

TITLE 17. AIR RESOURCES BOARD

NOTICE OF PUBLIC HEARING TO CONSIDER THE ADOPTION, AMENDMENT, AND REPEAL OF REGULATIONS REGARDING CERTIFICATION PROCEDURES AND TEST PROCEDURES FOR GASOLINE VAPOR RECOVERY SYSTEMS

The Air Resources Board (the "Board" or "ARB") will conduct a public hearing at the time and place noted below to consider adoption, amendment, and repeal of regulations for certifying and testing of gasoline vapor recovery systems installed at gasoline marketing operations (service stations and novel facilities (dispenses gasoline to vehicles in a non-traditional manner)), gasoline storage and distribution facilities (bulk plants and terminals), and transfer operations (cargo tanks which are vehicles used to transport gasoline).

DATE: May 21, 1998

TIME: 9:30 a.m.

PLACE: Air Resources Board
Hearing Room, Lower Level
2020 L Street
Sacramento, California

This item will be considered at a two-day meeting of the Board, which will commence at 9:30 a.m., May 21, 1998, and will continue at 8:30 a.m., May 22, 1998. This item may not be considered until May 22, 1998. Please consult the agenda for the meeting, which will be available at least 10 days before May 21, 1998, to determine the day on which this item will be considered.

This facility is accessible to persons with disabilities. If accommodation is needed, please contact Mr. George Lew at (916) 263-1630 or TDD (916) 324-9531 or (800) 700-8326 for TDD calls from outside the Sacramento area 14 days before May 21, 1998.

INFORMATIVE DIGEST OF PROPOSED ACTION/PLAIN ENGLISH POLICY STATEMENT OVERVIEW OF PROPOSED ACTION

Sections Affected: Proposed amendments and adoptions to Title 17, California Code of Regulations (CCR), Sections 94010-94015 and 94150, 94156, 94157, 94158, 94159, 94160, and 94162, which incorporate by reference certification procedures and test procedures identified below in bold type.

Background

To achieve and maintain applicable ambient air quality standards, Health and Safety Code (H&SC) Section 41954 requires the Board to adopt procedures for certifying systems designed to control gasoline vapor emissions during gasoline marketing operations, including storage and transfer operations. Section 41954 further requires that only systems certified by the Board can be offered for sale, sold, or installed in California.

While the Board certifies systems, state law gives air pollution control and air quality management districts (districts) the primary responsibility for controlling air pollution from non-vehicular sources such as gasoline marketing, storage, and transfer operations.

In 1996, the Board, pursuant to H&SC Sections 39607(d) and 41954, adopted five certification procedures and twenty test procedures (Sections 94010-94015 and 94148-94160, Title 17, CCR) to replace the then existing certification and test procedures. The procedures describe the criteria for testing and certifying gasoline vapor recovery systems for service stations, bulk plants, terminals, cargo tanks, and novel facilities. The certification process consists of four basic steps: application, engineering evaluation, testing, and certification. The vapor recovery equipment manufacturer or facility operator (applicant) submits an application to the ARB describing the system and providing information to show that the performance standards can be achieved. The review by the ARB's staff consists of determining if the application is complete and identifying appropriate performance standards, appropriate performance specifications, and appropriate test procedures. Minimum performance standards (e.g., 90% control efficiency or 0.29 pounds per 1000 gallons of gasoline dispensed) are established by each certification procedure. Testing is performed by the ARB's staff to verify that the proposed system can meet the applicable performance standards. During the test, performance specifications are established for systems that comply with the performance standards. Performance specifications are used by the district and the ARB staffs to check that the installed systems meet the performance standards. If the test results show that the system complies with the performance standards, the ARB's Executive Officer certifies the system by issuing an Executive Order along with appropriate conditions and performance specifications.

Due to the large number of service stations, only prototype vapor recovery systems for service stations are certified. Performance specifications established during testing provide the link to verify that the installed system is operating properly. Actual vapor recovery systems for bulk plants, terminals, cargo tanks, and novel facilities are tested to ensure that the required performance standards are met.

