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Ambient Water Quality Criteria Comparison for the Delaware River
US EPA • Delaware • New Jersey • New York • Pennsylvania • DRBC
Human Health for Consumption of Water + Organism (µg/L)

Parameter	CAS #	US EPA[1]	DE[2]	NJ[3]	PA[4]	NY[5,6]	DRBC [8] Zones 2 to 6	DRBC Zone 1 proposed
Antimony (sys)	7440360	5.6	6 (MCL)	5.6	5.6	3	5.6	5.6
Arsenic (sys)			10 (MCL)			50	10 (MCL)	10 (MCL)
Arsenic (c)	7440382	0.018		0.017	10		0.017	0.017
Beryllium (sys)	7440417		4 (MCL)	6		3	4(MCL)	4(MCL)
Cadmium (sys)	7440439		5 (MCL)	3.4		5 (FW)	3.4	3.4
Chromium III (sys)	16065831		100 (MCL)				100 (MCL)	100 (MCL)
Chromium VI (sys)	18540299		92				92	92
Chromium (total) (sys)	67663		100 (MCL)	92		50	92	92
Copper (sys)	7440508	1300	1300 (MCL)	1300		200	1300 (MCL)	1300 (MCL)
Lead (sys)	7439921		15 (MCL)			50	15 (MCL)	15 (MCL)
Mercury (sys)	7439976			0.050	0.05	0.0007 (FC)	0.050	0.050
Methylmercury (sys)	22967926		0.3 mg/kg				0.3 mg/kg	0.3 mg/kg
Nickel (sys)	7440020	610	100 (MCL)	500	610	100	500	500
Selenium (sys)	7782492	170	50 (MCL)	170		10	170	170
Silver (sys)	7440224		170	170		50	170	170
Thallium (sys)	7440280	0.24	2 (MCL)	0.24	0.24	0.5 [7]	0.24	0.24
Zinc (sys)	7440666	7400	7400	7400		2000 [7]	7400	7400
Cyanide (sys)	57125	140	200	140	140	200	140	140
Asbestos (sys)	1332214	7 million fibers/L	7 million fibers/L	7 million fibers/L		7 million fibers/L	7 million fibers/L (MCL)	7 million fibers/L (MCL)
2,3,7,8-TCDD (Dioxin) (sys)	1746016		0.00003 (MCL)				0.00003 (MCL)	0.00003 (MCL)
2,3,7,8-TCDD (Dioxin) (c)	1746016	5.0E-09	5.0E-09	5.0E-09	5.0E-09	0.0000000006 (FC)	5.0E-09	5.0E-09
Acrolein (sys)	107028	6.1	190	6.1	190	5	6.1	6.1
Acrylonitrile (c)	107131	0.051	0.051	0.051	0.051	0.07	0.051	0.051
Benzene (sys)	71432		5 (MCL)				5 (MCL)	5 (MCL)
Benzene (c)	71432	2.2	0.61	0.15	1.2	1	0.61	0.61
Bromoform (sys)	75252		650			50	650	650
Bromoform (c)	75252	4.3	4.1	4.3	4.3		4.3	4.3
Carbon Tetrachloride (sys)	56235		5 (MCL)				5 (MCL)	5 (MCL)
Carbon Tetrachloride (c)	56235	0.23	0.23	0.33	0.23	0.4 [7]	0.23	0.23
Chlorobenzene (Monochloro-benzene) (sys)	108907	130	100 (MCL)	210	130	5	130	130
Chlorodibromo-methane (sys)	124481		680			50	680	680
Chlorodibromo-methane (Dibromochloro-	124481	0.40	0.4	0.40	0.40		0.40	0.40
Chloroethane	75003					5		
Chloroform (sys)			340	68			68	68
Chloroform (c)	67663	5.7		68	5.7	7	5.7	5.7
Dichlorobromo-methane (sys)	75274		680			50	680	680
Dichlorobromo-methane (Bromodichloro-	75274	0.55	0.55	0.55	0.55		0.55	0.55
1,1-Dichloroethane	75343					5		
1,2-Dichloroethane (sys)	107062		5 (MCL)				5 (MCL)	5 (MCL)
1,2-Dichloroethane (c)	107062	0.38	0.38	0.29	0.38	0.6	0.38	0.38
1,1-Dichloroethylene (sys)	75354	330	7 (MCL)	4.7	33		7 (MCL)	7 (MCL)
1,2-Dichloropropane (c)	78875	0.50	0.50	0.50		1	0.50	0.50
1,3-Dichloropropene (1,3-Dichloropropylene) (sys)	542756		1000		10		1000	1000
1,3-Dichloropropene (cis and trans) (c)	542756	0.34	0.69	0.34		0.4	0.34	0.34
