

§ 133.100

Pollution Control Act as amended by the Federal Water Pollution Control Act Amendments of 1972, the Clean Water Act of 1977, and the Municipal Wastewater Treatment Construction Grant Amendments of 1981; 33 U.S.C. 1311(b)(1)(B), 1314(d) (1) and (4), 1318, and 1361; 86 Stat. 816, Pub. L. 92-500; 91 Stat. 1567, Pub. L. 95-217; 95 Stat. 1623, Pub. L. 97-117.

SOURCE: 49 FR 37006, Sept. 20, 1984, unless otherwise noted.

§ 133.100 Purpose.

This part provides information on the level of effluent quality attainable through the application of secondary or equivalent treatment.

§ 133.101 Definitions.

Terms used in this part are defined as follows:

(a) *7-day average*. The arithmetic mean of pollutant parameter values for samples collected in a period of 7 consecutive days.

(b) *30-day average*. The arithmetic mean of pollutant parameter values of samples collected in a period of 30 consecutive days.

(c) *Act*. The Clean Water Act (33 U.S.C. 1251 *et seq.*, as amended).

(d) *BOD*. The five day measure of the pollutant parameter biochemical oxygen demand (BOD).

(e) *CBOD₅*. The five day measure of the pollutant parameter carbonaceous biochemical oxygen demand (CBOD₅).

(f) *Effluent concentrations consistently achievable through proper operation and maintenance*. (1) For a given pollutant parameter, the 95th percentile value for the 30-day average effluent quality achieved by a treatment works in a period of at least two years, excluding values attributable to upsets, bypasses, operational errors, or other unusual conditions, and (2) a 7-day average value equal to 1.5 times the value derived under paragraph (f)(1) of this section.

(g) *Facilities eligible for treatment equivalent to secondary treatment*. Treatment works shall be eligible for consideration for effluent limitations described for treatment equivalent to secondary treatment (§133.105), if:

(1) The BOD₅ and SS effluent concentrations consistently achievable through proper operation and maintenance (§133.101(f)) of the treatment

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works exceed the minimum level of the effluent quality set forth in §§133.102(a) and 133.102(b),

(2) A trickling filter or waste stabilization pond is used as the principal process, and

(3) The treatment works provide significant biological treatment of municipal wastewater.

(h) *mg/l*. Milligrams per liter.

(i) *NPDES*. National Pollutant Discharge Elimination System.

(j) *Percent removal*. A percentage expression of the removal efficiency across a treatment plant for a given pollutant parameter, as determined from the 30-day average values of the raw wastewater influent pollutant concentrations to the facility and the 30-day average values of the effluent pollutant concentrations for a given time period.

(k) *Significant biological treatment*. The use of an aerobic or anaerobic biological treatment process in a treatment works to consistently achieve a 30-day average of a least 65 percent removal of BOD₅.

(l) *SS*. The pollutant parameter total suspended solids.

(m) *Significantly more stringent limitation* means BOD₅ and SS limitations necessary to meet the percent removal requirements of at least 5 mg/l more stringent than the otherwise applicable concentration-based limitations (e.g., less than 25 mg/l in the case of the secondary treatment limits for BOD₅ and SS), or the percent removal limitations in §§133.102 and 133.105, if such limits would, by themselves, force significant construction or other significant capital expenditure.

(n) *State Director* means the chief administrative officer of any State or interstate agency operating an "approved program," or the delegated representative of the State Director.

[49 FR 37006, Sept. 20, 1984; 49 FR 40405, Oct. 16, 1984, as amended at 50 FR 23387, June 3, 1985]

§ 133.102 Secondary treatment.

The following paragraphs describe the minimum level of effluent quality attainable by secondary treatment in terms of the parameters—BOD₅, SS and

pH. All requirements for each parameter shall be achieved except as provided for in §§ 133.103 and 133.105.

(a) *BOD₅*.

(1) The 30-day average shall not exceed 30 mg/l.

