



Ohio Administrative Code

Rule 3745-1-34 Water quality criteria for the protection of human health [fish consumption].

Effective: January 18, 2021

[Comment: For dates of non-regulatory government publications, publications of recognized organizations and associations, federal rules and federal statutory provisions referenced in this rule, see rule 3745-1-03 of the Administrative Code.]

(A) The chemical specific criteria listed in table 34-1 of this rule, or site-specific modifications thereof, apply as "Outside Mixing Zone Averages" and shall apply to all water bodies. For the purpose of setting water quality based effluent limits, these criteria shall be met after the effluent and the receiving water are reasonably well mixed as provided in rules 3745-1-06 and 3745-2-05 of the Administrative Code.

(B) Water bodies located within the Ohio river drainage basin. Any methodologies and procedures acceptable under 40 C.F.R. 131, effective July 1, 2019 may be used when developing or revising human health water quality criteria or implementing narrative criteria contained in rule 3745-1-04 of the Administrative Code. For any pollutant for which it is demonstrated that a methodology or procedure cited in this rule is not scientifically defensible, the director may apply an alternative methodology or procedure acceptable under 40 C.F.R. 131 when developing water quality criteria.

(C) Water bodies located within the lake Erie drainage basin. The methodologies contained in rules 3745-1-41 and 3745-1-42 of the Administrative Code shall be used when adopting or revising numeric human health criteria and when implementing the narrative water quality criteria contained in rule 3745-1-04 of the Administrative Code. For pollutants listed in table 34-2 of this rule, any methodologies and procedures acceptable under 40 C.F.R. 131 may be used when developing water quality criteria or implementing narrative criteria. For any pollutant other than those in table 33-2 of this rule, for which it is demonstrated that a methodology or procedure cited in this rule is not scientifically defensible, the director may apply an alternative methodology or procedure acceptable under 40 C.F.R. 131 when developing water quality criteria.



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			OMZA ³	Chemical
Form ¹	Units ²	Ohio river	Lake Erie	Acenaphthene
T	µg/l	90	--	Acrolein
T	µg/l	400	--	Acrylonitrile ⁵
T	µg/l	70	--	Aldrin ⁵
T	µg/l	7.7*10 ⁻⁶	--	Anthracene
T	µg/l	400	--	Antimony
TR	µg/l	640	--	Benzene ⁵
T	µg/l	160	160	Benzidine ⁵
T	µg/l	0.11	--	Benzo(a)anthracene ⁵
T	µg/l	0.013	--	Benzo(a)pyrene ⁵
T	µg/l	0.0013	--	Benzo(b)fluoranthene ⁵
T	µg/l	0.013	--	Benzo(k)fluoranthene ⁵
T	µg/l	0.13	--	Beryllium
TR	µg/l	280	--	Bromoform ⁵
T	µg/l	1,200	--	Butylbenzyl phthalate
T	µg/l	1.0	--	Carbon tetrachloride ⁵
T	µg/l	50	--	Chlordane ⁵
T	µg/l	0.0032	0.00025	Chlorobenzene
T	µg/l	800	800	Chlorodibromomethane ⁵
T	µg/l	210	--	Bis(2-Chloro-1-methylethyl)ether
T	µg/l	4,000	--	Bis(2-Chloroethyl)ether ⁵
T	µg/l	22	--	Chloroform ⁵
T	µg/l	20,000	--	bis(2-Chloromethyl)ether ⁵
T	µg/l	0.17	--	2-Chloronaphthalene
T	µg/l	1,000	--	2-Chlorophenol
T	µg/l	800	--	Chrysene ⁵
T	µg/l	1.3	--	Cyanide



free	µg/l	400	400	2,4-D (2,4-Dichlorophenoxy-acetic acid)
T	µg/l	12,000		4,4'-DDD ⁵
T	µg/l	0.0012	--	4,4'-DDE ⁵
T	µg/l	0.00018	--	4,4'-DDT ⁵
T	µg/l	0.0003	0.00015	Dibenzo(a,h)anthracene ⁵
T	µg/l	0.0013	--	Di-n-butyl phthalate
T	µg/l	30	--	1,2-Dichlorobenzene
T	µg/l	3,000	--	1,3-Dichlorobenzene
T	µg/l	10	--	1,4-Dichlorobenzene
T	µg/l	900	--	3,3'-Dichlorobenzidine ⁵
T	µg/l	1.5	--	Dichlorobromomethane ⁵
T	µg/l	270	--	1,2-Dichloroethane ⁵
T	µg/l	6,500	--	1,1-Dichloroethylene
T	µg/l	20,000	--	trans-1,2-Dichloroethylene
T	µg/l	4,000	--	2,4-Dichlorophenol
T	µg/l	60	--	1,2-Dichloropropane ⁵
T	µg/l	310	--	1,3-Dichloropropene ⁵
T	µg/l	120	--	Dieldrin ⁵
T	µg/l	1.2*10 ⁻⁵	0.0000065	Diethyl phthalate
T	µg/l	600	--	2,4-Dimethylphenol
T	µg/l	3,000	3,000	Dimethyl phthalate
T	µg/l	2,000	--	4,6-Dinitro-o-cresol (4,6-Dinitro-2-methylphenol)
T	µg/l	30	--	Dinitrophenols ⁴
T	µg/l	1,000		2,4-Dinitrophenol
T	µg/l	300	300	2,4-Dinitrotoluene ⁵
T	µg/l	17	--	1,2-Diphenylhydrazine ⁵
T	µg/l	2.0	--	alpha-Endosulfan ⁶



