



NR 101

State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Anthony S. Earl
Secretary

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IN REPLY REFER TO: _____

STATE OF WISCONSIN)
)
DEPARTMENT OF NATURAL RESOURCES) ss

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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. EQ-55-77 was duly approved and adopted by this Department on September 22, 1977. 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 2ND day of November, 1977.

Anthony S. Earl

Anthony S. Earl, Secretary

(SEAL)

STATE OF WISCONSIN NATURAL RESOURCES BOARD

.....
 IN THE MATTER of repealing and recreating .
 Chapter NR 101 of the Wisconsin Administrative .
 Code pertaining to reports and fees for . EQ-55-77
 discharges of industrial wastes, toxic and .
 hazardous substances and air contaminants .

ORDER OF THE STATE OF WISCONSIN NATURAL RESOURCES BOARD

REPEALING AND RECREATING RULES

Pursuant to the authority vested in the State of Wisconsin Natural Resources Board by section 144.54, as amended in sections 1186-1190 of chapter 29, Laws of 1977, and 227.014, Wisconsin Statutes, the State of Wisconsin Natural Resources Board hereby repeals and recreates rules as follows:

Section 1 - Chapter NR 101 is repealed and recreated to read:

DEPARTMENT OF NATURAL RESOURCES
CHAPTER NR 101

Reports and Fees for Discharges of
Industrial Wastes, Toxic and Hazardous Substances,
and Air Contaminants

NR 101.01 Purpose	NR 101.21 Required air emission reports
NR 101.02 Applicability	NR 101.22 Content of air emission reports
NR 101.03 Definitions	NR 101.23 Methods of air emission analysis
NR 101.11 Required effluent reports	NR 101.24 Air emission fees
NR 101.12 Content of effluent reports	NR 101.31 Discharge environmental fees
NR 101.13 Methods of effluent analysis	NR 101.32 Severability
NR 101.14 Effluent fees	

Note. This revision of Chapter NR 101 is primarily for the purpose of providing for payment of fees required by amendment of section 144.54(3), Stats.

NR 101.01 Purpose. The purpose of this chapter is to establish, pursuant to section 144.54, Stats., requirements for submission of reports and payment of discharge environmental fees by persons discharging industrial wastes, toxic and hazardous substances, or air contaminants.

Note. This chapter does not establish any limitations on discharges of industrial wastes, toxic and hazardous substances, or air contaminants. Persons owning or operating facilities having such discharges remain subject to any lawful limitations on such discharges imposed in accordance with federal, state or local regulatory programs.

NR 101.02 Applicability. The provisions of this chapter are applicable to persons required to submit reports to the department as set forth in either or both sections NR 101.11 and NR 101.21. Those sections require reports of discharges of industrial wastes, toxic and hazardous substances, and air contaminants which exceed specified reporting levels.

NR 101.03 Definitions. The following definitions are applicable to terms used in this chapter.

(1) "Person" means an individual, partnership, corporation, association, state agency, or interstate agency owning or operating a facility discharging effluents to a surface water, to a land disposal system, or to a publicly owned treatment works or discharging emissions into the atmosphere.

(2) "Facility" means an operating plant or establishment carrying on any manufacturing activity, trade, or business on a common site, including similar such plants under common ownership or control located on contiguous properties. Plants or establishments under common ownership or control located on separate sites shall be considered separate and individual facilities.

(3) "Effluent" means any discharge of process waste water, cooling water, or sanitary waste water, to a surface water including such discharge through a storm sewer, to a land disposal system, or to a publicly owned waste treatment works. Precipitation runoff and liquid agricultural wastes used as soil fertilizer are excluded from this definition unless monitoring of such discharges is required under a WPDES discharge permit.

(4) "Surface water" means those portions of Lake Michigan and Lake Superior within the boundaries of Wisconsin, all lakes, bays, rivers, streams, springs, ponds, impounding reservoirs, marshes, water courses, drainage systems and other surface water, natural or artificial, public or private within the state or under its jurisdiction, except those waters which are entirely confined and completely retained upon the property of a facility.

