+04	—	—	—	4.4E+00	4.4E+02
Isophorone	78-59-1	—	3.0E+04	6.0E+04	—	2.0E+05	4.1E+05	2.2E+00	2.2E+02	1.5E+01	1.5E+03
Isopropyl acetate	108-21-4	—	—	—	—	7.2E+04	—	—	—	5.1E+00	5.1E+02
Isopropyl alcohol	67-63-0	—	—	—	2.9E-01	1.0E+06	—	—	—	1.5E+02	1.5E+04
Isosafrole	120-58-1	6.5E-04	1.3E+02	2.6E+02	—	—	—	9.3E-03	9.3E-01	—	—
Kelthane (dicofol)	115-32-2	—	—	—	—	6.1E+03	1.2E+04	—	—	4.4E-01	4.4E+01
Kepone (chlordecone)	143-50-0	8.9E-06	2.9E+00	5.7E+00	—	3.1E+02	6.1E+02	2.0E-04	2.0E-02	2.2E-02	2.2E+00
Lead (inorganic)	7439-92-1	—	—	—	—	—	—	—	—	—	—
Leptophos	21609-90-5	—	—	—	2.6E-06	5.1E+00	1.0E+01	—	—	3.7E-04	3.7E-02
Limonene, d-*	5989-27-5	—	—	—	—	—	—	—	—	—	—
Lithium	7439-93-2	—	—	—	—	7.2E+03	1.4E+05	—	—	5.1E-01	5.1E+01
Magnesium*	7439-95-4	—	—	—	—	—	—	—	—	—	—
Malathion	121-75-5	—	—	—	2.9E-04	2.0E+04	4.1E+04	—	—	1.5E+00	1.5E+02
Maleic anhydride	108-31-6	—	—	—	—	1.0E+05	2.0E+05	—	—	7.3E+00	7.3E+02
Maleic hydrazide	123-33-1	—	—	—	—	5.1E+05	1.0E+06	—	—	3.7E+01	3.7E+03
Malononitrile	109-77-3	—	—	—	—	1.0E+02	2.0E+02	—	—	7.3E-03	7.3E-01
Mancozeb	8018-01-7	—	—	—	—	3.1E+04	6.1E+04	—	—	2.2E+00	2.2E+02
Manganese	7439-96-5	—	—	—	1.2E-03	1.4E+05	1.7E+05	—	—	1.0E+01	1.0E+03
MCPA (4-(chloro-2-methylphenoxy) acetic acid)	94-74-6	—	—	—	—	5.1E+02	1.0E+03	—	—	3.7E-02	3.7E+00
MCPP (2-(4-chloro-2-methylphenoxy) propanoic acid)	93-65-2	—	—	—	—	1.0E+03	2.0E+03	—	—	7.3E-02	7.3E+00
Mercury (pH = 4.9)	7439-97-6	—	—	—	4.4E-04	3.1E+02	4.3E+02	—	—	2.2E-02	2.2E+00

Table 10
Individual RBELs Commercial/Industrial

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Chemical of Concern	CAS	Soil						Groundwater			
		Carcinogenic			Noncarcinogenic			Carcinogenic		Noncarcinogenic	
		Air RBEL _{Inh} (mg/m ³)	Soil RBEL _{Ing} (mg/kg)	Soil RBEL _{Derm} (mg/kg)	Air RBEL _{Inh} (mg/m ³)	Soil RBEL _{Ing} (mg/kg)	Soil RBEL _{Derm} (mg/kg)	GW RBEL _{Ing} ¹ (mg/L)	GW RBEL _{Class 3} ² (mg/L)	GW RBEL _{Ing} ¹ (mg/L)	GW RBEL _{Class 3} ² (mg/L)
Mercury (pH=6.8)	7439-97-6	—	—	—	4.4E-04	3.1E+02	4.3E+02	—	—	2.2E-02	2.2E+00
Merphos	150-50-5	—	—	—	—	3.1E+01	6.1E+01	—	—	2.2E-03	2.2E-01
Methacrylic acid (2-methyl-2-propenoic acid)	79-41-4	—	—	—	—	1.0E+04	—	—	—	7.3E-01	7.3E+01
Methacrylonitrile	126-98-7	—	—	—	4.4E-02	5.1E+04	—	—	—	3.7E+00	3.7E+02
Methanol	67-56-1	—	—	—	1.1E+01	1.0E+06	—	—	—	1.5E+02	1.5E+04
Methapyrilene	91-80-5	—	6.1E+00	1.2E+01	—	—	—	4.3E-04	4.3E-02	—	—
Methomyl	16752-77-5	—	—	—	—	2.6E+04	5.1E+04	—	—	1.8E+00	1.8E+02
Methoxychlor	72-43-5	—	—	—	—	5.1E+03	1.0E+04	—	—	3.7E-01	3.7E+01
Methoxyethanol, 2-	109-86-4	—	—	—	2.9E-02	2.8E+04	—	—	—	2.0E+00	2.0E+02
Methyl acetate (acetic acid, methyl ester)	79-20-9	—	—	—	—	1.0E+06	—	—	—	7.3E+01	7.3E+03
Methyl acrylate	96-33-3	—	—	—	2.9E-02	2.0E+03	—	—	—	1.5E-01	1.5E+01
Methyl amyl ketone (2-heptanone)	110-43-0	—	—	—	4.1E+00	5.1E+04	—	—	—	3.7E+00	3.7E+02
Methyl chrysene, 1-	3351-28-8	4.6E-02	3.9E+03	6.0E+03	—	—	—	2.8E-01	2.8E+01	—	—
Methyl chrysene, 2-	3351-32-4	4.6E-02	3.9E+03	6.0E+03	—	—	—	2.8E-01	2.8E+01	—	—
Methyl chrysene, 6-	1705-85-7	4.6E-03	3.9E+02	6.0E+02	—	—	—	2.8E-02	2.8E+00	—	—
Methyl cyclohexane	108-87-2	—	—	—	4.4E+00	1.0E+06	—	—	—	3.7E+02	3.7E+04
Methyl ethyl ketone (2-butanone)	78-93-3	—	—	—	1.3E+01	6.1E+05	—	—	—	4.4E+01	4.4E+03
Methyl iodide (iodomethane)	74-88-4	—	—	—	—	1.4E+03	—	—	—	1.0E-01	1.0E+01
Methyl isobutyl ketone (4-methyl-2-pentanone)	108-10-1	—	—	—	4.4E+00	8.2E+04	—	—	—	5.8E+00	5.8E+02
Methyl mercury	22967-92-6	—	—	—	—	1.0E+02	2.0E+03	—	—	7.3E-03	7.3E-01
Methyl methacrylate	80-62-6	—	—	—	1.0E+00	1.0E+06	—	—	—	1.0E+02	1.0E+04
Methyl methanesulfonate	66-27-3	1.5E-03	2.9E+02	5.8E+02	—	—	—	2.1E-02	2.1E+00	—	—
Methyl parathion	298-00-0	—	—	—	—	2.6E+02	5.1E+02	—	—	1.8E-02	1.8E+00
Methyl-1-butene, 2-	563-46-2	—	—	—	2.6E+01	6.1E+04	—	—	—	4.4E+00	4.4E+02
Methyl-1-propanal, 2- (isobutyraldehyde)	78-84-2	—	—	—	—	4.1E+04	—	—	—	2.9E+00	2.9E+02
Methyl-2-butene, 2-	513-35-9	—	—	—	2.6E+01	6.1E+04	—	—	—	4.4E+00	4.4E+02
Methyl-2-pentenal, 2-	623-36-9	—	1.5E+01	—	—	—	—	1.1E-03	1.1E-01	—	—
Methylcholanthrene, 3-	56-49-5	1.9E-05	1.3E+00	2.0E+00	—	—	—	9.3E-05	9.3E-03	—	—
Methylene bromide (dibromomethane)	74-95-3	—	3.8E+03	—	5.8E-03	6.1E+04	—	2.7E-01	2.7E+01	4.4E+00	4.4E+02
Methylene chloride (dichloromethane)	75-09-2	1.5E+00	2.9E+05	—	1.9E+00	2.1E+04	—	2.1E+01	2.1E+03	1.5E+00	1.5E+02
Methylene-bis (2-chloroaniline) 4,4'-	101-14-4	1.1E-03	2.9E+02	5.7E+02	—	2.0E+03	4.1E+03	2.0E-02	2.0E+00	1.5E-01	1.5E+01
Methylmercury hydroxide	1184-57-2	—	—	—	—	1.0E+02	2.0E+02	—	—	7.3E-03	7.3E-01
Methylnaphthalene, 1-	90-12-0	—	9.9E+02	1.5E+03	—	7.2E+04	1.1E+05	7.0E-02	7.0E+00	5.1E+00	5.1E+02
Methylnaphthalene, 2-	91-57-6	—	—	—	—	4.1E+03	6.3E+03	—	—	2.9E-01	2.9E+01

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Chemical of Concern	CAS	Soil						Groundwater			
		Carcinogenic			Noncarcinogenic			Carcinogenic		Noncarcinogenic	
		Air ¹ RBEL _{Inh} (mg/m ³)	Soil ¹ RBEL _{Ing} (mg/kg)	Soil ¹ RBEL _{Derm} (mg/kg)	Air ¹ RBEL _{Inh} (mg/m ³)	Soil ¹ RBEL _{Ing} (mg/kg)	Soil ¹ RBEL _{Derm} (mg/kg)	GW ¹ RBEL _{Ing} (mg/L)	GW ² RBEL _{Class 3} (mg/L)	GW ¹ RBEL _{Ing} (mg/L)	GW ² RBEL _{Class 3} (mg/L)
Methylpyrrolidone, N-	872-50-4	—	—	—	—	2.0E+04	4.1E+04	—	—	1.5E+00	1.5E+02
Methylstyrene, alpha-	98-83-9	—	—	—	3.7E-02	8.5E+03	—	—	—	6.1E-01	6.1E+01
Methyltetrahydrofuran, 2-	96-47-9	2.2E-02	3.8E+03	—	—	2.0E+05	—	2.7E-01	2.7E+01	1.5E+01	1.5E+03
Methyltetrahydropyran, 2-	10141-72-7	2.2E-02	3.8E+03	—	—	2.0E+05	—	2.7E-01	2.7E+01	1.5E+01	1.5E+03
Metolachlor	51218-45-2	—	—	—	—	1.5E+05	3.1E+05	—	—	1.1E+01	1.1E+03
Metribuzin	21087-64-9	—	—	—	—	2.6E+04	5.1E+04	—	—	1.8E+00	1.8E+02
Mirex	2385-85-5	—	—	—	—	2.0E+02	4.1E+02	—	—	1.5E-02	1.5E+00
Molinate	2212-67-1	—	—	—	—	2.0E+03	4.1E+03	—	—	1.5E-01	1.5E+01
Molybdenum	7439-98-7	—	—	—	—	5.1E+03	3.9E+04	—	—	3.7E-01	3.7E+01
Monocrotophos	2157-98-4	—	—	—	—	6.1E+02	1.2E+03	—	—	4.4E-02	4.4E+00
Morpholine	110-91-8	—	—	—	—	1.0E+06	—	—	—	3.7E+04	3.7E+06
Morpholine, N-butyl-	1005-67-0	—	—	—	—	2.4E+03	4.7E+03	—	—	1.7E-01	1.7E+01
MTBE (methyl tert-butyl ether)	1634-04-4	1.6E-01	1.6E+04	—	4.4E+00	1.0E+04	—	1.1E+00	1.1E+02	7.3E-01	7.3E+01
Naled	300-76-5	—	—	—	—	2.0E+03	4.1E+03	—	—	1.5E-01	1.5E+01
Naphthalene	91-20-3	—	—	—	4.4E-03	2.0E+04	3.1E+04	—	—	1.5E+00	1.5E+02
Naphthoquinone, 1,4-	130-15-4	—	—	—	—	7.2E+03	1.4E+04	—	—	5.1E-01	5.1E+01
Naphthylamine, 1-	134-32-7	—	—	—	—	2.0E+04	4.1E+04	—	—	1.5E+00	1.5E+02
Naphthylamine, 2-	91-59-8	—	1.6E+01	3.2E+01	—	—	—	1.1E-03	1.1E-01	—	—
Napropamide	15299-99-7	—	—	—	—	1.0E+05	2.0E+05	—	—	7.3E+00	7.3E+02
Neopentyl glycol	126-30-7	—	—	—	—	3.1E+05	6.1E+05	—	—	2.2E+01	2.2E+03
Nickel and compounds	7440-02-0	2.4E-04	—	—	3.4E-04	2.0E+04	1.6E+04	—	—	1.5E+00	1.5E+02
Nitrate-N	14797-55-8	—	—	—	—	1.0E+06	1.0E+06	—	—	1.2E+02	1.2E+04
Nitrite-N	14797-65-0	—	—	—	—	1.0E+05	1.0E+06	—	—	7.3E+00	7.3E+02
Nitroaniline, 2-	88-74-4	—	—	—	2.9E-04	3.1E+02	6.1E+02	—	—	2.2E-02	2.2E+00
Nitroaniline, 3-	99-09-2	—	7.5E+02	1.5E+03	2.9E-04	3.1E+02	6.1E+02	5.4E-02	5.4E+00	2.2E-02	2.2E+00
Nitroaniline, 4-	100-01-6	—	1.4E+03	2.9E+03	8.8E-03	4.1E+03	8.2E+03	1.0E-01	1.0E+01	2.9E-01	2.9E+01
Nitrobenzene	98-95-3	1.0E-03	—	—	1.3E-02	2.0E+03	4.1E+03	—	—	1.5E-01	1.5E+01
Nitroglycerin	55-63-0	—	1.7E+03	3.4E+03	—	1.0E+02	2.0E+02	1.2E-01	1.2E+01	7.3E-03	7.3E-01
Nitrophenol, 2-	88-75-5	—	—	—	—	2.0E+03	4.1E+03	—	—	1.5E-01	1.5E+01
Nitrophenol, 3-	554-84-7	—	—	—	—	2.0E+03	4.1E+03	—	—	1.5E-01	1.5E+01
Nitrophenol, 4-	100-02-7	—	—	—	—	2.0E+03	4.1E+03	—	—	1.5E-01	1.5E+01
Nitropropane, 2-	79-46-9	7.0E-05	—	—	2.9E-02	1.4E+02	—	—	—	1.0E-02	1.0E+00
Nitroquinoline-N-oxide, 4-	56-57-5	1.5E-05	3.0E+00	6.1E+00	—	—	—	2.2E-04	2.2E-02	—	—
Nitrosodiethanolamine	1116-54-7	—	1.0E+01	2.0E+01	—	—	—	7.3E-04	7.3E-02	—	—

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Chemical of Concern	CAS	Soil						Groundwater			
		Carcinogenic			Noncarcinogenic			Carcinogenic		Noncarcinogenic	
		Air RBEL _{Inh} (mg/m ³)	Soil RBEL _{Ing} (mg/kg)	Soil RBEL _{Derm} (mg/kg)	Air RBEL _{Inh} (mg/m ³)	Soil RBEL _{Ing} (mg/kg)	Soil RBEL _{Derm} (mg/kg)	GW RBEL _{Ing} ¹ (mg/L)	GW RBEL _{Class 3} ² (mg/L)	GW RBEL _{Ing} ¹ (mg/L)	GW RBEL _{Class 3} ² (mg/L)
Nitrosodiethylamine, n-	55-18-5	9.5E-07	1.9E-01	—	—	—	—	1.4E-05	1.4E-03	—	—
Nitrosodimethylamine, n-	62-75-9	2.9E-06	5.6E-01	—	5.8E-05	8.2E+00	—	4.0E-05	4.0E-03	5.8E-04	5.8E-02
Nitrosodi-n-butylamine, n-	924-16-3	2.6E-05	5.3E+00	1.1E+01	—	—	—	3.8E-04	3.8E-02	—	—
Nitrosodi-n-propylamine, n-	621-64-7	—	4.1E+00	2.0E+00	—	—	—	2.9E-04	2.9E-02	—	—
Nitrosodiphenylamine	86-30-6	—	5.8E+03	2.9E+03	—	—	—	4.2E-01	4.2E+01	—	—
Nitroso-methyl-ethyl-amine, n-	10595-95-6	—	1.3E+00	—	—	—	—	9.3E-05	9.3E-03	—	—
Nitrosomorpholine, N-	59-89-2	2.2E-05	4.3E+00	8.5E+00	—	—	—	3.1E-04	3.1E-02	—	—
Nitroso-n-ethylurea, n-	759-73-9	—	2.0E-01	4.1E-01	—	—	—	1.5E-05	1.5E-03	—	—
Nitrosopiperidine, N-	100-75-4	1.5E-05	3.0E+00	6.1E+00	—	—	—	2.2E-04	2.2E-02	—	—
Nitrosopyrrolidine, n-	930-55-2	6.7E-05	1.4E+01	2.7E+01	—	—	—	9.7E-04	9.7E-02	—	—
Nitrotoluene, m-	99-08-1	—	—	—	—	1.0E+04	2.0E+04	—	—	7.3E-01	7.3E+01
Nitrotoluene, o-	88-72-2	—	1.3E+02	2.6E+02	—	9.2E+02	1.8E+03	9.3E-03	9.3E-01	6.6E-02	6.6E+00
Nitrotoluene, p-	99-99-0	—	1.8E+03	3.6E+03	—	4.1E+03	8.2E+03	1.3E-01	1.3E+01	2.9E-01	2.9E+01
Nonachlor, cis-	5103-73-1	4.1E-04	8.2E+01	1.6E+02	1.0E-03	5.1E+02	1.0E+03	5.8E-03	5.8E-01	3.7E-02	3.7E+00
Nonachlor, trans-	39765-80-5	4.1E-04	8.2E+01	1.6E+02	1.0E-03	5.1E+02	1.0E+03	5.8E-03	5.8E-01	3.7E-02	3.7E+00
Nonanal	124-19-6	—	—	—	—	2.0E+05	4.1E+05	—	—	1.5E+01	1.5E+03
Nonene, 1-n	124-11-8	—	—	—	—	1.0E+05	—	—	—	7.3E+00	7.3E+02
Nonylphenol, 4-n-	104-40-5	—	—	—	—	1.0E+05	2.0E+05	—	—	7.3E+00	7.3E+02
Nonylphenol ethoxylate	9016-45-9	—	—	—	—	1.0E+05	2.0E+05	—	—	7.3E+00	7.3E+02
Octamethylpyrophosphoramidate	152-16-9	—	—	—	—	2.0E+03	4.1E+03	—	—	1.5E-01	1.5E+01
Octanone	106-68-3	—	—	—	2.6E+01	6.1E+04	—	—	—	4.4E+00	4.4E+02
Oxamyl	23135-22-0	—	—	—	—	2.6E+04	5.1E+04	—	—	1.8E+00	1.8E+02
Oxychlorane	27304-13-8	4.1E-04	8.2E+01	1.6E+02	1.0E-03	5.1E+02	1.0E+03	5.8E-03	5.8E-01	3.7E-02	3.7E+00
Paraquat	1910-42-5	—	—	—	—	4.6E+03	9.2E+03	—	—	3.3E-01	3.3E+01
Parathion (ethyl parathion)	56-38-2	—	—	—	—	6.1E+03	1.2E+04	—	—	4.4E-01	4.4E+01
Pebulate	1114-71-2	—	—	—	—	5.1E+04	1.0E+05	—	—	3.7E+00	3.7E+02
Pendimethalin	40487-42-1	—	—	—	—	4.1E+04	8.2E+04	—	—	2.9E+00	2.9E+02
Pentachlorobenzene	608-93-5	—	—	—	—	8.2E+02	1.6E+03	—	—	5.8E-02	5.8E+00
Pentachloroethane	76-01-7	5.5E-03	3.2E+02	—	—	3.1E+04	—	2.3E-02	2.3E+00	2.2E+00	2.2E+02
Pentachloronitrobenzene	82-68-8	—	1.1E+02	2.2E+02	—	3.1E+03	6.1E+03	7.9E-03	7.9E-01	2.2E-01	2.2E+01
Pentachlorophenol	87-86-5	—	7.2E+01	5.7E+01	—	5.1E+03	4.1E+03	5.1E-03	5.1E-01	3.7E-01	3.7E+01
Pentadiene, 1,3-cis-	1574-41-0	—	—	—	2.6E+01	6.1E+04	—	—	—	4.4E+00	4.4E+02
Pentadiene, 1,3-trans-	2004-70-8	—	—	—	2.6E+01	6.1E+04	—	—	—	4.4E+00	4.4E+02
Pentaerythritol tetranitrate (PETN)	78-11-5	—	—	—	—	2.0E+03	4.1E+03	—	—	1.5E-01	1.5E+01

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Chemical of Concern	CAS	Soil						Groundwater			
		Carcinogenic			Noncarcinogenic			Carcinogenic		Noncarcinogenic	
		Air RBEL _{Inh} (mg/m ³)	Soil RBEL _{Ing} (mg/kg)	Soil RBEL _{Derm} (mg/kg)	Air RBEL _{Inh} (mg/m ³)	Soil RBEL _{Ing} (mg/kg)	Soil RBEL _{Derm} (mg/kg)	GW RBEL _{Ing} ¹ (mg/L)	GW RBEL _{Class 3} ² (mg/L)	GW RBEL _{Ing} ¹ (mg/L)	GW RBEL _{Class 3} ² (mg/L)
Pentane	109-66-0	–	–	–	3.5E+01	6.1E+04	–	–	–	4.4E+00	4.4E+02
Pentane, 2-methyl-	107-83-5	–	–	–	2.6E+01	6.1E+04	–	–	–	4.4E+00	4.4E+02
Pentane, 3-methyl-	96-14-0	–	–	–	2.6E+01	6.1E+04	–	–	–	4.4E+00	4.4E+02
Pentanediol, 1,5-	111-29-5	–	–	–	2.7E+01	1.0E+06	1.0E+06	–	–	3.7E+02	3.7E+04
Pentanol, 1-	71-41-0	–	–	–	–	3.4E+04	–	–	–	2.4E+00	2.4E+02
Pentanol, 4-methyl-2-	108-11-2	–	–	–	–	2.7E+04	–	–	–	1.9E+00	1.9E+02
Pentanone, 2-	107-87-9	–	–	–	–	4.1E+04	–	–	–	2.9E+00	2.9E+02
Pentene, 2-	109-68-2	–	–	–	2.6E+01	6.1E+04	–	–	–	4.4E+00	4.4E+02
Pentyne, 1-	627-19-0	–	–	–	2.6E+01	6.1E+04	–	–	–	4.4E+00	4.4E+02
Perchlorate	14797-73-0	–	–	–	–	7.2E+02	2.9E+03	–	–	5.1E-02	5.1E+00
Perfluorooctane sulfonic acid (1-Octanesulfonic acid, heptadecafluoro-1-) [PFOS]	1763-23-1	–	–	–	1.2E-04	2.4E+01	4.7E+01	–	–	1.7E-03	1.7E-01
Perfluoroundecanoic acid (Undecanoic acid, uncosafluoro-) [PFUnDa]	2058-94-8	–	–	–	–	1.2E+01	2.5E+01	–	–	8.8E-04	8.8E-02
Perfluoropentanoic acid (Pentanoic acid, nonafluoro-) [PFPeA]	2706-90-3	–	–	–	–	5.1E+02	1.0E+03	–	–	3.7E-02	3.7E+00
Perfluorohexanoic acid (Hexanoic acid, undecafluoro-) [PFHxA]	307-24-4	–	–	–	–	5.1E+02	1.0E+03	–	–	3.7E-02	3.7E+00
Perfluorododecanoic acid (Dodecanoic acid, tricosafuoro-) [PFDoA]	307-55-1	–	–	–	6.1E-05	1.2E+01	2.5E+01	–	–	8.8E-04	8.8E-02
Perfluorooctanoic acid (Octanoic acid, pentadecafluoro-) [PFOA]	335-67-1	–	–	–	6.0E-06	1.2E+01	2.5E+01	–	–	8.8E-04	8.8E-02
Perfluorodecanoic acid (Decanoic acid, nonadecafluoro-) [PFDA]	335-76-2	–	–	–	7.7E-05	1.5E+01	3.1E+01	–	–	1.1E-03	1.1E-01
Perfluorodecane sulfonic acid (1-Decanesulfonic acid, heneicosafuoro-) [PFDS]	335-77-3	–	–	–	–	1.2E+01	2.5E+01	–	–	8.8E-04	8.8E-02
Perfluorohexane sulfonic acid (1-Hexanesulfonic acid, tridecafluoro-) [PFHxS]	355-46-4	–	–	–	1.9E-05	3.9E+00	7.8E+00	–	–	2.8E-04	2.8E-02
Perfluorobutyric acid (Butanoic acid, heptafluoro-) [PFBA]	375-22-4	–	–	–	5.1E-03	1.0E+03	2.0E+03	–	–	7.3E-02	7.3E+00
Perfluorobutane sulfonic acid (1-Butanesulfonic acid, nonafluoro-) [PFBS]	375-73-5	–	–	–	7.2E-03	1.4E+03	2.9E+03	–	–	1.0E-01	1.0E+01
Perfluoroheptanoic acid (Heptanoic acid, tridecafluoro-) [PFHpA]	375-85-9	–	–	–	–	2.4E+01	4.7E+01	–	–	1.7E-03	1.7E-01
Perfluorononanoic acid (Nonanoic acid, heptadecafluoro-) [PFNA]	375-95-1	–	–	–	4.1E-05	1.2E+01	2.5E+01	–	–	8.8E-04	8.8E-02
Perfluorotetradecanoic acid (Tetradecanoic acid, heptacosafuoro-) [PFTeDA]	376-06-7	–	–	–	–	1.2E+01	2.5E+01	–	–	8.8E-04	8.8E-02
Perfluorotridecanoic acid (Tridecanoic acid, pentacosafuoro-) [PFTrDA]	72629-94-8	–	–	–	–	1.2E+01	2.5E+01	–	–	8.8E-04	8.8E-02
Perfluorooctane sulfonamide (1-Octanesulfonamide, heptadecafluoro-) [PFOSA]	754-91-6	–	–	–	6.0E-06	1.2E+01	2.5E+01	–	–	8.8E-04	8.8E-02
Perylene	198-55-0	–	–	–	–	2.0E+04	4.1E+04	–	–	1.5E+00	1.5E+02
Phenacetin	62-44-2	6.5E-02	1.3E+04	2.6E+04	–	–	–	9.3E-01	9.3E+01	–	–
Phenanthrene	85-01-8	–	–	–	–	3.1E+04	4.7E+04	–	–	2.2E+00	2.2E+02

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Chemical of Concern	CAS	Soil						Groundwater			
		Carcinogenic			Noncarcinogenic			Carcinogenic		Noncarcinogenic	
		Air ¹ RBEL _{Inh} (mg/m ³)	Soil ¹ RBEL _{Ing} (mg/kg)	Soil ¹ RBEL _{Derm} (mg/kg)	Air ¹ RBEL _{Inh} (mg/m ³)	Soil ¹ RBEL _{Ing} (mg/kg)	Soil ¹ RBEL _{Derm} (mg/kg)	GW ¹ RBEL _{Ing} (mg/L)	GW ² RBEL _{Class 3} (mg/L)	GW ¹ RBEL _{Ing} (mg/L)	GW ² RBEL _{Class 3} (mg/L)
Phenanthridine	229-87-8	—	—	—	—	3.1E+03	6.1E+03	—	—	2.2E-01	2.2E+01
Phenol	108-95-2	—	—	—	1.6E-02	3.1E+05	6.1E+05	—	—	2.2E+01	2.2E+03
Phenol, 4-tert-butyl-	98-54-4	—	—	—	—	1.2E+05	2.5E+05	—	—	8.8E+00	8.8E+02
Phenothiazine	92-84-2	—	—	—	—	1.1E+03	2.2E+03	—	—	8.0E-02	8.0E+00
Phenyl mercuric acetate	62-38-4	—	—	—	—	8.2E+01	1.6E+02	—	—	5.8E-03	5.8E-01
Phenylene diamine, m-	108-45-2	—	—	—	—	6.1E+03	1.2E+04	—	—	4.4E-01	4.4E+01
Phenylene diamine, p-	106-50-3	—	—	—	—	1.9E+05	3.9E+05	—	—	1.4E+01	1.4E+03
Phorate	298-02-2	—	—	—	—	2.0E+02	4.1E+02	—	—	1.5E-02	1.5E+00
Phosalone	2310-17-0	—	—	—	—	2.0E+03	4.1E+03	—	—	1.5E-01	1.5E+01
Phosdrin (mevinphos)	7786-34-7	—	—	—	—	2.6E+01	5.1E+01	—	—	1.8E-03	1.8E-01
Phosmet	732-11-6	—	—	—	—	2.0E+04	4.1E+04	—	—	1.5E+00	1.5E+02
Phosphine	7803-51-2	—	—	—	4.4E-04	3.1E+02	1.2E+03	—	—	2.2E-02	2.2E+00
Phosphorotrithioic acid, S,S,S-tributyl ester	78-48-8	—	3.4E+02	6.8E+02	—	5.1E+02	1.0E+03	2.4E-02	2.4E+00	3.7E-02	3.7E+00
Phosphorus, total*	7723-14-0	—	—	—	—	—	—	—	—	—	—
Phosphorus, white	7723-14-0	—	—	—	—	2.0E+01	8.2E+01	—	—	1.5E-03	1.5E-01
Phthalic anhydride	85-44-9	—	—	—	1.8E-01	1.0E+06	1.0E+06	—	—	1.5E+02	1.5E+04
Picloram	1918-02-1	—	—	—	—	7.2E+04	1.4E+05	—	—	5.1E+00	5.1E+02
Picoline, 2- (2-methylpyridine)	109-06-8	—	—	—	—	9.2E+03	—	—	—	6.6E-01	6.6E+01
Polybrominated biphenyls (PBBs)	67774-32-7	—	3.2E+00	6.4E+00	—	7.2E+00	1.4E+01	2.3E-04	2.3E-02	5.1E-04	5.1E-02
Polychlorinated biphenyls (PCBs)	1336-36-3	7.2E-05	1.4E+01	2.0E+01	—	2.0E+01	2.9E+01	1.0E-03	1.0E-01	1.5E-03	1.5E-01
Potassium*	7440-09-7	—	—	—	—	—	—	—	—	—	—
Primene	68955-53-3	—	—	—	—	6.1E+03	1.2E+04	—	—	4.4E-01	4.4E+01
Prometon (pramitol)	1610-18-0	—	—	—	—	1.5E+04	3.1E+04	—	—	1.1E+00	1.1E+02
Prometryn	7287-19-6	—	—	—	—	4.1E+04	8.2E+04	—	—	2.9E+00	2.9E+02
Pronamide	23950-58-5	—	—	—	—	7.7E+04	1.5E+05	—	—	5.5E+00	5.5E+02
Propanal (propionaldehyde)	123-38-6	—	—	—	1.2E-02	8.2E+03	—	—	—	5.8E-01	5.8E+01
Propane, 1-bromo-	106-94-5	—	—	—	—	3.7E+04	—	—	—	2.6E+00	2.6E+02
Propanil	709-98-8	—	—	—	—	5.1E+03	1.0E+04	—	—	3.7E-01	3.7E+01
Propanoic acid (propionic acid)	79-09-4	—	—	—	—	5.1E+05	—	—	—	3.7E+01	3.7E+03
Propanol, 1-	71-23-8	—	—	—	—	1.0E+06	—	—	—	1.5E+02	1.5E+04
Propargite	2312-35-8	—	—	—	—	2.0E+04	4.1E+04	—	—	1.5E+00	1.5E+02
Propargyl alcohol	107-19-7	—	—	—	—	2.0E+03	—	—	—	1.5E-01	1.5E+01
Propazine	139-40-2	—	6.4E+02	1.3E+03	—	2.0E+04	4.1E+04	4.6E-02	4.6E+00	1.5E+00	1.5E+02
Propham	122-42-9	—	—	—	—	2.0E+04	4.1E+04	—	—	1.5E+00	1.5E+02

Table 10
Individual RBELs Commercial/Industrial

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Chemical of Concern	CAS	Soil						Groundwater			
		Carcinogenic			Noncarcinogenic			Carcinogenic		Noncarcinogenic	
		Air RBEL _{Inh} (mg/m ³)	Soil RBEL _{Ing} (mg/kg)	Soil RBEL _{Derm} (mg/kg)	Air RBEL _{Inh} (mg/m ³)	Soil RBEL _{Ing} (mg/kg)	Soil RBEL _{Derm} (mg/kg)	GW RBEL _{Ing} ¹ (mg/L)	GW RBEL _{Class 3} ² (mg/L)	GW RBEL _{Ing} ¹ (mg/L)	GW RBEL _{Class 3} ² (mg/L)
Propionitrile (propane nitrile)	107-12-0	—	—	—	—	4.1E+02	—	—	—	2.9E-02	2.9E+00
Propyl acetate, n-	109-60-4	—	—	—	—	9.2E+04	—	—	—	6.6E+00	6.6E+02
Propylbenzene, n-	103-65-1	—	—	—	5.8E-01	4.1E+04	—	—	—	2.9E+00	2.9E+02
Propylene glycol	57-55-6	—	—	—	4.4E-03	1.0E+06	1.0E+06	—	—	1.5E+03	1.5E+05
Propylene glycol monomethyl ether	107-98-2	—	—	—	2.9E+00	7.2E+05	—	—	—	5.1E+01	5.1E+03
Propylene oxide	75-56-9	1.1E-02	1.2E+02	—	4.4E-02	—	—	8.5E-03	8.5E-01	—	—
Propylene tetramer	6842-15-5	—	—	—	1.5E+00	1.0E+05	2.0E+05	—	—	7.3E+00	7.3E+02
Prothiofos (Tokuthion)	34643-46-4	—	—	—	—	1.0E+02	2.0E+02	—	—	7.3E-03	7.3E-01
Pyrene	129-00-0	—	—	—	—	3.1E+04	4.7E+04	—	—	2.2E+00	2.2E+02
Pyridine	110-86-1	—	—	—	—	1.0E+03	—	—	—	7.3E-02	7.3E+00
Quinoline	91-22-5	—	9.5E+00	1.9E+01	—	—	—	6.8E-04	6.8E-02	—	—
Ronnel	299-84-3	—	—	—	—	5.1E+04	1.0E+05	—	—	3.7E+00	3.7E+02
Safrole	94-59-7	6.5E-04	1.3E+02	2.6E+02	—	—	—	9.3E-03	9.3E-01	—	—
Selenium	7782-49-2	—	—	—	—	5.1E+03	1.0E+05	—	—	3.7E-01	3.7E+01
Selenourea	630-10-4	—	—	—	—	5.1E+03	—	—	—	3.7E-01	3.7E+01
Silver	7440-22-4	—	—	—	—	5.1E+03	4.1E+03	—	—	3.7E-01	3.7E+01
Simazine	122-34-9	—	2.4E+02	4.8E+02	—	5.1E+03	1.0E+04	1.7E-02	1.7E+00	3.7E-01	3.7E+01
Sodium*	7440-23-5	—	—	—	—	—	—	—	—	—	—
Sodium hypochlorite	7681-52-9	—	—	—	4.5E-04	2.1E+05	8.6E+05	—	—	1.5E+01	1.5E+03
Sodium polyacrylate	9003-04-7	—	—	—	1.5E-03	5.1E+05	—	—	—	3.7E+01	3.7E+03
Strontium	7440-24-6	—	—	—	—	6.1E+05	1.0E+06	—	—	4.4E+01	4.4E+03
Strychnine	57-24-9	—	—	—	—	3.1E+02	6.1E+02	—	—	2.2E-02	2.2E+00
Styrene	100-42-5	—	—	—	6.9E-01	2.0E+05	—	—	—	1.5E+01	1.5E+03
Sulfate*	14808-79-8	—	—	—	—	—	—	—	—	—	—
Sulfide*	18496-25-8	—	—	—	—	—	—	—	—	—	—
Sulfolane	126-33-0	—	—	—	9.3E-03	1.3E+04	2.7E+04	—	—	9.5E-01	9.5E+01
Sulfur*	7704-34-9	—	—	—	—	—	—	—	—	—	—
Sulprofos (Bolstar)	35400-43-2	—	—	—	—	3.1E+03	6.1E+03	—	—	2.2E-01	2.2E+01
Tebuconazole	107534-96-3	—	—	—	—	3.1E+04	6.1E+04	—	—	2.2E+00	2.2E+02
Tebuthiuron	34014-18-1	—	—	—	—	7.2E+04	1.4E+05	—	—	5.1E+00	5.1E+02
Terbufos	13071-79-9	—	—	—	—	2.6E+01	5.1E+01	—	—	1.8E-03	1.8E-01
Tert-amyl ethyl ether (TAEE)	919-94-8	—	—	—	—	4.1E+04	—	—	—	2.9E+00	2.9E+02

Table 10
Individual RBELs Commercial/Industrial

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Chemical of Concern	CAS	Soil						Groundwater			
		Carcinogenic			Noncarcinogenic			Carcinogenic		Noncarcinogenic	
		Air RBEL _{Inh} (mg/m ³)	Soil RBEL _{Ing} (mg/kg)	Soil RBEL _{Derm} (mg/kg)	Air RBEL _{Inh} (mg/m ³)	Soil RBEL _{Ing} (mg/kg)	Soil RBEL _{Derm} (mg/kg)	GW RBEL _{Ing} ¹ (mg/L)	GW RBEL _{Class 3} ² (mg/L)	GW RBEL _{Ing} ¹ (mg/L)	GW RBEL _{Class 3} ² (mg/L)
Tert-amyl-methyl ether (TAME)	994-05-8	—	—	—	—	4.1E+04	—	—	—	2.9E+00	2.9E+02
Tert-butyl alcohol (2-methyl-2-propanol)	75-65-0	—	—	—	—	9.2E+04	—	—	—	6.6E+00	6.6E+02
Tetrachlorobenzene, 1,2,3,4-	634-66-2	—	—	—	—	3.1E+02	6.1E+02	—	—	2.2E-02	2.2E+00
Tetrachlorobenzene, 1,2,3,5-	634-90-2	—	—	—	—	3.1E+02	6.1E+02	—	—	2.2E-02	2.2E+00
Tetrachlorobenzene, 1,2,4,5-	95-94-3	—	—	—	—	3.1E+02	6.1E+02	—	—	2.2E-02	2.2E+00
Tetrachloroethane, 1,1,1,2-	630-20-6	5.5E-03	1.1E+03	—	—	3.1E+04	—	7.9E-02	7.9E+00	2.2E+00	2.2E+02
Tetrachloroethane, 1,1,2,2-	79-34-5	—	1.4E+02	—	—	2.0E+04	—	1.0E-02	1.0E+00	1.5E+00	1.5E+02
Tetrachloroethylene [PCE]	127-18-4	1.1E-01	1.4E+04	—	5.4E-01	2.1E+04	—	9.7E-01	9.7E+01	1.5E+00	1.5E+02
Tetrachlorophenol, 2,3,4,5-	4901-51-3	—	—	—	—	3.1E+04	6.1E+04	—	—	2.2E+00	2.2E+02
Tetrachlorophenol, 2,3,4,6-	58-90-2	—	—	—	—	3.1E+04	6.1E+04	—	—	2.2E+00	2.2E+02
Tetrachlorophenol, 2,3,5,6-	935-95-5	—	—	—	—	3.1E+04	6.1E+04	—	—	2.2E+00	2.2E+02
Tetrachlorvinphos (Stirophos)	22248-79-9	—	—	—	—	4.3E+04	8.6E+04	—	—	3.1E+00	3.1E+02
Tetradifon	116-29-0	—	—	—	—	2.0E+04	4.1E+04	—	—	1.5E+00	1.5E+02
Tetraethyl dithiopyrophosphate (sulfotep)	3689-24-5	—	—	—	—	5.1E+02	1.0E+03	—	—	3.7E-02	3.7E+00
Tetraethyl lead	78-00-2	—	—	—	—	1.0E-01	2.0E-01	—	—	7.3E-06	7.3E-04
Tetraethyl pyrophosphate (TEPP)	107-49-3	—	—	—	—	1.1E+01	2.2E+01	—	—	8.0E-04	8.0E-02
Tetraethylene glycol	112-60-7	—	—	—	—	3.4E+05	6.7E+05	—	—	2.4E+01	2.4E+03
Tetrahydrofuran	109-99-9	2.2E-02	3.8E+03	—	2.9E+00	9.2E+05	—	2.7E-01	2.7E+01	6.6E+01	6.6E+03
Tetrahydropyran	142-68-7	2.2E-02	3.8E+03	—	—	2.0E+05	—	2.7E-01	2.7E+01	1.5E+01	1.5E+03
Tetraoxadodecane, 2,5,8,11-	112-49-2	—	—	—	—	2.6E+04	5.1E+04	—	—	1.8E+00	1.8E+02
Thallium	7440-28-0	—	—	—	—	6.8E+01	1.4E+03	—	—	4.9E-03	4.9E-01
Thiofanox	39196-18-4	—	—	—	—	3.1E+02	6.1E+02	—	—	2.2E-02	2.2E+00
Thionazin	297-97-2	—	—	—	—	7.2E+01	1.4E+02	—	—	5.1E-03	5.1E-01
Thiophanate-methyl	23564-05-8	—	—	—	—	8.2E+04	1.6E+05	—	—	5.8E+00	5.8E+02
Thiram	137-26-8	—	—	—	—	5.1E+03	1.0E+04	—	—	3.7E-01	3.7E+01
Tin	7440-31-5	—	—	—	—	6.1E+05	1.0E+06	—	—	4.4E+01	4.4E+03
Titanium	7440-32-6	—	—	—	—	1.0E+06	1.0E+06	—	—	3.7E+02	3.7E+04
Toluene	108-88-3	—	—	—	6.0E+00	8.2E+04	—	—	—	5.8E+00	5.8E+02
Toluene diisocyanate, 2,4/2,6-	26471-62-5	—	—	—	1.0E-04	—	—	—	—	—	—
Toluenediamine, 2,4-	95-80-7	—	8.9E+00	1.8E+01	—	—	—	6.4E-04	6.4E-02	—	—
Toluenediamine, 2,6-	823-40-5	—	—	—	—	3.1E+04	6.1E+04	—	—	2.2E+00	2.2E+02
Toluidine, o-	95-53-4	8.0E-04	1.8E+03	2.4E+02	—	—	—	1.3E-01	1.3E+01	—	—
Toluidine, p-	106-49-0	—	9.5E+02	3.0E+02	—	—	—	6.8E-02	6.8E+00	—	—

Table 10
Individual RBELs Commercial/Industrial

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Chemical of Concern	CAS	Soil						Groundwater			
		Carcinogenic			Noncarcinogenic			Carcinogenic		Noncarcinogenic	
		Air ¹ RBEL _{Inh} (mg/m ³)	Soil ¹ RBEL _{Ing} (mg/kg)	Soil ¹ RBEL _{Derm} (mg/kg)	Air ¹ RBEL _{Inh} (mg/m ³)	Soil ¹ RBEL _{Ing} (mg/kg)	Soil ¹ RBEL _{Derm} (mg/kg)	GW ¹ RBEL _{Ing} (mg/L)	GW ² RBEL _{Class 3} (mg/L)	GW ¹ RBEL _{Ing} (mg/L)	GW ² RBEL _{Class 3} (mg/L)
Toxaphene	8001-35-2	1.3E-04	2.6E+01	5.2E+01	—	3.2E+02	6.3E+02	1.9E-03	1.9E-01	2.3E-02	2.3E+00
TPH, TX1005, C6-C12	TPH-1005-1	—	—	—	2.9E-01	4.1E+04	—	—	—	2.9E+00	2.9E+02
TPH, TX1005, >C12-C28	TPH-1005-2	—	—	—	2.9E-01	4.1E+04	8.2E+04	—	—	2.9E+00	2.9E+02
TPH, TX1005, >C12-C35	TPH-1005-3	—	—	—	2.9E-01	4.1E+04	8.2E+04	—	—	2.9E+00	2.9E+02
TPH, TX1005, >C28-C35	TPH-1005-4	—	—	—	2.9E-01	4.1E+04	8.2E+04	—	—	2.9E+00	2.9E+02
TP Silvex, 2,4,5-	93-72-1	—	—	—	—	8.2E+03	1.6E+04	—	—	5.8E-01	5.8E+01
Triademenol	55219-65-3	—	—	—	—	3.1E+04	6.1E+04	—	—	2.2E+00	2.2E+02
Triallate	2303-17-5	—	—	—	—	1.3E+04	2.7E+04	—	—	9.5E-01	9.5E+01
Triaminotrinitrobenzene (TATB)	3058-38-6	—	—	—	—	3.1E+03	6.1E+03	—	—	2.2E-01	2.2E+01
Tributyltin oxide	56-35-9	—	—	—	—	3.1E+02	6.1E+02	—	—	2.2E-02	2.2E+00
Trichloro-1,2,2-trifluoroethane, 1,1,2-	76-13-1	—	—	—	7.3E+00	1.0E+06	—	—	—	2.2E+03	2.2E+05
Trichlorobenzene, 1,2,3-	87-61-6	—	—	—	2.9E-03	3.1E+03	6.1E+03	—	—	2.2E-01	2.2E+01
Trichlorobenzene, 1,2,4-	120-82-1	—	9.9E+02	2.0E+03	2.9E-03	1.0E+04	2.0E+04	7.0E-02	7.0E+00	7.3E-01	7.3E+01
Trichlorobenzene, 1,3,5-	108-70-3	—	—	—	2.9E-03	3.1E+03	6.1E+03	—	—	2.2E-01	2.2E+01
Trichloroethane, 1,1,1-	71-55-6	—	—	—	7.4E+00	1.0E+06	—	—	—	1.5E+02	1.5E+04
Trichloroethane, 1,1,2-	79-00-5	2.6E-03	5.0E+02	—	—	4.1E+03	—	3.6E-02	3.6E+00	2.9E-01	2.9E+01
Trichloroethylene [TCE]	79-01-6	1.0E-02	6.2E+02	—	2.9E-03	5.1E+02	—	4.4E-02	4.4E+00	3.7E-02	3.7E+00
Trichlorofluoromethane	75-69-4	—	—	—	—	3.1E+05	—	—	—	2.2E+01	2.2E+03
Trichloronate	327-98-0	—	—	—	—	3.1E+03	6.1E+03	—	—	2.2E-01	2.2E+01
Trichlorophenol, 2,3,4-	15950-66-0	—	—	—	—	1.0E+05	2.0E+05	—	—	7.3E+00	7.3E+02
Trichlorophenol, 2,3,5-	933-78-8	—	—	—	—	1.0E+05	2.0E+05	—	—	7.3E+00	7.3E+02
Trichlorophenol, 2,3,6-	933-75-5	—	—	—	—	1.0E+05	2.0E+05	—	—	7.3E+00	7.3E+02
Trichlorophenol, 2,4,5-	95-95-4	—	—	—	—	1.0E+05	2.0E+05	—	—	7.3E+00	7.3E+02
Trichlorophenol, 2,4,6-	88-06-2	1.3E-02	2.6E+03	5.2E+03	—	1.0E+03	2.0E+03	1.9E-01	1.9E+01	7.3E-02	7.3E+00
Trichlorophenol, 3,4,5-	609-19-8	—	—	—	—	1.0E+05	2.0E+05	—	—	7.3E+00	7.3E+02
Trichlorophenoxyacetic acid, 2,4,5-	93-76-5	—	—	—	—	1.0E+04	2.0E+04	—	—	7.3E-01	7.3E+01
Trichloropropane, 1,1,2-	598-77-6	—	—	—	4.4E-04	5.1E+03	—	—	—	3.7E-01	3.7E+01
Trichloropropane, 1,2,3-	96-18-4	—	9.5E-01	—	4.4E-04	4.1E+03	—	6.8E-05	6.8E-03	2.9E-01	2.9E+01
Triethanolamine	102-71-6	—	—	—	3.7E-02	2.0E+05	4.1E+05	—	—	1.5E+01	1.5E+03
Triethylamine	121-44-8	—	—	—	1.0E-02	—	—	—	—	—	—
Triethylene glycol	112-27-6	—	—	—	—	1.0E+06	1.0E+06	—	—	1.5E+02	1.5E+04
Triethylphosphorothioate, O, O, O-	126-68-1	—	—	—	—	8.5E+00	1.7E+01	—	—	6.1E-04	6.1E-02
Trifluralin	1582-09-8	—	3.7E+03	7.4E+03	—	7.7E+03	1.5E+04	2.7E-01	2.7E+01	5.5E-01	5.5E+01

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Chemical of Concern	CAS	Soil						Groundwater			
		Carcinogenic			Noncarcinogenic			Carcinogenic		Noncarcinogenic	
		Air RBEL _{Inh} (mg/m ³)	Soil RBEL _{Ing} (mg/kg)	Soil RBEL _{Derm} (mg/kg)	Air RBEL _{Inh} (mg/m ³)	Soil RBEL _{Ing} (mg/kg)	Soil RBEL _{Derm} (mg/kg)	GW RBEL _{Ing} ¹ (mg/L)	GW RBEL _{Class 3} ² (mg/L)	GW RBEL _{Ing} ¹ (mg/L)	GW RBEL _{Class 3} ² (mg/L)
Trimethylamine	75-50-3	—	—	—	1.0E-02	—	—	—	—	—	—
Trimethylbenzene, 1,2,3-	526-73-8	—	—	—	2.6E-01	3.5E+04	—	—	—	2.5E+00	2.5E+02
Trimethylbenzene, 1,2,4-	95-63-6	—	—	—	2.6E-01	3.5E+04	—	—	—	2.5E+00	2.5E+02
Trimethylbenzene, 1,3,5-	108-67-8	—	—	—	2.6E-01	3.5E+04	—	—	—	2.5E+00	2.5E+02
Trinitrobenzene, 1,3,5-	99-35-4	—	—	—	—	3.1E+04	6.1E+04	—	—	2.2E+00	2.2E+02
Trinitrophenylmethylnitramine (tetryl; nitramine)	479-45-8	—	—	—	—	2.0E+03	8.2E+03	—	—	1.5E-01	1.5E+01
Trinitrotoluene, 2,4,6-	118-96-7	—	9.5E+02	1.9E+03	—	5.1E+02	1.0E+03	6.8E-02	6.8E+00	3.7E-02	3.7E+00
Tungsten (as sodium tungstate dihydride)	7440-33-7	—	—	—	7.7E-03	1.0E+03	4.1E+03	—	—	7.3E-02	7.3E+00
Uranium (soluble salts)	7440-61-1	—	—	—	5.8E-05	3.1E+03	6.1E+04	—	—	2.2E-01	2.2E+01
Valeric acid (pentanoic acid)	109-52-4	—	—	—	1.5E-03	5.1E+05	1.0E+06	—	—	3.7E+01	3.7E+03
Vanadium	7440-62-2	—	—	—	4.4E-05	1.8E+03	9.6E+02	—	—	1.3E-01	1.3E+01
Vernam	1929-77-7	—	—	—	—	1.0E+03	2.0E+03	—	—	7.3E-02	7.3E+00
Vinyl acetate	108-05-4	—	—	—	2.9E-01	1.0E+06	—	—	—	7.3E+01	7.3E+03
Vinyl chloride	75-01-4	4.9E-03	1.9E+01	—	8.8E-02	3.1E+03	—	1.4E-03	1.4E-01	2.2E-01	2.2E+01
Vinylcyclohexane	695-12-5	—	—	—	—	5.1E+05	—	—	—	3.7E+01	3.7E+03
Warfarin	81-81-2	—	—	—	—	3.1E+02	6.1E+02	—	—	2.2E-02	2.2E+00
Xylene, m-	108-38-3	—	—	—	8.9E-01	1.0E+06	—	—	—	1.5E+02	1.5E+04
Xylene, o-	95-47-6	—	—	—	8.9E-01	1.0E+06	—	—	—	1.5E+02	1.5E+04
Xylene, p-	106-42-3	—	—	—	8.9E-01	1.0E+06	—	—	—	1.5E+02	1.5E+04
Xylenes	1330-20-7	—	—	—	8.9E-01	2.0E+05	—	—	—	1.5E+01	1.5E+03
Zinc	7440-66-6	—	—	—	—	3.1E+05	1.0E+06	—	—	2.2E+01	2.2E+03
6 C aliphatics (TPH) (>53% n-hexane content)	NA	—	—	—	9.8E-01	6.1E+04	—	—	—	4.4E+00	4.4E+02
6 C aliphatics (TPH) (<53% n-hexane content)	NA	—	—	—	2.7E+01	6.1E+04	—	—	—	4.4E+00	4.4E+02
>6-8 C aliphatics (TPH) (>53% n-hexane content)	NA	—	—	—	9.8E-01	6.1E+04	—	—	—	4.4E+00	4.4E+02
>6-8 C aliphatics (TPH) (<53% n-hexane content)	NA	—	—	—	2.7E+01	6.1E+04	—	—	—	4.4E+00	4.4E+02
>8-10 C aliphatics (TPH)	NA	—	—	—	7.3E-01	1.0E+05	—	—	—	7.3E+00	7.3E+02
>10-12 C aliphatics (TPH)	NA	—	—	—	7.3E-01	1.0E+05	2.0E+05	—	—	7.3E+00	7.3E+02
>12-16 C aliphatics (TPH)	NA	—	—	—	7.3E-01	1.0E+05	2.0E+05	—	—	7.3E+00	7.3E+02
>16-21 C aliphatics (TPH)	NA	—	—	—	—	1.0E+06	1.0E+06	—	—	1.5E+02	1.5E+04
>16-21 C aliphatics (TPH) (for transformer mineral oil releases only)	NA	—	—	—	—	1.0E+06	1.0E+06	—	—	1.2E+02	1.2E+04
>21-35 C aliphatics (TPH)	NA	—	—	—	—	1.0E+06	1.0E+06	—	—	1.5E+02	1.5E+04

**Table 10
Individual RBELs Commercial/Industrial**

Last Revised: March 6, 2023

Chemical of Concern	CAS	Soil						Groundwater			
		Carcinogenic			Noncarcinogenic			Carcinogenic		Noncarcinogenic	
		Air RBEL _{Inh} (mg/m ³)	Soil RBEL _{Ing} (mg/kg)	Soil RBEL _{Derm} (mg/kg)	Air RBEL _{Inh} (mg/m ³)	Soil RBEL _{Ing} (mg/kg)	Soil RBEL _{Derm} (mg/kg)	GW RBEL _{Ing} ¹ (mg/L)	GW RBEL _{Class 3} ² (mg/L)	GW RBEL _{Ing} ¹ (mg/L)	GW RBEL _{Class 3} ² (mg/L)
>21-35 C aliphatics (TPH) (for transformer mineral oil releases only)	NA	–	–	–	–	1.0E+06	1.0E+06	–	–	1.2E+02	1.2E+04
>7-8 C aromatics (TPH)	NA	–	–	–	2.8E+00	1.0E+05	–	–	–	7.3E+00	7.3E+02
>8-10 C aromatics (TPH)	NA	–	–	–	2.9E-01	4.1E+04	–	–	–	2.9E+00	2.9E+02
>10-12 C aromatics (TPH)	NA	–	–	–	2.9E-01	4.1E+04	8.2E+04	–	–	2.9E+00	2.9E+02
>12-16 C aromatics (TPH)	NA	–	–	–	2.9E-01	4.1E+04	8.2E+04	–	–	2.9E+00	2.9E+02
>16-21 C aromatics (TPH)	NA	–	–	–	–	3.1E+04	6.1E+04	–	–	2.2E+00	2.2E+02
>21-35 C aromatics (TPH)	NA	–	–	–	–	3.1E+04	6.1E+04	–	–	2.2E+00	2.2E+02

Footnotes

1 Based on primary MCLs when available

2 100 x ^{GW}GW_{Ing}

3 The total MCL for trihalomethanes (bromodichloromethane, bromoform, chloroform, and dibromochloromethane) is 0.08 mg/L.