Description of the Proposed Regulatory Action

The Board's staff proposes to amend Title 17, CCR, Sections 94011, which incorporates by reference the following new test procedures as set forth below:

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| Section 94011 | "TP-201.2D" - Determination of Onboard Refueling Vapor Recovery (ORVR) Compatibility of Phase II Vapor Recovery Systems of Dispensing Facilities (Adopted: [date of adoption]) |
| | "TP-201.3C" - Determination of Vapor Piping Connections to Underground Gasoline Storage Tanks (Tie-Tank Test) (Adopted: [date of adoption]) |

The Board's staff proposes to amend Title 17, CCR, Sections 94010-94015 which incorporate by reference the following amended certification and test procedures as set forth below:

- Section 94010 **"D-200" - Definitions for Certification and Test Procedures for Vapor Recovery Systems (Adopted: April 12, 1996; as last amended [date of amendment])**
- Section 94011 **"TP-201.1A" - Determination of Efficiency of Phase I Vapor Recovery Systems of Dispensing Facilities with Assist Processors (Adopted: April 12, 1996; as last amended [date of amendment])**
- "TP-201.3" - Determination of Two Inch (WC) Static Pressure Performance of Vapor Recovery Systems of Dispensing Facilities (Adopted: April 12, 1996; as last amended [date of amendment])**
- "TP-201.5" - Determination of Air to Liquid Volume Ratio of Vapor Recovery Systems of Dispensing Facilities (Adopted: April 12, 1996; as last amended [date of amendment])**
- Section 94012 **"CP-202" - Certification Procedure for Vapor Recovery Systems of Bulk Plants (Adopted: April 12, 1996; as last amended [date of amendment])**
- "TP-202.1" - Determination of Emission Factor of Vapor Recovery Systems of Bulk Plants (Adopted: April 12, 1996; as last amended [date of amendment])**
- Section 94013 **"CP-203" - Certification Procedure for Vapor Recovery Systems of Terminals (Adopted: April 12, 1996; as last amended [date of amendment])**
- "TP-203.1" - Determination of Emission Factor of Vapor Recovery Systems of Terminals (Adopted: April 12, 1996; as last amended [date of amendment])**
- Section 94014 **"CP-204" - Certification Procedure for Vapor Recovery Systems of Cargo Tanks (Adopted: April 18, 1977; as last amended [date of amendment])**
- "TP-204.1" - Determination of Five Minute Static Pressure Performance of Vapor Recovery Systems of Cargo Tanks (Adopted: April 12, 1996; as last amended [date of amendment])**

"TP-204.2" - Determination of One Minute Static Pressure Performance of Vapor Recovery Systems of Cargo Tanks (Adopted: April 12, 1996; as last amended [date of amendment])

"TP-204.3" - Determination of Leak(s)(Adopted: April 12, 1996; as last amended [date of amendment])

Section 94015

"CP-205" - Certification Procedure for Vapor Recovery Systems of Novel Facilities (Adopted: April 12, 1996; as last amended [date of amendment])

"TP-205.1" - Determination of Efficiency of Phase I Vapor Recovery Systems of Novel Facilities (Adopted: April 12, 1996; as last amended [date of amendment])

"TP-205.2" - Determination of Efficiency of Phase II Vapor Recovery Systems of Novel Facilities (Adopted: April 12, 1996; as last amended [date of amendment])

The proposed amendment of Title 17, CCR, Sections 94010-94015 and 94010-94015 and 94150, 94156, 94157, 94158, 94159, and 94160 would incorporate, by reference, the above-mentioned changes to definitions and test procedures for gasoline dispensing facilities, bulk plants, terminals, cargo tanks, and novel facilities. New Section 94162 would incorporate, by reference, the tie-tank test procedure.

