

State of California
AIR RESOURCES BOARD

Resolution 84-2

February 24, 1984

Agenda Item No.: 84-4-1

WHEREAS, Health and Safety Code Section 39601 authorizes the Air Resources Board (the "Board") to adopt standards, rules and regulations necessary for the proper execution of the powers and duties granted to and imposed upon the Board by law;

WHEREAS, Health and Safety Code Section 41962 requires the Board to adopt test procedures for determining the compliance of vapor recovery systems of cargo tanks on tank vehicles used to transport gasoline with vapor emission standards which are reasonable and necessary to achieve or maintain any applicable ambient air quality standard;

WHEREAS, the Board has established certification and test procedures for gasoline cargo tank vapor recovery systems in its "Certification and Test Procedures for Vapor Recovery Systems of Gasoline Delivery Tanks," as last amended September 1, 1982 (the "Certification and Test Procedures"), incorporated by reference in Section 94004, Title 17, California Administrative Code;

WHEREAS, effective July 1, 1983, the Board has contracted with the California Highway Patrol to replace the State Fire Marshal in conducting the annual vapor recovery system certification program for individual gasoline delivery tanks pursuant to the Certification and Test Procedures;

WHEREAS, Section 94005, Title 17, California Administrative Code, sets forth the requirements for preparation and submittal of the proof of correction used in the optional alternative, established in Sections 41970-41972 of the Health and Safety Code, to criminal penalties in cases involving violations of statutes and regulations relating to gasoline cargo tank vapor recovery systems;

WHEREAS, the Board staff has proposed amendments to the "Certification and Test Procedures" and to Sections 94004 and 94005, Title 17, California Administrative Code, in order to provide that the California Highway Patrol administers the annual gasoline cargo tank vapor recovery system certification program, to allow annual certification renewal to occur throughout the year, to change the maximum time permitted between delivery tank testing and the issuance or renewal of certification, and to make minor technical and clarifying changes;

WHEREAS, the California Environmental Quality Act and Board regulations require that no project having significant adverse environmental impacts be adopted as proposed if feasible alternatives or mitigation measures are available;

WHEREAS, a public hearing and other administrative proceedings have been held in accordance with the provisions of the Administrative Procedure Act (Government Code, Title 2, Division 3, Part 1, Chapter 3.5); and

WHEREAS, the Board finds that:

The amendments to Section 94004, Title 17, California Administrative Code, and to the Certification and Test Procedures set forth in Attachment A are necessary and appropriate to reflect changes in the administration of the annual gasoline cargo tank vapor recovery system certification program, to provide for annual certification throughout the year, to assure that annual certification approvals are based on recent data, and to enhance clarity;

The amendments to Section 94005, Title 17, California Administrative Code, set forth in Attachment B reflect the transfer of administration of the annual gasoline cargo tank vapor recovery system certification program to the California Highway Patrol; and

The amendments set forth in Attachments A and B will have no significant adverse impact on the environment.

NOW, THEREFORE, BE IT RESOLVED that the Board hereby amends Section 94004, Title 17, California Administrative Code, and the incorporated "Certification and Test Procedures for Vapor Recovery Systems of Gasoline Delivery Tanks," as set forth in Attachment A hereto.

BE IT FURTHER RESOLVED that the Board hereby amends Section 94005, Title 17, California Administrative Code, as set forth in Attachment B hereto.

I certify that the above is a true and correct copy of Resolution 84-2, as adopted by the Air Resources Board.


Harold Holmes, Board Secretary

ATTACHMENT A

Amend Section 94004 of Title 17, California Administrative Code, to read as follows:

94004. Certification of Vapor Recovery Systems - Gasoline Delivery Tanks. Gasoline vapor recovery systems for delivery tanks shall be certified in accordance with the Air Resources Board's "Certification and Test Procedures for Vapor Recovery Systems of Gasoline Delivery Tanks," adopted on April 18, 1977, as last amended ~~September 7, 1982~~ February 24, 1984.

NOTE: Authority cited: Sections 39600, 39601, 39607, 41954, and 41962, Health and Safety Code. Reference: Sections 39515, 39516, 39607, 41954, and 41962, Health and Safety Code.

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State of California
AIR RESOURCES BOARD

Adopted: April 18, 1977
Amended: September 1, 1982
Amended: February 24, 1984

Certification and Test Procedures for Vapor
Recovery Systems of Gasoline Delivery Tanks

I. General Applicability

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.

