

**Rule 57 Surface Water Quality Values  
Surface Water Assessment Section  
Michigan EGLE  
August 1, 2019**

NOTES:  
 All chemical specific values are in µg/L and expressed as total unless otherwise indicated  
 Verif Year = Verification Year  
 EXP = exponent in log base e  
 H = hardness (in mg CaCO<sub>3</sub>/L)  
 ID = insufficient data to derive value  
 NLS = no literature search has been conducted  
 NA = not applicable  
 @ = Bioaccumulative Chemical of Concern

# = carcinogen  
 \* = the lowest HNV, WV, HCV or FCV given for this chemical will adequately protect the uses identified with an ID\* or \*  
 CFa = acute conversion factor for cadmium = 1.136672-[(lnH)(0.04184)]  
 CFb = chronic conversion factor for cadmium = 1.101672-[(lnH)(0.04184)]  
 CFc = acute and chronic conversion factor for lead = 1.46203-[(lnH)(0.14571)]  
 D = value is expressed as dissolved  
 Modifications/additions to this spreadsheet compared to the previous one dated 2/18/2019 are shaded.

CAS #	Parameter Name	Human Health Values						Wildlife Value (WV)		Aquatic Life Values						
		Human Noncancer Value (HNV)		Human Cancer Value (HCV)		Verif Year	Value	Tier	Verif Year	Chronic		Acute				
		Drink Value	Non-drink Value	Drink Value	Non-drink Value					Final Chronic Value (FCV)	Tier	Aquatic Maximum Value (AMV)	Final Acute Value (FAV)	Tier	Verif Year	
50000	Formaldehyde	5000	390000	1	NA	NA	2009	NA	790	180	2	1600	2	2013		
50293	DDT # @	0.002	0.002	1	0.00015	0.00015	1997	0.000011	1	1997	0.0032	2	0.029	0.057	2	1997
50328	Benzo(a)pyrene #	NLS	NLS		NLS	NLS		NA	ID	ID	ID	ID	ID	ID	2010	
51285	2,4-Dinitrophenol	55	2800	1	NA	NA	1997	NA	19	2	130	270	2	2003		
53703	Dibenzo(a,h)anthracene #	NLS	NLS		NLS	NLS		NA	ID	ID	ID	ID	ID	1997		
56235	Carbon tetrachloride #	18	140	1	4.7	38	1	2017	NA	77	2	690	1400	2	2017	
56382	Parathion	NLS	NLS		NA	NA		NA	0.013	1	0.065	0.13	1	1997		
56553	Benzo(a)anthracene	NLS	NLS		NA	NLS		NA	ID	ID	ID	ID	ID	2015		
57125	Cyanide, free	600	48000	1	NA	NA	1997	NA	5.2	1	22	44	1	1997		
57410	Phenytin #	790	11000	1	6.1	89	1	2010	NA	120	2	1100	2200	2	2006	
57556	Propylene glycol	580000	47000000	1	NA	NA	2002	NA	290000	2	1000000	2100000	2	2002		
57749	Chlordane # @	0.0014	0.0014	1	0.00025	0.00025	1	1997	NLS	0.029	2	0.27	0.53	2	1997	
58899	Lindane # @	0.47	0.5	1	0.025	0.027	2	1998	0.026	1	0.95	1.9	1	1997		
58902	2,3,4,6-Tetrachlorophenol	120	150	2	NA	NA	2003	NA	1.2	2	11	22	2	2003		
59507	4-Chloro-3-methylphenol	6900	39000	1	NA	NA	2001	NA	7.4	2	67	130	2	2001		
60297	Ethyl ether	14000	1000000	1	NA	NA	1997	NA	ID	ID	ID	ID	ID	2013		
60571	Dieldrin # @	0.00041	0.00041	1	0.000065	0.000065	1	1997	0.000071	1	0.24	0.48	1	1997		
62533	Aniline #	190	13000	1	21	1500	1	1998	NA	3	2	10	21	2	2014	
62737	Dichlorvos	NLS	NLS		NA	NA		NA	0.0040	2	0.038	0.076	1	2017		
63252	Carbaryl	NLS	NLS		NA	NA		NA	0.52	2	2.3	4.5	2	2017		
64175	Ethanol	15000000	120000000	1	NA	NA	1998	NA	NLS		NLS	NLS	NLS			
64186	Formic acid	38000	3100000	1	NA	NA	1999	NA	ID	ID	ID	ID	ID	1999		
64197	Acetic acid (includes acetate)	16000	1300000	2	NA	NA	1998	NA	EXP(0.2732*(pH) + 7.0362)	2	EXP(0.2732*(pH) + 9.2333)	EXP(0.2732*(pH) + 9.9265)	2	2005		
67561	Methanol	14000	1100000	1	NA	NA	1998	NA	590000	2	1300000	2700000	2	2003		
67630	2-Propanol	28000	2200000	1	NA	NA	2002	NA	57000	2	500000	1000000	2	2002		
67641	Acetone	5600	450000	1	NA	NA	1997	NA	1700	2	15000	30000	1	1997		