Ethylbenzene (sys)	100414	530	700 (MCL)	530	530	5	530	530
Methyl Bromide (sys)	74839	47	47	47	47		47	47

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Dichloromethane(methylene chloride)(sys)	75092		5 (MCL)				5 (MCL)	5 (MCL)
Dichloromethane(methylene chloride)(c)	75092	4.6	4.6	2.5	4.6	5	4.6	4.6
1,1,2,2-Tetrachloroethane (sys)				4.7				
1,1,2,2-Tetrachloroethane (c)	79345	0.17	0.17		0.17	0.2	0.17	0.17
Tetrachloro-ethylene (PCE) (sys)	127184		5 (MCL)				5 (MCL)	5 (MCL)
Tetrachloro-ethylene (PCE) (c)	127184	0.69	0.69	0.34	0.69	0.7	0.69	0.69
Toluene (sys)	108883	1300	1000 (MCL)	1300	1300	5	1300	1300
1,2-Trans-Dichloroethylene (sys)	156605	140	100 (MCL)	590	140	5	140	140
1,1,1-Trichloroethane (sys)	71556		200 (MCL)	120		5	200 (MCL)	200 (MCL)
1,1,2-Trichloroethane (sys)	79005		5 (MCL)				5 (MCL)	5 (MCL)
1,1,2-Trichloroethane (c)	79005	0.59	0.59	13	0.59	1	0.59	0.59
Trichloroethylene (sys)	79016		5 (MCL)				5 (MCL)	5 (MCL)
Trichloroethylene (Trichloroethene) (TCE) (c)	79016	2.5	2.5	1.0	2.5	5	2.5	2.5
Vinyl Chloride (sys)	75014		2 (MCL)				2 (MCL)	2 (MCL)
Vinyl Chloride (c)	75014	0.025	0.025	0.082	0.025	0.3 [7]	0.025	0.025
2-Chlorophenol (sys)	95578	81	81	81	81		81	81
2,4-Dichlorophenol (DCP) (sys)	120832	77	77	77	77		77	77
2,4-Dimethylphenol (sys)	105679	380	380	380	380	50 [7]	380	380
2-Methyl-4,6-Dinitrophenol (4,6-Dinitro-o-cresol) (sys)	534521	13		13	13		13	13
2,4-Dinitrophenol (sys)	51285	69	69	69	69	10 [7]	69	69
Pentachlorophenol (sys)	87865		1 (MCL)				1 (MCL)	1 (MCL)
Pentachlorophenol (c)	87865	0.27	0.27	0.27	0.27		0.27	0.27
Phenol (sys)	108952	21000	10000	10000	21000		10000	10000
2,4,6-Trichlorophenol (c)	88062	1.4	1.4	0.58	1.4		1.4	1.4
Acenaphthene (sys)	83329	670	670	670	670		670	670
Anthracene (sys)	120127	8300	8300	8300	8300		8300	8300
Benzidine (sys)	92875		59				59	59
Benzidine (c)	92875	8.6E-05	8.6E-05	8.6E-05	8.6E-05	0.02 [7]	8.60E-05	8.60E-05
Benzo(a)-Anthracene (c)	56553	0.0038	0.038	0.038	0.0038	0.002 [7]	0.0038	0.0038
Benzo(a)Pyrene (sys)	50328		0.2 (MCL)				0.2 (MCL)	0.2 (MCL)
Benzo(a)Pyrene (BaP) (c)	50328	0.0038	0.0038	0.0038	0.0038	0.0012 (FC)	0.0038	0.0038
Benzo(b)-Fluoranthene (3,4-Benzofluor-anthene) (c)	205992	0.0038	0.038	0.038	0.0038	0.002 [7]	0.038	0.038
Benzo(k)-Fluoranthene (c)	207089	0.0038		0.38	0.0038	0.002 [7]	0.38	0.38
Bis(2-Chloroethoxyl) Methane	111911					5 [7]		
Bis(2-Chloroethyl)Ether (Dichloroethyl ether) (c)	111444	0.030	0.030	0.030	0.030	0.03	0.03	0.03
Bis(2-Chloroisopropyl) Ether (sys)	108601	1400	1400	1400	1400	5 [7]	1400	1400
Bis(2-Ethylhexyl) Phthalate (sys)	117817		6 (MCL)				6 (MCL)	6 (MCL)
Bis(2-Ethylhexyl) Phthalate (DEHP) (c)	117817	1.2	1.2	1.2	1.2	5	1.2	1.2
Butylbenzyl Phthalate (sys)	85687	1500	1500	150	150	50 [7]	150	150
2-Chloronaphthalene (sys)	91587	1000	1000	1000	1000		1000	1000
Chrysene (c)	218019	0.0038	0.038	3.8	0.0038	0.002 [7]	3.8	3.8
Dibenzo(a,h) Anthracene (c)	53703	0.0038	0.0038	0.0038	0.0038		0.0038	0.0038
1,2-Dichlorobenzene (ortho) (sys)	95501	420	600 (MCL)	2000	420	3	420	420