II. Definitions

- A. Delivery tank means any container, including associated pipes and fittings, that is used for the transportation of gasoline on any highway and is required to be certified in accordance with Section 41962 of the California Health and Safety Code.
- B. Compartment means a liquid-tight division of a delivery tank.
- C. System design means the design of the delivery tank and all associated gasoline delivery and vapor recovery pipes, hoses and fittings. The system design shall be represented by a set of drawings and specifications which conform to good engineering practice.

III. General Requirements

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

- B. No person shall operate, or allow the operation of, a delivery tank unless the delivery tank is certified and maintained in accordance with these procedures. Annual Certifications shall be issued on an annual basis and shall expire at midnight of the next to the last day of the month one year following the month of issuance of the certification. ~~effective from July 1 through June 30 of the following year.~~
- C. The owner or operator of any delivery tank shall:
- (1) Annually test such tank(s) in accordance with the provisions of Section IX;
 - (2) Annually apply for certification of such tank(s) in accordance with the provisions of Section VII.

IV. Design and Performance Standards

- A. The design of the vapor recovery system of the delivery tank shall be such that when the delivery tank is connected to an approved underground storage tank vapor recovery system or a vapor recovery system at a bulk plant or terminal it shall not prevent such systems from achieving the required vapor recovery efficiencies. The connectors of the delivery tank shall be compatible with the fittings on the fill-pipes at the service stations and gasoline terminals which the delivery tank will service. Such compatibility may be achieved by the use of adapters.
- B. For the annual certification test for delivery tanks, except those tanks described in Section IV-C, a pressure change of not more than one (1) inch of water shall occur in five minutes when the delivery tank is pressurized to 18 inches of water (gauge) or evacuated to six

(6) inches of water (gauge) according to the procedures specified in Section IX. At no time after the annual test, shall a pressure change of 2.5 inches of water occur in five minutes when the delivery tank is tested as above. If, at any time during the year, the delivery tank is found to not be in compliance, it shall be made to comply with the annual certification leak-rate criterion.

- C. For delivery tanks of less than 2,500 gallons total capacity and delivery tanks which have to be tested by individual compartment, the pressure change may not exceed the values set forth in the table below.

Delivery Tank or Compartment Capacity Gallons)	Allowed Pressure Change Per Tank or Compartment Tested (inches water, gauge) (per 5 minutes)	
	<u>Annual Certification</u>	<u>Year-Round*</u>
2499 to 1500	1.5	3.0
1499 to 1000	2.0	3.5
999 or less	2.5	4.0

*Year-round; not to be exceeded anytime.

- D. A delivery tank shall be deemed to exceed the applicable year-round leak-rate criterion established in Sections IV. B and C if the delivery tank is tested pursuant to the Air Resources Board's "Test Procedure for Gasoline Vapor Leak Detection Using A Combustible Gas Detector" with the following results:
1. A vapor leak as defined in such test procedures occurs from the delivery tank; and
 2. During the test, a back-pressure of less than 18 inches water (gauge) is created in the delivery tank.

A delivery tank described in the previous sentence shall not be deemed to exceed the applicable year-round leak-rate criterion established in Sections IV. B and C if it is:

1. Taken out of service immediately following notification of the owner or operator of the results of the test conducted pursuant to the Air Resources Board's "Test Procedure for Gasoline Vapor Leak Detection Using A Combustible Gas Detector"; and
2. Tested in accordance with the procedures specified in Section IX without any maintenance being done on the tank, and found to be in compliance with the applicable year-round leak-rate criterion.

E. The internal vapor valve shall be maintained to meet the following requirements by the dates given. By July 1, 1983: A pressure increase in the vapor return line and manifold of no more than 15 inches of water (gauge) shall occur in five (5) minutes when the delivery tank is pressurized to 18 inches of water (gauge) according to the procedures specified in Section IX-E. By July 1, 1984: a pressure increase of no more than ten (10) inches of water (gauge) shall occur in five (5) minutes when the delivery tank is pressurized to 18 inches of water (gauge) according to the procedures specified in Section IX-E. By July 1, 1985: A pressure increase of no more than five (5) inches of water (gauge) shall occur in five (5) minutes when the delivery tank is pressurized to 18 inches of water (gauge) according to the procedures specified in Section IX-E.