Comparable Federal Regulation

There are no comparable federal regulations that certify gasoline vapor recovery systems for service stations, bulk plants, cargo tanks, and novel facilities. However, for terminals, the U.S. Environmental Protection Agency (U.S. EPA) has established a National Emission Standard for Hazardous Air Pollutants (NESHAP) at 10 milligrams/Liter (0.08 pounds per thousand gallons) in Title 40, Code of Federal Regulations, Section 63.420 through 63.429. There are currently eight terminals in California that are certified with emissions above this limit. A sentence is proposed for addition to CP-203 to alert facilities that compliance with the lower emission standard is required under federal law when the standard applies to the terminal facility as specified in federal law. For terminal facilities to which neither the federal standard nor a differing district standard applies, the current standard of 0.29 pounds per thousand gallons is retained as the threshold limit.

Rationale and Plain English Policy Statement of Proposed Action

The proposal provides new procedures and updates the existing vapor recovery systems certification and test procedures. The proposal includes new procedures for (1) Onboard Refueling Vapor Recovery (ORVR), (2) airport refuelers, (3) a tie-tank test and (4) safety improvements.

(1) ORVR provides a new way to capture refueling vapors that occur when motor vehicles fill up with gasoline. Instead of routing the vapors back to the underground tank at a gasoline dispensing facility, such as a service station, as happens with conventional vapor recovery, with ORVR, the vapors are routed to a canister of activated charcoal onboard the vehicle. Because there are no vapors to capture, vacuum assist type service station vapor recovery systems will forcibly ingest air into the underground tanks when fueling ORVR vehicles. When air enters the vapor space underground, emissions can result from vapor growth. The new ORVR test procedures are designed to ensure that the vapor recovery system controls or minimizes vapor growth.

The vapor recovery equipment found at gasoline dispensing facilities (known as Phase II vapor recovery) must be certified by the Air Resources Board before sale in California. Certification involves a complete engineering evaluation of the system, a durability test and several tests to measure whether emission standards are achieved. The ORVR compatibility test is proposed to be added to this existing battery of certification tests.

The ORVR test will be applied only to new or modified systems seeking certification. This means that the existing, installed systems at an estimated 14,000 gasoline dispensing facilities are not subject to retrofit or replacement at this time. A future proposal may address existing systems if data becomes available that indicates that the existing systems should be evaluated for ORVR compatibility.

2) Current certification procedures require an annual leak test to ensure that gasoline cargo tanks do not release vapors to the atmosphere. While the cargo tank must be free of vapors in order to safely conduct the leak test, current regulations prohibit purging vapors directly to the atmosphere. Airport refuelers, defined as small airplane fuel cargo tanks, have difficulty preparing for the annual test for a number of reasons. These cargo tanks operate only at the airport and are not licensed for public roads. Airports do not have facilities to process purged vapors. Cargo tanks of less than 2,000 gallons capacity cannot qualify for a one day license in order to travel to a vapor processor. Due to the relatively low emission impact (200 lbs. or 0.10 tons hydrocarbon vapors annually), a temporary exemption is proposed to allow airport refuelers to purge vapors to the atmosphere before the annual test.

This exemption will expire when at least two ARB-certified mobile vapor processors are available. These processors would travel to the airports and could thus be used to degas the airport refuelers of the vapors on-site.

(3) The tie-tank test is a proposed new test procedure to check for proper underground plumbing configurations at gasoline dispensing facilities. For example, the test can verify that a diesel underground storage tank is kept separate from the plumbing for the gasoline tanks. This procedure was requested by several air pollution control districts to assist with their permitting and inspection of gasoline dispensing facilities. The test is voluntary and may be used at district discretion.

(4) Several other minor changes are proposed to the remaining procedures. Safety improvements are part of the redesign of a test procedure which compares the volume of vapor returned to the underground tank with the volume of liquid dispensed to the vehicle tank. Under the current design, the tester is exposed to vapors vented from the test tank. In the proposed

design, which plumbs the equipment differently, the vapor is returned to the underground tank. Other improvements include clarifications to the test procedures as requested by private testers, districts and ARB staff who use these procedures.