(5) "Land disposal system" means an absorption or seepage pond, a ridge and furrow, a spray irrigation, a spray runoff, a subsurface field absorption, a surface spreading, or other installation on a land area used for the disposal of effluent by absorption or percolation into the ground.

(6) "Publicly owned treatment works" means a sewage treatment plant owned by a municipality and the sewerage system tributary thereto.

(7) "Municipality" means, as defined in section 144.01(12), Stats., any city, town, village, county, county utility district, town sanitary district, public inland lake protection and rehabilitation district or metropolitan sewage district.

(8) "Process waste water" means any water, except cooling water, which comes into direct contact with or results from the production or use of any raw material, service item, intermediate product, finished product, byproduct, or waste product, and may contain in solution or suspension various components of such raw materials, items or products.

(9) "Cooling water" means any water which is used primarily for cooling of raw materials, products, or equipment.

(10) "Sanitary waste water" means waste water associated with personal hygiene, food preparation, or cleaning but does not include waste water from commercial or bulk production of goods or services such as, but not limited to, laundromats, commercial laundries, carwashes, food production, or other manufacturing activities.

(11) "WPDES permit" means a Wisconsin pollutant discharge elimination system permit issued by the Department pursuant to Chapter 147, Stats.

(12) "Emission" or "air emission" means any discharge of air contaminants into the atmosphere.

(13) "Nitrogen oxides" means all oxides of nitrogen except nitrous oxide.

(14) "Particulate" or "particulate matter" means any material in an emission which exists as a solid at standard conditions.

(15) "Performance test" means the measurement of emissions or other procedures used for the purpose of determining compliance with a standard of performance.

(16) "Stack" means any device or opening designed or used to emit air contaminants into the ambient air.

NR 101.11 Required effluent reports.

(1) Each person owning or operating a facility for which a report is required by subsection (4) of this section shall submit to the department an annual report for each such facility for effluent:

- (a) To a surface water, directly or through a storm sewer;
- (b) To a land disposal system; or
- (c) To a publicly owned treatment works.

(2) Reports required pursuant to this section shall be submitted by February 1 of each year for effluents during the preceding calendar year. Persons unable to submit reports by February 1 for sufficient reasons shall, upon written request to the Department, be granted an extension of 45 days for submission of such reports.

(3) The form and content of effluent reports shall be as set forth in section NR 101.12.

(4) A report is required for each facility, other than one owned and operated by a municipality, having an effluent to a surface water, to a land disposal system, or to a publicly owned treatment works if any such effluent on any one or more days in a calendar year:

(a) Contains any one or more of the industrial wastes or toxic and hazardous substances identified in Table 1 in either a concentration or daily quantity in excess of the reporting level set forth in that table, and either;

(b) Has a volume greater than 10,000 gallons per day; or

(c) Has a volume less than 10,000 gallons per day where,

1. The effluent is to a surface water from a facility required by a WPDES permit to monitor the effluent for other than volume and temperature, or

2. The effluent is to a land disposal system from a facility required by a WPDES permit to monitor either the effluent or underlying ground water for other than effluent volume, or

3. The effluent is to a publicly owned treatment works from a facility subject to a pretreatment standard, adopted by the department pursuant to section 147.07(2), Stats., which limits the discharge of one or more of the substances identified in Table 1.

(5) For the purposes of subsection (4)(a) and of reports required by this section:

(a) The reporting level for thermal discharge is applicable only to effluent to a surface water, and

(b) Both the concentration and the daily quantity of industrial wastes or toxic and hazardous substances shall be determined in accordance with section NR 101.12(4).

(6) For the purpose of determining the volume of effluent to a surface water, to a land disposal system, or to a publicly owned treatment works:

(a) The volume of sanitary waste water contained in any such effluent may be deducted from the total volume; and

(b) Where any such effluent consists of more than one effluent stream the volume shall be the total of the individual streams less the volume of any sanitary waste water contained therein.

(7) Any person required to file a report for an effluent to a publicly owned treatment works shall provide a copy of such report, or equivalent data characterizing discharges to publicly owned treatment works, to the authority responsible for the operation of such works.