* These compounds are not necessarily of concern from a human health standpoint, therefore calculation of human health-based values is not required. However, aesthetics and ecological criteria would still apply. See table entitled "Compounds for which Calculation of a Human Health PCL is Not Required" available on the TCEQ website at <http://www.tceq.state.tx.us/remediation/trrp/trrp.html>.

NA = not applicable

All values capped at 1E+06

This table shows the commercial and industrial risk-based exposure limits for soil and groundwater with carcinogenic and non-carcinogenic values depicted.

end of worksheet

Toxicity Factors¹

Last Revised: March 6, 2023

Chemical of Concern	CAS	Class ²		SFo (mg/kg-day) ⁻¹		RfDo (mg/kg-day)		URF (µg/m ³) ⁻¹		RfC (mg/m ³)	
		Ref ³	Ref ³	Ref ³	Ref ³	Ref ³	Ref ³	Ref ³	Ref ³	Ref ³	Ref ³
Acenaphthene	83-32-9	IIACP	PPRTV	–	–	6.0E-02	I	–	–	–	–
Acenaphthylene	208-96-8	D	I	–	–	6.0E-02	T	–	–	–	–
Acetaldehyde	75-07-0	B2	I	–	–	1.0E-01	T	2.2E-06	I	9.0E-03	I
Acetate, 2-ethoxyethanol	111-15-9	–	–	–	–	1.0E-01	PPRTV	–	–	6.0E-02	PPRTV
Acetate, isoamyl	123-92-2	–	–	–	–	7.2E-02	T	–	–	–	–
Acetate, isobutyl	110-19-0	–	–	–	–	4.8E-02	T	–	–	–	–
Acetate, sec-butyl	105-46-4	–	–	–	–	4.8E-02	T	–	–	–	–
Acetic acid*	64-19-7	–	–	–	–	–	–	–	–	–	–
Acetone (2-propanone)	67-64-1	D	I	–	–	9.0E-01	I	–	–	3.1E+01	A
Acetone cyanohydrin	75-86-5	IIACP	PPRTV	–	–	3.0E-03	PPRTV	–	–	6.0E-02	PPRTV
Acetonitrile	75-05-8	D	I	–	–	3.2E-02	T	–	–	6.0E-02	I
Acetophenone	98-86-2	D	I	–	–	1.0E-01	I	–	–	–	–
Acetylaminofluorene, 2-	53-96-3	–	–	3.8E+00	OEHHA	–	–	1.3E-03	OEHHA	–	–
Acifluorfen, sodium	62476-59-9	–	–	–	–	1.3E-02	I	–	–	–	–
Acridine	260-94-6	–	–	–	–	3.0E-03	T	–	–	–	–
Acrolein	107-02-8	D	I	–	–	5.0E-04	I	–	–	2.7E-03	T
Acrylamide	79-06-1	LC	I	5.0E-01	I	2.0E-03	I	1.0E-04	I	6.0E-03	I
Acrylic acid	79-10-7	–	–	–	–	5.0E-01	I	–	–	1.0E-03	I
Acrylonitrile	107-13-1	B1	I	5.4E-01	I	1.0E-03	H	6.8E-05	I	2.0E-03	I
Adipic acid (hexanedioic acid)	124-04-9	–	–	–	–	2.0E+00	PPRTV	–	–	–	–
Alachlor	15972-60-8	B2	H	8.0E-02	H	1.0E-02	I	–	–	–	–
Aldicarb	116-06-3	D	I	–	–	1.0E-03	I	–	–	–	–
Aldicarb sulfone	1646-88-4	–	–	–	–	1.0E-03	I	–	–	–	–
Aldrin	309-00-2	B2	I	1.7E+01	I	3.0E-05	I	4.9E-03	I	–	–
Allyl alcohol	107-18-6	–	–	–	–	5.0E-03	I	–	–	1.0E-04	PPRTV
Allyl chloride	107-05-1	C	I	–	–	1.0E-02	I	–	–	1.0E-03	I
Aluminum	7429-90-5	–	–	–	–	1.0E+00	PPRTV	–	–	5.0E-03	PPRTV
Ametryn	834-12-8	–	–	–	–	9.0E-03	I	–	–	–	–
Amino-2,6-dinitrotoluene, 4-	19406-51-0	–	–	3.0E-02	T	5.0E-04	T	–	–	–	–
Amino-4,6-dinitrotoluene, 2-	35572-78-2	–	–	3.0E-02	T	5.0E-04	T	–	–	–	–
Aminobiphenyl, 4- (1,1-biphenyl-4-amine)	92-67-1	A	T	6.1E+00	T	–	–	–	–	–	–
Aminopyridine, 4-	504-24-5	D	I	–	–	2.0E-05	H	–	–	–	–
Ammonia	7664-41-7	IIACP	T	–	–	–	–	–	–	3.2E-01	T
Ammonium polyphosphate*	6833-79-9	–	–	–	–	–	–	–	–	–	–
Ammonium salts*	NA	–	–	–	–	–	–	–	–	–	–
Aniline	62-53-3	B2	I	5.7E-03	I	7.0E-03	N	–	–	1.0E-03	I
Anthracene	120-12-7	D	I	–	–	3.0E-01	I	–	–	–	–
Anthraquinone, 9,10-	84-65-1	LC	PPRTV	3.9E-02	PPRTV	2.0E-02	T	–	–	–	–
Antimony	7440-36-0	–	–	–	–	4.0E-04	I	–	–	–	–
Aramite	140-57-8	B2	I	2.5E-02	I	5.0E-02	H	7.1E-06	I	–	–
Arsenic	7440-38-2	A	I	1.5E+00	I	3.0E-04	I	1.5E-04	T	–	–
Arsine	7784-42-1	–	–	–	–	–	–	–	–	5.0E-05	I
Atrazine	1912-24-9	C	H	2.2E-01	H	3.5E-02	I	–	–	–	–
Azinphos-methyl (guthion)	86-50-0	–	–	–	–	1.5E-03	EPA –99	–	–	–	–
Azobenzene	103-33-3	B2	I	1.1E-01	I	–	–	3.1E-05	I	–	–
Barium	7440-39-3	D	I	–	–	2.0E-01	I	–	–	–	–
Bayleton	43121-43-3	–	–	–	–	3.0E-02	I	–	–	–	–
Benefin (benfluralin)	1861-40-1	–	–	–	–	3.0E-01	I	–	–	–	–
Benomyl	17804-35-2	–	I	–	–	5.0E-02	I	–	–	–	–
Benz-a-anthracene	56-55-3	CH	I	1.0E-01	EPA –93	–	–	6.0E-05	EPA –93	–	–
Benzaldehyde	100-52-7	–	–	–	–	1.0E-01	I	–	–	–	–
Benzene	71-43-2	A	I	1.5E-02	T	4.0E-03	I	2.2E-06	T	2.8E-01	T
Benzenedicarbonitrile, 1,3-	626-17-5	–	–	–	–	6.0E-03	T	–	–	–	–
Benzenedicarboxylic acid, 1,2-disodecyl ester	26761-40-0	–	–	–	–	4.0E-02	–	–	–	5.0E-03	–
Benzenethiol	108-98-5	–	–	–	–	1.0E-03	PPRTV	–	–	–	–
Benzydine	92-87-5	A	I	2.3E+02	I	3.0E-03	I	6.7E-02	I	–	–

Toxicity Factors¹

Last Revised: March 6, 2023

Chemical of Concern	CAS	Class ²	Ref ³	SFo (mg/kg-day) ⁻¹		RfDo (mg/kg-day)		URF (µg/m ³) ⁻¹		RfC (mg/m ³)	
					Ref ³		Ref ³		Ref ³		Ref ³
Benzo-a-pyrene	50-32-8	CH	I	1.0E+00	I	3.0E-04	I	6.0E-04	I	2.0E-06	I
Benzo-b-fluoranthene	205-99-2	CH	I	1.0E-01	EPA -93	—	—	6.0E-05	EPA -93	—	—
Benzo-e-pyrene	192-97-2	—	—	—	—	3.0E-02	T	—	—	—	—
Benzo-g,h,i-perylene	191-24-2	D	I	—	—	3.0E-02	T	—	—	—	—
Benzoic acid	65-85-0	D	I	—	—	4.0E+00	I	—	—	—	—
Benzo-j-fluoranthene	205-82-3	—	—	1.0E-01	T	—	—	6.0E-05	T	—	—
Benzo-k-fluoranthene	207-08-9	CH	I	1.0E-02	EPA -93	—	—	6.0E-06	EPA -93	—	—
Benzophenone	119-61-9	—	—	—	—	6.7E-03	T	—	—	—	—
Benzotrichloride	98-07-7	B2	I	1.3E+01	I	—	—	—	—	—	—
Benzoyl peroxide	94-36-0	—	—	—	—	5.0E-02	T	—	—	—	—
Benzyl alcohol	100-51-6	—	—	—	—	1.0E-01	PPRTV	—	—	—	—
Benzyl chloride	100-44-7	B2	I	1.7E-01	I	2.0E-03	PPRTV	—	—	1.0E-03	PPRTV
Benzyl dichloride	98-87-3	B2	T	1.7E-01	T	2.0E-03	T	—	—	1.0E-03	T
Beryllium	7440-41-7	B1	I	—	—	2.0E-03	I	2.4E-03	I	2.0E-05	I
Biphenyl, 1,1-	92-52-4	SEC	PPRTV	—	—	5.0E-01	I	—	—	—	—
Biphenyl, 1,1'-, 2-phenoxy-	6738-04-1	—	—	—	—	5.0E-02	T	—	—	—	—
Biquinoline, 2,2'-	119-91-5	—	—	—	—	3.0E-03	T	—	—	—	—
Bis (2-chloroethoxy) methane	111-91-1	B2	T	1.1E+00	T	3.0E-03	PPRTV	3.3E-04	T	—	—
Bis (2-chloroethyl) ether	111-44-4	B2	I	1.1E+00	I	—	—	3.3E-04	I	—	—
Bis (2-chloro-1-methylethyl) ether	108-60-1	C	H	7.0E-02	H	4.0E-02	H	1.0E-05	H	—	—
Bis (2-chloromethyl) ether	542-88-1	A	I	2.2E+02	I	—	—	6.2E-02	I	—	—
Bis (2-ethyl-hexyl) phthalate	117-81-7	B2	I	1.4E-02	I	2.0E-02	I	—	—	—	—
Bismuth	7440-69-9	—	—	—	—	5.0E-01	T	—	—	—	—
Bisphenol A	80-05-7	—	—	—	—	5.0E-02	I	—	—	—	—
Boron	7440-42-8	D	I	—	—	2.0E-01	I	—	—	2.0E-02	H
Bromacil	314-40-9	—	—	—	—	1.0E-01	T	—	—	—	—
Bromo-2-chloroethane, 1-	107-04-0	—	—	—	—	4.0E-02	T	—	—	—	—
Bromobenzene	108-86-1	IIACP	I	—	—	8.0E-03	I	—	—	6.0E-02	I
Bromodichloromethane	75-27-4	B2	I	6.2E-02	I	8.0E-03	A	—	—	—	—
Bromoform	75-25-2	B2	I	7.9E-03	I	2.0E-02	I	1.1E-06	I	—	—
Bromomethane	74-83-9	D	I	—	—	1.4E-03	I	—	—	3.9E-03	A
Bromophenyl phenylether, 4-	101-55-3	—	—	1.5E+01	T	—	—	3.3E-03	T	—	—
Butadiene, 1,3-	106-99-0	A	I	—	—	—	—	5.0E-07	T	3.3E-02	T
Butadiene, 2-methyl-1,3- (isoprene)	78-79-5	—	—	—	—	6.0E-02	T	—	—	1.8E+01	T
Butanal (butyraldehyde)	123-72-8	—	—	—	—	6.0E-02	T	—	—	1.0E-01	T
Butane, 2,3-dimethyl-	79-29-8	—	—	—	—	6.0E-02	T	—	—	1.8E+01	T
Butanoic acid (butyric acid)	107-92-6	—	—	—	—	5.0E-01	T	—	—	1.0E-03	T
Butanol, 2-	78-92-2	—	—	—	—	2.0E+00	PPRTV	—	—	3.0E+01	PPRTV
Butanol, 2-methyl-1-	137-32-6	—	—	—	—	1.0E-02	T	—	—	—	—
Butanol, 2-methyl-2-	75-85-4	—	—	—	—	1.0E-02	T	—	—	—	—
Butanol, n-	71-36-3	D	I	—	—	1.0E-01	I	—	—	—	—
Butene, 1-	106-98-9	—	—	—	—	6.0E-02	T	—	—	5.3E+00	T
Butene, cis-2-	590-18-1	—	—	—	—	6.0E-02	T	—	—	1.6E+00	T
Butene, trans-2-	624-64-6	—	—	—	—	6.0E-02	T	—	—	1.6E+00	T
Butoxy ethanol, 2- (Ethylene glycol monobutyl ether; EGBE)	111-76-2	NLC	I	—	—	1.0E-01	I	—	—	1.6E+00	I
Butyl acetate	123-86-4	—	—	—	—	1.4E-01	T	—	—	4.7E+00	T
Butyl acrylate	141-32-2	—	—	—	—	9.0E-03	T	—	—	—	—
Butyl benzyl phthalate	85-68-7	LC	PPRTV	1.9E-03	PPRTV	2.0E-01	I	—	—	—	—
Butyl ether, n- (dibutyl ether)	142-96-1	D	N	—	—	1.0E-01	T	—	—	—	—
Butyl methacrylate	97-88-1	—	—	—	—	9.0E-02	T	—	—	—	—
Butylate	2008-41-5	—	—	—	—	5.0E-02	I	—	—	—	—
Butylbenzene, n-	104-51-8	D	N	—	—	5.0E-02	PPRTV	—	—	—	—
Butylbenzene, sec-	135-98-8	IIACP	PPRTV	—	—	4.0E-02	N	—	—	—	—
Butylbenzene, tert-	98-06-6	IIACP	PPRTV	—	—	4.0E-02	N	—	—	—	—
Cacodylic acid	75-60-5	D	I	—	—	3.0E-03	H	—	—	—	—

Toxicity Factors¹

Last Revised: March 6, 2023

Chemical of Concern	CAS	Class ²	Ref ³	SFo (mg/kg-day) ⁻¹		RfDo (mg/kg-day)		URF (µg/m ³) ⁻¹		RfC (mg/m ³)	
				Ref ³	Ref ³	Ref ³	Ref ³	Ref ³	Ref ³		
Cadmium ⁴	7440-43-9	LC	T	—	—	1.0E-03/ 5.0E-04	I	4.9E-04	T	1.1E-05	T
Calcium*	7440-70-2	—	—	—	—	—	—	—	—	—	—
Caprolactam	105-60-2	—	—	—	—	5.0E-01	I	—	—	—	—
Captan	133-06-2	B2	H	3.5E-03	H	1.3E-01	I	—	—	—	—
Carbaryl	63-25-2	—	—	—	—	1.0E-01	I	—	—	—	—
Carbazole	86-74-8	B2	H	2.0E-02	H	—	—	—	—	—	—
Carbofuran	1563-66-2	—	—	—	—	5.0E-03	I	—	—	—	—
Carbon disulfide	75-15-0	—	—	—	—	1.0E-01	I	—	—	7.0E-01	I
Carbon tetrachloride	56-23-5	LC	I	7.0E-02	I	4.0E-03	I	6.0E-06	I	1.0E-01	I
Carbophenothion	786-19-6	—	—	—	—	1.3E-02	CU	—	—	—	—
Carbosulfan	55285-14-8	—	—	—	—	1.0E-02	I	—	—	—	—
Carboxin	5234-68-4	—	—	—	—	1.0E-01	I	—	—	—	—
Chloral	75-87-6	C	I	—	—	1.0E-01	I	—	—	—	—
Chloral hydrate (1,1-ethanediol, 2,2,2-trichloro-)	302-17-0	C	I	—	—	1.0E-01	I	—	—	—	—
Chloramben (amiben; 3-amino-2,5-dichlorobenzoic acid)	133-90-4	—	—	—	—	1.5E-02	I	—	—	—	—
Chlordane (technical)	12789-03-6	B2	I	3.5E-01	I	5.0E-04	I	1.0E-04	I	7.0E-04	I
Chlordane, cis- (alpha chlordane)	5103-71-9	B2	T	3.5E-01	T	5.0E-04	T	1.0E-04	T	7.0E-04	T
Chlordane, trans- (gamma chlordane)	57-74-9	B2	T	3.5E-01	T	5.0E-04	T	1.0E-04	T	7.0E-04	T
Chlorfenvinphos	470-90-6	—	—	—	—	7.0E-04	A	—	—	2.0E-03	T
Chloride*	16887-00-6	—	—	—	—	—	—	—	—	—	—
Chlorine	7782-50-5	—	—	—	—	1.0E-01	I	—	—	8.7E-03	T
Chloro-1,3-butadiene, 2-	126-99-8	LC	I	—	—	—	—	3.0E-04	I	2.0E-02	I
Chloro-2-propanol, 1-	127-00-4	—	—	—	—	2.0E-02	T	—	—	—	—
Chloro-3-methylphenol, 4-	59-50-7	—	—	—	—	5.0E-03	T	—	—	—	—
Chloroaniline, p-	106-47-8	LC	PPRTV	2.0E-01	PPRTV	4.0E-03	I	—	—	—	—
Chlorobenzene	108-90-7	D	I	—	—	2.0E-02	I	—	—	5.0E-02	PPRTV
Chlorobenzilate	510-15-6	B2	H	2.7E-01	H	2.0E-02	I	7.8E-05	H	—	—
Chlorobromomethane (bromochloromethane)	74-97-5	—	—	—	—	4.0E-02	T	—	—	—	—
Chlorodifluoromethane	75-45-6	—	—	—	—	—	—	—	—	5.0E+01	I
Chloroethane (ethyl chloride)	75-00-3	—	—	—	—	4.0E-01	N	—	—	1.0E+01	I
Chloroethanol, 2-	107-07-3	IIACP	PPRTV	—	—	2.0E-02	PPRTV	—	—	—	—
Chloroethoxy ethene, 2- (2-chloroethylvinylether)	110-75-8	—	—	1.1E+00	T	2.0E-03	T	—	—	3.0E-04	T
Chloroform	67-66-3	B2	I	—	—	1.0E-02	I	2.3E-05	I	9.7E-02	A
Chlorohexane, 1-	544-10-5	—	—	—	—	4.0E-02	T	—	—	1.0E+00	T
Chloromethane (methyl chloride)	74-87-3	IIACP	PPRTV	1.3E-02	H	3.6E-03	T	1.8E-06	H	9.0E-02	I
Chloronaphthalene, 1- (Chloronaphthalene, alpha-)	90-13-1	—	—	—	—	8.0E-02	I	—	—	—	—
Chloronaphthalene, 2- (chloronaphthalene, beta)	91-58-7	—	—	—	—	8.0E-02	I	—	—	—	—
Chloronitrobenzene, p- (1-chloro-4-nitrobenzene)	100-00-5	LC	PPRTV	6.3E-03	PPRTV	1.0E-03	PPRTV	—	—	6.0E-04	PPRTV
Chlorophenol, 2-	95-57-8	—	—	—	—	5.0E-03	I	—	—	—	—
Chlorophenol, 3-	108-43-0	—	—	—	—	5.0E-03	T	—	—	—	—
Chlorophenol, 4-	106-48-9	—	—	—	—	5.0E-03	T	—	—	—	—
Chlorophenyl phenylether, 4-	7005-72-3	—	—	1.5E+01	T	—	—	3.3E-03	T	—	—
Chloropropane, 2-	75-29-6	—	—	—	—	3.0E-02	T	—	—	1.0E-01	H
Chlorothalonil	1897-45-6	B2	H	1.1E-02	H	1.5E-02	I	—	—	—	—
Chlorotoluene, o- (2-chlorotoluene)	95-49-8	—	—	—	—	2.0E-02	I	—	—	8.0E-01	PPRTV
Chlorotoluene, p- (4-chlorotoluene)	106-43-4	—	—	—	—	2.0E-02	PPRTV	—	—	—	—
Chlorpyrifos	2921-88-2	—	—	—	—	3.0E-03	I	—	—	—	—
Chromium (III)	16065-83-1	—	—	—	—	1.5E+00	I	—	—	1.4E-04	T
Chromium (total)	7440-47-3	—	—	—	—	1.5E+00	I	—	—	1.4E-04	T
Chromium (VI)	18540-29-9	CH	T	—	—	3.1E-03	T	2.3E-03	T	2.2E-04	T
Chrysene	218-01-9	CH	I	1.0E-03	EPA-93	—	—	6.0E-07	EPA-93	—	—
Cobalt	7440-48-4	LC	T	—	—	1.0E-02	T	6.0E-03	T	6.3E-05	T
Copolymer acrylamide	69418-26-4	—	—	—	—	2.0E-04	T	—	—	—	—

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					Ref ³		Ref ³		Ref ³		Ref ³
Copper	7440-50-8	D	I	—	—	9.7E-02	T	—	—	—	—
Coronene	191-07-1	—	—	—	—	2.0E-03	T	—	—	—	—
Coumaphos	56-72-4	—	—	—	—	7.0E-03	T	—	—	—	—
Cresol	1319-77-3	C	I	—	—	5.0E-02	I	—	—	—	—
Cresol, m- (3-methylphenol)	108-39-4	C	I	—	—	5.0E-02	I	—	—	—	—
Cresol, o- (2-methylphenol)	95-48-7	C	I	—	—	5.0E-02	I	—	—	—	—
Cresol, p- (4-methylphenol)	106-44-5	C	I	—	—	5.0E-03	H	—	—	—	—
Crotonaldehyde	123-73-9	C	I	1.9E+00	H	1.0E-03	PPRTV	—	—	—	—
Cumene (isopropylbenzene)	98-82-8	D	I	—	—	1.0E-01	I	—	—	4.0E-01	I
Cyanazine	21725-46-2	C	H	8.4E-01	H	2.0E-03	H	—	—	—	—
Cyanide	57-12-5	D	I	—	—	6.0E-04	I	—	—	8.0E-04	I
Cyanogen	460-19-5	—	—	—	—	1.0E-03	I	—	—	8.0E-04	I
Cycloate	1134-23-2	—	—	—	—	5.5E-02	CU	—	—	—	—
Cyclohexane	110-82-7	D	I	—	—	5.0E+00	T	—	—	6.0E+00	I
Cyclohexanol	108-93-0	—	—	—	—	5.0E+00	T	—	—	—	—
Cyclohexanone	108-94-1	—	—	—	—	5.0E+00	I	—	—	7.0E-01	PPRTV
Cyclohexene-1-methanol, 3-	1679-51-2	—	—	—	—	2.0E-02	T	—	—	—	—
Cyclohexene, 4-vinyl-1-	100-40-3	—	—	—	—	2.2E-02	T	—	—	3.3E-01	T
Cyclopentane	287-92-3	—	—	—	—	6.0E-02	T	—	—	2.4E+01	T
Cyclopentane, methyl-	96-37-7	—	—	—	—	1.0E-01	T	—	—	1.0E+00	T
Cyclopentene	142-29-0	—	—	—	—	5.0E+00	T	—	—	—	—
Cyclotetramethylenetetranitramine (HMX)	2691-41-0	D	I	—	—	5.0E-02	I	—	—	—	—
Cyclotrimethylenetrinitramine (RDX)	121-82-4	SEC	I	8.0E-02	I	4.0E-03	I	—	—	—	—
Cymene (isopropyltoluene)	99-87-6	—	—	—	—	1.0E-01	T	—	—	—	—
Cymoxanil	57966-95-7	—	—	—	—	1.3E-02	EPA –OP	—	—	—	—
Dacthal (DCPA)	1861-32-1	—	—	—	—	1.0E-02	I	—	—	—	—
Dalapon, sodium salt (2,2-dichloropropanoic acid)	75-99-0	—	—	—	—	3.0E-02	I	—	—	—	—
DDD	72-54-8	B2	I	2.4E-01	I	—	—	—	—	—	—
DDE	72-55-9	B2	I	3.4E-01	I	—	—	—	—	—	—
DDT	50-29-3	B2	I	3.4E-01	I	5.0E-04	I	9.7E-05	I	—	—
Demeton	8065-48-3	—	—	—	—	4.0E-05	I	—	—	—	—
Desethylatrazine	6190-65-4	—	—	—	—	3.5E-02	T	—	—	—	—
Diacetone alcohol (4-hydroxy-4-methyl-2-pentanone)	123-42-2	—	—	—	—	4.0E-02	T	—	—	—	—
Diallate	2303-16-4	B2	H	6.1E-02	H	—	—	—	—	—	—
Diazinon	333-41-5	—	—	—	—	9.0E-04	H	—	—	1.0E-04	T
Dibenz(a,h)acridine	226-36-8	C	OEHHA	1.2E+00	OEHHA	—	—	1.1E-04	OEHHA	—	—
Dibenz(a,j)acridine	224-42-0	—	—	7.3E-01	T	—	—	8.8E-05	T	—	—
Dibenz-a,h-anthracene	53-70-3	CH	I	1.0E+00	EPA –93	—	—	6.0E-04	EPA –93	—	—
Dibenzo(a,e)pyrene	192-65-4	—	—	7.3E+00	T	—	—	8.8E-04	T	—	—
Dibenzo(a,h)pyrene	189-64-0	—	—	7.3E+01	T	—	—	8.8E-03	T	—	—
Dibenzo(a,i)pyrene	189-55-9	—	—	7.3E+01	T	—	—	8.8E-03	T	—	—
Dibenzofuran	132-64-9	D	I	—	—	4.0E-03	N	—	—	—	—
Dibenzothiophene	132-65-0	IIACP	PPRTV	—	—	3.0E-03	T	—	—	—	—
Dibromo-3-chloropropane, 1,2-	96-12-8	LC	PPRTV	8.0E-01	PPRTV	2.0E-04	PPRTV	6.0E-03	PPRTV	2.0E-04	I
Dibromochloromethane (chlorodibromomethane)	124-48-1	C	I	8.4E-02	I	2.0E-02	I	—	—	—	—
Dibromofluoromethane	1868-53-7	—	—	—	—	2.0E-01	T	—	—	—	—
Dicamba	1918-00-9	—	—	—	—	3.0E-02	I	—	—	—	—
Dichlormid	37764-25-3	—	—	—	—	2.5E-02	T	—	—	—	—
Dichloro-2-butene, 1,4-	764-41-0	SEC	PPRTV	—	—	—	—	4.2E-03	PPRTV	—	—
Dichloro-2-butene, 1,4- trans	110-57-6	SEC	PPRTV	—	—	—	—	4.2E-03	PPRTV	—	—
Dichlorobenzene, 1,2-	95-50-1	D	I	—	—	9.0E-02	I	—	—	3.0E-02	N
Dichlorobenzene, 1,3-	541-73-1	D	I	—	—	3.0E-02	N	—	—	8.0E-03	N
Dichlorobenzene, 1,4-	106-46-7	C	H	2.4E-02	H	—	—	—	—	5.3E-01	T
Dichlorobenzidine, 3,3-	91-94-1	B2	I	4.5E-01	I	—	—	—	—	—	—

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Dichlorobutane, 2,3-	7581-97-7	–	–	–	–	1.0E-02	T	–	–	7.0E-03	T
Dichlorodifluoromethane	75-71-8	–	–	–	–	2.0E-01	I	–	–	1.0E-01	PPRTV
Dichloroethane, 1,1-	75-34-3	C	I	–	–	2.0E-01	PPRTV	–	–	2.4E+00	T
Dichloroethane, 1,2-	107-06-2	B2	I	9.1E-02	I	7.8E-02	T	3.4E-06	T	4.4E-02	T
Dichloroethylene, 1,1-	75-35-4	C	I	–	–	5.0E-02	I	–	–	3.4E-01	T
Dichloroethylene, cis-1,2-	156-59-2	IIACP	I	–	–	2.0E-03	I	–	–	6.0E-02	T
Dichloroethylene, trans-1,2	156-60-5	IIACP	I	–	–	2.0E-02	I	–	–	6.0E-02	PPRTV
Dichlorofluoromethane	75-43-4	–	–	–	–	2.0E-01	T	–	–	–	–
Dichlorophenol, 2,3-	576-24-9	–	–	–	–	3.0E-03	T	–	–	–	–
Dichlorophenol, 2,4-	120-83-2	–	–	–	–	3.0E-03	I	–	–	–	–
Dichlorophenol, 2,5-	583-78-8	–	–	–	–	3.0E-03	T	–	–	–	–
Dichlorophenol, 2,6-	87-65-0	–	–	–	–	1.0E-03	T	–	–	–	–
Dichlorophenol, 3,4-	95-77-2	–	–	–	–	3.0E-03	T	–	–	–	–
Dichlorophenol, 3,5-	591-35-5	–	–	–	–	3.0E-03	T	–	–	–	–
Dichlorophenoxy, 2,4- butyric acid, 4- (2,4-DB)	94-82-6	–	–	–	–	8.0E-03	I	–	–	–	–
Dichlorophenoxyacetic acid, 2,4- (2,4-D)	94-75-7	–	–	–	–	2.0E-01	A	–	–	–	–
Dichloroprop (2-(2,4-dichlorophenoxy) propanoic acid)	120-36-5	–	–	–	–	1.0E-02	T	–	–	–	–
Dichloropropane, 1,2-	78-87-5	LC	PPRTV	3.7E-02	PPRTV	1.3E-01	T	9.2E-07	T	4.0E-03	I
Dichloropropane, 1,3-	142-28-9	–	–	1.0E-01	T	2.0E-02	PPRTV	4.0E-06	T	2.0E-02	T
Dichloropropane, 2,2-	594-20-7	–	–	6.8E-02	T	9.0E-02	T	–	–	4.0E-03	T
Dichloropropanol, 2,3-	616-23-9	–	–	–	–	3.0E-03	I	–	–	–	–
Dichloropropene, 1,1-	563-58-6	B2	T	1.0E-01	T	3.0E-02	T	4.0E-06	T	2.0E-02	T
Dichloropropene, 1,3- (mixed isomers)	542-75-6	B2	I	1.0E-01	I	3.0E-02	I	4.0E-06	I	2.0E-02	I
Dichloropropene, cis 1,3-	10061-01-5	–	–	5.4E-01	T	1.0E-04	T	–	–	2.0E-02	I
Dichloropropene, trans 1,3-	10061-02-6	–	–	1.0E-01	T	3.0E-02	T	4.0E-06	T	2.0E-02	I
Dichlorvos	62-73-7	B2	I	2.9E-01	I	5.0E-04	I	–	–	5.0E-04	I
Dicrotophos (bidrin)	141-66-2	–	–	–	–	1.0E-04	I	–	–	–	–
Dicyclopentadiene	77-73-6	IIACP	PPRTV	–	–	8.0E-02	PPRTV	–	–	–	–
Dieldrin	60-57-1	B2	I	1.6E+01	I	5.0E-05	I	4.6E-03	I	–	–
Diethanolamine	111-42-2	–	–	–	–	5.0E-04	T	–	–	2.5E-02	T
Diethyldithiocarbamate, sodium salt	148-18-5	C	H	2.7E-01	H	3.0E-02	I	–	–	–	–
Diethyl phthalate	84-66-2	D	I	–	–	8.0E-01	I	–	–	–	–
Diethylene glycol	111-46-6	–	–	–	–	2.0E+00	T	–	–	–	–
Diethylene glycol monobutyl ether	112-34-5	–	–	–	–	3.0E-02	PPRTV	–	–	1.0E-04	PPRTV
Diethylhexyl adipate	103-23-1	C	I	1.2E-03	I	6.0E-01	I	–	–	–	–
Diethylstilbestrol	56-53-1	A	H	4.7E+03	H	–	–	–	–	–	–
Diisobutylene (trimethyl-1-pentene, 2,4,4-)	107-39-1	–	–	–	–	6.0E-02	T	–	–	2.0E-01	T
Diisopropylbenzene, p-	100-18-5	–	–	–	–	1.0E-02	T	–	–	–	–
Diisopropyl ether (2,2'-oxybis-propane)	108-20-3	–	–	–	–	1.0E-01	T	–	–	7.0E-01	PPRTV
Dimethenamid	87674-68-8	–	–	–	–	1.5E-02	T	–	–	–	–
Dimethoate	60-51-5	–	–	–	–	2.0E-04	I	–	–	–	–
Dimethoxybenzidine, 3,3'-	119-90-4	B2	H	1.4E-02	H	–	–	–	–	–	–
Dimethyl-2-nitrobenzene, 1,3-	81-20-9	–	–	–	–	2.0E-03	T	–	–	9.0E-03	T
Dimethyl-3-nitrobenzene, 1,2-	83-41-0	–	–	–	–	2.0E-03	T	–	–	9.0E-03	T
Dimethyl-4-nitrobenzene, 1-2-	99-51-4	–	–	–	–	2.0E-03	T	–	–	9.0E-03	T
Dimethyl-5-nitrobenzene, 1,3-	99-12-7	–	–	–	–	2.0E-03	T	–	–	9.0E-03	T
Dimethylphenethylamine, alpha, alpha-	122-09-8	–	–	–	–	2.0E-03	T	–	–	–	–
Dimethyl phenol, 2,4-	105-67-9	–	–	–	–	2.0E-02	I	–	–	–	–
Dimethylaminoazobenzene, p-	60-11-7	–	–	–	–	1.0E-05	T	–	–	–	–
Dimethylbenz-a-anthracene, 7,12-	57-97-6	–	–	2.5E+02	T	–	–	2.4E-02	T	–	–
Dimethylbenzidine, 3,3'-	119-93-7	LC	PPRTV	1.1E+01	PPRTV	–	–	–	–	–	–
Dimethylformamide, N,N-	68-12-2	–	–	–	–	1.0E-01	PPRTV	–	–	3.0E-02	I
Dimethylnaphthalene, 1,3-	575-41-7	–	–	–	–	4.0E-02	T	–	–	–	–
Dimethylphthalate	131-11-3	D	I	–	–	8.0E-01	T	–	–	–	–
Di-n-butyl phthalate	84-74-2	D	I	–	–	1.0E-01	I	–	–	–	–

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Ethylene dibromide (dibromoethane, 1,2-)	106-93-4	LC	T	2.0E+00	I	9.0E-03	I	4.4E-05	T	6.7E-02	T
Ethylene glycol	107-21-1	–	–	–	–	2.0E+00	I	–	–	–	–
Ethylene oxide	75-21-8	LC	T	1.0E+00	H	–	–	1.4E-06	T	–	–
Ethylene thiourea	96-45-7	B2	H	1.1E-01	H	8.0E-05	I	–	–	–	–
Ethylenediamine	107-15-3	D	I	–	–	9.0E-02	PPRTV	–	–	–	–
Ethylenimine	151-56-4	C	T	6.5E+01	OEHHA	–	–	1.9E-02	OEHHA	–	–
Ethylhexyl acrylate, 2-	103-11-7	B2	T	4.8E-02	T	–	–	–	–	–	–
Famphur	52-85-7	–	–	–	–	3.0E-05	T	–	–	–	–
Fensulfothion	115-90-2	–	–	–	–	1.0E-03	T	–	–	–	–
Fenthion	55-38-9	–	–	–	–	7.0E-05	EPA –OP	–	–	–	–
Fenuron	–	–	–	–	–	7.0E-02	T	–	–	–	–
Fluoranthene	206-44-0	IIACP	PPRTV	–	–	4.0E-02	I	–	–	–	–
Fluorene	86-73-7	D	I	–	–	4.0E-02	I	–	–	–	–
Fluorine (soluble fluoride)	7782-41-4	–	–	–	–	6.0E-02	I	–	–	2.7E-02	T
Fluorochloridone	61213-25-0	–	–	–	–	7.5E-03	T	–	–	–	–
Fonofos	944-22-9	–	–	–	–	2.0E-03	I	–	–	–	–
Formaldehyde ⁵	50-00-0	B1	I	–	–	2.0E-01	I	–	–	1.1E-02	T
Formic acid	64-18-6	–	–	–	–	9.0E-01	PPRTV	–	–	3.0E-03	PPRTV
Furan	110-00-9	–	–	–	–	1.0E-03	I	–	–	–	–
Furfural	98-01-1	–	–	–	–	3.0E-03	I	–	–	–	–
Glycidylaldehyde	765-34-4	B2	I	–	–	4.0E-04	I	–	–	1.0E-03	H
Glyphosate	1071-83-6	D	I	–	–	1.0E+00	A	–	–	–	–
Heptachlor	76-44-8	B2	I	4.5E+00	I	5.0E-04	I	1.3E-03	I	–	–
Heptachlor epoxide	1024-57-3	B2	I	9.1E+00	I	1.3E-05	I	2.6E-03	I	–	–
Heptane, n-	142-82-5	D	I	–	–	6.0E-02	T	–	–	9.0E+00	T
Heptanoic acid, n-	111-14-8	–	–	–	–	5.0E-01	T	–	–	1.0E-03	T
Hexachlorobenzene	118-74-1	B2	I	1.6E+00	I	8.0E-04	I	4.6E-04	I	–	–
Hexachlorobutadiene	87-68-3	C	I	7.8E-02	I	1.0E-03	PPRTV	2.2E-05	I	–	–
Hexachlorocyclohexane, alpha (alpha-BHC)	319-84-6	B2	I	6.3E+00	I	8.0E-03	A	1.8E-03	I	–	–
Hexachlorocyclohexane, beta (beta-BHC)	319-85-7	C	I	1.8E+00	I	–	–	5.3E-04	I	–	–
Hexachlorocyclohexane, delta (delta-BHC)	319-86-8	B2	T	1.8E+00	T	3.0E-04	T	5.1E-04	T	–	–
Hexachlorocyclohexane, gamma (lindane; gamma-BHC)	58-89-9	B2	H	1.3E+00	H	3.0E-04	I	–	–	–	–
Hexachlorocyclohexane, techn (technical-BHC)	608-73-1	B2	I	1.8E+00	I	–	–	5.1E-04	I	–	–
Hexachlorocyclopentadiene	77-47-4	E	I	–	–	6.0E-03	I	–	–	2.0E-04	I
Hexachloroethane	67-72-1	LC	I	4.0E-02	I	7.0E-04	I	–	–	3.0E-02	I
Hexachlorophene	70-30-4	–	–	–	–	3.0E-04	I	–	–	–	–
Hexachloropropylene	1888-71-7	–	–	4.0E-02	T	7.0E-04	T	–	–	3.0E-02	T
Hexanal, 2-ethyl-	123-05-7	–	–	–	–	1.5E-01	T	–	–	–	–
Hexane, n-	110-54-3	D	I	–	–	6.0E-02	H	–	–	6.7E-01	T
Hexanediamine, 1,6-	124-09-4	–	–	–	–	5.0E-03	T	–	–	–	–
Hexanedinitrile	111-69-3	–	–	–	–	1.4E-03	T	–	–	6.0E-03	PPRTV
Hexanediol, 1,6-	629-11-8	–	–	–	–	5.0E+00	T	–	–	1.8E+01	T
Hexanoic acid	142-62-1	–	–	–	–	6.4E-02	T	–	–	1.0E-03	T
Hexanone, 2-	591-78-6	IIACP	I	–	–	5.0E-02	A	–	–	3.0E-02	I
Hexazinone	51235-04-2	–	–	–	–	3.3E-02	I	–	–	–	–
Hexene, 1-	592-41-6	–	–	–	–	3.3E-01	T	–	–	1.1E-01	T
Hexene, cis-2-	7688-21-3	–	–	–	–	3.3E-01	T	–	–	1.1E-01	T
Hexylene glycol (2-methyl-2,4-pentanediol)	107-41-5	–	–	–	–	3.0E-01	T	–	–	–	–
Hydrazine	302-01-2	B2	I	3.0E+00	I	–	–	4.9E-03	I	3.0E-05	PPRTV
Hydrocaproic acid, 6- (6-hydroxyhexanoic acid)	1191-25-9	–	–	–	–	6.4E-02	T	–	–	1.0E-03	T
Hydrogen chloride (hydrochloric acid)*	7647-01-0	–	–	–	–	–	–	–	–	–	–
Hydroquinone	123-31-9	LC	PPRTV	6.0E-02	PPRTV	4.0E-02	PPRTV	–	–	–	–
Indene	95-13-6	–	–	–	–	2.0E-02	T	–	–	3.0E-03	T
Indeno-1,2,3-cd-pyrene	193-39-5	CH	I	1.0E-01	EPA –93	–	–	6.0E-05	EPA –93	–	–

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Chemical of Concern	CAS	Class ²	Ref ³	SFo (mg/kg-day) ⁻¹	Ref ³	RfDo (mg/kg-day)	Ref ³	URF (µg/m ³) ⁻¹	Ref ³	RfC (mg/m ³)	Ref ³
Iron*	7439-89-6	—	—	—	—	—	—	—	—	—	—
Isoamyl alcohol	123-51-3	—	—	—	—	5.0E-03	T	—	—	—	—
Isobutyl alcohol	78-83-1	—	—	—	—	3.0E-01	I	—	—	—	—
Isobutylene (2-methyl-1-propene)	115-11-7	—	—	—	—	3.7E-03	T	—	—	1.1E+02	T
Isobutyric acid (2-methylpropanoic acid)	79-31-2	—	—	—	—	5.0E-01	T	—	—	—	—
Isodecanol	25339-17-7	—	—	—	—	1.6E-03	T	—	—	—	—
Isodrin	465-73-6	—	—	1.7E+02	T	3.0E-06	T	4.9E-02	T	—	—
Isopentane	78-78-4	—	—	—	—	6.0E-02	T	—	—	2.4E+01	T
Isophorone	78-59-1	C	I	9.5E-04	I	2.0E-01	I	—	—	—	—
Isopropyl acetate	108-21-4	—	—	—	—	7.0E-02	T	—	—	—	—
Isopropyl alcohol	67-63-0	—	—	—	—	2.0E+00	PPRTV	—	—	2.0E-01	PPRTV
Isosafrole	120-58-1	B2	T	2.2E-01	T	—	—	6.3E-05	T	—	—
Kelthane (dicofol)	115-32-2	—	—	—	—	6.0E-03	T	—	—	—	—
Kepone (chlordecone)	143-50-0	LC	I	1.0E+01	I	3.0E-04	I	—	—	—	—
Lead (inorganic)	7439-92-1	—	—	—	—	—	—	—	—	—	—
Leptophos	21609-90-5	—	—	—	—	5.0E-06	T	—	—	1.8E-06	T
Limonene, d-*	5989-27-5	—	—	—	—	—	—	—	—	—	—
Lithium	7439-93-2	—	—	—	—	7.0E-03	T	—	—	—	—
Magnesium*	7439-95-4	—	—	—	—	—	—	—	—	—	—
Malathion	121-75-5	—	—	—	—	2.0E-02	I	—	—	2.0E-04	T
Maleic anhydride	108-31-6	—	—	—	—	1.0E-01	I	—	—	—	—
Maleic hydrazide	123-33-1	—	—	—	—	5.0E-01	I	—	—	—	—
Malononitrile	109-77-3	—	—	—	—	1.0E-04	PPRTV	—	—	—	—
Mancozeb	8018-01-7	—	—	—	—	3.0E-02	I	—	—	—	—
Manganese ⁶	7439-96-5	D	I	—	—	1.4E-01/ 4.7E-02	I	—	—	8.4E-04	T
MCPA (4-(chloro-2-methylphenoxy) acetic acid)	94-74-6	—	—	—	—	5.0E-04	I	—	—	—	—
MCPP (2-(4-chloro-2-methylphenoxy) propanoic acid)	93-65-2	—	—	—	—	1.0E-03	I	—	—	—	—
Mercury (pH = 4.9) ⁷	7439-97-6	D	I	—	—	3.0E-04	I	—	—	3.0E-04	I
Mercury (pH = 6.8) ⁷	7439-97-6	D	I	—	—	3.0E-04	I	—	—	3.0E-04	I
Merphos	150-50-5	—	—	—	—	3.0E-05	I	—	—	—	—
Methacrylic acid (2-methyl-2-propenoic acid)	79-41-4	—	—	—	—	1.0E-02	T	—	—	—	—
Methacrylonitrile	126-98-7	NLC	PPRTV	—	—	5.0E-02	T	—	—	3.0E-02	PPRTV
Methanol	67-56-1	—	—	—	—	2.0E+00	I	—	—	7.2E+00	T
Methapyrilene	91-80-5	—	—	4.7E+00	NTP -00	—	—	—	—	—	—
Methomyl	16752-77-5	—	—	—	—	2.5E-02	I	—	—	—	—
Methoxychlor	72-43-5	D	I	—	—	5.0E-03	I	—	—	—	—
Methoxyethanol, 2-	109-86-4	—	—	—	—	2.7E-02	T	—	—	2.0E-02	I
Methyl acetate (acetic acid, methyl ester)	79-20-9	—	—	—	—	1.0E+00	H	—	—	—	—
Methyl acrylate	96-33-3	IIACP	PPRTV	—	—	2.0E-03	T	—	—	2.0E-02	PPRTV
Methyl amyl ketone (2-heptanone)	110-43-0	—	—	—	—	5.0E-02	T	—	—	2.8E+00	T
Methyl chrysene, 1-	3351-28-8	—	—	7.3E-03	T	—	—	8.8E-07	T	—	—
Methyl chrysene, 2-	3351-32-4	—	—	7.3E-03	T	—	—	8.8E-07	T	—	—
Methyl chrysene, 6-	1705-85-7	—	—	7.3E-02	T	—	—	8.8E-06	T	—	—
Methyl cyclohexane	108-87-2	IIACP	PPRTV	—	—	5.0E+00	T	—	—	3.0E+00	H
Methyl ethyl ketone (2-butanone)	78-93-3	D	I	—	—	6.0E-01	I	—	—	8.8E+00	T
Methyl iodide (iodomethane)	74-88-4	—	—	—	—	1.4E-03	T	—	—	—	—
Methyl isobutyl ketone (4-methyl-2-pentanone)	108-10-1	D	I	—	—	8.0E-02	H	—	—	3.0E+00	I
Methyl mercury	22967-92-6	C	I	—	—	1.0E-04	I	—	—	—	—
Methyl methacrylate	80-62-6	E	I	—	—	1.4E+00	I	—	—	7.0E-01	I
Methyl methanesulfonate	66-27-3	C	OEHHA	9.9E-02	OEHHA	—	—	2.8E-05	OEHHA	—	—
Methyl parathion	298-00-0	—	—	—	—	2.5E-04	I	—	—	—	—
Methyl-1-butene, 2-	563-46-2	—	—	—	—	6.0E-02	T	—	—	1.8E+01	T
Methyl-1-propanal, 2- (isobutyraldehyde)	78-84-2	—	—	—	—	4.0E-02	T	—	—	—	—
Methyl-2-butene, 2-	513-35-9	—	—	—	—	6.0E-02	T	—	—	1.8E+01	T