Each certification procedure references test procedures that are used to verify that the system complies with the applicable performance standards and to establish performance specifications. Performance specifications will be used by the district's or the ARB's staff to verify that the installed systems are operating properly. Adoption of these procedures in Title 17, CCR, Sections 94148-94160 allows the districts to enforce the performance standards or performance specifications without the districts having to formally adopt the test procedures. Title 17, CCR, Section 94100 provides that test procedures adopted by the Board shall be used to determine compliance with non-vehicular emission standards of the Board or district.

Workshops were held on October 30, 1997 and January 15, 1998, to allow the public opportunities to provide suggestions and comments as the proposed amendments to the certification and test procedures were developed. Through the workshop process, the ARB's staff resolved outstanding issues by adding clarifying language or deferring action until more test data are available to support regulatory action. The staff also discussed the proposed changes with the California Air Pollution Control Officer's Vapor Recovery Technical Committee for the purpose of maintaining communication among Districts, manufacturers, and other parties directly affected by vapor recovery regulations.

AVAILABILITY OF DOCUMENTS AND CONTACT PERSON

The Board's staff has prepared a staff report on this proposal, which includes the initial statement of reasons for the proposed action and a summary of the environmental impacts of the proposal, if any. Copies of the staff report and the full text of the proposed regulatory language may be obtained from the Board's Public Information Office, 2020 L Street, Sacramento, California 95814, (916) 322-2990, for at least 45 days prior to the scheduled hearing. The ARB has determined that it is not feasible to draft these regulations in plain English due to the technical nature of the regulations; however, a plain English summary is provided in this notice and in the staff report for this regulatory action. The staff report is available from the agency contact person named below. The Board's staff has compiled a record which includes all information upon which the proposal is based. This material is available for inspection upon request to the contact person identified immediately below.

Further inquiries regarding this matter should be directed to Mr. George Lew, Monitoring and Laboratory Division, Air Resources Board, P. O. Box 2815, Sacramento, California 95812, (916) 263-1630.

COSTS TO PUBLIC AGENCIES AND TO BUSINESSES AND PERSONS AFFECTED

The determinations of the Board's Executive Officer concerning the costs or savings necessarily incurred in reasonable compliance with the proposed regulations are presented below.

The Executive Officer has determined that the proposed regulatory action will not create costs or savings, as defined in Government Code Section 11346.5(a)(6), to any state agency or in federal funding to the state, costs or mandate to any local agency or school district whether or not

reimbursable by the state pursuant to Part 7 (commencing with section 17500), Division 4, Title 2 of the Government Code, or other nondiscretionary savings to local agencies.

The Executive Officer has also determined that adoption of the proposed regulatory action will not affect the ability of California businesses to compete with businesses in other states.

The Executive Officer has determined that there will be a potential cost impact, as defined in Government Code section 11346.5(a)(9), on private persons or businesses directly affected by the proposed action. The proposal does not substantively change the mandatory performance standards except in the case of the proposed new ORVR compatibility test. Since the proposal applies the new performance standard to businesses applying for new or revised certification, companies currently marketing vapor recovery systems will not be required to recertify currently certified systems under the proposed new performance standard for ORVR compatibility. However, applicants for new or revised vapor recovery systems would be subject to the additional cost of conducting the ORVR compatibility test. Under the proposal, gasoline dispensing facilities, many of which are small businesses, would be able to continue to use existing, certified vapor recovery systems and thus would not be subject to adverse economic impacts as a result of the adoption of the ORVR test procedure.

The other proposed new procedure, the tie-tank test, may result in a small, but less than significant, increase in testing costs for gasoline dispensing facilities that install new or modified vapor recovery systems. The test will be used by districts to check plumbing for new and modified systems at gasoline dispensing facilities in conjunction with other required tests. This check of underground plumbing while the system is being installed may save money for the facility operator by finding any installation problems before the plumbing becomes inaccessible by paving the property. This test may not be needed at every site and will be used at district discretion.