(8) Any person who establishes a new facility for which a report will be required in accordance with this section shall, within 90 days of commencing operation of such facility, register such new facility with the department.

TABLE 1. Register of Industrial Wastes or Toxic and Hazardous Substances

SUBSTANCE	REPORTING LEVELS ¹ Concentration (mg/l) and Quantity (lbs/day)	QUANTITY FEE FACTORS ² in dollars/lb/day for discharges to		
		Surface	Land	Publicly
		Waters	Disposal Systems	Owned Treatment Works
<u>1. METALS</u>				
Antimony, total	0.20	\$ 2.50	\$ 2.00	\$ 2.00
Arsenic, total	0.05	2.50	2.00	2.00
Beryllium, total	0.10	5.00	4.00	4.00
Cadmium, total	0.05	25.00	20.00	20.00
Chromium, total	0.10	2.50	1.25	1.25
Copper, total	0.10	2.50	1.25	1.25
Lead, total	0.10	2.50	1.25	1.25
Manganese, total	0.10	2.50	1.25	1.25
Mercury, total	0.0025	500.00	250.00	250.00
Nickel, total	0.20	2.50	2.00	2.00
Selenium, total	0.05	2.50	2.00	2.00
Silver, total	0.10	2.50	1.25	1.25
Thallium, total	0.05	2.50	2.00	2.00
Zinc, total	0.20	2.50	1.25	1.25
<u>2. NUTRIENTS & DISSOLVED IONS</u>				
Chloride	50	0.05	0.04	0.04
Cyanide, total	0.025	10.00	5.00	5.00
Fluoride	2	0.05	0.04	0.04
Nitrogen (Kjeldahl)	0.60	0.25	0.125	0.125
Nitrogen (Nitrate + Nitrite)	0.60	0.25	0.125	0.125
Phosphorus, total	0.10	1.00	0.50	0.50
Sulfate	30	0.05	0.04	0.04
Sulfide	1	2.00	0.20	0.20
<u>3. ORGANICS-GENERAL</u>				
Biochemical Oxygen Demand, five-day (BOD ₅)	5	0.25	0.00	0.025
Oil & Grease	5	1.00	0.30	0.30
Phenols	0.05	20.00	6.00	6.00
<u>4. ORGANICS-SPECIFIC</u>				
Aldrin	0.001	500.00	250.00	250.00
Chlordane	0.001	500.00	250.00	250.00
DDT	0.001	500.00	250.00	250.00
Dieldrin	0.001	500.00	250.00	250.00
Endrin	0.001	500.00	250.00	250.00
Hexachlorobenzene	0.001	500.00	250.00	250.00
Hexachlorocyclohexane	0.001	500.00	250.00	250.00
Methoxychlor	0.001	500.00	250.00	250.00
Pentachlorophenol	0.001	50.00	25.00	25.00
Polychlorinated Biphenyls	0.001	500.00	250.00	250.00
<u>5. OTHER SUBSTANCES & MEASUREMENTS</u>				
Chlorine, total residual	1	5.00	0.50	0.50
Solids, total suspended	10	0.125	0.00	0.0125
Thermal Discharge ³	1	0.25		

(1) The facility shall report, pursuant to NR 101.12(4), any substance in its effluent that exceeds the concentration level or quantity level or both as listed in this table.

(2) To obtain the discharge fee required pursuant to NR 101.14(3), the fee factors of this table are multiplied by the quantity of each respective industrial waste or toxic and hazardous substance discharged during a single day of facility operation, as determined in accordance with NR 101.12(4). The fee factors of this table are such that the adjustment factor of NR 101.14(4) is expected to be close to 1.3 for fees payable in 1979.

(3) Reporting level is one million british thermal units (BTU) per day, and the quantity fee factor is in dollars per million BTU per day.

NR 101.12 Content of effluent reports. Effluent reports required by Section NR 101.11 shall contain the following information.