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				Ref ³	Ref ³	Ref ³	Ref ³	Ref ³	Ref ³		
Methyl-2-pentenal, 2-	623-36-9	—	—	1.9E+00	T	—	—	—	—	—	—
Methylcholanthrene, 3-	56-49-5	—	—	2.2E+01	T	—	—	2.1E-03	T	—	—
Methylene bromide (dibromomethane)	74-95-3	—	—	7.5E-03	T	6.0E-02	T	—	—	4.0E-03	PPRTV
Methylene chloride (dichloromethane)	75-09-2	LC	T	9.8E-05	T	2.1E-02	T	2.8E-08	T	1.3E+00	T
Methylene-bis (2-chloroaniline) 4,4'-	101-14-4	LC	PPRTV	1.0E-01	PPRTV	2.0E-03	PPRTV	3.7E-05	H	—	—
Methylmercury hydroxide	1184-57-2	C	T	—	—	1.0E-04	T	—	—	—	—
Methylnaphthalene, 1-	90-12-0	SEC	PPRTV	2.9E-02	PPRTV	7.0E-02	A	—	—	—	—
Methylnaphthalene, 2-	91-57-6	D	I	—	—	4.0E-03	I	—	—	—	—
Methylpyrrolidone, N-	872-50-4	—	—	—	—	2.0E-02	T	—	—	—	—
Methylstyrene, alpha-	98-83-9	—	—	—	—	8.3E-03	T	—	—	2.5E-02	T
Methyltetrahydrofuran, 2-	96-47-9	—	—	7.6E-03	T	2.0E-01	T	1.9E-06	T	—	—
Methyltetrahydropyran, 2-	10141-72-7	—	—	7.6E-03	T	2.0E-01	T	1.9E-06	T	—	—
Metolachlor	51218-45-2	C	I	—	—	1.5E-01	I	—	—	—	—
Metribuzin	21087-64-9	D	I	—	—	2.5E-02	I	—	—	—	—
Mirex	2385-85-5	B2	H	—	—	2.0E-04	I	—	—	—	—
Molinate	2212-67-1	—	—	—	—	2.0E-03	I	—	—	—	—
Molybdenum	7439-98-7	—	—	—	—	5.0E-03	I	—	—	—	—
Monocrotophos	2157-98-4	—	—	—	—	6.0E-04	T	—	—	—	—
Morpholine	110-91-8	—	—	—	—	5.0E+02	T	—	—	—	—
Morpholine, N-butyl-	1005-67-0	—	—	—	—	2.3E-03	T	—	—	—	—
MTBE (methyl tert-butyl ether)	1634-04-4	—	—	1.8E-03	OEHHA	1.0E-02	OEHHA	2.6E-07	OEHHA	3.0E+00	I
Naled	300-76-5	—	—	—	—	2.0E-03	I	—	—	—	—
Naphthalene	91-20-3	D	I	—	—	2.0E-02	I	—	—	3.0E-03	I
Naphthoquinone, 1,4-	130-15-4	—	—	—	—	7.0E-03	T	—	—	—	—
Naphthylamine, 1-	134-32-7	—	—	—	—	2.0E-02	T	—	—	—	—
Naphthylamine, 2-	91-59-8	—	—	1.8E+00	OEHHA	—	—	—	—	—	—
Napropamide	15299-99-7	—	—	—	—	1.0E-01	I	—	—	—	—
Neopentyl glycol	126-30-7	—	—	—	—	3.0E-01	T	—	—	—	—
Nickel and compounds	7440-02-0	CH	T	—	—	2.0E-02	I	1.7E-04	T	2.3E-04	T
Nitrate-N	14797-55-8	—	—	—	—	1.6E+00	I	—	—	—	—
Nitrite-N	14797-65-0	—	—	—	—	1.0E-01	I	—	—	—	—
Nitroaniline, 2-	88-74-4	D	N	—	—	3.0E-04	N	—	—	2.0E-04	H
Nitroaniline, 3-	99-09-2	C	N	3.8E-02	N	3.0E-04	PPRTV	—	—	2.0E-04	T
Nitroaniline, 4-	100-01-6	SEC	PPRTV	2.0E-02	PPRTV	4.0E-03	PPRTV	—	—	6.0E-03	PPRTV
Nitrobenzene	98-95-3	LC	I	—	—	2.0E-03	I	4.0E-05	I	9.0E-03	I
Nitroglycerin	55-63-0	LC	PPRTV	1.7E-02	PPRTV	1.0E-04	PPRTV	—	—	—	—
Nitrophenol, 2-	88-75-5	—	—	—	—	2.0E-03	T	—	—	—	—
Nitrophenol, 3-	554-84-7	—	—	—	—	2.0E-03	T	—	—	—	—
Nitrophenol, 4-	100-02-7	—	—	—	—	2.0E-03	T	—	—	—	—
Nitropropane, 2-	79-46-9	—	—	—	—	1.4E-04	T	5.8E-04	PPRTV	2.0E-02	I
Nitroquinoline-N-oxide, 4-	56-57-5	B2	T	9.4E+00	T	—	—	2.7E-03	T	—	—
Nitrosodiethanolamine	1116-54-7	B2	I	2.8E+00	I	—	—	—	—	—	—
Nitrosodiethylamine, n-	55-18-5	B2	I	1.5E+02	I	—	—	4.3E-02	I	—	—
Nitrosodimethylamine, n-	62-75-9	B2	I	5.1E+01	I	8.0E-06	PPRTV	1.4E-02	I	4.0E-05	PPRTV
Nitrosodi-n-butylamine, n-	924-16-3	B2	I	5.4E+00	I	—	—	1.6E-03	I	—	—
Nitrosodi-n-propylamine, n-	621-64-7	B2	I	7.0E+00	I	—	—	—	—	—	—
Nitrosodiphenylamine	86-30-6	B2	I	4.9E-03	I	—	—	—	—	—	—
Nitroso-methyl-ethyl-amine, n-	10595-95-6	B2	I	2.2E+01	I	—	—	—	—	—	—
Nitrosomorpholine, N-	59-89-2	C	OEHHA	6.7E+00	OEHHA	—	—	1.9E-03	OEHHA	—	—
Nitroso-n-ethylurea, n-	759-73-9	B2	H	1.4E+02	H	—	—	—	—	—	—
Nitrosopiperidine, N-	100-75-4	C	OEHHA	9.4E+00	OEHHA	—	—	2.7E-03	OEHHA	—	—
Nitrosopyrrolidine, n-	930-55-2	B2	I	2.1E+00	I	—	—	6.1E-04	I	—	—
Nitrotoluene, m-	99-08-1	—	—	—	—	1.0E-02	H	—	—	—	—
Nitrotoluene, o-	88-72-2	LC	PPRTV	2.2E-01	PPRTV	9.0E-04	PPRTV	—	—	—	—

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				Ref ³	Ref ³	Ref ³	Ref ³	Ref ³	Ref ³		
Nitrotoluene, p-	99-99-0	LC	PPRTV	1.6E-02	PPRTV	4.0E-03	PPRTV	—	—	—	—
Nonachlor, cis-	5103-73-1	B2	T	3.5E-01	T	5.0E-04	T	1.0E-04	T	7.0E-04	T
Nonachlor, trans-	39765-80-5	B2	T	3.5E-01	T	5.0E-04	T	1.0E-04	T	7.0E-04	T
Nonanal	124-19-6	—	—	—	—	2.0E-01	T	—	—	—	—
Nonene, 1-n	124-11-8	—	—	—	—	1.0E-01	T	—	—	—	—
Nonylphenol, 4-n-	104-40-5	—	—	—	—	1.0E-01	T	—	—	—	—
Nonylphenol ethoxylate ⁸	9016-45-9	—	—	—	—	1.0E-01	T	—	—	—	—
Octamethylpyrophosphoramidate	152-16-9	—	—	—	—	2.0E-03	H	—	—	—	—
Octanone	106-68-3	—	—	—	—	6.0E-02	T	—	—	1.8E+01	T
Oxamyl	23135-22-0	—	—	—	—	2.5E-02	I	—	—	—	—
Oxychlorodane	27304-13-8	B2	T	3.5E-01	T	5.0E-04	T	1.0E-04	T	7.0E-04	T
Paraquat	1910-42-5	C	I	—	—	4.5E-03	I	—	—	—	—
Parathion (ethyl parathion)	56-38-2	C	I	—	—	6.0E-03	H	—	—	—	—
Pebulate	1114-71-2	—	—	—	—	5.0E-02	H	—	—	—	—
Pendimethalin	40487-42-1	—	—	—	—	4.0E-02	I	—	—	—	—
Pentachlorobenzene	608-93-5	D	I	—	—	8.0E-04	I	—	—	—	—
Pentachloroethane	76-01-7	LC	PPRTV	9.0E-02	PPRTV	3.0E-02	T	7.4E-06	T	—	—
Pentachloronitrobenzene	82-68-8	C	H	2.6E-01	H	3.0E-03	I	—	—	—	—
Pentachlorophenol	87-86-5	LC	I	4.0E-01	I	5.0E-03	I	—	—	—	—
Pentadiene, 1,3-cis-	1574-41-0	—	—	—	—	6.0E-02	T	—	—	1.8E+01	T
Pentadiene, 1,3-trans-	2004-70-8	—	—	—	—	6.0E-02	T	—	—	1.8E+01	T
Pentaerythritol tetranitrate (PETN)	78-11-5	—	—	—	—	2.0E-03	PPRTV	—	—	—	—
Pentane	109-66-0	—	—	—	—	6.0E-02	T	—	—	2.4E+01	T
Pentane, 2-methyl-	107-83-5	—	—	—	—	6.0E-02	T	—	—	1.8E+01	T
Pentane, 3-methyl-	96-14-0	—	—	—	—	6.0E-02	T	—	—	1.8E+01	T
Pentandiol, 1,5-	111-29-5	—	—	—	—	5.0E+00	T	—	—	1.8E+01	T
Pentanol, 1-	71-41-0	—	—	—	—	3.3E-02	T	—	—	—	—
Pentanol, 4-methyl-2-	108-11-2	—	—	—	—	2.6E-02	T	—	—	—	—
Pentanone, 2-	107-87-9	—	—	—	—	4.0E-02	T	—	—	—	—
Pentene, 2-	109-68-2	—	—	—	—	6.0E-02	T	—	—	1.8E+01	T
Pentyne, 1-	627-19-0	—	—	—	—	6.0E-02	T	—	—	1.8E+01	T
Perchlorate	14797-73-0	—	—	—	—	7.0E-04	I	—	—	—	—
Perfluorooctane sulfonic acid (1-Octanesulfonic acid, heptadecafluoro-1-) [PFOS]	1763-23-1	—	—	—	—	2.3E-05	T	—	—	8.1E-05	T
Perfluoroundecanoic acid (Undecanoic acid, uncosafluoro-) [PFUnDa]	2058-94-8	—	—	—	—	1.2E-05	T	—	—	—	—
Perfluoropentanoic acid (Pentanoic acid, nonafluoro-) [PFPeA]	2706-90-3	—	—	—	—	5.0E-04	T	—	—	—	—
Perfluorohexanoic acid (Hexanoic acid, undecafluoro-) [PFHxA]	307-24-4	—	—	—	—	5.0E-04	T	—	—	—	—
Perfluorododecanoic acid (Dodecanoic acid, tricosafafluoro-) [PFDoA]	307-55-1	—	—	—	—	1.2E-05	T	—	—	4.2E-05	T
Perfluorooctanoic acid (Octanoic acid, pentadecafluoro-) [PFOA]	335-67-1	—	—	—	—	1.2E-05	T	—	—	4.1E-06	T
Perfluorodecanoic acid (Decanoic acid, nonadecafluoro-) [PFDA]	335-76-2	—	—	—	—	1.5E-05	T	—	—	5.3E-05	T
Perfluorodecane sulfonic acid (1-Decanesulfonic acid, heneicosafluoro-) [PFDS]	335-77-3	—	—	—	—	1.2E-05	T	—	—	—	—
Perfluorohexane sulfonic acid (1-Hexanesulfonic acid, tridecafluoro-) [PFHxS]	355-46-4	—	—	—	—	3.8E-06	T	—	—	1.3E-05	T
Perfluorobutyric acid (Butanoic acid, heptafluoro-) [PFBA]	375-22-4	—	—	—	—	1.0E-03	T	—	—	3.5E-03	T
Perfluorobutane sulfonic acid (1-Butanesulfonic acid, nonafluoro-) [PFBS]	375-73-5	—	—	—	—	1.4E-03	T	—	—	4.9E-03	T
Perfluoroheptanoic acid (Heptanoic acid, tridecafluoro-) [PFHpA]	375-85-9	—	—	—	—	2.3E-05	T	—	—	—	—
Perfluorononanoic acid (Nonanoic acid, heptadecafluoro-) [PFNA]	375-95-1	—	—	—	—	1.2E-05	T	—	—	2.8E-05	T
Perfluorotetradecanoic acid (Tetradecanoic acid, heptacosafafluoro-) [PFTeDA]	376-06-7	—	—	—	—	1.2E-05	T	—	—	—	—
Perfluorotridecanoic acid (Tridecanoic acid, pentacosafafluoro-) [PFTTrDA]	72629-94-8	—	—	—	—	1.2E-05	T	—	—	—	—
Perfluorooctane sulfonamide (1-Octanesulfonamide, heptadecafluoro-) [PFOSA]	754-91-6	—	—	—	—	1.2E-05	T	—	—	4.1E-06	T

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Chemical of Concern	CAS	Class ²	Ref ³	SFo (mg/kg-day) ⁻¹	Ref ³	RfDo (mg/kg-day)	Ref ³	URF (µg/m ³) ⁻¹	Ref ³	RfC (mg/m ³)	Ref ³
Perylene	198-55-0	—	—	—	—	2.0E-02	T	—	—	—	—
Phenacetin	62-44-2	B1	OEHHA	2.2E-03	OEHHA	—	—	6.3E-07	OEHHA	—	—
Phenanthrene	85-01-8	D	I	—	—	3.0E-02	T	—	—	—	—
Phenanthridine	229-87-8	—	—	—	—	3.0E-03	T	—	—	—	—
Phenol	108-95-2	IIACP	T	—	—	3.0E-01	I	—	—	1.1E-02	T
Phenol, 4-tert-butyl-	98-54-4	—	—	—	—	1.2E-01	T	—	—	—	—
Phenothiazine	92-84-2	—	—	—	—	1.1E-03	T	—	—	—	—
Phenyl mercuric acetate	62-38-4	—	—	—	—	8.0E-05	I	—	—	—	—
Phenylene diamine, m-	108-45-2	—	—	—	—	6.0E-03	I	—	—	—	—
Phenylene diamine, p-	106-50-3	—	—	—	—	1.9E-01	H	—	—	—	—
Phorate	298-02-2	—	—	—	—	2.0E-04	H	—	—	—	—
Phosalone	2310-17-0	—	—	—	—	2.0E-03	EPA —OP	—	—	—	—
Phosdrin (mevinphos)	7786-34-7	—	—	—	—	2.5E-05	EPA —OP	—	—	—	—
Phosmet	732-11-6	—	—	—	—	2.0E-02	I	—	—	—	—
Phosphine	7803-51-2	D	I	—	—	3.0E-04	I	—	—	3.0E-04	I
Phosphorotrithioic acid, S,S,S-tributyl ester	78-48-8	—	—	8.4E-02	EPA —OP	5.0E-04	A	—	—	—	—
Phosphorus, total*	7723-14-0	—	—	—	—	—	—	—	—	—	—
Phosphorus, white	7723-14-0	D	I	—	—	2.0E-05	I	—	—	—	—
Phthalic anhydride	85-44-9	—	—	—	—	2.0E+00	I	—	—	1.2E-01	H
Picloram	1918-02-1	—	—	—	—	7.0E-02	I	—	—	—	—
Picoline, 2- (2-methylpyridine)	109-06-8	—	—	—	—	9.0E-03	T	—	—	—	—
Polybrominated biphenyls (PBBs)	67774-32-7	B2	H	8.9E+00	H	7.0E-06	H	—	—	—	—
Polychlorinated biphenyls (PCBs)	1336-36-3	B2	I	2.0E+00	I	2.0E-05	I	5.7E-04	I	—	—
Potassium*	7440-09-7	—	—	—	—	—	—	—	—	—	—
Primene	68955-53-3	—	—	—	—	6.0E-03	T	—	—	—	—
Prometon (pramitol)	1610-18-0	—	—	—	—	1.5E-02	I	—	—	—	—
Prometryn	7287-19-6	—	—	—	—	4.0E-02	T	—	—	—	—
Pronamide	23950-58-5	—	—	—	—	7.5E-02	I	—	—	—	—
Propanal (propionaldehyde)	123-38-6	—	—	—	—	8.0E-03	T	—	—	8.0E-03	I
Propane, 1-bromo-	106-94-5	—	—	—	—	3.6E-02	T	—	—	—	—
Propanil	709-98-8	—	—	—	—	5.0E-03	I	—	—	—	—
Propanoic acid (propionic acid)	79-09-4	—	—	—	—	5.0E-01	T	—	—	—	—
Propanol, 1-	71-23-8	—	—	—	—	7.0E+00	T	—	—	—	—
Propargite	2312-35-8	—	—	—	—	2.0E-02	I	—	—	—	—
Propargyl alcohol	107-19-7	—	—	—	—	2.0E-03	I	—	—	—	—
Propazine	139-40-2	C	EPA —OP	4.5E-02	EPA —OP	2.0E-02	I	—	—	—	—
Propham	122-42-9	—	—	—	—	2.0E-02	I	—	—	—	—
Propionitrile (propane nitrile)	107-12-0	—	—	—	—	4.0E-04	T	—	—	—	—
Propyl acetate, n-	109-60-4	—	—	—	—	9.0E-02	T	—	—	—	—
Propylbenzene, n-	103-65-1	—	—	—	—	4.0E-02	N	—	—	4.0E-01	T
Propylene glycol	57-55-6	—	—	—	—	2.0E+01	PPRTV	—	—	3.0E-03	PPRTV
Propylene glycol monomethyl ether	107-98-2	—	—	—	—	7.0E-01	H	—	—	2.0E+00	I
Propylene oxide	75-56-9	B2	I	2.4E-01	I	—	—	3.7E-06	I	3.0E-02	I
Propylene tetramer	6842-15-5	—	—	—	—	1.0E-01	T	—	—	1.0E+00	T
Prothiofos (Tokuthion)	34643-46-4	—	—	—	—	1.0E-04	T	—	—	—	—
Pyrene	129-00-0	D	I	—	—	3.0E-02	I	—	—	—	—
Pyridine	110-86-1	—	—	—	—	1.0E-03	I	—	—	—	—
Quinoline	91-22-5	B2	I	3.0E+00	I	—	—	—	—	—	—
Ronnel	299-84-3	—	—	—	—	5.0E-02	H	—	—	—	—
Safrole	94-59-7	C	OEHHA	2.2E-01	OEHHA	—	—	6.3E-05	OEHHA	—	—
Selenium	7782-49-2	D	I	—	—	5.0E-03	I	—	—	—	—
Selenourea	630-10-4	—	—	—	—	5.0E-03	H	—	—	—	—
Silver	7440-22-4	D	I	—	—	5.0E-03	I	—	—	—	—
Simazine	122-34-9	C	H	1.2E-01	H	5.0E-03	I	—	—	—	—
Sodium*	7440-23-5	—	—	—	—	—	—	—	—	—	—
Sodium hypochlorite	7681-52-9	—	—	—	—	2.1E-01	T	—	—	3.1E-04	T

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Chemical of Concern	CAS	Class ²	Ref ³	SFo (mg/kg-day) ⁻¹		RfDo (mg/kg-day)		URF (µg/m ³) ⁻¹		RfC (mg/m ³)	
				Ref ³	Ref ³	Ref ³	Ref ³	Ref ³	Ref ³		
Sodium polyacrylate	9003-04-7	—	—	—	—	5.0E-01	T	—	—	1.0E-03	T
Strontium	7440-24-6	—	—	—	—	6.0E-01	I	—	—	—	—
Strychnine	57-24-9	—	—	—	—	3.0E-04	I	—	—	—	—
Styrene	100-42-5	—	—	—	—	2.0E-01	I	—	—	4.7E-01	T
Sulfate*	14808-79-8	—	—	—	—	—	—	—	—	—	—
Sulfide*	18496-25-8	—	—	—	—	—	—	—	—	—	—
Sulfolane	126-33-0	—	—	—	—	1.3E-02	T	—	—	6.4E-03	T
Sulfur*	7704-34-9	—	—	—	—	—	—	—	—	—	—
Sulprofos (Bolstar)	35400-43-2	—	—	—	—	3.0E-03	EPA —OP	—	—	—	—
Tebuconazole	107534-96-3	C	EPA —OP	—	—	3.0E-02	EPA —OP	—	—	—	—
Tebuthiuron	34014-18-1	—	—	—	—	7.0E-02	I	—	—	—	—
Terbufos	13071-79-9	—	—	—	—	2.5E-05	H	—	—	—	—
Tert-amyl ethyl ether (TAEE)	919-94-8	—	—	—	—	4.0E-02	T	—	—	—	—
Tert-amyl-methyl ether (TAME)	994-05-8	—	—	—	—	4.0E-02	T	—	—	—	—
Tert-butyl alcohol (2-methyl-2-propanol)	75-65-0	—	—	—	—	9.0E-02	T	—	—	—	—
Tetrachlorobenzene, 1,2,3,4-	634-66-2	—	—	—	—	3.0E-04	T	—	—	—	—
Tetrachlorobenzene, 1,2,3,5-	634-90-2	—	—	—	—	3.0E-04	T	—	—	—	—
Tetrachlorobenzene, 1,2,4,5-	95-94-3	—	—	—	—	3.0E-04	I	—	—	—	—
Tetrachloroethane, 1,1,1,2-	630-20-6	C	I	2.6E-02	I	3.0E-02	I	7.4E-06	I	—	—
Tetrachloroethane, 1,1,2,2-	79-34-5	LC	I	2.0E-01	I	2.0E-02	I	—	—	—	—
Tetrachloroethylene (PCE)	127-18-4	LC	T	2.1E-03	I	2.1E-02	T	3.8E-07	T	3.7E-01	T
Tetrachlorophenol, 2,3,4,5-	4901-51-3	—	—	—	—	3.0E-02	T	—	—	—	—
Tetrachlorophenol, 2,3,4,6-	58-90-2	—	—	—	—	3.0E-02	I	—	—	—	—
Tetrachlorophenol, 2,3,5,6-	935-95-5	—	—	—	—	3.0E-02	T	—	—	—	—
Tetrachlorvinphos (Stirophos)	22248-79-9	—	—	—	—	4.2E-02	EPA —OP	—	—	—	—
Tetradifon	116-29-0	—	—	—	—	2.0E-02	T	—	—	—	—
Tetraethyl dithiopyrophosphate (sulfotep)	3689-24-5	—	—	—	—	5.0E-04	I	—	—	—	—
Tetraethyl lead	78-00-2	—	—	—	—	1.0E-07	I	—	—	—	—
Tetraethyl pyrophosphate (TEPP)	107-49-3	—	—	—	—	1.1E-05	T	—	—	—	—
Tetraethylene glycol	112-60-7	—	—	—	—	3.3E-01	T	—	—	—	—
Tetrahydrofuran	109-99-9	SEC	I	7.6E-03	N	9.0E-01	I	1.9E-06	N	2.0E+00	I
Tetrahydropyran	142-68-7	—	—	7.6E-03	T	2.0E-01	T	1.9E-06	T	—	—
Tetraoxadodecane, 2,5,8,11-	112-49-2	—	—	—	—	2.5E-02	T	—	—	—	—
Thallium	7440-28-0	D	I	—	—	6.7E-05	T	—	—	—	—
Thiofanox	39196-18-4	—	—	—	—	3.0E-04	H	—	—	—	—
Thionazin	297-97-2	—	—	—	—	7.0E-05	T	—	—	—	—
Thiophanate-methyl	23564-05-8	—	—	—	—	8.0E-02	I	—	—	—	—
Thiram	137-26-8	—	—	—	—	5.0E-03	I	—	—	—	—
Tin	7440-31-5	—	—	—	—	6.0E-01	H	—	—	—	—
Titanium	7440-32-6	—	—	—	—	5.0E+00	T	—	—	—	—
Toluene	108-88-3	D	I	—	—	8.0E-02	I	—	—	4.1E+00	T
Toluene diisocyanate, 2,4/2,6-	26471-62-5	—	—	—	—	—	—	—	—	7.0E-05	I
Toluenediamine, 2,4-	95-80-7	B2	H	3.2E+00	H	—	—	—	—	—	—
Toluenediamine, 2,6-	823-40-5	—	—	—	—	3.0E-02	PPRTV	—	—	—	—
Toluidine, o-	95-53-4	LC	PPRTV	1.6E-02	PPRTV	—	—	5.1E-05	OEHHA	—	—
Toluidine, p-	106-49-0	SEC	PPRTV	3.0E-02	PPRTV	—	—	—	—	—	—
Toxaphene	8001-35-2	B2	I	1.1E+00	I	3.1E-04	T	3.2E-04	I	—	—
TPH, TX1005, C6-C12	NA	—	—	—	—	4.0E-02	—	—	—	2.0E-01	—
TPH, TX1005, >C12-C28	NA	—	—	—	—	4.0E-02	—	—	—	2.0E-01	—
TPH, TX1005, >C12-C35	NA	—	—	—	—	4.0E-02	—	—	—	2.0E-01	—
TPH, TX1005, >C28-C35	NA	—	—	—	—	4.0E-02	—	—	—	2.0E-01	—

Toxicity Factors¹

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Chemical of Concern	CAS	Class ²	Ref ³	SFo (mg/kg-day) ⁻¹	Ref ³	RfDo (mg/kg-day)	Ref ³	URF (µg/m ³) ⁻¹	Ref ³	RfC (mg/m ³)	Ref ³
TP Silvex, 2,4,5-	93-72-1	D	I	—	—	8.0E-03	I	—	—	—	—
Triademenol	55219-65-3	—	—	—	—	3.0E-02	T	—	—	—	—
Triallate	2303-17-5	—	—	—	—	1.3E-02	I	—	—	—	—
Triaminotrinitrobenzene (TATB)	3058-38-6	—	—	—	—	3.0E-03	T	—	—	—	—
Tributyltin oxide	56-35-9	D	I	—	—	3.0E-04	I	—	—	—	—
Trichloro-1,2,2-trifluoroethane, 1,1,2-	76-13-1	—	—	—	—	3.0E+01	I	—	—	5.0E+00	PPRTV
Trichlorobenzene, 1,2,3-	87-61-6	—	—	—	—	3.0E-03	T	—	—	2.0E-03	T
Trichlorobenzene, 1,2,4-	120-82-1	LC	PPRTV	2.9E-02	PPRTV	1.0E-02	I	—	—	2.0E-03	PPRTV
Trichlorobenzene, 1,3,5-	108-70-3	—	—	—	—	3.0E-03	T	—	—	2.0E-03	T
Trichloroethane, 1,1,1-	71-55-6	IIACP	T	—	—	2.0E+00	I	—	—	5.1E+00	T
Trichloroethane, 1,1,2-	79-00-5	C	I	5.7E-02	I	4.0E-03	I	1.6E-05	I	—	—
Trichloroethylene (TCE)	79-01-6	CH	I	4.6E-02	I	5.0E-04	I	4.1E-06	I	2.0E-03	I
Trichlorofluoromethane	75-69-4	—	—	—	—	3.0E-01	I	—	—	—	—
Trichloronate	327-98-0	—	—	—	—	3.0E-03	T	—	—	—	—
Trichlorophenol, 2,3,4-	15950-66-0	—	—	—	—	1.0E-01	T	—	—	—	—
Trichlorophenol, 2,3,5-	933-78-8	—	—	—	—	1.0E-01	T	—	—	—	—
Trichlorophenol, 2,3,6-	933-75-5	—	—	—	—	1.0E-01	T	—	—	—	—
Trichlorophenol, 2,4,5-	95-95-4	—	—	—	—	1.0E-01	I	—	—	—	—
Trichlorophenol, 2,4,6-	88-06-2	B2	I	1.1E-02	I	1.0E-03	PPRTV	3.1E-06	I	—	—
Trichlorophenol, 3,4,5-	609-19-8	—	—	—	—	1.0E-01	T	—	—	—	—
Trichlorophenoxyacetic acid, 2,4,5-	93-76-5	—	—	—	—	1.0E-02	I	—	—	—	—
Trichloropropane, 1,1,2-	598-77-6	—	—	—	—	5.0E-03	I	—	—	3.0E-04	T
Trichloropropane, 1,2,3-	96-18-4	LC	I	3.0E+01	I	4.0E-03	I	—	—	3.0E-04	I
Triethanolamine	102-71-6	—	—	—	—	2.0E-01	T	—	—	2.5E-02	T
Triethylamine	121-44-8	—	—	—	—	—	—	—	—	7.0E-03	I
Triethylene glycol	112-27-6	IIACP	PPRTV	—	—	2.0E+00	PPRTV	—	—	—	—
Triethylphosphorothioate, O, O, O-	126-68-1	—	—	—	—	8.3E-06	T	—	—	—	—
Trifluralin	1582-09-8	C	I	7.7E-03	I	7.5E-03	I	—	—	—	—
Trimethylamine	75-50-3	—	—	—	—	—	—	—	—	7.0E-03	T
Trimethylbenzene, 1,2,3-	526-73-8	—	—	—	—	3.4E-02	T	—	—	1.8E-01	T
Trimethylbenzene, 1,2,4-	95-63-6	—	—	—	—	3.4E-02	T	—	—	1.8E-01	T
Trimethylbenzene, 1,3,5-	108-67-8	—	—	—	—	3.4E-02	T	—	—	1.8E-01	T
Trinitrobenzene, 1,3,5-	99-35-4	—	—	—	—	3.0E-02	I	—	—	—	—
Trinitrophenylmethylnitramine (tetryl; nitramine)	479-45-8	—	—	—	—	2.0E-03	PPRTV	—	—	—	—
Trinitrotoluene, 2,4,6-	118-96-7	C	I	3.0E-02	I	5.0E-04	I	—	—	—	—
Tungsten (as sodium tungstate dihydride)	7440-33-7	—	—	—	—	1.0E-03	T	—	—	5.3E-03	T
Uranium (soluble salts)	7440-61-1	—	—	—	—	3.0E-03	I	—	—	4.0E-05	A
Valeric acid (pentanoic acid)	109-52-4	—	—	—	—	5.0E-01	T	—	—	1.0E-03	T
Vanadium	7440-62-2	—	—	—	—	1.8E-03	T	—	—	3.0E-05	T
Vernam	1929-77-7	—	—	—	—	1.0E-03	I	—	—	—	—
Vinyl acetate	108-05-4	—	—	—	—	1.0E+00	H	—	—	2.0E-01	I
Vinyl chloride	75-01-4	A	I	1.5E+00	I	3.0E-03	I	8.4E-06	T	6.0E-02	T
Vinylcyclohexane	695-12-5	—	—	—	—	5.0E-01	T	—	—	—	—
Warfarin	81-81-2	—	—	—	—	3.0E-04	I	—	—	—	—
Xylene, m-	108-38-3	—	—	—	—	2.0E+00	H	—	—	6.1E-01	T
Xylene, o-	95-47-6	—	—	—	—	2.0E+00	H	—	—	6.1E-01	T
Xylene, p-	106-42-3	—	—	—	—	2.0E+00	H	—	—	6.1E-01	T
Xylenes	1330-20-7	D	I	—	—	2.0E-01	I	—	—	6.1E-01	T
Zinc	7440-66-6	D	I	—	—	3.0E-01	I	—	—	—	—
6 C aliphatics (TPH) (>53% n-hexane content)	NA	—	—	—	—	6.0E-02	—	—	—	6.7E-01	—
6 C aliphatics (TPH) (<53% n-hexane content)	NA	—	—	—	—	6.0E-02	—	—	—	1.8E+01	—
>6-8 C aliphatics (TPH) (>53% n-hexane content)	NA	—	—	—	—	6.0E-02	—	—	—	6.7E-01	—
>6-8 C aliphatics (TPH) (<53% n-hexane content)	NA	—	—	—	—	6.0E-02	—	—	—	1.8E+01	—

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Chemical of Concern	CAS	Class ²	SFo (mg/kg-day) ⁻¹		RfDo (mg/kg-day)		URF (µg/m ³) ⁻¹		RfC (mg/m ³)	
			Ref ³	Ref ³	Ref ³	Ref ³	Ref ³	Ref ³	Ref ³	Ref ³
>8-10 C aliphatics (TPH)	NA	–	–	–	–	–	–	–	–	–
>10-12 C aliphatics (TPH)	NA	–	–	–	–	–	–	–	–	–
>12-16 C aliphatics (TPH)	NA	–	–	–	–	–	–	–	–	–
>16-21 C aliphatics (TPH)	NA	–	–	–	–	–	–	–	–	–
>16-21 C aliphatics (TPH) (for transformer mineral oil releases only)	NA	–	–	–	–	–	–	–	–	–
>21-35 C aliphatics (TPH)	NA	–	–	–	–	–	–	–	–	–
>21-35 C aliphatics (TPH) (for transformer mineral oil releases only)	NA	–	–	–	–	–	–	–	–	–
>7-8 C aromatics (TPH)	NA	–	–	–	–	–	–	–	–	–
>8-10 C aromatics (TPH)	NA	–	–	–	–	–	–	–	–	–
>10-12 C aromatics (TPH)	NA	–	–	–	–	–	–	–	–	–
>12-16 C aromatics (TPH)	NA	–	–	–	–	–	–	–	–	–
>16-21 C aromatics (TPH)	NA	–	–	–	–	–	–	–	–	–
>21-35 C aromatics (TPH)	NA	–	–	–	–	–	–	–	–	–

For questions on toxicity factors, contact the Toxicology Division at 877-992-8370.

Footnotes

1 The general hierarchy of the sources for the toxicity factors is: USEPA Integrated Risk Information System (IRIS); USEPA Provisional Peer Reviewed Toxicity Values (PPRTVs); USEPA Health Effects Assessment Summary Tables (HEAST); USEPA National Center for Environmental Assessment (NCEA); TCEQ Toxicology Division Chronic Remediation-Specific Effects Screening Levels (RS-ESLs); Agency for Toxic Substances Disease Registry Chronic Minimal Risk Levels (ATSDR MRLs); other scientifically valid sources as approved by the executive director on a chemical-specific basis.

2 U.S. EPA 2005 carcinogen guideline class descriptors: CH = carcinogenic to humans; LC = likely to be carcinogenic to humans; SEC = suggestive evidence of carcinogenic potential; NLC = not likely to be carcinogenic to humans; IIACP = inadequate information to assess carcinogenic potential. These descriptors may be specific to the exposure pathway for which a carcinogenic toxicity factor was developed. U.S. EPA 1986 carcinogenic classes: A = human carcinogen; B1 = probable human carcinogen with limited evidence of carcinogenicity; B2 = probable human carcinogen with inadequate evidence of carcinogenicity; C = possible human carcinogen; D = not classifiable as to human carcinogenicity; E = evidence of non-carcinogenicity in humans.

3 Reference (Ref): A = ATSDR chronic MRL; CU = Cornell University Pesticide Management Education Program; EPA-OP = EPA Office of Pesticide Programs; H = HEAST, July, 1997; I = IRIS; MA DEP = Massachusetts Department of Environmental Protection; N = NCEA; NYSDOH = New York State Department of Health; OEHA = Cal/EPA Office of Environmental; PPRTV = EPA Provisional Peer Reviewed Toxicity Value; T = TCEQ Toxicology Division.

4 The first value represents the toxicity value to be used for evaluating all residential and commercial/industrial soil pathways for cadmium; the second value represents the toxicity value to be used for evaluating the groundwater dermal pathway (if applicable) for cadmium; as an MCL is available, a risk-based calculation for the groundwater ingestion and groundwater protection pathways is not appropriate.

5 The RfC value is considered protective of the carcinogenic effects of formaldehyde due to inhalation based on the TCEQ Development Support Document for Formaldehyde posted August 7, 2008.

6 The first value represents the toxicity value to be used for evaluating all residential and commercial/industrial soil pathways and all commercial/industrial groundwater pathways for manganese; the second value represents the toxicity value to be used for evaluating all residential groundwater pathways for manganese.

7 Site-specific PCLs for mercury may vary based on the pH-dependent Kd value (see Figure:30 TAC §350.73(f)(1)(C)).

8 Compound with CAS# 104-35-8 nonylphenol ethoxylate in 2006 tox-trrp table has different CAS# 9016-45-9 nonylphenol ethoxylate beginning in the 2010 toxicity factors table.

* These compounds, acetic acid, ammonium polyphosphate, ammonium salts, calcium, chloride, ethylene, hydrogen chloride (hydrochloric acid), iron, limonene, d-, magnesium, phosphorus, total, potassium, sodium, sulfate, sulfide, and sulfur, are not necessarily of concern from a human health standpoint, therefore calculation of human health-based values is not required. However, aesthetics and ecological criteria would still apply. See table entitled "Compounds for which Calculation of a Human Health PCL is Not Required" available on the TCEQ website at <http://www.tceq.state.tx.us/remediation/trrp/trrp.htm>.

SFo - Oral Slope Factor

RfC - Inhalation Reference Concentration

RfDo - Oral Reference Dose

URF - Inhalation Unit Risk Factor

This table shows the toxicity factors used to calculate protective concentration levels.

end of worksheet

Chemical/Physical Properties

Last Revised: March 6, 2023

Chemical of Concern	CAS	B _r _{abg} (μg/g DW)/ (μg/g soil)	B _r _{bg} (μg/g DW)/ (μg/g soil)	Physical State	Type	MW (g/mole)	H _{unitless} (unitless)	LogK _{oc} (unitless)	LogK _d (unitless)	D _{air} (cm ² /s)	D _{wat} (cm ² /s)	Solubility (mg/l)	Vapor_P (mm Hg)	logK _{ow} (unitless)
Acenaphthene	83-32-9	—	—	s	O	1.54E+02	6.44E-03	3.60E+00	—	4.21E-02	7.69E-06	4.24E+00	3.75E-03	4.15E+00
Acenaphthylene	208-96-8	—	—	s	O	1.52E+02	4.74E-03	3.84E+00	—	4.39E-02	7.06E-06	3.93E+00	2.90E-02	3.94E+00
Acetaldehyde	75-07-0	—	—	g	O	4.41E+01	2.75E-03	4.19E-01	—	1.24E-01	1.23E-05	1.00E+06	9.00E+02	4.30E-01
Acetate, 2-ethoxyethanol	111-15-9	—	—	l	O	1.32E+02	1.37E-04	8.17E-01	—	6.13E-02	6.70E-06	1.02E+05	1.93E+00	9.33E-01
Acetate, isoamyl	123-92-2	—	—	l	O	1.30E+02	2.04E-02	1.87E+00	—	6.01E-02	6.40E-06	1.13E+03	3.25E+00	2.27E+00
Acetate, isobutyl	110-19-0	—	—	l	O	1.16E+02	1.98E-02	1.46E+00	—	6.62E-02	6.88E-06	3.81E+03	1.19E+01	1.75E+00
Acetate, sec-butyl	105-46-4	—	—	l	O	1.16E+02	3.02E-02	1.54E+00	—	6.69E-02	6.91E-06	3.34E+03	1.59E+01	1.85E+00
Acetic acid*	64-19-7	—	—	—	—	—	—	—	—	—	—	—	—	—
Acetone (2-propanone)	67-64-1	—	—	l	O	5.81E+01	1.61E-03	-2.44E-01	—	1.24E-01	1.14E-05	6.00E+05	2.27E+02	-2.35E-01
Acetone cyanohydrin	75-86-5	—	—	l	O	8.51E+01	1.34E-04	-2.16E-01	—	8.12E-02	9.09E-06	1.83E+06	8.00E-01	-3.45E-02
Acetonitrile	75-05-8	—	—	l	O	4.11E+01	1.21E-03	-3.30E-01	—	1.28E-01	1.44E-05	2.05E+05	9.00E+01	-3.40E-01
Acetophenone	98-86-2	—	—	l	O	1.20E+02	4.45E-04	1.56E+00	—	6.00E-02	8.73E-06	5.50E+03	3.95E-01	1.67E+00
Acetylaminofluorene, 2-	53-96-3	—	—	s	O	2.23E+02	7.00E-10	2.63E+00	—	4.25E-02	6.08E-06	1.66E+00	9.52E-11	2.80E+00
Acifluorfen, sodium	62476-59-9	—	—	s	O	3.84E+02	8.31E-13	2.05E+00	—	1.45E-02	4.40E-06	2.50E+05	9.75E-09	3.73E-01
Acridine	260-94-6	—	—	s	O	1.79E+02	3.93E-06	3.40E+00	—	5.11E-02	6.66E-06	2.24E+01	8.96E-06	3.46E+00
Acrolein	107-02-8	—	—	l	O	5.61E+01	1.83E-04	-2.80E-01	—	1.05E-01	1.12E-05	2.00E+05	2.65E+02	-1.00E-01
Acrylamide	79-06-1	—	—	s	O	7.11E+01	1.33E-08	-6.60E-01	—	9.70E-02	1.27E-05	2.20E+06	7.00E-03	-8.07E-01
Acrylic acid	79-10-7	—	—	l	O	7.21E+01	1.32E-05	5.43E-02	—	9.08E-02	1.06E-05	1.00E+06	3.72E+00	4.42E-01
Acrylonitrile	107-13-1	—	—	l	O	5.31E+01	4.57E-03	4.00E-02	—	1.22E-01	1.34E-05	7.50E+04	1.10E+02	2.09E-01
Adipic acid (hexanedioic acid)	124-04-9	—	—	s	O	1.46E+02	1.80E-11	-6.56E+00	—	6.13E-02	7.90E-06	7.72E+04	1.74E-07	1.25E-01
Alachlor	15972-60-8	—	—	s	O	2.70E+02	8.62E-07	2.28E+00	—	1.94E-02	5.83E-06	2.40E+02	2.20E-05	3.37E+00
Aldicarb	116-06-3	—	—	s	O	1.90E+02	5.82E-08	1.20E+00	—	3.05E-02	7.20E-06	6.00E+03	2.90E-05	1.36E+00
Aldicarb sulfone	1646-88-4	—	—	s	O	2.22E+02	1.10E-07	2.30E-01	—	5.55E-02	5.79E-06	8.00E+03	9.00E-05	-6.66E-01
Aldrin	309-00-2	—	—	s	O	3.65E+02	7.07E-03	4.68E+00	—	1.32E-02	4.86E-06	7.84E-02	1.67E-05	6.75E+00
Allyl alcohol	107-18-6	—	—	l	O	5.81E+01	2.08E-04	5.10E-01	—	1.14E-01	1.10E-05	3.20E+05	2.63E+01	1.70E-01
Allyl chloride	107-05-1	—	—	l	O	7.65E+01	4.57E-01	1.43E+00	—	9.80E-02	1.08E-05	3.40E+03	3.60E+02	1.93E+00
Aluminum	7429-90-5	1.50E-03	6.50E-04	s	M	2.70E+01	0.00E+00	—	2.55E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.29E-01
Ametryn	834-12-8	—	—	s	OB	2.27E+02	7.33E-08	2.89E+00	—	4.24E-02	5.70E-06	1.85E+02	1.81E-07	2.88E+00
Amino-2,6-dinitrotoluene, 4-	19406-51-0	—	—	s	O	1.97E+02	1.74E-07	2.56E+00	—	5.60E-02	7.31E-06	3.64E+01	5.86E-07	2.62E+00
Amino-4,6-dinitrotoluene, 2-	35572-78-2	—	—	s	O	1.97E+02	1.19E-07	2.75E+00	—	5.60E-02	7.30E-06	1.73E+01	1.91E-07	2.80E+00
Aminobiphenyl, 4- (1,1-biphenyl-4-amine)	92-67-1	—	—	s	O	1.69E+02	1.84E-06	3.24E+00	—	5.25E-02	6.82E-06	7.14E+01	1.42E-05	3.24E+00
Aminopyridine, 4-	504-24-5	—	—	s	O	9.41E+01	2.44E-07	-3.22E-01	—	8.02E-02	1.08E-05	7.66E+04	2.00E-03	-1.12E-01
Ammonia	7664-41-7	—	—	g	I	1.70E+01	1.36E-02	4.90E-01	—	2.59E-01	6.93E-05	5.31E+05	7.47E+03	2.29E-01
Ammonium polyphosphate*	6833-79-9	—	—	—	—	—	—	—	—	—	—	—	—	—
Ammonium salts*	Ammonium	—	—	—	—	—	—	—	—	—	—	—	—	—
Aniline	62-53-3	—	—	l	O	9.31E+01	5.82E-05	9.60E-01	—	7.00E-02	8.30E-06	3.60E+04	6.69E-01	1.08E+00
Anthracene	120-12-7	—	—	s	O	1.78E+02	4.61E-03	4.37E+00	—	3.24E-02	7.74E-06	4.34E-02	2.55E-05	4.34E+00
Anthraquinone, 9,10-	84-65-1	—	—	s	O	2.08E+02	3.58E-06	3.07E+00	—	4.81E-02	6.26E-06	1.22E-01	3.83E-08	3.12E+00

Chemical/Physical Properties

Last Revised: March 6, 2023

Chemical of Concern	CAS	Br _{abg} ((µg/g DW)/ (µg/g soil))	Br _{bg} ((µg/g DW)/ (µg/g soil))	Physical State	Type	MW (g/mole)	H _{unitless} (unitless)	LogK _{oc} (unitless)	LogK _d (unitless)	D _{air} (cm ² /s)	D _{wat} (cm ² /s)	Solubility (mg/l)	Vapor_P (mm Hg)	logK _{ow} (unitless)
Antimony	7440-36-0	7.00E-02	3.00E-02	s	M	1.22E+02	0.00E+00	–	1.65E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Aramite	140-57-8	–	–	l	O	3.35E+02	–	4.00E+00	–	4.23E-02	4.45E-06	–	1.23E-04	4.82E+00
Arsenic	7440-38-2	1.00E-02	8.00E-03	s	M	7.49E+01	0.00E+00	–	1.40E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.79E-01
Arsine	7784-42-1	–	–	g	I	7.79E+01	2.41E-01	–	–	–	–	2.00E+05	1.13E+04	–
Atrazine	1912-24-9	–	–	s	O	2.16E+02	1.09E-07	2.20E+00	–	5.64E-02	5.58E-06	3.00E+01	3.00E-07	2.82E+00
Azinphos-methyl (guthion)	86-50-0	–	–	s	O	3.17E+02	8.80E-11	2.40E+00	–	4.11E-02	5.34E-06	9.00E-02	4.70E-09	2.50E+00
Azobenzene	103-33-3	–	–	l	O	1.82E+02	1.89E-03	4.73E+00	–	4.96E-02	6.36E-06	1.60E+00	3.02E-04	4.77E+00
Barium	7440-39-3	4.90E-02	1.50E-02	s	M	1.37E+02	0.00E+00	–	1.04E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bayleton	43121-43-3	–	–	s	O	2.94E+02	2.76E-08	2.31E+00	–	4.00E-02	5.25E-06	4.74E+01	8.13E-08	2.47E+00
Benefin (benfluralin)	1861-40-1	–	–	s	O	3.35E+02	7.77E-06	5.22E+00	–	3.60E-02	4.92E-06	5.09E+00	2.16E-06	5.25E+00
Benomyl	17804-35-2	–	–	s	O	2.90E+02	2.08E-07	1.16E+00	–	4.49E-02	4.46E-06	2.90E+00	7.50E-09	1.37E+00
Benz-a-anthracene	56-55-3	–	–	s	O	2.28E+02	1.39E-04	5.55E+00	–	5.10E-02	9.00E-06	1.00E-02	1.54E-07	5.52E+00
Benzaldehyde	100-52-7	–	–	l	O	1.06E+02	2.04E-03	1.77E+00	–	7.28E-02	8.67E-06	3.58E+03	1.26E+00	1.90E+00
Benzene	71-43-2	–	–	l	O	7.81E+01	2.27E-01	1.82E+00	–	8.80E-02	9.80E-06	1.77E+03	9.50E+01	1.99E+00
Benzenedicarbonitrile, 1,3-	626-17-5	–	–	s	O	1.28E+02	1.88E-06	8.79E-01	–	6.71E-02	7.62E-06	1.28E+04	3.43E-03	1.03E+00
Benzenedicarboxylic acid, 1,2-disodecyl ester	26761-40-0	–	–	l	O	4.47E+02	6.07E-05	1.04E+01	–	2.52E-02	3.24E-06	1.17E-03	3.76E-12	1.06E+01
Benzenethiol	108-98-5	–	–	l	O	1.10E+02	1.83E-02	1.32E+00	–	7.60E-02	8.68E-06	7.60E+02	2.40E+00	2.69E+00
Benzidine	92-87-5	–	–	s	O	1.84E+02	1.62E-09	1.32E+00	–	3.40E-02	1.50E-05	5.20E+02	8.36E-08	1.34E+00
Benzo-a-pyrene	50-32-8	–	–	s	O	2.52E+02	4.70E-05	5.98E+00	–	4.30E-02	9.00E-06	1.62E-03	4.89E-09	6.11E+00
Benzo-b-fluoranthene	205-99-2	–	–	s	O	2.52E+02	4.99E-04	6.08E+00	–	2.26E-02	5.56E-06	1.50E-03	8.06E-08	6.11E+00
Benzo-e-pyrene	192-97-2	–	–	s	O	2.52E+02	2.38E-05	6.59E+00	–	4.05E-02	5.49E-06	8.60E-04	7.26E-10	6.70E+00
Benzo-g,h,i-perylene	191-24-2	–	–	s	O	2.76E+02	5.82E-06	6.20E+00	–	4.90E-02	5.65E-05	2.60E-04	1.00E-10	6.70E+00
Benzoic acid	65-85-0	–	–	s	OA	1.22E+02	1.39E-05	-3.01E-01	–	5.36E-02	7.97E-06	3.50E+03	6.51E-03	1.87E+00
Benzo-j-fluoranthene	205-82-3	–	–	s	O	2.52E+02	4.63E-04	5.72E+00	–	4.15E-02	5.48E-06	2.50E-03	8.39E-08	6.11E+00
Benzo-k-fluoranthene	207-08-9	–	–	s	O	2.52E+02	4.45E-07	6.09E+00	–	2.26E-02	5.56E-06	5.50E-04	9.59E-11	6.11E+00
Benzophenone	119-61-9	–	–	s	O	1.82E+02	1.05E-04	3.40E+00	–	5.07E-02	6.03E-06	3.43E+01	3.61E-04	3.46E+00
Benzotrithloride	98-07-7	–	–	l	O	1.95E+02	2.03E-02	3.16E+00	–	5.91E-02	7.02E-06	1.00E+02	1.90E-01	3.90E+00
Benzoyl peroxide	94-36-0	–	–	s	O	2.42E+02	8.12E-06	3.02E+00	–	4.49E-02	5.48E-06	8.44E+00	5.17E-06	3.08E+00
Benzyl alcohol	100-51-6	–	–	l	O	1.08E+02	1.62E-05	1.08E+00	–	8.00E-02	8.00E-06	4.00E+04	1.06E-01	1.08E+00
Benzyl chloride	100-44-7	–	–	l	O	1.27E+02	1.66E-02	2.26E+00	–	7.50E-02	7.80E-06	4.93E+02	1.20E+00	2.79E+00
Benzyl dichloride	98-87-3	–	–	l	O	1.61E+02	8.28E-03	2.39E+00	–	6.14E-02	7.62E-06	2.09E+02	1.96E-01	2.92E+00
Beryllium	7440-41-7	3.60E-03	1.50E-03	s	M	9.01E+00	0.00E+00	–	1.36E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.71E-01
Biphenyl, 1,1-	92-52-4	–	–	s	O	1.54E+02	1.25E-02	3.71E+00	–	5.73E-02	6.71E-06	7.50E+00	2.94E-02	3.76E+00
Biphenyl, 1,1'-, 2-phenoxy-	6738-04-1	–	–	s	O	2.46E+02	2.82E-03	6.18E+00	–	4.08E-02	5.09E-06	1.92E-02	4.03E-06	6.29E+00
Biquinoline, 2,2'-	119-91-5	–	–	s	O	2.56E+02	2.85E-09	3.96E+00	–	4.18E-02	5.65E-06	1.70E+00	3.45E-10	4.02E+00
Bis (2-chloroethoxy) methane	111-91-1	–	–	l	O	1.73E+02	1.25E-03	2.49E+00	–	5.82E-02	7.11E-06	1.35E+03	1.78E-01	2.53E+00
Bis (2-chloroethyl) ether	111-44-4	–	–	l	O	1.43E+02	8.90E-04	1.19E+00	–	6.92E-02	7.53E-06	1.02E+04	1.34E+00	1.56E+00
Bis (2-chloro-1-methylethyl) ether	108-60-1	–	–	l	O	1.71E+02	4.16E-03	2.50E+00	–	6.00E-02	6.40E-06	1.70E+03	8.50E-01	2.58E+00