1,3-Dichlorobenzene (meta) (sys)	541731	320	350	2200	420	3	420	420
1,4-Dichlorobenzene (para) (sys)	106467	63	75 (MCL)	550	420	3	63	63
3,3'-Dichlorobenzidine (c)	91941	0.021	0.021	0.021	0.021	5 [7]	0.021	0.021

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Diethyl Phthalate (sys)	84662	17000	17000	17000	17000	50 [7]	17000	17000
Dimethyl Phthalate (sys)	131113	270000	270000		270000	50 [7]	270000	270000
Di-n-Butyl Phthalate (sys)	84742	2000	2000	2000	2000	50 [7]	2000	2000
2,4-Dinitrotoluene (sys)	121142		68			5 [7]	68	68
2,4-Dinitrotoluene (c)	121142	0.11	0.11	0.11	0.05		0.11	0.11
2,6-Dinitrotoluene	606202				0.05	0.07 [7]		
Di-n-Octyl Phthalate	117840					50 [7]		
1,2-Diphenyl-hydrazine (c)	122667	0.036	0.036	0.036	0.036	0.05 [7]	0.036	0.036
Fluoranthene (sys)	206440	130	130	130	130	50 [7]	130	130
Fluorene (sys)	86737	1100	1108	1100	1100	50 [7]	1100	1100
Hexachloro-benzene (sys)	118741		0.35				0.35	0.35
Hexachloro-benzene (c)	118741	0.00028	0.00028	0.00028	0.00028	0.00003 (FC)	0.00028	0.00028
Hexachloro-butadiene (c)	87683	0.44	0.44	0.44	0.44		0.44	0.44
Hexachlorocyclo-pentadiene (sys)	77474	40	50 (MCL)	40	40	5 [7]	40	40
Hexachloroethane (sys)	67721		20				20	20
Hexachloroethane (c)	67721	1.4	1.4	1.4	1.4	0.6 (FC)	1.4	1.4
Ideno(1,2,3-cd)Pyrene (c)	193395	0.0038	0.038	0.038	0.0038	0.002 [7]	0.038	0.038
Isophorone (sys)	78591		6700			50 [7]	6700	6700
Isophorone (c)	78591	35	35	35	35		35	35
Nitrobenzene (sys)	98953	17	17	17	17	0.4	17	17
N-Nitrosodi-methylamine (c)	62759	0.00069	0.00069	0.00069	0.00069		0.00069	0.00069
N-Nitrosodi-N-Propylamine (Di-n-	621647	0.0050	0.005	0.0050	0.005		0.0050	0.0050
N-Nitrosodi-N-phenylamine (c)	86306	3.3	3.3	3.3	3.3	50 [7]	3.3	3.3
Phenanathrene	85018					50 [7]		
Pyrene (sys)	129000	830	830	830	830	50 [7]	830	830
1,2,4-Trichlorobenzene (sys)	120821	35	70 (MCL)	21	35	5 [7]	35	35
Aldrin (sys)	309002		0.025				0.025	0.025
Aldrin (c)	309002	4.9E-05	4.90E-05	4.9E-05	4.9E-05	0.001 (FC)	4.9E-05	4.9E-05
alpha-BHC (sys)	319846		0.2 (MCL)				0.2 (MCL)	0.2 (MCL)
alpha-BHC (alpha-HCH) (c)	319846	0.0026	0.0026	0.0026	0.0026	0.002 (FC)	0.0026	0.0026
beta-BHC (sys)	319857		0.2 (MCL)				0.2 (MCL)	0.2 (MCL)
beta-BHC (beta-HCH) (c)	319857	0.0091	0.0091	0.0091	0.0091	0.007 (FC)	0.0091	0.0091
gamma-BHC (gamma-HCH/Lindane)(sys)	58899	0.98	0.12	0.98	0.098	0.008 (FC)	0.98	0.98
delta-BHC	319868					0.008 (FC)		
Chlordane (sys)	57749		0.14				0.14	0.14
Chlordane (c)	57749	0.00080	0.0008	0.00010	0.00080	0.00002 (FC)	0.00080	0.00080
4,4'-DDT (c)	50293	0.00022		0.00022	0.00022	0.00001 (FC)	0.00022	0.00022
4,4'-DDE (c)	72559	0.00022		0.00022	0.00022	0.000007 (FC)	0.00022	0.00022
4,4'-DDD (p,p=-TDE)(c)	72548	0.00031		0.00031	0.00031	0.00008 (FC)	0.00031	0.00031
DDT and Metabolites (DDD and DDE) (sys)			0.037				0.037	0.037
DDT and Metabolites (DDD and DDE) (c)			0.00022					
Dieldrin (sys)	60571		0.041				0.041	0.041
Dieldrin (c)	60571	5.2E-05	5.20E-05	5.2E-05	5E-05	0.0000006(FC)	5.2E-05	5.2E-05