67663	Chloroform #	350	11000	1	*	*	2015	NA	630	2	5700	11000	1	2015		
67685	Dimethylsulfoxide	830000	67000000	1	NA	NA	1998	NA	190000	2	1700000	3400000	2	1997		
67721	Hexachloroethane #	6	7.6	1	5.3	6.7	1	1997	NA	13	2	110	210	2	2005	
71363	n-Butanol	3500	250000	1	NA	NA	2011	NA	9800	2	88000	180000	2	2011		
71432	Benzene #	19	510	1	12	310	1	1997	NA	200	2	950	1900	2	2015	
71501	Acetate (includes acetic acid)	16000	1300000	2	NA	NA	1998	NA	EXP(0.2732*(pH) + 7.0362)	2	EXP(0.2732*(pH) + 9.2333)	EXP(0.2732*(pH) + 9.9265)	2	2004		
71556	1,1,1-Trichloroethane	62000	1300000	1	NA	NA	2012	NA	89	2	800	1600	2	2017		
72208	Endrin	NLS	NLS		NA	NA		NA	0.036	1	0.086	0.172	1	1997		
74839	Bromomethane	39	2600	1	NA	NA	1997	NA	4.2	2	38	75	2	2014		
74873	Chloromethane #	3500	240000	1	110	7300	1	2010	NA	ID	ID	ID	ID	2010		
74895	Methylamine	ID	ID		NA	NA	1998	NA	ID	ID	ID	ID	ID	1998		
74931	Methylmercaptan	140	11000	1	NA	NA	2001	NA	ID	ID	ID	ID	ID	2001		
74975	Bromochloromethane	1000	59000	1	NA	NA	2001	NA	ID	ID	ID	ID	ID	2010		
75003	Chloroethane #	500000	27000000	1	170	9400	1	2018	NA	1100	2	10000	20000	2	2018	
75014	Vinyl chloride #	83	4400	1	0.25	13	1	2016	NA	930	2	8400	17000	2	2015	
75047	Ethylamine	740	60000	1	NA	NA	1997	NA	ID	ID	ID	ID	ID	1998		
75058	Acetonitrile	5600	450000	1	NA	NA	2014	NA	13000	2	120000	230000	2	2014		
75070	Acetaldehyde	1200	93000	2	NA	NA	2001	NA	130	2	1200	2400	2	2001		
75092	Methylene chloride #	1600	90000	1	47	2600	1	1997	NA	1500	2	8500	17000	2	2015	
75150	Carbon disulfide	1000	34000	1	NA	NA	1998	NA	ID	ID	ID	ID	ID	2005		
75252	Bromoform #	470	8100	1	52	890	1	1998	NA	ID	ID	ID	ID	1997		
75274	Dichlorobromomethane #	170	4500	1	6.8	180	1	2015	NA	ID	ID	ID	ID	2015		
75343	1,1-Dichloroethane	9800	400000	1	NA	NA	2015	NA	740	2	6600	13000	2	2015		
75354	1,1-Dichloroethylene	1200	33000	1	NA	NA	2012	NA	130	2	1200	2300	2	2017		
75434	Dichlorofluoromethane	2500	130000	2	NA	NA	1999	NA	150	2	1300	2600	2	1999		
75569	Propylene oxide #	ID*	ID*		2.3	180	1	1997	NA	220	2	2000	4000	2	1997	
75718	Dichlorodifluoromethane	2900	90000	1	NA	NA	2014	NA	ID	ID	ID	ID	ID	2014		
76131	1,1,2-Trichloro-1,2,2-trifluoroethane	444000	1834000	1	NA	NA	2000	NA	32	2	280	570	2	2012		
76448	Heptachlor #	0.071	0.072	2	0.0017	0.0018	2	2000	NA	0.07	2	0.42	0.85	1	2000	
77474	Hexachlorocyclopentadiene	140	450	1	NA	NA	1999	NA	ID	ID	ID	ID	ID	1999		
77769	2,2-Dimethoxypropane	ID	ID		NA	NA	1998	NA	ID	ID	ID	ID	ID	1998		
78591	Isophorone #	4100	110000	1	310	8200	1	1998	NA	1300	2	4600	9200	2	2002	
78875	1,2-Dichloropropane #	12000	380000	1	9.1	290	1	2003	NA	230	2	2000	4000	2	2003	
78933	Methyl ethyl ketone	17000	1300000	1	NA	NA	2010	NA	2200	2	20000	40000	2	2010		
79005	1,1,2-Trichloroethane #	110	3000	1	12	330	1	2017	NA	730	2	3200	6400	2	2017	
79016	Trichloroethylene #	44	550	1	29	370	1	1997	NA	200	2	1800	3500	2	2015	
79061	Acrylamide #	28	2200	1	0.12	10	1	2005	NA	590	2	5300	11000	2	2008	
79094	Propionic acid	50000	3900000	1	NA	NA	1998	NA	ID	ID	ID	ID	ID	1997		

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		Drink Value	Non-drink Value	Tier	Drink Value	Non-drink Value	Tier					Final Chronic Value (FCV)	Tier	Aquatic Maximum Value (AMV)	Final Acute Value (FAV)		Tier	
79210	Paracetetic acid	NLS	NLS		NA	NA		NA				50	2	110	230	1	2018	
79345	1,1,2,2-Tetrachloroethane #	180	4300	1	3.2	78	1	2007	NA			200	2	910	1800	2	2007	
