

## Chapter NR 221

## ASBESTOS MANUFACTURING

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**NR 221.01 Purpose.** The purpose of this chapter is to establish effluent limitations, standards of performance, and pretreatment standards for discharges of process wastes from the asbestos 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 221.02 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 or activities in any of the following subcategories.

(1) **ASBESTOS – CEMENT PIPE.** This subcategory covers the manufacture of pipe using asbestos, portland cement, silica, and other ingredients.

(2) **ASBESTOS – CEMENT SHEET.** This subcategory covers the manufacture of sheets using asbestos, portland cement, silica, and other ingredients excluding the manufacture of sheet laboratory tops.

(3) **ASBESTOS PAPER – STARCH BINDER.** This subcategory covers the manufacture of asbestos paper using asbestos, starch binders, and other ingredients.

(4) **ASBESTOS PAPER – ELASTOMERIC BINDER.** This subcategory covers the manufacture of asbestos paper using asbestos, elastomeric binders, and other ingredients.

(5) **ASBESTOS MILLBOARD.** This subcategory covers the manufacture of asbestos millboard using asbestos in combination with other materials such as cement, starch, clay, lime, and mineral wool.

(6) **ASBESTOS ROOFING.** This subcategory covers the manufacture of roofing products by saturating asbestos paper with asphalt or coal tar and applying various surface treatments.

(7) **ASBESTOS FLOOR TILE.** This subcategory covers the manufacture of asbestos floor tile using asbestos, polyvinyl chloride resin, chemical stabilizers, limestone, and other fillers.

(8) **ASBESTOS TEXTILES, COATING OR FINISHING.** This subcategory covers the process of coating or impregnating asbestos textiles with materials to impart specific desired qualities to the finished product.

(9) **SOLVENT RECOVERY.** This subcategory covers the process of solvent recovery in the manufacture of asbestos products.

(10) **VAPOR ABSORPTION.** This subcategory covers the process of removing volatilized organic materials from atmospheric emissions by means of wet scrubbers.

(11) **WET DUST COLLECTION.** This subcategory covers the process of removing dust (particulates) from atmospheric emissions by means of wet scrubbers.

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

**NR 221.03 Definitions.** The following definitions are applicable to terms used in this chapter. Definitions of other terms and meanings of abbreviations are set forth in ch. NR 205.

(1) “COD” means COD added to the process wastewater.

(2) “Mpc” means 1,000 pieces of floor tile.

(3) “Pieces” means floor tile in the standard 12x12x3/32 inch size.

(4) “Std” means standard conditions for measuring gas volume.

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

**NR 221.04 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 221.06 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 a maximum month in each subcategory subject to the provisions of this chapter.

**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 221.10 Effluent limitations, best practicable treatment.** The following effluent limitations for all or specific subcategories 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) For subcategories (5), (8) and (10) identified in s. NR 221.02 there shall be no discharge of process wastewaters to surface waters.

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

(3) The 30-day average and daily maximum limitations for suspended solids and COD are set forth in table 1:

(a) For subcategories (1), (2), (3), (4), (6) and (9) in lbs/1000 lbs. or kg/1000 kg of product,

(b) For subcategory (7) in lbs/Mpc and below that in parenthesis in kg/Mpc, and

(c) For subcategory (11) in lbs/million std. cu. ft. and below that in parenthesis in kg/1000 std. cu. m. of air scrubbed.

**TABLE 1  
BPT EFFLUENT LIMITATIONS**

Subcategory*	Suspended Solids		COD	
	Average	Maximum	Average	Maximum
1	0.19	0.57		
2	0.23	0.68		
3	0.35	0.55		
4	0.35	0.55		
6	0.006	0.01	0.008	0.015
7	0.08	0.013	0.18	0.30
	(0.04)	(0.06)	(0.09)	(0.14)
9	0.09	0.18	0.15	0.30
11	2.50	5.0		
	(0.04)	(0.08)		

\*Subcategories are as identified in s. NR 221.02.

**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 221.11 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) For subcategory (9) identified in s. NR 221.02 the pH of all discharges shall be within the range of 6.0 to 9.0 and the 30-day average and daily maximum limitations for suspended solids and COD are set forth in table 1 in lbs/1000 lbs or kg/1000 kg of product.

(2) For all other subcategories subject to the provisions of this chapter there shall be no discharge of process wastewaters to surface waters.

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

**NR 221.12 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) For subcategories (1), (4) and (9) identified in s. NR 221.02 the pH of all discharges shall be within the range of 6.0 to 9.0 and the 30-day average and maximum daily limitations for COD, suspended solids as are set forth in table 1 in lbs/1000 lbs or kg/1000 kg of product.

(2) For all other subcategories subject to the provisions of this chapter there shall be no discharge of process wastewaters to surface waters.

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

**NR 221.13 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.