Alternatively, a check valve or other equivalent equipment, properly installed and maintained on the delivery tank's vapor recovery adapter(s), may be used providing such equipment prevents the escape

of any vapor from the vapor recovery piping when the system is not connected to any other vapor recovery system.

V. Application for Approval of System Design

Application for approval of a system design shall be made to the Executive Officer on a form approved by the Executive Officer. The applicant shall submit a set of drawings and specifications including but not limited to piping configuration and dimensions, types of seals, and types of couplers for delivery hoses. Data which demonstrate that the delivery tank vapor recovery piping system will work in conjunction with the appropriate underground storage tank vapor recovery system for controlling the gasoline vapors displaced during the filling of underground storage tanks shall also be submitted.

VI. Approval of a System Design

The Executive Officer, upon review of the drawings and specifications of a system design, and upon finding that the system complies with the requirements of Section IV-A, shall issue a System Design Approval Number.

VII. Application for Certification of Individual Delivery Tanks

The application for certification of individual delivery tanks shall ~~is-to~~ be submitted ~~annually~~, to the Executive Officer or his or her designate, and shall ~~is-to~~ contain the following information:

1. Name, address, and telephone number of owner or operator, and company name (if applicable).
2. The sizes and number of compartments of the delivery tank.
3. The delivery tank's California Highway Patrol cargo tank State-Fire Marshal's identification number.
4. The air pollution control district in which the delivery tank's base of operation is located.

5. A statement that the tank has been tested according to the test procedures in Section IX and complies with the performance standards in Section IV.
6. The test data acquired in 5 above.
7. A declaration under penalty of perjury by the person conducting the test that the information contained in items 5 and 6 is true and correct.
8. A declaration under penalty of perjury by the applicant setting forth his or her relationship to the delivery tank and stating that all information is true and correct.

VIII. Certification of an Individual Delivery Tank

The Executive Officer, or his or her designate, upon review of the application of certification of an individual delivery tank and any other pertinent data, and upon finding that the delivery tank complies with the requirements of Section IV, shall return a copy of the application to the applicant with a stamped acknowledgement of receipt thereon, or other appropriate documentation of certification. The stamped copy of the application or other documentation of certification shall be kept with the delivery tank at all times.

IX. Test Procedures

A. Testing

The delivery tank is to be tested in a location where it will be protected from direct sunlight. The delivery tank, mounted on either the truck or trailer, is to be pressurized, isolated from the pressure source, and the pressure drop recorded to determine the rate

of pressure change. A vacuum test is to be conducted in the same manner. ~~For an Annual recertification tests, the test may not~~ shall be conducted no more than sixty days ~~six months~~ prior to the issuance of the certification period.

B. Visual Inspection

The entire tank, including domes, dome vents, cargo tank, piping hose connections, 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.

C. Equipment Requirements

1. Source of air or inert gas of sufficient quantity to pressurize tanks to 27.5 inches of water (1 psi) above atmospheric pressure.
2. Low pressure (5 psi divisions) regulator for controlling pressurization of tank.
3. Water manometer with 0 to 25 inch range, with scale readings of 0.1 inch.
4. Test cap for vapor line with a shut-off valve for connection to the pressure and vacuum supply hoses. The test cap is to be equipped with a tap for connecting the manometer.
5. Caps for liquid delivery line.
6. Vacuum pump of sufficient capacity to evacuate tank to ten inches of water.
7. Pressure and vacuum supply hose of 1/4 inch internal diameter.

8. In-line, pressure-vacuum relief valve set to activate at one (1) psi and with a capacity equal to the pressurizing or evacuating pumps.

D. Vacuum and Pressure Tests of Tanks

1. Pressure Test

- a. The tank shall be purged of gasoline vapor and tested empty. The tank may be purged by any safe method not in violation of other regulations. Examples of such safe methods are flushing with a diesel fuel, or heating oil.
- b. The dome covers are to be opened and closed.
- c. Connect static electrical ground connections to tank. Attach the delivery and vapor hoses, remove the delivery elbows and plug the liquid delivery fittings.
- d. Attach the test cap to the vapor recovery line of the delivery tank.
- e. Connect the vacuum and pressure supply hose and the pressure-vacuum relief valve to the shut-off valve. Attach the pressure source to the hose. Attach a manometer to the pressure tap.
- f. Connect compartments of the tank internally to each other if possible.
- g. Applying air pressure slowly, pressurize the tank, or alternatively the first compartment, to 18 inches of water.
- h. Close the shut-off valve, allow the pressure in the delivery tank to stabilize (adjust the pressure if

necessary to maintain 18 inches of water), record the time and initial pressure.

