

9400.0500 CLASSIFICATION OF FACILITIES.

Subpart 1. **Basis.** The classification of all wastewater treatment facilities actually used or intended for use by the public and required to have permits under part 7080.0030, subpart 1a, for individual sewage treatment systems or chapter 7001, must be based on the degree of hazard to the public health, together with the type and loading of the facilities and the population served or the average population equivalent of the wastewater handled.

Subp. 2. **Rating values.** Facility classification must be based on the following rating values:

A. size:

(1) maximum population equivalent (P.E.) served, one point per 10,000 P.E. or part thereof;

(2) average wet weather design flow, one point per million gallons per day or part of a million gallons per day;

B. permit final effluent limitations:

(1) surface water discharge:

(a) carbonaceous biochemical oxygen demand (CBOD) limit. The loading must be based on the most restrictive of the effluent concentration loading or mass loading. The mass loading equivalent concentration must be calculated using the facility average wet weather design flow. CBOD loading of:

i. 14 milligrams per liter or less, five points;

ii. more than 14 milligrams per liter to 24 milligrams per liter, four points;

iii. more than 24 milligrams per liter to 39 milligrams per liter, three points;

iv. more than 39 milligrams per liter, two points;

(b) nutrient limits:

i. nitrogen limit, six points;

ii. phosphorus limit, eight points;

(2) land discharge, two points;

(3) subsurface discharge, four points;

C. variation in raw wastes based upon maximum month design values:

(1) one percent to five percent industrial flow or carbonaceous biochemical oxygen demand (CBOD) loading, whichever is greater, contributed to facility, one point;

(2) more than five percent to ten percent industrial flow or CBOD loading, whichever is greater, contributed to facility, two points;

(3) more than ten percent to 25 percent industrial flow or CBOD loading, whichever is greater, contributed to facility, three points;

(4) more than 25 percent to 50 percent industrial flow or CBOD loading, whichever is greater, contributed to facility, four points;

(5) more than 50 percent industrial flow or CBOD loading, whichever is greater, contributed to facility, five points;

D. liquids handling:

(1) screening, comminution, three points;

(2) grit removal, three points;

(3) pumping of raw wastewater flow, three points;

(4) preaeration, postaeration, or both, with less than two hours' detention time, three points;

(5) influent static or rotating screen, three points;

(6) flow equalization basin, primary clarifier, or both, five points;

(7) septic tank, three points;

(8) combined sedimentation and digestion, five points;

(9) trickling filter, seven points;

(10) activated sludge, including pure oxygen activated sludge and sequencing batch reactor, 13 points;

(11) trickling filter solids contact (TFSC) and activated biofilter, ten points;

(12) stabilization pond, designed for more than 180 days' detention time, five points;

(13) aerated pond designed for more than two hours' detention time, five points;

(14) anaerobic contactor process, ten points;

(15) anaerobic pond, four points;

(16) rotating biological surface including submerged biological surface, seven points;

(17) secondary clarifier, five points;

(18) on-site generation of oxygen, five points;

- five points;
- (19) aerated polishing pond designed for less than 180 days' detention time,
 - (20) polishing pond without aeration, two points;
 - (21) chemical addition for solids removal or pH adjustment, two points;
 - (22) subsurface soil treatment system constructed in accordance with chapter 7080, three points;
 - (23) rapid infiltration basin, three points;
 - (24) biological sand filter without backwash, three points;
 - (25) effluent irrigation, five points;
 - (26) effluent polishing filter with backwash, eight points;
 - (27) ion exchange, ten points;
 - (28) reverse osmosis, electrodialysis, 15 points;
 - (29) chemical recovery, carbon regeneration, four points;
 - (30) effluent microscreening, three points;
 - (31) disinfection:
 - (a) chlorination with or without dechlorination, five points;
 - (b) ultraviolet light, five points;
 - (c) ozonation, five points;
 - (32) unlisted new technologies, three to ten points (based on relative complexity);

E. solids handling:

- (1) gravity thickening with or without chemical treatment, five points;
- (2) anaerobic digestion, ten points;
- (3) aerobic digestion, six points;
- (4) sludge drying bed, two points;
- (5) mechanical thickening or dewatering, eight points;
- (6) solids reduction, such as incineration, wet oxidation, 12 points;
- (7) on-land disposal, five points;
- (8) lime stabilization of sludge, five points;

(9) sludge or septage storage, if the facility has neither anaerobic nor aerobic digestion, three points;

(10) composting, five points;

(11) unlisted new technologies, three to ten points (based on relative complexity);

F. laboratory monitoring:

(1) minimum required tests (pH, Cl_2 residual, dissolved oxygen, settleable solids, carbonaceous biochemical oxygen demand, and total suspended solids), two points;

(2) bacteriology (fecal coliform, total coliform, fecal streptococcal, etc.), three points;

(3) nutrients, one point;

(4) groundwater monitoring, one point.

Subp. 3. **Accumulated values.**

A. The accumulated point values for wastewater treatment facilities are as follows:

(1) Class A, 76 or more points;

(2) Class B, 56 to 75 points;

(3) Class C, 31 to 55 points;

(4) Class D, 30 and less points.

B. Notwithstanding item A, a facility that is given points for processes in subpart 2, item D, subitem (9), (10), (11), or (16), must be classified as a Class C facility or higher.

Subp. 4. **Type S facility.** A type S treatment facility means a system of collection, pumping, and conveyance facilities distinctly separate in operation from a facility which treats, stabilizes, or disposes of the wastewater collected, pumped, or conveyed.

A. Where a type S facility is not distinctly separate, it is considered to be part of the treatment facility for which the designated operator is responsible.

B. A type S treatment facility must be subclassified as follows:

(1) Class S-A, serving a population of 50,000 or more;

(2) Class S-B, serving a population of 15,000 or more but less than 50,000;

(3) Class S-C, serving a population of 1,500 or more but less than 15,000;

(4) Class S-D, serving a population of less than 1,500.

C. A type S treatment facility must be subclassified as follows:

- (1) Class S-A, serving a population of 50,000 or more;
- (2) Class S-B, serving a population of 15,000 or more but less than 50,000;
- (3) Class S-C, serving a population of 1,500 or more but less than 15,000;
- (4) Class S-D, serving a population of less than 1,500.

Statutory Authority: *MS s 115.03; 115.55; 115.56; 115.72; 115.79*

History: *21 SR 1165; 24 SR 426; 25 SR 1633*

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