

NR 154



State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Anthony S. Earl
Secretary

BOX 7921
MADISON, WISCONSIN 53707

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. A-31-79 was duly approved and adopted by this Department on May 24, 1979. 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 18th day of July, 1979.

RECEIVED
JUL 20 1979
3:30 pm
REVISOR OF STATUTES
BUREAU

Anthony S. Earl
Anthony S. Earl, Secretary

(SEAL)

STATE OF WISCONSIN NATURAL RESOURCES BOARD

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IN THE MATTER of amending sections .
NR 154.02 and NR 154.11(1), (2), .
(3) & (4); repealing and recreating .
sections NR 154.03 & 154.06; and . A-31-79
creating section NR 154.01(126m) .
of the Wisconsin Administrative Code .
pertaining to air pollution control .
in nonattainment areas .
.....

ORDER OF THE STATE OF WISCONSIN NATURAL RESOURCES BOARD
AMENDING, REPEALING AND RECREATING, AND CREATING RULES

Pursuant to the authority vested in the State of Wisconsin Natural Resources Board by sections 144.31, 144.34, 144.36, 144.38 and 227.014, Wisconsin Statutes, the State of Wisconsin Natural Resources Board hereby amends, repeals and recreates and creates rules as follows:

SECTION 1 - Section NR 154.01 (126m) is created to read:

(126m) "Silt content" means that portion by weight of a particulate material which will pass through a no. 200 (75 micron) wire sieve as determined by the dry method in ASTM C136-76 or other method approved by the department.

SECTION 2 - Section NR 154.02 is amended to read:

NR 154.02 Applicability, delayed compliance, variances. (1)
APPLICABILITY, The provisions of this chapter govern the release of air contaminants to the ambient air and the regulation of air contaminant sources by the department.

(2) DELAYED COMPLIANCE ORDERS. The department may, by order issued under s. 144.35(1)(b), Stats., authorize a source not in compliance

[144.423(1)(b)]

with an emission limitation prescribed in this chapter to achieve compliance as expeditiously as practicable but not later than 3 years after such requirement became applicable. The department shall hold a public hearing in accordance with its rules prior to authorizing any period of delayed compliance which exceeds 30 days in duration. No such order shall be issued unless:

(a) The cause of the violation was a malfunction, equipment failure, act of God, or some other condition beyond the entity's control, when using all prudent planning;

(b) The air contaminant source is located so that it will not delay attainment or affect maintenance of an ambient air quality standard at any point beyond the property line of the entity;

(c) Good faith efforts have been made to comply with this chapter;

(d) If the violation was caused by a malfunction or equipment failure, any plan required to be prepared by NR 154.06(9) was complied with;

(e) The air contaminant for which a deferral is sought is not a hazardous pollutant for which an emission standard has been established by the administrator of the U.S. environmental protection agency;

(f) The conditions listed in NR 154.09(1), if applicable, are met;

(g) The order contains:

1. An express provision whereby the order recipient consents to its issuance;

2. A requirement that the order recipient employ reasonable emission monitoring techniques to assess compliance with any interim requirements imposed by the order;

3. A requirement for submittal of reports showing whether any interim requirements, increments of progress, and final compliance have been achieved;

4. A provision prohibiting the reduction of employe wages where supplemental, intermittent or other dispersion-dependent control methods are to be used;

5. In the case of a major stationary source, a notice that it may be required to pay administrative noncompliance penalties for failure to comply with the order and that no order issued under this subsection shall be effective until it is approved by the administrator of the U.S. environmental protection agency or designee.

(h) All reasonably available alternative operating procedures and interim control measures to minimize emissions shall be utilized by the air contaminant source during the period of delayed compliance.

(3) RACT VARIANCES. (a) The department may grant source-specific revisions to the state implementation plan setting alternate compliance schedules or alternate emission limitations, or both, where compliance with general RACT requirements of this chapter are shown to be technologically or economically infeasible, provided that:

1. The revision will not delay attainment or prevent maintenance of any ambient air quality standard, as determined by methods acceptable to the department.

2. Construction or modification of the air contaminant source for which a revision is requested was commenced on or before [effective date].

3. The owner or operator of the air contaminant source for which a revision is requested demonstrates that all direct or portable sources

owned or operated in the state by such person are in compliance with all applicable requirements of this chapter or are on a schedule for compliance with such requirements.

4. The owner or operator submits to the department information concerning the conditions or special circumstances which demonstrates, to the department's satisfaction, that the applicable general RACT requirements from which variance is sought are technologically or economically infeasible. In addition,

a. Where an alternate compliance schedule is sought, the owner or operator shall submit a proposed schedule which demonstrates reasonable further progress and contains a date for final compliance as soon as practicable.

b. Where alternate emission limitations are sought, the owner or operator shall submit proposed emission limitations.

c. Requests for revisions shall be signed by the principal executive officer; partner; sole proprietor; or principal governmental executive or elected official or a duly authorized representative, as appropriate.

d. Requests shall contain other relevant information as required by the department.