Chemical/Physical Properties

Last Revised: March 6, 2023

Chemical of Concern	CAS	B _r _{abg} (µg/g DW)/ (µg/g soil)	B _r _{bg} (µg/g DW)/ (µg/g soil)	Physical State	Type	MW (g/mole)	H _{un} _{itless} (unitless)	LogK _{oc} (unitless)	LogK _d (unitless)	D _{air} (cm ² /s)	D _{wat} (cm ² /s)	Solubility (mg/l)	Vapor_P (mm Hg)	logK _{ow} (unitless)
Caprolactam	105-60-2	–	–	s	O	1.13E+02	2.19E-08	1.68E+00	–	6.71E-02	8.45E-06	3.40E+04	1.20E-04	5.62E-01
Captan	133-06-2	–	–	s	O	3.01E+02	2.99E-04	3.81E+00	–	1.83E-02	4.90E-06	5.00E-01	7.50E-06	1.84E+00
Carbaryl	63-25-2	–	–	s	O	2.01E+02	5.32E-07	2.37E+00	–	2.78E-02	5.60E-06	3.00E+01	1.36E-06	2.35E+00
Carbazole	86-74-8	–	–	s	O	1.67E+02	3.38E-03	3.39E+00	–	3.90E-02	7.03E-06	7.21E-01	2.66E-04	3.23E+00
Carbofuran	1563-66-2	–	–	s	O	2.21E+02	1.62E-07	1.46E+00	–	5.35E-02	5.40E-06	7.00E+02	8.30E-06	2.30E+00
Carbon disulfide	75-15-0	–	–	l	O	7.61E+01	6.13E-01	1.72E+00	–	1.04E-01	1.00E-05	2.30E+03	3.40E+02	1.94E+00
Carbon tetrachloride	56-23-5	–	–	l	O	1.54E+02	1.20E+00	2.27E+00	–	7.80E-02	8.80E-06	8.05E+02	1.12E+02	2.44E+00
Carbophenothion	786-19-6	–	–	l	O	3.43E+02	1.66E-04	5.07E+00	–	3.77E-02	5.00E-06	3.90E+00	3.45E-05	5.10E+00
Carbosulfan	55285-14-8	–	–	l	O	3.81E+02	2.15E-05	4.41E+00	–	3.76E-02	3.88E-06	3.00E-01	3.10E-07	5.57E+00
Carboxin	5234-68-4	–	–	s	O	2.35E+02	2.77E-08	2.93E+00	–	4.48E-02	6.14E-06	2.24E+01	4.82E-08	3.02E+00
Chloral	75-87-6	–	–	l	O	1.47E+02	2.66E-05	8.02E-01	–	3.85E-02	9.70E-06	8.30E+06	3.50E+01	1.19E+00
Chloral hydrate (1,1-ethanediol, 2,2,2-trichloro-)	302-17-0	–	–	l	O	1.65E+02	4.91E-09	7.27E-01	–	7.43E-02	9.16E-06	1.80E+06	9.79E-04	3.30E-01
Chloramben (amiben; 3-amino-2,5-dichlorobenzoic acid)	133-90-4	–	–	s	O	2.06E+02	3.49E-08	2.32E+00	–	5.71E-02	7.46E-06	6.26E+03	1.94E-05	2.48E+00
Chlordane (technical)	12789-03-6	–	–	s	O	4.10E+02	2.02E-03	5.08E+00	–	1.18E-02	4.37E-06	5.60E-02	1.00E-05	6.60E+00
Chlordane, cis- (alpha chlordane)	5103-71-9	–	–	l	O	4.10E+02	4.11E-03	6.85E+00	–	3.32E-02	4.66E-06	4.64E-02	8.51E-06	6.97E+00
Chlordane, trans- (gamma chlordane)	5103-74-2	–	–	s	O	4.10E+02	4.11E-03	5.59E+00	–	3.32E-02	4.65E-06	2.28E-02	4.17E-06	6.97E+00
Chlorfenvinphos	470-90-6	–	–	l	O	3.60E+02	2.31E-08	3.11E+00	–	–	–	1.45E+02	1.70E-07	4.15E+00
Chloride*	16887-00-6	–	–	–	–	–	–	–	–	–	–	–	–	–
Chlorine	7782-50-5	–	–	g	I	7.09E+01	2.86E+00	–	–	1.20E-01	1.48E-05	7.00E+03	5.17E+03	8.49E-01
Chloro-1,3-butadiene, 2-	126-99-8	–	–	l	O	8.85E+01	1.33E+00	2.00E+00	–	1.00E-01	1.00E-05	6.30E+02	2.12E+02	2.53E+00
Chloro-2-propanol, 1-	127-00-4	–	–	s	O	9.55E+01	9.64E-05	8.29E-01	–	8.28E-02	9.65E-06	1.10E+05	2.05E+00	9.48E-01
Chloro-3-methylphenol, 4-	59-50-7	–	–	s	O	1.43E+02	1.40E-05	2.94E+00	–	6.46E-02	8.01E-06	5.43E+03	9.75E-03	2.99E+00
Chloroaniline, p-	106-47-8	–	–	s	O	1.28E+02	4.86E-05	1.82E+00	–	4.83E-02	1.01E-05	3.90E+03	2.35E-02	1.72E+00
Chlorobenzene	108-90-7	–	–	l	O	1.13E+02	1.82E-01	2.33E+00	–	7.30E-02	8.70E-06	5.02E+02	1.21E+01	2.64E+00
Chlorobenzilate	510-15-6	–	–	s	O	3.25E+02	3.78E-06	2.90E+00	–	8.00E-02	8.00E-06	1.30E+01	2.20E-06	3.99E+00
Chlorobromomethane (bromochloromethane)	74-97-5	–	–	l	O	1.29E+02	3.69E-02	1.44E+00	–	9.65E-02	1.12E-05	2.04E+04	1.06E+02	1.32E+00
Chlorodifluoromethane	75-45-6	–	–	g	O	8.65E+01	1.22E+00	7.87E-01	–	1.13E-01	1.32E-05	2.90E+03	7.83E+03	8.94E-01
Chloroethane (ethyl chloride)	75-00-3	–	–	l	O	6.45E+01	2.12E-01	1.25E+00	–	1.50E-01	1.18E-05	2.00E+04	1.20E+03	1.58E+00
Chloroethanol, 2-	107-07-3	–	–	l	O	8.05E+01	3.23E-05	2.42E-01	–	9.60E-02	1.11E-05	5.51E+05	2.29E+00	2.06E-01
Chloroethoxy ethene, 2- (2-chloroethylvinylether)	110-75-8	–	–	l	O	1.07E+02	3.02E-02	1.57E+00	–	7.60E-02	8.55E-06	5.02E+03	2.60E+01	1.88E+00
Chloroform	67-66-3	–	–	l	O	1.19E+02	1.53E-01	1.67E+00	–	1.04E-01	1.00E-05	7.92E+03	1.98E+02	1.52E+00
Chlorohexane, 1-	544-10-5	–	–	l	O	1.21E+02	9.98E-01	2.95E+00	–	6.40E-02	7.27E-06	5.38E+01	8.22E+00	3.63E+00
Chloromethane (methyl chloride)	74-87-3	–	–	g	O	5.05E+01	1.44E+00	7.78E-01	–	1.26E-01	6.50E-06	7.25E+03	3.77E+03	1.09E+00
Chloronaphthalene, 1- (Chloronaphthalene, alpha-)	90-13-1	–	–	l	O	1.63E+02	6.33E-03	3.98E+00	–	5.76E-02	7.31E-06	1.69E+01	1.21E-02	4.04E+00
Chloronaphthalene, 2- (chloronaphthalene, beta)	91-58-7	–	–	s	O	1.63E+02	2.54E-02	3.93E+00	–	6.18E-02	6.98E-06	6.74E+00	1.70E-02	3.81E+00
Chloronitrobenzene, p- (1-chloro-4-nitrobenzene)	100-00-5	–	–	s	O	1.58E+02	1.00E-03	2.03E+00	–	6.37E-02	8.04E-06	2.67E+02	3.92E-02	2.47E+00
Chlorophenol, 2-	95-57-8	–	–	l	OA	1.29E+02	7.40E-04	2.46E+00	–	5.01E-02	9.46E-06	2.80E+04	1.42E+00	2.16E+00
Chlorophenol, 3-	108-43-0	–	–	s	OA	1.29E+02	9.20E-06	2.05E+00	–	7.13E-02	8.74E-06	4.11E+04	5.38E-02	2.07E+00

Chemical/Physical Properties

Last Revised: March 6, 2023

Chemical of Concern	CAS	B _r _{abg} (μg/g DW)/ (μg/g soil)	B _r _{bg} (μg/g DW)/ (μg/g soil)	Physical State	Type	MW (g/mole)	H _{un} _{itless} (unitless)	LogK _{oc} (unitless)	LogK _d (unitless)	D _{air} (cm ² /s)	D _{wat} (cm ² /s)	Solubility (mg/l)	Vapor_P (mm Hg)	logK _{ow} (unitless)
Chlorophenol, 4-	106-48-9	—	—	s	OA	1.29E+02	9.97E-06	2.09E+00	—	7.13E-02	8.75E-06	2.86E+04	4.06E-02	2.10E+00
Chlorophenyl phenylether, 4-	7005-72-3	—	—	l	O	2.05E+02	1.30E-02	4.12E+00	—	4.89E-02	6.19E-06	1.43E+00	1.66E-03	5.04E+00
Chloropropane, 2-	75-29-6	—	—	l	O	7.85E+01	1.11E+00	1.83E+00	—	9.12E-02	9.30E-06	1.56E+03	4.04E+02	2.21E+00
Chlorothalonil	1897-45-6	—	—	s	O	2.66E+02	1.53E-06	3.38E+00	—	4.90E-02	6.57E-06	2.30E+01	2.41E-06	3.46E+00
Chlorotoluene, o- (2-chlorotoluene)	95-49-8	—	—	l	O	1.27E+02	1.35E-01	2.61E+00	—	7.01E-02	8.01E-06	1.54E+02	3.90E-03	3.20E+00
Chlorotoluene, p- (4-chlorotoluene)	106-43-4	—	—	l	O	1.27E+02	1.33E-01	2.70E+00	—	6.76E-02	7.96E-06	1.18E+02	2.27E+00	3.31E+00
Chlorpyrifos	2921-88-2	—	—	s	O	3.51E+02	1.73E-04	3.70E+00	—	4.85E-02	5.11E-06	9.00E-01	1.87E-05	4.66E+00
Chromium (III)	16065-83-1	5.20E-03	4.50E-03	s	M	5.20E+01	0.00E+00	—	3.08E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Chromium (total)	7440-47-3	5.20E-03	4.50E-03	s	M	5.20E+01	0.00E+00	—	3.08E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Chromium (VI)	18540-29-9	5.20E-03	4.50E-03	s	M	5.20E+01	0.00E+00	—	1.15E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Chrysene	218-01-9	—	—	s	O	2.28E+02	5.03E-05	5.49E+00	—	2.48E-02	6.21E-06	2.00E-03	7.80E-09	5.52E+00
Cobalt	7440-48-4	1.00E-02	7.00E-03	s	M	5.89E+01	0.00E+00	—	1.65E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Copolymer acrylamide	69418-26-4	—	—	s	O	7.11E+01	1.33E-08	-6.60E-01	—	9.70E-02	1.27E-05	2.20E+06	7.00E-03	-8.07E-01
Copper	7440-50-8	2.90E-01	2.50E-01	s	M	6.35E+01	0.00E+00	—	1.60E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-5.71E-01
Coronene	191-07-1	—	—	s	O	3.00E+02	6.60E-06	7.46E+00	—	3.70E-02	4.93E-06	9.03E-06	2.21E-13	7.59E+00
Coumaphos	56-72-4	—	—	s	O	3.63E+02	2.17E-07	4.20E+00	—	3.53E-02	4.81E-06	3.86E-01	4.22E-09	4.26E+00
Cresol	1319-77-3	—	—	l	O	1.08E+02	3.62E-05	1.94E+00	—	7.40E-02	1.00E-05	2.30E+04	1.40E-01	2.06E+00
Cresol, m- (3-methylphenol)	108-39-4	—	—	l	O	1.08E+02	3.62E-05	1.94E+00	—	7.40E-02	1.00E-05	2.30E+04	1.40E-01	2.06E+00
Cresol, o- (2-methylphenol)	95-48-7	—	—	s	O	1.08E+02	6.65E-05	1.99E+00	—	7.40E-02	8.30E-06	2.04E+04	3.20E-01	2.06E+00
Cresol, p- (4-methylphenol)	106-44-5	—	—	s	O	1.08E+02	3.99E-05	1.91E+00	—	7.40E-02	1.00E-05	2.30E+04	1.30E-01	2.06E+00
Crotonaldehyde	123-73-9	—	—	l	O	7.01E+01	8.15E-04	2.14E-01	—	9.37E-02	1.02E-05	1.60E+05	1.90E+01	6.01E-01
Cumene (isopropylbenzene)	98-82-8	—	—	l	O	1.20E+02	6.07E-01	3.54E+00	—	6.50E-02	7.10E-06	5.00E+01	4.60E+00	3.45E+00
Cyanazine	21725-46-2	—	—	s	O	2.41E+02	6.70E-10	1.69E+00	—	4.33E-02	5.83E-06	1.15E+02	7.28E-09	1.72E+00
Cyanide	57-12-5	—	—	-	I	2.60E+01	0.00E+00	-	9.96E-01	5.21E-01	2.28E-05	1.00E+05	1.38E+01	-6.93E-01
Cyanogen	460-19-5	—	—	g	O	5.20E+01	2.06E-01	1.34E-01	—	2.04E-01	1.37E-05	1.00E+04	3.88E+03	7.00E-02
Cycloate	1134-23-2	—	—	l	O	2.15E+02	8.55E-05	3.44E+00	—	4.28E-02	5.60E-06	8.32E+01	6.04E-04	3.80E+00
Cyclohexane	110-82-7	—	—	l	O	8.42E+01	6.68E+00	2.87E+00	—	7.84E-02	8.39E-06	4.25E+01	6.16E+01	3.52E+00
Cyclohexanol	108-93-0	—	—	s	O	1.00E+02	3.52E-05	1.09E+00	—	7.20E-02	8.63E-06	2.09E+00	2.84E-01	1.11E+00
Cyclohexanone	108-94-1	—	—	l	O	9.81E+01	4.99E-04	7.39E-01	—	7.72E-02	8.73E-06	2.30E+04	4.00E+00	1.13E+00
Cyclohexene-1-methanol, 3-	1679-51-2	—	—	s	O	1.12E+02	3.13E-05	2.16E+00	—	6.60E-02	7.45E-06	1.44E+04	7.40E-01	2.63E+00
Cyclohexene, 4-vinyl-1-	100-40-3	—	—	l	O	1.08E+02	2.31E+00	3.09E+00	—	6.56E-02	6.93E-06	2.95E+01	1.15E+01	3.80E+00
Cyclopentane	287-92-3	—	—	l	O	7.01E+01	3.77E+00	2.29E+00	—	8.87E-02	8.45E-06	2.25E+02	2.21E+02	2.79E+00
Cyclopentane, methyl-	96-37-7	—	—	l	O	8.42E+01	9.82E+00	2.87E+00	—	7.84E-02	7.59E-06	5.02E+01	1.07E+02	3.52E+00
Cyclopentene	142-29-0	—	—	l	O	6.81E+01	1.26E+00	1.96E+00	—	9.21E-02	8.81E-06	6.63E+02	2.24E+02	2.38E+00
Cyclotetramethylenetetranitramine (HMX)	2691-41-0	—	—	s	O	2.96E+02	2.50E-14	-1.40E+00	—	3.74E-02	6.34E-06	2.37E+03	4.75E-15	-1.30E+00
Cyclotrimethylenetrinitramine (RDX)	121-82-4	—	—	s	O	2.22E+02	4.99E-04	1.80E+00	—	6.65E-02	6.39E-06	3.87E+01	1.00E-09	8.70E-01
Cymene (isopropyltoluene)	99-87-6	—	—	l	O	1.34E+02	4.66E-01	3.36E+00	—	5.72E-02	6.73E-06	1.71E+01	1.08E+00	4.14E+00
Cymoxanil	57966-95-7	—	—	s	OA	1.98E+02	1.37E-08	-3.89E+00	—	4.91E-02	6.76E-06	4.47E+03	1.13E-06	6.00E-01

Chemical/Physical Properties

Last Revised: March 6, 2023

Chemical of Concern	CAS	B _r _{abg} (µg/g DW)/ (µg/g soil)	B _r _{bg} (µg/g DW)/ (µg/g soil)	Physical State	Type	MW (g/mole)	H _{unitless} (unitless)	LogK _{oc} (unitless)	LogK _d (unitless)	D _{air} (cm ² /s)	D _{wat} (cm ² /s)	Solubility (mg/l)	Vapor_P (mm Hg)	logK _{ow} (unitless)
Dacthal (DCPA)	1861-32-1	—	—	s	O	3.32E+02	9.35E-06	4.67E+00	—	4.20E-02	2.05E+00	2.20E-01	1.13E-07	4.71E+00
Dalapon, sodium salt (2,2-dichloropropanoic acid)	75-99-0	—	—	s	O	1.43E+02	1.46E-05	1.40E+00	—	6.98E-02	8.70E-06	6.98E+04	1.30E-01	1.60E+00
DDD	72-54-8	—	—	s	O	3.20E+02	1.66E-04	4.93E+00	—	1.69E-02	4.76E-06	9.00E-02	8.66E-07	5.87E+00
DDE	72-55-9	—	—	s	O	2.42E+02	8.73E-04	5.04E+00	—	1.44E-02	5.87E-06	6.50E-02	5.66E-06	6.00E+00
DDT	50-29-3	—	—	s	O	3.54E+02	2.23E-03	5.14E+00	—	1.37E-02	4.95E-06	3.10E-03	3.93E-07	6.79E+00
Demeton	8065-48-3	—	—	l	O	2.58E+02	6.65E-03	2.43E+00	—	4.56E-02	5.45E-06	7.20E+02	1.00E-04	2.97E+00
Desethylatrazine	6190-65-4	—	—	s	O	1.88E+02	2.19E-08	1.85E+00	—	5.14E-02	6.39E-06	1.80E+03	3.85E-06	1.97E+00
Diacetone alcohol (4-hydroxy-4-methyl-2-pentanone)	123-42-2	—	—	l	O	1.16E+02	1.68E-06	2.67E-01	—	6.39E-02	7.74E-06	6.81E+05	1.80E-01	2.71E-01
Diallate	2303-16-4	—	—	s	O	2.70E+02	1.58E-04	3.28E+00	—	8.00E-02	8.00E-06	1.40E+01	1.50E-04	4.08E+00
Diazinon	333-41-5	—	—	l	O	3.04E+02	4.70E-06	2.12E+00	—	1.80E-02	4.90E-06	4.00E+01	8.40E-05	3.86E+00
Dibenz(a,h)acridine	226-36-8	—	—	s	O	2.79E+02	8.44E-09	6.28E+00	—	3.78E-02	5.39E-06	6.84E-04	3.79E-13	6.39E+00
Dibenz(a,j)acridine	224-42-0	—	—	s	O	2.79E+02	7.08E-09	6.35E+00	—	3.79E-02	5.41E-06	8.14E-04	3.77E-13	6.36E+00
Dibenz-a,h-anthracene	53-70-3	—	—	s	O	2.78E+02	4.66E-07	6.28E+00	—	2.00E-02	5.18E-06	5.00E-04	2.10E-11	6.70E+00
Dibenzo(a,e)pyrene	192-65-4	—	—	s	O	3.02E+02	2.16E-06	7.42E+00	—	3.67E-02	5.06E-06	7.84E-05	5.32E-13	7.85E+00
Dibenzo(a,h)pyrene	189-64-0	—	—	s	O	3.02E+02	1.83E-06	7.38E+00	—	3.68E-02	5.07E-06	2.08E-05	1.30E-13	7.81E+00
Dibenzo(a,i)pyrene	189-55-9	—	—	s	O	3.02E+02	1.83E-06	7.38E+00	—	3.68E-02	5.07E-06	3.39E-05	2.11E-13	7.81E+00
Dibenzofuran	132-64-9	—	—	s	O	1.68E+02	5.28E-03	3.93E+00	—	5.51E-02	7.04E-06	2.86E+00	1.64E-03	4.00E+00
Dibenzothiophene	132-65-0	—	—	s	O	1.84E+02	9.79E-04	4.54E+00	—	5.22E-02	6.74E-06	2.11E-01	2.05E-05	4.61E+00
Dibromo-3-chloropropane, 1,2-	96-12-8	—	—	l	O	2.36E+02	8.31E-03	2.23E+00	—	8.00E-02	8.00E-06	1.00E+03	7.60E-01	2.68E+00
Dibromochloromethane (chlorodibromomethane)	124-48-1	—	—	l	O	2.08E+02	3.25E-02	1.80E+00	—	1.96E-02	1.05E-05	5.25E+03	1.50E+01	1.70E+00
Dibromofluoromethane	1868-53-7	—	—	l	O	1.92E+02	1.14E-01	1.40E+00	—	8.70E-02	1.01E-05	1.26E+04	1.37E+02	1.67E+00
Dicamba	1918-00-9	—	—	s	O	2.09E+02	3.28E-07	3.42E-01	—	6.02E-02	6.69E-06	5.60E+03	9.70E-05	2.14E+00
Dichlormid	37764-25-3	—	—	l	O	2.08E+02	2.75E-06	1.77E+00	—	4.66E-02	5.79E-06	4.26E+03	1.03E-03	1.89E+00
Dichloro-2-butene, 1,4-	764-41-0	—	—	l	O	1.25E+02	1.24E-02	2.26E+00	—	7.43E-02	8.62E-06	6.91E+03	1.26E+01	2.60E+00
Dichloro-2-butene, 1,4- trans	110-57-6	—	—	l	O	1.25E+02	1.35E-02	2.31E+00	—	7.14E-02	8.48E-06	1.27E+03	2.52E+00	2.35E+00
Dichlorobenzene, 1,2-	95-50-1	—	—	l	O	1.47E+02	8.73E-02	2.84E+00	—	6.90E-02	7.90E-06	1.50E+02	1.36E+00	3.28E+00
Dichlorobenzene, 1,3-	541-73-1	—	—	l	O	1.47E+02	1.95E-01	2.23E+00	—	6.80E-02	8.13E-06	1.10E+02	2.30E+00	3.28E+00
Dichlorobenzene, 1,4-	106-46-7	—	—	s	O	1.47E+02	1.17E-01	2.81E+00	—	6.90E-02	7.90E-06	7.38E+01	1.06E+00	3.28E+00
Dichlorobenzidine, 3,3-	91-94-1	—	—	s	O	2.53E+02	8.65E-07	2.86E+00	—	1.94E-02	6.74E-06	3.11E+00	2.20E-07	3.21E+00
Dichlorobutane, 2,3-	7581-97-7	—	—	l	O	1.27E+02	2.31E-01	2.30E+00	—	7.10E-02	8.07E-06	4.52E+02	1.50E+01	2.81E+00
Dichlorodifluoromethane	75-71-8	—	—	l	O	1.21E+02	1.67E+01	2.11E+00	—	5.20E-02	1.05E-05	2.80E+02	4.80E+03	1.82E+00
Dichloroethane, 1,1-	75-34-3	—	—	l	O	9.90E+01	2.39E-01	1.50E+00	—	7.42E-02	1.05E-05	5.50E+03	2.28E+02	1.76E+00
Dichloroethane, 1,2-	107-06-2	—	—	l	O	9.90E+01	5.32E-02	1.24E+00	—	1.04E-01	9.90E-06	8.70E+03	8.13E+01	1.83E+00
Dichloroethylene, 1,1-	75-35-4	—	—	l	O	9.69E+01	1.06E+00	1.81E+00	—	9.00E-02	1.04E-05	2.40E+03	5.91E+02	2.12E+00
Dichloroethylene, cis-1,2-	156-59-2	—	—	l	O	9.69E+01	1.87E-01	1.46E+00	—	7.35E-02	1.13E-05	4.93E+03	1.75E+02	1.86E+00
Dichloroethylene, trans-1,2	156-60-5	—	—	l	O	9.69E+01	3.90E-01	1.70E+00	—	7.07E-02	1.19E-05	6.30E+03	3.52E+02	2.07E+00
Dichlorofluoromethane	75-43-4	—	—	g	O	1.03E+02	1.98E-01	1.08E+00	—	1.00E-01	9.81E-06	1.99E+04	7.43E+02	1.26E+00
Dichlorophenol, 2,3-	576-24-9	—	—	s	OA	1.63E+02	9.40E-06	2.14E+00	—	6.63E-02	8.21E-06	6.94E+03	7.32E-03	2.77E+00

Chemical/Physical Properties

Last Revised: March 6, 2023

Chemical of Concern	CAS	B _r _{abg} ((μg/g DW)/ (μg/g soil))	B _r _{bg} ((μg/g DW)/ (μg/g soil))	Physical State	Type	MW (g/mole)	H _{unitless} (unitless)	LogK _{oc} (unitless)	LogK _d (unitless)	D _{air} (cm ² /s)	D _{wat} (cm ² /s)	Solubility (mg/l)	Vapor_P (mm Hg)	logK _{ow} (unitless)
Dichlorophenol, 2,4-	120-83-2	–	–	s	OA	1.63E+02	1.31E-04	1.86E+00	–	3.46E-02	8.77E-06	4.50E+03	7.15E-02	2.80E+00
Dichlorophenol, 2,5-	583-78-8	–	–	s	OA	1.63E+02	9.09E-06	2.09E+00	–	6.63E-02	8.19E-06	8.34E+03	8.50E-03	2.73E+00
Dichlorophenol, 2,6-	87-65-0	–	–	s	O	1.63E+02	1.20E-05	1.35E+00	–	6.57E-02	8.12E-06	1.03E+02	1.50E-01	2.83E+00
Dichlorophenol, 3,4-	95-77-2	–	–	s	OA	1.63E+02	2.75E-06	2.81E+00	–	6.50E-02	8.21E-06	6.80E+03	2.10E-03	2.89E+00
Dichlorophenol, 3,5-	591-35-5	–	–	s	OA	1.63E+02	3.68E-06	2.61E+00	–	6.51E-02	8.18E-06	1.06E+04	4.38E-03	2.75E+00
Dichlorophenoxy, 2,4- butyric acid, 4- (2,4-DB)	94-82-6	–	–	s	O	2.49E+02	3.19E-08	2.74E-01	–	4.41E-02	6.13E-06	7.76E+01	1.82E-07	3.79E+00
Dichlorophenoxyacetic acid, 2,4- (2,4-D)	94-75-7	–	–	s	O	2.21E+02	5.82E-09	2.95E+00	–	5.90E-02	6.50E-06	8.90E+02	2.40E-05	2.62E+00
Dichloroprop (2-(2,4-dichlorophenoxy) propanoic acid)	120-36-5	–	–	s	O	2.35E+02	9.00E-07	-1.54E+00	–	4.70E-02	6.43E-06	2.30E+02	1.60E-05	3.26E+00
Dichloropropane, 1,2-	78-87-5	–	–	l	O	1.13E+02	1.17E-01	1.77E+00	–	7.82E-02	8.73E-06	2.80E+03	5.00E+01	2.25E+00
Dichloropropane, 1,3-	142-28-9	–	–	l	O	1.13E+02	5.52E-02	2.10E+00	–	7.91E-02	9.07E-06	2.16E+03	1.93E+01	2.23E+00
Dichloropropane, 2,2-	594-20-7	–	–	l	O	1.13E+02	3.39E-01	2.19E+00	–	7.96E-02	8.71E-06	1.68E+03	9.24E+01	2.36E+00
Dichloropropanol, 2,3-	616-23-9	–	–	l	O	1.29E+02	3.97E-05	1.53E+00	–	4.84E-02	9.84E-06	2.95E+05	5.82E-01	7.84E-01
Dichloropropene, 1,1-	563-58-6	–	–	l	O	1.11E+02	1.82E+00	2.31E+00	–	8.21E-02	8.95E-06	5.44E+02	1.63E+02	2.82E+00
Dichloropropene, 1,3- (mixed isomers)	542-75-6	–	–	l	O	1.11E+02	1.23E-01	1.72E+00	–	6.26E-02	1.00E-05	1.55E+03	3.12E+01	1.75E+00
Dichloropropene, cis 1,3-	10061-01-5	–	–	l	O	1.11E+02	9.15E-02	1.65E+00	–	7.94E-02	8.00E-06	2.70E+03	3.70E+01	1.53E+00
Dichloropropene, trans 1,3-	10061-02-6	–	–	l	O	1.11E+02	9.15E-02	1.65E+00	–	7.94E-02	9.20E-06	2.80E+03	3.00E+01	1.53E+00
Dichlorvos	62-73-7	–	–	l	O	2.21E+02	3.98E-05	9.59E+00	–	2.32E-02	7.80E-06	1.60E+04	5.27E-02	1.40E+00
Dicrotophos (bidrin)	141-66-2	–	–	l	O	2.37E+02	1.49E-10	-9.68E-01	–	4.33E-02	5.70E-06	1.31E+07	1.68E-03	-7.65E-01
Dicyclopentadiene	77-73-6	–	–	–	O	1.32E+02	–	2.96E+00	–	7.32E-02	8.48E-06	–	1.40E+00	3.60E+00
Dieldrin	60-57-1	–	–	s	O	3.81E+02	1.11E-04	4.33E+00	–	1.25E-02	4.74E-06	1.95E-01	9.96E-07	5.45E+00
Diethanolamine	111-42-2	–	–	s	O	1.05E+02	1.90E-11	-2.10E+00	–	7.15E-02	9.10E-06	–	1.00E-04	-2.13E+00
Diethyldithiocarbamate, sodium salt	148-18-5	–	–	s	O	1.71E+02	–	–	–	–	–	–	–	2.69E-01
Diethyl phthalate	84-66-2	–	–	l	O	2.22E+02	1.87E-05	2.18E+00	–	2.56E-02	6.35E-06	1.08E+03	1.65E-03	2.65E+00
Diethylene glycol	111-46-6	–	–	l	O	1.06E+02	3.88E-09	-1.33E+00	–	7.31E-02	9.15E-06	1.00E+06	1.30E-03	-1.36E+00
Diethylene glycol monobutyl ether	112-34-5	–	–	l	O	1.62E+02	2.75E-07	7.50E-01	–	5.14E-02	6.35E-06	5.11E+04	1.58E-03	1.00E+00
Diethylhexyl adipate	103-23-1	–	–	l	O	3.71E+02	9.78E-01	5.58E+00	–	3.56E-02	3.72E-06	1.71E-03	8.25E-05	8.12E+00
Diethylstilbestrol	56-53-1	–	–	s	O	2.68E+02	2.62E-13	4.88E+00	–	4.43E-02	8.00E-06	1.30E+04	1.06E-09	5.64E+00
Diisobutylene (trimethyl-1-pentene, 2,4,4-)	107-39-1	–	–	l	O	1.12E+02	7.34E+01	3.75E+00	–	6.25E-02	6.70E-06	3.17E+00	3.80E+01	4.64E+00
Diisopropylbenzene, p-	100-18-5	–	–	l	O	1.62E+02	9.39E-01	3.98E+00	–	4.91E-02	5.55E-06	1.94E+00	2.10E-01	4.93E+00
Diisopropyl ether (2,2'-oxybis-propane)	108-20-3	–	–	l	O	1.02E+02	1.63E-01	1.81E+00	–	6.81E-02	7.15E-06	2.67E+03	7.76E+01	2.19E+00
Dimethenamid	87674-68-8	–	–	l	O	2.76E+02	2.18E-09	1.35E+00	–	3.80E-02	5.35E-06	3.75E+04	5.42E-06	1.49E+00
Dimethoate	60-51-5	–	–	s	O	2.29E+02	2.58E-09	6.30E-01	–	8.00E-02	8.00E-06	2.50E+04	5.09E-06	2.78E-01
Dimethoxybenzidine, 3,3'-	119-90-4	–	–	s	O	2.44E+02	1.66E-08	1.78E+00	–	2.42E-02	5.50E-06	2.40E+02	2.50E-07	2.08E+00
Dimethyl-2-nitrobenzene, 1,3-	81-20-9	–	–	l	O	1.51E+02	1.18E-03	3.04E+00	–	5.83E-02	6.87E-06	1.14E+02	1.62E-02	3.09E+00
Dimethyl-3-nitrobenzene, 1,2-	83-41-0	–	–	l	O	1.51E+02	9.35E-04	2.83E+00	–	5.85E-02	6.88E-06	2.13E+02	2.42E-02	2.88E+00
Dimethyl-4-nitrobenzene, 1-2-	99-51-4	–	–	s	O	1.51E+02	8.36E-04	2.82E+00	–	5.82E-02	6.85E-06	2.02E+02	2.05E-02	2.87E+00
Dimethyl-5-nitrobenzene, 1,3-	99-12-7	–	–	s	O	1.51E+02	1.36E-03	2.90E+00	–	5.81E-02	6.80E-06	1.22E+02	2.01E-02	2.95E+00
Dimethylphenethylamine, alpha, alpha-	122-09-8	–	–	l	O	1.49E+02	5.45E-05	2.16E+00	–	5.57E-02	6.64E-06	3.54E+03	1.30E-01	2.20E+00

Chemical/Physical Properties

Last Revised: March 6, 2023

Chemical of Concern	CAS	Br _{abg} (µg/g DW)/ (µg/g soil)	Br _{bg} (µg/g DW)/ (µg/g soil)	Physical State	Type	MW (g/mole)	H _{unitless} (unitless)	LogK _{oc} (unitless)	LogK _d (unitless)	D _{air} (cm ² /s)	D _{wat} (cm ² /s)	Solubility (mg/l)	Vapor_P (mm Hg)	logK _{ow} (unitless)
Dimethyl phenol, 2,4-	105-67-9	–	–	s	O	1.22E+02	8.31E-05	2.07E+00	–	5.84E-02	8.69E-06	6.20E+03	1.26E-01	2.61E+00
Dimethylaminoazobenzene, p-	60-11-7	–	–	s	OB	2.25E+02	3.25E-05	5.06E+00	–	4.25E-02	5.57E-06	4.04E-01	1.07E-06	5.00E+00
Dimethylbenz-a-anthracene, 7,12-	57-97-6	–	–	s	O	2.56E+02	6.49E-06	6.93E+00	–	3.90E-02	5.39E-06	1.27E-03	4.03E-10	7.14E+00
Dimethylbenzidine, 3,3'-	119-93-7	–	–	s	O	2.12E+02	5.40E-09	2.30E+00	–	5.10E-02	8.00E-06	2.40E+02	3.70E-07	3.02E+00
Dimethylformamide, N,N-	68-12-2	–	–	l	O	7.31E+01	3.21E-05	-3.10E-01	–	9.01E-02	9.28E-06	1.00E+06	1.07E+01	-4.90E-01
Dimethylnaphthalene, 1,3-	575-41-7	–	–	l	O	1.56E+02	7.23E-03	4.30E+00	–	5.39E-02	6.77E-06	8.85E+00	7.49E-03	4.38E+00
Dimethylphthalate	131-11-3	–	–	l	O	1.94E+02	2.40E-05	1.50E+00	–	5.68E-02	6.30E-06	4.19E+03	9.12E-03	1.66E+00
Di-n-butyl phthalate	84-74-2	–	–	l	O	2.78E+02	5.94E-05	4.53E+00	–	4.38E-02	7.86E-06	1.12E+01	4.25E-05	4.61E+00
Dinitro-2-methylphenol, 4,6- (dinitro-o-cresol, 4, 6-)	534-52-1	–	–	s	O	1.98E+02	1.07E-07	-1.50E+00	–	5.31E-02	7.27E-06	3.00E+03	2.87E-05	2.07E+00
Dinitrobenzene, 1,3- (dinitrobenzene, 2,4-)	99-65-0	–	–	s	O	1.68E+02	4.57E-06	1.48E+00	–	2.80E-01	7.60E-06	5.40E+02	2.49E-04	1.63E+00
Dinitrobenzene, 1,4-	100-25-4	–	–	s	O	1.68E+02	4.44E-06	1.42E+00	–	6.15E-02	7.18E-06	1.00E+02	4.83E-05	1.63E+00
Dinitrophenol, 2,4-	51-28-5	–	–	s	OA	1.84E+02	2.01E-07	-2.00E+00	–	2.73E-02	9.06E-06	5.80E+03	1.14E-04	1.73E+00
Dinitrophenol, 2,5-	329-71-5	–	–	s	OA	1.84E+02	1.47E-07	2.55E-03	–	5.98E-02	7.84E-06	1.79E+03	2.61E-05	2.62E+00
Dinitrotoluene, 2,4-	121-14-2	–	–	s	O	1.82E+02	3.60E-05	1.71E+00	–	2.03E-01	7.06E-06	2.85E+02	1.74E-04	2.18E+00
Dinitrotoluene, 2,6-	606-20-2	–	–	s	O	1.82E+02	3.11E-05	1.62E+00	–	3.27E-02	7.26E-06	1.82E+02	5.70E-04	2.18E+00
Di-n-octyl phthalate	117-84-0	–	–	l	O	3.91E+02	2.78E-03	7.92E+00	–	1.51E-02	3.90E-06	2.00E-02	4.47E-06	8.54E+00
Dinoseb	88-85-7	–	–	s	O	2.40E+02	2.08E-02	3.08E+00	–	2.25E-02	6.25E-06	5.20E+01	7.52E-02	3.67E+00
Dioxane 1,4-	123-91-1	–	–	l	O	8.81E+01	2.04E-04	-2.68E-01	–	2.30E-01	1.00E-05	9.00E+05	3.80E+01	-3.20E-01
Dioxins/furans, polychlorinated; (reported as 2,3,7,8-TCDD TEQ)	1746-01-6	–	–	s	O	3.22E+02	1.47E-03	7.15E+00	–	4.70E-02	8.00E-06	1.93E-05	7.40E-10	7.02E+00
Diphenyl ether	101-84-8	–	–	s	O	1.70E+02	1.75E-02	4.18E+00	–	5.30E-02	6.69E-06	7.78E+00	1.47E-02	4.25E+00
Diphenylamine	122-39-4	–	–	s	O	1.69E+02	1.83E-04	2.54E+00	–	6.80E-02	6.30E-06	3.00E+02	4.26E-03	3.29E+00
Diphenylhydrazine, 1,2-	122-66-7	–	–	s	O	1.84E+02	1.42E-07	2.82E+00	–	5.62E-02	5.70E-06	1.84E+03	2.60E-05	3.06E+00
Dipropylene glycol	110-98-5	–	–	l	O	1.34E+02	1.79E-08	-4.77E-01	–	5.97E-02	6.90E-06	9.83E+05	2.39E-03	-4.86E-01
Diquat	85-00-7	–	–	s	O	3.44E+02	2.69E-12	2.31E+00	–	5.52E-02	5.52E-06	7.00E+05	1.00E-07	-2.82E+00
Disodium iminodiacetate (iminodiacetic acid, disodium salt)	142-73-4	–	–	s	O	1.33E+02	3.82E-14	-1.31E+00	–	6.03E-02	8.38E-06	1.57E+05	8.21E-10	-1.33E+00
Disulfoton	298-04-4	–	–	s	O	2.74E+02	2.58E-04	3.95E+00	–	8.00E-02	8.00E-06	1.60E+01	2.30E-04	3.86E+00
Diuron	330-54-1	–	–	s	O	2.33E+02	3.04E-08	2.63E+00	–	5.40E-02	5.30E-06	4.20E+01	1.00E-07	2.67E+00
Dodecylphenol, 4-	104-43-8	–	–	l	OA	2.62E+02	4.00E-04	8.40E+00	–	3.46E-02	4.72E-06	3.80E-02	1.06E-06	8.40E+00
Endosulfan	115-29-7	–	–	s	O	4.07E+02	4.66E-04	2.87E+00	–	1.15E-02	4.55E-06	5.10E-01	9.96E-06	3.84E+00
Endosulfan I	959-98-8	–	–	s	O	4.07E+02	3.55E-05	4.20E+00	–	3.22E-02	4.67E-06	1.73E+00	2.75E-06	5.20E+00
Endosulfan II	33213-65-9	–	–	s	O	4.07E+02	3.55E-05	4.20E+00	–	3.22E-02	4.67E-06	1.16E+00	1.84E-06	5.20E+00
Endosulfan sulfate	1031-07-8	–	–	s	O	4.23E+02	3.65E-05	5.90E+00	–	3.00E-02	4.63E-06	1.02E-01	1.62E-07	6.01E+00
Endothall	145-73-3	–	–	s	O	2.30E+02	1.08E-08	1.93E+00	–	5.72E-02	7.50E-06	1.00E+05	1.80E-04	1.89E+00
Endrin	72-20-8	–	–	s	O	3.81E+02	4.95E-05	3.97E+00	–	1.25E-02	4.74E-06	2.50E-01	5.84E-07	5.45E+00
Endrin aldehyde	7421-93-4	–	–	l	O	3.81E+02	1.80E-02	6.33E+00	–	2.97E-02	3.83E-06	1.68E-02	1.46E-05	6.44E+00
Endrin ketone	53494-70-5	–	–	s	O	3.81E+02	3.66E-05	5.24E+00	–	3.10E-02	4.46E-06	8.60E-01	1.51E-06	5.33E+00
Epichlorohydrin	106-89-8	–	–	l	O	9.25E+01	1.37E-03	3.00E-01	–	8.60E-02	9.80E-06	6.60E+04	1.67E+01	6.26E-01

Chemical/Physical Properties

Last Revised: March 6, 2023

Chemical of Concern	CAS	B _r _{abg} (µg/g DW)/ (µg/g soil)	B _r _{bg} (µg/g DW)/ (µg/g soil)	Physical State	Type	MW (g/mole)	H _{un} _{itless} (unitless)	LogK _{oc} (unitless)	LogK _d (unitless)	D _{air} (cm ² /s)	D _{wat} (cm ² /s)	Solubility (mg/l)	Vapor_P (mm Hg)	logK _{ow} (unitless)
EPN (o-ethyl o-(4-nitrophenyl)phenylphosphonothioate)	2104-64-5	—	—	s	O	3.23E+02	2.00E-08	3.75E+00	—	3.93E-02	5.16E-06	1.40E+00	1.91E-09	3.81E+00
Esfenvalerate	66230-04-4	—	—	s	O	4.20E+02	1.70E-08	4.80E+00	—	2.91E-02	4.18E-06	2.00E-04	1.80E-11	6.30E+00
Ethalfuralin (sonolan)	55283-68-6	—	—	l	O	3.33E+02	1.54E-05	4.78E+00	—	3.75E-02	4.96E-06	1.01E+01	8.54E-06	4.82E+00
Ethanol	64-17-5	—	—	l	O	4.61E+01	2.77E-04	7.68E-02	—	1.15E-01	1.22E-05	2.96E+05	3.26E+01	-2.00E-03
Ethanol, 2-amino-	141-43-5	—	—	l	O	6.11E+01	1.75E-07	-8.96E-01	—	1.02E-01	1.11E-05	1.00E+06	5.70E-01	-1.23E+00
Ethanol, 2-(2-aminoethoxy)-	929-06-6	—	—	l	O	1.05E+02	8.48E-09	-8.09E-01	—	7.15E-02	8.06E-06	1.00E+06	2.45E-02	-1.12E+00
Ethanol, 2-(2-ethoxyethoxy)-	111-90-0	—	—	l	O	1.34E+02	2.54E-07	1.56E+00	—	5.95E-02	6.73E-06	7.40E+05	2.56E-02	3.30E-01
Ethanol, 2-(methylamino)-	109-83-1	—	—	s	O	7.51E+01	2.20E-07	-7.69E-01	—	8.44E-02	9.23E-06	1.39E+06	1.10E-01	-1.07E+00
Ethion	563-12-2	—	—	l	O	3.84E+02	2.87E-05	4.19E+00	—	3.20E-02	4.60E-06	1.20E+00	1.50E-06	4.75E+00
Ethoprop	13194-48-4	—	—	l	O	2.42E+02	6.73E-06	3.09E+00	—	4.16E-02	5.56E-06	7.50E+02	3.80E-04	3.14E+00
Ethoxy ethanol, 2-	110-80-5	—	—	l	O	9.01E+01	1.04E-05	-9.69E-02	—	9.47E-02	9.75E-06	1.20E+01	4.56E+00	-4.16E-01
Ethyl acetate	141-78-6	—	—	l	O	8.81E+01	5.57E-03	7.20E-01	—	7.30E-02	9.70E-06	7.90E+04	9.41E+01	8.64E-01
Ethyl acrylate	140-88-5	—	—	l	O	1.00E+02	1.06E-02	2.03E+00	—	7.40E-02	8.68E-06	2.00E+04	2.95E+01	1.22E+00
Ethyl benzene	100-41-4	—	—	l	O	1.06E+02	3.28E-01	2.31E+00	—	7.50E-02	7.80E-06	1.69E+02	9.60E+00	3.03E+00
Ethyl dipropylthiocarbamate, S-	759-94-4	—	—	l	O	1.89E+02	4.57E-03	2.38E+00	—	5.35E-02	5.65E-06	3.70E+02	1.60E-01	3.02E+00
Ethyl ether	60-29-7	—	—	l	O	7.41E+01	2.70E-02	8.80E-01	—	7.40E-02	9.30E-06	6.10E+04	5.40E+02	1.05E+00
Ethyl methacrylate	97-63-2	—	—	l	O	1.14E+02	6.65E-03	1.57E+00	—	8.00E-02	8.00E-06	1.90E+04	1.75E+01	1.77E+00
Ethyl methanesulfonate	62-50-0	—	—	l	O	1.24E+02	2.49E-06	-6.04E-01	—	6.94E-02	8.72E-06	6.95E+04	2.54E-02	-6.14E-01
Ethyl tert-butyl ether (2-ethyl-2-ethoxypropane)	637-92-3	—	—	l	O	1.02E+02	9.99E-02	1.57E+00	—	6.95E-02	7.34E-06	5.03E+03	9.00E+01	1.88E+00
Ethyl-1-hexanol, 2-	104-76-7	—	—	l	O	1.30E+02	8.73E-04	2.67E+00	—	5.70E-02	6.73E-06	8.66E+02	1.10E-01	2.72E+00
Ethyl-2-hexenal, 2-	645-62-5	—	—	l	O	1.26E+02	1.79E-02	2.15E+00	—	6.00E-02	6.91E-06	5.85E+02	1.52E+00	2.62E+00
Ethyl-2-methyl benzene, 1-	611-14-3	—	—	l	O	1.20E+02	2.19E-01	3.03E+00	—	6.76E-02	7.29E-06	7.46E+01	2.48E+00	3.53E+00
Ethyl-4-methyl benzene, 1-	622-96-8	—	—	l	O	1.20E+02	3.27E-01	3.07E+00	—	6.70E-02	7.18E-06	9.48E+01	2.95E+00	3.58E+00
Ethylene*	74-85-1	—	—	—	—	—	—	—	—	—	—	—	—	—
Ethylene dibromide (dibromoethane, 1,2-)	106-93-4	—	—	l	O	1.88E+02	2.93E-02	1.73E+00	—	2.17E-02	1.90E-05	4.32E+03	1.10E+01	2.01E+00
Ethylene glycol	107-21-1	—	—	l	O	6.21E+01	2.49E-06	-9.00E-01	—	1.08E-01	1.22E-05	1.00E+06	7.00E-02	-1.20E+00
Ethylene oxide	75-21-8	—	—	g	O	4.41E+01	4.92E-03	3.42E-01	—	1.04E-01	1.45E-05	3.83E+05	1.32E+03	-4.54E-02
Ethylene thiourea	96-45-7	—	—	s	O	1.02E+02	4.99E-05	-6.60E-01	—	7.15E-02	1.02E-05	1.20E+04	8.36E-02	-4.91E-01
Ethylenediamine	107-15-3	—	—	l	O	6.01E+01	7.19E-08	6.73E-01	—	1.53E-01	1.12E-05	7.95E+06	1.10E+01	-1.62E+00
Ethylenimine	151-56-4	—	—	l	OB	4.31E+01	1.68E-05	2.68E-01	—	1.20E-01	1.30E-05	8.62E+05	2.31E+02	-6.04E-01
Ethylhexyl acrylate, 2-	103-11-7	—	—	l	O	1.84E+02	4.29E-02	4.00E+00	—	4.68E-02	5.74E-06	1.37E+01	5.85E-02	4.07E+00
Famphur	52-85-7	—	—	s	O	3.25E+02	6.70E-11	1.14E+00	—	4.02E-02	5.31E-06	7.06E+03	2.66E-08	1.29E+00
Fensulfothion	115-90-2	—	—	l	O	3.08E+02	1.42E-07	2.49E+00	—	4.04E-02	5.32E-06	4.10E+04	3.45E-04	2.05E+00
Fenthion	55-38-9	—	—	l	O	2.78E+02	2.13E-05	3.04E+00	—	4.35E-02	5.42E-06	2.17E+01	1.38E-04	3.06E+00
Fenuron	101-42-8	—	—	s	O	1.64E+02	7.03E-08	1.28E+00	—	5.36E-02	6.61E-06	2.30E+03	1.81E-05	1.37E+00
Fluoranthene	206-44-0	—	—	s	O	2.02E+02	3.88E-04	4.69E+00	—	3.02E-02	6.35E-06	2.60E-01	8.13E-06	4.93E+00
Fluorene	86-73-7	—	—	s	O	1.66E+02	2.64E-03	3.88E+00	—	3.63E-02	7.88E-06	1.98E+00	3.24E-03	4.02E+00
Fluorine (soluble fluoride)	7782-41-4	—	—	g	I	3.80E+01	—	—	2.18E+00	—	—	—	7.60E+02	2.23E-01