79390	Methacrylamide	NLS	NLS		NLS	NLS			NA			ID		ID	ID		2010	
80057	Bisphenol A	NLS	NLS		NLS	NLS			NLS			20	2	180	350	2	2002	
80466	Dimethylpropyl phenol	ID	ID		NA	NA	1997	NA				ID		ID	ID		1997	
83329	Acenaphthene	580	890	2	NA	NA	1999	NA				38	1	100	200	1	2014	
84662	Diethyl phthalate	14000	40000	1	NA	NA	2001	NA				110	2	980	2000	2	2001	
84742	Di-n-butyl phthalate	640	690	2	NA	NA	1998	NA				9.7	2	38	75	2	1998	
84764	Dinonyl phthalate	ID*	ID*		NA	NA	2005	NA				140	2	1200	2500	2	2005	
85018	Phenanthrene	ID*	ID*		NA	NA	1997	NA				1.7	2	5.7	11	2	2014	
85687	Butyl benzyl phthalate	6.9	160	1	NA	NA	1999	NA				67	2	310	630	1	2002	
86737	Fluorene	140	160	2	NA	NA	1999	NA				12	2	110	220	2	2014	
86748	Carbazole#	ID*	ID*		19	41	1	2001	NA			4	2	36	72	2	1999	
87616	1,2,3-Trichlorobenzene	55	73	1	NA	NA	2006	NA				ID		ID	ID		2006	
87683	Hexachlorobutadiene # @	0.093	0.098	1	0.33	0.35	2	1997	0.053	1	1999		1	2	7	15	2	1999
87821	Hexabromobenzene	81	6500	1	NA	NA	1999	NA				ID		ID	ID		1999	
87865	Pentachlorophenol #	300	450	1	1.8	2.8	1	1997	NA			EXP(1.005*(pH)-5.134)	1	EXP(1.005*(pH)-4.869)	(EXP(1.005*(pH)-4.869))*2	1	1997	
88062	2,4,6-Trichlorophenol #	1900	14000	1	41	290	1	2006	NA			5	2	39	79	2	2006	
88697	2-Isopropylphenol	ID	ID		NA	NA	2002	NA				36	2	320	650	2	2002	
88755	2-Nitrophenol	ID	ID		NA	NA	2010	NA				56	2	510	1000	2	2009	
88857	Dinoseb	28	1900	1	NA	NA	2000	NA				0.48	2	4.8	9.5	2	2000	
90120	1-Methylnaphthalene #	740	1200	2	34	54	2	2015	NA			ID		ID	ID		2014	
91203	Naphthalene	1100	2300	1	NA	NA	2017	NA				11	2	100	200	2	2017	
91576	2-Methylnaphthalene	600	1000	2	NA	NA	2009	NA				19	2	170	340	2	2009	
91941	3,3-Dichlorobenzidine #	650	950	2	0.14	0.2	2	1997	NA			4.5	2	41	81	2	1997	
92524	Biphenyl	460	690	1	NA	NA	2001	NA				13	2	54	110	2	2001	
92875	Benzidine #	74	3700	1	0.0015	0.073	1	2010	NA			2.7	2	25	49	2	2009	
93721	Silvex	83	140	2	NA	NA	2003	NA				30	2	270	540	2	2003	
93765	2,4,5-T	490	1200	1	NA	NA	2003	NA				ID		ID	ID		2003	
94757	2,4-D	240	1900	1	NA	NA	1998	NA				220	2	1400	2900	2	1998	
95487	2-Methylphenol	1400	44000	1	NA	NA	1998	NA				76	2	690	1400	2	2011	
95498	o-Chlorotoluene	360	970	1	NA	NA	2000	NA				ID		ID	ID		2000	
95501	1,2-Dichlorobenzene	2000	11000	1	NA	NA	2018	NA				13	2	120	240	2	2018	
95512	2-Chloroaniline	91	3100	1	NA	NA	2008	NA				ID		ID	ID		1999	
95578	2-Chlorophenol	190	400	2	NA	NA	2007	NA				18	2	160	320	2	2008	
95636	1,2,4-Trimethylbenzene	190	330	2	NA	NA	2001	NA				17	2	150	310	2	2001	
95658	3,4-Dimethylphenol	37	580	1	NA	NA	2011	NA				25	2	230	460	2	2011	
95943	1,2,4,5-Tetrachlorobenzene	2.8	2.9	1	NA	NA	1999	ID				3	2	23	46	2	1999	
96128	1,2-Dibromo-3-chloropropane #	ID*	ID*		0.24	4.9	1	2009	NA			ID		ID	ID		2009	
98066	tert-Butylbenzene	ID	ID		NA	NA	2001	NA				ID		ID	ID		2001	
98668	4-Chlorobenzenesulfonic acid	28000	2200000	2	NA	NA	2009	NA				ID		ID	ID		2009	
98828	Cumene	1700	3800	1	NA	NA	2011	NA				28	2	250	500	2	2008	
98862	Acetophenone	ID	ID		NA	NA	2001	NA				ID		ID	ID		2001	
98953	Nitrobenzene #	26	990	1	4.7	180	1	2010	NA			230	2	1000	2100	2	2010	
99876	p-Isopropyltoluene	ID	ID		NA	NA	2000	NA				ID		ID	ID		2000	
99898	4-Isopropylphenol	ID	ID		NA	NA	2002	NA				20	2	180	360	2	2002	
100027	4-Nitrophenol	680	18000	1	NA	NA	2009	NA				200	2	940	1900	2	2008	
100414	Ethylbenzene #	2100	8900	1	25	110	1	2004	NA			18	2	160	320	2	2003	
100425	Styrene #	4200	18000	1	20	80	1	1998	NA			160	2	1400	2900	2	1998	