(b) The department, in acting upon any request for a revision under this subsection, shall:

1. Act on requests for revisions within 3 months of the filing of a completed request.

2. Offer, through public notice, the opportunity for public comment including, where requested, a public hearing.

3. State in writing the reasons for denying, granting, or for granting in modified form any request.

(c) The department may, after notice and opportunity for hearing, revoke or modify any revision when:

1. Any term or condition of the revision has been violated;
2. Changes in ambient air quality indicate that the source has a significant adverse impact on the attainment or maintenance of any ambient air quality standard; or
3. The owner or operator did not act in good faith in demonstrating the technological or economic infeasibility of compliance with the general RACT requirements or in submitting other relevant information in support of the revision request.

(d) When the department grants, modifies or revokes a source-specific revision to a general RACT requirement which has been approved by the administrator of the U.S. environmental protection agency as part of the state implementation plan, such revision shall not become effective until:

1. It has been submitted to the administrator pursuant to applicable law, including but not limited to 42 U.S.C. 7410, as amended, and 40 CFR Parts 51 and 52, as amended, and all such requirements have been met, and
2. It has been approved by the administrator or designee as a revision to the state implementation plan.

(4) ALTERNATE FUEL VARIANCES. The department may grant temporary variances from the emission limitations of this chapter to air contaminant sources which request such variances in order to switch from a regular fuel to an alternate fuel which is in more plentiful supply, provided that the conditions of this subsection are met.

(a) If the office of state planning and energy has certified that a switch from the fuel regularly used by the applicant to an alternate fuel would cause an emission limitation to be exceeded is needed to protect public health, safety or welfare in the applicant's part of the state, the department may grant a temporary variance from such requirements provided that:

1. The applicant has submitted a list of steps which will be implemented without delay to minimize adverse effects caused by the switch in fuels permitted by the variance, including all feasible steps to minimize use of the alternate fuel through energy conservation and other measures; and
2. The applicant has provided, or has agreed to provide within 5 days after the date the variance is granted, information on the type, quantity and quality of fuel and rate of consumption in use before and to be used after the switch in fuels; and
3. Granting the variance would be unlikely to cause or exacerbate a violation of any primary ambient air quality standard; and
4. Litigation for violation of an emission limitation prescribed in this chapter or an ambient air quality standard prescribed in chapter NR 155, Wis. Adm. Code, is not presently pending; and
5. The applicant has agreed to submit no later than 90 days from the date that the variance is granted a plan and time schedule for preventing the recurrence of the conditions which necessitated a variance request; and
6. The applicant submitted and implemented in good faith any plan required to be submitted as a condition to a previously-granted variance; and

7. After July 1, 1978, if the applicant uses natural gas or distillate oil as a regular fuel, the applicant has submitted and received department approval of a plan to minimize dependence on these fuels while complying with the emission limitations of this chapter.

(b) If the office of state planning and energy has not certified that a switch in fuels is needed, the department may grant a temporary variance from the emission limitations of this chapter only if the conditions of subds. (4)(a)1. through 7. are met and the applicant has submitted documentation of the unavailability of the fuel regularly used and of any alternate fuel which the air contaminant source has the capability to burn in compliance with emission limitations.

(c) When granting a variance is likely to cause a secondary standard (but not a primary standard) to be violated or exacerbated, the following conditions shall apply:

1. The variance must specify an expiration date no later than 45 days from the date the variance is granted.

2. Prior to granting a variance extension which expires on a date more than 45 days after the date the variance was originally granted, the department shall:

a. Determine either that the applicant's regular fuel is unavailable or that certification by the office of state planning and energy of the need for a switch in fuels in the applicant's part of the state remains in effect; and

b. Evaluate through ambient air quality monitoring and/or dispersion modeling the air quality impact of granting the variance and determine that maintenance of the primary standards is not being endangered; and

c. Solicit and consider public comment on permitting the extension.

(d) When granting a variance is unlikely to cause any ambient air quality standard to be violated, the following conditions shall apply:

1. The variance must specify an expiration date no later than 60 days from the date the variance is granted.

2. Prior to granting a variance extension which expires on a date more than 60 days after the date the variance was originally granted, the department shall:

a. Determine either that the applicant's regular fuel is unavailable or that certification by the office of state planning and energy of the need for a switch in fuels in the applicant's part of the state remains in effect; and

b. Evaluate through ambient air monitoring and/or dispersion modeling the air quality impact of granting the variance. If the evaluation indicates that maintenance of the air standards is not being endangered, an extension may be granted. If the evaluation indicates that a secondary air standard has been or may be violated, the procedure set forth in subd. (4)(c)2. shall apply.