Chemical/Physical Properties

Last Revised: March 6, 2023

Chemical of Concern	CAS	B _r _{abg} (µg/g DW)/ (µg/g soil)	B _r _{bg} (µg/g DW)/ (µg/g soil)	Physical State	Type	MW (g/mole)	H _{unitless} (unitless)	LogK _{oc} (unitless)	LogK _d (unitless)	D _{air} (cm ² /s)	D _{wat} (cm ² /s)	Solubility (mg/l)	Vapor_P (mm Hg)	logK _{ow} (unitless)
Fluorochloridone	61213-25-0	—	—	s	O	3.12E+02	8.44E-08	2.69E+00	—	4.09E-02	5.47E-06	8.23E+01	4.07E-07	3.30E+00
Fonofos	944-22-9	—	—	s	O	2.46E+02	3.17E-01	3.55E+00	—	4.65E-02	5.52E-06	1.46E+01	3.43E-01	4.00E+00
Formaldehyde	50-00-0	—	—	g	O	3.00E+01	1.37E-05	3.40E-01	—	1.80E-01	2.00E-05	5.50E+05	3.88E+03	3.50E-01
Formic acid	64-18-6	—	—	l	O	4.60E+01	1.79E-04	-5.40E-01	—	7.90E-02	1.40E-06	1.00E+06	4.10E+01	-4.61E-01
Furan	110-00-9	—	—	l	O	6.81E+01	2.24E-01	1.32E+00	—	1.04E-01	1.20E-05	1.00E+04	6.00E+02	1.36E+00
Furfural	98-01-1	—	—	l	O	9.61E+01	1.25E-04	4.45E-01	—	8.72E-02	1.12E-05	8.60E+04	2.00E+00	8.32E-01
Glycidylaldehyde	765-34-4	—	—	l	O	7.21E+01	1.08E-05	9.64E-01	—	9.64E-02	1.16E-05	8.55E+07	2.70E+01	-1.17E-01
Glyphosate	1071-83-6	—	—	s	OA	1.69E+02	6.11E-12	3.00E+00	—	5.07E-02	7.64E-06	1.46E+04	2.43E-08	-3.33E+00
Heptachlor	76-44-8	—	—	s	O	3.73E+02	2.44E-02	4.07E+00	—	1.12E-02	5.69E-06	1.80E-01	3.26E-04	6.21E+00
Heptachlor epoxide	1024-57-3	—	—	s	O	3.89E+02	3.45E-04	3.86E+00	—	1.32E-02	4.23E-06	2.75E-01	4.34E-06	4.91E+00
Heptane, n-	142-82-5	—	—	l	O	1.00E+02	8.37E+01	3.84E+00	—	6.54E-02	7.00E-06	2.66E+00	4.07E+01	4.75E+00
Heptanoic acid, n-	111-14-8	—	—	l	OA	1.30E+02	3.72E-05	-3.00E-01	—	5.73E-02	7.13E-06	1.70E+03	8.84E-03	2.99E+00
Hexachlorobenzene	118-74-1	—	—	s	O	2.85E+02	2.22E-02	4.45E+00	—	5.42E-02	5.91E-06	6.00E-03	1.23E-05	5.86E+00
Hexachlorobutadiene	87-68-3	—	—	l	O	2.61E+02	9.94E-01	3.84E+00	—	5.61E-02	6.16E-06	2.55E+00	1.77E-01	4.72E+00
Hexachlorocyclohexane, alpha (alpha-BHC)	319-84-6	—	—	s	O	2.91E+02	2.82E-04	3.12E+00	—	1.42E-02	7.34E-06	2.00E+00	4.26E-05	4.26E+00
Hexachlorocyclohexane, beta (beta-BHC)	319-85-7	—	—	s	O	2.91E+02	1.44E-05	3.14E+00	—	1.42E-02	7.34E-06	5.42E-01	4.90E-07	4.26E+00
Hexachlorocyclohexane, delta (delta-BHC)	319-86-8	—	—	s	O	2.91E+02	1.77E-04	3.93E+00	—	4.50E-02	6.20E-06	2.59E+00	2.87E-05	4.00E+00
Hexachlorocyclohexane, gamma (lindane; gamma-BHC)	58-89-9	—	—	s	O	2.91E+02	1.41E-04	3.04E+00	—	1.42E-02	7.34E-06	5.75E+00	3.72E-05	4.26E+00
Hexachlorocyclohexane, techn (technical-BHC)	608-73-1	—	—	—	O	2.91E+02	5.99E-05	3.38E+00	—	1.42E-02	7.34E-06	4.35E+01	1.64E-04	4.26E+00
Hexachlorocyclopentadiene	77-47-4	—	—	l	O	2.74E+02	7.15E-01	3.98E+00	—	1.61E-02	7.21E-06	1.80E+00	7.32E-02	4.63E+00
Hexachloroethane	67-72-1	—	—	s	O	2.37E+02	1.62E-01	3.26E+00	—	2.50E-03	6.80E-06	5.00E+01	4.72E-01	4.03E+00
Hexachlorophene	70-30-4	—	—	s	O	4.07E+02	2.54E-09	7.30E+00	—	8.00E-02	8.00E-06	3.00E-03	2.74E-12	6.92E+00
Hexachloropropylene	1888-71-7	—	—	l	O	2.49E+02	3.94E-02	4.03E+00	—	5.64E-02	7.15E-06	4.11E+01	1.19E-01	4.10E+00
Hexanal, 2-ethyl-	123-05-7	—	—	l	O	1.28E+02	1.23E-02	2.12E+00	—	5.81E-02	6.26E-06	5.48E+02	9.59E-01	2.58E+00
Hexane, n-	110-54-3	—	—	l	O	8.62E+01	4.66E+01	2.68E+00	—	2.00E-01	7.77E-06	1.30E+01	1.52E+02	3.29E+00
Hexanediamine, 1,6-	124-09-4	—	—	s	O	1.16E+02	2.88E-08	3.56E-01	—	6.02E-02	6.79E-06	1.00E+06	4.22E-02	3.50E-01
Hexanedinitrile	111-69-3	—	—	l	O	1.08E+02	9.31E-08	2.62E-01	—	6.72E-02	7.66E-06	1.00E+06	6.23E-03	2.80E-01
Hexanediol, 1,6-	629-11-8	—	—	s	O	1.18E+02	3.14E-08	7.62E-01	—	6.58E-02	7.82E-06	2.34E+04	1.10E-04	7.75E-01
Hexanoic acid	142-62-1	—	—	l	O	1.16E+02	1.31E-05	-1.29E+00	—	6.20E-02	7.68E-06	1.19E+04	2.46E-02	2.06E+00
Hexanone, 2-	591-78-6	—	—	l	O	1.00E+02	3.38E-03	1.25E+00	—	6.96E-02	7.75E-06	1.79E+04	1.11E+01	1.48E+00
Hexazinone	51235-04-2	—	—	s	O	2.52E+02	8.62E-11	1.57E+00	—	5.08E-02	5.11E-06	3.30E+04	2.03E-07	2.15E+00
Hexene, 1-	592-41-6	—	—	l	O	8.42E+01	2.33E+01	2.90E+00	—	7.39E-02	7.12E-06	2.98E+01	1.52E+02	3.56E+00
Hexene, cis-2-	7688-21-3	—	—	l	O	8.42E+01	1.62E+01	2.93E+00	—	7.39E-02	7.15E-06	3.75E+01	1.33E+02	3.60E+00
Hexylene glycol (2-methyl-2,4-pentanediol)	107-41-5	—	—	l	O	1.18E+02	6.57E-07	3.93E-01	—	6.57E-02	7.70E-06	7.27E+05	7.40E-02	4.00E-01
Hydrazine	302-01-2	—	—	l	O	3.20E+01	7.20E-08	-1.00E+00	—	4.16E-01	1.90E-05	3.41E+08	1.40E+01	-1.47E+00
Hydrocaproic acid, 6- (6-hydroxyhexanoic acid)	1191-25-9	—	—	l	OA	1.32E+02	1.84E-09	-2.55E-01	—	5.77E-02	7.22E-06	9.86E+03	2.51E-06	-3.00E+00
Hydrogen chloride (hydrochloric acid)*	7647-01-0	—	—	—	—	—	—	—	—	—	—	—	—	—
Hydroquinone	123-31-9	—	—	s	O	1.10E+02	1.35E-09	4.98E-01	—	6.82E-02	8.56E-06	2.06E+04	4.62E-06	5.30E-01

Chemical/Physical Properties

Last Revised: March 6, 2023

Chemical of Concern	CAS	Br _{abg} ((µg/g DW)/ (µg/g soil))	Br _{bg} ((µg/g DW)/ (µg/g soil))	Physical State	Type	MW (g/mole)	H _{unitless} (unitless)	LogK _{oc} (unitless)	LogK _d (unitless)	D _{air} (cm ² /s)	D _{wat} (cm ² /s)	Solubility (mg/l)	Vapor_P (mm Hg)	logK _{ow} (unitless)
Indene	95-13-6	—	—	l	O	1.16E+02	2.08E-02	2.50E+00	—	6.82E-02	7.97E-06	3.90E+02	1.30E+00	2.80E+00
Indeno-1,2,3-cd-pyrene	193-39-5	—	—	s	O	2.76E+02	2.85E-06	6.54E+00	—	1.90E-02	5.66E-06	3.75E-03	1.40E-10	6.70E+00
Iron*	7439-89-6	—	—	—	—	—	—	—	—	—	—	—	—	—
Isoamyl alcohol	123-51-3	—	—	l	O	8.81E+01	5.64E-04	1.24E+00	—	7.40E-02	7.75E-06	1.75E+04	2.05E+00	1.47E+00
Isobutyl alcohol	78-83-1	—	—	l	O	7.41E+01	4.99E-04	7.50E-01	—	8.60E-02	8.00E-06	9.49E+04	1.00E+01	7.67E-01
Isobutylene (2-methyl-1-propene)	115-11-7	—	—	g	O	5.61E+01	9.56E+00	2.03E+00	—	9.90E-02	9.08E-06	2.39E+02	1.75E+03	2.47E+00
Isobutyric acid (2-methylpropanoic acid)	79-31-2	—	—	l	OA	8.81E+01	2.40E-05	-2.05E+00	—	7.76E-02	9.17E-06	4.96E+04	4.52E-01	1.15E+00
Isodecanol	25339-17-7	—	—	l	O	1.58E+02	1.67E-03	3.27E+00	—	4.84E-02	5.49E-06	3.43E+01	6.63E-03	4.02E+00
Isodrin	465-73-6	—	—	s	O	3.65E+02	9.13E-02	6.84E+00	—	3.40E-02	4.49E-06	1.70E-02	7.77E-05	6.82E+00
Isopentane	78-78-4	—	—	l	O	7.22E+01	6.28E+01	2.74E+00	—	8.21E-02	7.43E-06	4.24E+01	6.75E+02	3.36E+00
Isophorone	78-59-1	—	—	l	O	1.38E+02	2.57E-04	1.48E+00	—	6.23E-02	6.76E-06	1.20E+04	4.10E-01	2.62E+00
Isopropyl acetate	108-21-4	—	—	l	O	1.02E+02	1.16E-02	1.02E+00	—	7.35E-02	8.00E-06	2.14E+04	4.43E+01	1.19E+00
Isopropyl alcohol	67-63-0	—	—	l	O	6.01E+01	3.70E-04	5.30E-01	—	9.59E-02	1.03E-05	1.97E+05	2.22E+01	5.00E-01
Isosafrole	120-58-1	—	—	l	O	1.62E+02	1.28E-03	2.87E+00	—	5.59E-02	7.07E-06	1.43E+02	2.06E-02	2.92E+00
Kelthane (dicofol)	115-32-2	—	—	s	OA	3.70E+02	8.20E-07	4.10E+00	—	3.91E-02	5.20E-06	7.00E-01	3.90E-08	5.10E+00
Kepone (chlordecone)	143-50-0	—	—	s	O	4.91E+02	1.04E-06	4.43E+00	—	4.22E-02	4.30E-06	7.60E+00	2.25E-07	4.91E+00
Lead (Inorganic)	7439-92-1	—	—	s	M	2.07E+02	0.00E+00	-	1.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.29E-01
Leptophos	21609-90-5	—	—	s	O	4.12E+02	1.31E-05	5.12E+00	—	3.39E-02	4.69E-06	1.96E-03	1.14E-09	6.88E+00
Limonene, d-*	5989-27-5	—	—	—	—	—	—	—	—	—	—	—	—	—
Lithium	7439-93-2	2.00E-02	4.00E-03	s	M	6.94E+00	0.00E+00	—	—	—	—	—	—	—
Magnesium*	7439-95-4	—	—	—	—	—	—	—	—	—	—	—	—	—
Malathion	121-75-5	—	—	l	O	3.30E+02	9.98E-07	2.46E+00	—	1.50E-02	4.40E-06	1.45E+02	7.90E-06	2.29E+00
Maleic anhydride	108-31-6	—	—	s	O	9.81E+01	8.31E-06	1.41E+00	—	9.50E-02	1.11E-05	8.65E+02	1.34E-03	1.62E+00
Maleic hydrazide	123-33-1	—	—	s	O	1.12E+02	1.03E-10	1.40E+00	—	8.75E-02	8.75E-06	6.00E+03	7.50E-08	-8.87E-01
Malononitrile	109-77-3	—	—	s	O	6.61E+01	1.97E-07	6.90E-01	—	9.97E-02	1.09E-05	6.96E+06	3.79E-01	-1.78E-01
Mancozeb	8018-01-7	—	—	s	O	2.65E+02	1.81E-05	1.13E+00	—	5.69E-02	6.02E-06	6.20E+00	7.50E-06	1.33E+00
Manganese	7439-96-5	1.00E-01	5.00E-02	s	M	5.49E+01	0.00E+00	—	1.70E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MCPA (4-(chloro-2-methylphenoxy) acetic acid)	94-74-6	—	—	s	O	2.01E+02	1.18E-07	-1.50E+00	—	5.12E-02	6.82E-06	6.50E+02	6.99E-06	3.39E+00
MCPP (2-(4-(chloro-2-methylphenoxy) propanoic acid)	93-65-2	—	—	s	O	2.15E+02	1.00E-06	-1.76E+00	—	4.70E-02	6.36E-06	2.80E+02	2.50E-05	3.13E+00
Mercury (pH = 4.9)	7439-97-6	5.50E-03	1.40E-02	l	M	2.01E+02	4.74E-01	—	-1.40E+00	3.07E-02	6.30E-06	3.00E-02	1.30E-03	-4.71E-01
Mercury (pH=6.8)	7439-97-6	5.50E-03	1.40E-02	l	M	2.01E+02	4.74E-01	—	1.72E+00	3.07E-02	6.30E-06	3.00E-02	1.30E-03	-4.71E-01
Merphos	150-50-5	—	—	l	O	2.99E+02	1.26E+00	5.34E+00	—	3.65E-02	4.75E-06	4.97E-03	3.83E-04	7.29E+00
Methacrylic acid (2-methyl-2-propenoic acid)	79-41-4	—	—	l	O	8.61E+01	5.21E-04	-2.40E+00	—	8.50E-02	9.59E-06	9.59E+04	1.06E+01	1.67E+00
Methacrylonitrile	126-98-7	—	—	l	O	6.71E+01	3.03E-03	5.30E-01	—	8.00E-02	8.00E-06	2.50E+04	6.80E+01	7.57E-01
Methanol	67-56-1	—	—	l	O	3.20E+01	1.94E-04	-7.40E-01	—	1.50E-01	1.64E-05	1.00E+06	1.22E+02	-6.32E-01
Methapyrilene	91-80-5	—	—	l	O	2.61E+02	1.18E-07	1.30E+00	—	4.00E-02	5.29E-06	2.03E+03	1.68E-05	3.15E+00
Methylol	16752-77-5	—	—	s	O	1.62E+02	7.48E-09	2.20E+00	—	4.07E-02	7.20E-06	5.80E+04	5.00E-05	6.09E-01
Methoxychlor	72-43-5	—	—	s	O	3.46E+02	6.57E-04	4.89E+00	—	1.56E-02	4.46E-06	4.50E-02	1.23E-06	5.67E+00

Chemical/Physical Properties

Last Revised: March 6, 2023

Chemical of Concern	CAS	B _r _{abg} ((μg/g DW)/ (μg/g soil))	B _r _{bg} ((μg/g DW)/ (μg/g soil))	Physical State	Type	MW (g/mole)	H _{unitless} (unitless)	LogK _{oc} (unitless)	LogK _d (unitless)	D _{air} (cm ² /s)	D _{wat} (cm ² /s)	Solubility (mg/l)	Vapor_P (mm Hg)	logK _{ow} (unitless)
Methoxyethanol, 2-	109-86-4	–	–	l	O	7.61E+01	1.28E+00	9.31E-01	–	9.15E-02	1.02E-05	2.01E+01	6.20E+00	-9.07E-01
Methyl acetate (acetic acid, methyl ester)	79-20-9	–	–	l	O	7.41E+01	4.46E-03	2.43E-01	–	9.50E-02	1.01E-05	1.44E+05	1.58E+02	2.46E-01
Methyl acrylate	96-33-3	–	–	l	O	8.61E+01	9.15E-03	6.56E-01	–	8.70E-02	9.35E-06	4.03E+04	7.93E+01	7.30E-01
Methyl amyl ketone (2-heptanone)	110-43-0	–	–	l	O	1.14E+02	3.64E-03	1.69E+00	–	6.32E-02	7.20E-06	6.06E+03	3.53E+00	2.03E+00
Methyl chrysene, 1-	3351-28-8	–	–	s	O	2.42E+02	1.16E-05	6.65E+00	–	4.09E-02	5.61E-06	2.53E-04	2.22E-10	6.76E+00
Methyl chrysene, 2-	3351-32-4	–	–	s	O	2.42E+02	1.18E-05	6.65E+00	–	4.09E-02	5.61E-06	3.54E-04	3.17E-10	6.76E+00
Methyl chrysene, 6-	1705-85-7	–	–	s	O	2.42E+02	1.17E-05	6.55E+00	–	4.09E-02	5.61E-06	1.07E-03	9.44E-10	6.76E+00
Methyl cyclohexane	108-87-2	–	–	l	O	9.82E+01	1.59E+01	3.33E+00	–	6.97E-02	7.59E-06	1.04E+01	3.08E+01	4.10E+00
Methyl ethyl ketone (2-butanone)	78-93-3	–	–	l	O	7.21E+01	1.94E-03	2.79E-01	–	8.08E-02	9.80E-06	2.40E+05	9.10E+01	2.56E-01
Methyl iodide (iodomethane)	74-88-4	–	–	l	O	1.42E+02	2.36E-01	1.31E+00	–	1.02E-01	1.17E-05	1.24E+04	3.79E+02	1.55E+00
Methyl isobutyl ketone (4-methyl-2-pentanone)	108-10-1	–	–	l	O	1.00E+02	5.82E-03	1.18E+00	–	7.50E-02	7.80E-06	1.90E+04	1.45E+01	1.16E+00
Methyl mercury	22967-92-6	–	–	–	I	2.16E+02	–	–	–	–	–	–	–	7.63E-02
Methyl methacrylate	80-62-6	–	–	l	O	1.00E+02	1.33E-02	1.36E+00	–	7.70E-02	8.60E-06	1.60E+04	3.80E+01	1.28E+00
Methyl methanesulfonate	66-27-3	–	–	l	O	1.10E+02	3.25E-06	-7.54E-01	–	7.52E-02	9.50E-06	4.95E+04	2.67E-02	-7.67E-01
Methyl parathion	298-00-0	–	–	s	O	2.63E+02	5.82E-06	2.81E+00	–	8.00E-02	8.00E-06	5.00E+01	1.52E-05	2.75E+00
Methyl-1-butene, 2-	563-46-2	–	–	l	O	7.01E+01	1.41E+01	2.23E+00	–	8.57E-02	8.93E-06	1.38E+02	5.06E+02	2.72E+00
Methyl-1-propanal, 2- (isobutyraldehyde)	78-84-2	–	–	l	O	7.21E+01	7.48E-03	7.04E-01	–	8.90E-02	9.36E-06	4.59E+04	8.89E+01	7.90E-01
Methyl-2-butene, 2-	513-35-9	–	–	l	O	7.01E+01	7.32E+00	2.19E+00	–	8.57E-02	8.93E-06	2.06E+02	3.93E+02	2.67E+00
Methyl-2-pentenal, 2-	623-36-9	–	–	l	O	9.81E+01	1.34E-02	1.44E+00	–	7.20E-02	8.05E-06	5.04E+03	1.26E+01	1.72E+00
Methylcholanthrene, 3-	56-49-5	–	–	s	O	2.68E+02	7.72E-07	6.96E+00	–	3.83E-02	5.40E-06	1.76E-04	6.64E-12	7.08E+00
Methylene bromide (dibromomethane)	74-95-3	–	–	l	O	1.74E+02	3.49E-02	2.26E+00	–	8.00E-02	8.00E-06	1.10E+04	4.56E+01	1.52E+00
Methylene chloride (dichloromethane)	75-09-2	–	–	l	O	8.49E+01	9.10E-02	1.07E+00	–	1.01E-01	1.17E-05	1.54E+04	4.55E+02	1.34E+00
Methylene-bis (2-chloroaniline) 4,4'-	101-14-4	–	–	s	O	2.67E+02	1.40E-05	3.90E+00	–	1.99E-02	5.80E-06	7.24E+01	6.94E-05	3.47E+00
Methylmercury hydroxide	1184-57-2	–	–	s	OM	2.33E+02	5.47E-09	1.92E-02	–	1.05E-01	1.43E-05	1.00E+06	7.50E-03	-1.33E+00
Methylnaphthalene, 1-	90-12-0	–	–	s	O	1.42E+02	1.64E-02	3.36E+00	–	6.31E-02	7.13E-06	2.80E+01	6.62E-02	3.72E+00
Methylnaphthalene, 2-	91-57-6	–	–	s	O	1.42E+02	1.85E-02	3.63E+00	–	6.29E-02	7.20E-06	2.54E+01	6.75E-02	3.72E+00
Methylpyrrolidone, N-	872-50-4	–	–	l	O	9.91E+01	1.83E-06	1.01E-02	–	7.16E-02	8.75E-06	–	4.90E-01	1.00E-02
Methylstyrene, alpha-	98-83-9	–	–	l	O	1.18E+02	1.95E-01	2.87E+00	–	6.31E-02	6.91E-06	6.11E+01	1.84E+00	3.53E+00
Methyltetrahydrofuran, 2-	96-47-9	–	–	l	O	8.61E+01	8.78E-03	9.43E-01	–	8.09E-02	8.72E-06	3.99E+04	7.44E+01	1.09E+00
Methyltetrahydropyran, 2-	10141-72-7	–	–	l	O	1.00E+02	8.30E-03	1.28E+00	–	7.19E-02	8.04E-06	1.23E+04	1.87E+01	1.52E+00
Metolachlor	51218-45-2	–	–	l	O	2.84E+02	3.13E-08	2.85E+00	–	3.61E-02	5.10E-06	8.64E+02	2.29E-06	2.90E+00
Metribuzin	21087-64-9	–	–	s	O	2.14E+02	4.99E-09	3.48E-01	–	4.51E-02	5.98E-06	1.21E+05	5.16E-05	3.72E-01
Mirex	2385-85-5	–	–	s	O	5.46E+02	3.20E-01	7.36E+00	–	3.50E-02	4.08E-06	3.41E-08	7.50E-07	1.10E+01
Molinat	2212-67-1	–	–	l	O	1.87E+02	5.25E-05	1.70E+00	–	5.65E-02	6.00E-06	9.00E+02	5.60E-03	2.91E+00
Molybdenum	7439-98-7	1.00E-01	6.00E-02	s	M	9.59E+01	0.00E+00	–	1.30E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Monocrotophos	2157-98-4	–	–	s	O	2.23E+02	1.24E-12	3.18E-01	–	4.48E-02	5.67E-06	8.02E+05	8.12E-08	4.84E-01
Morpholine	110-91-8	–	–	l	O	8.71E+01	2.28E-06	-2.63E-02	–	8.34E-02	9.44E-06	3.33E+07	1.59E+01	-8.80E-01
Morpholine, N-butyl-	1005-67-0	–	–	l	O	1.43E+02	7.19E-05	1.74E+00	–	5.36E-02	6.01E-06	7.36E+04	6.80E-01	1.77E+00

Chemical/Physical Properties

Last Revised: March 6, 2023

Chemical of Concern	CAS	B _r _{abg} (μg/g DW)/ (μg/g soil)	B _r _{bg} (μg/g DW)/ (μg/g soil)	Physical State	Type	MW (g/mole)	H _u _{nitless} (unitless)	LogK _{oc} (unitless)	LogK _d (unitless)	D _{air} (cm ² /s)	D _{wat} (cm ² /s)	Solubility (mg/l)	Vapor_P (mm Hg)	logK _{ow} (unitless)
MTBE (methyl tert-butyl ether)	1634-04-4	—	—	l	O	8.81E+01	2.44E-02	1.15E+00	—	7.92E-02	9.41E-05	4.80E+04	2.49E+02	1.43E+00
Naled	300-76-5	—	—	l	O	3.81E+02	2.71E-03	2.12E+00	—	4.40E-02	6.80E-06	1.50E+00	2.00E-04	1.60E+00
Naphthalene	91-20-3	—	—	s	O	1.28E+02	2.00E-02	3.19E+00	—	5.90E-02	7.50E-06	3.14E+01	8.89E-02	3.17E+00
Naphthoquinone, 1,4-	130-15-4	—	—	s	O	1.58E+02	4.00E-05	1.29E+00	—	5.55E-02	7.09E-06	2.20E+02	1.34E-03	1.50E+00
Naphthylamine, 1-	134-32-7	—	—	s	O	1.43E+02	8.64E-06	2.64E+00	—	5.89E-02	7.56E-06	5.84E+02	6.44E-04	2.64E+00
Naphthylamine, 2-	91-59-8	—	—	s	O	1.43E+02	1.00E-06	2.76E+00	—	5.86E-02	7.46E-06	1.25E+02	6.76E-05	2.76E+00
Napropamide	15299-99-7	—	—	s	OB	2.71E+02	2.17E-07	3.74E+00	—	3.78E-02	5.05E-06	2.57E+01	3.77E-07	3.81E+00
Neopentyl glycol	126-30-7	—	—	s	O	1.04E+02	5.11E-07	2.54E-01	—	7.23E-02	8.54E-06	2.81E+05	2.52E-02	2.22E-01
Nickel and compounds	7440-02-0	2.50E-02	8.00E-03	s	M	5.87E+01	0.00E+00	—	1.20E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-5.71E-01
Nitrate-N	14797-55-8	—	—	—	I	6.20E+01	—	—	—	—	—	—	—	2.09E-01
Nitrite-N	14797-65-0	—	—	—	I	4.60E+01	—	—	—	—	—	—	—	5.64E-02
Nitroaniline, 2-	88-74-4	—	—	s	O	1.38E+02	2.08E-05	1.43E+00	—	5.99E-02	7.18E-06	1.26E+03	4.75E-03	2.02E+00
Nitroaniline, 3-	99-09-2	—	—	s	O	1.38E+02	2.31E-07	1.60E+00	—	6.73E-02	8.59E-06	4.56E+02	1.39E-05	1.62E+00
Nitroaniline, 4-	100-01-6	—	—	s	O	1.38E+02	3.33E-08	1.05E+00	—	6.69E-02	8.59E-06	6.49E+02	2.86E-06	1.07E+00
Nitrobenzene	98-95-3	—	—	l	O	1.23E+02	8.56E-04	2.12E+00	—	7.60E-02	8.60E-06	1.90E+03	2.44E-01	1.81E+00
Nitroglycerin	55-63-0	—	—	l	O	2.27E+02	3.40E-06	1.97E+00	—	5.53E-02	7.34E-06	6.70E+04	1.00E-04	2.00E+00
Nitrophenol, 2-	88-75-5	—	—	s	O	1.39E+02	2.21E-05	1.32E+00	—	6.87E-02	8.47E-06	1.73E+04	5.03E-02	2.35E+00
Nitrophenol, 3-	554-84-7	—	—	s	O	1.39E+02	1.90E-11	1.84E+00	—	6.65E-02	8.61E-06	5.86E+03	7.81E-05	1.97E+00
Nitrophenol, 4-	100-02-7	—	—	s	O	1.39E+02	3.24E-08	5.00E-01	—	6.73E-02	8.66E-06	4.49E+03	1.91E-05	1.73E+00
Nitropropane, 2-	79-46-9	—	—	l	O	8.91E+01	5.15E-03	5.44E-01	—	9.23E-02	1.01E-05	1.70E+04	1.82E+01	8.72E-01
Nitroquinoline-N-oxide, 4-	56-57-5	—	—	s	O	1.90E+02	8.23E-13	1.07E+00	—	6.78E-02	7.44E-06	1.17E+07	9.23E-07	1.09E+00
Nitrosodiethanolamine	1116-54-7	—	—	l	O	1.34E+02	2.05E-09	4.76E-01	—	7.27E-02	7.70E-06	7.33E+07	5.00E-04	-1.28E+00
Nitrosodiethylamine, n-	55-18-5	—	—	l	O	1.02E+02	3.60E-05	4.77E-01	—	8.00E-02	8.00E-06	1.47E+05	1.42E+00	3.44E-01
Nitrosodimethylamine, n-	62-75-9	—	—	l	O	7.41E+01	2.16E-05	5.56E-01	—	1.34E-01	9.72E-06	1.00E+06	5.37E+00	-6.39E-01
Nitrosodi-n-butylamine, n-	924-16-3	—	—	—	O	1.58E+02	3.58E-03	2.36E+00	—	8.00E-02	8.00E-06	1.20E+03	2.89E-01	2.31E+00
Nitrosodi-n-propylamine, n-	621-64-7	—	—	s	O	1.30E+02	9.35E-05	1.29E+00	—	5.45E-02	8.17E-06	9.89E+03	4.00E-01	1.35E+00
Nitrosodiphenylamine	86-30-6	—	—	s	O	1.98E+02	2.08E-04	2.52E+00	—	3.12E-02	6.35E-06	3.51E+01	9.88E-02	3.16E+00
Nitroso-methyl-ethyl-amine, n-	10595-95-6	—	—	—	O	8.81E+01	3.70E-05	1.32E+00	—	8.00E-02	8.00E-06	3.00E+05	2.28E+00	-1.47E-01
Nitrosomorpholine, N-	59-89-2	—	—	s	O	1.16E+02	3.99E-08	-1.37E+00	—	7.41E-02	9.22E-06	4.71E+06	2.96E-02	-1.39E+00
Nitroso-n-ethylurea, n-	759-73-9	—	—	s	O	1.17E+02	1.05E-04	1.51E+00	—	8.08E-02	8.25E-06	4.85E+04	7.97E-01	-2.47E-02
Nitrosopiperidine, N-	100-75-4	—	—	l	O	1.14E+02	1.30E-05	7.28E-01	—	6.90E-02	8.57E-06	4.91E+04	1.00E-01	7.40E-01
Nitrosopyrrolidine, n-	930-55-2	—	—	l	O	1.00E+02	7.48E-07	-1.87E-01	—	8.00E-02	8.00E-06	7.80E+05	1.75E-01	2.31E-01
Nitrotoluene, m-	99-08-1	—	—	l	O	1.37E+02	2.24E-03	2.15E+00	—	6.42E-02	7.69E-06	4.98E+02	1.50E-01	2.36E+00

Chemical/Physical Properties

Last Revised: March 6, 2023

Chemical of Concern	CAS	Br _{abg} (µg/g DW)/ (µg/g soil)	Br _{bg} (µg/g DW)/ (µg/g soil)	Physical State	Type	MW (g/mole)	H _{unitless} (unitless)	LogK _{oc} (unitless)	LogK _d (unitless)	D _{air} (cm ² /s)	D _{wat} (cm ² /s)	Solubility (mg/l)	Vapor_P (mm Hg)	logK _{ow} (unitless)
Nitrotoluene, o-	88-72-2	—	—	l	O	1.37E+02	1.87E-03	2.15E+00	—	6.47E-02	7.73E-06	6.00E+02	1.50E-01	2.36E+00
Nitrotoluene, p-	99-99-0	—	—	s	O	1.37E+02	2.29E-03	2.15E+00	—	6.40E-02	7.70E-06	4.00E+02	1.20E-01	2.36E+00
Nonachlor, cis-	5103-73-1	—	—	s	O	4.10E+02	2.02E-03	5.08E+00	—	1.18E-02	4.37E-06	5.60E-02	1.00E-05	6.60E+00
Nonachlor, trans-	39765-80-5	—	—	s	O	4.10E+02	2.02E-03	5.08E+00	—	1.18E-02	4.37E-06	5.60E-02	1.00E-05	6.60E+00
Nonanal	124-19-6	—	—	l	O	1.42E+02	2.34E-02	2.85E+00	—	5.29E-02	6.29E-06	1.24E+02	3.71E-01	3.50E+00
Nonene, 1-n	124-11-8	—	—	l	o	1.26E+02	8.81E+01	4.45E+00	—	5.56E-02	5.86E-06	3.00E-01	3.80E+00	5.52E+00
Nonylphenol, 4-n-	104-40-5	—	—	l	OA	2.20E+02	6.96E-05	6.48E+00	—	3.93E-02	5.27E-06	7.23E-01	4.14E-06	6.48E+00
Nonylphenol ethoxylate	9016-45-9	—	—	l	O	2.92E+02	8.19E-04	6.88E+00	—	3.29E-02	4.08E-06	2.79E-02	1.38E-06	7.00E+00
Octamethylpyrophosphoramidate	152-16-9	—	—	l	O	2.86E+02	1.16E-08	-5.09E-01	—	8.00E-02	8.00E-06	1.00E+06	9.88E-04	-1.01E+00
Octanone	106-68-3	—	—	l	O	1.28E+02	6.35E-03	2.15E+00	—	5.78E-02	6.67E-06	1.65E+03	1.50E+00	2.61E+00
Oxamyl	23135-22-0	—	—	s	O	2.19E+02	1.60E-11	6.99E-01	—	5.57E-02	5.75E-06	2.80E+05	3.83E-07	-1.20E+00
Oxychlorthane	27304-13-8	—	—	s	O	4.10E+02	2.02E-03	5.08E+00	—	1.18E-02	4.37E-06	5.60E-02	1.00E-05	6.60E+00
Paraquat	1910-42-5	—	—	s	OB	2.57E+02	2.91E-11	-4.81E+00	—	3.74E-02	3.57E-06	7.00E+05	1.45E-06	-4.50E+00
Parathion (ethyl parathion)	56-38-2	—	—	s	O	2.91E+02	2.37E-05	3.75E+00	—	1.70E-02	5.80E-06	1.18E+01	1.73E-05	3.73E+00
Pebulate	1114-71-2	—	—	l	O	2.03E+02	9.85E-04	2.63E+00	—	5.10E-02	5.38E-06	9.20E+01	8.85E-03	3.51E+00
Pendimethalin	40487-42-1	—	—	s	O	2.81E+02	1.97E-05	5.28E+00	—	3.81E-02	5.26E-06	5.69E-01	7.31E-07	5.37E+00
Pentachlorobenzene	608-93-5	—	—	s	O	2.50E+02	3.16E-02	4.50E+00	—	6.70E-02	6.30E-06	6.50E-01	1.67E-03	5.22E+00
Pentachloroethane	76-01-7	—	—	l	O	2.02E+02	2.15E-02	2.28E+00	—	6.37E-02	7.88E-06	6.19E+02	1.20E+00	2.78E+00
Pentachloronitrobenzene	82-68-8	—	—	s	O	2.95E+02	2.57E-02	4.11E+00	—	1.59E-02	6.10E-06	7.11E-02	1.13E-04	5.03E+00
Pentachlorophenol	87-86-5	—	—	s	OA	2.66E+02	1.16E-05	2.61E+00	—	5.60E-02	6.10E-06	1.40E+01	1.70E-05	4.74E+00
Pentadiene, 1,3-cis-	1574-41-0	—	—	l	O	6.81E+01	2.42E+00	2.08E+00	—	8.73E-02	8.10E-06	5.62E+02	3.65E+02	2.53E+00
Pentadiene, 1,3-trans-	2004-70-8	—	—	l	O	6.81E+01	1.31E+00	1.95E+00	—	8.75E-02	8.74E-06	8.94E+02	3.15E+02	2.37E+00
Pentaerythritol tetranitrate (PETN)	78-11-5	—	—	s	O	3.16E+02	5.60E-05	3.80E+00	—	4.48E-02	6.20E-06	2.66E+01	8.63E-05	3.86E+00
Pentane	109-66-0	—	—	l	O	7.22E+01	4.50E+01	3.48E+00	—	8.26E-01	8.07E-06	4.05E+01	4.62E+02	3.54E+00
Pentane, 2-methyl-	107-83-5	—	—	l	O	8.62E+01	7.44E+01	3.26E+00	—	7.34E-02	6.89E-06	1.25E+01	1.97E+02	4.01E+00
Pentane, 3-methyl-	96-14-0	—	—	l	O	8.62E+01	5.78E+01	3.21E+00	—	7.38E-02	6.96E-06	1.48E+01	1.81E+02	3.96E+00
Pentanediol, 1,5-	111-29-5	—	—	l	O	1.04E+02	2.51E-08	1.47E-01	—	7.14E-02	8.57E-06	7.44E+04	3.27E-04	1.49E-01
Pentanol, 1-	71-41-0	—	—	l	O	8.81E+01	6.10E-04	1.35E+00	—	7.44E-02	7.77E-06	1.50E+04	1.90E+00	1.61E+00
Pentanol, 4-methyl-2-	108-11-2	—	—	l	O	1.02E+02	9.33E-04	1.33E+00	—	6.72E-02	7.08E-06	1.47E+04	2.46E+00	1.58E+00
Pentanone, 2-	107-87-9	—	—	l	O	8.61E+01	2.54E-03	9.31E-01	—	7.78E-02	8.46E-06	5.40E+04	2.91E+01	1.08E+00
Pentene, 2-	109-68-2	—	—	l	O	7.01E+01	7.90E+00	2.40E+00	—	8.48E-02	7.87E-06	1.86E+02	3.80E+02	2.93E+00
Pentyne, 1-	627-19-0	—	—	l	O	6.81E+01	1.35E+00	1.92E+00	—	8.92E-02	8.84E-06	8.34E+02	3.03E+02	2.32E+00
Perchlorate	14797-73-0	—	—	s	I	9.95E+01	0.00E+00	—	-5.00E-01	—	—	—	0.00E+00	0.00E+00
Perfluorooctane sulfonic acid (1-Octanesulfonic acid, heptadecafluoro-1-) [PFOS]	1763-23-1	—	—	s	O	4.99E+02	3.25E-08	3.34E+00	—	3.92E-02	9.00E-06	5.70E+02	5.91E-09	2.45E+00

Chemical/Physical Properties

Last Revised: March 6, 2023

Chemical of Concern	CAS	B _r _{abg} ((μg/g DW)/ (μg/g soil))	B _r _{bg} ((μg/g DW)/ (μg/g soil))	Physical State	Type	MW (g/mole)	H _u _{unitless} (unitless)	LogK _{oc} (unitless)	LogK _d (unitless)	D _{air} (cm ² /s)	D _{wat} (cm ² /s)	Solubility (mg/l)	Vapor_P (mm Hg)	logK _{ow} (unitless)
Perfluoroundecanoic acid (Undecanoic acid, uncosafluoro-) [PFUnDa]	2058-94-8	—	—	s	O	5.63E+02	1.27E-05	3.18E+00	—	3.57E-02	7.97E-06	5.33E-01	2.14E-07	3.59E+00
Perfluoropentanoic acid (Pentanoic acid, nonafluoro-) [PFPeA]	2706-90-3	—	—	s	O	2.63E+02	1.03E-10	1.58E+00	—	5.36E-02	1.17E-05	1.07E+05	7.15E-07	-7.00E-02
Perfluorohexanoic acid (Hexanoic acid, undecafluoro-) [PFHxA]	307-24-4	—	—	s	O	3.13E+02	7.07E-10	1.91E+00	—	4.88E-02	1.07E-05	1.15E+05	5.67E-07	5.40E-01
Perfluorododecanoic acid (Dodecanoic acid, tricosafuoro-) [PFDoA]	307-55-1	—	—	s	O	6.13E+02	9.36E-05	3.45E+00	—	3.41E-02	7.63E-06	6.71E-02	1.83E-07	3.68E+00
Perfluorooctanoic acid (Octanoic acid, pentadecafluoro-) [PFOA]	335-67-1	—	—	s	O	4.13E+02	3.31E-08	2.31E+00	—	4.21E-02	9.30E-06	9.50E+03	3.57E-07	1.76E+00
Perfluorodecanoic acid (Decanoic acid, nonadecafluoro-) [PFDA]	335-76-2	—	—	s	O	5.13E+02	1.72E-06	3.17E+00	—	3.75E-02	8.34E-06	4.20E+00	2.50E-07	2.98E+00
Perfluorodecane sulfonic acid (1-Decanesulfonic acid, heneicosafuoro-) [PFDS]	335-77-3	—	—	s	O	5.99E+02	1.76E-06	3.53E+00	—	3.54E-02	8.21E-06	8.20E-02	4.29E-09	3.59E+00
Perfluorohexane sulfonic acid (1-Hexanesulfonic acid, tridecafluoro-) [PFHxS]	355-46-4	—	—	s	O	3.99E+02	6.02E-10	2.70E+00	—	4.45E-02	1.01E-05	3.07E+02	8.12E-09	1.15E+00
Perfluorobutyric acid (Butanoic acid, heptafluoro-) [PFBA]	375-22-4	—	—	s	O	2.13E+02	1.51E-11	1.32E+00	—	6.00E-02	1.29E-05	7.58E+05	9.01E-07	-6.80E-01
Perfluorobutane sulfonic acid (1-Butanesulfonic acid, nonafluoro-) [PFBS]	375-73-5	—	—	s	O	2.99E+02	1.12E-11	1.47E+00	—	5.25E-02	1.16E-05	1.74E+04	1.12E-08	-7.00E-02
Perfluoroheptanoic acid (Heptanoic acid, tridecafluoro-) [PFHpA]	375-85-9	—	—	s	O	3.63E+02	4.84E-09	2.19E+00	—	4.51E-02	9.92E-06	1.94E+03	4.50E-07	1.15E+00
Perfluorononanoic acid (Nonanoic acid, heptadecafluoro-) [PFNA]	375-95-1	—	—	s	O	4.63E+02	2.33E-07	2.33E+00	—	3.96E-02	8.78E-06	3.28E+01	2.92E-07	2.37E+00
Perfluorotetradecanoic acid (Tetradecanoic acid, heptacosafuoro-) [PFTeDA]	376-06-7	—	—	s	O	7.13E+02	5.09E-03	3.98E+00	—	3.15E-02	7.08E-06	1.05E-03	1.34E-07	5.02E+00
Perfluorotridecanoic acid (Tridecanoic acid, pentacosafuoro-) [PFTrDA]	72629-94-8	—	—	s	O	6.63E+02	6.88E-04	3.71E+00	—	3.27E-02	7.34E-06	8.39E-03	1.56E-07	4.35E+00
Perfluorooctane sulfonamide (1-Octanesulfonamide, heptadecafluoro-) [PFOSA]	754-91-6	—	—	s	O	4.99E+02	1.05E+03	4.10E+00	—	3.91E-02	9.00E-06	4.88E-02	3.13E-01	5.80E+00
Perylene	198-55-0	—	—	s	O	2.52E+02	3.50E-13	6.59E+00	—	4.06E-02	5.49E-06	1.31E-04	1.11E-10	6.70E+00
Phenacetin	62-44-2	—	—	s	O	1.79E+02	8.80E-09	1.43E+00	—	5.04E-02	6.65E-06	3.60E+02	3.30E-07	1.45E+00
Phenanthrene	85-01-8	—	—	s	O	1.78E+02	5.40E-03	4.15E+00	—	3.33E-02	7.47E-06	9.94E-01	6.80E-04	4.34E+00
Phenanthridine	229-87-8	—	—	s	O	1.79E+02	1.83E-06	3.24E+00	—	5.46E-02	7.19E-06	2.50E+01	4.30E-06	3.30E+00
Phenol	108-95-2	—	—	s	O	9.41E+01	2.47E-05	1.24E+00	—	8.20E-02	9.10E-06	8.70E+04	4.63E-01	1.51E+00
Phenol, 4-tert-butyl-	98-54-4	—	—	s	O	1.50E+02	7.03E-05	2.94E+00	—	5.57E-02	6.25E-06	1.83E+02	1.57E-03	3.62E+00
Phenothiazine	92-84-2	—	—	s	O	1.99E+02	1.46E-06	3.87E+00	—	5.09E-02	6.32E-06	1.39E-02	1.87E-09	4.19E+00
Phenyl mercuric acetate	62-38-4	—	—	s	O	3.37E+02	3.41E-09	2.20E+00	—	8.00E-02	8.00E-06	4.37E+03	3.04E-06	8.90E-01
Phenylene diamine, m-	108-45-2	—	—	s	O	1.08E+02	9.56E-07	4.14E-02	—	6.63E-02	9.90E-06	3.51E+05	2.28E-02	-3.91E-01
Phenylene diamine, p-	106-50-3	—	—	s	O	1.08E+02	5.24E-08	4.14E-02	—	7.15E-02	8.92E-06	3.80E+04	4.60E-03	-3.91E-01
Phorate	298-02-2	—	—	l	O	2.60E+02	4.99E-04	3.74E+00	—	8.00E-02	8.00E-06	4.40E+01	1.30E-03	3.37E+00
Phosalone	2310-17-0	—	—	s	O	3.68E+02	1.95E-05	3.06E+00	—	3.80E-02	4.97E-06	7.77E+01	7.53E-05	3.15E+00
Phosdrin (mevinphos)	7786-34-7	—	—	l	O	2.24E+02	3.28E-09	-9.00E-01	—	4.72E-02	6.06E-06	1.24E+07	1.81E-02	-7.00E-01
Phosmet	732-11-6	—	—	s	O	3.17E+02	8.02E-08	2.21E+00	—	4.07E-02	5.37E-06	3.70E+03	1.71E-05	1.53E+00
Phosphine	7803-51-2	—	—	g	I	3.40E+01	1.46E+02	-	—	3.81E-01	1.82E-05	4.00E+02	3.14E+04	-2.71E-01

Chemical/Physical Properties

Last Revised: March 6, 2023

Chemical of Concern	CAS	B _r _{abg} (μg/g DW)/ (μg/g soil)	B _r _{bg} (μg/g DW)/ (μg/g soil)	Physical State	Type	MW (g/mole)	H _u _{unitless} (unitless)	LogK _{oc} (unitless)	LogK _d (unitless)	D _{air} (cm ² /s)	D _{wat} (cm ² /s)	Solubility (mg/l)	Vapor_P (mm Hg)	logK _{ow} (unitless)
Phosphorotriothioic acid, S,S,S-tributyl ester	78-48-8	—	—	s	O	3.15E+02	1.98E-03	6.00E+00	—	3.34E-02	4.32E-06	1.23E-03	1.41E-07	6.10E+00
Phosphorus, total*	7723-14-0	—	—	—	—	—	—	—	—	—	—	—	—	—
Phosphorus, white	7723-14-0	—	—	s	I	1.24E+02	5.65E-02	3.05E+00	—	—	—	3.00E+00	2.50E-02	3.08E+00
Phthalic anhydride	85-44-9	—	—	s	O	1.48E+02	2.54E-07	1.90E+00	—	6.36E-02	7.90E-06	6.20E+03	2.00E-04	2.07E+00
Picloram	1918-02-1	—	—	s	O	2.41E+02	1.01E-07	-6.00E-02	—	5.50E-02	7.27E-06	2.82E+02	2.15E-06	2.94E+00
Picoline, 2- (2-methylpyridine)	109-06-8	—	—	l	O	9.31E+01	6.21E-04	1.20E+00	—	7.77E-02	8.86E-06	6.14E+04	7.48E+00	1.28E+00
Polybrominated biphenyls (PBBs)	67774-32-7	—	—	s	O	6.28E+02	1.62E-04	3.33E+00	—	—	4.63E-06	1.10E-02	5.20E-08	6.39E+00
Polychlorinated biphenyls (PCBs)	1336-36-3	—	—	l	O	2.90E+02	1.75E-02	5.72E+00	—	1.04E-01	1.00E-05	5.55E-02	7.60E-05	6.30E+00
Potassium*	7440-09-7	—	—	—	—	—	—	—	—	—	—	—	—	—
Primene	68955-53-3	—	—	l	O	1.71E+02	3.24E-03	3.96E+00	—	4.60E-02	1.08E-03	9.56E+01	3.30E-02	4.03E+00
Prometon (pramitol)	1610-18-0	—	—	s	O	2.25E+02	7.32E-07	2.78E+00	—	4.25E-02	5.54E-06	5.76E+01	3.43E-06	2.88E+00
Prometryn	7287-19-6	—	—	S	O	2.41E+02	4.99E-08	3.39E+00	—	3.89E-02	5.06E-06	2.09E+01	7.90E-08	3.62E+00
Pronamide	23950-58-5	—	—	s	O	2.56E+02	3.74E-04	2.30E+00	—	8.00E-02	8.00E-06	1.50E+01	4.00E-04	3.57E+00
Propanal (propionaldehyde)	123-38-6	—	—	l	O	5.81E+01	4.40E-03	3.40E-01	—	1.04E-01	1.07E-05	1.09E+05	1.51E+02	3.30E-01
Propane, 1-bromo-	106-94-5	—	—	l	O	1.23E+02	1.63E-01	1.59E+00	—	8.28E-02	8.63E-06	3.98E+03	9.67E+01	1.91E+00
Propanil	709-98-8	—	—	s	OA	2.18E+02	8.47E-08	2.96E+00	—	4.93E-02	6.59E-06	1.27E+02	8.99E-07	2.97E+00
Propanoic acid (propionic acid)	79-09-4	—	—	l	OA	7.41E+01	1.54E-05	-2.79E+00	—	9.01E-02	1.04E-05	1.92E+05	2.90E+00	4.95E-01
Propanol, 1-	71-23-8	—	—	l	O	6.01E+01	4.66E-04	5.70E-01	—	9.75E-02	1.05E-05	1.21E+05	1.71E+01	6.21E-01
Propargite	2312-35-8	—	—	l	O	3.50E+02	1.44E-06	3.75E+00	—	3.94E-02	4.20E-06	5.00E-01	4.48E-08	3.73E+00
Propargyl alcohol	107-19-7	—	—	l	O	5.61E+01	1.34E-05	7.31E-01	—	1.04E-01	1.24E-05	5.57E+06	1.20E+01	-4.22E-01
Propazine	139-40-2	—	—	s	O	2.30E+02	2.15E-06	3.04E+00	—	4.40E-02	5.69E-06	7.23E+00	1.23E-06	3.25E+00
Propham	122-42-9	—	—	s	O	1.79E+02	5.30E-06	1.71E+00	—	5.71E-02	6.28E-06	2.50E+02	1.35E-04	2.66E+00
Propionitrile (propane nitrile)	107-12-0	—	—	l	O	5.51E+01	1.02E-03	2.15E-01	—	1.02E-01	1.72E-05	9.73E+04	3.28E+01	1.73E-01
Propyl acetate, n-	109-60-4	—	—	l	O	1.02E+02	8.89E-03	1.07E+00	—	7.36E-02	8.09E-06	1.84E+04	2.93E+01	1.26E+00
Propylbenzene, n-	103-65-1	—	—	l	O	1.20E+02	4.24E-01	3.03E+00	—	6.22E-02	7.21E-06	4.20E+01	2.71E+00	3.73E+00
Propylene glycol	57-55-6	—	—	—	O	7.61E+01	2.06E-07	-5.67E-01	—	1.06E-01	1.23E-05	1.00E+05	2.05E-02	-9.21E-01
Propylene glycol monomethyl ether	107-98-2	—	—	—	O	9.01E+01	1.40E-05	-1.89E-01	—	9.45E-02	1.09E-05	1.00E+05	1.18E+01	-4.37E-01
Propylene oxide	75-56-9	—	—	l	O	5.81E+01	3.47E-03	1.02E-01	—	1.04E-01	1.16E-05	4.76E+05	5.32E+02	3.00E-02
Propylene tetramer	6842-15-5	—	—	l	O	1.60E+02	1.20E+02	5.40E+00	—	1.00E-01	1.00E-05	3.40E-02	4.79E-01	—
Prothiofos (Tokuthion)	34643-46-4	—	—	l	O	3.45E+02	5.72E-03	7.39E+00	—	3.56E-02	4.58E-06	6.23E-03	1.89E-06	7.36E+00
Pyrene	129-00-0	—	—	s	O	2.02E+02	4.57E-04	4.58E+00	—	2.72E-02	7.24E-06	1.35E-01	4.25E-06	4.93E+00
Pyridine	110-86-1	—	—	l	O	7.91E+01	2.91E-01	6.43E-01	—	9.10E-02	7.60E-06	3.00E+02	2.00E+01	8.04E-01
Quinoline	91-22-5	—	—	l	O	1.29E+02	1.15E-04	2.76E+00	—	5.46E-02	8.31E-06	6.78E+03	9.60E-02	2.14E+00
Ronnel	299-84-3	—	—	s	O	3.22E+02	1.32E-03	3.93E+00	—	4.62E-02	5.54E-06	2.28E+00	1.01E-04	4.86E+00
Safrole	94-59-7	—	—	l	O	1.62E+02	3.09E-03	2.97E+00	—	5.60E-02	7.01E-06	1.37E+02	4.77E-02	3.02E+00
Selenium	7782-49-2	1.50E-02	2.20E-02	s	M	7.90E+01	0.00E+00	—	3.42E-01	—	—	0.00E+00	0.00E+00	2.39E-01
Selenourea	630-10-4	—	—	—	O	1.19E+02	—	—	—	—	—	—	—	-2.63E+00
Silver	7440-22-4	1.70E-01	1.00E-01	s	M	1.08E+02	0.00E+00	—	-1.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Chemical/Physical Properties