100618	N-methylaniline	ID	ID		NA	NA	2006	NA				ID		ID	ID		2006	
101848	Diphenylloxide	44	78	2	NA	NA	2001	NA				2.9	2	26	52	2	2001	
102829	Tributylamine	ID	ID		NA	NA	1997	NA				ID		ID	ID		1997	
103231	Di(2-ethylhexyl)adipate	ID	ID		ID	ID	2002	NA				4.6	2	41	83	2	2004	
103333	Azobenzene #	ID*	ID*		3.7	6.0	2	2010	NA			ID		ID	ID		2010	
103651	N-propyl benzene	ID	ID		NA	NA	2000	NA				ID		ID	ID		2006	
103695	N-ethylamine	ID	ID		NA	NA	1999	NA				1.8	2	16	32	2	1997	
104518	n-Butylbenzene	ID	ID		NA	NA	2000	NA				ID		ID	ID		2000	
104767	2-Ethylhexanol #	8700	68000	1	86	660	1	2004	NA			130	2	1100	2300	2	2004	
105679	2,4-Dimethylphenol	450	8700	1	NA	NA	1997	NA				380	2	1300	2700	1	1999	
106445	4-Methylphenol	1400	45000	1	NA	NA	1998	NA				25	2	230	450	2	2013	
106467	1,4-Dichlorobenzene #	1100	11000	1	24	240	1	2015	NA			17	2	100	210	2	2015	
106478	4-Chloroaniline #	39	1400	1	2	72	1	2008	NA			ID		ID	ID		2008	
106489	4-Chlorophenol	880	14000	2	NA	NA	2010	NA				30	2	270	530	2	2010	
106934	1,2-Dibromoethane #	250	8200	1	0.17	5.7	1	2006	NA			15	2	140	280	2	2006	
107062	1,2-Dichloroethane #	6900	420000	1	6.0	360	1	2017	NA			2000	2	8200	16000	2	2017	
107131	Acrylonitrile #	58	320	1	0.21	1.2	1	2007	NA			66	2	590	1200	2	2010	
107211	Ethylene glycol	56000	4500000	1	NA	NA	2000	NA				190000	2	1700000	3400000	2	2000	
108101	4-Methyl-2-pentanone	ID	ID		NA	NA	2010	NA				ID		ID	ID		2009	
108112	4-Methyl-2-pentanol	ID	ID		NA	NA	2012	NA				ID		ID	ID		2012	
108203	Diisopropylether	7300	390000	1	NA	NA	2015	NA				ID		ID	ID		2000	
108394	3-Methylphenol	2700	89000	1	NA	NA	1999	NA				71	2	636	1271	2	1999	
108601	Bis(2-chloroisopropyl)ether #	990	47000	1	6	290	1	1997	NA			ID		ID	ID		1997	
108678	1,3,5-Trimethylbenzene	2000	4200	1	NA	NA	2001	NA				45	2	410	810	2	2001	
108872	Methylcyclohexane	ID	ID		NA	NA	2009	NA				ID		ID	ID		2009	

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108883	Toluene	5600	51000	1	NA	NA	1997	NA				270	2	1300	2600	1	2018	
108907	Chlorobenzene	470	3200	1	NA	NA	1997	NA				25	2	220	450	2	2015	
108952	Phenol	1100	1200	2	NA	NA	2003	NA						3400	6800	1	2003	
109739	Butylamine	ID	ID		NA	NA	1998	NA				57	2	510	1000	2	1998	
109897	Diethylamine	310	24000	1	NA	NA	1997	NA				20	2	180	350	2	1998	
109999	Tetrahydrofuran	350	26000	2	NA	NA	1998	NA				11000	2	74000	150000	2	1998	
110816	Diethyl disulfide	ID	ID		NA	NA	1997	NA				ID		ID	ID		1997	
110827	Cyclohexane	ID	ID		NA	NA	2006	NA				ID		ID	ID		2018	
111444	Bis(2-chloroethyl)ether #	ID*	ID*		0.79	15	2	2018	NA			ID*		ID	ID		2018	
111466	Diethylene glycol	170000	1400000	1	NA	NA	1997	NA				ID		ID	ID		1998	
111922	Dibutylamine	ID	ID		NA	NA	1997	NA				ID		ID	ID		1998	
112265	1,2-Bis(2-chloroethoxy)ethane	ID	ID		NA	NA	2018	NA				1500	2	13000	26000	2	2018	
115297	Endosulfan	85	170	1	NA	NA	2001	NA				0.029	2	0.13	0.27	1	2001	
117817	Bis(2-ethylhexyl)phthalate #	120	160	1	14	18	1	2014	NA			ID*		285	285	2	1998	
117840	Di-n-octyl phthalate	240	300	2	NA	NA	1999	NA				ID		ID	ID		1998	
118741	Hexachlorobenzene # @	0.046	0.046	1	0.00045	0.00045	1	1997	0.0003	1	1997	ID*		ID	ID		1998	
120127	Anthracene	1900	2400	2	NA	NA	1999	NA				ID		ID	ID		2014	
120821	1,2,4-Trichlorobenzene	80	99	1	NA	NA	2010	NA				130	2	420	850	1	2010	
120832	2,4-Dichlorophenol	220	1100	1	NA	NA	2006	NA				11	2	92	180	2	2008	
120956	2,4-Di-tert-pentylphenol	ID	ID		NA	NA	1997	NA				NLS		NLS	NLS			
