

3745-54-94

**Concentration limits.**

(A) The facility permit ~~will~~shall specify the concentration limits in the ground water for hazardous constituents established under rule 3745-54-93 of the Administrative Code. The concentration of a hazardous constituent shall meet one or more of the following:

(1) ~~Must~~Shall not exceed the background level of that constituent in the ground water at the time that limit is specified in the permit; ~~or~~.

(2) For any of the constituents listed in the table in this rule, the concentration of the constituent must~~shall~~ not exceed the respective value given in the table in this rule if the background level of the constituent is below the value given in the table; ~~or~~ in this rule.

(3) ~~Must~~Shall not exceed an alternate limit established in the permit under paragraph (B) of this rule.

(B) ~~An~~If approved by the director, an alternate concentration limit may; ~~if approved by the director,~~ be established for a hazardous constituent if it is found that the constituent ~~will~~shall not pose a substantial present or potential hazard to human health or the environment as long as the alternate concentration limit is not exceeded. The director ~~will~~shall consider the following factors when making a determination on the alternate concentration limit:

(1) Potential adverse effects on ground water quality, considering the following:

(a) The physical and chemical characteristics of the waste in the regulated unit, including ~~its~~the potential for migration; ~~;~~

(b) The hydrogeological characteristics of the facility and surrounding land; ~~;~~

(c) The quantity of ground water and the direction of ground water flow; ~~;~~

(d) The proximity and withdrawal rates of ground water users; ~~;~~

(e) The current and future use of ground water in the area; ~~;~~

(f) The existing quality of ground water, including other sources of contamination and ~~their~~the cumulative impact on the ground water quality; ~~;~~

(g) The potential for health risks caused by human exposure to waste constituents; ~~;~~

- (h) The potential damage to wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents; ~~and~~.
  - (i) The persistence and permanence of the potential adverse effects.
- (2) Potential adverse effects on hydraulically-connected ~~surface waters~~ surface water quality, considering the following:
- (a) The volume and physical and chemical characteristics of the waste in the regulated unit; ~~and~~.
  - (b) The hydrogeological characteristics of the facility and surrounding land; ~~and~~.
  - (c) The quantity and quality of ground water, and the direction of ground water flow; ~~and~~.
  - (d) The patterns of rainfall in the region; ~~and~~.
  - (e) The proximity of the regulated unit to surface waters; ~~and~~.
  - (f) The current and future uses of surface waters in the area and any water quality standards established for those surface waters; ~~and~~.
  - (g) The existing quality of surface water, including other sources of contamination and the cumulative impact on surface water quality; ~~and~~.
  - (h) The potential for health risks caused by human exposure to waste constituents; ~~and~~.
  - (i) The potential damage to wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents; ~~and~~.
  - (j) The persistence and permanence of the potential adverse effects.

Table: Maximum Concentration of Constituents for Ground Water Protection

Constituent	Maximum Contaminant Concentration ( <del>mg/L</del> )(milligrams per liter)
Antimony	0.006
Arsenic	0.010
Barium	2.0
Benzene	0.005
Benzo(a)pyrene (PAHs)	0.0002
Beryllium	0.004
Bis(2ethylhexyl)phthalate	0.006
Cadmium	0.005
Carbofuran	0.04
Carbon tetrachloride	0.005
Chlordane	0.002
Chlorobenzene	0.1
Chromium (total)	0.1
Copper	1.3 *
Cyanide (as free cyanide)	0.2
2,4-D	0.07
1,2-Dibromo-3-chloropropane (DBCP)	0.0002
o-Dichlorobenzene	0.6
p-Dichlorobenzene	0.075
1,2-Dichloroethane	0.005
1,1-Dichloroethylene	0.007

cis-1,2-Dichloroethylene	0.07
trans-1,2-Dichloroethylene	0.1
Dichloromethane (Methylene chloride)	0.005
1,2-Dichloropropane (Propylene dichloride)	0.005
Dinoseb	0.007
Endrin	0.002
Ethylbenzene	0.7
Ethylene dibromide	0.00005
Heptachlor	0.0004
Heptachlor epoxide	0.0002
Hexachlorobenzene	0.001
Hexachlorocyclopentadiene	0.05
Lead	0.015 *
Lindane	0.0002
Mercury (inorganic)	0.002
Methoxychlor	0.04
Pentachlorophenol	0.001
Polychlorinated biphenyls (PCBs)	0.0005
Selenium	0.05
Styrene	0.1 *
Tetrachloroethylene	0.005
Thallium	0.002
Toluene	1.0
Toxaphene	0.003

2,4,5-TP (Silvex)	0.05
1,2,4-Trichlorobenzene	0.07
1,1,1-Trichloroethane (Methyl chloroform)	0.2
1,1,2-Trichloroethane	0.005
Trichloroethylene	0.005
Vinyl chloride	0.002
Xylene	10.0
* Action level, not an <del>MCL</del> <u>maximum contaminant limit</u> .	

Effective: 2/12/2018

Five Year Review (FYR) Dates: 10/30/2017 and 02/12/2023

CERTIFIED ELECTRONICALLY

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Certification

01/10/2018

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Date

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