



NR 286

Filed April 14, 1975
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State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

L. P. Voigt
Secretary

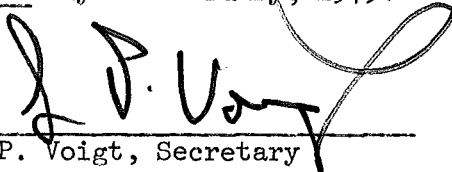
IN REPLY REFER TO: _____

STATE OF WISCONSIN)
)
DEPARTMENT OF NATURAL RESOURCES) SS

TO ALL TO WHOM THESE PRESENTS SHALL COME, GREETINGS:

I, L. P. Voigt, Secretary of the Department of Natural Resources and custodian of the official records, do hereby certify that the annexed copy of Natural Resources Board Order No. W-8-75 (I) has been compared by me with the original order on file in this office of the Department of Natural Resources, Madison, Wisconsin, and that the same is a true copy thereof, and of the whole of such original order; that said order was duly passed and published as set forth therein.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the official seal of the Department at the Pyare Square Building in the City of Madison, this 11th day of February, 1975.


L. P. Voigt, Secretary

(SEAL)

STATE OF WISCONSIN NATURAL RESOURCES BOARD

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IN THE MATTER of creating Chapter .
NR 286 of the Wisconsin Administrative .
Code pertaining to Rubber Processing .
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ORDER NO. W-8-75 (I)

ORDER OF THE STATE OF WISCONSIN NATURAL RESOURCES BOARD

CREATING RULES

Pursuant to authority vested in the State of Wisconsin Natural Resources Board by sections 147.04(2), 147.04(5), 147.06, 147.07(2) and Chapter 227, Wisconsin Statutes, the State of Wisconsin Natural Resources Board hereby creates rules as follows:

CHAPTER NR 286

EFFLUENT LIMITATIONS AND STANDARDS
Rubber Processing

NR 286.01 Purpose. The purpose of this chapter is to establish effluent limitations, standards of performance, and pretreatment standards for discharges of process wastes from the rubber processing category of point sources and subcategories thereof.

NOTE: The authority for promulgation of this chapter is set forth in Wis. Adm. Code chapter NR 205.

NR 286.02 Applicability. (1) The effluent limitations, standards of performance, pretreatment standards, and other provision in this chapter are applicable to pollutants or pollutant properties in discharges of process waste resulting from manufacture in any of the following product subcategories.

- (a) Pneumatic tires and inner tubes
- (b) Emulsion crumb rubber
- (c) Solution crumb rubber
- (d) Latex rubber.
- (e) Small-sized rubber products manufacturing plants.
- (f) Medium-sized rubber products manufacturing plants.
- (g) Large-sized rubber products manufacturing plants.
- (h) Wet digestion process reclaimed rubber.
- (i) Pan, dry digestion, and mechanically reclaimed rubber.
- (j) Latex-dipped, latex-extruded, and latex-molded rubber products.
- (k) Latex foam.

(2) Discharges resulting from the production of latex based products, tires (except retreaded tires) and inner tubes, and textiles subject to the provisions of Wis. Adm. Code chapter NR 296 are specifically excluded from subcategories (e), (f), and (g) of sub (1) above.

(3) Discharges resulting from textile facilities subject to the provisions of Wis. Adm. Code chapter NR 296 are specifically excluded from subcategories (j) and (k) of sub (1) above.

NR 286.03 Definitions. The following definitions are applicable to terms used in this chapter. Definitions of other terms and meanings of abbreviations are set forth in Wis. Adm. Code NR 205.

- (1) "Chromium" or "Cr" means total chromium
- (2) "Large-sized" means manufacturing plants which process more than 23,000 lbs or 10,430 kg per day of raw materials.
- (3) "Medium-sized" means manufacturing plants which process between 8,200 and 23,000 lbs or 3,720 and 10,430 kg per day of raw materials.
- (4) "Oil and grease" means those components of a waste water amenable to measurement by the method described on page 217, Methods for Chemical Analysis of Water and Waste, published 1971 by the Environmental Protection Agency. Copies of this publication are available for inspection at the office of the department of natural resources, the secretary of state's office, and the office of the revisor of statutes, and may be obtained for personal use from the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402 (Stock No. 5501-0067).
- (5) "Pan, dry digestion, and mechanically reclaimed rubber" means rubber reclaimed by other than the wet digestion process.

