different location (e.g., portable asphalt plant, portable package boiler, portable air curtain destructor, etc.). A modified portable source or a source which has never received a plan approval shall be considered to be a direct stationary source which is subject to the requirements of ss. NR 154.04 and 154.05.

(150) "Prime coat" means the first film of coating applied to a product in a multiple-coat surface coating operation.

(151) "Printed interior panels" means panels whose grain or natural surface is obscured by fillers and basecoats upon which a simulated grain or decorative pattern is printed.

(152) "Process gas" means any gas generated by a petroleum refinery process unit except fuel gas and process upset gas as defined in this section.

(153) "Process line" means one or more actions or unit operations which must function simultaneously or in sequence in order to manufacture or modify a product (e.g. a spray booth, conveyor and drying oven are considered a process line).

(154) "Process upset gas" means any gas generated by a petroleum refinery process unit as a result of start-up, shut-down, upset or malfunction.

(155) "Process weight" means the total weight of all materials introduced into any direct source operation, except liquid fuels, gaseous fuels and air.

(156) "Production equipment exhaust system" means a device for collecting and directing out of the work area fugitive emissions from reactor openings, centrifuge openings, and other vessel openings at a pharmaceutical manufacturing plant.

(156g) "Propellant" means a fuel and oxidizer physically or chemically combined which undergoes combustion to provide rocket propulsion.

(156r) "Propellant plant" means any facility engaged in the mixing, casting or machining of propellant.

(157) "Proportional sampling" means sampling at a rate that produces a constant ratio of flow in the sampling nozzle to stack gas flow rate.

(158) "Psia" means pounds per square inch absolute.

(159) "Publication rotogravure printing" means rotogravure printing upon paper which is subsequently formed into books, magazines, catalogues, brochures, directories, newspaper supplements, and other types of printed materials.

(159m) "Public trafficable area" means any trafficable area which is owned, operated, maintained or controlled by a municipality, interstate agency, state agency or federal agency.

(160) "Quench area" means a chamber where the hot metal exiting the oven is cooled by either a spray of water or a blast of air followed by water cooling.

(161) "Reactor" means a vat or vessel, which may be jacketed to permit temperature control, designed to contain chemical reactions.

(162) "'Reasonably available control technology' or 'RACT'" means that which provides the lowest emission rate that a particular source is capable of achieving by the application of control technology that is reasonably available considering technological and economic feasibility. Such technology may previously have been applied to similar, but not necessarily identical, source categories.

(162m) "Reconstruction" means the removal of components of a stationary source and the substitution of those components with similar new components to such an extent that the fixed capital cost of the new components exceeds 50% of the fixed capital cost that would be required to construct a comparable entirely new stationary source. The term "reconstruction" does not apply to minor sources.

(162s) "Reference method" means any method of sampling and analyzing for an air pollutant, as described in 40 C.F.R. pt. 61, Appendix B.

(163) "Refinery process unit" means any segment of a petroleum refinery in which a specific processing operation is conducted.

(164) "Reid vapor pressure" means the absolute vapor pressure of volatile crude petroleum and volatile nonviscous petroleum liquids except liquefied petroleum gases as determined by ASTM-D-232-72 (reapproved 1977).

(164g) "Relocation" means the removal of a stationary source from one location and the siting of the stationary souce at a different location.

(164m) "Renovation" means the removing or stripping of friable asbestos material used on any pipe, duct, boiler, tank, reactor, turbine, furnace or structural member. Operations in which load-supporting structural members are wrecked or taken out are excluded.

(164n) "Replacement" means the physical dismantling of a stationary source and the substitution of that source with a stationary source which is similar in operating capacity and function.

(164t) "Residual fuel oil" means an industrial fuel oil of grade No. 4, 5 or 6, as determined by the specifications in ASTM D396.

Note: See American Society for Testing and Materials 1983, "1983 Annual Book of ASTM Standards, Volume 05.01." Copies of this document are available for inspection at the offices of the department of natural resources, secretary of state and revisor of statutes, Madison, Wisconsin, and may be obtained for personal use from American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103.

(165) "Ringlemann Chart" means the chart published by the U.S. bureau of mines in which are illustrated graduated shades of grey to black for use in estimating the shade or density of smoke. (One unit on the Ringlemann Chart equals 20% opacity).

