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Pollutant or pollutant property	BPT limitations	
	Maximum for any 1 day	Average of daily values for 30 consecutive days
	Kg/kg (or pounds per 1,000 lb) of product	
BOD5 .....	35.2	17.6
COD .....	256.8	128.4
TSS .....	55.4	27.7
Sulfide .....	0.44	0.22
Phenol .....	0.22	0.11
Total chromium .....	0.22	0.11
pH .....	( <sup>1</sup> )	( <sup>1</sup> )

<sup>1</sup> Within the range 6.0 to 9.0.

**§410.93 Effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable (BAT).**

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart must achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable (BAT):

Pollutant or pollutant property	BAT limitations	
	Maximum for any 1 day	Average of daily values for 30 consecutive days
	Kg/kg (or pounds per 1,000 lb) of product	
COD .....	256.8	128.4
Sulfide .....	0.44	0.22
Phenols .....	0.22	0.11
Total Chromium .....	0.22	0.11

**§410.94 Pretreatment standards for existing sources (PSES).**

Any existing source subject to this subpart that introduces process wastewater pollutants into a publicly owned treatment works must comply with 40 CFR part 403.

**§410.95 New source performance standards (NSPS).**

Any new source subject to this subpart must achieve the following new source performance standards (NSPS):

Pollutant or pollutant property	NSPS	
	Maximum for any 1 day	Average of daily values for 30 consecutive days
	Kg/kg (or pounds per 1,000 lb) of product	
BOD5 .....	16.9	8.7
COD .....	179.3	115.5
TSS .....	50.9	22.7
Sulfide .....	0.44	0.22
Phenols .....	0.22	0.11
Total Chromium .....	0.22	0.11
pH .....	( <sup>1</sup> )	( <sup>1</sup> )

<sup>1</sup> Within the range of 6.0 to 9.0 at all times.  
Note: Additional allocations for "commission finishers" are not available to new sources.

**§410.96 Pretreatment standards for new sources (PSNS).**

Any new source subject to this subpart that introduces process wastewater pollutants into a publicly owned treatment works must comply with 40 CFR part 403.

**§410.97 Effluent limitations representing the degree of effluent reduction attainable by the application of the best conventional pollutant control technology (BCT). [Reserved]**

**PART 411—CEMENT MANUFACTURING POINT SOURCE CATEGORY**

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**Subpart C—Materials Storage Piles Runoff Subcategory**

- 411.30 Applicability; description of the materials storage piles runoff subcategory.
- 411.31 Specialized definitions.
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- 411.37 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best conventional pollutant control technology.

AUTHORITY: Secs. 301, 304 (b) and (c), 306 (b) and (c), and 307(c) of the Federal Water Pollution Control Act, as amended; 33 U.S.C. 1251, 1311, 1314 (b) and (c), 1316 (b) and (c), and 1317(c); 86 Stat. 816 *et seq.*, Pub. L., 92-500; 91 Stat. 1567, Pub. L. 95-217.

SOURCE: 39 FR 6591, Feb. 20, 1974, unless otherwise noted.

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**Subpart A—Nonleaching Subcategory**

**§ 411.10 Applicability; description of the nonleaching subcategory.**

The provisions of this subpart are applicable to discharges resulting from the process in which several mineral ingredients (limestone or other natural sources of calcium carbonate, silica, alumina, and iron together with gypsum) are used in the manufacturing of cement and in which kiln dust is not contracted with water as an integral part of the process and water is not used in wet scrubbers to control kiln stack emissions.

**§ 411.11 Specialized definitions.**

For the purpose of this subpart:

(a) Except as provided below, the general definitions, abbreviations and methods of analysis set forth in 40 CFR part 401 shall apply to this subpart.

**§ 411.12 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.**

Except as provided in §§ 125.30 through 125.32, any existing point source subject to this subpart shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available (BPT):

Effluent characteristic	Effluent limitations (maximum for any 1 day)	
	Metric units (kg/kg of product)	
TSS .....	0.005.	
Temperature (heat) .....	Not to exceed 3 °C rise above inlet temperature.	
pH .....	Within the range 6.0 to 9.0.	
English units (lb/1,000 lb of product)		
TSS .....	0.005.	
Temperature (heat) .....	Not to exceed 3 °C rise above inlet temperature.	
pH .....	Within the range 6.0 to 9.0.	

[39 FR 6591, Feb. 20, 1974, as amended at 60 FR 33950, June 29, 1995]

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**§ 411.13 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.**

The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best available technology economically achievable.

Effluent characteristic	Effluent limitations (maximum for any 1 day)
Temperature (heat) .....	Not to exceed 3 °C rise above inlet temperature.

[44 FR 50741, Aug. 29, 1979]

**§ 411.14 Pretreatment standards for existing sources.**

Any existing source subject to this subpart that introduces process wastewater pollutants into a publicly owned treatment works must comply with 40 CFR part 403. In addition, the following pretreatment standard establishes the quantity or quality of pollutants or pollutant properties controlled by this section which may be discharged to a publicly owned treatment works by a point source subject to the provisions of this subpart.