- (6) "Raw material" means, as appropriate,
- (a) all natural and synthetic rubber, carbon black, oils, chemical compounds and fabric used in rubber products manufacturing,
 - (b) wire in addition to the materials listed in sub (a) above used in the manufacture of tires and inner tubes, or
 - (c) all latex solids used in the manufacture of latex foam or latex-dipped, latex-extruded, or latex-molded products.
- (7) "Raw material equivalent" means the amount of raw material equal to the daily raw material usage multiplied by the daily volume of wet scrubbed air and divided by the daily volume of all scrubbed air.
- (8) "Rubber products manufacturing" means the production of molded, extruded, and fabricated rubber products, foam rubber backing, rubber cement-dipped goods, and retreaded tires.
- (9) "Small-sized" means manufacturing plants which process less than 8,200 lbs or 3,720 kg per day of raw materials.

NR 286.04 Compliance with effluent limitations and standards. Discharge of pollutants from facilities subject to the provisions of this chapter shall 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, 1977 pretreatment standards for existing discharges to publicly owned treatment works;
- (3) by July 1, 1983 effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable;
- (4) standards of performance for new sources; or
- (5) pretreatment standards for new sources discharging to publicly owned treatment works.

NR 286.05 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, to 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 from that facility compared to those specified in either the Tires and Synthetic or Fabricated and Reclaimed Rubber Development Documents, EPA 440/1-74-013-a (Feb. 1974) or EPA 440/1-75-030-a (Jan. 1975) respectively. 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. Copies of these Development Documents are available for inspection at the office of the department of natural resources, the secretary of state's office, and the office of the revisor of statutes, and may be obtained for personal use from the Superintendent of Documents, U.S. Government Printing Office, Washington D.C. 20460

NR 286.06 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 section NR 286.05,

(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 a maximum month in each subcategory subject to the provisions of this chapter.

NR 286.10 Effluent limitations, best practicable treatment. The following effluent limitations for all or specific subcategories establish, except as provided in section NR 286.05 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 30-day average and daily maximum limitations for BOD₅, suspended solids, and other parameters are set forth in table 1.

(3) The limitations of table 1 are in lbs/1000 lbs or kg/1000 of raw material, for subcategories (e), (f), (g), (j) and (k) and of product for the other subcategories of section NR 286.02.

(4) The limitations for lead in table 1 apply only to discharges attributable to the manufacture of lead sheathed hose.

(5) The limitations for chromium in table 1 apply only to facilities using a chromic acid form cleaning operation.

(6) For facilities in subcategories (e), (f), or (g) having wet scrubbing operations the 30 day average and daily maximum discharge limitations for suspended solids shall be increased above those calculated from table 1 by respectively 2.9 and 5.8 lbs/1000 lbs or kg/1000kg of raw material equivalent.

Table 1
BPT Effluent Limitations

Subcategory	Sus.Solids		Oil & Grease		BOD ₅		Other Parameters	
	ave.	max.	ave.	max.	ave.	max.	ave.	max.
(a)	.064	.096	.016	.024				
(b)	.65	.98	.16	.24	.40	.60	8.0	12.0 COD
(c)	.65	.98	.16	.24	.40	.60	3.94	5.91 COD

Table 1 Continued

(d)	.55	.82	.14	.21	.34	.54	6.85	10.27	COD
(e)	.64	1.28	.25	.70			.0007	.0017	lead
(f)	.40	.80	.15	.42			.0007	.0017	lead
(g)	.25	.50	.093	.26			.0007	.0017	lead
(h)	.52	1.04	.144	.40			6.11	14.7	COD
(i)	.192	.384	.144	.40			2.8*	6.7*	COD
(j)	2.90	6.96	.73	2.0	2.20	3.72	.0036	.0086	Cr
(k)	.94	2.26			1.4	2.4	.024	.058	Zinc

Subcategories are as set forth in section NR 286.02

* These limitations are applicable only to facilities in which dry digestion processes are integrated with wet digestion processes for reclaiming rubber.

