

3745-81-12

Maximum contaminant levels and best available technologies for organic contaminants.

~~(A) The following maximum contaminant levels for total trihalomethanes and haloacetic acids (five) apply to community public water systems and nontransient noncommunity public water systems that supply water treated with any combination of chlorine, chloramines, chlorine dioxide or ozone. Compliance with the maximum contaminant levels of total trihalomethanes and haloacetic acids (five) is calculated according to rule 3745-81-24 of the Administrative Code. The director identifies the following as the best available technology (BAT), for achieving compliance with the maximum contaminant levels for organic disinfection byproducts identified in this table until the applicable compliance date identified in paragraph (D)(1) of rule 3745-81-24 of the Administrative Code:~~

Contaminant	MCL/mg/l	BAT
Total trihalomethanes	0.080	Enhanced coagulation or enhanced softening or GAC10, with chlorine as the primary and residual disinfectant
Haloacetic acids (five)	0.060	Enhanced coagulation or enhanced softening or GAC10, with chlorine as the primary and residual disinfectant.

~~(B)(A) The director identifies~~ may determine that a public water system shall apply the following as ~~the~~ best available technology (BAT), for achieving compliance with the maximum contaminant levels (MCLs) for organic disinfection byproducts identified in this table ~~beginning on the applicable compliance date identified in paragraph (D)(1) of rule 3745-81-24 of the Administrative Code:~~

Contaminant	MCL (mg/L)	BAT
Total trihalomethanes	0.080	Enhanced coagulation or enhanced softening plus GAC10; or nanofiltration with a molecular weight of less than or equal to 1000 Daltons; or GAC20
Haloacetic acids (five)	0.060	Enhanced coagulation or enhanced softening plus GAC10; or nanofiltration

		with a molecular weight of less than or equal to 1000 Daltons; or GAC20
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~~(C)~~(B) The director ~~identifies~~ may determine that a public water system shall apply the following ~~as the~~ best technology, treatment techniques, or other means available for achieving compliance with the ~~maximum contaminant levels~~ MCLs for TTHM and HAA5 identified in this rule for consecutive systems and applies only to the disinfected water that consecutive systems buy or otherwise receive:

Contaminant	MCL (mg/L)	BAT
Total trihalomethanes	0.080	Systems serving greater than or equal to 10,000: Improved distribution system and storage tank management to reduce residence time, plus the use of chloramines for disinfectant residual maintenance. Systems serving less than 10,000: Improved distribution system and storage tank management to reduce residence time.
Haloacetic acids (five)	0.060	Systems serving greater than or equal to 10,000: Improved distribution system and storage tank management to reduce residence time, plus the use of chloramines for disinfectant residual maintenance. Systems serving less than 10,000: Improved distribution system and storage tank management to reduce residence time.

~~(D)~~(C) The following maximum contaminant levels (MCLs) apply to community public water systems and nontransient noncommunity public water systems. The

associated ~~best available technologies (BATs)~~BATs, designated as GAC for granular activated carbon and PTA for packed-tower aeration, identify the best technology, treatment techniques, or other means available for achieving compliance with the stated ~~maximum contaminant levels~~MCLs. The director may determine that a public water system shall apply best available technology in order to reduce the level of a contaminant to below its ~~maximum contaminant level~~MCL.

Contaminant	CAS number	MCL milligrams per liter(mg/L)	BAT
Vinyl chloride	75-01-4	0.002	PTA
Benzene	71-43-2	0.005	GAC PTA
Carbon tetrachloride	56-23-5	0.005	GAC PTA
p-Dichlorobenzene	106-46-7	0.075	GAC PTA
1,2-Dichloroethane	107-06-2	0.005	GAC PTA
1,1-Dichloroethylene	75-35-4	0.007	GAC PTA
Trichloroethylene	79-01-6	0.005	GAC PTA
1,1,1-Trichloroethane	71-55-6	0.2	GAC PTA
o-Dichlorobenzene	95-50-1	0.6	GAC PTA
cis-1,2-Dichloroethylene	156-59-2	0.07	GAC PTA
trans-1,2-Dichloroethylene	156-60-5	0.1	GAC PTA
1,2-Dichloropropane	78-87-5	0.005	GAC PTA
Dichloromethane	75-09-2	0.005	PTA
Ethylbenzene	100-41-4	0.7	GAC PTA
Monochlorobenzene	108-90-7	0.1	GAC PTA
Styrene	100-42-5	0.1	GAC PTA
Tetrachloroethylene	127-18-4	0.005	GAC PTA
Toluene	108-88-3	1	GAC PTA
1,2,4-Trichlorobenzene	120-82-1	0.07	GAC PTA
1,1,2-Trichloroethane	79-00-5	0.005	GAC PTA

Xylenes (total)	1330-20-7	10	GAC PTA
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~~(E)~~(D) The following maximum contaminant levels apply to community public water systems and nontransient noncommunity water systems. The associated ~~best available technologies (BATs)~~BATs, designated as GAC for granular activated carbon, PTA for packed-tower aeration, and OX for oxidation with chlorine or ozone, identify the best technology, treatment technique, or other means available for achieving compliance with the stated ~~maximum contaminant levels~~MCLs. The director may determine that a public water system shall apply ~~best available technology~~BAT in order to reduce the level of a contaminant to below its ~~maximum contaminant level~~MCL.

Contaminant	CAS number	MCL milligrams per liter <u>(mg/L)</u>	BAT
Alachlor	15972-60-8	0.002	GAC
Atrazine	1912-24-9	0.003	GAC
Benzo[a]pyrene	50-32-8	0.0002	GAC
Carbofuran	1563-66-2	0.04	GAC
Chlordane	57-74-9	0.002	GAC
2,4-D	94-75-7	0.07	GAC
Dalapon	75-99-0	0.2	GAC
Dibromochloropropane (DBCP)	96-12-8	0.0002	GAC PTA
Di(2-ethylhexyl) adipate	103-23-1	0.4	GAC
Di(2-ethylhexyl) phthalate	117-81-7	0.006	GAC
Dinoseb	88-85-7	0.007	GAC
Diquat	85-00-7	0.02	GAC
Endothall	145-73-3	0.1	GAC
Endrin	72-20-8	0.002	GAC
Ethylene dibromide (EDB)	106-93-4	0.00005	GAC PTA
Glyphosate	1071-53-6	0.7	OX
Heptachlor	76-44-8	0.0004	GAC

Heptachlor epoxide	1024-57-3	0.0002	GAC
Hexachlorobenzene	118-74-1	0.001	GAC
Hexachlorocyclopentadiene	77-47-4	0.05	GAC PTA
Lindane	58-89-9	0.0002	GAC
Methoxychlor	72-43-5	0.04	GAC
Oxamyl (Vydate)	23135-22-0	0.2	GAC
Picloram	1918-02-1	0.5	GAC
Polychlorinated biphenyls (PCBs)	1336-36-3	0.0005	GAC
Pentachlorophenol	87-86-5	0.001	GAC
Simazine	122-34-9	0.004	GAC
2,3,7,8-TCDD (Dioxin)	1745-01-6	3×10^{-8}	GAC
Toxaphene	8001-35-2	0.003	GAC
2,4,5-TP (Silvex)	93-72-1	0.05	GAC

Effective: 04/01/2016

Five Year Review (FYR) Dates: 01/15/2016 and 04/01/2021

CERTIFIED ELECTRONICALLY

Certification

03/21/2016

Date

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