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DEPARTMENT OF ENVIRONMENTAL PROTECTION

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BUREAU OF AIR QUALITY CONTROL

CHAPTER 120: GASOLINE TANK TRUCK TIGHTNESS SELF-CERTIFICATION

SUMMARY: This regulation requires that all tank trucks that transport and receive gasoline from a bulk gasoline terminal and/or plant be maintained leak-tight and must be tested and certified annually.

1. Scope

A. This regulation shall be effective in all ambient air quality control regions in the State of Maine.

B. This regulation applies to tank trucks that transport and receive gasoline from a bulk gasoline terminal and/or plant.

2. Definitions

A. Lower Explosive Limit. "Lower Explosive Limit" (LEL) means the concentration above which an explosion of a combustible gas can take place.

3. Prohibition

A. After May 1, 1989, no person owning, leasing, or controlling a tank truck excluding any tank truck with a total capacity of less than 3500 gallons including all of its compartments which was put into service prior to May 22, 1991 that carries gasoline and receives fuel from a bulk gasoline terminal subject to Chapter 112 of the Department's regulations shall permit or suffer the tank truck to be loaded or unloaded unless the tank truck:

1. has been certified as leak-tight according to the procedure specified in Section 5 below; and

2. displays the initials "DEP" attached to both the left and right bulkhead of the tank truck in contrasting letters that are no less than 2 inches high and displays the date that the test was conducted and that the certification expires not more than 12 months after the certification test date.

B. After May 31, 1995, no person owning, leasing, or controlling any tank truck that carries gasoline and receives fuel from a bulk gasoline terminal and/or a bulk gasoline plant subject to Chapter 112 and Chapter 133 of the Department's regulations, respectively, shall permit or suffer the tank truck to be loaded or unloaded unless the tank truck meets the requirements of Section 3(A)(1) and 3(A)(2) of this regulation.

C. The owner or operator of a bulk gasoline terminal and/or a bulk gasoline plant shall design and operate their vapor control system in such a manner that, during loading and unloading operations at the loading rack:

1. the tank compartments of the tank truck are not subjected to a gauge pressure exceeding 18 inches of water or a vacuum exceeding 6 inches of water;
2. readings equal to or greater than 100 percent of the lower explosive limit (LEL, measured as 2.2 percent propane or equivalent percent of another calibration gas by volume in air) are not obtained within 1 inch (2.5 cm) around any potential leak source of the tank truck including all loading couplings and vapor lines and fittings employed in transferring gasoline to the tank truck; and
3. there are no visible or audible liquid or vapor leaks in the vicinity of the loading rack.

D. The owner or operator of the vapor control system must repair and retest a vapor control system that exceeds the limits of Section 3 (C) within 15 days. Copies of the records of all repairs and retest of the vapor control system are to be retained by the owner or operator of the bulk gasoline terminal or bulk gasoline plant for a minimum of two years after the date on which the test was conducted. These records shall be available for inspection during normal business hours and copies shall be provided to the Department and/or the Environmental Protection Agency (EPA) upon request.

4. Tightness Standard

A. A tank truck subject to the provisions of this Chapter may sustain a pressure change of no more than 3 inches of water over five consecutive minutes when pressurized to a gauge pressure of 18 inches of water or when evacuated to a gauge pressure of 6 inches of water when tested using the procedure specified in Section 5.

B. A tank truck certified according to Section 5 must remain leak-tight for the 12 months following the certification test. To verify that this requirement is being met, spot checks with a combustible gas detector must not reveal readings equal to or greater than 100 percent LEL (measured as 2.2 percent propane or equivalent percent of another calibration gas by volume in air) when measured at a distance of one inch (2.5 cm) from

potential leak sources, and no visible or audible liquid or vapor leaks must be observed.

5. Annual Certification Test.

A tank truck subject to the provisions of this regulation must be tested annually by the owner or his agent using Reference Method 27 (as amended and defined in 40 CFR 60 Appendix A, Method 27), or any other methods as approved by the Department and EPA. The Department must be informed at least 24 hours before each certification test.

The owner or his agent conducting the certification test must be registered with the Department.

6. Compliance Provisions.

The owner or operator of any tank truck that fails to meet any of these requirements shall repair and retest the tank truck within 15 days. No owner or operator of any tank truck may use or suffer to be used any tank truck which fails to meet all the requirements of this regulation after such retesting.

7. Spot Inspection Tests.

The Department may, at any time without announcement, measure the back pressure during the loading of tank trucks at the loading rack or the emissions (as percent LEL) from a tank truck using a combustible gas detector to determine the compliance of the tank trucks with the requirements set forth above. The leak tightness of a tank truck shall be measured by use of a gasoline leak detection technique which uses a combustible gas detector or by use of such other means as approved by the Department.

