



NR 235

Filed June 25, 1976
10:35 am O. S. Earl

State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Anthony S. Earl
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, Anthony S. Earl, Secretary of the Department of Natural Resources and custodian of the official records of said Department, do hereby certify that the annexed copy of Natural Resources Board Order No. EL-42-76 was duly approved and adopted by this Department on April 15, 1976. I further certify that said copy has been compared by me with the original on file in this Department and that the same is a true copy thereof, and of the whole of such original.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the official seal of the Department at Pyare Square Building in the Village of Shorewood Hills, this 22nd day of June, 1976.


Anthony S. Earl, Secretary

(SEAL)

STATE OF WISCONSIN NATURAL RESOURCES BOARD

.....
IN THE MATTER of creating Chapter NR 235
of the Wisconsin Administrative Code
pertaining to organic chemical manufacturing
.....

EL-42-76

ORDER OF THE STATE OF WISCONSIN NATURAL RESOURCES BOARD

CREATING RULES

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

SECTION 1 - Chapter NR 235 is created to read:

Chapter NR 235

ORGANIC CHEMICAL MANUFACTURING

NR 235.01	Purpose	NR 235.10	Effluent limitations, best practicable treatment
NR 235.02	Applicability	NR 235.11	Effluent limitations, best available treatment
NR 235.03	Definitions	NR 235.12	Standards of performance
NR 235.04	Compliance with effluent limitations and standards	NR 235.13	Pretreatment standards for new sources
NR 235.05	Modification of effluent limitations	NR 235.14	Pretreatment standards for existing sources
NR 235.06	Application of effluent limitations and standards		

NR 235.01 Purpose. The purpose of this chapter is to establish effluent limitations, standards of performance, and pretreatment standards for discharges of process wastes from the organic chemicals manufacturing 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.

History: Cr. eff. 2-28-75.

NR 235.02 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 the manufacture of the organic chemicals identified under the following process subcategories.

(1) NONAQUEOUS PROCESSES. This subcategory includes the manufacture in nonaqueous processes of the following chemicals;

- Chemicals.....Manufacturing processes
- BTX aromatics.....hydrotreatment of pyrolysis gasoline.
- BTX aromatics.....solvent extraction from reformate.
- cyclohexane.....hydrogenation of benzene.
- vinylchloride.....addition of hydrochloric acid to acetylene.

NR 235.04 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.

History: Cr. eff. 2-28-75.

NR 235.05 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, the process applied, or other such factors related to such discharges 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 for that facility compared to those specified in the Major Organic Products Development Document, EPA 440/1-74-009-a. 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.

(3) Copies of this Development Document, "Major Organic Products", EPA 440/1-74-009-a, published April, 1974, 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.

History: Cr. eff. 2-28-75.

NR 235.06 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 235.05.

(b) They may be superceded by more stringent limitations and standards necessary to achieve water quality standards or meet other legal requirements, or

(c) They may be supplemented or superceded 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 for the facility in each subcategory subject to the provisions of this chapter.

History: Cr. eff. 2-28-75.

NR 235.10 Effluent limitations, best practicable treatment. The following effluent limitations for all or specific subcategories establish, except as provided in section NR 235.05, 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 BOD, suspended solids, and phenol are set forth in table 1. Limitations for subcategories (2)(a) and (3)(a) and (b) are not applicable to discharges resulting from the manufacture of the specific materials set forth in table 1.

Process Category Group, defined in sec. NR 235.02	BOD		TSS		Phenol	
	ave.	max.	ave.	max.	ave.	max.
(1)	.02	.045	.03	.067		
(2) (a)	.058	.13	.088	.20		
(2) (b)	.42	.95	.64	1.42		
(3) (a)	.12	.28	.19	.42		
(3) (b)	.25	.55	.25	.56	.020	.045
(3) (c)	.51	1.15	.068	.15	.020	.045
(3) (d)	1.37	3.08	1.25	2.80	.020	.045

Specific Materials.

ethylene oxide	.032	.072	.032	.072
methyl amines	.10	.22	.10	.22
ethylene glycol	.088	.20	.13	.30
oxo chemicals	.24	.54	.24	.54

Note: Phenol limitations applicable only to discharges resulting from the manufacture of phenol and acetone, bisphenol A, and p-cresol.

