utes, and may be obtained for personal use from American Public Health Association, Inc., 1790 Broadway, New York, N.Y. 10019.

History: Cr. Register, September, 1973, No. 213, eff. 10-1-73; renum. (5) and (6) to be (6) and (7), cr. (5), Register, July, 1975, No. 235, eff. 8-1-75; r. and recr. (3), Register, August, 1981, No. 308, eff. 9-1-81; correction in (7) made under s. 13.93 (2m) (b) 7, Stats., cr. (4) (h), Register, September, 1984, No. 345, eff. 10-1-84.

NR 102.04 Enforcement. Financial assistance, industrial incentives, increased surveillance, orders, and permits will be used to achieve and maintain the adopted water quality standards. Reasonable time schedules to comply with orders and permit conditions depend on the circumstances. All municipal sewage treatment plants shall provide a minimum of secondary treatment. Communities with a population of 2,500 and over in the Lakes Michigan and Superior basins shall achieve an 85% reduction of phosphorus on an annual basis, and there shall be a commensurate removal from industrial wastes containing more than 2 mg/l of total phosphorus and having an annual phosphorus discharge greater than 8,750 pounds. Any wastewater discharger, regardless of population, volume or type of waste discharge, or geographic location, may be required to remove excess amounts of phosphorus where the phosphorus is causing overfertilization of surface waters. A permit program is being initiated in accordance with the Federal Water Pollution Control Act Amendments of 1972 regarding treatment and monitoring requirements for waste discharges to waters of the state. All industrial plants discharging wastes to surface waters are required to provide, as a minimum, an effluent quality established in accordance with the Federal Water Pollution Control Act Amendments of 1972.

History: Cr. Register, July, 1975, No. 235, eff. 8-1-75; am. Register, October, 1986, No. 370, eff. 11-1-86.

NR 102.05 Lake Michigan and Lake Superior thermal standards. For Lake Michigan and Lake Superior the following thermal standards are established so as to minimize effects on the aquatic biota in the receiving waters.

- (1) (a) Thermal discharges shall not raise the receiving water temperature more than 3°F above the existing natural temperature at the boundary of mixing zones established in pars. (b) and (c).
- (b) 1. The mixing zone for a shoreline thermal discharge shall be the area included within the perimeter of a rectangular figure extending 1,250 feet in both directions along the shoreline from the outfall and 1,250 feet into the lake.
- 2. The mixing zone for an offshore thermal discharge shall be the area within a 1,000-foot radius circle with its center at the point of discharge.
- (c) The department may, upon request from the owner of a source of thermal discharge, adjust the boundaries of the mixing zone established in par. (b) for that source. In no case may any mixing zone so established include an area greater than 72 acres nor may it include more than 2,800 feet of shoreline.
- (2) In addition to the limitation set forth in sub. (1), but excepting the Milwaukee Harbor, Port Washington Harbor and the mouth of the Fox River, thermal discharges to Lake Michigan shall not raise the temperature of the receiving waters at the boundary of the established mixing zone above the following limits:

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January45°F February45°	July80° August80°
March45°	September
April55°	October 65°
May6°	November 60°
June 70°	December 50°

History: Cr. Register, September, 1973, No. 213, eff. 10-1-73; r. and recr. Register, July, 1975, No. 235, eff. 8-1-75.

NR 102.06 Mississippi river thermal standards. In addition to the standards for fish and aquatic life, the monthly average of the maximum daily temperature in the Mississippi river outside the mixing zone shall not exceed the following limits:

January———40°F	July84°
February ————40°	August 84°
March54°	September
April65°	October 73°
May75°	November 58°
June84°	December 48°

History: Cr. Register, July, 1975, No. 235, eff. 8-1-75.

NR 102.07 Review of thermal standards. (1) Whenever the owner of any source of thermal discharges that existed on or before July 31, 1975, in compliance with department guidelines and after opportunity for public hearing, can demonstrate to the satisfaction of the department that the mixing zone established pursuant to this chapter is more stringent than necessary to assure the protection and propagation of a balanced, indigenous population of shellfish, fish and wildlife in and on the receiving water, the department may:

- (a) Impose a mixing zone with respect to such thermal discharge that will assure the protection and propagation of such a population, or
- (b) Exempt such thermal discharge from the thermal requirements of this chapter provided this exemption will not endanger the propagation of such a population.
- (2) Any owner desiring a review pursuant to sub. (1) shall submit a demonstration to the department no later than June 30, 1976. The department shall reach a decision no later than December 31, 1976.
- (3) In the event the owner fails to make a satisfactory demonstration pursuant to sub. (1), the department shall establish a compliance date for the thermal component to be achieved no later than July 1, 1979.
- (4) Whenever the owner of any source of thermal discharges that commenced on or after August 1, 1975, in compliance with department guidelines and after opportunity for public hearing, can demonstrate to the satisfaction of the department that the mixing zone established pursuant to this chapter is more stringent than necessary to assure the protection and propagation of a balanced, indigenous population of shellfish, fish and wildlife in and on the receiving water, the department may:
- (a) Impose a mixing zone with respect to such thermal discharge that will assure the protection and propagation of such a population, or Register, October, 1986, No. 370

- (b) Exempt such thermal discharge from the thermal requirements of this chapter provided this exemption will not endanger the propagation of such a population.
- (5) In the event an owner fails to make a satisfactory demonstration pursuance to sub. (4), the discharge shall be in compliance with the thermal requirements of this chapter upon commencement of the discharge.
- (6) The department may require the reduction of thermal discharges or the size and configuration of a mixing zone if it finds that environmental damage is imminent or existent.

History: Cr. Register, July, 1975, No. 235, eff. 8-1-75; am. Register, February, 1977, No. 254, eff. 3-1-77.