- (1) Facility identification. The report shall include:
 - (a) The name and mailing address of the reporting facility;
 - (b) The location of the facility if different from its mailing address;
 - (c) The name and address of the parent company or corporation if different from that of the facility;
 - (d) A brief description of the nature of the business or other activity of the facility;
 - (e) The normal operation schedule of the facility in hours per day, days per week, days per year, and the percentage production by quarter; and
 - (f) The name and telephone number of the individual to be contacted regarding the effluent report.
- (2) Effluent stream identification. The report shall include a scaled map of the facility showing the location of all effluent streams leaving the facility and discharging to a surface water, to a land disposal system, or to a publicly owned treatment works, and identifying the points at which the effluent streams are sampled for the purposes of this chapter. This map shall be submitted with the first report required pursuant to NR 101.11, and shall be updated with any subsequent report showing changes in the number, location, receiving system, or sampling points of any effluent stream.
- (3) Effluent stream data. The report shall include the following information for each effluent stream:
 - (a) The average and maximum flow volumes, in gallons per day, based on days during the year when discharge occurs;
 - (b) The percentage of the average effluent stream volume which is process, cooling, or sanitary waste water;
 - (c) A statement on the presence or absence of runoff in the effluent stream during periods of precipitation;
 - (d) A description of any waste treatment or pretreatment applied prior to discharge;
 - (e) The average and maximum temperatures, and corresponding influent temperature, of effluent streams discharging to a surface water; and
 - (f) The pH range of the effluent stream, except streams carrying only sanitary waste water;
 - (g) The name of the surface water or publicly owned treatment works, or a description of the location and type of land disposal system receiving the effluent stream.
- (4) Effluent composition. The report shall include for each effluent for which a report is required pursuant to NR 101.11 the concentration and quantity of each industrial waste or toxic and hazardous substance which exceeds the reporting levels established in Table 1. The concentrations and quantities of each substance shall be reported as specified in this subsection:
 - (a) The concentration shall be in milligrams per liter (mg/l) and the quantity shall be in pounds per day, except that thermal discharges shall be reported in millions of BTU's per day;
 - (b) The concentration and quantity shall be determined using the sampling, flow measurement, and analytical procedures set forth in section NR 101.13;

(c) The concentration and quantity may be reported either:

1. As a daily maximum based on samples for a single operating day of full facility production when all substances subject to the provisions of this chapter, including those in batch or periodic discharges, are present in the effluent, and where the quantity of each reported substance is the greatest daily quantity contributed to the effluent during the reporting year, or

2. As a daily maximum and a daily average based on separate samples for at least three days of operation where one of the days is of the type described in paragraph 1., and the others are days of routine facility operation, except as provided in subsection (5).

(5) For a facility required by a WPDES permit or other program to provide more frequent periodic monitoring than required in subsection (4)(c)2., all applicable data resulting from such monitoring shall be used to determine the maximum and average daily concentration of substances, and to determine the maximum and average daily flow volume for calculation of corresponding daily quantities.

(6) Where the maximum daily quantity is determined in accordance with subsection (4)(c)1, it shall be used to determine the annual discharge fee pursuant to NR 101.14(3), and where the maximum and average daily quantities are determined in accordance with subsection (4)(c)2, the average daily quantity shall be used to determine the annual discharge fee pursuant to section NR 101.14(3).

(7) Raw materials report. The report shall include a list of the amounts of raw materials used annually which contribute the industrial wastes or toxic and hazardous substances reported. The list shall also indicate the general purpose for which each raw material is used: cleaning agent, boiler treatment, disinfectant, component of product, and the like.

(8) Reporting forms. Forms for reporting information required by subsections (1), (3), and (4), shall be provided by the Department.

NR 101.13 Methods of effluent analysis.

(1) Persons required to file reports pursuant to Section NR 101.11 shall develop accurate and reliable data sufficient to enable verification of such reports. Records of such data shall include the time and place of sampling, flow measurement, and analyses together with the names of persons or firms responsible for each. Such records shall be retained for three years following the year in which the report is submitted.

(2) Effluent volumes, temperatures, pH ranges, effluent concentrations, and calculated quantities of industrial wastes or toxic and hazardous substances shall be determined and reported annually, except that the department may for relatively minor or constant effluents, approve less frequent determination of concentrations and pH ranges. The department shall not allow the continued use of the same effluent concentration or pH data for more than three consecutive annual reports.

