

## Chapter NR 228

### CEMENT MANUFACTURING

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**NR 228.01 Purpose.** The purpose of this chapter is to establish effluent limitations, standards of performance, and pretreatment standards for discharges of process wastes from the cement manufacturing category of point sources and subcategories thereof.

**Note:** The authority for promulgation of this chapter is set forth in ch. NR 205.  
**History:** Cr. Register, June, 1976, No. 246, eff. 7-1-76.

**NR 228.02 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:

(1) **NONLEACHING.** This subcategory includes facilities having discharges resulting from the manufacture of cement using a process in which kiln dust is not contacted with water as an integral part of the process and water is not used in wet scrubbers to control kiln stack emissions.

(2) **LEACHING.** This subcategory includes facilities having discharges resulting from the manufacture of cement using a process in which kiln dust is contacted with water as an integral part of the process or water is used in wet scrubbers to control kiln stack emissions.

(3) **MATERIALS STORAGE.** This subcategory includes facilities having discharges resulting from the runoff of rainfall from storage of materials, including raw materials, intermediate and finished products, and waste materials which are used in or derived from the manufacture of cement.

**History:** Cr. Register, June, 1976, No. 246, eff. 7-1-76.

**NR 228.03 Definitions.** The following definition is applicable to this chapter. Definitions of other terms and meanings of abbreviations are set forth in ch. NR 205.

(1) "Manufacture of cement" means use of the process in which several mineral ingredients, including limestone or other natural sources of calcium carbonate, silica, alumina, and iron together with gypsum are used to produce cement.

**History:** Cr. Register, June, 1976, No. 246, eff. 7-1-76.

**NR 228.04 Compliance with effluent limitations and standards.** Discharge of pollutants from facilities subject to the provisions of this chapter may 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, 1983 effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable;

(3) Pretreatment standards for discharges to publicly owned treatment works;

(4) Standards of performance for new sources.

**History:** Cr. Register, June, 1976, No. 246, eff. 7-1-76; r. and recr. Register, August, 1983, No. 332, eff. 9-1-83.

**NR 228.05 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 Cement Manufacturing Development Document, EPA 440/1-74-005-a. 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.

(3) Copies of this Development Document, "Cement Manufacturing," EPA 440/1-74-005-a, published January, 1974, are available for inspection at the office of the department of natural resources, the secretary of state's office, and the legislative reference bureau, and may be obtained for personal use from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20460.

**History:** Cr. Register, June, 1976, No. 246, eff. 7-1-76; correction in (3) made under s. 13.92 (4) (b) 6., Stats., Register April 2013 No. 688.

**NR 228.06 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 s. NR 228.05.

(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 the maximum month production in the past year.

(3) The limitations for pH and concentration limits for subcategory (3) in table 1 shall not apply to any untreated runoff from storage facilities designed, constructed, and operated to treat the volume of runoff which results from a 10 year, 24 hour rainfall event as set forth in s. NR 205.05.

**History:** Cr. Register, June, 1976, No. 246, eff. 7-1-76.

**NR 228.10 Effluent limitations, best practicable treatment.**

The following effluent limitations for all or specific subcategories when applied in accordance with s. NR 228.06 establish, except as provided in s. NR 228.05, the quantity or qual-

ity 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) The pH of all discharges shall be within the range of 6.0 to 9.0.
- (2) The temperature of all discharges shall not exceed inlet temperatures by more than 3°C (5.4°F).
- (3) The daily maximum limitation for suspended solids is set forth in table 1.

**History:** Cr. Register, June, 1976, No. 246, eff. 7-1-76.

**NR 228.11 Effluent limitations, best available treatment.** The following effluent limitations for all or specific subcategories when applied in accordance with s. NR 228.06 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) The pH of all discharges shall be within the range of 6.0 to 9.0.
- (2) The temperature of all discharges shall not exceed inlet temperatures by more than 3°C (5.4°F).
- (3) The daily maximum limitation for suspended solids is set forth in table 1.

**History:** Cr. Register, June, 1976, No. 246, eff. 7-1-76.

**NR 228.12 Standards of performance.** The following

effluent limitations for all or specific subcategories when applied in accordance with s. NR 228.06 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) The pH of all discharges shall be within the range of 6.0 to 9.0.
- (2) The temperature of all discharges shall not exceed inlet temperatures by more than 3°C (5.4°F).
- (3) The daily maximum limitation for suspended solids is set forth in table 1.

**TABLE 1**  
**Effluent Limitations for Suspended Solids (1)**

Subcategory	BPT	BAT	Standard of Performance
(1) Nonleaching	.005	.005	.005
(2) Leaching	.4	.005	.4
(3) Material Storage	50 mg/l	50 mg/l	No Discharge

Note (1) Limitations are for suspended solids in lbs/1000 lbs or kg/1000 kg of product except for subcategory (3) for which limitations apply to concentrations in the runoff discharge.

**History:** Cr. Register, June, 1976, No. 246, eff. 7-1-76.

**NR 228.13 Pretreatment standards.** The pretreatment standards for discharges to publicly owned treatment works from sources subject to the provisions of this chapter shall be as set forth in ch. NR 211.

**History:** Cr. Register, June, 1976, No. 246, eff. 7-1-76; r. and recr. Register, August, 1983, No. 322, eff. 9-1-83.