



NR 274

Filed April 28, 1976
12:50pm B.L.P.

State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Anthony S. Earl
Secretary

BOX 450
MADISON, WISCONSIN 53701

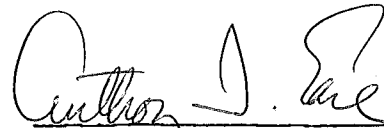
IN REPLY REFER TO: _____

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-26-76 was duly approved and adopted by this Department on February 19, 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 13TH day of April, 1976.


Anthony S. Earl, Secretary

(SEAL)

STATE OF WISCONSIN NATURAL RESOURCES BOARD

.....
IN THE MATTER of creating chapter NR 274 .
of the Wisconsin Administrative Code . EL-26-76
pertaining to nonferrous metals manufacturing .
.....

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), 147.06 and 147.07 and chapter 227, Wisconsin Statutes, the State of Wisconsin Natural Resources Board hereby creates rules as follows:

SECTION 1 - Chapter NR 274 is created to read:

CHAPTER NR 274
EFFLUENT LIMITATIONS AND STANDARDS
NONFERROUS METALS MANUFACTURING

NR 274.01 Purpose. The purpose of this chapter is to establish effluent limitations, standards of performance, and pretreatment standards for discharges of process wastes from the nonferrous metals 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.

NR 274.02 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 of the following subcategories.

- (1) Bauxite refining. This subcategory covers the process of converting bauxite ore containing alumina monohydrate or trihydrate to alumina by the Bayer process or the combination process.
- (2) Primary aluminum smelting. This subcategory covers the process of converting alumina to aluminum by the Hall-Heroult process.
- (3) Secondary aluminum smelting. This subcategory covers the processes of:
 - (a) Secondary aluminum smelting where aluminum fluoride or chlorine is used in the magnesium removed process; and
 - (b) Producing metallic aluminum alloys by the recovery, processing, and resmelting of aluminum scrap.
- (4) Primary copper smelting. This subcategory covers the process of primary smelting and onsite refining of copper. It does not include recovery of copper from ore by hydrometallurgical methods.
- (5) Primary copper refining. This subcategory covers the process of primary refining of copper on a site other than with primary smelting of copper.
- (6) Secondary copper. This subcategory covers the reprocessing of new and used copper scrap and residues to produce copper and copper alloys.
- (7) Primary lead. This subcategory covers the process of lead productions at primary lead smelters and refineries. It does not include primary lead refineries not located onsite with a primary lead smelter.
- (8) Primary zinc. This subcategory covers the process of producing primary zinc by either electrolytic or pyrolytic means.

NR 274.03 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 chapter NR 205.

- (1) "Product" means as appropriate;

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 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 the appropriate one of the Development Documents listed in subsection (3) below. 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) Applicable Development Documents for segments of the nonferrous metals manufacturing category are:

- (a) Bauxite refining, EPA 440/1-74-019e, published March, 1974,
- (b) Primary Aluminum Smelting, EPA 440/1-74-019d, published March, 1974,
- (c) Secondary Aluminum Smelting, EPA 440/1-74-019c, published March, 1974,
- (d) Primary Copper Smelting, EPA 440/1-75-032b, published February, 1975,
- (e) Secondary Copper, EPA 440/1-75-032c, published February, 1975,
- (f) Lead, EPA 440/1-75-032a, published February 1975, and
- (g) Zinc, EPA 440/1-75-032, published February, 1975.

(4) 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 274.06 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 274.05,
- (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.

NR 274.11 Effluent limitations, best available treatment. The following effluent limitations for all or specific subcategories identified in section NR 274.02 establish the quantity or quality of pollutants or pollutant properties which may be discharged to surface waters 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 (1) there shall be no discharge except in accordance with section NR 274.07(3).

(2) For subcategories (2) and (8) the pH of discharges shall be within the range of 6.0-9.0 and the limitations for other pollutants are set forth in table 4.

(3) For subcategories (4), (5), (6), and (7) there shall be no discharge except in accordance with section NR 274.07(2) and (3).

(4) For subcategories (3a) and (3b) there shall be no discharge.

NR 274.12 Standards of performance. The following effluent limitations for specific subcategories identified in section NR 274.02 establish the quantity or quality of pollutants or pollutant properties which may be discharged to surface waters by a facility which is a new source subject to the provisions of this chapter.

(1) For subcategory (1) there shall be no discharge except in accordance with section NR 274.07(3).

(2) For subcategory (2) discharges shall be within the pH range of 6.0 to 9.0, the 30-day average limitations for suspended solids and fluoride shall be respectively .05 and .025 lbs/1000 lbs. or kg/1000 kg. of product, and the daily maximum limitations for suspended solids and fluoride shall be twice the 30-day average limitations.

(3) For subcategory (3) there shall be no discharge of process wastes to surface waters unless variation from this standard is determined to be necessary for facilities using chlorine for magnesium removal after consideration of the cost of achieving effluent reduction and any non-water quality environmental impact and energy requirements. Such variation shall not exceed the limitations of section NR 274.10(4) for subcategory (3a).

(4) For subcategories (4), (5), (6), and (7) there shall be no discharge except in accordance with section NR 274.07(2) and (3).

(5) For subcategory (8) the limitations shall be as set forth in section NR 274.11(2).

NR 274.13 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 for specific subcategories shall be those set forth in table 5. Wastewaters from such new sources may not be discharged to publicly owned treatment works except in compliance with this section.

Table 3
Effluent Limitations for Discharges from
Impoundments in Areas of Net Precipitation(1)

Subcategory	(5)	(7)
<u>Parameter</u>		
Suspended Solids	0.05	0.021
Arsenic	0.02	
Cadmium		0.0004
Copper	0.0005	
Lead		0.0004
Oil and Grease	0.02	
Selenium	0.01	
Zinc	0.01	0.004

Note(1): Effluent limitations are set forth for 30-day average in lbs/1000 lbs. or kg/1000 kg. of product. Daily maximum limitations are twice the limits shown.

(2) Limitations for subcategory (5) for best available technology and standards of performance for new sources are 1/10 of the values in the table.

Table 4
BAT Effluent Limitations

Subcategory	(2)	(8)
<u>Parameter</u>		
Suspended Solids	0.1	0.14
Fluoride	0.05	
Arsenic		0.00054
Cadmium		0.0027
Selenium		0.027
Zinc		0.027

Note: 30-day average limitations in lbs/1000 lbs. or kg/1000 kg. of product are set forth in this table. Daily maximum limitations are twice the values shown.

The foregoing rules were approved and adopted by the State of Wisconsin Natural Resources Board on February 19, 1976.

The rules contained herein shall take effect upon publication.

Dated at Madison, Wisconsin 13 April 1976

STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES

By Anthony S. Earl
Anthony S. Earl, Secretary

(SEAL)