8. Records.

Any person owning, leasing, or controlling the day-to-day activities of a tank truck subject to the provisions of this regulation shall maintain the following records:

A. The tank identification number (the manufacturer's serial number, vehicle identification number (VIN), and/or the owner's identification number);

B. The calendar year during which the tank was manufactured;

C. The date and location of the pressure-vacuum test; if failed, then the date and location of the retest must be recorded as well;

D. The name, title, and telephone number of the person who conducted the test, and the name and address of the company where the person is employed; and

E. A copy of the test record showing the following:

1. the tank pressure at the start of the pressure test;
2. the tank pressure at the end of the pressure test;
3. the tank pressure at the start of the vacuum test;
4. the tank pressure at the end of the vacuum test; and
5. a list of all repairs which were made to the tank truck to enable it to pass all applicable requirements of the test method.

Copies of the records are to be retained by the owner or operator of the tank truck for a minimum of two years after the date on which the test was conducted. These records shall be available for inspection during normal business hours and copies shall be provided to the Department and/or EPA upon request.

9. Equivalency.

At the discretion of the Department, the requirements for testing and marking gasoline transport vehicles subject to this Chapter may be satisfied if the vehicle undergoes equivalent certification in another state.

BASIS STATEMENT FOR AUGUST 10, 1988 : It is necessary to control gasoline vapors as these vapors contribute to the formation of ozone and Maine violates both the state and federal ozone air quality standards. Gasoline tank trucks are a critical link in the collection and return of gasoline vapors to vapor recovery systems at the bulk gasoline terminals. Chapter 112 requires that tank trucks be 90 percent vapor tight. Spot checks have shown a 40 percent noncompliance rate. An annual self-certification program will improve compliance to 90 percent.

BASIS STATEMENT FOR AMENDMENT OF SEPTEMBER 27, 1989 : This amendment corrected certain minor deficiencies identified by the U.S. Environmental Protection Agency in the State Implementation Plan and for consistency with State statute. The U.S. Environmental Protection Agency requested the addition of the definitions of gasoline, tank truck, vapor control system, and bottom filling. The Department agreed that the inclusion of these definitions , with the exception of bottom filling, clarified the regulation. The term bottom filling is not used in

Chapter 120. EPA also commented that Maine must adopt a separate regulation for bulk gasoline plants. The Department recognizes that bulk gasoline plant emissions are currently uncontrolled. The Department considers these emissions as insubstantial, but will continue to evaluate this source of VOC emissions for future reductions. The U.S. Environmental Protection Agency commented that there should be no cut-off exemption of 3500 gallons for tank trucks as the original SIP includes all tank trucks. The Department believes the 3500 gallon capacity cut-off is appropriate. There are only a minimum number of trucks under the 3500 gallon capacity which pick up gasoline at the bulk gasoline terminals. Therefore the environmental impact is deemed insignificant. Lastly, EPA commented that the owner or operator of the vapor control system repair and retest a vapor control system which exceeds the emission limits. The Department agrees that this provision is necessary to ensure that system is repaired and returned to good working order as soon as possible, in this case 15 days.

BASIS STATEMENT FOR AMENDMENT OF SEPTEMBER 26, 1990 : During the 114th Session of the Maine Legislature, the Board of Environmental Protection was given the authority under 38 M.R.S.A. 585 and 585-A to establish and amend emission standards and regulations to implement ambient air quality standards and emission standards. This rule was amended to reflect the new authority under statute. No request for public hearing nor comments were received on the reauthorization.

BASIS STATEMENT FOR AMENDMENT OF MAY 22, 1991 : This amendment corrected certain minor deficiencies identified by the Environmental Protection Agency in the State Implementation Plan (SIP). The U. S. Environmental Protection Agency commented that since the State has opted to retain the tank truck cutoff exemption of 3500 gallons or less, a demonstration must be made to show that those trucks account for less than 0.8 percent of the gasoline throughput in the State. A survey was conducted that sufficiently met that criteria. The U. S. EPA also commented that the "tank truck" definition needed clarification; that the exemption applied to trucks with a total truck capacity of less than 3500 gallons and that after this date any additional trucks added to the fleet not be exempted from the VOC control requirements.

BASIS STATEMENT FOR AMENDMENT OF JUNE 22, 1994 : This amendment removes the definitions gasoline, tank truck, and vapor control system from this chapter and relocates them to Chapter 100, Definitions since they apply to more than just Chapter 120. The annual certification tests are now required anytime during the year instead of January through June. The exemption for tank trucks with a capacity of less than 3500 gallons that were put into service prior to May 22, 1991 to be leak-tight has been eliminated. All tank trucks loading and unloading gasoline at bulk gasoline terminals and plants are required to be leak-tight.

In addition to the Basis Statement above, the Department has filed with the Secretary of State its responses to comments received during the public comment period.

AUTHORITY: 38 M.R.S.A., Section 585, 585-A

EFFECTIVE DATE: September 21, 1989
Amended: October 25, 1989
Amended: November 3, 1990
Amended: June 9, 1991
Amended: July 11, 1994