

EL DORADO COUNTY AIR POLLUTION CONTROL DISTRICT

RULE 244 – ORGANIC LIQUID LOADING AND TRANSPORT VESSELS

(Adopted March 27, 2001) (Amended September 25, 2001)

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RULE 244 ORGANIC LIQUID LOADING AND TRANSPORT VESSELS

244.1 GENERAL

- A. **PURPOSE:** This rule is intended to control emissions of volatile organic compounds (VOC) from facilities that load organic liquids with a vapor pressure of 1.5 psia (77.5 mm Hg) or greater under actual loading conditions into any tank truck, trailer, or railroad tank car.
- B. **APPLICABILITY:** The provisions of this rule shall apply to all organic liquid loading facilities.
- C. **EXEMPTION:** Section 244.3 A.5. shall not apply to components found in violation of facility vapor leaks or liquid leaks, if such is detected and recorded originally by the owner or operator, provided the repair or replacement of applicable equipment is completed within the specified period as given in Section 244.5 A.

244.2 DEFINITIONS

- A. **BACKGROUND** is the ambient concentration of organic vapors in the air measured according to the EPA Method 21 subsection 4.3.2.
- B. **BULK TERMINAL** is a FACILITY as defined below that receives organic liquids or gasoline by pipeline.
- C. **FACILITY** is an organic liquid or gasoline loading rack or set of such racks that load organic liquid or gasoline into tank trucks, trailers, or railroad cars, which are located on one or more contiguous properties within the District, in actual physical contact or separated solely by a public roadway or other public right-of-way, and are owned or operated by the same person or persons under common control.
- D. **FACILITY VAPOR LEAK** is an escape of organic vapors from a source other than a tank truck, trailer or railroad tank car in excess of 3,000 ppm as methane above background when measured according to EPA Method 21. A facility vapor leak source does not include liquid spillage or condensate resulting from "liquid leaks".
- E. **GASOLINE** is any petroleum distillate or petroleum distillate/alcohol blend or alcohol, except any liquefied petroleum gas (LPG), which has a vapor pressure of 1.5 psia (77.5 mm Hg) or greater under actual loading conditions and is used as a fuel for internal combustion engines.
- F. **LIQUID LEAK** is a dripping of liquid organic compounds at a rate in excess of three drops per minute from any single leak source other than the liquid fill line and vapor line of disconnect operations.
- G. **LIQUID LEAK FROM DISCONNECT OPERATIONS** is defined as: (a) more than two milliliters of liquid drainage per disconnect from a top loading operation; or (b) more than ten milliliters of liquid drainage per disconnect from a bottom loading operation. Such liquid drainage shall be determined by computing the average drainage from three consecutive disconnects at any one loading arm.

- H. **ORGANIC LIQUID** is any liquid compound containing the element carbon that has a vapor pressure of 1.5 psia (77.5 mm Hg) or greater under actual loading conditions excluding liquefied petroleum gases (LPG), methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, ammonium carbonate, and exempt compounds.
- I. **SUBMERGED FILL LOADING** is a type of organic liquid loading operation where the discharge opening is completely submerged when the liquid level above the bottom of the vessel is eight centimeters (3.2 inches) or higher.
- J. **SWITCH LOADING** is a transfer of organic liquids with a vapor pressure of less than 1.5 psia (77.5 mm Hg) under actual loading condition into any tank truck, trailer or railroad tank car that was loaded with an organic liquid with a vapor pressure of 1.5 psia (77.5 mm Hg) or greater immediately preceding the transfer.
- K. **TRANSFER EQUIPMENT** shall consist of all the components of the liquid loading line between the liquid pump and the transporting vessel, and the vapor return line from the transporting vessel to the storage tank, or to and including the vapor recovery system.
- L. **TRANSPORT VESSEL** is a tank truck, trailer or railroad tank car that is equipped to receive and transport organic liquid.
- M. **TRANSPORT VESSEL VAPOR LEAK** is an escape of organic vapors from a transport vessel in excess of 100 percent of the LEL when monitored according to the CARB Vapor Recovery Test Procedure TP-204.3 – Determination of Leak(s).
- N. **VAPOR DISPOSAL SYSTEM** is a control equipment designed and operated to reduce VOC emissions into the atmosphere.
- O. **VAPOR RECOVERY SYSTEM** is a vapor gathering system which is capable of collecting and returning discharged hydrocarbon vapors and gases during loading of organic liquids into transport vessels, back to a stationary storage container, or into an enclosed process system.
- P. **VOLATILE ORGANIC COMPOUND (VOC)** is as defined in Rule 101.