NR 235.11 Effluent limitations, best available treatment. The following effluent limitations for all of 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 BOD, suspended solids, phenol and COD are set forth in table 2. Limitations for subcategories (2)(a) and (3)(a) and (b) are not applicable to discharges resulting from the manufacture of the specific materials set forth in table 2.

Table 2

BAT Effluent limitations

Process Category Group, defined in sec. NR 235.02	(in lbs/1000 lbs or kg/1000 kg of product)							
	COD		BOD		TSS		Phenol	
	ave.	max.	ave.	max.	ave.	max.	ave.	max.
(1)	.045	.062	.0085	.015	.013	.022		
(2) (a)	.58	.80	.025	.044	.04	.066		
(2) (b)	.95	1.32	.18	.32	.29	.48		
(3) (a)	.37	.52	.053	.093	.085	.14		
(3) (b)	.98	1.75	.068	.12	.11	.19	.0017	.003
(3) (c)	4.37	6.07	.043	.067	.03	.05	.0017	.003
(3) (d)	28.26	39.25	.35	.62	.57	.94	.0017	.003

Specific Materials

ethylene oxide	.52	.98	.011	.020	.016	.030
methyl amines	.21	.39	.034	.062	.052	.098
ethylene glycol	.65	1.20	.046	.086	.069	.13
oxo chemicals	2.2	4.1	.088	.16	.13	.24

Note: Phenol limitations applicable only to discharges resulting from the manufacture of phenol and acetone, bisphenol A, and p-cresol.

NR 235.12 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 BOD, suspended solids, and phenol are set forth in table 3. Limitations for subcategories (2)(a) and (3)(a) and (b) are not applicable to discharges resulting from the manufacture of the specific materials set forth in table 3.

Table 3

Standards of performance effluent limitations

Process Category Group, defined in sec. NR 235.02	(in lbs/1000 lbs or kg/1000 kg of product)					
	BOD		TSS		phenol	
	ave.	max.	ave.	max.	ave.	max.
(1)	.017	.037	.015	.034		
(2) (a)	.048	.11	.044	.10		
(2) (b)	.34	.76	.32	.72		
(3) (a)	.10	.23	.094	.21		
(3) (b)	.20	.45	.12	.28	.020	.045
(3) (c)	.42	.94	.034	.076	.020	.045
(3) (d)	1.14	2.56	.63	1.40	.020	.045

Specific Materials

ethylene oxide	.024	.054	.014	.032
methyl amines	.088	.16	.052	.098
ethylene glycol	.076	.14	.069	.13
oxo chemicals	.21	.39	.13	.24

Note: Phenol limitations applicable only to discharges resulting from the manufacture of phenol and acetone, bisphenol A, and p-cresol.

NR 235.13 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 those set forth in section NR 235.12, except as provided in Wis. Adm. Code section NR 211.30(2). Wastewaters from such new sources may not be discharged to publicly owned treatment works except in compliance with this section.

History: Cr. eff. 2-28-75.

NR 235.14 Pretreatment standards for existing sources. The pretreatment standards for discharges to publicly owned treatment works from existing point sources subject to the provisions of this chapter shall be as set forth in Wis. Adm. Code chapter NR 211 except that section NR 211.30 shall not apply.

The foregoing rules were approved and adopted by the State of Wisconsin Natural Resources Board on April 15, 1976.

The rules contained herein shall take effect upon publication.

Dated at Madison, Wisconsin 22 June 1976

STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES

By Anthony S. Earl
Anthony S. Earl, Secretary

(SEAL)