alpha-Endosulfan (sys)	959988	62			62		62	62
beta-Endosulfan (sys)	33213659	62			62		62	62
Endosulfan (alpha & beta)				62				
Endosulfan Sulfate (sys)	1031078	62		62			62	62
Endrin (sys)	72208	0.059	0.29	0.059	0.059	0.02 (FC)	0.059	0.059
Endrin Aldehyde (sys)	7421934	0.29	0.29	0.059	0.29	5 [7]	0.29	0.29
Heptachlor (sys)	76448		0.18				0.18	0.18
Heptachlor (c)	76448	7.9E-05	7.90E-05	7.9E-05	7.9E-05	0.0002 (FC)	7.9E-05	7.9E-05

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Heptachlor Epoxide (sys)	1024573		0.0046				0.0046	0.0046
Heptachlor Epoxide (c)	1024573	3.9E-05	3.90E-05	3.9E-05	3.9E-05	0.0003 (FC)	3.9E-05	3.9E-05
PCBs (c)		6.4E-05	6.40E-05	6.4E-05	6.4E-05	0.000001 (FC)		
Toxaphene (sys)	8001352		3 (MCL)				3 (MCL)	3 (MCL)
Toxaphene (c)	8001352	0.00028	0.00028	0.00028	0.00028	0.000006 (FC)	0.00028	0.00028
Barium (sys)			2000 (MCL)	2000	2400	1000	2000 (MCL)	2000 (MCL)
2,4-Dichloro- phenoxyacetic acid (2,4-D)			70 (MCL)			50	70 (MCL)	70 (MCL)
Fluoride (sys)			4000 (MCL)			1500	4000 (MCL)	4000 (MCL)
Hexachlorocyclo-hexane (c)			0.0091					
Methoxychlor (sys)			40 (MCL)	40		35	40 (MCL)	40 (MCL)
Nitrate (sys)	10000		10000 (MCL)	10000		10000	10000 (MCL)	10000 (MCL)
Total Trihalomethanes (TTHM)			80 (MCL)				80 (MCL)	80 (MCL)
2,4,5 Trichloro-phenoxypropionic acid (2,4,5-			50 (MCL)			10	50 (MCL)	50 (MCL)
Chloride **NP**	16887-00-6			250000		250000		
Methyl tertiary-butyl ether (MTBE)	1634-04-4			70		10		
N-Nitrosodi-n-butylamine **NP** (c)	924163	0.0063		0.0063			0.0063	0.0063
N-Nitrosodiethyl-amine **NP** (c)	55185	0.0008		0.00023			0.0008	0.0008
N-Nitrosopyrrolidine **NP** (c)	930552	0.016		0.016			0.016	0.016
Pentachloro-benzene **NP** (sys)	608935	1.4		1.4		5 [7]	1.4	1.4
1,2,4,5-Tetratchloro-benzene **NP** (sys)	95943	0.97		0.97		5 [7]	0.97	0.97
2,4,5-Trichloro-phenol (sys)	95954	1800		1800			1800	1800
Boron	7440428				3100			
Acetone	67641				3500	50 [7]		
Methylethyl ketone	78933				21000	50 [7]		
1,2,3-Trichloropropane	96184				210	0.04		
Xylene	1330207				70000	5 (isomers)		
Formaldehyde	50000				700	8		
ethylene glycol	107-21-1					50 [9]		
molybdenum	7439-98-7				210			210 [10]

[1]National Recommended Water Quality Criteria 2006
[2]Delaware Water Quality Standards regulation, amended July 11, 2004
[3]From New Jersey's amended Surface Water Quality Standards, June 16, 2008
[4]Title 25, Chapter 93 of Pennsylvania Code, Water Quality Standards, August 2009
[5]NYSDEC Part 703: Surface Water and Groundwater Quality Standards and Groundwater Effluent Limitations amended February 16, 2008
Standards for health- water souce unless noted as (FC) fish consumption only
[6] NYSDEC criteria derived based on water source only
[7] NYS Division of Water TOGS 1.1.1 guidance value
[8]DRBC Water Quality Regulations, dated December 8, 2010, Zones 2 to 6
[9]NYSDEC Standards Documentaion 1985
[10]Not listed in DRBC Water Quality Regulations, dated December 8, 2010
NP = non-priority pollutant