

Chapter NR 276

PHOSPHATE MANUFACTURING

(Interim Effluent Limitations)

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Note: Pursuant to chapter 147, Wis. Stats. and under the procedure of section 227.027, Wis. Stats., the department of natural resources has promulgated interim effluent limitations which were in effect for one year. These interim effluent limitations will be periodically replaced by permanent effluent limitations.

NR 276.01 Purpose. The purpose of this chapter is to establish effluent limitations, standards of performance, and pretreatment standards for discharges of process wastes from the phosphate manufacturing category of point sources and subcategories thereof.

Note: The authority for promulgation of this chapter is set forth in Wis. Adm. Code chapter NR 205.

History: Cr. eff. 2-28-75.

NR 276.02 Applicability. The effluent limitations, standards of performance, pretreatment standards, and other provisions in this chapter are applicable to pollutants or pollutant properties in discharges of process waste resulting from manufacture in any of the following subcategories.

- (1) Phosphorus production
- (2) Phosphorus consuming
- (3) Phosphate

History: Cr. eff. 2-28-75.

NR 276.03 Definitions. The following definitions are applicable to terms used in this chapter. Definitions of other terms and meanings of abbreviations are set forth in Wis. Adm. Code chapter NR 205.

- (1) "Phosphorus production" means the manufacture of phosphorus and ferrophosphorus by smelting phosphate ore.
- (2) "Phosphorus consuming" means the manufacture from elemental phosphorus of phosphoric acid and phosphorus pentoxide, pentasulfide, trichloride, and oxychloride.
- (3) "Phosphate" means the manufacture from phosphoric acid of sodium tripolyphosphate, animal feed grade calcium phosphate, and human food grade calcium phosphate.

History: Cr. eff. 2-28-75.

NR 276.04 Compliance with effluent limitations and standards. Discharge of pollutants from facilities subject to the provisions of this chapter shall not exceed, as appropriate:

(1) By July 1, 1977 effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available;

(2) By July 1, 1977 pretreatment standards for existing discharges to publicly owned treatment works;

(3) By July 1, 1983 effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable;

(4) Standards of performance for new sources; or

(5) Pretreatment standards for new sources discharging to publicly owned treatment works.

History: Cr. eff. 2-28-75.

NR 276.05 Modification of effluent limitations. (1) Effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available may be modified in accordance with this section.

(2) An individual discharger or other interested person may submit evidence to the department that factors relating to the equipment or facilities involved, the process applied, or other such factors related to such discharger are fundamentally different from the factors considered in the establishment of the effluent limitations. On the basis of such evidence or other available information the department will make a written determination that such factors are or are not fundamentally different for that facility compared to those specified in the Phosphorus Derived Chemicals Development Document, EPA 440/1-74-006-a published January, 1974. If such fundamentally different factors are found to exist, the department shall establish for the discharge effluent limitations in the WPDES permit either more or less stringent than the limitations in this chapter, to the extent dictated by such fundamentally different factors. Such limitations must be approved by EPA which may approve, disapprove, or specify other limitations. Copies of this Development Document are available for inspection at the office of the department of natural resources, the secretary of state's office, and the office of the revisor of statutes, and may be obtained for personal use from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20460.

History: Cr. eff. 2-28-75.

NR 276.06 Application of effluent limitations and standards (1) The effluent limitations and standards set forth in this chapter shall be used in accordance with this section to establish the quantity or quality of pollutants or pollutant properties which may be discharged by a point source subject to the provisions of this chapter, except as;

(a) They may be modified in accordance with section NR 276.05,

(b) They may be superseded by more stringent limitations and standards necessary to achieve water quality standards or meet other legal requirements, or

(c) They may be supplemented or superseded by standards or prohibitions for toxic pollutants or by additional limitations for other pollutants required to achieve water quality.

(2) The production basis for application of the limitations and standards set forth in this chapter shall be the daily average of a maximum month in each subcategory subject to the provisions of this chapter.

History: Cr. 2-28-75.

NR 276.10 Effluent limitations, best practicable treatment. The following effluent limitations for all or specific subcategories establish, except as provided in section NR 276.05, the quantity or quality of pollutants or pollutant properties which may be discharged by a facility subject to the provisions of this chapter after application to process wastes of the best practicable control technology currently available.

(1) There shall be no discharge to surface waters of process wastes resulting from the manufacture of sodium tripolyphosphate or animal feed grade calcium phosphate in the phosphate subcategory.

(2) The pH of all discharges shall be within the range of 6.0 to 9.0.

(3) The 30-day average limitations for suspended solids and other parameters are set forth in table 1 in lbs/1000 lbs. or kg/1000 kg. of product. Daily maximum limitations are twice the 30-day average limitations, except for elemental phosphorus.

TABLE 1
BPT EFFLUENT LIMITATIONS

Subcategory*	Susp. Solids	Total Phosphorus	Fluoride	Arsenic	Elemental Phosphorus
(1)	0.5	0.15			No detectable quantity
(2)	0.7	0.8	.05	.00005	No detectable quantity
(3)**	0.06	0.03			

* As identified in section NR 276.02

**Limits are applicable only to the manufacture of human food grade calcium phosphate

History: Cr. eff. 2-28-75.

NR 276.11 Effluent limitations, best available treatment. The following effluent limitations for all or specific subcategories establish the quantity or quality of pollutants or pollutant properties which may be discharged by a facility subject to the provisions of this chapter after application to process wastes of the best available technology economically achievable.

(1) There shall be no discharge to surface waters of process wastes from facilities subject to the provisions of this chapter.

History: Cr. eff. 2-28-75.

NR 276.12 Standards of performance. The following effluent limitations for all or specific subcategories establish the quantity or quality of pollutants or pollutant properties which may be discharged

by a facility which is a new source subject to the provisions of this chapter.

(1) There shall be no discharge to surface waters of process wastes from facilities subject to the provisions of this chapter.

History: Cr. eff. 2-28-75.

NR 276.13 Pretreatment standards for new sources. The pretreatment standards for discharges to publicly owned treatment works from new sources subject to the provisions of this chapter shall be those set forth in section NR 276.12. ✓

History: Cr. eff. 2-28-75.