- i. At the end of five minutes, record the final time and pressure.
- j. Repeat for each compartment if they were not interconnected.

2. Vacuum Test

- a. Connect vacuum source to pressure and vacuum supply hose.
- b. Slowly evacuate the tank, or alternatively the first compartment, to six (6) inches of water. Close the shut-off valve, allow the pressure in the delivery tank to stabilize (adjust the pressure if necessary to maintain six inches of water vacuum), record the initial pressure and time. At the end of five (5) minutes, record the final pressure and time.

E. Leak Check of Internal Vapor Valve(s)

1. After completing the vacuum and pressure tests, pressurize the tank as in D.1 above to 18 inches of water.
2. Close the delivery tank's internal valve(s) including the internal vapor valve(s), thereby isolating the vapor return line and manifold from the delivery tank.
3. Relieve the pressure in the vapor return line to atmospheric pressure.
4. Seal the vapor return line and after five (5) minutes record the pressure existing in the vapor return line and manifold.

F. Alternative Test Methods

1. Methods, other than specified above, may be used if prior approval is obtained from the Executive Officer of the Air Resources Board. In order to secure the Executive Officer's approval of an alternative test method, the proponent is responsible for demonstrating to the Executive Officer's satisfaction that the alternative method is equivalent to the adopted method.

X. Conduct of Testing

Tests should be conducted by the owner of the delivery 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, of the date, time and location of the testing. The Executive Officer, or his or her representatives or designate may observe the tests or conduct tests.

XI. Fees

- A. The Executive Officer, to cover the cost of approving system designs may charge a fee not to exceed the actual cost incurred.
- B. The Executive Officer, or his or her designate, to cover the cost of certifying delivery tanks, may charge a fee not to exceed the actual cost of certification.

XII. Application for Variance

- A. Any person who cannot comply with the requirements set forth in Section IV because of unreasonable economic hardship, unavailability of equipment or lack of technological feasibility may apply to the Executive Officer for a variance. The application shall set forth:

- (1) the specific grounds upon which the variance is sought;
 - (2) the proposed date(s) by which compliance with the requirements of Section IV will be achieved; and
 - (3) a plan reasonably detailing the method by which compliance will be achieved.
- B. Upon receipt of an application for a variance, the Executive Officer shall hold a hearing to determine whether, and under what conditions and to what extent, a variance from the requirements established by Section IV is necessary and will be permitted. Notice of the time and place of the hearing shall be sent to the applicant by certified mail not less than 30 days prior to the hearing. Notice of the hearing shall also be published in at least one newspaper of general circulation and shall be sent to every person who requests such notice, not less than 30 days prior to the hearing.
- C. At least 30 days prior to the hearing the application for the variance shall be made available to the public for inspection. Interested members of the public shall be allowed a reasonable opportunity to testify at the hearing and their testimony shall be considered.
- D. No variance shall be granted unless all of the following findings are made:
- (1) that the applicant for the variance is, or will be, in violation of the requirements established by Section IV;
 - (2) that due to unreasonable economic hardship, unavailability of equipment or lack of technological feasibility beyond the reasonable control of the applicant, requiring compliance would

result in either (a) an arbitrary or unreasonable taking of property, or (b) the practical closing and elimination of a lawful business; and

(3) that such taking or closing would be without a corresponding benefit in reducing air contaminants.

E. Any variance order shall include the date(s) by which compliance with the requirements of Section IV will be achieved and any other condition(s) including, where appropriate, increments of progress, that the Executive Officer, as a result of the testimony received at the hearing, find necessary.

F. If the Executive Officer determines that, due to conditions beyond the reasonable control of the applicant, the applicant needs an immediate variance from the requirements established by Section IV, the Executive Officer may hold a hearing without complying with the provisions of Section XII B or Section XII C above.

No variance granted under the provisions of this subparagraph may extend for a period of more than 45 days. The Executive Officer shall maintain a list of persons who in writing have informed the Executive Officer of their desire to be notified by telephone in advance of any hearing held pursuant to this section, and shall provide advance telephone notice to any such person.