121448	Triethylamine	4000	230000	1	NA	NA	1997	NA				260	2	1100	2100	2	1997	
121824	RDX #	83	6100	1	5.8	420	1	1999	NA			85	2	400	790	2	1999	
122349	Simazine	140	4000	1	NA	NA	2006	NA				17	2	160	310	2	2006	
123911	1,4-Dioxane #	890	72000	1	3.5	280	1	2016	NA			22000	2	200000	390000	2	1998	
124174	Diethylene glycol butyl ether acetate	330	13000	1	NA	NA	2005	NA				260	2	2300	4600	2	2005	
124481	Dibromochloromethane #	570	12000	1	6.8	150	1	2014	NA			ID		ID	ID		2014	
126727	Tris(2,3-dibromopropyl)phosphate #	ID*	ID*		0.31	13	1	2009	NA			ID		ID	ID		2009	
126863	2,4,7,9-Tetramethyl-5-decyn-4,7-diol	ID	ID		NA	NA	2001	NA				350	2	3100	6200	2	2004	
127184	Tetrachloroethylene #	320	1800	1	11	60	1	1997	NA			190	2	1400	2900	1	2015	
127195	N,N-dimethylacetamide	700	57000	1	NA	NA	1997	NA				4100	2	37000	74000	2	1997	
128370	4-Methyl-2,6-di-T-butylphenol #	3	3	2	0.25	0.25	2	1998	NA			ID		ID	ID		1998	
129000	Pyrene	15	15	2	NA	NA	1998	NA				ID		ID	ID		2014	
132649	Dibenzofuran #	ID*	ID*		NA	NA	1999	NA				4	2	36	72	2	1999	
135988	sec-Butylbenzene	ID	ID		NA	NA	2000	NA				ID		ID	ID		2010	
140669	Octylphenol	NLS	NLS		NA	NA		NA				2	2	13	26	2	1997	
140807	N,N-diethyl-1,4-pentanediamine	ID	ID		NA	NA	1998	NA				ID		ID	ID		1998	
140932	Sodium isopropyl xanthate	ID	ID		NA	NA	2014	NA				150	2	1400	2800	2	2014	
144627	Oxalic acid	4500	360000	1	NA	NA	1999	NA				250	2	2300	4600	2	2000	
149735	Trimethylorthoformate	ID	ID		NA	NA	1997	NA				ID		ID	ID		1997	
156592	cis-1,2-Dichloroethylene	880	36000	1	NA	NA	2018	NA				620	2	5500	11000	2	2000	
156605	trans-1,2-Dichloroethylene	470	19000	1	NA	NA	2018	NA				1500	2	14000	28000	2	2000	
191242	Benzo(g,h,i)perylene	ID	ID		NA	NA	2010	NA				ID		ID	ID		2010	
193395	Indeno (1,2,3-cd) pyrene #	NLS	NLS		NLS	NLS		NA				ID		ID	ID		1997	
205992	Benzo(b)fluoranthene #	NLS	NLS		NLS	NLS		NA				ID		ID	ID		1997	
206440	Fluoranthene	18	18	2	NA	NA	1999	NA				1.6	2	14	28	1	2014	
208968	Acenaphthylene	ID	ID		NA	NA	1998	NA				ID		ID	ID		2014	
218019	Chrysene #	ID	ID		ID	ID	1999	NA				ID		ID	ID		2014	
288324	Imidazole	ID	ID		NA	NA	2010	NA				ID		ID	ID		2010	
302012	Hydrazine #	42	3400	1	0.094	7.6	1	2012	NA			1.8	2	16	32	2	2012	
309002	Aldrin #	0.00012	0.00012	1	0.000087	0.000087	1	2000	NA			0.017	2	0.15	0.3	2	2000	
319846	alpha-Hexachlorocyclohexane #	19	21	1	0.016	0.017	1	2009	ID*	2009		ID*		ID	ID		2009	
319857	beta-Hexachlorocyclohexane # @	0.091	0.098	1	0.024	0.026	2	2000	ID*	2000		ID		ID	ID		2000	
319868	delta-Hexachlorocyclohexane @	ID	ID		NA	NA	2000	NA				ID		ID	ID		2000	
333415	Diazinon	12	37	1	NA	NA	2004	NA				0.004	2	0.064	0.13	1	2004	
335671	Perfluorooctanoic acid	0.42	12	1	NA	NA	2011	NA				880	2	7700	15000	2	2010	
495487	Azoxybenzene	ID	ID		NA	NA	1998	NA				ID		ID	ID		1998	
526738	1,2,3-Trimethylbenzene	290	650	1	NA	NA	2006	NA				ID		ID	ID		2006	
526750	2,3-Dimethylphenol	ID	ID		NA	NA	2011	NA				120	2	1100	2200	2	2011	
540590	1,2-Dichloroethylene	ID	ID		NA	NA	1999	NA				1100	2	9600	19000	2	2000	
541731	1,3-Dichlorobenzene	37	65	2	NA	NA	2003	NA				28	2	100	200	2	2003	
542756	1,3-Dichloropropylene #	930	39000	1	3.3	140	1	2007	NA			9.0	2	81	160	1	2007	
575371	1,7-Dimethylnaphthalene	ID	ID		NA	NA	2000	NA				ID		ID	ID		2000	
585342	3-tert-Butylphenol	ID	ID		NA	NA	2002	NA				29	2	260	530	2	2002	
591786	2-Hexanone	9700	630000	1	NA	NA	2004	NA				ID		ID	ID		2004	
594207	2,2-Dichloropropane	ID	ID		NA	NA	1998	NA				ID		ID	ID		1998	