Last Revised: March 6, 2023

Chemical of Concern	CAS	B _r _{abg} ($\mu\text{g/g DW}$)/ ($\mu\text{g/g soil}$)	B _r _{bg} ($\mu\text{g/g DW}$)/ ($\mu\text{g/g soil}$)	Physical State	Type	MW (g/mole)	H _{unitless} (unitless)	LogK _{oc} (unitless)	LogK _d (unitless)	D _{air} (cm ² /s)	D _{wat} (cm ² /s)	Solubility (mg/l)	Vapor_P (mm Hg)	logK _{ow} (unitless)
Simazine	122-34-9	–	–	s	O	2.02E+02	2.48E-07	2.47E+00	–	4.90E-02	6.37E-06	4.06E+01	9.10E-07	2.64E+00
Sodium*	7440-23-5	–	–	–	–	–	–	–	–	–	–	–	–	–
Sodium hypochlorite	7681-52-9	–	–	l	I	7.44E+01	–	–	-2.08E-01	–	–	–	–	–
Sodium polyacrylate	9003-04-7	–	–	l	O	7.21E+01	1.32E-05	5.43E-02	–	9.08E-02	1.06E-05	1.00E+06	3.72E+00	4.42E-01
Strontium	7440-24-6	–	–	s	M	8.76E+01	0.00E+00	-	3.01E-01	0.00E+00	0.00E+00	-	0.00E+00	0.00E+00
Strychnine	57-24-9	–	–	s	O	3.34E+02	6.65E-12	1.90E+00	–	8.00E-02	8.00E-06	1.43E+02	1.67E-10	1.85E+00
Styrene	100-42-5	–	–	l	O	1.04E+02	1.14E-01	2.88E+00	–	7.10E-02	8.00E-06	3.10E+02	6.24E+00	2.89E+00
Sulfate*	14808-79-8	–	–	–	–	–	–	–	–	–	–	–	–	–
Sulfide*	18496-25-8	–	–	–	–	–	–	–	–	–	–	–	–	–
Sulfolane	126-33-0	–	–	s	O	1.20E+02	4.82E-07	-7.89E-01	–	6.98E-01	9.30E-06	8.37E+03	6.15E-04	-8.03E-01
Sulfur*	7704-34-9	–	–	–	–	–	–	–	–	–	–	–	–	–
Sulprofos (Bolstar)	35400-43-2	–	–	l	O	3.22E+02	3.64E-05	6.41E+00	–	3.55E-02	4.52E-06	1.90E-02	3.99E-08	6.40E+00
Tebuconazole	107534-96-3	–	–	s	O	3.08E+02	5.94E-09	3.01E+00	–	4.25E-02	4.17E-06	3.60E+01	1.28E-08	3.70E+00
Tebuthiuron	34014-18-1	–	–	s	O	2.28E+02	4.99E-11	1.50E+00	–	5.62E-02	5.85E-06	2.50E+03	2.03E-05	1.79E+00
Terbufos	13071-79-9	–	–	l	O	2.88E+02	6.83E-02	4.14E+00	–	4.18E-02	5.08E-06	6.84E+00	2.96E-02	4.20E+00
Tert-amyl ethyl ether (TAEE)	919-94-8	–	–	l	O	1.66E+02	3.31E-01	2.24E+00	–	6.43E-02	6.38E-06	7.76E+02	4.04E+01	2.73E+00
Tert-amyl-methyl ether (TAME)	994-05-8	–	–	l	O	1.02E+02	1.30E-01	1.62E+00	–	6.99E-02	7.37E-06	4.29E+03	9.97E+01	1.95E+00
Tert-butyl alcohol (2-methyl-2-propanol)	75-65-0	–	–	s	O	7.41E+01	5.42E-04	6.25E-01	–	8.52E-02	9.11E-06	2.35E+05	3.14E+01	6.90E-01
Tetrachlorobenzene, 1,2,3,4-	634-66-2	–	–	s	O	2.16E+02	3.02E-02	4.61E+00	–	5.72E-02	7.31E-06	6.43E+00	1.64E-02	4.69E+00
Tetrachlorobenzene, 1,2,3,5-	634-90-2	–	–	s	O	2.16E+02	2.41E-02	3.80E+00	–	5.75E-02	7.31E-06	5.18E+00	1.06E-02	4.70E+00
Tetrachlorobenzene, 1,2,4,5-	95-94-3	–	–	s	O	2.16E+02	4.99E-02	3.20E+00	–	2.11E-02	8.80E-06	3.00E-01	5.40E-03	4.57E+00
Tetrachloroethane, 1,1,1,2-	630-20-6	–	–	s	O	1.68E+02	9.98E-02	2.98E+00	–	7.10E-02	7.90E-06	1.10E+03	1.22E+01	2.93E+00
Tetrachloroethane, 1,1,2,2-	79-34-5	–	–	l	O	1.68E+02	1.55E-02	1.89E+00	–	7.10E-02	7.90E-06	2.97E+03	5.17E+00	2.19E+00
Tetrachloroethylene (PCE)	127-18-4	–	–	l	O	1.66E+02	7.65E-01	2.19E+00	–	7.20E-02	8.20E-06	2.00E+02	1.84E+01	2.97E+00
Tetrachlorophenol, 2,3,4,5-	4901-51-3	–	–	s	OA	2.32E+02	1.98E-06	2.66E+00	–	5.65E-02	7.32E-06	2.96E+02	4.62E-05	4.41E+00
Tetrachlorophenol, 2,3,4,6-	58-90-2	–	–	s	OA	2.32E+02	2.54E-04	2.02E+00	–	2.17E-02	7.10E-06	1.00E+02	5.02E-03	4.09E+00
Tetrachlorophenol, 2,3,5,6-	935-95-5	–	–	s	O	2.32E+02	5.82E-03	1.40E+00	–	5.60E-02	7.29E-06	2.03E+00	9.20E-04	4.51E+00
Tetrachlorvinphos (Stirophos)	22248-79-9	–	–	s	O	3.66E+02	7.84E-08	4.76E+00	–	3.88E-02	4.82E-06	9.74E+01	3.82E-07	4.80E+00
Tetradifon	116-29-0	–	–	s	O	3.56E+02	7.32E-09	3.65E+00	–	4.14E-02	5.80E-06	7.02E-01	2.64E-10	4.17E+00
Tetraethyl dithiopyrophosphate (sulfotep)	3689-24-5	–	–	l	O	3.22E+02	1.75E-04	2.87E+00	–	1.50E-02	5.50E-06	2.50E+01	1.70E-04	3.98E+00
Tetraethyl lead	78-00-2	–	–	l	O	3.23E+02	3.31E+00	3.69E+00	–	1.32E-02	6.40E-06	8.00E-01	1.50E-01	4.88E+00
Tetraethyl pyrophosphate (TEPP)	107-49-3	–	–	l	O	2.90E+02	1.52E-08	2.91E+00	–	3.77E-02	4.76E-06	1.48E+04	1.41E-05	3.00E+00
Tetraethylene glycol	112-60-7	–	–	l	O	1.94E+02	5.69E-12	-5.54E-01	–	4.61E-02	5.81E-06	6.54E+05	2.54E-07	-5.90E-01
Tetrahydrofuran	109-99-9	–	–	l	O	7.21E+01	5.75E-03	5.73E-01	–	9.36E-02	9.88E-06	1.09E+05	1.59E+02	6.25E-01
Tetrahydropyran	142-68-7	–	–	l	O	8.61E+01	5.53E-03	9.19E-01	–	8.14E-02	8.95E-06	3.40E+04	3.99E+01	1.06E+00
Tetraoxadodecane, 2,5,8,11-	112-49-2	–	–	l	O	1.78E+02	6.73E-08	1.35E+00	–	4.88E-02	5.62E-06	1.00E+06	6.74E-02	-4.40E-02
Thallium	7440-28-0	1.00E-03	4.00E-04	s	M	2.40E+02	0.00E+00	–	1.64E+00	–	–	2.90E+03	0.00E+00	–

Chemical/Physical Properties

Last Revised: March 6, 2023

Chemical of Concern	CAS	B _r _{abg} ((μg/g DW)/ (μg/g soil))	B _r _{bg} ((μg/g DW)/ (μg/g soil))	Physical State	Type	MW (g/mole)	H _{unitless} (unitless)	LogK _{oc} (unitless)	LogK _d (unitless)	D _{air} (cm ² /s)	D _{wat} (cm ² /s)	Solubility (mg/l)	Vapor_P (mm Hg)	logK _{ow} (unitless)
Thiofanox	39196-18-4	–	–	s	O	2.18E+02	3.90E-07	1.77E+00	–	2.55E-02	6.62E-06	5.20E+03	3.10E-04	2.16E+00
Thionazin	297-97-2	–	–	l	O	2.48E+02	1.62E-05	2.06E+00	–	4.67E-02	5.81E-06	2.10E+02	2.51E-04	2.09E+00
Thiophanate-methyl	23564-05-8	–	–	s	O	3.42E+02	3.82E-07	9.54E-01	–	4.55E-02	4.68E-06	3.50E+00	7.50E-08	1.50E+00
Thiram	137-26-8	–	–	s	O	2.40E+02	3.28E-06	2.83E+00	–	2.25E-02	6.24E-06	3.00E+01	7.50E-06	1.70E+00
Tin	7440-31-5	1.00E-02	6.00E-03	s	M	1.19E+02	0.00E+00	–	2.10E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.29E+00
Titanium	7440-32-6	3.70E-03	3.00E-03	s	M	4.79E+01	0.00E+00	–	–	–	–	0.00E+00	–	–
Toluene	108-88-3	–	–	l	O	9.21E+01	2.76E-01	2.15E+00	–	8.70E-02	8.60E-06	5.30E+02	2.82E+01	2.54E+00
Toluene diisocyanate, 2,4/2,6-	26471-62-5	–	–	l	O	1.74E+02	6.86E-06	3.35E+00	–	6.09E-02	6.80E-06	1.11E+05	8.00E-02	3.74E+00
Toluenediamine, 2,4-	95-80-7	–	–	s	O	1.22E+02	7.48E-08	3.11E+00	–	8.00E-02	8.00E-06	7.47E+03	8.36E-05	1.56E-01
Toluenediamine, 2,6-	823-40-5	–	–	s	O	1.22E+02	5.15E-10	1.60E-01	–	6.87E-02	7.97E-06	4.80E+04	1.98E-05	1.56E-01
Toluidine, o-	95-53-4	–	–	l	OB	1.07E+02	1.57E-04	2.31E+00	–	7.01E-02	8.43E-06	1.06E+04	2.84E-01	1.61E+00
Toluidine, p-	106-49-0	–	–	s	O	1.07E+02	3.82E-04	1.40E+00	–	8.00E-02	8.00E-06	7.20E+03	3.30E-01	1.62E+00
Toxaphene	8001-35-2	–	–	s	O	4.14E+02	1.40E-04	4.98E+00	–	1.16E-02	4.34E-06	7.40E-01	4.19E-06	6.79E+00
TPH, TX1005, C6-C12	NA	–	–	l	O	1.20E+02	4.80E-01	3.20E+00	–	1.00E-01	1.00E-05	6.50E+01	4.79E+00	0.00E+00
TPH, TX1005, >C12-C28	NA	–	–	l	O	1.50E+02	5.30E-02	3.70E+00	–	1.00E-01	1.00E-05	5.80E+00	3.65E-02	0.00E+00
TPH, TX1005, >C12-C35	NA	–	–	l	O	1.50E+02	5.30E-02	3.70E+00	–	1.00E-01	1.00E-05	5.80E+00	3.65E-02	0.00E+00
TPH, TX1005, >C28-C35	NA	–	–	l	O	1.50E+02	5.30E-02	3.70E+00	–	1.00E-01	1.00E-05	5.80E+00	3.65E-02	0.00E+00
TP Silvex, 2,4,5-	93-72-1	–	–	s	O	2.70E+02	5.45E-07	3.41E+00	–	1.94E-02	5.80E-06	1.40E+02	5.20E-06	3.68E+00
Triademenol	55219-65-3	–	–	s	O	2.96E+02	5.32E-11	2.37E+00	–	4.55E-02	4.53E-06	9.50E+01	3.08E-10	2.90E+00
Triallate	2303-17-5	–	–	s	O	3.05E+02	4.53E-04	3.16E+00	–	4.58E-02	4.84E-06	4.00E+00	1.20E-04	4.57E+00
Triaminotrinitrobenzene (TATB)	3058-38-6	–	–	s	O	2.58E+02	5.80E-12	6.88E-01	–	5.02E-02	6.84E-06	3.20E+01	1.34E-11	7.00E-01
Tributyltin oxide	56-35-9	–	–	l	O	5.96E+02	2.08E-03	–	–	–	–	1.80E+01	6.91E-05	5.80E+00
Trichloro-1,2,2-trifluoroethane, 1,1,2-	76-13-1	–	–	l	O	1.87E+02	2.20E+01	3.11E+00	–	7.80E-02	8.20E-06	2.00E+02	3.60E+02	3.09E+00
Trichlorobenzene, 1,2,3-	87-61-6	–	–	l	O	1.81E+02	3.80E-02	3.95E+00	–	6.20E-02	7.71E-06	1.64E+01	6.30E-02	4.02E+00
Trichlorobenzene, 1,2,4-	120-82-1	–	–	l	O	1.81E+02	5.90E-02	3.22E+00	–	3.00E-02	8.23E-06	4.88E+01	3.36E-01	3.93E+00
Trichlorobenzene, 1,3,5-	108-70-3	–	–	s	O	1.81E+02	6.03E-02	3.40E+00	–	6.25E-02	7.66E-06	1.82E+01	1.11E-01	4.19E+00
Trichloroethane, 1,1,1-	71-55-6	–	–	l	O	1.33E+02	7.15E-01	2.04E+00	–	7.80E-02	8.80E-06	1.33E+03	1.24E+02	2.68E+00
Trichloroethane, 1,1,2-	79-00-5	–	–	l	O	1.33E+02	3.80E-02	1.70E+00	–	7.92E-02	8.80E-06	4.42E+03	2.52E+01	2.01E+00
Trichloroethylene (TCE)	79-01-6	–	–	l	O	1.31E+02	4.28E-01	1.97E+00	–	7.90E-02	9.10E-06	1.10E+03	7.20E+01	2.47E+00
Trichlorofluoromethane	75-69-4	–	–	l	O	1.37E+02	4.03E+00	2.13E+00	–	8.70E-02	9.70E-06	1.10E+03	6.87E+02	2.13E+00
Trichloronate	327-98-0	–	–	l	O	3.34E+02	4.82E-04	4.62E+00	–	4.27E-02	5.18E-06	8.13E-01	4.48E-05	5.74E+00
Trichlorophenol, 2,3,4-	15950-66-0	–	–	s	OA	1.97E+02	4.60E-06	2.75E+00	–	6.10E-02	7.73E-06	1.55E+03	6.60E-04	3.88E+00
Trichlorophenol, 2,3,5-	933-78-8	–	–	s	OA	1.97E+02	3.95E-06	2.37E+00	–	6.10E-02	7.71E-06	3.74E+03	1.37E-03	3.75E+00

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Trichlorophenol, 2,3,6-	933-75-5	–	–	s	OA	1.97E+02	8.78E-03	2.39E+00	–	6.08E-02	7.70E-06	2.78E+01	2.26E-02	4.66E+00
Trichlorophenol, 2,4,5-	95-95-4	–	–	s	OA	1.97E+02	1.78E-04	2.47E+00	–	2.91E-02	7.03E-06	1.20E+03	1.63E-02	3.45E+00
Trichlorophenol, 2,4,6-	88-06-2	–	–	s	OA	1.97E+02	3.19E-04	2.12E+00	–	3.18E-02	6.25E-06	9.82E+02	1.18E-02	3.45E+00
Trichlorophenol, 3,4,5-	609-19-8	–	–	s	OA	1.97E+02	1.15E-06	3.52E+00	–	6.00E-02	7.73E-06	1.52E+03	1.61E-04	3.91E+00
Trichlorophenoxyacetic acid, 2,4,5-	93-76-5	–	–	s	O	2.55E+02	3.62E-07	1.72E+00	–	8.00E-02	8.00E-06	2.78E+02	3.61E-06	3.26E+00
Trichloropropane, 1,1,2-	598-77-6	–	–	l	O	1.47E+02	1.21E+00	2.24E+00	–	3.96E-02	9.30E-06	4.44E+01	6.64E+00	2.43E+00
Trichloropropane, 1,2,3-	96-18-4	–	–	l	O	1.47E+02	1.58E-02	2.59E+00	–	7.10E-02	7.90E-06	1.90E+03	3.70E+00	2.50E+00
Triethanolamine	102-71-6	–	–	s	O	1.49E+02	3.50E-13	-2.93E+00	–	5.33E-02	7.54E-06	-	2.90E-06	-2.98E+00
Triethylamine	121-44-8	–	–	l	O	1.01E+02	1.99E-02	1.12E+00	–	7.54E-02	7.51E-06	1.50E+04	5.00E+01	1.51E+00
Triethylene glycol	112-27-6	–	–	l	O	1.50E+02	8.96E-11	-1.16E+00	–	5.65E-02	7.38E-06	2.11E+06	2.31E-05	-1.18E+00
Triethylphosphorothioate, O, O, O-	126-68-1	–	–	l	O	1.98E+02	2.08E-02	2.69E+00	–	5.26E-02	6.24E-06	8.45E+02	7.30E-01	2.64E+00
Trifluralin	1582-09-8	–	–	s	O	3.35E+02	2.01E-03	4.14E+00	–	1.49E-02	4.70E-06	6.00E-01	1.10E-04	5.31E+00
Trimethylamine	75-50-3	–	–	g	OB	5.91E+01	4.14E-03	1.24E+00	–	9.58E-02	9.13E-06	5.50E+05	9.36E+01	2.47E-01
Trimethylbenzene, 1,2,3-	526-73-8	–	–	l	O	1.20E+02	1.33E-01	2.77E+00	–	6.77E-02	7.41E-06	7.52E+01	1.49E+00	3.55E+00
Trimethylbenzene, 1,2,4-	95-63-6	–	–	l	O	1.20E+02	1.84E-01	2.97E+00	–	6.22E-02	7.28E-06	5.68E+01	1.59E+00	3.65E+00
Trimethylbenzene, 1,3,5-	108-67-8	–	–	l	O	1.20E+02	2.72E-01	3.01E+00	–	6.21E-02	7.23E-06	5.15E+01	2.13E+00	3.70E+00
Trinitrobenzene, 1,3,5-	99-35-4	–	–	s	O	2.13E+02	2.87E-06	1.15E+00	–	8.00E-02	8.00E-06	3.53E+02	9.90E-05	1.45E+00
Trinitrophenylmethylnitramine (tetryl; nitramine)	479-45-8	–	–	s	O	2.87E+02	8.31E-11	2.37E+00	–	5.69E-02	6.40E-06	7.50E+01	4.00E-10	2.04E+00
Trinitrotoluene, 2,4,6-	118-96-7	–	–	s	O	2.27E+02	1.90E-05	2.48E+00	–	5.41E-02	6.57E-06	1.30E+02	1.24E-04	1.99E+00
Tungsten (as sodium tungstate dihydride)	7440-33-7	–	–	s	M	3.30E+02	0.00E+00	–	3.47E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Uranium (soluble salts)	7440-61-1	5.00E-03	4.00E-03	s	M	2.38E+02	0.00E+00	–	3.47E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Valeric acid (pentanoic acid)	109-52-4	–	–	l	O	1.02E+02	1.16E-05	-1.80E+00	–	6.92E-02	8.37E-06	2.20E+00	7.39E-02	1.53E+00
Vanadium	7440-62-2	3.60E-03	3.00E-03	s	M	5.09E+01	0.00E+00	–	3.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Vernam	1929-77-7	–	–	l	O	2.03E+02	7.36E-04	3.44E+00	–	5.10E-02	5.39E-06	9.85E+01	1.04E-02	3.51E+00
Vinyl acetate	108-05-4	–	–	l	O	8.61E+01	2.29E-02	7.20E-01	–	8.50E-02	9.20E-06	2.00E+04	1.09E+02	7.28E-01
Vinyl chloride	75-01-4	–	–	g	O	6.25E+01	3.49E+00	1.04E+00	–	1.06E-01	1.23E-05	2.76E+03	2.80E+03	1.62E+00
Vinylcyclohexane	695-12-5	–	–	l	O	1.10E+02	3.57E+00	3.42E+00	–	6.49E-02	7.33E-06	1.08E+01	6.40E+00	4.22E+00
Warfarin	81-81-2	–	–	s	O	3.08E+02	1.15E-07	2.96E+00	–	1.63E-02	4.40E-06	1.70E+01	1.16E-07	3.20E+00
Xylene, m-	108-38-3	–	–	l	O	1.06E+02	3.05E-01	2.29E+00	–	7.00E-02	7.80E-06	1.60E+02	8.00E+00	3.20E+00
Xylene, o-	95-47-6	–	–	l	O	1.06E+02	7.36E-04	2.11E+00	–	8.70E-02	1.00E-05	1.78E+02	6.75E+00	3.13E+00
Xylene, p-	106-42-3	–	–	l	O	1.06E+02	3.18E-01	2.49E+00	–	7.69E-02	8.44E-06	1.85E+02	8.76E+00	3.17E+00
Xylenes	1330-20-7	–	–	l	O	1.06E+02	2.93E-01	2.38E+00	–	7.40E-02	8.50E-06	1.98E+02	8.06E+00	3.09E+00
Zinc	7440-66-6	9.00E-02	4.40E-02	s	M	6.54E+01	0.00E+00	–	1.20E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-4.71E-01

Chemical/Physical Properties

Last Revised: March 6, 2023

Chemical of Concern	CAS	Br _{abg} (µg/g DW)/ (µg/g soil)	Br _{bg} (µg/g DW)/ (µg/g soil)	Physical State	Type	MW (g/mole)	H _{unitless} (unitless)	LogK _{oc} (unitless)	LogK _d (unitless)	D _{air} (cm ² /s)	D _{wat} (cm ² /s)	Solubility (mg/l)	Vapor_P (mm Hg)	logK _{ow} (unitless)
6 C aliphatics (TPH) (>53% n-hexane content)	NA	—	—	l	O	8.10E+01	3.30E+01	2.90E+00	—	1.00E-01	1.00E-05	3.60E+01	2.66E+02	—
6 C aliphatics (TPH) (<53% n-hexane content)	NA	—	—	l	O	8.10E+01	3.30E+01	2.90E+00	—	1.00E-01	1.00E-05	3.60E+01	2.66E+02	—
>6-8 C aliphatics (TPH) (>53% n-hexane content)	NA	—	—	l	O	1.00E+02	5.00E+01	3.60E+00	—	1.00E-01	1.00E-05	5.40E+00	4.79E+01	—
>6-8 C aliphatics (TPH) (<53% n-hexane content)	NA	—	—	l	O	1.00E+02	5.00E+01	3.60E+00	—	1.00E-01	1.00E-05	5.40E+00	4.79E+01	—
>8-10 C aliphatics (TPH)	NA	—	—	l	O	1.30E+02	8.00E+01	4.50E+00	—	1.00E-01	1.00E-05	4.30E-01	4.79E+00	—
>10-12 C aliphatics (TPH)	NA	—	—	l	O	1.60E+02	1.20E+02	5.40E+00	—	1.00E-01	1.00E-05	3.40E-02	4.79E-01	—
>12-16 C aliphatics (TPH)	NA	—	—	l	O	2.00E+02	5.20E+02	6.70E+00	—	1.00E-01	1.00E-05	7.60E-04	3.65E-02	—
>16-35 C aliphatics (TPH)	NA	—	—	l	O	2.70E+02	4.90E+03	8.80E+00	—	1.00E-01	1.00E-05	2.50E-06	8.40E-04	—
>16-35 C aliphatics (TPH) (for transformer mineral oil releases only)	NA	—	—	l	O	2.70E+02	4.90E+03	8.80E+00	—	1.00E-01	1.00E-05	2.50E-06	8.40E-04	—
>7-8 C aromatics (TPH)	NA	—	—	l	O	9.20E+01	2.76E-01	2.15E+00	—	8.70E-02	8.60E-06	5.30E+02	2.82E+01	—
>8-10 C aromatics (TPH)	NA	—	—	l	O	1.20E+02	4.80E-01	3.20E+00	—	1.00E-01	1.00E-05	6.50E+01	4.79E+00	—
>10-12 C aromatics (TPH)	NA	—	—	l	O	1.30E+02	1.40E-01	3.40E+00	—	1.00E-01	1.00E-05	2.50E+01	4.79E-01	—
>12-16 C aromatics (TPH)	NA	—	—	l	O	1.50E+02	5.30E-02	3.70E+00	—	1.00E-01	1.00E-05	5.80E+00	3.65E-02	—
>16-21 C aromatics (TPH)	NA	—	—	l	O	1.90E+02	1.30E-02	4.20E+00	—	1.00E-01	1.00E-05	6.50E-01	8.40E-04	—
>21-35 C aromatics (TPH)	NA	—	—	s	O	2.40E+02	6.70E-04	5.10E+00	—	1.00E-01	1.00E-05	6.60E-03	3.30E-07	—

Footnotes

* These compounds are not necessarily of concern from a human health standpoint, therefore calculation of human health-based values is not required. However, aesthetics and ecological criteria would still apply. See table entitled "Compounds for which Calculation of a Human Health PCL is Not Required" available on the TCEQ website at <http://www.tceq.texas.gov/remediation/trrp/trrppcls.html>.

s - compound solid at @ 20 oC

l - compound liquid at @ 20 oC

g - compound gaseous at @ 20 oC

H' - Dimensionless Henry's Law Constant H' = H x 41.57 @ 20 oC (cm³-H₂O/cm³-air)

H - Henry's Law Constant (atm-m³/mole)

MW - Molecular Weight (g/mole)

K_{oc} - Soil organic carbon-water partition coefficient (cm³-H₂O/g-Carbon)

K_d - soil-water partition coefficient (cm³-H₂O/g-Soil)

D_{air} - Diffusion coefficient in air (cm²/s)

D_{wat} - Diffusion coefficient in water (cm²/s)

K_{ow} - Octanol-water partition coefficient (cm³-H₂O/cm³-Octanol)

Br_{abg} - Soil-to-above ground plant biotransfer factor (g soil/g plant tissue dry weight)

Br_{bg} - Soil-to-below ground plant biotransfer factor (g soil/g plant tissue dry weight)

Type - O: Organic, I: Inorganic, M: Metal, OA: Organic Acids

CE - Not found, Can not estimate

NA/reacts - Not applicable because reacts with water

This table shows the chemical and physical properties used to calculate protective concentration levels.

end of worksheet

Koc Values for Ionizing Organic COCs as a Function of pH

Last Revised: March 6, 2023

pH	Adipic acid 124-04-9	Ametryn 834-12-8	Aminobiphenyl, 4- 92-67-1	Benz[c]acridine 225-51-4	Benzoic Acid* 65-85-0	Butanoic acid 107-92-6	Chlorophenol, 2-* 95-57-8	Chlorophenol, 3- 108-43-0	Chlorophenol, 4- 106-48-9
4.9	1.69E-01	8.57E+02	5.31E+03	1.48E+05	5.54E+00	4.19E+00	3.98E+02	1.17E+02	1.26E+02
5.0	1.22E-01	8.37E+02	4.68E+03	1.31E+05	4.64E+00	3.61E+00	3.98E+02	1.17E+02	1.26E+02
5.1	9.21E-02	8.24E+02	4.21E+03	1.17E+05	3.88E+00	3.11E+00	3.98E+02	1.17E+02	1.26E+02
5.2	6.27E-02	8.11E+02	3.73E+03	1.03E+05	3.25E+00	2.60E+00	3.98E+02	1.17E+02	1.26E+02
5.3	4.64E-02	8.03E+02	3.40E+03	9.35E+04	2.72E+00	2.20E+00	3.98E+02	1.17E+02	1.26E+02
5.4	3.01E-02	7.95E+02	3.06E+03	8.36E+04	2.29E+00	1.81E+00	3.98E+02	1.17E+02	1.26E+02
5.5	2.18E-02	7.90E+02	2.83E+03	7.67E+04	1.94E+00	1.51E+00	3.97E+02	1.17E+02	1.26E+02
5.6	1.36E-02	7.85E+02	2.61E+03	6.98E+04	1.65E+00	1.22E+00	3.97E+02	1.17E+02	1.26E+02
5.7	9.77E-03	7.82E+02	2.45E+03	6.51E+04	1.42E+00	1.01E+00	3.97E+02	1.17E+02	1.26E+02
5.8	5.91E-03	7.78E+02	2.30E+03	6.05E+04	1.24E+00	8.01E-01	3.97E+02	1.17E+02	1.26E+02
5.9	4.20E-03	7.76E+02	2.20E+03	5.74E+04	1.09E+00	6.61E-01	3.97E+02	1.17E+02	1.26E+02
6.0	2.49E-03	7.74E+02	2.10E+03	5.44E+04	9.69E-01	5.20E-01	3.96E+02	1.17E+02	1.26E+02
6.1	1.76E-03	7.73E+02	2.04E+03	5.24E+04	8.75E-01	4.27E-01	3.96E+02	1.17E+02	1.26E+02
6.2	1.03E-03	7.72E+02	1.97E+03	5.04E+04	7.99E-01	3.34E-01	3.96E+02	1.17E+02	1.26E+02
6.3	7.25E-04	7.71E+02	1.93E+03	4.92E+04	7.36E-01	2.74E-01	3.95E+02	1.17E+02	1.26E+02
6.4	4.20E-04	7.70E+02	1.89E+03	4.79E+04	6.89E-01	2.13E-01	3.94E+02	1.17E+02	1.26E+02
6.5	2.95E-04	7.70E+02	1.87E+03	4.71E+04	6.51E-01	1.74E-01	3.93E+02	1.17E+02	1.26E+02
6.6	1.70E-04	7.69E+02	1.84E+03	4.63E+04	6.20E-01	1.36E-01	3.92E+02	1.17E+02	1.26E+02
6.7	1.19E-04	7.69E+02	1.82E+03	4.58E+04	5.95E-01	1.11E-01	3.90E+02	1.17E+02	1.26E+02
6.8	6.83E-05	7.69E+02	1.81E+03	4.52E+04	5.76E-01	8.59E-02	3.88E+02	1.17E+02	1.26E+02
6.9	4.78E-05	7.68E+02	1.80E+03	4.49E+04	5.60E-01	7.02E-02	3.86E+02	1.17E+02	1.26E+02
7.0	2.74E-05	7.68E+02	1.79E+03	4.46E+04	5.47E-01	5.44E-02	3.83E+02	1.17E+02	1.26E+02
7.1	1.91E-05	7.68E+02	1.78E+03	4.44E+04	5.38E-01	4.44E-02	3.79E+02	1.17E+02	1.25E+02
7.2	1.09E-05	7.68E+02	1.77E+03	4.42E+04	5.32E-01	3.44E-02	3.75E+02	1.16E+02	1.25E+02
7.3	7.65E-06	7.68E+02	1.77E+03	4.41E+04	5.25E-01	2.81E-02	3.69E+02	1.16E+02	1.25E+02
7.4	4.36E-06	7.68E+02	1.77E+03	4.39E+04	5.19E-01	2.17E-02	3.62E+02	1.16E+02	1.25E+02
7.5	3.05E-06	7.68E+02	1.76E+03	4.38E+04	5.16E-01	1.77E-02	3.54E+02	1.15E+02	1.25E+02
7.6	1.74E-06	7.68E+02	1.76E+03	4.38E+04	5.13E-01	1.37E-02	3.44E+02	1.15E+02	1.24E+02
7.7	1.22E-06	7.68E+02	1.76E+03	4.37E+04	5.09E-01	1.12E-02	3.33E+02	1.14E+02	1.24E+02
7.8	6.93E-07	7.68E+02	1.76E+03	4.37E+04	5.06E-01	8.66E-03	3.19E+02	1.13E+02	1.23E+02
7.9	4.85E-07	7.68E+02	1.76E+03	4.36E+04	5.06E-01	7.06E-03	3.04E+02	1.12E+02	1.23E+02
8.0	2.76E-07	7.68E+02	1.75E+03	4.36E+04	5.06E-01	5.46E-03	2.86E+02	1.11E+02	1.22E+02

Koc Values for Ionizing Organic COCs as a Function of pH

Last Revised: March 6, 2023

pH	Cymoxanil 57966-95-7	Dibenz(a,j)acridine 224-42-0	Dichlorophenol, 2,3- 576-24-9	Dichlorophenol,2,4-* 120-83-2	Dichlorophenol, 2,5- 583-78-8	Dichlorophenol, 2,6- 87-65-0	Dichlorophenol, 3,4- 95-77-2
4.9	1.56E-01	7.18E+06	5.87E+02	1.59E+02	5.36E+02	6.58E+02	7.77E+02
5.0	1.22E-01	6.32E+06	5.87E+02	1.59E+02	5.35E+02	6.55E+02	7.77E+02
5.1	1.00E-01	5.68E+06	5.86E+02	1.59E+02	5.35E+02	6.49E+02	7.77E+02
5.2	7.83E-02	5.03E+06	5.86E+02	1.59E+02	5.34E+02	6.44E+02	7.77E+02
5.3	6.41E-02	4.56E+06	5.85E+02	1.59E+02	5.33E+02	6.36E+02	7.76E+02
5.4	4.99E-02	4.10E+06	5.84E+02	1.58E+02	5.33E+02	6.28E+02	7.76E+02
5.5	4.08E-02	3.78E+06	5.83E+02	1.58E+02	5.31E+02	6.16E+02	7.76E+02
5.6	3.17E-02	3.46E+06	5.81E+02	1.58E+02	5.30E+02	6.03E+02	7.76E+02
5.7	2.59E-02	3.24E+06	5.79E+02	1.58E+02	5.28E+02	5.86E+02	7.76E+02
5.8	2.01E-02	3.03E+06	5.77E+02	1.58E+02	5.26E+02	5.69E+02	7.76E+02
5.9	1.64E-02	2.89E+06	5.73E+02	1.57E+02	5.23E+02	5.45E+02	7.75E+02
6.0	1.27E-02	2.75E+06	5.70E+02	1.57E+02	5.20E+02	5.21E+02	7.75E+02
6.1	1.03E-02	2.66E+06	5.65E+02	1.57E+02	5.15E+02	4.90E+02	7.75E+02
6.2	8.02E-03	2.57E+06	5.59E+02	1.56E+02	5.10E+02	4.60E+02	7.74E+02
6.3	6.54E-03	2.51E+06	5.52E+02	1.55E+02	5.03E+02	4.24E+02	7.73E+02
6.4	5.06E-03	2.46E+06	5.44E+02	1.54E+02	4.95E+02	3.88E+02	7.73E+02
6.5	4.13E-03	2.42E+06	5.32E+02	1.53E+02	4.85E+02	3.49E+02	7.71E+02
6.6	3.20E-03	2.38E+06	5.20E+02	1.52E+02	4.74E+02	3.11E+02	7.70E+02
6.7	2.61E-03	2.36E+06	5.04E+02	1.50E+02	4.58E+02	2.73E+02	7.68E+02
6.8	2.02E-03	2.34E+06	4.87E+02	1.47E+02	4.43E+02	2.36E+02	7.67E+02
6.9	1.65E-03	2.32E+06	4.65E+02	1.45E+02	4.23E+02	2.04E+02	7.64E+02
7.0	1.27E-03	2.31E+06	4.42E+02	1.41E+02	4.02E+02	1.71E+02	7.61E+02
7.1	1.04E-03	2.30E+06	4.14E+02	1.38E+02	3.76E+02	1.45E+02	7.56E+02
7.2	8.03E-04	2.29E+06	3.86E+02	1.33E+02	3.51E+02	1.19E+02	7.51E+02
7.3	6.55E-04	2.28E+06	3.54E+02	1.28E+02	3.21E+02	9.97E+01	7.44E+02
7.4	5.07E-04	2.28E+06	3.22E+02	1.21E+02	2.91E+02	8.04E+01	7.37E+02
7.5	4.13E-04	2.27E+06	2.88E+02	1.14E+02	2.61E+02	6.67E+01	7.27E+02
7.6	3.20E-04	2.27E+06	2.54E+02	1.07E+02	2.30E+02	5.31E+01	7.16E+02
7.7	2.61E-04	2.27E+06	2.22E+02	9.84E+01	2.01E+02	4.38E+01	7.01E+02
7.8	2.02E-04	2.26E+06	1.91E+02	8.97E+01	1.72E+02	3.45E+01	6.85E+02
7.9	1.65E-04	2.26E+06	1.64E+02	8.07E+01	1.48E+02	2.83E+01	6.63E+02
8.0	1.27E-04	2.26E+06	1.37E+02	7.17E+01	1.23E+02	2.22E+01	6.41E+02

Koc Values for Ionizing Organic COCs as a Function of pH

Last Revised: March 6, 2023

pH	Dichlorophenol, 3,5- 591-35-5	DB, 2,4- (4-(2,4-Dichlorophenoxy) butyric acid) 94-82-6	Dichloroprop (2-(2,4-dichlorophenoxy) propanoic acid) 120-36-5	Dimethylamino- azobenzene, 4- 60-11-7	Dimethylhydrazine, 1,1- 57-14-7	Dinitro-2-methylphenol, 4,6- (dinitro-o-cresol, 4, 6-) 534-52-1
4.9	5.59E+02	1.72E+03	3.61E+01	1.13E+05	6.44E-01	2.91E+01
5.0	5.59E+02	1.44E+03	2.81E+01	1.10E+05	6.44E-01	2.43E+01
5.1	5.59E+02	1.22E+03	2.30E+01	1.09E+05	6.43E-01	2.05E+01
5.2	5.59E+02	9.93E+02	1.78E+01	1.07E+05	6.43E-01	1.67E+01
5.3	5.59E+02	8.30E+02	1.46E+01	1.06E+05	6.42E-01	1.40E+01
5.4	5.59E+02	6.66E+02	1.13E+01	1.04E+05	6.41E-01	1.12E+01
5.5	5.59E+02	5.52E+02	9.22E+00	1.04E+05	6.40E-01	9.27E+00
5.6	5.59E+02	4.38E+02	7.15E+00	1.03E+05	6.38E-01	7.35E+00
5.7	5.58E+02	3.61E+02	5.83E+00	1.03E+05	6.36E-01	6.05E+00
5.8	5.58E+02	2.84E+02	4.52E+00	1.02E+05	6.34E-01	4.75E+00
5.9	5.58E+02	2.33E+02	3.68E+00	1.02E+05	6.31E-01	3.90E+00
6.0	5.57E+02	1.82E+02	2.85E+00	1.02E+05	6.28E-01	3.05E+00
6.1	5.57E+02	1.49E+02	2.33E+00	1.01E+05	6.22E-01	2.50E+00
6.2	5.56E+02	1.16E+02	1.80E+00	1.01E+05	6.17E-01	1.94E+00
6.3	5.55E+02	9.51E+01	1.47E+00	1.01E+05	6.10E-01	1.59E+00
6.4	5.54E+02	7.39E+01	1.14E+00	1.01E+05	6.02E-01	1.24E+00
6.5	5.53E+02	6.03E+01	9.27E-01	1.01E+05	5.91E-01	1.01E+00
6.6	5.51E+02	4.68E+01	7.17E-01	1.01E+05	5.80E-01	7.83E-01
6.7	5.49E+02	3.82E+01	5.85E-01	1.01E+05	5.63E-01	6.39E-01
6.8	5.46E+02	2.96E+01	4.53E-01	1.01E+05	5.47E-01	4.95E-01
6.9	5.42E+02	2.42E+01	3.69E-01	1.01E+05	5.26E-01	4.04E-01
7.0	5.39E+02	1.87E+01	2.86E-01	1.01E+05	5.04E-01	3.13E-01
7.1	5.33E+02	1.53E+01	2.33E-01	1.01E+05	4.77E-01	2.55E-01
7.2	5.27E+02	1.18E+01	1.80E-01	1.01E+05	4.49E-01	1.98E-01
7.3	5.19E+02	9.65E+00	1.47E-01	1.01E+05	4.17E-01	1.61E-01
7.4	5.10E+02	7.47E+00	1.14E-01	1.01E+05	3.86E-01	1.25E-01
7.5	4.98E+02	6.09E+00	9.27E-02	1.01E+05	3.52E-01	1.02E-01
7.6	4.85E+02	4.71E+00	7.17E-02	1.01E+05	3.19E-01	7.88E-02
7.7	4.68E+02	3.84E+00	5.85E-02	1.01E+05	2.88E-01	6.43E-02
7.8	4.50E+02	2.98E+00	4.53E-02	1.01E+05	2.56E-01	4.97E-02
7.9	4.27E+02	2.43E+00	3.69E-02	1.01E+05	2.29E-01	4.06E-02
8.0	4.04E+02	1.88E+00	2.86E-02	1.01E+05	2.02E-01	3.14E-02

Koc Values for Ionizing Organic COCs as a Function of pH

Last Revised: March 6, 2023

pH	Dinitrophenol, 2,4-* 51-28-5	Dinitrophenol, 2,5- 329-71-5	Dodecylphenol, 4- 104-43-8	Endothall 145-73-3	Ethanol, 2-(methylamino)- 109-83-1	Ethyleneimine 151-56-4	Glyphosate ¹ 1071-83-6	Heptanoic Acid, n- 111-14-8
4.9	2.94E-02	3.15E+02	2.51E+08	3.70E+00	3.11E-06	2.49E+00	Under review.	3.85E+02
5.0	2.55E-02	2.97E+02	2.51E+08	2.49E+00	3.82E-06	2.49E+00	-	3.31E+02
5.1	2.23E-02	2.75E+02	2.51E+08	1.84E+00	4.93E-06	2.49E+00	-	2.85E+02
5.2	1.98E-02	2.54E+02	2.51E+08	1.19E+00	6.05E-06	2.49E+00	-	2.39E+02
5.3	1.78E-02	2.30E+02	2.51E+08	8.60E-01	7.82E-06	2.49E+00	-	2.02E+02
5.4	1.62E-02	2.06E+02	2.51E+08	5.35E-01	9.58E-06	2.49E+00	-	1.66E+02
5.5	1.50E-02	1.82E+02	2.51E+08	3.83E-01	1.24E-05	2.49E+00	-	1.39E+02
5.6	1.40E-02	1.58E+02	2.51E+08	2.32E-01	1.52E-05	2.49E+00	-	1.12E+02
5.7	1.32E-02	1.37E+02	2.51E+08	1.65E-01	1.96E-05	2.49E+00	-	9.26E+01
5.8	1.25E-02	1.16E+02	2.51E+08	9.76E-02	2.41E-05	2.49E+00	-	7.35E+01
5.9	1.20E-02	9.86E+01	2.51E+08	6.89E-02	3.11E-05	2.48E+00	-	6.06E+01
6.0	1.16E-02	8.14E+01	2.51E+08	4.03E-02	3.82E-05	2.48E+00	-	4.77E+01
6.1	1.13E-02	6.83E+01	2.51E+08	2.84E-02	4.93E-05	2.48E+00	-	3.92E+01
6.2	1.10E-02	5.53E+01	2.51E+08	1.64E-02	6.05E-05	2.48E+00	-	3.07E+01
6.3	1.08E-02	4.60E+01	2.51E+08	1.15E-02	7.82E-05	2.47E+00	-	2.51E+01
6.4	1.06E-02	3.67E+01	2.51E+08	6.64E-03	9.58E-05	2.47E+00	-	1.96E+01
6.5	1.05E-02	3.03E+01	2.51E+08	4.65E-03	1.24E-04	2.46E+00	-	1.60E+01
6.6	1.04E-02	2.39E+01	2.51E+08	2.67E-03	1.52E-04	2.46E+00	-	1.24E+01
6.7	1.03E-02	1.96E+01	2.51E+08	1.87E-03	1.96E-04	2.45E+00	-	1.02E+01
6.8	1.02E-02	1.54E+01	2.51E+08	1.07E-03	2.41E-04	2.44E+00	-	7.89E+00
6.9	1.02E-02	1.26E+01	2.51E+08	7.48E-04	3.11E-04	2.42E+00	-	6.44E+00
7.0	1.02E-02	9.85E+00	2.51E+08	4.27E-04	3.81E-04	2.41E+00	-	4.99E+00
7.1	1.02E-02	8.06E+00	2.51E+08	2.99E-04	4.93E-04	2.38E+00	-	4.07E+00
7.2	1.01E-02	6.27E+00	2.51E+08	1.71E-04	6.04E-04	2.36E+00	-	3.16E+00
7.3	1.01E-02	5.12E+00	2.51E+08	1.19E-04	7.81E-04	2.32E+00	-	2.57E+00
7.4	1.01E-02	3.98E+00	2.51E+08	6.80E-05	9.57E-04	2.29E+00	-	1.99E+00
7.5	1.01E-02	3.25E+00	2.51E+08	4.75E-05	1.24E-03	2.24E+00	-	1.63E+00
7.6	1.01E-02	2.52E+00	2.51E+08	2.71E-05	1.52E-03	2.19E+00	-	1.26E+00
7.7	1.00E-02	2.05E+00	2.51E+08	1.89E-05	1.96E-03	2.11E+00	-	1.03E+00
7.8	1.00E-02	1.59E+00	2.50E+08	1.08E-05	2.40E-03	2.04E+00	-	7.95E-01
7.9	1.00E-02	1.30E+00	2.50E+08	7.55E-06	3.10E-03	1.95E+00	-	6.48E-01
8.0	1.00E-02	1.01E+00	2.50E+08	4.30E-06	3.80E-03	1.86E+00	-	5.02E-01

Koc Values for Ionizing Organic COCs as a Function of pH

Last Revised: March 6, 2023

pH	Hexanoic acid 142-62-1	Kelthane 115-32-2	MCPA (4-(Chloro-2-methylphenoxy) acetic acid) 94-74-6	MCPP, acid (2-(4-chloro-2-methylphenoxy) propanoic acid) 93-65-2	Methacrylic acid (2-methyl-2-propenoic acid) 79-41-4	Methanethiol 74-93-1	Methapyrilene 91-80-5
4.9	4.00E+01	1.26E+05	4.01E+01	2.20E+01	4.60E+00	4.23E+00	1.43E+04
5.0	3.44E+01	1.26E+05	3.12E+01	1.71E+01	3.67E+00	4.23E+00	1.43E+04
5.1	2.95E+01	1.26E+05	2.55E+01	1.40E+01	3.03E+00	4.23E+00	1.43E+04
5.2	2.47E+01	1.26E+05	1.98E+01	1.09E+01	2.39E+00	4.23E+00	1.43E+04
5.3	2.09E+01	1.26E+05	1.61E+01	8.87E+00	1.96E+00	4.23E+00	1.43E+04
5.4	1.71E+01	1.26E+05	1.25E+01	6.87E+00	1.54E+00	4.23E+00	1.43E+04
5.5	1.42E+01	1.26E+05	1.02E+01	5.61E+00	1.26E+00	4.23E+00	1.43E+04
5.6	1.14E+01	1.26E+05	7.90E+00	4.34E+00	9.83E-01	4.23E+00	1.43E+04
5.7	9.49E+00	1.26E+05	6.45E+00	3.54E+00	8.04E-01	4.23E+00	1.43E+04
5.8	7.53E+00	1.26E+05	4.99E+00	2.74E+00	6.25E-01	4.23E+00	1.42E+04
5.9	6.20E+00	1.26E+05	4.07E+00	2.24E+00	5.11E-01	4.23E+00	1.42E+04
6.0	4.88E+00	1.26E+05	3.15E+00	1.73E+00	3.97E-01	4.23E+00	1.42E+04
6.1	4.00E+00	1.26E+05	2.57E+00	1.41E+00	3.24E-01	4.23E+00	1.42E+04
6.2	3.13E+00	1.26E+05	1.99E+00	1.09E+00	2.51E-01	4.23E+00	1.42E+04
6.3	2.56E+00	1.26E+05	1.62E+00	8.92E-01	2.05E-01	4.23E+00	1.42E+04
6.4	2.00E+00	1.26E+05	1.26E+00	6.90E-01	1.59E-01	4.23E+00	1.41E+04
6.5	1.63E+00	1.26E+05	1.02E+00	5.63E-01	1.30E-01	4.23E+00	1.41E+04
6.6	1.27E+00	1.26E+05	7.93E-01	4.36E-01	1.00E-01	4.23E+00	1.40E+04
6.7	1.04E+00	1.26E+05	6.46E-01	3.55E-01	8.18E-02	4.23E+00	1.39E+04
6.8	8.05E-01	1.26E+05	5.00E-01	2.75E-01	6.34E-02	4.23E+00	1.39E+04
6.9	6.57E-01	1.26E+05	4.08E-01	2.24E-01	5.17E-02	4.23E+00	1.38E+04
7.0	5.09E-01	1.26E+05	3.16E-01	1.73E-01	4.00E-02	4.23E+00	1.36E+04
7.1	4.15E-01	1.26E+05	2.57E-01	1.41E-01	3.26E-02	4.23E+00	1.35E+04
7.2	3.22E-01	1.26E+05	1.99E-01	1.09E-01	2.52E-02	4.23E+00	1.33E+04
7.3	2.63E-01	1.26E+05	1.62E-01	8.93E-02	2.06E-02	4.23E+00	1.30E+04
7.4	2.03E-01	1.26E+05	1.26E-01	6.91E-02	1.59E-02	4.22E+00	1.28E+04
7.5	1.66E-01	1.26E+05	1.02E-01	5.63E-02	1.30E-02	4.22E+00	1.24E+04
7.6	1.28E-01	1.26E+05	7.93E-02	4.36E-02	1.01E-02	4.22E+00	1.20E+04
7.7	1.05E-01	1.26E+05	6.47E-02	3.55E-02	8.20E-03	4.22E+00	1.16E+04
7.8	8.10E-02	1.26E+05	5.00E-02	2.75E-02	6.34E-03	4.21E+00	1.11E+04
7.9	6.61E-02	1.26E+05	4.08E-02	2.24E-02	5.17E-03	4.21E+00	1.05E+04
8.0	5.11E-02	1.26E+05	3.16E-02	1.73E-02	4.00E-03	4.20E+00	9.83E+03