(e) The department may rescind or amend a variance granted under NR 154.02(4) at any time.

(5) The issuance or granting of any order or variance under subs. (2), (3) or (4) shall not relieve any person of the duty to comply with all other applicable federal, state and local laws and rules.

SECTION 3 - Section NR 154.03 is repealed and recreated to read:

NR 154.03 Nonattainment areas; sources affected. (1) NONATTAINMENT AREAS. The department may, from time to time, issue documents defining, listing or describing any area of the state where it has determined that

any ambient air quality standard for any air contaminant is not being met.

(2) SOURCES AFFECTED. Upon issuing documents under sub. (1), the department shall also issue documents identifying, listing or describing air contaminant sources located in or near nonattainment areas, the location or impact of whose emissions require such sources to comply with RACT emission limitations specified in NR 154.11 or NR 154.12.

(3) The impact of a source's emissions on a nonattainment area shall be determined by the department, using methods including but not limited to ambient air monitoring and meteorological data, and diffusion modeling.

(4) The failure to identify, in a document issued under sub. (2), a specific source in or near a nonattainment area which is otherwise subject to RACT emission limitations shall not relieve such source from compliance.

(5) The department may issue or revise a document under sub. (1) or (2) only after 30 days notice and public hearing in the region affected. Such hearings shall not be contested cases under s. 227.01(2), Stats.

SECTION 4 - Section NR 154.06 is repealed and recreated to read:

NR 154.06 Source reporting, recordkeeping, testing, inspection and operation. (1) NOTICE OF HAZARDOUS SUBSTANCE AIR SPILLS. (a) Persons possessing or controlling a hazardous substance shall immediately notify the department of any hazardous emission not in conformity with a permit or allowed by the department under this chapter. Notice shall be given as required by s. 144.76, Stats., and chapter NR 158, Wis. Adm. Code.

(2) REPORTING. (a) When requested by the department, a person shall furnish to the department information to locate and classify air contaminant sources according to the type, level, duration, frequency and other characteristics of emissions and such other information as may be necessary. The information shall be sufficient to evaluate the effect on air quality and compliance with these rules.

(b) The owner or operator of a source requested to submit information under par. (a) may subsequently be required to submit annually, or at such other intervals as specified by the department, reports detailing any changes in the nature of the source since the previous report and the total annual quantities of the air contaminants emitted.

(c) When requested by the department, the owner or operator of a source to which this chapter applies shall submit to the department a standard operating procedure which includes a detailed description of process and emission control equipment startup, operating and shutdown procedures designed to minimize emissions.

(d) When stack or performance tests required by the department are performed by a person other than the department, the test results shall be furnished to the department within 30 days unless the department provides, in writing, a 30-day extension of this deadline. Results of stack or performance tests submitted to the department shall include information from the instrumentation specified in sub. (5) taken at the time of the tests, along with copies of the original data sheets, nozzle and stack diameter, weight of material sampled and other information needed to evaluate the stack or performance of tests.

(e) The department shall furnish a report of stack or performance tests or inspections it conducts to a representative of the source within 60 days after the testing or inspection is completed.

(f) Except where sub. (1) requires immediate notice of hazardous substance air spills, a person shall report to the department within 8 hours following the onset of a malfunction or other event not reported in advance to the department which causes or may cause any emission limitation, including the visual emission limit, to be violated. A person shall also report to the department emissions in excess of the emissions provided for in a plan approved pursuant to NR 154.09(1)(b). The person shall report the cause and duration of the violation, the period of time considered necessary for correction, and measures taken to minimize emissions during the period.

(g) A person required to operate a continuous monitoring system or monitoring device shall notify the department within 1 week of any shutdown, breakdown, or malfunction of such device or system.

(h) A person shall report to the department in advance schedules for planned shutdown and startup of air pollution control equipment and the measure to be taken to minimize the down time of the control equipment. Scheduled maintenance or startup of other equipment which causes an emission limitation to be exceeded shall also be reported in advance to the department. Advance reporting under this paragraph shall not relieve any person from the duty to comply with any applicable emission limitation.

(3) RECORDKEEPING. (a) The owner or operator of any source to which this chapter applies shall maintain records of all testing and monitoring conducted under this section, records detailing all malfunctions which cause any applicable emission limitation to be exceeded, including logs to document the implementation of the plan required by

sub. (9), records detailing all activities relating to any compliance schedule approved by the department under this chapter and any other records relating to the emission of air contaminants which may be requested in writing by the department.

(b) Copies of all records required under par. (a) shall be retained by the owner or operator for a period of 3 years or for such other period as may be specified by the department.

(4) ACCESS TO RECORDS. (a) No person shall deny information or access to records relating to emissions to an authorized representative of the department.

