

## Chapter NR 110

### SEWERAGE SYSTEMS

NR 110.01	Applicability (p. 99)	NR 110.14	Sewage lift station design criteria (p. 132)
NR 110.03	Definitions (p. 99)	NR 110.15	General requirements for sewage treatment facilities (p. 137)
NR 110.04	Alternative requirements (p. 103)	NR 110.16	Screening devices (p. 144)
NR 110.05	Sewer extensions (p. 103)	NR 110.17	Grit removal facilities (p. 146)
NR 110.06	Construction plans for reviewable projects (p. 109)	NR 110.18	Settling tanks (p. 147)
NR 110.07	Specifications for reviewable projects (p. 109)	NR 110.19	Trickling filters (p. 149)
NR 110.08	Facilities plans for reviewable projects (p. 109)	NR 110.20	Rotating biological contactors (p. 152)
NR 110.09	Sewage treatment facilities projects (p. 112)	NR 110.21	Activated sludge (p. 153)
NR 110.10	Sewage collection system projects (p. 122)	NR 110.22	Physical-chemical treatment (p. 156)
NR 110.11	Sewage lift stations (p. 124)	NR 110.23	Disinfection (p. 160)
NR 110.12	Owner approval requirement (p. 126)	NR 110.24	Lagoons (p. 163)
NR 110.13	Sewer design criteria (p. 126)	NR 110.25	Land disposal of effluent (p. 170)
		NR 110.26	Sludge handling and disposal (p. 172)

**History:** Chapter NR 110 as it existed on November 30, 1974 was repealed and a new chapter NR 110 was created effective December 1, 1974.

**NR 110.01 Applicability.** This chapter is applicable to all new or modified sewerage systems, excluding only industrial waste treatment facilities. This chapter also applies to sewerage systems employing land disposal of sewage effluent, except those systems defined as plumbing within the purview of s. 145.01 (1) (b), Stats.

**Note:** The authority to enact these rules is contained in ch. 144, Stats. Pursuant to s. 144.99 Stats., any person who violates this chapter shall forfeit not less than \$10 nor more than \$5,000 for each violation. Each day of continued violation is a separate offense.

**History:** Cr. Register, November, 1974, No. 227, eff. 12-1-74.

**NR 110.02 Severability.** **History:** Cr. Register, November, 1974, No. 227, eff. 12-1-74; r. under s. 13.93 (2m) (b) 16, Stats., Register, October, 1985, No. 358.

**NR 110.03 Definitions.** For purposes of this chapter:

(1) "Approved areawide waste treatment management plan" means a plan or element thereof developed pursuant to Section 208 of the Federal Water Pollution Control Act Amendments of 1972 as amended by the Clean Water Act Amendments of 1977 (33 USC 1251 et seq.) and approved by the state of Wisconsin.

(2) "Approval" means the written approval of the department for any project requiring approval pursuant to s. 144.04, Stats., and s. NR 108.03.

(3) "ASCE" means the American society of civil engineers. Copies of ASCE publications referenced in this chapter are available for inspection at the offices of the department of natural resources, the secretary of state's office and the office of the revisor of statutes. ASCE publications may be obtained from the American Society of Civil Engineers, 345 East 47th Street, New York, N.Y. 10017.

(4) "ASTM" means the American Society for Testing and Materials. Copies of ASTM standards referenced in this chapter are available for inspection at the offices of the department of natural resources, the secretary of state's office and the office of the revisor of statutes. ASTM standards may be obtained from the American Society for Testing and Materials, 1916 Race Street, Philadelphia, Penn. 19103.

(5) "Average design flow" means the anticipated average daily wastewater discharge to a sewage treatment facility.

(6) "AWWA" means the American Water Works Association. Copies of AWWA standards referenced in this chapter are available for inspection at the offices of the department of natural resources, the secretary of state's office and the office of the revisor of statutes. AWWA standards may be obtained from the American Water Works Association, 6666 West Quincy Avenue, Denver, Colo. 80235.

(7) "Bypass or overflow" means the discharge of wastewater directly or indirectly to the waters of the state during dry or wet weather flow conditions caused by intentional or inadvertent diversion of all or a portion of the wastewater flow from a sewerage system.

(8) "Bypass or overflow structure" means the physical structures, hydraulic control mechanisms, and piping which allow a bypass or overflow to occur.

(9) "Controlled diversion" means the discharge of untreated or partially treated wastewater around the entire sewage treatment facility, or treatment processes therein, which is recombined with the treated effluent prior to the effluent sampling location.

(10) "Controlled diversion structure" means the physical structures, hydraulic control mechanisms, and piping which allow a controlled diversion to occur.

(11) "Cost-effective analysis" means a systematic comparison of alternative means of meeting state water quality standards, effluent limitations or other treatment standards in order to identify the alternative which will minimize the total resources costs over the planning period. These resources costs include monetary costs and environmental as well as other non-monetary costs.

(12) "Department" means the department of natural resources.

(13) "Dry land access" means a sewage treatment facility service road which has a minimum elevation of at least one foot above the regional flood elevation.

(14) "Excessive infiltration/inflow" means the quantities of infiltration/inflow which can be economically eliminated from a sewerage system by rehabilitation, as determined in a cost-effectiveness analysis that compares the cost of correcting the infiltration/inflow conditions to the total costs for transportation and treatment of the infiltration/inflow.

(15) "Industrial user" means:

(a) Any nongovernmental, nonresidential user of a municipally owned sewerage system which discharges more than the equivalent of 25,000 gallons per day (gpd) of sanitary wastes and which is identified in the Standard Industrial Classification Manual, 1972, United States Office of