Koc Values for Ionizing Organic COCs as a Function of pH

Last Revised: March 6, 2023

pH	Methylpyridine, 2- 109-06-8	Morpholine 110-91-8	Naphthylamine, 1- 134-32-7	Naphthylamine, 2- 91-59-8	Nitrophenol, 2- 88-75-5	Nitrophenol, 3- 554-84-7	Nitrophenol, 4- 100-02-7	Nonylphenol, 4- (branched) 84852-15-3
4.9	1.71E+02	1.32E+00	9.52E+02	1.44E+03	2.03E+02	9.33E+01	4.95E+01	3.01E+06
5.0	1.67E+02	1.32E+00	8.50E+02	1.27E+03	2.02E+02	9.33E+01	4.94E+01	3.01E+06
5.1	1.61E+02	1.32E+00	7.78E+02	1.16E+03	2.02E+02	9.33E+01	4.92E+01	3.01E+06
5.2	1.56E+02	1.32E+00	7.07E+02	1.04E+03	2.01E+02	9.33E+01	4.90E+01	3.01E+06
5.3	1.49E+02	1.32E+00	6.59E+02	9.61E+02	2.01E+02	9.33E+01	4.86E+01	3.01E+06
5.4	1.41E+02	1.32E+00	6.11E+02	8.81E+02	2.00E+02	9.32E+01	4.83E+01	3.01E+06
5.5	1.32E+02	1.32E+00	5.79E+02	8.27E+02	1.98E+02	9.32E+01	4.78E+01	3.01E+06
5.6	1.24E+02	1.32E+00	5.47E+02	7.74E+02	1.97E+02	9.32E+01	4.73E+01	3.01E+06
5.7	1.14E+02	1.32E+00	5.27E+02	7.39E+02	1.95E+02	9.32E+01	4.66E+01	3.01E+06
5.8	1.04E+02	1.32E+00	5.06E+02	7.04E+02	1.93E+02	9.31E+01	4.58E+01	3.01E+06
5.9	9.45E+01	1.32E+00	4.93E+02	6.82E+02	1.90E+02	9.31E+01	4.47E+01	3.01E+06
6.0	8.48E+01	1.31E+00	4.80E+02	6.59E+02	1.88E+02	9.30E+01	4.36E+01	3.01E+06
6.1	7.60E+01	1.31E+00	4.72E+02	6.45E+02	1.83E+02	9.29E+01	4.21E+01	3.01E+06
6.2	6.73E+01	1.31E+00	4.63E+02	6.30E+02	1.79E+02	9.28E+01	4.06E+01	3.01E+06
6.3	6.02E+01	1.31E+00	4.58E+02	6.21E+02	1.73E+02	9.27E+01	3.86E+01	3.01E+06
6.4	5.30E+01	1.31E+00	4.52E+02	6.12E+02	1.67E+02	9.25E+01	3.65E+01	3.01E+06
6.5	4.76E+01	1.30E+00	4.49E+02	6.06E+02	1.59E+02	9.23E+01	3.40E+01	3.01E+06
6.6	4.22E+01	1.30E+00	4.46E+02	6.00E+02	1.51E+02	9.20E+01	3.15E+01	3.01E+06
6.7	3.83E+01	1.29E+00	4.44E+02	5.97E+02	1.41E+02	9.17E+01	2.87E+01	3.01E+06
6.8	3.44E+01	1.29E+00	4.41E+02	5.93E+02	1.31E+02	9.13E+01	2.59E+01	3.01E+06
6.9	3.18E+01	1.28E+00	4.40E+02	5.91E+02	1.20E+02	9.07E+01	2.30E+01	3.01E+06
7.0	2.91E+01	1.27E+00	4.39E+02	5.88E+02	1.08E+02	9.02E+01	2.02E+01	3.01E+06
7.1	2.73E+01	1.25E+00	4.38E+02	5.87E+02	9.66E+01	8.93E+01	1.76E+01	3.00E+06
7.2	2.55E+01	1.24E+00	4.37E+02	5.85E+02	8.49E+01	8.84E+01	1.50E+01	3.00E+06
7.3	2.44E+01	1.22E+00	4.36E+02	5.85E+02	7.41E+01	8.71E+01	1.28E+01	3.00E+06
7.4	2.32E+01	1.19E+00	4.36E+02	5.84E+02	6.33E+01	8.58E+01	1.06E+01	3.00E+06
7.5	2.25E+01	1.16E+00	4.36E+02	5.83E+02	5.42E+01	8.38E+01	8.94E+00	3.00E+06
7.6	2.17E+01	1.13E+00	4.35E+02	5.82E+02	4.51E+01	8.19E+01	7.26E+00	3.00E+06
7.7	2.12E+01	1.09E+00	4.35E+02	5.82E+02	3.80E+01	7.91E+01	6.05E+00	3.00E+06
7.8	2.08E+01	1.05E+00	4.35E+02	5.82E+02	3.10E+01	7.64E+01	4.84E+00	3.00E+06
7.9	2.05E+01	9.95E-01	4.35E+02	5.81E+02	2.58E+01	7.27E+01	4.00E+00	3.00E+06
8.0	2.02E+01	9.41E-01	4.34E+02	5.81E+02	2.07E+01	6.91E+01	3.17E+00	2.99E+06

Koc Values for Ionizing Organic COCs as a Function of pH

Last Revised: March 6, 2023

pH	Pentachlorophenol* 87-86-5	Propanil 709-98-8	Tetrachlorophenol, 2,3,4,5-* 4901-51-3	Tetrachlorophenol, 2,3,4,6-* 58-90-2	Tetrachlorophenol, 2,3,5,6- 935-95-5	Toluenediamine, 2,6 823-40-5	Toluidine, o- 95-53-4
4.9	9.05E+03	9.33E+02	1.73E+04	4.45E+03	1.60E+04	9.01E+00	1.85E+02
5.0	7.96E+03	9.33E+02	1.72E+04	4.15E+03	1.42E+04	8.29E+00	1.65E+02
5.1	6.93E+03	9.33E+02	1.70E+04	3.83E+03	1.24E+04	7.55E+00	1.47E+02
5.2	5.97E+03	9.33E+02	1.67E+04	3.49E+03	1.07E+04	6.81E+00	1.30E+02
5.3	5.10E+03	9.33E+02	1.65E+04	3.14E+03	9.18E+03	6.13E+00	1.16E+02
5.4	4.32E+03	9.33E+02	1.61E+04	2.79E+03	7.68E+03	5.44E+00	1.03E+02
5.5	3.65E+03	9.33E+02	1.57E+04	2.45E+03	6.50E+03	4.87E+00	9.26E+01
5.6	3.07E+03	9.33E+02	1.52E+04	2.13E+03	5.32E+03	4.29E+00	8.25E+01
5.7	2.58E+03	9.33E+02	1.47E+04	1.83E+03	4.45E+03	3.84E+00	7.55E+01
5.8	2.18E+03	9.33E+02	1.40E+04	1.56E+03	3.58E+03	3.40E+00	6.84E+01
5.9	1.84E+03	9.33E+02	1.32E+04	1.32E+03	2.96E+03	3.07E+00	6.36E+01
6.0	1.56E+03	9.33E+02	1.24E+04	1.11E+03	2.35E+03	2.75E+00	5.88E+01
6.1	1.33E+03	9.33E+02	1.15E+04	9.27E+02	1.94E+03	2.52E+00	5.57E+01
6.2	1.15E+03	9.33E+02	1.05E+04	7.75E+02	1.53E+03	2.29E+00	5.25E+01
6.3	9.98E+02	9.33E+02	9.51E+03	6.47E+02	1.25E+03	2.14E+00	5.04E+01
6.4	8.77E+02	9.32E+02	8.48E+03	5.42E+02	9.80E+02	1.99E+00	4.84E+01
6.5	7.81E+02	9.32E+02	7.47E+03	4.55E+02	8.03E+02	1.89E+00	4.71E+01
6.6	7.03E+02	9.32E+02	6.49E+03	3.84E+02	6.25E+02	1.79E+00	4.57E+01
6.7	6.40E+02	9.32E+02	5.58E+03	3.27E+02	5.11E+02	1.72E+00	4.49E+01
6.8	5.92E+02	9.31E+02	4.74E+03	2.80E+02	3.97E+02	1.66E+00	4.41E+01
6.9	5.52E+02	9.31E+02	3.99E+03	2.42E+02	3.25E+02	1.62E+00	4.35E+01
7.0	5.21E+02	9.30E+02	3.33E+03	2.13E+02	2.52E+02	1.58E+00	4.30E+01
7.1	4.96E+02	9.29E+02	2.76E+03	1.88E+02	2.06E+02	1.55E+00	4.27E+01
7.2	4.76E+02	9.28E+02	2.28E+03	1.69E+02	1.59E+02	1.52E+00	4.23E+01
7.3	4.61E+02	9.27E+02	1.87E+03	1.53E+02	1.30E+02	1.51E+00	4.21E+01
7.4	4.47E+02	9.26E+02	1.53E+03	1.41E+02	1.01E+02	1.49E+00	4.19E+01
7.5	4.37E+02	9.23E+02	1.25E+03	1.31E+02	8.22E+01	1.48E+00	4.17E+01
7.6	4.29E+02	9.21E+02	1.02E+03	1.23E+02	6.37E+01	1.47E+00	4.16E+01
7.7	4.23E+02	9.18E+02	8.31E+02	1.17E+02	5.19E+01	1.46E+00	4.15E+01
7.8	4.18E+02	9.14E+02	6.79E+02	1.13E+02	4.02E+01	1.46E+00	4.14E+01
7.9	4.14E+02	9.09E+02	5.56E+02	1.08E+02	3.28E+01	1.45E+00	4.14E+01
8.0	4.10E+02	9.03E+02	4.58E+02	1.05E+02	2.54E+01	1.45E+00	4.13E+01

Koc Values for Ionizing Organic COCs as a Function of pH

Last Revised: March 6, 2023

pH	Trichlorophenol, 2,3,4- 15950-66-0	Trichlorophenol, 2,3,5- 933-78-8	Trichlorophenol, 2,3,6- 933-75-5	Trichlorophenol, 2,4,5-* 95-95-4	Trichlorophenol, 2,4,6-* 88-06-2	Trichlorophenol, 3,4,5- 609-19-8	Valeric acid (pentanoic acid) 109-52-4
4.9	7.51E+03	5.47E+03	4.00E+04	2.37E+03	1.04E+03	8.13E+03	1.24E+01
5.0	7.49E+03	5.45E+03	3.88E+04	2.36E+03	1.03E+03	8.13E+03	1.06E+01
5.1	7.46E+03	5.41E+03	3.71E+04	2.36E+03	1.02E+03	8.12E+03	9.12E+00
5.2	7.44E+03	5.38E+03	3.55E+04	2.35E+03	1.01E+03	8.12E+03	7.63E+00
5.3	7.40E+03	5.32E+03	3.34E+04	2.34E+03	9.99E+02	8.12E+03	6.45E+00
5.4	7.35E+03	5.27E+03	3.13E+04	2.33E+03	9.82E+02	8.11E+03	5.27E+00
5.5	7.29E+03	5.19E+03	2.88E+04	2.32E+03	9.62E+02	8.10E+03	4.40E+00
5.6	7.22E+03	5.11E+03	2.64E+04	2.31E+03	9.38E+02	8.09E+03	3.54E+00
5.7	7.13E+03	4.99E+03	2.37E+04	2.29E+03	9.10E+02	8.08E+03	2.93E+00
5.8	7.03E+03	4.87E+03	2.11E+04	2.27E+03	8.77E+02	8.07E+03	2.33E+00
5.9	6.89E+03	4.71E+03	1.86E+04	2.24E+03	8.39E+02	8.04E+03	1.92E+00
6.0	6.74E+03	4.54E+03	1.60E+04	2.21E+03	7.96E+02	8.02E+03	1.51E+00
6.1	6.53E+03	4.32E+03	1.38E+04	2.17E+03	7.48E+02	7.99E+03	1.24E+00
6.2	6.33E+03	4.10E+03	1.16E+04	2.12E+03	6.97E+02	7.96E+03	9.68E-01
6.3	6.05E+03	3.82E+03	9.85E+03	2.06E+03	6.44E+02	7.90E+03	7.93E-01
6.4	5.77E+03	3.55E+03	8.08E+03	1.99E+03	5.89E+02	7.85E+03	6.17E-01
6.5	5.42E+03	3.24E+03	6.77E+03	1.91E+03	5.33E+02	7.77E+03	5.05E-01
6.6	5.06E+03	2.93E+03	5.45E+03	1.82E+03	4.80E+02	7.69E+03	3.92E-01
6.7	4.65E+03	2.61E+03	4.53E+03	1.71E+03	4.29E+02	7.57E+03	3.21E-01
6.8	4.24E+03	2.29E+03	3.60E+03	1.60E+03	3.81E+02	7.45E+03	2.49E-01
6.9	3.80E+03	2.00E+03	2.97E+03	1.47E+03	3.38E+02	7.28E+03	2.03E-01
7.0	3.37E+03	1.70E+03	2.34E+03	1.34E+03	3.00E+02	7.10E+03	1.57E-01
7.1	2.95E+03	1.46E+03	1.92E+03	1.21E+03	2.67E+02	6.86E+03	1.28E-01
7.2	2.54E+03	1.21E+03	1.50E+03	1.07E+03	2.39E+02	6.61E+03	9.83E-02
7.3	2.18E+03	1.02E+03	1.23E+03	9.43E+02	2.15E+02	6.29E+03	8.06E-02
7.4	1.83E+03	8.31E+02	9.60E+02	8.19E+02	1.95E+02	5.96E+03	6.28E-02
7.5	1.55E+03	6.93E+02	7.85E+02	7.03E+02	1.78E+02	5.55E+03	5.12E-02
7.6	1.27E+03	5.55E+02	6.10E+02	5.99E+02	1.64E+02	5.15E+03	3.97E-02
7.7	1.06E+03	4.59E+02	4.99E+02	5.07E+02	1.53E+02	4.70E+03	3.24E-02
7.8	8.52E+02	3.64E+02	3.87E+02	4.26E+02	1.44E+02	4.24E+03	2.50E-02
7.9	7.06E+02	2.99E+02	3.16E+02	3.57E+02	1.37E+02	3.78E+03	2.04E-02
8.0	5.61E+02	2.35E+02	2.45E+02	2.98E+02	1.31E+02	3.31E+03	1.58E-02

Footnotes

1 Glyphosate - Koc under review. Contact your TCEQ Project

* As listed in Figure: 30 TAC §350.73(e)(1)(B)

This table shows the carbon-water partitioning coefficient for end of worksheet

ABS_{GI} and ABS.d Values

Last Revised: March 6, 2023

Chemical of Concern	CAS	ABS _{GI} (unitless)	ABS.d (unitless)
Acenaphthene	83-32-9	8.90E-01	1.30E-01
Acenaphthylene	208-96-8	8.90E-01	1.30E-01
Acetaldehyde	75-07-0	8.00E-01	0.00E+00
Acetate, 2-ethoxyethanol	111-15-9	8.00E-01	0.00E+00
Acetate, isoamyl	123-92-2	8.00E-01	0.00E+00
Acetate, isobutyl	110-19-0	8.00E-01	0.00E+00
Acetate, sec-butyl	105-46-4	8.00E-01	0.00E+00
Acetic acid*	64-19-7	0.00E+00	0.00E+00
Acetone (2-propanone)	67-64-1	8.30E-01	0.00E+00
Acetone cyanohydrin	75-86-5	5.00E-01	1.00E-01
Acetonitrile	75-05-8	8.00E-01	0.00E+00
Acetophenone	98-86-2	5.00E-01	1.00E-01
Acetylaminofluorene, 2-	53-96-3	5.00E-01	1.00E-01
Acifluorfen, sodium	62476-59-9	5.00E-01	1.00E-01
Acridine	260-94-6	5.00E-01	1.00E-01
Acrolein	107-02-8	8.00E-01	0.00E+00
Acrylamide	79-06-1	5.00E-01	1.00E-01
Acrylic acid	79-10-7	8.00E-01	0.00E+00
Acrylonitrile	107-13-1	8.00E-01	0.00E+00
Adipic acid (hexanedioic acid)	124-04-9	5.00E-01	1.00E-01
Alachlor	15972-60-8	5.00E-01	1.00E-01
Aldicarb	116-06-3	5.00E-01	1.00E-01
Aldicarb sulfone	1646-88-4	5.00E-01	1.00E-01
Aldrin	309-00-2	5.00E-01	1.00E-01
Allyl alcohol	107-18-6	8.00E-01	0.00E+00
Allyl chloride	107-05-1	8.00E-01	0.00E+00
Aluminum	7429-90-5	1.00E-01	1.00E-02
Ametryn	834-12-8	5.00E-01	1.00E-01
Amino-2,6-dinitrotoluene, 4-	19406-51-0	5.00E-01	1.00E-01
Amino-4,6-dinitrotoluene, 2-	35572-78-2	5.00E-01	1.00E-01

ABS_{GI} and ABS.d Values

Last Revised: March 6, 2023

Chemical of Concern	CAS	ABS _{GI} (unitless)	ABS.d (unitless)
Aminobiphenyl, 4- (1,1-biphenyl-4-amine)	92-67-1	5.00E-01	1.00E-01
Aminopyridine, 4-	504-24-5	5.00E-01	1.00E-01
Ammonia	7664-41-7	2.00E-01	1.00E-02
Ammonium polyphosphate*	6833-79-9	0.00E+00	0.00E+00
Ammonium salts*	AMMONIUM	0.00E+00	0.00E+00
Aniline	62-53-3	5.00E-01	1.00E-01
Anthracene	120-12-7	8.90E-01	1.30E-01
Anthraquinone, 9,10-	84-65-1	5.00E-01	1.00E-01
Antimony	7440-36-0	1.50E-01	1.00E-02
Aramite	140-57-8	5.00E-01	1.00E-01
Arsenic	7440-38-2	9.50E-01	3.00E-02
Arsine	7784-42-1	2.00E-01	1.00E-02
Atrazine	1912-24-9	5.00E-01	1.00E-01
Azinphos-methyl (guthion)	86-50-0	5.00E-01	1.00E-01
Azobenzene	103-33-3	5.00E-01	1.00E-01
Barium	7440-39-3	7.00E-02	1.00E-02
Bayleton	43121-43-3	5.00E-01	1.00E-01
Benefin (benfluralin)	1861-40-1	5.00E-01	1.00E-01
Benomyl	17804-35-2	5.00E-01	1.00E-01
Benz-a-anthracene	56-55-3	8.90E-01	1.30E-01
Benzaldehyde	100-52-7	8.00E-01	0.00E+00
Benzene	71-43-2	9.70E-01	0.00E+00
Benzenedicarbonitrile, 1,3-	626-17-5	5.00E-01	1.00E-01
Benzenedicarboxylic acid, 1,2-disodecyl ester	26761-40-0	5.00E-01	1.00E-01
Benzenethiol	108-98-5	8.00E-01	0.00E+00
Benzidine	92-87-5	8.00E-01	1.00E-01
Benzo-a-pyrene	50-32-8	8.90E-01	1.30E-01
Benzo-b-fluoranthene	205-99-2	8.90E-01	1.30E-01
Benzo-e-pyrene	192-97-2	8.90E-01	1.30E-01
Benzo-g,h,i-perylene	191-24-2	8.90E-01	1.30E-01

ABS_{GI} and ABS.d Values

Last Revised: March 6, 2023

Chemical of Concern	CAS	ABS _{GI} (unitless)	ABS.d (unitless)
Benzoic acid	65-85-0	1.00E+00	1.00E-01
Benzo-j-fluoranthene	205-82-3	8.90E-01	1.30E-01
Benzo-k-fluoranthene	207-08-9	8.90E-01	1.30E-01
Benzophenone	119-61-9	5.00E-01	1.00E-01
Benzotrichloride	98-07-7	5.00E-01	1.00E-01
Benzoyl peroxide	94-36-0	5.00E-01	1.00E-01
Benzyl alcohol	100-51-6	6.60E-01	1.00E-01
Benzyl chloride	100-44-7	8.00E-01	0.00E+00
Benzyl dichloride	98-87-3	5.00E-01	1.00E-01
Beryllium	7440-41-7	7.00E-03	1.00E-02
Biphenyl, 1,1-	92-52-4	5.00E-01	1.00E-01
Biphenyl, 1,1'-, 2-phenoxy-	6738-04-1	5.00E-01	1.00E-01
Biquinoline, 2,2'-	119-91-5	5.00E-01	1.00E-01
Bis (2-chloroethoxy) methane	111-91-1	5.00E-01	1.00E-01
Bis (2-chloroethyl) ether	111-44-4	8.00E-01	0.00E+00
Bis (2-chloro-1-methylethyl) ether	108-60-1	5.00E-01	1.00E-01
Bis (2-chloromethyl) ether	542-88-1	8.00E-01	0.00E+00
Bis (2-ethyl-hexyl) phthalate	117-81-7	1.90E-01	1.00E-01
Bismuth	7440-69-9	2.00E-01	1.00E-02
Bisphenol A	80-05-7	5.00E-01	1.00E-01
Boron	7440-42-8	9.00E-01	1.00E-02
Bromacil	314-40-9	5.00E-01	1.00E-01
Bromo-2-chloroethane, 1-	107-04-0	8.00E-01	0.00E+00
Bromobenzene	108-86-1	8.00E-01	0.00E+00
Bromodichloromethane	75-27-4	9.80E-01	0.00E+00
Bromoform	75-25-2	6.00E-01	0.00E+00
Bromomethane	74-83-9	8.00E-01	0.00E+00
Bromophenyl phenylether, 4-	101-55-3	5.00E-01	1.00E-01
Butadiene, 1,3-	106-99-0	8.00E-01	0.00E+00
Butadiene, 2-methyl-1,3- (isoprene)	78-79-5	8.00E-01	0.00E+00

ABS_{GI} and ABS.d Values

Last Revised: March 6, 2023

Chemical of Concern	CAS	ABS _{GI} (unitless)	ABS.d (unitless)
Butanal (butyraldehyde)	123-72-8	8.00E-01	0.00E+00
Butane, 2,3-dimethyl-	79-29-8	8.00E-01	0.00E+00
Butanoic acid (butyric acid)	107-92-6	5.00E-01	1.00E-01
Butanol, 2-	78-92-2	8.00E-01	0.00E+00
Butanol, 2-methyl-1-	137-32-6	5.00E-01	1.00E-01
Butanol, 2-methyl-2-	75-85-4	8.00E-01	0.00E+00
Butanol, n-	71-36-3	8.00E-01	0.00E+00
Butene, 1-	106-98-9	8.00E-01	0.00E+00
Butene, cis-2-	590-18-1	8.00E-01	0.00E+00
Butene, trans-2-	624-64-6	8.00E-01	0.00E+00
Butoxy ethanol, 2- (Ethylene glycol monobutyl ether; EGBE)	111-76-2	5.00E-01	1.00E-01
Butyl acetate	123-86-4	8.00E-01	0.00E+00
Butyl acrylate	141-32-2	8.00E-01	0.00E+00
Butyl benzyl phthalate	85-68-7	6.10E-01	1.00E-01
Butyl ether, n- (dibutyl ether)	142-96-1	8.00E-01	0.00E+00
Butyl methacrylate	97-88-1	9.40E-01	5.00E-01
Butylate	2008-41-5	5.00E-01	1.00E-01
Butylbenzene, n-	104-51-8	5.00E-01	1.00E-01
Butylbenzene, sec-	135-98-8	8.00E-01	0.00E+00
Butylbenzene, tert-	98-06-6	8.00E-01	0.00E+00
Cacodylic acid	75-60-5	5.00E-01	1.00E-01
Cadmium	7440-43-9	2.50E-02	1.00E-03
Calcium*	7440-70-2	0.00E+00	0.00E+00
Caprolactam	105-60-2	5.00E-01	1.00E-01
Captan	133-06-2	5.00E-01	1.00E-01
Carbaryl	63-25-2	5.00E-01	1.00E-01
Carbazole	86-74-8	7.00E-01	1.00E-01
Carbofuran	1563-66-2	5.00E-01	1.00E-01
Carbon disulfide	75-15-0	6.30E-01	0.00E+00
Carbon tetrachloride	56-23-5	6.50E-01	0.00E+00

ABS_{GI} and ABS.d Values

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Chemical of Concern	CAS	ABS _{GI} (unitless)	ABS.d (unitless)
Carbophenothion	786-19-6	5.00E-01	1.00E-01
Carbosulfan	55285-14-8	5.00E-01	1.00E-01
Carboxin	5234-68-4	5.00E-01	1.00E-01
Chloral	75-87-6	8.00E-01	0.00E+00
Chloral hydrate (1,1-ethanediol, 2,2,2-trichloro-)	302-17-0	5.00E-01	1.00E-01
Chloramben (amiben; 3-amino-2,5-dichlorobenzoic acid)	133-90-4	5.00E-01	1.00E-01
Chlordane (technical)	12789-03-6	8.00E-01	4.00E-02
Chlordane, cis- (alpha chlordane)	5103-71-9	5.00E-01	1.00E-01
Chlordane, trans- (gamma chlordane)	5103-74-2	5.00E-01	1.00E-01
Chlorfenvinphos	470-90-6	5.00E-01	1.00E-01
Chloride*	16887-00-6	0.00E+00	0.00E+00
Chlorine	7782-50-5	2.00E-01	1.00E-02
Chloro-1,3-butadiene, 2-	126-99-8	8.00E-01	0.00E+00
Chloro-2-propanol, 1-	127-00-4	8.00E-01	0.00E+00
Chloro-3-methylphenol, 4-	59-50-7	5.00E-01	1.00E-01
Chloroaniline, p-	106-47-8	5.00E-01	1.00E-01
Chlorobenzene	108-90-7	3.10E-01	0.00E+00
Chlorobenzilate	510-15-6	5.00E-01	1.00E-01
Chlorobromomethane (bromochloromethane)	74-97-5	8.00E-01	0.00E+00
Chlorodifluoromethane	75-45-6	8.00E-01	0.00E+00
Chloroethane (ethyl chloride)	75-00-3	8.00E-01	0.00E+00
Chloroethanol, 2-	107-07-3	8.00E-01	0.00E+00
Chloroethoxy ethene, 2- (2-chloroethylvinylether)	110-75-8	8.00E-01	0.00E+00
Chloroform	67-66-3	2.00E-01	0.00E+00
Chlorohexane, 1-	544-10-5	8.00E-01	0.00E+00
Chloromethane (methyl chloride)	74-87-3	8.00E-01	0.00E+00
Chloronaphthalene, 1- (Chloronaphthalene, alpha-)	90-13-1	8.90E-01	1.30E-01
Chloronaphthalene, 2- (chloronaphthalene, beta)	91-58-7	8.90E-01	1.30E-01
Chloronitrobenzene, p- (1-chloro-4-nitrobenzene)	100-00-5	5.00E-01	1.00E-01
Chlorophenol, 2-	95-57-8	8.00E-01	0.00E+00

ABS_{GI} and ABS.d Values

Last Revised: March 6, 2023

Chemical of Concern	CAS	ABS _{GI} (unitless)	ABS.d (unitless)
Chlorophenol, 3-	108-43-0	5.00E-01	1.00E-01
Chlorophenol, 4-	106-48-9	5.00E-01	1.00E-01
Chlorophenyl phenylether, 4-	7005-72-3	5.00E-01	1.00E-01
Chloropropane, 2-	75-29-6	8.00E-01	0.00E+00
Chlorothalonil	1897-45-6	5.00E-01	1.00E-01
Chlorotoluene, o- (2-chlorotoluene)	95-49-8	5.00E-01	1.00E-01
Chlorotoluene, p- (4-chlorotoluene)	106-43-4	8.00E-01	0.00E+00
Chlorpyrifos	2921-88-2	5.00E-01	1.00E-01
Chromium (III)	16065-83-1	1.30E-02	1.00E-02
Chromium (total)	7440-47-3	1.30E-02	1.00E-02
Chromium (VI)	18540-29-9	2.50E-02	1.00E-02
Chrysene	218-01-9	8.90E-01	1.30E-01
Cobalt	7440-48-4	8.00E-01	1.00E-02
Copolymer acrylamide	69418-26-4	5.00E-01	1.00E-01
Copper	7440-50-8	5.70E-01	1.00E-02
Coronene	191-07-1	5.00E-01	1.00E-01
Coumaphos	56-72-4	5.00E-01	1.00E-01
Cresol	1319-77-3	5.00E-01	1.00E-01
Cresol, m- (3-methylphenol)	108-39-4	5.00E-01	1.00E-01
Cresol, o- (2-methylphenol)	95-48-7	5.00E-01	1.00E-01
Cresol, p- (4-methylphenol)	106-44-5	6.50E-01	1.00E-01
Crotonaldehyde	123-73-9	8.00E-01	0.00E+00
Cumene (isopropylbenzene)	98-82-8	8.00E-01	0.00E+00
Cyanazine	21725-46-2	5.00E-01	1.00E-01
Cyanide	57-12-5	5.00E-01	1.00E-02
Cyanogen	460-19-5	8.00E-01	0.00E+00
Cycloate	1134-23-2	5.00E-01	1.00E-01
Cyclohexane	110-82-7	8.00E-01	0.00E+00
Cyclohexanol	108-93-0	5.00E-01	1.00E-01
Cyclohexanone	108-94-1	8.00E-01	0.00E+00

ABS_{GI} and ABS.d Values

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Chemical of Concern	CAS	ABS _{GI} (unitless)	ABS.d (unitless)
Cyclohexene, 1-methanol-3-	1679-51-2	5.00E-01	1.00E-01
Cyclohexene, 4-vinyl-1-	100-40-3	8.00E-01	0.00E+00
Cyclopentane	287-92-3	8.00E-01	0.00E+00
Cyclopentane, methyl-	96-37-7	8.00E-01	0.00E+00
Cyclopentene	142-29-0	8.00E-01	0.00E+00
Cyclotetramethylenetetranitramine (HMX)	2691-41-0	1.50E-01	1.00E-01
Cyclotrimethylenetrinitramine (RDX)	121-82-4	1.00E+00	1.00E-01
Cymene (isopropyltoluene)	99-87-6	8.00E-01	0.00E+00
Cymoxanil	57966-95-7	5.00E-01	1.00E-01
Dacthal (DCPA)	1861-32-1	5.00E-01	1.00E-01
Dalapon, sodium salt (2,2-dichloropropanoic acid)	75-99-0	5.00E-01	1.00E-01
DDD	72-54-8	7.00E-01	3.00E-02
DDE	72-55-9	7.00E-01	3.00E-02
DDT	50-29-3	7.00E-01	3.00E-02
Demeton	8065-48-3	5.00E-01	1.00E-01
Desethylatrazine	6190-65-4	5.00E-01	1.00E-01
Diacetone alcohol (4-hydroxy-4-methyl-2-pentanone)	123-42-2	5.00E-01	1.00E-01
Diallate	2303-16-4	5.00E-01	1.00E-01
Diazinon	333-41-5	5.00E-01	1.00E-01
Dibenz(a,h)acridine	226-36-8	5.00E-01	1.00E-01
Dibenz(a,j)acridine	224-42-0	8.90E-01	1.30E-01
Dibenz-a,h-anthracene	53-70-3	8.90E-01	1.30E-01
Dibenzo(a,e)pyrene	192-65-4	5.00E-01	1.00E-01
Dibenzo(a,h)pyrene	189-64-0	5.00E-01	1.00E-01
Dibenzo(a,i)pyrene	189-55-9	5.00E-01	1.00E-01
Dibenzofuran	132-64-9	5.00E-01	1.00E-01
Dibenzothiophene	132-65-0	5.00E-01	1.00E-01
Dibromo-3-chloropropane, 1,2-	96-12-8	5.00E-01	1.00E-01
Dibromochloromethane (chlorodibromomethane)	124-48-1	6.00E-01	0.00E+00
Dibromofluoromethane	1868-53-7	8.00E-01	0.00E+00

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Dicamba	1918-00-9	5.00E-01	1.00E-01
Dichlormid	37764-25-3	5.00E-01	1.00E-01
Dichloro-2-butene, 1,4-	764-41-0	8.00E-01	0.00E+00
Dichloro-2-butene, 1,4- trans	110-57-6	8.00E-01	0.00E+00
Dichlorobenzene, 1,2-	95-50-1	8.00E-01	0.00E+00
Dichlorobenzene, 1,3-	541-73-1	8.00E-01	0.00E+00
Dichlorobenzene, 1,4-	106-46-7	9.00E-01	0.00E+00
Dichlorobenzidine, 3,3-	91-94-1	5.00E-01	1.00E-01
Dichlorobutane, 2,3-	7581-97-7	8.00E-01	0.00E+00
Dichlorodifluoromethane	75-71-8	2.30E-01	0.00E+00
Dichloroethane, 1,1-	75-34-3	1.00E+00	0.00E+00
Dichloroethane, 1,2-	107-06-2	1.00E+00	0.00E+00
Dichloroethylene, 1,1-	75-35-4	1.00E+00	0.00E+00
Dichloroethylene, cis-1,2-	156-59-2	1.00E+00	0.00E+00
Dichloroethylene, trans-1,2	156-60-5	1.00E+00	0.00E+00
Dichlorofluoromethane	75-43-4	8.00E-01	0.00E+00
Dichlorophenol, 2,3-	576-24-9	5.00E-01	1.00E-01
Dichlorophenol, 2,4-	120-83-2	8.20E-01	1.00E-01
Dichlorophenol, 2,5-	583-78-8	5.00E-01	1.00E-01
Dichlorophenol, 2,6-	87-65-0	5.00E-01	1.00E-01
Dichlorophenol, 3,4-	95-77-2	5.00E-01	1.00E-01
Dichlorophenol, 3,5-	591-35-5	5.00E-01	1.00E-01
Dichlorophenoxy, 2,4- butyric acid, 4- (2,4-DB)	94-82-6	5.00E-01	1.00E-01
Dichlorophenoxyacetic acid, 2,4- (2,4-D)	94-75-7	9.00E-01	5.00E-02
Dichloroprop (2-(2,4-dichlorophenoxy) propanoic acid)	120-36-5	5.00E-01	1.00E-01
Dichloropropane, 1,2-	78-87-5	7.40E-01	0.00E+00
Dichloropropane, 1,3-	142-28-9	8.00E-01	0.00E+00
Dichloropropane, 2,2-	594-20-7	8.00E-01	0.00E+00
Dichloropropanol, 2,3-	616-23-9	5.00E-01	1.00E-01
Dichloropropene, 1,1-	563-58-6	8.00E-01	0.00E+00

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Dichloropropene, 1,3- (mixed isomers)	542-75-6	5.50E-01	0.00E+00
Dichloropropene, cis 1,3-	10061-01-5	8.00E-01	0.00E+00
Dichloropropene, trans 1,3-	10061-02-6	8.00E-01	0.00E+00
Dichlorvos	62-73-7	5.00E-01	1.00E-01
Dicrotophos (bidrin)	141-66-2	5.00E-01	1.00E-01
Dicyclopentadiene	77-73-6	8.00E-01	0.00E+00
Dieldrin	60-57-1	5.00E-01	1.00E-01
Diethanolamine	111-42-2	5.00E-01	1.00E-01
Diethyldithiocarbamate, sodium salt	148-18-5	0.00E+00	0.00E+00
Diethyl phthalate	84-66-2	9.00E-01	1.00E-01
Diethylene glycol	111-46-6	5.00E-01	1.00E-01
Diethylene glycol monobutyl ether	112-34-5	5.00E-01	1.00E-01
Diethylhexyl adipate	103-23-1	5.00E-01	1.00E-01
Diethylstilbestrol	56-53-1	5.00E-01	1.00E-01
Diisobutylene (trimethyl-1-pentene, 2,4,4-)	107-39-1	8.00E-01	0.00E+00
Diisopropylbenzene, p-	100-18-5	5.00E-01	1.00E-01
Diisopropyl ether (2,2'-oxybis-propane)	108-20-3	8.00E-01	0.00E+00
Dimethenamid	87674-68-8	5.00E-01	1.00E-01
Dimethoate	60-51-5	5.00E-01	1.00E-01
Dimethoxybenzidine, 3,3'-	119-90-4	5.00E-01	1.00E-01
Dimethyl-2-nitrobenzene, 1,3-	81-20-9	5.00E-01	1.00E-01
Dimethyl-3-nitrobenzene, 1,2-	83-41-0	5.00E-01	1.00E-01
Dimethyl-4-nitrobenzene, 1-2-	99-51-4	5.00E-01	1.00E-01
Dimethyl-5-nitrobenzene, 1,3-	99-12-7	5.00E-01	1.00E-01
Dimethylphenethylamine, alpha, alpha-	122-09-8	5.00E-01	1.00E-01
Dimethyl phenol, 2,4-	105-67-9	5.00E-01	1.00E-01
Dimethylaminoazobenzene, p-	60-11-7	5.00E-01	1.00E-01
Dimethylbenz-a-anthracene, 7,12-	57-97-6	8.90E-01	1.30E-01
Dimethylbenzidine, 3,3'-	119-93-7	5.00E-01	1.00E-01
Dimethylformamide, N,N-	68-12-2	8.00E-01	0.00E+00

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Dimethylnaphthalene, 1,3-	575-41-7	8.90E-01	1.30E-01
Dimethylphthalate	131-11-3	9.00E-01	1.00E-01
Di-n-butyl phthalate	84-74-2	1.00E+00	1.00E-01
Dinitro-2-methylphenol, 4,6- (dinitro-o-cresol, 4, 6-)	534-52-1	1.00E+00	1.00E-01
Dinitrobenzene, 1,3- (dinitrobenzene, 2,4-)	99-65-0	6.50E-01	1.00E-01
Dinitrobenzene, 1,4-	100-25-4	5.00E-01	1.00E-01
Dinitrophenol, 2,4-	51-28-5	1.00E+00	1.00E-01
Dinitrophenol, 2,5-	329-71-5	5.00E-01	1.00E-01
Dinitrotoluene, 2,4-	121-14-2	8.50E-01	1.00E-01
Dinitrotoluene, 2,6-	606-20-2	8.50E-01	1.00E-01
Di-n-octyl phthalate	117-84-0	9.00E-01	1.00E-01
Dinoseb	88-85-7	5.00E-01	1.00E-01
Dioxane 1,4-	123-91-1	8.00E-01	0.00E+00
Dioxins/furans, polychlorinated; (reported as 2,3,7,8-TCDD TEQ)	1746-01-6	5.00E-01	3.00E-02
Diphenyl ether	101-84-8	5.00E-01	1.00E-01
Diphenylamine	122-39-4	5.00E-01	1.00E-01
Diphenylhydrazine, 1,2-	122-66-7	5.00E-01	1.00E-01
Dipropylene glycol	110-98-5	5.00E-01	1.00E-01
Diquat	85-00-7	5.00E-01	1.00E-01
Disodium iminodiacetate (iminodiacetic acid, disodium salt)	142-73-4	5.00E-01	1.00E-01
Disulfoton	298-04-4	5.00E-01	1.00E-01
Diuron	330-54-1	5.00E-01	1.00E-01
Dodecylphenol, 4-	104-43-8	5.00E-01	1.00E-01
Endosulfan	115-29-7	5.00E-01	1.00E-01
Endosulfan I	959-98-8	5.00E-01	1.00E-01
Endosulfan II	33213-65-9	5.00E-01	1.00E-01
Endosulfan sulfate	1031-07-8	5.00E-01	1.00E-01
Endothall	145-73-3	5.00E-01	1.00E-01
Endrin	72-20-8	5.00E-01	1.00E-01
Endrin aldehyde	7421-93-4	5.00E-01	1.00E-01

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Endrin ketone	53494-70-5	5.00E-01	1.00E-01
Epichlorohydrin	106-89-8	8.00E-01	0.00E+00
EPN (o-ethyl o-(4-nitrophenyl)phenylphosphonothioate)	2104-64-5	5.00E-01	1.00E-01
Esfenvalerate	66230-04-4	5.00E-01	1.00E-01
Ethalfuralin (sonolan)	55283-68-6	5.00E-01	1.00E-01
Ethanol	64-17-5	8.00E-01	0.00E+00
Ethanol, 2-amino-	141-43-5	5.00E-01	1.00E-01
Ethanol, 2-(2-aminoethoxy)-	929-06-6	5.00E-01	1.00E-01
Ethanol, 2-(2-ethoxyethoxy)-	111-90-0	5.00E-01	1.00E-01
Ethanol, 2-(methylamino)-	109-83-1	5.00E-01	1.00E-01
Ethion	563-12-2	5.00E-01	1.00E-01
Ethoprop	13194-48-4	5.00E-01	1.00E-01
Ethoxy ethanol, 2-	110-80-5	8.00E-01	0.00E+00
Ethyl acetate	141-78-6	8.00E-01	0.00E+00
Ethyl acrylate	140-88-5	8.00E-01	0.00E+00
Ethyl benzene	100-41-4	9.70E-01	0.00E+00
Ethyl dipropylthiocarbamate, S-	759-94-4	5.00E-01	1.00E-01
Ethyl ether	60-29-7	8.00E-01	0.00E+00
Ethyl methacrylate	97-63-2	8.00E-01	0.00E+00
Ethyl methanesulfonate	62-50-0	5.00E-01	1.00E-01
Ethyl tert-butyl ether (2-ethyl-2-ethoxypropane)	637-92-3	8.00E-01	0.00E+00
Ethyl-1-hexanol, 2-	104-76-7	5.00E-01	1.00E-01
Ethyl-2-hexenal, 2-	645-62-5	8.00E-01	0.00E+00
Ethyl-2-methyl benzene, 1-	611-14-3	9.70E-01	0.00E+00
Ethyl-4-methyl benzene, 1-	622-96-8	9.70E-01	0.00E+00
Ethylene*	74-85-1	0.00E+00	0.00E+00
Ethylene dibromide (dibromoethane, 1,2-)	106-93-4	8.00E-01	0.00E+00
Ethylene glycol	107-21-1	5.00E-01	1.00E-01
Ethylene oxide	75-21-8	8.00E-01	0.00E+00
Ethylene thiourea	96-45-7	5.00E-01	1.00E-01

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Ethylenediamine	107-15-3	8.00E-01	0.00E+00
Ethylenimine	151-56-4	8.00E-01	0.00E+00
Ethylhexyl acrylate, 2-	103-11-7	5.00E-01	1.00E-01
Famphur	52-85-7	5.00E-01	1.00E-01
Fensulfothion	115-90-2	5.00E-01	1.00E-01
Fenthion	55-38-9	5.00E-01	1.00E-01
Fenuron	101-42-8	5.00E-01	1.00E-01
Fluoranthene	206-44-0	8.90E-01	1.30E-01
Fluorene	86-73-7	8.90E-01	1.30E-01
Fluorine (soluble fluoride)	7782-41-4	9.70E-01	1.00E-02
Fluorochloridone	61213-25-0	5.00E-01	1.00E-01
Fonofos	944-22-9	5.00E-01	1.00E-01
Formaldehyde	50-00-0	8.00E-01	0.00E+00
Formic acid	64-18-6	8.00E-01	0.00E+00
Furan	110-00-9	8.00E-01	0.00E+00
Furfural	98-01-1	8.00E-01	0.00E+00
Glycidylaldehyde	765-34-4	8.00E-01	0.00E+00
Glyphosate	1071-83-6	5.00E-01	1.00E-01
Heptachlor	76-44-8	7.20E-01	1.00E-01
Heptachlor epoxide	1024-57-3	7.20E-01	1.00E-01
Heptane, n-	142-82-5	8.00E-01	0.00E+00
Heptanoic acid, n-	111-14-8	5.00E-01	1.00E-01
Hexachlorobenzene	118-74-1	5.00E-01	1.00E-01
Hexachlorobutadiene	87-68-3	5.00E-01	1.00E-01
Hexachlorocyclohexane, alpha (alpha-BHC)	319-84-6	9.70E-01	4.00E-02
Hexachlorocyclohexane, beta (beta-BHC)	319-85-7	9.10E-01	4.00E-02
Hexachlorocyclohexane, delta (delta-BHC)	319-86-8	5.00E-01	4.00E-02
Hexachlorocyclohexane, gamma (lindane; gamma-BHC)	58-89-9	9.70E-01	4.00E-02
Hexachlorocyclohexane, techn (technical-BHC)	608-73-1	9.70E-01	4.00E-02
Hexachlorocyclopentadiene	77-47-4	5.00E-01	1.00E-01

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Hexachloroethane	67-72-1	5.00E-01	1.00E-01
Hexachlorophene	70-30-4	5.00E-01	1.00E-01
Hexachloropropylene	1888-71-7	5.00E-01	1.00E-01
Hexanal, 2-ethyl-	123-05-7	5.00E-01	1.00E-01
Hexane, n-	110-54-3	8.00E-01	0.00E+00
Hexanediamine, 1,6-	124-09-4	5.00E-01	1.00E-01
Hexanedinitrile	111-69-3	5.00E-01	1.00E-01
Hexanediol, 1,6-	629-11-8	5.00E-01	1.00E-01
Hexanoic acid	142-62-1	5.00E-01	1.00E-01
Hexanone, 2-	591-78-6	6.60E-01	0.00E+00
Hexazinone	51235-04-2	5.00E-01	1.00E-01
Hexene, 1-	592-41-6	8.00E-01	0.00E+00
Hexene, cis-2-	7688-21-3	8.00E-01	0.00E+00
Hexylene glycol (2-methyl-2,4-pentanediol)	107-41-5	5.00E-01	1.00E-01
Hydrazine	302-01-2	8.00E-01	0.00E+00
Hydrocaproic acid, 6- (6-hydroxyhexanoic acid)	1191-25-9	5.00E-01	1.00E-01
Hydrogen chloride (hydrochloric acid)*	7647-01-0	0.00E+00	0.00E+00
Hydroquinone	123-31-9	5.00E-01	1.00E-01
Indene	95-13-6	8.00E-01	0.00E+00
Indeno-1,2,3-cd-pyrene	193-39-5	8.90E-01	1.30E-01
Iron*	7439-89-6	0.00E+00	0.00E+00
Isoamyl alcohol	123-51-3	8.00E-01	0.00E+00
Isobutyl alcohol	78-83-1	8.00E-01	0.00E+00
Isobutylene (2-methyl-1-propene)	115-11-7	8.00E-01	0.00E+00
Isobutyric acid (2-methylpropanoic acid)	79-31-2	5.00E-01	1.00E-01
Isodecanol	25339-17-7	5.00E-01	1.00E-01
Isodrin	465-73-6	5.00E-01	1.00E-01
Isopentane	78-78-4	8.00E-01	0.00E+00
Isophorone	78-59-1	5.00E-01	1.00E-01
Isopropyl acetate	108-21-4	8.00E-01	0.00E+00

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Isopropyl alcohol	67-63-0	8.00E-01	0.00E+00
Isosafrole	120-58-1	5.00E-01	1.00E-01
Kelthane (dicofol)	115-32-2	5.00E-01	1.00E-01
Kepone (chlordecone)	143-50-0	5.00E-01	1.00E-01
Lead (inorganic)	7439-92-1	1.50E-01	1.00E-02
Leptophos	21609-90-5	5.00E-01	1.00E-01
Limonene, d-*	5989-27-5	0.00E+00	0.00E+00
Lithium	7439-93-2	8.00E-01	1.00E-02
Magnesium*	7439-95-4	0.00E+00	0.00E+00
Malathion	121-75-5	5.00E-01	1.00E-01
Maleic anhydride	108-31-6	5.00E-01	1.00E-01
Maleic hydrazide	123-33-1	5.00E-01	1.00E-01
Malononitrile	109-77-3	5.00E-01	1.00E-01
Mancozeb	8018-01-7	5.00E-01	1.00E-01
Manganese	7439-96-5	6.00E-02	1.00E-02
MCPA (4-(chloro-2-methylphenoxy) acetic acid)	94-74-6	5.00E-01	1.00E-01
MCPP (2-(4-chloro-2-methylphenoxy) propanoic acid)	93-65-2	5.00E-01	1.00E-01
Mercury (pH = 4.9)	7439-97-6	7.00E-02	1.00E-02
Mercury (pH=6.8)	7439-97-6	7.00E-02	1.00E-02
Merphos	150-50-5	5.00E-01	1.00E-01
Methacrylic acid (2-methyl-2-propenoic acid)	79-41-4	8.00E-01	0.00E+00
Methacrylonitrile	126-98-7	8.00E-01	0.00E+00
Methanol	67-56-1	8.00E-01	0.00E+00
Methapyrilene	91-80-5	5.00E-01	1.00E-01
Methomyl	16752-77-5	5.00E-01	1.00E-01
Methoxychlor	72-43-5	5.00E-01	1.00E-01
Methoxyethanol, 2-	109-86-4	8.00E-01	0.00E+00
Methyl acetate (acetic acid, methyl ester)	79-20-9	8.00E-01	0.00E+00
Methyl acrylate	96-33-3	8.00E-01	0.00E+00
Methyl amyl ketone (2-heptanone)	110-43-0	8.00E-01	0.00E+00

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Methyl chrysene, 1-	3351-28-8	8.90E-01	1.30E-01
Methyl chrysene, 2-	3351-32-4	8.90E-01	1.30E-01
Methyl chrysene, 6-	1705-85-7	8.90E-01	1.30E-01
Methyl cyclohexane	108-87-2	8.00E-01	0.00E+00
Methyl ethyl ketone (2-butanone)	78-93-3	8.00E-01	0.00E+00
Methyl iodide (iodomethane)	74-88-4	8.00E-01	0.00E+00
Methyl isobutyl ketone (4-methyl-2-pentanone)	108-10-1	8.00E-01	0.00E+00
Methyl mercury	22967-92-6	9.00E-01	1.00E-02
Methyl methacrylate	80-62-6	8.00E-01	0.00E+00
Methyl methanesulfonate	66-27-3	5.00E-01	1.00E-01
Methyl parathion	298-00-0	5.00E-01	1.00E-01
Methyl-1-butene, 2-	563-46-2	8.00E-01	0.00E+00
Methyl-1-propanal, 2- (isobutyraldehyde)	78-84-2	8.00E-01	0.00E+00
Methyl-2-butene, 2-	513-35-9	8.00E-01	0.00E+00
Methyl-2-pentenal, 2-	623-36-9	8.00E-01	0.00E+00
Methylcholanthrene, 3-	56-49-5	8.90E-01	1.30E-01
Methylene bromide (dibromomethane)	74-95-3	8.00E-01	0.00E+00
Methylene chloride (dichloromethane)	75-09-2	9.50E-01	0.00E+00
Methylene-bis (2-chloroaniline) 4,4'-	101-14-4	5.00E-01	1.00E-01
Methylmercury hydroxide	1184-57-2	5.00E-01	1.00E-01
Methylnaphthalene, 1-	90-12-0	8.90E-01	1.30E-01
Methylnaphthalene, 2-	91-57-6	8.90E-01	1.30E-01
Methylpyrrolidone, N-	872-50-4	5.00E-01	1.00E-01
Methylstyrene, alpha-	98-83-9	8.00E-01	0.00E+00
Methyltetrahydrofuran, 2-	96-47-9	8.00E-01	0.00E+00
Methyltetrahydropyran, 2-	10141-72-7	8.00E-01	0.00E+00
Metolachlor	51218-45-2	5.00E-01	1.00E-01
Metribuzin	21087-64-9	5.00E-01	1.00E-01
Mirex	2385-85-5	5.00E-01	1.00E-01
Molinate	2212-67-1	5.00E-01	1.00E-01

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Molybdenum	7439-98-7	3.80E-01	1.00E-02
Monocrotophos	2157-98-4	5.00E-01	1.00E-01
Morpholine	110-91-8	8.00E-01	0.00E+00
Morpholine, N-butyl-	1005-67-0	5.00E-01	1.00E-01
MTBE (methyl tert-butyl ether)	1634-04-4	8.00E-01	0.00E+00
Naled	300-76-5	5.00E-01	1.00E-01
Naphthalene	91-20-3	8.90E-01	1.30E-01
Naphthoquinone, 1,4-	130-15-4	5.00E-01	1.00E-01
Naphthylamine, 1-	134-32-7	5.00E-01	1.00E-01
Naphthylamine, 2-	91-59-8	5.00E-01	1.00E-01
Napropamide	15299-99-7	5.00E-01	1.00E-01
Neopentyl glycol	126-30-7	5.00E-01	1.00E-01
Nickel and compounds	7440-02-0	4.00E-02	1.00E-02
Nitrate-N	14797-55-8	5.00E-01	1.00E-02
Nitrite-N	14797-65-0	5.00E-01	1.00E-02
Nitroaniline, 2-	88-74-4	5.00E-01	1.00E-01
Nitroaniline, 3-	99-09-2	5.00E-01	1.00E-01
Nitroaniline, 4-	100-01-6	5.00E-01	1.00E-01
Nitrobenzene	98-95-3	9.70E-01	1.00E-01
Nitroglycerin	55-63-0	5.00E-01	1.00E-01
Nitrophenol, 2-	88-75-5	5.00E-01	1.00E-01
Nitrophenol, 3-	554-84-7	5.00E-01	1.00E-01
Nitrophenol, 4-	100-02-7	1.00E+00	1.00E-01
Nitropropane, 2-	79-46-9	8.00E-01	0.00E+00
Nitroquinoline-N-oxide, 4-	56-57-5	5.00E-01	1.00E-01
Nitrosodiethanolamine	1116-54-7	5.00E-01	1.00E-01
Nitrosodiethylamine, n-	55-18-5	8.00E-01	0.00E+00
Nitrosodimethylamine, n-	62-75-9	8.00E-01	0.00E+00
Nitrosodi-n-butylamine, n-	924-16-3	5.00E-01	1.00E-01
Nitrosodi-n-propylamine, n-	621-64-7	2.50E-01	1.00E-01

