

## Chapter NR 283

**INTERIM EFFLUENT LIMITATIONS FOR THE  
PULP AND PAPER INDUSTRY  
WISCONSIN POLLUTANT DISCHARGE  
ELIMINATION SYSTEM**

NR 283.01	Purpose	NR 283.05	Description of abatement models
NR 283.02	Applicability	NR 283.06	Table of interim effluent limitations
NR 283.03	Production basis		
NR 283.04	Application of interim limitations		

**Note:** Pursuant to Chapter 74, Laws of 1973, in sections 147.04 (3) and (5) and under the procedure of section 227.027, Wis. Stats., the department of natural resources has promulgated interim effluent limitations which become effective February 1, 1974 and will remain in effect for a period of one year. These interim effluent limitations will be periodically replaced by permanent effluent limitations.

**NR 283.01 Purpose.** The purpose of this chapter is to establish interim effluent limitations for discharges from industrial point sources identified herein as authorized by section 147.04 (5), Wis. Stats.

**History:** Emerg. cr. eff. 2-1-74.

**NR 283.02 Applicability.** These limitations apply to Standard Industrial Classification Codes 2611, 2621, and 2631.

(1) Subcategories are those identified in the table of NR 283.06.

(2) Other Limitations. Other interim effluent limitations in chapter NR 217, Wis. Adm. Code, are applicable to discharges from facilities which belong in the classifications of this section but are excluded from, or not specifically included in, its provisions.

**History:** Emerg. cr. eff. 2-1-74.

**NR 283.03 Production basis.** Daily discharge limitations shall be based on the maximum daily production, in air-dry tons which shall be the highest average level of production sustained for 7 consecutive operating days of normal production.

**History:** Emerg. cr. eff. 2-1-74.

**NR 283.04 Application of interim limitations.** Specialty paper mills should be handled on a selective basis. The limitations should not be applied to facilities in the following categories:

Category	With Maximum Capacity of
Acid Sulfite (paper grade)	less than 200 T/D
Waste Paperboard	less than 100 T/D
Tissue from Purchased Pulp	less than 50 T/D
Fine Paper from Purchased Pulp	less than 200 T/D
NSSC	All
Integrated Kraft with NSSC	All

**History:** Emerg. cr. eff. 2-1-74.

**NR 283.05 Description of abatement models.** (1) The following production process controls and treatment systems are a model for attaining the recommended effluent limitations for the industry except tissue paper mills using purchased pulp.

(a) Heat and/or chemical recovery from pulping liquors, efficient save-alls within the paper making process, and a high degree of water reuse,

(b) Primary clarification,

(c) Biological oxidation using aerated lagoons or activated sludge,

(d) Secondary clarification,

(e) Disinfection, if necessary.

(2) The treatment model for tissue mills, using purchased pulp, is based on an expected effluent quality from efficient physical or physical-chemical treatment. The majority of the BOD in this wastewater is associated with fibrous materials and thus is amenable to this type of treatment. The application of biological oxidation to this wastewater would not significantly lower the effluent BOD. The wastewater is also nutrient deficient and, therefore, subsequent nutrient additions to support a biological system would result in an additional loading on the receiving water.

**History:** Emerg. cr. eff. 2-1-74.

**NR 283.06 Table of interim effluent limitations (In Pounds per Ton of Production).**

Subcategories	BOD <sub>5</sub>	Suspended Solids
(1) Kraft Pulping and Manufacture of:		
(a) Coarse Paper and Liner Board.....	5	5
(b) Newsprint.....	5	6
(c) Bleached & Unbleached Grades.....	9	10
(d) Bleached Grades.....	11	10
(2) Sulfite Pulping and the Manufacture of:		
(a) Paper.....	35	20
(b) Dissolving Pulp.....	65	20
(3) Neutral Sulfite Semi-Chemical.....	14	8
(4) Groundwood		
(a) Unbleached.....	2.5	5
(b) Bleached.....	4.5	9
(5) Deinking Mill.....	10	16
(6) Paperboard (No Deinking).....	3	3
(7) Paper Manufacture (From Purchased Pulp)		
(a) Coarse.....	2	3
(b) Fine (8% filled).....	6	7
(c) Book (8% filled).....	3	4
(d) Tissue.....	8	6

For all subcategories settleable solids shall not exceed 0.1 ml/l.

**NOTES:**

<sup>1</sup>Groups 1, 2, 3 and 4 refer to integrated mills (combined pulping and papermaking operations).

<sup>2</sup>Groups 5 and 6 refer to wastepaper processing plants.

**History:** Emerg. cr. eff. 2-1-74.