

Table 1-3  
Groundwater Standards for  
Organic Compounds

2016 BNL Groundwater Status Report

CHEMICAL CONSTITUENT	CAS #	NYS AMBIENT WATER QUALITY STANDARDS AND GUIDANCE VALUES µg/L (a)	FEDERAL DRINKING WATER STANDARDS µg/L (b)
<i>Volatile Organics</i>			
1,1-Dichloroethane	75-34-3	5	-
1,1-Dichloroethene	75-35-4	5	7
1,1,1-Trichloroethane	71-55-6	5	200
1,1,2-Trichloroethane	79-00-5	1	5
1,1,2,2-Tetrachloroethane	79-34-5	5	-
1,2-Dibromo-3-chloropropane	96-12-8	0.04	0.2
1,2-Dibromoethane (EDB)	106-93-4	0.0006	0.05
1,2-Dichlorobenzene	95-50-1	3	600
1,2-Dichloroethane	107-06-2	0.6	5
1,2-Dichloropropane	78-87-5	1	5
1,3-Dichlorobenzene	541-73-1	3	600
1,4-Dichlorobenzene	106-46-7	3	75
2-Butanone	78-93-3	50	-
2-Hexanone	591-78-6	50	-
4-Methyl-2-pentanone	108-10-1	-	-
Acetone	67-64-1	50	-
Benzene	71-43-2	1	5
Bromochloromethane	74-97-5	5	-
Bromodichloromethane	75-27-4	50	100
Bromoform	75-25-2	50	100
Bromomethane	74-83-9	5	-
Carbon disulfide	75-15-0	60	-
Carbon Tetrachloride	56-23-5	5	5
Chlorobenzene	108-90-7	5	-
Chloroethane	75-00-3	5	-
Chloroform	67-66-3	7	100
Chloromethane	74-87-3	5	-
cis-1,2-Dichloroethene	156-59-2	5	70
cis-1,3-Dichloropropene	10061-01-5	0.4(c)	-
Dibromochloromethane	124-48-1	50	-
Ethylbenzene	100-41-4	5	700
Methylene chloride	75-09-2	5	5
Methyl-tert-butyl ether (MTBE)	1634-04-4	10	-
Styrene	100-42-5	5	100
Tetrachloroethene	127-18-4	5	5
Toluene	108-88-3	5	1000
trans-1,2-Dichloroethene	156-60-5	5	100
trans-1,3-Dichloropropene	10061-02-6	0.4(c)	-
Trichloroethene	79-01-6	5	5
Vinyl chloride	75-01-4	2	2
Xylenes (total)	1330-20-7	5(d)	10000

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<i>Semivolatile Organics</i>			
1,2,4-Trichlorobenzene	120-82-1	5	70
1,4-Dioxane	123-91-1	50 (g)	
2-Chloronaphthalene	91-58-7	10	-
2-Chlorophenol	95-57-8	1(e)	-
2-Methylnaphthalene	91-57-6	-	-
2-Methylphenol	95-48-7	1(e)	-
2-Nitroaniline	88-74-4	5	-
2-Nitrophenol	88-75-5	1(e)	-
2,2'-oxybis(1-Chloropropane)	108-60-1	5	-
2,4-Dichlorophenol	120-83-2	1(e)	-
2,4-Dimethylphenol	105-67-9	1(e)	-
2,4-Dinitrophenol	51-28-5	1(e)	-
2,4-Dinitrotoluene	121-14-2	5	-
2,4,5-Trichlorophenol	95-95-4	1(e)	-
2,4,6-Trichlorophenol	88-06-2	1(e)	-
2,6-Dinitrotoluene	606-20-2	5	-
3-Nitroaniline	99-09-2	5	-
3,3'-Dichlorobenzidine	91-94-1	5	-
4-Bromophenyl phenyl ether	101-55-3	-	-
4-Chloro-3-methylphenol	59-50-7	1(e)	-
4-Chloroaniline	106-47-8	5	-
4-Chlorophenyl phenyl ether	7005-72-3	-	-
4-Methylphenol	106-44-5	1(e)	-
4-Nitroaniline	100-01-6	5	-
4-Nitrophenol	100-02-7	1(e)	-
4,6-Dinitro-2-methylphenol	534-52-1	1(e)	-
Acenaphthene	83-32-9	20	-
Acenaphthylene	208-96-8	-	-
Anthracene	120-12-7	50	-
Benzo(a)anthracene	56-55-3	0.002	-
Benzo(a)pyrene	50-32-8	ND	0.2
Benzo(b)fluoranthene	205-99-2	0.002	-
Benzo(g,h,i)perylene	191-24-2	-	-
Benzo(k)fluoranthene	207-08-9	0.002	-
bis-(2-Chloroethoxy)methane	111-91-1	5	-
bis-(2-Chloroethyl)ether	111-44-4	1	-
bis(2-Ethylhexyl)phthalate	117-81-7	5	-
Butylbenzylphthalate	85-68-7	50	-
Carbazole	86-74-8	-	-
Chrysene	218-01-9	0.002	-
Dibenzofuran	132-64-9	-	-
Dibenz(a,h)anthracene	53-70-3	-	-
Diethylphthalate	84-66-2	50	-
Dimethylphthalate	131-11-3	50	-

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		µg/L (a)	µg/L (b)
Di-n-butylphthalate	84-74-2	50	-
Di-n-octylphthalate	117-84-0	50	-
Fluoranthene	206-44-0	50	-
Fluorene	86-73-7	50	-
Hexachlorobenzene	118-74-1	0.04	1
Hexachlorobutadiene	87-68-3	0.5	-
Hexachlorocyclopentadiene	77-47-4	5	50
Hexachloroethane	67-72-1	5	-
Indeno(1,2,3-cd)pyrene	193-39-5	0.002	-
Isophorone	78-59-1	50	-
Naphthalene	91-20-3	10	-
Nitrobenzene	98-95-3	0.4	-
N-Nitroso-di-n-propylamine	621-64-7	-	-
N-Nitrosodiphenylamine	86-30-6	50	-
Pentachlorophenol	87-86-5	1(e)	1
Perchlorate	14797-73-0	18	15(f)
Phenanthrene	85-01-8	50	-
Phenol	108-95-2	1(e)	-
Pyrene	129-00-0	50	-

Notes:

- No standard available
- ND Non-detectable
- (a) NYSDEC June 1998 Ambient Water Quality Standards and Guidance Values for Groundwater Class GA and April 2000 Addendum.
- (b) USEPA February 1996, Drinking Water Regulations and Health Advisories. Note that the information under MCL was converted from mg/l to µg/L in order to maintain uniform units for this table.
- (c) Refers to sum of cis and trans isomers.
- (d) Refers to concentration of individual isomers.
- (e) Refers to sum of all phenolic compounds.
- (f) US EPA Interim Health Standard
- (g) Unspecified Organic Compound Standard.

NYSDEC = New York State Department of Environmental Conservation

µg/L = micrograms per liter (ppb)

mg/L = milligrams per liter (ppm)

MCL = Maximum Contaminant Level

USEPA = United States Environmental Protection Agency