608935	Pentachlorobenzene # @	0.38	0.38	1	NA	NA	2002	0.019	1	2002		1.2	2	11	21	2	2002	
611143	2-Ethyltoluene	ID	ID		NA	NA	2001	NA				ID		ID	ID		2001	
618451	3-Isopropylphenol	ID	ID		NA	NA	2002	NA				26	2	240	470	2	2002	
620144	3-Ethyltoluene	ID	ID		NA	NA	2001	NA				ID		ID	ID		2001	
620235	m-Tolualdehyde	ID*	ID*		NA	NA	2011	NA				34	2	310	620	2	2011	
624920	Dimethyl disulfide	480	20000	2	NA	NA	1997	NA				ID		ID	ID		1997	
625456	Methoxyacetic acid	ID	ID		NA	NA	2001	NA				270	2	2400	4800	2	2000	
625503	N-ethyl acetamide	ID	ID		NA	NA	1998	NA				ID		ID	ID		1997	
630206	1,1,1,2-Tetrachloroethane #	680	3500	1	19	100	1	2002	NA			ID		ID	ID		2002	

CAS #	Parameter Name	Human Health Values						Wildlife Value (WV)		Aquatic Life Values							
		Human Noncancer Value (HNV)			Human Cancer Value (HCY)			Verif Year	Value	Tier	Verif Year	Chronic			Acute		
		Drink Value	Non-drink Value	Tier	Drink Value	Non-drink Value	Tier					Final Chronic Value (FCV)	Tier	Aquatic Maximum Value (AMV)	Final Acute Value (FAV)	Tier	Verif Year
632224	1,1,3,3-Tetramethylurea	ID	ID		NA	NA	2006	NA				ID	ID	ID	ID	2006	
634662	1,2,3,4-Tetrachlorobenzene @	3.9	4.1	1	NA	NA	2010	ID		2010		3.4	2	18	35	2010	
637923	Ethyl tert-butyl ether	2500	130000	1	NA	NA	2007	ID				ID	ID	ID	ID	2006	
685916	Diethylacetamide	ID	ID		NA	NA	1997	NA				ID	ID	ID	ID	1997	
706785	Octachlorocyclopentene	ID	ID		NA	NA	1999	NA				ID	ID	ID	ID	1999	
792745	Dimethyl 4,4'-biphenylcarboxylate	ID	ID		NA	NA	2009	NA				ID	ID	ID	ID	2009	
872504	N-Methyl pyrrolidone	25000	2000000	1	NA	NA	2004	NA				ID	ID	ID	ID	2004	
927628	N,N-dimethyl-1-butamine	ID	ID		NA	NA	1998	NA				ID	ID	ID	ID	1998	
950107	Mephosfolan	2.5	170	1	NA	NA	2001	NA				0.37	2	3.3	6.6	2001	
1024573	Heptachlor epoxide #	0.0075	0.0076	2	0.0021	0.0021	2000	NA				ID	ID	ID	ID	2000	
1330207	Xylene	3800	16000	1	NA	NA	2015	NA				49	2	440	890	2015	
1336363	PCB # @	NLS	NLS		0.000026	0.000026	1	0.00012	1	1997		ID*	ID	ID	ID	1997	
1634044	Methyl tert butyl ether (MTBE) #	920	63000	1	100	7100	1	2019	NA			32000	2	210000	420000	1	2018
1702176	3,6-Dichloropicolinic acid	4100	200000	1	NA	NA	1998	NA				ID	ID	ID	ID	1998	
1746016	2,3,7,8-TCDD # @	6.7E-08	0.00000067	1	8.6E-09	8.6E-09	1	1997	3.1E-09	1	1997	ID*	ID*	ID*	ID*	1997	
1763231	Perfluorooctane sulfonate @	0.011	0.012	1	NA	NA	2014	NA				140	2	780	1600	2	2014
1912249	Atrazine	880	8600	1	NA	NA	2003	NA				7.3	2	50	100	2	1997
1918021	Picloram	5500	180000	1	NA	NA	2003	NA				46	2	290	570	2	2003
2385855	Mirex # @	ID*	ID*		0.000042	0.000042	1	1999	0.000016	1	1999	ID*	ID*	ID*	ID*	1999	
2691410	HMX	1400	110000	1	NA	NA	1999	NA				250	2	2300	4600	2	1999
2764729	Diquat	61	4900	1	NA	NA	2002	NA				6.0	2	54	110	2	2011
2921882	Chlorpyrifos	*	*		NA	NA	NA	NA				0.002	2	0.027	0.053	1	2003
3380345	Triclosan	NLS	NLS		NA	NA	NA	NA				4.4	2	25	50	2	2017
3383968	Temephos	NLS	NLS		NA	NA	NA	NA				0.000075	2	0.00067	0.0013	2	2011
4684940	6-Chloropicolinic acid	410	22000	1	NA	NA	1998	NA				26	2	230	460	2	1998
4860031	1-Chlorohexadecane	ID	ID		NA	NA	2000	NA				ID	ID	ID	ID	2000	
7439921	Lead	14	190	1	NA	NA	2007	NA				(EXP(0.9859*(LnH)-1.0967))*CFc <sup>2</sup>	1	(EXP(0.9859*(LnH)+0.4892))*CFc <sup>2</sup>	(EXP(0.9859*(LnH)+1.1823))*CFc <sup>2</sup>	1	2018
7439932	Lithium	720	58000	2	NA	NA	2006	NA				440	2	910	1800	1	2008
7439965	Manganese	1300	59000	1	NA	NA	2006	NA				EXP(0.8784*(LnH)+3.5385)	1	EXP(0.8784*(LnH)+4.3075)	EXP(0.8784*(LnH)+5.0006)	1	2012