NR 286.11 Effluent limitations, best available treatment. The following effluent limitations for all 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) The pH of all discharges shall be within the range of 6.0 to 9.0.

(2) The 30-day average and daily maximum limitations for BOD₅, suspended solids, and other parameters are set forth in table 2.

(3) The limitations of table 2 are in lbs/1000 lbs or kg/1000kg of raw material for subcategories (e), (f), (g), (j) and (k) and of product for the other subcategories of section NR 286.02.

(4) The limitations for lead in table 2 apply only to discharges attributable to the manufacture of lead sheathed hose.

(5) The limitations for chromium in table 2 apply only to facilities using a chromic acid form cleaning operation.

(6) For facilities in subcategories (e), (f), or (g) having wet scrubbing operations the 30 day average and daily maximum discharge limitations for suspended solids shall be increased above those calculated from table 2 by respectively 0.5 and 1.0 lbs/1000 lbs or kg/1000kg of raw material equivalent.

Table 2

Subcategory	BAT Effluent Limitations							
	Sus.Solids		Oil & Grease		BOD ₅		Other Parameters	
	Ave.	Max.	Ave.	max.	ave.	max.	ave.	max.
(a)	.064	.096	.016	.024				
(b)	.16	.24	.08	.12	.08	.12	2.08	3.12
(c)	.16	.24	.08	.12	.08	.12	2.08	3.12
(d)	.07	.11	.14	.21	.07	.11	1.78	2.66
(e)	.64	1.28	.25	.70			.0007	.0017
(f)	.40	.80	.15	.42			.0007	.0017
(g)	.25	.50	.093	.26			.0007	.0017
(h)	.52	1.04	.144	.40			6.11	14.7
(i)	.192	.384	.144	.40			2.8*	6.7*
(j)	2.90	6.96	.73	2.00	2.20	3.72	.0036	.0086
(k)	.94	2.26			1.4	2.4	.024	.058

Subcategories are set forth in section NR 286.02

- * These limitations are applicable only to facilities in which dry digestion processes are integrated with wet digestion processes for reclaiming rubber.

NR 286.12 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) The pH of all discharges shall be within the range of 6.0 to 9.0
- (2) The 30-day average and daily maximum limitations for BOD₅, suspended solids, and other parameters are set forth in table 1.
- (3) The limitations of table 1 are in lbs/1000 lbs or kg/1000kg or raw material for subcategories (e), (f), (g), (j) and (k) and of product for the other subcategories of section NR 286.02.
- (4) The limitations for lead in table 1 apply only to discharges attributable to the manufacture of lead sheathed hose.
- (5) The limitations for chromium in table 1 apply only to facilities using a chromic acid form cleaning operation.

NR 286.13 Pretreatment standards for new sources. The pretreatment standards for discharges to publicly owned treatment works from new sources subject to the provisions of this chapter shall be as set forth in Wis. Adm. Code chapter NR 211. In addition the limitations for incompatible pollutants shall be;

- (1) for subcategories (e), (f), (g), (h), (i) and (j) a maximum of 100 mg/l of oil & grease,
- (2) for subcategories (h) and (i) the COD limitations of table 1 of this chapter,
- (3) for subcategory (e), (f) and (g) the lead limitations of table 1 of this chapter,
- (4) for subcategory (j) the chromium limitations of table 1 of this chapter, and
- (5) for subcategory (k) the zinc limitation of table 1 of this chapter.

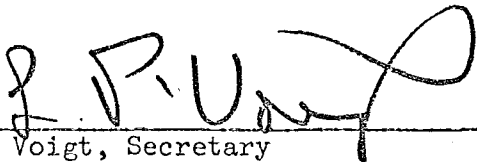
NR 286.14 Pretreatment standards for existing sources. (Reserved)

The foregoing rules were approved and adopted by the State of Wisconsin Natural Resources Board on December 20, 1974.

The rules contained herein shall take effect upon publication in the official state newspaper.

Dated at Madison, Wisconsin February 11, 1975

STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES

By 
L. P. Voigt, Secretary

(SEAL)