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T	µg/l	30	--	beta-Endosulfan ⁶
T	µg/l	40	--	Endosulfan sulfate ⁶
T	µg/l	40	--	Endrin ⁶
T	µg/l	0.03	--	Endrin aldehyde ⁶
T	µg/l	1.0	--	Ethylbenzene
T	µg/l	130	--	bis(2-Ethylhexyl)phthalate
T	µg/l	3.7	--	Fluoranthene
T	µg/l	20	--	Fluorene
T	µg/l	70	--	Heptachlor ⁵
T	µg/l	5.9*10 ⁻⁵	--	Heptachlor epoxide ⁵
T	µg/l	0.00032	--	Hexachlorobenzene ⁵
T	µg/l	0.00079	0.00045	Hexachlorobutadiene
T	µg/l	0.1	--	alpha-Hexachlorocyclohexane ⁵
T	µg/l	0.0039	--	beta-Hexachlorocyclohexane ⁵
T	µg/l	0.14	--	gamma-Hexachlorocyclohexane (Lindane) ⁵
T	µg/l	44	0.50	Hexachlorocyclohexane - technical grade ⁵
T	µg/l	0.1	--	Hexachlorocyclopentadiene
T	µg/l	4.0	--	Hexachloroethane ⁵
T	µg/l	1.0	1.0	Indeno(1,2,3-c,d)pyrene ⁵
T	µg/l	0.013	--	Isophorone ⁵
T	µg/l	18,000	--	Methoxychlor
T	µg/l	0.02		Mercury
TR	µg/l	0.012	0.0031	3-Methyl-4-Chlorophenol
TR	µg/l	2,000		Methyl bromide
T	µg/l	10,000	--	Methylene chloride ⁵
T	µg/l	10,000	2,600	Nickel



TR	µg/l	4,600	--	Nitrobenzene
T	µg/l	600	--	Nitrosoamines ⁵
T	µg/l	12.4	--	N-Nitrosodibutylamine ⁵
T	µg/l	2.2	--	N-Nitrosodiethylamine ⁵
T	µg/l	12.4	--	N-Nitrosodimethylamine ⁵
T	µg/l	30	--	N-Nitrosodi-p-propylamine ⁵
T	µg/l	5.1	--	N-Nitrosodiphenylamine ⁵
T	µg/l	60	--	N-Nitrosodipyrrolidine ⁵
T	µg/l	340	--	Pentachlorobenzene
T	µg/l	0.1	--	Pentachlorophenol ⁵
T	µg/l	0.4	--	Phenol
T	µg/l	300,000	--	Polychlorinated biphenyls ⁵
T	µg/l	0.00064	0.000026	Pyrene
T	µg/l	30	--	Selenium
TR	µg/l	4,200	--	Silvex (2,4,5-Trichlorophenoxypropionic acid)
T	µg/l	400	--	1,2,4,5-Tetrachlorobenzene
T	µg/l	0.03	--	2,3,7,8-Tetrachlorodibenzo-p-dioxin ⁵
T	pg/l	0.051	0.0086	1,1,2,2-Tetrachloroethane ⁵
T	µg/l	30	--	Tetrachloroethylene ⁵
T	µg/l	290	--	Toluene
T	µg/l	520	520	Toxaphene ⁵
T	µg/l	0.0071	0.000068	1,2,4-Trichlorobenzene ⁵
T	µg/l	0.76	--	1,1,1-Trichloroethane
T	µg/l	200,000	--	1,1,2-Trichloroethane ⁵



T	µg/l	89	--	Trichloroethylene ⁵
T	µg/l	70	70	2,4,5-Trichlorophenol
T	µg/l	600	--	2,4,6-Trichlorophenol ⁵
T	µg/l	28	--	Vinyl chloride ⁵
T	µg/l	16	--	Zinc

¹ S = soluble; T = total; TR = total recoverable. ² mg/l = milligrams per liter (parts per million); µg/l = micrograms per liter (parts per billion); pg/l = picograms per liter (parts per quadrillion). ³ OMZA = outside mixing zone average. ⁴ The criteria for this chemical apply to the sum of all dinitrophenols. ⁵ Criteria for this chemical are based on a carcinogenic endpoint. ⁶ The criteria for this chemical apply to the sum of alpha-endosulfan, beta-endosulfan and endosulfan sulfate. ⁷ The criteria for this chemical apply to the sum of endrin and endrin aldehyde.

Alkalinity
Ammonia
Bacteria
Biochemical oxygen demand (BOD)
Chlorine
Color
Dissolved oxygen
Dissolved solids
pH
Phosphorus
Salinity
Temperature
Total and suspended solids
Turbidity