(5) METHODS AND PROCEDURES FOR SOURCE TESTING. (a) The department shall be notified 10 days in advance of stack or performance tests required by the department to afford it the opportunity to have a representative present to witness the testing procedures. Said 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.

(b) Sources of air contaminants other than volatile organic compounds. 1. The test plan required under par. (a) shall include, in addition to the information required under par. (a), 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, and a cross-sectional sketch showing:

- a. Stack configuration at the sampling location.
 - b. Sampling port locations.
 - c. Sampling point positions of each port.
2. The department may require: Provision for sampling ports, a safe work area for test crews, safe access to the sampling platform, utilities for sampling and testing equipment, stack or performance tests performed by or under the direction of a qualified engineer or person with demonstrated ability in this field, instrumentation to monitor and record emission data, stack or performance tests performed in compliance with emission test guidelines developed by the department and submitted to the tester prior to the conducting of the test, or transfer of the test data sheets or sample collecting media to the department's witness for evaluation.

3. Performance tests or stack tests shall follow the guiding principles described in ASME performance test code 27 with a sampling train utilizing a velocity measuring probe during sampling and an integrating gas volume meter for existing direct or portable sources, or sampling methods required or approved by the United States environmental protection agency for direct or portable sources and for hazardous pollutants. Other sampling methods may be prescribed by the department or must have prior approval of the department.

Note: See american society of mechanical engineers performance test code 27, copyright 1957. Copies of PTC-27-1957 are available for inspection in the offices of department of natural resources, and secretary of state and revisor of statutes, Madison, Wisconsin, and may be obtained for personal use from the American Society of Mechanical Engineers, 345 East 47th Street, New York, New York 10017.

(c) Volatile organic compound sources. 1. The owner or operator of any volatile organic compound source to which NR 154.13 applies shall demonstrate compliance by methods approved by the department.

2. The results of volatile organic compound emissions compliance testing shall only be accepted if prior notification has been supplied to the department as required under par. (a).

(6) INSTRUMENTATION FOR AIR POLLUTION CONTROL EQUIPMENT. (a) The department may require provisions for instrumentation to determine the efficiency of control equipment. Such instrumentation may include devices to measure voltage, or pressure drop across the control equipment; amperage, exhaust flow rates, or scrubbing solution flow rates to, or in, the control equipment; temperature in the control equipment; or other information determined to be necessary by the department.

(7) ENTRY FOR INSPECTION. (a) No person shall deny entry at any reasonable time to an authorized representative of the department for purposes of inspection, or at any time when an air pollution episode condition exists or is believed imminent.

(8) CIRCUMVENTION. (a) No person shall cause, allow or permit the installation or use of any article, machine, equipment, process, or method, which conceals an emission which would otherwise constitute a violation of an applicable rule unless written approval has been obtained from the department. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance and the unnecessary separation of an operation into parts to avoid coverage by a rule that applies only to operations larger than a specified size.

(9) MALFUNCTION PREVENTION AND ABATEMENT PLANS. (a) The owner or operator of any direct or portable source which may emit hazardous substances or emits more than 15 pounds in any day or 3 pounds in any

hour of any air contaminant for which air standards have been adopted shall prepare a malfunction prevention and abatement plan to prevent, detect and correct malfunctions or equipment failures which may cause any emission limitation to be violated or which may cause air pollution. The plan shall be in writing, updated as needed, and shall include:

1. Identification of the individual(s) responsible for inspecting, maintaining, and repairing the air pollution control equipment.
2. The maximum intervals for inspection and routine maintenance.
3. A description of the items or conditions that will be checked.
4. A listing of materials and spare parts that will be maintained in inventory.
5. An identification of the source and air pollution control equipment operation variables that will be monitored in order to detect a malfunction or failure; the correct operating range of these variables; and a description of the method of monitoring or surveillance procedures, or a reference to specific pages containing this information in manuals or other documents kept by the owner or operator.
6. A description of the corrective procedures that will be taken in the event of a malfunction or failure in order to achieve and maintain compliance with the applicable emission limitations as expeditiously as possible but not longer than the time necessary to discontinue operation of the source consistent with safe operating procedures.
7. Such other information as the department shall deem pertinent.

(b) The department may order any owner or operator to submit the plan required by par. (a) for review and approval. The department may amend the plan if deemed necessary for malfunction prevention or the reduction of excess emissions during malfunctions.

(c) No owner or operator shall fail to carry out a plan required under par. (a) or as amended under par. (b).

SECTION 5 - Subsections NR 154.11 (1), (2), (3) and (4) are amended to read:

NR 154.11 Control of particulate emissions. (1) GENERAL LIMITATIONS. No person shall cause, allow, or permit particulate matter to be emitted into the ambient air which substantially contributes to exceeding of an air standard, or creates air pollution.