Pollutant or pollutant property	Pretreatment standard
pH .....	No limitation.
Temperature (heat) .....	Do.
TSS .....	Do.

[40 FR 6440, Feb. 11, 1975, as amended at 60 FR 33951, June 29, 1995]

**§ 411.15 Standards of performance for new sources.**

The following standards of performance establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a new source subject to the provisions of this subpart:

Effluent characteristic	Effluent limitations (maximum for any 1 day)
	Metric units (kg/kg of product)
TSS .....	0.005.
Temperature (heat) .....	Not to exceed 3 °C rise above inlet temperature.

Effluent characteristic	Effluent limitations (maximum for any 1 day)
pH .....	Within the range 6.0 to 9.0.
	English units (lb/1,000 lb of product)
TSS .....	0.005.
Temperature (heat) .....	Not to exceed 3 °C rise above inlet temperature.
pH .....	Within the range 6.0 to 9.0.

**§ 411.16 Pretreatment standards for new sources.**

Any new source subject to this subpart that introduces process wastewater pollutants into a publicly owned treatment works must comply with 40 CFR part 403.

[60 FR 33951, June 29, 1995]

**§ 411.17 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best conventional pollutant control technology.**

The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best conventional pollutant control technology.

Effluent characteristic	Effluent limitations (maximum for any 1 day)
	Metric units (kg/kg of product)
TSS .....	0.005.
pH .....	Within the range 6.0 to 9.0.
	English units (lb/1,000 lb of product)
TSS .....	0.005.
pH .....	Within the range 6.0 to 9.0.

[44 FR 50741, Aug. 29, 1979]

**Subpart B—Leaching Subcategory**

**§ 411.20 Applicability; description of the leaching subcategory.**

The provisions of this subpart are applicable to discharges resulting from the process in which several mineral ingredients (limestone or other natural sources of calcium carbonate, silica, alumina, and iron together with gypsum) are used in the manufacturing of

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cement and 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.

**§411.21 Specialized definitions.**

For the purpose of this subpart:

(a) Except as provided below, the general definitions, abbreviations and methods of analysis set forth in 40 CFR part 401 shall apply to this subpart.

**§411.22 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.**

Except as provided in §§125.30 through 125.32, any existing point source subject to this subpart shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available (BPT):

Effluent characteristic	Effluent limitations (maximum for any 1 day)
	Metric units (kg/kkg of dust leached)
TSS .....	0.4.
Temperature (heat) .....	Not to exceed 3 °C rise above inlet temperature.
pH .....	Within the range 6.0 to 9.0.
	English units (lb/1,000 lb of dust leached)
TSS .....	0.4.
Temperature (heat) .....	Not to exceed 3 °C rise above inlet temperature.
pH .....	Within the range 6.0 to 9.0.

[39 FR 6591, Feb. 20, 1974, as amended at 60 FR 33951, June 29, 1995]

**§411.23 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.**

The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best available technology economically achievable.

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Effluent characteristic	Effluent limitations (maximum for any 1 day)
Temperature (heat) .....	Not to exceed 3 °C rise above inlet temperature.

[44 FR 50741, Aug. 29, 1979]

**§411.24 Pretreatment standards for existing sources.**

Any existing source subject to this subpart that introduces process wastewater pollutants into a publicly owned treatment works must comply with 40 CFR part 403. In addition, the following pretreatment standard establishes the quantity or quality of pollutants or pollutant properties controlled by this section which may be discharged to a publicly owned treatment works by a point source subject to the provisions of this subpart.

Pollutant or pollutant property	Pretreatment standard
pH .....	No limitation.
BOD <sub>5</sub> .....	Do.
TSS .....	Do.

[40 FR 6440, Feb. 11, 1975, as amended at 60 FR 33951, June 29, 1995]

**§411.25 Standards of performance for new sources.**

The following standards of performance establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a new source subject to the provisions of this subpart:

Effluent characteristic	Effluent limitations (maximum for any 1 day)
	Metric units (kg/kkg of dust leached)
TSS .....	0.4.
Temperature (heat) .....	Not to exceed 3 °C rise above inlet temperature.
pH .....	Within the range 6.0 to 9.0.
	English units (lb/1,000 lb of dust leached)
TSS .....	0.4.
Temperature (heat) .....	Not to exceed 3 °C rise above inlet temperature.
pH .....	Within the range 6.0 to 9.0.

**§411.26 Pretreatment standards for new sources.**

Any new source subject to this subpart that introduces process wastewater pollutants into a publicly owned

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treatment works must comply with 40 CFR part 403.

[60 FR 33951, June 29, 1995]

**§ 411.27 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the conventional pollutant control technology (BCT).**

Except as provided in §§ 125.30 through 125.32, any existing point source subject to this subpart shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best conventional pollutant control technology (BCT): The limitations shall be the same as those specified for conventional pollutants (which are defined in § 401.16) in § 411.22 of this subpart for the best practicable control technology currently available (BPT).