(3) Effluent volumes, temperatures, and pH shall be determined by individual measurements in sufficient number to obtain representative average and maximum daily flow volumes, average and maximum annual discharge temperatures, and annual pH ranges.

(4) Effluent concentrations of industrial wastes or toxic and hazardous substances shall be determined on the basis of a composite sample of effluent to a surface water, to a land disposal system, or to a publicly owned treatment work:

(a) For effluent comprised of a single effluent stream a composite sample shall be taken at intervals of not more than one hour during a complete operating day either:

1. Such that the volume of each individual sample is proportional to the volume of stream flow during each interval, or
2. With prior approval by the department, such that each individual sample is of equal volume.

(b) For an effluent comprised of more than one effluent stream a composite sample of each individual stream shall be taken as provided in subsection (a), and either:

1. Those composite samples shall be analyzed separately and the concentrations of substances in the effluent calculated from the ratio of the volume of each individual stream to the total volume of the effluent; or

2. Volumes of those composite samples proportional to the volume of each individual stream shall be combined into one sample representative of the total effluent volume and that sample analyzed to determine the concentration of substances in the effluent.

(5) Continuous measurement and continuous or proportional sampling conforming to the requirements of Wis. Adm. Code Chapter NR 218 may be used in lieu of methods described in subsections (3) and (4) of this section, and shall be so used when required in the WPDES permit for a facility. Single grab sampling may be used in lieu of measurement and composite sampling required in subsections (3) and (4) only when such sampling is specified in the WPDES permit for a facility.

(6) Sanitary waste water may be excluded from the composite samples of subsection (4).

(7) Concentrations and quantities of industrial wastes or toxic and hazardous substances present in water influent to a facility may be deducted from effluent concentrations and quantities of such substances provided that the net difference represents all contributions of substances to the effluent by the reporting facility. Thermal discharges shall be reported as effluent heat content less influent heat content for corresponding volumes of discharge and intake water.

(8) Methods of analyzing for pollutants shall be those set forth in Wis. Adm. Code Chapter NR 219 unless, on request, an alternate or modified method has been approved previously in writing by the department. Appropriate sample preservation and laboratory procedures shall be used to avoid sample deterioration and interference with prescribed analyses.

NR 101.14 Effluent fees.

(1) An annual effluent fee consisting of an annual administrative fee and an annual discharge fee shall be assessed for each facility which is required to submit an effluent report pursuant to section NR 101.11.

(2) The administrative fee shall be:

(a) 50 dollars for each facility which is also required to file an air emission report pursuant to section NR 101.21; or

(b) 100 dollars for each facility which is not required to file such an air emission report.

Note. The effect of subsection (2) and similar subsection NR 101.24(2) is to assess a 100 dollar administrative fee for each facility for which reports are required by this chapter.

(3) The discharge fee for each facility shall be based on effluent data reported by the facility for the year preceding that in which such fee is assessed and payable, and shall be the sum of the dollar amounts

determined in accordance with paragraphs (a), (b) and (c) of this section, multiplied by an annual adjustment factor determined in accordance with subsection (4). Such dollar amounts shall be:

(a) For each substance discharged to a surface water that is required to be reported, the greater of either:

1. Five dollars, or
2. The dollar amount determined by multiplying the daily discharge quantity in pounds per day by the appropriate quantity fee factor listed in Table 1;

(b) For each substance discharged to a land disposal system that is required to be reported, the greater of either:

1. Five dollars, or
2. The dollar amount determined by multiplying the daily discharge quantity in pounds per day by the appropriate quantity fee factor listed in Table 1; and

(c) For each substance discharged to a publicly owned treatment works that is required to be reported, the greater of either:

1. Five dollars, or
2. The dollar amount determined by multiplying the daily discharge quantity in pounds per day by the appropriate quantity fee factor listed in Table 1.