(2) FUGITIVE DUST. No person shall cause, allow, or permit any materials to be handled, transported, or stored without taking precautions to prevent particulate matter from becoming airborne. Nor shall a person allow a structure, a parking lot, or a road to be used, constructed, altered, repaired, sand blasted or demolished without taking such precautions.

(a) Such precautions shall include, but not be limited to:

1. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, or construction operations.

2. Application of asphalt, oil, water, suitable chemicals, or plastic covering on dirt roads, material stockpiles, and other surfaces which can create airborne dust, provided such application does not create a hydrocarbon, odor, or water pollution problem.

3. Installation and use of hoods, fans, and air cleaning devices to enclose and vent the areas where dusty materials are handled.

4. Covering or securing of materials likely to become airborne while being moved on public roads, railroads, or navigable waters.

5. Conduct of agricultural practices such as tilling of land or application of fertilizers in such manner as not to create air pollution.

6. The paving or maintenance of roadways or parking lots so as not to create air pollution.

(b) In addition, any direct or portable source in a primary or associated secondary nonattainment area identified under NR 154.03(1) for suspended particulate matter; and any direct or portable source located near such areas whose aggregate fugitive dust emissions may cause an impact on the ambient air quality in such areas equal to or greater than one microgram per cubic meter (annual concentration) or 5 micrograms per cubic meter (maximum 24-hour concentration), by the analysis under NR 154.03 shall meet the following RACT requirements:

1. Industrial and commercial private roadways and areas subject to traffic of more than 10 vehicles in any hour shall be paved with asphalt, concrete, or other surface approved by the department and shall be periodically cleaned in order to be kept free of loose material. Where paving is shown to be unreasonable, or where the roadway or area is to be used for less than one year, dust shall be controlled by other methods approved by the department such as watering, chemical suppression, or stabilizers.

2. Storage piles having a material transfer greater than 100 tons in any year:

a. Storage piles of material having a silt content of 5% to 20% shall be treated with water, surfactants, stabilizers, chemicals; draped; or enclosed on a minimum of 3 sides. Access areas surrounding storage piles shall be watered, cleaned, or treated with stabilizers as needed to prevent fugitive dust from vehicle traffic.

b. Storage piles of materials having a silt content of 20% or more shall be completely enclosed or draped except any part being worked, loaded or unloaded. Access areas surrounding storage piles shall be watered, cleaned or treated with stabilizers as needed to prevent fugitive dust from vehicle traffic.

3. Materials handling operations: a. Materials handling operations, including but not limited to crushing, grinding, mixing, screening, compacting, conveying, handling of waste material with more than 5% silt, and loading and unloading of railcar, truck, ship or barge shall have fugitive emissions controlled to 10% opacity when wind speeds are less than 25 miles per hour except that for 3 minutes in any hour, fugitive emissions may equal 50% opacity.

b. Any device used to control fugitive emissions from materials handling operations which has a discharge to the ambient air shall be controlled equal to or less than 0.1 pound of particulate matter per 1000 pounds of exhaust gas.

4. Process fugitive emissions: a. Any device used to control fugitive particulate emissions from processes which has a discharge to the ambient air shall be controlled to an exhaust gas concentration equal to or less than 0.1 pound particulate matter per 1000 pounds exhaust gas.

b. Emissions from any building or structure egress other than a stack shall be controlled such that visible emissions shall not exceed 10% opacity except for 3 minutes in any hour when fugitive emissions may equal 50% opacity.

c. Coking operations: 1) There shall be no visible emissions beyond 1 meter from the charging ports while coal is being charged to the oven except for a total of 125 seconds during 5 consecutive oven charges.

2) Fugitive emissions from pushing operations shall be captured by a travelling hood and controlled to not more than 0,08 pounds of particulate matter per 1000 pounds of exhaust gas. Any emissions escaping capture shall not exceed 20% opacity for each pushing operation.

3) There shall be no visible emissions from 90% of the doors of all coke ovens in use; 95% of all coke oven charging port lids; and 90% of all offtake piping except those open for charging, pushing, cleaning, and maintenance as determined by a one pass observation.

4) Quench towers for the application of water on hot coke shall be equipped with grit arrestors or equivalent equipment approved by the department. Water used in quenching shall not include coke by-product plant effluent.

(c) When a direct or portable source is subject to the emission limitations of par. (b) due to its location in or impact on a primary or associated secondary nonattainment area, the owner or operator shall not exceed the following increments of progress in achieving compliance commencing with the nonattainment determination under NR 154.03(1):

1. Submit plans for compliance within 8 months.
2. Award any necessary contracts within 15 months.
3. Commence construction, installation or modification of emission control techniques required under subd. 1., 2. and 3.a. of par. (b) within 18 months.
4. Commence construction, installation or modification of emission control techniques required under subd. 3.b. and 4. of par. (b) within 24 months.
5. Complete construction, installation or modification of emission control techniques required under subd. 1., 2. and 3.a. of par. (b), achieve compliance, and so certify to the department within 21 months.