[51 FR 24999, July 9, 1986]

**Subpart C—Materials Storage Piles Runoff Subcategory**

**§ 411.30 Applicability; description of the materials storage piles runoff subcategory.**

The provisions of this subpart are applicable to discharges resulting from the runoff of rainfall which derives from the storage of materials including raw materials, intermediate products, finished products and waste materials which are used in or derived from the manufacture of cement under either Subcategory—A or B.

**§ 411.31 Specialized definitions.**

For the purpose of this subpart:

(a) Except as provided below, the general definitions, abbreviations and methods of analysis set forth in 40 CFR part 401 shall apply to this subpart.

(b) The term *10 year, 24 hour rainfall event* shall mean a rainfall event with a probable recurrence interval of once in ten years as defined by the National Weather Service in Technical Paper No. 40, "Rainfall Frequency Atlas of the United States," May 1961, and subsequent amendments, or equivalent regional or state rainfall probability information developed therefrom.

**§ 411.32 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.**

(a) Except as provided in §§ 125.30 through 125.32, and subject to the provisions of paragraph (b) of this section, any existing point source subject to this subpart shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available (BPT):

Effluent characteristic	Effluent limitations
TSS .....	Not to exceed 50 mg/l.
pH .....	Within the range 6.0 to 9.0.

(b) Any untreated overflow from facilities designed, constructed and operated to treat the volume of runoff from materials storage piles which is associated with a 10-year, 24-hour rainfall event shall not be subject to the pH and TSS limitations stipulated in paragraph (a) of this section.

[39 FR 6591, Feb. 20, 1974, as amended at 60 FR 33951, June 29, 1995]

**§ 411.33 [Reserved]**

**§ 411.34 Pretreatment standards for existing sources.**

Any existing source subject to this subpart that introduces process wastewater pollutants into a publicly owned treatment works must comply with 40 CFR part 403. In addition, the following pretreatment standard establishes the quantity or quality of pollutants or pollutant properties controlled by this section which may be discharged to a publicly owned treatment works by a point source subject to the provisions of this subpart.

Pollutant or pollutant property	Pretreatment standard
pH .....	No limitation.
TSS .....	Do.

[40 FR 6440, Feb. 11, 1975, as amended at 60 FR 33951, June 29, 1995]

**§ 411.35 Standards of performance for new sources.**

(a) Subject to the provisions of paragraph (b) of this section the following

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standards of performance establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a new source subject to the provisions of this subpart:

Effluent characteristic	Effluent limitations
TSS .....	Not to exceed 50 mg/l.
pH .....	Within the range 6.0 to 9.0.

(b) Any overflow from facilities designed, constructed and operated to treat to the applicable limitations the precipitation and runoff resulting from a 10-year, 24-hour precipitation event shall not be subject to the limitations of this section.

[42 FR 10681, Feb. 23, 1977]

**§ 411.36 Pretreatment standards for new sources.**

Any new source subject to this subpart that introduces process wastewater pollutants into a publicly owned treatment works must comply with 40 CFR part 403.

[60 FR 33951, June 29, 1995]

**§ 411.37 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best conventional pollutant control technology.**

The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best conventional pollutant control technology.

(a) Subject to the provisions of paragraph (b) of this section, the following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best conventional pollutant control technology.

Effluent characteristic	Effluent limitations
TSS .....	Not to exceed 50 mg/l.
pH .....	Within the range 6.0 to 9.0.

(b) Any untreated overflow from facilities designed, constructed and oper-

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ated to treat the volume of runoff from materials storage piles which results from a 10-year, 24-hour rainfall event shall not be subject to the pH and TSS limitations stipulated in paragraph (a) of this section.

[39 FR 6591, Feb. 20, 1974. Redesignated and amended at 44 FR 50741, Aug. 29, 1979]

**PART 412—CONCENTRATED ANIMAL FEEDING OPERATIONS (CAFO) POINT SOURCE CATEGORY**

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- 412.1 General applicability.
- 412.2 General definitions.
- 412.3 General pretreatment standards.
- 412.4 Best management practices (BMPs) for land application of manure, litter, and process wastewater.

**Subpart A—Horses and Sheep**

- 412.10 Applicability.
- 412.11 [Reserved]
- 412.12 Effluent limitations attainable by the application of the best practicable control technology currently available (BPT).
- 412.13 Effluent limitations attainable by the application of the best available technology economically achievable (BAT).
- 412.14 [Reserved]
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**Subpart B—Ducks**

- 412.20 Applicability.
- 412.21 Special definitions.
- 412.22 Effluent limitations attainable by the application of the best practicable control technology currently available (BPT).
- 412.23-412.24 [Reserved]
- 412.25 New source performance standards (NSPS).
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**Subpart C—Dairy Cows and Cattle Other Than Veal Calves**

- 412.30 Applicability.
- 412.31 Effluent limitations attainable by the application of the best practicable control technology currently available (BPT).
- 412.32 Effluent limitations attainable by the application of the best conventional pollutant control technology (BCT).
- 412.33 Effluent limitations attainable by the application of the best available technology economically achievable (BAT).