

NR 272



State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

L. P. Voigt
Secretary

BOX 450
MADISON, WISCONSIN 53701

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-21-74 (E) 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 at the Pyare Square Building in the City of Madison, this 23rd day of January, 1974.

L. P. Voigt, Secretary

(SEAL)

STATE OF WISCONSIN NATURAL RESOURCES BOARD

.....
IN THE MATTER of creating NR 272 .
of the Wisconsin Administrative .
Code .
.....

ORDER NUMBER W-21-74 (E)

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 (5) and 227.027, Wisconsin Statutes, the State of Wisconsin Natural Resources Board hereby creates rules as follows:

CHAPTER NR 272
Interim Effluent Limitations for the
Motor Vehicle Industry
Wisconsin Pollutant Discharge Elimination System

NR 272.01 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), Wisconsin Statutes.

272.02 Applicability. These interim limitations were developed to apply to SIC Codes 3711, 3712, 3714, and 3461.

- (1) Subcategories included. The following subcategories of operations in the motor vehicles industry are included; casting, engine machining and assembly, stamping, body assembly, frame manufacture, electroplating of metal, and final assembly.
- (2) Operations Excluded. Other operations not listed such as aluminum casting, conversion coating, and the manufacture of springs, radiators, heaters, and transmissions are not included but must be taken into consideration.

272.03 Application of Interim Limitations. The interim limitations are based on a very limited information base and must be used very selectively.

272.04 Abatement Models. Abatement facilities may include provisions for suspended solids settling, breaking emulsions, oil and grease removal, and metal ion precipitation. Treatment facilities can be kept at a minimum by good housekeeping and control of in-plant processes including:

- (a) Separation of contaminated wastewaters from cooling waters,
- (b) Separation of soluble oils utilized in machining or hydraulic systems from other plant wastewaters,
- (c) Recirculation in emulsified oil systems,
- (d) Electrostatic painting,
- (e) Use of non-phenol paint strippers,
- (f) Reduction of drag-in to rinsing circuits,
- (g) Curtailment in water usage by countercurrent rinsing, the use of sprays, better control of water flow and proper use and maintenance of racks and tanks,
- (h) Segregation of toxic wastewaters,
- (i) Prevention of leaks, overflows, and spills, and provisions for impounding such discharges.

272.05 Table of Interim Effluent Limitations; Motor Vehicle Industry

<u>Subcategory</u>	<u>Unit</u>	<u>Water Use Gal/Unit</u>	<u>Effluent Limitation (Pounds Per Unit)</u>					
			<u>TSS</u>	<u>Oil & Grease</u>	<u>Phosphate</u>	<u>BOD5</u>	<u>Other</u>	
(1) Casting (1)	Ton Metal	1000	.0834	.04			Phenol Iron	.0008 .0025
(2) Engine; Machining, Assembly	Engine	150	.0125	.0625	.00125		Phenol Chromium (2) Copper Zinc	.000125 .00006 .00004 .0006
(3) Stamping	1000 sq.ft.	170	.0142	.007	.00142	.0142	Chromium (2) Zinc	.00007 .0007
(4) Body Assembly	Body	600	.05	.025	.005	.05	Chromium (2)	.00025
(5) Frame Mfg.	Frame	100	.008	.004	.0008	.008	Phenol	.00008
(6) Electroplating	1000 sq.ft.	12	1.0	.50			Chromium (2) Copper Cyanide Iron Nickel Zinc	.005 .003 .0025 .03 .04 .05
(7) Final Assembly	Body	100	.008	.004	.0008	.008	Chromium (2)	.00004

NOTES:

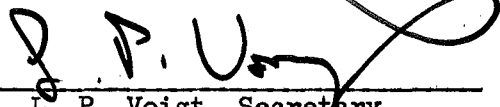
- (1) Limitations apply to casting with dry air pollution control equipment; multiply by factor not to exceed 10 for wet air pollution control equipment.
- (2) Chromium as total chromium.
- (3) Typical for good operation.

The rules contained herein shall take effect upon publication.

Dated at Madison, Wisconsin January 23, 1974

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES

By



L. P. Voigt, Secretary

(SEAL)

CHAPTER NR 283
Interim Effluent Limitations for the
Pulp and Paper Industry
Wisconsin Pollutant Discharge Elimination System

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), Wisconsin Statutes.

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, Wisconsin Administrative 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.

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 seven consecutive operating days of normal production.

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 Sulfitte (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

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. Heat and/or chemical recovery from pulping liquors, efficient save-alls within the paper making process, and a high degree of water reuse, Primary clarification, Biological oxidation using aerated lagoons or activated sludge, Secondary clarification, 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.

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234.06 Table of Interim Effluent Limitations (In Pounds per 1000 Tons of Product

<u>Subcategory</u>	<u>TSS(1)</u>	<u>Iron</u>	<u>Oil</u>	<u>Ammonia Nitrogen</u>	<u>Other</u>	
(1) Sulfuric Acid Sulfur Burning	25.0	1.0			Arsenic	0.25
					Selenium	0.5
					Vanadium	1.0
(2) Phosphoric Acid	625.0	25.0			Cadmium	5.0
					Fluorine	125.0
					Phosphorus	125.0
					Heavy metals(2)	25.0
(3) Normal and Triple Superphosphate Mono-and Di-Ammonium Phosphate N-P-K	208.0	8.3			Cadmium	1.7
					Fluorine	41.5
					Phosphorus	41.5
					Heavy metals(2)	8.3
(4) Ammonia Production Centrifugal and Reciprocal Compressors	130.0	5.3	52.0	52.0	Nickel	2.6
(5) Ammonium Sulfate	50.0	2.0		19.8	Nickel	1.0
(6) Urea (3)	80.0	3.2	32.0		Cobalt	1.6
					Nickel	1.6
					Organic Nitrogen	32.0 100.0
(7) Nitric Acid	72.0	2.9	28.0	28.0	Cobalt	1.4
					Nickel	1.4
					Nitrate Nitrogen	28.0
(8) Ammonium Nitrate	62.5	2.5	25.0	25.0	Nickel	1.3
					Nitrate Nitrogen	25.0

NOTES:

(1) TSS means total suspended solids

(2) Heavy metals means the combination of U, Nat, Va

(3) The 32 pound limits apply to once-through and partial recycle urea plants and the 100 pound limits to total recycle plants as described in NR 234.05(6)

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(6) Urea (3)	80.0	3.2	32.0		Cobalt	1.6
					Nickel	1.6
					Organic Nitrogen	32.0
						100.0
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State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

L. P. Voigt
Secretary

January 23, 1974

BOX 450
MADISON, WISCONSIN 53701

IN REPLY REFER TO: 1020

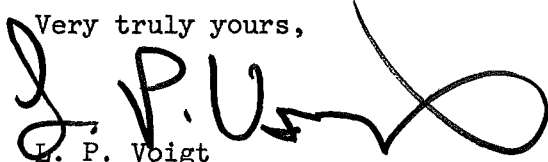
Mr. James J. Burke
Revisor of Statutes
411 West
C A P I T O L

Dear Mr. Burke:

Enclosed is State of Wisconsin Natural Resources Board Order No. W-21-74 (E) for filing as required by section 147.04 (5), Wisconsin Statutes.

These are interim rules concerning Effluent Limitations for the Motor Vehicle Industry adopted pursuant to section 227.027, Wisconsin Statutes, and are effective the day of publication, in the official state paper, which is February 1, 1974.

Very truly yours,


L. P. Voigt
Secretary

Enc.