6. Complete construction, installation or modification of emission control techniques required under subd. 3.b. and 4. of par. (b) within 30 months and achieve final compliance and so certify to the department within 33 months.

7. All direct or portable sources to which par. (b) applies which have been identified under NR 154.03(2) on or before April 1, 1980 shall achieve final compliance and so certify to the department on or before December 31, 1982.

(3) PARTICULATE EMISSION LIMITS FOR PROCESSES. No person shall cause, allow, or permit the emission of particulate matter to the ambient air from a direct or portable source involving a process in excess of the following limitations:

(a) All direct and portable sources on which construction or modification is commenced after April 1, 1972 shall meet the emission limitations of this paragraph.

1. Direct or portable sources other than those specified in subd. (3)(a)2.; emissions in excess of:

a. Any process not otherwise covered by par. (3)(a): emissions calculated by the use of the equation, $E = 3.59 P^{0.62}$ for process weight rates up to 60,000 pounds per hour; by use of the equation $E = 17.31 P^{0.16}$ for process weight rates of 60,000 pounds per hour or more; (E is the allowable emissions in pounds per hour and P is the process weight rate in tons per hour) or in concentrations greater than those listed in NR 154.11(3)(b), whichever is more restrictive. Some examples of these calculations are given in the following table.

Process Weight Rate (Lbs/Hr.)	Emission Rate (Lbs/Hr.)
50	0.36
100	0.56
500	1.52
1,000	2.33
5,000	6.33
10,000	9.74
20,000	14.96
60,000	29.57
80,000	31.23
120,000	33.33
160,000	34.90
200,000	36.16
400,000	40.41
1,000,000	46.79

b. Cement kilns: 0.30 pounds of particulate per ton of feed to the kiln.

c. Cement clinker coolers: 0.10 pounds of particulate per ton of feed to the kiln.

2. Direct or portable sources specified hereunder on which construction or modification is commenced after February 1, 1975; emissions in excess of:

a. Asphalt concrete plants (any combination of the following: dryers; systems for screening, handling, storing, and weighing hot aggregate; systems for loading, transferring, and storing mineral filler; systems for mixing asphalt concrete; and the loading, transfer and storage systems associated with emission control systems): 0.04 grains per dry cubic foot at standard conditions (90 milligrams per dry cubic meter at standard conditions).

b. Petroleum refineries: (fluid catalytic cracking unit catalyst regenerators or fluid catalytic cracking unit incinerator-waste heat boilers):

1) 1.0 pound per 1,000 pounds (1.0 kilogram per 1,000 kilograms) of coke burn-off in the catalyst regenerator.

2) In those instances in which auxiliary liquid or solid fossil fuels are burned in the fluid catalytic cracking unit incinerator-waste heat boiler, particulate matter in excess of that permitted by subd. (a)2.b.1), may be emitted to the atmosphere, except that the incremental rate of particulate emissions shall not exceed 0.10 pounds per million BTU (0.18 grams per million calories) of heat input attributable to such liquid or solid fuel.

c. Secondary lead smelters (blast or cupola furnaces and reverberatory furnaces): 0.022 grains per dry cubic foot at standard conditions (50 milligrams per dry cubic meter at standard conditions).

d. Secondary brass and bronze ingot production plants (reverberatory furnaces of 2.205 pounds or greater production capacity): 0.022 grains per dry cubic foot at standard conditions (50 milligrams per dry cubic meter at standard conditions).

e. Iron and steel plants (basic oxygen process furnaces): 0.022 grains per dry cubic foot at standard conditions (50 milligrams per dry cubic meter at standard conditions).

(b) All direct and portable sources on which construction or modification was commenced on or before April 1, 1972 shall meet the emission limitations of this paragraph.

1. Direct or portable sources specified hereunder; emissions in excess of:

a. Cupolas melting more than 200 tons of metal in any year: 0.45 pounds of particulate matter per 1,000 pounds of gas.

b. Electric arc or induction furnaces: 0.1 pounds of particulate matter per 1,000 pounds of gas.