G. Upon the application of any person, the Executive Officer may review and for good cause modify or revoke any variance from the requirements of Section IV after holding a hearing in accordance with the provisions of this section.

Amend Section 94005 of Title 17, California Administrative Code, to read as follows:

94005. Preparation and Submittal of Proof of Correction for Gasoline Cargo Tanks.

(a) Whenever any person has received a notice to appear issued pursuant to Health and Safety Code Section 41970, and the preparation and submittal of a proof of correction by verification is authorized by Health and Safety Code Section 41972, such proof of correction shall contain:

- (1) Name of owner or operator, company name (if applicable), and address.
- (2) Date, time and violation specified in notice to appear.
- (3) ~~State-Fire-Marshal~~ California Highway Patrol cargo tank number.
- (4) Manufacturer's number of tank.
- (5) California Air Resources Board vapor-emission-certification decal number.
- (6) License number of vehicle carrying cargo tank at the time of issuance of notice to appear.
- (7) A statement that the violation was corrected, including the following information and documentation:
 - (A) A brief description of the corrections that were made.
 - (B) The date on which the corrections were made.
 - (C) The name, address, and company affiliation (if any) of the person, making the correction.

(D) If the violation consists of operation of the cargo tank without issuance of the required vapor recovery certification, a copy of the application for vapor recovery certification and a copy of the issued certification.

(E) If in order to correct the violation it was necessary to test the cargo tank to determine compliance with the annual leak rate criteria, (i) the name, address and company affiliation (if any) of the person conducting the test; (ii) the date of the test; (iii) pressure change in five minutes (in inches of water); (iv) vacuum change in five minutes (in inches of water); (v) a statement by the person conducting the test that the cargo tank was tested in accordance with the procedures established by the Air Resources Board (ARB).

(8) Date, time, and means by which the issuing agency was notified of the opportunity to inspect the corrections.

(9) Location of cargo tank and time specified for inspection.

(10) Statement that the representative of the issuing agency failed to appear at the designated place and time.

(11) Declaration under penalty of perjury by person making correction and/or conducting test that the information contained in Item 7 is true and correct.

(12) Declaration under penalty of perjury by owner or operator named in the notice to appear that all information submitted is true and correct and the violation has been corrected.

(b) The executive officer shall have the authority to approve any modification to the form used for submittal of the information set forth in subsection (a) consistent with said subsection, and shall provide the form to

the ~~State-Fire-Marshat~~ California Highway Patrol and all air pollution control districts. Every "Proof of Correction by Verification" shall be prepared in triplicate on the form approved by the ARB. The original, along with the copy of the notice to appear, shall be submitted pursuant to Health and Safety Code Section 41970 to the court specified in the notice to appear. No later than the date of presentment to the court, copies shall be mailed to the agency issuing the notice to appear and to the ~~Enforeement~~ Compliance Division of the ARB.

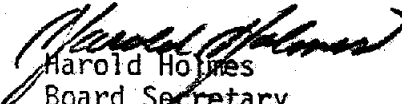
NOTE: Authority cited: Sections 39600, 39601 and 41972, Health and Safety Code. Reference: Sections 41970, 41971 and 41972, Health and Safety Code.

Memorandum

Gordon Van Vleck
Secretary
Resources Agency

Date : April 5, 1984


Subject: Filing of Notice of
Decisions of the Air
Resources Board


Harold Holmes
Board Secretary

From : **Air Resources Board**

Pursuant to Title 17, Section 60007 (b), and in compliance with Air Resources Board certification under section 21080.5 of the Public Resources Code, the Air Resources Board hereby forwards for posting the attached notice of decision and response to environmental comments raised during the comment period.

ATTACHMENTS


84-3
84-4
84-5
84-6

State of California
AIR RESOURCES BOARD

Response to Significant Environmental Issues

Item: Public Hearing to Consider Amendments to Title 17, California Administrative Code, Sections 94004 and 94005, and Incorporated Procedures, Regarding Vapor Recovery Systems for Gasoline Delivery Tanks

Agenda Item No.: 84-4-1

Public Hearing Date: February 24, 1984

Response Date: February 24, 1984

Issuing Authority: Air Resources Board

Comment: No comments were received identifying any significant environmental issues pertaining to this item. The staff report identified no adverse environmental effects.

Response: N/A

CERTIFIED:

Elizabeth Schwall
Board Secretary

Date:

4-24-84