Note: See Ringlemann Chart published December, 1950, by the U.S. bureau of mines. Copies of "Fundamentals of Smoke Abatement," December, 1950, Ringlemann Chart, Information Circular 7588, are available for inspection at the offices of the department of natural resources, secretary of state and revisor of statutes, Madison, Wisconsin, and may be obtained for personal use from the U.S. department of interior, Washington, D.C.

(165m) "Roadway" has the meaning given it in s. 340.01 (54), Stats.

(165q) "Roadway areas" means any surface on which motor vehicles travel including, but not limited to, highways, roads, streets, parking areas and driveways.

(165w) "Rocket motor test site" means any building, structure, facility or installation where the static test firing of a beryllium rocket motor or the disposal of beryllium propellant, or both, is conducted.

Next page is numbered 599

takes suction from a pressure below atmospheric and discharges against atmospheric pressure.

(203) "Vapor balance system" means a combination of pipes or hoses which create a closed system between the vapor spaces of an unloading tank and a receiving tank such that vapors displaced from the receiving tank are transferred to the tank being unloaded.

(204) "Vapor collection system" means, for the purpose of liquid organic compound transfer operations, a vapor transport system which uses direct displacement by the liquid loaded to force vapors from the tank into a vapor control system or vapor holding tank.

(205) "Vapor-mounted seal" means any primary floating roof seal mounted so that there is an annular vapor space underneath the seal. The annular vapor space is bounded by the bottom of the primary seal, the tank wall, the liquid surface, and the floating roof.

(206) "Vapor recovery or control system" means a system that gathers organic compound vapors released during the operation of any transfer, storage, or process equipment and processes the vapors so as to prevent their emission into the ambient air.

(206e) "Vinyl chloride purification" includes any part of the process of vinyl chloride production which follows vinyl chloride formation and in which finished vinyl chloride is produced.

(206j) "Vinyl chloride plant" includes any plant which produces vinyl chloride by any process.

(206o) "Vinyl chloride reactor" includes any vessel in which vinyl chloride is partially or totally polymerized into polyvinyl chloride.

(206t) "Vinyl chloride reactor opening loss" means the emission of vinyl chloride occurring when a reactor is vented to the atmosphere for any purpose other than an emergency relief discharge as defined in s. NR 154.19(6)(f)1.c. and (g)1.

(207) "Vinyl coating" means applying a decorative or protective topcoat or printing on vinyl coated fabric or vinyl sheets.

(207m) "Visible asbestos emissions" means any emissions which are visually detectable without the aid of instruments and which contain particulate asbestos material.

(208) "'Volatile organic compound' or 'VOC'" means any compound of carbon that has a vapor pressure greater than 0.1 millimeter of mercury (0.0019 psia) at standard conditions, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate.

(209) "Wastewater (oil-water) separator" means any device or piece of equipment which utilizes the difference in density between oil and water to remove oil and associated chemicals from water. This includes any device, such as a flocculation tank, clarifer, etc., which removes petroleum derived compounds from wastewater.

(209m) "Wastewater treatment process" includes any process which modifies characteristics such as biological or chemical oxygen demand,

total suspended solids, or pH, usually for the purpose of meeting effluent guidelines and standards but does not include any process the purpose of which is to remove vinyl chloride from water to meet requirements of s. NR 154.19(6).

(210) "Water based sprays" means release compounds, sprayed on the inside and outside of green tires, in which solids, water, and emulsifiers have been substituted for all organic solvents.

(211) "Waxy, heavy pour crude petroleum" means a crude petroleum with a pour point of 10°C (50°F) or higher as determined by the ASTM standard D97-66, "Test For Pour Point of Petroleum Oils."

History: Cr. Register, March, 1972, No. 195, eff. 4-1-72, renum. (41) (a) 6 to be (41) (c); am. (41)(c) 3. and 4., Register, December, 1972, No. 204, eff. 1-1-73; r. and recr., Register, June, 1975, No. 234, eff. 7-1-75; renum. (3)(b) and (c) to be (3)(c) and (d), renum. (3)(a) 3. to be (3)(b) and am., am. (38) (intro.), Register, April, 1977, No. 256, eff. 5-1-77; r. and recr., Register, July, 1979, No. 283, eff. 8-1-79; am. Register, March, 1981, No. 303, eff. 4-1-81; cr. (118m) and (193m), Register, March, 1982, No. 315, eff. 4-1-82; cr. (94m), (118n), (159m) and (165m), Register, October, 1982, No. 322, eff. 11-1-82; cr. (intro.), (13m), (27m), (66m), (75m), (106m), (118s), (162m), (164g) and (164m), r. and recr. (118), Register, April, 1983, No. 328, eff. 5-1-83; cr. (68m), Register, July, 1983, No. 331, eff. 8-1-83; cr. (38m) and (178m) and am. (63), Register, November, 1983, No. 335, eff. 12-1-83; cr. (1g), (1r), (12m), (19m), (28e), (28j), (28o), (28t), (28y), (35m), (38s), (38w), (50m), (52m), (59g), (59r), (61m), (64m), (67g), (67r), (69m), (70g), (70r), (71m), (72m), (79m), (81m), (89m), (96m), (98m), (100m), (103m), (107m), (114m), (115m), (116e), (116j), (116o), (116t), (116y), (147m), (148m), (156g), (156r), (162s), (164m), (165q), (165w), (169m), (175e), (175m), (175s), (182e), (182m), (182s), (184e), (184m), (184s), (199m), (206e), (206j), (206o), (206t), (207m), and (209m), Register January, 1984, No. 337, eff. 2-1-84; cr. (95m), Register, September, 1984, No. 345, eff. 10-1-84; cr. (164t), Register, January, 1985, No. 349, eff. 2-1-85.

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), [144.423 (1) (b)] Stats., authorize a source not in compliance 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 s. 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 s. 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 October 1, 1979.

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 re-

Next page is numbered 601

b. 0.522 pounds per million BTU heat input if all liquid fossil fuel and natural gas fired steam generating boilers at the mill emit from a point between 160 and 232 feet above ground, or

c. 2.930 pounds per million BTU heat input if all liquid fossil fuel and natural gas fired steam generating boilers at the mill emit from a point 232 feet or more above ground.

3. From any spent sulfite liquor incinerator and evaporation plant emitting from a point 197 feet or more above ground, 1,682.00 pounds per hour and 35,184.00 pounds in any 24 hours.

4. From all pulp digesters emitting from a point 100 feet or more above ground, 300.00 pounds in any 3 hours and 1,365.00 pounds in any 24 hours.

5. From any air contact evaporator emitting from a point 35 feet or more above ground, 33.02 pounds per hour and 686.88 pounds in any 24 hours.

6. From any acid plant emitting from a point 99 feet or more above ground, 0.543 pounds per hour.

7. From all other sources, a total of 6.82 pounds per hour.

(b) When a source is subject to par.(a), the owner or operator shall meet the following deadlines in achieving compliance with the emission limitations of that paragraph:

1. Achieve compliance with par. (a) 1., 2., 3., 5., 6., and 7. by October 1, 1984 and so certify to the department before November 1, 1984.

2. Submit plans for achieving compliance with the emission limitations of par. (a) 4. before April 1, 1985.

3. Award contracts for physical alterations necessary to achieve compliance with par. (a) 4. before May 1, 1985.

4. Commence construction necessary to achieve compliance with par. (a) 4. before August 1, 1985.

5. Complete construction necessary to achieve compliance with par. (a) 4. before November 1, 1986.

6. Achieve compliance with the emission limitations of par. (a) 4. and so certify to the department before November 20, 1986.

(c) The owner or operator of a source subject to par. (a) shall prepare and maintain a compliance demonstration plan to assure continuous compliance with the emission limitations of that paragraph.

1. The plan shall be in writing, updated as needed, and shall include but need not be limited to:

a. The name of the individual responsible for compliance demonstration activities at the source.

b. A description of the stacks, vents, raw materials, fuels and other items or parameters which will be tested, monitored, sampled, analyzed or measured to determine that the source is in compliance with par. (a).

c. A description of the testing methods, monitoring techniques, sampling and analysis methods and measurements which will be used, including the types of equipment to be used and the frequency of testing, monitoring, sampling, analysis or measurement.

d. A description of the records which will be created and maintained, their retention time, and the periodic reports which will be submitted to the department to demonstrate that the emission limitations of par. (a) are being met.

e. A procedure for detecting and reporting upsets, malfunctions and other events which may result in the violation of an emission limitation or which may affect the quantity or quality of complaince demonstration data.

f. Other relevant information reasonably needed to demonstrate continuous compliance with the emission limitations of par. (a).

2. The plan shall be filed with the department before November 1, 1984. Subsequent revisions to the plan shall be filed within 10 days of their completion.

3. The department may order any owner or operator of a source subject to par. (a) to submit the plan required by this paragraph for review and approval. The department may amend the plan if deemed necessary to assure that continuous compliance is adequately demonstrated and to recognize changes in the economic or technological feasibility of different compliance demonstration methods.

4. No owner or operator may fail to carry out the plan required under this paragraph or as amended by the department under subd. 3.

5. Nothing in this paragraph precludes the department from exercising its authority to require reporting or recordkeeping in addition to that required by this paragraph or exempts the owner or operator of a source subject to par. (a) from any other requirements relating to proof of compliance.

(d) No owner or operator of a source subject to par. (a) may cause, allow or permit sulfur dioxide to be emitted from emission points lower than those which existed at the source on December 1, 1983, unless written permission has been granted by the department.

(11) STATEWIDE SULFUR DIOXIDE LIMITATIONS. (a) *Applicability.* This subsection applies to any direct source of sulfur dioxide, with the following exceptions:

1. Any direct source which is subject to emission limitations specified in sub. (2) or subs. (4) to (10); or

2. Any direct source which is subject to an emission limitation for sulfur dioxide, imposed by statute, rule, permit, order or plan approval, which is more restrictive than an emission limitation under par. (b) or (c).

(b) *Emission limits for existing sources.* Except as provided under par. (e) or (h), no person may cause, allow or permit sulfur dioxide to be emitted to the ambient air from any direct source constructed on or before

February 1, 1985, in amounts greater than those specified in this paragraph.

1. All steam generating units and other fuel burning equipment firing solid fossil fuel, alone or in combination with fuel burning equipment firing other fuels, at a facility which has a total heat input capacity on solid fossil fuel of greater than or equal to 250 million BTU per hour may not emit more than 3.2 pounds of sulfur dioxide per million BTU heat input to any stack.

2. Any steam generating unit or other fuel burning equipment firing solid fossil fuel at a facility which has a total heat input capacity on solid fossil fuel of less than 250 million BTU per hour may not emit more than 5.5 pounds of sulfur dioxide per million BTU heat input from the fuel burning equipment to any stack.

3. Any steam generating unit or other fuel burning equipment firing residual fuel oil at a facility which has a total heat input capacity on residual fuel oil of greater than or equal to 250 million BTU per hour may not emit more than 1.5 pounds of sulfur dioxide per million BTU heat input from the fuel burning equipment to any stack.

4. Any steam generating unit or other fuel burning equipment firing residual fuel oil at a facility which has a total heat input capacity on residual fuel oil of less than 250 million BTU per hour may not emit more than 3.0 pounds of sulfur dioxide per million BTU heat input from the fuel burning equipment to any stack.

5. Any kraft mill producing pulp may not emit more than 10.0 pounds of sulfur dioxide per ton of air dried unbleached pulp from all process sources at the kraft mill. Process sources do not include equipment which is combustiing fossil fuel.

6. Any sulfite mill producing pulp may not emit more than 20.0 pounds of sulfur dioxide per ton of air dried unbleached pulp from all process sources at the sulfite mill. Process sources do not include equipment which is combusting fossil fuel.

7. Any petroleum refinery shall comply with the following emisssion limitations:

a. The sulfur dioxide emissions from any process heater firing residual fuel oil may not exceed 0.8 pounds of sulfur dioxide per million BTU heat input from the process heater.

b. The sulfur dioxide emissions from any fuel burning equipment firing residual fuel oil may not exceed 0.8 pounds of sulfur dioxide per million BTU heat input to any stack.

c. The sulfur dioxide emissions from any Claus sulfur recovery plant may not exceed 6,743 pounds of sulfur dioxide in any 24-hour period or 843 pounds of sulfur dioxide in any 3-hour period.

d. The sulfur dioxide emissions from all other process units may not exceed 1,035 pounds of sulfur dioxide in any 1-hour period.

(c) *Emission limits for new sources.* No person may cause, allow or permit sulfur dioxide to be emitted to the ambient air from any direct source

constructed after February 1, 1985 in amounts greater than those specified in this paragraph.

1. Any steam generating unit or other fuel burning equipment firing solid fossil fuel may not emit more than 3.2 pounds of sulfur dioxide per million BTU heat input from the fuel burning equipment to any stack.

2. Any steam generating unit or other fuel burning equipment firing residual fuel oil may not emit more than 1.5 pounds of sulfur dioxide per million BTU heat input from the fuel burning equipment to any stack.

3. Any kraft mill producing pulp may not emit more than 10.0 pounds of sulfur dioxide per ton of air dried unbleached pulp from all process sources at the kraft mill. Process sources do not include equipment which is combusting fossil fuel.

4. Any sulfite mill producing pulp may not emit more than 20.0 pounds of sulfur dioxide per ton of air dried unbleached pulp from all process sources at the sulfite mill. Process sources do not include equipment which is combusting fossil fuel.

5. Any petroleum refinery shall comply with the following emission limitations:

a. The sulfur dioxide emissions from any process heater firing residual fuel oil may not exceed 1.5 pounds of sulfur dioxide per million BTU heat input from the process heater.

b. The sulfur dioxide emissions from any fuel burning equipment firing residual fuel oil may not exceed 1.5 pounds of sulfur dioxide per million BTU heat input to any stack.

c. The sulfur dioxide emissions from any Claus sulfur recovery plant may not exceed:

1) 0.025% by volume of sulfur dioxide at zero percent oxygen on a dry basis, if emissions are controlled by an oxidation control system or a reduction control system followed by incineration; or

2) 0.030% by volume of reduced sulfur compounds and 0.0010% by volume of hydrogen sulfide calculated as sulfur dioxide at zero percent oxygen on a dry basis, if emissions are controlled by a reduction control system not followed by incineration.

(d) *More restrictive emission limits.* The department may require a source to meet a more restrictive emission limitation than an applicable emission limitation provided under par. (b) or (c) if the department determines that a more restrictive emission limitation is required to ensure that the source will not cause or exacerbate a violation of an ambient air quality standard or air increment for sulfur dioxide.

(e) *Alternate emission limits.* The department may grant an alternate emission limitation to a source which is subject to an emission limitation in par. (b) 1., 3., 5., 6., or 7. if the following conditions are met:

1. The owner or operator of the source submits a written request for an alternate emission limitation which outlines the specific conditions or special circumstances which prevent the source from complying with the

applicable emission limitation in par. (b) and which contains a proposed alternate emission limitation for the source.

2. The owner or operator of the source demonstrates that the proposed alternate emission limitation will not delay attainment or prevent maintenance of an ambient air quality standard for sulfur dioxide, as demonstrated by air quality modeling acceptable to the department.

3. If the source is subject to the emission limitation in par. (b) 1. or 3., the proposed alternate emission limitation may not exceed 5.5 pounds of sulfur dioxide per million BTU heat input for any fuel burning equipment firing solid fossil fuel; or 3.0 pounds of sulfur dioxide per million BTU heat input for any fuel burning equipment firing residual fuel oil.

The alternate emission limitation of 5.5 pounds of sulfur dioxide per million BTU heat input for solid fossil fuel burning equipment may be calculated on a 30-day rolling average for a source, if there is one or more other sulfur dioxide emission limitations applicable to the source which would assure the attainment and maintenance of the ambient air quality standards for sulfur dioxide.

4. The owner or operator of the source demonstrates that there is a substantial cost difference between the costs required for the source's compliance with the applicable emission limitation in par. (b) and the costs required for the source's compliance with the proposed alternate emission limitation.

5. The owner or operator of the source demonstrates that the ambient air quality impact of the emissions from the source while emitting at the proposed alternate emission limitation, when added to the background concentration of sulfur dioxide in the vicinity of the source, does not exceed 75% of the ambient air quality standards for sulfur dioxide. In calculating the 75% figure, sulfur dioxide emissions from sources which are regulated under ch. NR 440 shall not be considered. The condition in this subdivision may be waived by the department if a public hearing is held on the proposed alternate emission limitation and the public comments on the proposed alternate emission limitation indicate that there is no significant opposition to waiving this condition.

6. The proposed alternate emission limitation will not result in an increase in the annual emissions of sulfur dioxide from the source when comparing the source's projected annual emissions under the proposed alternate emission limitation with the source's actual annual emissions of sulfur dioxide, either in terms of the highest total tons of sulfur dioxide per calendar year or in terms of the highest annual average emission rate, as expressed in pounds of sulfur dioxide per million BTU, for calendar years 1979 to 1983. This condition does not apply to a source which is authorized by statute to increase its annual emissions of sulfur dioxide or to a major utility which is subject to s. 144.385, Stats.

7. The owner or operator of the source submits an application for and receives an elective operation permit or a modification to an operation permit for the source.

(f) *Compliance schedules.* 1. When a source is subject to the emission limitations of par. (b), the owner or operator shall meet the following deadlines in achieving compliance with those emission limitations:

a. Submit plans for achieving compliance on or before July 1, 1985;

b. Award any necessary contracts on or before October 1, 1985;

c. If physical alteration of the source is necessary to achieve compliance, commence construction on or before May 1, 1986 and complete construction on or before October 1, 1987;

d. If only fuel modification or switching is necessary to achieve compliance, commence operation using new fuel on or before October 1, 1986;

e. Achieve final compliance with the applicable emission limitation in par. (b) and so certify to the department on or before December 31, 1987.

2. If the owner or operator of a source subject to the emission limitations of par. (b) requests an alternate emission limitation under par. (e), the owner or operator shall meet the following deadlines:

a. Submit request for alternate emission limitation under par. (e) on or before March 1, 1985;

b. Submit plans for achieving compliance with the applicable emission limitation on or before December 31, 1985;

c. Award any necessary contracts on or before February 1, 1986;

d. If physical alteration of the source is necessary to achieve compliance, commence construction on or before May 1, 1986 and complete construction on or before October 1, 1987;

e. If only fuel modification or switching is necessary to achieve compliance, commence operation using new fuel on or before January 1, 1987;

f. Achieve final compliance with the applicable emission limitation and so certify to the department on or before December 31, 1987.

3. If the owner or operator of a source requests an alternate emission limitation under par. (e) and the department does not grant the request, the owner or operator of the source shall meet the following deadlines:

a. Submit plans for achieving compliance on or before September 1, 1985;

b. Award any necessary contracts on or before December 1, 1985;

c. If physical alteration of the source is necessary to achieve compliance, commence construction on or before May 1, 1986 and complete construction on or before October 1, 1987.

d. If only fuel modification or switching is necessary to achieve compliance, commence operation using new fuel on or before October 1, 1986;

e. Achieve final compliance with the applicable emission limitation in par. (b) and so certify to the department on or before December 31, 1987.

4. The department shall notify the owner or operator of a source which requests an alternate emission limit under par. (e) or submits a compli-

ance plan under subd. 1.a., 2.b. or 3.a. whether the request is granted or the plan is approved not later than 55 business days after the department receives the request or submittal.

(g) *Compliance demonstrations.* 1. For purposes of determining compliance with the emission limitations of par. (b) or the alternate emission limitations of par. (e), the owner or operator of the source shall outline the specific methods for demonstrating compliance with the emission limitations, to the satisfaction of the department, in the compliance plans submitted under par. (e) 1.a., 2.b., or 3.a. The compliance demonstrations shall consist of one or more of the following:

a. Installation, calibration, maintenance and operation of a continuous emission monitor, utilizing equipment and procedures reviewed and approved by the department.

b. Collection and analysis of fuel used, utilizing equipment and procedures reviewed and approved by the department;

c. Stack emissions testing, utilizing equipment and procedures reviewed and approved by the department; and

d. Other appropriate methods reviewed and approved by the department.

2. An owner or operator of a source subject to the emission limitations of par. (b) or the alternate emission limitations of par. (e), shall maintain complete records of emissions data and calculations used to verify emissions data at the premises of the source and shall make such records available for inspection upon request by authorized representatives of the department during regular business hours.

(h) *Variance from emission limits.* 1. The department may grant a source-specific variance from an emission limitation provided in par. (b), an alternate emission limitation authorized under par. (e) or a compliance schedule in par. (f) if compliance with the emission limitations of pars. (b) and (e) or the compliance schedule of par. (f) are shown to be technologically or economically infeasible. A variance may be granted, by setting alternate emission limitations or alternate compliance schedules, or both, provided that:

a. The variance will not delay attainment or prevent maintenance of an ambient air quality standard for sulfur dioxide, as determined by methods acceptable to the department;

b. The owner or operator of the source for which a variance 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 complying with such requirements.

c. The owner or operator submits to the department on or before December 31, 1985 a request for a source-specific variance which demonstrates, to the department's satisfaction, that compliance with the applicable emission limitation or compliance schedule from which a variance is sought is technologically or economically infeasible.

2. A request for a source-specific variance under this paragraph shall be signed by the principal executive officer, sole proprietor, principal gov-

ernmental executive or elected official or a duly authorized representative of the source and shall contain the following information:

a. The specific conditions or special circumstances which make compliance with the applicable emission limitation or compliance schedule by the source technologically or economically infeasible.

b. If a variance from an emission limitation is sought, the owner or operator shall submit proposed emission limitations.

c. If a variance from a compliance schedule is sought, the owner or operator shall submit a proposed compliance schedule which demonstrates reasonable further progress toward final compliance and contains a date for final compliance as soon as practicable.

d. Other relevant information as required by the department.

3. The department, in acting upon any request for a variance under this paragraph, shall:

a. Act on a request for a variance within 65 business days of the filing of a completed request;

b. Offer, through public notice, the opportunity for public comments including, if requested, a public hearing.

c. State in writing the reasons for denying, or granting, or for granting in modified form, any request for a variance.

4. The department may, after notice and opportunity for hearing, revoke or modify any variance if:

a. Any term or condition of the variance has been violated;

b. 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 for sulfur dioxide; or

c. The owner or operator did not act in good faith in demonstrating the technological or economic infeasibility of compliance with the applicable emission limitation or compliance schedule or in submitting other relevant information in support of the variance request.

(i) *Subsequent requests for alternate limits or variances.* If the owner or operator of a source subject to the emission limitations of par. (b) does not request an alternate emission under par. (e) on or before March 1, 1985, or source-specific variance under par. (h) on or before December 31, 1985, the source shall comply with the emission limitations of par. (b) and may not request an alternate emission limitation or a source-specific variance prior to January 1, 1988.

History: Cr. Register, March, 1972, No. 195, eff. 4-1-72;cr. (3), Register, June, 1975, No. 234, eff. 7-1-75;cr. (2) (c), Register, April, 1976, No. 244, eff. 5-1-76; cr. (5), Register, November, 1979, No. 287, eff. 12-1-79; cr. (4), Register, January, 1980, No. 289, eff. 2-1-80; am. (4) (a), Register, December, 1982, No. 324, eff. 1-1-83; cr. (6), Register, November, 1983, No. 335, eff. 12-1-83; cr. (7), Register, January, 1984, No. 337, eff. 2-1-84; cr. (8), Register, September, 1984, No. 345, eff. 10-1-84; correction in (7) (d) 5. made under s. 13.93 (2m) (b) 6, Stats., correction in (8) (a) (intro.), (b) 1. and 2. and (c) 2., made under s. 13.93 (2m) (b) 14, Stats., Register, September, 1984, No. 345; cr. (11), Register, January, 1985, No. 349, eff. 2-1-85.

NR 154.13 Control of organic compound emissions. (1) GENERAL LIMITATIONS. (a) No person shall cause, allow or permit organic compound emissions into the ambient air which substantially contribute to the exceeding of an air standard or cause air pollution.

(b) No person shall cause, allow or permit organic compounds to be used or handled without using good operating practices and taking reasonable precautions to prevent the spillage, escape or emission of organic compounds, solvents or mixtures. Such precautions shall include, but are not limited to:

1. Use of caution to prevent spillage or leakage when filling tanks, trucks or trailers.

2. Use of caution when filling automobile tanks to prevent spillage.

(c) *Disposal of VOC wastes.* 1. Effective August 1, 1979, no person shall cause, allow, or permit the disposal of more than 5.7 liters (1.5 gallons) of any liquid VOC waste, or of any liquid, semisolid or solid waste materials containing more than 5.7 liters (1.5 gallons) of any VOC, in any one day from a facility in a manner that would permit their evaporation into the ambient air during the ozone season. This includes, but is not limited to, the disposal of VOC which must be removed from VOC control devices so as to maintain the control devices at their required operating efficiency.

2. Disposal during the ozone season shall be by methods approved by the department, such as incineration, recovery for reuse, or transfer in closed containers to an acceptable disposal facility, such that the quantity of VOC which evaporates into the ambient air does not exceed 15% (by weight) or 5.7 liters (1.5 gallons) in any one day, whichever is larger.

(2) STORAGE OF ORGANIC COMPOUNDS. (a) *Storage of petroleum liquids.* 1. Applicability. a. The storage, monitoring and maintenance requirements of subds. 2., 3. and 4. apply to all storage vessels for petroleum liquids of more than 151,412 liter (40,000 gallon) capacity on which construction or modification is commenced after July 1, 1975, with the exception of:

1) Storage vessels being used for number 2 through number 6 fuel oils as specified in ASTM-D-396-73, gas turbine fuel oils numbers 2-GT through 4-GT as specified in ASTM-D-2880-71, or diesel fuel oils numbers 2-D and 4-D as specified in ASTM-D975-73.

Note: See American Society for Testing and Materials, Part 17, 1973. Copies of applicable standards from Part 17; Petroleum Products - Fuels, Solvents, Burner Fuel Oils, Lubricating Oils, Cutting Oils, Lubricating Greases, Hydraulic Fluids; are available for inspection at the offices of the department of natural resources, secretary of state and revisor of statutes, Madison, Wisconsin, and may be obtained for personal use from ASTM, 1916 Race Street, Philadelphia, PA 19103.

2) Storage vessels for the crude petroleum or condensate stored, processed or treated at a drilling and production facility outside a standard metropolitan statistical area prior to custody transfer.

3) Pressure vessels which are designed to operate at pressures in excess of 104 kPa (15 psig) without emissions except under emergency conditions.

4) Subsurface caverns or porous rock reservoirs.

5) Underground tanks if the total volume of petroleum liquids added to and taken from a tank annually does not exceed twice the volume of the tank.

b. Effective July 1, 1980, the maintenance requirements of subd. 4. apply to all storage vessels for petroleum liquids of more than 7,571 liter (2,000 gallon) capacity.

c. Effective August 1, 1979, subd. 5. applies, subject to the provisions of sub. (12), to all fixed roof storage vessels with capacities greater than 151,412 liters (40,000 gallons) with the exception of those having capacities less than 1,600,000 liters (416,000 gallons) used to store crude petroleum and condensate prior to custody transfer.

d. Effective April 1, 1981, subd. 6. applies, subject to the provisions of sub. (12) (d) or (e), to all storage vessels equipped with external floating roofs having capacities greater than 151,412 liters (40,000 gallons) with the exception of:

1) Storage vessels having capacities less than 1,500,000 liters (396,270 gallons) used to store crude petroleum and condensate prior to custody transfer.

2) Storage vessels used to store waxy, heavy pour crude petroleum.

3) Storage vessels used solely for petroleum liquids with a true vapor pressure of less than 10.5 kPa (1.52 psia).

4) Storage vessels used solely for petroleum liquids with a true vapor pressure of less than 27.6 kPa (4.0 psia), and which are of welded construction, and presently possess a metallic-type shoe seal, a liquid-mounted foam seal, a liquid-mounted liquid filled type seal, or equally effective alternative control, approved by the department.

5) Storage vessels of welded construction, equipped with metallic-type shoe primary seal which has a secondary seal from the top of the shoe seal to the tank wall.

e. Effective April 1, 1981, subd. 7. applies to all storage vessels with capacities greater than 151,412 liters (40,000 gallons) equipped with external floating roofs without secondary seals or their approved equivalent.

2. Storage requirements. The owner or operator of any storage vessel to which this subdivision applies shall store petroleum liquids as follows:

Next page is numbered 623