- c. Open hearth furnaces: 0.2 pounds of particulate matter per 1,000 pounds of gas.
- d. Basic oxygen furnaces: 0.1 pounds of particulate matter per 1,000 pounds of gas.
- e. Sintering plants: 0.2 pounds of particulate matter per 1,000 pounds of gas.
- f. Air melting furnaces: 0.3 pounds of particulate matter per 1,000 pounds of gas.
- g. Heating or preheating furnaces: 0.3 pounds of particulate matter per 1,000 pounds of gas.
- h. Blast furnaces: 0.2 pounds of particulate matter per 1,000 pounds of gas.
- i. Asphalt, concrete, or aggregate mix plants: 0.3 pounds of particulate matter per 1,000 pounds of gas.
- j. Cement kilns: 0.2 pounds of particulate matter per 1,000 pounds of gas.
- k. Lime kilns: 0.2 pounds of particulate matter per 1,000 pounds of gas.
- l. Cement clinker coolers: 0.3 pounds of particulate matter per 1,000 pounds of gas.
- m. Grinding, drying, mixing, conveying, sizing, or blending: 0.2 pounds of particulate matter per 1,000 pounds of gas.
- n. Grain processing or handling: 0.4 pounds of particulate matter per 1,000 pounds of gas.
- o. Any other process not enumerated: 0.4 pounds of particulate matter per 1,000 pounds of gas.

(c) Any direct or portable source located in or near a primary or associated secondary nonattainment area identified under NR 154.03(1)

for suspended particulate matter whose aggregate particulate emissions (excluding fugitive dust) may cause an impact on the ambient air quality in such areas equal to or greater than one microgram per cubic meter (annual concentration) or 5 micrograms per cubic meter (maximum 24-hour concentration) as determined by the analysis under NR 154.03 shall meet the following RACT emission limitations:

1. Sources on which construction or modification was commenced after April 1, 1972 shall not emit more than the emission limits of par. (3)(a) or 0.10 pounds of particulate matter per 1000 pounds of exhaust gas, whichever is more restrictive.

2. Sources on which construction or modification was commenced on or before April 1, 1972 shall not emit more than 0.10 pounds of particulate matter per 1000 pounds of exhaust gas.

(d) When a direct or portable source is subject to the emission limitations of par. (c) due to its impact on a primary or associated secondary nonattainment area, the owner or operator shall not exceed the following increments of progress in achieving compliance commencing with the nonattainment determination under NR 154.03(1):

1. Submit plans for compliance within 6 months.
2. Award any necessary contracts within 12 months.
3. Commence construction, installation or modification of any emission control system within 24 months.
4. Complete construction, installation or modification of any emission control system within 30 months.
5. Achieve final compliance with the applicable emission limitations and so certify to the department within 33 months.

6. All direct or portable sources to which par. (c) applies which have been identified under NR 154.03(2) on or before April 1, 1980 shall achieve final compliance and so certify to the department on or before December 31, 1982.

(e) Notwithstanding par. (3)(c), any cupola may emit up to, but not more than 0.2 pounds of particulate matter per 1000 pounds of exhaust gas if, as of March 1, 1980, the cupola has an emission rate based on original design or equipment performance test conditions (whichever is more restrictive) which is 0.2 pounds of particulate matter per 1000 pounds of exhaust gas or less and the emission control system of such cupola has not been allowed to degrade more than 0.05 pounds of particulate matter per 1000 pounds of exhaust gas from the original design or equipment performance test conditions.

(4) PARTICULATE EMISSION LIMITS FOR FUEL BURNING INSTALLATIONS.

No person shall cause, allow, or permit the emission of particulate matter to the ambient air from any indirect heat exchanger, power or heating plant, fuel-burning installation, or pulp recovery furnace with maximum heat input more than one million BTU per hour in excess of one of the following limitations:

(a) All installations on which construction or modification is commenced after April 1, 1972 shall meet the emission limitations of this paragraph.

1. Installations of 250 million BTU per hour or less except as provided in subd. 2. hereof; 0.15 pounds of particulate matter per million BTU input to any stack.

2. Installations of 100 million BTU per hour or less which are not located in the Southeast Wisconsin Intrastate AQCR and which burn only

wood, or wood simultaneously with liquid or gaseous fossil fuel: 0.5 pounds of particulate matter per million BTU input to any stack except that installations located in subregion 1 of the Lake Michigan Intrastate AQCR shall meet the requirements of NR 154.11(4)(b)2.a.

3. Installations of more than 250 million BTU per hour: 0.10 pounds of particulate matter per million BTU input to any stack.

(b) All installations on which construction or modification was commenced on or before April 1, 1972 shall meet the emission limitations of this paragraph.

1. Installations throughout the state shall meet the following emission limitations:

a. All installations: emissions determined by use of figure 2 of the ASME Standard number APS-1 with the maximum emission irrespective of stack height of 0.60 pounds of particulate matter per million BTU input to any stack.

Note: See american society of mechanical engineers standard number APS-1, second edition, November, 1968, copyright 1969. Copies of standard number APS-1 are available for inspection in the offices of department of natural resources, the secretary of state and revisor of statutes, Madison, Wisconsin and may be obtained for personal use from the American Society of Mechanical Engineers, 345 East 47th Street, New York, New York 10017.

