567—62.3(455B) Secondary treatment information: effluent standards for publicly owned treatment works and privately owned domestic sewage treatment works.

62.3(1) *General.* The following paragraphs describe the minimum level of effluent quality attainable by secondary treatment in terms of the pollutant measurements carbonaceous biochemical oxygen demand ($CBOD_5$), the five-day measure of the pollutant parameter carbonaceous biochemical oxygen demand; suspended solids (SS), the pollutant parameter total suspended solids; and pH, the measure of the relative acidity or alkalinity. All requirements for each pollutant measurement shall be achieved by publicly owned treatment works and privately owned domestic sewage treatment works except as provided for in subrules 62.3(2) and 62.3(3).

Effluent limitations on pollutants other than carbonaceous biochemical oxygen demand (five day), suspended solids and pH may be imposed in the NPDES permit. Such limitations will reflect pretreatment requirements that may be imposed on users of the treatment works.

a. Carbonaceous biochemical oxygen demand (5 day) — $CBOD_5$.

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

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

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

b. Suspended solids — 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.

62.3(2) *Special considerations.*

a. Combined sewers. Treatment works subject to this part may not be capable of meeting the percentage removal requirements established under 62.3(1)*"a"*(3) and 62.3(1)*"b"*(3), or 62.3(3)*"f"*(3) and 62.3(3)*"g"*(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 of $CBOD_5$ and SS permitted (under Section 301(b)(1)(A)(i), 301(b)(2)(E) or 306 of the Act) may be less stringent than the values given in 62.3(1)*"a"*(1), 62.3(1)*"b"*(1), 62.3(3)*"f"*(1), and 62.3(3)*"g"*(1). In cases when wastes would be introduced from such an industrial category into a publicly owned treatment works, the values for $CBOD_5$ and SS in 62.3(1)*"a"*(1), 62.3(1)*"b"*(1), 62.3(3)*"f"*(1), and 62.3(3)*"g"*(1) 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 waters of the state, 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 $CBOD_5$ or SS in 62.3(1)*"a"*(2), 62.3(1)*"b"*(2), 62.3(3)*"f"*(2), and 62.3(3)*"g"*(2) should be adjusted proportionately.

c. Waste stabilization ponds. Departmental secondary treatment standards for waste stabilization ponds are the same as those found in subrule 62.3(1) concerning secondary treatment with the exception of the standards for suspended solids which are as follows:

(1) SS, the 30-day average shall not exceed 80 mg/l.

(2) SS, the 7-day average shall not exceed 120 mg/l.

d. Less concentrated influent wastewater for separate sewers. The department may substitute either a lower percent removal requirement or a mass loading limit for the percent removal requirements in 62.3(1) and 62.3(3) provided that the permittee demonstrates that:

(1) The treatment works is consistently meeting or will consistently meet, its permit effluent concentration limits but its percent removal requirements cannot be met due to less concentrated influent wastewater.

(2) To meet the percent removal requirements, the treatment works would have to achieve significantly more stringent limitations than would otherwise be required by the concentration-based standards, and

(3) The less concentrated influent wastewater is not the result of excessive infiltration/inflow (I/I). A system is considered to have nonexcessive I/I when an average wet weather influent flow (as defined in the department's design standards 567—paragraph 64.2(9)*"b,"* Chapter 14.4.5.1.b) comprised of domestic wastewater plus infiltration plus inflow equals less than 275 gallons per day per capita.

e. Upgraded facilities designed to operate in a split flow mode. The department may substitute either a lower percent removal requirement or a mass loading limit for the percent removal requirements in 62.3(1) only (not 62.3(3)),provided that the treatment works is designed to split part of the primary treated wastewater flow around the secondary treatment unit(s). The design to accommodate split flow must be approved by the department and consistent with applicable design standards for wastewater treatment facilities. The requirements of 62.3(2)*"d"* would apply to facilities considered under this subrule. This subrule shall not be considered for facilities eligible for treatment equivalent to secondary treatment under 62.3(3).

Any applicant requesting a permit limit adjustment must include as part of the request an analysis of the I/I sources in the system and a plan for the elimination of all inflow sources such as roof drains, manholes and storm sewer interconnections. Infiltration sources that can be economically eliminated or minimized shall be corrected.

f. Dilution. Nothing in this subrule or any other rule of the department shall be construed to encourage dilution of sewage as a means of complying with secondary treatment effluent standards. Reasonable efforts to prevent and abate infiltration of groundwater into sewers, and prevention or removal of any significant source of inflow, are required of all persons responsible for facilities subject to these standards.

62.3(3) *Treatment equivalent to secondary treatment.* This subrule describes the minimum level of effluent quality attainable by facilities eligible for treatment equivalent to secondary treatment in terms of the pollutant measurements $CBOD_5$, SS and pH. Treatment works shall be eligible at any time for consideration of effluent limitations described for treatment equivalent to secondary treatment if:

a. The $CBOD_5$ and SS effluent concentrations consistently achievable through proper operation and maintenance of the treatment works exceed the minimum level of the effluent quality set forth in 62.3(1)*"a"* and 62.3(1)*"b"*; and

b. A trickling filter or waste stabilization pond is used as the principal process; and

c. The treatment works provide significant biological treatment of municipal wastewater; and

d. The facility was not constructed since January 1, 1972, in order to achieve design effluent limits set forth in 62.3(1)*"a," "b,"* and *"c"* or predecessor rules on secondary treatment. An eligible trickling filter or waste stabilization pond may have undergone an upgrade to achieve the effluent requirements specified in this subrule. Nothing in this subrule shall be construed to allow a facility to circumvent the design standards of 567—Chapter 64 in the replacement or construction of the individual treatment units; and

e. The treatment works is one that does not receive organic or hydraulic loadings which prevent the facilities from consistently complying with 62.3(3)*"f," "g,"* and *"h."*

All requirements for the specified pollutant measurements in paragraphs *"f," "g,"* and *"h"* following in this subrule shall be achieved except as provided for above in 62.3(2) or paragraph *"i"* of this subrule below.

f. $CBOD_5$ limitations:

(1) The 30-day average shall not exceed 40 mg/l.

(2) The 7-day average shall not exceed 60 mg/l.

(3) The 30-day average percent removal shall not be less than 65 percent.

g. SS limitations. Except where SS values have been adjusted in accordance with subrule 62.3(2), paragraph *"c,"* above:

(1) The 30-day average shall not exceed 45 mg/l.

(2) The 7-day average shall not exceed 65 mg/l.

(3) The 30-day average percent removal shall not be less than 65 percent.

h. pH. The requirements of above subrule 62.3(1), paragraph *"c,"* shall be met.

i. Permit adjustments. More stringent limitations are required if the 30-day average and 7-day average $CBOD_5$ and SS effluent values that could be achievable through proper operation and maintenance of the upgraded or existing treatment works, based on an analysis of the past performance of the treatment works, would enable the treatment works to achieve more stringent limitations. These more stringent limitations shall be maintained and not relaxed unless as specified in subrule 62.3(2)*"b."*

Effluent concentrations consistently achievable through proper operation and maintenance are:

(1) The ninety-fifth percentile value of the 30-day average effluent quality achieved by the upgraded or existing 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 for the 30-day average above.

This subrule shall only be applied when the existing or upgraded facility has achieved its design organic loading as specified in the most recent construction permit or its accompanying documentation. The determination of the effluent concentration consistently achievable through proper operation and maintenance shall only be based on the effluent quality data following the period when the design organic loading has been achieved.