7439976	Mercury @	0.0018	0.0018	1	NA	NA	1997	0.0013	1	1997		0.77 <sup>2</sup>	1	1.4 <sup>2</sup>	2.8 <sup>2</sup>	1	1997
7439987	Molybdenum	120	10000	1	NA	NA	2006	NA				3200	2	29000	58000	2	2006
7440020	Nickel	2600	210000	1	NA	NA	1997	NA				(EXP(0.846*(LnH)+0.0584))*0.997 <sup>2</sup>	1	(EXP(0.846*(LnH)+2.255))*0.998 <sup>2</sup>	(EXP(0.846*(LnH)+2.255))*0.998 <sup>2</sup>	1	1997
7440224	Silver	130	11000	1	NA	NA	1997	NA				0.06	1	0.54	1.1	1	1997
7440246	Strontium	ID*	ID*		NA	NA	1998	NA				36000	1	40000	81000	1	2019
7440280	Thallium	1.2	3.7	1	NA	NA	2016	NA				7.2	2	47	94	2	2014
7440326	Titanium	NLS	NLS		NA	NA	NA	NA				ID	ID	ID	ID	2002	
7440360	Antimony	1.7	130	1	NA	NA	1998	NA				240	2	1100	2300	2	2001
7440382	Arsenic #	10	280	1	10	10	1	2010	NA			150	1	340	680	1	1997
7440393	Barium	1900	160000	1	NA	NA	1997	NA				EXP(1.0629*(LnH)+1.1869)	2	EXP(1.0629*(LnH)+2.2354)	EXP(1.0629*(LnH)+2.9285)	2	2009
7440417	Beryllium	160	1200	1	NA	NA	2014	NA				EXP(1.6839*(LnH)-5.8575)	2	EXP(1.6839*(LnH)-3.6603)	EXP(1.6839*(LnH)-2.9672)	2	2014
7440428	Boron	4000	330000	1	NA	NA	2015	NA				7200	1	34000	69000	1	2015
7440439	Cadmium	2.5	130	1	NA	NA	1997	NA				(EXP(0.7852*(LnH)-2.715))*CFb <sup>2</sup>	1	(EXP(1.128*(LnH)-3.6867))*CFa <sup>2</sup>	(EXP(1.128*(LnH)-3.6867))*CFa <sup>2</sup>	1	1997
7440473	Chromium	120	9400	1	NA	NA	1997	NA				(EXP(0.819*(LnH)+0.6848))*0.86 <sup>2</sup>	1	(EXP(0.819*(LnH)+3.7256))*0.316 <sup>2</sup>	(EXP(0.819*(LnH)+3.7256))*0.316 <sup>2</sup>	1	1997
7440484	Cobalt	ID*	ID*		NA	NA	1998	NA				100	2	370	740	2	1998
7440508	Copper	470	38000	1	NA	NA	2005	NA				(EXP(0.8545*(LnH)-1.702))*0.96 <sup>2</sup>	1	(EXP(0.9422*(LnH)-1.7))*0.96 <sup>2</sup>	(EXP(0.9422*(LnH)-1.7))*0.96 <sup>2</sup>	1	1997
7440622	Vanadium	53	540	1	NA	NA	2009	NA				27	2	79	160	2	2011
7440666	Zinc	3300	16000	1	NA	NA	2005	NA				(EXP(0.8473*(LnH)+0.884))*0.986 <sup>2</sup>	1	(EXP(0.8473*(LnH)+0.884))*0.978 <sup>2</sup>	(EXP(0.8473*(LnH)+0.884))*0.978 <sup>2</sup>	1	1997
7664417	Ammonia, total ammonia nitrogen	ID*	ID*		NA	NA	2019	NA				'see equation in footnote	1	'see equation in footnote	'see equation in footnote	1	2019
7722647	Potassium permanganate	NLS	NLS		NA	NA	NA	NA				*	2	29	58	2	2003
7722841	Hydrogen peroxide	ID*	ID*		NA	NA	1999	NA				10	2	92	180	2	2009
7726956	Bromine	ID*	ID*		NA	NA	1999	NA				0.26	2	2.4	4.8	2	2009
7782492	Selenium & inorganic salts	120	2700	1	NA	NA	1997	NA				5	1	62	120	1	1998
7782505	Chlorine	NLS	NLS		NA	NA	NA	NA				*	1	19	38	1	1997
7783064	Hydrogen sulfide	160	13000	1	NA	NA	2004	NA				0.36	2	3.2	6.4	1	2008
8001352	Toxaphene # @	0.021	0.021	1	0.000068	0.000068	1	1997	0.00014	1	1997	0.005	2	0.15	0.3	2	1997
10028156	Ozone	NLS	NLS		NLS	NLS		NLS				0.065	2	0.58	1.2	2	2001
10061015	cis-1,3-Dichloropropylene #	930	39000	1	3.3	140	1	2007	NA			9.0	2	81	160	1	2007
10061026	trans-1,3-Dichloropropylene #	930	39000	1	3.3	140	1	2007	NA			9.0	2	81	160	1	2007
10222012	DBNPA	ID*	ID*		NA	NA	1998	NA				7.8	2	71	140	2	1998
14797558	Nitrate	10000	NLS	1	NA	NA	2003	NA				NLS	NLS	NLS	NLS		
14797730	Perchlorate	19	1600	1	NA	NA	2009	NA				400	2	6300	13000	2	2016
14808798	Sulfate	ID*	ID*		NA	NA	2019	NA				370000	1	600000	1200000	1	2019
14998277	Chlorite	830	67000	1	NA	NA	2006	NA				0.72	2	6.5	13	1	2006
15541454	Bromate #	100	8200	1	0.5	40	1	2005	NA			760	2	6900	14000	2	2005
