California Environmental Protection Agency

Air Resources Board

Vapor Recovery Certification Procedure

Proposed CP-204

Certification Procedure for Vapor Recovery Systems of Cargo Tanks

Adopted: April 12, 1996
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Note: ~~Strikeout text is deleted text which was provided in 4/3/98 staff report.~~
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1 GENERAL INFORMATION AND APPLICABILITY

This document describes a procedure for certifying equipment which recovers vapors emitted in association with gasoline marketing operations involving cargo tanks.

Other vapor recovery certification procedures provide instructions for determining performance standards, performance specifications, and test procedures for equipment which recovers vapors emitted in association with gasoline marketing operations involving: dispensing facilities (CP-201); bulk plants and cargo tanks (CP-202); and supply lines, terminals, delivery lines, and cargo tanks (CP-203). For novel facilities or systems to which CP-201 through 204 do not apply, CP-205 provides instructions for determining performance standards, performance specifications, and test procedures for equipment which recovers vapors emitted in association with gasoline marketing operations.

This procedure is applicable to tank trucks and trailers that are equipped for the transport of gasoline and that must be equipped for gasoline vapor recovery in accordance with air pollution control district rules.

Only a vapor recovery system of a design that is certified by the ARB Executive Officer may be installed on a cargo tank.

No person shall operate, or allow the operation of, a cargo tank unless the cargo tank is certified and maintained in accordance with these procedures. Certifications shall be issued on an annual basis and shall expire on the last day of the month one year following the month of issuance of the certification.

The owner or operator of any cargo tank shall:

(1) annually test such tank(s) in accordance with the provisions of § 4 and

(2) annually apply for certification of such tank(s) in accordance with this procedure.

Tests shall be conducted by the owner of the cargo tank, or a consultant, at the expense of the owner. Prior to testing, the owner shall notify the Executive Officer, or his or her designate(s), of the date, time, and location of the testing. The Executive Officer or designate(s) may observe or conduct tests.

A set of definitions common to all certification and test procedures is in:

D-200 Definitions for Certification Procedures and Test Procedures for Vapor Recovery Systems

1.1 Legislative and Regulatory Requirements of Other California State Agencies

As required, the ARB Executive Officer shall coordinate this certification procedure with:

(1) Department of Food and Agriculture, Division of Measurement Standards (DMS)

(2) State Fire Marshal (SFM)

(3) Department of Industrial Relations, Division of Occupational Safety and Health (DOSH)

1.2 Legislative and Regulatory Requirements of Other Agencies

In addition to California's local Districts, other federal, state, or local agencies may have legal jurisdiction regarding vapor recovery systems. The applicant is solely responsible for:

(1) compatibility of the applicant's equipment with the application of any other agency's test procedures;

(2) testing of the applicant's equipment with such test procedures; and

(3) compliance with performance standards and performance specifications in any other agency's regulations referencing such test procedures.

The ARB Executive Officer is not responsible for items (1) through (3) above.

4 PERFORMANCE STANDARDS, PERFORMANCE SPECIFICATIONS, AND TEST PROCEDURES [continued]

4.1 Performance Standards and Test Procedurs [continued]

4.1.3 Internal Vapor Valve

4.1.3.1 Performance Standard

Every cargo tank shall have an internal vapor valve. A check valve or cap is not an acceptable alternative.

The opening pressure for any pneumatic internal vapor valve shall be listed in the Executive Order certifying a cargo tank with such a valve. A pressure gauge (0 to 100 psig) shall be installed on any such cargo tank, maintained in good working order, and observed by the operator during as large a fraction of the duration of each delivery as practicable. The operator shall terminate delivery and return for maintenance and repairs if the pressure gauge indicates a pressure below the opening pressure of such a cargo tank's pneumatic internal vapor valve.

Two equivalent performance standards are specified below. It is a permanent condition of certification that cargo tank performance comply with both of these standards.

(1) **Five Minute Performance Standard (~~Daily~~ Yearly)**

Pressure Change per Cargo Tank or Compartment Tested per TP-204.1	
Allowed Pressure Change in Five Minutes (inches water column, gauge)	Cargo Tank or Compartment Capacity (gallons)
5.0	all

(2) **One Minute Performance Standard (Daily)**

Pressure Change per Cargo Tank or Compartment Tested per TP-204.2
The appropriate one minute performance standard is determined by application of TP-204.2.

7 CERTIFICATION [continued]

7.3 Requirements for Determination of Compliance and Violation [continued]

7.3.2 Specific Requirements [continued]

7.3.2.3 Requirements in Preparation for Pressure Testing

Any cargo tank which is in preparation for pressure testing as required by § 7.3.2.1 (1), § 7.3.2.2 (1), or § 7.3.2.2 (2), shall prepare in one of the following ways:

Warning: Under no circumstances shall the vapors in any cargo tank be purged or vented directly to the atmosphere. The only exception to this shall be for airport refuelers, which may purge or vent directly to the atmosphere, so long as no safety or fire regulations are violated.

"Airport refueler" is defined as a cargo tank which:
has a total capacity no greater than ~~2,000~~ 5,000 gallons;
exclusively transports avgas and jet fuel; and
is not licensed for public highway use.

The airport refueler exception terminates when
there are two CARB-certified degassing vapor control systems which are appropriate for degassing airport refuelers.

(1) Five Minute Pressure Testing (TP-204.1)

(a) If such cargo tank contains product for delivery, such cargo tank shall deliver until empty; then

(b) Such cargo tank shall purge by a method not in violation of any regulations, including but not limited to:

(i) purging with air to an incinerator certified by the ARB or permitted by a District;

(ii) purging with water to an ARB certified vapor recovery system at a bulk plant or terminal which shall recover the purge water in conformity with all applicable regulations;

(iii) purging with a liquid with a vapor pressure of less than four pounds Reid (<4 psi RVP) to an ARB certified vapor recovery system at a bulk plant of terminal; then

(c) Such cargo tank shall be empty.

(d) Such cargo tank shall adhere to the PRE-TEST PROTOCOL of (TP-204.1).

(2) One Minute Pressure Testing (TP-204.2)

Such cargo tank shall adhere to the PRE-TEST PROTOCOL of (TP-204.2).

7.3.2.4 Requirements at Conclusion of Pressure Testing

The entire cargo tank, including tank, domes, dome vents, piping hose connections, adaptors, couplings, hoses and delivery elbows shall be inspected for evidence of wear, damage, or misadjustment that could be a potential leak source. Any part found to be defective shall be adjusted, repaired or replaced as necessary.