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Nitrosodiphenylamine	86-30-6	2.50E-01	1.00E-01
Nitroso-methyl-ethyl-amine, n-	10595-95-6	8.00E-01	0.00E+00
Nitrosomorpholine, N-	59-89-2	5.00E-01	1.00E-01
Nitroso-n-ethylurea, n-	759-73-9	5.00E-01	1.00E-01
Nitrosopiperidine, N-	100-75-4	5.00E-01	1.00E-01
Nitrosopyrrolidine, n-	930-55-2	5.00E-01	1.00E-01
Nitrotoluene, m-	99-08-1	5.00E-01	1.00E-01
Nitrotoluene, o-	88-72-2	5.00E-01	1.00E-01
Nitrotoluene, p-	99-99-0	5.00E-01	1.00E-01
Nonachlor, cis-	5103-73-1	5.00E-01	1.00E-01
Nonachlor, trans-	39765-80-5	5.00E-01	1.00E-01
Nonanal	124-19-6	5.00E-01	1.00E-01
Nonene, 1-n	124-11-8	8.00E-01	0.00E+00
Nonylphenol, 4-n-	104-40-5	5.00E-01	1.00E-01
Nonylphenol ethoxylate	9016-45-9	5.00E-01	1.00E-01
Octamethylpyrophosphoramidate	152-16-9	5.00E-01	1.00E-01
Octanone	106-68-3	8.00E-01	0.00E+00
Oxamyl	23135-22-0	5.00E-01	1.00E-01
Oxychlorthane	27304-13-8	5.00E-01	1.00E-01
Paraquat	1910-42-5	5.00E-01	1.00E-01
Parathion (ethyl parathion)	56-38-2	5.00E-01	1.00E-01
Pebulate	1114-71-2	5.00E-01	1.00E-01
Pendimethalin	40487-42-1	5.00E-01	1.00E-01
Pentachlorobenzene	608-93-5	5.00E-01	1.00E-01
Pentachloroethane	76-01-7	8.00E-01	0.00E+00
Pentachloronitrobenzene	82-68-8	5.00E-01	1.00E-01
Pentachlorophenol	87-86-5	7.60E-01	2.50E-01
Pentadiene, 1,3-cis-	1574-41-0	8.00E-01	0.00E+00
Pentadiene, 1,3-trans-	2004-70-8	8.00E-01	0.00E+00
Pentaerythritol tetranitrate (PETN)	78-11-5	5.00E-01	1.00E-01

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Pentane	109-66-0	8.00E-01	0.00E+00
Pentane, 2-methyl-	107-83-5	8.00E-01	0.00E+00
Pentane, 3-methyl-	96-14-0	8.00E-01	0.00E+00
Pentanediol, 1,5-	111-29-5	5.00E-01	1.00E-01
Pentanol, 1-	71-41-0	5.00E-01	0.00E+00
Pentanol, 4-methyl-2-	108-11-2	8.00E-01	0.00E+00
Pentanone, 2-	107-87-9	8.00E-01	0.00E+00
Pentene, 2-	109-68-2	8.00E-01	0.00E+00
Pentyne, 1-	627-19-0	8.00E-01	0.00E+00
Perchlorate	14797-73-0	2.00E-01	1.00E-02
Perfluorooctane sulfonic acid (1-Octanesulfonic acid, heptadecafluoro-1-) [PFOS]	1763-23-1	5.00E-01	1.00E-01
Perfluoroundecanoic acid (Undecanoic acid, uncosafluoro-) [PFUnDa]	2058-94-8	5.00E-01	1.00E-01
Perfluoropentanoic acid (Pentanoic acid, nonafluoro-) [PFPeA]	2706-90-3	5.00E-01	1.00E-01
Perfluorohexanoic acid (Hexanoic acid, undecafluoro-) [PFHxA]	307-24-4	5.00E-01	1.00E-01
Perfluorododecanoic acid (Dodecanoic acid, tricosafuoro-) [PFDoA]	307-55-1	5.00E-01	1.00E-01
Perfluorooctanoic acid (Octanoic acid, pentadecafluoro-) [PFOA]	335-67-1	5.00E-01	1.00E-01
Perfluorodecanoic acid (Decanoic acid, nonadecafluoro-) [PFDA]	335-76-2	5.00E-01	1.00E-01
Perfluorodecane sulfonic acid (1-Decanesulfonic acid, heneicosafluoro-) [PFDS]	335-77-3	5.00E-01	1.00E-01
Perfluorohexane sulfonic acid (1-Hexanesulfonic acid, tridecafluoro-) [PFHxS]	355-46-4	5.00E-01	1.00E-01
Perfluorobutyric acid (Butanoic acid, heptafluoro-) [PFBA]	375-22-4	5.00E-01	1.00E-01
Perfluorobutane sulfonic acid (1-Butanesulfonic acid, nonafluoro-) [PFBS]	375-73-5	5.00E-01	1.00E-01
Perfluoroheptanoic acid (Heptanoic acid, tridecafluoro-) [PFHpA]	375-85-9	5.00E-01	1.00E-01
Perfluorononanoic acid (Nonanoic acid, heptadecafluoro-) [PFNA]	375-95-1	5.00E-01	1.00E-01
Perfluorotetradecanoic acid (Tetradecanoic acid, heptacosafuoro-) [PFTeDA]	376-06-7	5.00E-01	1.00E-01

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Perfluorotridecanoic acid (Tridecanoic acid, pentacosafuoro-) [PFTTrDA]	72629-94-8	5.00E-01	1.00E-01
Perfluorooctane sulfonamide (1-Octanesulfonamide, heptadecafluoro-) [PFOSA]	754-91-6	5.00E-01	1.00E-01
Perylene	198-55-0	5.00E-01	1.00E-01
Phenacetin	62-44-2	5.00E-01	1.00E-01
Phenanthrene	85-01-8	8.90E-01	1.30E-01
Phenanthridine	229-87-8	5.00E-01	1.00E-01
Phenol	108-95-2	9.00E-01	1.00E-01
Phenol, 4-tert-butyl-	98-54-4	5.00E-01	1.00E-01
Phenothiazine	92-84-2	5.00E-01	1.00E-01
Phenyl mercuric acetate	62-38-4	5.00E-01	1.00E-01
Phenylene diamine, m-	108-45-2	5.00E-01	1.00E-01
Phenylene diamine, p-	106-50-3	5.00E-01	1.00E-01
Phorate	298-02-2	5.00E-01	1.00E-01
Phosalone	2310-17-0	5.00E-01	1.00E-01
Phosdrin (mevinphos)	7786-34-7	5.00E-01	1.00E-01
Phosmet	732-11-6	5.00E-01	1.00E-01
Phosphine	7803-51-2	2.00E-01	1.00E-02
Phosphorotrithioic acid, S,S,S-tributyl ester	78-48-8	5.00E-01	1.00E-01
Phosphorus, total*	7723-14-0	0.00E+00	0.00E+00
Phosphorus, white	7723-14-0	2.00E-01	1.00E-02
Phthalic anhydride	85-44-9	5.00E-01	1.00E-01
Picloram	1918-02-1	5.00E-01	1.00E-01
Picoline, 2- (2-methylpyridine)	109-06-8	8.00E-01	0.00E+00
Polybrominated biphenyls (PBBs)	67774-32-7	9.30E-01	1.00E-01
Polychlorinated biphenyls (PCBs)	1336-36-3	8.10E-01	1.40E-01
Potassium*	7440-09-7	0.00E+00	0.00E+00
Primene	68955-53-3	5.00E-01	1.00E-01
Prometon (pramitol)	1610-18-0	5.00E-01	1.00E-01
Prometryn	7287-19-6	5.00E-01	1.00E-01

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Pronamide	23950-58-5	5.00E-01	1.00E-01
Propanal (propionaldehyde)	123-38-6	8.00E-01	0.00E+00
Propane, 1-bromo-	106-94-5	8.00E-01	0.00E+00
Propanil	709-98-8	5.00E-01	1.00E-01
Propanoic acid (propionic acid)	79-09-4	8.00E-01	0.00E+00
Propanol, 1-	71-23-8	8.00E-01	0.00E+00
Propargite	2312-35-8	5.00E-01	1.00E-01
Propargyl alcohol	107-19-7	8.00E-01	0.00E+00
Propazine	139-40-2	5.00E-01	1.00E-01
Propham	122-42-9	5.00E-01	1.00E-01
Propionitrile (propane nitrile)	107-12-0	8.00E-01	0.00E+00
Propyl acetate, n-	109-60-4	8.00E-01	0.00E+00
Propylbenzene, n-	103-65-1	8.00E-01	0.00E+00
Propylene glycol	57-55-6	5.00E-01	1.00E-01
Propylene glycol monomethyl ether	107-98-2	8.00E-01	0.00E+00
Propylene oxide	75-56-9	8.00E-01	0.00E+00
Propylene tetramer	6842-15-5	5.00E-01	1.00E-01
Prothiofos (Tokuthion)	34643-46-4	5.00E-01	1.00E-01
Pyrene	129-00-0	8.90E-01	1.30E-01
Pyridine	110-86-1	8.00E-01	0.00E+00
Quinoline	91-22-5	5.00E-01	1.00E-01
Ronnel	299-84-3	5.00E-01	1.00E-01
Safrole	94-59-7	5.00E-01	1.00E-01
Selenium	7782-49-2	5.00E-01	1.00E-02
Selenourea	630-10-4	0.00E+00	0.00E+00
Silver	7440-22-4	4.00E-02	1.00E-02
Simazine	122-34-9	5.00E-01	1.00E-01
Sodium*	7440-23-5	0.00E+00	0.00E+00
Sodium hypochlorite	7681-52-9	2.00E-01	1.00E-02
Sodium polyacrylate	9003-04-7	8.00E-01	0.00E+00

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Strontium	7440-24-6	2.00E-01	1.00E-02
Strychnine	57-24-9	5.00E-01	1.00E-01
Styrene	100-42-5	8.00E-01	0.00E+00
Sulfate*	14808-79-8	0.00E+00	0.00E+00
Sulfide*	18496-25-8	0.00E+00	0.00E+00
Sulfolane	126-33-0	5.00E-01	1.00E-01
Sulfur*	7704-34-9	0.00E+00	0.00E+00
Sulprofos (Bolstar)	35400-43-2	5.00E-01	1.00E-01
Tebuconazole	107534-96-3	5.00E-01	1.00E-01
Tebuthiuron	34014-18-1	5.00E-01	1.00E-01
Terbufos	13071-79-9	5.00E-01	1.00E-01
Tert-amyl ethyl ether (TAEE)	919-94-8	8.00E-01	0.00E+00
Tert-amyl-methyl ether (TAME)	994-05-8	8.00E-01	0.00E+00
Tert-butyl alcohol (2-methyl-2-propanol)	75-65-0	8.00E-01	0.00E+00
Tetrachlorobenzene, 1,2,3,4-	634-66-2	5.00E-01	1.00E-01
Tetrachlorobenzene, 1,2,3,5-	634-90-2	5.00E-01	1.00E-01
Tetrachlorobenzene, 1,2,4,5-	95-94-3	5.00E-01	1.00E-01
Tetrachloroethane, 1,1,1,2-	630-20-6	8.00E-01	0.00E+00
Tetrachloroethane, 1,1,2,2-	79-34-5	7.00E-01	0.00E+00
Tetrachloroethylene (PCE)	127-18-4	1.00E+00	0.00E+00
Tetrachlorophenol, 2,3,4,5-	4901-51-3	5.00E-01	1.00E-01
Tetrachlorophenol, 2,3,4,6-	58-90-2	5.00E-01	1.00E-01
Tetrachlorophenol, 2,3,5,6-	935-95-5	5.00E-01	1.00E-01
Tetrachlorvinphos (Stirophos)	22248-79-9	5.00E-01	1.00E-01
Tetradifon	116-29-0	5.00E-01	1.00E-01
Tetraethyl dithiopyrophosphate (sulfotep)	3689-24-5	5.00E-01	1.00E-01
Tetraethyl lead	78-00-2	5.00E-01	1.00E-01
Tetraethyl pyrophosphate (TEPP)	107-49-3	5.00E-01	1.00E-01
Tetraethylene glycol	112-60-7	5.00E-01	1.00E-01
Tetrahydrofuran	109-99-9	8.00E-01	0.00E+00

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Tetrahydropyran	142-68-7	8.00E-01	0.00E+00
Tetraoxadodecane, 2,5,8,11-	112-49-2	5.00E-01	1.00E-01
Thallium	7440-28-0	1.00E+00	1.00E-02
Thiofanox	39196-18-4	5.00E-01	1.00E-01
Thionazin	297-97-2	5.00E-01	1.00E-01
Thiophanate-methyl	23564-05-8	5.00E-01	1.00E-01
Thiram	137-26-8	5.00E-01	1.00E-01
Tin	7440-31-5	1.00E-01	1.00E-02
Titanium	7440-32-6	3.00E-02	1.00E-02
Toluene	108-88-3	8.00E-01	0.00E+00
Toluene diisocyanate, 2,4/2,6-	26471-62-5	5.00E-01	1.00E-01
Toluenediamine, 2,4-	95-80-7	5.00E-01	1.00E-01
Toluenediamine, 2,6-	823-40-5	5.00E-01	1.00E-01
Toluidine, o-	95-53-4	5.00E-01	1.00E-01
Toluidine, p-	106-49-0	5.00E-01	1.00E-01
Toxaphene	8001-35-2	5.00E-01	1.00E-01
TPH, TX1005, C6-C12	NA	8.00E-01	0.00E+00
TPH, TX1005, >C12-C28	NA	5.00E-01	1.00E-01
TPH, TX1005, >C12-C35	NA	5.00E-01	1.00E-01
TPH, TX1005, >C28-C35	NA	5.00E-01	1.00E-01
TP Silvex, 2,4,5-	93-72-1	5.00E-01	1.00E-01
Triademenol	55219-65-3	5.00E-01	1.00E-01
Triallate	2303-17-5	5.00E-01	1.00E-01
Triaminotrinitrobenzene (TATB)	3058-38-6	5.00E-01	1.00E-01
Tributyltin oxide	56-35-9	5.00E-01	1.00E-01
Trichloro-1,2,2-trifluoroethane, 1,1,2-	76-13-1	8.00E-01	0.00E+00
Trichlorobenzene, 1,2,3-	87-61-6	5.00E-01	1.00E-01
Trichlorobenzene, 1,2,4-	120-82-1	9.70E-01	1.00E-01
Trichlorobenzene, 1,3,5-	108-70-3	5.00E-01	1.00E-01
Trichloroethane, 1,1,1-	71-55-6	9.00E-01	0.00E+00

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Trichloroethane, 1,1,2-	79-00-5	8.10E-01	0.00E+00
Trichloroethylene (TCE)	79-01-6	1.00E+00	0.00E+00
Trichlorofluoromethane	75-69-4	2.30E-01	0.00E+00
Trichloronate	327-98-0	5.00E-01	1.00E-01
Trichlorophenol, 2,3,4-	15950-66-0	5.00E-01	1.00E-01
Trichlorophenol, 2,3,5-	933-78-8	5.00E-01	1.00E-01
Trichlorophenol, 2,3,6-	933-75-5	5.00E-01	1.00E-01
Trichlorophenol, 2,4,5-	95-95-4	5.00E-01	1.00E-01
Trichlorophenol, 2,4,6-	88-06-2	5.00E-01	1.00E-01
Trichlorophenol, 3,4,5-	609-19-8	5.00E-01	1.00E-01
Trichlorophenoxyacetic acid, 2,4,5-	93-76-5	5.00E-01	1.00E-01
Trichloropropane, 1,1,2-	598-77-6	8.00E-01	0.00E+00
Trichloropropane, 1,2,3-	96-18-4	8.00E-01	0.00E+00
Triethanolamine	102-71-6	5.00E-01	1.00E-01
Triethylamine	121-44-8	8.00E-01	0.00E+00
Triethylene glycol	112-27-6	5.00E-01	1.00E-01
Triethylphosphorothioate, O, O, O-	126-68-1	5.00E-01	1.00E-01
Trifluralin	1582-09-8	5.00E-01	1.00E-01
Trimethylamine	75-50-3	8.00E-01	0.00E+00
Trimethylbenzene, 1,2,3-	526-73-8	9.70E-01	0.00E+00
Trimethylbenzene, 1,2,4-	95-63-6	8.00E-01	0.00E+00
Trimethylbenzene, 1,3,5-	108-67-8	8.00E-01	0.00E+00
Trinitrobenzene, 1,3,5-	99-35-4	6.50E-01	1.00E-01
Trinitrophenylmethylnitramine (tetryl; nitramine)	479-45-8	5.00E-01	1.00E-01
Trinitrotoluene, 2,4,6-	118-96-7	6.00E-01	1.00E-01
Tungsten (as sodium tungstate dihydride)	7440-33-7	2.00E-01	1.00E-01
Uranium (soluble salts)	7440-61-1	8.50E-01	1.00E-02

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Valeric acid (pentanoic acid)	109-52-4	5.00E-01	1.00E-01
Vanadium	7440-62-2	2.60E-02	1.00E-02
Vernam	1929-77-7	5.00E-01	1.00E-01
Vinyl acetate	108-05-4	6.50E-01	0.00E+00
Vinyl chloride	75-01-4	1.00E+00	0.00E+00
Vinylcyclohexane	695-12-5	8.00E-01	0.00E+00
Warfarin	81-81-2	5.00E-01	1.00E-01
Xylene, m-	108-38-3	8.00E-01	0.00E+00
Xylene, o-	95-47-6	8.00E-01	0.00E+00
Xylene, p-	106-42-3	8.00E-01	0.00E+00
Xylenes	1330-20-7	9.20E-01	0.00E+00
Zinc	7440-66-6	2.00E-01	1.00E-02
6 C aliphatics (TPH) (>53% n-hexane content)	NA	8.00E-01	0.00E+00
6 C aliphatics (TPH) (<53% n-hexane content)	NA	8.00E-01	0.00E+00
>6-8 C aliphatics (TPH) (>53% n-hexane content)	NA	8.00E-01	0.00E+00
>6-8 C aliphatics (TPH) (<53% n-hexane content)	NA	8.00E-01	0.00E+00
>8-10 C aliphatics (TPH)	NA	8.00E-01	0.00E+00
>10-12 C aliphatics (TPH)	NA	5.00E-01	1.00E-01
>12-16 C aliphatics (TPH)	NA	5.00E-01	1.00E-01
>16-21 C aliphatics (TPH)	NA	5.00E-01	1.00E-01
>16-21 C aliphatics (TPH) (for transformer mineral oil releases only)	NA	5.00E-01	1.00E-01
>21-35 C aliphatics (TPH)	NA	5.00E-01	1.00E-01
>21-35 C aliphatics (TPH) (for transformer mineral oil releases only)	NA	5.00E-01	1.00E-01
>7-8 C aromatics (TPH)	NA	8.00E-01	0.00E+00

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Last Revised: March 6, 2023

Chemical of Concern	CAS	ABS _{GI} (unitless)	ABS.d (unitless)
>8-10 C aromatics (TPH)	NA	8.00E-01	0.00E+00
>10-12 C aromatics (TPH)	NA	5.00E-01	1.00E-01
>12-16 C aromatics (TPH)	NA	5.00E-01	1.00E-01
>16-21 C aromatics (TPH)	NA	5.00E-01	1.00E-01
>21-35 C aromatics (TPH)	NA	5.00E-01	1.00E-01

Footnotes

*Acetic acid; Ammonium polyphosphate; Ammonium salts; Calcium; Chloride; Ethylene; Hydrogen chloride (hydrochloric acid); Iron; Limonene, d-; Magnesium; Phosphorus, total; Potassium; Sodium; Sulfate; Sulfide; Sulfur. These compounds are not necessarily of concern from a human health standpoint, therefore calculation of human health-based values is not required. However, aesthetics and ecological criteria would still apply. See table entitled "Compounds for which Calculation of a Human Health PCL is Not Required" available on the TCEQ website at <http://www.tceq.texas.gov/remediation/trrp/trrppcls.html>.

This table show gastrointestinal and dermal absorption values used in calculating protective concentration levels.

end of worksheet

Toxicity Factor changes for 2011 PCL table update

Chemical of Concern	CAS	Class ¹		SFo (mg/kg-day) ⁻¹		RfD (mg/kg-day)		URF (ug/m3) ⁻¹		RfC ³ (mg/m ³)	
		Ref ²	Ref ²	Ref ²	Ref ²	Ref ²	Ref ²	Ref ²	Ref ²		
Acetate, 2-ethoxyethanol	111-15-9	—	—	—	—	0.1	PPRTV	—	—	0.06	PPRTV
Acetate, isoamyl	123-92-2	—	—	—	—	—	—	—	—	delete value	—
Acetate, isobutyl	110-19-0	—	—	—	—	—	—	—	—	delete value	—
Acetate, sec-butyl	105-46-4	—	—	—	—	—	—	—	—	delete value	—
Acetone (2-propanone)	67-64-1	—	—	—	—	—	—	—	—	31	A
Acetophenone	98-86-2	—	—	—	—	—	—	—	—	delete value	—
Acifluorfen, sodium	62476-59-9	—	—	—	—	—	—	—	—	delete value	—
Acrolein	107-02-8	—	—	—	—	—	—	—	—	0.0005	T
Acrylamide	79-06-1	LC	—	—	—	—	—	—	—	—	—
Adipic acid (hexanedioic acid)	124-04-9	—	—	—	—	—	—	—	—	delete value	—
Allyl alcohol	107-18-6	—	—	—	—	—	—	—	—	0.0001	—
Aluminum	7429-90-5	—	—	—	—	—	—	—	—	0.005	PPRTV
Amino-2,6-dinitrotoluene, 4-	19406-51-0	—	—	—	—	—	—	—	—	delete value	—
Amino-4,6-dinitrotoluene, 2-	35572-78-2	—	—	—	—	—	—	—	—	delete value	—
Aminopyridine, 4-	504-24-5	—	—	—	—	—	—	—	—	delete value	—
Anthraquinone, 9,10-	84-65-1	LC	PPRTV	0.039	PPRTV	—	—	—	—	—	—
Antimony	7440-36-0	—	—	—	—	—	—	—	—	delete value	—
Asbestos	1332-21-4	—	—	—	—	—	—	URF removed	—	—	—
Atrazine	1912-24-9	—	—	—	—	—	—	—	—	delete value	—
Barium	7440-39-3	—	—	—	—	—	—	—	—	delete value	—
Benzaldehyde	100-52-7	—	—	—	—	—	—	—	—	delete value	—
Benzene	71-43-2	—	—	0.015	T	—	—	—	—	—	—
Benzenethiol	108-98-5	—	—	—	—	—	—	—	—	delete value	—
Benzoic acid	65-85-0	—	—	—	—	—	—	—	—	delete value	—
Benzotrichloride	98-07-7	—	—	—	—	—	—	—	—	delete value	—
Benzoyl peroxide	94-36-0	—	—	—	—	—	—	—	—	delete value	—
Benzyl alcohol	100-51-6	—	—	—	—	—	—	—	—	delete value	—
Benzyl dichloride	98-87-3	—	—	—	—	0.002	T	—	—	0.001	T

Toxicity Factor changes for 2011 PCL table update

Chemical of Concern	CAS	SFo		RfD		URF		RfC ³			
		Class ¹	Ref ²	(mg/kg-day) ⁻¹	Ref ²	(mg/kg-day)	Ref ²	(ug/m3) ⁻¹	Ref ²	(mg/m ³)	Ref ²
Biphenyl, 1,1-	92-52-4	—	—	—	—	—	—	—	—	delete value	—
Bisphenol A	80-05-7	—	—	—	—	—	—	—	—	delete value	—
Bromo-2-chloroethane, 1-	107-04-0	—	—	—	—	—	—	—	—	delete value	—
Butanal (butyraldehyde)	123-72-8	—	—	—	—	—	—	—	—	delete value	—
Butanol, 1-, 2-methyl-	137-32-6	—	—	—	—	—	—	—	—	delete value	—
Butanol, 2-methyl-2-	75-85-4	—	—	—	—	—	—	—	—	delete value	—
Butanol, n-	71-36-3	—	—	—	—	—	—	—	—	delete value	—
Butoxy ethanol, 2- (Ethylene glycol monobutyl ether; EGBE)	111-76-2	NLC	—	—	—	0.1	—	—	—	1.6	—
Butyl acetate	123-86-4	—	—	—	—	—	—	—	—	0.62	—
Butyl acrylate	141-32-2	—	—	—	—	—	—	—	—	delete value	—
Butyl benzyl phthalate	85-68-7	LC	PPRTV	—	—	—	—	—	—	delete value	—
Butyl ether, n- (dibutyl ether)	142-96-1	—	—	—	—	—	—	—	—	delete value	—
Butyl methacrylate	97-88-1	—	—	—	—	—	—	—	—	delete value	—
Butylbenzene, n-	104-51-8	—	—	—	—	0.05	PPRTV	—	—	delete value	—
Butylbenzene, sec-	135-98-8	—	—	—	—	—	—	—	—	delete value	—
Butylbenzene, tert-	98-06-6	—	—	—	—	—	—	—	—	delete value	—
Caprolactam	105-60-2	—	—	—	—	—	—	—	—	delete value	—
Captan	133-06-2	—	—	—	—	—	—	—	—	delete value	—
Carbaryl	63-25-2	—	—	—	—	—	—	—	—	delete value	—
Carbofuran	1563-66-2	—	—	—	—	—	—	—	—	delete value	—
Carbon tetrachloride	56-23-5	LC	I	0.07	—	0.004	—	0.000006	—	0.1	I
Chloral	75-87-6	—	—	—	—	—	—	—	—	delete value	—
Chloral hydrate (1,1-ethanediol, 2,2,2-trichloro-)	302-17-0	—	—	—	—	—	—	—	—	delete value	—
Chlorine	7782-50-5	—	—	—	—	—	—	—	—	0.00015	A
Chloro-1,3-butadiene, 2-	126-99-8	LC	I	—	—	—	—	0.0003	I	0.02	I
Chloro-3-methylphenol, 4-	59-50-7	—	—	—	—	—	—	—	—	delete value	—
Chloroaniline, p-	106-47-8	LC	PPRTV	—	—	—	—	—	—	delete value	—

Toxicity Factor changes for 2011 PCL table update

Chemical of Concern	CAS	Class ¹	Ref ²	SFo (mg/kg-day) ⁻¹		RfD (mg/kg-day)		URF (ug/m ³) ⁻¹		RfC ³ (mg/m ³)	
				Ref ²	Ref ²	Ref ²	Ref ²	Ref ²	Ref ²		
Dichloro-2-butene, 1,4- trans	110-57-6	SEC	PPRTV	—	—	—	—	—	—	—	—
Dichlorodifluoromethane	75-71-8	—	—	—	—	—	—	—	—	0.1	PPRTV
Dichloroethane, 1,1-	75-34-3	—	—	—	—	—	—	—	—	2.4	T
Dichloroethane, 1,2-	107-06-2	—	—	—	—	0.006	—	—	—	0.007	PPRTV
Dichloroethylene, cis-1,2-	156-59-2	—	—	—	—	—	—	—	—	0.06	T
Dichloroethylene, trans-1,2	156-60-5	IIACP	I	—	—	—	—	—	—	—	—
Dichlorofluoromethane	75-43-4	—	—	—	—	—	—	—	—	delete value	—
Dichlorophenol, 2,3-	576-24-9	—	—	—	—	—	—	—	—	delete value	—
Dichlorophenol, 2,4-	120-83-2	—	—	—	—	—	—	—	—	delete value	—
Dichlorophenol, 2,5-	583-78-8	—	—	—	—	—	—	—	—	delete value	—
Dichlorophenol, 2,6-	87-65-0	—	—	—	—	—	—	—	—	delete value	—
Dichlorophenol, 3,4-	95-77-2	—	—	—	—	—	—	—	—	delete value	—
Dichlorophenol, 3,5-	591-35-5	—	—	—	—	—	—	—	—	delete value	—
Dichlorophenoxyacetic acid, 2,4- (2,4-D)	94-75-7	—	—	—	—	—	—	—	—	delete value	—
Dichloropropene, cis 1,3-	10061-01-5	—	—	—	—	—	—	—	—	0.02	I
Dichloropropene, trans 1,3-	10061-02-6	—	—	—	—	—	—	—	—	0.02	I
Diethanolamine	111-42-2	—	—	—	—	—	—	—	—	delete value	—
Diethyl phthalate	84-66-2	—	—	—	—	—	—	—	—	delete value	—
Diethylhexyl adipate	103-23-1	—	—	—	—	—	—	—	—	delete value	—
Diisopropylbenzene, p-	100-18-5	—	—	—	—	—	—	—	—	delete value	—
Dimethyl phenol, 2,4-	105-67-9	—	—	—	—	—	—	—	—	delete value	—
Dimethylbenzidine, 3,3'-	119-93-7	LC	PPRTV	—	—	—	—	—	—	—	—
Dimethylphenethylamine, alpha, alpha-	122-09-8	—	—	—	—	—	—	—	—	delete value	—
Dimethylphthalate	131-11-3	—	—	—	—	—	—	—	—	delete value	—
Di-n-butyl phthalate	84-74-2	—	—	—	—	—	—	—	—	delete value	—
Dinitro-2-methylphenol, 4,6- (dinitro-o-cresol, 4, 6-)	534-52-1	—	—	—	—	—	—	—	—	delete value	—
Dinitrobenzene, 1,3- (dinitrobenzene, 2,4-)	99-65-0	—	—	—	—	—	—	—	—	delete value	—
Dinitrobenzene, 1,4-	100-25-4	—	—	—	—	—	—	—	—	delete value	—

Toxicity Factor changes for 2011 PCL table update

Chemical of Concern	CAS	Class ¹		SfO (mg/kg- day) ⁻¹		RfD (mg/k g-day)		URF (ug/m3) ⁻¹		RfC ³ (mg/m ³)	
		Ref ²	Ref ²	Ref ²	Ref ²	Ref ²	Ref ²	Ref ²	Ref ²		
Dinitrotoluene, 2,4-	121-14-2	—	—	—	—	—	—	—	—	delete value	—
Dinitrotoluene, 2,6-	606-20-2	—	—	—	—	—	—	—	—	delete value	—
Di-n-octyl phthalate	117-84-0	—	—	—	—	—	—	—	—	delete value	—
Dioxane, 1,4-	123-91-1	LC	—	0.1	I	0.03	I	—	—	3.6	A
Diphenyl ether	101-84-8	—	—	—	—	—	—	—	—	delete value	—
Diphenylamine	122-39-4	—	—	—	—	—	—	—	—	delete value	—
Dipropylene glycol	110-98-5	—	—	—	—	—	—	—	—	delete value	—
Diquat	85-00-7	—	—	—	—	—	—	—	—	delete value	—
Disulfoton	298-04-4	—	—	—	—	—	—	—	—	delete value	—
Diuron	330-54-1	—	—	—	—	—	—	—	—	delete value	—
Dodecylphenol, 4-	104-43-8	—	—	—	—	—	—	—	—	delete value	—
Endosulfan	115-29-7	—	—	—	—	—	—	—	—	delete value	—
Endosulfan I	959-98-8	—	—	—	—	—	—	—	—	delete value	—
Endrin	72-20-8	—	—	—	—	—	—	—	—	delete value	—
Endrin ketone	53494-70-5	—	—	—	—	—	—	—	—	delete value	—
Ethanol	64-17-5	—	—	—	—	—	—	—	—	delete value	—
Ethanol, 2-(2-aminoethoxy)-	141-43-5	—	—	—	—	—	—	—	—	delete value	—
Ethanol, 2-amino-	929-06-6	—	—	—	—	—	—	—	—	delete value	—
Ethion	563-12-2	—	—	—	—	—	—	—	—	delete value	—
Ethyl acetate	141-78-6	—	—	—	—	—	—	—	—	delete value	—
Ethyl acrylate	140-88-5	—	—	—	—	—	—	—	—	delete value	—
Ethyl benzene	100-41-4	—	—	—	—	—	—	—	—	1.9	T
Ethyl ether	60-29-7	—	—	—	—	—	—	—	—	delete value	—
Ethyl methacrylate	97-63-2	—	—	—	—	—	—	—	—	0.3	PPRTV
Ethyl-1-hexanol, 2-	104-76-7	—	—	—	—	—	—	—	—	delete value	—
Ethyl-2-hexenal, 2-	645-62-5	—	—	—	—	—	—	—	—	delete value	—
Ethylene glycol	74-85-1	—	—	—	—	—	—	—	—	delete value	—

Toxicity Factor changes for 2011 PCL table update

Chemical of Concern	CAS	Class ¹		SFo (mg/kg-day) ⁻¹		RfD (mg/kg-day)		URF (ug/m3) ⁻¹		RfC ³ (mg/m ³)	
		Ref ²	Ref ²	Ref ²	Ref ²	Ref ²	Ref ²	Ref ²	Ref ²		
Ethylene thiourea	107-21-1	—	—	—	—	—	—	—	—	delete value	—
Ethylenediamine	96-45-7	—	—	—	—	—	—	—	—	delete value	—
Ethylhexyl acrylate, 2-	107-15-3	—	—	—	—	—	—	—	—	delete value	—
Famphur	103-11-7	—	—	—	—	—	—	—	—	delete value	—
Fluorochloridone	52-85-7	—	—	—	—	—	—	—	—	delete value	—
Formic Acid	61213-25-0	—	—	—	—	0.9	PPRTV	—	—	—	—
Furan	64-18-6	—	—	—	—	—	—	—	—	delete value	—
Furfural	110-00-9	—	—	—	—	—	—	—	—	delete value	—
Hexachlorocyclohexane, gamma (lindane; gamma-BHC)	98-01-1	—	—	—	—	—	—	—	—	delete value	—
Hexanal, 2-ethyl-	58-89-9	—	—	—	—	—	—	—	—	delete value	—
Hexanediamine, 1,6-	123-05-7	—	—	—	—	—	—	—	—	delete value	—
Hexanone, 2-	124-09-4	IIACP	I	—	—	—	—	—	—	—	—
Hexazinone	591-78-6	—	—	—	—	—	—	—	—	delete value	—
Hexene, 1-	51235-04-2	—	—	—	—	0.33	T	—	—	0.11	T
Hexylene glycol (2-methyl-2,4-pentanediol)	592-41-6	—	—	—	—	—	—	—	—	delete value	—
Hydroquinone	107-41-5	LC	PPRTV	—	—	—	—	—	—	—	—
Isoamyl alcohol	123-31-9	—	—	—	—	—	—	—	—	delete value	—
Isobutyl alcohol	123-51-3	—	—	—	—	—	—	—	—	delete value	—
Isobutyric acid	78-83-1	—	—	—	—	—	—	—	—	delete value	—
Isophorone	79-31-2	—	—	—	—	—	—	—	—	delete value	—
Isopropyl alcohol	67-63-0	—	—	—	—	—	—	—	—	delete value	—
Malathion	121-75-5	—	—	—	—	—	—	—	—	0.0002	T
Maleic anhydride	108-31-6	—	—	—	—	—	—	—	—	delete value	—
Maleic hydrazide	123-33-1	—	—	—	—	—	—	—	—	delete value	—
Malononitrile	109-77-3	—	—	—	—	—	—	—	—	delete value	—
Methacrylic acid (2-methyl-2-propenoic acid)	79-41-4	—	—	—	—	—	—	—	—	delete value	—
Methacrylonitrile	126-98-7	—	—	—	—	—	—	—	—	delete value	—
Methanol	67-56-1	—	—	—	—	—	—	—	—	delete value	—

Toxicity Factor changes for 2011 PCL table update

Chemical of Concern	CAS	Class ¹		SFo (mg/kg-day) ⁻¹		RfD (mg/kg-day)		URF (ug/m3) ⁻¹		RfC ³ (mg/m ³)	
		Ref ²	Ref ²	Ref ²	Ref ²	Ref ²	Ref ²	Ref ²	Ref ²		
Methapyrilene	91-80-5	—	—	—	—	—	—	—	—	delete value	—
Methomyl	16752-77-5	—	—	—	—	—	—	—	—	delete value	—
Methoxychlor	72-43-5	—	—	—	—	—	—	—	—	delete value	—
Methoxyethanol, 2-	109-86-4	—	—	—	—	0.003	PPRTV	—	—	—	—
Methyl acetate (acetic acid, methyl ester)	79-20-9	—	—	—	—	—	—	—	—	delete value	—
Methyl acrylate	96-33-3	—	—	—	—	—	—	—	—	delete value	—
Methyl ethyl ketone (2-butanone)	78-93-3	—	—	—	—	—	—	—	—	8.8	T
Methyl iodide (iodomethane)	74-88-4	—	—	—	—	—	—	—	—	delete value	—
Methyl mercury	22967-92-6	—	—	—	—	—	—	—	—	delete value	—
Methyl parathion	298-00-0	—	—	—	—	—	—	—	—	delete value	—
Methyl-1-propanal, 2- (isobutyraldehyde)	78-84-2	—	—	—	—	—	—	—	—	delete value	—
Methyl-2-pentenal, 2-	623-36-9	—	—	—	—	—	—	—	—	delete value	—
Methylene bromide (dibromomethane)	74-95-3	—	—	—	—	—	—	—	—	0.004	PPRTV
Methylene-bis (2-chloroaniline) 4,4'-	101-14-4	LC	PPRTV	—	—	—	—	—	—	—	—
Methylmercury hydroxide	1184-57-2	—	—	—	—	—	—	—	—	delete value	—
Methylnaphthalene, 1-	90-12-0	SEC	PPRTV	—	—	—	—	—	—	—	—
Methylpyrrolidone, N-	872-50-4	—	—	—	—	—	—	—	—	delete value	—
Molybdenum	7439-98-7	—	—	—	—	—	—	—	—	delete value	—
Monocrotophos	2157-98-4	—	—	—	—	—	—	—	—	delete value	—
Morpholine	110-91-8	—	—	—	—	—	—	—	—	delete value	—
Naled	300-76-5	—	—	—	—	—	—	—	—	delete value	—
Naphthoquinone, 1,4-	130-15-4	—	—	—	—	—	—	—	—	delete value	—
Nitroaniline, 3-	99-09-2	—	—	—	—	—	—	—	—	0.0002	T
Nitroaniline, 4-	100-01-6	SEC	PPRTV	—	—	—	—	—	—	—	—
Nitroglycerin	55-63-0	LC	PPRTV	—	—	—	—	—	—	—	—
Nitrophenol, 2-	88-75-5	—	—	—	—	—	—	—	—	delete value	—
Nitrophenol, 3-	554-84-7	—	—	—	—	—	—	—	—	delete value	—
Nitrophenol, 4-	100-02-7	—	—	—	—	—	—	—	—	delete value	—
Nitropropane, 2-	79-46-9	—	—	—	—	—	—	—	—	0.02	I

Toxicity Factor changes for 2011 PCL table update

Chemical of Concern	CAS	Class ¹		SFo (mg/kg-day) ⁻¹		RfD (mg/kg-day)		URF (ug/m3) ⁻¹		RfC ³ (mg/m ³)	
		Ref ²	Ref ²	Ref ²	Ref ²	Ref ²	Ref ²	Ref ²	Ref ²		
Nitrotoluene, m-	99-08-1	—	—	—	—	—	—	—	—	delete value	—
Nitrotoluene, o-	88-72-2	LC	PPRTV	—	—	—	—	—	—	delete value	—
Nitrotoluene, p-	99-99-0	LC	PPRTV	—	—	—	—	—	—	delete value	—
Nonene, 1-n	124-11-8	—	—	—	—	—	—	—	—	delete value	—
Nonylphenol	104-40-5	—	—	—	—	—	—	—	—	delete value	—
Nonylphenol ethoxylate**	9016-45-9	—	—	—	—	—	—	—	—	delete value	—
Parathion (ethyl parathion)	56-38-2	—	—	—	—	—	—	—	—	delete value	—
Pentachlorobenzene	608-93-5	—	—	—	—	—	—	—	—	delete value	—
Pentachloroethane	76-01-7	LC	PPRTV	—	—	—	—	—	—	—	—
Pentachloronitrobenzene	82-68-8	—	—	—	—	—	—	—	—	delete value	—
Pentachlorophenol	87-86-5	—	—	—	—	—	—	—	—	delete value	—
Pentaerythritol tetranitrate (PETN)	78-11-5	—	—	—	—	0.002	PPRTV	—	—	—	—
Pentanol, 1-	71-41-0	—	—	—	—	—	—	—	—	delete value	—
Pentanol, 4-methyl-2-	108-11-2	—	—	—	—	—	—	—	—	delete value	—
Pentanone, 2-	107-87-9	—	—	—	—	—	—	—	—	delete value	—
Phenol	108-95-2	—	—	—	—	—	—	—	—	delete value	—
Phenol, 4-tert-butyl-	98-54-4	—	—	—	—	—	—	—	—	delete value	—
Phenothiazine	92-84-2	—	—	—	—	—	—	—	—	delete value	—
Phenylene diamine, m-	108-45-2	—	—	—	—	—	—	—	—	delete value	—
Phenylene diamine, p-	106-50-3	—	—	—	—	—	—	—	—	delete value	—
Phorate	298-02-2	—	—	—	—	—	—	—	—	delete value	—
Phosmet	732-11-6	—	—	—	—	—	—	—	—	delete value	—
Phosphorus, white	7723-14-0	—	—	—	—	—	—	—	—	delete value	—
Picoline, 2- (2-methylpyridine)	109-06-8	—	—	—	—	—	—	—	—	delete value	—
Primene	68955-53-3	—	—	—	—	—	—	—	—	delete value	—
Propane, 1-bromo-	106-94-5	—	—	—	—	—	—	—	—	delete value	—
Propanoic acid	79-09-4	—	—	—	—	—	—	—	—	delete value	—
Propanol, 1-	71-23-8	—	—	—	—	—	—	—	—	delete value	—

Toxicity Factor changes for 2011 PCL table update

Chemical of Concern	CAS	SFo		RfD		URF		RfC ³			
		Class ¹	Ref ²	(mg/kg-day) ⁻¹	Ref ²	(mg/kg-day)	Ref ²	(ug/m ³) ⁻¹	Ref ²	(mg/m ³)	Ref ²
Propargyl alcohol	107-19-7	—	—	—	—	—	—	—	—	delete value	—
Propionitrile (propane nitrile)	107-12-0	—	—	—	—	—	—	—	—	delete value	—
Propylene glycol	57-55-6	—	—	—	—	—	—	—	—	0.003	PPRTV
Prothiofos (Tokuthion)	34643-46-4	—	—	—	—	—	—	—	—	delete value	—
Pyridine	110-86-1	—	—	—	—	—	—	—	—	delete value	—
Quinoline	91-22-5	—	—	—	—	—	—	—	—	delete value	—
Selenium	7782-49-2	—	—	—	—	—	—	—	—	delete value	—
Silver	7440-22-4	—	—	—	—	—	—	—	—	delete value	—
Sodium diethyldithiocarbamate	7440-23-5	—	—	—	—	—	—	—	—	delete value	—
Sodium hypochlorite	148-18-5	—	—	—	—	—	—	—	—	0.00031	T
Sulfolane	7681-52-9	—	—	—	—	0.0037	—	—	—	0.0064	T
Sulprofos (Bolstar)	126-33-0	—	—	—	—	—	—	—	—	delete value	—
Tert-amyl ethyl ether (TAEE)	35400-43-2	—	—	—	—	—	—	—	—	delete value	—
Tert-amyl-methyl ether (TAME)	919-94-8	—	—	—	—	—	—	—	—	delete value	—
Tert-butyl alcohol (2-methyl-2-propanol)	994-05-8	—	—	—	—	—	—	—	—	delete value	—
Tetrachlorobenzene, 1,2,3,4-	75-65-0	—	—	—	—	—	—	—	—	delete value	—
Tetrachlorobenzene, 1,2,3,5-	634-66-2	—	—	—	—	—	—	—	—	delete value	—
Tetrachlorobenzene, 1,2,4,5-	634-90-2	—	—	—	—	—	—	—	—	delete value	—
Tetrachloroethane, 1,1,2,2-	95-94-3	LC	I	—	—	0.02	I	delete value	—	—	—
Tetrachlorophenol, 2,3,4,5-	79-34-5	—	—	—	—	—	—	—	—	delete value	—
Tetrachlorophenol, 2,3,4,6-	4901-51-3	—	—	—	—	—	—	—	—	delete value	—
Tetrachlorophenol, 2,3,5,6-	58-90-2	—	—	—	—	—	—	—	—	delete value	—
Tetrachlorvinphos (Stirophos)	935-95-5	—	—	—	—	—	—	—	—	delete value	—
Tetraethyl dithiopyrophosphate (sulfotep)	22248-79-9	—	—	—	—	—	—	—	—	delete value	—
Tetraethyl lead	3689-24-5	—	—	—	—	—	—	—	—	delete value	—
Tetraethyl pyrophosphate (TEPP)	78-00-2	—	—	—	—	—	—	—	—	delete value	—
Tetraethylene glycol	112-60-7	—	—	—	—	—	—	—	—	delete value	—

Toxicity Factor changes for 2011 PCL table update

Chemical of Concern	CAS	Class ¹		SFo (mg/kg-day) ⁻¹		RfD (mg/kg-day)		URF (ug/m3) ⁻¹		RfC ³ (mg/m ³)	
		Ref ²	Ref ²	Ref ²	Ref ²	Ref ²	Ref ²	Ref ²	Ref ²	Ref ²	
Tetraoxadodecane, 2,5,8,11-	112-49-2	–	–	–	–	–	–	–	–	delete value	–
Thallium and compounds (as thallium chloride)	7791-12-0	–	–	–	–	–	–	–	–	delete value	–
Thiofanox	39196-18-4	–	–	–	–	–	–	–	–	delete value	–
Thiram	137-26-8	–	–	–	–	–	–	–	–	delete value	–
Tin	7440-31-5	–	–	–	–	–	–	–	–	delete value	–
Toluenediamine, 2,4-	95-80-7	–	–	–	–	–	–	–	–	delete value	–
TP Silvex, 2,4,5-	93-72-1	–	–	–	–	–	–	–	–	delete value	–
Triaminotrinitrobenzene (TATB)	3058-38-6	–	–	–	–	–	–	–	–	delete value	–
Tributyltin oxide	56-35-9	–	–	–	–	–	–	–	–	delete value	–
Trichlorobenzene, 1,2,3-	87-61-6	–	–	–	–	–	–	–	–	0.002	T
Trichlorobenzene, 1,2,4-	120-82-1	LC	PPRTV	–	–	–	–	–	–	–	–
Trichlorobenzene, 1,3,5-	108-70-3	–	–	–	–	–	–	–	–	0.002	T
Trichlorofluoromethane	75-69-4	–	–	–	–	–	–	–	–	delete value	–
Trichlorophenol, 2,3,4-	15950-66-0	–	–	–	–	–	–	–	–	delete value	–
Trichlorophenol, 2,3,5-	933-78-8	–	–	–	–	–	–	–	–	delete value	–
Trichlorophenol, 2,3,6-	933-75-5	–	–	–	–	–	–	–	–	delete value	–
Trichlorophenol, 2,4,5-	95-95-4	–	–	–	–	–	–	–	–	delete value	–
Trichlorophenol, 3,4,5-	609-19-8	–	–	–	–	–	–	–	–	delete value	–
Trichlorophenoxyacetic acid, 2,4,5-	93-76-5	–	–	–	–	–	–	–	–	delete value	–
Trichloropropane, 1,1,2-	598-77-6	–	–	–	–	–	–	–	–	0.0003	I
Trichloropropane, 1,2,3-	96-18-4	LC	I	–	–	–	–	–	–	0.0003	–
Triethanolamine	102-71-6	–	–	–	–	–	–	–	–	delete value	–
Trifluralin	1582-09-8	–	–	–	–	–	–	–	–	delete value	–
Trimethylbenzene, 1,2,4-	95-63-6	–	–	–	–	0.05	N	–	–	–	–
Trimethylbenzene, 1,3,5-	108-67-8	–	–	–	–	–	PPRTV	–	–	0.006	PPRTV
Trinitrophenylmethylnitramine (tetryl; nitramine)	479-45-8	–	–	–	–	–	–	–	–	delete value	–
Trinitrotoluene, 2,4,6-	118-96-7	–	–	–	–	–	–	–	–	delete value	–
Vanadium	7440-62-2	–	–	–	–	–	–	–	–	0.0001	A

Toxicity Factor changes for 2011 PCL table update

Chemical of Concern	CAS	Class ¹		SFo (mg/kg-day) ⁻¹		RfD (mg/kg-day)		URF (ug/m ³) ⁻¹		RfC ³ (mg/m ³)	
		Ref ²	Ref ²	Ref ²	Ref ²	Ref ²	Ref ²	Ref ²	Ref ²	Ref ²	
Vinylcyclohexane	695-12-5	—	—	—	—	—	—	—	—	delete value	—
Warfarin	81-81-2	—	—	—	—	—	—	—	—	delete value	—
6 C aliphatics (TPH)	NA	—	—	—	—	—	—	—	—	0.67	—
>6-8 C aliphatics (TPH)	NA	—	—	—	—	—	—	—	—	0.67	—
>8-10 C aliphatics (TPH)	NA	—	—	—	—	—	MA DEP	—	—	0.5	T
>10-12 C aliphatics (TPH)	NA	—	—	—	—	—	MA DEP	—	—	0.5	T
>12-16 C aliphatics (TPH)	NA	—	—	—	—	—	MA DEP	—	—	0.5	T
>16-21 C aliphatics (TPH)	NA	—	—	—	—	—	MA DEP	—	—	—	—
>7-8 C aromatics (TPH)	NA	—	—	—	—	—	—	—	—	1.9	—

For questions on toxicity factors, contact the Toxicology Section at 877-992-8370.

Footnotes

1 2005 carcinogen guideline class descriptors: LC = likely to be carcinogenic to humans; SEC = suggestive evidence of carcinogenic potential; NLC = not likely to be carcinogenic to humans; IIACP = inadequate information to assess carcinogenic potential. These descriptors may be specific to the exposure pathway for which a carcinogenic toxicity factor was developed.

2 Reference (Ref): A = ATSDR chronic MRL; CU = Cornell University Pesticide Management Education Program; EPA-OP = EPA Office of Pesticide Programs; H = HEAST, July, 1997; I = IRIS; MA DEP = Massachusetts Department of Environmental Protection; N = NCEA; NYSDOH = New York State Department of Health; OEHHA = Cal/EPA Office of Environmental; PPRTV = EPA Provisional Peer Reviewed Toxicity Value; T = TCEQ Toxicology Division.

3 RS-ESL values have been rescinded by the Toxicology Division as more scientifically rigorous methods are available for the derivation of inhalation toxicity factors which impact the setting of regulatory standards (i.e., TRRP PCLs). Consequently, there are no RS-ESLs to serve as a source of inhalation toxicity factors for TRRP, and RS-ESLs have been removed from the Toxicity Factors table. Any newly developed inhalation values by the Toxicology Division will not be differentially termed as "RS-ESLs," but will be referred to as an RfC or URF (with "T" noted as the source for the Toxicology Division) and undergo a more scientifically rigorous derivation process. If inhalation may be the driving exposure pathway for a chemical in a particular instance (e.g., groundwater-to-air or subsurface-soil-to-air for class 3 groundwater) but no inhalation toxicity factors are listed in the TRRP Toxicity Factors table, then contact the TCEQ to request that an inhalation toxicity factor and PCLs be derived. See the general process for requesting a PCL at <http://www.tceq.texas.gov/remediation/trrp/pclrequests.html>.

This table shows the 2011 changes to the protective concentration level tables
end of workheet