15687271	Ibuprofen	NLS	NLS		NA	NA	NA	NA				96	2	860	1700	2	2014
15972608	Alachlor #	270	6900	1	3.5	91	1	1998	NA			11	2	150	300	2	1998
16887006	Chloride	ID*	ID*		NA	NA	2019	NA				150000	1	320000	640000	1	2019
16984488	Fluoride	NLS	NLS		NA	NA	NA	NA				EXP(0.1776*(LnH)+6.9017)	2	EXP(0.1776*(LnH)+8.1995)	EXP(0.1776*(LnH)+8.8927)	1	2013
18540299	Chromium, hexavalent	120	9400	1	NA	NA	1997	NA				11 <sup>2</sup>	1	16 <sup>2</sup>	32 <sup>2</sup>	1	1997
21725462	Cyanazine #	190	12000	1	0.93	56	1	1998	NA			110	2	1000	2000	2	1998
22204531	Naproxen	NLS	NLS		NLS	NLS		NA				96	2	860	1700	2	2015
25154523	n-Nonylphenol (mixed isomers)	NLS	NLS		NA	NA	NA	NA				2	1	7	14	1	1999
25812300	Gemfibrozil	NLS	NLS		NA	NA	NA	NA				44	2	400	800	2	2014
26628228	Sodium azide	330	27000	2	NA	NA	2003	NA				7.3	2	65	130	2	2003

CAS #	Parameter Name	Human Health Values						Wildlife Value (WV)			Aquatic Life Values								
		Human Noncancer Value (HNV)			Human Cancer Value (HCV)			Verif Year	Value	Tier	Verif Year	Chronic		Acute		Verif Year			
		Drink Value	Non-drink Value	Tier	Drink Value	Non-drink Value	Tier					Final Chronic Value (FCV)	Tier	Aquatic Maximum Value (AMV)	Final Acute Value (FAV)		Tier		
32289580	PHMB	*	*		*	*		2012	NA				0.2	2	1.8		3.6	2	2012
38836394	N-(1-methylpropylidene)-2-propanamine	ID	ID		NA	NA		1998	NA				ID		ID		ID		1998
40360449	3,5,6-Trichloropicolinic acid	ID	ID		NA	NA		1998	NA				ID		ID		ID		1998
40596698	Methoprene	21	21	2	NA	NA		2004	NA				2.9	2	26		51	2	2019
51207319	Tetrachlorodibenzofuran, 2,3,7,8-	NLS	NLS		NA	NA			NA				ID		ID		ID		1997
51218452	Metolachlor	3300	14000	1	78	340	1	2006	NA				15	2	110		210	2	2006
59756604	Fluridone	2200	80000	1	NA	NA		2002	NA				1	2	3		250	2	2003
64741668	Isopar C	ID	ID		NA	NA		2004	NA				1.9	2	17		35	2	2004
67774327	PBB #	0.00031	0.00031	1	0.00013	0.00013	1	1999	NA				NLS		NLS		NLS		
84852153	4-Nonylphenol	130	200	2	NA	NA		1998	NA				ID		ID		ID		1999
1.03E+08	Flumioxazin	NLS	NLS		NA	NA			NA				ID		ID		ID		2012
1.68E+08	Spinosad	620	7500	1	NA	NA		2005	NA				60	2	540		1100	2	2005
2.22E+08	Cyprosulamide	11000	870000	1	NA	NA		2019	NA				ID		ID		ID		2019

CAS #	Parameter Name	Human Health Values						Wildlife Value (WV)			Aquatic Life Values																				
		Human Noncancer Value (HNV)			Human Cancer Value (HCV)			Verif Year	Value	Tier	Verif Year	Chronic			Acute																
		Drink Value	Non-drink Value	Tier	Drink Value	Non-drink Value	Tier					Final Chronic Value (FCV)	Tier	Aquatic Maximum Value (AMV)	Final Acute Value (FAV)	Tier	Verif Year														
<sup>1</sup> Ammonia Aquatic Life Equations (mg/L total ammonia nitrogen; TAN) T = Temperature (in °C) MAX = Maximum value in following parentheses $FAV \left( \frac{mg\ TAN}{L} \right) = 2 * \left( 0.9490 * \left( \frac{0.0114}{1 + 10^{7.204-pH}} + \frac{1.6181}{1 + 10^{pH-7.204}} \right) * (14.70 * 10^{0.036*(20-MAX(T,13))}) \right)$ $AMV \left( \frac{mg\ TAN}{L} \right) = 0.9490 * \left( \frac{0.0114}{1 + 10^{7.204-pH}} + \frac{1.6181}{1 + 10^{pH-7.204}} \right) * (14.70 * 10^{0.036*(20-MAX(T,13))})$ $FCV \left( \frac{mg\ TAN}{L} \right) = 0.8962 * \left( \frac{0.0278}{1 + 10^{7.688-pH}} + \frac{1.1994}{1 + 10^{pH-7.688}} \right) * (2.276 * 10^{0.028*(20-MAX(T,7))})$																															
Tables showing ammonia aquatic life values at different pH (6.5-9) and temperature (0-30°C).																															