(2) The 7-day average shall not exceed 45 mg/l.

(3) The 30-day average percent removal shall not be less than 85 percent.

(4) At the option of the NPDES permitting authority, in lieu of the parameter BOD₅ and the levels of the effluent quality specified in paragraphs (a)(1), (a)(2) and (a)(3), the parameter CBOD₅ may be substituted with the following levels of the CBOD₅ effluent quality provided:

(i) The 30-day average shall not exceed 25 mg/l.

(ii) The 7-day average shall not exceed 40 mg/l.

(iii) The 30-day average percent removal shall not be less than 85 percent.

(b) *SS*. (1) The 30-day average shall not exceed 30 mg/l.

(2) The 7-day average shall not exceed 45 mg/l.

(3) The 30-day average percent removal shall not be less than 85 percent.

(c) *pH*. The effluent values for pH shall be maintained within the limits of 6.0 to 9.0 unless the publicly owned treatment works demonstrates that: (1) Inorganic chemicals are not added to the waste stream as part of the treatment process; and (2) contributions from industrial sources do not cause the pH of the effluent to be less than 6.0 or greater than 9.0.

[49 FR 37006, Sept. 20, 1984; 49 FR 40405, Oct. 16, 1984]

§ 133.103 Special considerations.

(a) *Combined sewers*. Treatment works subject to this part may not be capable of meeting the percentage removal requirements established under §§ 133.102(a)(3) and 133.102(b)(3), or §§ 133.105(a)(3) and 133.105(b)(3) during wet weather where the treatment works receive flows from combined sewers (*i.e.*, sewers which are designed to transport both storm water and sanitary sewage). For such treatment works, the decision must be made on a case-by-case basis as to whether any attainable percentage removal level

can be defined, and if so, what the level should be.

(b) *Industrial wastes*. For certain industrial categories, the discharge to navigable waters of BOD₅ and SS permitted under sections 301(b)(1)(A)(i), (b)(2)(E) or 306 of the Act may be less stringent than the values given in §§ 133.102(a)(1), 133.102(a)(4)(i), 133.102(b)(1), 133.105(a)(1), 133.105(b)(1) and 133.105(e)(1)(i). In cases when wastes would be introduced from such an industrial category into a publicly owned treatment works, the values for BOD₅ and SS in §§ 133.102(a)(1), 133.102(a)(4)(i), 133.102(b)(1), 133.105(a)(1), 133.105(b)(1), and 133.105(e)(1)(i) may be adjusted upwards provided that: (1) The permitted discharge of such pollutants, attributable to the industrial category, would not be greater than that which would be permitted under sections 301(b)(1)(A)(i), 301(b)(2)(E) or 306 of the Act if such industrial category were to discharge directly into the navigable waters, and (2) the flow or loading of such pollutants introduced by the industrial category exceeds 10 percent of the design flow or loading of the publicly owned treatment works. When such an adjustment is made, the values for BOD₅ or SS in §§ 133.102(a)(2), 133.102(a)(4)(ii), § 133.102(b)(2), 133.105(a)(2), 133.105(b)(2), and 133.105(e)(1)(ii) should be adjusted proportionately.

(c) *Waste stabilization ponds*. The Regional Administrator, or, if appropriate, State Director subject to EPA approval, is authorized to adjust the minimum levels of effluent quality set forth in § 133.105 (b)(1), (b)(2), and (b)(3) for treatment works subject to this part, to conform to the SS concentrations achievable with waste stabilization ponds, provided that: (1) Waste stabilization ponds are the principal process used for secondary treatment; and (2) operation and maintenance data indicate that the SS values specified in § 133.105 (b)(1), (b)(2), and (b)(3) cannot be achieved. The term "SS concentrations achievable with waste stabilization ponds" means a SS value, determined by the Regional Administrator, or, if appropriate, State Director subject to EPA approval, which is equal to the effluent concentration achieved 90