244.3 STANDARDS

- A. **GASOLINE LOADING FACILITIES:** Each facility which loads gasoline into a truck tank, trailer, or railroad car shall have a vapor recovery system which meets the following standards:
 - 1. The system is either
 - a. a CARB certified vapor recovery and/or disposal system; or;
 - b. a District-approved vapor recovery and/or disposal system only when such system does not require CARB certification.
 - 2. Such system shall be designed and operated to recover at least 99 percent of the displaced non-methane vapors or to have a vapor emission rate to the atmosphere

not exceeding 0.08 pounds of non-methane vapor per 1,000 gallons of organic liquid transferred.

3. The pressure in the vapor recovery system shall not exceed 18 inches of water column pressure.
4. The facility shall be designed for bottom loading only.
5. The transfer equipment shall be operated and maintained so that there are no overfills, facility vapor leaks, liquid leaks, or liquid leaks from disconnect operations.

B. SWITCH LOADING: Uncontrolled switch loading is prohibited.

C. TRANSPORT VESSELS

1. No person shall allow loading or unloading of organic liquid or other use or operation of any transport vessel unless the vessel has a valid certification of vapor integrity as defined by the applicable Air Resources Board Certification and Test Procedures, pursuant to Health and Safety Code Section 41962(g).
2. Transport vessel vapor leaks from dome covers, pressure vacuum vents or other sources shall be determined in accordance with the CARB Vapor Recovery Test Procedure TP-204.3 – Determination of Leak(s).
3. The transport vessel shall be operated so that there are no vapor leaks or liquid leaks.
4. Transport vessels shall not have a pressure exceeding 18 inches water column nor vacuum exceeding 6 inches water column at any time.
5. There shall be no liquid leaks upon disconnect.

D. NON-GASOLINE LOADING FACILITIES

1. Each facility shall be equipped and operated for submerged fill loading or bottom fill loading. All gasoline or equivalent vapor pressure organic liquids shall be transferred in this manner.
2. The transfer equipment shall be operated and maintained so that there are no overfills, liquid leaks, or liquid leak from disconnect operations.

244.4 ADMINISTRATIVE REQUIREMENTS

A. DISTRIBUTION OF RESPONSIBILITIES

1. The owner and operator of any facility shall be responsible and liable for complying with the provisions of Sections 244.3 A., 244.3 D., 244.4 A., 244.5 A., and 244.5 C., and for maintaining the equipment at the facility in such condition that it can comply with the requirements of this rule if properly operated. If employees of the owner or operator of the facility supervise or affect the transfer operation, the owner or operator of the facility shall be responsible

for ensuring the transfer operation complies with all requirements of this rule and the transfer equipment is properly operated.

2. The owner, operator, and driver of a transport vessel shall be responsible and liable for complying with Sections 244.3 B. and 244.3 C.

244.5 MONITORING AND RECORDS

A. LEAK INSPECTION REQUIREMENTS

1. The owner and operator of any facility shall be required to perform an inspection of the vapor collection system, the vapor disposal system, and each loading rack handling organic liquids, for facility vapor leaks or liquid leaks of volatile organic compounds on one of the following schedules:
 - a. monthly if sight, sound, and smell are used as detection methods.
 - b. quarterly if an organic vapor analyzer (OVA) is used to monitor for facility vapor leaks.
2. Each detection of a leak shall be repaired or replaced within 72 hours. The repaired or replacement component shall be reinspected the first time the component is in operation after the repair or replacement.

B. COMPLIANCE DETERMINATION/TEST METHODS

1. Compliance with the vapor recovery efficiency as specified in Section 244.3 A.2. shall be determined according to the CARB Vapor Recovery Certification Procedure CP-202 – Certification Procedure for Vapor Recovery Systems of Bulk Plants.
2. Determinations of facility vapor leaks shall be conducted according to EPA Method 21.
3. Any other alternative test method approved in writing by the District, CARB, and EPA may be used only when none of the test methods identified in this subdivision are applicable.
4. When more than one test method or set of test methods are specified for any testing, a violation of any requirements of this rule established by any one of the specified test methods or set of test methods shall constitute a violation of the rule.

C. RECORDKEEPING

1. The owner and operator of any facility shall maintain a daily log of the throughput and a summary of the throughput for the calendar year to date, of the liquid organic compounds subject to the provisions of this rule.
2. The owner and operator of any facility shall maintain records for verification of compliance with the requirements in Section 244.5 A. The records shall include,

but are not limited to, inspection dates, description of leaks detected, repair/replacement dates, and reinspection dates.

3. All records shall be maintained at the facility for at least five years and shall be available to District staff upon request.

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Rescinded:

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