(4) The adjustment factor shall be determined annually by the department on the basis of its cost for administration of water resource programs as specified in section 144.54(3)(c), Stats., by:

(a) Subtracting the total administrative fees required of all reporting facilities by this section from 30 percent of such costs for the last fiscal year preceding the calendar year in which the effluent fee is assessed and payable, and dividing the difference by;

(b) The total discharge fees of all reporting facilities, each determined in accordance with subsection (3) of this section.

NR 101.21 Required air emission reports.

(1) Each person owning or operating a facility for which a report is required by subsection (4) of this section shall annually submit to the department a report of air emissions for each such facility.

(2) Reports required pursuant to this section shall be submitted by February 1 of each year for air emissions during the preceding calendar year. Persons unable to submit reports by February 1 for sufficient reasons shall, upon written request to the Department, be granted an extension of 45 days for submission of such reports.

(3) The form and content of air emission reports shall be as set forth in section NR 101.22.

(4) An annual air emission report shall be submitted for each facility, other than one owned and operated by a municipality, which:

(a) Has air emissions in quantities of 0.25 tons or more on any one day of operation or 50 tons or more per year of operation of any one or more of the primary air contaminants;

1. Particulates,
2. Sulfur dioxide,
3. Nitrogen oxides,
4. Carbon monoxide, or
5. Hydrocarbons; or

(b) Has air emissions of any one or more of the toxic and hazardous air contaminants identified in Table 2 in excess of either the concentration or emission reporting level set forth in that table.

(5) Reports required by this section shall include data for each air contaminant identified in subsection (4) which is discharged at a level which exceeds the level specified in that subsection.

TABLE 2. Register of Toxic and Hazardous Air Contaminants

SUBSTANCE	REPORTING LEVELS ¹		EMISSION ²
	Concentration (mg/m ³)	Emission (lbs/day)	FEE FACTORS (dollars/lb/day)
Antimony and its compounds	5.0	10.40	4.81
Arsenic and its compounds	5.0	10.40	4.81
Barium and its compounds	5.0	10.40	4.81
Beryllium and its compounds	0.02	0.04	1,250.00
Bromine	7.0	14.56	3.43
Cadmium and its compounds	0.5	1.04	48.08
Chlorine	30.0	62.40	0.80
Chromic acid and chromates	1.0	2.08	24.04
Chromium and its compounds	5.0	10.40	4.81
Cobalt fume and dust	1.0	2.08	24.04
Copper fume and dust	2.0	4.16	12.02
Cyanides	50.0	104.00	0.48
Fluorine	20.0	41.60	1.20
Hydrogen Chloride	70.0	145.60	0.34
Hydrogen Fluoride	20.0	41.60	1.20
Iron, water soluble salts	10.0	20.80	2.40
Lead and its compounds	1.5	3.12	16.03
Manganese and its compounds	50.0	104.00	0.48
Mercury (alkyl compounds)	0.10	0.21	238.10
Mercury and its compounds (except alkyl)	0.50	1.04	48.08
Molybdenum and its compounds	50.0	104.00	0.48
Nickel carbonyl	3.5	7.28	6.87
Nickel and its water soluble compounds	1.0	2.08	24.04
Nitric acid and its anhydride as HNO ₃	50.0	104.00	0.48
Phosphoric acid and its anhydride as H ₃ PO ₄	10.0	20.80	2.40
Phosphorous (yellow)	1.0	2.08	24.04
Platinum, water soluble salts	0.02	0.04	1,250.00
Selenium and its compounds	2.0	4.16	12.02
Sulfuric acid and its anhydride as H ₂ SO ₄	10.0	20.80	2.40
Thallium, water soluble compounds	1.0	2.08	24.04
Tin and its compounds	20.0	41.60	1.20
Uranium and its compounds	2.0	4.16	12.02
Vanadium and its compounds	5.0	10.40	4.81

(1) The facility shall report, pursuant to NR 101.22(5), any substance emitted in excess of the concentration level or emission level or both as listed in this table.

(2) The emission fee factors of this table are such that the adjustment factor of NR 101.24(4) is close to 1.0 for fees payable in 1979.

(6) A person who establishes a new facility for which a report shall be required under this section shall register with the department for reporting within 90 days of the commencement of operations at such facility.

NR 101.22 Content of air emission reports. Air emission reports required by section NR 101.21 shall be on forms supplied by the department and shall contain the information specified in this section.

- (1) Facility identification. The report shall include:
 - (a) The name and mailing address of the facility required to report;
 - (b) The location of the facility if different from its mailing address;
 - (c) The name and address of the parent company or corporation if different from that of the facility;
 - (d) A brief description of the nature of the business or other activity of the facility;
 - (e) The normal operation schedule of the facility in hours per day, days per week, days per year, and percentage production by quarter;
 - (f) The name and telephone number of the individual to be contacted regarding the air emission report; and
 - (g) A description of any air emission monitoring equipment used at the facility.

(2) Fuel combustion. The report shall include, for fuel combustion units:

- (a) Number of boilers;
 - (b) Types of fuel burning equipment for each boiler;
 - (c) Rated capacity of each boiler;
 - (d) For each fuel burned;
 1. Type of fuel and place of origin,
 2. Maximum and average quantity per hour,
 3. Quantity per year,
 4. Hours of operation per day,
 5. Sulfur content in percent as received,
 6. Ash content in percent as received, and
 7. Heat content of fuel in BTU per unit as received;
 - (e) Percent of total heat output used for space heating and for process heat;
 - (f) The type of existing and proposed air pollution control equipment and the actual and design collection efficiency in percent;
 - (g) Stack data showing;
 1. A list of stacks by boilers served and for each stack,
 2. The height, and
 3. Inside top diameter; and
 - (h) Emission data as requested by the Department.
- (3) Manufacturing activities. The report shall include for manufacturing activities or process losses resulting in air emissions;
- (a) Process name and description of each product;
 - (b) Quantity of raw materials used and handled for each product, maximum quantity per hour, and average quantity per year;
 - (c) Description of annual, seasonal, monthly, weekly, and daily operating cycle including downtime for maintenance and repairs;
 - (d) The type of existing and proposed air pollution control equipment and the actual and design collection efficiency in percent;
 - (e) Stack data showing;

1. A list of stacks by equipment served and for each stack,
2. Height, and
3. Inside top diameter; and
- (f) Emission data as requested by the Department.
- (4) Incineration. The report shall include for all incineration equipment;
 - (a) Type of waste;
 - (b) Percent of waste which is combustible;
 - (c) Capacity of incinerator;
 - (d) The type of existing and proposed air pollution control equipment and the actual and design collection efficiency in percent;
 - (e) Stack data showing;
 1. A list of stacks by incinerators served and for each stack;
 2. Height, and
 3. Inside top diameter; and
 - (f) Emission data as requested by the Department.
- (5) Toxic and hazardous substances. The report shall include for emissions of toxic and hazardous air contaminants identified in table 2 information on;
 - (a) Substances emitted and their source;
 - (b) Amount used;
 - (c) General processes from which the substances are emitted;
 - (d) Quantity of substances emitted per year and per operating day;
 - (e) The type of existing and proposed air pollution control equipment and the actual and design collection efficiency in percent;
 - (f) Manner in which the substances are emitted; and
 - (g) Emission data as requested by the Department.

NR 101.23 Methods of air emission analysis.

(1) Persons required to file air emission reports shall develop accurate and reliable data sufficient to enable verification of such reports. Records shall include data on fuel composition and consumption, quantities of raw materials handled which contribute to air emissions, quantities of wastes incinerated, and any results of stack or performance tests together with the names of persons or firms responsible for each. Such records shall be retained for three years following the year in which the report is submitted.

(2) Any person required to file an air emission report may submit to the department the results and data from performance tests, stack tests, or emission calculations. These results shall be reviewed and evaluated by the department. Acceptable stack tests or performance tests shall follow the procedure and sampling train described in American Society of Mechanical Engineers (ASME) Test Code 27 or other methods previously approved in writing by the department. A copy of ASME Code 27 is available for inspection at the office of the department of natural resources, secretary of state's office and the office of the revisor of statutes, and may be obtained for personal use from the American Society of Mechanical Engineers, 315 East 47th Street, New York, New York 10017.