2. Installations located in subregion 1 of the Lake Michigan Intrastate AQCR; in addition to meeting the emission limitations of subd. (4)(b)1.a. of this section, these installations shall, by July 31, 1975, meet the following emission limitations:

a. All installations: emissions determined by use of figure 2 of the ASME Standard number APS-1 with the maximum emission irrespective of stack height of 0.30 pounds of particulate matter per million BTU input to any stack.

3. Installations located in the Southeast Wisconsin Intrastate AQCR, in addition to meeting the emission limitations of subd. (4)(b)1.a., shall meet the following requirements:

a. Installations of 250 million BTU per hour or less (heat input of an installation shall follow ASME Standard number APS-1); maximum emission defined by the equation, $E = 0.3 - 0.0006I$ where I is heat input in millions of BTU per hour and E is maximum allowable particulate emissions in pounds per million BTU to any stack.

b. Installations of more than 250 million BTU per hour: maximum emissions of 0.15 pounds of particulate matter per million BTU input to any stack.

(c) All installations located in or near a primary or associated secondary nonattainment area identified under NR 154.03(1) for suspended particulate matter whose aggregate particulate emissions (excluding fugitive dust) may cause an impact on the ambient air quality in such areas equal to or greater than one microgram per cubic meter (annual concentration) or 5 micrograms per cubic meter (maximum 24-hour concentration) as determined by the analysis under NR 154.03 shall meet the following RACT emission limitations:

1. Installations of 100 million BTU per hour or less: maximum emission of 0.24 pounds of particulate matter per million BTU input to any stack.

2. Installations of more than 100 million BTU per hour: maximum emission of 0.10 pounds of particulate matter per million BTU input to any stack.

(d) When an installation is subject to the emission limitations of par. (c) due to its impact on a primary or associated secondary nonattainment area, the owner or operator shall not exceed the following increments of progress in achieving compliance commencing with the nonattainment determination under NR 154.03(1):

1. Submit plans for compliance within 6 months.
2. Award any necessary contracts within 12 months.
3. Commence construction, installation or modification of any emission control system within 24 months.
4. Complete construction, installation or modification of any emission control system within 30 months.
5. Achieve final compliance with the applicable emission limitations and so certify to the department within 33 months.
6. Notwithstanding the increments of progress specified in this paragraph, all installations to which par. (c) applies which have been identified pursuant to NR 154.03(2) on or before April 1, 1980 shall achieve final compliance and so certify to the department on or before December 31, 1982.

(e) Notwithstanding subd. (4)(c)2., any fuel burning installation of more than 250 million BTU per hour on which construction or modification was commenced on or before April 1, 1972 may emit up to, but not more than, 0.15 pounds particulate matter per million BTU if, as of March 1, 1980, the installation has an emission rate based on original design or equipment performance test conditions (whichever is more restrictive)

which is less than 0.15 pounds per million BTU, and the emission control system of such installation has not been allowed to degrade more than 0.05 pounds per million BTU from the original design or acceptance performance test conditions.

(f) Notwithstanding subd. (4)(c)1. or 2., any fuel burning installation of 250 million BTU per hour or less on which construction or modification was commenced on or before April 1, 1972 may emit up to, but not more than, an emission rate defined by the equation $E = 0.3 - 0.0006I$ (where I is the heat input in millions of BTU per hour and E is the maximum allowable particulate emissions in pounds per million BTU to any stack) if, as of March 1, 1980, the installation has an emission rate based on original design or equipment performance test conditions (whichever is more restrictive) which is less than the limit set by the above equation, and the emission control system of such installation has not been allowed to degrade more than 0.05 pounds per million BTU from original design or acceptance performance test conditions.

The foregoing rules were approved and adopted by the State of Wisconsin Natural Resources Board on May 24, 1979.

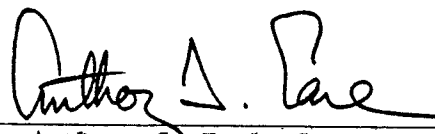
The rules contained herein shall take effect upon publication.

Dated at Madison, Wisconsin

18 July 1979

STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES

By


Anthony S. Earl, Secretary

SEAL



State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Anthony S. Earl
Secretary

July 18, 1979

BOX 7921
MADISON, WISCONSIN 53707

IN REPLY REFER TO: 1020


Mr. Orlan L. Prestegard
Revisor of Statutes
411 West
C A P I T O L

Dear Mr. Prestegard:

Enclosed are two copies, including one certified copy, of State of Wisconsin Natural Resources Board Order No. A-31-79. These rules were submitted to the Assembly Environmental Resources Committee and the Senate Natural Resources Committee pursuant to sec. 227.018, Stats. There were no objections.

You will note that this order takes effect upon publication. Kindly publish it in the Administrative Code accordingly.

Sincerely,


Anthony S. Earl
Secretary

Enc.

cc: David Kee - US EPA