**Section 304.120 Deoxygenating Wastes**

Except as provided in 35 Ill. Adm. Code 306.Subpart C, all effluents containing deoxygenating wastes must meet the following standards:

a) Effluents must not exceed 30 mg/L of five-day biochemical oxygen demand (BOD5) or 30 mg/L of suspended solids, except that treatment works employing three-stage lagoon treatment systems which are properly designed, maintained and operated, and whose effluent has a dilution ratio no less than five to one or who qualify for exceptions under subsection (c) must not exceed 37 mg/L of suspended solids.

b) Effluents from any source whose untreated waste load is 10,000 population equivalents or more, or from any source discharging into the Chicago River System or the Calumet River System, must not exceed 20 mg/L of BOD5 or 25 mg/L of suspended solids.

c) Effluents whose dilution ratio is less than five to one must not exceed 10 mg/L of BOD5 or 12 mg/L of suspended solids, except that sources employing third-stage treatment lagoons are be exempt from this subsection (c) provided all of the following conditions are met:

1) The waste source qualifies under one of the following categories:

A) Any wastewater treatment works with an untreated waste load less than 2500 population equivalents, which is sufficiently isolated that combining with other sources to aggregate 2500 population equivalents or more is not practicable.

B) Any wastewater treatment works in existence and employing third-stage treatment lagoons on January 1, 1986, whose untreated waste load is 5000 population equivalents or less and sufficiently isolated that combining to aggregate 5000 population equivalents or more is not practicable.

C) Any wastewater treatment works with an untreated waste load of 5000 population equivalents or less, which has reached the end of its useful life by January 1, 1987, and is sufficiently isolated that combining to aggregate 5000 population equivalents or more is not practicable.

D) Any wastewater treatment works with an untreated waste load of 5000 population equivalents or less which has reached the end of its useful life and which has received an adjusted standard determination from the Board that it qualifies for a lagoon exemption. Such a Board determination will only be made in an adjusted standard proceeding, held in compliance with Section 28.1 of the Environmental Protection Act [415 ILCS 5/28.1] and applicable procedures at 35 Ill. Adm. Code 104.

i) In an adjusted standard proceeding the Board may determine that the petitioning wastewater treatment source qualifies for a lagoon exemption if the wastewater treatment works proves that it is so situated that a land treatment system is not a suitable treatment alternative. Factors relevant to a suitability finding may include the following: cost; influent character; geographic characteristics; climate; soil conditions; hydrologic conditions; and the availability of irrigable land.

ii) For subsection (c)(1)(D), a land treatment system is a wastewater treatment system that does not directly discharge treated effluent into the waters of the State but instead uses the treated effluent to irrigate terrestrial vegetation;

2) The lagoons are properly constructed, maintained and operated; and

3) The deoxygenating constituents of the effluent do not, alone or in combination with other sources, cause a violation of the applicable dissolved oxygen water quality standard.

d) Effluents discharged to the Lake Michigan basin must not exceed 4 mg/L of BOD5 or 5 mg/L of suspended solids.

e) Compliance with the numerical standards in this Section must be determined based on the type and frequency of sampling prescribed by the NPDES permit for the discharge at the time of monitoring.

f) For this Section, useful life is the period of time during which it is cost-effective to operate and maintain a particular wastewater treatment works under consideration. At a minimum, the following factors relating to a wastewater treatment works must be considered in determining its useful life:

1) Structural and operational condition of components;

2) Past operations and maintenance records;

3) Cost for continued use; and

4) Description and costs of treatment alternatives.

g) Compliance with the five-day biochemical oxygen demand (BOD5) numerical standard in this Part will be determined by the analysis of five-day carbonaceous biochemical oxygen demand (CBOD5), unless federal regulations require treatment works treating industrial wastes to comply with more stringent requirements determined by the analysis of BOD5. Effluent from the treatment works subject to the requirements of Section 304.120(a) must not exceed 25 mg/L CBOD5.

(Source: Amended at 47 Ill. Reg. 4601, effective March 23, 2023)