(b) The department shall be notified 10 days in advance of stack or performance tests to afford the department opportunity to have a representative present to witness the testing procedures. Such a notice shall provide a test plan which includes:

1. A description of the sampling equipment;
2. A description of the processes, operations, and equipment venting to the stack;
3. A description of process or operation variables which affect the air contaminant source's emissions;
4. A cross-sectional sketch showing:
 - a. Stack configuration at the sampling location,
 - b. Sampling port locations, and
 - c. Sampling point positions of each port; and
5. A sketch or sketches showing the relative position and elevations of all processes or operations venting to the test stack and also the position of the sampling ports relative to the nearest upstream and downstream gas flow disturbance.

(3) The department may require that stack or performance tests be conducted by facilities for which emission rate data is not submitted. Such tests shall be under the direction of a qualified engineer or person approved by the department and shall be conducted in accordance with Wis. Adm. Code chapter NR 154.06.

(4) When stack or performance test data or other emission rate estimates acceptable to the department are not reported for a primary or toxic and hazardous air contaminant, the department may make an emission rate estimate.

NR 101.24 Air emission fee.

(1) An annual air emission fee consisting of an annual administrative fee and an annual discharge fee shall be assessed for each facility which is required to submit an air emission report pursuant to section NR 101.21.

(2) The administrative fee shall be:

(a) 50 dollars for each facility which is also required to file an effluent report pursuant to section NR 101.11; or

(b) 100 dollars for each facility which is not required to file such an effluent report.

Note. The effect of subsection (2) and similar subsection NR 101.14(2) is to assess a 100 dollar administrative fee for each facility for which reports are required by this chapter.

(3) The discharge fee for each facility shall be based on emission data reported by the facility for the year preceding that in which such fee is assessed and payable, and shall be the sum of the dollar amounts determined in accordance with paragraphs (a) and (b) of this subsection multiplied by an annual adjustment factor determined in accordance with subsection (4). Such dollar amounts shall be:

(a) For each primary air contaminant required to be reported the greater of:

1. 10 dollars; or

2. The amount determined by multiplying the annual emission rate in tons per year by 0.20 dollars; and

(b) For each toxic and hazardous air contaminant required to be reported the greater of:

1. 50 dollars; or

2. The amount determined by multiplying the daily emission rate in pounds per day by the appropriate emission fee factor set forth in table 2.

(4) The adjustment factor shall be determined annually by the department on the basis of its costs for administration of air pollution control programs as specified in section 144.54(3)(c), Stats., by:

(a) Subtracting the total administrative fees required of all reporting facilities by this section from 30 percent of such costs for the last fiscal year preceding the calendar year in which the air emission fee is assessed and payable, and dividing the difference by:

(b) The total discharge fees of all reporting facilities, each determined in accordance with subsection (3) of this section.

NR 101.31 Discharge environmental fees.

(1) Persons subject to the provisions of this chapter shall pay to the department an annual discharge environmental fee for each facility for which a report is required pursuant to either, or both, sections NR 101.11 and NR 101.21.

(2) For each facility the discharge environmental fee shall be the sum of the effluent fee and the air emission fee determined in accordance with sections NR 101.14 and NR 101.24 respectively.

(3) The department shall mail statements annually to persons owning or operating facilities required to pay discharge environmental fees. The first statements issued in accordance with the provisions of this section shall be mailed by May 1, 1979, and shall be based on calendar year 1978 discharges.

(4) Fees payable in accordance with this section shall be paid to the department within 30 days of the statement date.

NR 101.32 Severability. Should any section or portion of this chapter be declared invalid or unconstitutional for any reason, the remainder of the chapter shall not be affected thereby.

The foregoing rules were approved and adopted by the State of Wisconsin Natural Resources Board on September 22, 1977.

The rules contained herein shall take effect upon publication.

Dated at Madison, Wisconsin 2 November 1977

STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES

By Anthony S. Earl
Anthony S. Earl, Secretary

(SEAL)