In accordance with Government Code Section 11346.3 and 11346.54, the Executive Officer has determined that the proposed regulatory action will not affect the creation or elimination of jobs within the State of California, the creation of new businesses or the elimination of existing businesses within California, or the expansion of businesses currently doing business within California. An assessment of the impacts of the proposed regulatory action can be found in the ARB's Staff Report: Initial Statement of Reasons.

The Executive Officer has also determined, pursuant to Government Code Section 11346.3, that the regulation will have an adverse economic impact on some businesses or individuals. The directly affected businesses include vapor recovery equipment manufacturers, airport refuelers and gasoline dispensing facilities. The equipment manufacturers are subject to an increase in test fees if they choose to submit new or modified systems for certification. The proposal may affect small businesses (gasoline dispensing facilities) whenever districts choose to apply the tie-tank test during installation or modification of their vapor recovery systems. The proposal provides relief to airport refuelers in the form of a temporary exemption from venting requirements until mobile degassing units are certified.

In accordance with Government Code section 11346.5(a)(7) and in view of the adverse economic impacts, the ARB finds that adoption of the proposed new ORVR compatibility test and the new tie-tank test may have a significant adverse economic impact on businesses, although

not on the ability of California businesses to compete with businesses in other states. The ARB has considered alternatives that would lessen any adverse economic impact on business and invites the submission of other proposals. Submissions may include the following considerations: (1) the establishment of differing compliance requirements or timetables that take into account the resources available to business; (2) consolidation or simplification of compliance requirements for businesses; (3) the use of performance standards rather than prescriptive standards; and (4) exemption or partial exemption from the regulatory requirements for businesses.

Before taking final action on the proposed regulatory action, the Board must determine that no alternative considered by the agency would be more effective in carrying out the purpose for which the action is proposed or would be as effective and less burdensome to affected private persons than the proposed action.

SUBMITTAL OF COMMENTS

The public may present comments relating to this matter orally or in writing. To be considered by the Board, written submissions must be addressed to and received by the Clerk of the Board, Air Resources Board, P. O. Box 2815, Sacramento, California 95812, no later than 12:00 noon, May 20, 1998; or received by the Clerk of the Board at the hearing.

The Board requests, but does not require, that 20 copies of any written statement be submitted and that all written statements be filed at least 10 days prior to the hearing. The Board encourages members of the public to bring to the attention of staff in advance of the hearing any suggestions for modification of the proposed regulatory action.

Any party who previously submitted comments on the proposed certification and test procedures at the October 30, 1997 or January 15, 1998 workshops is advised that the comments must be resubmitted to be assured formal consideration by the Board during the comment period.

STATUTORY AUTHORITY AND HEARING PROCEDURES

These regulations are proposed under the authority granted in Health and Safety Code Sections 39600, 39601, 39607, 41954, and 41962. The regulations are proposed to implement, interpret, or make specific Health and Safety Code Sections 39515, 39516, 39605, 39607, 39666, 40001, 41954, 41959, 41960, 41960.2, and 41962.

The public hearing will be conducted in accordance with the California Administrative Procedure Act, Title 2, Division 3, Part 1, Chapter 3.5 (commencing with section 11340) of the Government Code.

Following the public hearing, the Board may adopt the regulatory language as originally proposed, or with nonsubstantive or grammatical modifications. The Board may also adopt the proposed regulatory language with other modifications if the text as modified is sufficiently related to the originally proposed text that the public was adequately placed on notice that the regulatory language as modified could result from the proposed regulatory action. In such event, the full text of the regulations, with the modifications clearly indicated, will be made available to the public, for written comment, at least 15 days before it is adopted. The public may request a

copy of the modified regulatory text from the Board's Public Information Office, 2020 L Street, Sacramento, California 95814, (916) 322-2990.

CALIFORNIA AIR RESOURCES BOARD

Michael P. Kenny
Executive Officer

Date: