4. No owner or operator of a bulk gasoline plant or delivery vessel shall permit the transfer of gasoline unless:

a. Submerged or bottom filling is used; and

b. The vapor balance system is in good working order and is connected and operating; and

c. Delivery vessel hatches are closed at all times during transfer operations; and

d. There are no leaks in the delivery vessels' pressure/vacuum relief valves and hatch covers, nor in the delivery vessel tanks or stationary storage tanks or associated vapor and liquid lines during loading or unloading; and

e. The pressure relief valves on stationary storage tanks and delivery vessels are set to release at no less than 4.8 kilo Pascals (0.7 pounds per square inch gauge), or the highest possible pressure consistent with state or local fire codes or the national fire prevention association guidelines.

5. Vapor balance systems required under subds. (3) (b) 2. and 3. shall include vapor space connections on the stationary storage tank and on the delivery vessel with connecting pipe or hose. These connections are required either for loading of the bulk plant storage tank only or for both loading and unloading, as indicated in subd. (3) (b) 1. Both sides of all junctions shall be equipped with fittings which are vapor tight and will automatically and immediately close upon disconnection so as to prevent release of organic compound vapors.

6. Notwithstanding sub. (1) (c), no owner or operator of a bulk gasoline plant shall permit gasoline to be spilled, discarded in sewers or stored in open containers.

(c) Gasoline dispensing facilities. 1. Applicability. a. Effective July,* [August 1,], 1979, sub. (3) (c) applies, subject to the provisions of sub. (9), to gasoline dispensing facilities, to the delivery vessels used to bring these facilities the gasoline which they dispense, and to the operation of transferring gasoline to the dispensing facilities with the following exceptions:

1) Gasoline dispensing facilities which are supplied exclusively by bulk gasoline plants whose unloading operations are exempted from the requirements of sub. (3) (b) by (3) (b) 1.a.

2) Gasoline dispensing facilities located outside the counties of Brown, Calumet, Dane, Dodge, Fond du Lac, Jefferson, Kenosha, Manitowoc, Milwaukee, Outagamie, Ozaukee, Racine, Rock, Sheboygan, Walworth, Washington, Waukesha and Winnebago.

3) Delivery vessels used exclusively to supply exempt gasoline dispensing facilities or used exclusively for the transfer operations exempted under 4) through 7) below.

4) Transfers made to storage tanks of gasoline dispensing facilities equipped with floating roofs or their equivalent which have been approved by the department.

5) Transfers made to any stationary storage tank at a gasoline dispensing facility with a capacity of 7,580 liters (2,000 gallons) or less which is in place on or before July* 1, [August 1,] 1979.

6) Transfers made to any stationary storage tank at a gasoline dispensing facility with a capacity of 2,176 liters (575 gallons) or less which is installed after July* 1, [August 1,] 1979.

7). Transfers made to stationary gasoline storage tanks with a capacity of 2,176 liters (575 gallons) or less used primarily for the fueling of agricultural equipment.

2. No owner or operator of a gasoline dispensing facility and no owner of a gasoline storage tank at such a facility shall transfer or cause or allow the transfer of gasoline from any delivery vessel into any stationary storage tank not excluded under sub. (3) (c) 1. unless the storage tank is equipped with a submerged fill pipe and the vapors displaced from it by filling are processed by a vapor control system in accordance with sub. (3) (c) 3.

3. A vapor control system required by sub. (3) (c) 2. shall include one or more of the following:

a. A vapor balance system with a vapor-tight vapor return line from the storage tank to the delivery vessel and a system that will ensure the vapor line is connected before gasoline can be transferred into the storage tank; or

b. A refrigeration-condensation system or equivalent capable of recovering at least 90% by weight of the organic compounds in the displaced vapor; or

c. A system demonstrated to have control efficiency equivalent to or greater than that provided under a. or b. above and approved by the department.

4. The operator of a delivery vessel shall not commence transfer of gasoline to any gasoline dispensing facility equipped with a vapor balance system pursuant to (3) (c) 3.a. without first properly connecting the vapor return line. The delivery vessel shall be designed, maintained and operated to be vapor tight at all times that it is vapor-laden.

5. During the ozone season, vapor-laden delivery vessels shall be refilled in Wisconsin only at:

a. Bulk gasoline terminals complying with sub. (3) (a); or

b. Bulk gasoline plants equipped with a vapor balance system for unloading as described in sub. (3) (b) 5.

6. Each owner of a gasoline storage tank or delivery vessel shall:

a. Install all necessary control systems and make all necessary process modifications in accordance with subds. 2., 3., 4. and 5. of sub. (3) (c); and

b. Repair, replace or modify any worn out or malfunctioning component or element of design, and keep such records as may be requested in writing by the department relating to the repair, replacement or modification of any component or element of design of the control system.

2. Where a source is subject to requirements of this section in effect prior to July*1, [August 1,] 1979, the source shall continue to comply with such requirements during the interim period prior to the final compliance date in the applicable compliance schedule.

3. Where a source is not subject to requirements of this section in effect prior to July*1, [August 1,] 1979, the final compliance plan shall specify reasonable measures to minimize emissions of volatile organic compounds during the interim period prior to the final compliance date.

(10) EXCEPTIONS AND DEFERRALS. (a) Exceptions for certain organic compounds. For sources on which construction or modification is commenced on or before July*1, [August 1,] 1979, the provisions of subs. (2) (b), (3) (d) and (8) (a) shall not apply to the use or application of insecticides, pesticides, herbicides, saturated halogenated hydrocarbons, perchloroethylene or acetone. In addition, none of the provisions of this section shall apply to the use or emission of trichlorotrifluoroethane (freon 113), ethane or methane.

(b) Internal offsets. 1. On or before December 31, 1987, no owner or operator of any surface coating facility shall cause or allow the emission of volatile organic compounds from any coating line to exceed the limitations contained in this section unless:

a. Each coating line which is involved in the internal offset is operating with an emission rate of volatile organic compounds less than or equal to the special emission rate for the coating line (which may be a weighted daily average) contained in a compliance plan approved under this paragraph;

b. The construction or modifiction of the coating line was commenced on or before July*1, [August 1,] 1979; and

c. The combined emission rate from all coating lines involved in the internal offset is less than or equal to an emission rate determined by the following equation: $E = A_1 \times B_1 + A_2 \times B_2 + \ldots A_n \times B_n$ where E = the total allowable emission rate from all of the coating lines involved in the internal offset in kilograms per hour (pounds per hour), $A_{1,2\ldots n}$ = the allowable emission rate for each coating line pursuant to sub. (4) in kilograms per liter (pounds per gallon) of coating, excluding water, delivered to the coating applicator, and $B_{1,2\ldots n}$ = the amount of coating material in liters per hour (gallons per hour), excluding water, delivered to the coating applicator; and

d. The owner or operator has certified, and the department has confirmed, that the emissions of all air contaminants from all existing sources owned or controlled by the owner or operator in the state are in compliance with or under a schedule for compliance as expeditiously as practicable with, all applicable local, state and federal laws and regulations.

2. The provisions of subd. 1. apply to a surface coating facility only after the department has approved a compliance plan which specifies an emission rate for each of the coating lines involved in the internal offset. If, at any time, the department determines that one of these emission rates is being exceeded, approval of the compliance plan may be revoked and subd. 1. shall no longer apply to the facility.

3. The compliance plan required under subd. 2. shall include a compliance schedule consistent with sub. (9). Notwithstanding subd. (9) (e) 2., the internal offset provided for in the compliance plan may remain in effect until December 31, 1987. After December 31, 1987, no owner or operator of any coating line shall cause or allow the emission of volatile organic material from the coating line to exceed any limitation contained in sub. (4).

(c) Compliance schedule delays. Notwithstanding any compliance schedule approved or issued under sub. (9), the department may approve a new compliance schedule which provides additional time for completion of an increment of progress, provided:

1. That the owner or operator of the source is able to document to the department's satisfaction that the source is unable to meet the applicable deadline under sub. (9) for said increment of progress due to circumstances beyond the owner or operator's control which could not reasonably have been avoided by using all prudent planning; and

2. That the additional time allowed for the said increment of progress does not exceed that originally allotted under sub. (9); and

3. That the final compliance date is not later than December 31, 1982, except as provided in (9) (f) 1.c. or sub. (10) (b) 3.

(d) Limitation of restrictions to the ozone season. Where the requirements of this section are met by means of a fossil-fuel fired incinerator, use of the incinerator shall be required only during the ozone season, provided that operation of the incinerator is not required for purposes of occupational health or safety or for the control of toxic or hazardous substances, malodors, or other pollutants regulated by other sections of this chapter.

History: Cr. Register, March, 1972, No. 195, eff. 4-1-72; r. and recr., Register, June, 1975, No. 234, eff. 7-1-75; am. Register, July, 1979, No. 283, eff. 8-1-79; am. (3) (c) 2. and 4., Register, August, 1979, No. 284, eff. 9-1-79.

NR 154.14 Control of carbon monoxide emissions. (1) GENERAL LIMITATIONS. No person shall cause, suffer, allow, or permit emission of carbon monoxide to the ambient air which substantially contribute to the exceeding of an air standard or cause air pollution.

(2) CARBON MONOXIDE LIMITATIONS. No person shall cause, suffer, allow, or permit significant emissions of carbon monoxide from any new direct source not listed below to be emitted to the ambient air unless such emissions are incinerated at 1,300°F for 0.3 seconds, or reduced by some other means an equivalent amount. Such emissions shall include, but are not limited to, the exhaust from cupolas, blast furnaces, basic oxygen furnaces; or waste streams from petroleum fluid cokers or other petroleum processes. Compliance with these limitations shall be shown to the department on initial startup of the source.

(a) Petroleum refineries (fluid catalytic cracking unit catalyst regenerators): 0.050% carbon monoxide by volume, dry basis.

History: Cr. Register, March, 1972, No. 195, eff. 4-1-72; am. (2) and cr. (2) (a), Register, June, 1975, No. 234, eff. 7-1-75.