

## 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 228.06 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 subch. IV of ch. NR 220.

(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; correction in (1) (a) made under s. 13.92 (4) (b) 7, Stats., Register April 2018 No. 748.

**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 subch. IV of ch. NR 220, 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) 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; correction in (intro.) made under s. 13.92 (4) (b) 7, Stats., Register April 2018 No. 748.

**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
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(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.