**Section 724.194 Concentration Limits**

a) The Agency must specify in the facility permit concentration limits in the groundwater for hazardous constituents established under Section 724.193. The following must be true of the concentration of a hazardous constituent:

1) It must not exceed the background level of that constituent in the groundwater at the time that limit is specified in the permit; or

2) For any of the constituents listed in Table 1, it must not exceed the respective value given in that Table if the background level of the constituent is below the value given in Table 1; or

3) It must not exceed an alternative limit established by the Agency under subsection (b).

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| TABLE 1 − MAXIMUM CONCENTRATION OF CONSTITUENTS FOR GROUNDWATER PROTECTION |
| Constituent | Maximum Concentration (mg/ℓ) |
|  |  |
| Arsenic (CAS No. 7440-38-2) | 0.05 |
| Barium (CAS No. 7440-39-3) | 1.0 |
| Cadmium (CAS No. 7440-43-9) | 0.01 |
| Chromium (CAS No. 7440-47-3) | 0.05 |
| Lead (CAS No. 7439-92-1) | 0.05 |
| Mercury (CAS No. 7439-97-6) | 0.002 |
| Selenium(CAS No. 7782-49-2) | 0.01 |
| Silver (CAS No. 7440-22-4) | 0.05 |
| Endrin (1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-endo,endo-1,4: 5,8-dimethanonaphthalene) (CAS No. 72-20-8) | 0.0002 |
| Lindane (1,2,3,4,5,6-hexachlorocyclohexane, gamma isomer) (CAS No. 58-89-9) | 0.004 |
| Methoxychlor (1,1,1-Trichloro-2,2-bis(p-methoxyphenyl)ethane) (CAS No. 72-43-5) | 0.1 |
| Toxaphene (C10H10Cl6, Technical chlorinated camphene, 67-69 percent chlorine) (CAS No. 8001-35-2) | 0.005 |
| 2,4-D (2,4-Dichlorophenoxyacetic acid) (CAS No. 94-75-7) | 0.1 |
| 2,4,5-TP (Silvex) (2,4,5-Trichlorophenoxy- propionic acid) (CAS No. 93-72-1) | 0.01 |

b) The Agency must establish an alternative concentration limit for a hazardous constituent if it finds that the constituent will not pose a substantial present or potential hazard to human health or the environment as long as the alternative concentration limit is not exceeded. In establishing alternate concentration limits, the Agency must consider the following factors:

1) Potential adverse effects on groundwater quality, considering the following:

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

B) The hydrogeological characteristics of the facility and surrounding land;

C) The quantity of groundwater and the direction of groundwater flow;

D) The proximity and withdrawal rates of groundwater users;

E) The current and future uses of groundwater in the area;

F) The existing quality of groundwater, including other sources of contamination and their cumulative impact on the groundwater 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;

I) The persistence and permanence of the potential adverse effects; and

2) Potential adverse effects on hydraulically-connected surface-water quality, considering the following:

A) The volume and physical and chemical characteristics of the waste in the regulated unit;

B) The hydrogeological characteristics of the facility and surrounding land;

C) The quantity and quality of groundwater and the direction of groundwater flow;

D) The patterns of rainfall in the region;

E) The proximity of the regulated unit to surface waters;

F) The current and future uses of surface waters in the area and any water quality standards established for those surface waters;

G) The existing quality of surface water, including other sources of contamination and the cumulative impact on surface-water quality;

H) The potential for health risks caused by human exposure to waste constituents;

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.

c) In making any determination under subsection (b) about the use of groundwater in the area around the facility, the Agency must consider any identification of underground sources of drinking water and exempted aquifers made under 35 Ill. Adm. Code 704.123.

d) The Agency must make specific written findings in setting any alternate concentration limits under subsection (b).

(Source: Amended at 40 Ill. Reg. 11726, effective August 9, 2016)